

conjunction	8101 Mar 13 09:43	24° H 14'31	-1°05'49		8105 Nov 15 15:52	0° M	
minimum elong	8101 Mar 13 09:07	24° H 13'28	1°05'48		8105 Dec 31 23:13	0° A	
	8101 Mar 21 10:12	0° Y			8106 Feb 20 02:48	0° Z	
	8101 May 01 01:51	0° B			8106 Apr 21 05:00	0° \approx	
morning rise	8101 May 06 20:12	4° B 21'22		desc. node	8106 May 21 08:53	9° \approx 37'45	
	8101 Jun 09 06:09	0° II		retrograde	8106 Jun 10 21:15	11° \approx 57'14	
	8101 Jul 17 16:18	0° E		opposition	8106 Jul 19 19:58	3° \approx 05'08	-2°05'13
	8101 Aug 25 04:35	0° O		greatest brilliancy	8106 Jul 20 03:25	2° \approx 57'56	-1.5m
asc. node	8101 Aug 31 20:31	5° O 07'55		min. Earth dist.	8106 Jul 24 12:01	1° \approx 16'56	0.64030 AU
	8101 Oct 03 18:27	0° M			8106 Jul 27 21:19	30° K Z	
	8101 Nov 14 15:46	0° A		direct	8106 Aug 30 08:04	23° Z 03'47	
	8101 Dec 31 01:37	0° M			8106 Oct 05 05:42	0° \approx	
	8102 Mar 03 03:16	0° A			8106 Dec 04 09:07	0° H	
retrograde	8102 Apr 02 12:36	5° A 16'24			8107 Jan 18 22:11	0° Y	
	8102 Apr 30 18:29	30° K M			8107 Feb 28 21:02	0° B	
min. Earth dist.	8102 May 10 01:53	26° M 27'45	0.65592 AU		8107 Apr 08 16:27	0° II	
opposition	8102 May 12 23:56	25° M 18'00	3°05'17	asc. node	8107 Apr 23 17:04	11° II 48'40	
greatest brilliancy	8102 May 12 16:44	25° M 25'09	-1.4m		8107 May 16 19:27	0° E	
direct	8102 Jun 21 15:14	15° M 57'38			8107 Jun 24 08:34	0° O	
desc. node	8102 Aug 16 10:29	29° M 54'58		evening set	8107 Jul 26 06:16	24° O 08'02	
	8102 Aug 16 15:16	0° A			8107 Aug 03 04:17	0° M	
	8102 Oct 15 03:46	0° Z			8107 Sep 13 20:35	0° A	
	8102 Dec 04 04:45	0° \approx					
	8103 Jan 18 20:39	0° H		conjunction	8107 Sep 23 22:34	7° A 02'24	1°06'58
	8103 Mar 02 09:20	0° Y		minimum elong	8107 Sep 23 22:26	7° A 02'10	1°06'59
evening set	8103 Mar 11 01:20	6° Y 20'27		max. Earth dist.	8107 Oct 24 18:33	28° A 04'47	2.56568 AU
max. Earth dist.	8103 Mar 29 14:10	20° Y 08'35	2.40339 AU		8107 Oct 27 15:18	0° M	
	8103 Apr 11 14:13	0° B		morning rise	8107 Nov 15 09:50	12° M 26'30	
					8107 Dec 12 11:39	0° A	
conjunction	8103 May 09 16:58	21° B 43'35	-0°46'15		8108 Jan 29 07:54	0° Z	
minimum elong	8103 May 09 19:56	21° B 49'24	0°46'20		8108 Mar 19 17:09	0° \approx	
	8103 May 20 06:25	0° II		desc. node	8108 Apr 07 06:33	10° \approx 27'04	
	8103 Jun 27 06:32	0° E			8108 May 15 01:01	0° H	
morning rise	8103 Jul 19 15:34	17° E 37'57		retrograde	8108 Jul 24 06:57	20° H 39'01	
asc. node	8103 Jul 19 19:07	17° E 44'55		opposition	8108 Aug 29 07:29	13° H 04'21	-4°50'56
	8103 Aug 04 11:37	0° O		greatest brilliancy	8108 Aug 30 15:28	12° H 35'21	-1.9m
	8103 Sep 12 18:23	0° M		min. Earth dist.	8108 Sep 06 08:30	10° H 09'58	0.53700 AU
	8103 Oct 23 22:54	0° A		direct	8108 Oct 07 17:58	3° H 51'06	
	8103 Dec 06 22:43	0° M			8108 Dec 19 13:23	0° Y	
	8104 Jan 24 09:32	0° A			8109 Feb 02 23:59	0° B	
	8104 Mar 25 09:03	0° Z		asc. node	8109 Mar 10 18:19	26° B 22'37	
retrograde	8104 May 05 16:07	8° Z 37'35			8109 Mar 15 13:05	0° II	
	8104 Jun 12 12:16	30° K A			8109 Apr 23 17:47	0° E	
opposition	8104 Jun 15 00:15	29° A 00'51	0°37'55		8109 Jun 02 05:17	0° O	
greatest brilliancy	8104 Jun 15 00:58	29° A 00'09	-1.3m		8109 Jul 12 23:00	0° M	
min. Earth dist.	8104 Jun 15 21:39	28° A 39'42	0.68095 AU		8109 Aug 24 12:03	0° A	
desc. node	8104 Jul 03 10:21	22° A 24'51		evening set	8109 Sep 17 15:12	16° A 26'23	
direct	8104 Jul 26 08:34	19° A 05'57			8109 Oct 07 22:49	0° M	
	8104 Sep 12 04:21	0° Z					
	8104 Nov 10 18:51	0° \approx		conjunction	8109 Nov 06 11:36	19° M 19'57	0°50'42
	8104 Dec 28 14:46	0° H		minimum elong	8109 Nov 06 12:49	19° M 21'56	0°50'49
	8105 Feb 09 16:01	0° Y		max. Earth dist.	8109 Nov 19 10:46	27° M 42'10	2.65066 AU
	8105 Mar 21 20:16	0° B			8109 Nov 23 00:33	0° A	
	8105 Apr 29 08:26	0° II		morning rise	8109 Dec 22 11:32	18° A 47'20	
evening set	8105 May 13 23:49	11° II 34'35			8110 Jan 09 05:09	0° Z	
asc. node	8105 Jun 05 17:20	29° II 35'21		desc. node	8110 Feb 23 03:44	28° Z 08'54	
	8105 Jun 06 05:47	0° E			8110 Feb 26 03:08	0° \approx	
	8105 Jul 14 11:12	0° O			8110 Apr 15 19:39	0° H	
					8110 Jun 05 06:36	0° Y	
conjunction	8105 Jul 23 17:35	7° O 09'34	0°32'44		8110 Aug 01 07:02	0° B	
minimum elong	8105 Jul 23 14:41	7° O 03'58	0°32'34	retrograde	8110 Sep 26 12:06	15° B 09'27	
	8105 Aug 22 20:44	0° M		opposition	8110 Oct 27 16:23	9° B 41'26	-5°27'58
max. Earth dist.	8105 Sep 13 22:03	16° M 14'02	2.43421 AU	greatest brilliancy	8110 Oct 29 03:49	9° B 15'19	-2.7m
morning rise	8105 Sep 27 16:41	26° M 09'13		min. Earth dist.	8110 Nov 03 12:06	7° B 41'48	0.40226 AU
	8105 Oct 03 02:31	0° A		direct	8110 Nov 29 17:48	3° B 21'04	

asc. node	8111 Jan 26 17:44	22°♄17'08		evening set	8116 Jan 09 01:56	5°♊32'38	
	8111 Feb 09 00:37	0°♈		max. Earth dist.	8116 Jan 28 13:57	18°♊27'22	2.57889 AU
	8111 Mar 26 15:33	0°♉			8116 Feb 14 15:55	0°♈	
	8111 May 08 13:42	0°♊					
	8111 Jun 20 17:55	0°♋		conjunction	8116 Feb 24 22:03	7°♈02'29	-0°59'04
	8111 Aug 04 03:15	0°♌		minimum elong	8116 Feb 24 20:55	7°♈00'32	0°59'00
	8111 Sep 18 21:57	0°♍			8116 Mar 28 13:10	0°♎	
evening set	8111 Oct 28 23:22	25°♍41'06		morning rise	8116 Apr 14 23:47	12°♎37'04	
	8111 Nov 04 18:06	0°♏			8116 May 08 12:20	0°♐	
max. Earth dist.	8111 Dec 12 06:14	23°♏48'28	2.68127 AU		8116 Jun 17 00:38	0°♈	
					8116 Jul 25 17:50	0°♉	
conjunction	8111 Dec 13 12:33	24°♏36'34	0°14'50		8116 Sep 02 12:21	0°♊	
minimum elong	8111 Dec 13 13:00	24°♏37'17	0°15'00	asc. node	8116 Sep 17 14:50	11°♊30'34	
behind sun begin	8111 Dec 13 06:44	24°♏27'20			8116 Oct 12 10:04	0°♋	
behind sun end	8111 Dec 13 19:17	24°♏47'14			8116 Nov 24 01:24	0°♌	
	8111 Dec 22 00:24	0°♍			8117 Jan 12 07:39	0°♍	
desc. node	8112 Jan 11 00:57	12°♍43'59		retrograde	8117 Mar 19 18:36	21°♍24'56	
morning rise	8112 Jan 26 05:23	22°♍25'20		min. Earth dist.	8117 Apr 24 12:09	13°♍11'48	0.62805 AU
	8112 Feb 07 01:18	0°♎		opposition	8117 Apr 28 22:12	11°♍26'36	3°55'44
	8112 Mar 24 10:20	0°♏		greatest brilliancy	8117 Apr 28 08:06	11°♍40'36	-1.5m
	8112 May 08 23:38	0°♎		direct	8117 Jun 06 11:49	2°♍27'45	
	8112 Jun 22 19:34	0°♐			8117 Aug 30 06:31	0°♏	
	8112 Aug 06 08:44	0°♈		desc. node	8117 Sep 01 23:35	1°♏22'28	
	8112 Sep 21 08:06	0°♉			8117 Oct 23 18:48	0°♊	
	8112 Nov 19 01:50	0°♊			8117 Dec 11 15:54	0°♋	
asc. node	8112 Dec 13 17:32	4°♊27'56			8118 Jan 26 00:33	0°♌	
retrograde	8112 Dec 15 03:15	4°♊28'47		evening set	8118 Feb 19 08:27	16°♌56'13	
min. Earth dist.	8113 Jan 10 03:25	0°♊08'26	0.38659 AU	max. Earth dist.	8118 Mar 05 03:03	26°♌47'06	2.45608 AU
	8113 Jan 10 15:12	30°♋♉			8118 Mar 09 13:40	0°♎	
opposition	8113 Jan 16 06:39	28°♉21'00	2°24'19				
greatest brilliancy	8113 Jan 15 15:36	28°♉32'03	-2.9m	conjunction	8118 Apr 14 17:56	26°♎50'16	-1°02'11
direct	8113 Feb 15 03:43	23°♉03'54		minimum elong	8118 Apr 14 19:30	26°♎53'13	1°02'14
	8113 Mar 21 18:06	0°♊			8118 Apr 18 22:00	0°♐	
	8113 May 21 06:52	0°♋			8118 May 27 18:10	0°♈	
	8113 Jul 10 14:33	0°♌		morning rise	8118 Jun 18 05:21	16°♈51'42	
	8113 Aug 28 11:17	0°♍			8118 Jul 04 21:19	0°♉	
	8113 Oct 15 23:18	0°♏		asc. node	8118 Aug 05 11:23	24°♉47'25	
desc. node	8113 Nov 27 23:44	26°♏53'32			8118 Aug 12 04:10	0°♊	
	8113 Dec 02 22:00	0°♍			8118 Sep 20 12:02	0°♋	
evening set	8113 Dec 03 09:40	0°♍18'26			8118 Oct 31 19:28	0°♌	
max. Earth dist.	8114 Jan 03 00:41	19°♍48'42	2.65672 AU		8118 Dec 15 07:34	0°♍	
					8119 Feb 03 21:13	0°♏	
conjunction	8114 Jan 17 00:25	28°♍50'32	-0°25'51	retrograde	8119 Apr 23 09:51	26°♏05'56	
minimum elong	8114 Jan 16 23:40	28°♍49'19	0°25'42	opposition	8119 Jun 02 22:40	16°♏17'59	1°37'12
	8114 Jan 18 19:13	0°♎		min. Earth dist.	8119 Jun 02 08:31	16°♏32'02	0.67888 AU
morning rise	8114 Mar 02 14:47	28°♎15'31		greatest brilliancy	8119 Jun 02 22:11	16°♏18'28	-1.3m
	8114 Mar 05 04:58	0°♏		direct	8119 Jul 13 18:46	6°♏33'34	
	8114 Apr 17 22:56	0°♎		desc. node	8119 Jul 20 23:52	6°♏52'00	
	8114 May 30 02:43	0°♐			8119 Sep 27 22:15	0°♍	
	8114 Jul 09 22:42	0°♈			8119 Nov 20 18:37	0°♊	
	8114 Aug 19 00:33	0°♉			8120 Jan 06 11:19	0°♋	
	8114 Sep 28 09:43	0°♊			8120 Feb 18 05:38	0°♌	
asc. node	8114 Oct 31 17:22	23°♊36'34			8120 Mar 29 09:12	0°♍	
	8114 Nov 10 06:10	0°♋		evening set	8120 Apr 15 23:41	13°♍35'37	
	8115 Jan 03 00:15	0°♌			8120 May 06 22:13	0°♈	
retrograde	8115 Feb 08 17:52	8°♌25'18			8120 Jun 13 19:43	0°♉	
min. Earth dist.	8115 Mar 10 20:12	2°♌11'03	0.51637 AU	asc. node	8120 Jun 22 10:15	6°♉48'22	
	8115 Mar 16 16:26	30°♋♎					
greatest brilliancy	8115 Mar 17 06:19	29°♎46'54	-2.0m	conjunction	8120 Jun 23 15:58	7°♉47'01	0°00'55
opposition	8115 Mar 18 17:32	29°♎13'51	5°18'56	minimum elong	8120 Jun 23 15:54	7°♉46'53	0°00'45
direct	8115 Apr 22 11:20	21°♎40'05		behind sun begin	8120 Jun 22 09:28	6°♉46'48	
	8115 Jun 01 13:45	0°♌		behind sun end	8120 Jun 24 22:20	8°♉46'56	
	8115 Aug 03 19:38	0°♍			8120 Jul 21 23:58	0°♊	
	8115 Sep 25 13:45	0°♏		max. Earth dist.	8120 Aug 09 04:01	14°♊00'49	2.38102 AU
desc. node	8115 Oct 15 23:33	12°♏09'17			8120 Aug 30 07:09	0°♋	
	8115 Nov 14 05:24	0°♍		morning rise	8120 Sep 03 03:35	2°♎52'28	
	8115 Dec 31 13:52	0°♎			8120 Oct 10 10:36	0°♌	

	8120 Nov 23 00:57	0°♌			8126 Apr 07 18:29	0°♏	
	8121 Jan 08 19:53	0°♊			8126 May 18 15:57	0°♏	
	8121 Mar 02 00:18	0°♊			8126 Jun 29 12:39	0°♎	
retrograde	8121 May 27 05:40	28°♊53'39			8126 Aug 11 23:31	0°♌	
desc. node	8121 Jun 06 23:35	28°♊10'05			8126 Sep 26 02:46	0°♌	
opposition	8121 Jul 05 21:18	19°♊41'16	-1°00'34	evening set	8126 Oct 13 20:32	11°♌32'15	
greatest brilliancy	8121 Jul 05 23:38	19°♊38'59	-1.4m		8126 Nov 11 13:44	0°♊	
min. Earth dist.	8121 Jul 09 02:10	18°♊26'11	0.66395 AU				
direct	8121 Aug 16 12:53	9°♊38'22		conjunction	8126 Nov 29 14:45	11°♊30'26	0°29'53
	8121 Oct 23 07:22	0°♏		minimum elong	8126 Nov 29 15:37	11°♊31'48	0°30'02
	8121 Dec 14 08:49	0°♏		max. Earth dist.	8126 Dec 03 12:59	14°♊00'16	2.67589 AU
	8122 Jan 27 12:39	0°♑			8126 Dec 28 17:40	0°♊	
	8122 Mar 09 01:09	0°♏		morning rise	8127 Jan 12 19:47	9°♊34'01	
	8122 Apr 16 16:14	0°♐		desc. node	8127 Jan 27 15:04	18°♊57'34	
asc. node	8122 May 10 09:41	18°♐44'07			8127 Feb 14 00:16	0°♏	
	8122 May 24 15:46	0°♏			8127 Apr 02 01:15	0°♏	
evening set	8122 Jun 29 06:56	27°♏53'09			8127 May 18 21:11	0°♑	
	8122 Jul 02 00:36	0°♏			8127 Jul 04 23:17	0°♏	
	8122 Aug 10 14:59	0°♎			8127 Aug 23 00:14	0°♐	
					8127 Oct 27 13:16	0°♏	
conjunction	8122 Sep 02 10:59	16°♎42'49	1°02'00	retrograde	8127 Nov 16 04:13	2°♏28'33	
minimum elong	8122 Sep 02 09:18	16°♎39'46	1°01'57		8127 Dec 06 04:57	30°♎♐	
	8122 Sep 21 01:32	0°♌		min. Earth dist.	8127 Dec 15 06:26	27°♐42'19	0.36630 AU
max. Earth dist.	8122 Oct 11 19:40	14°♌28'13	2.51845 AU	opposition	8127 Dec 16 07:02	27°♐25'54	-1°10'36
morning rise	8122 Oct 29 06:56	26°♌22'30		greatest brilliancy	8127 Dec 16 07:36	27°♐25'31	-3.1m
	8122 Nov 03 16:17	0°♌		asc. node	8127 Dec 31 11:14	23°♐52'15	
	8122 Dec 19 13:48	0°♊		direct	8128 Jan 14 16:18	22°♐33'03	
	8123 Feb 05 23:52	0°♊			8128 Feb 18 20:57	0°♏	
	8123 Mar 30 09:48	0°♏			8128 Apr 16 07:48	0°♏	
desc. node	8123 Apr 24 21:11	13°♏00'23			8128 Jun 03 05:30	0°♎	
	8123 Jun 06 14:46	0°♏			8128 Jul 20 02:57	0°♌	
retrograde	8123 Jul 06 10:42	4°♏39'42			8128 Sep 05 09:27	0°♌	
	8123 Aug 02 22:55	30°♎♏			8128 Oct 23 01:53	0°♊	
opposition	8123 Aug 12 20:22	26°♏29'23	-3°48'51	evening set	8128 Nov 19 11:46	17°♊14'40	
greatest brilliancy	8123 Aug 13 17:22	26°♏09'43	-1.7m		8128 Dec 09 16:12	0°♊	
min. Earth dist.	8123 Aug 19 17:16	23°♏55'03	0.58412 AU	desc. node	8128 Dec 14 12:49	3°♊04'52	
direct	8123 Sep 22 11:01	16°♏47'02		max. Earth dist.	8128 Dec 25 04:04	9°♊50'42	2.67279 AU
	8123 Nov 11 09:20	0°♏					
	8124 Jan 02 15:19	0°♑		conjunction	8129 Jan 03 03:04	15°♊34'00	-0°10'18
	8124 Feb 14 07:04	0°♏		minimum elong	8129 Jan 03 02:45	15°♊33'30	0°10'08
	8124 Mar 24 20:04	0°♐		behind sun begin	8129 Jan 02 12:16	15°♊10'20	
asc. node	8124 Mar 27 09:24	1°♐58'38		behind sun end	8129 Jan 03 17:15	15°♊56'41	
	8124 May 02 10:30	0°♏			8129 Jan 25 13:28	0°♏	
	8124 Jun 10 10:13	0°♏		morning rise	8129 Feb 15 23:19	13°♏56'47	
	8124 Jul 20 16:57	0°♎			8129 Mar 12 06:13	0°♏	
evening set	8124 Aug 29 15:07	28°♎28'18			8129 Apr 25 13:33	0°♑	
	8124 Aug 31 19:47	0°♌			8129 Jun 07 11:44	0°♏	
	8124 Oct 14 22:31	0°♌			8129 Jul 19 06:18	0°♐	
					8129 Aug 29 11:55	0°♏	
conjunction	8124 Oct 21 11:43	4°♌20'55	1°00'32		8129 Oct 10 16:41	0°♏	
minimum elong	8124 Oct 21 12:49	4°♌22'43	1°00'36	asc. node	8129 Nov 17 09:41	24°♏15'26	
max. Earth dist.	8124 Nov 09 21:33	17°♌05'36	2.62377 AU		8129 Nov 27 15:31	0°♎	
	8124 Nov 29 20:13	0°♊		retrograde	8130 Jan 20 18:10	17°♎03'26	
morning rise	8124 Dec 08 08:59	5°♊28'07		min. Earth dist.	8130 Feb 17 13:09	11°♎43'34	0.46185 AU
	8125 Jan 16 04:03	0°♊		greatest brilliancy	8130 Feb 24 10:43	9°♎18'21	-2.4m
	8125 Mar 05 18:08	0°♏		opposition	8130 Feb 26 00:26	8°♎45'06	5°05'17
desc. node	8125 Mar 11 17:58	3°♏38'21		direct	8130 Mar 30 19:15	2°♎00'56	
	8125 Apr 25 05:18	0°♏			8130 Jun 21 02:21	0°♌	
	8125 Jun 19 22:50	0°♑			8130 Aug 13 23:45	0°♌	
retrograde	8125 Aug 29 03:04	21°♑03'41			8130 Oct 03 12:06	0°♊	
opposition	8125 Oct 01 06:05	14°♑42'03	-5°54'06	desc. node	8130 Nov 01 12:39	17°♊43'06	
greatest brilliancy	8125 Oct 03 02:12	14°♑05'46	-2.4m		8130 Nov 21 07:33	0°♊	
min. Earth dist.	8125 Oct 09 19:18	11°♑54'17	0.45298 AU	evening set	8130 Dec 25 11:44	21°♊38'51	
direct	8125 Nov 06 11:22	6°♑56'09			8131 Jan 07 10:00	0°♏	
	8126 Jan 10 19:28	0°♏		max. Earth dist.	8131 Jan 17 23:08	6°♏53'21	2.61545 AU
asc. node	8126 Feb 12 10:34	20°♏57'51					
	8126 Feb 25 09:55	0°♐		conjunction	8131 Feb 09 00:11	21°♏30'47	-0°48'08

minimum elong	8131 Feb 08 22:59	21° \approx 28'46	0°48'01		8136 Mar 14 09:09	0° \mathcal{Z}	
	8131 Feb 21 13:57	0° \mathcal{H}		retrograde	8136 May 13 08:45	16° \mathcal{Z} 15'36	
morning rise	8131 Mar 28 04:05	23° \mathcal{H} 55'37		opposition	8136 Jun 22 12:26	6° \mathcal{Z} 46'39	0°02'10
	8131 Apr 05 18:04	0° \mathcal{Y}		greatest brilliancy	8136 Jun 22 12:35	6° \mathcal{Z} 46'30	-1.3m
	8131 May 17 02:31	0° \mathcal{B}		desc. node	8136 Jun 23 13:29	6° \mathcal{Z} 21'59	
	8131 Jun 26 00:41	0° Π		min. Earth dist.	8136 Jun 24 05:48	6° \mathcal{Z} 05'55	0.67781 AU
	8131 Aug 04 03:02	0° \mathcal{E}			8136 Jul 11 12:34	30° \mathcal{R} \mathcal{A}	
	8131 Sep 12 06:44	0° \mathcal{Q}		direct	8136 Aug 03 00:57	26° \mathcal{A} 47'36	
asc. node	8131 Oct 05 07:40	17° \mathcal{Q} 16'29			8136 Aug 27 05:34	0° \mathcal{Z}	
	8131 Oct 22 18:22	0° \mathcal{M}			8136 Nov 04 05:33	0° \approx	
	8131 Dec 05 21:53	0° \mathcal{L}			8136 Dec 23 05:08	0° \mathcal{H}	
	8132 Feb 01 18:07	0° \mathcal{M}			8137 Feb 04 14:52	0° \mathcal{Y}	
retrograde	8132 Mar 05 06:12	6° \mathcal{M} 22'13			8137 Mar 16 21:48	0° \mathcal{B}	
	8132 Apr 04 21:43	30° \mathcal{R} \mathcal{L}			8137 Apr 24 10:46	0° Π	
min. Earth dist.	8132 Apr 07 22:52	28° \mathcal{L} 50'11	0.59102 AU	asc. node	8137 May 27 02:08	25° Π 50'17	
opposition	8132 Apr 13 20:03	26° \mathcal{L} 31'44	4°39'17	evening set	8137 May 30 17:41	28° Π 43'39	
greatest brilliancy	8132 Apr 12 21:38	26° \mathcal{L} 53'45	-1.7m		8137 Jun 01 08:16	0° \mathcal{E}	
direct	8132 May 21 02:58	17° \mathcal{L} 59'57			8137 Jul 09 13:59	0° \mathcal{Q}	
	8132 Jul 10 14:19	0° \mathcal{M}					
	8132 Sep 09 19:54	0° \mathcal{A}		conjunction	8137 Aug 08 12:38	22° \mathcal{Q} 53'44	0°46'47
desc. node	8132 Sep 18 13:15	4° \mathcal{A} 50'12		minimum elong	8137 Aug 08 09:34	22° \mathcal{Q} 47'58	0°46'38
	8132 Oct 31 17:56	0° \mathcal{Z}			8137 Aug 18 00:14	0° \mathcal{M}	
	8132 Dec 18 20:45	0° \approx		max. Earth dist.	8137 Sep 25 18:05	28° \mathcal{M} 12'51	2.46530 AU
evening set	8133 Feb 01 18:46	29° \approx 48'41			8137 Sep 28 06:28	0° \mathcal{L}	
	8133 Feb 02 01:23	0° \mathcal{H}		morning rise	8137 Oct 10 00:02	8° \mathcal{L} 15'02	
max. Earth dist.	8133 Feb 16 13:11	10° \mathcal{H} 00'30	2.50832 AU		8137 Nov 10 18:57	0° \mathcal{M}	
	8133 Mar 16 16:59	0° \mathcal{Y}			8137 Dec 26 20:37	0° \mathcal{A}	
					8138 Feb 14 04:17	0° \mathcal{Z}	
conjunction	8133 Mar 24 07:51	5° \mathcal{Y} 31'55	-1°06'58		8138 Apr 11 04:43	0° \approx	
minimum elong	8133 Mar 24 07:53	5° \mathcal{Y} 31'58	1°06'59	desc. node	8138 May 11 11:50	12° \approx 35'56	
	8133 Apr 26 06:24	0° \mathcal{B}		retrograde	8138 Jun 19 17:25	20° \approx 13'50	
morning rise	8133 May 20 21:51	18° \mathcal{B} 49'27		opposition	8138 Jul 28 04:54	11° \approx 35'04	-2°43'19
	8133 Jun 04 08:05	0° Π		greatest brilliancy	8138 Jul 28 16:32	11° \approx 23'56	-1.5m
	8133 Jul 12 15:37	0° \mathcal{E}		min. Earth dist.	8138 Aug 02 16:31	9° \approx 29'08	0.62305 AU
	8133 Aug 20 01:23	0° \mathcal{Q}		direct	8138 Sep 07 12:08	1° \approx 37'42	
asc. node	8133 Aug 22 05:30	1° \mathcal{Q} 40'45			8138 Nov 26 22:16	0° \mathcal{H}	
	8133 Sep 28 11:54	0° \mathcal{M}			8139 Jan 13 00:10	0° \mathcal{Y}	
	8133 Nov 09 01:26	0° \mathcal{L}			8139 Feb 23 10:29	0° \mathcal{B}	
	8133 Dec 24 11:33	0° \mathcal{M}			8139 Apr 03 11:08	0° Π	
	8134 Feb 17 14:41	0° \mathcal{A}		asc. node	8139 Apr 14 03:17	8° Π 21'17	
retrograde	8134 Apr 10 04:24	13° \mathcal{A} 18'18			8139 May 11 17:12	0° \mathcal{E}	
min. Earth dist.	8134 May 18 15:45	4° \mathcal{A} 12'06	0.66684 AU		8139 Jun 19 08:51	0° \mathcal{Q}	
opposition	8134 May 20 17:36	3° \mathcal{A} 22'28	2°33'49		8139 Jul 29 07:09	0° \mathcal{M}	
greatest brilliancy	8134 May 20 13:27	3° \mathcal{A} 26'35	-1.4m	evening set	8139 Aug 08 22:09	7° \mathcal{M} 46'12	
	8134 May 29 10:59	30° \mathcal{R} \mathcal{M}			8139 Sep 09 01:40	0° \mathcal{L}	
direct	8134 Jun 29 20:28	23° \mathcal{M} 52'18					
	8134 Aug 03 15:36	0° \mathcal{A}		conjunction	8139 Oct 04 21:30	17° \mathcal{L} 50'35	1°06'15
desc. node	8134 Aug 06 13:41	0° \mathcal{A} 57'01		minimum elong	8139 Oct 04 22:00	17° \mathcal{L} 51'25	1°06'17
	8134 Oct 08 20:24	0° \mathcal{Z}			8139 Oct 22 21:52	0° \mathcal{M}	
	8134 Nov 28 23:38	0° \approx		max. Earth dist.	8139 Oct 31 09:49	5° \mathcal{M} 39'37	2.58844 AU
	8135 Jan 13 23:40	0° \mathcal{H}		morning rise	8139 Nov 24 11:20	21° \mathcal{M} 26'47	
	8135 Feb 25 14:28	0° \mathcal{Y}			8139 Dec 07 17:15	0° \mathcal{A}	
evening set	8135 Mar 23 11:15	19° \mathcal{Y} 08'23			8140 Jan 24 07:19	0° \mathcal{Z}	
	8135 Apr 06 18:57	0° \mathcal{B}			8140 Mar 13 20:51	0° \approx	
max. Earth dist.	8135 Apr 22 16:00	12° \mathcal{B} 13'22	2.37783 AU	desc. node	8140 Mar 28 08:25	8° \approx 27'01	
	8135 May 15 10:02	0° Π			8140 May 06 06:29	0° \mathcal{H}	
					8140 Jul 22 02:25	0° \mathcal{Y}	
conjunction	8135 May 25 13:05	7° Π 58'59	-0°31'35	retrograde	8140 Aug 05 05:46	1° \mathcal{Y} 08'43	
minimum elong	8135 May 25 15:54	8° Π 04'32	0°31'41		8140 Aug 18 18:01	30° \mathcal{R} \mathcal{H}	
	8135 Jun 22 08:59	0° \mathcal{E}		opposition	8140 Sep 09 07:13	23° \mathcal{H} 57'44	-5°21'22
asc. node	8135 Jul 10 02:12	13° \mathcal{E} 59'03		greatest brilliancy	8140 Sep 10 21:16	23° \mathcal{H} 24'11	-2.1m
	8135 Jul 30 13:18	0° \mathcal{Q}		min. Earth dist.	8140 Sep 17 18:49	20° \mathcal{H} 58'43	0.50787 AU
morning rise	8135 Aug 06 09:09	5° \mathcal{Q} 17'38		direct	8140 Oct 17 19:43	15° \mathcal{H} 08'50	
	8135 Sep 07 19:31	0° \mathcal{M}			8140 Dec 08 05:54	0° \mathcal{Y}	
	8135 Oct 18 22:22	0° \mathcal{L}			8141 Jan 26 13:38	0° \mathcal{B}	
	8135 Dec 01 16:33	0° \mathcal{M}		asc. node	8141 Mar 01 03:00	24° \mathcal{B} 01'13	
	8136 Jan 18 07:12	0° \mathcal{A}			8141 Mar 09 04:19	0° Π	

	8141 Apr 17 21:51	0°☿		minimum elong	8146 Jan 25 03:00	7°≈07'29	0°34'24
	8141 May 27 18:08	0°♈			8146 Feb 28 12:31	0°♈	
	8141 Jul 07 19:09	0°♉		morning rise	8146 Mar 11 11:20	7°♈25'51	
	8141 Aug 19 14:00	0°♊			8146 Apr 13 01:22	0°♉	
evening set	8141 Sep 27 13:13	26°♊15'23			8146 May 24 21:38	0°♊	
	8141 Oct 03 05:08	0°♋			8146 Jul 04 08:56	0°♋	
					8146 Aug 13 00:46	0°☿	
conjunction	8141 Nov 15 02:45	27°♋54'32	0°43'38		8146 Sep 21 20:04	0°♈	
minimum elong	8141 Nov 15 03:54	27°♋56'23	0°43'45	asc. node	8146 Oct 22 00:53	22°♈00'08	
	8141 Nov 18 08:54	0°♉			8146 Nov 02 11:10	0°♉	
max. Earth dist.	8141 Nov 24 19:08	4°♉07'03	2.66187 AU		8146 Dec 20 06:49	0°♊	
morning rise	8141 Dec 30 08:04	26°♉43'26		retrograde	8147 Feb 18 11:32	19°♊30'04	
	8142 Jan 04 12:20	0°♊		min. Earth dist.	8147 Mar 21 21:24	12°♊46'23	0.54505 AU
desc. node	8142 Feb 13 05:16	25°♊01'15		greatest brilliancy	8147 Mar 27 20:17	10°♊29'48	-1.9m
	8142 Feb 21 03:35	0°♋		opposition	8147 Mar 29 03:20	10°♊00'01	5°10'43
	8142 Apr 10 03:04	0°♌		direct	8147 May 03 21:15	2°♊03'00	
	8142 May 28 22:02	0°♍			8147 Jul 27 04:00	0°♋	
	8142 Jul 19 10:19	0°♎			8147 Sep 19 22:53	0°♌	
	8142 Sep 29 21:07	0°♏		desc. node	8147 Oct 06 02:40	9°♌25'38	
retrograde	8142 Oct 14 10:53	1°♏17'07			8147 Nov 09 07:04	0°♍	
	8142 Oct 28 17:48	30°♏♎			8147 Dec 26 21:50	0°≈	
opposition	8142 Nov 13 14:25	26°♏12'56	-4°26'42	evening set	8148 Jan 17 16:45	14°≈16'55	
greatest brilliancy	8142 Nov 14 13:10	25°♏57'16	-2.9m	max. Earth dist.	8148 Feb 04 04:30	26°≈00'58	2.55563 AU
min. Earth dist.	8142 Nov 18 08:03	24°♏54'55	0.38108 AU		8148 Feb 10 01:02	0°♌	
direct	8142 Dec 14 21:59	20°♏38'08					
asc. node	8143 Jan 17 02:45	27°♏35'43		conjunction	8148 Mar 05 14:06	17°♏00'34	-1°03'38
	8143 Jan 22 23:40	0°♏		minimum elong	8148 Mar 05 13:12	16°♏58'59	1°03'35
	8143 Mar 17 08:41	0°☿			8148 Mar 23 20:39	0°♍	
	8143 May 01 10:19	0°♈		morning rise	8148 Apr 26 21:03	24°♍54'38	
	8143 Jun 14 16:50	0°♉			8148 May 03 16:20	0°♎	
	8143 Jul 29 18:11	0°♊			8148 Jun 12 00:36	0°♏	
	8143 Sep 13 23:10	0°♋			8148 Jul 20 13:46	0°☿	
	8143 Oct 31 01:11	0°♌			8148 Aug 28 04:00	0°♈	
evening set	8143 Nov 06 07:06	3°♌57'24		asc. node	8148 Sep 07 22:13	8°♈15'17	
max. Earth dist.	8143 Dec 17 07:47	29°♌56'58	2.68051 AU		8148 Oct 06 19:50	0°♉	
	8143 Dec 17 09:42	0°♍			8148 Nov 17 21:38	0°♊	
					8149 Jan 04 02:41	0°♋	
conjunction	8143 Dec 21 09:35	2°♍32'15	0°05'40	retrograde	8149 Mar 27 17:42	29°♋56'27	
minimum elong	8143 Dec 21 09:44	2°♍32'30	0°05'50	min. Earth dist.	8149 May 03 12:20	21°♋22'38	0.64477 AU
behind sun begin	8143 Dec 20 16:21	2°♍04'53		opposition	8149 May 07 02:03	19°♋57'22	3°27'02
behind sun end	8143 Dec 22 03:08	3°♍00'06		greatest brilliancy	8149 May 06 16:06	20°♋07'17	-1.4m
desc. node	8144 Jan 01 03:27	9°♍22'15		direct	8149 Jun 15 06:13	10°♋45'54	
	8144 Feb 02 08:51	0°≈			8149 Aug 21 23:51	0°♌	
morning rise	8144 Feb 03 00:37	0°≈25'24		desc. node	8149 Aug 23 03:00	0°♌31'25	
	8144 Mar 19 11:21	0°♍			8149 Oct 18 02:29	0°♎	
	8144 May 03 12:41	0°♍			8149 Dec 06 16:23	0°≈	
	8144 Jun 16 13:14	0°♎			8150 Jan 21 06:29	0°♏	
	8144 Jul 29 19:57	0°♏		evening set	8150 Mar 02 03:51	28°♏02'18	
	8144 Sep 11 07:28	0°☿			8150 Mar 04 20:49	0°♍	
	8144 Oct 28 12:43	0°♈		max. Earth dist.	8150 Mar 17 05:18	9°♍02'27	2.42670 AU
asc. node	8144 Dec 04 03:35	17°♈01'27			8150 Apr 14 04:10	0°♎	
retrograde	8144 Dec 29 12:31	21°♈23'13					
min. Earth dist.	8145 Jan 24 15:44	16°♈49'26	0.40957 AU	conjunction	8150 Apr 28 06:58	10°♎48'58	-0°54'40
greatest brilliancy	8145 Jan 31 02:53	14°♈47'19	-2.7m	minimum elong	8150 Apr 28 09:27	10°♎53'46	0°54'45
opposition	8145 Feb 01 06:20	14°♈25'30	3°48'55		8150 May 22 22:44	0°♏	
direct	8145 Mar 04 02:46	8°♈38'40			8150 Jun 30 00:11	0°☿	
	8145 May 10 17:27	0°♉		morning rise	8150 Jul 05 15:39	4°☿27'24	
	8145 Jul 03 18:52	0°♊		asc. node	8150 Jul 26 20:54	21°☿08'27	
	8145 Aug 22 22:32	0°♋			8150 Aug 07 05:21	0°♌	
	8145 Oct 11 00:42	0°♌			8150 Sep 15 11:26	0°♍	
desc. node	8145 Nov 18 02:35	23°♌38'01			8150 Oct 26 15:20	0°♎	
	8145 Nov 28 05:58	0°♍			8150 Dec 09 17:27	0°♏	
evening set	8145 Dec 11 08:40	8°♍17'02			8151 Jan 27 18:31	0°♌	
max. Earth dist.	8146 Jan 08 08:08	26°♍11'51	2.64414 AU		8151 Apr 04 20:23	0°♎	
	8146 Jan 14 04:57	0°≈		retrograde	8151 Apr 30 23:45	3°♎47'36	
					8151 May 25 06:27	30°♎♌	
conjunction	8146 Jan 25 03:58	7°≈09'04	-0°34'33	opposition	8151 Jun 10 10:44	24°♌05'32	1°02'42

greatest brilliancy	8151 Jun 10 11:14	24° \mathring{A} 05'02	-1.3m		8156 Jul 15 16:27	0° \mathring{M}	
min. Earth dist.	8151 Jun 10 16:40	23° \mathring{A} 59'39	0.68135 AU		8156 Aug 26 23:22	0° \mathring{A}	
desc. node	8151 Jul 11 02:59	14° \mathring{A} 55'53		evening set	8156 Sep 09 16:30	9° \mathring{A} 26'21	
direct	8151 Jul 21 14:10	14° \mathring{A} 14'42			8156 Oct 10 05:09	0° \mathring{M}	
	8151 Sep 19 03:38	0° \mathring{Z}					
	8151 Nov 14 22:46	0° \approx		conjunction	8156 Oct 30 18:17	13° \mathring{M} 32'15	0°55'13
	8152 Jan 01 07:59	0° \mathring{H}		minimum elong	8156 Oct 30 19:30	13° \mathring{M} 34'15	0°55'18
	8152 Feb 13 07:41	0° \mathring{Y}		max. Earth dist.	8156 Nov 15 13:18	23° \mathring{M} 48'09	2.63967 AU
	8152 Mar 24 12:36	0° \mathring{B}			8156 Nov 25 03:56	0° \mathring{A}	
evening set	8152 May 01 08:11	29° \mathring{B} 25'23		morning rise	8156 Dec 16 12:29	13° \mathring{A} 39'05	
	8152 May 02 01:45	0° \mathring{I}			8157 Jan 11 09:07	0° \mathring{Z}	
	8152 Jun 08 23:12	0° \mathring{G}			8157 Feb 28 12:56	0° \approx	
asc. node	8152 Jun 12 19:13	3° \mathring{G} 02'06		desc. node	8157 Mar 01 20:19	0° \approx 48'21	
					8157 Apr 18 21:06	0° \mathring{H}	
conjunction	8152 Jul 10 18:59	25° \mathring{G} 03'04	0°19'48		8157 Jun 10 01:21	0° \mathring{Y}	
minimum elong	8152 Jul 10 16:56	24° \mathring{G} 59'03	0°19'37		8157 Aug 15 17:34	0° \mathring{B}	
	8152 Jul 17 03:29	0° \mathring{Q}		retrograde	8157 Sep 13 11:26	4° \mathring{B} 33'52	
	8152 Aug 25 10:57	0° \mathring{M}			8157 Oct 11 06:38	30° \mathring{R} \mathring{Y}	
max. Earth dist.	8152 Sep 02 02:06	5° \mathring{M} 40'51	2.40921 AU	opposition	8157 Oct 15 13:02	28° \mathring{Y} 42'08	-5°49'14
morning rise	8152 Sep 17 11:47	16° \mathring{M} 59'28		greatest brilliancy	8157 Oct 17 06:34	28° \mathring{Y} 09'49	-2.6m
	8152 Oct 05 14:10	0° \mathring{A}		min. Earth dist.	8157 Oct 23 10:31	26° \mathring{Y} 16'07	0.42366 AU
	8152 Nov 18 01:57	0° \mathring{M}		direct	8157 Nov 19 01:37	21° \mathring{Y} 42'05	
	8153 Jan 03 11:32	0° \mathring{A}			8157 Dec 25 08:23	0° \mathring{B}	
	8153 Feb 23 05:56	0° \mathring{Z}		asc. node	8158 Feb 02 19:19	21° \mathring{B} 12'15	
	8153 Apr 28 19:32	0° \approx			8158 Feb 16 10:35	0° \mathring{I}	
desc. node	8153 May 28 01:39	6° \approx 28'04			8158 Mar 31 15:31	0° \mathring{G}	
retrograde	8153 Jun 04 11:15	6° \approx 47'32			8158 May 12 11:36	0° \mathring{Q}	
	8153 Jul 07 21:51	30° \mathring{R} \mathring{Z}			8158 Jun 23 23:02	0° \mathring{M}	
opposition	8153 Jul 13 18:32	27° \mathring{Z} 45'53	-1°38'07		8158 Aug 06 20:22	0° \mathring{A}	
greatest brilliancy	8153 Jul 13 23:28	27° \mathring{Z} 41'06	-1.4m		8158 Sep 21 06:44	0° \mathring{M}	
min. Earth dist.	8153 Jul 17 19:20	26° \mathring{Z} 11'54	0.65218 AU	evening set	8158 Oct 22 14:02	20° \mathring{M} 12'02	
direct	8153 Aug 24 09:17	17° \mathring{Z} 42'54			8158 Nov 06 21:53	0° \mathring{A}	
	8153 Oct 13 06:21	0° \approx					
	8153 Dec 08 02:34	0° \mathring{H}		conjunction	8158 Dec 07 14:33	19° \mathring{A} 31'16	0°21'12
	8154 Jan 22 01:44	0° \mathring{Y}		minimum elong	8158 Dec 07 15:11	19° \mathring{A} 32'16	0°21'21
	8154 Mar 03 20:42	0° \mathring{B}		max. Earth dist.	8158 Dec 08 14:35	20° \mathring{A} 09'24	2.67992 AU
	8154 Apr 11 14:34	0° \mathring{I}			8158 Dec 24 02:52	0° \mathring{Z}	
asc. node	8154 Apr 30 18:28	15° \mathring{I} 05'53		desc. node	8159 Jan 17 17:38	15° \mathring{Z} 38'21	
	8154 May 19 15:47	0° \mathring{G}		morning rise	8159 Jan 20 11:30	17° \mathring{Z} 23'08	
	8154 Jun 27 02:09	0° \mathring{Q}			8159 Feb 09 06:12	0° \approx	
evening set	8154 Jul 14 21:35	13° \mathring{Q} 36'51			8159 Mar 27 22:06	0° \mathring{H}	
	8154 Aug 05 18:22	0° \mathring{M}			8159 May 13 00:04	0° \mathring{Y}	
					8159 Jun 27 16:26	0° \mathring{B}	
conjunction	8154 Sep 14 23:48	29° \mathring{M} 05'30	1°05'55		8159 Aug 12 17:14	0° \mathring{I}	
minimum elong	8154 Sep 14 23:04	29° \mathring{M} 04'12	1°05'55		8159 Oct 01 06:28	0° \mathring{G}	
	8154 Sep 16 06:42	0° \mathring{A}		retrograde	8159 Dec 03 17:14	21° \mathring{G} 11'55	
max. Earth dist.	8154 Oct 19 10:43	22° \mathring{A} 56'03	2.54543 AU	asc. node	8159 Dec 21 18:52	19° \mathring{G} 02'26	
	8154 Oct 29 22:08	0° \mathring{M}		min. Earth dist.	8159 Dec 30 12:22	16° \mathring{G} 49'32	0.37344 AU
morning rise	8154 Nov 08 06:06	6° \mathring{M} 13'38		opposition	8160 Jan 03 16:56	15° \mathring{G} 40'04	0°58'48
	8154 Dec 14 17:22	0° \mathring{A}		greatest brilliancy	8160 Jan 03 12:16	15° \mathring{G} 43'18	-3.0m
	8155 Jan 31 17:38	0° \mathring{Z}		direct	8160 Feb 02 00:44	10° \mathring{G} 40'41	
	8155 Mar 23 19:02	0° \approx			8160 Apr 04 00:38	0° \mathring{Q}	
desc. node	8155 Apr 14 23:08	12° \approx 05'05			8160 May 26 13:14	0° \mathring{M}	
	8155 May 22 03:46	0° \mathring{H}			8160 Jul 14 02:01	0° \mathring{A}	
retrograde	8155 Jul 16 20:07	14° \mathring{H} 01'38			8160 Aug 31 03:41	0° \mathring{M}	
opposition	8155 Aug 22 12:17	6° \mathring{H} 10'04	-4°25'13		8160 Oct 18 06:11	0° \mathring{A}	
greatest brilliancy	8155 Aug 23 15:27	5° \mathring{H} 45'02	-1.8m	evening set	8160 Nov 27 10:52	25° \mathring{A} 12'08	
min. Earth dist.	8155 Aug 30 01:34	3° \mathring{H} 23'14	0.55908 AU	desc. node	8160 Dec 04 16:04	29° \mathring{A} 45'31	
	8155 Sep 09 07:44	30° \mathring{R} \approx			8160 Dec 05 01:13	0° \mathring{Z}	
direct	8155 Oct 01 13:15	26° \approx 41'31		max. Earth dist.	8160 Dec 30 08:03	16° \mathring{Z} 04'46	2.66502 AU
	8155 Oct 24 15:02	0° \mathring{H}					
	8155 Dec 26 00:02	0° \mathring{Y}		conjunction	8161 Jan 11 00:12	23° \mathring{Z} 34'29	-0°19'28
	8156 Feb 08 01:04	0° \mathring{B}		minimum elong	8161 Jan 10 23:38	23° \mathring{Z} 33'34	0°19'18
asc. node	8156 Mar 17 19:35	29° \mathring{B} 00'36			8161 Jan 20 22:54	0° \approx	
	8156 Mar 19 02:38	0° \mathring{I}		morning rise	8161 Feb 24 04:44	22° \approx 27'06	
	8156 Apr 27 00:11	0° \mathring{G}			8161 Mar 07 12:27	0° \mathring{H}	
	8156 Jun 05 05:06	0° \mathring{Q}			8161 Apr 20 13:02	0° \mathring{Y}	

	8161 Jun 02 01:12	0°♄		greatest brilliancy	8166 May 28 06:31	11°♂20'03	-1.3m
	8161 Jul 13 06:51	0°♂		direct	8166 Jul 07 20:56	1°♂39'42	
	8161 Aug 22 19:21	0°♄		desc. node	8166 Jul 27 16:22	3°♂49'42	
	8161 Oct 02 18:43	0°♂			8166 Oct 01 22:40	0°♄	
asc. node	8161 Nov 07 19:04	24°♂45'54			8166 Nov 23 14:16	0°♄	
	8161 Nov 16 00:04	0°♄			8167 Jan 09 01:10	0°♄	
	8162 Jan 28 09:11	0°♄			8167 Feb 20 19:29	0°♄	
retrograde	8162 Jan 31 21:25	0°♄05'24			8167 Apr 02 00:27	0°♄	
	8162 Feb 04 09:13	30°♄		evening set	8167 Apr 05 19:40	2°♄54'42	
min. Earth dist.	8162 Mar 01 21:26	24°♄16'02	0.49222 AU		8167 May 10 14:51	0°♂	
greatest brilliancy	8162 Mar 08 14:55	21°♄48'50	-2.2m				
opposition	8162 Mar 10 04:22	21°♄14'31	5°19'12	conjunction	8167 Jun 11 05:22	24°♂59'49	-0°13'52
direct	8162 Apr 13 02:19	14°♄01'41		minimum elong	8167 Jun 11 06:53	25°♂02'48	0°13'59
	8162 Jun 10 11:32	0°♄		behind sun begin	8167 Jun 10 15:27	24°♂32'16	
	8162 Aug 07 12:15	0°♄		behind sun end	8167 Jun 11 22:18	25°♂33'20	
	8162 Sep 28 05:03	0°♄			8167 Jun 17 12:59	0°♄	
desc. node	8162 Oct 22 15:42	14°♂43'20		max. Earth dist.	8167 Jun 25 12:37	6°♄19'05	2.36621 AU
	8162 Nov 16 12:09	0°♄		asc. node	8167 Jun 30 11:52	10°♄14'35	
evening set	8163 Jan 02 17:43	29°♄58'15			8167 Jul 25 16:35	0°♂	
	8163 Jan 02 18:48	0°♄		morning rise	8167 Aug 23 01:20	21°♂48'21	
max. Earth dist.	8163 Jan 23 22:41	13°♄52'48	2.59621 AU		8167 Sep 02 22:11	0°♄	
	8163 Feb 16 22:42	0°♄			8167 Oct 13 23:52	0°♄	
					8167 Nov 26 13:40	0°♄	
conjunction	8163 Feb 17 21:21	0°♄38'34	-0°54'54		8168 Jan 12 13:40	0°♄	
minimum elong	8163 Feb 17 20:09	0°♄36'31	0°54'48		8168 Mar 05 21:26	0°♄	
	8163 Apr 01 00:05	0°♄		retrograde	8168 May 21 05:30	23°♄57'25	
morning rise	8163 Apr 07 12:10	4°♄39'19		desc. node	8168 Jun 13 16:24	20°♄28'54	
	8163 May 12 04:09	0°♄		opposition	8168 Jun 30 03:21	14°♄37'21	-0°34'22
	8163 Jun 20 21:17	0°♂		greatest brilliancy	8168 Jun 30 04:23	14°♄36'20	-1.3m
	8163 Jul 29 18:36	0°♄		min. Earth dist.	8168 Jul 02 16:41	13°♄37'13	0.67137 AU
	8163 Sep 06 16:19	0°♂		direct	8168 Aug 10 18:13	4°♄35'33	
asc. node	8163 Sep 25 16:47	14°♂24'40			8168 Oct 27 21:08	0°♄	
	8163 Oct 16 18:05	0°♄			8168 Dec 17 13:02	0°♄	
	8163 Nov 28 19:36	0°♄			8169 Jan 30 10:19	0°♄	
	8164 Jan 19 03:13	0°♄			8169 Mar 11 21:22	0°♄	
retrograde	8164 Mar 13 16:49	15°♄36'25			8169 Apr 19 12:03	0°♂	
min. Earth dist.	8164 Apr 17 13:03	7°♄40'37	0.61257 AU	asc. node	8169 May 17 11:38	22°♂07'15	
opposition	8164 Apr 22 14:34	5°♄40'32	4°15'18	greatest brilliancy	8169 May 20 21:22	24°♂48'58	1.2m
greatest brilliancy	8164 Apr 21 20:59	5°♄57'55	-1.6m		8169 May 27 10:42	0°♄	
	8164 May 08 16:38	30°♄		evening set	8169 Jun 16 12:21	15°♄48'24	
direct	8164 May 30 14:40	26°♄52'55			8169 Jul 04 17:29	0°♂	
	8164 Jun 23 10:26	0°♄			8169 Aug 13 04:51	0°♄	
	8164 Sep 03 02:25	0°♄					
desc. node	8164 Sep 08 15:51	2°♄56'39		conjunction	8169 Aug 23 00:48	7°♄16'32	0°56'52
	8164 Oct 26 10:40	0°♄		minimum elong	8169 Aug 22 22:24	7°♄12'07	0°56'46
	8164 Dec 14 00:52	0°♄			8169 Sep 23 12:04	0°♄	
	8165 Jan 28 09:04	0°♄		max. Earth dist.	8169 Oct 05 08:39	8°♄20'17	2.49518 AU
evening set	8165 Feb 11 12:34	9°♄45'29		morning rise	8169 Oct 21 05:44	19°♄18'41	
max. Earth dist.	8165 Feb 25 06:47	19°♄26'08	2.47990 AU		8169 Nov 06 00:03	0°♄	
	8165 Mar 12 00:36	0°♄			8169 Dec 21 21:34	0°♄	
					8170 Feb 08 14:08	0°♄	
conjunction	8165 Apr 05 00:42	17°♄37'32	-1°05'27		8170 Apr 03 03:15	0°♄	
minimum elong	8165 Apr 05 01:33	17°♄39'06	1°05'29	desc. node	8170 May 01 14:14	13°♄37'48	
	8165 Apr 21 12:03	0°♄		retrograde	8170 Jun 29 00:21	28°♄47'40	
	8165 May 30 11:08	0°♂		opposition	8170 Aug 05 22:28	20°♄23'59	-3°21'18
morning rise	8165 Jun 05 07:07	4°♂33'23		greatest brilliancy	8170 Aug 06 15:11	20°♄08'10	-1.6m
	8165 Jul 07 16:18	0°♄		min. Earth dist.	8170 Aug 12 05:03	18°♄01'24	0.60262 AU
greatest brilliancy	8165 Jul 26 07:56	14°♄39'26	1.2m	direct	8170 Sep 15 21:52	10°♄33'22	
asc. node	8165 Aug 12 13:10	28°♄06'01			8170 Nov 18 02:05	0°♄	
	8165 Aug 14 23:52	0°♂			8171 Jan 06 15:27	0°♄	
	8165 Sep 23 07:44	0°♄			8171 Feb 17 17:54	0°♄	
	8165 Nov 03 15:53	0°♄			8171 Mar 29 01:18	0°♂	
	8165 Dec 18 09:23	0°♄		asc. node	8171 Apr 04 10:50	4°♂58'32	
	8166 Feb 08 05:02	0°♄			8171 May 06 11:42	0°♄	
retrograde	8166 Apr 17 18:58	21°♄10'05			8171 Jun 14 06:57	0°♂	
min. Earth dist.	8166 May 27 02:33	11°♄47'53	0.67474 AU		8171 Jul 24 08:41	0°♄	
opposition	8166 May 28 08:18	11°♄18'17	2°01'00	evening set	8171 Aug 21 14:07	20°♄21'47	

	8171 Sep 04 06:31	0°♄			8176 Jun 10 15:33	0°♄	
conjunction	8171 Oct 15 03:03	27°♄56'32 1°03'31			8176 Jul 23 00:27	0°♄	
minimum elong	8171 Oct 15 03:58	27°♄58'04 1°03'35			8176 Sep 03 01:13	0°♄	
	8171 Oct 18 04:54	0°♄	asc. node		8176 Oct 16 16:08	0°♄	
max. Earth dist.	8171 Nov 06 12:44	12°♄47'42 2.60902 AU			8176 Nov 24 11:56	22°♄55'47	
morning rise	8171 Dec 03 02:16	0°♄03'04	retrograde		8176 Dec 10 04:17	0°♄	
	8171 Dec 03 00:21	0°♄	min. Earth dist.		8177 Jan 11 12:41	6°♄54'07	
	8172 Jan 19 09:40	0°♄			8177 Feb 07 10:11	1°♄57'28 0.43749 AU	
	8172 Mar 08 08:00	0°♄	greatest brilliancy		8177 Feb 13 06:16	30°♄♄	
desc. node	8172 Mar 18 10:48	6°♄03'11	opposition		8177 Feb 14 07:13	29°♄38'48 -2.5m	
	8172 Apr 28 19:37	0°♄	direct		8177 Feb 15 18:35	29°♄08'52 4°42'50	
	8172 Jun 27 18:23	0°♄			8177 Mar 19 15:23	22°♄49'59	
retrograde	8172 Aug 18 04:39	12°♄27'24			8177 Apr 24 15:04	0°♄	
opposition	8172 Sep 21 04:59	5°♄42'28 -5°44'09			8177 Jun 26 03:02	0°♄	
greatest brilliancy	8172 Sep 22 23:31	5°♄06'11 -2.2m			8177 Aug 17 02:43	0°♄	
min. Earth dist.	8172 Sep 29 20:53	2°♄45'59 0.47766 AU	desc. node		8177 Oct 05 22:57	0°♄	
	8172 Oct 09 04:46	30°♄♄			8177 Nov 08 04:51	20°♄27'05	
direct	8172 Oct 28 13:08	27°♄24'57	evening set		8177 Nov 23 12:21	0°♄	
	8172 Nov 17 04:58	0°♄			8177 Dec 19 09:35	16°♄21'59	
	8173 Jan 17 20:43	0°♄	max. Earth dist.		8178 Jan 09 13:57	0°♄	
asc. node	8173 Feb 19 11:53	22°♄15'17			8178 Jan 13 21:42	2°♄48'40 2.62936 AU	
	8173 Mar 02 05:42	0°♄	conjunction		8178 Feb 02 12:36	15°♄42'32 -0°42'43	
	8173 Apr 11 17:36	0°♄	minimum elong		8178 Feb 02 11:28	15°♄40'40 0°42'35	
	8173 May 22 01:38	0°♄			8178 Feb 23 20:34	0°♄	
	8173 Jul 02 11:30	0°♄	morning rise		8178 Mar 20 17:52	17°♄03'17	
	8173 Aug 14 13:37	0°♄			8178 Apr 08 05:29	0°♄	
	8173 Sep 28 10:03	0°♄			8178 May 19 19:55	0°♄	
evening set	8173 Oct 07 00:23	5°♄37'53			8178 Jun 29 00:05	0°♄	
	8173 Nov 13 16:59	0°♄			8178 Aug 07 08:07	0°♄	
					8178 Sep 15 17:18	0°♄	
conjunction	8173 Nov 23 11:39	6°♄15'20 0°35'48	asc. node		8178 Oct 12 09:33	19°♄48'35	
minimum elong	8173 Nov 23 12:40	6°♄16'56 0°35'56			8178 Oct 26 13:14	0°♄	
max. Earth dist.	8173 Nov 29 23:33	10°♄23'55 2.67076 AU			8178 Dec 10 17:07	0°♄	
	8173 Dec 30 20:12	0°♄	retrograde		8179 Feb 27 16:20	29°♄50'11	
morning rise	8174 Jan 07 01:46	4°♄34'47	min. Earth dist.		8179 Apr 01 09:03	22°♄38'34 0.57146 AU	
desc. node	8174 Feb 03 08:07	21°♄49'42	opposition		8179 Apr 07 21:01	20°♄06'56 4°54'57	
	8174 Feb 16 06:10	0°♄	greatest brilliancy		8179 Apr 06 18:47	20°♄32'31 -1.8m	
	8174 Apr 04 16:24	0°♄	direct		8179 May 14 11:55	11°♄49'29	
	8174 May 22 06:32	0°♄			8179 Jul 18 01:33	0°♄	
	8174 Jul 09 20:49	0°♄			8179 Sep 13 23:54	0°♄	
	8174 Sep 01 01:59	0°♄	desc. node		8179 Sep 26 05:35	6°♄57'04	
retrograde	8174 Nov 01 20:17	18°♄51'11			8179 Nov 04 05:18	0°♄	
opposition	8174 Dec 01 16:33	13°♄56'06 -2°46'42			8179 Dec 22 03:42	0°♄	
greatest brilliancy	8174 Dec 02 00:28	13°♄50'49 -3.0m	evening set		8180 Jan 26 16:55	23°♄26'19	
min. Earth dist.	8174 Dec 03 09:30	13°♄28'48 0.36859 AU			8180 Feb 05 09:00	0°♄	
direct	8174 Dec 31 17:01	8°♄52'43	max. Earth dist.		8180 Feb 11 12:32	4°♄12'49 2.53026 AU	
asc. node	8175 Jan 07 12:57	9°♄11'56					
	8175 Mar 04 23:44	0°♄	conjunction		8180 Mar 15 22:10	27°♄40'57 -1°06'24	
	8175 Apr 23 07:51	0°♄	minimum elong		8180 Mar 15 21:42	27°♄40'07 1°06'23	
	8175 Jun 08 05:44	0°♄			8180 Mar 19 03:35	0°♄	
	8175 Jul 24 04:16	0°♄			8180 Apr 28 20:50	0°♄	
	8175 Sep 08 21:36	0°♄	morning rise		8180 May 09 21:52	8°♄21'18	
	8175 Oct 26 06:54	0°♄			8180 Jun 07 01:59	0°♄	
evening set	8175 Nov 14 11:11	12°♄05'56			8180 Jul 15 12:11	0°♄	
	8175 Dec 12 18:36	0°♄			8180 Aug 22 23:27	0°♄	
max. Earth dist.	8175 Dec 22 10:19	6°♄07'51 2.67738 AU	asc. node		8180 Aug 29 07:37	4°♄53'33	
desc. node	8175 Dec 22 05:40	6°♄00'26			8180 Oct 01 10:52	0°♄	
					8180 Nov 12 03:13	0°♄	
conjunction	8175 Dec 29 05:55	10°♄28'14 -0°03'44			8180 Dec 28 01:01	0°♄	
minimum elong	8175 Dec 29 05:47	10°♄28'01 0°03'34			8181 Feb 24 17:51	0°♄	
behind sun begin	8175 Dec 28 11:42	9°♄59'14	retrograde		8181 Apr 04 12:09	8°♄09'19	
behind sun end	8175 Dec 29 23:52	10°♄56'48			8181 May 10 10:12	30°♄♄	
	8176 Jan 28 16:57	0°♄	min. Earth dist.		8181 May 12 05:58	29°♄16'42 0.65814 AU	
morning rise	8176 Feb 10 22:11	8°♄33'36	opposition		8181 May 14 23:29	28°♄11'25 2°56'32	
	8176 Mar 14 14:32	0°♄	greatest brilliancy		8181 May 14 17:04	28°♄17'48 -1.4m	
	8176 Apr 28 06:01	0°♄	direct		8181 Jun 23 16:21	18°♄48'59	

	8181 Aug 11 16:32	0°♊			8186 Sep 11 12:08	0°♎	
desc. node	8181 Aug 13 06:19	0°♊37'17					
	8181 Oct 12 02:12	0°♎	conjunction	8186 Sep 26 14:41	10°♎32'23	1°06'58	
	8181 Dec 01 13:47	0°♎	minimum elong	8186 Sep 26 14:43	10°♎32'27	1°07'00	
	8182 Jan 16 10:53	0°♋		8186 Oct 25 04:39	0°♎		
	8182 Feb 28 02:45	0°♊	max. Earth dist.	8186 Oct 26 12:32	0°♎53'25	2.57010 AU	
evening set	8182 Mar 13 20:19	10°♊03'30	morning rise	8186 Nov 17 16:37	15°♎34'18		
max. Earth dist.	8182 Apr 03 04:28	25°♊16'52		8186 Dec 09 22:34	0°♊		
	8182 Apr 09 09:31	0°♋		8187 Jan 26 15:22	0°♎		
				8187 Mar 17 17:10	0°♎		
conjunction	8182 May 13 04:10	26°♋07'47 -0°43'03	desc. node	8187 Apr 05 01:16	10°♎26'50		
minimum elong	8182 May 13 07:10	26°♋13'40 0°43'09		8187 May 11 22:53	0°♋		
	8182 May 18 02:37	0°♌	retrograde	8187 Jul 28 01:11	23°♋56'57		
	8182 Jun 25 02:47	0°♍	opposition	8187 Sep 01 20:21	16°♋26'46	-4°58'47	
asc. node	8182 Jul 17 04:16	17°♍23'49	greatest brilliancy	8187 Sep 03 05:49	15°♋56'33	-1.9m	
morning rise	8182 Jul 23 15:04	22°♍27'17	min. Earth dist.	8187 Sep 09 23:08	13°♋31'19	0.53154 AU	
	8182 Aug 02 07:06	0°♎	direct	8187 Oct 11 02:53	7°♋17'30		
	8182 Sep 10 12:15	0°♏		8187 Dec 16 19:19	0°♊		
	8182 Oct 21 14:04	0°♎		8188 Feb 01 05:25	0°♋		
	8182 Dec 04 09:12	0°♎	asc. node	8188 Mar 08 04:33	26°♋19'26		
	8183 Jan 21 09:36	0°♊		8188 Mar 13 01:32	0°♌		
	8183 Mar 21 02:34	0°♎		8188 Apr 21 08:54	0°♍		
retrograde	8183 May 08 14:34	11°♎24'22		8188 May 30 21:04	0°♎		
opposition	8183 Jun 17 22:02	1°♎49'16 0°27'28		8188 Jul 10 14:19	0°♏		
greatest brilliancy	8183 Jun 17 22:40	1°♎48'39 -1.3m		8188 Aug 22 02:17	0°♎		
min. Earth dist.	8183 Jun 18 23:52	1°♎23'44 0.68066 AU	evening set	8188 Sep 20 01:44	19°♎43'09		
	8183 Jun 22 13:08	30°♏♊		8188 Oct 05 11:43	0°♎		
desc. node	8183 Jul 01 06:06	26°♊48'14					
direct	8183 Jul 29 06:52	21°♊53'17	conjunction	8188 Nov 08 15:46	22°♎21'30	0°48'46	
	8183 Sep 07 16:18	0°♎	minimum elong	8188 Nov 08 16:59	22°♎23'29	0°48'53	
	8183 Nov 08 18:14	0°♎		8188 Nov 20 12:12	0°♊		
	8183 Dec 27 01:56	0°♋	max. Earth dist.	8188 Nov 21 01:19	0°♊21'05	2.65295 AU	
	8184 Feb 08 08:34	0°♊	morning rise	8188 Dec 24 11:42	21°♊40'39		
	8184 Mar 19 15:35	0°♋		8189 Jan 06 15:32	0°♎		
	8184 Apr 27 04:57	0°♌	desc. node	8189 Feb 19 21:52	27°♎46'25		
evening set	8184 May 17 15:48	16°♌10'37		8189 Feb 23 11:31	0°♎		
asc. node	8184 Jun 03 03:28	29°♌14'46		8189 Apr 12 23:39	0°♋		
	8184 Jun 04 02:19	0°♍		8189 Jun 01 23:21	0°♊		
	8184 Jul 12 06:47	0°♎		8189 Jul 27 02:21	0°♋		
			retrograde	8189 Sep 30 08:22	19°♋26'00		
conjunction	8184 Jul 27 09:49	11°♎40'31 0°36'31	opposition	8189 Oct 31 06:07	14°♋03'26	-5°16'17	
minimum elong	8184 Jul 27 06:44	11°♎34'36 0°36'22	greatest brilliancy	8189 Nov 01 15:34	13°♋39'11	-2.8m	
	8184 Aug 20 14:38	0°♏	min. Earth dist.	8189 Nov 06 19:27	12°♋10'06	0.39764 AU	
max. Earth dist.	8184 Sep 16 19:18	19°♏59'54 2.44022 AU	direct	8189 Dec 02 23:26	7°♋52'24		
morning rise	8184 Sep 30 16:35	29°♏57'09	asc. node	8190 Jan 24 04:02	23°♋39'51		
	8184 Sep 30 18:11	0°♎		8190 Feb 04 16:18	0°♌		
	8184 Nov 13 04:36	0°♎		8190 Mar 23 12:32	0°♍		
	8184 Dec 29 07:35	0°♊		8190 May 05 19:19	0°♎		
	8185 Feb 17 01:49	0°♎		8190 Jun 18 02:54	0°♏		
	8185 Apr 16 09:44	0°♎		8190 Aug 01 13:33	0°♎		
desc. node	8185 May 18 04:32	11°♎16'42		8190 Sep 16 08:42	0°♎		
retrograde	8185 Jun 13 00:18	14°♎51'12	evening set	8190 Oct 31 01:55	28°♎38'34		
opposition	8185 Jul 21 21:31	6°♎01'44 -2°15'55		8190 Nov 02 05:08	0°♊		
greatest brilliancy	8185 Jul 22 05:56	5°♎53'36 -1.5m	max. Earth dist.	8190 Dec 13 15:53	26°♊18'13	2.68127 AU	
min. Earth dist.	8185 Jul 26 17:49	4°♎09'35 0.63738 AU					
	8185 Aug 07 11:46	30°♏♎	conjunction	8190 Dec 15 12:49	27°♊29'30	0°12'10	
direct	8185 Sep 01 09:07	26°♎00'47	minimum elong	8190 Dec 15 13:12	27°♊30'05	0°12'19	
	8185 Sep 27 20:57	0°♎	behind sun begin	8190 Dec 15 01:15	27°♊11'09		
	8185 Dec 01 06:45	0°♋	behind sun end	8190 Dec 16 01:08	27°♊49'00		
	8186 Jan 16 09:32	0°♊		8190 Dec 19 11:42	0°♎		
	8186 Feb 26 13:48	0°♋	desc. node	8191 Jan 07 20:00	12°♎17'58		
	8186 Apr 06 11:35	0°♌	morning rise	8191 Jan 28 05:06	25°♎18'33		
asc. node	8186 Apr 21 04:31	11°♌32'41		8191 Feb 04 12:42	0°♎		
	8186 May 14 15:12	0°♍		8191 Mar 22 21:17	0°♋		
	8186 Jun 22 03:39	0°♎		8191 May 07 09:04	0°♊		
evening set	8186 Jul 29 10:53	28°♎10'57		8191 Jun 21 01:47	0°♋		
	8186 Jul 31 21:50	0°♏		8191 Aug 04 08:23	0°♌		

	8191 Sep 18 14:42	0°☿		8196 Oct 20 22:06	0°♄
	8191 Nov 11 06:18	0°♌		8196 Dec 09 02:41	0°♊
asc. node	8191 Dec 12 05:05	8°♌44'53		8197 Jan 23 15:46	0°♋
retrograde	8191 Dec 19 10:10	9°♌07'19	evening set	8197 Feb 21 18:52	20°♋16'57
min. Earth dist.	8192 Jan 14 11:02	4°♌44'53 0.39037 AU		8197 Mar 07 07:56	0°♌
opposition	8192 Jan 20 21:23	2°♌50'18 2°47'39	max. Earth dist.	8197 Mar 07 13:40	0°♌10'23 2.45072 AU
greatest brilliancy	8192 Jan 20 03:20	3°♌03'48 -2.9m		8197 Apr 16 18:13	0°♍
	8192 Jan 31 03:08	30°♋☿			
direct	8192 Feb 19 23:30	27°☿28'00	conjunction	8197 Apr 17 16:09	0°♍41'38 -1°00'44
	8192 Mar 11 01:26	0°♌	minimum elong	8197 Apr 17 17:57	0°♍45'03 1°00'48
	8192 May 17 13:43	0°♍		8197 May 25 15:18	0°♎
	8192 Jul 07 14:41	0°♎	morning rise	8197 Jun 21 22:33	21°♎27'39
	8192 Aug 25 17:21	0°♏		8197 Jul 02 18:20	0°☿
	8192 Oct 13 08:17	0°♐	asc. node	8197 Aug 02 22:31	24°☿29'52
desc. node	8192 Nov 24 18:50	26°♐28'48		8197 Aug 10 00:01	0°♌
	8192 Nov 30 09:01	0°♄		8197 Sep 18 05:37	0°♍
evening set	8192 Dec 05 09:37	3°♄10'18		8197 Oct 29 09:22	0°♎
max. Earth dist.	8193 Jan 04 13:32	22°♄23'58 2.65447 AU		8197 Dec 12 14:51	0°♏
	8193 Jan 16 07:54	0°♊		8198 Jan 31 10:51	0°♐
			retrograde	8198 Apr 25 08:46	28°♐55'36
conjunction	8193 Jan 19 00:51	1°♊45'25 -0°28'24	opposition	8198 Jun 04 21:14	19°♐08'44 1°27'08
minimum elong	8193 Jan 19 00:02	1°♊44'06 0°28'15	min. Earth dist.	8198 Jun 04 11:32	19°♐18'23 0.67971 AU
	8193 Mar 02 18:54	0°♋	greatest brilliancy	8198 Jun 04 21:03	19°♐08'56 -1.3m
morning rise	8193 Mar 04 18:23	1°♋19'54	direct	8198 Jul 15 18:22	9°♐22'45
	8193 Apr 15 13:30	0°♌	desc. node	8198 Jul 17 19:38	9°♐24'17
	8193 May 27 17:20	0°♍		8198 Sep 24 02:16	0°♄
	8193 Jul 07 12:40	0°♎		8198 Nov 17 23:08	0°♊
	8193 Aug 16 12:51	0°☿		8199 Jan 04 00:07	0°♋
	8193 Sep 25 18:00	0°♌		8199 Feb 15 22:47	0°♌
asc. node	8193 Oct 29 03:09	23°♌52'01		8199 Mar 28 04:52	0°♍
	8193 Nov 07 03:27	0°♍	evening set	8199 Apr 20 06:45	17°♍50'01
	8193 Dec 28 07:38	0°♎		8199 May 05 19:07	0°♎
retrograde	8194 Feb 11 04:19	11°♎56'39		8199 Jun 12 16:51	0°☿
min. Earth dist.	8194 Mar 13 11:58	5°♎36'38 0.52209 AU	asc. node	8199 Jun 20 21:16	6°☿28'30
greatest brilliancy	8194 Mar 19 20:06	3°♎13'52 -2.0m			
opposition	8194 Mar 21 06:28	2°♎41'26 5°18'34	conjunction	8199 Jun 28 09:50	12°☿24'53 0°05'28
	8194 Mar 28 17:05	30°♋♍	minimum elong	8199 Jun 28 09:13	12°☿23'40 0°05'18
direct	8194 Apr 25 05:51	25°♍02'49	behind sun begin	8199 Jun 27 04:02	11°☿26'08
	8194 May 25 04:48	0°♎	behind sun end	8199 Jun 29 14:25	13°☿21'11
	8194 Jul 31 10:01	0°♏		8199 Jul 20 20:23	0°♌
	8194 Sep 22 17:23	0°♐	max. Earth dist.	8199 Aug 16 17:30	20°♌40'45 2.38582 AU
desc. node	8194 Oct 12 18:45	11°♐52'38		8199 Aug 29 01:56	0°♍
	8194 Nov 11 14:41	0°♄	morning rise	8199 Sep 07 11:05	6°♍59'37
	8194 Dec 29 02:44	0°♊		8199 Oct 09 02:54	0°♎
evening set	8195 Jan 11 03:38	8°♊29'51		8199 Nov 21 13:36	0°♏
max. Earth dist.	8195 Jan 30 04:52	21°♊08'28 2.57468 AU		8200 Jan 07 02:25	0°♐
	8195 Feb 12 07:30	0°♋		8200 Feb 27 15:10	0°♄
				8200 May 12 17:52	0°♊
conjunction	8195 Feb 27 03:59	10°♋12'15 -1°00'30	retrograde	8200 May 30 06:34	1°♊44'03
minimum elong	8195 Feb 27 02:54	10°♋10'23 1°00'25	desc. node	8200 Jun 04 18:28	1°♊32'52
	8195 Mar 27 06:38	0°♌		8200 Jun 15 20:55	30°♋♄
morning rise	8195 Apr 18 15:23	16°♌12'04	opposition	8200 Jul 08 21:03	22°♄33'44 -1°11'26
	8195 May 07 06:53	0°♍	greatest brilliancy	8200 Jul 08 23:59	22°♄30'52 -1.4m
	8195 Jun 15 19:26	0°♎	min. Earth dist.	8200 Jul 12 06:15	21°♄14'28 0.66206 AU
	8195 Jul 24 12:04	0°☿	direct	8200 Aug 19 12:28	12°♄30'25
	8195 Sep 01 04:58	0°♌		8200 Oct 20 07:25	0°♊
asc. node	8195 Sep 15 23:46	11°♌17'54		8200 Dec 12 14:17	0°♋
	8195 Oct 10 23:23	0°♍		8201 Jan 26 02:49	0°♌
	8195 Nov 22 07:41	0°♎		8201 Mar 07 19:15	0°♍
	8196 Jan 09 15:24	0°♏		8201 Apr 15 12:01	0°♎
retrograde	8196 Mar 21 20:19	24°♏25'30	asc. node	8201 May 08 20:01	18°♎24'46
min. Earth dist.	8196 Apr 26 18:58	16°♏07'31 0.63165 AU		8201 May 23 11:52	0°☿
greatest brilliancy	8196 Apr 30 11:10	14°♏39'53 -1.5m		8201 Jun 30 20:02	0°♌
opposition	8196 May 01 00:14	14°♏26'52 3°48'10	evening set	8201 Jul 03 19:59	2°♌18'50
direct	8196 Jun 08 16:08	5°♏25'18		8201 Aug 09 08:59	0°♍
	8196 Aug 26 13:40	0°♐			
desc. node	8196 Aug 29 19:22	1°♐36'01	conjunction	8201 Sep 06 10:11	20°♍30'25 1°03'17

minimum elong	8201 Sep 06 08:44	20° \mathbb{M} 27'49	1°03'14	min. Earth dist.	8206 Dec 19 16:35	2° \mathfrak{G} 49'04	0.36673 AU
	8201 Sep 19 17:38	0° \mathfrak{L}		opposition	8206 Dec 21 09:41	2° \mathfrak{G} 21'40	-0°39'21
max. Earth dist.	8201 Oct 14 18:23	17° \mathfrak{L} 26'38	2.52373 AU	greatest brilliancy	8206 Dec 21 09:37	2° \mathfrak{G} 21'43	-3.1m
morning rise	8201 Nov 01 17:37	29° \mathfrak{L} 39'05		asc. node	8206 Dec 29 20:36	0° \mathfrak{G} 12'04	
	8201 Nov 02 06:04	0° \mathbb{M}			8206 Dec 30 17:18	30° \mathbb{R} II	
	8201 Dec 18 00:35	0° \mathfrak{J}		direct	8207 Jan 19 15:17	27°II29'30	
	8202 Feb 04 05:33	0° \mathfrak{Z}			8207 Feb 08 11:22	0° \mathfrak{G}	
	8202 Mar 28 02:33	0° \approx			8207 Apr 14 10:46	0° \mathcal{O}	
desc. node	8202 Apr 22 16:00	13° \approx 21'09			8207 Jun 02 04:15	0° \mathbb{M}	
	8202 May 31 06:54	0° \mathfrak{H}			8207 Jul 19 08:34	0° \mathfrak{L}	
retrograde	8202 Jul 09 21:17	7° \mathfrak{H} 45'14			8207 Sep 04 18:03	0° \mathbb{M}	
	8202 Aug 15 04:07	30° \mathbb{R} \approx			8207 Oct 22 12:07	0° \mathfrak{J}	
opposition	8202 Aug 16 03:17	29° \approx 38'26	-3°58'31	evening set	8207 Nov 23 11:27	20° \mathfrak{J} 05'50	
greatest brilliancy	8202 Aug 17 01:45	29° \approx 17'27	-1.7m		8207 Dec 09 03:43	0° \mathfrak{Z}	
min. Earth dist.	8202 Aug 23 03:18	27° \approx 01'27	0.57971 AU	desc. node	8207 Dec 13 08:44	2° \mathfrak{Z} 39'57	
direct	8202 Sep 25 15:37	19° \approx 58'02		max. Earth dist.	8207 Dec 28 13:17	12° \mathfrak{Z} 19'21	2.67166 AU
	8202 Nov 07 06:04	0° \mathfrak{H}					
	8202 Dec 31 16:49	0° \mathbb{Y}		conjunction	8208 Jan 07 01:42	18° \mathfrak{Z} 24'21	-0°12'57
	8203 Feb 12 19:31	0° \mathfrak{B}		minimum elong	8208 Jan 07 01:19	18° \mathfrak{Z} 23'44	0°12'48
	8203 Mar 24 12:37	0°II		behind sun begin	8208 Jan 06 14:04	18° \mathfrak{Z} 05'45	
asc. node	8203 Mar 26 20:43	1°II48'15		behind sun end	8208 Jan 07 12:33	18° \mathfrak{Z} 41'44	
	8203 May 02 04:24	0° \mathfrak{G}			8208 Jan 25 02:09	0° \approx	
	8203 Jun 10 03:58	0° \mathcal{O}		morning rise	8208 Feb 19 23:04	16° \approx 51'35	
	8203 Jul 20 09:37	0° \mathbb{M}			8208 Mar 10 19:50	0° \mathfrak{H}	
	8203 Aug 31 10:58	0° \mathfrak{L}			8208 Apr 24 03:30	0° \mathbb{Y}	
evening set	8203 Sep 03 07:13	1° \mathfrak{L} 58'40			8208 Jun 06 01:14	0° \mathfrak{B}	
	8203 Oct 14 12:06	0° \mathbb{M}			8208 Jul 17 18:10	0°II	
					8208 Aug 27 20:02	0° \mathfrak{G}	
conjunction	8203 Oct 25 19:00	7° \mathbb{M} 29'20	0°59'10		8208 Oct 08 15:33	0° \mathcal{O}	
minimum elong	8203 Oct 25 20:09	7° \mathbb{M} 31'15	0°59'16	asc. node	8208 Nov 15 20:49	25° \mathcal{O} 08'14	
max. Earth dist.	8203 Nov 13 09:24	19° \mathbb{M} 40'40	2.62700 AU		8208 Nov 24 03:27	0° \mathbb{M}	
	8203 Nov 29 08:13	0° \mathfrak{J}		retrograde	8209 Jan 24 11:43	21° \mathbb{M} 01'01	
morning rise	8203 Dec 12 10:30	8° \mathfrak{J} 23'42		min. Earth dist.	8209 Feb 21 10:03	15° \mathbb{M} 36'43	0.46752 AU
	8204 Jan 15 14:05	0° \mathfrak{Z}		greatest brilliancy	8209 Feb 28 08:22	13° \mathbb{M} 10'03	-2.3m
	8204 Mar 04 00:37	0° \approx		opposition	8209 Mar 01 22:30	12° \mathbb{M} 36'11	5°11'32
desc. node	8204 Mar 09 13:14	3° \approx 22'17		direct	8209 Apr 03 23:13	5° \mathbb{M} 46'27	
	8204 Apr 23 03:15	0° \mathfrak{H}			8209 Jun 18 01:46	0° \mathfrak{L}	
	8204 Jun 16 15:20	0° \mathbb{Y}			8209 Aug 11 22:10	0° \mathbb{M}	
retrograde	8204 Sep 02 09:42	24° \mathbb{Y} 54'34			8209 Oct 01 18:00	0° \mathfrak{J}	
opposition	8204 Oct 05 09:03	18° \mathbb{Y} 38'18	-5°54'03	desc. node	8209 Oct 30 08:00	17° \mathfrak{J} 22'59	
greatest brilliancy	8204 Oct 07 04:46	18° \mathbb{Y} 02'39	-2.4m		8209 Nov 19 17:25	0° \mathfrak{Z}	
min. Earth dist.	8204 Oct 13 20:23	15° \mathbb{Y} 54'02	0.44731 AU	evening set	8209 Dec 28 12:36	24° \mathfrak{Z} 33'37	
direct	8204 Nov 10 05:45	11° \mathbb{Y} 00'55			8210 Jan 05 22:41	0° \approx	
	8205 Jan 07 10:29	0° \mathfrak{B}		max. Earth dist.	8210 Jan 20 15:44	9° \approx 36'20	2.61207 AU
asc. node	8205 Feb 10 21:17	21° \mathfrak{B} 25'35					
	8205 Feb 23 09:26	0°II		conjunction	8210 Feb 12 03:13	24° \approx 33'11	-0°50'08
	8205 Apr 06 02:57	0° \mathfrak{G}		minimum elong	8210 Feb 12 02:01	24° \approx 31'10	0°50'01
	8205 May 17 03:50	0° \mathcal{O}			8210 Feb 20 04:49	0° \mathfrak{H}	
	8205 Jun 28 01:35	0° \mathbb{M}		morning rise	8210 Mar 31 13:01	27° \mathfrak{H} 14'23	
	8205 Aug 10 12:21	0° \mathfrak{L}			8210 Apr 04 10:32	0° \mathbb{Y}	
	8205 Sep 24 15:04	0° \mathbb{M}			8210 May 15 20:02	0° \mathfrak{B}	
evening set	8205 Oct 17 00:12	14° \mathbb{M} 32'33			8210 Jun 24 18:34	0°II	
	8205 Nov 10 01:36	0° \mathfrak{J}			8210 Aug 02 20:26	0° \mathfrak{G}	
					8210 Sep 10 22:19	0° \mathcal{O}	
conjunction	8205 Dec 02 14:31	14° \mathfrak{J} 22'13	0°27'25	asc. node	8210 Oct 03 19:00	17° \mathcal{O} 12'30	
minimum elong	8205 Dec 02 15:20	14° \mathfrak{J} 23'30	0°27'34		8210 Oct 21 05:28	0° \mathbb{M}	
max. Earth dist.	8205 Dec 06 01:51	16° \mathfrak{J} 34'37	2.67686 AU		8210 Dec 03 21:08	0° \mathfrak{L}	
	8205 Dec 27 05:17	0° \mathfrak{Z}			8211 Jan 27 15:56	0° \mathbb{M}	
morning rise	8206 Jan 15 17:42	12° \mathfrak{Z} 22'45		retrograde	8211 Mar 09 10:14	9° \mathbb{M} 31'29	
desc. node	8206 Jan 25 10:41	18° \mathfrak{Z} 32'30		min. Earth dist.	8211 Apr 12 07:54	1° \mathbb{M} 54'18	0.59517 AU
	8206 Feb 12 11:26	0° \approx		greatest brilliancy	8211 Apr 17 03:22	0° \mathbb{M} 00'48	-1.7m
	8206 Mar 31 10:58	0° \mathfrak{H}			8211 Apr 17 04:10	30° \mathbb{R} \mathfrak{L}	
	8206 May 17 03:17	0° \mathbb{Y}		opposition	8211 Apr 18 00:41	29° \mathfrak{L} 39'46	4°33'41
	8206 Jul 02 21:18	0° \mathfrak{B}		direct	8211 May 25 10:03	21° \mathfrak{L} 04'46	
	8206 Aug 20 00:58	0°II			8211 Jul 06 23:05	0° \mathbb{M}	
	8206 Oct 16 20:26	0° \mathfrak{G}			8211 Sep 08 14:16	0° \mathfrak{J}	
retrograde	8206 Nov 21 05:32	7° \mathfrak{G} 28'01		desc. node	8211 Sep 17 08:22	4° \mathfrak{J} 47'27	

	8211 Oct 30 23:52	0°♄			8216 Aug 16 19:16	0°♍		
	8211 Dec 18 08:18	0°♊			8216 Sep 26 23:18	0°♌		
	8212 Feb 01 16:34	0°♋		max. Earth dist.	8216 Sep 29 01:52	1°♌29'42	2.47086 AU	
evening set	8212 Feb 06 01:33	2°♋59'30		morning rise	8216 Oct 13 16:20	11°♌44'38		
max. Earth dist.	8212 Feb 20 11:29	12°♋58'41	2.50304 AU		8216 Nov 09 08:57	0°♍		
	8212 Mar 15 10:38	0°♎			8216 Dec 25 06:45	0°♏		
					8217 Feb 12 07:06	0°♐		
conjunction	8212 Mar 27 22:38	9°♎05'00	-1°06'54		8217 Apr 08 07:03	0°♑		
minimum elong	8212 Mar 27 22:50	9°♎05'21	1°06'55	desc. node	8217 May 09 06:59	13°♑35'21		
	8212 Apr 25 01:36	0°♒		retrograde	8217 Jun 22 23:01	23°♑10'12		
morning rise	8212 May 25 04:44	23°♒02'36		opposition	8217 Jul 31 07:56	14°♑34'23	-2°53'51	
	8212 Jun 03 03:58	0°♓		greatest brilliancy	8217 Jul 31 20:46	14°♑22'06	-1.5m	
	8212 Jul 11 11:23	0°♈		min. Earth dist.	8217 Aug 05 23:24	12°♑24'51	0.61926 AU	
	8212 Aug 18 20:09	0°♉		direct	8217 Sep 10 13:32	4°♑37'48		
asc. node	8212 Aug 20 15:23	1°♉23'44			8217 Nov 24 11:13	0°♊		
	8212 Sep 27 04:28	0°♋			8218 Jan 11 08:28	0°♌		
	8212 Nov 07 13:53	0°♌			8218 Feb 22 01:18	0°♍		
	8212 Dec 22 14:56	0°♍			8218 Apr 02 04:43	0°♎		
	8213 Feb 14 05:07	0°♏		asc. node	8218 Apr 12 12:07	8°♎03'20		
retrograde	8213 Apr 13 04:09	16°♏10'08			8218 May 10 11:45	0°♈		
min. Earth dist.	8213 May 21 19:03	7°♏00'34	0.66850 AU		8218 Jun 18 03:14	0°♉		
opposition	8213 May 23 16:40	6°♏15'06	2°24'30		8218 Jul 28 00:35	0°♊		
greatest brilliancy	8213 May 23 13:08	6°♏18'37	-1.3m	evening set	8218 Aug 12 22:28	11°♊36'58		
	8213 Jun 10 03:43	30°♋♌			8218 Sep 07 17:38	0°♌		
direct	8213 Jul 02 20:31	26°♌43'15						
	8213 Jul 27 14:37	0°♏		conjunction	8218 Oct 08 09:10	21°♌09'12	1°05'41	
desc. node	8213 Aug 04 09:02	2°♏08'05		minimum elong	8218 Oct 08 09:48	21°♌10'15	1°05'44	
	8213 Oct 06 13:34	0°♐			8218 Oct 21 12:05	0°♍		
	8213 Nov 27 06:58	0°♑		max. Earth dist.	8218 Nov 02 22:54	8°♍17'32	2.59260 AU	
	8214 Jan 12 13:29	0°♒		morning rise	8218 Nov 27 14:35	24°♍26'05		
	8214 Feb 24 08:09	0°♓			8218 Dec 06 05:26	0°♏		
evening set	8214 Mar 27 08:52	22°♓58'36			8219 Jan 22 16:42	0°♐		
	8214 Apr 05 14:59	0°♒			8219 Mar 13 00:44	0°♑		
max. Earth dist.	8214 Apr 29 22:29	18°♒45'30	2.37394 AU	desc. node	8219 Mar 27 03:41	8°♑18'26		
	8214 May 14 07:09	0°♓			8219 May 04 18:29	0°♒		
					8219 Jul 11 20:15	0°♓		
conjunction	8214 May 30 02:21	12°♓27'40	-0°27'41	retrograde	8219 Aug 10 02:50	4°♓32'44		
minimum elong	8214 May 30 04:57	12°♓32'49	0°27'48		8219 Sep 06 07:15	30°♋♌		
	8214 Jun 21 06:06	0°♈		opposition	8219 Sep 13 23:02	27°♋26'17	-5°27'21	
asc. node	8214 Jul 08 13:29	13°♈40'20		greatest brilliancy	8219 Sep 15 14:10	26°♋51'52	-2.1m	
	8214 Jul 29 09:28	0°♉		min. Earth dist.	8219 Sep 22 11:13	24°♋27'30	0.50220 AU	
morning rise	8214 Aug 11 02:37	9°♉51'11		direct	8219 Oct 22 05:36	18°♋42'27		
	8214 Sep 06 13:52	0°♋			8219 Dec 05 03:55	0°♌		
	8214 Oct 17 13:58	0°♌			8220 Jan 25 13:12	0°♍		
	8214 Nov 30 03:58	0°♍		asc. node	8220 Feb 28 12:57	24°♍03'54		
	8215 Jan 16 10:20	0°♏			8220 Mar 07 14:03	0°♎		
	8215 Mar 12 06:12	0°♐			8220 Apr 16 11:06	0°♏		
retrograde	8215 May 17 08:40	19°♐04'15			8220 May 26 08:25	0°♉		
desc. node	8215 Jun 22 08:53	11°♐13'10			8220 Jul 06 09:18	0°♊		
opposition	8215 Jun 26 11:13	9°♐37'10	-0°08'31		8220 Aug 18 03:27	0°♋		
greatest brilliancy	8215 Jun 26 11:28	9°♐36'56	-1.3m	evening set	8220 Sep 30 22:08	29°♌27'33		
min. Earth dist.	8215 Jun 28 08:50	8°♐52'14	0.67674 AU		8220 Oct 01 17:48	0°♍		
	8215 Jul 30 06:01	30°♋♌			8220 Nov 16 20:50	0°♏		
direct	8215 Aug 06 23:39	29°♏37'21						
	8215 Aug 14 22:13	0°♐		conjunction	8220 Nov 18 05:36	0°♏52'34	0°41'27	
	8215 Nov 02 22:33	0°♑		minimum elong	8220 Nov 18 06:44	0°♏54'23	0°41'35	
	8215 Dec 22 13:52	0°♒		max. Earth dist.	8220 Nov 27 08:15	6°♏42'37	2.66396 AU	
	8216 Feb 04 06:06	0°♓		morning rise	8221 Jan 02 07:06	29°♏34'01		
	8216 Mar 15 16:32	0°♒			8221 Jan 02 23:31	0°♐		
asc. node	8216 Apr 23 07:18	0°♓		desc. node	8221 Feb 11 00:47	24°♐38'15		
	8216 May 25 13:17	25°♓30'41			8221 Feb 19 13:25	0°♑		
	8216 May 31 05:19	0°♈			8221 Apr 08 09:51	0°♒		
evening set	8216 Jun 04 10:06	3°♈19'18			8221 May 26 21:35	0°♓		
	8216 Jul 08 10:30	0°♉			8221 Jul 16 13:27	0°♒		
					8221 Sep 17 06:03	0°♓		
conjunction	8216 Aug 12 20:42	27°♉03'07	0°49'34	retrograde	8221 Oct 19 08:34	5°♓49'45		
minimum elong	8216 Aug 12 17:43	26°♉57'31	0°49'27	opposition	8221 Nov 18 09:44	0°♓48'22	-4°06'25	

greatest brilliancy	8221 Nov 19 05:23	0°II34'54	-2.9m	evening set	8227 Jan 20 21:21	17°≈22'07	
	8221 Nov 21 08:15	30°R8		max. Earth dist.	8227 Feb 07 01:57	28°≈56'07	2.55101 AU
min. Earth dist.	8221 Nov 22 14:33	29°839'21	0.37796 AU		8227 Feb 08 15:31	0°H	
direct	8221 Dec 19 12:17	25°820'18					
asc. node	8222 Jan 15 14:20	0°II07'02		conjunction	8227 Mar 10 00:04	20°H21'21	-1°04'37
	8222 Jan 15 05:46	0°II		minimum elong	8227 Mar 09 23:17	20°H19'58	1°04'34
	8222 Mar 14 16:41	0°☾			8227 Mar 23 13:24	0°Y	
	8222 Apr 29 11:09	0°Ω		morning rise	8227 May 01 18:06	28°Y44'02	
	8222 Jun 12 23:30	0°♍			8227 May 03 10:41	0°8	
	8222 Jul 28 03:08	0°♊			8227 Jun 11 19:49	0°II	
	8222 Sep 12 09:07	0°♋			8227 Jul 20 08:56	0°☾	
	8222 Oct 29 11:51	0°♌			8227 Aug 27 22:02	0°Ω	
evening set	8222 Nov 09 09:13	6°♌53'36		asc. node	8227 Sep 07 09:24	8°Ω03'12	
	8222 Dec 15 21:06	0°8			8227 Oct 06 11:09	0°♍	
max. Earth dist.	8222 Dec 19 17:31	2°826'39	2.68024 AU		8227 Nov 17 07:15	0°♊	
					8228 Jan 02 21:12	0°♋	
conjunction	8222 Dec 24 09:38	5°824'41	0°02'56		8228 Mar 08 20:11	0°♌	
minimum elong	8222 Dec 24 09:43	5°824'48	0°03'06	retrograde	8228 Mar 30 18:16	2°♌53'11	
behind sun begin	8222 Dec 23 15:32	4°855'55			8228 Apr 20 07:35	30°R♋	
behind sun end	8222 Dec 25 03:54	5°853'40		min. Earth dist.	8228 May 06 17:02	24°♋15'18	0.64746 AU
desc. node	8222 Dec 29 22:14	8°855'27		opposition	8228 May 10 02:27	22°♋54'08	3°18'45
	8223 Jan 31 20:54	0°≈		greatest brilliancy	8228 May 09 17:21	23°♋03'13	-1.4m
morning rise	8223 Feb 06 00:12	3°≈18'39		direct	8228 Jun 18 08:17	13°♋40'28	
	8223 Mar 18 23:31	0°H			8228 Aug 18 16:21	0°♌	
	8223 May 03 00:01	0°Y		desc. node	8228 Aug 20 22:38	1°♌00'16	
	8223 Jun 15 22:28	0°8			8228 Oct 16 02:25	0°8	
	8223 Jul 29 01:02	0°II			8228 Dec 05 01:29	0°≈	
	8223 Sep 10 03:32	0°☾			8229 Jan 19 20:27	0°H	
	8223 Oct 26 03:08	0°Ω			8229 Mar 03 13:50	0°Y	
asc. node	8223 Dec 03 13:49	19°Ω27'16		evening set	8229 Mar 05 20:01	1°Y38'14	
retrograde	8224 Jan 03 12:47	25°Ω48'32		max. Earth dist.	8229 Mar 21 18:37	13°Y20'11	2.42091 AU
min. Earth dist.	8224 Jan 29 19:13	21°Ω11'27	0.41460 AU		8229 Apr 12 23:07	0°8	
greatest brilliancy	8224 Feb 05 09:06	19°Ω05'23	-2.7m				
opposition	8224 Feb 06 15:01	18°Ω41'20	4°05'26	conjunction	8229 May 02 13:55	15°802'53	-0°52'12
direct	8224 Mar 08 14:36	12°Ω48'30		minimum elong	8229 May 02 16:35	15°808'02	0°52'18
	8224 May 06 23:11	0°♍			8229 May 21 18:41	0°II	
	8224 Jul 01 13:15	0°♊			8229 Jun 28 20:15	0°☾	
	8224 Aug 21 02:11	0°♋		morning rise	8229 Jul 10 15:10	9°☾18'15	
	8224 Oct 09 08:22	0°♌		asc. node	8229 Jul 25 06:21	20°☾48'26	
desc. node	8224 Nov 15 20:56	23°♌13'59			8229 Aug 06 00:43	0°Ω	
	8224 Nov 26 16:12	0°8			8229 Sep 14 05:08	0°♍	
evening set	8224 Dec 14 09:16	11°810'56			8229 Oct 25 06:05	0°♊	
max. Earth dist.	8225 Jan 10 23:50	28°852'45	2.64169 AU		8229 Dec 08 02:58	0°♋	
	8225 Jan 12 17:21	0°≈			8230 Jan 25 15:29	0°♌	
					8230 Mar 29 12:51	0°8	
conjunction	8225 Jan 28 05:19	10°≈06'50	-0°36'57	retrograde	8230 May 03 22:36	6°834'55	
minimum elong	8225 Jan 28 04:18	10°≈05'10	0°36'49		8230 Jun 05 08:50	30°R♌	
	8225 Feb 27 02:44	0°H		opposition	8230 Jun 13 08:27	26°♌54'10	0°52'27
morning rise	8225 Mar 14 16:08	10°H33'56		greatest brilliancy	8230 Jun 13 09:01	26°♌53'36	-1.3m
	8225 Apr 11 16:52	0°Y		min. Earth dist.	8230 Jun 13 18:25	26°♌44'17	0.68149 AU
	8225 May 23 13:45	0°8		desc. node	8230 Jul 08 22:39	18°♌34'25	
	8225 Jul 03 00:52	0°II		direct	8230 Jul 24 12:09	17°♌02'07	
	8225 Aug 11 15:26	0°☾			8230 Sep 15 14:13	0°8	
	8225 Sep 20 07:36	0°Ω			8230 Nov 13 00:33	0°≈	
asc. node	8225 Oct 20 11:20	22°Ω06'49			8230 Dec 30 19:54	0°H	
	8225 Oct 31 15:02	0°♍			8231 Feb 12 00:28	0°Y	
	8225 Dec 17 07:43	0°♊			8231 Mar 24 07:57	0°8	
retrograde	8226 Feb 21 19:51	22°♊54'40			8231 May 01 22:13	0°II	
min. Earth dist.	8226 Mar 25 11:33	16°♊04'52	0.55028 AU	evening set	8231 May 06 21:35	3°II55'22	
greatest brilliancy	8226 Mar 31 07:29	13°♊50'32	-1.9m		8231 Jun 08 19:38	0°☾	
opposition	8226 Apr 01 13:31	13°♊21'34	5°07'58	asc. node	8231 Jun 12 04:55	2°☾40'58	
direct	8226 May 07 11:07	5°♊20'12					
	8226 Jul 24 07:27	0°♋		conjunction	8231 Jul 16 14:15	29°☾42'56	0°24'07
	8226 Sep 17 23:01	0°♌		minimum elong	8231 Jul 16 11:50	29°☾38'14	0°23'57
desc. node	8226 Oct 03 21:35	9°♌13'49			8231 Jul 16 23:02	0°Ω	
	8226 Nov 07 14:23	0°8			8231 Aug 25 04:54	0°♍	
	8226 Dec 25 09:17	0°≈		max. Earth dist.	8231 Sep 07 16:29	10°♍01'24	2.41517 AU

morning rise	8231 Sep 22 15:59	20° \cap 58'03	min. Earth dist.	8236 Oct 27 15:33	0° δ 27'23	0.41832 AU
	8231 Oct 05 05:54	0° $\underline{\cap}$		8236 Oct 29 05:13	30° κ Υ	
	8231 Nov 17 14:42	0° \cap	direct	8236 Nov 23 01:11	25° Υ 58'31	
	8232 Jan 02 19:30	0° \nearrow		8236 Dec 17 16:26	0° δ	
	8232 Feb 22 02:45	0° $\overline{\delta}$	asc. node	8237 Feb 01 05:52	22° δ 03'10	
	8232 Apr 23 19:59	0° \approx		8237 Feb 13 22:07	0° Π	
desc. node	8232 May 25 21:14	8° \approx 43'31		8237 Mar 29 18:56	0° $\overline{\delta}$	
retrograde	8232 Jun 07 13:44	9° \approx 38'57		8237 May 10 20:31	0° Ω	
opposition	8232 Jul 16 19:10	0° \approx 39'40 -1°48'50		8237 Jun 22 10:06	0° \cap	
greatest brilliancy	8232 Jul 17 00:54	0° \approx 34'07 -1.4m		8237 Aug 05 08:05	0° $\underline{\cap}$	
	8232 Jul 18 12:00	30° κ $\overline{\delta}$		8237 Sep 19 18:30	0° \cap	
min. Earth dist.	8232 Jul 20 23:41	29° $\overline{\delta}$ 02'05 0.64973 AU	evening set	8237 Oct 25 17:05	23° \cap 10'18	
direct	8232 Aug 27 09:00	20° $\overline{\delta}$ 36'44		8237 Nov 05 09:33	0° \nearrow	
	8232 Oct 09 02:32	0° \approx				
	8232 Dec 06 04:17	0° H	conjunction	8237 Dec 10 14:47	22° \nearrow 23'32	0°18'36
	8233 Jan 20 14:43	0° Υ	minimum elong	8237 Dec 10 15:21	22° \nearrow 24'25	0°18'45
	8233 Mar 02 14:28	0° δ	max. Earth dist.	8237 Dec 11 03:22	22° \nearrow 43'29	2.68033 AU
	8233 Apr 10 10:26	0° Π		8237 Dec 22 14:31	0° $\overline{\delta}$	
asc. node	8233 Apr 29 05:44	14° Π 48'09	desc. node	8238 Jan 15 12:50	15° $\overline{\delta}$ 12'14	
	8233 May 18 12:06	0° $\overline{\delta}$	morning rise	8238 Jan 23 10:28	20° $\overline{\delta}$ 14'07	
	8233 Jun 25 21:44	0° Ω		8238 Feb 07 17:41	0° \approx	
evening set	8233 Jul 19 06:24	17° Ω 50'17		8238 Mar 26 08:46	0° H	
	8233 Aug 04 12:24	0° \cap		8238 May 11 08:36	0° Υ	
	8233 Sep 14 22:41	0° $\underline{\cap}$		8238 Jun 25 20:25	0° δ	
				8238 Aug 10 11:03	0° Π	
conjunction	8233 Sep 18 19:21	2° $\underline{\cap}$ 43'19 1°06'26		8238 Sep 27 15:17	0° $\overline{\delta}$	
minimum elong	8233 Sep 18 18:50	2° $\underline{\cap}$ 42'24 1°06'26	retrograde	8238 Dec 08 07:07	25° $\overline{\delta}$ 59'16	
max. Earth dist.	8233 Oct 22 09:59	25° $\underline{\cap}$ 54'03 2.55024 AU	asc. node	8238 Dec 20 06:43	24° $\overline{\delta}$ 59'25	
	8233 Oct 28 11:53	0° \cap	min. Earth dist.	8239 Jan 03 21:46	21° $\overline{\delta}$ 37'37	0.37586 AU
morning rise	8233 Nov 11 14:50	9° \cap 25'18	opposition	8239 Jan 08 12:45	20° $\overline{\delta}$ 19'53	1°26'47
	8233 Dec 13 04:32	0° \nearrow	greatest brilliancy	8239 Jan 08 05:21	20° $\overline{\delta}$ 25'05	-3.0m
	8234 Jan 30 00:54	0° $\overline{\delta}$	direct	8239 Feb 07 00:40	15° $\overline{\delta}$ 17'12	
	8234 Mar 21 17:18	0° \approx		8239 Mar 31 17:23	0° Ω	
desc. node	8234 Apr 12 18:23	12° \approx 11'50		8239 May 25 05:09	0° \cap	
	8234 May 18 11:14	0° H		8239 Jul 13 05:01	0° $\underline{\cap}$	
retrograde	8234 Jul 20 10:46	17° H 12'06		8239 Aug 30 11:00	0° \cap	
opposition	8234 Aug 25 21:57	9° H 24'29 -4°33'59		8239 Oct 17 15:46	0° \nearrow	
greatest brilliancy	8234 Aug 27 02:34	8° H 58'09 -1.8m	evening set	8239 Dec 01 10:42	28° \nearrow 03'35	
min. Earth dist.	8234 Sep 02 13:16	6° H 36'05 0.55406 AU	desc. node	8239 Dec 03 11:23	29° \nearrow 20'23	
	8234 Oct 03 05:06	30° κ \approx		8239 Dec 04 12:29	0° $\overline{\delta}$	
direct	8234 Oct 04 19:00	29° \approx 58'58	max. Earth dist.	8240 Jan 02 17:27	18° $\overline{\delta}$ 34'08	2.66317 AU
	8234 Oct 06 09:02	0° H				
	8234 Dec 23 17:04	0° Υ	conjunction	8240 Jan 15 00:13	26° $\overline{\delta}$ 27'52	-0°22'05
	8235 Feb 06 10:17	0° δ	minimum elong	8240 Jan 14 23:34	26° $\overline{\delta}$ 26'49	0°21'56
asc. node	8235 Mar 17 06:08	28° δ 52'48		8240 Jan 20 11:32	0° \approx	
	8235 Mar 18 17:24	0° Π	morning rise	8240 Feb 28 07:01	25° \approx 27'58	
	8235 Apr 26 17:01	0° $\overline{\delta}$		8240 Mar 06 02:02	0° H	
	8235 Jun 04 22:17	0° Ω		8240 Apr 19 03:04	0° Υ	
	8235 Jul 15 08:59	0° \cap		8240 May 31 15:03	0° δ	
	8235 Aug 26 14:38	0° $\underline{\cap}$		8240 Jul 11 19:49	0° Π	
evening set	8235 Sep 14 05:34	12° $\underline{\cap}$ 48'09		8240 Aug 21 06:09	0° $\overline{\delta}$	
	8235 Oct 09 18:57	0° \cap		8240 Oct 01 00:17	0° Ω	
			asc. node	8240 Nov 06 05:31	25° Ω 12'53	
conjunction	8235 Nov 04 00:06	16° \cap 36'17 0°53'28		8240 Nov 13 13:38	0° \cap	
minimum elong	8235 Nov 04 01:20	16° \cap 38'18 0°53'36		8241 Jan 11 19:53	0° $\underline{\cap}$	
max. Earth dist.	8235 Nov 19 01:39	26° \cap 22'55 2.64234 AU	retrograde	8241 Feb 04 10:11	3° $\underline{\cap}$ 44'40	
	8235 Nov 24 16:16	0° \nearrow		8241 Feb 27 03:49	30° κ \cap	
morning rise	8235 Dec 20 13:18	16° \nearrow 32'40	min. Earth dist.	8241 Mar 05 15:11	27° \cap 49'22	0.49799 AU
	8236 Jan 10 19:54	0° $\overline{\delta}$	greatest brilliancy	8241 Mar 12 07:00	25° \cap 22'58	-2.1m
	8236 Feb 27 21:13	0° \approx	opposition	8241 Mar 13 19:52	24° \cap 48'57	5°21'08
desc. node	8236 Feb 28 14:53	0° \approx 27'19	direct	8241 Apr 16 23:29	17° \cap 30'52	
	8236 Apr 16 23:45	0° H		8241 Jun 06 09:07	0° $\underline{\cap}$	
	8236 Jun 07 12:08	0° Υ		8241 Aug 05 06:53	0° \cap	
	8236 Aug 08 07:15	0° δ		8241 Sep 26 09:47	0° \nearrow	
retrograde	8236 Sep 18 00:47	8° δ 34'51	desc. node	8241 Oct 20 11:02	14° \nearrow 25'06	
opposition	8236 Oct 19 20:52	2° δ 49'04 -5°43'31		8241 Nov 14 21:39	0° $\overline{\delta}$	
greatest brilliancy	8236 Oct 21 13:23	2° δ 18'03 -2.6m		8242 Jan 01 07:32	0° \approx	

evening set	8242 Jan 05 18:39	2°≈53'41		morning rise	8246 Aug 27 13:20	26°Ω07'42	
max. Earth dist.	8242 Jan 26 15:08	16°≈36'02	2.59231 AU		8246 Sep 01 16:43	0°♐	
	8242 Feb 15 13:53	0°♋			8246 Oct 12 15:46	0°♌	
					8246 Nov 25 01:39	0°♍	
conjunction	8242 Feb 21 02:00	3°♋44'58	-0°56'35		8247 Jan 10 18:45	0°♊	
minimum elong	8242 Feb 21 00:49	3°♋42'57	0°56'30		8247 Mar 04 06:50	0°♈	
	8242 Mar 30 16:58	0°♑		retrograde	8247 May 25 06:12	26°♈47'02	
morning rise	8242 Apr 11 00:51	8°♑07'15		desc. node	8247 Jun 12 11:05	24°♈40'56	
	8242 May 10 21:57	0°♉		opposition	8247 Jul 04 02:15	17°♈28'48	-0°45'07
	8242 Jun 19 15:16	0°♊		greatest brilliancy	8247 Jul 04 03:42	17°♈27'23	-1.3m
	8242 Jul 28 11:55	0°♋		min. Earth dist.	8247 Jul 06 19:30	16°♈24'47	0.66991 AU
	8242 Sep 05 07:56	0°♌		direct	8247 Aug 14 16:34	7°♈26'21	
asc. node	8242 Sep 24 01:49	14°♌14'55			8247 Oct 26 05:45	0°≈	
	8242 Oct 15 06:06	0°♐			8247 Dec 16 19:54	0°♋	
	8242 Nov 26 23:14	0°♍			8248 Jan 30 00:47	0°♑	
	8243 Jan 15 22:45	0°♎			8248 Mar 10 15:28	0°♉	
retrograde	8243 Mar 17 19:03	18°♎40'23			8248 Apr 18 07:49	0°♊	
min. Earth dist.	8243 Apr 21 20:28	10°♎39'32	0.61654 AU	greatest brilliancy	8248 May 03 10:47	11°♊55'54	1.2m
opposition	8243 Apr 26 17:22	8°♎43'37	4°08'27	asc. node	8248 May 15 21:30	21°♊46'55	
greatest brilliancy	8243 Apr 26 00:49	9°♎00'03	-1.6m		8248 May 26 06:50	0°♋	
	8243 May 30 14:41	30°♎♌		evening set	8248 Jun 21 04:29	20°♋22'51	
direct	8243 Jun 03 19:55	29°♌53'13			8248 Jul 03 13:01	0°♌	
	8243 Jun 08 03:05	0°♍			8248 Aug 11 23:02	0°♐	
	8243 Sep 01 14:56	0°♊					
desc. node	8243 Sep 07 11:56	3°♊03'13		conjunction	8248 Aug 27 04:22	11°♐15'04	0°58'47
	8243 Oct 25 14:56	0°♈		minimum elong	8248 Aug 27 02:10	11°♐11'03	0°58'44
	8243 Dec 13 11:43	0°≈			8248 Sep 22 04:18	0°♌	
	8244 Jan 27 23:59	0°♋		max. Earth dist.	8248 Oct 08 13:47	11°♌31'17	2.50070 AU
evening set	8244 Feb 15 20:34	13°♋00'43		morning rise	8248 Oct 24 18:59	22°♌41'27	
max. Earth dist.	8244 Feb 29 13:22	22°♋40'52	2.47459 AU		8248 Nov 04 13:47	0°♍	
	8244 Mar 10 18:22	0°♑			8248 Dec 20 07:55	0°♊	
					8249 Feb 06 18:34	0°♈	
conjunction	8244 Apr 08 18:44	21°♑19'20	-1°04'39		8249 Mar 31 15:21	0°≈	
minimum elong	8244 Apr 08 19:47	21°♑21'18	1°04'41	desc. node	8249 Apr 29 08:43	14°≈11'40	
	8244 Apr 20 07:39	0°♉			8249 Jun 14 06:32	0°♋	
	8244 May 29 07:36	0°♊		retrograde	8249 Jul 02 09:08	1°♋49'14	
morning rise	8244 Jun 09 19:42	8°♊59'46			8249 Jul 19 09:57	30°♎≈	
	8244 Jul 06 12:37	0°♋		opposition	8249 Aug 09 03:26	23°≈28'37	-3°31'23
greatest brilliancy	8244 Jul 07 20:32	1°♋02'52	1.2m	greatest brilliancy	8249 Aug 09 21:26	23°≈11'34	-1.6m
asc. node	8244 Aug 11 00:19	27°♋50'19		min. Earth dist.	8249 Aug 15 12:55	21°≈03'22	0.59862 AU
	8244 Aug 13 18:59	0°♌		direct	8249 Sep 19 00:18	13°≈39'18	
	8244 Sep 22 00:31	0°♐			8249 Nov 14 22:46	0°♋	
	8244 Nov 02 04:45	0°♍			8250 Jan 04 20:43	0°♑	
	8244 Dec 16 14:49	0°♎			8250 Feb 16 07:55	0°♉	
	8245 Feb 05 11:50	0°♊			8250 Mar 27 18:46	0°♊	
retrograde	8245 Apr 20 18:30	24°♊01'29		asc. node	8250 Apr 02 21:39	4°♊45'01	
min. Earth dist.	8245 May 30 05:24	14°♊36'04	0.67602 AU		8250 May 05 06:12	0°♋	
opposition	8245 May 31 07:08	14°♊10'25	1°51'15		8250 Jun 13 01:08	0°♌	
greatest brilliancy	8245 May 31 05:46	14°♊11'48	-1.3m		8250 Jul 23 01:43	0°♐	
direct	8245 Jul 10 20:45	4°♊30'17		evening set	8250 Aug 25 09:22	24°♐00'12	
desc. node	8245 Jul 25 12:23	5°♊43'10			8250 Sep 02 21:59	0°♌	
	8245 Sep 29 08:39	0°♈			8250 Oct 16 18:40	0°♍	
	8245 Nov 21 19:35	0°≈					
	8246 Jan 07 13:52	0°♋		conjunction	8250 Oct 18 12:11	1°♍09'20	1°02'28
	8246 Feb 19 12:20	0°♑		minimum elong	8250 Oct 18 13:11	1°♍11'00	1°02'32
	8246 Mar 31 19:47	0°♉		max. Earth dist.	8250 Nov 09 01:15	15°♍24'24	2.61262 AU
evening set	8246 Apr 09 22:15	6°♉58'35			8250 Dec 01 12:23	0°♊	
	8246 May 09 11:31	0°♊		morning rise	8250 Dec 06 04:39	3°♊00'34	
					8251 Jan 17 19:25	0°♈	
conjunction	8246 Jun 15 22:05	29°♊36'37	-0°09'25		8251 Mar 07 13:27	0°≈	
minimum elong	8246 Jun 15 23:08	29°♊38'42	0°09'35	desc. node	8251 Mar 17 06:09	5°≈50'08	
behind sun begin	8246 Jun 14 22:18	28°♊49'31			8251 Apr 27 14:06	0°♋	
behind sun end	8246 Jun 16 23:59	0°♋27'53			8251 Jun 24 11:31	0°♑	
	8246 Jun 16 09:54	0°♋		retrograde	8251 Aug 23 06:58	16°♑07'21	
asc. node	8246 Jun 28 23:08	9°♋55'48		opposition	8251 Sep 26 03:33	9°♑27'25	-5°47'13
max. Earth dist.	8246 Jul 14 06:14	21°♋58'07	2.36813 AU	greatest brilliancy	8251 Sep 27 22:23	8°♑51'05	-2.3m
	8246 Jul 24 12:46	0°♌		min. Earth dist.	8251 Oct 04 19:05	6°♑32'54	0.47192 AU

direct	8251 Nov 02 04:05	1°♈17'14			8257 Jan 08 02:46	0°♊	
	8252 Jan 16 07:02	0°♈		max. Earth dist.	8257 Jan 16 13:40	5°♊29'48	2.62640 AU
asc. node	8252 Feb 18 22:56	22°♈30'34					
	8252 Feb 29 10:59	0°♈		conjunction	8257 Feb 05 14:31	18°♊41'42	-0°44'54
	8252 Apr 10 05:06	0°♈		minimum elong	8257 Feb 05 13:22	18°♊39'46	0°44'47
	8252 May 20 15:23	0°♈			8257 Feb 22 11:20	0°♈	
	8252 Jul 01 01:42	0°♈		morning rise	8257 Mar 24 00:25	20°♈15'50	
	8252 Aug 13 03:22	0°♈			8257 Apr 06 21:44	0°♈	
	8252 Sep 26 23:03	0°♈			8257 May 18 13:05	0°♈	
evening set	8252 Oct 10 05:37	8°♈41'17			8257 Jun 27 17:31	0°♈	
	8252 Nov 12 05:19	0°♈			8257 Aug 06 00:54	0°♈	
					8257 Sep 14 07:49	0°♈	
conjunction	8252 Nov 26 12:28	9°♈08'36	0°33'26	asc. node	8257 Oct 10 20:57	19°♈48'26	
minimum elong	8252 Nov 26 13:26	9°♈10'08	0°33'35		8257 Oct 24 22:16	0°♈	
max. Earth dist.	8252 Dec 02 12:37	12°♈58'17	2.67214 AU		8257 Dec 08 10:19	0°♈	
	8252 Dec 29 08:02	0°♈			8258 Feb 08 22:33	0°♈	
morning rise	8253 Jan 10 00:04	7°♈23'33		retrograde	8258 Mar 02 22:22	3°♈06'15	
desc. node	8253 Feb 01 03:14	21°♈24'04			8258 Mar 23 17:23	30°♈	
	8253 Feb 14 17:12	0°♈		min. Earth dist.	8258 Apr 04 20:25	25°♈49'03	0.57603 AU
	8253 Apr 03 01:20	0°♈		greatest brilliancy	8258 Apr 10 02:54	23°♈45'37	-1.7m
	8253 May 20 10:29	0°♈		opposition	8258 Apr 11 04:08	23°♈20'54	4°50'16
	8253 Jul 07 12:56	0°♈		direct	8258 May 17 21:40	15°♈00'00	
	8253 Aug 28 01:45	0°♈			8258 Jul 14 10:38	0°♈	
retrograde	8253 Nov 06 22:15	23°♈45'16			8258 Sep 11 20:51	0°♈	
opposition	8253 Dec 06 19:01	18°♈49'55	-2°18'03	desc. node	8258 Sep 24 00:26	6°♈49'47	
greatest brilliancy	8253 Dec 07 00:15	18°♈46'26	-3.0m		8258 Nov 02 11:51	0°♈	
min. Earth dist.	8253 Dec 07 18:57	18°♈34'03	0.36730 AU		8258 Dec 20 15:17	0°♈	
direct	8254 Jan 05 12:39	13°♈50'39		evening set	8259 Jan 29 22:17	26°♈33'35	
asc. node	8254 Jan 05 22:11	13°♈50'43			8259 Feb 03 23:55	0°♈	
	8254 Feb 28 16:51	0°♈		max. Earth dist.	8259 Feb 14 10:41	7°♈09'43	2.52522 AU
	8254 Apr 20 23:03	0°♈			8259 Mar 18 20:50	0°♈	
	8254 Jun 06 08:51	0°♈					
	8254 Jul 22 12:05	0°♈		conjunction	8259 Mar 20 10:22	1°♈07'28	-1°06'48
	8254 Sep 07 07:31	0°♈		minimum elong	8259 Mar 20 10:04	1°♈06'56	1°06'48
	8254 Oct 24 17:59	0°♈			8259 Apr 28 15:32	0°♈	
evening set	8254 Nov 17 11:33	14°♈57'36		morning rise	8259 May 15 00:04	12°♈23'21	
	8254 Dec 11 06:41	0°♈			8259 Jun 06 21:24	0°♈	
desc. node	8254 Dec 20 01:00	5°♈33'33			8259 Jul 15 07:32	0°♈	
max. Earth dist.	8254 Dec 24 19:07	8°♈34'57	2.67658 AU		8259 Aug 22 17:47	0°♈	
				asc. node	8259 Aug 28 17:28	4°♈37'43	
conjunction	8255 Jan 01 04:56	13°♈18'04	-0°06'26		8259 Oct 01 02:56	0°♈	
minimum elong	8255 Jan 01 04:44	13°♈17'44	0°06'15		8259 Nov 11 14:40	0°♈	
behind sun begin	8254 Dec 31 11:33	12°♈50'21			8259 Dec 27 01:34	0°♈	
behind sun end	8255 Jan 01 21:55	13°♈45'07			8260 Feb 21 08:13	0°♈	
	8255 Jan 27 05:56	0°♈		retrograde	8260 Apr 07 12:27	11°♈03'44	
morning rise	8255 Feb 13 21:34	11°♈26'15		min. Earth dist.	8260 May 15 09:16	2°♈07'53	0.66025 AU
	8255 Mar 14 04:07	0°♈		opposition	8260 May 17 23:01	1°♈06'15	2°47'33
	8255 Apr 27 19:31	0°♈		greatest brilliancy	8260 May 17 17:16	1°♈11'59	-1.4m
	8255 Jun 10 03:58	0°♈			8260 May 20 17:42	30°♈	
	8255 Jul 22 10:20	0°♈		direct	8260 Jun 26 17:17	21°♈42'07	
	8255 Sep 02 05:36	0°♈			8260 Aug 07 00:51	0°♈	
	8255 Oct 15 06:24	0°♈		desc. node	8260 Aug 11 01:12	1°♈27'33	
asc. node	8255 Nov 23 22:10	24°♈17'07			8260 Oct 09 22:02	0°♈	
	8255 Dec 05 07:14	0°♈			8260 Nov 29 21:36	0°♈	
retrograde	8256 Jan 16 10:48	11°♈05'40			8261 Jan 15 00:37	0°♈	
min. Earth dist.	8256 Feb 12 10:36	6°♈05'06	0.44304 AU		8261 Feb 26 20:10	0°♈	
greatest brilliancy	8256 Feb 19 09:34	3°♈43'47	-2.5m	evening set	8261 Mar 17 14:44	13°♈45'44	
opposition	8256 Feb 20 22:12	3°♈12'32	4°53'15	max. Earth dist.	8261 Apr 08 07:21	0°♈04'13	2.39296 AU
	8256 Mar 02 02:00	30°♈			8261 Apr 08 05:08	0°♈	
direct	8256 Mar 24 01:03	26°♈47'42			8261 May 16 23:15	0°♈	
	8256 Apr 16 05:55	0°♈					
	8256 Jun 23 12:22	0°♈		conjunction	8261 May 17 14:02	0°♈29'01	-0°39'44
	8256 Aug 15 03:50	0°♈		minimum elong	8261 May 17 17:03	0°♈34'55	0°39'51
	8256 Oct 04 05:59	0°♈			8261 Jun 23 23:23	0°♈	
desc. node	8256 Nov 06 00:06	20°♈05'06		asc. node	8261 Jul 15 14:57	17°♈05'15	
	8256 Nov 21 22:43	0°♈		morning rise	8261 Jul 28 12:06	27°♈11'03	
evening set	8256 Dec 22 10:00	19°♈15'16			8261 Aug 01 02:42	0°♈	

	8261 Sep 09 05:59	0°♍			8266 Dec 13 19:59	0°♍	
	8261 Oct 20 04:55	0°♌			8267 Jan 30 09:46	0°♌	
	8261 Dec 02 19:25	0°♍	asc. node		8267 Mar 07 14:11	26°♌16'24	
	8262 Jan 19 10:06	0°♎			8267 Mar 12 13:19	0°♍	
	8262 Mar 17 08:01	0°♏			8267 Apr 20 23:22	0°♎	
retrograde	8262 May 11 14:45	14°♏13'53			8267 May 30 12:11	0°♏	
opposition	8262 Jun 20 20:34	4°♏40'21	0°16'56		8267 Jul 10 05:07	0°♍	
greatest brilliancy	8262 Jun 20 21:02	4°♏39'53	-1.3m		8267 Aug 21 16:18	0°♌	
min. Earth dist.	8262 Jun 22 02:09	4°♏11'05	0.68009 AU	evening set	8267 Sep 24 12:47	23°♌00'20	
desc. node	8262 Jun 29 01:11	1°♏29'12			8267 Oct 05 00:48	0°♍	
	8262 Jul 03 04:13	30°♎♎					
direct	8262 Aug 01 05:15	24°♎♎43'32		conjunction	8267 Nov 12 19:51	25°♍22'02	0°46'45
	8262 Sep 02 00:47	0°♏		minimum elong	8267 Nov 12 21:04	25°♍23'59	0°46'53
	8262 Nov 06 14:22	0°♎			8267 Nov 20 00:22	0°♎	
	8262 Dec 25 11:21	0°♏		max. Earth dist.	8267 Nov 24 11:35	2°♎52'17	2.65543 AU
	8263 Feb 06 23:56	0°♍		morning rise	8267 Dec 28 11:04	24°♎31'43	
	8263 Mar 19 10:14	0°♌			8268 Jan 06 02:38	0°♏	
	8263 Apr 27 01:17	0°♍		desc. node	8268 Feb 18 17:44	27°♏25'06	
evening set	8263 May 23 06:46	20°♍44'42			8268 Feb 22 20:50	0°♎	
asc. node	8263 Jun 02 14:47	28°♍56'06			8268 Apr 11 05:03	0°♏	
	8263 Jun 03 23:03	0°♎			8268 May 30 18:59	0°♍	
	8263 Jul 12 02:51	0°♏			8268 Jul 23 11:13	0°♌	
				retrograde	8268 Oct 05 03:50	23°♌43'00	
conjunction	8263 Aug 01 21:51	16°♏01'44	0°39'59	opposition	8268 Nov 04 20:00	18°♌25'03	-5°03'00
minimum elong	8263 Aug 01 18:42	15°♏55'42	0°39'50	greatest brilliancy	8268 Nov 06 03:11	18°♌02'41	-2.8m
	8263 Aug 20 09:08	0°♍		min. Earth dist.	8268 Nov 11 00:45	16°♌38'43	0.39335 AU
max. Earth dist.	8263 Sep 21 14:01	23°♍39'46	2.44589 AU	direct	8268 Dec 07 07:23	12°♌22'15	
	8263 Sep 30 10:23	0°♌		asc. node	8269 Jan 22 16:02	25°♌14'19	
morning rise	8263 Oct 05 12:42	3°♌37'06			8269 Jan 31 22:11	0°♍	
	8263 Nov 12 17:50	0°♍			8269 Mar 21 08:01	0°♎	
	8263 Dec 28 16:33	0°♎			8269 May 04 00:34	0°♏	
	8264 Feb 16 02:07	0°♏			8269 Jun 16 11:48	0°♍	
	8264 Apr 12 23:46	0°♎			8269 Jul 30 23:50	0°♌	
desc. node	8264 May 15 23:40	12°♎43'03			8269 Sep 14 19:30	0°♍	
retrograde	8264 Jun 16 05:31	17°♎46'33			8269 Oct 31 16:20	0°♎	
opposition	8264 Jul 24 23:40	8°♎59'41	-2°26'33	evening set	8269 Nov 03 04:25	1°♎35'28	
greatest brilliancy	8264 Jul 25 09:07	8°♎50'35	-1.5m	max. Earth dist.	8269 Dec 16 04:16	28°♎51'34	2.68140 AU
min. Earth dist.	8264 Jul 29 23:24	7°♎04'14	0.63404 AU		8269 Dec 17 23:24	0°♏	
	8264 Aug 22 23:25	30°♎♏					
direct	8264 Sep 04 09:13	28°♏59'14		conjunction	8269 Dec 18 12:45	0°♏21'10	0°09'29
	8264 Sep 17 06:33	0°♎		minimum elong	8269 Dec 18 13:03	0°♏21'37	0°09'39
	8264 Nov 29 01:01	0°♏		behind sun begin	8269 Dec 17 22:05	29°♎57'54	
	8265 Jan 14 19:02	0°♍		behind sun end	8269 Dec 19 04:01	0°♏45'21	
	8265 Feb 25 05:03	0°♌		desc. node	8270 Jan 05 15:04	11°♏51'10	
	8265 Apr 05 05:24	0°♍		morning rise	8270 Jan 31 03:53	28°♏09'30	
asc. node	8265 Apr 19 13:40	11°♍14'39			8270 Feb 03 00:48	0°♎	
	8265 May 13 09:56	0°♎			8270 Mar 21 09:09	0°♏	
	8265 Jun 20 22:11	0°♏			8270 May 05 19:38	0°♍	
	8265 Jul 30 15:21	0°♍			8270 Jun 19 09:23	0°♌	
evening set	8265 Aug 02 14:52	2°♍12'02			8270 Aug 02 10:02	0°♍	
	8265 Sep 10 04:04	0°♌			8270 Sep 16 01:57	0°♎	
					8270 Nov 05 17:10	0°♏	
conjunction	8265 Sep 30 04:54	13°♌57'51	1°06'50	asc. node	8270 Dec 10 15:55	12°♏31'43	
minimum elong	8265 Sep 30 05:08	13°♌58'15	1°06'51	retrograde	8270 Dec 23 15:13	13°♏43'45	
	8265 Oct 23 18:38	0°♍		min. Earth dist.	8271 Jan 18 17:03	9°♏19'34	0.39450 AU
max. Earth dist.	8265 Oct 29 06:06	3°♍40'12	2.57458 AU	opposition	8271 Jan 25 11:18	7°♏17'04	3°09'31
morning rise	8265 Nov 20 21:19	18°♍37'31		greatest brilliancy	8271 Jan 24 14:09	7°♏33'07	-2.8m
	8265 Dec 08 10:19	0°♎		direct	8271 Feb 24 15:49	1°♏49'17	
	8266 Jan 24 23:54	0°♏			8271 May 15 16:02	0°♍	
	8266 Mar 15 19:04	0°♎			8271 Jul 06 13:48	0°♌	
desc. node	8266 Apr 02 20:46	10°♎24'05			8271 Aug 24 23:06	0°♍	
	8266 May 09 03:04	0°♏			8271 Oct 12 17:11	0°♎	
retrograde	8266 Jul 31 17:52	27°♏13'32		desc. node	8271 Nov 23 13:21	26°♎03'09	
opposition	8266 Sep 05 08:27	19°♏47'26	-5°06'12		8271 Nov 29 20:07	0°♏	
greatest brilliancy	8266 Sep 06 19:13	19°♏16'07	-2.0m	evening set	8271 Dec 09 09:51	6°♏02'20	
min. Earth dist.	8266 Sep 13 12:38	16°♏51'17	0.52611 AU	max. Earth dist.	8272 Jan 08 01:22	24°♏57'13	2.65241 AU
direct	8266 Oct 14 09:33	10°♏42'12			8272 Jan 15 20:53	0°♎	

conjunction	8272 Jan 23 01:27	4° \approx 40'04 -0°30'56	retrograde	8277 Apr 28 07:55	1° \approx 43'19	
minimum elong	8272 Jan 23 00:34	4° \approx 38'39 0°30'46		8277 May 14 13:03	30° \approx 8'27	
	8272 Mar 01 09:27	0° \approx	opposition	8277 Jun 07 18:57	21° \approx 57'26	1°17'05
morning rise	8272 Mar 07 21:29	4° \approx 22'43	greatest brilliancy	8277 Jun 07 18:58	21° \approx 57'26	-1.3m
	8272 Apr 14 05:05	0° \approx	min. Earth dist.	8277 Jun 07 12:40	22° \approx 03'42	0.68027 AU
	8272 May 26 09:15	0° \approx	desc. node	8277 Jul 15 15:21	12° \approx 13'45	
	8272 Jul 06 04:06	0° \approx	direct	8277 Jul 18 16:32	12° \approx 10'18	
	8272 Aug 15 02:42	0° \approx		8277 Sep 21 01:25	0° \approx	
	8272 Sep 24 03:58	0° \approx		8277 Nov 16 02:37	0° \approx	
asc. node	8272 Oct 27 13:20	24° \approx 04'32		8278 Jan 02 12:22	0° \approx	
	8272 Nov 05 03:29	0° \approx		8278 Feb 14 15:28	0° \approx	
	8272 Dec 24 10:12	0° \approx		8278 Mar 26 23:58	0° \approx	
retrograde	8273 Feb 14 14:13	15° \approx 27'01	evening set	8278 Apr 24 16:40	22° \approx 11'43	
min. Earth dist.	8273 Mar 17 04:07	9° \approx 00'23 0.52759 AU		8278 May 04 15:16	0° \approx	
greatest brilliancy	8273 Mar 23 09:14	6° \approx 39'34 -2.0m		8278 Jun 11 13:03	0° \approx	
opposition	8273 Mar 24 18:45	6° \approx 07'42 5°17'34	asc. node	8278 Jun 19 06:20	6° \approx 06'44	
	8273 Apr 13 11:47	30° \approx 8'27				
direct	8273 Apr 28 21:57	28° \approx 24'22	conjunction	8278 Jul 03 06:51	17° \approx 10'43	0°10'07
	8273 May 15 05:40	0° \approx	minimum elong	8278 Jul 03 05:44	17° \approx 08'32	0°09'55
	8273 Jul 28 21:26	0° \approx	behind sun begin	8278 Jul 02 05:18	16° \approx 20'27	
	8273 Sep 20 19:54	0° \approx	behind sun end	8278 Jul 04 06:11	17° \approx 56'36	
desc. node	8273 Oct 10 13:50	11° \approx 37'19		8278 Jul 19 15:46	0° \approx	
	8273 Nov 09 23:12	0° \approx	max. Earth dist.	8278 Aug 23 14:01	26° \approx 04'27	2.39131 AU
	8273 Dec 27 14:58	0° \approx		8278 Aug 27 19:48	0° \approx	
evening set	8274 Jan 14 07:01	11° \approx 30'50	morning rise	8278 Sep 11 20:06	11° \approx 10'31	
max. Earth dist.	8274 Feb 02 02:50	24° \approx 02'19 2.57044 AU		8278 Oct 07 18:34	0° \approx	
	8274 Feb 10 22:32	0° \approx		8278 Nov 20 02:07	0° \approx	
				8279 Jan 05 09:34	0° \approx	
conjunction	8274 Mar 02 11:54	13° \approx 26'27 -1°01'49		8279 Feb 25 08:43	0° \approx	
minimum elong	8274 Mar 02 10:52	13° \approx 24'41 1°01'46		8279 May 03 21:47	0° \approx	
	8274 Mar 25 23:49	0° \approx	retrograde	8279 Jun 02 08:19	4° \approx 33'49	
morning rise	8274 Apr 22 08:24	19° \approx 50'23	desc. node	8279 Jun 02 13:53	4° \approx 33'47	
	8274 May 06 01:32	0° \approx		8279 Jun 29 08:20	30° \approx 8'27	
	8274 Jun 14 14:46	0° \approx	opposition	8279 Jul 11 20:25	25° \approx 25'35	-1°22'07
	8274 Jul 23 07:15	0° \approx	greatest brilliancy	8279 Jul 11 23:58	25° \approx 22'07	-1.4m
	8274 Aug 30 22:51	0° \approx	min. Earth dist.	8279 Jul 15 08:49	24° \approx 03'08	0.66007 AU
asc. node	8274 Sep 14 11:23	11° \approx 07'38	direct	8279 Aug 22 10:45	15° \approx 22'08	
	8274 Oct 09 14:15	0° \approx		8279 Oct 17 00:16	0° \approx	
	8274 Nov 20 16:00	0° \approx		8279 Dec 10 18:23	0° \approx	
	8275 Jan 07 04:20	0° \approx		8280 Jan 24 16:26	0° \approx	
retrograde	8275 Mar 25 21:15	27° \approx 24'22		8280 Mar 05 13:09	0° \approx	
min. Earth dist.	8275 Apr 30 23:57	19° \approx 02'21 0.63476 AU		8280 Apr 13 07:48	0° \approx	
opposition	8275 May 05 01:25	17° \approx 25'16 3°40'24	asc. node	8280 May 06 06:50	18° \approx 06'19	
greatest brilliancy	8275 May 04 13:14	17° \approx 37'25 -1.5m		8280 May 21 08:00	0° \approx	
direct	8275 Jun 12 19:22	8° \approx 21'26		8280 Jun 28 15:23	0° \approx	
	8275 Aug 24 16:39	0° \approx	evening set	8280 Jul 07 09:19	6° \approx 04'46	
desc. node	8275 Aug 28 15:11	1° \approx 53'29		8280 Aug 07 02:43	0° \approx	
	8275 Oct 20 00:08	0° \approx				
	8275 Dec 08 12:33	0° \approx	conjunction	8280 Sep 09 09:59	24° \approx 19'15	1°04'22
	8276 Jan 23 05:59	0° \approx	minimum elong	8280 Sep 09 08:46	24° \approx 17'05	1°04'22
evening set	8276 Feb 26 08:06	23° \approx 44'59		8280 Sep 17 09:18	0° \approx	
	8276 Mar 06 01:01	0° \approx	max. Earth dist.	8280 Oct 16 23:27	20° \approx 36'37	2.52892 AU
max. Earth dist.	8276 Mar 11 14:02	4° \approx 01'00 2.44490 AU		8280 Oct 30 19:21	0° \approx	
	8276 Apr 15 13:11	0° \approx	morning rise	8280 Nov 04 04:38	2° \approx 56'55	
				8280 Dec 15 11:01	0° \approx	
conjunction	8276 Apr 21 18:07	4° \approx 43'04 -0°59'01		8281 Feb 01 11:24	0° \approx	
minimum elong	8276 Apr 21 20:08	4° \approx 46'54 0°59'05		8281 Mar 24 21:10	0° \approx	
	8276 May 24 11:17	0° \approx	desc. node	8281 Apr 19 11:26	13° \approx 38'14	
morning rise	8276 Jun 26 18:50	26° \approx 11'48		8281 May 25 07:40	0° \approx	
	8276 Jul 01 14:33	0° \approx	retrograde	8281 Jul 12 08:56	10° \approx 51'43	
asc. node	8276 Aug 01 08:42	24° \approx 11'10	opposition	8281 Aug 18 10:36	2° \approx 48'21	-4°07'52
	8276 Aug 08 19:34	0° \approx	greatest brilliancy	8281 Aug 19 10:24	2° \approx 26'07	-1.7m
	8276 Sep 16 23:27	0° \approx		8281 Aug 25 23:10	30° \approx 8'27	
	8276 Oct 28 00:06	0° \approx	min. Earth dist.	8281 Aug 25 12:39	0° \approx 09'38	0.57511 AU
	8276 Dec 10 23:41	0° \approx	direct	8281 Sep 27 19:10	23° \approx 10'19	
	8277 Jan 29 04:20	0° \approx		8281 Nov 01 04:24	0° \approx	
	8277 Apr 11 02:49	0° \approx		8281 Dec 28 15:43	0° \approx	

	8282 Feb 10 06:41	0°♄		behind sun end	8287 Jan 09 06:16	21°♄24'36	
	8282 Mar 22 04:19	0°♂			8287 Jan 22 14:33	0°♂	
asc. node	8282 Mar 24 07:36	1°♂38'39		morning rise	8287 Feb 22 00:45	19°♂50'31	
	8282 Apr 29 21:46	0°♄			8287 Mar 09 08:58	0°♄	
	8282 Jun 07 21:24	0°♂			8287 Apr 22 16:47	0°♄	
	8282 Jul 18 02:07	0°♄			8287 Jun 04 14:04	0°♄	
	8282 Aug 29 01:58	0°♄			8287 Jul 16 05:40	0°♂	
evening set	8282 Sep 05 22:49	5°♄28'02			8287 Aug 26 04:36	0°♄	
	8282 Oct 12 01:25	0°♂			8287 Oct 06 16:47	0°♂	
				asc. node	8287 Nov 14 07:30	25°♂51'45	
conjunction	8282 Oct 28 02:18	10°♂38'01	0°57'41		8287 Nov 21 02:28	0°♄	
minimum elong	8282 Oct 28 03:30	10°♂39'59	0°57'47	retrograde	8288 Jan 28 03:55	24°♄51'17	
max. Earth dist.	8282 Nov 14 22:21	22°♂18'03	2.63004 AU	min. Earth dist.	8288 Feb 25 07:09	19°♄20'53	0.47329 AU
	8282 Nov 26 19:54	0°♄		greatest brilliancy	8288 Mar 03 04:03	16°♄54'26	-2.3m
morning rise	8282 Dec 14 12:02	11°♄19'53		opposition	8288 Mar 04 18:09	16°♄20'17	5°16'29
	8283 Jan 12 23:57	0°♄		direct	8288 Apr 07 01:05	9°♄24'52	
	8283 Mar 02 07:23	0°♂			8288 Jun 13 20:49	0°♄	
desc. node	8283 Mar 07 07:56	3°♂04'37			8288 Aug 08 20:14	0°♂	
	8283 Apr 21 02:47	0°♄			8288 Sep 28 23:58	0°♄	
	8283 Jun 13 15:12	0°♄		desc. node	8288 Oct 27 03:05	17°♄02'24	
retrograde	8283 Sep 06 17:28	28°♄44'56			8288 Nov 17 03:26	0°♄	
opposition	8283 Oct 09 12:16	22°♄34'33	-5°52'48	evening set	8288 Dec 30 13:07	27°♄27'30	
greatest brilliancy	8283 Oct 11 07:51	21°♄59'29	-2.4m		8289 Jan 03 11:32	0°♂	
min. Earth dist.	8283 Oct 17 22:54	19°♄53'02	0.44156 AU	max. Earth dist.	8289 Jan 22 07:33	12°♂17'41	2.60848 AU
direct	8283 Nov 14 01:27	15°♄05'58					
	8284 Jan 03 13:48	0°♄		conjunction	8289 Feb 14 06:47	27°♂36'15	-0°52'04
asc. node	8284 Feb 09 07:37	21°♄57'15		minimum elong	8289 Feb 14 05:34	27°♂34'13	0°51'57
	8284 Feb 21 06:20	0°♂			8289 Feb 17 19:53	0°♄	
	8284 Apr 03 09:52	0°♄		morning rise	8289 Apr 02 23:14	0°♄35'44	
	8284 May 14 14:28	0°♂			8289 Apr 02 03:05	0°♄	
	8284 Jun 25 13:32	0°♄			8289 May 13 13:23	0°♄	
	8284 Aug 08 00:30	0°♄			8289 Jun 22 12:01	0°♂	
	8284 Sep 22 02:53	0°♂			8289 Jul 31 13:13	0°♄	
evening set	8284 Oct 19 04:31	17°♂34'22			8289 Sep 08 13:18	0°♂	
	8284 Nov 07 13:04	0°♄		asc. node	8289 Oct 01 03:48	17°♂04'33	
					8289 Oct 18 16:23	0°♄	
conjunction	8284 Dec 04 15:28	17°♄16'27	0°24'53		8289 Nov 30 21:50	0°♄	
minimum elong	8284 Dec 04 16:13	17°♄17'37	0°25'02		8290 Jan 22 12:30	0°♂	
max. Earth dist.	8284 Dec 07 15:50	19°♄11'24	2.67771 AU	retrograde	8290 Mar 11 13:23	12°♂39'34	
	8284 Dec 24 16:28	0°♄		min. Earth dist.	8290 Apr 14 16:37	4°♂57'14	0.59959 AU
morning rise	8285 Jan 17 16:46	15°♄14'13		greatest brilliancy	8290 Apr 19 08:56	3°♂06'25	-1.6m
desc. node	8285 Jan 22 05:08	18°♄06'17		opposition	8290 Apr 20 05:13	2°♂46'21	4°27'31
	8285 Feb 09 22:10	0°♂			8290 Apr 27 11:34	30°♄	
	8285 Mar 28 20:31	0°♄		direct	8290 May 27 17:23	24°♄08'23	
	8285 May 14 09:51	0°♄			8290 Jun 30 08:13	0°♂	
	8285 Jun 29 21:19	0°♄			8290 Sep 05 07:22	0°♄	
	8285 Aug 16 08:26	0°♂		desc. node	8290 Sep 14 03:56	4°♄46'39	
	8285 Oct 09 08:32	0°♄			8290 Oct 28 05:37	0°♄	
retrograde	8285 Nov 25 02:41	12°♄19'40			8290 Dec 15 19:52	0°♂	
min. Earth dist.	8285 Dec 23 02:30	7°♄45'18	0.36753 AU		8291 Jan 30 07:57	0°♄	
opposition	8285 Dec 25 08:50	7°♄08'55	-0°09'09	evening set	8291 Feb 08 07:48	6°♄09'14	
greatest brilliancy	8285 Dec 25 08:47	7°♄08'57	-3.1m	max. Earth dist.	8291 Feb 22 15:12	16°♄05'56	2.49786 AU
asc. node	8285 Dec 27 08:00	6°♄37'23			8291 Mar 14 04:40	0°♄	
direct	8286 Jan 23 14:43	2°♄16'25					
	8286 Apr 10 08:58	0°♂		conjunction	8291 Mar 31 13:35	12°♄38'02	-1°06'39
	8286 May 30 01:45	0°♄		minimum elong	8291 Mar 31 13:59	12°♄38'46	1°06'42
	8286 Jul 16 13:31	0°♄			8291 Apr 23 21:20	0°♄	
	8286 Sep 02 02:11	0°♂		morning rise	8291 May 29 12:58	27°♄17'55	
	8286 Oct 19 22:03	0°♄			8291 Jun 02 00:26	0°♂	
evening set	8286 Nov 25 12:03	22°♄58'39			8291 Jul 10 07:37	0°♄	
	8286 Dec 06 15:01	0°♄			8291 Aug 17 15:11	0°♂	
desc. node	8286 Dec 10 03:30	2°♄13'38		asc. node	8291 Aug 19 01:49	1°♂07'13	
max. Earth dist.	8286 Dec 29 21:54	14°♄47'23	2.67015 AU		8291 Sep 25 21:08	0°♄	
					8291 Nov 06 02:23	0°♄	
conjunction	8287 Jan 09 02:03	21°♄17'51	-0°15'39		8291 Dec 20 18:57	0°♂	
minimum elong	8287 Jan 09 01:36	21°♄17'07	0°15'29		8292 Feb 11 02:47	0°♄	
behind sun begin	8287 Jan 08 20:55	21°♄09'37		retrograde	8292 Apr 15 03:49	19°♄02'27	

min. Earth dist.	8292 May 23 21:48	9° \mathbb{A} 49'48	0.67029 AU	evening set	8297 Aug 15 21:29	15° \mathbb{M} 25'31	
opposition	8292 May 25 15:51	9° \mathbb{A} 07'49	2°14'57		8297 Sep 05 08:59	0° \mathbb{A}	
greatest brilliancy	8292 May 25 12:50	9° \mathbb{A} 10'50	-1.3m				
	8292 Jun 26 15:33	30° \mathbb{R} \mathbb{M}		conjunction	8297 Oct 10 20:48	24° \mathbb{A} 28'28	1°04'58
direct	8292 Jul 04 21:14	29° \mathbb{M} 34'25		minimum elong	8297 Oct 10 21:33	24° \mathbb{A} 29'45	1°05'02
	8292 Jul 13 10:41	0° \mathbb{A}			8297 Oct 19 01:38	0° \mathbb{M}	
desc. node	8292 Aug 01 04:32	3° \mathbb{A} 29'45		max. Earth dist.	8297 Nov 04 15:42	11° \mathbb{M} 02'36	2.59662 AU
	8292 Oct 03 04:45	0° \mathbb{B}		morning rise	8297 Nov 29 18:28	27° \mathbb{M} 27'20	
	8292 Nov 24 13:48	0° \approx			8297 Dec 03 17:03	0° \mathbb{A}	
	8293 Jan 10 02:59	0° \mathbb{H}			8298 Jan 20 01:38	0° \mathbb{B}	
	8293 Feb 22 01:33	0° \mathbb{Y}			8298 Mar 10 04:27	0° \approx	
evening set	8293 Mar 30 07:37	26° \mathbb{Y} 51'39		desc. node	8298 Mar 23 23:07	8° \approx 09'56	
	8293 Apr 03 10:49	0° \mathbb{B}			8298 May 01 07:52	0° \mathbb{H}	
max. Earth dist.	8293 May 09 06:03	27° \mathbb{B} 42'16	2.37070 AU		8298 Jul 03 22:18	0° \mathbb{Y}	
	8293 May 12 04:15	0° \mathbb{I}		retrograde	8298 Aug 12 23:57	8° \mathbb{Y} 02'46	
				opposition	8298 Sep 16 16:43	1° \mathbb{Y} 00'49	-5°32'37
conjunction	8293 Jun 02 16:53	16° \mathbb{I} 58'56	-0°23'36	greatest brilliancy	8298 Sep 18 08:38	0° \mathbb{Y} 25'53	-2.1m
minimum elong	8293 Jun 02 19:13	17° \mathbb{I} 03'33	0°23'44		8298 Sep 19 14:08	30° \mathbb{R} \mathbb{H}	
	8293 Jun 19 03:23	0° \mathbb{B}		min. Earth dist.	8298 Sep 25 05:56	28° \mathbb{H} 02'31	0.49666 AU
asc. node	8293 Jul 06 00:39	13° \mathbb{B} 20'51		direct	8298 Oct 24 17:07	22° \mathbb{H} 22'58	
	8293 Jul 27 05:57	0° \mathbb{Q}			8298 Nov 29 00:11	0° \mathbb{Y}	
morning rise	8293 Aug 14 19:23	14° \mathbb{Q} 22'21			8299 Jan 22 09:30	0° \mathbb{B}	
	8293 Sep 04 08:32	0° \mathbb{M}		asc. node	8299 Feb 26 00:29	24° \mathbb{B} 11'31	
	8293 Oct 15 05:49	0° \mathbb{A}			8299 Mar 05 22:55	0° \mathbb{I}	
	8293 Nov 27 15:34	0° \mathbb{M}			8299 Apr 15 00:22	0° \mathbb{B}	
	8294 Jan 13 14:04	0° \mathbb{A}			8299 May 24 23:08	0° \mathbb{Q}	
	8294 Mar 08 08:28	0° \mathbb{B}			8299 Jul 04 23:57	0° \mathbb{M}	
retrograde	8294 May 19 09:23	21° \mathbb{B} 53'20			8299 Aug 16 17:18	0° \mathbb{A}	
desc. node	8294 Jun 19 03:31	15° \mathbb{B} 59'22			8299 Sep 30 06:38	0° \mathbb{M}	
opposition	8294 Jun 28 09:49	12° \mathbb{B} 27'45	-0°19'15	evening set	8299 Oct 04 05:19	2° \mathbb{M} 36'12	
greatest brilliancy	8294 Jun 28 10:18	12° \mathbb{B} 27'17	-1.3m		8299 Nov 15 08:48	0° \mathbb{A}	
min. Earth dist.	8294 Jun 30 10:49	11° \mathbb{B} 39'27	0.67577 AU				
direct	8294 Aug 08 21:49	2° \mathbb{B} 27'16		conjunction	8299 Nov 21 07:38	3° \mathbb{A} 49'07	0°39'12
	8294 Oct 30 13:22	0° \approx		minimum elong	8299 Nov 21 08:43	3° \mathbb{A} 50'51	0°39'21
	8294 Dec 19 22:19	0° \mathbb{H}		max. Earth dist.	8299 Nov 29 18:43	9° \mathbb{A} 13'58	2.66571 AU
	8295 Feb 01 21:13	0° \mathbb{Y}			8300 Jan 01 10:40	0° \mathbb{B}	
	8295 Mar 14 10:59	0° \mathbb{B}		morning rise	8300 Jan 05 05:49	2° \mathbb{B} 24'17	
	8295 Apr 22 03:16	0° \mathbb{I}		desc. node	8300 Feb 08 20:01	24° \mathbb{B} 14'39	
asc. node	8295 May 23 23:04	25° \mathbb{I} 09'50			8300 Feb 17 23:19	0° \approx	
	8295 May 30 01:37	0° \mathbb{B}			8300 Apr 06 16:52	0° \mathbb{H}	
evening set	8295 Jun 09 03:07	7° \mathbb{B} 57'12			8300 May 24 21:50	0° \mathbb{Y}	
	8295 Jul 07 06:12	0° \mathbb{Q}			8300 Jul 13 19:47	0° \mathbb{B}	
	8295 Aug 15 13:35	0° \mathbb{M}			8300 Sep 09 21:40	0° \mathbb{I}	
				retrograde	8300 Oct 24 08:08	10° \mathbb{I} 33'08	
conjunction	8295 Aug 17 04:29	1° \mathbb{M} 12'42	0°52'12	opposition	8300 Nov 23 08:56	5° \mathbb{I} 34'14	-3°43'38
minimum elong	8295 Aug 17 01:39	1° \mathbb{M} 07'24	0°52'05	greatest brilliancy	8300 Nov 24 01:05	5° \mathbb{I} 23'13	-3.0m
	8295 Sep 25 15:36	0° \mathbb{A}		min. Earth dist.	8300 Nov 26 22:52	4° \mathbb{I} 35'53	0.37511 AU
max. Earth dist.	8295 Oct 02 15:22	4° \mathbb{A} 57'15	2.47662 AU	direct	8300 Dec 24 03:29	0° \mathbb{I} 13'09	
morning rise	8295 Oct 17 08:44	15° \mathbb{A} 15'01		asc. node	8301 Jan 14 00:09	3° \mathbb{I} 06'45	
	8295 Nov 07 22:37	0° \mathbb{M}			8301 Mar 11 16:53	0° \mathbb{B}	
	8295 Dec 23 16:39	0° \mathbb{A}			8301 Apr 27 09:30	0° \mathbb{Q}	
	8296 Feb 10 10:05	0° \mathbb{B}			8301 Jun 11 05:24	0° \mathbb{M}	
	8296 Apr 04 12:49	0° \approx			8301 Jul 26 12:05	0° \mathbb{A}	
desc. node	8296 May 06 01:23	14° \approx 26'50			8301 Sep 10 19:20	0° \mathbb{M}	
retrograde	8296 Jun 25 06:14	26° \approx 08'51			8301 Oct 27 22:47	0° \mathbb{A}	
opposition	8296 Aug 02 11:27	17° \approx 35'40	-3°04'11	evening set	8301 Nov 12 09:34	9° \mathbb{A} 46'21	
greatest brilliancy	8296 Aug 03 01:25	17° \approx 22'18	-1.6m		8301 Dec 14 08:44	0° \mathbb{B}	
min. Earth dist.	8296 Aug 08 05:31	15° \approx 23'39	0.61574 AU	max. Earth dist.	8301 Dec 22 04:36	4° \mathbb{B} 58'00	2.67980 AU
direct	8296 Sep 12 14:34	7° \approx 40'04					
	8296 Nov 20 20:00	0° \mathbb{H}		conjunction	8301 Dec 27 08:18	8° \mathbb{B} 14'27	0°00'13
	8297 Jan 08 16:11	0° \mathbb{Y}		minimum elong	8301 Dec 27 08:17	8° \mathbb{B} 14'26	0°00'23
	8297 Feb 19 16:17	0° \mathbb{B}		behind sun begin	8301 Dec 26 13:59	7° \mathbb{B} 45'23	
	8297 Mar 30 22:37	0° \mathbb{I}		behind sun end	8301 Dec 28 02:34	8° \mathbb{B} 43'29	
asc. node	8297 Apr 09 22:49	7° \mathbb{I} 48'32		desc. node	8301 Dec 27 17:34	8° \mathbb{B} 29'09	
	8297 May 08 06:28	0° \mathbb{B}			8302 Jan 30 09:13	0° \approx	
	8297 Jun 15 21:31	0° \mathbb{Q}		morning rise	8302 Feb 08 22:40	6° \approx 09'53	
	8297 Jul 25 17:36	0° \mathbb{M}			8302 Mar 17 12:09	0° \mathbb{H}	

	8302 May 01 12:10	0°♄	direct	8307 Jun 22 10:23	16°♊34'13	
	8302 Jun 14 08:51	0°♄		8307 Aug 16 00:58	0°♄	
	8302 Jul 27 07:38	0°♊	desc. node	8307 Aug 19 17:42	1°♄33'40	
	8302 Sep 08 02:03	0°♄		8307 Oct 15 01:24	0°♄	
	8302 Oct 23 01:37	0°♊		8307 Dec 04 10:37	0°♄	
asc. node	8302 Dec 01 23:39	21°♊35'45		8308 Jan 19 10:53	0°♄	
	8303 Jan 01 20:24	0°♄		8308 Mar 02 07:37	0°♄	
retrograde	8303 Jan 07 15:51	0°♄14'44	evening set	8308 Mar 09 10:57	5°♄10'53	
	8303 Jan 13 10:49	30°♊♊	max. Earth dist.	8308 Mar 26 04:27	17°♄30'42	2.41547 AU
min. Earth dist.	8303 Feb 02 22:31	25°♊34'42		8308 Apr 11 18:57	0°♄	
greatest brilliancy	8303 Feb 09 16:05	23°♊24'29				
opposition	8303 Feb 11 00:12	22°♊58'25	4°20'41	conjunction	8308 May 06 19:01	19°♄12'06 -0°49'36
direct	8303 Mar 14 04:44	16°♊59'35		minimum elong	8308 May 06 21:48	19°♄17'30 0°49'42
	8303 May 03 13:18	0°♄			8308 May 20 15:26	0°♊
	8303 Jun 30 05:03	0°♊			8308 Jun 27 16:58	0°♄
	8303 Aug 20 05:11	0°♊	morning rise	8308 Jul 15 12:35	14°♄03'42	
	8303 Oct 08 16:05	0°♄	asc. node	8308 Jul 23 16:45	20°♄29'15	
desc. node	8303 Nov 14 16:33	22°♄51'35		8308 Aug 04 20:31	0°♊	
	8303 Nov 26 02:45	0°♄		8308 Sep 12 23:08	0°♄	
evening set	8303 Dec 18 09:04	14°♄02'56		8308 Oct 23 21:10	0°♊	
	8304 Jan 12 06:04	0°♄		8308 Dec 06 13:04	0°♊	
max. Earth dist.	8304 Jan 14 11:57	1°♄27'17	2.63913 AU	8309 Jan 23 14:14	0°♄	
				8309 Mar 24 15:08	0°♄	
conjunction	8304 Feb 01 06:10	13°♄03'18	-0°39'17	retrograde	8309 May 06 22:26	9°♄23'27
minimum elong	8304 Feb 01 05:07	13°♄01'33	0°39'08		8309 Jun 15 14:29	30°♊♄
	8304 Feb 26 17:14	0°♄		opposition	8309 Jun 16 06:43	29°♄43'54 0°42'03
morning rise	8304 Mar 17 20:38	13°♄41'21		greatest brilliancy	8309 Jun 16 07:17	29°♄43'20 -1.3m
	8304 Apr 10 08:43	0°♄		min. Earth dist.	8309 Jun 16 19:55	29°♄30'48 0.68143 AU
	8304 May 22 06:24	0°♄		desc. node	8309 Jul 06 17:48	22°♄34'54
	8304 Jul 01 17:37	0°♊	direct	8309 Jul 27 10:45	19°♄51'03	
	8304 Aug 10 07:16	0°♄			8309 Sep 11 12:24	0°♄
	8304 Sep 18 20:43	0°♊			8309 Nov 11 00:10	0°♄
asc. node	8304 Oct 18 22:49	22°♊11'47			8309 Dec 29 06:46	0°♄
	8304 Oct 29 21:16	0°♄			8310 Feb 10 16:46	0°♄
	8304 Dec 14 15:38	0°♊			8310 Mar 23 03:20	0°♄
retrograde	8305 Feb 25 02:46	26°♊16'36			8310 Apr 30 19:10	0°♊
min. Earth dist.	8305 Mar 29 00:23	19°♊20'59	0.55519 AU	evening set	8310 May 11 09:47	8°♊22'15
opposition	8305 Apr 04 22:29	16°♊40'31	5°04'40		8310 Jun 07 16:54	0°♄
greatest brilliancy	8305 Apr 03 17:19	17°♊08'46	-1.8m	asc. node	8310 Jun 10 16:06	2°♄21'05
direct	8305 May 10 23:06	8°♊35'25			8310 Jul 15 19:34	0°♊
	8305 Jul 21 06:20	0°♊				
	8305 Sep 15 22:30	0°♄	conjunction	8310 Jul 21 05:40	4°♊12'49	0°28'10
desc. node	8305 Oct 01 16:53	9°♄03'09	minimum elong	8310 Jul 21 02:56	4°♊07'32	0°27'59
	8305 Nov 05 21:54	0°♄		8310 Aug 23 23:51	0°♄	
	8305 Dec 23 21:18	0°♄	max. Earth dist.	8310 Sep 12 01:55	14°♄10'23	2.42079 AU
evening set	8306 Jan 24 01:26	20°♄25'29	morning rise	8310 Sep 26 16:35	24°♄47'59	
	8306 Feb 07 06:37	0°♄		8310 Oct 03 22:32	0°♊	
max. Earth dist.	8306 Feb 10 00:02	1°♄51'17	2.54626 AU		8310 Nov 16 04:17	0°♊
					8311 Jan 01 04:23	0°♄
conjunction	8306 Mar 13 09:55	23°♄41'11	-1°05'26		8311 Feb 20 01:26	0°♄
minimum elong	8306 Mar 13 09:14	23°♄39'59	1°05'25		8311 Apr 20 15:24	0°♄
	8306 Mar 22 06:40	0°♄	desc. node	8311 May 24 16:31	10°♄42'48	
	8306 May 02 05:21	0°♄	retrograde	8311 Jun 11 17:50	12°♄31'27	
morning rise	8306 May 05 15:44	2°♄34'25	opposition	8311 Jul 20 20:02	3°♄34'26	-1°59'35
	8306 Jun 10 15:09	0°♊	greatest brilliancy	8311 Jul 21 02:36	3°♄28'04	-1.4m
	8306 Jul 19 04:11	0°♄	min. Earth dist.	8311 Jul 25 03:39	1°♄53'49	0.64687 AU
	8306 Aug 26 16:18	0°♊		8311 Jul 30 04:03	30°♊♄	
asc. node	8306 Sep 05 19:52	7°♊49'11	direct	8311 Aug 31 07:53	23°♄31'53	
	8306 Oct 05 02:59	0°♄		8311 Oct 05 01:04	0°♄	
	8306 Nov 15 17:57	0°♊		8311 Dec 05 03:09	0°♄	
	8306 Dec 31 18:41	0°♊		8312 Jan 20 01:55	0°♄	
retrograde	8307 Mar 02 18:22	0°♄		8312 Mar 01 06:48	0°♄	
	8307 Apr 03 18:08	5°♄48'44		8312 Apr 09 05:12	0°♊	
	8307 May 03 08:52	30°♊♊	asc. node	8312 Apr 27 15:25	14°♊29'06	
min. Earth dist.	8307 May 10 20:21	27°♊07'37	0.64999 AU		8312 May 17 07:44	0°♄
opposition	8307 May 14 02:23	25°♊49'43	3°10'12		8312 Jun 24 17:07	0°♊
greatest brilliancy	8307 May 13 18:02	25°♊58'03	-1.4m	evening set	8312 Jul 23 14:27	22°♊01'22

	8312 Aug 03 06:42	0°♎			8317 Dec 02 06:51	0°♏
	8312 Sep 13 15:14	0°♐		retrograde	8317 Dec 12 17:31	0°♏45'58
				asc. node	8317 Dec 18 17:39	0°♏30'39
conjunction	8312 Sep 22 12:41	6°♐15'45 1°06'45			8317 Dec 23 05:04	30°♎♌
minimum elong	8312 Sep 22 12:22	6°♐15'12 1°06'47		min. Earth dist.	8318 Jan 08 05:26	26°♌25'06 0.37871 AU
max. Earth dist.	8312 Oct 25 08:26	28°♐49'28 2.55498 AU		opposition	8318 Jan 13 07:25	24°♌58'13 1°53'40
	8312 Oct 27 02:17	0°♍		greatest brilliancy	8318 Jan 12 21:00	25°♌05'39 -3.0m
morning rise	8312 Nov 14 21:08	12°♍31'48		direct	8318 Feb 11 21:59	19°♌51'28
	8312 Dec 11 16:22	0°♌			8318 Mar 26 11:14	0°♏
	8313 Jan 28 09:00	0°♌			8318 May 22 17:44	0°♎
	8313 Mar 19 17:15	0°♍			8318 Jul 11 06:35	0°♐
desc. node	8313 Apr 10 13:53	12°♍15'22			8318 Aug 28 17:24	0°♍
	8313 May 15 03:53	0°♌			8318 Oct 16 00:38	0°♌
retrograde	8313 Jul 24 00:08	20°♌22'50		desc. node	8318 Dec 01 05:28	28°♌54'15
opposition	8313 Aug 29 07:23	12°♌38'50 -4°42'21			8318 Dec 02 23:11	0°♌
greatest brilliancy	8313 Aug 30 13:20	12°♌11'20 -1.8m		evening set	8318 Dec 04 11:25	0°♌57'09
min. Earth dist.	8313 Sep 06 00:50	9°♌48'59 0.54890 AU		max. Earth dist.	8319 Jan 05 03:30	21°♌05'06 2.66142 AU
direct	8313 Oct 07 23:46	3°♌16'40				
	8313 Dec 21 06:21	0°♎		conjunction	8319 Jan 18 00:49	29°♌22'43 -0°24'42
	8314 Feb 04 17:58	0°♏		minimum elong	8319 Jan 18 00:07	29°♌21'34 0°24'32
asc. node	8314 Mar 15 15:29	28°♏45'13			8319 Jan 18 23:54	0°♍
	8314 Mar 17 06:52	0°♐		morning rise	8319 Mar 03 09:08	28°♍28'54
	8314 Apr 25 08:33	0°♌			8319 Mar 05 15:42	0°♌
	8314 Jun 03 14:13	0°♏			8319 Apr 18 17:26	0°♎
	8314 Jul 14 00:24	0°♎			8319 May 31 05:24	0°♏
	8314 Aug 25 05:04	0°♐			8319 Jul 11 09:20	0°♐
evening set	8314 Sep 17 18:28	16°♐10'24			8319 Aug 20 17:30	0°♌
	8314 Oct 08 08:15	0°♍			8319 Sep 30 06:40	0°♏
				asc. node	8319 Nov 05 15:14	25°♏36'07
conjunction	8314 Nov 07 05:07	19°♍39'23 0°51'41			8319 Nov 12 05:58	0°♎
minimum elong	8314 Nov 07 06:22	19°♍41'25 0°51'47			8320 Jan 05 17:38	0°♐
max. Earth dist.	8314 Nov 21 11:17	28°♍53'42 2.64517 AU		retrograde	8320 Feb 08 22:39	7°♐25'37
	8314 Nov 23 04:24	0°♌		min. Earth dist.	8320 Mar 09 10:31	1°♐23'14 0.50372 AU
morning rise	8314 Dec 23 13:02	19°♌24'45			8320 Mar 13 05:16	30°♎♎
	8315 Jan 09 06:41	0°♌		greatest brilliancy	8320 Mar 15 23:15	28°♎58'26 -2.1m
desc. node	8315 Feb 26 10:40	0°♍07'39		opposition	8320 Mar 17 11:38	28°♎24'33 5°22'20
	8315 Feb 26 05:44	0°♍		direct	8320 Apr 20 19:18	21°♎01'19
	8315 Apr 16 03:12	0°♌			8320 Jun 01 11:22	0°♐
	8315 Jun 06 01:52	0°♎			8320 Aug 02 22:39	0°♍
	8315 Aug 03 19:03	0°♏			8320 Sep 24 13:04	0°♌
retrograde	8315 Sep 23 16:38	12°♏38'40		desc. node	8320 Oct 18 05:52	14°♌08'09
opposition	8315 Oct 25 05:44	6°♏58'24 -5°36'10			8320 Nov 13 06:01	0°♌
greatest brilliancy	8315 Oct 26 21:06	6°♏28'38 -2.6m			8320 Dec 30 19:17	0°♍
min. Earth dist.	8315 Nov 01 19:08	4°♏41'59 0.41322 AU		evening set	8321 Jan 08 21:03	5°♍53'04
direct	8315 Nov 28 04:03	0°♏16'29		max. Earth dist.	8321 Jan 29 11:35	19°♍27'20 2.58847 AU
asc. node	8316 Jan 31 17:25	23°♏02'42			8321 Feb 14 04:17	0°♌
	8316 Feb 12 04:53	0°♐				
	8316 Mar 27 20:39	0°♌		conjunction	8321 Feb 24 08:01	6°♌55'08 -0°58'13
	8316 May 09 04:19	0°♏		minimum elong	8321 Feb 24 06:52	6°♌53'11 0°58'07
	8316 Jun 20 20:11	0°♎			8321 Mar 29 09:26	0°♎
	8316 Aug 03 18:51	0°♐		morning rise	8321 Apr 14 14:23	11°♎37'46
	8316 Sep 18 05:25	0°♍			8321 May 09 15:47	0°♏
evening set	8316 Oct 28 20:41	26°♍10'21			8321 Jun 18 09:44	0°♐
	8316 Nov 03 20:34	0°♌			8321 Jul 27 06:07	0°♌
					8321 Sep 04 00:37	0°♏
conjunction	8316 Dec 13 15:13	25°♌16'47 0°15'57		asc. node	8321 Sep 22 13:05	14°♏07'08
minimum elong	8316 Dec 13 15:42	25°♌17'33 0°16'07			8321 Oct 13 19:22	0°♎
max. Earth dist.	8316 Dec 13 17:00	25°♌19'36 2.68090 AU			8321 Nov 25 04:43	0°♐
	8316 Dec 21 01:46	0°♌			8322 Jan 13 01:27	0°♍
desc. node	8317 Jan 13 07:29	14°♌45'42		retrograde	8322 Mar 20 20:37	21°♍44'30
morning rise	8317 Jan 26 09:13	23°♌05'18		min. Earth dist.	8322 Apr 25 02:33	13°♍39'38 0.62017 AU
	8317 Feb 06 05:01	0°♍		opposition	8322 Apr 29 20:14	11°♍46'44 4°01'13
	8317 Mar 24 19:28	0°♌		greatest brilliancy	8322 Apr 29 04:37	12°♍02'15 -1.5m
	8317 May 09 17:20	0°♎		direct	8322 Jun 07 01:28	2°♍53'47
	8317 Jun 24 00:57	0°♏			8322 Aug 29 23:57	0°♌
	8317 Aug 08 06:39	0°♐		desc. node	8322 Sep 05 07:08	3°♌12'15
	8317 Sep 24 08:55	0°♌			8322 Oct 23 17:51	0°♌



































































































































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	8323 Jan 26 13:59	0°♋		8327 Nov 04 03:25	0°♌	
evening set	8323 Feb 19 07:34	16°♋23'01		8327 Dec 19 18:30	0°♍	
max. Earth dist.	8323 Mar 05 05:24	26°♋14'21 2.46892 AU		8328 Feb 05 23:54	0°♎	
	8323 Mar 10 11:11	0°♏		8328 Mar 29 06:37	0°♐	
			desc. node	8328 Apr 27 04:17	14°♐40'05	
conjunction	8323 Apr 13 16:35	25°♏10'32 -1°03'35		8328 Jun 05 04:01	0°♑	
minimum elong	8323 Apr 13 17:52	25°♏12'58 1°03'40	retrograde	8328 Jul 05 18:15	4°♑51'14	
	8323 Apr 20 02:21	0°♒		8328 Aug 02 18:21	30°♒	
	8323 May 29 03:25	0°♓	opposition	8328 Aug 12 09:00	26°♒33'33 -3°41'12	
morning rise	8323 Jun 15 11:58	13°♓34'59	greatest brilliancy	8328 Aug 13 04:14	26°♒15'20 -1.6m	
	8323 Jul 06 08:41	0°♈	min. Earth dist.	8328 Aug 18 20:36	24°♒06'27 0.59452 AU	
asc. node	8323 Aug 10 10:43	27°♈32'36	direct	8328 Sep 22 02:39	16°♒46'10	
	8323 Aug 13 14:23	0°♉		8328 Nov 11 10:14	0°♈	
	8323 Sep 21 18:10	0°♊		8329 Jan 03 00:25	0°♏	
	8323 Nov 01 18:58	0°♋		8329 Feb 14 21:19	0°♌	
	8323 Dec 15 22:19	0°♌		8329 Mar 26 12:01	0°♍	
	8324 Feb 03 23:58	0°♍	asc. node	8329 Apr 01 09:03	4°♍33'00	
retrograde	8324 Apr 23 17:17	26°♍50'41		8329 May 04 00:47	0°♎	
min. Earth dist.	8324 Jun 02 06:23	17°♍22'57 0.67702 AU		8329 Jun 11 19:33	0°♏	
opposition	8324 Jun 03 05:07	17°♍00'17 1°41'21		8329 Jul 21 19:01	0°♐	
greatest brilliancy	8324 Jun 03 04:05	17°♍01'19 -1.3m	evening set	8329 Aug 29 04:12	27°♐36'58	
direct	8324 Jul 13 20:04	7°♍18'54		8329 Sep 01 13:36	0°♑	
desc. node	8324 Jul 23 07:28	7°♍49'59		8329 Oct 15 08:30	0°♒	
	8324 Sep 26 15:43	0°♓				
	8324 Nov 20 00:28	0°♈	conjunction	8329 Oct 21 21:37	4°♒22'20 1°01'15	
	8325 Jan 06 02:33	0°♉	minimum elong	8329 Oct 21 22:42	4°♒24'08 1°01'21	
	8325 Feb 18 05:09	0°♊	max. Earth dist.	8329 Nov 11 18:28	18°♒08'46 2.61608 AU	
	8325 Mar 30 14:56	0°♋		8329 Nov 30 00:25	0°♌	
evening set	8325 Apr 14 04:41	11°♋10'50	morning rise	8329 Dec 09 07:33	5°♌58'52	
	8325 May 08 07:44	0°♌		8330 Jan 16 05:22	0°♍	
	8325 Jun 15 06:12	0°♍		8330 Mar 05 19:40	0°♎	
			desc. node	8330 Mar 15 00:56	5°♎34'40	
conjunction	8325 Jun 20 19:26	4°♍23'50 -0°04'45		8330 Apr 25 10:58	0°♈	
minimum elong	8325 Jun 20 19:59	4°♍24'56 0°04'55		8330 Jun 20 18:52	0°♏	
behind sun begin	8325 Jun 19 14:40	3°♍26'55	retrograde	8330 Aug 27 08:48	19°♏45'50	
behind sun end	8325 Jun 22 01:18	5°♍22'57	opposition	8330 Sep 30 01:42	13°♏11'25 -5°49'19	
asc. node	8325 Jun 27 07:39	9°♍32'50	greatest brilliancy	8330 Oct 01 21:04	12°♏35'05 -2.3m	
	8325 Jul 23 08:19	0°♉	min. Earth dist.	8330 Oct 08 18:30	10°♏17'52 0.46608 AU	
max. Earth dist.	8325 Jul 27 01:00	2°♉52'42 2.37143 AU	direct	8330 Nov 05 20:15	5°♏08'53	
	8325 Aug 31 10:48	0°♊		8331 Jan 13 12:09	0°♌	
morning rise	8325 Sep 01 03:29	0°♊31'23	asc. node	8331 Feb 17 09:15	22°♌48'00	
	8325 Oct 11 07:35	0°♋		8331 Feb 27 14:24	0°♍	
	8325 Nov 23 14:06	0°♌		8331 Apr 09 15:19	0°♎	
	8326 Jan 09 01:07	0°♍		8331 May 20 04:09	0°♏	
	8326 Mar 01 20:24	0°♎		8331 Jun 30 15:11	0°♐	
retrograde	8326 May 28 07:10	29°♎35'27		8331 Aug 12 16:36	0°♑	
desc. node	8326 Jun 10 06:23	28°♎31'27		8331 Sep 26 11:39	0°♒	
opposition	8326 Jul 07 01:00	20°♎18'55 -0°55'50	evening set	8331 Oct 14 11:29	11°♒46'04	
greatest brilliancy	8326 Jul 07 02:53	20°♎17'04 -1.4m		8331 Nov 11 17:14	0°♓	
min. Earth dist.	8326 Jul 09 21:08	19°♎12'01 0.66840 AU				
direct	8326 Aug 17 14:45	10°♎16'13	conjunction	8331 Nov 30 14:11	12°♓03'55 0°30'59	
	8326 Oct 23 10:38	0°♏	minimum elong	8331 Nov 30 15:05	12°♓05'22 0°31'08	
	8326 Dec 15 02:29	0°♐	max. Earth dist.	8331 Dec 06 00:14	15°♓31'03 2.67336 AU	
	8327 Jan 28 15:34	0°♑		8331 Dec 28 19:23	0°♔	
	8327 Mar 10 10:04	0°♒	morning rise	8332 Jan 13 23:09	10°♔14'26	
	8327 Apr 18 04:05	0°♓	desc. node	8332 Jan 30 21:35	20°♔57'56	
asc. node	8327 May 15 07:55	21°♓26'54		8332 Feb 14 03:45	0°♕	
	8327 May 26 03:19	0°♈		8332 Apr 01 10:06	0°♈	
evening set	8327 Jun 26 20:55	24°♈57'05		8332 May 18 15:09	0°♏	
	8327 Jul 03 08:39	0°♉		8332 Jul 05 08:01	0°♌	
	8327 Aug 11 17:06	0°♊		8332 Aug 24 14:56	0°♍	
			retrograde	8332 Nov 11 23:54	28°♍33'22	
conjunction	8327 Sep 01 08:33	15°♍14'30 1°00'33	opposition	8332 Dec 11 18:43	23°♍37'18 -1°49'14	
minimum elong	8327 Sep 01 06:36	15°♍10'55 1°00'29	greatest brilliancy	8332 Dec 11 21:59	23°♍35'08 -3.1m	
	8327 Sep 21 20:19	0°♋	min. Earth dist.	8332 Dec 12 04:52	23°♍30'36 0.36637 AU	
max. Earth dist.	8327 Oct 13 00:44	14°♋52'29 2.50631 AU	asc. node	8333 Jan 04 09:22	18°♍55'32	

direct	8333 Jan 10 07:29	18° Π 41'23		8338 Mar 17 14:24	0° Υ
	8333 Feb 23 13:53	0° \mathfrak{D}			
	8333 Apr 18 11:23	0° Ω	conjunction	8338 Mar 23 22:31	4° Υ 33'47 -1°07'04
	8333 Jun 04 10:36	0° \mathfrak{M}	minimum elong	8338 Mar 23 22:22	4° Υ 33'31 1°07'05
	8333 Jul 20 18:50	0° \mathfrak{L}		8338 Apr 27 10:36	0° \mathfrak{B}
	8333 Sep 05 16:28	0° \mathfrak{M}	morning rise	8338 May 19 03:24	16° \mathfrak{B} 27'38
	8333 Oct 23 04:11	0° \mathfrak{A}		8338 Jun 05 17:04	0° Π
evening set	8333 Nov 20 12:05	17° \mathfrak{A} 50'44		8338 Jul 14 02:52	0° \mathfrak{D}
	8333 Dec 09 17:53	0° \mathfrak{B}		8338 Aug 21 11:51	0° Ω
desc. node	8333 Dec 17 19:53	5° \mathfrak{B} 07'23	asc. node	8338 Aug 27 03:35	4° Ω 22'54
max. Earth dist.	8333 Dec 27 06:06	11° \mathfrak{B} 06'49 2.67546 AU		8338 Sep 29 18:32	0° \mathfrak{M}
				8338 Nov 10 01:49	0° \mathfrak{L}
conjunction	8334 Jan 04 04:46	16° \mathfrak{B} 10'34 -0°09'08		8338 Dec 25 02:52	0° \mathfrak{M}
minimum elong	8334 Jan 04 04:29	16° \mathfrak{B} 10'07 0°08'58		8339 Feb 17 13:20	0° \mathfrak{A}
behind sun begin	8334 Jan 03 12:59	15° \mathfrak{B} 45'24	retrograde	8339 Apr 11 11:16	13° \mathfrak{A} 57'50
behind sun end	8334 Jan 04 19:59	16° \mathfrak{B} 34'51	min. Earth dist.	8339 May 19 11:54	4° \mathfrak{A} 58'57 0.66253 AU
	8334 Jan 25 18:00	0° \approx	opposition	8339 May 21 22:28	4° \mathfrak{A} 00'29 2°38'23
morning rise	8334 Feb 16 22:07	14° \approx 22'40	greatest brilliancy	8339 May 21 17:22	4° \mathfrak{A} 05'35 -1.4m
	8334 Mar 12 16:39	0° \mathfrak{H}		8339 Jun 01 10:48	30° \mathfrak{R} \mathfrak{M}
	8334 Apr 26 07:57	0° Υ	direct	8339 Jun 30 19:07	24° \mathfrak{M} 34'40
	8334 Jun 08 15:31	0° \mathfrak{B}		8339 Aug 02 08:56	0° \mathfrak{A}
	8334 Jul 20 19:55	0° Π	desc. node	8339 Aug 09 21:00	2° \mathfrak{A} 26'02
	8334 Aug 31 10:56	0° \mathfrak{D}		8339 Oct 08 16:35	0° \mathfrak{B}
	8334 Oct 13 00:42	0° Ω		8339 Nov 29 05:08	0° \approx
asc. node	8334 Nov 22 09:20	25° Ω 26'24		8340 Jan 14 14:11	0° \mathfrak{H}
	8334 Nov 30 19:58	0° \mathfrak{M}		8340 Feb 26 13:27	0° Υ
retrograde	8335 Jan 20 07:00	15° \mathfrak{M} 08'19	evening set	8340 Mar 21 09:04	17° Υ 28'14
min. Earth dist.	8335 Feb 16 10:27	10° \mathfrak{M} 02'02 0.44870 AU		8340 Apr 07 00:44	0° \mathfrak{B}
greatest brilliancy	8335 Feb 23 09:02	7° \mathfrak{M} 39'46 -2.4m	max. Earth dist.	8340 Apr 13 11:56	4° \mathfrak{B} 55'45 2.38826 AU
opposition	8335 Feb 24 22:18	7° \mathfrak{M} 07'36 5°01'48		8340 May 15 20:05	0° Π
direct	8335 Mar 29 07:27	0° \mathfrak{M} 36'44			
	8335 Jun 21 18:57	0° \mathfrak{L}	conjunction	8340 May 22 00:02	4° Π 50'25 -0°36'16
	8335 Aug 14 04:12	0° \mathfrak{M}	minimum elong	8340 May 22 02:59	4° Π 56'12 0°36'23
	8335 Oct 03 12:33	0° \mathfrak{A}		8340 Jun 22 20:24	0° \mathfrak{D}
desc. node	8335 Nov 04 19:29	19° \mathfrak{A} 44'06	asc. node	8340 Jul 14 02:20	16° \mathfrak{D} 47'00
	8335 Nov 21 08:43	0° \mathfrak{B}		8340 Jul 30 22:51	0° Ω
evening set	8335 Dec 26 10:01	22° \mathfrak{B} 08'21	morning rise	8340 Aug 02 07:54	1° Ω 51'14
	8336 Jan 07 15:16	0° \approx		8340 Sep 08 00:15	0° \mathfrak{M}
max. Earth dist.	8336 Jan 20 01:49	8° \approx 05'13 2.62314 AU		8340 Oct 18 20:15	0° \mathfrak{L}
				8340 Dec 01 06:09	0° \mathfrak{M}
conjunction	8336 Feb 09 17:02	21° \approx 42'28 -0°47'01		8341 Jan 17 11:50	0° \mathfrak{A}
minimum elong	8336 Feb 09 15:52	21° \approx 40'31 0°46'54		8341 Mar 13 23:08	0° \mathfrak{B}
	8336 Feb 22 01:46	0° \mathfrak{H}	retrograde	8341 May 14 14:39	17° \mathfrak{B} 02'58
morning rise	8336 Mar 27 08:30	23° \mathfrak{H} 32'15	opposition	8341 Jun 23 18:53	7° \mathfrak{B} 30'32 0°06'21
	8336 Apr 05 13:29	0° Υ	greatest brilliancy	8341 Jun 23 19:07	7° \mathfrak{B} 30'18 -1.3m
	8336 May 17 05:28	0° \mathfrak{B}	min. Earth dist.	8341 Jun 25 03:23	6° \mathfrak{B} 58'22 0.67964 AU
	8336 Jun 26 09:55	0° Π	desc. node	8341 Jun 26 20:23	6° \mathfrak{B} 17'56
	8336 Aug 04 16:33	0° \mathfrak{D}		8341 Jul 15 13:57	30° \mathfrak{R} \mathfrak{A}
	8336 Sep 12 21:28	0° Ω	direct	8341 Aug 04 03:55	27° \mathfrak{A} 33'00
asc. node	8336 Oct 09 05:58	19° Ω 44'46		8341 Aug 25 06:08	0° \mathfrak{B}
	8336 Oct 23 07:13	0° \mathfrak{M}		8341 Nov 04 09:18	0° \approx
	8336 Dec 06 06:04	0° \mathfrak{L}		8341 Dec 23 20:44	0° \mathfrak{H}
	8337 Feb 01 20:05	0° \mathfrak{M}		8342 Feb 05 15:24	0° Υ
retrograde	8337 Mar 06 01:31	6° \mathfrak{M} 18'50		8342 Mar 18 04:51	0° \mathfrak{B}
	8337 Apr 05 11:03	30° \mathfrak{R} \mathfrak{L}		8342 Apr 25 21:27	0° Π
min. Earth dist.	8337 Apr 08 05:37	28° \mathfrak{L} 56'40 0.58078 AU	evening set	8342 May 27 22:37	25° Π 20'45
greatest brilliancy	8337 Apr 13 09:34	26° \mathfrak{L} 55'17 -1.7m	asc. node	8342 Jun 01 00:45	28° Π 35'08
opposition	8337 Apr 14 09:49	26° \mathfrak{L} 31'29 4°45'10		8342 Jun 02 19:36	0° \mathfrak{D}
direct	8337 May 21 06:36	18° \mathfrak{L} 07'26		8342 Jul 10 22:49	0° Ω
	8337 Jul 10 10:12	0° \mathfrak{M}			
	8337 Sep 09 16:49	0° \mathfrak{A}	conjunction	8342 Aug 06 09:42	20° Ω 21'56 0°43'18
desc. node	8337 Sep 21 20:17	6° \mathfrak{A} 44'59	minimum elong	8342 Aug 06 06:30	20° Ω 15'52 0°43'09
	8337 Oct 31 18:10	0° \mathfrak{B}		8342 Aug 19 03:45	0° \mathfrak{M}
	8337 Dec 19 02:50	0° \approx	max. Earth dist.	8342 Sep 25 13:06	27° \mathfrak{M} 26'26 2.45177 AU
evening set	8338 Feb 02 02:56	29° \approx 39'33		8342 Sep 29 02:57	0° \mathfrak{L}
	8338 Feb 02 14:59	0° \mathfrak{H}	morning rise	8342 Oct 09 08:44	7° \mathfrak{L} 15'54
max. Earth dist.	8338 Feb 17 11:56	10° \mathfrak{H} 11'43 2.52023 AU		8342 Nov 11 07:35	0° \mathfrak{M}

	8342 Dec 27 02:11	0°♊			8348 May 02 04:30	0°♏	
	8343 Feb 14 03:44	0°♊			8348 Jun 14 20:34	0°♎	
	8343 Apr 10 21:02	0°♋			8348 Jul 29 10:30	0°♌	
desc. node	8343 May 14 18:19	13°♋57'11			8348 Sep 13 06:49	0°♍	
retrograde	8343 Jun 20 10:15	20°♋41'41			8348 Oct 30 03:57	0°♊	
opposition	8343 Jul 29 01:26	11°♋57'03 -2°37'05	evening set		8348 Nov 06 05:30	4°♊29'13	
greatest brilliancy	8343 Jul 29 11:50	11°♋47'00 -1.5m			8348 Dec 16 11:27	0°♊	
min. Earth dist.	8343 Aug 03 03:43	9°♋59'08 0.63097 AU	max. Earth dist.		8348 Dec 18 17:19	1°♊25'25	2.68136 AU
direct	8343 Sep 08 09:14	1°♋57'17					
	8343 Nov 27 17:39	0°♋	conjunction		8348 Dec 21 11:40	3°♊10'39	0°06'48
	8344 Jan 14 04:58	0°♋	minimum elong		8348 Dec 21 11:52	3°♊10'59	0°06'59
	8344 Feb 24 21:08	0°♌	behind sun begin		8348 Dec 20 19:01	2°♊44'15	
	8344 Apr 04 00:06	0°♌	behind sun end		8348 Dec 22 04:43	3°♊37'42	
asc. node	8344 Apr 18 00:18	10°♌57'58	desc. node		8349 Jan 03 09:40	11°♊23'09	
	8344 May 12 05:21	0°♌			8349 Feb 01 13:14	0°♋	
	8344 Jun 19 17:06	0°♏	morning rise		8349 Feb 03 02:14	0°♋59'21	
	8344 Jul 29 09:01	0°♎			8349 Mar 19 21:33	0°♋	
evening set	8344 Aug 06 18:03	6°♎10'37			8349 May 04 06:57	0°♋	
	8344 Sep 08 20:03	0°♌			8349 Jun 17 17:56	0°♌	
					8349 Jul 31 13:02	0°♌	
conjunction	8344 Oct 03 19:14	17°♌23'02 1°06'31			8349 Sep 13 16:14	0°♌	
minimum elong	8344 Oct 03 19:37	17°♌23'41 1°06'34			8349 Nov 01 04:38	0°♏	
	8344 Oct 22 08:41	0°♍	asc. node		8349 Dec 09 01:02	15°♏54'01	
max. Earth dist.	8344 Nov 01 03:08	6°♍32'31 2.57895 AU	retrograde		8349 Dec 27 23:34	18°♏23'33	
morning rise	8344 Nov 24 02:31	21°♍41'16	min. Earth dist.		8350 Jan 22 22:32	13°♏58'31	0.39891 AU
	8344 Dec 06 22:10	0°♊	greatest brilliancy		8350 Jan 29 02:06	12°♏06'02	-2.8m
	8345 Jan 23 08:40	0°♊	opposition		8350 Jan 30 02:19	11°♏47'29	3°30'30
	8345 Mar 13 21:32	0°♋	direct		8350 Mar 01 10:08	6°♏14'12	
desc. node	8345 Mar 31 16:02	10°♋19'36			8350 May 12 10:10	0°♎	
	8345 May 06 10:30	0°♋			8350 Jul 04 10:39	0°♌	
	8345 Jul 25 13:41	0°♋			8350 Aug 23 04:03	0°♍	
retrograde	8345 Aug 04 10:59	0°♋34'36			8350 Oct 11 01:51	0°♊	
	8345 Aug 14 00:12	30°♋♋	desc. node		8350 Nov 21 08:43	25°♊39'07	
opposition	8345 Sep 08 22:19	23°♋12'28 -5°13'00			8350 Nov 28 07:07	0°♊	
greatest brilliancy	8345 Sep 10 10:09	22°♋40'20 -2.0m	evening set		8350 Dec 12 09:50	8°♊54'02	
min. Earth dist.	8345 Sep 17 04:51	20°♋15'27 0.52082 AU	max. Earth dist.		8351 Jan 10 11:00	27°♊27'04	2.65017 AU
direct	8345 Oct 17 18:53	14°♋12'04			8351 Jan 14 09:44	0°♋	
	8345 Dec 10 11:22	0°♋					
	8346 Jan 28 12:51	0°♌	conjunction		8351 Jan 26 01:53	7°♋34'43 -0°33'23	
asc. node	8346 Mar 06 01:54	26°♌17'03	minimum elong		8351 Jan 26 00:58	7°♋33'12	0°33'14
	8346 Mar 11 01:22	0°♌			8351 Feb 28 23:49	0°♋	
	8346 Apr 19 14:40	0°♌	morning rise		8351 Mar 12 00:30	7°♋25'57	
	8346 May 29 04:19	0°♏			8351 Apr 13 20:34	0°♋	
	8346 Jul 08 20:49	0°♎			8351 May 26 01:14	0°♌	
	8346 Aug 20 06:57	0°♌			8351 Jul 05 19:52	0°♌	
evening set	8346 Sep 27 21:38	26°♌12'42			8351 Aug 14 17:07	0°♌	
	8346 Oct 03 14:15	0°♍			8351 Sep 23 14:52	0°♏	
			asc. node		8351 Oct 27 00:31	24°♏16'19	
conjunction	8346 Nov 15 22:50	28°♍20'14 0°44'40			8351 Nov 04 05:25	0°♎	
minimum elong	8346 Nov 16 00:02	28°♍22'10 0°44'49			8351 Dec 22 00:35	0°♌	
	8346 Nov 18 12:46	0°♊	retrograde		8352 Feb 18 23:04	18°♌57'55	
max. Earth dist.	8346 Nov 26 21:17	5°♊22'12 2.65755 AU	min. Earth dist.		8352 Mar 20 19:32	12°♌25'23	0.53285 AU
morning rise	8346 Dec 31 10:21	27°♊22'19	greatest brilliancy		8352 Mar 26 22:04	10°♌06'05	-2.0m
	8347 Jan 04 14:02	0°♊	opposition		8352 Mar 28 06:58	9°♌34'40	5°15'50
desc. node	8347 Feb 16 12:48	27°♊01'53	direct		8352 May 02 13:23	1°♌47'15	
	8347 Feb 21 06:31	0°♋			8352 Jul 26 04:35	0°♍	
	8347 Apr 10 10:56	0°♋			8352 Sep 18 20:57	0°♊	
	8347 May 29 15:42	0°♋	desc. node		8352 Oct 08 09:06	11°♊24'03	
	8347 Jul 21 02:49	0°♌			8352 Nov 08 07:00	0°♊	
retrograde	8347 Oct 11 01:12	28°♌12'22			8352 Dec 26 02:46	0°♋	
opposition	8347 Nov 10 14:48	22°♌58'36 -4°46'59	evening set		8353 Jan 17 09:59	14°♋31'50	
greatest brilliancy	8347 Nov 11 18:50	22°♌38'38 -2.8m	max. Earth dist.		8353 Feb 04 23:09	26°♋54'04	2.56606 AU
min. Earth dist.	8347 Nov 16 07:20	21°♌21'47 0.38929 AU			8353 Feb 09 13:09	0°♋	
direct	8347 Dec 12 18:04	17°♌04'19					
asc. node	8348 Jan 22 01:58	27°♌06'06	conjunction		8353 Mar 05 19:31	16°♋41'09	-1°03'00
	8348 Jan 28 06:50	0°♌	minimum elong		8353 Mar 05 18:35	16°♋39'32	1°02'57
	8348 Mar 18 23:15	0°♌			8353 Mar 24 16:30	0°♋	

morning rise	8353 Apr 26 01:57	23° Υ 31'13			8358 Apr 27 20:31	0° \approx	
	8353 May 04 19:35	0° \mathcal{B}		desc. node	8358 May 31 09:07	7° \approx 17'09	
	8353 Jun 13 09:30	0° Π		retrograde	8358 Jun 05 11:15	7° \approx 26'23	
	8353 Jul 22 01:55	0° \mathcal{E}			8358 Jul 10 13:09	30° \mathcal{R} \mathcal{Z}	
	8353 Aug 29 16:24	0° Ω		opposition	8358 Jul 14 20:43	28° \mathcal{Z} 20'05	-1°32'55
asc. node	8353 Sep 12 22:03	10° Ω 56'00		greatest brilliancy	8358 Jul 15 00:55	28° \mathcal{Z} 15'59	-1.4m
	8353 Oct 08 05:03	0° \mathcal{M}		min. Earth dist.	8358 Jul 18 12:07	26° \mathcal{Z} 54'45	0.65770 AU
	8353 Nov 19 00:50	0° $\underline{\mathcal{A}}$		direct	8358 Aug 25 09:58	18° \mathcal{Z} 16'54	
	8354 Jan 04 20:12	0° \mathcal{M}			8358 Oct 13 05:37	0° \approx	
	8354 Mar 21 00:32	0° \mathcal{A}			8358 Dec 08 19:46	0° \mathcal{H}	
retrograde	8354 Mar 28 21:11	0° \mathcal{A} 24'15			8359 Jan 23 04:21	0° Υ	
	8354 Apr 05 12:44	30° $\mathcal{R}\mathcal{M}$			8359 Mar 05 05:47	0° \mathcal{B}	
min. Earth dist.	8354 May 04 04:09	21° \mathcal{M} 59'01	0.63781 AU		8359 Apr 13 02:45	0° Π	
opposition	8354 May 08 02:41	20° \mathcal{M} 24'50	3°32'16	asc. node	8359 May 05 17:08	17° Π 47'56	
greatest brilliancy	8354 May 07 15:19	20° \mathcal{M} 36'09	-1.5m		8359 May 21 03:47	0° \mathcal{E}	
direct	8354 Jun 15 23:44	11° \mathcal{M} 18'56			8359 Jun 28 10:51	0° Ω	
	8354 Aug 21 13:16	0° \mathcal{A}		evening set	8359 Jul 12 20:40	11° Ω 05'48	
desc. node	8354 Aug 26 09:35	2° \mathcal{A} 14'53			8359 Aug 06 20:59	0° \mathcal{M}	
	8354 Oct 18 00:25	0° \mathcal{Z}					
	8354 Dec 06 21:41	0° \approx		conjunction	8359 Sep 14 06:47	28° \mathcal{M} 00'58	1°05'15
	8355 Jan 21 20:03	0° \mathcal{H}		minimum elong	8359 Sep 14 05:49	27° \mathcal{M} 59'14	1°05'14
evening set	8355 Mar 01 20:37	27° \mathcal{H} 11'49			8359 Sep 17 01:43	0° $\underline{\mathcal{A}}$	
	8355 Mar 05 18:14	0° Υ		max. Earth dist.	8359 Oct 21 01:30	23° $\underline{\mathcal{A}}$ 39'56	2.53398 AU
max. Earth dist.	8355 Mar 16 10:57	7° Υ 45'34	2.43930 AU		8359 Oct 30 09:26	0° \mathcal{M}	
	8355 Apr 15 08:20	0° \mathcal{B}		morning rise	8359 Nov 08 13:20	6° \mathcal{M} 09'23	
					8359 Dec 14 22:18	0° \mathcal{A}	
conjunction	8355 Apr 26 19:10	8° \mathcal{B} 42'59	-0°57'06		8360 Jan 31 18:22	0° \mathcal{Z}	
minimum elong	8355 Apr 26 21:23	8° \mathcal{B} 47'14	0°57'12		8360 Mar 22 18:03	0° \approx	
	8355 May 24 07:20	0° Π		desc. node	8360 Apr 17 06:39	13° \approx 50'23	
	8355 Jul 01 10:36	0° \mathcal{E}			8360 May 21 03:26	0° \mathcal{H}	
morning rise	8355 Jul 02 14:59	0° \mathcal{E} 55'59		retrograde	8360 Jul 15 19:56	13° \mathcal{H} 58'49	
asc. node	8355 Jul 31 18:26	23° \mathcal{E} 52'14		opposition	8360 Aug 21 18:14	5° \mathcal{H} 58'39	-4°17'01
	8355 Aug 08 14:45	0° Ω		greatest brilliancy	8360 Aug 22 19:20	5° \mathcal{H} 35'14	-1.7m
	8355 Sep 16 16:47	0° \mathcal{M}		min. Earth dist.	8360 Aug 28 23:06	3° \mathcal{H} 17'48	0.57029 AU
	8355 Oct 27 14:20	0° $\underline{\mathcal{A}}$			8360 Sep 07 18:39	30° $\mathcal{R}\approx$	
	8355 Dec 10 08:18	0° \mathcal{M}		direct	8360 Sep 30 23:17	26° \approx 23'21	
	8356 Jan 27 23:07	0° \mathcal{A}			8360 Oct 25 08:43	0° \mathcal{H}	
	8356 Apr 02 09:43	0° \mathcal{Z}			8360 Dec 26 11:57	0° Υ	
retrograde	8356 May 01 06:53	4° \mathcal{Z} 33'42			8361 Feb 08 16:30	0° \mathcal{B}	
	8356 May 27 20:43	30° $\mathcal{R}\mathcal{A}$			8361 Mar 20 18:55	0° Π	
opposition	8356 Jun 10 17:17	24° \mathcal{A} 48'46	1°06'50	asc. node	8361 Mar 22 16:49	1° Π 28'03	
greatest brilliancy	8356 Jun 10 17:27	24° \mathcal{A} 48'37	-1.3m		8361 Apr 28 14:09	0° \mathcal{E}	
min. Earth dist.	8356 Jun 10 13:59	24° \mathcal{A} 52'04	0.68070 AU		8361 Jun 06 14:04	0° Ω	
desc. node	8356 Jul 13 09:50	15° \mathcal{A} 26'22			8361 Jul 16 18:09	0° \mathcal{M}	
direct	8356 Jul 21 16:19	15° \mathcal{A} 00'46			8361 Aug 27 16:56	0° $\underline{\mathcal{A}}$	
	8356 Sep 17 15:58	0° \mathcal{Z}		evening set	8361 Sep 09 14:09	8° $\underline{\mathcal{A}}$ 56'23	
	8356 Nov 14 03:43	0° \approx			8361 Oct 10 15:05	0° \mathcal{M}	
	8356 Dec 31 23:24	0° \mathcal{H}					
	8357 Feb 13 07:39	0° Υ		conjunction	8361 Oct 31 08:48	13° \mathcal{M} 44'25	0°56'06
	8357 Mar 25 19:07	0° \mathcal{B}		minimum elong	8361 Oct 31 10:02	13° \mathcal{M} 46'27	0°56'13
evening set	8357 Apr 29 01:44	26° \mathcal{B} 31'30		max. Earth dist.	8361 Nov 17 11:09	24° \mathcal{M} 54'10	2.63325 AU
	8357 May 03 11:53	0° Π			8361 Nov 25 08:14	0° \mathcal{A}	
	8357 Jun 10 09:54	0° \mathcal{E}		morning rise	8361 Dec 17 12:45	14° \mathcal{A} 13'36	
asc. node	8357 Jun 17 17:12	5° \mathcal{E} 47'07			8362 Jan 11 10:40	0° \mathcal{Z}	
					8362 Feb 28 15:19	0° \approx	
conjunction	8357 Jul 08 00:41	21° \mathcal{E} 48'38	0°14'32	desc. node	8362 Mar 05 03:22	2° \approx 46'05	
minimum elong	8357 Jul 07 23:06	21° \mathcal{E} 45'33	0°14'21		8362 Apr 19 04:16	0° \mathcal{H}	
behind sun begin	8357 Jul 07 09:06	21° \mathcal{E} 18'04			8362 Jun 10 21:00	0° Υ	
behind sun end	8357 Jul 08 13:07	22° \mathcal{E} 13'02			8362 Aug 20 19:21	0° \mathcal{B}	
	8357 Jul 18 11:48	0° Ω		retrograde	8362 Sep 11 03:17	2° \mathcal{B} 35'01	
	8357 Aug 26 14:07	0° \mathcal{M}			8362 Oct 01 12:59	30° $\mathcal{R}\Upsilon$	
max. Earth dist.	8357 Aug 28 23:16	1° \mathcal{M} 47'24	2.39647 AU	opposition	8362 Oct 13 15:30	26° Υ 30'24	-5°50'21
morning rise	8357 Sep 16 01:41	15° \mathcal{M} 13'52		greatest brilliancy	8362 Oct 15 10:58	25° Υ 55'52	-2.5m
	8357 Oct 06 10:28	0° $\underline{\mathcal{A}}$		min. Earth dist.	8362 Oct 22 00:15	23° Υ 51'55	0.43595 AU
	8357 Nov 18 14:42	0° \mathcal{M}		direct	8362 Nov 17 23:20	19° Υ 09'56	
	8358 Jan 03 16:54	0° \mathcal{A}			8362 Dec 30 00:39	0° \mathcal{B}	
	8358 Feb 23 03:41	0° \mathcal{Z}		asc. node	8363 Feb 07 18:28	22° \mathcal{B} 33'09	

	8363 Feb 19 01:17	0°♂		morning rise	8368 Apr 06 09:46	3°♂57'48	
	8363 Apr 02 16:08	0°♂			8368 May 12 07:18	0°♂	
	8363 May 14 00:46	0°♂			8368 Jun 21 06:20	0°♂	
	8363 Jun 25 01:13	0°♂			8368 Jul 30 07:05	0°♂	
	8363 Aug 07 12:28	0°♂			8368 Sep 07 05:25	0°♂	
	8363 Sep 21 14:44	0°♂		asc. node	8368 Sep 29 14:50	16°♂58'29	
evening set	8363 Oct 23 09:25	20°♂36'34			8368 Oct 17 04:33	0°♂	
	8363 Nov 07 00:48	0°♂			8368 Nov 29 00:34	0°♂	
					8369 Jan 18 22:55	0°♂	
conjunction	8363 Dec 08 16:19	20°♂09'49	0°22'18	retrograde	8369 Mar 14 15:04	15°♂46'58	
minimum elong	8363 Dec 08 17:00	20°♂10'53	0°22'28	min. Earth dist.	8369 Apr 17 23:26	8°♂00'43	0.60369 AU
max. Earth dist.	8363 Dec 11 02:36	21°♂42'22	2.67868 AU	opposition	8369 Apr 23 09:18	5°♂52'25	4°21'05
	8363 Dec 24 04:08	0°♂		greatest brilliancy	8369 Apr 22 13:56	6°♂11'33	-1.6m
morning rise	8364 Jan 21 15:15	18°♂03'58			8369 May 10 08:22	30°♂	
desc. node	8364 Jan 21 00:03	17°♂39'49		direct	8369 May 31 01:05	27°♂11'37	
	8364 Feb 09 09:34	0°♂			8369 Jun 22 14:03	0°♂	
	8364 Mar 27 06:50	0°♂			8369 Sep 02 21:39	0°♂	
	8364 May 12 17:26	0°♂		desc. node	8369 Sep 11 23:21	4°♂48'51	
	8364 Jun 27 22:59	0°♂			8369 Oct 26 10:01	0°♂	
	8364 Aug 13 20:06	0°♂			8369 Dec 14 06:22	0°♂	
	8364 Oct 04 08:51	0°♂			8370 Jan 28 22:17	0°♂	
retrograde	8364 Nov 29 18:47	17°♂10'21		evening set	8370 Feb 11 16:37	9°♂25'19	
asc. node	8364 Dec 25 19:19	13°♂06'41		max. Earth dist.	8370 Feb 26 00:57	19°♂25'44	2.49245 AU
min. Earth dist.	8364 Dec 27 11:49	12°♂39'33	0.36879 AU		8370 Mar 12 21:40	0°♂	
opposition	8364 Dec 30 07:06	11°♂53'52	0°20'50				
greatest brilliancy	8364 Dec 30 05:54	11°♂54'41	-3.1m	conjunction	8370 Apr 04 07:25	16°♂18'43	-1°06'13
direct	8365 Jan 28 15:02	6°♂59'50		minimum elong	8370 Apr 04 08:02	16°♂19'49	1°06'16
	8365 Apr 07 00:01	0°♂			8370 Apr 22 16:10	0°♂	
	8365 May 27 21:52	0°♂			8370 May 31 20:17	0°♂	
	8365 Jul 14 18:03	0°♂		morning rise	8370 Jun 02 23:29	1°♂39'34	
	8365 Aug 31 10:08	0°♂			8370 Jul 09 03:40	0°♂	
	8365 Oct 18 07:55	0°♂			8370 Aug 16 10:28	0°♂	
evening set	8365 Nov 28 12:29	25°♂50'58		asc. node	8370 Aug 17 12:53	0°♂51'22	
	8365 Dec 05 02:24	0°♂			8370 Sep 24 14:26	0°♂	
desc. node	8365 Dec 07 21:55	1°♂46'38			8370 Nov 04 15:57	0°♂	
max. Earth dist.	8366 Jan 01 09:14	17°♂19'17	2.66879 AU		8370 Dec 19 00:47	0°♂	
					8371 Feb 08 07:20	0°♂	
conjunction	8366 Jan 12 01:53	24°♂10'04	-0°18'19	retrograde	8371 Apr 19 01:43	21°♂52'53	
minimum elong	8366 Jan 12 01:20	24°♂09'12	0°18'09	min. Earth dist.	8371 May 27 22:53	12°♂37'57	0.67175 AU
	8366 Jan 21 03:18	0°♂		opposition	8371 May 29 14:10	11°♂58'47	2°05'23
morning rise	8366 Feb 25 01:35	22°♂47'22		greatest brilliancy	8371 May 29 11:36	12°♂01'20	-1.3m
	8366 Mar 07 22:46	0°♂		direct	8371 Jul 08 22:05	2°♂24'00	
	8366 Apr 21 06:58	0°♂		desc. node	8371 Jul 30 23:54	5°♂02'29	
	8366 Jun 03 03:50	0°♂			8371 Oct 01 17:17	0°♂	
	8366 Jul 14 18:03	0°♂			8371 Nov 23 19:40	0°♂	
	8366 Aug 24 14:06	0°♂			8372 Jan 09 15:44	0°♂	
	8366 Oct 04 19:30	0°♂			8372 Feb 21 18:07	0°♂	
asc. node	8366 Nov 12 17:18	26°♂29'10			8372 Apr 02 05:38	0°♂	
	8366 Nov 18 07:34	0°♂		evening set	8372 Apr 03 09:24	0°♂52'46	
retrograde	8367 Jan 31 18:49	28°♂41'35			8372 May 11 00:09	0°♂	
min. Earth dist.	8367 Mar 01 05:04	23°♂04'05	0.47920 AU	max. Earth dist.	8372 May 20 05:02	7°♂14'32	2.36781 AU
greatest brilliancy	8367 Mar 07 23:30	20°♂38'17	-2.3m				
opposition	8367 Mar 09 13:31	20°♂03'50	5°20'21	conjunction	8372 Jun 07 11:27	21°♂40'52	-0°19'13
direct	8367 Apr 12 00:36	13°♂02'41		minimum elong	8372 Jun 07 13:26	21°♂44'47	0°19'23
	8367 Jun 11 07:27	0°♂			8372 Jun 17 23:27	0°♂	
	8367 Aug 07 16:31	0°♂		asc. node	8372 Jul 04 09:28	12°♂59'02	
	8367 Sep 28 05:04	0°♂			8372 Jul 26 01:22	0°♂	
desc. node	8367 Oct 25 22:08	16°♂43'00		morning rise	8372 Aug 19 13:42	18°♂57'40	
	8367 Nov 16 12:50	0°♂			8372 Sep 03 02:29	0°♂	
	8368 Jan 02 23:56	0°♂			8372 Oct 13 21:26	0°♂	
evening set	8368 Jan 03 14:31	0°♂23'32			8372 Nov 26 03:28	0°♂	
max. Earth dist.	8368 Jan 25 23:39	15°♂00'07	2.60504 AU		8373 Jan 11 19:02	0°♂	
	8368 Feb 17 10:43	0°♂			8373 Mar 05 15:58	0°♂	
				retrograde	8373 May 22 08:50	24°♂41'19	
conjunction	8368 Feb 18 11:00	0°♂41'02	-0°53'55	desc. node	8373 Jun 16 23:16	20°♂31'44	
minimum elong	8368 Feb 18 09:48	0°♂39'01	0°53'50	opposition	8373 Jul 01 07:54	15°♂17'06	-0°29'49
	8368 Mar 31 19:47	0°♂		greatest brilliancy	8373 Jul 01 08:39	15°♂16'22	-1.3m

min. Earth dist.	8373 Jul 03 11:39	14°  26'06	0.67475 AU	conjunction	8378 Nov 24 09:55	6°  46'10	0°36'52
direct	8373 Aug 11 20:30	5°  16'16		minimum elong	8378 Nov 24 10:58	6°  47'51	0°37'02
	8373 Oct 28 01:09	0°  ≈		max. Earth dist.	8378 Dec 02 04:54	11°  45'03	2.66731 AU
	8373 Dec 18 06:02	0°  ✕			8378 Dec 30 21:44	0°  ♊	
	8374 Jan 31 12:09	0°  ♈		morning rise	8379 Jan 08 05:08	5°  ♊15'42	
	8374 Mar 13 05:25	0°  ♉		desc. node	8379 Feb 06 14:04	23°  ♊49'06	
	8374 Apr 20 23:14	0°  ♊			8379 Feb 16 09:18	0°  ≈	
asc. node	8374 May 22 09:09	24°  ♊49'50			8379 Apr 05 00:28	0°  ✕	
	8374 May 28 21:45	0°  ♊			8379 May 22 23:49	0°  ♈	
evening set	8374 Jun 13 21:10	12°  ♊37'21			8379 Jul 11 07:19	0°  ♉	
	8374 Jul 06 01:31	0°  ♊			8379 Sep 04 13:02	0°  ♊	
	8374 Aug 14 07:21	0°  ♊		retrograde	8379 Oct 29 08:53	15°  ♊12'44	
				opposition	8379 Nov 28 06:43	10°  ♊16'03	-3°19'33
conjunction	8374 Aug 21 13:17	5°  ♊24'36	0°54'39	greatest brilliancy	8379 Nov 28 19:47	10°  ♊07'17	-3.0m
minimum elong	8374 Aug 21 10:36	5°  ♊19'36	0°54'33	min. Earth dist.	8379 Dec 01 07:41	9°  ♊27'09	0.37260 AU
	8374 Sep 24 07:21	0°  ♊		direct	8379 Dec 28 16:39	5°  ♊01'28	
max. Earth dist.	8374 Oct 06 06:50	8°  ♊28'57	2.48258 AU	asc. node	8380 Jan 12 10:40	6°  ♊28'48	
morning rise	8374 Oct 21 01:58	18°  ♊47'23			8380 Mar 07 10:36	0°  ♊	
	8374 Nov 06 11:53	0°  ♊			8380 Apr 24 06:07	0°  ♊	
	8374 Dec 22 02:35	0°  ♊			8380 Jun 08 10:23	0°  ♊	
	8375 Feb 08 13:53	0°  ♊			8380 Jul 23 20:26	0°  ♊	
	8375 Apr 02 22:34	0°  ≈			8380 Sep 08 05:11	0°  ♊	
desc. node	8375 May 04 21:16	15°  ≈11'35			8380 Oct 25 09:29	0°  ♊	
retrograde	8375 Jun 29 12:23	29°  ≈07'34		evening set	8380 Nov 14 10:43	12°  ♊40'30	
opposition	8375 Aug 06 14:55	20°  ≈36'55	-3°14'16		8380 Dec 11 20:08	0°  ♊	
greatest brilliancy	8375 Aug 07 05:59	20°  ≈22'32	-1.6m	max. Earth dist.	8380 Dec 23 18:26	7°  ♊34'02	2.67913 AU
min. Earth dist.	8375 Aug 12 11:36	18°  ≈22'38	0.61211 AU	desc. node	8380 Dec 24 11:58	8°  ♊01'51	
direct	8375 Sep 16 15:58	10°  ≈42'52					
	8375 Nov 18 23:20	0°  ✕		conjunction	8380 Dec 29 08:11	11°  ♊06'34	-0°02'35
	8376 Jan 07 22:35	0°  ♈		minimum elong	8380 Dec 29 08:05	11°  ♊06'24	0°02'24
	8376 Feb 19 06:47	0°  ♉		behind sun begin	8380 Dec 28 13:50	10°  ♊37'24	
	8376 Mar 29 16:27	0°  ♊		behind sun end	8380 Dec 30 02:20	11°  ♊35'25	
asc. node	8376 Apr 08 10:38	7°  ♊35'54			8381 Jan 27 21:14	0°  ≈	
	8376 May 07 01:24	0°  ♊		morning rise	8381 Feb 10 22:51	9°  ≈04'32	
	8376 Jun 14 16:08	0°  ♊			8381 Mar 15 00:27	0°  ✕	
	8376 Jul 24 10:55	0°  ♊			8381 Apr 29 00:02	0°  ♈	
evening set	8376 Aug 19 20:02	19°  ♊12'17			8381 Jun 11 19:20	0°  ♉	
	8376 Sep 04 00:29	0°  ♊			8381 Jul 24 15:11	0°  ♊	
					8381 Sep 05 03:17	0°  ♊	
conjunction	8376 Oct 14 08:28	27°  ♊47'34	1°04'06		8381 Oct 19 08:35	0°  ♊	
minimum elong	8376 Oct 14 09:20	27°  ♊49'01	1°04'10	asc. node	8381 Nov 29 10:57	23°  ♊24'02	
	8376 Oct 17 15:08	0°  ♊			8381 Dec 15 21:24	0°  ♊	
max. Earth dist.	8376 Nov 07 12:55	13°  ♊55'00	2.60045 AU	retrograde	8382 Jan 10 16:36	4°  ♊30'23	
morning rise	8376 Dec 02 22:27	0°  ♊28'52			8382 Feb 05 06:51	30°  ♊	
	8376 Dec 02 04:34	0°  ♊		min. Earth dist.	8382 Feb 06 00:49	29°  ♊45'56	0.42499 AU
	8377 Jan 18 10:41	0°  ♊		greatest brilliancy	8382 Feb 12 19:54	27°  ♊33'12	-2.6m
	8377 Mar 08 08:57	0°  ≈		opposition	8382 Feb 14 05:33	27°  ♊05'31	4°34'00
desc. node	8377 Mar 21 17:54	7°  ≈58'42		direct	8382 Mar 17 16:44	21°  ♊00'33	
	8377 Apr 29 00:11	0°  ✕			8382 Apr 27 08:35	0°  ♊	
	8377 Jun 28 16:32	0°  ♈			8382 Jun 26 19:32	0°  ♊	
retrograde	8377 Aug 16 21:25	11°  ♈32'37			8382 Aug 17 08:01	0°  ♊	
opposition	8377 Sep 20 10:46	4°  ♈35'44	-5°37'08		8382 Oct 05 23:50	0°  ♊	
greatest brilliancy	8377 Sep 22 03:40	4°  ♈00'16	-2.2m	desc. node	8382 Nov 11 11:38	22°  ♊28'21	
min. Earth dist.	8377 Sep 29 02:38	1°  ♈36'54	0.49087 AU		8382 Nov 23 13:24	0°  ♊	
	8377 Oct 04 04:00	30°  ♈		evening set	8382 Dec 20 09:24	16°  ♊55'30	
direct	8377 Oct 28 06:26	26°  ♈04'19			8383 Jan 09 18:52	0°  ≈	
	8377 Nov 21 22:45	0°  ♈		max. Earth dist.	8383 Jan 15 21:43	3°  ≈57'51	2.63615 AU
	8378 Jan 20 02:30	0°  ♉					
asc. node	8378 Feb 24 10:54	24°  ♉19'59		conjunction	8383 Feb 03 08:15	16°  ≈01'47	-0°41'35
	8378 Mar 04 06:18	0°  ♊		minimum elong	8383 Feb 03 07:09	15°  ≈59'59	0°41'27
	8378 Apr 13 12:39	0°  ♊			8383 Feb 24 07:41	0°  ✕	
	8378 May 23 13:12	0°  ♊		morning rise	8383 Mar 21 03:01	16°  ♈52'40	
	8378 Jul 03 14:13	0°  ♊			8383 Apr 09 00:14	0°  ♈	
	8378 Aug 15 06:59	0°  ♊			8383 May 20 22:24	0°  ♉	
	8378 Sep 28 19:23	0°  ♊			8383 Jun 30 09:32	0°  ♊	
evening set	8378 Oct 07 12:25	5°  ♊44'34			8383 Aug 08 22:18	0°  ♊	
	8378 Nov 13 20:40	0°  ♊			8383 Sep 17 09:28	0°  ♊	

asc. node	8383 Oct 17 08:15	22°♏12'24			8388 Dec 26 16:54	0°♐	
	8383 Oct 28 04:18	0°♐			8389 Feb 08 08:28	0°♐	
	8383 Dec 12 04:38	0°♏			8389 Mar 20 22:06	0°♐	
retrograde	8384 Feb 28 07:14	29°♏34'40			8389 Apr 28 15:28	0°♐	
min. Earth dist.	8384 Mar 31 11:18	22°♏34'09	0.56026 AU	evening set	8389 May 14 23:32	12°♐53'36	
greatest brilliancy	8384 Apr 06 02:17	20°♏23'26	-1.8m		8389 Jun 05 13:34	0°♏	
opposition	8384 Apr 07 06:33	19°♏56'01	5°00'39	asc. node	8389 Jun 08 02:15	2°♏00'14	
direct	8384 May 13 10:54	11°♏47'25			8389 Jul 13 15:39	0°♏	
	8384 Jul 17 00:24	0°♐					
	8384 Sep 12 21:28	0°♐		conjunction	8389 Jul 24 21:13	8°♏43'15	0°32'06
desc. node	8384 Sep 28 12:19	8°♐53'14		minimum elong	8389 Jul 24 18:16	8°♏37'33	0°31'55
	8384 Nov 03 05:21	0°♏			8389 Aug 21 18:29	0°♐	
	8384 Dec 21 09:22	0°♐		max. Earth dist.	8389 Sep 15 14:50	18°♐25'35	2.42654 AU
evening set	8385 Jan 26 04:50	23°♐27'31		morning rise	8389 Sep 29 16:34	28°♐36'58	
	8385 Feb 04 21:56	0°♐			8389 Oct 01 14:53	0°♏	
max. Earth dist.	8385 Feb 11 21:39	4°♐45'20	2.54153 AU		8389 Nov 13 17:33	0°♐	
					8389 Dec 29 13:01	0°♐	
conjunction	8385 Mar 15 19:39	27°♐00'41	-1°06'07		8390 Feb 17 00:33	0°♏	
minimum elong	8385 Mar 15 19:06	26°♐59'43	1°06'07		8390 Apr 15 22:00	0°♐	
	8385 Mar 20 00:15	0°♐		desc. node	8390 May 21 11:01	12°♐27'55	
	8385 Apr 30 00:19	0°♐		retrograde	8390 Jun 13 20:47	15°♐25'32	
morning rise	8385 May 08 14:44	6°♐27'27		opposition	8390 Jul 22 21:00	6°♐30'31	-2°10'12
	8385 Jun 08 10:37	0°♐		greatest brilliancy	8390 Jul 23 04:22	6°♐23'22	-1.4m
	8385 Jul 16 23:17	0°♏		min. Earth dist.	8390 Jul 27 07:25	4°♐47'17	0.64422 AU
	8385 Aug 24 10:06	0°♏			8390 Aug 10 00:53	30°♐	
asc. node	8385 Sep 03 05:13	7°♏33'53		direct	8390 Sep 02 08:26	26°♏28'29	
	8385 Oct 02 18:14	0°♐			8390 Sep 27 07:54	0°♐	
	8385 Nov 13 04:19	0°♏			8390 Dec 02 00:12	0°♐	
	8385 Dec 28 17:17	0°♐			8391 Jan 17 12:49	0°♐	
	8386 Feb 24 13:14	0°♐			8391 Feb 27 23:05	0°♐	
retrograde	8386 Apr 05 16:54	8°♐44'45			8391 Apr 07 23:49	0°♐	
min. Earth dist.	8386 May 12 23:45	0°♐00'34	0.65281 AU	asc. node	8391 Apr 26 01:43	14°♐11'48	
	8386 May 13 00:18	30°♐			8391 May 16 02:58	0°♏	
opposition	8386 May 16 02:47	28°♐45'43	3°01'21		8391 Jun 23 11:52	0°♏	
greatest brilliancy	8386 May 15 19:11	28°♐53'18	-1.4m	evening set	8391 Jul 27 21:41	26°♏11'33	
direct	8386 Jun 24 14:11	19°♐28'15			8391 Aug 02 00:10	0°♐	
	8386 Aug 10 22:20	0°♐			8391 Sep 12 06:57	0°♏	
desc. node	8386 Aug 16 12:51	2°♐13'17					
	8386 Oct 11 22:58	0°♏		conjunction	8391 Sep 26 06:13	9°♏49'29	1°06'55
	8386 Dec 01 19:09	0°♐		minimum elong	8391 Sep 26 06:08	9°♏49'19	1°06'56
	8387 Jan 17 00:57	0°♐			8391 Oct 25 15:58	0°♐	
	8387 Mar 01 01:10	0°♐		max. Earth dist.	8391 Oct 28 06:53	1°♐46'00	2.55977 AU
evening set	8387 Mar 13 02:12	8°♐44'40		morning rise	8391 Nov 18 04:22	15°♐40'51	
max. Earth dist.	8387 Mar 30 09:01	21°♐32'14	2.41029 AU		8391 Dec 10 03:35	0°♐	
	8387 Apr 10 14:46	0°♐			8392 Jan 26 16:33	0°♏	
					8392 Mar 16 17:07	0°♐	
conjunction	8387 May 11 00:51	23°♐22'52	-0°46'47	desc. node	8392 Apr 07 08:30	12°♐16'56	
minimum elong	8387 May 11 03:45	23°♐28'31	0°46'55		8392 May 11 01:08	0°♐	
	8387 May 19 12:26	0°♐		retrograde	8392 Jul 26 14:00	23°♐38'36	
	8387 Jun 26 14:04	0°♏		opposition	8392 Aug 31 18:30	15°♐58'12	-4°50'19
morning rise	8387 Jul 20 10:22	18°♏49'06		greatest brilliancy	8392 Sep 02 01:40	15°♐29'42	-1.9m
asc. node	8387 Jul 22 03:45	20°♏10'28		min. Earth dist.	8392 Sep 08 15:06	13°♐06'31	0.54394 AU
	8387 Aug 03 16:42	0°♏		direct	8392 Oct 10 07:50	6°♐39'52	
	8387 Sep 11 17:21	0°♐			8392 Dec 17 14:10	0°♐	
	8387 Oct 22 12:14	0°♏			8393 Feb 02 00:30	0°♐	
	8387 Dec 04 23:07	0°♐		asc. node	8393 Mar 13 02:57	28°♐41'48	
	8388 Jan 21 13:44	0°♐			8393 Mar 14 20:18	0°♐	
	8388 Mar 19 11:16	0°♏			8393 Apr 23 00:28	0°♏	
retrograde	8388 May 08 21:19	12°♏13'08			8393 Jun 01 06:33	0°♏	
opposition	8388 Jun 18 05:07	2°♏34'34	0°31'34		8393 Jul 11 16:03	0°♐	
greatest brilliancy	8388 Jun 18 05:38	2°♏34'03	-1.3m		8393 Aug 22 19:27	0°♏	
min. Earth dist.	8388 Jun 18 21:12	2°♏18'37	0.68146 AU	evening set	8393 Sep 20 05:45	19°♏29'43	
	8388 Jun 24 19:04	30°♐			8393 Oct 05 21:19	0°♐	
desc. node	8388 Jul 03 12:41	26°♐55'15					
direct	8388 Jul 29 10:52	22°♐40'54		conjunction	8393 Nov 09 09:40	22°♐42'01	0°49'46
	8388 Sep 05 16:56	0°♏		minimum elong	8393 Nov 09 10:55	22°♐44'02	0°49'54
	8388 Nov 07 22:03	0°♐			8393 Nov 20 16:15	0°♐	

max. Earth dist.	8393 Nov 23 00:07	1°♏30'03	2.64773 AU		8398 Dec 30 14:01	0°♎	
morning rise	8393 Dec 25 13:25	22°♏18'16		retrograde	8399 Feb 11 09:21	11°♎05'45	
	8394 Jan 06 17:15	0°♏		min. Earth dist.	8399 Mar 13 04:16	4°♎57'27	0.50934 AU
desc. node	8394 Feb 23 05:24	29°♏46'28		greatest brilliancy	8399 Mar 19 15:08	2°♎33'14	-2.1m
	8394 Feb 23 14:07	0°♎		opposition	8399 Mar 21 03:10	1°♎59'31	5°22'37
	8394 Apr 13 06:41	0°♏			8399 Mar 26 15:04	30°♏♏	
	8394 Jun 02 16:46	0°♏		direct	8399 Apr 24 14:19	24°♏31'35	
	8394 Jul 29 03:23	0°♏			8399 May 26 05:36	0°♎	
retrograde	8394 Sep 27 10:22	16°♏53'43			8399 Jul 31 12:10	0°♎	
opposition	8394 Oct 28 18:40	11°♏18'41	-5°26'47		8399 Sep 22 16:05	0°♏	
greatest brilliancy	8394 Oct 30 07:59	10°♏50'41	-2.7m	desc. node	8399 Oct 16 01:28	13°♏52'17	
min. Earth dist.	8394 Nov 04 23:45	9°♏09'36	0.40825 AU		8399 Nov 11 14:45	0°♏	
direct	8394 Dec 01 09:21	4°♏45'45			8399 Dec 29 07:36	0°♎	
asc. node	8395 Jan 29 03:30	24°♏13'03		evening set	8400 Jan 11 22:54	8°♎50'33	
	8395 Feb 08 02:51	0°♏		max. Earth dist.	8400 Feb 01 03:28	22°♎10'09	2.58452 AU
	8395 Mar 25 19:50	0°♏			8400 Feb 12 19:12	0°♏	
	8395 May 07 11:29	0°♏					
	8395 Jun 19 06:30	0°♏		conjunction	8400 Feb 27 13:32	10°♏03'50	-0°59'41
	8395 Aug 02 06:12	0°♎		minimum elong	8400 Feb 27 12:26	10°♏01'57	0°59'37
	8395 Sep 16 16:55	0°♎			8400 Mar 27 02:19	0°♏	
evening set	8395 Oct 31 22:48	29°♎06'59		morning rise	8400 Apr 17 04:19	15°♏08'40	
	8395 Nov 02 08:03	0°♏			8400 May 07 10:00	0°♏	
					8400 Jun 16 04:37	0°♏	
conjunction	8395 Dec 16 14:22	28°♏07'23	0°13'18		8400 Jul 25 00:50	0°♏	
minimum elong	8395 Dec 16 14:47	28°♏08'02	0°13'29		8400 Sep 01 18:06	0°♏	
behind sun begin	8395 Dec 16 04:46	27°♏52'10		asc. node	8400 Sep 20 00:11	13°♏57'14	
behind sun end	8395 Dec 17 00:47	28°♏23'53			8400 Oct 11 09:45	0°♏	
max. Earth dist.	8395 Dec 16 04:06	27°♏51'06	2.68123 AU		8400 Nov 22 12:01	0°♎	
	8395 Dec 19 13:22	0°♏			8401 Jan 09 10:15	0°♎	
desc. node	8396 Jan 11 02:11	14°♏18'41		retrograde	8401 Mar 22 20:32	24°♎46'38	
morning rise	8396 Jan 29 07:16	25°♏54'55		min. Earth dist.	8401 Apr 27 07:35	16°♎38'27	0.62368 AU
	8396 Feb 04 16:45	0°♎		opposition	8401 May 01 22:30	14°♎48'20	3°53'39
	8396 Mar 22 06:44	0°♏		greatest brilliancy	8401 May 01 07:48	15°♎02'56	-1.5m
	8396 May 07 02:51	0°♏		direct	8401 Jun 09 07:50	5°♎52'57	
	8396 Jun 21 06:31	0°♏			8401 Aug 26 05:48	0°♏	
	8396 Aug 05 03:56	0°♏		desc. node	8401 Sep 02 01:51	3°♏23'29	
	8396 Sep 20 08:25	0°♏			8401 Oct 20 20:29	0°♏	
	8396 Nov 16 19:57	0°♏			8401 Dec 09 07:57	0°♎	
retrograde	8396 Dec 16 07:06	5°♏38'44			8402 Jan 24 04:48	0°♏	
asc. node	8396 Dec 16 02:36	5°♏38'43		evening set	8402 Feb 21 17:45	19°♏42'33	
min. Earth dist.	8397 Jan 11 13:20	1°♏19'30	0.38195 AU	max. Earth dist.	8402 Mar 07 17:09	29°♏38'54	2.46334 AU
	8397 Jan 16 03:44	30°♏♏			8402 Mar 08 04:54	0°♏	
opposition	8397 Jan 17 04:17	29°♏42'16	2°20'17				
greatest brilliancy	8397 Jan 16 14:32	29°♏52'11	-2.9m	conjunction	8402 Apr 16 13:25	28°♏58'53	-1°02'22
direct	8397 Feb 15 19:33	24°♏31'18		minimum elong	8402 Apr 16 14:55	29°♏01'44	1°02'26
	8397 Mar 18 04:30	0°♏			8402 Apr 17 21:50	0°♏	
	8397 May 19 01:41	0°♏			8402 May 26 23:44	0°♏	
	8397 Jul 08 06:57	0°♎		morning rise	8402 Jun 19 03:37	18°♏08'34	
	8397 Aug 25 23:41	0°♎			8402 Jul 04 04:59	0°♏	
	8397 Oct 13 09:49	0°♏		asc. node	8402 Aug 07 20:32	27°♏13'37	
desc. node	8397 Nov 28 01:09	28°♏30'04			8402 Aug 11 09:50	0°♏	
	8397 Nov 30 10:18	0°♏			8402 Sep 19 11:46	0°♏	
evening set	8397 Dec 06 10:52	3°♏47'52			8402 Oct 30 09:19	0°♎	
max. Earth dist.	8398 Jan 06 13:54	23°♏35'53	2.65959 AU		8402 Dec 13 06:30	0°♎	
	8398 Jan 16 12:40	0°♎			8403 Jan 31 15:13	0°♏	
				retrograde	8403 Apr 26 15:11	29°♏40'30	
conjunction	8398 Jan 20 00:12	2°♎14'57	-0°27'15	min. Earth dist.	8403 Jun 05 07:49	20°♏10'34	0.67793 AU
minimum elong	8398 Jan 19 23:25	2°♎13'41	0°27'05	opposition	8403 Jun 06 03:32	19°♏50'58	1°31'20
	8398 Mar 03 05:50	0°♏		greatest brilliancy	8403 Jun 06 02:47	19°♏51'42	-1.3m
morning rise	8398 Mar 05 10:34	1°♏28'06		direct	8403 Jul 16 21:05	10°♏08'30	
	8398 Apr 16 08:29	0°♏		desc. node	8403 Jul 21 02:14	10°♏14'47	
	8398 May 28 20:42	0°♏			8403 Sep 23 17:43	0°♏	
	8398 Jul 09 00:01	0°♏			8403 Nov 18 04:05	0°♎	
	8398 Aug 18 06:14	0°♏			8404 Jan 04 14:48	0°♏	
	8398 Sep 27 14:48	0°♏			8404 Feb 16 22:06	0°♏	
asc. node	8398 Nov 03 02:15	25°♏57'18			8404 Mar 28 10:38	0°♏	
	8398 Nov 09 01:44	0°♏		evening set	8404 Apr 17 09:00	15°♏18'14	

	8404 May 06 04:48	0°♂			8408 Nov 27 12:38	0°♂
	8404 Jun 13 03:26	0°♂	morning rise		8408 Dec 11 08:47	8°♂54'08
					8409 Jan 13 15:37	0°♂
conjunction	8404 Jun 24 12:55	9°♂01'36 -0°00'11			8409 Mar 03 02:27	0°♂
minimum elong	8404 Jun 24 12:57	9°♂01'39 0°00'23	desc. node		8409 Mar 11 20:05	5°♂18'35
behind sun begin	8404 Jun 23 06:35	8°♂01'37			8409 Apr 22 09:28	0°♂
behind sun end	8404 Jun 25 19:18	10°♂01'40			8409 Jun 16 11:24	0°♂
asc. node	8404 Jun 24 18:43	9°♂13'01	retrograde		8409 Aug 30 13:23	23°♂24'56
	8404 Jul 21 04:43	0°♂	opposition		8409 Oct 03 00:04	16°♂56'13 -5°50'29
max. Earth dist.	8404 Aug 06 16:38	12°♂48'21 2.37513 AU	greatest brilliancy		8409 Oct 04 20:06	16°♂19'42 -2.3m
	8404 Aug 29 05:30	0°♂	min. Earth dist.		8409 Oct 11 17:12	14°♂03'53 0.46021 AU
morning rise	8404 Sep 04 13:55	4°♂46'16	direct		8409 Nov 08 13:42	9°♂00'52
	8404 Oct 08 23:49	0°♂			8410 Jan 09 10:34	0°♂
	8404 Nov 21 02:52	0°♂	asc. node		8410 Feb 14 19:30	23°♂08'50
	8405 Jan 06 08:02	0°♂			8410 Feb 24 15:53	0°♂
	8405 Feb 26 12:17	0°♂			8410 Apr 07 00:16	0°♂
	8405 May 09 08:16	0°♂			8410 May 17 15:46	0°♂
retrograde	8405 May 30 08:13	2°♂25'56			8410 Jun 28 03:34	0°♂
desc. node	8405 Jun 07 02:04	2°♂03'14			8410 Aug 10 04:52	0°♂
	8405 Jun 18 20:58	30°♂♂			8410 Sep 23 23:31	0°♂
opposition	8405 Jul 09 00:29	23°♂11'04 -1°06'33	evening set		8410 Oct 16 17:20	14°♂51'32
greatest brilliancy	8405 Jul 09 02:50	23°♂08'45 -1.4m			8410 Nov 09 04:44	0°♂
min. Earth dist.	8405 Jul 11 23:41	22°♂01'15 0.66659 AU				
direct	8405 Aug 19 14:30	13°♂08'26	conjunction		8410 Dec 02 15:20	14°♂58'48 0°28'30
	8405 Oct 19 08:09	0°♂	minimum elong		8410 Dec 02 16:11	15°♂00'09 0°28'41
	8405 Dec 12 06:37	0°♂	max. Earth dist.		8410 Dec 07 08:31	17°♂58'59 2.67474 AU
	8406 Jan 26 04:46	0°♂			8410 Dec 26 06:36	0°♂
	8406 Mar 08 03:36	0°♂	morning rise		8411 Jan 15 21:39	13°♂04'38
	8406 Apr 15 23:49	0°♂	desc. node		8411 Jan 27 16:42	20°♂33'01
asc. node	8406 May 12 18:52	21°♂08'13			8411 Feb 11 14:22	0°♂
	8406 May 23 23:47	0°♂			8411 Mar 30 19:06	0°♂
evening set	8406 Jun 30 10:43	29°♂24'59			8411 May 16 20:25	0°♂
	8406 Jul 01 04:44	0°♂			8411 Jul 03 04:50	0°♂
	8406 Aug 09 11:55	0°♂			8411 Aug 21 11:49	0°♂
					8411 Oct 24 12:44	0°♂
conjunction	8406 Sep 04 09:11	19°♂05'19 1°02'01	retrograde		8411 Nov 16 21:45	3°♂22'50
minimum elong	8406 Sep 04 07:27	19°♂02'10 1°01'58			8411 Dec 10 14:56	30°♂♂
	8406 Sep 19 13:09	0°♂	opposition		8411 Dec 16 18:07	28°♂24'32 -1°19'44
max. Earth dist.	8406 Oct 15 04:04	17°♂58'57 2.51164 AU	greatest brilliancy		8411 Dec 16 19:52	28°♂23'23 -3.1m
morning rise	8406 Oct 31 20:18	29°♂23'35	min. Earth dist.		8411 Dec 16 14:36	28°♂26'52 0.36594 AU
	8406 Nov 01 17:49	0°♂	asc. node		8412 Jan 02 20:44	24°♂30'18
	8406 Dec 17 05:47	0°♂	direct		8412 Jan 15 06:01	23°♂30'26
	8407 Feb 03 06:11	0°♂			8412 Feb 16 18:55	0°♂
	8407 Mar 27 00:21	0°♂			8412 Apr 14 19:49	0°♂
desc. node	8407 Apr 24 23:37	15°♂02'56			8412 Jun 01 10:56	0°♂
	8407 May 30 01:11	0°♂			8412 Jul 18 00:44	0°♂
retrograde	8407 Jul 09 02:29	7°♂53'53			8412 Sep 03 00:47	0°♂
	8407 Aug 14 16:20	30°♂♂			8412 Oct 20 13:53	0°♂
opposition	8407 Aug 15 14:30	29°♂39'09 -3°50'49	evening set		8412 Nov 22 12:59	20°♂44'46
greatest brilliancy	8407 Aug 16 10:58	29°♂19'50 -1.7m			8412 Dec 07 04:50	0°♂
min. Earth dist.	8407 Aug 22 05:39	27°♂09'17 0.59005 AU	desc. node		8412 Dec 14 14:13	4°♂40'45
direct	8407 Sep 25 06:05	19°♂54'02	max. Earth dist.		8412 Dec 28 19:47	13°♂43'06 2.67452 AU
	8407 Nov 07 07:44	0°♂				
	8408 Jan 01 01:23	0°♂	conjunction		8413 Jan 06 04:30	19°♂03'07 -0°11'51
	8408 Feb 13 08:53	0°♂	minimum elong		8413 Jan 06 04:08	19°♂02'33 0°11'39
	8408 Mar 24 03:42	0°♂	behind sun begin		8413 Jan 05 15:19	18°♂42'05
asc. node	8408 Mar 29 18:26	4°♂20'08	behind sun end		8413 Jan 06 16:57	19°♂23'01
	8408 May 01 18:01	0°♂			8413 Jan 23 06:06	0°♂
	8408 Jun 09 12:56	0°♂	morning rise		8413 Feb 18 22:27	17°♂18'35
	8408 Jul 19 11:43	0°♂			8413 Mar 10 05:31	0°♂
	8408 Aug 30 05:01	0°♂			8413 Apr 23 20:54	0°♂
evening set	8408 Aug 31 22:14	1°♂12'17			8413 Jun 06 03:37	0°♂
	8408 Oct 12 22:23	0°♂			8413 Jul 18 06:04	0°♂
					8413 Aug 28 17:02	0°♂
conjunction	8408 Oct 24 05:25	7°♂32'15 0°59'58			8413 Oct 09 21:03	0°♂
minimum elong	8408 Oct 24 06:33	7°♂34'09 1°00'04	asc. node		8413 Nov 19 19:24	26°♂27'05
max. Earth dist.	8408 Nov 13 10:47	20°♂51'16 2.61959 AU			8413 Nov 26 00:38	0°♂

retrograde	8414 Jan 23 00:51	19° \mathbb{M} 10'55		evening set	8419 Mar 25 07:29	21° Υ 19'57	
min. Earth dist.	8414 Feb 19 11:07	13° \mathbb{M} 57'58	0.45447 AU		8419 Apr 05 19:37	0° \mathcal{B}	
greatest brilliancy	8414 Feb 26 08:03	11° \mathbb{M} 35'18	-2.4m	max. Earth dist.	8419 Apr 20 08:21	11° \mathcal{B} 06'01	2.38339 AU
opposition	8414 Feb 27 21:55	11° \mathbb{M} 02'11	5°09'18		8419 May 14 16:10	0° \mathbb{I}	
direct	8414 Apr 01 11:48	4° \mathbb{M} 25'11					
	8414 Jun 17 20:26	0° \mathcal{L}		conjunction	8419 May 26 15:21	9° \mathbb{I} 24'06	-0°32'25
	8414 Aug 11 03:02	0° \mathbb{M}		minimum elong	8419 May 26 18:10	9° \mathbb{I} 29'38	0°32'33
	8414 Sep 30 18:17	0° \mathcal{X}			8419 Jun 21 16:47	0° \mathcal{G}	
desc. node	8414 Nov 01 14:06	19° \mathcal{X} 23'01		asc. node	8419 Jul 12 11:11	16° \mathcal{G} 24'42	
	8414 Nov 18 18:08	0° \mathcal{Z}			8419 Jul 29 18:41	0° \mathcal{Q}	
evening set	8414 Dec 28 11:19	25° \mathcal{Z} 04'03		morning rise	8419 Aug 07 06:08	6° \mathcal{Q} 36'18	
	8415 Jan 05 03:25	0° \approx			8419 Sep 06 18:40	0° \mathbb{M}	
max. Earth dist.	8415 Jan 21 14:26	10° \approx 41'51	2.62000 AU		8419 Oct 17 12:13	0° \mathcal{L}	
					8419 Nov 29 18:03	0° \mathbb{M}	
conjunction	8415 Feb 11 20:10	24° \approx 44'43	-0°49'06		8420 Jan 15 15:40	0° \mathcal{X}	
minimum elong	8415 Feb 11 18:58	24° \approx 42'44	0°48'58		8420 Mar 09 22:35	0° \mathcal{Z}	
	8415 Feb 19 16:07	0° \mathcal{X}		retrograde	8420 May 16 12:50	19° \mathcal{Z} 50'23	
morning rise	8415 Mar 30 16:33	26° \mathcal{X} 48'37		desc. node	8420 Jun 23 15:36	11° \mathcal{Z} 07'44	
	8415 Apr 04 05:31	0° Υ		opposition	8420 Jun 25 16:50	10° \mathcal{Z} 19'12	-0°04'14
	8415 May 15 22:32	0° \mathcal{B}		greatest brilliancy	8420 Jun 25 16:58	10° \mathcal{Z} 19'03	-1.3m
	8415 Jun 25 03:17	0° \mathbb{I}		min. Earth dist.	8420 Jun 27 04:26	9° \mathcal{Z} 44'01	0.67903 AU
	8415 Aug 03 09:16	0° \mathcal{G}		direct	8420 Aug 06 03:42	0° \mathcal{Z} 21'05	
	8415 Sep 11 12:11	0° \mathcal{Q}			8420 Nov 01 02:26	0° \approx	
asc. node	8415 Oct 07 16:40	19° \mathcal{Q} 42'05			8420 Dec 21 05:55	0° \mathcal{X}	
	8415 Oct 21 17:21	0° \mathbb{M}			8421 Feb 03 07:02	0° Υ	
	8415 Dec 04 04:15	0° \mathcal{L}			8421 Mar 15 23:41	0° \mathcal{B}	
	8416 Jan 27 15:40	0° \mathbb{M}			8421 Apr 23 17:43	0° \mathbb{I}	
retrograde	8416 Mar 08 04:31	9° \mathbb{M} 32'10		asc. node	8421 May 29 10:07	28° \mathbb{I} 13'10	
min. Earth dist.	8416 Apr 10 14:25	2° \mathbb{M} 05'51	0.58533 AU	evening set	8421 May 31 17:29	0° \mathcal{G} 02'52	
	8416 Apr 15 22:49	30° \mathcal{R} \mathcal{L}			8421 May 31 16:03	0° \mathcal{G}	
opposition	8416 Apr 16 16:06	29° \mathcal{L} 43'04	4°39'31		8421 Jul 08 18:28	0° \mathcal{Q}	
greatest brilliancy	8416 Apr 15 16:49	0° \mathbb{M} 05'53	-1.7m				
direct	8416 May 23 17:24	21° \mathcal{L} 15'45		conjunction	8421 Aug 09 23:16	24° \mathcal{Q} 45'41	0°46'30
	8416 Jul 04 16:57	0° \mathbb{M}		minimum elong	8421 Aug 09 20:08	24° \mathcal{Q} 39'44	0°46'20
	8416 Sep 06 10:30	0° \mathcal{X}			8421 Aug 16 21:54	0° \mathbb{M}	
desc. node	8416 Sep 18 15:15	6° \mathcal{X} 41'38			8421 Sep 26 19:05	0° \mathcal{L}	
	8416 Oct 28 23:18	0° \mathcal{Z}		max. Earth dist.	8421 Sep 28 11:20	1° \mathcal{L} 11'56	2.45794 AU
	8416 Dec 16 13:24	0° \approx		morning rise	8421 Oct 12 05:26	10° \mathcal{L} 56'10	
	8417 Jan 31 05:09	0° \mathcal{X}			8421 Nov 08 21:08	0° \mathbb{M}	
evening set	8417 Feb 04 09:58	2° \mathcal{X} 51'06			8421 Dec 24 12:04	0° \mathcal{X}	
max. Earth dist.	8417 Feb 19 15:50	13° \mathcal{X} 19'55	2.51518 AU		8422 Feb 11 06:32	0° \mathcal{Z}	
	8417 Mar 15 07:13	0° Υ			8422 Apr 07 00:09	0° \approx	
				desc. node	8422 May 11 13:56	15° \approx 01'30	
conjunction	8417 Mar 26 12:57	8° Υ 05'55	-1°07'09	retrograde	8422 Jun 22 14:32	23° \approx 37'20	
minimum elong	8417 Mar 26 12:59	8° Υ 06'00	1°07'11	opposition	8422 Jul 31 03:48	14° \approx 55'00	-2°47'23
	8417 Apr 25 05:16	0° \mathcal{B}		greatest brilliancy	8422 Jul 31 15:11	14° \approx 44'03	-1.5m
morning rise	8417 May 22 08:36	20° \mathcal{B} 36'28		min. Earth dist.	8422 Aug 05 09:20	12° \approx 54'18	0.62775 AU
	8417 Jun 03 12:48	0° \mathbb{I}		direct	8422 Sep 10 10:51	4° \approx 56'26	
	8417 Jul 11 22:47	0° \mathcal{G}			8422 Nov 24 06:42	0° \mathcal{X}	
	8417 Aug 19 06:54	0° \mathcal{Q}			8423 Jan 11 13:56	0° Υ	
asc. node	8417 Aug 24 14:39	4° \mathcal{Q} 07'51			8423 Feb 22 12:53	0° \mathcal{B}	
	8417 Sep 27 11:29	0° \mathbb{M}			8423 Apr 02 18:45	0° \mathbb{I}	
	8417 Nov 07 14:36	0° \mathcal{L}		asc. node	8423 Apr 16 11:45	10° \mathbb{I} 42'49	
	8417 Dec 22 06:40	0° \mathbb{M}			8423 May 11 00:54	0° \mathcal{G}	
	8418 Feb 13 05:51	0° \mathcal{X}			8423 Jun 18 12:11	0° \mathcal{Q}	
retrograde	8418 Apr 13 09:06	16° \mathcal{X} 50'28			8423 Jul 28 02:45	0° \mathbb{M}	
min. Earth dist.	8418 May 21 14:10	7° \mathcal{X} 48'51	0.66450 AU	evening set	8423 Aug 10 20:49	10° \mathbb{M} 07'43	
opposition	8418 May 23 21:40	6° \mathcal{X} 53'30	2°29'00		8423 Sep 07 11:55	0° \mathcal{L}	
greatest brilliancy	8418 May 23 17:10	6° \mathcal{X} 57'59	-1.4m				
	8418 Jun 12 19:24	30° \mathcal{R} \mathbb{M}		conjunction	8423 Oct 07 09:55	20° \mathcal{L} 48'47	1°06'02
direct	8418 Jul 02 21:48	27° \mathbb{M} 25'54		minimum elong	8423 Oct 07 10:29	20° \mathcal{L} 49'44	1°06'06
	8418 Jul 24 14:37	0° \mathcal{X}			8423 Oct 20 22:30	0° \mathbb{M}	
desc. node	8418 Aug 06 15:49	3° \mathcal{X} 32'12		max. Earth dist.	8423 Nov 04 01:18	9° \mathbb{M} 27'04	2.58327 AU
	8418 Oct 05 09:11	0° \mathcal{Z}		morning rise	8423 Nov 27 08:23	24° \mathbb{M} 46'22	
	8418 Nov 26 11:59	0° \approx			8423 Dec 05 09:50	0° \mathcal{X}	
	8419 Jan 12 03:13	0° \mathcal{X}			8424 Jan 21 17:30	0° \mathcal{Z}	
	8419 Feb 24 06:07	0° Υ			8424 Mar 11 00:49	0° \approx	

desc. node	8424 Mar 28 10:29	10° \approx 11'52	opposition	8429 Feb 02 13:50	16° Ω 09'31	3°49'16
	8424 May 02 21:35	0° \mathcal{H}	direct	8429 Mar 05 03:22	10° Ω 30'38	
	8424 Jul 11 02:56	0° Υ		8429 May 07 20:41	0° \mathcal{M}	
retrograde	8424 Aug 07 04:45	3° Υ 57'01		8429 Jul 01 05:44	0° $\underline{\Omega}$	
	8424 Sep 01 12:23	30° $\mathcal{R}\mathcal{H}$		8429 Aug 20 07:57	0° \mathcal{M}	
opposition	8424 Sep 11 13:13	26° \mathcal{H} 39'31 -5°19'15		8429 Oct 08 09:39	0° \mathcal{J}	
greatest brilliancy	8424 Sep 13 02:19	26° \mathcal{H} 06'30 -2.0m	desc. node	8429 Nov 18 04:01	25° \mathcal{J} 16'14	
min. Earth dist.	8424 Sep 19 23:00	23° \mathcal{H} 41'00 0.51525 AU		8429 Nov 25 17:22	0° $\underline{\mathcal{Z}}$	
direct	8424 Oct 20 06:11	17° \mathcal{H} 44'18	evening set	8429 Dec 14 09:50	11° $\underline{\mathcal{Z}}$ 46'40	
	8424 Dec 05 13:30	0° Υ		8430 Jan 11 21:54	0° \approx	
	8425 Jan 25 13:02	0° \mathcal{B}	max. Earth dist.	8430 Jan 11 21:30	29° $\underline{\mathcal{Z}}$ 59'22	2.64758 AU
asc. node	8425 Mar 03 12:12	26° \mathcal{B} 18'21				
	8425 Mar 08 11:44	0° \mathcal{I}	conjunction	8430 Jan 28 02:59	10° \approx 31'41 -0°35'49	
	8425 Apr 17 04:47	0° \mathcal{G}	minimum elong	8430 Jan 28 02:00	10° \approx 30'04 0°35'39	
	8425 May 26 19:37	0° Ω		8430 Feb 26 13:27	0° \mathcal{H}	
	8425 Jul 06 11:57	0° \mathcal{M}	morning rise	8430 Mar 14 05:11	10° \mathcal{H} 33'41	
	8425 Aug 17 21:12	0° $\underline{\Omega}$		8430 Apr 11 11:07	0° Υ	
evening set	8425 Sep 30 06:49	29° $\underline{\Omega}$ 25'54		8430 May 23 16:08	0° \mathcal{B}	
	8425 Oct 01 03:20	0° \mathcal{M}		8430 Jul 03 10:32	0° \mathcal{I}	
	8425 Nov 16 00:45	0° \mathcal{J}		8430 Aug 12 06:43	0° \mathcal{G}	
				8430 Sep 21 01:38	0° Ω	
conjunction	8425 Nov 18 02:24	1° \mathcal{J} 19'57 0°42'29	asc. node	8430 Oct 24 10:38	24° Ω 24'33	
minimum elong	8425 Nov 18 03:33	1° \mathcal{J} 21'49 0°42'38		8430 Nov 01 08:51	0° \mathcal{M}	
max. Earth dist.	8425 Nov 28 09:52	7° \mathcal{J} 57'20 2.65958 AU		8430 Dec 18 00:39	0° $\underline{\Omega}$	
morning rise	8426 Jan 02 10:29	0° $\underline{\mathcal{Z}}$ 14'59	retrograde	8431 Feb 21 05:04	22° $\underline{\Omega}$ 23'23	
	8426 Jan 02 01:01	0° $\underline{\mathcal{Z}}$	min. Earth dist.	8431 Mar 24 08:10	15° $\underline{\Omega}$ 45'56 0.53824 AU	
desc. node	8426 Feb 13 06:33	26° $\underline{\mathcal{Z}}$ 36'50	greatest brilliancy	8431 Mar 30 09:12	13° $\underline{\Omega}$ 27'35 -1.9m	
	8426 Feb 18 16:02	0° \approx	opposition	8431 Mar 31 17:18	12° $\underline{\Omega}$ 56'53 5°13'20	
	8426 Apr 07 17:16	0° \mathcal{H}	direct	8431 May 06 04:11	5° $\underline{\Omega}$ 05'29	
	8426 May 26 14:22	0° Υ		8431 Jul 23 08:47	0° \mathcal{M}	
	8426 Jul 17 02:29	0° \mathcal{B}		8431 Sep 16 21:31	0° \mathcal{J}	
	8426 Sep 23 18:17	0° \mathcal{I}	desc. node	8431 Oct 06 04:26	11° \mathcal{J} 11'30	
retrograde	8426 Oct 14 21:50	2° \mathcal{I} 39'44		8431 Nov 06 14:41	0° $\underline{\mathcal{Z}}$	
	8426 Nov 04 22:37	30° $\mathcal{R}\mathcal{B}$		8431 Dec 24 14:35	0° \approx	
opposition	8426 Nov 14 08:30	27° \mathcal{B} 30'24 -4°29'33	evening set	8432 Jan 20 12:18	17° \approx 31'33	
greatest brilliancy	8426 Nov 15 09:29	27° \mathcal{B} 12'51 -2.9m	max. Earth dist.	8432 Feb 07 15:45	29° \approx 39'23 2.56162 AU	
min. Earth dist.	8426 Nov 19 14:51	26° \mathcal{B} 02'10 0.38535 AU		8432 Feb 08 03:58	0° \mathcal{H}	
direct	8426 Dec 16 01:47	21° \mathcal{B} 44'55				
asc. node	8427 Jan 19 11:51	29° \mathcal{B} 13'25	conjunction	8432 Mar 08 03:08	19° \mathcal{H} 55'49 -1°04'04	
	8427 Jan 21 09:39	0° \mathcal{I}	minimum elong	8432 Mar 08 02:17	19° \mathcal{H} 54'19 1°04'01	
	8427 Mar 16 10:15	0° \mathcal{G}		8432 Mar 22 09:26	0° Υ	
	8427 Apr 30 06:16	0° Ω	morning rise	8432 Apr 28 21:04	27° Υ 15'10	
	8427 Jun 13 03:47	0° \mathcal{M}		8432 May 02 13:48	0° \mathcal{B}	
	8427 Jul 27 19:57	0° $\underline{\Omega}$		8432 Jun 11 04:09	0° \mathcal{I}	
	8427 Sep 11 17:08	0° \mathcal{M}		8432 Jul 19 20:12	0° \mathcal{G}	
	8427 Oct 28 14:43	0° \mathcal{J}		8432 Aug 27 09:21	0° Ω	
evening set	8427 Nov 09 07:31	7° \mathcal{J} 25'34	asc. node	8432 Sep 10 06:58	10° Ω 42'06	
	8427 Dec 14 22:35	0° $\underline{\mathcal{Z}}$		8432 Oct 05 19:18	0° \mathcal{M}	
max. Earth dist.	8427 Dec 21 05:52	3° $\underline{\mathcal{Z}}$ 59'53 2.68112 AU		8432 Nov 16 09:36	0° $\underline{\Omega}$	
				8433 Jan 01 14:22	0° \mathcal{M}	
conjunction	8427 Dec 24 11:32	6° $\underline{\mathcal{Z}}$ 03'07 0°04'05		8433 Mar 07 03:56	0° \mathcal{J}	
minimum elong	8427 Dec 24 11:39	6° $\underline{\mathcal{Z}}$ 03'18 0°04'17	retrograde	8433 Mar 30 19:59	3° \mathcal{J} 22'36	
behind sun begin	8427 Dec 23 17:43	5° $\underline{\mathcal{Z}}$ 34'51		8433 Apr 22 02:18	30° $\mathcal{R}\mathcal{M}$	
behind sun end	8427 Dec 25 05:35	6° $\underline{\mathcal{Z}}$ 31'46	min. Earth dist.	8433 May 06 08:19	24° \mathcal{M} 54'02 0.64110 AU	
desc. node	8428 Jan 01 04:23	10° $\underline{\mathcal{Z}}$ 56'49	opposition	8433 May 10 03:42	23° \mathcal{M} 23'08 3°23'51	
	8428 Jan 31 00:42	0° \approx	greatest brilliancy	8433 May 09 17:14	23° \mathcal{M} 33'32 -1.5m	
morning rise	8428 Feb 06 01:47	3° \approx 52'51	direct	8433 Jun 18 04:46	14° \mathcal{M} 14'51	
	8428 Mar 17 08:59	0° \mathcal{H}		8433 Aug 17 04:07	0° \mathcal{J}	
	8428 May 01 17:33	0° Υ	desc. node	8433 Aug 23 05:06	2° \mathcal{J} 41'20	
	8428 Jun 15 02:25	0° \mathcal{B}		8433 Oct 15 00:07	0° $\underline{\mathcal{Z}}$	
	8428 Jul 28 17:10	0° \mathcal{I}		8433 Dec 04 06:50	0° \approx	
	8428 Sep 10 10:25	0° \mathcal{G}		8434 Jan 19 10:16	0° \mathcal{H}	
	8428 Oct 27 10:59	0° Ω		8434 Mar 03 11:48	0° Υ	
asc. node	8428 Dec 06 12:32	18° Ω 46'44	evening set	8434 Mar 04 08:55	0° Υ 37'55	
retrograde	8428 Dec 31 06:02	22° Ω 54'34	max. Earth dist.	8434 Mar 19 02:47	11° Υ 20'34 2.43390 AU	
min. Earth dist.	8429 Jan 26 03:37	18° Ω 26'54 0.40339 AU		8434 Apr 13 04:01	0° \mathcal{B}	
greatest brilliancy	8429 Feb 01 11:06	16° Ω 30'16 -2.8m				

conjunction	8434 Apr 29 20:14	12°♄42'17 -0°55'01	desc. node	8439 Apr 15 01:13	13°♊58'25
minimum elong	8434 Apr 29 22:39	12°♄46'55 0°55'06		8439 May 17 10:52	0°♋
	8434 May 22 04:05	0°♌	retrograde	8439 Jul 19 06:08	17°♋07'15
	8434 Jun 29 07:22	0°♍	opposition	8439 Aug 25 02:23	9°♋10'22 -4°25'44
morning rise	8434 Jul 06 10:54	5°♍38'34	greatest brilliancy	8439 Aug 26 04:47	8°♋45'51 -1.8m
asc. node	8434 Jul 29 05:26	23°♍34'28	min. Earth dist.	8439 Sep 01 10:57	6°♋26'59 0.56567 AU
	8434 Aug 06 10:30	0°♎		8439 Sep 26 21:01	30°♌
	8434 Sep 14 10:31	0°♏	direct	8439 Oct 04 05:38	29°♌38'01
	8434 Oct 25 04:51	0°♐		8439 Oct 11 17:43	0°♋
	8434 Dec 07 17:22	0°♑		8439 Dec 24 06:01	0°♌
	8435 Jan 24 19:47	0°♒		8440 Feb 07 02:32	0°♍
	8435 Mar 27 12:49	0°♓		8440 Mar 18 10:21	0°♌
retrograde	8435 May 04 04:43	7°♓23'26	asc. node	8440 Mar 20 04:10	1°♌19'55
	8435 Jun 07 16:42	30°♌♒		8440 Apr 26 07:31	0°♍
opposition	8435 Jun 13 15:46	27°♒39'27 0°56'29		8440 Jun 04 07:36	0°♎
greatest brilliancy	8435 Jun 13 16:02	27°♒39'11 -1.3m		8440 Jul 14 10:49	0°♏
min. Earth dist.	8435 Jun 13 15:40	27°♒39'33 0.68123 AU		8440 Aug 25 08:14	0°♐
desc. node	8435 Jul 11 05:21	18°♒58'57	evening set	8440 Sep 12 03:58	12°♐21'09
direct	8435 Jul 24 17:25	17°♒50'20		8440 Oct 08 04:54	0°♑
	8435 Sep 13 22:30	0°♓			
	8435 Nov 12 04:14	0°♊	conjunction	8440 Nov 02 14:34	16°♌49'17 0°54'26
	8435 Dec 30 10:24	0°♋	minimum elong	8440 Nov 02 15:49	16°♌51'20 0°54'33
	8436 Feb 11 23:47	0°♌	max. Earth dist.	8440 Nov 19 03:28	27°♌35'46 2.63618 AU
	8436 Mar 23 14:11	0°♍		8440 Nov 22 20:39	0°♒
	8436 May 01 08:30	0°♌	morning rise	8440 Dec 19 13:37	17°♒07'26
evening set	8436 May 02 10:59	0°♌52'01		8441 Jan 08 21:28	0°♓
	8436 Jun 08 06:59	0°♍		8441 Feb 25 23:23	0°♊
asc. node	8436 Jun 15 04:06	5°♍27'04	desc. node	8441 Mar 01 22:11	2°♊26'14
				8441 Apr 16 06:12	0°♋
conjunction	8436 Jul 11 17:57	26°♍24'14 0°18'54		8441 Jun 07 05:28	0°♌
minimum elong	8436 Jul 11 15:57	26°♍20'19 0°18'41		8441 Aug 10 09:30	0°♍
	8436 Jul 16 08:17	0°♎	retrograde	8441 Sep 14 16:32	6°♍34'14
	8436 Aug 24 09:07	0°♏	opposition	8441 Oct 16 22:25	0°♍35'16 -5°46'16
max. Earth dist.	8436 Sep 02 09:20	6°♏45'35 2.40179 AU		8441 Oct 18 19:08	30°♌♌
morning rise	8436 Sep 19 05:49	19°♏12'50	greatest brilliancy	8441 Oct 18 17:01	0°♍01'40 -2.5m
	8436 Oct 04 03:07	0°♐	min. Earth dist.	8441 Oct 25 01:57	28°♌02'01 0.43045 AU
	8436 Nov 16 04:02	0°♑	direct	8441 Nov 20 23:11	23°♌23'15
	8437 Jan 01 01:10	0°♒		8441 Dec 22 23:13	0°♍
	8437 Feb 20 00:47	0°♓	asc. node	8442 Feb 05 05:05	23°♍16'17
	8437 Apr 22 01:53	0°♊		8442 Feb 15 15:59	0°♌
desc. node	8437 May 28 04:05	9°♊40'22		8442 Mar 30 21:17	0°♍
retrograde	8437 Jun 07 12:02	10°♊17'43		8442 May 11 11:06	0°♎
opposition	8437 Jul 16 20:34	1°♊13'07 -1°43'35		8442 Jun 22 13:25	0°♏
greatest brilliancy	8437 Jul 17 01:26	1°♊08'23 -1.4m		8442 Aug 05 01:02	0°♐
	8437 Jul 19 23:33	30°♌♓		8442 Sep 19 03:01	0°♑
min. Earth dist.	8437 Jul 20 15:16	29°♓44'45 0.65555 AU	evening set	8442 Oct 25 12:22	23°♌34'45
direct	8437 Aug 27 10:40	21°♓10'05		8442 Nov 04 12:49	0°♒
	8437 Oct 07 22:30	0°♊			
	8437 Dec 05 20:50	0°♋	conjunction	8442 Dec 10 15:49	23°♒00'38 0°19'43
	8438 Jan 20 16:46	0°♌	minimum elong	8442 Dec 10 16:24	23°♒01'34 0°19'54
	8438 Mar 02 22:59	0°♍	max. Earth dist.	8442 Dec 12 11:14	24°♒09'33 2.67938 AU
	8438 Apr 10 22:04	0°♌		8442 Dec 21 16:03	0°♓
asc. node	8438 May 03 03:18	17°♌28'54	desc. node	8443 Jan 17 18:57	17°♓12'54
	8438 May 18 23:43	0°♍	morning rise	8443 Jan 23 13:24	20°♓52'51
	8438 Jun 26 06:19	0°♎		8443 Feb 06 21:17	0°♊
evening set	8438 Jul 16 07:32	15°♎25'09		8443 Mar 25 17:36	0°♋
	8438 Aug 04 15:15	0°♏		8443 May 11 01:35	0°♌
	8438 Sep 14 18:17	0°♐		8443 Jun 26 01:31	0°♍
				8443 Aug 11 09:58	0°♌
conjunction	8438 Sep 17 03:47	1°♐42'10 1°05'56		8443 Sep 30 02:32	0°♍
minimum elong	8438 Sep 17 03:03	1°♐40'51 1°05'56	retrograde	8443 Dec 04 12:58	22°♍09'11
max. Earth dist.	8438 Oct 22 22:53	26°♐34'43 2.53910 AU	asc. node	8443 Dec 24 04:17	19°♍41'31
	8438 Oct 27 23:51	0°♑	min. Earth dist.	8443 Dec 31 20:45	17°♍43'12 0.37055 AU
morning rise	8438 Nov 10 22:41	9°♑22'08	opposition	8444 Jan 04 07:53	16°♍46'09 0°51'18
	8438 Dec 12 10:02	0°♒	greatest brilliancy	8444 Jan 04 04:21	16°♍48'35 -3.0m
	8439 Jan 29 01:54	0°♓	direct	8444 Feb 02 15:19	11°♍50'06
	8439 Mar 20 16:18	0°♊		8444 Apr 02 01:13	0°♎

	8444 May 24 14:45	0°♈			8449 May 29 15:48	0°♊
	8444 Jul 11 21:31	0°♊	morning rise		8449 Jun 06 10:27	6°♊03'17
	8444 Aug 28 17:48	0°♋			8449 Jul 06 23:15	0°♋
	8444 Oct 15 17:42	0°♌	asc. node		8449 Aug 14 22:24	0°♌33'23
evening set	8444 Nov 30 12:03	28°♌41'44			8449 Aug 14 05:15	0°♌
	8444 Dec 02 13:43	0°♍	greatest brilliancy		8449 Aug 27 21:03	10°♌35'41 1.2m
desc. node	8444 Dec 04 17:21	1°♍21'26			8449 Sep 22 07:20	0°♈
max. Earth dist.	8445 Jan 02 22:18	19°♍53'59 2.66736 AU			8449 Nov 02 05:22	0°♊
					8449 Dec 16 07:06	0°♋
conjunction	8445 Jan 14 00:54	27°♍01'09 -0°20'56			8450 Feb 04 15:49	0°♌
minimum elong	8445 Jan 14 00:18	27°♍00'11 0°20'45	retrograde		8450 Apr 20 23:26	24°♌44'54
	8445 Jan 18 16:00	0°♍	min. Earth dist.		8450 May 30 01:13	15°♌27'14 0.67316 AU
morning rise	8445 Feb 27 02:15	25°♍44'07	opposition		8450 May 31 12:58	14°♌51'39 1°55'30
	8445 Mar 05 12:38	0°♈	greatest brilliancy		8450 May 31 10:53	14°♌53'43 -1.3m
	8445 Apr 18 21:27	0°♉	direct		8450 Jul 10 23:53	5°♌15'21
	8445 May 31 18:11	0°♊	desc. node		8450 Jul 27 18:11	6°♌49'51
	8445 Jul 12 07:15	0°♋			8450 Sep 28 01:28	0°♍
	8445 Aug 22 00:34	0°♌			8450 Nov 21 00:04	0°♍
	8445 Oct 01 23:40	0°♌			8451 Jan 07 03:54	0°♈
asc. node	8445 Nov 10 03:59	27°♌03'52			8451 Feb 19 10:41	0°♉
	8445 Nov 14 17:16	0°♈			8451 Apr 01 00:50	0°♊
	8446 Jan 15 04:52	0°♊	evening set		8451 Apr 07 10:18	4°♊51'59
retrograde	8446 Feb 03 08:21	2°♊32'54			8451 May 09 20:39	0°♋
	8446 Feb 21 22:48	30°♋	max. Earth dist.		8451 Jun 06 03:55	21°♋32'24 2.36603 AU
min. Earth dist.	8446 Mar 04 01:42	26°♋49'33 0.48495 AU				
greatest brilliancy	8446 Mar 10 18:47	24°♋23'33 -2.2m	conjunction		8451 Jun 12 03:58	26°♋17'45 -0°14'52
opposition	8446 Mar 12 08:59	23°♋48'44 5°23'23	minimum elong		8451 Jun 12 05:33	26°♋20'54 0°15'02
direct	8446 Apr 14 23:51	16°♋42'25	behind sun begin		8451 Jun 11 18:17	25°♋58'35
	8446 Jun 06 04:57	0°♊	behind sun end		8451 Jun 12 16:49	26°♋43'12
	8446 Aug 04 10:17	0°♋			8451 Jun 16 20:09	0°♌
	8446 Sep 25 09:12	0°♌	asc. node		8451 Jul 02 19:56	12°♌39'17
desc. node	8446 Oct 22 17:28	16°♌25'05			8451 Jul 24 21:17	0°♌
	8446 Nov 13 21:46	0°♍	morning rise		8451 Aug 24 05:43	23°♌27'15
	8446 Dec 31 11:58	0°♍			8451 Sep 01 20:43	0°♈
evening set	8447 Jan 05 16:00	3°♍20'09			8451 Oct 12 13:08	0°♊
max. Earth dist.	8447 Jan 27 12:14	17°♍37'22 2.60139 AU			8451 Nov 24 15:26	0°♋
	8447 Feb 15 01:08	0°♈			8452 Jan 10 00:20	0°♌
					8452 Mar 02 02:20	0°♍
conjunction	8447 Feb 20 15:02	3°♈46'23 -0°55'40	retrograde		8452 May 24 08:34	27°♍32'00
minimum elong	8447 Feb 20 13:51	3°♈44'24 0°55'34	desc. node		8452 Jun 13 18:21	24°♍52'37
	8447 Mar 30 12:00	0°♉	opposition		8452 Jul 03 07:04	18°♍09'22 -0°40'37
morning rise	8447 Apr 09 20:34	7°♉21'35	greatest brilliancy		8452 Jul 03 08:08	18°♍08'20 -1.3m
	8447 May 11 00:47	0°♊	min. Earth dist.		8452 Jul 05 14:21	17°♍15'02 0.67342 AU
	8447 Jun 20 00:26	0°♋	direct		8452 Aug 13 20:58	8°♍08'18
	8447 Jul 29 00:58	0°♌			8452 Oct 24 07:24	0°♍
	8447 Sep 05 21:52	0°♌			8452 Dec 15 11:37	0°♈
asc. node	8447 Sep 28 02:11	16°♌52'02			8453 Jan 29 01:49	0°♉
	8447 Oct 15 17:25	0°♈			8453 Mar 10 23:12	0°♊
	8447 Nov 27 04:49	0°♊			8453 Apr 18 19:06	0°♋
	8448 Jan 15 18:31	0°♋	asc. node		8453 May 19 20:06	24°♋30'54
retrograde	8448 Mar 16 16:29	18°♋54'36			8453 May 26 18:18	0°♌
min. Earth dist.	8448 Apr 20 06:23	11°♋04'43 0.60762 AU	evening set		8453 Jun 17 13:20	17°♌12'22
opposition	8448 Apr 25 13:28	8°♋59'15 4°14'09	greatest brilliancy		8453 Jun 20 05:42	19°♌18'52 1.2m
greatest brilliancy	8448 Apr 24 19:08	9°♋17'21 -1.6m			8453 Jul 03 21:36	0°♌
direct	8448 Jun 02 09:49	0°♋15'37			8453 Aug 12 02:02	0°♈
	8448 Aug 30 08:33	0°♌				
desc. node	8448 Sep 08 17:52	4°♌53'23	conjunction		8453 Aug 24 18:13	9°♈27'00 0°56'48
	8448 Oct 23 13:15	0°♍	minimum elong		8453 Aug 24 15:43	9°♈22'23 0°56'42
	8448 Dec 11 16:22	0°♍			8453 Sep 21 23:57	0°♊
	8449 Jan 26 12:24	0°♈	max. Earth dist.		8453 Oct 08 12:51	11°♊42'21 2.48813 AU
evening set	8449 Feb 14 00:58	12°♈40'58	morning rise		8453 Oct 23 16:13	22°♊12'55
max. Earth dist.	8449 Feb 28 05:36	22°♈37'05 2.48703 AU			8453 Nov 04 01:53	0°♋
	8449 Mar 10 14:32	0°♉			8453 Dec 19 13:14	0°♌
					8454 Feb 05 18:45	0°♍
conjunction	8449 Apr 07 00:48	19°♉59'18 -1°05'35			8454 Mar 30 11:34	0°♍
minimum elong	8449 Apr 07 01:37	20°♉00'49 1°05'39	desc. node		8454 May 01 16:15	15°♍48'34
	8449 Apr 20 10:48	0°♊			8454 Jun 12 03:21	0°♈

retrograde	8454 Jul 01 18:49	2° H 07'54			8459 Sep 06 14:42	0° M	
	8454 Jul 20 04:33	30° R			8459 Oct 23 20:01	0° A	
opposition	8454 Aug 08 19:25	23° A 40'03	-3°24'20	evening set	8459 Nov 17 12:22	15° A 35'17	
greatest brilliancy	8454 Aug 09 11:39	23° A 24'35	-1.6m		8459 Dec 10 07:35	0° Z	
min. Earth dist.	8454 Aug 14 20:09	21° A 22'28	0.60797 AU	desc. node	8459 Dec 22 06:46	7° Z 35'03	
direct	8454 Sep 18 19:36	13° A 47'45		max. Earth dist.	8459 Dec 26 06:59	10° Z 07'47	2.67862 AU
	8454 Nov 14 18:55	0° H					
	8455 Jan 05 02:39	0° Y		conjunction	8460 Jan 01 07:46	13° Z 58'01	-0°05'19
	8455 Feb 16 19:36	0° B		minimum elong	8460 Jan 01 07:35	13° Z 57'44	0°05'07
	8455 Mar 28 08:53	0° I		behind sun begin	8459 Dec 31 13:58	13° Z 29'42	
asc. node	8455 Apr 06 19:43	7° I 20'34		behind sun end	8460 Jan 02 01:13	14° Z 25'46	
	8455 May 05 19:16	0° G			8460 Jan 26 09:33	0° A	
	8455 Jun 13 10:08	0° Q		morning rise	8460 Feb 13 22:26	11° A 57'50	
	8455 Jul 23 04:10	0° P			8460 Mar 12 13:13	0° H	
evening set	8455 Aug 23 17:27	22° P 55'58			8460 Apr 26 12:27	0° Y	
	8455 Sep 02 16:25	0° L			8460 Jun 09 06:26	0° B	
	8455 Oct 16 05:24	0° M			8460 Jul 21 23:28	0° I	
					8460 Sep 02 05:48	0° G	
conjunction	8455 Oct 17 18:27	1° M 02'19	1°03'07		8460 Oct 15 19:42	0° Q	
minimum elong	8455 Oct 17 19:25	1° M 03'58	1°03'12	asc. node	8460 Nov 26 21:33	24° Q 59'13	
max. Earth dist.	8455 Nov 10 05:43	16° M 38'45	2.60435 AU		8460 Dec 07 15:45	0° P	
	8455 Nov 30 16:59	0° A		retrograde	8461 Jan 13 14:45	8° P 45'54	
morning rise	8455 Dec 06 01:01	3° A 26'38		min. Earth dist.	8461 Feb 09 04:50	3° P 55'27	0.43042 AU
	8456 Jan 16 20:45	0° Z		greatest brilliancy	8461 Feb 15 23:23	1° P 41'09	-2.6m
	8456 Mar 05 14:52	0° A		opposition	8461 Feb 17 10:28	1° P 11'50	4°45'55
desc. node	8456 Mar 18 12:26	7° A 44'28			8461 Feb 21 02:12	30° R 0	
	8456 Apr 25 19:26	0° H		direct	8461 Mar 21 02:51	25° Q 00'34	
	8456 Jun 23 08:53	0° Y			8461 Apr 19 10:10	0° P	
retrograde	8456 Aug 19 21:14	15° Y 02'30			8461 Jun 23 06:36	0° L	
opposition	8456 Sep 23 05:17	8° Y 10'56	-5°40'56		8461 Aug 14 09:27	0° M	
greatest brilliancy	8456 Sep 24 23:22	7° Y 34'47	-2.2m		8461 Oct 03 06:42	0° A	
min. Earth dist.	8456 Oct 01 22:46	5° Y 11'56	0.48496 AU	desc. node	8461 Nov 08 06:08	22° A 05'26	
	8456 Oct 24 23:45	30° R 0			8461 Nov 20 23:22	0° Z	
direct	8456 Oct 30 21:00	29° H 45'26		evening set	8461 Dec 22 10:05	19° Z 49'15	
	8456 Nov 05 19:03	0° Y			8462 Jan 07 07:17	0° A	
	8457 Jan 16 16:06	0° B		max. Earth dist.	8462 Jan 17 09:50	6° A 32'42	2.63341 AU
asc. node	8457 Feb 21 20:16	24° B 29'03					
	8457 Mar 01 12:21	0° I		conjunction	8462 Feb 05 10:03	19° A 00'21	-0°43'49
	8457 Apr 10 23:58	0° G		minimum elong	8462 Feb 05 08:56	18° A 58'30	0°43'41
	8457 May 21 02:23	0° Q			8462 Feb 21 22:08	0° H	
	8457 Jul 01 03:46	0° P		morning rise	8462 Mar 23 08:54	20° H 03'05	
	8457 Aug 12 20:12	0° L			8462 Apr 06 16:08	0° Y	
	8457 Sep 26 08:03	0° M			8462 May 18 15:07	0° B	
evening set	8457 Oct 09 20:06	8° M 53'28			8462 Jun 28 02:17	0° I	
	8457 Nov 11 08:50	0° A			8462 Aug 06 14:10	0° G	
					8462 Sep 14 23:00	0° Q	
conjunction	8457 Nov 26 12:06	9° A 42'23	0°34'31	asc. node	8462 Oct 14 18:38	22° Q 13'10	
minimum elong	8457 Nov 26 13:06	9° A 43'58	0°34'40		8462 Oct 25 12:19	0° P	
max. Earth dist.	8457 Dec 03 14:42	14° A 14'48	2.66910 AU		8462 Dec 08 20:43	0° L	
	8457 Dec 28 09:23	0° Z			8463 Feb 09 12:19	0° M	
morning rise	8458 Jan 10 04:13	8° Z 05'51		retrograde	8463 Mar 02 11:56	2° M 53'27	
desc. node	8458 Feb 03 09:12	23° Z 24'05			8463 Mar 22 14:18	30° R 0	
	8458 Feb 13 20:01	0° A		min. Earth dist.	8463 Apr 03 21:59	25° L 48'28	0.56526 AU
	8458 Apr 02 09:01	0° H		greatest brilliancy	8463 Apr 09 11:29	23° L 39'02	-1.8m
	8458 May 20 03:19	0° Y		opposition	8463 Apr 10 14:45	23° L 12'35	4°56'11
	8458 Jul 07 22:27	0° B		direct	8463 May 17 00:19	15° L 00'14	
	8458 Aug 30 04:01	0° I			8463 Jul 13 09:17	0° M	
retrograde	8458 Nov 02 10:45	19° I 53'17			8463 Sep 10 18:09	0° A	
opposition	8458 Dec 02 04:43	14° I 58'04	-2°54'04	desc. node	8463 Sep 26 07:05	8° A 45'14	
greatest brilliancy	8458 Dec 02 15:03	14° I 51'11	-3.0m		8463 Nov 01 11:22	0° Z	
min. Earth dist.	8458 Dec 04 17:40	14° I 17'29	0.37043 AU		8463 Dec 19 20:13	0° A	
direct	8459 Jan 01 09:35	9° I 48'57		evening set	8464 Jan 29 10:13	26° A 34'39	
asc. node	8459 Jan 09 21:55	10° I 18'11			8464 Feb 03 12:10	0° H	
	8459 Mar 03 18:45	0° G		max. Earth dist.	8464 Feb 14 19:33	7° H 41'45	2.53685 AU
	8459 Apr 22 00:38	0° Q			8464 Mar 17 17:01	0° Y	
	8459 Jun 06 14:31	0° P					
	8459 Jul 22 04:18	0° L		conjunction	8464 Mar 18 07:05	0° Y 25'06	-1°06'40

minimum elong	8464 Mar 18 06:40	0°♂24'20	1°06'40	desc. node	8469 May 18 06:50	13°♊59'15	
	8464 Apr 27 18:54	0°♂		retrograde	8469 Jun 15 22:46	18°♊18'37	
morning rise	8464 May 11 14:58	10°♂24'05		opposition	8469 Jul 24 21:46	9°♊25'40	-2°20'39
	8464 Jun 06 06:10	0°♂		greatest brilliancy	8469 Jul 25 05:59	9°♊17'43	-1.4m
	8464 Jul 14 18:55	0°♂		min. Earth dist.	8469 Jul 29 12:06	7°♊39'00	0.64154 AU
	8464 Aug 22 04:46	0°♂			8469 Aug 25 18:47	30°♊	
asc. node	8464 Aug 31 16:19	7°♂20'11		direct	8469 Sep 04 09:31	29°♊24'14	
	8464 Sep 30 10:31	0°♂			8469 Sep 14 07:23	0°♊	
	8464 Nov 10 15:54	0°♂			8469 Nov 28 19:06	0°♊	
	8464 Dec 25 18:06	0°♂			8470 Jan 14 23:17	0°♊	
	8465 Feb 19 07:10	0°♂			8470 Feb 25 15:27	0°♂	
retrograde	8465 Apr 07 15:11	11°♂39'48			8470 Apr 05 18:43	0°♂	
min. Earth dist.	8465 May 15 03:09	2°♂52'21	0.65526 AU	asc. node	8470 Apr 23 12:55	13°♂55'38	
opposition	8465 May 18 02:41	1°♂41'07	2°52'20		8470 May 13 22:33	0°♂	
greatest brilliancy	8465 May 17 19:52	1°♂47'54	-1.4m		8470 Jun 21 06:56	0°♂	
	8465 May 22 09:22	30°♊			8470 Jul 30 17:51	0°♂	
direct	8465 Jun 26 17:41	22°♂21'28		evening set	8470 Jul 31 04:46	0°♂20'18	
	8465 Aug 05 02:27	0°♂			8470 Sep 09 22:46	0°♂	
desc. node	8465 Aug 13 08:06	3°♂00'16					
	8465 Oct 08 18:24	0°♂		conjunction	8470 Sep 29 00:12	13°♂23'28	1°06'54
	8465 Nov 29 02:31	0°♂		minimum elong	8470 Sep 29 00:17	13°♂23'37	1°06'56
	8466 Jan 14 13:57	0°♂			8470 Oct 23 05:42	0°♂	
	8466 Feb 26 17:35	0°♂		max. Earth dist.	8470 Oct 30 03:39	4°♂39'36	2.56452 AU
evening set	8466 Mar 15 21:03	12°♂27'32		morning rise	8470 Nov 20 12:08	18°♂50'29	
max. Earth dist.	8466 Apr 03 01:26	25°♂58'55	2.40474 AU		8470 Dec 07 14:59	0°♂	
	8466 Apr 08 09:21	0°♂			8471 Jan 24 00:42	0°♂	
					8471 Mar 14 18:33	0°♂	
conjunction	8466 May 14 11:02	27°♂44'57	-0°43'39	desc. node	8471 Apr 05 03:23	12°♂15'29	
minimum elong	8466 May 14 13:58	27°♂50'42	0°43'47		8471 May 08 04:34	0°♂	
	8466 May 17 08:11	0°♂		retrograde	8471 Jul 30 04:05	26°♂53'49	
	8466 Jun 24 10:09	0°♂		opposition	8471 Sep 04 06:00	19°♂17'38	-4°57'45
asc. node	8466 Jul 19 13:22	19°♂50'21		greatest brilliancy	8471 Sep 05 14:36	18°♂48'01	-1.9m
morning rise	8466 Jul 24 09:14	23°♂38'03		min. Earth dist.	8471 Sep 12 06:16	16°♂23'41	0.53870 AU
	8466 Aug 01 12:16	0°♂		direct	8471 Oct 13 16:48	10°♂03'18	
	8466 Sep 09 11:27	0°♂			8471 Dec 14 16:04	0°♂	
	8466 Oct 20 03:44	0°♂			8472 Jan 31 05:33	0°♂	
	8466 Dec 02 10:09	0°♂		asc. node	8472 Mar 10 13:48	28°♂38'32	
	8467 Jan 18 15:21	0°♂			8472 Mar 12 09:06	0°♂	
	8467 Mar 15 20:58	0°♂			8472 Apr 20 16:09	0°♂	
retrograde	8467 May 11 18:42	15°♂00'55			8472 May 29 22:59	0°♂	
opposition	8467 Jun 21 02:58	5°♂23'35	0°21'04		8472 Jul 09 08:01	0°♂	
greatest brilliancy	8467 Jun 21 03:23	5°♂23'10	-1.3m		8472 Aug 20 10:14	0°♂	
min. Earth dist.	8467 Jun 21 22:40	5°♂04'06	0.68129 AU	evening set	8472 Sep 22 16:57	22°♂47'53	
desc. node	8467 Jul 01 08:13	1°♂28'16			8472 Oct 03 10:42	0°♂	
	8467 Jul 05 14:55	30°♊					
direct	8467 Aug 01 10:57	25°♂29'01		conjunction	8472 Nov 11 14:05	25°♂43'57	0°47'46
	8467 Aug 30 16:57	0°♂		minimum elong	8472 Nov 11 15:20	25°♂45'58	0°47'55
	8467 Nov 05 18:23	0°♂			8472 Nov 18 04:20	0°♂	
	8467 Dec 25 02:34	0°♂		max. Earth dist.	8472 Nov 24 16:10	4°♂11'06	2.65013 AU
	8468 Feb 06 23:53	0°♂		morning rise	8472 Dec 27 13:45	25°♂11'24	
	8468 Mar 18 16:32	0°♂			8473 Jan 04 04:05	0°♂	
	8468 Apr 26 11:16	0°♂		desc. node	8473 Feb 19 23:26	29°♂23'07	
evening set	8468 May 18 16:07	17°♂31'48			8473 Feb 20 23:06	0°♂	
	8468 Jun 03 09:34	0°♂			8473 Apr 10 11:37	0°♂	
asc. node	8468 Jun 05 11:35	1°♂39'09			8473 May 30 11:17	0°♂	
	8468 Jul 11 10:58	0°♂			8473 Jul 24 05:54	0°♂	
				retrograde	8473 Oct 01 01:55	21°♂06'28	
conjunction	8468 Jul 28 14:37	13°♂18'17	0°35'58	opposition	8473 Nov 01 07:04	15°♂36'50	-5°15'52
minimum elong	8468 Jul 28 11:29	13°♂12'15	0°35'47	greatest brilliancy	8473 Nov 02 18:06	15°♂10'51	-2.7m
	8468 Aug 19 12:22	0°♂		min. Earth dist.	8473 Nov 08 04:40	13°♂35'01	0.40332 AU
max. Earth dist.	8468 Sep 19 02:12	22°♂38'25	2.43276 AU	direct	8473 Dec 04 11:35	9°♂13'24	
	8468 Sep 29 06:45	0°♂		asc. node	8474 Jan 26 13:30	25°♂32'14	
morning rise	8468 Oct 02 16:56	2°♂27'07			8474 Feb 03 16:35	0°♂	
	8468 Nov 11 06:43	0°♂			8474 Mar 22 16:47	0°♂	
	8468 Dec 26 22:08	0°♂			8474 May 04 17:25	0°♂	
	8469 Feb 14 01:21	0°♂			8474 Jun 16 16:01	0°♂	
	8469 Apr 11 14:20	0°♂			8474 Jul 30 17:04	0°♂	

	8474 Sep 14 04:12	0°♌			8479 Mar 25 19:07	0°♑
	8474 Oct 30 19:27	0°♊	morning rise		8479 Apr 20 20:03	18°♑43'47
evening set	8474 Nov 03 01:28	2°♊04'17			8479 May 06 03:54	0°♐
	8474 Dec 17 00:54	0°♐			8479 Jun 14 22:55	0°♑
					8479 Jul 23 18:46	0°♑
conjunction	8474 Dec 18 14:22	0°♐59'26 0°10'37			8479 Aug 31 10:43	0°♑
minimum elong	8474 Dec 18 14:41	0°♐59'57 0°10'48	asc. node		8479 Sep 18 08:49	13°♑44'05
behind sun begin	8474 Dec 18 00:51	0°♐38'00			8479 Oct 09 23:33	0°♑
behind sun end	8474 Dec 19 04:32	1°♐21'54			8479 Nov 20 19:34	0°♑
max. Earth dist.	8474 Dec 17 13:45	0°♐20'24 2.68139 AU			8480 Jan 06 22:57	0°♌
desc. node	8475 Jan 07 21:00	13°♐51'58	retrograde		8480 Mar 24 20:52	27°♌47'31
morning rise	8475 Jan 31 06:33	28°♐46'46	min. Earth dist.		8480 Apr 29 13:22	19°♌35'32 0.62737 AU
	8475 Feb 02 04:23	0°♌	greatest brilliancy		8480 May 03 11:08	18°♌02'34 -1.5m
	8475 Mar 20 18:01	0°♋	opposition		8480 May 04 00:47	17°♌49'02 3°45'47
	8475 May 05 12:48	0°♑	direct		8480 Jun 11 14:07	8°♌50'57
	8475 Jun 19 13:24	0°♐			8480 Aug 22 07:37	0°♊
	8475 Aug 03 04:20	0°♑	desc. node		8480 Aug 29 21:09	3°♊38'49
	8475 Sep 17 16:11	0°♑			8480 Oct 17 22:09	0°♐
	8475 Nov 09 17:11	0°♑			8480 Dec 06 17:43	0°♌
asc. node	8475 Dec 14 14:07	10°♑03'52			8481 Jan 21 19:12	0°♋
retrograde	8475 Dec 20 19:32	10°♑20'07	evening set		8481 Feb 24 03:41	23°♋02'14
min. Earth dist.	8476 Jan 15 19:29	6°♑01'07 0.38534 AU			8481 Mar 05 22:25	0°♑
opposition	8476 Jan 21 20:57	4°♑15'28 2°44'36	max. Earth dist.		8481 Mar 09 23:36	2°♑54'37 2.45791 AU
greatest brilliancy	8476 Jan 21 04:09	4°♑27'43 -2.9m			8481 Apr 15 17:22	0°♐
	8476 Feb 08 09:37	30°♋♑				
direct	8476 Feb 20 15:43	29°♑00'07	conjunction		8481 Apr 19 10:41	2°♐48'30 -1°00'56
	8476 Mar 04 03:26	0°♑	minimum elong		8481 Apr 19 12:25	2°♐51'47 1°01'02
	8476 May 15 06:25	0°♑			8481 May 24 20:13	0°♑
	8476 Jul 05 06:30	0°♑	morning rise		8481 Jun 22 20:39	22°♑44'58
	8476 Aug 23 05:35	0°♌			8481 Jul 02 01:25	0°♑
	8476 Oct 10 18:44	0°♊	asc. node		8481 Aug 05 06:46	26°♑55'26
desc. node	8476 Nov 24 20:09	28°♊05'13			8481 Aug 09 05:14	0°♑
	8476 Nov 27 21:13	0°♐			8481 Sep 17 05:09	0°♑
evening set	8476 Dec 08 11:04	6°♐39'51			8481 Oct 27 23:20	0°♑
max. Earth dist.	8477 Jan 08 03:18	26°♐11'42 2.65740 AU			8481 Dec 10 14:33	0°♌
	8477 Jan 14 01:14	0°♌			8482 Jan 28 08:13	0°♊
					8482 Apr 07 16:10	0°♐
conjunction	8477 Jan 22 00:58	5°♌09'54 -0°29'47	retrograde		8482 Apr 28 12:57	2°♐31'00
minimum elong	8477 Jan 22 00:07	5°♌08'33 0°29'37			8482 May 18 03:54	30°♋♊
	8477 Feb 28 19:37	0°♋	min. Earth dist.		8482 Jun 07 10:20	22°♊58'14 0.67897 AU
morning rise	8477 Mar 07 14:17	4°♋32'00	opposition		8482 Jun 08 02:12	22°♊42'29 1°21'08
	8477 Apr 13 23:00	0°♑	greatest brilliancy		8482 Jun 08 01:45	22°♊42'56 -1.3m
	8477 May 26 11:22	0°♐	desc. node		8482 Jul 17 21:33	12°♊58'55
	8477 Jul 06 14:14	0°♑	direct		8482 Jul 18 22:20	12°♊58'32
	8477 Aug 15 19:01	0°♑			8482 Sep 19 13:50	0°♐
	8477 Sep 25 00:01	0°♑			8482 Nov 15 06:19	0°♌
asc. node	8477 Oct 31 12:59	26°♑13'28			8483 Jan 02 02:11	0°♋
	8477 Nov 06 01:02	0°♑			8483 Feb 14 14:14	0°♑
	8477 Dec 25 12:37	0°♑			8483 Mar 27 05:37	0°♐
retrograde	8478 Feb 13 17:50	14°♑38'12	evening set		8483 Apr 21 14:37	19°♐29'46
min. Earth dist.	8478 Mar 15 19:05	8°♑24'57 0.51489 AU			8483 May 05 01:20	0°♑
greatest brilliancy	8478 Mar 22 04:50	6°♑01'12 -2.1m			8483 Jun 12 00:24	0°♑
opposition	8478 Mar 23 16:20	5°♑27'53 5°22'03	asc. node		8483 Jun 23 05:39	8°♑53'22
	8478 Apr 09 19:02	30°♋♑				
direct	8478 Apr 27 08:26	27°♑55'32	conjunction		8483 Jun 29 07:25	13°♑41'29 0°04'26
	8478 May 16 03:22	0°♑	minimum elong		8483 Jun 29 06:54	13°♑40'28 0°04'14
	8478 Jul 28 00:09	0°♌	behind sun begin		8483 Jun 28 01:03	12°♑41'32
	8478 Sep 19 18:55	0°♊	behind sun end		8483 Jun 30 12:45	14°♑39'23
desc. node	8478 Oct 12 20:18	13°♊35'36			8483 Jul 20 01:05	0°♑
	8478 Nov 08 23:28	0°♐	max. Earth dist.		8483 Aug 14 06:20	19°♑32'09 2.37948 AU
	8478 Dec 26 19:55	0°♌			8483 Aug 28 00:18	0°♑
evening set	8479 Jan 14 00:50	11°♌48'05	morning rise		8483 Sep 08 23:37	8°♑59'14
max. Earth dist.	8479 Feb 02 16:43	24°♌48'33 2.58025 AU			8483 Oct 07 16:05	0°♑
	8479 Feb 10 10:09	0°♋			8483 Nov 19 15:33	0°♌
					8484 Jan 04 14:58	0°♊
conjunction	8479 Mar 01 19:37	13°♋13'49 -1°01'05			8484 Feb 24 05:39	0°♐
minimum elong	8479 Mar 01 18:35	13°♋12'02 1°01'00			8484 Apr 30 11:40	0°♌

retrograde	8484 Jun 01 07:58	5°≈17'05			8489 Jun 25 16:28	0°♐	
desc. node	8484 Jun 03 20:35	5°≈14'43			8489 Aug 07 17:38	0°♌	
	8484 Jun 30 11:31	30°♊			8489 Sep 21 11:46	0°♍	
opposition	8484 Jul 10 23:55	26°♊03'55 -1°17'19	evening set		8489 Oct 18 22:06	17°♍54'14	
greatest brilliancy	8484 Jul 11 02:49	26°♊01'05 -1.4m			8489 Nov 06 16:31	0°♊	
min. Earth dist.	8484 Jul 14 03:03	24°♊50'28 0.66486 AU					
direct	8484 Aug 21 15:23	16°♊01'03	conjunction		8489 Dec 04 15:59	17°♊52'24 0°25'59	
	8484 Oct 14 22:08	0°≈	minimum elong		8489 Dec 04 16:46	17°♊53'38 0°26'10	
	8484 Dec 09 09:37	0°♋	max. Earth dist.		8489 Dec 08 18:15	20°♊28'42 2.67583 AU	
	8485 Jan 23 17:29	0°♌			8489 Dec 23 18:05	0°♊	
	8485 Mar 05 20:40	0°♍	morning rise		8490 Jan 17 20:28	15°♊54'56	
	8485 Apr 13 18:54	0°♎	desc. node		8490 Jan 24 11:29	20°♊06'58	
asc. node	8485 May 10 04:34	20°♎48'37			8490 Feb 09 01:21	0°≈	
	8485 May 21 19:26	0°♏			8490 Mar 28 04:36	0°♋	
	8485 Jun 28 23:56	0°♐			8490 May 14 02:18	0°♌	
evening set	8485 Jul 04 01:20	3°♐55'32			8490 Jun 30 02:46	0°♍	
	8485 Aug 07 05:53	0°♐			8490 Aug 17 13:07	0°♎	
					8490 Oct 13 23:39	0°♏	
conjunction	8485 Sep 07 10:02	22°♐57'19 1°03'19	retrograde		8490 Nov 20 20:00	8°♏22'46	
minimum elong	8485 Sep 07 08:33	22°♐54'39 1°03'16	opposition		8490 Dec 20 21:11	3°♏21'10 -0°48'27	
	8485 Sep 17 05:17	0°♑	min. Earth dist.		8490 Dec 20 00:47	3°♏34'47 0.36594 AU	
max. Earth dist.	8485 Oct 17 01:37	20°♑56'25 2.51706 AU	greatest brilliancy		8490 Dec 20 21:44	3°♏20'48 -3.1m	
	8485 Oct 30 07:38	0°♒	asc. node		8490 Dec 31 05:55	0°♏45'01	
morning rise	8485 Nov 03 07:58	2°♒42'58			8491 Jan 03 21:24	30°♒♐	
	8485 Dec 14 16:35	0°♊	direct		8491 Jan 19 07:42	28°♐28'12	
	8486 Jan 31 12:10	0°♋			8491 Feb 03 12:06	0°♏	
	8486 Mar 23 18:54	0°≈			8491 Apr 11 21:44	0°♐	
desc. node	8486 Apr 21 17:39	15°≈21'06			8491 May 30 09:36	0°♐	
	8486 May 24 02:52	0°♋			8491 Jul 16 06:29	0°♑	
retrograde	8486 Jul 11 10:32	10°♋59'11			8491 Sep 01 09:30	0°♒	
opposition	8486 Aug 17 20:57	2°♋47'34 -4°00'13			8491 Oct 19 00:08	0°♊	
greatest brilliancy	8486 Aug 18 18:46	2°♋27'04 -1.7m	evening set		8491 Nov 25 12:56	23°♊36'13	
min. Earth dist.	8486 Aug 24 16:18	0°♋14'28 0.58575 AU			8491 Dec 05 16:16	0°♊	
	8486 Aug 25 08:02	30°♋≈	desc. node		8491 Dec 12 09:35	4°♊15'01	
direct	8486 Sep 27 11:34	23°≈04'36	max. Earth dist.		8491 Dec 31 08:40	16°♊17'19 2.67349 AU	
	8486 Nov 01 07:15	0°♋					
	8486 Dec 29 00:35	0°♌	conjunction		8492 Jan 09 03:08	21°♊53'12 -0°14'30	
	8487 Feb 10 20:15	0°♍	minimum elong		8492 Jan 09 02:42	21°♊52'31 0°14'19	
	8487 Mar 22 19:33	0°♎	behind sun begin		8492 Jan 08 18:24	21°♊39'14	
asc. node	8487 Mar 28 05:01	4°♎09'17	behind sun end		8492 Jan 09 11:00	22°♊05'47	
	8487 Apr 30 11:24	0°♏			8492 Jan 21 18:41	0°≈	
	8487 Jun 08 06:16	0°♐	morning rise		8492 Feb 21 22:10	20°≈12'48	
	8487 Jul 18 04:06	0°♐			8492 Mar 07 19:01	0°♋	
	8487 Aug 28 19:58	0°♑			8492 Apr 21 10:44	0°♌	
evening set	8487 Sep 04 15:28	4°♑46'28			8492 Jun 03 16:52	0°♍	
	8487 Oct 11 11:45	0°♒			8492 Jul 15 17:34	0°♎	
					8492 Aug 26 00:42	0°♏	
conjunction	8487 Oct 27 13:20	10°♒43'02 0°58'32			8492 Oct 06 19:47	0°♐	
minimum elong	8487 Oct 27 14:32	10°♒45'01 0°58'40	asc. node		8492 Nov 17 05:36	27°♐21'17	
max. Earth dist.	8487 Nov 16 03:36	23°♒35'24 2.62301 AU			8492 Nov 21 16:01	0°♐	
	8487 Nov 26 00:24	0°♊	retrograde		8493 Jan 25 18:19	23°♐15'05	
morning rise	8487 Dec 14 10:52	11°♊51'31	min. Earth dist.		8493 Feb 22 11:20	17°♐56'29 0.46027 AU	
	8488 Jan 12 01:28	0°♊	greatest brilliancy		8493 Mar 01 07:43	15°♐32'34 -2.4m	
	8488 Feb 29 08:57	0°≈	opposition		8493 Mar 02 22:24	14°♐58'28 5°15'44	
desc. node	8488 Mar 08 14:30	5°≈01'33	direct		8493 Apr 04 15:59	8°♐15'48	
	8488 Apr 19 08:13	0°♋			8493 Jun 13 15:09	0°♑	
	8488 Jun 12 08:34	0°♌			8493 Aug 08 00:33	0°♒	
retrograde	8488 Sep 02 21:08	27°♌12'26			8493 Sep 27 23:54	0°♊	
opposition	8488 Oct 06 01:36	20°♌49'10 -5°50'24	desc. node		8493 Oct 29 09:20	19°♊02'44	
greatest brilliancy	8488 Oct 07 21:43	20°♌12'50 -2.4m			8493 Nov 16 03:49	0°♊	
min. Earth dist.	8488 Oct 14 16:05	18°♌00'01 0.45452 AU	evening set		8493 Dec 30 12:00	27°♊58'02	
direct	8488 Nov 11 09:20	13°♌01'06			8494 Jan 02 15:54	0°≈	
	8489 Jan 04 21:34	0°♍	max. Earth dist.		8494 Jan 23 02:27	13°≈16'53 2.61676 AU	
asc. node	8489 Feb 12 06:19	23°♍35'17					
	8489 Feb 21 15:03	0°♎	conjunction		8494 Feb 13 22:39	27°≈45'29 -0°51'03	
	8489 Apr 04 08:46	0°♏	minimum elong		8494 Feb 13 21:28	27°≈43'30 0°50'56	
	8489 May 15 03:39	0°♐			8494 Feb 17 06:48	0°♋	

	8494 Apr 01 21:55	0°♈		greatest brilliancy	8499 Jun 28 15:58	13°♊09'53	-1.3m
morning rise	8494 Apr 02 00:40	0°♈04'50		min. Earth dist.	8499 Jun 30 07:13	12°♊31'14	0.67821 AU
	8494 May 13 16:04	0°♉		direct	8499 Aug 09 04:00	3°♊11'29	
	8494 Jun 22 21:20	0°♊			8499 Oct 29 15:23	0°♋	
	8494 Aug 01 02:57	0°♋			8499 Dec 19 13:18	0°♌	
	8494 Sep 09 04:09	0°♌			8500 Feb 01 21:36	0°♈	
asc. node	8494 Oct 05 04:03	19°♌37'56			8500 Mar 14 18:02	0°♉	
	8494 Oct 19 05:08	0°♍			8500 Apr 22 14:01	0°♊	
	8494 Dec 01 05:16	0°♎		asc. node	8500 May 27 21:33	27°♊54'28	
	8495 Jan 22 11:18	0°♏			8500 May 30 12:55	0°♋	
retrograde	8495 Mar 11 07:58	12°♏43'55		evening set	8500 Jun 05 09:20	4°♋38'06	
min. Earth dist.	8495 Apr 13 23:14	5°♏13'29	0.58973 AU		8500 Jul 07 14:45	0°♌	
opposition	8495 Apr 19 21:57	2°♏53'36	4°33'29				
greatest brilliancy	8495 Apr 18 23:47	3°♏15'21	-1.7m	conjunction	8500 Aug 14 08:17	28°♌58'53	0°49'20
	8495 Apr 27 13:37	30°♏♎		minimum elong	8500 Aug 14 05:12	28°♌53'04	0°49'12
direct	8495 May 27 03:58	24°♎22'55			8500 Aug 15 16:44	0°♍	
	8495 Jun 28 21:07	0°♏			8500 Sep 25 11:45	0°♎	
	8495 Sep 04 02:29	0°♐		max. Earth dist.	8500 Oct 01 22:01	4°♎35'35	2.46363 AU
desc. node	8495 Sep 16 09:49	6°♐39'23		morning rise	8500 Oct 15 22:57	14°♎29'37	
	8495 Oct 27 04:17	0°♑			8500 Nov 07 11:04	0°♏	
	8495 Dec 15 00:21	0°♒			8500 Dec 22 22:21	0°♐	
	8496 Jan 29 19:50	0°♓			8501 Feb 09 10:09	0°♑	
evening set	8496 Feb 07 16:35	6°♓01'07			8501 Apr 04 07:17	0°♒	
max. Earth dist.	8496 Feb 22 13:58	16°♓17'22	2.51000 AU	desc. node	8501 May 09 09:08	15°♒57'00	
	8496 Mar 13 00:29	0°♈		retrograde	8501 Jun 25 18:46	26°♒34'27	
				opposition	8501 Aug 03 06:38	17°♒54'46	-2°57'41
conjunction	8496 Mar 29 03:12	11°♈37'23	-1°07'04	greatest brilliancy	8501 Aug 03 19:06	17°♒42'48	-1.5m
minimum elong	8496 Mar 29 03:25	11°♈37'46	1°07'05	min. Earth dist.	8501 Aug 08 16:36	15°♒50'17	0.62413 AU
	8496 Apr 23 00:13	0°♉		direct	8501 Sep 13 13:35	7°♒57'19	
morning rise	8496 May 25 14:34	24°♉47'06			8501 Nov 21 14:09	0°♓	
	8496 Jun 01 08:38	0°♊			8502 Jan 09 20:27	0°♈	
	8496 Jul 09 18:42	0°♋			8502 Feb 21 02:48	0°♉	
	8496 Aug 17 02:00	0°♌			8502 Apr 01 11:56	0°♊	
asc. node	8496 Aug 22 00:21	3°♌49'59		asc. node	8502 Apr 14 21:14	10°♊26'32	
	8496 Sep 25 04:38	0°♍			8502 May 09 19:22	0°♋	
	8496 Nov 05 03:56	0°♎			8502 Jun 17 06:41	0°♌	
	8496 Dec 19 11:48	0°♏			8502 Jul 26 20:26	0°♍	
	8497 Feb 09 05:50	0°♐		evening set	8502 Aug 14 21:41	14°♍00'36	
retrograde	8497 Apr 15 07:21	19°♐42'46			8502 Sep 06 04:06	0°♎	
min. Earth dist.	8497 May 23 17:14	10°♐37'58	0.66637 AU				
opposition	8497 May 25 20:49	9°♐46'38	2°19'27	conjunction	8502 Oct 10 22:15	24°♎09'26	1°05'25
greatest brilliancy	8497 May 25 16:58	9°♐50'29	-1.4m	minimum elong	8502 Oct 10 22:55	24°♎10'36	1°05'30
direct	8497 Jul 04 23:37	0°♐17'09			8502 Oct 19 12:50	0°♏	
desc. node	8497 Aug 03 10:30	4°♐48'58		max. Earth dist.	8502 Nov 06 16:09	12°♏08'35	2.58748 AU
	8497 Oct 01 23:14	0°♑		morning rise	8502 Nov 30 12:16	27°♏47'25	
	8497 Nov 23 18:17	0°♒			8502 Dec 03 22:03	0°♐	
	8498 Jan 09 16:25	0°♓			8503 Jan 20 02:57	0°♑	
	8498 Feb 21 23:19	0°♈			8503 Mar 10 05:09	0°♒	
evening set	8498 Mar 28 04:27	25°♈08'15		desc. node	8503 Mar 27 05:17	10°♒02'26	
	8498 Apr 03 15:11	0°♉			8503 May 01 11:55	0°♓	
max. Earth dist.	8498 Apr 26 10:09	17°♉27'03	2.37895 AU		8503 Jul 04 22:58	0°♈	
	8498 May 12 12:54	0°♊		retrograde	8503 Aug 12 00:32	7°♈19'08	
				opposition	8503 Sep 16 03:57	0°♈06'33	-5°24'58
conjunction	8498 May 30 04:11	13°♊52'10	-0°28'32		8503 Sep 16 11:23	30°♉♈	
minimum elong	8498 May 30 06:47	13°♊57'19	0°28'40	greatest brilliancy	8503 Sep 17 18:30	29°♉32'29	-2.0m
	8498 Jun 19 13:37	0°♋		min. Earth dist.	8503 Sep 24 16:14	27°♉06'47	0.50947 AU
asc. node	8498 Jul 09 21:38	16°♋04'51		direct	8503 Oct 24 17:43	21°♉16'06	
	8498 Jul 27 14:43	0°♌			8503 Dec 01 21:10	0°♈	
morning rise	8498 Aug 11 01:35	11°♌15'05			8504 Jan 24 10:39	0°♉	
	8498 Sep 04 13:04	0°♍		asc. node	8504 Mar 01 21:32	26°♉20'40	
	8498 Oct 15 04:04	0°♎			8504 Mar 06 20:37	0°♊	
	8498 Nov 27 05:57	0°♏			8504 Apr 15 17:36	0°♋	
	8499 Jan 12 20:03	0°♐			8504 May 25 09:42	0°♌	
	8499 Mar 07 02:41	0°♑			8504 Jul 05 02:04	0°♍	
retrograde	8499 May 19 11:45	22°♑39'45			8504 Aug 16 10:43	0°♎	
desc. node	8499 Jun 21 10:47	15°♑57'19			8504 Sep 29 16:02	0°♏	
opposition	8499 Jun 28 15:41	13°♑10'11	-0°14'56	evening set	8504 Oct 03 15:52	2°♏39'03	

	8504 Nov 14 12:39	0°♊			8509 Aug 10 21:16	0°♎	
conjunction	8504 Nov 21 04:58	4°♊18'06 0°40'16	asc. node		8509 Sep 19 13:23	0°♎	
minimum elong	8504 Nov 21 06:05	4°♊19'55 0°40'26			8509 Oct 22 20:37	24°♎30'23	
max. Earth dist.	8504 Nov 30 22:49	10°♊33'04 2.66172 AU			8509 Oct 30 13:47	0°♎	
	8504 Dec 31 12:05	0°♋	retrograde		8509 Dec 15 06:43	0°♎	
morning rise	8505 Jan 05 09:24	3°♋05'41	min. Earth dist.		8510 Feb 24 12:07	25°♎48'32	
desc. node	8505 Feb 11 02:04	26°♋14'08	greatest brilliancy		8510 Mar 27 20:57	19°♎06'12 0.54359 AU	
	8505 Feb 17 01:47	0°♌	opposition		8510 Apr 02 20:40	16°♎48'53 -1.9m	
	8505 Apr 06 00:11	0°♌	direct		8510 Apr 04 03:47	16°♎19'04 5°10'15	
	8505 May 24 14:34	0°♍			8510 May 09 20:13	8°♎23'20	
	8505 Jul 14 07:48	0°♍			8510 Jul 20 07:54	0°♎	
	8505 Sep 13 21:18	0°♎	desc. node		8510 Sep 14 20:46	0°♊	
retrograde	8505 Oct 19 21:06	7°♎07'39			8510 Oct 03 22:49	10°♊59'08	
opposition	8505 Nov 19 02:20	2°♎02'19 -4°10'20			8510 Nov 04 21:39	0°♋	
greatest brilliancy	8505 Nov 20 00:28	1°♎47'00 -2.9m	evening set		8510 Dec 23 01:49	0°♌	
min. Earth dist.	8505 Nov 23 23:24	0°♎41'42 0.38175 AU			8511 Jan 23 16:34	20°♌35'18	
	8505 Nov 26 13:48	30°♏♋	max. Earth dist.		8511 Feb 06 18:18	0°♌	
direct	8505 Dec 20 11:10	26°♏24'56			8511 Feb 10 09:20	2°♌27'07 2.55718 AU	
	8506 Jan 12 19:26	0°♎	conjunction		8511 Mar 12 12:06	23°♌13'40 -1°05'00	
asc. node	8506 Jan 17 23:22	1°♎39'24	minimum elong		8511 Mar 12 11:22	23°♌12'22 1°04'58	
	8506 Mar 13 17:07	0°♏			8511 Mar 22 02:11	0°♍	
	8506 Apr 28 06:33	0°♏			8511 May 02 08:12	0°♋	
	8506 Jun 11 10:04	0°♎	morning rise		8511 May 03 16:47	1°♋00'37	
	8506 Jul 26 04:40	0°♎			8511 Jun 10 23:28	0°♎	
	8506 Sep 10 02:54	0°♎			8511 Jul 19 15:33	0°♏	
evening set	8506 Oct 27 01:09	0°♊	asc. node		8511 Aug 27 03:38	0°♏	
	8506 Nov 12 09:40	10°♊22'12			8511 Sep 09 17:53	10°♏29'18	
	8506 Dec 13 09:42	0°♋			8511 Oct 05 11:04	0°♎	
max. Earth dist.	8506 Dec 23 15:00	6°♋28'53 2.68100 AU			8511 Nov 15 20:10	0°♎	
					8511 Dec 31 11:49	0°♎	
conjunction	8506 Dec 27 11:08	8°♋55'09 0°01'21	retrograde		8512 Feb 29 11:35	0°♊	
minimum elong	8506 Dec 27 11:10	8°♋55'12 0°01'32			8512 Apr 02 19:54	6°♊20'08	
behind sun begin	8506 Dec 26 16:51	8°♋26'08			8512 May 03 20:40	30°♏♎	
behind sun end	8506 Dec 28 05:29	9°♋24'16	min. Earth dist.		8512 May 09 13:31	27°♎47'38 0.64400 AU	
desc. node	8506 Dec 29 23:30	10°♋31'01	opposition		8512 May 13 04:49	26°♎20'49 3°15'15	
	8507 Jan 29 12:24	0°♌	greatest brilliancy		8512 May 12 19:17	26°♎30'18 -1.4m	
morning rise	8507 Feb 09 00:57	6°♌45'30	direct		8512 Jun 21 09:04	17°♎10'02	
	8507 Mar 16 20:48	0°♌			8512 Aug 13 10:13	0°♊	
	8507 May 01 04:38	0°♍	desc. node		8512 Aug 21 00:19	3°♊12'42	
	8507 Jun 14 11:32	0°♋			8512 Oct 12 22:18	0°♋	
	8507 Jul 27 22:22	0°♎			8512 Dec 02 15:05	0°♌	
	8507 Sep 09 07:00	0°♏			8513 Jan 17 23:38	0°♌	
	8507 Oct 25 04:05	0°♏			8513 Mar 02 04:27	0°♍	
asc. node	8507 Dec 05 23:33	21°♏16'35	evening set		8513 Mar 08 00:40	4°♍12'09	
retrograde	8508 Jan 05 08:48	27°♏22'09	max. Earth dist.		8513 Mar 23 00:49	15°♍09'09 2.42818 AU	
min. Earth dist.	8508 Jan 31 09:24	22°♏50'06 0.40815 AU			8513 Apr 11 22:48	0°♋	
opposition	8508 Feb 07 23:28	20°♏27'27 4°06'24					
greatest brilliancy	8508 Feb 06 18:29	20°♏50'23 -2.7m	conjunction		8513 May 04 01:48	16°♋52'20 -0°52'35	
direct	8508 Mar 09 18:55	14°♏42'25	minimum elong		8513 May 04 04:23	16°♋57'19 0°52'43	
	8508 May 03 20:04	0°♎			8513 May 21 00:06	0°♎	
	8508 Jun 28 22:57	0°♎			8513 Jun 28 03:48	0°♏	
	8508 Aug 18 11:09	0°♎	morning rise		8513 Jul 11 09:07	10°♏26'22	
	8508 Oct 06 17:04	0°♊	asc. node		8513 Jul 27 15:16	23°♏14'19	
desc. node	8508 Nov 15 22:07	24°♊51'53			8513 Aug 05 06:26	0°♏	
	8508 Nov 24 03:28	0°♋			8513 Sep 13 04:58	0°♎	
evening set	8508 Dec 17 10:24	14°♋40'05			8513 Oct 23 20:34	0°♎	
	8509 Jan 10 10:11	0°♌			8513 Dec 06 04:12	0°♎	
max. Earth dist.	8509 Jan 14 11:46	2°♌37'25 2.64520 AU			8514 Jan 22 19:35	0°♊	
					8514 Mar 22 22:32	0°♋	
conjunction	8509 Jan 31 04:10	13°♌28'33 -0°38'12	retrograde		8514 May 07 02:09	10°♋10'46	
minimum elong	8509 Jan 31 03:09	13°♌26'52 0°38'02	opposition		8514 Jun 16 13:37	0°♋28'06 0°46'07	
	8509 Feb 25 03:32	0°♌	greatest brilliancy		8514 Jun 16 13:58	0°♋27'45 -1.3m	
morning rise	8509 Mar 17 09:44	13°♌40'30	min. Earth dist.		8514 Jun 16 17:46	0°♋23'59 0.68150 AU	
	8509 Apr 10 02:27	0°♍			8514 Jun 17 17:59	30°♏♊	
	8509 May 22 08:02	0°♋	desc. node		8514 Jul 09 00:32	22°♊49'49	
	8509 Jul 02 02:14	0°♎	direct		8514 Jul 27 17:10	20°♊37'40	

	8514 Sep 09 17:33	0°☾		minimum elong	8519 Nov 06 22:11	19°♌57'52	0°52'46
	8514 Nov 10 03:44	0°♊			8519 Nov 22 08:30	0°♊	
	8514 Dec 28 21:06	0°♋		max. Earth dist.	8519 Nov 22 20:34	0°♊19'32	2.63905 AU
	8515 Feb 10 15:42	0°♌		morning rise	8519 Dec 23 14:59	20°♊03'03	
	8515 Mar 23 08:53	0°♍			8520 Jan 08 07:49	0°☾	
	8515 May 01 04:33	0°♎			8520 Feb 25 07:22	0°♊	
evening set	8515 May 08 01:11	5°♎23'40		desc. node	8520 Feb 28 16:00	2°♊04'45	
	8515 Jun 08 03:18	0°☾			8520 Apr 14 08:58	0°♋	
asc. node	8515 Jun 14 12:54	5°☾04'22			8520 Jun 04 17:39	0°♌	
	8515 Jul 16 04:00	0°♍			8520 Aug 04 02:58	0°♍	
				retrograde	8520 Sep 19 03:20	10°♍34'31	
conjunction	8515 Jul 17 15:19	1°♍09'01	0°23'20	opposition	8520 Oct 21 05:29	4°♍41'07	-5°40'52
minimum elong	8515 Jul 17 12:56	1°♍04'21	0°23'08	greatest brilliancy	8520 Oct 22 22:50	4°♍08'49	-2.6m
	8515 Aug 24 03:29	0°♎		min. Earth dist.	8520 Oct 29 04:23	2°♍13'13	0.42493 AU
max. Earth dist.	8515 Sep 09 00:16	11°♎52'42	2.40782 AU		8520 Nov 06 07:30	30°♎♌	
morning rise	8515 Sep 24 11:10	23°♎14'16		direct	8520 Nov 24 21:02	27°♌38'11	
	8515 Oct 03 19:29	0°♏			8520 Dec 13 11:15	0°♍	
	8515 Nov 15 17:31	0°♎		asc. node	8521 Feb 03 14:59	24°♍05'59	
	8515 Dec 31 10:10	0°♊			8521 Feb 13 01:36	0°♎	
	8516 Feb 18 23:54	0°☾			8521 Mar 28 23:54	0°☾	
	8516 Apr 18 01:07	0°♊			8521 May 09 19:33	0°♍	
desc. node	8516 May 25 23:14	11°♊45'45			8521 Jun 21 00:07	0°♎	
retrograde	8516 Jun 10 12:46	13°♊08'27			8521 Aug 03 12:26	0°♏	
opposition	8516 Jul 19 20:34	4°♊05'55	-1°54'09		8521 Sep 17 14:24	0°♎	
greatest brilliancy	8516 Jul 20 02:09	4°♊00'29	-1.4m	evening set	8521 Oct 28 16:33	26°♎35'55	
min. Earth dist.	8516 Jul 23 19:35	2°♊33'37	0.65330 AU		8521 Nov 03 00:01	0°♊	
	8516 Jul 30 15:30	30°♎☾					
direct	8516 Aug 30 11:20	24°☾02'58		conjunction	8521 Dec 13 16:43	25°♊54'59	0°17'03
	8516 Oct 02 17:11	0°♊		minimum elong	8521 Dec 13 17:15	25°♊55'48	0°17'15
	8516 Dec 03 20:16	0°♋		max. Earth dist.	8521 Dec 14 21:13	26°♊40'11	2.67995 AU
	8517 Jan 19 04:49	0°♌			8521 Dec 20 03:09	0°☾	
	8517 Mar 01 16:09	0°♍		desc. node	8522 Jan 15 13:16	16°☾46'23	
	8517 Apr 09 17:27	0°♎		morning rise	8522 Jan 26 12:59	23°☾45'30	
asc. node	8517 May 01 13:41	17°♎10'12			8522 Feb 05 08:11	0°♊	
	8517 May 17 19:38	0°☾			8522 Mar 24 03:47	0°♋	
	8517 Jun 25 01:35	0°♍			8522 May 09 09:43	0°♌	
evening set	8517 Jul 20 19:26	19°♍46'19			8522 Jun 24 05:10	0°♍	
	8517 Aug 03 09:05	0°♎			8522 Aug 09 03:34	0°♎	
	8517 Sep 13 10:13	0°♏			8522 Sep 26 12:06	0°☾	
				retrograde	8522 Dec 09 06:57	27°☾00'37	
conjunction	8517 Sep 21 01:27	5°♏25'14	1°06'27	asc. node	8522 Dec 22 15:27	25°☾49'00	
minimum elong	8517 Sep 21 00:57	5°♏24'22	1°06'27	min. Earth dist.	8523 Jan 05 04:16	22°☾38'23	0.37249 AU
max. Earth dist.	8517 Oct 25 19:44	29°♏29'39	2.54427 AU	opposition	8523 Jan 09 05:35	21°☾31'17	1°20'19
	8517 Oct 26 13:37	0°♎		greatest brilliancy	8523 Jan 08 23:25	21°☾35'33	-3.0m
morning rise	8517 Nov 14 08:33	12°♎36'38		direct	8523 Feb 07 12:04	16°☾33'03	
	8517 Dec 10 21:19	0°♊			8523 Mar 29 10:32	0°♍	
	8518 Jan 27 09:28	0°☾			8523 May 23 04:41	0°♎	
	8518 Mar 18 15:43	0°♊			8523 Jul 10 23:24	0°♏	
desc. node	8518 Apr 12 20:04	14°♊03'42			8523 Aug 28 00:16	0°♎	
	8518 May 14 02:53	0°♋			8523 Oct 15 02:30	0°♊	
retrograde	8518 Jul 22 18:13	20°♋17'25			8523 Dec 02 00:08	0°☾	
opposition	8518 Aug 28 11:47	12°♋24'26	-4°34'10	desc. node	8523 Dec 03 12:10	0°☾56'45	
greatest brilliancy	8518 Aug 29 15:40	11°♋58'41	-1.8m	evening set	8523 Dec 04 12:34	1°☾35'12	
min. Earth dist.	8518 Sep 05 00:22	9°♋38'08	0.56077 AU	max. Earth dist.	8524 Jan 06 12:29	22°☾31'52	2.66561 AU
direct	8518 Oct 07 13:15	2°♋55'07					
	8518 Dec 21 19:42	0°♌		conjunction	8524 Jan 18 01:10	29°☾55'50	-0°23'33
	8519 Feb 05 10:50	0°♍		minimum elong	8524 Jan 18 00:29	29°☾54'44	0°23'23
	8519 Mar 18 00:45	0°♎			8524 Jan 18 03:46	0°♊	
asc. node	8519 Mar 19 14:57	1°♎12'44		morning rise	8524 Mar 02 04:42	28°♊45'48	
	8519 Apr 26 00:13	0°☾			8524 Mar 04 01:26	0°♋	
	8519 Jun 04 00:40	0°♍			8524 Apr 17 10:47	0°♌	
	8519 Jul 14 03:08	0°♎			8524 May 30 07:31	0°♍	
	8519 Aug 24 23:11	0°♏			8524 Jul 10 19:51	0°♎	
evening set	8519 Sep 16 18:13	15°♏46'50			8524 Aug 20 11:13	0°☾	
	8519 Oct 07 18:15	0°♎			8524 Sep 30 05:25	0°♍	
				asc. node	8524 Nov 08 15:00	27°♍32'49	
conjunction	8519 Nov 06 20:55	19°♎55'48	0°52'37		8524 Nov 12 08:25	0°♎	

	8525 Jan 06 20:23	0°♄		evening set	8530 Apr 11 11:12	8°♄51'08	
retrograde	8525 Feb 06 20:16	6°♄16'41			8530 May 08 17:34	0°♄	
min. Earth dist.	8525 Mar 07 19:21	0°♄28'33	0.49063 AU		8530 Jun 15 17:26	0°♄	
	8525 Mar 09 03:15	30°♄					
greatest brilliancy	8525 Mar 14 12:07	28°♄02'06	-2.2m	conjunction	8530 Jun 16 20:10	0°♄52'57	-0°10'28
opposition	8525 Mar 16 02:07	27°♄27'19	5°25'13	minimum elong	8530 Jun 16 21:19	0°♄55'15	0°10'39
direct	8525 Apr 18 22:00	20°♄16'06		behind sun begin	8530 Jun 15 22:10	0°♄09'23	
	8525 Jun 01 11:30	0°♄		behind sun end	8530 Jun 17 20:29	1°♄41'06	
	8525 Aug 02 02:33	0°♄		max. Earth dist.	8530 Jun 26 15:57	8°♄39'48	2.36569 AU
	8525 Sep 23 12:46	0°♄		asc. node	8530 Jul 01 07:24	12°♄20'12	
desc. node	8525 Oct 20 12:04	16°♄06'51			8530 Jul 23 17:53	0°♄	
	8525 Nov 12 06:22	0°♄		morning rise	8530 Aug 28 20:02	27°♄51'46	
	8525 Dec 29 23:50	0°♄			8530 Aug 31 15:39	0°♄	
evening set	8526 Jan 08 17:18	6°♄16'38			8530 Oct 11 05:31	0°♄	
max. Earth dist.	8526 Jan 30 00:40	20°♄14'32	2.59743 AU		8530 Nov 23 04:03	0°♄	
	8526 Feb 13 15:26	0°♄			8531 Jan 08 06:39	0°♄	
					8531 Feb 28 16:08	0°♄	
conjunction	8526 Feb 23 19:42	6°♄53'19	-0°57'19		8531 May 20 14:09	0°♄	
minimum elong	8526 Feb 23 18:33	6°♄51'21	0°57'14	retrograde	8531 May 28 07:42	0°♄21'26	
	8526 Mar 29 04:00	0°♄			8531 Jun 04 20:46	30°♄	
morning rise	8526 Apr 13 09:22	10°♄49'58		desc. node	8531 Jun 12 13:12	28°♄53'17	
	8526 May 09 17:48	0°♄		opposition	8531 Jul 07 06:12	21°♄00'29	-0°51'19
	8526 Jun 18 17:47	0°♄		greatest brilliancy	8531 Jul 07 07:39	20°♄59'04	-1.3m
	8526 Jul 27 18:00	0°♄		min. Earth dist.	8531 Jul 09 17:50	20°♄02'00	0.67217 AU
	8526 Sep 04 13:35	0°♄		direct	8531 Aug 17 21:20	10°♄58'47	
asc. node	8526 Sep 26 10:46	16°♄41'17			8531 Oct 22 10:10	0°♄	
	8526 Oct 14 06:01	0°♄			8531 Dec 14 17:09	0°♄	
	8526 Nov 25 10:05	0°♄			8532 Jan 28 15:43	0°♄	
	8527 Jan 12 21:44	0°♄			8532 Mar 09 17:06	0°♄	
retrograde	8527 Mar 20 18:27	21°♄59'04			8532 Apr 17 14:54	0°♄	
min. Earth dist.	8527 Apr 24 13:43	14°♄04'40	0.61172 AU	asc. node	8532 May 18 06:10	24°♄10'31	
opposition	8527 Apr 29 16:43	12°♄03'14	4°06'56		8532 May 25 14:41	0°♄	
greatest brilliancy	8527 Apr 28 23:33	12°♄20'12	-1.6m	greatest brilliancy	8532 May 31 06:12	4°♄28'04	1.2m
direct	8527 Jun 06 16:47	3°♄16'28		evening set	8532 Jun 22 05:24	21°♄47'03	
	8527 Aug 28 17:22	0°♄			8532 Jul 02 17:34	0°♄	
desc. node	8527 Sep 07 13:07	5°♄00'34			8532 Aug 10 20:46	0°♄	
	8527 Oct 22 16:19	0°♄					
	8527 Dec 11 02:33	0°♄		conjunction	8532 Aug 28 22:50	13°♄27'54	0°58'45
	8528 Jan 26 02:53	0°♄		minimum elong	8532 Aug 28 20:33	13°♄23'42	0°58'41
evening set	8528 Feb 18 08:46	15°♄54'59			8532 Sep 20 16:49	0°♄	
max. Earth dist.	8528 Mar 03 05:01	25°♄38'26	2.48168 AU	max. Earth dist.	8532 Oct 11 13:02	14°♄44'52	2.49373 AU
	8528 Mar 09 07:59	0°♄		morning rise	8532 Oct 27 06:26	25°♄37'31	
					8532 Nov 02 16:17	0°♄	
conjunction	8528 Apr 10 18:34	23°♄39'50	-1°04'47		8532 Dec 18 00:22	0°♄	
minimum elong	8528 Apr 10 19:36	23°♄41'45	1°04'50		8533 Feb 04 00:26	0°♄	
	8528 Apr 19 06:08	0°♄			8533 Mar 28 03:15	0°♄	
	8528 May 28 11:59	0°♄		desc. node	8533 Apr 29 10:26	16°♄18'15	
morning rise	8528 Jun 10 23:09	10°♄29'39			8533 Jun 03 13:35	0°♄	
	8528 Jul 05 19:20	0°♄		retrograde	8533 Jul 05 00:31	5°♄07'32	
greatest brilliancy	8528 Aug 06 16:49	25°♄04'08	1.2m		8533 Aug 02 21:45	30°♄	
asc. node	8528 Aug 13 08:11	0°♄15'27		opposition	8533 Aug 11 23:35	26°♄42'36	-3°34'04
	8528 Aug 13 00:16	0°♄		greatest brilliancy	8533 Aug 12 17:07	26°♄25'58	-1.6m
	8528 Sep 21 00:15	0°♄		min. Earth dist.	8533 Aug 18 04:48	24°♄21'15	0.60416 AU
	8528 Oct 31 18:46	0°♄		direct	8533 Sep 21 23:15	16°♄51'35	
	8528 Dec 14 13:53	0°♄			8533 Nov 11 06:43	0°♄	
	8529 Feb 02 03:55	0°♄			8534 Jan 03 06:34	0°♄	
retrograde	8529 Apr 23 21:36	27°♄35'49			8534 Feb 15 09:07	0°♄	
min. Earth dist.	8529 Jun 02 04:24	18°♄14'44	0.67469 AU		8534 Mar 27 02:07	0°♄	
opposition	8529 Jun 03 11:48	17°♄43'31	1°45'34	asc. node	8534 Apr 05 06:07	7°♄06'22	
greatest brilliancy	8529 Jun 03 10:11	17°♄45'08	-1.3m		8534 May 04 13:44	0°♄	
direct	8529 Jul 14 00:52	8°♄05'23			8534 Jun 12 04:28	0°♄	
desc. node	8529 Jul 25 14:00	8°♄51'40			8534 Jul 21 21:29	0°♄	
	8529 Sep 25 06:48	0°♄		evening set	8534 Aug 27 14:06	26°♄37'44	
	8529 Nov 19 04:19	0°♄			8534 Sep 01 08:16	0°♄	
	8530 Jan 05 16:15	0°♄			8534 Oct 14 19:35	0°♄	
	8530 Feb 18 03:27	0°♄					
	8530 Mar 30 20:19	0°♄		conjunction	8534 Oct 21 04:31	4°♄17'09	1°02'00

minimum elong	8534 Oct 21 05:34	4°♍18'54	1°02'06	retrograde	8540 Jan 18 11:53	13°♑02'58	
max. Earth dist.	8534 Nov 12 20:17	19°♍18'52	2.60814 AU	min. Earth dist.	8540 Feb 14 07:33	8°♑07'40	0.43601 AU
	8534 Nov 29 05:22	0°♊		greatest brilliancy	8540 Feb 21 02:52	5°♑50'48	-2.5m
morning rise	8534 Dec 09 04:09	6°♊25'25		opposition	8540 Feb 22 15:32	5°♑19'48	4°56'40
	8535 Jan 15 06:50	0°♋			8540 Mar 13 15:17	30°♋02	
	8535 Mar 04 20:52	0°♌		direct	8540 Mar 25 11:25	29°♌02'28	
desc. node	8535 Mar 17 07:17	7°♌30'17			8540 Apr 06 18:43	0°♍	
	8535 Apr 24 15:36	0°♎			8540 Jun 20 13:06	0°♎	
	8535 Jun 20 12:52	0°♏			8540 Aug 12 09:32	0°♏	
retrograde	8535 Aug 24 23:50	18°♏37'42			8540 Oct 01 13:02	0°♐	
opposition	8535 Sep 28 01:42	11°♏51'12	-5°43'47	desc. node	8540 Nov 06 01:14	21°♐44'00	
greatest brilliancy	8535 Sep 29 20:29	11°♏14'38	-2.2m		8540 Nov 19 09:06	0°♑	
min. Earth dist.	8535 Oct 06 18:23	8°♏53'44	0.47933 AU	evening set	8540 Dec 25 10:19	22°♑42'27	
direct	8535 Nov 04 12:08	3°♏31'44			8541 Jan 05 19:30	0°♒	
	8536 Jan 15 00:56	0°♓		max. Earth dist.	8541 Jan 19 23:48	9°♒10'47	2.63054 AU
asc. node	8536 Feb 21 07:49	24°♓43'37					
	8536 Feb 28 17:43	0°♈		conjunction	8541 Feb 08 11:34	21°♈58'55	-0°45'58
	8536 Apr 09 11:40	0°♉		minimum elong	8541 Feb 08 10:25	21°♈57'00	0°45'50
	8536 May 19 16:18	0°♊			8541 Feb 20 12:22	0°♈	
	8536 Jun 29 18:01	0°♋		morning rise	8541 Mar 26 15:07	23°♈14'44	
	8536 Aug 11 09:54	0°♌			8541 Apr 05 07:54	0°♏	
	8536 Sep 24 20:54	0°♍			8541 May 17 07:51	0°♐	
evening set	8536 Oct 13 02:00	11°♍58'51			8541 Jun 26 19:17	0°♑	
	8536 Nov 09 20:58	0°♒			8541 Aug 05 06:33	0°♒	
					8541 Sep 13 13:16	0°♓	
conjunction	8536 Nov 29 13:11	12°♒36'52	0°32'06	asc. node	8541 Oct 13 05:46	22°♓13'34	
minimum elong	8536 Nov 29 14:08	12°♒38'22	0°32'17		8541 Oct 23 21:25	0°♈	
max. Earth dist.	8536 Dec 06 03:38	16°♒49'34	2.67055 AU		8541 Dec 06 15:46	0°♉	
	8536 Dec 26 20:55	0°♋			8542 Feb 02 00:46	0°♌	
morning rise	8537 Jan 13 02:56	10°♋55'44		retrograde	8542 Mar 05 17:48	6°♌11'55	
desc. node	8537 Feb 01 04:21	22°♋59'09			8542 Apr 04 19:42	30°♌02	
	8537 Feb 12 06:41	0°♌		min. Earth dist.	8542 Apr 07 09:04	29°♌02'08	0.57007 AU
	8537 Mar 31 17:34	0°♍		opposition	8542 Apr 13 22:40	26°♌29'07	4°51'10
	8537 May 18 07:00	0°♎		greatest brilliancy	8542 Apr 12 20:34	26°♌54'30	-1.8m
	8537 Jul 05 14:44	0°♏		direct	8542 May 20 12:59	18°♌12'51	
	8537 Aug 26 06:22	0°♐			8542 Jul 09 06:14	0°♍	
retrograde	8537 Nov 07 11:48	24°♐45'46			8542 Sep 08 13:02	0°♎	
opposition	8537 Dec 07 06:49	19°♐50'44	-2°26'03	desc. node	8542 Sep 24 01:50	8°♎39'08	
greatest brilliancy	8537 Dec 07 14:15	19°♐45'46	-3.0m		8542 Oct 30 16:52	0°♏	
min. Earth dist.	8537 Dec 09 03:49	19°♐20'43	0.36874 AU		8542 Dec 18 06:54	0°♑	
direct	8538 Jan 06 08:21	14°♐46'12		evening set	8543 Feb 01 15:23	29°♑41'39	
asc. node	8538 Jan 08 07:50	14°♐47'48			8543 Feb 02 02:16	0°♒	
	8538 Feb 27 08:52	0°♈		max. Earth dist.	8543 Feb 17 13:53	10°♒32'24	2.53187 AU
	8538 Apr 19 15:32	0°♉			8543 Mar 17 09:32	0°♏	
	8538 Jun 04 17:36	0°♋					
	8538 Jul 20 12:01	0°♌		conjunction	8543 Mar 22 18:27	3°♏50'09	-1°07'03
	8538 Sep 05 00:21	0°♍		minimum elong	8543 Mar 22 18:11	3°♏49'40	1°07'03
	8538 Oct 22 06:40	0°♎			8543 Apr 27 13:03	0°♐	
evening set	8538 Nov 20 12:30	18°♎27'16		morning rise	8543 May 16 15:51	14°♐23'25	
	8538 Dec 08 19:05	0°♏			8543 Jun 06 01:14	0°♑	
desc. node	8538 Dec 20 01:57	7°♏08'49			8543 Jul 14 14:07	0°♒	
max. Earth dist.	8538 Dec 28 16:36	12°♏36'49	2.67794 AU		8543 Aug 21 23:12	0°♓	
				asc. node	8543 Aug 31 02:24	7°♓04'47	
conjunction	8539 Jan 04 06:14	16°♓47'39	-0°08'00		8543 Sep 30 02:53	0°♈	
minimum elong	8539 Jan 04 05:59	16°♓47'16	0°07'48		8543 Nov 10 04:02	0°♉	
behind sun begin	8539 Jan 03 13:41	16°♓21'18			8543 Dec 24 20:28	0°♌	
behind sun end	8539 Jan 04 22:18	17°♓13'13			8544 Feb 16 14:59	0°♍	
	8539 Jan 24 21:54	0°♎		retrograde	8544 Apr 10 14:46	14°♎35'02	
morning rise	8539 Feb 16 21:34	14°♎50'30		min. Earth dist.	8544 May 18 07:27	5°♎43'52	0.65756 AU
	8539 Mar 12 02:09	0°♏		opposition	8544 May 21 02:41	4°♎36'57	2°43'04
	8539 Apr 26 01:16	0°♐		greatest brilliancy	8544 May 20 20:38	4°♎42'58	-1.4m
	8539 Jun 08 18:05	0°♑			8544 Jun 02 09:45	30°♎02	
	8539 Jul 21 08:27	0°♒		direct	8544 Jun 29 19:41	25°♎15'09	
	8539 Sep 01 09:21	0°♓			8544 Jul 30 00:41	0°♈	
	8539 Oct 14 09:46	0°♈		desc. node	8544 Aug 11 02:51	3°♈55'13	
asc. node	8539 Nov 26 07:03	26°♈23'30			8544 Oct 06 11:40	0°♉	
	8539 Dec 03 07:48	0°♊			8544 Nov 27 09:17	0°♋	

	8545 Jan 13 02:59	0°♄		morning rise	8549 Nov 23 17:39	21°♄55'00	
	8545 Feb 25 10:21	0°♅			8549 Dec 06 03:15	0°♄	
evening set	8545 Mar 19 14:39	16°♅07'46			8550 Jan 22 09:50	0°♄	
	8545 Apr 07 04:24	0°♄			8550 Mar 12 21:35	0°♄	
max. Earth dist.	8545 Apr 08 04:36	0°♄45'41	2.39936 AU	desc. node	8550 Apr 02 22:00	12°♄10'24	
	8545 May 16 04:21	0°♄			8550 May 05 12:50	0°♄	
					8550 Jul 28 13:45	0°♅	
conjunction	8545 May 18 20:06	2°♄04'38	-0°40'22	retrograde	8550 Aug 02 21:25	0°♅10'03	
minimum elong	8545 May 18 23:03	2°♄10'25	0°40'31		8550 Aug 08 02:48	30°♄	
	8545 Jun 23 06:26	0°♄		opposition	8550 Sep 07 18:29	22°♄38'22	-5°04'56
asc. node	8545 Jul 17 23:12	19°♄30'35		greatest brilliancy	8550 Sep 09 04:37	22°♄07'31	-1.9m
morning rise	8545 Jul 29 07:14	28°♄24'54		min. Earth dist.	8550 Sep 15 21:37	19°♄42'30	0.53310 AU
	8545 Jul 31 07:49	0°♄		direct	8550 Oct 17 02:17	13°♄27'51	
	8545 Sep 08 05:25	0°♄			8550 Dec 11 09:56	0°♅	
	8545 Oct 18 19:07	0°♄			8551 Jan 29 08:28	0°♄	
	8545 Nov 30 21:20	0°♄		asc. node	8551 Mar 09 22:37	28°♄34'16	
	8546 Jan 16 17:54	0°♄			8551 Mar 11 20:26	0°♄	
	8546 Mar 12 14:42	0°♄			8551 Apr 20 06:33	0°♄	
retrograde	8546 May 14 17:22	17°♄50'15			8551 May 29 14:22	0°♄	
opposition	8546 Jun 24 01:29	8°♄14'34	0°10'27		8551 Jul 08 23:14	0°♄	
greatest brilliancy	8546 Jun 24 01:46	8°♄14'17	-1.3m		8551 Aug 20 00:42	0°♄	
min. Earth dist.	8546 Jun 25 01:34	7°♄50'48	0.68094 AU	evening set	8551 Sep 27 04:18	26°♄05'47	
desc. node	8546 Jun 29 02:55	6°♄15'23			8551 Oct 03 00:11	0°♄	
	8546 Jul 19 02:33	30°♄					
direct	8546 Aug 04 10:34	28°♄19'00		conjunction	8551 Nov 15 18:00	28°♄44'21	0°45'42
	8546 Aug 21 16:31	0°♄		minimum elong	8551 Nov 15 19:13	28°♄46'20	0°45'52
	8546 Nov 03 11:42	0°♄			8551 Nov 17 16:47	0°♄	
	8546 Dec 23 11:04	0°♄		max. Earth dist.	8551 Nov 28 06:29	6°♄48'45	2.65269 AU
	8547 Feb 05 14:53	0°♅		morning rise	8551 Dec 31 13:18	28°♄02'38	
	8547 Mar 18 11:08	0°♄			8552 Jan 03 15:25	0°♄	
	8547 Apr 26 07:42	0°♄		desc. node	8552 Feb 18 18:28	29°♄00'14	
evening set	8547 May 24 07:16	22°♄05'41			8552 Feb 20 08:45	0°♄	
	8547 Jun 03 06:30	0°♄			8552 Apr 08 17:37	0°♄	
asc. node	8547 Jun 04 22:42	1°♄19'43			8552 May 28 08:11	0°♅	
	8547 Jul 11 07:17	0°♄			8552 Jul 20 19:31	0°♄	
				retrograde	8552 Oct 05 19:39	25°♄19'46	
conjunction	8547 Aug 03 04:34	17°♄44'11	0°39'32	opposition	8552 Nov 05 19:41	19°♄55'29	-5°03'18
minimum elong	8547 Aug 03 01:20	17°♄38'00	0°39'21	greatest brilliancy	8552 Nov 07 04:35	19°♄31'30	-2.8m
	8547 Aug 19 07:10	0°♄		min. Earth dist.	8552 Nov 12 11:31	17°♄59'48	0.39864 AU
max. Earth dist.	8547 Sep 23 22:00	26°♄21'06	2.43852 AU	direct	8552 Dec 08 15:02	13°♄41'20	
	8547 Sep 28 23:19	0°♄		asc. node	8553 Jan 25 00:31	27°♄03'08	
morning rise	8547 Oct 07 14:58	6°♄11'20			8553 Jan 30 18:42	0°♄	
	8547 Nov 10 20:26	0°♄			8553 Mar 20 11:21	0°♄	
	8547 Dec 26 07:50	0°♄			8553 May 02 22:08	0°♄	
	8548 Feb 13 03:16	0°♄			8553 Jun 15 00:35	0°♄	
	8548 Apr 08 12:55	0°♄			8553 Jul 29 03:10	0°♄	
desc. node	8548 May 16 01:35	15°♄18'51			8553 Sep 12 14:55	0°♄	
retrograde	8548 Jun 19 01:49	21°♄13'45			8553 Oct 29 06:35	0°♄	
opposition	8548 Jul 27 23:46	12°♄23'23	-2°31'08	evening set	8553 Nov 06 04:57	5°♄03'01	
greatest brilliancy	8548 Jul 28 08:59	12°♄14'30	-1.5m		8553 Dec 15 12:26	0°♄	
min. Earth dist.	8548 Aug 01 18:38	10°♄32'37	0.63836 AU	max. Earth dist.	8553 Dec 19 22:06	2°♄47'37	2.68166 AU
direct	8548 Sep 07 11:31	2°♄22'26					
	8548 Nov 26 09:57	0°♄		conjunction	8553 Dec 21 14:44	3°♄52'02	0°07'54
	8549 Jan 13 07:53	0°♅		minimum elong	8553 Dec 21 14:59	3°♄52'25	0°08'06
	8549 Feb 24 06:34	0°♄		behind sun begin	8553 Dec 20 22:48	3°♄26'47	
	8549 Apr 04 12:49	0°♄		behind sun end	8553 Dec 22 07:09	4°♄18'04	
asc. node	8549 Apr 21 22:32	13°♄37'33		desc. node	8554 Jan 05 15:45	13°♄25'02	
	8549 May 12 17:48	0°♄			8554 Jan 31 16:12	0°♄	
	8549 Jun 20 02:08	0°♄		morning rise	8554 Feb 03 05:47	1°♄38'27	
	8549 Jul 29 12:05	0°♄			8554 Mar 19 05:33	0°♄	
evening set	8549 Aug 04 09:32	4°♄23'10			8554 May 03 23:02	0°♅	
	8549 Sep 08 15:21	0°♄			8554 Jun 17 20:46	0°♄	
					8554 Aug 01 05:53	0°♄	
conjunction	8549 Oct 02 15:13	16°♄50'35	1°06'42		8554 Sep 15 03:51	0°♄	
minimum elong	8549 Oct 02 15:30	16°♄51'04	1°06'45		8554 Nov 04 11:10	0°♄	
	8549 Oct 21 20:16	0°♄		asc. node	8554 Dec 13 01:13	13°♄58'12	
max. Earth dist.	8549 Nov 01 18:38	7°♄22'02	2.56903 AU	retrograde	8554 Dec 25 04:27	15°♄00'07	

min. Earth dist.	8555 Jan 20 03:38	10°♎38'57	0.38911 AU		8560 Apr 14 11:50	0°♎	
opposition	8555 Jan 26 12:27	8°♎46'14	3°07'28				
greatest brilliancy	8555 Jan 25 16:46	9°♎00'52	-2.9m	conjunction	8560 Apr 23 11:37	6°♎47'25	-0°59'14
direct	8555 Feb 25 12:43	3°♎25'41		minimum elong	8560 Apr 23 13:34	6°♎51'07	0°59'20
	8555 May 13 05:27	0°♎			8560 May 23 15:57	0°♎	
	8555 Jul 04 04:18	0°♎		morning rise	8560 Jun 27 15:43	27°♎26'37	
	8555 Aug 22 10:28	0°♎			8560 Jun 30 21:30	0°♎	
	8555 Oct 10 02:53	0°♎		asc. node	8560 Aug 03 17:16	26°♎37'31	
desc. node	8555 Nov 23 14:02	27°♎39'37			8560 Aug 08 00:45	0°♎	
	8555 Nov 27 07:34	0°♎			8560 Sep 15 23:02	0°♎	
evening set	8555 Dec 12 11:39	9°♎33'04			8560 Oct 26 14:11	0°♎	
max. Earth dist.	8556 Jan 11 18:05	28°♎50'14	2.65543 AU		8560 Dec 08 23:54	0°♎	
	8556 Jan 13 13:28	0°♎			8561 Jan 26 04:11	0°♎	
					8561 Mar 31 03:40	0°♎	
conjunction	8556 Jan 26 01:27	8°♎04'55	-0°32'17	retrograde	8561 May 01 10:56	5°♎19'56	
minimum elong	8556 Jan 26 00:33	8°♎03'28	0°32'06		8561 May 30 07:41	30°♎♎	
	8556 Feb 28 09:24	0°♎		opposition	8561 Jun 11 00:13	25°♎32'38	1°10'55
morning rise	8556 Mar 10 17:18	7°♎35'01		greatest brilliancy	8561 Jun 11 00:02	25°♎32'50	-1.3m
	8556 Apr 12 13:44	0°♎		min. Earth dist.	8561 Jun 10 12:55	25°♎43'51	0.67968 AU
	8556 May 25 02:23	0°♎		desc. node	8561 Jul 15 17:00	16°♎01'23	
	8556 Jul 05 04:46	0°♎		direct	8561 Jul 21 21:41	15°♎47'05	
	8556 Aug 14 08:01	0°♎			8561 Sep 16 03:05	0°♎	
	8556 Sep 23 09:29	0°♎			8561 Nov 13 07:27	0°♎	
asc. node	8556 Oct 29 22:32	26°♎26'26			8561 Dec 31 13:02	0°♎	
	8556 Nov 04 01:25	0°♎			8562 Feb 13 05:52	0°♎	
	8556 Dec 21 23:23	0°♎			8562 Mar 25 23:54	0°♎	
retrograde	8557 Feb 17 04:07	18°♎12'20		evening set	8562 Apr 26 00:17	23°♎51'14	
min. Earth dist.	8557 Mar 19 10:43	11°♎53'54	0.52057 AU		8562 May 03 20:57	0°♎	
greatest brilliancy	8557 Mar 25 19:29	9°♎30'41	-2.0m		8562 Jun 10 20:19	0°♎	
opposition	8557 Mar 27 06:07	8°♎58'04	5°20'43	asc. node	8562 Jun 21 14:36	8°♎31'46	
direct	8557 May 01 04:00	1°♎20'52					
	8557 Jul 25 07:39	0°♎		conjunction	8562 Jul 04 05:18	18°♎29'52	0°09'08
	8557 Sep 17 19:46	0°♎		minimum elong	8562 Jul 04 04:18	18°♎27'53	0°08'55
desc. node	8557 Oct 10 14:27	13°♎20'31		behind sun begin	8562 Jul 03 02:23	17°♎36'47	
	8557 Nov 07 06:47	0°♎		behind sun end	8562 Jul 05 06:13	19°♎18'58	
	8557 Dec 25 07:07	0°♎			8562 Jul 18 20:29	0°♎	
evening set	8558 Jan 17 03:58	14°♎49'09		max. Earth dist.	8562 Aug 21 20:30	26°♎16'19	2.38461 AU
max. Earth dist.	8558 Feb 05 08:43	27°♎32'58	2.57616 AU		8562 Aug 26 18:24	0°♎	
	8558 Feb 09 00:17	0°♎		morning rise	8562 Sep 13 09:24	13°♎12'50	
					8562 Oct 06 08:07	0°♎	
conjunction	8558 Mar 05 02:30	16°♎26'34	-1°02'21		8562 Nov 18 04:34	0°♎	
minimum elong	8558 Mar 05 01:31	16°♎24'52	1°02'18		8563 Jan 02 22:56	0°♎	
	8558 Mar 24 11:29	0°♎			8563 Feb 22 01:46	0°♎	
morning rise	8558 Apr 24 11:51	22°♎19'56			8563 Apr 25 21:49	0°♎	
	8558 May 04 21:49	0°♎		desc. node	8563 Jun 02 15:42	8°♎04'12	
	8558 Jun 13 17:36	0°♎		retrograde	8563 Jun 05 07:55	8°♎06'47	
	8558 Jul 22 13:20	0°♎			8563 Jul 12 04:55	30°♎♎	
	8558 Aug 30 04:07	0°♎		opposition	8563 Jul 14 23:16	28°♎55'36	-1°27'56
asc. node	8558 Sep 16 19:31	13°♎33'18		greatest brilliancy	8563 Jul 15 02:45	28°♎52'12	-1.4m
	8558 Oct 08 14:08	0°♎		min. Earth dist.	8563 Jul 18 06:51	27°♎37'56	0.66306 AU
	8558 Nov 19 04:08	0°♎		direct	8563 Aug 25 15:08	18°♎52'22	
	8559 Jan 04 14:45	0°♎			8563 Oct 12 02:36	0°♎	
	8559 Mar 17 16:04	0°♎			8563 Dec 08 11:48	0°♎	
retrograde	8559 Mar 28 22:16	0°♎49'01			8564 Jan 23 06:16	0°♎	
	8559 Apr 08 19:58	30°♎♎			8564 Mar 04 14:03	0°♎	
min. Earth dist.	8559 May 03 20:03	22°♎32'26	0.63076 AU		8564 Apr 12 14:19	0°♎	
opposition	8559 May 08 02:54	20°♎50'22	3°37'38	asc. node	8564 May 08 14:43	20°♎29'25	
greatest brilliancy	8559 May 07 14:18	21°♎02'53	-1.5m		8564 May 20 15:18	0°♎	
direct	8559 Jun 15 18:52	11°♎49'30			8564 Jun 27 19:08	0°♎	
	8559 Aug 20 02:57	0°♎		evening set	8564 Jul 08 16:47	8°♎27'02	
desc. node	8559 Aug 28 16:18	3°♎59'14			8564 Aug 05 23:40	0°♎	
	8559 Oct 16 21:46	0°♎					
	8559 Dec 06 02:04	0°♎		conjunction	8564 Sep 11 11:27	26°♎50'17	1°04'25
	8560 Jan 21 08:19	0°♎		minimum elong	8564 Sep 11 10:13	26°♎48'04	1°04'24
evening set	8560 Feb 28 16:35	26°♎29'35			8564 Sep 15 21:10	0°♎	
	8560 Mar 04 14:43	0°♎		max. Earth dist.	8564 Oct 20 01:43	23°♎58'30	2.52257 AU
max. Earth dist.	8560 Mar 13 12:11	6°♎23'48	2.45228 AU		8564 Oct 28 21:20	0°♎	

morning rise	8564 Nov 06 20:03	6°♌03'02		greatest brilliancy	8569 Dec 25 21:39	8°♏10'35	-3.1m
	8564 Dec 13 03:37	0°♊		asc. node	8569 Dec 29 16:54	7°♏10'23	
	8565 Jan 29 19:01	0°♊		direct	8570 Jan 24 04:01	3°♏18'29	
	8565 Mar 21 15:52	0°♊			8570 Apr 08 17:55	0°♏	
desc. node	8565 Apr 19 12:57	15°♊35'28			8570 May 28 06:42	0°♏	
	8565 May 19 23:38	0°♊			8570 Jul 14 11:27	0°♏	
retrograde	8565 Jul 14 19:58	14°♊03'43			8570 Aug 30 17:46	0°♌	
opposition	8565 Aug 21 03:36	5°♊55'39	-4°09'11		8570 Oct 17 10:06	0°♊	
greatest brilliancy	8565 Aug 22 02:51	5°♊33'54	-1.7m	evening set	8570 Nov 28 13:28	26°♊28'44	
min. Earth dist.	8565 Aug 28 02:52	3°♊19'21	0.58134 AU		8570 Dec 04 03:29	0°♊	
	8565 Sep 06 20:47	30°♊		desc. node	8570 Dec 10 04:17	3°♊48'42	
direct	8565 Sep 30 16:47	26°♊14'42		max. Earth dist.	8571 Jan 02 19:54	18°♊49'20	2.67215 AU
	8565 Oct 25 15:00	0°♊					
	8565 Dec 26 21:44	0°♊		conjunction	8571 Jan 12 02:59	24°♊45'44	-0°17'11
	8566 Feb 09 07:12	0°♊		minimum elong	8571 Jan 12 02:29	24°♊44'55	0°16'59
	8566 Mar 21 11:31	0°♊			8571 Jan 20 06:56	0°♊	
asc. node	8566 Mar 26 16:14	3°♊59'23		morning rise	8571 Feb 24 23:34	23°♊10'44	
	8566 Apr 29 05:13	0°♊			8571 Mar 07 08:01	0°♊	
	8566 Jun 07 00:14	0°♏			8571 Apr 21 00:03	0°♊	
	8566 Jul 16 21:09	0°♏			8571 Jun 03 05:49	0°♊	
	8566 Aug 27 11:29	0°♏			8571 Jul 15 05:19	0°♊	
evening set	8566 Sep 08 08:45	8°♏19'10			8571 Aug 25 09:37	0°♏	
	8566 Oct 10 01:35	0°♌			8571 Oct 05 21:47	0°♏	
				asc. node	8571 Nov 16 16:39	28°♏06'07	
conjunction	8566 Oct 30 21:32	13°♌53'22	0°56'59		8571 Nov 19 18:26	0°♏	
minimum elong	8566 Oct 30 22:47	13°♌55'25	0°57'07	retrograde	8572 Jan 30 09:24	27°♏08'28	
max. Earth dist.	8566 Nov 18 18:18	26°♌15'26	2.62627 AU	min. Earth dist.	8572 Feb 27 07:10	21°♏45'28	0.46591 AU
	8566 Nov 24 12:34	0°♊		greatest brilliancy	8572 Mar 05 04:11	19°♏20'07	-2.3m
morning rise	8566 Dec 17 13:01	14°♊48'26		opposition	8572 Mar 06 19:13	18°♏45'31	5°20'44
	8567 Jan 10 11:50	0°♊		direct	8572 Apr 08 17:56	11°♏57'31	
	8567 Feb 27 16:26	0°♊			8572 Jun 10 04:02	0°♏	
desc. node	8567 Mar 07 09:02	4°♊42'54			8572 Aug 05 21:14	0°♌	
	8567 Apr 18 09:02	0°♊			8572 Sep 26 05:10	0°♊	
	8567 Jun 10 12:29	0°♊		desc. node	8572 Oct 27 04:00	18°♊42'09	
	8567 Aug 26 04:05	0°♊			8572 Nov 14 13:17	0°♊	
retrograde	8567 Sep 08 03:39	0°♊59'43			8573 Jan 01 04:14	0°♊	
	8567 Sep 20 15:41	30°♊		evening set	8573 Jan 02 12:57	0°♊52'35	
opposition	8567 Oct 11 03:22	24°♊41'50	-5°49'16	max. Earth dist.	8573 Jan 25 16:54	15°♊56'04	2.61310 AU
greatest brilliancy	8567 Oct 12 23:08	24°♊06'01	-2.4m		8573 Feb 15 21:15	0°♊	
min. Earth dist.	8567 Oct 19 15:24	21°♊56'14	0.44875 AU				
direct	8567 Nov 16 02:37	17°♊01'47		conjunction	8573 Feb 17 02:22	0°♊48'55	-0°52'57
	8568 Jan 01 18:51	0°♊		minimum elong	8573 Feb 17 01:11	0°♊46'55	0°52'50
asc. node	8568 Feb 11 16:48	24°♊05'23			8573 Mar 31 13:51	0°♊	
	8568 Feb 20 11:45	0°♊		morning rise	8573 Apr 05 11:09	3°♊26'32	
	8568 Apr 02 16:10	0°♏			8573 May 12 08:48	0°♊	
	8568 May 13 14:58	0°♏			8573 Jun 21 14:19	0°♊	
	8568 Jun 24 05:11	0°♏			8573 Jul 30 19:30	0°♏	
	8568 Aug 06 06:26	0°♏			8573 Sep 07 19:14	0°♏	
	8568 Sep 20 00:10	0°♌		asc. node	8573 Oct 03 12:56	19°♏29'59	
evening set	8568 Oct 22 02:52	20°♌56'27			8573 Oct 17 16:43	0°♏	
	8568 Nov 05 04:25	0°♊			8573 Nov 29 07:52	0°♏	
					8574 Jan 18 22:12	0°♌	
conjunction	8568 Dec 07 16:56	20°♊46'14	0°23'24	retrograde	8574 Mar 14 11:36	15°♌51'57	
minimum elong	8568 Dec 07 17:38	20°♊47'22	0°23'36	min. Earth dist.	8574 Apr 17 08:20	8°♌16'16	0.59418 AU
max. Earth dist.	8568 Dec 11 07:04	23°♊03'08	2.67676 AU	greatest brilliancy	8574 Apr 22 05:33	6°♌21'13	-1.7m
	8568 Dec 22 05:38	0°♊		opposition	8574 Apr 23 02:29	6°♌00'39	4°27'03
morning rise	8569 Jan 20 19:32	18°♊45'42			8574 May 10 17:00	30°♊	
desc. node	8569 Jan 22 05:52	19°♊40'09		direct	8574 May 30 11:56	27°♏26'34	
	8569 Feb 07 12:28	0°♊			8574 Jun 20 19:43	0°♌	
	8569 Mar 26 14:33	0°♊			8574 Sep 01 16:48	0°♊	
	8569 May 12 09:24	0°♊		desc. node	8574 Sep 14 05:10	6°♊39'47	
	8569 Jun 28 03:25	0°♊			8574 Oct 25 08:49	0°♊	
	8569 Aug 14 21:32	0°♊			8574 Dec 13 11:01	0°♊	
	8569 Oct 07 19:50	0°♏			8575 Jan 28 10:22	0°♊	
retrograde	8569 Nov 25 17:47	13°♏15'34		evening set	8575 Feb 10 22:31	9°♊10'16	
min. Earth dist.	8569 Dec 24 08:33	8°♏35'20	0.36623 AU	max. Earth dist.	8575 Feb 25 09:58	19°♊11'22	2.50472 AU
opposition	8569 Dec 25 21:36	8°♏10'37	-0°17'48		8575 Mar 12 17:43	0°♊	

conjunction	8575 Apr 02 17:40	15° Υ 09'41	-1°06'48	greatest brilliancy	8580 Aug 05 23:14	20° \approx 42'17	-1.5m
minimum elong	8575 Apr 02 18:05	15° Υ 10'26	1°06'51	min. Earth dist.	8580 Aug 10 24:00	18° \approx 46'51	0.62070 AU
	8575 Apr 22 19:08	0° \mathcal{B}		direct	8580 Sep 15 15:56	10° \approx 58'31	
morning rise	8575 May 30 22:11	29° \mathcal{B} 01'47			8580 Nov 17 16:57	0° \mathcal{H}	
	8575 Jun 01 04:18	0° Π			8581 Jan 07 02:36	0° Υ	
	8575 Jul 09 14:13	0° \mathcal{E}			8581 Feb 18 16:55	0° \mathcal{B}	
	8575 Aug 16 20:27	0° Ω			8581 Mar 30 05:19	0° Π	
asc. node	8575 Aug 21 09:49	3° Ω 32'54		asc. node	8581 Apr 12 07:09	10° Π 10'52	
	8575 Sep 24 21:00	0° \mathcal{M}			8581 May 07 13:49	0° \mathcal{E}	
	8575 Nov 04 16:33	0° $\underline{\mathcal{L}}$			8581 Jun 15 00:52	0° Ω	
	8575 Dec 18 16:56	0° \mathcal{M}			8581 Jul 24 13:32	0° \mathcal{M}	
	8576 Feb 07 10:36	0° \mathcal{A}		evening set	8581 Aug 17 22:03	17° \mathcal{M} 52'58	
retrograde	8576 Apr 18 06:34	22° \mathcal{A} 35'23			8581 Sep 03 19:39	0° $\underline{\mathcal{L}}$	
min. Earth dist.	8576 May 26 21:12	13° \mathcal{A} 26'49	0.66837 AU				
opposition	8576 May 28 20:11	12° \mathcal{A} 40'02	2°09'43	conjunction	8581 Oct 13 10:43	27° $\underline{\mathcal{L}}$ 31'03	1°04'39
greatest brilliancy	8576 May 28 16:56	12° \mathcal{A} 43'16	-1.3m	minimum elong	8581 Oct 13 11:32	27° $\underline{\mathcal{L}}$ 32'26	1°04'45
direct	8576 Jul 08 00:33	3° \mathcal{A} 08'36			8581 Oct 17 02:34	0° \mathcal{M}	
desc. node	8576 Aug 01 06:19	6° \mathcal{A} 18'07		max. Earth dist.	8581 Nov 08 06:10	14° \mathcal{M} 49'37	2.59164 AU
	8576 Sep 29 10:18	0° \mathcal{Z}			8581 Dec 01 09:47	0° \mathcal{A}	
	8576 Nov 21 23:31	0° \approx		morning rise	8581 Dec 02 16:45	0° \mathcal{A} 50'13	
	8577 Jan 08 04:52	0° \mathcal{H}			8582 Jan 17 12:02	0° \mathcal{Z}	
	8577 Feb 20 15:57	0° Υ			8582 Mar 07 09:22	0° \approx	
evening set	8577 Apr 01 01:17	28° Υ 57'27		desc. node	8582 Mar 23 23:47	9° \approx 52'18	
	8577 Apr 02 10:25	0° \mathcal{B}			8582 Apr 28 03:26	0° \mathcal{H}	
max. Earth dist.	8577 May 03 04:16	23° \mathcal{B} 35'19	2.37499 AU		8582 Jun 28 11:13	0° Υ	
	8577 May 11 09:32	0° Π		retrograde	8582 Aug 14 23:03	10° Υ 46'55	
conjunction	8577 Jun 03 17:20	18° Π 21'16	-0°24'31	opposition	8582 Sep 18 20:56	3° Υ 38'56	-5°29'58
minimum elong	8577 Jun 03 19:43	18° Π 25'58	0°24'41	greatest brilliancy	8582 Sep 20 12:32	3° Υ 04'05	-2.1m
	8577 Jun 18 10:32	0° \mathcal{E}		min. Earth dist.	8582 Sep 27 09:23	0° Υ 39'37	0.50396 AU
asc. node	8577 Jul 08 08:49	15° \mathcal{E} 46'13			8582 Sep 29 08:29	30° \mathcal{R} \mathcal{H}	
	8577 Jul 26 10:51	0° Ω		direct	8582 Oct 27 05:32	24° \mathcal{H} 53'22	
morning rise	8577 Aug 15 20:39	15° Ω 52'34			8582 Nov 24 16:12	0° Υ	
	8577 Sep 03 07:29	0° \mathcal{M}			8583 Jan 21 05:40	0° \mathcal{B}	
	8577 Oct 13 19:48	0° $\underline{\mathcal{L}}$		asc. node	8583 Feb 28 08:54	26° \mathcal{B} 27'19	
	8577 Nov 25 17:41	0° \mathcal{M}			8583 Mar 05 05:17	0° Π	
	8578 Jan 11 00:39	0° \mathcal{A}			8583 Apr 14 06:55	0° \mathcal{E}	
	8578 Mar 04 10:20	0° \mathcal{Z}			8583 May 24 00:27	0° Ω	
retrograde	8578 May 22 10:54	25° \mathcal{Z} 29'26			8583 Jul 03 16:46	0° \mathcal{M}	
desc. node	8578 Jun 19 05:30	20° \mathcal{Z} 38'21			8583 Aug 15 00:35	0° $\underline{\mathcal{L}}$	
opposition	8578 Jul 01 14:28	16° \mathcal{Z} 01'36	-0°25'39	evening set	8583 Sep 28 04:51	0° \mathcal{M}	
greatest brilliancy	8578 Jul 01 14:59	16° \mathcal{Z} 01'05	-1.3m		8583 Oct 06 23:56	5° \mathcal{M} 49'57	
min. Earth dist.	8578 Jul 03 10:37	15° \mathcal{Z} 18'09	0.67741 AU		8583 Nov 13 00:33	0° \mathcal{A}	
direct	8578 Aug 12 03:29	6° \mathcal{Z} 01'58		conjunction	8583 Nov 24 07:29	7° \mathcal{A} 16'00	0°37'58
	8578 Oct 27 01:03	0° \approx		minimum elong	8583 Nov 24 08:34	7° \mathcal{A} 17'44	0°38'08
	8578 Dec 17 19:46	0° \mathcal{H}		max. Earth dist.	8583 Dec 03 13:48	13° \mathcal{A} 12'00	2.66362 AU
	8579 Jan 31 11:33	0° Υ			8583 Dec 29 23:11	0° \mathcal{Z}	
	8579 Mar 13 11:45	0° \mathcal{B}		morning rise	8584 Jan 08 08:51	5° \mathcal{Z} 57'20	
	8579 Apr 21 09:39	0° Π		desc. node	8584 Feb 08 20:37	25° \mathcal{Z} 49'43	
asc. node	8579 May 26 07:37	27° Π 34'18			8584 Feb 15 11:39	0° \approx	
	8579 May 29 09:10	0° \mathcal{E}			8584 Apr 03 07:16	0° \mathcal{H}	
evening set	8579 Jun 10 02:17	9° \mathcal{E} 16'33			8584 May 21 15:13	0° Υ	
	8579 Jul 06 10:35	0° Ω			8584 Jul 10 15:35	0° \mathcal{B}	
	8579 Aug 14 11:16	0° \mathcal{M}			8584 Sep 06 06:03	0° Π	
conjunction	8579 Aug 18 17:42	3° \mathcal{M} 12'41	0°52'01	retrograde	8584 Oct 23 23:48	11° Π 47'44	
minimum elong	8579 Aug 18 14:45	3° \mathcal{M} 07'10	0°51'53	opposition	8584 Nov 23 00:45	6° Π 45'29	-3°48'23
	8579 Sep 24 04:14	0° $\underline{\mathcal{L}}$		greatest brilliancy	8584 Nov 23 19:42	6° Π 32'30	-2.9m
max. Earth dist.	8579 Oct 05 04:32	7° $\underline{\mathcal{L}}$ 51'54	2.46932 AU	min. Earth dist.	8584 Nov 27 09:14	5° Π 33'56	0.37858 AU
morning rise	8579 Oct 19 16:39	18° $\underline{\mathcal{L}}$ 03'23		direct	8584 Dec 24 04:30	1° Π 15'26	
	8579 Nov 06 00:50	0° \mathcal{M}		asc. node	8585 Jan 15 09:26	4° Π 32'01	
	8579 Dec 21 08:26	0° \mathcal{A}			8585 Mar 09 16:54	0° \mathcal{E}	
	8580 Feb 07 13:54	0° \mathcal{Z}			8585 Apr 25 05:13	0° Ω	
	8580 Mar 31 17:11	0° \approx			8585 Jun 08 16:19	0° \mathcal{M}	
desc. node	8580 May 06 02:55	16° \approx 43'50			8585 Jul 23 13:58	0° $\underline{\mathcal{L}}$	
retrograde	8580 Jun 27 23:22	29° \approx 32'17			8585 Sep 07 13:25	0° \mathcal{M}	
opposition	8580 Aug 05 09:34	20° \approx 55'21	-3°07'46	evening set	8585 Oct 24 12:16	0° \mathcal{A}	
					8585 Nov 14 10:54	13° \mathcal{A} 16'04	

	8585 Dec 10 21:26	0°♁			8590 Aug 24 22:11	0°♁
max. Earth dist.	8585 Dec 24 23:31	8°♁55'54	2.68065 AU	asc. node	8590 Sep 07 04:31	10°♁15'10
desc. node	8585 Dec 26 17:50	10°♁03'04			8590 Oct 03 03:22	0°♁
					8590 Nov 13 07:38	0°♁
conjunction	8585 Dec 29 10:19	11°♁45'26	-0°01'26		8590 Dec 28 11:27	0°♁
minimum elong	8585 Dec 29 10:15	11°♁45'21	0°01'14		8591 Feb 23 11:27	0°♁
behind sun begin	8585 Dec 28 15:56	11°♁16'17		retrograde	8591 Apr 05 20:44	9°♁17'31
behind sun end	8585 Dec 30 04:34	12°♁14'25		min. Earth dist.	8591 May 12 18:41	0°♁40'58 0.64675 AU
	8586 Jan 27 00:44	0°♁			8591 May 14 11:52	30°♁
morning rise	8586 Feb 11 00:03	9°♁37'13		opposition	8591 May 16 05:34	29°♁18'27 3°06'20
	8586 Mar 14 09:21	0°♁		greatest brilliancy	8591 May 15 20:55	29°♁27'04 -1.4m
	8586 Apr 28 16:35	0°♁		direct	8591 Jun 24 11:32	20°♁05'21
	8586 Jun 11 21:33	0°♁			8591 Aug 09 03:21	0°♁
	8586 Jul 25 04:30	0°♁		desc. node	8591 Aug 18 18:53	3°♁49'49
	8586 Sep 06 05:04	0°♁			8591 Oct 10 18:52	0°♁
	8586 Oct 21 03:19	0°♁			8591 Nov 30 23:00	0°♁
asc. node	8586 Dec 03 08:20	23°♁29'28			8592 Jan 16 13:12	0°♁
	8586 Dec 23 02:49	0°♁			8592 Feb 28 21:31	0°♁
retrograde	8587 Jan 08 10:56	1°♁54'06		evening set	8592 Mar 10 15:23	7°♁44'08
	8587 Jan 24 17:24	30°♁		max. Earth dist.	8592 Mar 26 03:42	19°♁06'15 2.42249 AU
min. Earth dist.	8587 Feb 03 15:56	27°♁18'04	0.41327 AU		8592 Apr 09 18:00	0°♁
greatest brilliancy	8587 Feb 10 03:14	25°♁14'29	-2.7m			
opposition	8587 Feb 11 10:42	24°♁49'14	4°22'26	conjunction	8592 May 07 06:40	21°♁00'58 -0°50'01
direct	8587 Mar 14 09:47	18°♁57'57		minimum elong	8592 May 07 09:23	21°♁06'12 0°50'08
	8587 Apr 28 23:27	0°♁			8592 May 18 20:21	0°♁
	8587 Jun 26 13:32	0°♁			8592 Jun 26 00:10	0°♁
	8587 Aug 16 13:54	0°♁		morning rise	8592 Jul 15 06:56	15°♁13'40
	8587 Oct 05 00:41	0°♁		asc. node	8592 Jul 25 00:59	22°♁54'21
desc. node	8587 Nov 13 17:01	24°♁28'24			8592 Aug 03 02:03	0°♁
	8587 Nov 22 13:53	0°♁			8592 Sep 10 22:58	0°♁
evening set	8587 Dec 20 10:17	17°♁31'43			8592 Oct 21 11:52	0°♁
	8588 Jan 08 22:46	0°♁			8592 Dec 03 14:51	0°♁
max. Earth dist.	8588 Jan 17 02:52	5°♁16'15	2.64275 AU		8593 Jan 19 20:07	0°♁
					8593 Mar 17 23:19	0°♁
conjunction	8588 Feb 03 04:41	16°♁23'52	-0°40'30	retrograde	8593 May 09 01:11	13°♁00'07
minimum elong	8588 Feb 03 03:37	16°♁22'07	0°40'20	opposition	8593 Jun 18 12:01	3°♁18'59 0°35'35
	8588 Feb 23 17:56	0°♁		greatest brilliancy	8593 Jun 18 12:25	3°♁18'35 -1.3m
morning rise	8588 Mar 19 13:58	16°♁46'31		min. Earth dist.	8593 Jun 18 20:33	3°♁10'32 0.68162 AU
	8588 Apr 07 18:14	0°♁			8593 Jun 27 01:07	30°♁
	8588 May 20 00:34	0°♁		desc. node	8593 Jul 05 19:10	27°♁03'01
	8588 Jun 29 18:49	0°♁		direct	8593 Jul 29 16:13	23°♁27'21
	8588 Aug 08 12:53	0°♁			8593 Sep 03 14:58	0°♁
	8588 Sep 17 02:17	0°♁			8593 Nov 07 00:34	0°♁
asc. node	8588 Oct 20 07:18	24°♁35'00			8593 Dec 26 06:43	0°♁
	8588 Oct 27 20:15	0°♁			8594 Feb 08 07:13	0°♁
	8588 Dec 11 17:34	0°♁			8594 Mar 21 03:41	0°♁
retrograde	8589 Feb 26 21:06	29°♁14'35			8594 Apr 29 01:01	0°♁
min. Earth dist.	8589 Mar 30 11:15	22°♁26'39	0.54887 AU	evening set	8594 May 11 12:56	9°♁49'53
greatest brilliancy	8589 Apr 05 08:45	20°♁11'03	-1.9m		8594 Jun 06 00:09	0°♁
opposition	8589 Apr 06 14:46	19°♁42'10	5°06'33	asc. node	8594 Jun 11 23:57	4°♁45'02
direct	8589 May 12 12:02	11°♁41'58			8594 Jul 14 00:10	0°♁
	8589 Jul 16 00:10	0°♁				
	8589 Sep 11 18:46	0°♁		conjunction	8594 Jul 21 07:58	5°♁43'18 0°27'28
desc. node	8589 Sep 30 17:40	10°♁48'40		minimum elong	8594 Jul 21 05:15	5°♁38'00 0°27'15
	8589 Nov 02 04:23	0°♁			8594 Aug 21 22:06	0°♁
	8589 Dec 20 13:11	0°♁		max. Earth dist.	8594 Sep 12 17:38	16°♁18'38 2.41346 AU
evening set	8590 Jan 25 20:29	23°♁38'07		morning rise	8594 Sep 27 13:37	27°♁09'43
	8590 Feb 04 08:48	0°♁			8594 Oct 01 11:51	0°♁
max. Earth dist.	8590 Feb 12 02:37	5°♁14'04	2.55254 AU		8594 Nov 13 06:53	0°♁
					8594 Dec 28 19:06	0°♁
conjunction	8590 Mar 14 21:04	26°♁31'36	-1°05'47		8595 Feb 15 23:40	0°♁
minimum elong	8590 Mar 14 20:25	26°♁30'28	1°05'46		8595 Apr 14 10:15	0°♁
	8590 Mar 19 18:59	0°♁		desc. node	8595 May 23 18:02	13°♁37'42
	8590 Apr 30 02:34	0°♁		retrograde	8595 Jun 13 15:22	16°♁02'18
morning rise	8590 May 06 13:07	4°♁47'52		opposition	8595 Jul 22 21:49	7°♁02'14 -2°04'47
	8590 Jun 08 18:44	0°♁		greatest brilliancy	8595 Jul 23 04:16	6°♁55'59 -1.4m
	8590 Jul 17 10:57	0°♁		min. Earth dist.	8595 Jul 27 01:11	5°♁25'49 0.65062 AU

	8595 Aug 11 21:07	30° $\text{R}\overline{\text{C}}$		minimum elong	8600 Dec 16 17:18	28° $\text{A}\overline{\text{A}}$ 48'25	0°14'36
direct	8595 Sep 02 12:09	26° $\overline{\text{C}}\text{59}'24$		behind sun begin	8600 Dec 16 09:48	28° $\text{A}\overline{\text{A}}$ 36'32	
	8595 Sep 25 11:05	0° \approx		behind sun end	8600 Dec 17 00:48	29° $\text{A}\overline{\text{A}}$ 00'18	
	8595 Dec 01 15:45	0° H		max. Earth dist.	8600 Dec 17 07:43	29° $\text{A}\overline{\text{A}}$ 11'17	2.68059 AU
	8596 Jan 17 14:39	0° Y			8600 Dec 18 14:26	0° $\overline{\text{C}}$	
	8596 Feb 28 07:48	0° B		desc. node	8601 Jan 13 08:22	16° $\overline{\text{C}}\text{20}'37$	
	8596 Apr 07 11:55	0° II		morning rise	8601 Jan 29 11:26	26° $\overline{\text{C}}\text{36}'01$	
asc. node	8596 Apr 29 00:02	16° $\text{II}\text{52}'39$			8601 Feb 03 19:28	0° \approx	
	8596 May 15 15:12	0° C			8601 Mar 22 14:27	0° H	
	8596 Jun 22 20:59	0° Ω			8601 May 07 18:32	0° Y	
evening set	8596 Jul 24 03:42	23° $\Omega\text{59}'20$			8601 Jun 22 09:56	0° B	
	8596 Aug 01 03:21	0° np			8601 Aug 06 23:38	0° II	
	8596 Sep 11 02:41	0° $\underline{\text{A}}$			8601 Sep 23 07:14	0° C	
					8601 Nov 27 10:33	0° Ω	
conjunction	8596 Sep 23 19:21	9° $\underline{\text{A}}\text{00}'18$	1°06'44	retrograde	8601 Dec 13 23:19	1° $\Omega\text{49}'41$	
minimum elong	8596 Sep 23 19:04	8° $\underline{\text{A}}\text{59}'47$	1°06'46	asc. node	8601 Dec 21 02:49	1° $\Omega\text{28}'12$	
	8596 Oct 24 03:54	0° M			8601 Dec 30 09:53	30° $\text{R}\overline{\text{C}}$	
max. Earth dist.	8596 Oct 27 14:05	2° $\text{M}\text{19}'25$	2.54906 AU	min. Earth dist.	8602 Jan 09 13:25	27° $\text{C}\text{28}'34$	0.37493 AU
morning rise	8596 Nov 16 15:51	15° $\text{M}\text{46}'02$		opposition	8602 Jan 14 02:01	26° $\text{C}\text{12}'57$	1°48'04
	8596 Dec 08 09:05	0° A		greatest brilliancy	8602 Jan 13 17:06	26° $\text{C}\text{19}'11$	-3.0m
	8597 Jan 24 17:40	0° $\overline{\text{C}}$					
	8597 Mar 15 16:27	0° \approx					
desc. node	8597 Apr 09 14:57	14° $\approx\text{05}'55$					
	8597 May 10 01:34	0° H					
retrograde	8597 Jul 25 08:23	23° $\text{H}\text{28}'32$					
opposition	8597 Aug 30 21:23	15° $\text{H}\text{39}'41$	-4°42'17				
greatest brilliancy	8597 Sep 01 02:49	15° $\text{H}\text{12}'36$	-1.8m				
min. Earth dist.	8597 Sep 07 12:44	12° $\text{H}\text{51}'12$	0.55550 AU				
direct	8597 Oct 09 19:42	6° $\text{H}\text{13}'17$					
	8597 Dec 18 04:06	0° Y					
	8598 Feb 02 16:51	0° B					
	8598 Mar 15 13:24	0° II					
asc. node	8598 Mar 16 23:55	1° $\text{II}\text{05}'26$					
	8598 Apr 23 15:28	0° C					
	8598 Jun 01 16:40	0° Ω					
	8598 Jul 11 18:50	0° np					
	8598 Aug 22 13:58	0° $\underline{\text{A}}$					
evening set	8598 Sep 19 07:45	19° $\underline{\text{A}}\text{10}'39$					
	8598 Oct 05 07:48	0° M					
conjunction	8598 Nov 09 01:59	22° $\text{M}\text{59}'27$	0°50'46				
minimum elong	8598 Nov 09 03:16	23° $\text{M}\text{01}'32$	0°50'55				
	8598 Nov 19 20:45	0° A					
max. Earth dist.	8598 Nov 24 08:28	2° $\text{A}\text{54}'13$	2.64193 AU				
morning rise	8598 Dec 25 14:46	22° $\text{A}\text{55}'33$					
	8599 Jan 05 18:37	0° $\overline{\text{C}}$					
	8599 Feb 22 15:59	0° \approx					
desc. node	8599 Feb 25 11:20	1° $\approx\text{44}'31$					
	8599 Apr 12 12:53	0° H					
	8599 Jun 02 09:04	0° Y					
	8599 Jul 30 05:10	0° B					
retrograde	8599 Sep 23 14:39	14° $\text{B}\text{34}'43$					
opposition	8599 Oct 25 12:30	8° $\text{B}\text{47}'01$	-5°34'05				
greatest brilliancy	8599 Oct 27 04:37	8° $\text{B}\text{16}'06$	-2.6m				
min. Earth dist.	8599 Nov 02 08:30	6° $\text{B}\text{23}'33$	0.41954 AU				
direct	8599 Nov 28 18:50	1° $\text{B}\text{53}'19$					
asc. node	8600 Feb 02 01:48	25° $\text{B}\text{03}'32$					
	8600 Feb 10 06:19	0° II					
	8600 Mar 27 00:53	0° C					
	8600 May 08 03:01	0° Ω					
	8600 Jun 19 10:04	0° np					
	8600 Aug 01 23:15	0° $\underline{\text{A}}$					
	8600 Sep 16 01:25	0° M					
evening set	8600 Oct 31 20:17	29° $\text{M}\text{36}'14$					
	8600 Nov 01 11:08	0° A					
conjunction	8600 Dec 16 16:51	28° $\text{A}\text{47}'43$	0°14'24				