

conjunction	3100 Feb 22 03:44	2° H 59'20	-1°04'30		3104 Sep 14 00:41	0° M	
minimum elong	3100 Feb 22 04:23	3° H 00'36	1°04'30		3104 Oct 31 17:32	0° L	
	3100 Mar 28 08:46	0° Y			3104 Dec 20 10:11	0° M	
morning rise	3100 May 03 19:06	28° Y 30'29			3105 Feb 12 11:19	0° J	
	3100 May 05 17:24	0° B		desc. node	3105 Apr 27 23:21	26° J 43'55	
	3100 Jun 14 07:01	0° II		retrograde	3105 May 06 10:57	27° J 09'45	
asc. node	3100 Jul 09 05:33	18° II 12'56		opposition	3105 Jun 10 14:22	19° J 58'26	-2°02'24
	3100 Jul 25 19:55	0° E		greatest brilliancy	3105 Jun 11 04:56	19° J 45'37	-2.1m
	3100 Sep 08 02:22	0° O		min. Earth dist.	3105 Jun 18 22:40	17° J 02'54	0.50826 AU
	3100 Oct 26 10:21	0° M		direct	3105 Jul 19 04:23	11° J 09'43	
	3100 Dec 23 21:29	0° L			3105 Sep 16 14:50	0° B	
retrograde	3101 Feb 11 21:27	12° L 01'06			3105 Nov 03 07:27	0° \approx	
opposition	3101 Mar 23 17:25	2° L 33'17	3°45'11		3105 Dec 14 15:05	0° H	
greatest brilliancy	3101 Mar 23 22:46	2° L 27'58	-1.3m		3106 Jan 23 08:44	0° Y	
min. Earth dist.	3101 Mar 25 10:37	1° L 52'27	0.67509 AU	asc. node	3106 Mar 01 01:58	27° Y 35'05	
	3101 Mar 30 05:41	30° R M			3106 Mar 04 08:03	0° B	
direct	3101 May 03 23:45	22° M 35'17			3106 Apr 14 13:26	0° II	
	3101 Jun 11 05:46	0° L			3106 May 27 12:57	0° E	
desc. node	3101 Jul 24 01:17	19° L 10'01		evening set	3106 Jun 27 05:27	20° E 40'33	
	3101 Aug 12 16:19	0° M			3106 Jul 11 07:52	0° O	
	3101 Sep 29 19:15	0° J					
	3101 Nov 11 20:32	0° B		conjunction	3106 Aug 15 20:33	23° O 06'49	1°08'06
	3101 Dec 21 23:13	0° \approx		minimum elong	3106 Aug 15 20:16	23° O 06'21	1°08'05
	3102 Jan 29 10:51	0° H		max. Earth dist.	3106 Aug 25 17:19	29° O 27'23	2.65744 AU
evening set	3102 Feb 27 21:21	23° H 16'21			3106 Aug 26 13:40	0° M	
	3102 Mar 08 09:48	0° Y		morning rise	3106 Sep 30 22:02	22° M 32'07	
	3102 Apr 15 19:35	0° B			3106 Oct 12 16:45	0° L	
					3106 Nov 29 05:31	0° M	
conjunction	3102 May 07 01:19	16° B 12'17	-0°13'22		3107 Jan 16 02:39	0° J	
minimum elong	3102 May 07 02:29	16° B 14'30	0°13'21		3107 Mar 06 00:04	0° B	
behind sun begin	3102 May 06 10:50	15° B 44'57		desc. node	3107 Mar 15 22:33	5° B 56'09	
behind sun end	3102 May 07 18:08	16° B 44'01			3107 Apr 27 10:08	0° \approx	
	3102 May 25 12:18	0° II		retrograde	3107 Jul 14 19:49	26° \approx 31'50	
asc. node	3102 May 27 04:58	1° II 15'06		opposition	3107 Aug 14 07:50	21° \approx 25'13	-6°37'42
max. Earth dist.	3102 Jun 24 19:34	22° II 00'24	2.46154 AU	greatest brilliancy	3107 Aug 15 09:41	21° \approx 07'17	-2.8m
	3102 Jul 06 02:38	0° E		min. Earth dist.	3107 Aug 18 21:08	20° \approx 09'47	0.38675 AU
morning rise	3102 Jul 09 08:22	2° E 16'19		direct	3107 Sep 14 22:19	15° \approx 46'48	
	3102 Aug 18 23:36	0° O			3107 Nov 03 13:26	0° H	
	3102 Oct 04 09:36	0° M			3107 Dec 24 03:03	0° Y	
	3102 Nov 23 03:35	0° L		asc. node	3108 Jan 17 01:02	15° Y 55'07	
	3103 Jan 19 15:40	0° M			3108 Feb 06 19:10	0° B	
retrograde	3103 Mar 21 07:25	16° M 16'02			3108 Mar 21 23:23	0° II	
opposition	3103 Apr 28 13:25	7° M 38'24	1°40'42		3108 May 06 00:16	0° E	
greatest brilliancy	3103 Apr 28 22:08	7° M 30'01	-1.5m		3108 Jun 21 04:45	0° O	
min. Earth dist.	3103 May 04 00:45	5° M 32'16	0.62100 AU	evening set	3108 Aug 06 05:28	29° O 21'47	
	3103 May 21 01:54	30° R L			3108 Aug 07 05:32	0° M	
direct	3103 Jun 08 17:40	27° L 41'48		max. Earth dist.	3108 Sep 17 02:17	25° M 56'30	2.67661 AU
desc. node	3103 Jun 10 23:44	27° L 43'44					
	3103 Jun 28 12:13	0° M		conjunction	3108 Sep 21 04:32	28° M 32'47	0°59'29
	3103 Sep 04 05:56	0° J		minimum elong	3108 Sep 21 05:28	28° M 34'16	0°59'28
	3103 Oct 20 10:59	0° B			3108 Sep 23 11:20	0° L	
	3103 Nov 30 14:43	0° \approx		morning rise	3108 Nov 04 08:52	26° L 50'58	
	3104 Jan 08 13:45	0° H			3108 Nov 09 05:53	0° M	
	3104 Feb 15 21:27	0° Y			3108 Dec 25 02:50	0° J	
	3104 Mar 25 17:06	0° B		desc. node	3109 Jan 30 21:19	24° J 32'46	
asc. node	3104 Apr 13 04:29	13° B 57'04			3109 Feb 07 23:17	0° B	
	3104 May 04 21:11	0° II			3109 Mar 23 21:47	0° \approx	
evening set	3104 May 06 13:34	1° II 13'42			3109 May 06 07:35	0° H	
	3104 Jun 15 22:20	0° E			3109 Jun 19 08:22	0° Y	
					3109 Aug 07 19:35	0° B	
conjunction	3104 Jul 03 07:53	12° E 00'06	0°46'23	retrograde	3109 Sep 28 19:47	15° B 45'46	
minimum elong	3104 Jul 03 06:04	11° E 56'59	0°46'23	min. Earth dist.	3109 Oct 25 07:03	11° B 07'55	0.40973 AU
	3104 Jul 30 00:40	0° O		opposition	3109 Nov 01 14:26	8° B 50'57	-2°04'42
max. Earth dist.	3104 Jul 30 17:53	0° O 28'37	2.58368 AU	greatest brilliancy	3109 Nov 01 02:41	9° B 00'10	-2.7m
morning rise	3104 Aug 24 01:32	16° O 28'15		direct	3109 Dec 02 09:11	3° B 06'06	

asc. node	3109 Dec 04 01:33	3°♄07'13		minimum elong	3115 Jan 27 23:28	6°♊45'44	1°00'57
	3110 Feb 18 12:18	0°♈			3115 Feb 26 20:35	0°♈	
	3110 Apr 11 22:58	0°♌		morning rise	3115 Apr 03 22:25	28°♈23'42	
	3110 May 31 13:10	0°♍			3115 Apr 05 23:21	0°♍	
	3110 Jul 19 07:36	0°♎			3115 May 14 09:11	0°♄	
	3110 Sep 05 06:43	0°♎			3115 Jun 22 23:11	0°♈	
evening set	3110 Sep 12 05:32	4°♎24'27		asc. node	3115 Jul 26 22:32	24°♈37'11	
max. Earth dist.	3110 Oct 10 11:03	22°♎30'36	2.64147 AU		3115 Aug 03 14:19	0°♌	
	3110 Oct 21 23:27	0°♍			3115 Sep 17 07:21	0°♍	
					3115 Nov 06 11:02	0°♎	
conjunction	3110 Oct 27 15:46	3°♍43'09	0°28'24	retrograde	3116 Jan 30 10:05	29°♎22'37	
minimum elong	3110 Oct 27 16:38	3°♍44'34	0°28'24	opposition	3116 Mar 10 13:22	19°♎41'22	4°13'05
	3110 Dec 06 00:33	0°♈		greatest brilliancy	3116 Mar 10 13:46	19°♎40'58	-1.3m
morning rise	3110 Dec 12 04:10	4°♈11'24		min. Earth dist.	3116 Mar 10 18:13	19°♎36'31	0.67841 AU
desc. node	3110 Dec 18 20:05	8°♈45'19		direct	3116 Apr 20 10:23	9°♎51'42	
	3111 Jan 18 07:26	0°♄			3116 Jun 28 09:55	0°♎	
	3111 Feb 28 23:31	0°♊		desc. node	3116 Aug 09 17:08	22°♎38'06	
	3111 Apr 10 09:31	0°♈			3116 Aug 22 02:51	0°♍	
	3111 May 20 04:09	0°♍			3116 Oct 07 21:05	0°♈	
	3111 Jun 29 07:53	0°♄			3116 Nov 19 13:03	0°♄	
	3111 Aug 10 18:13	0°♈			3116 Dec 29 13:31	0°♊	
	3111 Sep 30 04:48	0°♌		evening set	3117 Jan 30 17:30	25°♊01'57	
asc. node	3111 Oct 22 00:24	9°♌06'51			3117 Feb 06 00:52	0°♈	
retrograde	3111 Nov 19 05:31	14°♌11'45			3117 Mar 15 23:27	0°♍	
min. Earth dist.	3111 Dec 20 13:03	7°♌29'11	0.54043 AU				
opposition	3111 Dec 27 18:10	4°♌43'00	3°05'06	conjunction	3117 Apr 08 19:50	18°♍44'17	-0°40'57
greatest brilliancy	3111 Dec 26 21:26	5°♌02'57	-2.0m	minimum elong	3117 Apr 08 23:07	18°♍50'41	0°40'56
	3112 Jan 10 10:03	30°♈♈			3117 Apr 23 07:53	0°♄	
direct	3112 Feb 01 04:57	26°♈48'18		max. Earth dist.	3117 May 29 22:54	27°♈47'39	2.40743 AU
	3112 Feb 24 21:33	0°♌			3117 Jun 01 22:10	0°♈	
	3112 May 05 03:45	0°♍		asc. node	3117 Jun 12 21:07	8°♈04'12	
	3112 Jun 27 15:11	0°♎		morning rise	3117 Jun 16 09:28	10°♈38'13	
	3112 Aug 16 09:49	0°♎			3117 Jul 13 10:20	0°♌	
	3112 Oct 02 15:34	0°♍			3117 Aug 26 08:00	0°♍	
evening set	3112 Oct 19 04:02	10°♍52'18			3117 Oct 12 04:30	0°♎	
desc. node	3112 Nov 04 18:39	22°♍00'51			3117 Dec 02 16:46	0°♎	
max. Earth dist.	3112 Nov 06 04:39	22°♍58'29	2.55470 AU		3118 Feb 11 19:51	0°♍	
	3112 Nov 16 11:28	0°♈		retrograde	3118 Mar 06 00:53	2°♍42'53	
					3118 Mar 26 15:10	30°♈♎	
conjunction	3112 Dec 06 07:26	13°♈47'27	-0°18'12	opposition	3118 Apr 14 01:45	23°♎42'11	2°38'33
minimum elong	3112 Dec 06 06:41	13°♈46'07	0°18'12	greatest brilliancy	3118 Apr 14 11:21	23°♎32'49	-1.4m
	3112 Dec 29 00:55	0°♄		min. Earth dist.	3118 Apr 18 02:27	22°♎07'50	0.65011 AU
morning rise	3113 Jan 26 22:49	21°♄13'05		direct	3118 May 25 12:16	13°♎40'04	
	3113 Feb 07 16:15	0°♊		desc. node	3118 Jun 27 15:48	19°♎33'59	
	3113 Mar 18 22:41	0°♈			3118 Jul 23 12:55	0°♍	
	3113 Apr 26 13:23	0°♍			3118 Sep 15 01:05	0°♈	
	3113 Jun 04 09:02	0°♄			3118 Oct 29 10:57	0°♄	
	3113 Jul 14 10:54	0°♈			3118 Dec 09 00:37	0°♊	
	3113 Aug 26 05:41	0°♌			3119 Jan 16 16:49	0°♈	
asc. node	3113 Sep 07 22:41	8°♌20'56			3119 Feb 23 19:17	0°♍	
	3113 Oct 13 22:33	0°♍			3119 Apr 03 09:25	0°♄	
retrograde	3113 Dec 26 20:56	25°♍06'07		evening set	3119 Apr 12 16:41	7°♄06'08	
min. Earth dist.	3114 Feb 01 06:57	16°♍36'13	0.64064 AU	asc. node	3119 Apr 30 19:49	20°♄45'14	
opposition	3114 Feb 04 23:16	15°♍07'50	4°33'08		3119 May 13 07:25	0°♈	
greatest brilliancy	3114 Feb 04 08:32	15°♍22'35	-1.4m				
direct	3114 Mar 15 20:22	5°♍58'11		conjunction	3119 Jun 14 00:04	22°♈52'40	0°27'37
	3114 Jun 01 08:25	0°♎		minimum elong	3119 Jun 13 22:25	22°♈49'45	0°27'36
	3114 Jul 26 13:55	0°♎			3119 Jun 24 02:51	0°♌	
	3114 Sep 13 12:01	0°♍		max. Earth dist.	3119 Jul 19 17:03	17°♌39'05	2.54098 AU
desc. node	3114 Sep 22 17:33	5°♍57'06			3119 Aug 07 01:19	0°♍	
	3114 Oct 28 16:55	0°♈		morning rise	3119 Aug 08 11:26	0°♍56'48	
evening set	3114 Dec 02 18:51	24°♈44'16			3119 Sep 22 02:33	0°♎	
	3114 Dec 10 00:46	0°♄			3119 Nov 09 07:42	0°♎	
max. Earth dist.	3114 Dec 18 21:35	6°♄30'31	2.42887 AU		3119 Dec 30 17:46	0°♍	
	3115 Jan 19 03:50	0°♊			3120 Mar 01 11:24	0°♈	
				retrograde	3120 Apr 16 06:38	10°♈05'29	
conjunction	3115 Jan 28 00:59	6°♊48'39	-1°00'58	desc. node	3120 May 14 14:02	5°♈09'24	

opposition	3120 May 22 20:49	2°♊14'13	-0°21'42			3125 Jul 26 12:20	0°♎	
greatest brilliancy	3120 May 22 23:14	2°♊11'59	-1.9m	evening set		3125 Aug 28 23:15	21°♎02'37	
	3120 May 28 22:12	30°♎				3125 Sep 12 02:38	0°♌	
min. Earth dist.	3120 May 30 07:46	29°♎29'33	0.55836 AU	max. Earth dist.		3125 Oct 01 03:39	12°♌09'03	2.66153 AU
direct	3120 Jul 01 21:23	22°♎46'16						
	3120 Aug 06 06:51	0°♊		conjunction		3125 Oct 13 06:24	19°♌56'30	0°42'43
	3120 Oct 02 01:07	0°♊		minimum elong		3125 Oct 13 07:28	19°♌58'13	0°42'42
	3120 Nov 14 11:53	0°♊				3125 Oct 28 18:37	0°♎	
	3120 Dec 24 10:08	0°♋		morning rise		3125 Nov 26 20:25	19°♎08'25	
	3121 Feb 01 08:46	0°♎				3125 Dec 13 01:49	0°♊	
	3121 Mar 12 17:16	0°♋		desc. node		3126 Jan 04 11:07	15°♊12'43	
asc. node	3121 Mar 17 19:29	3°♋49'18				3126 Jan 25 20:27	0°♊	
	3121 Apr 22 09:31	0°♎				3126 Mar 09 04:49	0°♊	
	3121 Jun 03 21:49	0°♌				3126 Apr 19 09:55	0°♋	
evening set	3121 Jun 08 20:50	3°♌24'44				3126 May 30 02:54	0°♎	
	3121 Jul 18 08:12	0°♎				3126 Jul 10 14:59	0°♋	
						3126 Aug 25 08:56	0°♎	
conjunction	3121 Jul 31 01:23	8°♎22'26	1°03'51	retrograde		3126 Nov 01 11:23	24°♎34'11	
minimum elong	3121 Jul 31 00:25	8°♎20'52	1°03'51	asc. node		3126 Nov 07 16:49	24°♎16'39	
max. Earth dist.	3121 Aug 16 05:33	18°♎55'03	2.63485 AU	min. Earth dist.		3126 Nov 30 13:05	18°♎43'03	0.48849 AU
	3121 Sep 02 09:55	0°♎		opposition		3126 Dec 08 15:36	15°♎45'29	1°39'50
morning rise	3121 Sep 16 18:59	9°♎11'48		greatest brilliancy		3126 Dec 08 02:16	15°♎57'42	-2.3m
	3121 Oct 19 15:41	0°♌		direct		3127 Jan 11 09:16	8°♎34'55	
	3121 Dec 06 18:30	0°♎				3127 Mar 22 01:00	0°♌	
	3122 Jan 25 03:34	0°♊				3127 May 16 17:53	0°♎	
	3122 Mar 18 22:05	0°♊				3127 Jul 06 17:18	0°♎	
desc. node	3122 Apr 01 13:31	7°♊03'05				3127 Aug 24 14:30	0°♌	
	3122 Jun 08 05:52	0°♊		evening set		3127 Oct 04 23:28	26°♌21'58	
retrograde	3122 Jun 14 11:05	0°♊13'59				3127 Oct 10 13:22	0°♎	
	3122 Jun 20 13:21	30°♎		max. Earth dist.		3127 Oct 26 13:44	10°♎32'41	2.59434 AU
opposition	3122 Jul 16 14:27	24°♊21'16	-5°08'11					
greatest brilliancy	3122 Jul 17 23:09	23°♊55'58	-2.5m	conjunction		3127 Nov 20 14:11	27°♎22'44	0°01'05
min. Earth dist.	3122 Jul 24 06:49	21°♊59'12	0.42737 AU	minimum elong		3127 Nov 20 14:13	27°♎22'48	0°01'05
direct	3122 Aug 20 11:19	17°♊19'03		behind sun begin		3127 Nov 19 18:26	26°♎49'05	
	3122 Oct 05 13:47	0°♊		behind sun end		3127 Nov 21 10:01	27°♎56'33	
	3122 Nov 24 18:17	0°♋		desc. node		3127 Nov 22 10:22	28°♎38'07	
	3123 Jan 06 14:47	0°♎				3127 Nov 24 10:13	0°♊	
asc. node	3123 Feb 02 18:25	19°♎29'26				3128 Jan 06 05:10	0°♊	
	3123 Feb 17 10:46	0°♋		morning rise		3128 Jan 08 01:01	1°♊18'44	
	3123 Apr 01 00:06	0°♎				3128 Feb 16 04:35	0°♊	
	3123 May 14 23:42	0°♌				3128 Mar 26 19:41	0°♋	
	3123 Jun 29 11:31	0°♎				3128 May 04 18:33	0°♎	
evening set	3123 Jul 23 00:42	15°♎13'01				3128 Jun 12 22:19	0°♋	
	3123 Aug 15 02:45	0°♎				3128 Jul 23 11:57	0°♎	
						3128 Sep 05 12:31	0°♌	
conjunction	3123 Sep 08 00:33	15°♎13'51	1°05'49	asc. node		3128 Sep 24 15:46	11°♌43'51	
minimum elong	3123 Sep 08 01:09	15°♎14'47	1°05'49			3128 Oct 30 03:20	0°♎	
max. Earth dist.	3123 Sep 09 05:39	16°♎00'09	2.67558 AU	retrograde		3128 Dec 12 15:50	10°♎34'20	
	3123 Oct 01 05:46	0°♌		min. Earth dist.		3129 Jan 16 05:06	2°♎42'38	0.60820 AU
morning rise	3123 Oct 22 13:51	13°♌35'47		opposition		3129 Jan 21 09:12	0°♎39'26	4°15'57
	3123 Nov 17 05:07	0°♎		greatest brilliancy		3129 Jan 20 13:40	0°♎58'50	-1.6m
	3124 Jan 02 16:13	0°♊				3129 Jan 23 01:09	30°♎	
desc. node	3124 Feb 17 12:46	29°♊56'56		direct		3129 Feb 28 02:31	21°♌53'59	
	3124 Feb 17 14:38	0°♊				3129 Apr 09 07:26	0°♎	
	3124 Apr 03 08:05	0°♊				3129 Jun 12 11:39	0°♎	
	3124 May 19 20:02	0°♋				3129 Aug 03 18:12	0°♌	
	3124 Jul 10 12:48	0°♎				3129 Sep 20 20:10	0°♎	
retrograde	3124 Sep 01 19:57	15°♎43'50		desc. node		3129 Oct 09 09:36	12°♎08'39	
min. Earth dist.	3124 Sep 29 07:51	11°♎14'25	0.37718 AU			3129 Nov 04 20:09	0°♊	
opposition	3124 Oct 03 01:25	10°♎12'19	-5°01'22	evening set		3129 Nov 14 01:53	6°♊23'47	
greatest brilliancy	3124 Oct 02 13:59	10°♎20'15	-2.9m	max. Earth dist.		3129 Nov 28 13:52	16°♊35'43	2.48074 AU
direct	3124 Nov 01 13:55	5°♎12'31				3129 Dec 17 05:18	0°♊	
asc. node	3124 Dec 20 17:12	18°♎18'21						
	3125 Jan 12 19:56	0°♋		conjunction		3130 Jan 05 07:14	14°♊02'30	-0°47'29
	3125 Mar 04 17:39	0°♎		minimum elong		3130 Jan 05 05:22	13°♊59'02	0°47'28
	3125 Apr 21 18:49	0°♌				3130 Jan 26 12:19	0°♊	
	3125 Jun 08 14:23	0°♎		morning rise		3130 Mar 05 19:20	29°♊32'39	

	3130 Mar 06 09:21	0° H		greatest brilliancy	3135 May 07 13:41	16° M 22'51	-1.6m
	3130 Apr 13 15:31	0° Y		min. Earth dist.	3135 May 13 13:00	14° M 06'55	0.60114 AU
greatest brilliancy	3130 May 11 18:24	21° Y 58'08	1.2m	desc. node	3135 Jun 01 05:14	8° M 21'27	
	3130 May 22 03:37	0° B		direct	3135 Jun 17 05:06	6° M 38'51	
	3130 Jun 30 19:43	0° II			3135 Aug 27 01:09	0° Z	
	3130 Aug 11 16:18	0° E			3135 Oct 14 06:46	0° Z	
asc. node	3130 Aug 12 13:45	0° E 37'04			3135 Nov 25 01:04	0° \approx	
	3130 Sep 26 04:46	0° Q			3136 Jan 03 06:23	0° H	
	3130 Nov 19 00:46	0° M			3136 Feb 10 18:01	0° Y	
retrograde	3131 Jan 17 03:13	16° M 37'25			3136 Mar 20 17:02	0° B	
min. Earth dist.	3131 Feb 25 01:47	7° M 18'08	0.67158 AU	asc. node	3136 Apr 03 11:35	10° B 23'35	
opposition	3131 Feb 26 09:39	6° M 46'15	4°30'14		3136 Apr 30 00:10	0° II	
greatest brilliancy	3131 Feb 26 04:11	6° M 51'43	-1.3m	evening set	3136 May 19 08:11	13° II 55'58	
	3131 Mar 17 14:08	30° R Q			3136 Jun 11 04:08	0° E	
direct	3131 Apr 07 15:59	27° Q 09'05					
	3131 Apr 30 12:34	0° M		conjunction	3136 Jul 13 21:09	22° E 20'27	0°54'26
	3131 Jul 11 02:15	0° E		minimum elong	3136 Jul 13 19:33	22° E 17'46	0°54'25
desc. node	3131 Aug 27 08:14	27° E 22'39			3136 Jul 25 08:11	0° Q	
	3131 Aug 31 13:51	0° M		max. Earth dist.	3136 Aug 06 02:28	7° Q 46'43	2.60414 AU
	3131 Oct 16 13:05	0° Z		morning rise	3136 Sep 01 23:11	25° Q 16'18	
	3131 Nov 28 00:26	0° Z			3136 Sep 09 07:40	0° M	
evening set	3132 Jan 05 21:28	29° Z 06'50			3136 Oct 26 18:49	0° E	
	3132 Jan 07 01:13	0° \approx			3136 Dec 14 18:17	0° M	
	3132 Feb 14 13:56	0° H			3137 Feb 04 13:07	0° Z	
					3137 Apr 08 08:26	0° Z	
conjunction	3132 Mar 10 03:41	19° H 24'36	-1°00'10	desc. node	3137 Apr 18 04:04	3° Z 16'25	
minimum elong	3132 Mar 10 05:58	19° H 29'06	1°00'09	retrograde	3137 May 19 07:46	8° Z 25'52	
max. Earth dist.	3132 Mar 14 06:06	22° H 39'12	2.36943 AU	opposition	3137 Jun 22 12:18	1° Z 40'28	-3°07'56
	3132 Mar 23 13:15	0° Y		greatest brilliancy	3137 Jun 23 10:47	1° Z 21'26	-2.2m
	3132 Apr 30 21:07	0° B			3137 Jun 27 10:35	30° R Z	
morning rise	3132 May 20 11:47	15° B 02'08		min. Earth dist.	3137 Jul 01 01:08	28° Z 47'43	0.47920 AU
	3132 Jun 09 09:46	0° II		direct	3137 Jul 30 01:00	23° Z 22'54	
asc. node	3132 Jun 29 13:46	14° II 47'42			3137 Aug 31 15:30	0° Z	
	3132 Jul 20 20:49	0° E			3137 Oct 26 01:07	0° \approx	
	3132 Sep 02 21:43	0° Q			3137 Dec 07 22:08	0° H	
	3132 Oct 20 11:50	0° M			3138 Jan 17 08:54	0° Y	
	3132 Dec 14 05:20	0° E		asc. node	3138 Feb 19 10:18	24° Y 34'09	
retrograde	3133 Feb 19 18:39	19° E 47'23			3138 Feb 26 19:28	0° B	
opposition	3133 Mar 31 09:23	10° E 28'07	3°23'49		3138 Apr 09 09:06	0° II	
greatest brilliancy	3133 Mar 31 16:50	10° E 20'47	-1.3m		3138 May 22 15:03	0° E	
min. Earth dist.	3133 Apr 02 22:22	9° E 27'59	0.66901 AU	evening set	3138 Jul 06 22:39	0° Q 13'22	
direct	3133 May 11 19:17	0° E 27'16			3138 Jul 06 14:30	0° Q	
desc. node	3133 Jul 14 06:35	18° E 28'00			3138 Aug 21 22:46	0° M	
	3133 Aug 05 17:46	0° M					
	3133 Sep 24 06:10	0° Z		conjunction	3138 Aug 24 11:14	1° M 36'49	1°08'27
	3133 Nov 06 17:28	0° Z		minimum elong	3138 Aug 24 11:19	1° M 36'57	1°08'27
	3133 Dec 16 23:57	0° \approx		max. Earth dist.	3138 Aug 31 02:35	5° M 51'35	2.66624 AU
	3134 Jan 24 13:04	0° H		morning rise	3138 Oct 08 20:36	0° E 31'05	
	3134 Mar 03 12:58	0° Y			3138 Oct 08 01:01	0° E	
evening set	3134 Mar 16 00:43	9° Y 49'06			3138 Nov 24 07:57	0° M	
	3134 Apr 10 23:47	0° B			3139 Jan 10 14:28	0° Z	
asc. node	3134 May 17 13:31	27° B 39'30			3139 Feb 27 03:32	0° Z	
	3134 May 20 17:25	0° II		desc. node	3139 Mar 06 03:45	4° Z 22'31	
					3139 Apr 17 02:21	0° \approx	
conjunction	3134 May 21 15:18	0° II 40'23	0°02'44		3139 Jun 11 12:03	0° H	
minimum elong	3134 May 21 15:05	0° II 40'00	0°02'44	retrograde	3139 Aug 02 09:51	13° H 54'46	
behind sun begin	3134 May 20 12:37	29° B 51'08		opposition	3139 Sep 01 09:05	8° H 58'12	-6°43'07
behind sun end	3134 May 22 17:33	1° II 28'46		greatest brilliancy	3139 Sep 01 21:58	8° H 49'40	-2.9m
	3134 Jul 01 08:23	0° E		min. Earth dist.	3139 Sep 03 04:22	8° H 29'34	0.37456 AU
max. Earth dist.	3134 Jul 05 00:34	2° E 34'31	2.49106 AU	direct	3139 Oct 01 12:56	3° H 52'29	
morning rise	3134 Jul 20 22:21	13° E 35'53			3139 Dec 13 00:08	0° Y	
	3134 Aug 14 04:21	0° Q		asc. node	3140 Jan 07 09:53	15° Y 24'35	
	3134 Sep 29 09:08	0° M			3140 Jan 30 03:43	0° B	
	3134 Nov 17 09:18	0° E			3140 Mar 15 18:53	0° II	
	3135 Jan 10 18:31	0° M			3140 Apr 30 14:38	0° E	
retrograde	3135 Mar 30 13:38	24° M 51'49			3140 Jun 16 06:06	0° Q	
opposition	3135 May 07 07:31	16° M 28'43	1°00'25		3140 Aug 02 13:09	0° M	

evening set	3140 Aug 14 14:26	7° \cap 37'28			3145 Jul 09 00:47	0° Π	
	3140 Sep 18 21:22	0° $\underline{\Omega}$			3145 Aug 20 07:49	0° $\underline{\Omega}$	
max. Earth dist.	3140 Sep 22 06:46	2° $\underline{\Omega}$ 09'32	2.67360 AU	asc. node	3145 Aug 29 07:26	6° $\underline{\Omega}$ 02'58	
					3145 Oct 06 08:20	0° Ω	
conjunction	3140 Sep 29 04:41	6° $\underline{\Omega}$ 34'06	0°54'12		3145 Dec 10 15:01	0° \cap	
minimum elong	3140 Sep 29 05:44	6° $\underline{\Omega}$ 35'46	0°54'11	retrograde	3146 Jan 03 17:19	3° \cap 26'32	
	3140 Nov 04 14:49	0° \cap			3146 Jan 26 05:55	30° \mathbb{R} Ω	
morning rise	3140 Nov 12 09:07	5° \cap 02'46		min. Earth dist.	3146 Feb 10 02:05	24° Ω 38'06	0.65433 AU
	3140 Dec 20 06:31	0° \mathbb{X}		opposition	3146 Feb 12 22:38	23° Ω 29'28	4°36'02
desc. node	3141 Jan 21 02:56	21° \mathbb{X} 25'33		greatest brilliancy	3146 Feb 12 11:04	23° Ω 41'02	-1.4m
	3141 Feb 02 16:34	0° $\underline{\Omega}$		direct	3146 Mar 24 09:14	14° Ω 08'48	
	3141 Mar 17 23:02	0° \approx			3146 May 23 09:13	0° \cap	
	3141 Apr 29 08:45	0° \mathbb{X}			3146 Jul 20 17:50	0° $\underline{\Omega}$	
	3141 Jun 10 17:10	0° Υ			3146 Sep 08 10:42	0° \cap	
	3141 Jul 25 08:49	0° \mathbb{X}		desc. node	3146 Sep 12 23:07	2° \cap 52'31	
	3141 Sep 28 04:56	0° Π			3146 Oct 23 22:07	0° \mathbb{X}	
retrograde	3141 Oct 12 02:07	1° Π 21'38			3146 Dec 05 07:25	0° $\underline{\Omega}$	
	3141 Oct 25 15:06	30° \mathbb{R} \mathbb{X}		evening set	3146 Dec 14 08:24	6° $\underline{\Omega}$ 38'09	
min. Earth dist.	3141 Nov 08 03:59	26° \mathbb{X} 21'09	0.43601 AU	max. Earth dist.	3147 Jan 03 21:39	22° $\underline{\Omega}$ 00'18	2.40117 AU
opposition	3141 Nov 16 05:59	23° \mathbb{X} 39'02	-0°29'38		3147 Jan 14 09:54	0° \approx	
greatest brilliancy	3141 Nov 16 02:40	23° \mathbb{X} 41'49	-2.6m				
asc. node	3141 Nov 24 08:15	21° \mathbb{X} 04'06		conjunction	3147 Feb 11 08:04	21° \approx 36'21	-1°04'34
direct	3141 Dec 18 03:32	17° \mathbb{X} 21'58		minimum elong	3147 Feb 11 07:33	21° \approx 35'21	1°04'34
	3142 Feb 05 17:22	0° Π			3147 Feb 22 01:10	0° \mathbb{X}	
	3142 Apr 04 19:22	0° $\underline{\Omega}$			3147 Apr 01 02:21	0° Υ	
	3142 May 25 22:15	0° Ω		morning rise	3147 Apr 21 07:39	15° Υ 53'15	
	3142 Jul 14 08:21	0° \cap			3147 May 09 10:59	0° \mathbb{X}	
	3142 Aug 31 14:26	0° $\underline{\Omega}$			3147 Jun 17 23:38	0° Π	
evening set	3142 Sep 20 09:53	12° $\underline{\Omega}$ 34'26		asc. node	3147 Jul 17 06:07	21° Π 20'12	
max. Earth dist.	3142 Oct 16 03:21	29° $\underline{\Omega}$ 11'04	2.62702 AU		3147 Jul 29 11:46	0° $\underline{\Omega}$	
	3142 Oct 17 09:19	0° \cap			3147 Sep 11 20:09	0° Ω	
					3147 Oct 30 16:40	0° \cap	
conjunction	3142 Nov 05 02:22	12° \cap 19'18	0°18'58		3148 Jan 01 03:50	0° $\underline{\Omega}$	
minimum elong	3142 Nov 05 03:00	12° \cap 20'20	0°18'57	retrograde	3148 Feb 07 02:41	7° $\underline{\Omega}$ 07'06	
	3142 Dec 01 09:14	0° \mathbb{X}			3148 Mar 11 20:32	30° \mathbb{R} \cap	
desc. node	3142 Dec 09 01:30	5° \mathbb{X} 14'59		opposition	3148 Mar 18 02:42	27° \cap 32'49	3°57'58
morning rise	3142 Dec 21 09:58	13° \mathbb{X} 46'46		greatest brilliancy	3148 Mar 18 05:58	27° \cap 29'35	-1.3m
	3143 Jan 13 12:00	0° $\underline{\Omega}$		min. Earth dist.	3148 Mar 19 03:28	27° \cap 08'13	0.67785 AU
	3143 Feb 23 22:05	0° \approx		direct	3148 Apr 28 06:02	17° \cap 38'09	
	3143 Apr 05 00:43	0° \mathbb{X}			3148 Jun 18 14:41	0° $\underline{\Omega}$	
	3143 May 14 10:50	0° Υ		desc. node	3148 Jul 30 21:48	20° $\underline{\Omega}$ 46'02	
	3143 Jun 23 03:11	0° \mathbb{X}			3148 Aug 16 01:51	0° \cap	
	3143 Aug 03 14:09	0° Π			3148 Oct 02 15:46	0° \mathbb{X}	
	3143 Sep 19 07:23	0° $\underline{\Omega}$			3148 Nov 14 14:17	0° $\underline{\Omega}$	
asc. node	3143 Oct 12 07:26	12° $\underline{\Omega}$ 02'21			3148 Dec 24 17:04	0° \approx	
retrograde	3143 Nov 28 12:16	24° $\underline{\Omega}$ 39'05			3149 Feb 01 04:58	0° \mathbb{X}	
min. Earth dist.	3143 Dec 31 00:27	17° $\underline{\Omega}$ 30'46	0.56672 AU	evening set	3149 Feb 15 09:00	11° \mathbb{X} 11'40	
opposition	3144 Jan 06 14:07	14° $\underline{\Omega}$ 56'58	3°38'57		3149 Mar 11 03:31	0° Υ	
greatest brilliancy	3144 Jan 05 16:21	15° $\underline{\Omega}$ 18'14	-1.8m		3149 Apr 18 12:02	0° \mathbb{X}	
direct	3144 Feb 11 22:05	6° $\underline{\Omega}$ 42'01					
	3144 Apr 26 23:49	0° Ω		conjunction	3149 Apr 25 01:04	5° \mathbb{X} 02'16	-0°25'41
	3144 Jun 21 21:10	0° \cap		minimum elong	3149 Apr 25 03:22	5° \mathbb{X} 06'40	0°25'40
	3144 Aug 11 09:53	0° $\underline{\Omega}$			3149 May 28 02:30	0° Π	
	3144 Sep 27 22:27	0° \cap		asc. node	3149 Jun 03 05:02	4° Π 30'42	
desc. node	3144 Oct 26 00:12	18° \cap 33'28		max. Earth dist.	3149 Jun 15 10:27	13° Π 26'39	2.43705 AU
evening set	3144 Oct 28 05:37	20° \cap 03'25		morning rise	3149 Jun 29 19:36	23° Π 46'53	
	3144 Nov 11 20:08	0° \mathbb{X}			3149 Jul 08 14:21	0° $\underline{\Omega}$	
max. Earth dist.	3144 Nov 13 14:40	1° \mathbb{X} 13'10	2.52989 AU		3149 Aug 21 09:54	0° Ω	
					3149 Oct 06 22:06	0° \cap	
conjunction	3144 Dec 16 13:05	24° \mathbb{X} 22'31	-0°29'23		3149 Nov 26 05:04	0° $\underline{\Omega}$	
minimum elong	3144 Dec 16 11:51	24° \mathbb{X} 20'18	0°29'22		3150 Jan 25 20:38	0° \cap	
	3144 Dec 24 08:21	0° $\underline{\Omega}$		retrograde	3150 Mar 14 14:52	10° \cap 51'58	
	3145 Feb 02 21:04	0° \approx		opposition	3150 Apr 22 06:18	2° \cap 03'19	2°06'20
morning rise	3145 Feb 08 13:08	4° \approx 17'33		greatest brilliancy	3150 Apr 22 15:44	1° \cap 54'11	-1.5m
	3145 Mar 14 00:17	0° \mathbb{X}		min. Earth dist.	3150 Apr 27 02:15	0° \cap 11'10	0.63520 AU
	3145 Apr 21 11:42	0° Υ			3150 Apr 27 13:55	30° \mathbb{R} $\underline{\Omega}$	
	3145 May 30 04:02	0° \mathbb{X}		direct	3150 Jun 02 14:38	22° $\underline{\Omega}$ 03'27	

desc. node	3150 Jun 17 20:14	23° Ω 26'09	minimum elong	3155 Sep 16 04:58	23° Π 21'47	1°02'32
	3150 Jul 11 08:10	0° \mathbb{M}		3155 Sep 26 15:18	0° Ω	
	3150 Sep 08 09:45	0° \mathcal{A}	morning rise	3155 Oct 30 10:52	21° Ω 36'19	
	3150 Oct 23 19:35	0° \mathcal{Z}		3155 Nov 12 12:09	0° \mathbb{M}	
	3150 Dec 03 17:56	0° \approx		3155 Dec 28 15:25	0° \mathcal{A}	
	3151 Jan 11 14:15	0° \mathcal{H}	desc. node	3156 Feb 07 18:00	27° \mathcal{A} 11'45	
	3151 Feb 18 19:19	0° Υ		3156 Feb 11 22:51	0° \mathcal{Z}	
	3151 Mar 29 11:49	0° \mathcal{B}		3156 Mar 27 14:27	0° \approx	
asc. node	3151 Apr 21 04:39	17° \mathcal{B} 10'41		3156 May 11 02:22	0° \mathcal{H}	
evening set	3151 Apr 27 02:29	21° \mathcal{B} 35'01		3156 Jun 26 05:48	0° Υ	
	3151 May 08 11:58	0° \mathbb{I}		3156 Aug 25 18:46	0° \mathcal{B}	
	3151 Jun 19 09:06	0° \mathcal{D}	retrograde	3156 Sep 17 16:01	3° \mathcal{B} 29'57	
				3156 Oct 10 18:11	30° \mathcal{R} Υ	
conjunction	3151 Jun 25 20:10	4° \mathcal{D} 29'58	min. Earth dist.	3156 Oct 14 03:37	29° Υ 02'33	0.39212 AU
minimum elong	3151 Jun 25 18:18	4° \mathcal{D} 26'44	opposition	3156 Oct 20 05:30	27° Υ 15'04	-3°23'00
max. Earth dist.	3151 Jul 26 22:04	25° \mathcal{D} 42'05	greatest brilliancy	3156 Oct 19 14:49	27° Υ 25'54	-2.8m
	3151 Aug 02 08:17	0° Ω	direct	3156 Nov 19 05:48	21° Υ 53'59	
morning rise	3151 Aug 18 02:53	10° Ω 26'17	asc. node	3156 Dec 11 01:47	24° Υ 49'39	
	3151 Sep 17 07:27	0° \mathbb{M}		3156 Dec 27 02:02	0° \mathcal{B}	
	3151 Nov 04 03:58	0° Ω		3157 Feb 24 12:08	0° \mathbb{I}	
	3151 Dec 24 10:54	0° \mathbb{M}		3157 Apr 15 14:27	0° \mathcal{D}	
	3152 Feb 18 18:00	0° \mathcal{A}		3157 Jun 03 07:29	0° Ω	
retrograde	3152 Apr 27 08:09	19° \mathcal{A} 59'00		3157 Jul 21 16:13	0° \mathbb{M}	
desc. node	3152 May 04 19:52	19° \mathcal{A} 38'00	evening set	3157 Sep 06 03:29	29° \mathbb{M} 09'21	
opposition	3152 Jun 02 04:28	12° \mathcal{A} 28'45		3157 Sep 07 11:29	0° Ω	
greatest brilliancy	3152 Jun 02 13:24	12° \mathcal{A} 20'42	max. Earth dist.	3157 Oct 06 12:25	18° Ω 32'49	2.65152 AU
min. Earth dist.	3152 Jun 10 05:31	9° \mathcal{A} 35'32				
direct	3152 Jul 11 12:35	3° \mathcal{A} 20'03	conjunction	3157 Oct 21 10:44	28° Ω 12'46	0°34'42
	3152 Sep 23 10:04	0° \mathcal{Z}	minimum elong	3157 Oct 21 11:42	28° Ω 14'21	0°34'41
	3152 Nov 07 19:52	0° \approx		3157 Oct 24 04:33	0° \mathbb{M}	
	3152 Dec 18 11:01	0° \mathcal{H}	morning rise	3157 Dec 05 11:09	28° \mathbb{M} 01'54	
	3153 Jan 26 18:56	0° Υ		3157 Dec 08 09:07	0° \mathcal{A}	
	3153 Mar 07 10:29	0° \mathcal{B}	desc. node	3157 Dec 25 16:35	11° \mathcal{A} 47'45	
asc. node	3153 Mar 08 02:26	0° \mathcal{B} 29'47		3158 Jan 20 21:48	0° \mathcal{Z}	
	3153 Apr 17 08:38	0° \mathbb{I}		3158 Mar 03 21:24	0° \approx	
	3153 May 30 01:44	0° \mathcal{D}		3158 Apr 13 15:41	0° \mathcal{H}	
evening set	3153 Jun 19 13:14	13° \mathcal{D} 55'51		3158 May 23 18:57	0° Υ	
	3153 Jul 13 15:36	0° Ω		3158 Jul 03 09:47	0° \mathcal{B}	
				3158 Aug 15 18:52	0° \mathbb{I}	
conjunction	3153 Aug 09 05:08	17° Ω 22'42		3158 Oct 10 18:32	0° \mathcal{D}	
minimum elong	3153 Aug 09 04:35	17° Ω 21'47	asc. node	3158 Oct 29 00:49	5° \mathcal{D} 11'43	
max. Earth dist.	3153 Aug 21 19:42	25° Ω 31'40	retrograde	3158 Nov 11 19:28	6° \mathcal{D} 31'24	
	3153 Aug 28 18:38	0° \mathbb{M}	min. Earth dist.	3158 Dec 12 03:11	0° \mathcal{D} 11'47	0.51768 AU
morning rise	3153 Sep 24 22:30	17° \mathbb{M} 20'28		3158 Dec 12 15:57	30° \mathcal{R} \mathbb{I}	
	3153 Oct 14 22:07	0° Ω	opposition	3158 Dec 19 20:02	27° \mathbb{I} 17'42	2°33'48
	3153 Dec 01 16:23	0° \mathbb{M}	greatest brilliancy	3158 Dec 19 01:14	27° \mathbb{I} 35'26	-2.1m
	3154 Jan 19 03:17	0° \mathcal{A}	direct	3159 Jan 23 12:39	19° \mathbb{I} 41'38	
	3154 Mar 10 08:56	0° \mathcal{Z}		3159 Mar 09 17:23	0° \mathcal{D}	
desc. node	3154 Mar 22 19:16	7° \mathcal{Z} 04'17		3159 May 10 02:01	0° Ω	
	3154 May 06 08:51	0° \approx		3159 Jul 01 08:55	0° \mathbb{M}	
retrograde	3154 Jun 30 23:41	14° \approx 51'30		3159 Aug 19 18:17	0° Ω	
opposition	3154 Aug 01 03:29	9° \approx 26'41		3159 Oct 05 22:00	0° \mathbb{M}	
greatest brilliancy	3154 Aug 02 11:24	9° \approx 03'24	evening set	3159 Oct 13 13:38	5° \mathbb{M} 00'29	
min. Earth dist.	3154 Aug 07 10:08	7° \approx 37'27	max. Earth dist.	3159 Nov 02 01:12	17° \mathbb{M} 56'55	2.57342 AU
direct	3154 Sep 03 04:50	3° \approx 12'03	desc. node	3159 Nov 12 15:27	25° \mathbb{M} 06'27	
	3154 Nov 14 01:03	0° \mathcal{H}		3159 Nov 19 19:31	0° \mathcal{A}	
	3154 Dec 29 21:15	0° Υ				
asc. node	3155 Jan 24 01:08	17° Υ 27'30	conjunction	3159 Nov 29 22:14	6° \mathcal{A} 58'20	-0°10'00
	3155 Feb 10 23:57	0° \mathcal{B}	minimum elong	3159 Nov 29 21:50	6° \mathcal{A} 57'39	0°09'59
	3155 Mar 26 07:42	0° \mathbb{I}	behind sun begin	3159 Nov 29 05:31	6° \mathcal{A} 29'23	
	3155 May 09 19:14	0° \mathcal{D}	behind sun end	3159 Nov 30 14:09	7° \mathcal{A} 25'57	
	3155 Jun 24 15:04	0° Ω		3160 Jan 01 12:27	0° \mathcal{Z}	
evening set	3155 Jul 31 19:49	23° Ω 51'50	morning rise	3160 Jan 18 23:26	12° \mathcal{Z} 40'45	
	3155 Aug 10 11:00	0° \mathbb{M}		3160 Feb 11 08:07	0° \approx	
max. Earth dist.	3155 Sep 14 10:08	22° \mathbb{M} 13'41		3160 Mar 21 18:48	0° \mathcal{H}	
		2.67732 AU		3160 Apr 29 12:51	0° Υ	
conjunction	3155 Sep 16 04:08	23° \mathbb{M} 20'28		3160 Jun 07 11:14	0° \mathcal{B}	





































































































































	3160 Jul 17 16:21	0°♊			3166 Feb 26 14:46	0°♑	
	3160 Aug 29 19:19	0°♋		evening set	3166 Mar 31 22:24	26°♑00'46	
asc. node	3160 Sep 14 23:03	10°♋22'53			3166 Apr 06 02:36	0°♌	
	3160 Oct 19 01:11	0°♌		asc. node	3166 May 07 19:51	24°♌01'02	
retrograde	3160 Dec 20 21:11	19°♌29'24			3166 May 15 21:33	0°♊	
min. Earth dist.	3161 Jan 25 12:06	11°♌16'08	0.62732 AU				
opposition	3161 Jan 29 20:48	9°♌31'45	4°28'17	conjunction	3166 Jun 04 07:03	14°♊09'06	0°17'41
greatest brilliancy	3161 Jan 29 03:40	9°♌48'49	-1.5m	minimum elong	3166 Jun 04 05:50	14°♊06'54	0°17'40
direct	3161 Mar 09 06:44	0°♌32'11			3166 Jun 26 13:32	0°♋	
	3161 Jun 05 11:27	0°♍		max. Earth dist.	3166 Jul 13 20:52	12°♋01'32	2.51953 AU
	3161 Jul 29 08:24	0°♎		morning rise	3166 Jul 31 18:29	24°♋12'55	
	3161 Sep 15 22:46	0°♏			3166 Aug 09 09:29	0°♌	
desc. node	3161 Sep 29 14:15	8°♏50'55			3166 Sep 24 10:34	0°♍	
	3161 Oct 31 02:55	0°♐			3166 Nov 11 21:37	0°♎	
evening set	3161 Nov 24 10:53	17°♐00'01			3167 Jan 03 06:52	0°♏	
max. Earth dist.	3161 Dec 09 03:06	27°♐31'59	2.45221 AU		3167 Mar 13 14:38	0°♐	
	3161 Dec 12 12:36	0°♑		retrograde	3167 Apr 09 08:31	3°♐49'54	
					3167 May 04 03:09	30°♑	
conjunction	3162 Jan 17 17:55	26°♑56'38	-0°56'04	opposition	3167 May 16 12:31	25°♑43'25	0°14'59
minimum elong	3162 Jan 17 16:04	26°♑53'08	0°56'04	greatest brilliancy	3167 May 16 14:21	25°♑41'42	-1.8m
	3162 Jan 21 18:26	0°♒		desc. node	3167 May 22 10:36	23°♑30'30	
	3162 Mar 01 13:42	0°♓		min. Earth dist.	3167 May 23 11:27	23°♑07'36	0.57861 AU
morning rise	3162 Mar 21 18:30	15°♓51'21		direct	3167 Jun 26 00:38	16°♑03'57	
	3162 Apr 08 17:56	0°♑			3167 Aug 16 15:17	0°♐	
	3162 May 17 04:12	0°♒			3167 Oct 07 13:16	0°♑	
	3162 Jun 25 17:58	0°♊			3167 Nov 19 04:43	0°♒	
asc. node	3162 Aug 02 22:58	27°♊35'58			3167 Dec 28 19:10	0°♓	
	3162 Aug 06 09:20	0°♋			3168 Feb 05 12:06	0°♑	
	3162 Sep 20 07:13	0°♌			3168 Mar 15 15:11	0°♒	
	3162 Nov 10 11:50	0°♍		asc. node	3168 Mar 24 19:33	6°♒54'50	
retrograde	3163 Jan 24 17:51	24°♍26'54			3168 Apr 25 02:00	0°♊	
opposition	3163 Mar 05 23:33	14°♍40'43	4°21'33	evening set	3168 May 31 07:20	25°♊46'51	
min. Earth dist.	3163 Mar 05 11:54	14°♍52'20	0.67662 AU		3168 Jun 06 08:57	0°♋	
greatest brilliancy	3163 Mar 05 21:24	14°♍42'51	-1.3m		3168 Jul 20 15:13	0°♌	
direct	3163 Apr 15 15:10	4°♍56'09					
	3163 Jul 03 19:45	0°♎		conjunction	3168 Jul 23 21:18	2°♌09'26	1°00'33
desc. node	3163 Aug 17 13:25	24°♎51'01		minimum elong	3168 Jul 23 20:02	2°♌07'21	1°00'33
	3163 Aug 26 01:39	0°♏		max. Earth dist.	3168 Aug 12 04:44	14°♌50'43	2.62214 AU
	3163 Oct 11 12:55	0°♐			3168 Sep 04 14:45	0°♍	
	3163 Nov 23 04:05	0°♑		morning rise	3168 Sep 10 13:44	3°♍49'09	
	3164 Jan 02 05:38	0°♒			3168 Oct 21 21:57	0°♎	
evening set	3164 Jan 20 02:31	13°♒48'57			3168 Dec 09 08:24	0°♏	
	3164 Feb 09 18:06	0°♓			3169 Jan 28 13:59	0°♐	
	3164 Mar 18 16:54	0°♑			3169 Mar 25 03:37	0°♑	
				desc. node	3169 Apr 08 09:49	6°♑33'14	
conjunction	3164 Mar 26 20:35	6°♑25'55	-0°50'50	retrograde	3169 Jun 02 12:54	20°♑43'48	
minimum elong	3164 Mar 26 23:54	6°♑32'26	0°50'49	opposition	3169 Jul 05 14:06	14°♑27'02	-4°16'31
	3164 Apr 26 00:33	0°♒		greatest brilliancy	3169 Jul 06 19:37	14°♑03'09	-2.4m
max. Earth dist.	3164 May 11 09:16	11°♒48'04	2.38558 AU	min. Earth dist.	3169 Jul 13 20:38	11°♒46'56	0.44996 AU
	3164 Jun 04 13:12	0°♊		direct	3169 Aug 10 18:16	6°♒48'16	
morning rise	3164 Jun 05 04:17	0°♊28'02			3169 Oct 15 14:02	0°♓	
asc. node	3164 Jun 19 21:44	11°♊18'25			3169 Nov 30 08:44	0°♓	
	3164 Jul 15 23:21	0°♋			3170 Jan 10 22:20	0°♑	
	3164 Aug 28 20:34	0°♌		asc. node	3170 Feb 09 18:46	21°♑49'56	
	3164 Oct 14 21:27	0°♍			3170 Feb 21 00:28	0°♒	
	3164 Dec 06 08:49	0°♎			3170 Apr 04 01:12	0°♊	
retrograde	3165 Feb 27 19:52	27°♎37'00			3170 May 17 15:02	0°♋	
opposition	3165 Apr 08 03:49	18°♎27'25	2°58'41		3170 Jul 01 20:03	0°♌	
greatest brilliancy	3165 Apr 08 12:40	18°♎18'44	-1.4m	evening set	3170 Jul 16 06:39	9°♌23'42	
min. Earth dist.	3165 Apr 11 12:37	17°♎08'14	0.65987 AU		3170 Aug 17 07:15	0°♍	
direct	3165 May 19 15:21	8°♎25'14					
desc. node	3165 Jul 04 12:16	18°♎52'18		conjunction	3170 Sep 01 21:10	9°♍56'49	1°07'22
	3165 Jul 28 20:12	0°♏		minimum elong	3170 Sep 01 21:34	9°♍57'28	1°07'23
	3165 Sep 18 10:35	0°♐		max. Earth dist.	3170 Sep 05 10:16	12°♍12'25	2.67245 AU
	3165 Nov 01 11:26	0°♑			3170 Oct 03 09:32	0°♎	
	3165 Dec 11 22:42	0°♒		morning rise	3170 Oct 16 18:01	8°♎29'28	
	3166 Jan 19 13:50	0°♓			3170 Nov 19 12:10	0°♏	

	3171 Jan 05 07:21	0°♂		min. Earth dist.	3176 Jan 09 23:16	26°♂50'44	0.59073 AU
	3171 Feb 20 21:12	0°♂		opposition	3176 Jan 15 19:07	24°♂32'56	4°03'25
desc. node	3171 Feb 24 09:05	2°♂15'02		greatest brilliancy	3176 Jan 14 22:04	24°♂53'42	-1.7m
	3171 Apr 08 18:32	0°♂		direct	3176 Feb 21 22:52	16°♂00'13	
	3171 May 27 17:51	0°♂			3176 Apr 17 00:52	0°♂	
retrograde	3171 Aug 02 02:45	0°♂			3176 Jun 15 19:33	0°♂	
	3171 Aug 20 12:00	2°♂10'06			3176 Aug 06 07:38	0°♂	
	3171 Sep 08 02:13	30°♂			3176 Sep 23 04:51	0°♂	
opposition	3171 Sep 19 20:57	27°♂03'01	-6°01'39	desc. node	3176 Oct 16 06:03	15°♂08'21	
min. Earth dist.	3171 Sep 18 12:51	27°♂24'29	0.37174 AU	evening set	3176 Nov 06 15:16	29°♂36'26	
greatest brilliancy	3171 Sep 19 18:42	27°♂04'30	-3.0m		3176 Nov 07 05:00	0°♂	
direct	3171 Oct 19 10:18	22°♂09'11		max. Earth dist.	3176 Nov 21 15:32	10°♂00'38	2.50327 AU
	3171 Nov 24 18:45	0°♂			3176 Dec 19 16:41	0°♂	
asc. node	3171 Dec 28 17:25	16°♂25'20					
	3172 Jan 21 02:33	0°♂		conjunction	3176 Dec 27 10:22	5°♂38'19	-0°40'06
	3172 Mar 09 01:28	0°♂		minimum elong	3176 Dec 27 08:43	5°♂35'17	0°40'05
	3172 Apr 24 23:00	0°♂			3177 Jan 29 02:56	0°♂	
	3172 Jun 11 04:32	0°♂		morning rise	3177 Feb 22 07:37	18°♂30'53	
	3172 Jul 28 19:07	0°♂			3177 Mar 09 03:07	0°♂	
evening set	3172 Aug 22 21:16	15°♂48'59			3177 Apr 16 11:29	0°♂	
	3172 Sep 14 06:38	0°♂			3177 May 25 00:44	0°♂	
max. Earth dist.	3172 Sep 27 12:32	8°♂26'25	2.66792 AU		3177 Jul 03 17:38	0°♂	
					3177 Aug 14 16:18	0°♂	
conjunction	3172 Oct 07 06:10	14°♂40'27	0°47'50	asc. node	3177 Aug 19 14:02	3°♂21'51	
minimum elong	3172 Oct 07 07:15	14°♂42'11	0°47'50		3177 Sep 29 14:51	0°♂	
	3172 Oct 30 23:43	0°♂			3177 Nov 25 01:10	0°♂	
morning rise	3172 Nov 20 14:19	13°♂29'02		retrograde	3178 Jan 11 10:29	11°♂32'07	
	3172 Dec 15 11:08	0°♂		min. Earth dist.	3178 Feb 18 17:18	2°♂26'08	0.66522 AU
desc. node	3173 Jan 11 07:15	18°♂09'10		opposition	3178 Feb 20 17:35	1°♂37'50	4°34'12
	3173 Jan 28 13:05	0°♂		greatest brilliancy	3178 Feb 20 09:25	1°♂46'00	-1.3m
	3173 Mar 12 07:07	0°♂			3178 Feb 24 20:16	30°♂	
	3173 Apr 23 00:07	0°♂		direct	3178 Apr 01 16:17	22°♂07'29	
	3173 Jun 03 07:25	0°♂			3178 May 11 13:51	0°♂	
	3173 Jul 15 19:02	0°♂			3178 Jul 14 13:06	0°♂	
	3173 Sep 02 16:36	0°♂		desc. node	3178 Sep 03 04:33	29°♂56'34	
retrograde	3173 Oct 24 00:11	15°♂25'55			3178 Sep 03 06:44	0°♂	
asc. node	3173 Nov 14 16:45	12°♂02'11			3178 Oct 19 02:13	0°♂	
min. Earth dist.	3173 Nov 21 03:34	9°♂58'10	0.46454 AU		3178 Nov 30 14:05	0°♂	
opposition	3173 Nov 29 09:36	7°♂03'17	0°50'27	evening set	3178 Dec 26 16:44	19°♂22'08	
greatest brilliancy	3173 Nov 29 02:30	7°♂09'34	-2.4m		3179 Jan 09 16:31	0°♂	
direct	3174 Jan 01 07:06	0°♂15'46		max. Earth dist.	3179 Jan 29 16:51	15°♂27'13	2.37815 AU
	3174 Mar 27 16:03	0°♂			3179 Feb 17 06:52	0°♂	
	3174 May 20 00:26	0°♂					
	3174 Jul 09 06:13	0°♂		conjunction	3179 Feb 26 15:10	7°♂21'48	-1°03'56
	3174 Aug 26 20:56	0°♂		minimum elong	3179 Feb 26 16:12	7°♂23'48	1°03'56
evening set	3174 Sep 28 16:50	20°♂52'05			3179 Mar 27 06:51	0°♂	
	3174 Oct 12 18:52	0°♂			3179 May 04 14:16	0°♂	
max. Earth dist.	3174 Oct 22 00:26	6°♂03'09	2.60983 AU	morning rise	3179 May 08 14:05	3°♂05'05	
					3179 Jun 13 01:45	0°♂	
conjunction	3174 Nov 13 20:00	21°♂14'36	0°08'49	asc. node	3179 Jul 07 13:44	17°♂57'05	
minimum elong	3174 Nov 13 20:19	21°♂15'08	0°08'47		3179 Jul 24 11:32	0°♂	
behind sun begin	3174 Nov 13 03:39	20°♂47'05			3179 Sep 06 13:18	0°♂	
behind sun end	3174 Nov 14 12:59	21°♂43'13			3179 Oct 24 11:48	0°♂	
	3174 Nov 26 17:55	0°♂			3179 Dec 20 06:14	0°♂	
desc. node	3174 Nov 29 06:37	1°♂43'43		retrograde	3180 Feb 14 21:08	14°♂51'02	
morning rise	3174 Dec 31 05:24	23°♂57'51		opposition	3180 Mar 25 17:08	5°♂24'34	3°39'12
	3175 Jan 08 17:14	0°♂		greatest brilliancy	3180 Mar 25 22:54	5°♂18'53	-1.3m
	3175 Feb 18 21:56	0°♂		min. Earth dist.	3180 Mar 27 14:04	4°♂40'09	0.67430 AU
	3175 Mar 30 18:31	0°♂			3180 Apr 09 05:04	30°♂	
	3175 May 08 22:07	0°♂		direct	3180 May 06 01:29	25°♂25'58	
	3175 Jun 17 06:19	0°♂			3180 Jun 04 07:11	0°♂	
	3175 Jul 28 02:36	0°♂		desc. node	3180 Jul 21 02:55	19°♂29'08	
	3175 Sep 10 21:26	0°♂			3180 Aug 09 14:00	0°♂	
asc. node	3175 Oct 02 16:02	12°♂43'50			3180 Sep 27 06:21	0°♂	
	3175 Nov 10 18:00	0°♂			3180 Nov 09 13:24	0°♂	
retrograde	3175 Dec 07 07:22	4°♂23'26			3180 Dec 19 19:06	0°♂	
	3176 Jan 01 08:45	30°♂			3181 Jan 27 08:11	0°♂	

evening set	3181 Mar 03 11:20	27° H 45'43			3185 Oct 10 05:11	0° L		
	3181 Mar 06 07:22	0° Y			3185 Nov 26 16:28	0° M		
	3181 Apr 13 16:26	0° B			3186 Jan 13 10:01	0° A		
					3186 Mar 02 22:47	0° Z		
conjunction	3181 May 10 10:31	20° B 23'18 -0°09'24	desc. node		3186 Mar 13 00:00	6° Z 04'39		
minimum elong	3181 May 10 11:20	20° B 24'49 0°09'24			3186 Apr 23 06:54	0° \approx		
behind sun begin	3181 May 09 12:31	19° B 41'55			3186 Jul 05 10:34	0° H		
behind sun end	3181 May 11 10:09	21° B 07'41	retrograde		3186 Jul 18 22:15	1° H 06'16		
	3181 May 23 07:35	0° II			3186 Aug 01 06:49	30° R \approx		
asc. node	3181 May 24 13:36	0° II 55'34	opposition		3186 Aug 18 05:42	26° \approx 02'51 -6°42'12		
max. Earth dist.	3181 Jun 27 10:56	25° II 29'57 2.46718 AU	greatest brilliancy		3186 Aug 19 05:40	25° \approx 46'29 -2.8m		
	3181 Jul 03 19:37	0° E	min. Earth dist.		3186 Aug 22 08:29	24° \approx 55'37 0.38386 AU		
morning rise	3181 Jul 12 03:57	5° E 51'03	direct		3186 Sep 18 11:53	20° \approx 32'03		
	3181 Aug 16 13:39	0° L			3186 Oct 28 01:33	0° H		
	3181 Oct 01 19:29	0° M			3186 Dec 20 16:41	0° Y		
	3181 Nov 20 05:15	0° L	asc. node		3187 Jan 14 10:10	16° Y 11'31		
	3182 Jan 15 10:11	0° M			3187 Feb 03 23:23	0° B		
retrograde	3182 Mar 23 12:27	19° M 13'33			3187 Mar 20 08:57	0° II		
opposition	3182 Apr 30 17:18	10° M 38'13 1°29'42			3187 May 04 11:52	0° E		
greatest brilliancy	3182 May 01 01:20	10° M 30'31 -1.6m			3187 Jun 19 17:08	0° L		
min. Earth dist.	3182 May 06 08:25	8° M 28'54 0.61762 AU			3187 Aug 05 18:25	0° M		
desc. node	3182 Jun 08 01:51	0° M 45'45	evening set		3187 Aug 09 08:19	2° M 16'14		
direct	3182 Jun 10 21:22	0° M 42'42	max. Earth dist.		3187 Sep 19 14:55	28° M 27'50 2.67634 AU		
	3182 Sep 01 00:29	0° A			3187 Sep 22 00:51	0° L		
	3182 Oct 17 21:58	0° Z						
	3182 Nov 28 07:32	0° \approx	conjunction		3187 Sep 24 05:05	1° L 23'09 0°58'04		
	3183 Jan 06 08:59	0° H	minimum elong		3187 Sep 24 06:04	1° L 24'43 0°58'04		
	3183 Feb 13 17:16	0° Y	morning rise		3187 Nov 07 09:11	29° L 42'28		
	3183 Mar 24 12:24	0° B			3187 Nov 07 20:02	0° M		
asc. node	3183 Apr 11 11:50	13° B 35'38			3187 Dec 23 17:03	0° A		
	3183 May 03 15:15	0° II	desc. node		3188 Jan 28 23:30	24° A 13'42		
evening set	3183 May 10 14:46	5° II 05'17			3188 Feb 06 12:29	0° Z		
	3183 Jun 14 14:45	0° E			3188 Mar 21 08:19	0° \approx		
					3188 May 03 12:54	0° H		
conjunction	3183 Jul 06 22:32	15° E 23'04 0°48'43			3188 Jun 16 02:12	0° Y		
minimum elong	3183 Jul 06 20:45	15° E 20'01 0°48'41			3188 Aug 02 18:47	0° B		
	3183 Jul 28 15:17	0° L	retrograde		3188 Oct 02 01:26	20° B 15'10		
max. Earth dist.	3183 Aug 02 14:27	3° L 18'04 2.58787 AU	min. Earth dist.		3188 Oct 28 14:28	15° B 32'55 0.41457 AU		
morning rise	3183 Aug 27 08:07	19° L 32'05	opposition		3188 Nov 05 02:20	13° B 10'20 -1°40'24		
	3183 Sep 12 13:15	0° M	greatest brilliancy		3188 Nov 04 16:27	13° B 18'14 -2.7m		
	3183 Oct 30 03:09	0° L	asc. node		3188 Dec 01 08:49	7° B 28'09		
	3183 Dec 18 13:35	0° M	direct		3188 Dec 06 03:44	7° B 18'58		
	3184 Feb 09 19:28	0° A			3189 Feb 14 08:18	0° II		
desc. node	3184 Apr 25 00:37	29° A 23'29			3189 Apr 08 22:00	0° E		
	3184 Apr 29 10:48	0° Z			3189 May 28 20:06	0° L		
retrograde	3184 May 09 07:58	0° Z 34'32			3189 Jul 16 18:07	0° M		
	3184 May 18 23:06	30° R A			3189 Sep 02 19:38	0° L		
opposition	3184 Jun 13 07:25	23° A 27'58 -2°18'32	evening set		3189 Sep 14 06:54	7° L 16'09		
greatest brilliancy	3184 Jun 14 00:00	23° A 13'30 -2.1m	max. Earth dist.		3189 Oct 12 01:04	25° L 05'14 2.63905 AU		
min. Earth dist.	3184 Jun 21 17:48	20° A 31'51 0.50296 AU			3189 Oct 19 14:24	0° M		
direct	3184 Jul 21 18:34	14° A 44'22						
	3184 Sep 12 04:18	0° Z	conjunction		3189 Oct 29 17:34	6° M 38'08 0°25'50		
	3184 Oct 31 10:27	0° \approx	minimum elong		3189 Oct 29 18:22	6° M 39'27 0°25'49		
	3184 Dec 12 03:16	0° H			3189 Dec 03 17:14	0° A		
	3185 Jan 21 00:14	0° Y	morning rise		3189 Dec 14 09:11	7° A 16'12		
asc. node	3185 Feb 26 10:28	27° Y 20'25	desc. node		3189 Dec 15 22:05	8° A 19'26		
	3185 Mar 02 00:28	0° B			3190 Jan 16 01:19	0° Z		
	3185 Apr 12 05:31	0° II			3190 Feb 26 17:51	0° \approx		
	3185 May 25 04:06	0° E			3190 Apr 08 03:26	0° H		
evening set	3185 Jun 29 15:57	23° E 53'18			3190 May 17 20:25	0° Y		
	3185 Jul 08 22:00	0° L			3190 Jun 26 20:16	0° B		
					3190 Aug 07 21:10	0° II		
conjunction	3185 Aug 18 01:13	26° L 05'55 1°08'19			3190 Sep 25 17:30	0° E		
minimum elong	3185 Aug 18 01:02	26° L 05'37 1°08'20	asc. node		3190 Oct 19 07:31	10° E 45'09		
	3185 Aug 24 02:56	0° M	retrograde		3190 Nov 21 13:13	17° E 36'44		
max. Earth dist.	3185 Aug 27 06:49	2° M 01'39 2.65927 AU	min. Earth dist.		3190 Dec 23 02:02	10° E 50'06 0.54561 AU		
morning rise	3185 Oct 02 23:12	25° M 24'14	greatest brilliancy		3190 Dec 29 08:12	8° E 25'43 -1.9m		

opposition	3190 Dec 30 05:41	8°☾05'02	3°15'42	minimum elong	3196 Apr 12 14:33	23°♊19'34	0°37'28
direct	3191 Feb 03 21:27	0°☾06'19			3196 Apr 21 04:56	0°♊	
	3191 May 02 15:24	0°♊			3196 May 30 17:27	0°♊	
	3191 Jun 25 19:06	0°♊		max. Earth dist.	3196 Jun 03 10:38	2°♊45'18	2.41282 AU
	3191 Aug 14 20:09	0°♊		asc. node	3196 Jun 10 05:08	7°♊44'39	
	3191 Oct 01 05:49	0°♊		morning rise	3196 Jun 19 14:02	14°♊34'59	
evening set	3191 Oct 22 09:18	13°♊54'50			3196 Jul 11 03:10	0°☾	
desc. node	3191 Nov 02 20:56	21°♊37'01			3196 Aug 23 21:32	0°♊	
max. Earth dist.	3191 Nov 08 23:26	25°♊45'22	2.55022 AU		3196 Oct 09 12:41	0°♊	
	3191 Nov 15 04:32	0°♊			3196 Nov 29 11:46	0°♊	
					3197 Feb 03 07:59	0°♊	
conjunction	3191 Dec 09 17:02	17°♊03'50	-0°21'11	retrograde	3197 Mar 08 03:39	5°♊36'28	
minimum elong	3191 Dec 09 16:10	17°♊02'17	0°21'10		3197 Apr 07 04:10	30°♊♊	
	3191 Dec 27 20:02	0°♊		opposition	3197 Apr 16 03:43	26°♊37'55	2°29'31
morning rise	3192 Jan 30 18:13	24°♊55'28		greatest brilliancy	3197 Apr 16 13:10	26°♊28'43	-1.4m
	3192 Feb 06 12:38	0°♊		min. Earth dist.	3197 Apr 20 08:14	25°♊00'09	0.64744 AU
	3192 Mar 16 19:38	0°♊		direct	3197 May 27 14:58	16°♊36'19	
	3192 Apr 24 10:03	0°♊		desc. node	3197 Jun 24 16:38	20°♊58'19	
	3192 Jun 02 04:18	0°♊			3197 Jul 19 01:29	0°♊	
	3192 Jul 12 03:06	0°♊			3197 Sep 12 04:39	0°♊	
	3192 Aug 23 15:20	0°☾			3197 Oct 27 00:39	0°♊	
asc. node	3192 Sep 05 07:47	8°☾25'07			3197 Dec 06 18:54	0°♊	
	3192 Oct 10 13:24	0°♊			3198 Jan 14 13:18	0°♊	
retrograde	3192 Dec 28 21:10	28°♊03'20			3198 Feb 21 16:24	0°♊	
min. Earth dist.	3193 Feb 03 12:07	19°♊30'11	0.64344 AU		3198 Apr 01 05:59	0°♊	
greatest brilliancy	3193 Feb 06 10:52	18°♊19'31	-1.4m	evening set	3198 Apr 16 00:57	11°♊16'27	
opposition	3193 Feb 07 01:02	18°♊05'21	4°34'48	asc. node	3198 Apr 28 04:43	20°♊25'07	
direct	3193 Mar 18 01:38	8°♊53'27			3198 May 11 02:33	0°♊	
	3193 May 28 12:06	0°♊					
	3193 Jul 23 17:26	0°♊		conjunction	3198 Jun 16 20:20	26°♊29'34	0°30'45
	3193 Sep 10 23:46	0°♊		minimum elong	3198 Jun 16 18:35	26°♊26'30	0°30'44
desc. node	3193 Sep 19 19:41	5°♊39'49			3198 Jun 21 19:58	0°☾	
	3193 Oct 26 09:18	0°♊		max. Earth dist.	3198 Jul 21 15:04	20°☾32'48	2.54572 AU
evening set	3193 Dec 05 10:12	28°♊14'47			3198 Aug 04 16:07	0°♊	
	3193 Dec 07 20:06	0°♊		morning rise	3198 Aug 10 20:52	4°♊07'35	
max. Earth dist.	3193 Dec 21 19:43	10°♊16'33	2.42340 AU		3198 Sep 19 14:38	0°♊	
	3194 Jan 17 00:53	0°♊			3198 Nov 06 15:33	0°♊	
					3198 Dec 27 15:17	0°♊	
conjunction	3194 Jan 31 04:17	10°♊51'20	-1°02'11		3199 Feb 25 03:37	0°♊	
minimum elong	3194 Jan 31 02:57	10°♊48'46	1°02'11	retrograde	3199 Apr 19 19:38	13°♊16'10	
	3194 Feb 24 18:22	0°♊		desc. node	3199 May 12 16:13	10°♊00'48	
	3194 Apr 03 20:57	0°♊		opposition	3199 May 26 07:22	5°♊28'50	-0°35'59
morning rise	3194 Apr 07 17:55	3°♊03'01		greatest brilliancy	3199 May 26 11:22	5°♊25'10	-1.9m
	3194 May 12 05:43	0°♊		min. Earth dist.	3199 Jun 02 22:27	2°♊41'24	0.55318 AU
	3194 Jun 20 17:46	0°♊			3199 Jun 10 22:29	30°♊♊	
asc. node	3194 Jul 24 06:53	24°♊23'34		direct	3199 Jul 05 06:27	26°♊04'15	
	3194 Aug 01 05:38	0°☾			3199 Jul 30 15:05	0°♊	
	3194 Sep 14 16:49	0°♊			3199 Sep 29 21:39	0°♊	
	3194 Nov 03 05:25	0°♊			3199 Nov 12 22:07	0°♊	
	3195 Jan 12 21:37	0°♊			3199 Dec 23 01:16	0°♊	
retrograde	3195 Feb 01 09:08	2°♊12'07			3200 Jan 31 01:48	0°♊	
	3195 Feb 19 17:00	30°♊♊			3200 Mar 10 10:40	0°♊	
opposition	3195 Mar 13 12:46	22°♊32'06	4°08'58	asc. node	3200 Mar 15 03:09	3°♊31'07	
greatest brilliancy	3195 Mar 13 13:44	22°♊31'09	-1.3m		3200 Apr 20 02:24	0°♊	
min. Earth dist.	3195 Mar 13 21:17	22°♊23'38	0.67858 AU		3200 Jun 01 13:37	0°☾	
direct	3195 Apr 23 12:02	12°♊41'28		evening set	3200 Jun 11 12:02	6°☾49'39	
	3195 Jun 25 08:26	0°♊			3200 Jul 15 22:42	0°♊	
desc. node	3195 Aug 07 18:12	22°♊39'10					
	3195 Aug 20 07:03	0°♊		conjunction	3200 Aug 02 08:33	11°♊27'38	1°04'49
	3195 Oct 06 10:32	0°♊		minimum elong	3200 Aug 02 07:41	11°♊26'13	1°04'49
	3195 Nov 18 07:19	0°♊		max. Earth dist.	3200 Aug 17 22:47	21°♊36'21	2.63768 AU
	3195 Dec 28 10:26	0°♊			3200 Aug 30 23:07	0°♊	
evening set	3196 Feb 04 03:19	29°♊21'17		morning rise	3200 Sep 18 20:56	12°♊05'45	
	3196 Feb 04 22:58	0°♊			3200 Oct 17 03:25	0°♊	
	3196 Mar 13 21:32	0°♊			3200 Dec 04 03:38	0°♊	
					3201 Jan 22 06:26	0°♊	
conjunction	3196 Apr 12 11:25	23°♊13'27	-0°37'31		3201 Mar 15 05:59	0°♊	

desc. node	3201 Mar 29 15:33	7° Z 40'01			3206 Aug 22 01:30	0° Z	
	3201 May 21 07:59	0° \approx		evening set	3206 Oct 07 03:17	29° Z 20'32	
retrograde	3201 Jun 17 23:25	4° \approx 13'19			3206 Oct 08 03:32	0° M	
	3201 Jul 14 16:20	30° R Z		max. Earth dist.	3206 Oct 28 04:31	13° M 11'31	2.59069 AU
opposition	3201 Jul 19 22:46	28° Z 25'52	-5°22'56	desc. node	3206 Nov 19 11:53	28° M 12'29	
greatest brilliancy	3201 Jul 21 07:58	28° Z 00'22	-2.6m				
min. Earth dist.	3201 Jul 27 09:35	26° Z 09'24	0.42227 AU	conjunction	3206 Nov 22 20:31	0° Z 30'07	-0°01'58
direct	3201 Aug 23 10:52	21° Z 32'19		minimum elong	3206 Nov 22 20:28	0° Z 30'03	0°01'58
	3201 Sep 29 05:43	0° \approx		behind sun begin	3206 Nov 22 00:38	29° M 56'09	
	3201 Nov 21 10:29	0° H		behind sun end	3206 Nov 23 16:19	1° Z 03'59	
	3202 Jan 03 20:08	0° Y			3206 Nov 22 02:53	0° Z	
asc. node	3202 Jan 31 01:21	19° Y 25'54			3207 Jan 03 23:41	0° Z	
	3202 Feb 14 20:52	0° B		morning rise	3207 Jan 10 13:51	4° Z 44'10	
	3202 Mar 29 12:03	0° II			3207 Feb 14 00:09	0° \approx	
	3202 May 12 12:10	0° E			3207 Mar 25 15:27	0° H	
	3202 Jun 27 00:03	0° Q			3207 May 03 13:35	0° Y	
evening set	3202 Jul 25 06:59	18° Q 15'35			3207 Jun 11 15:21	0° B	
	3202 Aug 12 15:22	0° M			3207 Jul 22 00:47	0° II	
					3207 Sep 03 15:14	0° E	
conjunction	3202 Sep 10 02:52	18° M 08'12	1°04'59	asc. node	3207 Sep 22 23:16	12° E 04'00	
minimum elong	3202 Sep 10 03:32	18° M 09'16	1°04'59		3207 Oct 26 06:35	0° Q	
max. Earth dist.	3202 Sep 10 15:32	18° M 28'21	2.67628 AU	retrograde	3207 Dec 15 18:27	13° Q 39'32	
	3202 Sep 28 18:33	0° Z		min. Earth dist.	3208 Jan 19 13:19	5° Q 43'43	0.61217 AU
morning rise	3202 Oct 24 14:27	16° Z 27'45		opposition	3208 Jan 24 13:57	3° Q 44'01	4°20'27
	3202 Nov 14 17:52	0° M		greatest brilliancy	3208 Jan 23 18:46	4° Q 03'04	-1.6m
	3202 Dec 31 04:07	0° Z			3208 Feb 03 11:20	30° R E	
desc. node	3203 Feb 14 14:16	29° Z 43'48		direct	3208 Mar 02 11:28	24° E 55'31	
	3203 Feb 15 00:07	0° Z			3208 Apr 02 09:26	0° Q	
	3203 Apr 01 12:13	0° \approx			3208 Jun 09 05:22	0° M	
	3203 May 17 11:52	0° H			3208 Aug 01 00:44	0° Z	
	3203 Jul 06 06:44	0° Y			3208 Sep 18 08:35	0° M	
retrograde	3203 Sep 06 11:46	20° Y 28'31		desc. node	3208 Oct 06 10:35	11° M 46'58	
min. Earth dist.	3203 Oct 03 15:26	16° Y 01'31	0.37921 AU		3208 Nov 02 12:23	0° Z	
opposition	3203 Oct 07 21:46	14° Y 50'06	-4°40'08	evening set	3208 Nov 16 13:29	9° Z 43'35	
greatest brilliancy	3203 Oct 07 09:13	14° Y 58'51	-2.9m	max. Earth dist.	3208 Nov 30 22:07	19° Z 51'53	2.47547 AU
direct	3203 Nov 06 09:56	9° Y 47'26			3208 Dec 15 00:15	0° Z	
asc. node	3203 Dec 19 01:38	19° Y 57'36					
	3204 Jan 09 07:07	0° B		conjunction	3209 Jan 08 03:21	17° Z 46'20	-0°49'52
	3204 Mar 01 13:55	0° II		minimum elong	3209 Jan 08 01:28	17° Z 42'48	0°49'51
	3204 Apr 19 00:06	0° E			3209 Jan 24 09:05	0° \approx	
	3204 Jun 05 23:19	0° Q			3209 Mar 04 07:02	0° H	
	3204 Jul 23 23:21	0° M		morning rise	3209 Mar 09 07:06	3° H 54'28	
evening set	3204 Aug 31 02:16	23° M 57'29			3209 Apr 11 13:11	0° Y	
	3204 Sep 09 15:21	0° Z		greatest brilliancy	3209 Apr 14 16:53	2° Y 28'33	1.2m
max. Earth dist.	3204 Oct 02 19:12	14° Z 46'18	2.65990 AU		3209 May 20 00:13	0° B	
					3209 Jun 28 14:01	0° II	
conjunction	3204 Oct 15 08:31	22° Z 51'22	0°40'30	asc. node	3209 Aug 09 22:54	0° E 28'28	
minimum elong	3204 Oct 15 09:34	22° Z 53'04	0°40'30		3209 Aug 09 06:31	0° E	
	3204 Oct 26 08:51	0° M			3209 Sep 23 10:40	0° Q	
morning rise	3204 Nov 28 23:48	22° M 08'46			3209 Nov 15 01:30	0° M	
	3204 Dec 10 17:09	0° Z		retrograde	3210 Jan 19 01:51	19° M 27'40	
desc. node	3205 Jan 01 12:48	14° Z 48'50		min. Earth dist.	3210 Feb 27 05:30	10° M 05'13	0.67278 AU
	3205 Jan 23 12:12	0° Z		opposition	3210 Feb 28 09:19	9° M 37'26	4°28'13
	3205 Mar 06 20:11	0° \approx		greatest brilliancy	3210 Feb 28 04:33	9° M 42'11	-1.3m
	3205 Apr 17 00:01	0° H			3210 Apr 07 19:59	30° R Q	
	3205 May 27 14:09	0° Y		direct	3210 Apr 09 18:23	29° Q 58'37	
	3205 Jul 07 19:38	0° B			3210 Apr 11 17:07	0° M	
	3205 Aug 21 16:11	0° II			3210 Jul 07 18:44	0° Z	
retrograde	3205 Nov 03 23:33	28° II 16'12		desc. node	3210 Aug 24 09:24	27° Z 13'16	
asc. node	3205 Nov 05 01:08	28° II 15'42			3210 Aug 28 21:59	0° M	
min. Earth dist.	3205 Dec 03 07:30	22° II 20'10	0.49407 AU		3210 Oct 14 03:45	0° Z	
opposition	3205 Dec 11 09:14	19° II 22'12	1°55'20		3210 Nov 25 18:48	0° Z	
greatest brilliancy	3205 Dec 10 18:03	19° II 36'10	-2.2m		3211 Jan 04 21:43	0° \approx	
direct	3206 Jan 14 06:53	12° II 06'46		evening set	3211 Jan 09 02:49	3° \approx 13'54	
	3206 Mar 17 16:30	0° E			3211 Feb 12 11:27	0° H	
	3206 May 13 16:13	0° Q					
	3206 Jul 04 00:00	0° M		conjunction	3211 Mar 14 22:05	24° H 02'55	-0°58'21

minimum elong	3211 Mar 15 00:41	24°  08'03	0°58'20	desc. node	3216 Apr 15 06:07	4°  54'46	
	3211 Mar 22 10:50	0°  Y		retrograde	3216 May 22 12:16	12°  01'20	
max. Earth dist.	3211 Apr 03 04:52	9°  Y15'54	2.37060 AU	opposition	3216 Jun 25 10:31	5°  21'26	-3°24'36
	3211 Apr 29 17:55	0°  B		greatest brilliancy	3216 Jun 26 11:00	5°  00'51	-2.3m
morning rise	3211 May 25 03:51	19°  B27'27		min. Earth dist.	3216 Jul 03 22:16	2°  30'32	0.47361 AU
	3211 Jun 08 04:59	0°  II			3216 Jul 12 07:30	30°  R  A	
asc. node	3211 Jun 27 22:07	14°  II29'59		direct	3216 Aug 01 17:56	27°  A10'22	
	3211 Jul 19 13:34	0°  S			3216 Aug 22 09:46	0°  S	
	3211 Sep 01 10:37	0°  O			3216 Oct 22 17:08	0°  ≈	
	3211 Oct 18 17:24	0°  M			3216 Dec 05 05:39	0°  H	
	3211 Dec 11 10:58	0°  A			3217 Jan 14 21:46	0°  Y	
retrograde	3212 Feb 22 18:28	22°  A35'39		asc. node	3217 Feb 16 19:11	24°  Y23'34	
opposition	3212 Apr 02 09:02	13°  A18'03	3°16'44		3217 Feb 24 10:17	0°  B	
greatest brilliancy	3212 Apr 02 16:42	13°  A10'30	-1.3m		3217 Apr 07 00:11	0°  II	
min. Earth dist.	3212 Apr 05 02:07	12°  A14'03	0.66760 AU		3217 May 20 05:33	0°  S	
direct	3212 May 13 20:30	3°  A16'49			3217 Jul 04 04:07	0°  O	
desc. node	3212 Jul 11 08:39	19°  A02'19		evening set	3217 Jul 09 07:43	3°  O22'26	
	3212 Aug 02 09:36	0°  M			3217 Aug 19 11:38	0°  M	
	3212 Sep 21 16:06	0°  A					
	3212 Nov 04 10:07	0°  S		conjunction	3217 Aug 26 15:17	4°  M34'46	1°08'15
	3212 Dec 14 19:45	0°  ≈		minimum elong	3217 Aug 26 15:27	4°  M35'03	1°08'16
	3213 Jan 22 10:10	0°  H		max. Earth dist.	3217 Sep 01 15:55	8°  M25'51	2.66758 AU
greatest brilliancy	3213 Feb 20 08:51	22°  H51'20	1.2m		3217 Oct 05 13:21	0°  A	
	3213 Mar 01 10:06	0°  Y		morning rise	3217 Oct 10 21:45	3°  A23'46	
evening set	3213 Mar 19 17:01	14°  Y22'07			3217 Nov 21 19:29	0°  M	
	3213 Apr 08 20:00	0°  B			3218 Jan 07 23:54	0°  A	
asc. node	3213 May 14 19:50	27°  B16'18			3218 Feb 24 07:43	0°  S	
	3213 May 18 12:05	0°  II		desc. node	3218 Mar 03 05:27	4°  S20'33	
					3218 Apr 13 17:18	0°  ≈	
conjunction	3213 May 24 22:48	4°  II45'12	0°06'41		3218 Jun 05 21:28	0°  H	
minimum elong	3213 May 24 22:17	4°  II44'15	0°06'40	retrograde	3218 Aug 06 10:01	18°  H40'06	
behind sun begin	3213 May 23 21:52	3°  II59'24		opposition	3218 Sep 05 09:40	13°  H43'24	-6°37'37
behind sun end	3213 May 25 22:42	5°  II29'03		greatest brilliancy	3218 Sep 05 19:48	13°  H36'41	-2.9m
	3213 Jun 29 01:04	0°  S		min. Earth dist.	3218 Sep 06 15:17	13°  H23'46	0.37302 AU
max. Earth dist.	3213 Jul 07 08:01	5°  S48'28	2.49691 AU	direct	3218 Oct 05 10:51	8°  H41'44	
morning rise	3213 Jul 23 15:26	17°  S03'59			3218 Dec 08 11:00	0°  Y	
	3213 Aug 11 18:37	0°  O		asc. node	3219 Jan 04 17:43	15°  Y58'34	
	3213 Sep 26 20:09	0°  M			3219 Jan 26 23:37	0°  B	
	3213 Nov 14 14:11	0°  A			3219 Mar 14 00:20	0°  II	
	3214 Jan 07 04:17	0°  M			3219 Apr 28 23:49	0°  S	
retrograde	3214 Apr 01 20:44	27°  M52'05			3219 Jun 14 16:54	0°  O	
opposition	3214 May 09 13:15	19°  M31'51	0°48'17		3219 Aug 01 00:54	0°  M	
greatest brilliancy	3214 May 09 18:21	19°  M27'01	-1.7m	evening set	3219 Aug 17 17:35	10°  M33'11	
min. Earth dist.	3214 May 15 22:54	17°  M06'45	0.59726 AU		3219 Sep 17 10:00	0°  A	
desc. node	3214 May 29 07:17	12°  M40'50		max. Earth dist.	3219 Sep 24 20:27	4°  A44'01	2.67274 AU
direct	3214 Jun 19 10:35	9°  M43'41					
	3214 Aug 23 07:39	0°  A		conjunction	3219 Oct 02 06:19	9°  A27'51	0°52'27
	3214 Oct 11 14:56	0°  S		minimum elong	3219 Oct 02 07:23	9°  A29'33	0°52'27
	3214 Nov 22 16:54	0°  ≈			3219 Nov 03 04:16	0°  M	
	3215 Jan 01 01:16	0°  H		morning rise	3219 Nov 15 11:14	7°  M59'37	
	3215 Feb 08 13:46	0°  Y			3219 Dec 18 20:28	0°  A	
	3215 Mar 19 12:16	0°  B		desc. node	3220 Jan 19 03:54	21°  A03'36	
asc. node	3215 Apr 01 19:26	10°  B02'58			3220 Feb 01 06:19	0°  S	
	3215 Apr 28 18:03	0°  II			3220 Mar 15 11:34	0°  ≈	
evening set	3215 May 23 06:22	17°  II38'39			3220 Apr 26 18:35	0°  H	
	3215 Jun 09 20:16	0°  S			3220 Jun 07 21:02	0°  Y	
					3220 Jul 21 19:40	0°  B	
conjunction	3215 Jul 17 09:56	25°  S38'30	0°56'17		3220 Sep 16 05:29	0°  II	
minimum elong	3215 Jul 17 08:25	25°  S35'58	0°56'16	retrograde	3220 Oct 14 21:44	5°  II28'23	
	3215 Jul 23 22:32	0°  O		min. Earth dist.	3220 Nov 11 05:40	0°  II22'38	0.44112 AU
max. Earth dist.	3215 Aug 08 22:56	10°  O35'21	2.60791 AU		3220 Nov 12 09:02	30°  R  B	
morning rise	3215 Sep 05 04:52	28°  O17'59		opposition	3220 Nov 19 08:38	27°  B37'26	-0°08'31
	3215 Sep 07 20:19	0°  M		greatest brilliancy	3218 Aug 16 14:24	17°  H59'47	-3.1m
	3215 Oct 25 05:17	0°  A		asc. node	3220 Nov 21 16:51	26°  B50'08	
	3215 Dec 13 00:19	0°  M		direct	3220 Dec 21 09:48	21°  B14'34	
	3216 Feb 02 06:58	0°  A			3221 Jan 30 14:29	0°  II	
	3216 Apr 02 05:38	0°  S			3221 Apr 01 11:27	0°  S	

	3221 May 23 02:21	0°♈	morning rise	3226 Apr 25 04:04	20°♊32'18
	3221 Jul 11 17:16	0°♍		3226 May 07 08:03	0°♉
	3221 Aug 29 02:18	0°♊		3226 Jun 15 18:32	0°♈
evening set	3221 Sep 22 12:13	15°♊29'15	asc. node	3226 Jul 14 13:51	21°♈04'00
	3221 Oct 14 23:27	0°♌		3226 Jul 27 03:29	0°♎
max. Earth dist.	3221 Oct 17 17:43	1°♌48'07 2.62380 AU		3226 Sep 09 06:47	0°♈
				3226 Oct 27 16:15	0°♍
conjunction	3221 Nov 07 06:26	15°♌20'38 0°16'10		3226 Dec 26 11:24	0°♊
minimum elong	3221 Nov 07 06:59	15°♌21'33 0°16'10	retrograde	3227 Feb 09 01:38	9°♊55'51
	3221 Nov 29 01:09	0°♈	opposition	3227 Mar 21 02:18	0°♊22'56 3°52'42
desc. node	3221 Dec 06 02:59	4°♈49'50	greatest brilliancy	3227 Mar 21 06:05	0°♊19'11 -1.3m
morning rise	3221 Dec 23 18:59	17°♈02'16	min. Earth dist.	3227 Mar 22 07:21	29°♍54'09 0.67759 AU
	3222 Jan 11 05:07	0°♉		3227 Mar 22 01:26	30°♌♍
	3222 Feb 21 15:47	0°♊	direct	3227 May 01 07:47	20°♍27'16
	3222 Apr 02 18:19	0°♈		3227 Jun 14 11:57	0°♊
	3222 May 12 03:33	0°♊	desc. node	3227 Jul 28 23:17	20°♊55'42
	3222 Jun 20 17:25	0°♉		3227 Aug 14 03:03	0°♌
	3222 Jul 31 22:20	0°♈		3227 Oct 01 04:17	0°♈
	3222 Sep 15 20:08	0°♎		3227 Nov 13 08:05	0°♉
asc. node	3222 Oct 09 16:29	12°♎59'50		3227 Dec 23 13:45	0°♊
retrograde	3222 Nov 30 17:09	27°♎52'15		3228 Jan 31 03:02	0°♈
min. Earth dist.	3223 Jan 02 10:36	20°♎39'43 0.57150 AU	evening set	3228 Feb 19 21:27	15°♈36'59
opposition	3223 Jan 08 21:28	18°♎08'38 3°46'47		3228 Mar 09 01:50	0°♊
greatest brilliancy	3223 Jan 07 23:33	18°♎30'02 -1.8m		3228 Apr 16 09:35	0°♉
direct	3223 Feb 14 10:23	9°♎50'04			
	3223 Apr 23 23:54	0°♈	conjunction	3228 Apr 28 13:25	9°♉21'11 -0°21'49
	3223 Jun 19 22:32	0°♍	minimum elong	3228 Apr 28 15:23	9°♉24'55 0°21'47
	3223 Aug 09 19:17	0°♊		3228 May 25 22:24	0°♈
	3223 Sep 26 12:22	0°♌	asc. node	3228 May 31 13:39	4°♈10'26
desc. node	3223 Oct 24 02:34	18°♌10'37	max. Earth dist.	3228 Jun 18 12:32	17°♈16'56 2.44270 AU
evening set	3223 Oct 31 11:52	23°♌09'08	morning rise	3228 Jul 02 19:11	27°♈30'08
	3223 Nov 10 13:12	0°♈		3228 Jul 06 07:54	0°♎
max. Earth dist.	3223 Nov 16 09:08	4°♈00'46 2.52489 AU		3228 Aug 19 00:19	0°♈
				3228 Oct 04 07:55	0°♍
conjunction	3223 Dec 20 01:38	27°♈46'40 -0°32'14		3228 Nov 23 05:06	0°♊
minimum elong	3223 Dec 20 00:18	27°♈44'15 0°32'14		3229 Jan 20 22:37	0°♌
	3223 Dec 23 03:34	0°♉	retrograde	3229 Mar 16 18:08	13°♌46'03
	3224 Feb 01 17:28	0°♊	opposition	3229 Apr 24 08:54	4°♌59'42 1°56'12
morning rise	3224 Feb 12 14:37	8°♊15'10	greatest brilliancy	3229 Apr 24 17:55	4°♌51'00 -1.5m
	3224 Mar 11 20:58	0°♈	min. Earth dist.	3229 Apr 29 09:15	3°♌03'41 0.63221 AU
	3224 Apr 19 07:54	0°♊		3229 May 07 19:14	30°♌♊
	3224 May 27 22:48	0°♉	direct	3229 Jun 04 17:51	25°♊00'23
	3224 Jul 06 16:53	0°♈	desc. node	3229 Jun 14 22:18	25°♊38'26
	3224 Aug 17 18:51	0°♎		3229 Jul 04 16:10	0°♌
asc. node	3224 Aug 26 14:40	5°♎59'18		3229 Sep 05 09:36	0°♈
	3224 Oct 03 06:42	0°♈		3229 Oct 21 08:25	0°♉
	3224 Dec 03 02:44	0°♍		3229 Dec 01 11:52	0°♊
retrograde	3225 Jan 05 16:46	6°♍20'02		3230 Jan 09 10:20	0°♈
	3225 Feb 05 18:54	30°♌♈		3230 Feb 16 15:57	0°♊
min. Earth dist.	3225 Feb 12 07:02	27°♈28'00 0.65680 AU		3230 Mar 27 07:54	0°♉
opposition	3225 Feb 14 23:24	26°♈23'38 4°36'07	asc. node	3230 Apr 18 12:16	16°♉48'33
greatest brilliancy	3225 Feb 14 12:34	26°♈34'29 -1.4m	evening set	3230 Apr 30 07:09	25°♉35'11
direct	3225 Mar 26 13:12	17°♈00'53		3230 May 06 06:45	0°♈
	3225 May 18 18:49	0°♍		3230 Jun 17 02:09	0°♎
	3225 Jul 17 18:37	0°♊			
	3225 Sep 05 21:36	0°♌	conjunction	3230 Jun 28 13:24	7°♎58'43 0°41'51
desc. node	3225 Sep 10 01:05	2°♌37'19	minimum elong	3230 Jun 28 11:31	7°♎55'29 0°41'50
	3225 Oct 21 14:19	0°♈	max. Earth dist.	3230 Jul 28 17:03	28°♎29'17 2.56993 AU
	3225 Dec 03 03:01	0°♉		3230 Jul 30 23:18	0°♈
evening set	3225 Dec 17 02:04	10°♉15'14	morning rise	3230 Aug 20 10:52	13°♈32'56
max. Earth dist.	3226 Jan 08 09:48	27°♉01'27 2.39634 AU		3230 Sep 14 20:06	0°♍
	3226 Jan 12 07:32	0°♊		3230 Nov 01 13:05	0°♊
				3230 Dec 21 12:24	0°♌
conjunction	3226 Feb 14 15:26	25°♊48'33 -1°04'50		3231 Feb 14 16:18	0°♈
minimum elong	3226 Feb 14 15:15	25°♊48'12 1°04'51	retrograde	3231 May 01 01:29	23°♈16'19
	3226 Feb 19 23:39	0°♈	desc. node	3231 May 02 21:08	23°♈15'07
	3226 Mar 30 00:38	0°♊	opposition	3231 Jun 05 18:15	15°♈50'27 -1°32'37

greatest brilliancy	3231 Jun 06 05:04	15°♄40'47	-2.0m	max. Earth dist.	3236 Oct 08 04:51	21°♎11'50	2.64941 AU
min. Earth dist.	3231 Jun 13 21:53	12°♄55'48	0.52613 AU		3236 Oct 21 18:51	0°♎	
direct	3231 Jul 15 00:00	6°♄45'41					
	3231 Sep 20 18:50	0°♄		conjunction	3236 Oct 23 12:20	1°♎07'36	0°32'16
	3231 Nov 06 03:28	0°♈		minimum elong	3236 Oct 23 13:15	1°♎09'07	0°32'16
	3231 Dec 17 01:24	0°♊			3236 Dec 06 00:53	0°♊	
	3232 Jan 25 11:45	0°♋		morning rise	3236 Dec 07 15:12	1°♊04'44	
asc. node	3232 Mar 05 10:55	0°♌13'26		desc. node	3236 Dec 22 18:29	11°♊23'15	
	3232 Mar 05 03:44	0°♌			3237 Jan 18 14:29	0°♄	
	3232 Apr 15 01:14	0°♍			3237 Mar 01 14:15	0°♈	
	3232 May 27 17:12	0°♎			3237 Apr 11 07:43	0°♊	
evening set	3232 Jun 22 01:36	17°♎13'31			3237 May 21 08:49	0°♋	
	3232 Jul 11 05:51	0°♏			3237 Jun 30 18:47	0°♌	
					3237 Aug 12 15:08	0°♍	
conjunction	3232 Aug 11 11:01	20°♏24'43	1°07'26		3237 Oct 04 08:57	0°♎	
minimum elong	3232 Aug 11 10:34	20°♏23'58	1°07'25	asc. node	3237 Oct 26 07:37	7°♎39'43	
max. Earth dist.	3232 Aug 23 12:22	28°♏11'34	2.65064 AU	retrograde	3237 Nov 14 06:27	10°♎06'17	
	3232 Aug 26 07:50	0°♐		min. Earth dist.	3237 Dec 14 19:14	3°♎42'17	0.52321 AU
morning rise	3232 Sep 27 00:26	20°♐14'10		opposition	3237 Dec 22 11:00	0°♎48'44	2°46'37
	3232 Oct 12 10:10	0°♑		greatest brilliancy	3237 Dec 21 15:02	1°♎07'37	-2.0m
	3232 Nov 29 02:23	0°♒			3237 Dec 24 15:04	30°♒♐	
	3233 Jan 16 08:36	0°♊		direct	3238 Jan 26 09:25	23°♐08'06	
	3233 Mar 07 02:18	0°♌			3238 Mar 03 05:43	0°♎	
desc. node	3233 Mar 19 19:57	7°♌22'25			3238 May 06 18:11	0°♏	
	3233 May 01 02:33	0°♈			3238 Jun 28 13:35	0°♐	
retrograde	3233 Jul 04 20:07	19°♈12'30			3238 Aug 17 04:26	0°♑	
opposition	3233 Aug 04 20:24	13°♈52'16	-6°17'23		3238 Oct 03 11:40	0°♒	
greatest brilliancy	3233 Aug 06 03:24	13°♈30'00	-2.7m	evening set	3238 Oct 15 17:55	8°♒01'19	
min. Earth dist.	3233 Aug 10 19:20	12°♈10'18	0.39870 AU	max. Earth dist.	3238 Nov 03 17:53	20°♒40'23	2.56924 AU
direct	3233 Sep 06 11:49	7°♈46'41		desc. node	3238 Nov 09 17:18	24°♒42'33	
	3233 Nov 09 17:53	0°♊			3238 Nov 17 11:52	0°♊	
	3233 Dec 26 20:06	0°♋					
asc. node	3234 Jan 21 10:22	17°♋34'45		conjunction	3238 Dec 02 06:00	10°♊10'46	-0°13'00
	3234 Feb 08 07:43	0°♌		minimum elong	3238 Dec 02 05:29	10°♊09'52	0°13'00
	3234 Mar 23 18:49	0°♍		behind sun begin	3238 Dec 01 17:02	9°♊48'14	
	3234 May 07 07:29	0°♎		behind sun end	3238 Dec 02 17:55	10°♊31'30	
	3234 Jun 22 03:33	0°♏			3238 Dec 30 06:46	0°♌	
evening set	3234 Aug 02 23:44	26°♏49'10		morning rise	3239 Jan 21 15:34	16°♌15'42	
	3234 Aug 07 23:38	0°♐			3239 Feb 09 03:45	0°♈	
max. Earth dist.	3234 Sep 15 20:26	24°♐42'08	2.67737 AU		3239 Mar 20 14:56	0°♊	
					3239 Apr 28 08:37	0°♋	
conjunction	3234 Sep 18 05:18	26°♐12'33	1°01'21		3239 Jun 06 05:27	0°♌	
minimum elong	3234 Sep 18 06:10	26°♐13'56	1°01'21		3239 Jul 16 07:03	0°♍	
	3234 Sep 24 04:18	0°♑			3239 Aug 28 02:18	0°♎	
morning rise	3234 Nov 01 11:33	24°♑28'39		asc. node	3239 Sep 13 07:43	10°♎33'37	
	3234 Nov 10 01:29	0°♒			3239 Oct 16 06:36	0°♏	
	3234 Dec 26 04:24	0°♊		retrograde	3239 Dec 23 23:11	22°♏31'10	
desc. node	3235 Feb 04 19:43	26°♊55'25		min. Earth dist.	3240 Jan 28 19:11	14°♏13'57	0.63067 AU
	3235 Feb 09 10:06	0°♌		greatest brilliancy	3240 Feb 01 07:28	12°♏50'00	-1.5m
	3235 Mar 25 21:55	0°♈		opposition	3240 Feb 02 00:02	12°♏33'28	4°31'02
	3235 May 09 02:15	0°♊		direct	3240 Mar 11 13:20	3°♏31'11	
	3235 Jun 23 10:50	0°♋			3240 Jun 01 21:24	0°♐	
	3235 Aug 16 23:24	0°♌			3240 Jul 26 12:55	0°♑	
retrograde	3235 Sep 22 03:47	8°♌12'57			3240 Sep 13 10:33	0°♒	
min. Earth dist.	3235 Oct 18 13:28	3°♌43'02	0.39609 AU	desc. node	3240 Sep 26 15:54	8°♒31'57	
opposition	3235 Oct 24 23:07	1°♌48'13	-2°58'00		3240 Oct 28 19:02	0°♊	
greatest brilliancy	3235 Oct 24 09:17	1°♌58'37	-2.8m	evening set	3240 Nov 27 00:10	20°♊25'13	
	3235 Oct 31 03:49	30°♒♋			3240 Dec 10 07:30	0°♌	
direct	3235 Nov 24 05:31	26°♋21'24		max. Earth dist.	3240 Dec 11 15:51	0°♌58'49	2.44662 AU
asc. node	3235 Dec 09 09:07	27°♋49'04			3241 Jan 19 15:02	0°♈	
	3235 Dec 18 16:03	0°♌					
	3236 Feb 21 21:17	0°♍		conjunction	3241 Jan 20 17:56	0°♈51'10	-0°57'52
	3236 Apr 12 16:23	0°♎		minimum elong	3241 Jan 20 16:10	0°♈47'49	0°57'51
	3236 May 31 15:13	0°♏			3241 Feb 27 11:02	0°♊	
	3236 Jul 19 02:46	0°♐		morning rise	3241 Mar 25 12:08	20°♊27'12	
	3236 Sep 05 00:01	0°♑			3241 Apr 06 15:10	0°♋	
evening set	3236 Sep 08 05:19	2°♑02'19			3241 May 15 00:28	0°♌	

	3241 Jun 23 12:13	0°♄			3246 Aug 11 15:55	0°♂	
asc. node	3241 Jul 31 07:05	27°♄23'40			3246 Oct 04 15:21	0°♂	
	3241 Aug 04 00:05	0°♄			3246 Nov 16 17:23	0°♂	
	3241 Sep 17 15:18	0°♄			3246 Dec 26 11:57	0°♂	
	3241 Nov 07 00:55	0°♄			3247 Feb 03 06:29	0°♄	
retrograde	3242 Jan 26 16:54	27°♄17'14			3247 Mar 14 09:46	0°♂	
opposition	3242 Mar 07 23:10	17°♄32'20	4°18'12	asc. node	3247 Mar 23 03:42	6°♂35'27	
greatest brilliancy	3242 Mar 07 21:42	17°♄33'48	-1.3m		3247 Apr 23 19:52	0°♄	
min. Earth dist.	3242 Mar 07 15:45	17°♄39'44	0.67726 AU	evening set	3247 Jun 04 01:01	29°♄17'22	
direct	3242 Apr 17 17:01	7°♄46'23			3247 Jun 05 01:35	0°♄	
	3242 Jun 30 02:50	0°♄			3247 Jul 19 06:23	0°♄	
desc. node	3242 Aug 14 14:27	24°♄47'07					
	3242 Aug 23 07:30	0°♄		conjunction	3247 Jul 27 06:08	5°♄17'44	1°01'53
	3242 Oct 09 03:02	0°♂		minimum elong	3247 Jul 27 04:59	5°♄15'49	1°01'52
	3242 Nov 20 22:40	0°♂		max. Earth dist.	3247 Aug 14 22:00	17°♄31'49	2.62541 AU
	3242 Dec 31 02:43	0°♂			3247 Sep 03 04:27	0°♄	
evening set	3243 Jan 23 09:51	18°♂01'30		morning rise	3247 Sep 13 16:43	6°♄44'20	
	3243 Feb 07 16:14	0°♂			3247 Oct 20 09:53	0°♄	
	3243 Mar 17 14:56	0°♄			3247 Dec 07 17:06	0°♄	
					3248 Jan 26 14:36	0°♂	
conjunction	3243 Mar 31 13:52	11°♄00'15	-0°47'58		3248 Mar 20 23:07	0°♂	
minimum elong	3243 Mar 31 17:14	11°♄06'54	0°47'57	desc. node	3248 Apr 05 11:50	7°♂29'35	
	3243 Apr 24 21:33	0°♂		retrograde	3248 Jun 05 20:53	24°♂30'02	
max. Earth dist.	3243 May 18 02:35	17°♂47'44	2.39020 AU	opposition	3248 Jul 08 17:07	18°♂18'44	-4°32'42
	3243 Jun 03 08:22	0°♄		greatest brilliancy	3248 Jul 10 00:02	17°♂53'52	-2.4m
morning rise	3243 Jun 09 13:50	4°♄37'18		min. Earth dist.	3248 Jul 16 20:15	15°♂42'36	0.44441 AU
asc. node	3243 Jun 18 05:10	10°♄58'31		direct	3248 Aug 13 13:20	10°♂47'52	
	3243 Jul 14 16:01	0°♄			3248 Oct 11 07:36	0°♂	
	3243 Aug 27 09:44	0°♄			3248 Nov 27 09:23	0°♂	
	3243 Oct 13 04:39	0°♄			3249 Jan 08 07:26	0°♄	
	3243 Dec 03 23:44	0°♄		asc. node	3249 Feb 07 01:45	21°♄41'17	
	3244 Feb 21 22:03	0°♄			3249 Feb 18 12:49	0°♂	
retrograde	3244 Mar 01 21:27	0°♄28'54			3249 Apr 01 14:41	0°♄	
	3244 Mar 10 14:59	30°♄♄			3249 May 15 04:40	0°♄	
opposition	3244 Apr 10 05:13	21°♄21'26	2°50'24		3249 Jun 29 09:27	0°♄	
greatest brilliancy	3244 Apr 10 14:08	21°♄12'43	-1.4m	evening set	3249 Jul 18 14:11	12°♄28'29	
min. Earth dist.	3244 Apr 13 18:23	19°♄58'13	0.65768 AU		3249 Aug 14 20:26	0°♄	
direct	3244 May 21 17:58	11°♄19'16					
desc. node	3244 Jul 01 13:05	19°♄51'21		conjunction	3249 Sep 03 23:50	12°♄51'21	1°06'49
	3244 Jul 24 22:49	0°♄		minimum elong	3249 Sep 04 00:19	12°♄52'07	1°06'48
	3244 Sep 15 16:56	0°♂		max. Earth dist.	3249 Sep 06 21:44	14°♄42'38	2.67348 AU
	3244 Oct 30 02:27	0°♂			3249 Sep 30 22:34	0°♄	
	3244 Dec 09 17:54	0°♂		morning rise	3249 Oct 18 18:14	11°♄20'00	
	3245 Jan 17 11:01	0°♂			3249 Nov 17 00:50	0°♄	
	3245 Feb 24 12:27	0°♄			3250 Jan 02 18:42	0°♂	
	3245 Apr 03 23:39	0°♂			3250 Feb 18 05:09	0°♂	
evening set	3245 Apr 04 09:30	0°♂18'57		desc. node	3250 Feb 21 10:41	2°♂05'24	
asc. node	3245 May 05 04:38	23°♂40'19			3250 Apr 05 18:51	0°♂	
	3245 May 13 17:05	0°♄			3250 May 23 21:44	0°♂	
					3250 Jul 21 06:27	0°♄	
conjunction	3245 Jun 07 07:03	17°♄54'55	0°21'10	retrograde	3250 Aug 24 06:41	6°♄56'50	
minimum elong	3245 Jun 07 05:39	17°♄52'24	0°21'09	min. Earth dist.	3250 Sep 21 20:54	2°♄17'14	0.37219 AU
	3245 Jun 24 06:59	0°♄		opposition	3250 Sep 23 19:56	1°♄45'39	-5°46'05
max. Earth dist.	3245 Jul 15 19:42	14°♄57'31	2.52460 AU	greatest brilliancy	3250 Sep 23 15:10	1°♄48'51	-3.0m
morning rise	3245 Aug 03 06:36	27°♄29'15			3250 Sep 30 14:22	30°♄♂	
	3245 Aug 07 00:32	0°♄		direct	3250 Oct 23 05:51	26°♄51'52	
	3245 Sep 21 22:40	0°♄			3250 Nov 14 13:24	0°♄	
	3245 Nov 09 04:47	0°♄		asc. node	3250 Dec 26 01:29	17°♄28'18	
	3245 Dec 31 01:03	0°♄			3251 Jan 17 09:35	0°♂	
	3246 Mar 05 19:31	0°♂			3251 Mar 07 02:32	0°♄	
retrograde	3246 Apr 11 19:31	6°♂55'48			3251 Apr 23 06:08	0°♄	
	3246 May 15 20:24	30°♄♄			3251 Jun 09 14:19	0°♄	
opposition	3246 May 18 21:14	28°♄52'58	0°01'38		3251 Jul 27 06:30	0°♄	
greatest brilliancy	3247 Jul 24 09:16	3°♄23'51	1.6m	evening set	3251 Aug 26 00:05	18°♄43'36	
desc. node	3246 May 19 12:35	28°♄38'41			3251 Sep 12 19:25	0°♄	
min. Earth dist.	3246 May 26 00:15	26°♄14'03	0.57380 AU	max. Earth dist.	3251 Sep 30 02:10	11°♄00'27	2.66675 AU
direct	3246 Jun 28 08:12	19°♄15'57					

conjunction	3251 Oct 10 07:33	17° Ω 33'41	0°45'50	asc. node	3256 Aug 16 23:01	3° Ω 16'16	
minimum elong	3251 Oct 10 08:38	17° Ω 35'25	0°45'49		3256 Sep 26 18:05	0° Ω	
	3251 Oct 29 13:46	0° Π			3256 Nov 20 10:03	0° Π	
morning rise	3251 Nov 23 16:29	16° Π 26'23		retrograde	3257 Jan 13 10:00	14° Π 24'22	
	3251 Dec 14 02:02	0° \mathcal{A}		min. Earth dist.	3257 Feb 20 21:59	5° Π 14'43	0.66687 AU
desc. node	3252 Jan 09 09:26	17° \mathcal{A} 47'10		opposition	3257 Feb 22 17:46	4° Π 30'57	4°33'02
	3252 Jan 27 04:05	0° \mathcal{B}		greatest brilliancy	3257 Feb 22 10:22	4° Π 38'20	-1.3m
	3252 Mar 09 21:23	0° \approx			3257 Mar 06 15:06	30° \mathcal{R} Ω	
	3252 Apr 20 12:32	0° \mathcal{H}		direct	3257 Apr 03 18:50	24° Ω 58'41	
	3252 May 31 16:03	0° Υ			3257 May 04 19:23	0° Π	
	3252 Jul 12 18:23	0° \mathcal{B}			3257 Jul 11 08:43	0° Ω	
	3252 Aug 29 02:18	0° Π		desc. node	3257 Aug 31 05:42	29° Ω 45'01	
retrograde	3252 Oct 26 15:16	19° Π 17'40			3257 Aug 31 15:20	0° Π	
asc. node	3252 Nov 12 01:29	17° Π 18'55			3257 Oct 16 16:46	0° \mathcal{A}	
min. Earth dist.	3252 Nov 24 00:19	13° Π 45'06	0.47009 AU		3257 Nov 28 08:11	0° \mathcal{B}	
opposition	3252 Dec 02 06:39	10° Π 48'35	1°08'22	evening set	3257 Dec 29 17:35	23° \mathcal{B} 18'25	
greatest brilliancy	3252 Dec 01 21:07	10° Π 57'04	-2.4m		3258 Jan 07 12:47	0° \approx	
direct	3253 Jan 04 08:13	3° Π 55'45		max. Earth dist.	3258 Feb 06 10:03	23° \approx 08'00	2.37484 AU
	3253 Mar 23 20:55	0° \mathcal{B}			3258 Feb 15 04:13	0° \mathcal{H}	
	3253 May 17 01:19	0° Ω					
	3253 Jul 06 13:44	0° Π		conjunction	3258 Mar 02 05:50	11° \mathcal{H} 52'31	-1°03'04
	3253 Aug 24 08:08	0° Ω		minimum elong	3258 Mar 02 07:16	11° \mathcal{H} 55'21	1°03'04
evening set	3253 Sep 30 19:47	23° Ω 48'41			3258 Mar 25 04:21	0° Υ	
	3253 Oct 10 08:55	0° Π			3258 May 02 11:02	0° \mathcal{B}	
max. Earth dist.	3253 Oct 23 15:50	8° Π 42'30	2.60653 AU	morning rise	3258 May 12 08:59	7° \mathcal{B} 39'07	
					3258 Jun 10 20:53	0° Π	
conjunction	3253 Nov 16 00:47	24° Π 18'16	0°05'54	asc. node	3258 Jul 04 22:34	17° Π 41'05	
minimum elong	3253 Nov 16 00:59	24° Π 18'37	0°05'55		3258 Jul 22 03:59	0° \mathcal{B}	
behind sun begin	3253 Nov 15 06:29	23° Π 47'24			3258 Sep 04 01:31	0° Ω	
behind sun end	3253 Nov 16 19:29	24° Π 49'52			3258 Oct 21 15:30	0° Π	
	3253 Nov 24 10:18	0° \mathcal{A}			3258 Dec 16 01:18	0° Ω	
desc. node	3253 Nov 26 08:20	1° \mathcal{A} 18'28		retrograde	3259 Feb 16 20:18	17° Ω 38'51	
morning rise	3254 Jan 02 15:34	27° \mathcal{A} 16'50		opposition	3259 Mar 28 16:22	8° Ω 14'01	3°32'51
	3254 Jan 06 11:17	0° \mathcal{B}		greatest brilliancy	3259 Mar 28 22:31	8° Ω 07'57	-1.3m
	3254 Feb 16 16:51	0° \approx		min. Earth dist.	3259 Mar 30 17:47	7° Ω 25'16	0.67334 AU
	3254 Mar 28 13:28	0° \mathcal{H}			3259 Apr 22 11:33	30° \mathcal{R} Π	
	3254 May 06 16:09	0° Υ		direct	3259 May 09 02:14	28° Π 14'33	
	3254 Jun 14 22:07	0° \mathcal{B}			3259 May 26 14:52	0° Ω	
	3254 Jul 25 13:29	0° Π		desc. node	3259 Jul 19 05:01	19° Ω 51'47	
	3254 Sep 07 19:32	0° \mathcal{B}			3259 Aug 07 10:11	0° Π	
asc. node	3254 Sep 29 23:50	13° \mathcal{B} 17'05			3259 Sep 25 17:13	0° \mathcal{A}	
	3254 Nov 03 16:42	0° Ω			3259 Nov 08 06:15	0° \mathcal{B}	
retrograde	3254 Dec 09 11:27	7° Ω 32'47			3259 Dec 18 14:57	0° \approx	
min. Earth dist.	3255 Jan 12 08:52	29° \mathcal{B} 55'30	0.59510 AU		3260 Jan 26 05:18	0° \mathcal{H}	
	3255 Jan 12 04:15	30° \mathcal{R} \mathcal{B}			3260 Mar 04 04:32	0° Υ	
greatest brilliancy	3255 Jan 17 04:11	28° \mathcal{B} 01'52	-1.7m	evening set	3260 Mar 07 04:04	2° Υ 21'08	
opposition	3255 Jan 18 00:59	27° \mathcal{B} 41'18	4°09'19		3260 Apr 11 12:48	0° \mathcal{B}	
direct	3255 Feb 24 08:43	19° \mathcal{B} 05'10					
	3255 Apr 12 21:59	0° Ω		conjunction	3260 May 13 21:47	24° \mathcal{B} 38'14	-0°05'19
	3255 Jun 13 16:11	0° Π		minimum elong	3260 May 13 22:15	24° \mathcal{B} 39'06	0°05'19
	3255 Aug 04 14:49	0° Ω		behind sun begin	3260 May 12 19:57	23° \mathcal{B} 49'53	
	3255 Sep 21 17:20	0° Π		behind sun end	3260 May 15 00:33	25° \mathcal{B} 28'16	
desc. node	3255 Oct 14 07:00	14° Π 45'53		asc. node	3260 May 21 20:11	0° Π 32'51	
	3255 Nov 05 21:07	0° \mathcal{A}			3260 May 21 02:29	0° Π	
evening set	3255 Nov 10 00:47	2° \mathcal{A} 51'03		max. Earth dist.	3260 Jun 29 21:25	28° Π 50'52	2.47324 AU
max. Earth dist.	3255 Nov 24 17:51	13° \mathcal{A} 04'52	2.49819 AU		3260 Jul 01 12:33	0° \mathcal{B}	
	3255 Dec 18 11:24	0° \mathcal{B}		morning rise	3260 Jul 15 00:16	9° \mathcal{B} 26'36	
					3260 Aug 14 04:05	0° Ω	
conjunction	3255 Dec 31 02:52	9° \mathcal{B} 13'18	-0°42'45		3260 Sep 29 06:15	0° Π	
minimum elong	3255 Dec 31 01:09	9° \mathcal{B} 10'08	0°42'44		3260 Nov 17 08:44	0° Ω	
	3256 Jan 27 23:22	0° \approx			3261 Jan 11 11:59	0° Π	
morning rise	3256 Feb 26 13:42	22° \approx 40'13		retrograde	3261 Mar 25 17:39	22° Π 10'00	
	3256 Mar 07 00:22	0° \mathcal{H}		opposition	3261 May 02 21:16	13° Π 37'25	1°18'25
	3256 Apr 14 08:35	0° Υ		greatest brilliancy	3261 May 03 04:33	13° Π 30'28	-1.6m
	3256 May 22 20:39	0° \mathcal{B}		min. Earth dist.	3261 May 08 16:45	11° Π 24'24	0.61412 AU
	3256 Jul 01 11:06	0° Π		desc. node	3261 Jun 05 03:48	4° Π 07'20	
	3256 Aug 12 05:15	0° \mathcal{B}		direct	3261 Jun 13 01:33	3° Π 42'53	

	3261 Aug 28 16:20	0°♊		max. Earth dist.	3266 Sep 21 01:57	0°♎57'28	2.67586 AU
	3261 Oct 15 08:38	0°♊					
	3261 Nov 26 00:41	0°♋		conjunction	3266 Sep 26 06:58	4°♎16'31	0°56'32
	3262 Jan 04 04:47	0°♋		minimum elong	3266 Sep 26 07:59	4°♎18'07	0°56'31
	3262 Feb 11 13:43	0°♌			3266 Nov 05 09:38	0°♎	
	3262 Mar 22 08:13	0°♌		morning rise	3266 Nov 09 11:09	2°♎37'43	
asc. node	3262 Apr 08 19:34	13°♌14'01			3266 Dec 21 06:51	0°♊	
	3262 May 01 09:39	0°♍		desc. node	3267 Jan 26 00:17	23°♊52'30	
evening set	3262 May 13 16:19	8°♍56'26			3267 Feb 04 01:37	0°♊	
	3262 Jun 12 07:19	0°♎			3267 Mar 19 19:30	0°♋	
					3267 May 01 20:01	0°♋	
conjunction	3262 Jul 09 13:31	18°♎46'12	0°50'56		3267 Jun 14 00:11	0°♌	
minimum elong	3262 Jul 09 11:47	18°♎43'15	0°50'56		3267 Jul 30 09:36	0°♌	
	3262 Jul 26 05:58	0°♍		retrograde	3267 Oct 06 02:08	24°♌35'30	
max. Earth dist.	3262 Aug 04 08:48	6°♍03'42	2.59199 AU	min. Earth dist.	3267 Nov 01 19:28	19°♌48'52	0.41918 AU
morning rise	3262 Aug 29 14:49	22°♍35'55		opposition	3267 Nov 09 10:33	17°♌21'19	-1°17'01
	3262 Sep 10 02:02	0°♎		greatest brilliancy	3267 Nov 09 02:36	17°♌27'45	-2.7m
	3262 Oct 27 13:19	0°♎		asc. node	3267 Nov 29 16:47	12°♌12'54	
	3262 Dec 15 18:20	0°♎		direct	3267 Dec 10 15:33	11°♌24'04	
	3263 Feb 06 07:53	0°♊			3268 Feb 10 20:23	0°♍	
	3263 Apr 16 00:34	0°♊			3268 Apr 05 19:10	0°♎	
desc. node	3263 Apr 23 02:22	1°♊43'46			3268 May 26 01:59	0°♍	
retrograde	3263 May 13 07:52	4°♊00'52			3268 Jul 14 03:51	0°♎	
	3263 Jun 07 20:26	30°♊♊			3268 Aug 31 07:48	0°♎	
opposition	3263 Jun 17 01:44	26°♊59'20	-2°34'45	evening set	3268 Sep 16 09:34	10°♎10'55	
greatest brilliancy	3263 Jun 17 20:20	26°♊43'12	-2.2m	max. Earth dist.	3268 Oct 13 17:54	27°♎45'44	2.63615 AU
min. Earth dist.	3263 Jun 25 12:14	24°♊03'52	0.49744 AU		3268 Oct 17 04:30	0°♎	
direct	3263 Jul 25 08:17	18°♊21'04					
	3263 Sep 08 03:38	0°♊		conjunction	3268 Oct 31 21:11	9°♎37'43	0°23'10
	3263 Oct 29 11:05	0°♋		minimum elong	3268 Oct 31 21:55	9°♎38'55	0°23'10
	3263 Dec 10 14:34	0°♋			3268 Dec 01 08:49	0°♊	
	3264 Jan 19 15:26	0°♌		desc. node	3268 Dec 12 23:10	7°♊53'59	
asc. node	3264 Feb 24 19:40	27°♌07'05		morning rise	3268 Dec 16 16:37	10°♊27'25	
	3264 Feb 28 16:53	0°♌			3269 Jan 13 17:54	0°♊	
	3264 Apr 09 21:48	0°♍			3269 Feb 24 10:51	0°♋	
	3264 May 22 19:28	0°♎			3269 Apr 05 20:13	0°♋	
evening set	3264 Jul 02 02:27	27°♎05'23			3269 May 15 12:02	0°♌	
	3264 Jul 06 12:16	0°♍			3269 Jun 24 08:55	0°♌	
					3269 Aug 05 02:06	0°♍	
conjunction	3264 Aug 20 06:10	29°♍05'13	1°08'26		3269 Sep 21 17:00	0°♎	
minimum elong	3264 Aug 20 06:06	29°♍05'07	1°08'25	asc. node	3269 Oct 16 16:45	12°♎10'51	
	3264 Aug 21 16:17	0°♎		retrograde	3269 Nov 23 20:58	20°♎56'57	
max. Earth dist.	3264 Aug 28 23:37	4°♎41'03	2.66102 AU	min. Earth dist.	3269 Dec 25 14:51	14°♎05'40	0.55071 AU
morning rise	3264 Oct 05 00:47	28°♎16'55		opposition	3270 Jan 01 15:41	11°♎23'05	3°25'26
	3264 Oct 07 17:46	0°♎		greatest brilliancy	3269 Dec 31 17:45	11°♎44'15	-1.9m
	3264 Nov 24 03:52	0°♎		direct	3270 Feb 06 12:26	3°♎20'20	
	3265 Jan 10 18:29	0°♊			3270 Apr 28 23:57	0°♍	
	3265 Feb 27 23:59	0°♊			3270 Jun 22 21:59	0°♎	
desc. node	3265 Mar 10 01:29	6°♊08'55			3270 Aug 12 05:45	0°♎	
	3265 Apr 19 11:10	0°♋			3270 Sep 28 19:28	0°♎	
	3265 Jun 21 05:57	0°♋		evening set	3270 Oct 24 14:32	16°♎58'13	
retrograde	3265 Jul 23 00:45	5°♋41'36		desc. node	3270 Oct 30 22:41	21°♎13'19	
opposition	3265 Aug 22 04:02	0°♋40'58	-6°44'43	max. Earth dist.	3270 Nov 10 16:15	28°♎29'48	2.54541 AU
greatest brilliancy	3265 Aug 23 02:03	0°♋26'04	-2.9m		3270 Nov 12 21:03	0°♊	
	3265 Aug 24 16:34	30°♋♋					
min. Earth dist.	3265 Aug 25 19:41	29°♋41'44	0.38100 AU	conjunction	3270 Dec 12 03:43	20°♊23'25	-0°24'09
direct	3265 Sep 22 04:35	25°♋17'10		minimum elong	3270 Dec 12 02:43	20°♊21'39	0°24'08
	3265 Oct 19 07:23	0°♋			3270 Dec 25 14:32	0°♊	
	3265 Dec 17 01:24	0°♌		morning rise	3271 Feb 02 16:09	28°♊44'47	
asc. node	3266 Jan 11 18:00	16°♌30'03			3271 Feb 04 08:13	0°♋	
	3266 Feb 01 01:35	0°♌			3271 Mar 15 15:30	0°♋	
	3266 Mar 17 17:22	0°♍			3271 Apr 23 05:23	0°♌	
	3266 May 01 22:45	0°♎			3271 May 31 22:12	0°♌	
	3266 Jun 17 05:01	0°♍			3271 Jul 10 18:12	0°♍	
	3266 Aug 03 06:50	0°♎			3271 Aug 22 00:40	0°♎	
evening set	3266 Aug 11 12:08	5°♎12'41		asc. node	3271 Sep 03 15:03	8°♎26'12	
	3266 Sep 19 13:50	0°♎			3271 Oct 08 06:47	0°♍	

	3271 Dec 19 08:56	0°♎		3276 Dec 04 12:57	0°♏	
retrograde	3271 Dec 31 22:12	0°♎59'58		3277 Jan 12 09:22	0°♏	
	3272 Jan 13 00:50	30°♎♎		3277 Feb 19 12:58	0°♏	
min. Earth dist.	3272 Feb 06 18:28	22°♎22'34	0.64642 AU	3277 Mar 30 02:00	0°♏	
opposition	3272 Feb 10 02:40	21°♎02'26	4°35'53	3277 Apr 19 08:52	15°♏26'26	
greatest brilliancy	3272 Feb 09 13:14	21°♎15'52	-1.4m	3277 Apr 25 12:43	20°♏04'10	
direct	3272 Mar 20 06:03	11°♎48'09		3277 May 08 21:18	0°♐	
	3272 May 24 10:23	0°♎				
	3272 Jul 20 19:39	0°♎	conjunction	3277 Jun 19 16:42	0°♐06'44	0°33'49
	3272 Sep 08 10:47	0°♎	minimum elong	3277 Jun 19 14:52	0°♐03'31	0°33'47
desc. node	3272 Sep 16 21:19	5°♎22'56		3277 Jun 19 12:52	0°♐	
	3272 Oct 24 01:14	0°♎	max. Earth dist.	3277 Jul 23 10:03	23°♐21'36	2.55049 AU
	3272 Dec 05 15:14	0°♎		3277 Aug 02 06:50	0°♎	
evening set	3272 Dec 08 01:19	1°♎45'38	morning rise	3277 Aug 13 06:54	7°♎19'27	
max. Earth dist.	3272 Dec 25 02:36	14°♎19'30	2.41806 AU	3277 Sep 17 02:41	0°♎	
	3273 Jan 14 21:57	0°♏		3277 Nov 03 23:31	0°♎	
				3277 Dec 24 13:55	0°♎	
conjunction	3273 Feb 03 08:26	14°♏56'08	-1°03'12	3278 Feb 20 09:00	0°♎	
minimum elong	3273 Feb 03 07:20	14°♏54'00	1°03'11	3278 Apr 22 10:05	16°♎27'52	
	3273 Feb 22 16:14	0°♏	retrograde	3278 May 09 17:37	14°♎35'16	
	3273 Apr 01 18:31	0°♏	desc. node	3278 May 28 18:24	8°♎44'26	-0°50'27
morning rise	3273 Apr 11 15:05	7°♏45'50	opposition	3278 May 29 00:04	8°♎39'16	-1.9m
	3273 May 10 02:01	0°♏	greatest brilliancy	3278 Jun 05 12:17	5°♎54'59	0.54836 AU
	3273 Jun 18 11:51	0°♐	min. Earth dist.	3278 Jun 28 01:39	30°♎♎	
asc. node	3273 Jul 21 13:34	24°♐07'58	direct	3278 Jul 07 15:13	29°♎22'40	
	3273 Jul 29 20:19	0°♐		3278 Jul 17 08:32	0°♎	
	3273 Sep 12 01:51	0°♎		3278 Sep 26 16:20	0°♎	
	3273 Oct 31 01:03	0°♎		3278 Nov 10 08:37	0°♏	
	3274 Jan 03 23:05	0°♎		3278 Dec 20 17:05	0°♏	
retrograde	3274 Feb 03 08:31	5°♎02'12		3279 Jan 28 19:28	0°♏	
	3274 Mar 03 08:44	30°♎♎		3279 Mar 09 04:27	0°♏	
opposition	3274 Mar 15 12:30	25°♎23'37	4°04'28	3279 Mar 13 11:16	3°♏13'05	
greatest brilliancy	3274 Mar 15 14:08	25°♎22'00	-1.3m	3279 Apr 18 19:23	0°♐	
min. Earth dist.	3274 Mar 16 01:45	25°♎10'27	0.67880 AU	3279 May 31 05:20	0°♐	
direct	3274 Apr 25 13:31	15°♎31'42		3279 Jun 15 02:51	10°♐13'26	
	3274 Jun 20 23:39	0°♎	evening set	3279 Jul 14 13:09	0°♎	
desc. node	3274 Aug 04 19:37	22°♎43'14				
	3274 Aug 17 09:52	0°♎	conjunction	3279 Aug 05 16:09	14°♎33'20	1°05'42
	3274 Oct 03 23:14	0°♎	minimum elong	3279 Aug 05 15:24	14°♎32'06	1°05'42
	3274 Nov 16 01:00	0°♎	max. Earth dist.	3279 Aug 20 15:18	24°♎16'25	2.64044 AU
	3274 Dec 26 06:56	0°♏		3279 Aug 29 12:22	0°♎	
	3275 Feb 02 20:50	0°♏	morning rise	3279 Sep 21 23:48	15°♎01'07	
evening set	3275 Feb 07 13:56	3°♏42'50		3279 Oct 15 15:16	0°♎	
	3275 Mar 12 19:32	0°♏		3279 Dec 02 12:56	0°♎	
				3280 Jan 20 09:48	0°♎	
conjunction	3275 Apr 17 02:37	27°♏41'29	-0°33'55	3280 Mar 11 16:38	0°♎	
minimum elong	3275 Apr 17 05:33	27°♏47'11	0°33'53	3280 Mar 26 16:02	8°♎10'59	
	3275 Apr 20 02:03	0°♏	desc. node	3280 May 12 13:23	0°♏	
	3275 May 29 12:47	0°♐	retrograde	3280 Jun 21 13:20	8°♏18'42	
max. Earth dist.	3275 Jun 08 09:56	7°♐19'01	2.41824 AU	3280 Jul 23 09:29	2°♏36'27	-5°36'53
asc. node	3275 Jun 08 13:36	7°♐25'46	opposition	3280 Jul 24 18:54	2°♏11'06	-2.6m
morning rise	3275 Jun 23 17:54	18°♐30'01	greatest brilliancy	3280 Jul 30 15:13	0°♏25'46	0.41764 AU
	3275 Jul 09 19:55	0°♐	min. Earth dist.	3280 Aug 01 02:52	30°♎♎	
	3275 Aug 22 10:55	0°♎	direct	3280 Aug 26 12:04	25°♎52'04	
	3275 Oct 07 20:54	0°♎		3280 Sep 20 14:33	0°♏	
	3275 Nov 27 08:12	0°♎		3280 Nov 17 23:12	0°♏	
	3276 Jan 28 20:59	0°♎		3281 Jan 01 01:14	0°♏	
retrograde	3276 Mar 10 06:22	8°♎29'52	asc. node	3281 Jan 28 10:35	19°♏25'37	
	3276 Apr 17 02:28	30°♎♎		3281 Feb 12 07:41	0°♏	
opposition	3276 Apr 18 05:43	29°♎33'37	2°20'09	3281 Mar 27 00:57	0°♐	
greatest brilliancy	3276 Apr 18 15:01	29°♎24'35	-1.4m	3281 May 10 01:33	0°♐	
min. Earth dist.	3276 Apr 22 15:01	27°♎51'30	0.64484 AU	3281 Jun 24 13:19	0°♎	
direct	3276 May 29 17:39	19°♎32'04		3281 Jul 27 12:00	21°♎14'50	
desc. node	3276 Jun 21 18:39	22°♎34'22	evening set	3281 Aug 10 04:31	0°♎	
	3276 Jul 14 03:17	0°♎				
	3276 Sep 09 07:21	0°♎	conjunction	3281 Sep 12 04:26	21°♎00'27	1°04'03
	3276 Oct 24 14:08	0°♎	minimum elong	3281 Sep 12 05:10	21°♎01'37	1°04'02

max. Earth dist.	3281 Sep 12 02:36	20° \cap 57'34	2.67667 AU	asc. node	3286 Sep 20 07:54	12° \ominus 22'15	
	3281 Sep 26 07:49	0° Ω			3286 Oct 21 21:45	0° Ω	
morning rise	3281 Oct 26 14:46	19° Ω 18'39		retrograde	3286 Dec 17 22:06	16° Ω 44'03	
	3281 Nov 12 07:10	0° \cap		min. Earth dist.	3287 Jan 21 21:43	8° Ω 43'44	0.61593 AU
	3281 Dec 28 16:36	0° \nearrow		opposition	3287 Jan 26 18:10	6° Ω 48'05	4°24'32
desc. node	3282 Feb 11 16:00	29° \nearrow 30'05		greatest brilliancy	3287 Jan 25 23:25	7° Ω 06'43	-1.6m
	3282 Feb 12 10:09	0° \beth			3287 Feb 16 01:07	30° \mathbb{R} \ominus	
	3282 Mar 29 16:59	0° \approx		direct	3287 Mar 05 18:48	27° \ominus 56'34	
	3282 May 14 05:24	0° \mathbb{X}			3287 Mar 24 18:21	0° Ω	
	3282 Jul 01 12:40	0° Υ			3287 Jun 06 20:49	0° \cap	
retrograde	3282 Sep 10 05:44	25° Υ 19'55			3287 Jul 30 06:52	0° Ω	
min. Earth dist.	3282 Oct 07 02:25	20° Υ 53'33	0.38193 AU		3287 Sep 16 21:07	0° \cap	
opposition	3282 Oct 11 20:25	19° Υ 33'13	-4°16'59	desc. node	3287 Oct 04 12:10	11° \cap 26'09	
greatest brilliancy	3282 Oct 11 07:13	19° Υ 42'33	-2.9m		3287 Nov 01 04:50	0° \nearrow	
direct	3282 Nov 10 11:43	14° Υ 26'41		evening set	3287 Nov 20 00:29	13° \nearrow 02'11	
asc. node	3282 Dec 16 09:31	21° Υ 54'08		max. Earth dist.	3287 Dec 04 04:17	23° \nearrow 04'16	2.46996 AU
	3283 Jan 04 04:11	0° \mathbb{X}			3287 Dec 13 19:19	0° \beth	
	3283 Feb 27 08:11	0° \cap					
	3283 Apr 17 05:19	0° \ominus		conjunction	3288 Jan 11 23:16	21° \beth 30'11	-0°52'05
	3283 Jun 04 08:43	0° Ω		minimum elong	3288 Jan 11 21:23	21° \beth 26'40	0°52'04
	3283 Jul 22 10:54	0° \cap			3288 Jan 23 05:44	0° \approx	
evening set	3283 Sep 03 03:35	26° \cap 48'38			3288 Mar 02 04:24	0° \mathbb{X}	
	3283 Sep 08 04:33	0° Ω		morning rise	3288 Mar 12 19:22	8° \mathbb{X} 18'15	
max. Earth dist.	3283 Oct 05 09:58	17° Ω 21'27	2.65825 AU		3288 Apr 09 10:27	0° Υ	
					3288 May 17 20:29	0° \mathbb{X}	
conjunction	3283 Oct 18 09:14	25° Ω 43'10	0°38'15		3288 Jun 26 08:12	0° \cap	
minimum elong	3283 Oct 18 10:15	25° Ω 44'49	0°38'14		3288 Aug 06 20:54	0° \ominus	
	3283 Oct 24 23:38	0° \cap		asc. node	3288 Aug 07 07:31	0° \ominus 18'34	
morning rise	3283 Dec 02 02:24	25° \cap 07'01			3288 Sep 20 17:24	0° Ω	
	3283 Dec 09 09:11	0° \nearrow			3288 Nov 11 07:28	0° \cap	
desc. node	3283 Dec 30 15:09	14° \nearrow 24'42		retrograde	3289 Jan 21 01:47	22° \cap 18'34	
	3284 Jan 22 04:52	0° \beth		min. Earth dist.	3289 Mar 01 09:45	12° \cap 52'51	0.67386 AU
	3284 Mar 04 12:36	0° \approx		opposition	3289 Mar 02 09:06	12° \cap 29'33	4°25'45
	3284 Apr 14 15:09	0° \mathbb{X}		greatest brilliancy	3289 Mar 02 05:05	12° \cap 33'33	-1.3m
	3284 May 25 02:25	0° Υ		direct	3289 Apr 11 19:49	2° \cap 49'10	
	3284 Jul 05 01:35	0° \mathbb{X}			3289 Jul 04 07:52	0° Ω	
	3284 Aug 18 03:45	0° \cap		desc. node	3289 Aug 21 10:59	27° Ω 06'17	
	3284 Oct 20 15:44	0° \ominus			3289 Aug 26 05:09	0° \cap	
asc. node	3284 Nov 02 07:57	1° \ominus 51'16			3289 Oct 11 18:14	0° \nearrow	
retrograde	3284 Nov 06 13:27	1° \ominus 59'02			3289 Nov 23 13:24	0° \beth	
	3284 Nov 23 00:17	30° \mathbb{R} \cap			3290 Jan 02 18:39	0° \approx	
min. Earth dist.	3284 Dec 06 01:57	25° \cap 58'21	0.49985 AU	evening set	3290 Jan 12 05:53	7° \approx 16'15	
greatest brilliancy	3284 Dec 13 10:24	23° \cap 15'37	-2.2m		3290 Feb 10 09:23	0° \mathbb{X}	
opposition	3284 Dec 14 03:16	23° \cap 00'02	2°10'26				
direct	3285 Jan 17 06:59	15° \cap 39'25		conjunction	3290 Mar 18 13:57	28° \mathbb{X} 35'35	-0°56'18
	3285 Mar 12 21:40	0° \ominus		minimum elong	3290 Mar 18 16:51	28° \mathbb{X} 41'18	0°56'17
	3285 May 10 13:08	0° Ω			3290 Mar 20 08:41	0° Υ	
	3285 Jul 01 06:34	0° \cap		max. Earth dist.	3290 Apr 16 22:06	21° Υ 40'36	2.37264 AU
	3285 Aug 19 12:41	0° Ω			3290 Apr 27 14:43	0° \mathbb{X}	
	3285 Oct 05 17:53	0° \cap		morning rise	3290 May 28 17:31	23° \mathbb{X} 48'01	
evening set	3285 Oct 09 06:21	2° \cap 17'27			3290 Jun 05 23:58	0° \cap	
max. Earth dist.	3285 Oct 29 21:51	15° \cap 54'11	2.58691 AU	asc. node	3290 Jun 25 05:37	14° \cap 11'09	
desc. node	3285 Nov 16 13:38	27° \cap 47'06			3290 Jul 17 05:58	0° \ominus	
	3285 Nov 19 19:42	0° \nearrow			3290 Aug 29 23:14	0° Ω	
					3290 Oct 15 23:10	0° \cap	
conjunction	3285 Nov 25 02:22	3° \nearrow 36'38	-0°04'57		3290 Dec 07 19:55	0° Ω	
minimum elong	3285 Nov 25 02:10	3° \nearrow 36'16	0°04'56	retrograde	3291 Feb 24 19:34	25° Ω 26'33	
behind sun begin	3285 Nov 24 06:50	3° \nearrow 03'09		opposition	3291 Apr 05 09:36	16° Ω 11'02	3°09'14
behind sun end	3285 Nov 25 21:29	4° \nearrow 09'25		greatest brilliancy	3291 Apr 05 17:32	16° Ω 03'14	-1.3m
	3286 Jan 01 18:24	0° \beth		min. Earth dist.	3291 Apr 08 07:15	15° Ω 02'40	0.66593 AU
morning rise	3286 Jan 13 02:37	8° \beth 09'41		direct	3291 May 16 21:53	6° Ω 09'23	
	3286 Feb 11 20:02	0° \approx		desc. node	3291 Jul 09 09:33	19° Ω 43'33	
	3286 Mar 23 11:45	0° \mathbb{X}			3291 Jul 30 20:12	0° \cap	
	3286 May 01 09:21	0° Υ			3291 Sep 19 23:56	0° \nearrow	
	3286 Jun 09 09:15	0° \mathbb{X}			3291 Nov 03 01:40	0° \beth	
	3286 Jul 19 14:39	0° \cap			3291 Dec 13 15:10	0° \approx	
	3286 Aug 31 19:46	0° \ominus			3292 Jan 21 07:25	0° \mathbb{X}	

greatest brilliancy	3292 Jan 23 23:12	2° Υ 05'26	1.2m			3296 Oct 03 02:08	0° Ω	
	3292 Feb 28 07:46	0° Υ		morning rise		3296 Oct 12 21:59	6° Ω 14'28	
evening set	3292 Mar 23 05:44	18° Υ 46'23				3296 Nov 19 07:32	0° \mathbb{M}	
	3292 Apr 06 16:57	0° \mathcal{B}				3297 Jan 05 10:02	0° \mathcal{A}	
asc. node	3292 May 12 04:50	26° \mathcal{B} 56'42				3297 Feb 21 13:14	0° \mathcal{Z}	
	3292 May 16 07:27	0° Π		desc. node		3297 Feb 28 06:49	4° \mathcal{Z} 15'42	
						3297 Apr 10 11:32	0° \approx	
conjunction	3292 May 28 02:27	8° Π 41'06	0°10'26			3297 Jun 01 00:21	0° \mathcal{H}	
minimum elong	3292 May 28 01:39	8° Π 39'39	0°10'25	retrograde		3297 Aug 10 07:05	23° \mathcal{H} 24'23	
behind sun begin	3292 May 27 05:28	8° Π 02'44		opposition		3297 Sep 09 09:20	18° \mathcal{H} 26'40	-6°29'48
behind sun end	3292 May 28 21:50	9° Π 16'31		greatest brilliancy		3297 Sep 09 16:30	18° \mathcal{H} 21'54	-2.9m
	3292 Jun 26 18:16	0° \mathcal{G}		min. Earth dist.		3297 Sep 10 00:07	18° \mathcal{H} 16'51	0.37191 AU
max. Earth dist.	3292 Jul 09 09:38	8° \mathcal{G} 51'16	2.50219 AU	direct		3297 Oct 09 06:13	13° \mathcal{H} 28'08	
morning rise	3292 Jul 26 06:18	20° \mathcal{G} 27'21				3297 Dec 03 09:15	0° Υ	
	3292 Aug 09 09:15	0° Ω		asc. node		3298 Jan 02 01:15	16° Υ 37'11	
	3292 Sep 24 07:27	0° \mathbb{M}				3298 Jan 23 17:04	0° \mathcal{B}	
	3292 Nov 11 19:39	0° Ω				3298 Mar 11 04:46	0° Π	
	3293 Jan 03 16:55	0° \mathbb{M}				3298 Apr 26 08:29	0° \mathcal{G}	
	3293 Mar 22 16:07	0° \mathcal{A}				3298 Jun 12 03:27	0° Ω	
retrograde	3293 Apr 04 06:04	0° \mathcal{A} 54'57				3298 Jul 29 12:40	0° \mathbb{M}	
	3293 Apr 16 08:49	30° $\mathcal{R}\mathbb{M}$		evening set		3298 Aug 19 20:50	13° \mathbb{M} 28'33	
opposition	3293 May 11 20:05	22° \mathbb{M} 38'11	0°35'45			3298 Sep 14 22:56	0° Ω	
greatest brilliancy	3293 May 12 00:01	22° \mathbb{M} 34'29	-1.7m	max. Earth dist.		3298 Sep 26 07:01	7° Ω 12'56	2.67196 AU
min. Earth dist.	3293 May 18 09:42	20° \mathbb{M} 09'47	0.59281 AU					
desc. node	3293 May 26 08:40	17° \mathbb{M} 21'51		conjunction		3298 Oct 04 07:49	12° Ω 20'46	0°50'39
direct	3293 Jun 21 16:06	12° \mathbb{M} 51'47		minimum elong		3298 Oct 04 08:53	12° Ω 22'29	0°50'38
	3293 Aug 19 05:39	0° \mathcal{A}				3298 Oct 31 18:13	0° \mathbb{M}	
	3293 Oct 08 20:06	0° \mathcal{Z}		morning rise		3298 Nov 17 13:02	10° \mathbb{M} 55'20	
	3293 Nov 20 06:47	0° \approx				3298 Dec 16 11:00	0° \mathcal{A}	
	3293 Dec 29 18:49	0° \mathcal{H}		desc. node		3299 Jan 16 05:44	20° \mathcal{A} 42'09	
	3294 Feb 06 08:44	0° Υ				3299 Jan 29 20:38	0° \mathcal{Z}	
	3294 Mar 17 07:17	0° \mathcal{B}				3299 Mar 14 00:39	0° \approx	
asc. node	3294 Mar 30 04:20	9° \mathcal{B} 44'21				3299 Apr 25 05:05	0° \mathcal{H}	
	3294 Apr 26 12:10	0° Π				3299 Jun 06 02:12	0° Υ	
evening set	3294 May 26 02:24	21° Π 16'12				3299 Jul 19 10:41	0° \mathcal{B}	
	3294 Jun 07 12:55	0° \mathcal{G}				3299 Sep 09 20:41	0° Π	
				retrograde		3299 Oct 18 16:45	9° Π 31'42	
conjunction	3294 Jul 19 20:07	28° \mathcal{G} 51'01	0°57'56	min. Earth dist.		3299 Nov 15 05:08	4° Π 21'42	0.44642 AU
minimum elong	3294 Jul 19 18:40	28° \mathcal{G} 48'36	0°57'56	asc. node		3299 Nov 20 01:32	2° Π 42'36	
	3294 Jul 21 13:28	0° Ω		opposition		3299 Nov 23 10:13	1° Π 33'04	0°12'03
max. Earth dist.	3294 Aug 10 13:53	13° Ω 14'02	2.61144 AU	greatest brilliancy		3289 Sep 19 04:09	15° \mathbb{M} 04'45	1.4m
	3294 Sep 05 09:29	0° \mathbb{M}				3299 Nov 28 01:39	30° $\mathcal{R}\mathcal{B}$	
morning rise	3294 Sep 07 08:19	1° \mathbb{M} 15'18		direct		3299 Dec 25 14:56	25° \mathcal{B} 04'33	
	3294 Oct 22 16:19	0° Ω				3300 Jan 23 21:07	0° Π	
	3294 Dec 10 07:19	0° \mathbb{M}				3300 Mar 30 00:59	0° \mathcal{G}	
	3295 Jan 30 03:18	0° \mathcal{A}				3300 May 21 05:45	0° Ω	
	3295 Mar 28 23:50	0° \mathcal{Z}				3300 Jul 10 01:57	0° \mathbb{M}	
desc. node	3295 Apr 13 08:03	6° \mathcal{Z} 19'53				3300 Aug 27 14:10	0° Ω	
retrograde	3295 May 26 16:21	15° \mathcal{Z} 38'34		evening set		3300 Sep 25 15:01	18° Ω 24'28	
opposition	3295 Jun 29 09:20	9° \mathcal{Z} 03'56	-3°41'07			3300 Oct 13 13:51	0° \mathbb{M}	
greatest brilliancy	3295 Jun 30 11:34	8° \mathcal{Z} 41'59	-2.3m	max. Earth dist.		3300 Oct 20 11:12	4° \mathbb{M} 29'45	2.62079 AU
min. Earth dist.	3295 Jul 07 19:37	6° \mathcal{Z} 15'25	0.46779 AU					
direct	3295 Aug 05 09:41	0° \mathcal{Z} 59'53		conjunction		3300 Nov 10 10:19	18° \mathbb{M} 21'08	0°13'22
	3295 Oct 20 04:16	0° \approx		minimum elong		3300 Nov 10 10:46	18° \mathbb{M} 21'54	0°13'22
	3295 Dec 03 10:58	0° \mathcal{H}		behind sun begin		3300 Nov 09 23:47	18° \mathbb{M} 03'35	
	3296 Jan 13 09:02	0° Υ		behind sun end		3300 Nov 10 21:45	18° \mathbb{M} 40'13	
asc. node	3296 Feb 15 02:16	24° Υ 12'09				3300 Nov 27 17:35	0° \mathcal{A}	
	3296 Feb 22 23:51	0° \mathcal{B}		desc. node		3300 Dec 04 04:33	4° \mathcal{A} 23'58	
	3296 Apr 04 14:24	0° Π		morning rise		3300 Dec 27 03:04	20° \mathcal{A} 15'29	
	3296 May 17 19:38	0° \mathcal{G}				3301 Jan 09 22:58	0° \mathcal{Z}	
	3296 Jul 01 17:43	0° Ω				3301 Feb 20 10:16	0° \approx	
evening set	3296 Jul 11 16:09	6° Ω 30'02				3301 Apr 01 12:39	0° \mathcal{H}	
	3296 Aug 17 00:48	0° \mathbb{M}				3301 May 10 20:49	0° Υ	
						3301 Jun 19 08:08	0° \mathcal{B}	
conjunction	3296 Aug 28 18:27	7° \mathbb{M} 30'43	1°07'58			3301 Jul 30 07:16	0° Π	
minimum elong	3296 Aug 28 18:44	7° \mathbb{M} 31'10	1°07'57			3301 Sep 13 12:06	0° \mathcal{G}	
max. Earth dist.	3296 Sep 03 06:26	11° \mathbb{M} 01'21	2.66900 AU	asc. node		3301 Oct 08 00:21	13° \mathcal{G} 49'52	

	3301 Nov 21 02:35	0°♏			3306 Nov 12 01:10	0°♄
retrograde	3301 Dec 03 23:50	1°♏06'46			3306 Dec 22 09:37	0°♍
	3301 Dec 16 10:40	30°♏♌			3307 Jan 30 00:06	0°♎
min. Earth dist.	3302 Jan 05 22:33	23°♌49'03	0.57628 AU	evening set	3307 Feb 24 14:07	20°♎12'54
greatest brilliancy	3302 Jan 11 07:35	21°♌42'57	-1.8m		3307 Mar 08 22:59	0°♏
opposition	3302 Jan 12 05:29	21°♌21'29	3°54'18		3307 Apr 16 05:57	0°♐
direct	3302 Feb 17 22:11	12°♌59'08				
	3302 Apr 20 16:47	0°♏		conjunction	3307 May 04 04:23	13°♐46'41 -0°17'43
	3302 Jun 17 22:05	0°♐		minimum elong	3307 May 04 06:00	13°♐49'45 0°17'43
	3302 Aug 08 03:33	0°♑			3307 May 25 17:16	0°♒
	3302 Sep 25 01:24	0°♒		asc. node	3307 May 30 20:41	3°♒49'01
desc. node	3302 Oct 22 03:07	17°♒46'08		max. Earth dist.	3307 Jun 23 05:54	20°♒52'44 2.44885 AU
evening set	3302 Nov 03 19:32	26°♒18'26			3307 Jul 06 00:43	0°♓
	3302 Nov 09 05:38	0°♑		morning rise	3307 Jul 07 18:57	1°♓14'37
max. Earth dist.	3302 Nov 19 08:40	6°♑58'07	2.52007 AU		3307 Aug 18 14:23	0°♏
	3302 Dec 21 22:31	0°♄			3307 Oct 03 17:54	0°♐
					3307 Nov 22 06:24	0°♑
conjunction	3302 Dec 23 15:16	1°♄13'34 -0°35'05			3308 Jan 18 11:22	0°♒
minimum elong	3302 Dec 23 13:49	1°♄10'57 0°35'03		retrograde	3308 Mar 19 22:40	16°♒40'34
	3303 Jan 31 14:03	0°♍		opposition	3308 Apr 27 11:54	7°♒56'52 1°45'45
morning rise	3303 Feb 16 16:12	12°♍12'59		greatest brilliancy	3308 Apr 27 20:28	7°♒48'38 -1.5m
	3303 Mar 11 18:16	0°♎		min. Earth dist.	3308 May 02 16:29	5°♒57'03 0.62909 AU
	3303 Apr 19 04:57	0°♏			3308 May 21 05:01	30°♒♑
	3303 May 27 18:33	0°♐		direct	3308 Jun 07 20:43	27°♑58'03
	3303 Jul 06 09:58	0°♒		desc. node	3308 Jun 13 00:10	28°♑08'05
	3303 Aug 17 06:58	0°♓			3308 Jun 26 08:17	0°♒
asc. node	3303 Aug 25 22:52	5°♓55'12			3308 Sep 03 06:58	0°♑
	3303 Oct 02 07:11	0°♏			3308 Oct 19 20:26	0°♄
	3303 Nov 29 04:28	0°♐			3308 Nov 30 05:26	0°♍
retrograde	3304 Jan 09 17:56	9°♐14'15			3309 Jan 08 06:10	0°♎
min. Earth dist.	3304 Feb 16 12:45	0°♐18'06	0.65897 AU		3309 Feb 15 12:16	0°♏
	3304 Feb 17 06:52	30°♐♏			3309 Mar 26 03:30	0°♐
opposition	3304 Feb 19 00:22	29°♏18'27	4°35'56	asc. node	3309 Apr 16 19:41	16°♐27'06
greatest brilliancy	3304 Feb 18 14:18	29°♏28'32	-1.4m	evening set	3309 May 04 12:29	29°♐37'11
direct	3304 Mar 29 15:53	19°♏53'33			3309 May 05 00:53	0°♒
	3304 May 14 15:52	0°♐			3309 Jun 15 18:25	0°♓
	3304 Jul 15 17:12	0°♑				
	3304 Sep 04 07:09	0°♒		conjunction	3309 Jul 02 07:24	11°♓29'54 0°44'29
desc. node	3304 Sep 08 01:45	2°♒22'21		minimum elong	3309 Jul 02 05:32	11°♓26'39 0°44'28
	3304 Oct 20 05:17	0°♑			3309 Jul 29 13:35	0°♏
	3304 Dec 01 21:22	0°♄		max. Earth dist.	3309 Jul 31 11:14	1°♏16'19 2.57447 AU
evening set	3304 Dec 20 23:37	14°♄02'13		morning rise	3309 Aug 23 19:18	16°♏41'24
	3305 Jan 11 04:02	0°♍			3309 Sep 13 08:16	0°♐
max. Earth dist.	3305 Jan 14 13:04	2°♍34'40	2.39174 AU		3309 Oct 30 22:10	0°♑
	3305 Feb 18 21:18	0°♎			3309 Dec 19 14:48	0°♒
					3310 Feb 11 20:03	0°♑
conjunction	3305 Feb 19 02:41	0°♎10'34 -1°04'52		desc. node	3310 Apr 30 22:35	26°♑30'19
minimum elong	3305 Feb 19 02:52	0°♎10'55 1°04'51		retrograde	3310 May 04 21:32	26°♑35'54
	3305 Mar 28 22:28	0°♏		opposition	3310 Jun 09 09:02	19°♑14'31 -1°48'09
morning rise	3305 Apr 30 01:29	25°♏13'10		greatest brilliancy	3310 Jun 09 21:47	19°♑03'11 -2.0m
	3305 May 06 05:07	0°♐		min. Earth dist.	3310 Jun 17 13:38	16°♑19'33 0.52088 AU
	3305 Jun 14 13:50	0°♒		direct	3310 Jul 18 10:37	10°♑13'55
asc. node	3305 Jul 12 22:34	20°♒48'22			3310 Sep 17 20:25	0°♄
	3305 Jul 25 19:53	0°♓			3310 Nov 04 08:58	0°♍
	3305 Sep 07 18:25	0°♏			3310 Dec 15 14:44	0°♎
	3305 Oct 25 17:49	0°♐			3311 Jan 24 03:59	0°♏
	3305 Dec 22 12:44	0°♑		asc. node	3311 Mar 04 19:46	29°♏58'20
retrograde	3306 Feb 12 01:28	12°♑43'51			3311 Mar 04 20:40	0°♐
opposition	3306 Mar 24 01:34	3°♑12'34 3°47'10			3311 Apr 14 17:37	0°♒
greatest brilliancy	3306 Mar 24 05:54	3°♑08'17	-1.3m		3311 May 27 08:25	0°♓
min. Earth dist.	3306 Mar 25 11:11	2°♑39'17	0.67703 AU	evening set	3311 Jun 26 14:19	20°♓31'48
	3306 Apr 01 07:21	30°♐♐			3311 Jul 10 19:48	0°♏
direct	3306 May 04 07:55	23°♐15'48				
	3306 Jun 09 14:23	0°♑		conjunction	3311 Aug 15 17:34	23°♏28'08 1°07'50
desc. node	3306 Jul 27 01:14	21°♑09'16		minimum elong	3311 Aug 15 17:13	23°♏27'35 1°07'51
	3306 Aug 12 02:25	0°♒			3311 Aug 25 20:43	0°♐
	3306 Sep 29 15:56	0°♑		max. Earth dist.	3311 Aug 27 05:44	0°♐53'05 2.65289 AU

morning rise	3311 Oct 01 02:46	23° \mathbb{M} 09'00		3317 Jan 07 01:03	30° \mathbb{R} II
	3311 Oct 11 22:05	0° \mathbb{L}	direct	3317 Jan 30 02:39	26° \mathbb{II} 27'22
	3311 Nov 28 12:40	0° \mathbb{M}		3317 Feb 23 24:00	0° \mathbb{G}
	3312 Jan 15 15:00	0° \mathbb{J}		3317 May 04 09:06	0° \mathbb{Q}
	3312 Mar 04 22:38	0° \mathbb{Z}		3317 Jun 26 18:13	0° \mathbb{M}
desc. node	3312 Mar 17 21:35	7° \mathbb{Z} 36'54		3317 Aug 15 14:46	0° \mathbb{L}
	3312 Apr 27 10:45	0° \mathbb{M}		3317 Oct 02 01:38	0° \mathbb{M}
retrograde	3312 Jul 09 20:28	23° \mathbb{M} 34'46	evening set	3317 Oct 18 22:05	11° \mathbb{M} 01'27
opposition	3312 Aug 09 14:00	18° \mathbb{M} 19'28 -6°26'13	max. Earth dist.	3317 Nov 06 11:24	23° \mathbb{M} 24'39 2.56474 AU
greatest brilliancy	3312 Aug 10 20:16	17° \mathbb{M} 58'04 -2.8m	desc. node	3317 Nov 07 18:44	24° \mathbb{M} 17'33
min. Earth dist.	3312 Aug 15 04:57	16° \mathbb{M} 44'23 0.39468 AU		3317 Nov 16 04:30	0° \mathbb{J}
direct	3312 Sep 10 22:07	12° \mathbb{M} 22'52			
	3312 Nov 05 22:12	0° \mathbb{H}	conjunction	3317 Dec 05 14:49	13° \mathbb{J} 24'49 -0°16'00
	3312 Dec 24 15:32	0° \mathbb{Y}	minimum elong	3317 Dec 05 14:11	13° \mathbb{J} 23'42 0°15'59
asc. node	3313 Jan 19 18:23	17° \mathbb{Y} 43'41	behind sun begin	3317 Dec 05 10:54	13° \mathbb{J} 17'58
	3313 Feb 06 13:42	0° \mathbb{B}	behind sun end	3317 Dec 05 17:28	13° \mathbb{J} 29'25
	3313 Mar 22 04:54	0° \mathbb{II}		3317 Dec 29 01:14	0° \mathbb{Z}
	3313 May 05 19:06	0° \mathbb{G}	morning rise	3318 Jan 25 09:53	19° \mathbb{Z} 55'18
	3313 Jun 20 15:35	0° \mathbb{Q}		3318 Feb 07 23:15	0° \mathbb{M}
evening set	3313 Aug 06 04:18	29° \mathbb{Q} 47'57		3318 Mar 19 10:42	0° \mathbb{H}
	3313 Aug 06 11:52	0° \mathbb{M}		3318 Apr 27 03:54	0° \mathbb{Y}
max. Earth dist.	3313 Sep 18 07:46	27° \mathbb{M} 12'53 2.67727 AU		3318 Jun 04 23:17	0° \mathbb{B}
				3318 Jul 14 21:51	0° \mathbb{II}
conjunction	3313 Sep 21 07:15	29° \mathbb{M} 06'33 1°00'03		3318 Aug 26 10:30	0° \mathbb{G}
minimum elong	3313 Sep 21 08:11	29° \mathbb{M} 08'01 1°00'03	asc. node	3318 Sep 11 15:46	10° \mathbb{G} 40'21
	3313 Sep 22 16:52	0° \mathbb{L}		3318 Oct 13 17:57	0° \mathbb{Q}
morning rise	3313 Nov 04 12:43	27° \mathbb{L} 22'41	retrograde	3318 Dec 27 01:16	25° \mathbb{Q} 29'04
	3313 Nov 08 14:26	0° \mathbb{M}	min. Earth dist.	3319 Feb 01 02:08	17° \mathbb{Q} 07'13 0.63401 AU
	3313 Dec 24 17:17	0° \mathbb{J}	greatest brilliancy	3319 Feb 04 10:09	15° \mathbb{Q} 47'21 -1.5m
desc. node	3314 Feb 02 20:49	26° \mathbb{J} 37'18	opposition	3319 Feb 05 02:06	15° \mathbb{Q} 31'25 4°33'17
	3314 Feb 07 21:51	0° \mathbb{Z}	direct	3319 Mar 15 17:40	6° \mathbb{Q} 26'35
	3314 Mar 24 06:50	0° \mathbb{M}		3319 May 31 05:05	0° \mathbb{M}
	3314 May 07 05:11	0° \mathbb{H}		3319 Jul 25 17:27	0° \mathbb{L}
	3314 Jun 20 22:56	0° \mathbb{Y}		3319 Sep 12 22:44	0° \mathbb{M}
	3314 Aug 11 04:40	0° \mathbb{B}	desc. node	3319 Sep 25 17:41	8° \mathbb{M} 12'41
retrograde	3314 Sep 26 09:59	12° \mathbb{B} 47'15		3319 Oct 28 11:42	0° \mathbb{J}
min. Earth dist.	3314 Oct 22 21:21	8° \mathbb{B} 14'41 0.39984 AU	evening set	3319 Dec 01 12:42	23° \mathbb{J} 48'10
opposition	3314 Oct 29 13:19	6° \mathbb{B} 13'00 -2°33'31		3319 Dec 10 03:06	0° \mathbb{Z}
greatest brilliancy	3314 Oct 29 00:31	6° \mathbb{B} 22'48 -2.8m	max. Earth dist.	3319 Dec 16 08:51	4° \mathbb{Z} 32'22 2.44109 AU
direct	3314 Nov 29 00:04	0° \mathbb{B} 40'46		3320 Jan 19 12:24	0° \mathbb{M}
asc. node	3314 Dec 07 16:56	1° \mathbb{B} 10'44			
	3315 Feb 19 02:07	0° \mathbb{II}	conjunction	3320 Jan 25 17:50	4° \mathbb{M} 44'37 -0°59'28
	3315 Apr 11 16:55	0° \mathbb{G}	minimum elong	3320 Jan 25 16:11	4° \mathbb{M} 41'28 0°59'27
	3315 May 30 22:12	0° \mathbb{Q}		3320 Feb 27 09:03	0° \mathbb{H}
	3315 Jul 18 12:49	0° \mathbb{M}	morning rise	3320 Mar 30 06:05	25° \mathbb{H} 03'05
	3315 Sep 04 12:10	0° \mathbb{L}		3320 Apr 05 12:51	0° \mathbb{Y}
evening set	3315 Sep 12 07:30	4° \mathbb{L} 56'17		3320 May 13 20:54	0° \mathbb{B}
max. Earth dist.	3315 Oct 11 20:39	23° \mathbb{L} 50'27 2.64704 AU		3320 Jun 22 06:26	0° \mathbb{II}
	3315 Oct 21 08:43	0° \mathbb{M}	asc. node	3320 Jul 29 13:46	27° \mathbb{II} 08'44
				3320 Aug 02 14:51	0° \mathbb{G}
conjunction	3315 Oct 27 15:01	4° \mathbb{M} 04'56 0°29'45		3320 Sep 15 23:54	0° \mathbb{Q}
minimum elong	3315 Oct 27 15:54	4° \mathbb{M} 06'23 0°29'44		3320 Nov 04 17:12	0° \mathbb{M}
	3315 Dec 05 16:10	0° \mathbb{J}		3321 Jan 25 13:10	0° \mathbb{L}
morning rise	3315 Dec 11 20:48	4° \mathbb{J} 11'23	retrograde	3321 Jan 29 17:04	0° \mathbb{L} 06'29
desc. node	3315 Dec 21 19:34	10° \mathbb{J} 58'15		3321 Feb 02 19:40	30° \mathbb{R} \mathbb{M}
	3316 Jan 18 06:38	0° \mathbb{Z}	opposition	3321 Mar 10 22:52	20° \mathbb{M} 22'52 4°14'34
	3316 Feb 29 06:42	0° \mathbb{M}	greatest brilliancy	3321 Mar 10 22:08	20° \mathbb{M} 23'37 -1.3m
	3316 Apr 09 23:45	0° \mathbb{H}	min. Earth dist.	3321 Mar 10 20:10	20° \mathbb{M} 25'34 0.67792 AU
	3316 May 19 23:24	0° \mathbb{Y}	direct	3321 Apr 20 17:38	10° \mathbb{M} 35'32
	3316 Jun 29 05:36	0° \mathbb{B}		3321 Jun 27 06:05	0° \mathbb{L}
	3316 Aug 10 15:39	0° \mathbb{II}	desc. node	3321 Aug 12 16:17	24° \mathbb{L} 45'35
	3316 Sep 30 05:07	0° \mathbb{G}		3321 Aug 21 12:46	0° \mathbb{M}
asc. node	3316 Oct 24 17:01	9° \mathbb{G} 46'07		3321 Oct 07 16:55	0° \mathbb{J}
retrograde	3316 Nov 17 16:29	13° \mathbb{G} 33'13		3321 Nov 19 17:07	0° \mathbb{Z}
min. Earth dist.	3316 Dec 18 10:03	7° \mathbb{G} 04'12 0.52854 AU		3321 Dec 29 23:52	0° \mathbb{M}
opposition	3316 Dec 25 23:16	4° \mathbb{G} 12'33 2°58'19	evening set	3322 Jan 27 16:33	22° \mathbb{M} 12'42
greatest brilliancy	3316 Dec 25 02:28	4° \mathbb{G} 32'20 -2.0m		3322 Feb 06 14:40	0° \mathbb{H}

	3322 Mar 16 13:31	0°♄				3326 Dec 06 01:14	0°♍	
						3327 Jan 24 15:09	0°♊	
conjunction	3322 Apr 05 05:41	15°♄30'26 -0°44'57				3327 Mar 18 23:02	0°♈	
minimum elong	3322 Apr 05 09:05	15°♄37'06 0°44'54	desc. node			3327 Apr 04 12:19	8°♈19'01	
	3322 Apr 23 19:12	0°♄	retrograde			3327 Jun 11 05:16	28°♈22'41	
max. Earth dist.	3322 May 25 00:02	23°♄52'18 2.39491 AU	opposition			3327 Jul 13 22:19	22°♈16'39 -4°48'25	
	3322 Jun 02 04:10	0°♄	greatest brilliancy			3327 Jul 15 06:11	21°♈51'17 -2.5m	
morning rise	3322 Jun 13 21:41	8°♄41'52	min. Earth dist.			3327 Jul 21 22:56	19°♈44'31 0.43927 AU	
asc. node	3322 Jun 16 13:49	10°♄39'41	direct			3327 Aug 18 09:50	14°♈54'25	
	3322 Jul 13 09:09	0°♄				3327 Oct 08 12:20	0°♈	
	3322 Aug 25 23:18	0°♄				3327 Nov 26 07:55	0°♈	
	3322 Oct 11 12:30	0°♄				3328 Jan 07 16:10	0°♄	
	3322 Dec 01 17:16	0°♄	asc. node			3328 Feb 06 10:44	21°♄36'12	
	3323 Feb 09 07:52	0°♍				3328 Feb 18 01:18	0°♄	
retrograde	3323 Mar 05 23:44	3°♍19'42				3328 Mar 31 04:21	0°♄	
	3323 Mar 28 21:38	30°♍♄				3328 May 13 18:19	0°♄	
opposition	3323 Apr 14 06:13	24°♄14'25 2°41'54				3328 Jun 27 22:39	0°♄	
greatest brilliancy	3323 Apr 14 15:12	24°♄05'39 -1.4m	evening set			3328 Jul 21 20:06	15°♄30'45	
min. Earth dist.	3323 Apr 18 00:00	22°♄46'49 0.65555 AU				3328 Aug 13 09:19	0°♄	
direct	3323 May 25 18:54	14°♄11'55						
desc. node	3323 Jun 30 14:58	20°♄58'52	conjunction			3328 Sep 07 02:01	15°♄45'30 1°06'07	
	3323 Jul 22 19:47	0°♍	minimum elong			3328 Sep 07 02:35	15°♄46'24 1°06'08	
	3323 Sep 14 22:31	0°♊	max. Earth dist.			3328 Sep 09 11:39	17°♄17'12 2.67425 AU	
	3323 Oct 29 17:09	0°♈				3328 Sep 29 11:19	0°♄	
	3323 Dec 09 12:45	0°♈	morning rise			3328 Oct 21 18:35	14°♄11'27	
	3324 Jan 17 07:45	0°♈				3328 Nov 15 13:13	0°♍	
	3324 Feb 24 09:41	0°♄				3329 Jan 01 05:44	0°♊	
	3324 Apr 02 20:24	0°♄				3329 Feb 16 12:46	0°♈	
evening set	3324 Apr 08 20:00	4°♄35'53	desc. node			3329 Feb 19 12:02	1°♈55'47	
asc. node	3324 May 03 13:22	23°♄19'41				3329 Apr 03 19:07	0°♈	
	3324 May 12 12:31	0°♄				3329 May 21 04:04	0°♈	
						3329 Jul 14 10:13	0°♄	
conjunction	3324 Jun 11 06:32	21°♄39'20 0°24'34	retrograde			3329 Aug 29 06:13	11°♄52'53	
minimum elong	3324 Jun 11 04:58	21°♄36'32 0°24'32	min. Earth dist.			3329 Sep 26 08:34	7°♄17'25 0.37346 AU	
	3324 Jun 23 00:30	0°♄	opposition			3329 Sep 28 21:45	6°♄36'12 -5°27'39	
max. Earth dist.	3324 Jul 18 17:27	17°♄51'23 2.52959 AU	greatest brilliancy			3329 Sep 28 14:53	6°♄40'50 -2.9m	
	3324 Aug 05 15:40	0°♄	direct			3329 Oct 28 06:42	1°♄41'14	
morning rise	3324 Aug 06 18:37	0°♄45'10	asc. node			3329 Dec 24 09:48	18°♄43'47	
	3324 Sep 20 10:49	0°♄				3330 Jan 14 10:02	0°♄	
	3324 Nov 07 12:09	0°♄				3330 Mar 05 02:06	0°♄	
	3324 Dec 28 20:47	0°♍				3330 Apr 21 13:00	0°♄	
	3325 Feb 28 15:25	0°♊				3330 Jun 08 00:08	0°♄	
retrograde	3325 Apr 15 07:32	10°♊01'53				3330 Jul 25 17:56	0°♄	
desc. node	3325 May 17 13:53	3°♊44'14	evening set			3330 Aug 29 01:34	21°♄35'52	
opposition	3325 May 22 05:39	2°♊02'39 -0°11'58				3330 Sep 11 08:13	0°♄	
greatest brilliancy	3325 May 22 06:59	2°♊01'26 -1.8m	max. Earth dist.			3330 Oct 02 13:33	13°♄30'48 2.66547 AU	
	3325 May 27 17:32	30°♍♍						
min. Earth dist.	3325 May 29 11:38	29°♍21'19 0.56926 AU	conjunction			3330 Oct 13 08:16	20°♄25'46 0°43'45	
direct	3325 Jul 01 14:16	22°♍27'44	minimum elong			3330 Oct 13 09:20	20°♄27'29 0°43'44	
	3325 Aug 06 21:45	0°♊				3330 Oct 28 03:54	0°♍	
	3325 Oct 02 16:15	0°♈	morning rise			3330 Nov 26 18:32	19°♍23'30	
	3325 Nov 15 06:04	0°♈				3330 Dec 12 17:12	0°♊	
	3325 Dec 25 04:57	0°♈	desc. node			3331 Jan 07 11:29	17°♊24'20	
	3326 Feb 02 00:55	0°♄				3331 Jan 25 19:31	0°♈	
	3326 Mar 13 04:10	0°♄				3331 Mar 09 12:07	0°♈	
asc. node	3326 Mar 21 11:41	6°♄16'13				3331 Apr 20 01:22	0°♈	
	3326 Apr 22 13:18	0°♄				3331 May 31 01:01	0°♄	
	3326 Jun 03 17:38	0°♄				3331 Jul 11 18:39	0°♄	
evening set	3326 Jun 07 18:01	2°♄47'04				3331 Aug 26 20:18	0°♄	
	3326 Jul 17 20:57	0°♄	retrograde			3331 Oct 31 08:47	23°♄12'32	
			asc. node			3331 Nov 11 08:11	22°♄19'11	
conjunction	3326 Jul 30 14:50	8°♄26'29 1°03'05	min. Earth dist.			3331 Nov 28 21:35	17°♄35'25 0.47597 AU	
minimum elong	3326 Jul 30 13:47	8°♄24'45 1°03'04	opposition			3331 Dec 07 04:49	14°♄37'06 1°26'09	
max. Earth dist.	3326 Aug 17 11:39	20°♄08'01 2.62851 AU	greatest brilliancy			3331 Dec 06 16:59	14°♄47'42 -2.3m	
	3326 Sep 01 17:34	0°♄	direct			3332 Jan 09 12:38	7°♄38'29	
morning rise	3326 Sep 16 19:47	9°♄40'43				3332 Mar 20 19:34	0°♄	
	3326 Oct 18 21:12	0°♄				3332 May 15 00:56	0°♄	

	3332 Jul 04 20:58	0°♎		conjunction	3337 Mar 06 20:06	16°♎21'30 -1°01'55
	3332 Aug 22 19:17	0°♏		minimum elong	3337 Mar 06 21:55	16°♎25'05 1°01'53
evening set	3332 Oct 03 22:19	26°♏44'38			3337 Mar 24 02:16	0°♐
	3332 Oct 08 22:53	0°♎			3337 May 01 08:00	0°♏
max. Earth dist.	3332 Oct 26 11:02	11°♎28'09	2.60308 AU	morning rise	3337 May 17 03:29	12°♏11'37
					3337 Jun 09 16:04	0°♐
conjunction	3332 Nov 19 05:15	27°♎21'43	0°03'00	asc. node	3337 Jul 03 05:51	17°♐22'09
minimum elong	3332 Nov 19 05:20	27°♎21'50	0°03'00		3337 Jul 20 20:29	0°♑
behind sun begin	3332 Nov 18 09:51	26°♎48'54			3337 Sep 02 13:55	0°♒
behind sun end	3332 Nov 20 00:48	27°♎54'48			3337 Oct 19 20:00	0°♎
	3332 Nov 23 02:35	0°♏			3337 Dec 13 02:16	0°♏
desc. node	3332 Nov 24 09:50	0°♏53'09		retrograde	3338 Feb 19 21:47	20°♏28'54
	3333 Jan 05 05:19	0°♏		opposition	3338 Mar 31 16:39	11°♏06'01 3°26'09
morning rise	3333 Jan 06 01:35	0°♏36'06		greatest brilliancy	3338 Mar 31 23:12	10°♏59'33 -1.3m
	3333 Feb 15 11:58	0°♏		min. Earth dist.	3338 Apr 02 22:28	10°♏12'57 0.67213 AU
	3333 Mar 27 08:52	0°♎		direct	3338 May 12 02:32	1°♏05'52
	3333 May 05 10:51	0°♐		desc. node	3338 Jul 17 05:55	20°♏18'51
	3333 Jun 13 14:42	0°♏			3338 Aug 05 02:55	0°♎
	3333 Jul 24 01:20	0°♐			3338 Sep 24 02:58	0°♏
	3333 Sep 05 19:44	0°♑			3338 Nov 06 22:52	0°♏
asc. node	3333 Sep 28 07:54	13°♑46'32			3338 Dec 17 11:08	0°♏
	3333 Oct 30 00:08	0°♒			3339 Jan 25 03:08	0°♎
retrograde	3333 Dec 12 17:21	10°♒43'12			3339 Mar 04 02:38	0°♐
min. Earth dist.	3334 Jan 15 19:25	3°♒00'49	0.59933 AU	evening set	3339 Mar 12 18:09	6°♐49'14
greatest brilliancy	3334 Jan 20 10:36	1°♒10'57	-1.6m		3339 Apr 11 10:04	0°♏
opposition	3334 Jan 21 07:11	0°♒50'32	4°14'47			
	3334 Jan 23 10:32	30°♒♑		conjunction	3339 May 19 05:33	28°♏44'31 -0°01'20
direct	3334 Feb 27 17:50	22°♑11'08		minimum elong	3339 May 19 05:36	28°♏44'37 0°01'20
	3334 Apr 08 00:26	0°♒		behind sun begin	3339 May 18 02:25	27°♏53'57
	3334 Jun 11 11:01	0°♎		behind sun end	3339 May 20 08:48	29°♏35'14
	3334 Aug 02 21:37	0°♏			3339 May 20 22:07	0°♐
	3334 Sep 20 05:50	0°♎		asc. node	3339 May 21 04:59	0°♐12'47
desc. node	3334 Oct 12 08:16	14°♎24'01			3339 Jul 01 05:56	0°♑
	3334 Nov 04 13:18	0°♏		max. Earth dist.	3339 Jul 04 06:15	2°♑07'44 2.47872 AU
evening set	3334 Nov 13 09:45	6°♏04'46		morning rise	3339 Jul 19 18:21	12°♑57'18
max. Earth dist.	3334 Nov 27 21:16	16°♏11'03	2.49290 AU		3339 Aug 13 18:47	0°♒
	3334 Dec 17 06:07	0°♏			3339 Sep 28 17:20	0°♎
					3339 Nov 16 13:01	0°♏
conjunction	3335 Jan 03 19:33	12°♏49'04 -0°45'17			3340 Jan 09 18:09	0°♎
minimum elong	3335 Jan 03 17:47	12°♏45'47 0°45'15		retrograde	3340 Mar 29 02:10	25°♎09'47
	3335 Jan 26 19:43	0°♏		opposition	3340 May 06 03:00	16°♎40'25 1°06'46
morning rise	3335 Mar 02 21:15	26°♏53'04		greatest brilliancy	3340 May 06 09:28	16°♎34'16 -1.6m
	3335 Mar 06 21:30	0°♎		min. Earth dist.	3340 May 12 02:09	14°♎24'07 0.61006 AU
	3335 Apr 14 05:39	0°♐		desc. node	3340 Jun 03 04:34	7°♎54'35
	3335 May 22 16:44	0°♏		direct	3340 Jun 16 05:26	6°♎47'07
	3335 Jul 01 04:57	0°♐			3340 Aug 26 02:22	0°♏
	3335 Aug 11 18:56	0°♑			3340 Oct 13 16:47	0°♏
asc. node	3335 Aug 16 07:35	3°♑08'32			3340 Nov 24 16:09	0°♏
	3335 Sep 25 22:50	0°♒			3341 Jan 02 23:29	0°♎
	3335 Nov 18 04:31	0°♎			3341 Feb 10 09:37	0°♐
retrograde	3336 Jan 17 11:00	17°♎16'55			3341 Mar 21 04:04	0°♏
min. Earth dist.	3336 Feb 25 02:38	8°♎03'43	0.66842 AU	asc. node	3341 Apr 07 04:41	12°♏54'32
opposition	3336 Feb 26 17:57	7°♎24'23	4°31'28		3341 Apr 30 04:29	0°♐
greatest brilliancy	3336 Feb 26 11:16	7°♎31'04	-1.3m	evening set	3341 May 17 15:30	12°♐41'43
	3336 Mar 19 12:07	30°♎♒			3341 Jun 11 00:30	0°♑
direct	3336 Apr 06 20:07	27°♒50'21				
	3336 Apr 26 13:11	0°♎		conjunction	3341 Jul 13 02:08	22°♑03'54 0°52'59
	3336 Jul 09 02:18	0°♏		minimum elong	3341 Jul 13 00:27	22°♑01'03 0°52'57
desc. node	3336 Aug 29 07:11	29°♏34'29			3341 Jul 24 21:17	0°♒
	3336 Aug 29 23:43	0°♎		max. Earth dist.	3341 Aug 06 23:53	8°♒42'54 2.59584 AU
	3336 Oct 15 07:44	0°♏		morning rise	3341 Sep 01 19:40	25°♒35'51
	3336 Nov 27 02:57	0°♏			3341 Sep 08 15:22	0°♎
evening set	3337 Jan 02 17:38	27°♏12'13			3341 Oct 26 00:07	0°♏
	3337 Jan 06 09:47	0°♏			3341 Dec 14 00:13	0°♎
	3337 Feb 14 02:12	0°♎			3342 Feb 03 23:37	0°♏
max. Earth dist.	3337 Feb 17 21:10	2°♎58'48	2.37202 AU		3342 Apr 08 21:02	0°♏
				desc. node	3342 Apr 21 04:08	3°♏46'45

retrograde	3342 May 17 08:11	7° ♁ 29'10	evening set	3347 Sep 20 11:47	13° ♁ 05'29	
opposition	3342 Jun 20 20:40	0° ♁ 32'32 -2°51'03		3347 Oct 16 18:27	0° ♁	
greatest brilliancy	3342 Jun 21 17:12	0° ♁ 14'47 -2.2m	max. Earth dist.	3347 Oct 17 10:19	0° ♁ 25'47	2.63359 AU
	3342 Jun 22 10:14	30° ♁				
min. Earth dist.	3342 Jun 29 07:02	27° ♁ 38'08 0.49164 AU	conjunction	3347 Nov 05 00:06	12° ♁ 36'17	0°20'29
direct	3342 Jul 28 20:44	22° ♁ 00'09	minimum elong	3347 Nov 05 00:46	12° ♁ 37'23	0°20'28
	3342 Sep 03 03:59	0° ♁		3347 Dec 01 00:38	0° ♁	
	3342 Oct 27 07:59	0° ♁	desc. node	3347 Dec 12 00:52	7° ♁ 29'13	
	3342 Dec 08 23:33	0° ♁	morning rise	3347 Dec 20 22:46	13° ♁ 36'23	
	3343 Jan 18 04:45	0° ♁		3348 Jan 13 10:55	0° ♁	
asc. node	3343 Feb 23 02:29	26° ♁ 52'11		3348 Feb 24 04:19	0° ♁	
	3343 Feb 27 07:50	0° ♁		3348 Apr 04 13:24	0° ♁	
	3343 Apr 09 13:02	0° ♁		3348 May 14 03:56	0° ♁	
	3343 May 22 10:16	0° ♁		3348 Jun 22 21:52	0° ♁	
evening set	3343 Jul 06 12:34	0° ♁ 16'46		3348 Aug 03 07:54	0° ♁	
	3343 Jul 06 02:24	0° ♁		3348 Sep 18 22:24	0° ♁	
	3343 Aug 21 05:44	0° ♁	asc. node	3348 Oct 15 00:55	13° ♁ 26'10	
			retrograde	3348 Nov 27 05:27	24° ♁ 17'28	
conjunction	3343 Aug 24 10:34	2° ♁ 03'18 1°08'25	min. Earth dist.	3348 Dec 29 04:33	17° ♁ 20'26	0.55580 AU
minimum elong	3343 Aug 24 10:35	2° ♁ 03'21 1°08'25	greatest brilliancy	3349 Jan 04 03:04	15° ♁ 02'42	-1.9m
max. Earth dist.	3343 Sep 01 15:00	7° ♁ 17'53 2.66290 AU	opposition	3349 Jan 05 01:18	14° ♁ 41'08	3°34'37
	3343 Oct 07 06:34	0° ♁	direct	3349 Feb 10 01:47	6° ♁ 34'15	
morning rise	3343 Oct 09 01:29	1° ♁ 08'05		3349 Apr 26 03:38	0° ♁	
	3343 Nov 23 15:35	0° ♁		3349 Jun 20 23:10	0° ♁	
	3344 Jan 10 03:35	0° ♁		3349 Aug 10 14:17	0° ♁	
	3344 Feb 27 02:43	0° ♁		3349 Sep 27 08:21	0° ♁	
desc. node	3344 Mar 08 03:03	6° ♁ 10'29	evening set	3349 Oct 27 20:33	20° ♁ 03'54	
	3344 Apr 16 20:39	0° ♁	desc. node	3349 Oct 28 23:19	20° ♁ 48'47	
	3344 Jun 14 01:21	0° ♁		3349 Nov 11 13:11	0° ♁	
retrograde	3344 Jul 27 23:12	10° ♁ 16'57	max. Earth dist.	3349 Nov 13 15:16	1° ♁ 25'30	2.54091 AU
opposition	3344 Aug 27 01:43	5° ♁ 18'25 -6°45'08				
greatest brilliancy	3344 Aug 27 21:20	5° ♁ 05'11 -2.9m	conjunction	3349 Dec 15 14:48	23° ♁ 44'08	-0°27'05
min. Earth dist.	3344 Aug 30 04:02	4° ♁ 28'18 0.37832 AU	minimum elong	3349 Dec 15 13:41	23° ♁ 42'10	0°27'04
direct	3344 Sep 26 20:55	0° ♁ 00'48		3349 Dec 24 09:05	0° ♁	
	3344 Dec 14 04:14	0° ♁		3350 Feb 03 04:20	0° ♁	
asc. node	3345 Jan 10 01:11	16° ♁ 52'11	morning rise	3350 Feb 06 13:23	2° ♁ 32'22	
	3345 Jan 30 01:27	0° ♁		3350 Mar 14 12:15	0° ♁	
	3345 Mar 16 00:17	0° ♁		3350 Apr 22 01:47	0° ♁	
	3345 Apr 30 08:30	0° ♁		3350 May 30 17:10	0° ♁	
	3345 Jun 15 16:03	0° ♁		3350 Jul 09 10:18	0° ♁	
	3345 Aug 01 18:43	0° ♁		3350 Aug 20 11:07	0° ♁	
evening set	3345 Aug 14 15:55	8° ♁ 09'37	asc. node	3350 Sep 01 23:07	8° ♁ 26'31	
	3345 Sep 18 02:33	0° ♁		3350 Oct 06 02:52	0° ♁	
max. Earth dist.	3345 Sep 23 12:04	3° ♁ 25'59 2.67546 AU		3350 Dec 09 03:01	0° ♁	
			retrograde	3351 Jan 04 00:08	3° ♁ 56'44	
conjunction	3345 Sep 29 08:24	7° ♁ 09'27 0°54'56		3351 Jan 28 01:54	30° ♁	
minimum elong	3345 Sep 29 09:26	7° ♁ 11'06 0°54'56	min. Earth dist.	3351 Feb 10 00:21	25° ♁ 15'06	0.64904 AU
	3345 Nov 03 23:06	0° ♁	opposition	3351 Feb 13 04:03	23° ♁ 59'20	4°36'42
morning rise	3345 Nov 12 12:04	5° ♁ 31'43	greatest brilliancy	3351 Feb 12 15:17	24° ♁ 12'08	-1.4m
	3345 Dec 19 20:36	0° ♁	direct	3351 Mar 24 08:45	14° ♁ 42'47	
desc. node	3346 Jan 24 02:05	23° ♁ 32'55		3351 May 22 01:31	0° ♁	
	3346 Feb 02 14:49	0° ♁		3351 Jul 19 20:13	0° ♁	
	3346 Mar 18 06:55	0° ♁		3351 Sep 07 20:47	0° ♁	
	3346 Apr 30 03:49	0° ♁	desc. node	3351 Sep 15 22:03	5° ♁ 06'25	
	3346 Jun 12 00:08	0° ♁		3351 Oct 23 16:15	0° ♁	
	3346 Jul 27 09:11	0° ♁		3351 Dec 05 09:30	0° ♁	
retrograde	3346 Oct 10 01:17	28° ♁ 52'15	evening set	3351 Dec 12 19:27	5° ♁ 23'54	
min. Earth dist.	3346 Nov 05 21:46	24° ♁ 02'24 0.42393 AU	max. Earth dist.	3351 Dec 31 04:07	18° ♁ 59'17	2.41288 AU
opposition	3346 Nov 13 17:21	21° ♁ 29'25 -0°54'09		3352 Jan 14 18:20	0° ♁	
greatest brilliancy	3346 Nov 13 11:32	21° ♁ 34'10 -2.7m				
asc. node	3346 Nov 28 01:38	17° ♁ 23'33	conjunction	3352 Feb 08 14:43	19° ♁ 06'35	-1°04'00
direct	3346 Dec 15 01:31	15° ♁ 26'30	minimum elong	3352 Feb 08 13:53	19° ♁ 04'58	1°04'00
	3347 Feb 06 20:32	0° ♁		3352 Feb 22 13:46	0° ♁	
	3347 Apr 04 13:54	0° ♁		3352 Mar 31 16:14	0° ♁	
	3347 May 25 06:37	0° ♁	morning rise	3352 Apr 16 11:07	12° ♁ 25'47	
	3347 Jul 13 12:43	0° ♁		3352 May 08 22:57	0° ♁	
	3347 Aug 30 19:25	0° ♁		3352 Jun 17 06:58	0° ♁	

asc. node	3352 Jul 19 22:50	23°II54'33		3357 Sep 24 07:31	0°Z	
	3352 Jul 28 12:21	0°E		3357 Nov 08 18:17	0°A	
	3352 Sep 10 12:40	0°Q		3357 Dec 19 08:48	0°H	
	3352 Oct 28 23:53	0°P		3358 Jan 27 13:23	0°Y	
	3352 Dec 29 10:57	0°L		3358 Mar 07 22:40	0°B	
retrograde	3353 Feb 06 08:57	7°L50'24		asc. node	3358 Mar 11 19:50	2°B55'04
	3353 Mar 13 23:25	30°R		3358 Apr 17 12:48	0°II	
opposition	3353 Mar 18 11:43	28°P13'13	3°59'45	3358 May 29 21:24	0°E	
greatest brilliancy	3353 Mar 18 13:55	28°P11'00	-1.3m	evening set	3358 Jun 18 17:31	13°E35'59
min. Earth dist.	3353 Mar 19 05:11	27°P55'50	0.67865 AU		3358 Jul 13 03:46	0°Q
direct	3353 Apr 28 12:52	18°P20'06				
	3353 Jun 17 06:19	0°L		conjunction	3358 Aug 08 23:38	17°Q38'23 1°06'27
desc. node	3353 Aug 02 21:41	22°L50'00		minimum elong	3358 Aug 08 22:59	17°Q37'20 1°06'26
	3353 Aug 15 11:42	0°M		max. Earth dist.	3358 Aug 23 05:59	26°Q53'20 2.64308 AU
	3353 Oct 02 11:31	0°J			3358 Aug 28 01:44	0°P
	3353 Nov 14 18:14	0°Z		morning rise	3358 Sep 25 02:11	17°P55'32
	3353 Dec 25 02:50	0°A			3358 Oct 14 03:26	0°L
	3354 Feb 01 17:59	0°H			3358 Nov 30 23:00	0°M
evening set	3354 Feb 12 04:12	8°H13'14			3359 Jan 18 14:48	0°J
	3354 Mar 11 16:53	0°Y			3359 Mar 10 07:34	0°Z
	3354 Apr 18 22:43	0°B		desc. node	3359 Mar 25 17:54	8°Z37'06
					3359 May 07 23:02	0°A
conjunction	3354 Apr 21 19:49	2°B13'50 -0°30'06		retrograde	3359 Jun 27 07:33	12°A26'13
minimum elong	3354 Apr 21 22:29	2°B19'00 0°30'03		opposition	3359 Jul 28 21:44	6°A49'49 -5°49'53
	3354 May 28 08:03	0°II		greatest brilliancy	3359 Jul 30 07:25	6°A24'43 -2.6m
asc. node	3354 Jun 06 21:28	7°II05'34		min. Earth dist.	3359 Aug 04 22:55	4°A44'31 0.41277 AU
max. Earth dist.	3354 Jun 12 17:19	11°II22'42 2.42429 AU		direct	3359 Aug 31 16:20	0°A15'11
morning rise	3354 Jun 27 21:00	22°II22'45			3359 Nov 16 05:54	0°H
	3354 Jul 08 13:06	0°E			3359 Dec 31 03:56	0°Y
	3354 Aug 21 01:14	0°Q		asc. node	3360 Jan 27 18:51	19°Y26'30
	3354 Oct 06 06:39	0°P			3360 Feb 11 17:09	0°B
	3354 Nov 25 07:37	0°L			3360 Mar 25 13:06	0°II
	3355 Jan 24 11:56	0°M			3360 May 08 14:29	0°E
retrograde	3355 Mar 14 09:47	11°M21'06			3360 Jun 23 02:17	0°Q
opposition	3355 Apr 22 07:12	2°M27'14 2°10'36		evening set	3360 Jul 30 17:13	24°Q14'37
greatest brilliancy	3355 Apr 22 16:17	2°M18'26 -1.4m			3360 Aug 08 17:23	0°P
min. Earth dist.	3355 Apr 26 20:22	0°M41'25 0.64216 AU				
	3355 Apr 28 15:35	30°R		conjunction	3360 Sep 15 06:43	23°P54'16 1°02'59
direct	3355 Jun 02 18:18	22°L25'42		minimum elong	3360 Sep 15 07:30	23°P55'32 1°02'59
desc. node	3355 Jun 20 20:31	24°L21'17		max. Earth dist.	3360 Sep 14 16:44	23°P32'04 2.67696 AU
	3355 Jul 10 13:29	0°M			3360 Sep 24 20:47	0°L
	3355 Sep 08 09:12	0°J		morning rise	3360 Oct 29 15:35	22°L10'58
	3355 Oct 24 03:47	0°Z			3360 Nov 10 20:14	0°M
	3355 Dec 04 07:23	0°A			3360 Dec 27 05:12	0°J
	3356 Jan 12 05:49	0°H		desc. node	3361 Feb 09 17:12	29°J14'05
	3356 Feb 19 09:49	0°Y			3361 Feb 10 20:58	0°Z
	3356 Mar 28 22:10	0°B			3361 Mar 27 23:39	0°A
evening set	3356 Apr 23 17:52	19°B37'37			3361 May 12 02:56	0°H
asc. node	3356 Apr 23 20:00	19°B41'39			3361 Jun 28 07:18	0°Y
	3356 May 07 16:04	0°II			3361 Sep 11 10:40	0°B
	3356 Jun 18 05:50	0°E		retrograde	3361 Sep 14 18:31	0°B04'43
					3361 Sep 18 02:04	30°R
conjunction	3356 Jun 23 13:48	3°E44'38 0°36'50		min. Earth dist.	3361 Oct 11 12:53	25°Y37'45 0.38454 AU
minimum elong	3356 Jun 23 11:56	3°E41'21 0°36'49		opposition	3361 Oct 16 15:56	24°Y09'35 -3°53'22
max. Earth dist.	3356 Jul 26 07:03	26°E13'22 2.55539 AU		greatest brilliancy	3361 Oct 16 02:28	24°Y19'17 -2.9m
	3356 Jul 31 21:48	0°Q		direct	3361 Nov 15 11:41	18°Y58'57
morning rise	3356 Aug 16 16:55	10°Q30'44		asc. node	3361 Dec 14 17:15	24°Y06'59
	3356 Sep 15 15:18	0°P			3361 Dec 30 05:12	0°B
	3356 Nov 02 08:34	0°L			3362 Feb 24 23:07	0°II
	3356 Dec 22 14:45	0°M			3362 Apr 15 08:52	0°E
	3357 Feb 17 01:02	0°J			3362 Jun 02 16:59	0°Q
retrograde	3357 Apr 26 02:23	19°J39'44			3362 Jul 20 21:32	0°P
desc. node	3357 May 07 18:50	18°J48'18		evening set	3362 Sep 06 05:52	29°P42'33
opposition	3357 Jun 01 05:54	12°J00'18 -1°05'07			3362 Sep 06 16:54	0°L
greatest brilliancy	3357 Jun 01 13:17	11°J53'36 -1.9m		max. Earth dist.	3362 Oct 07 22:30	19°L54'26 2.65631 AU
min. Earth dist.	3357 Jun 09 01:07	9°J09'59 0.54339 AU				
direct	3357 Jul 10 22:46	2°J41'49		conjunction	3362 Oct 21 11:45	28°L39'21 0°35'53

minimum elong	3362 Oct 21 12:44	28° Ω 40'57	0°35'53		3367 Sep 20 00:11	0° Ω	
	3362 Oct 23 13:29	0° \mathbb{M}			3367 Nov 09 17:18	0° \mathbb{M}	
morning rise	3362 Dec 05 06:59	28° \mathbb{M} 10'33		retrograde	3368 Jan 25 02:34	25° \mathbb{M} 09'38	
	3362 Dec 08 00:13	0° \mathbb{A}		opposition	3368 Mar 05 08:51	15° \mathbb{M} 21'38	4°22'53
desc. node	3362 Dec 28 15:47	13° \mathbb{A} 59'23		greatest brilliancy	3368 Mar 05 05:33	15° \mathbb{M} 24'56	-1.3m
	3363 Jan 20 20:36	0° \mathbb{B}		min. Earth dist.	3368 Mar 04 13:55	15° \mathbb{M} 40'33	0.67500 AU
	3363 Mar 04 04:21	0° \approx		direct	3368 Apr 14 20:10	5° \mathbb{M} 39'48	
	3363 Apr 14 06:09	0° \mathbb{H}			3368 Jul 01 17:40	0° Ω	
	3363 May 24 15:21	0° Υ		desc. node	3368 Aug 19 12:35	27° Ω 01'06	
	3363 Jul 04 09:28	0° \mathbb{B}			3368 Aug 24 11:20	0° \mathbb{M}	
	3363 Aug 16 20:48	0° \mathbb{I}			3368 Oct 10 08:06	0° \mathbb{A}	
	3363 Oct 12 17:35	0° \mathbb{B}			3368 Nov 22 07:38	0° \mathbb{B}	
asc. node	3363 Nov 01 17:07	4° \mathbb{B} 58'04			3369 Jan 01 15:28	0° \approx	
retrograde	3363 Nov 11 02:35	5° \mathbb{B} 35'29		evening set	3369 Jan 16 09:32	11° \approx 20'06	
	3363 Dec 09 09:24	30° \mathbb{R} \mathbb{I}			3369 Feb 09 07:29	0° \mathbb{H}	
min. Earth dist.	3363 Dec 10 19:33	29° \mathbb{I} 29'27	0.50531 AU		3369 Mar 19 06:52	0° Υ	
opposition	3363 Dec 18 18:50	26° \mathbb{I} 32'10	2°24'31				
greatest brilliancy	3363 Dec 18 00:36	26° \mathbb{I} 49'08	-2.1m	conjunction	3369 Mar 23 06:18	3° Υ 08'34	-0°54'00
direct	3364 Jan 22 03:43	19° \mathbb{I} 06'29		minimum elong	3369 Mar 23 09:24	3° Υ 14'42	0°53'58
	3364 Mar 08 13:59	0° \mathbb{B}			3369 Apr 26 11:54	0° \mathbb{B}	
	3364 May 08 08:12	0° Ω		max. Earth dist.	3369 Apr 28 09:25	1° \mathbb{B} 28'19	2.37562 AU
	3364 Jun 29 12:10	0° \mathbb{M}		morning rise	3369 Jun 02 06:48	28° \mathbb{B} 06'53	
	3364 Aug 17 23:06	0° Ω			3369 Jun 04 19:13	0° \mathbb{I}	
	3364 Oct 04 07:29	0° \mathbb{M}		asc. node	3369 Jun 23 13:45	13° \mathbb{I} 53'03	
evening set	3364 Oct 12 10:00	5° \mathbb{M} 16'32			3369 Jul 15 22:25	0° \mathbb{B}	
max. Earth dist.	3364 Nov 01 17:31	18° \mathbb{M} 41'58	2.58268 AU		3369 Aug 28 11:49	0° Ω	
desc. node	3364 Nov 14 14:45	27° \mathbb{M} 22'09			3369 Oct 14 05:15	0° \mathbb{M}	
	3364 Nov 18 11:41	0° \mathbb{A}			3369 Dec 05 07:57	0° Ω	
				retrograde	3370 Feb 27 22:03	28° Ω 17'33	
conjunction	3364 Nov 28 09:45	6° \mathbb{A} 47'23	-0°07'56	opposition	3370 Apr 08 10:16	19° Ω 03'59	3°01'28
minimum elong	3364 Nov 28 09:26	6° \mathbb{A} 46'50	0°07'56	greatest brilliancy	3370 Apr 08 18:24	18° Ω 56'00	-1.3m
behind sun begin	3364 Nov 27 15:34	6° \mathbb{A} 16'07		min. Earth dist.	3370 Apr 11 12:01	17° Ω 51'36	0.66425 AU
behind sun end	3364 Nov 29 03:18	7° \mathbb{A} 17'34		direct	3370 May 19 21:53	9° Ω 01'48	
	3364 Dec 31 12:04	0° \mathbb{B}		desc. node	3370 Jul 07 11:06	20° Ω 31'18	
morning rise	3365 Jan 16 17:48	11° \mathbb{B} 42'07			3370 Jul 28 03:05	0° \mathbb{M}	
	3365 Feb 10 14:39	0° \approx			3370 Sep 18 07:05	0° \mathbb{A}	
	3365 Mar 22 06:39	0° \mathbb{H}			3370 Nov 01 16:51	0° \mathbb{B}	
	3365 Apr 30 03:48	0° Υ			3370 Dec 12 10:10	0° \approx	
	3365 Jun 08 02:12	0° \mathbb{B}			3371 Jan 20 04:16	0° \mathbb{H}	
	3365 Jul 18 04:16	0° \mathbb{I}			3371 Feb 27 05:06	0° Υ	
	3365 Aug 30 01:25	0° \mathbb{B}		evening set	3371 Mar 28 18:40	23° Υ 10'59	
asc. node	3365 Sep 18 16:23	12° \mathbb{B} 37'14			3371 Apr 06 13:42	0° \mathbb{B}	
	3365 Oct 18 21:47	0° Ω		asc. node	3371 May 11 13:48	26° \mathbb{B} 36'58	
retrograde	3365 Dec 21 01:27	19° Ω 46'30			3371 May 16 02:49	0° \mathbb{I}	
min. Earth dist.	3366 Jan 25 05:44	11° Ω 41'23	0.61965 AU				
opposition	3366 Jan 29 21:34	9° Ω 50'01	4°27'56	conjunction	3371 Jun 02 05:31	12° \mathbb{I} 35'23	0°14'08
greatest brilliancy	3366 Jan 29 03:17	10° Ω 08'15	-1.5m	minimum elong	3371 Jun 02 04:28	12° \mathbb{I} 33'29	0°14'07
direct	3366 Mar 09 00:09	0° Ω 55'54		behind sun begin	3371 Jun 01 16:20	12° \mathbb{I} 11'22	
	3366 Jun 04 09:41	0° \mathbb{M}		behind sun end	3371 Jun 02 16:37	12° \mathbb{I} 55'34	
	3366 Jul 28 12:03	0° Ω			3371 Jun 26 11:35	0° \mathbb{B}	
	3366 Sep 15 09:03	0° \mathbb{M}		max. Earth dist.	3371 Jul 13 14:06	11° \mathbb{B} 58'38	2.50740 AU
desc. node	3366 Oct 02 13:52	11° \mathbb{M} 06'30		morning rise	3371 Jul 30 20:52	23° \mathbb{B} 49'53	
	3366 Oct 30 20:54	0° \mathbb{A}			3371 Aug 08 23:59	0° Ω	
evening set	3366 Nov 23 10:53	16° \mathbb{A} 20'30			3371 Sep 23 18:55	0° \mathbb{M}	
max. Earth dist.	3366 Dec 07 15:32	26° \mathbb{A} 26'18	2.46442 AU		3371 Nov 11 01:38	0° Ω	
	3366 Dec 12 14:12	0° \mathbb{B}			3372 Jan 02 08:15	0° \mathbb{M}	
					3372 Mar 11 10:06	0° \mathbb{A}	
conjunction	3367 Jan 15 19:54	25° \mathbb{B} 16'10	-0°54'09	retrograde	3372 Apr 07 16:29	3° \mathbb{A} 57'47	
minimum elong	3367 Jan 15 18:03	25° \mathbb{B} 12'41	0°54'08		3372 May 02 20:47	30° \mathbb{R} \mathbb{M}	
	3367 Jan 22 02:15	0° \approx		opposition	3372 May 15 03:00	25° \mathbb{M} 44'14	0°23'03
	3367 Mar 02 01:33	0° \mathbb{H}		greatest brilliancy	3372 May 15 05:39	25° \mathbb{M} 41'45	-1.7m
morning rise	3367 Mar 18 09:57	12° \mathbb{H} 47'42		min. Earth dist.	3372 May 21 19:24	23° \mathbb{M} 13'20	0.58859 AU
	3367 Apr 09 07:16	0° Υ		desc. node	3372 May 24 09:52	22° \mathbb{M} 16'10	
	3367 May 17 16:03	0° \mathbb{B}		direct	3372 Jun 24 20:31	15° \mathbb{M} 59'21	
	3367 Jun 26 01:34	0° \mathbb{I}			3372 Aug 15 20:24	0° \mathbb{A}	
asc. node	3367 Aug 06 13:57	0° \mathbb{B} 05'52			3372 Oct 07 00:57	0° \mathbb{B}	
	3367 Aug 06 10:37	0° \mathbb{B}			3372 Nov 18 20:57	0° \approx	

	3372 Dec 28 12:36	0° H		desc. node	3378 Jan 14 07:40	20° x 19'48	
	3373 Feb 05 03:43	0° Y			3378 Jan 28 11:34	0° Z	
	3373 Mar 16 02:05	0° B			3378 Mar 12 14:22	0° \approx	
asc. node	3373 Mar 28 11:57	9° B 23'46			3378 Apr 23 16:09	0° H	
	3373 Apr 25 05:59	0° II			3378 Jun 04 08:00	0° Y	
evening set	3373 May 29 22:33	24° II 53'46			3378 Jul 17 03:48	0° B	
	3373 Jun 06 05:19	0° E			3378 Sep 04 22:37	0° II	
	3373 Jul 20 04:16	0° Ω		retrograde	3378 Oct 22 14:22	13° II 38'24	
				asc. node	3378 Nov 18 08:39	8° II 41'30	
conjunction	3373 Jul 23 07:03	2° Ω 04'41 0°59'31		min. Earth dist.	3378 Nov 19 05:33	8° II 24'08	0.45218 AU
minimum elong	3373 Jul 23 05:42	2° Ω 02'27 0°59'30		opposition	3378 Nov 27 13:14	5° II 32'01	0°32'33
max. Earth dist.	3373 Aug 13 03:01	15° Ω 49'54 2.61491 AU		greatest brilliancy	3378 Nov 27 08:36	5° II 36'00	-2.5m
	3373 Sep 03 22:37	0° M			3378 Dec 17 13:49	30° R B	
morning rise	3373 Sep 10 12:35	4° M 14'04		direct	3378 Dec 30 00:21	28° B 57'22	
	3373 Oct 21 03:22	0° A			3379 Jan 11 22:06	0° II	
	3373 Dec 08 14:30	0° M			3379 Mar 27 10:42	0° E	
	3374 Jan 28 00:50	0° x			3379 May 19 08:15	0° Ω	
	3374 Mar 25 06:14	0° Z			3379 Jul 08 10:25	0° M	
desc. node	3374 Apr 11 08:30	7° Z 33'34			3379 Aug 26 01:58	0° A	
retrograde	3374 May 30 19:31	19° Z 18'57		evening set	3379 Sep 28 16:46	21° A 17'59	
opposition	3374 Jul 03 09:17	12° Z 49'16 -3°57'28			3379 Oct 12 04:11	0° M	
greatest brilliancy	3374 Jul 04 13:05	12° Z 26'12 -2.3m		max. Earth dist.	3379 Oct 23 05:22	7° M 12'28	2.61779 AU
min. Earth dist.	3374 Jul 11 18:49	10° Z 03'05 0.46250 AU					
direct	3374 Aug 09 02:00	4° Z 52'37		conjunction	3379 Nov 13 13:37	21° M 20'45	0°10'33
	3374 Oct 17 10:59	0° \approx		minimum elong	3379 Nov 13 13:59	21° M 21'22	0°10'33
	3374 Dec 01 16:00	0° H		behind sun begin	3379 Nov 12 23:03	20° M 56'25	
	3375 Jan 11 20:53	0° Y		behind sun end	3379 Nov 14 04:55	21° M 46'20	
asc. node	3375 Feb 13 10:35	24° Y 01'42			3379 Nov 26 10:03	0° x	
	3375 Feb 21 14:07	0° B		desc. node	3379 Dec 02 06:05	3° x 58'03	
	3375 Apr 04 05:14	0° II		morning rise	3379 Dec 30 10:49	23° x 28'20	
	3375 May 17 10:06	0° E			3380 Jan 08 17:01	0° Z	
	3375 Jul 01 07:34	0° Ω			3380 Feb 19 05:13	0° \approx	
evening set	3375 Jul 15 23:55	9° Ω 35'51			3380 Mar 30 07:42	0° H	
	3375 Aug 16 14:09	0° M			3380 May 08 14:57	0° Y	
					3380 Jun 16 23:45	0° B	
conjunction	3375 Sep 01 22:02	10° M 26'50 1°07'33			3380 Jul 27 17:18	0° II	
minimum elong	3375 Sep 01 22:23	10° M 27'24 1°07'33			3380 Sep 10 07:01	0° E	
max. Earth dist.	3375 Sep 06 21:37	13° M 37'31 2.67023 AU		asc. node	3380 Oct 05 07:55	14° E 33'45	
	3375 Oct 02 15:09	0° A			3380 Nov 09 20:17	0° Ω	
morning rise	3375 Oct 16 22:56	9° A 06'06		retrograde	3380 Dec 06 06:54	4° Ω 21'53	
	3375 Nov 18 19:50	0° M			3380 Dec 31 03:05	30° R E	
	3376 Jan 04 20:23	0° x		min. Earth dist.	3381 Jan 08 10:35	26° E 58'38	0.58092 AU
	3376 Feb 20 19:00	0° Z		opposition	3381 Jan 14 13:11	24° E 34'40	4°01'18
desc. node	3376 Feb 27 07:57	4° Z 09'55		greatest brilliancy	3381 Jan 13 15:15	24° E 56'16	-1.7m
	3376 Apr 08 06:53	0° \approx		direct	3381 Feb 20 08:47	16° E 08'49	
	3376 May 28 12:10	0° H			3381 Apr 16 00:15	0° Ω	
retrograde	3376 Aug 15 08:27	28° H 16'32			3381 Jun 14 20:05	0° M	
opposition	3376 Sep 14 11:50	23° H 16'46 -6°18'56			3381 Aug 05 11:21	0° A	
min. Earth dist.	3376 Sep 14 11:01	23° H 17'18 0.37155 AU			3381 Sep 22 14:14	0° M	
greatest brilliancy	3376 Sep 14 15:54	23° H 14'05 -2.9m		desc. node	3381 Oct 19 04:26	17° M 23'24	
direct	3376 Oct 14 03:09	18° H 20'32		evening set	3381 Nov 06 02:45	29° M 27'26	
	3376 Nov 28 09:18	0° Y			3381 Nov 06 21:52	0° x	
asc. node	3376 Dec 31 10:10	17° Y 24'21		max. Earth dist.	3381 Nov 21 11:26	10° x 01'28	2.51507 AU
	3377 Jan 21 07:46	0° B			3381 Dec 19 17:11	0° Z	
	3377 Mar 09 08:58	0° II					
	3377 Apr 24 17:34	0° E		conjunction	3381 Dec 26 05:06	4° Z 41'39 -0°37'49	
	3377 Jun 10 14:32	0° Ω		minimum elong	3381 Dec 26 03:34	4° Z 38'52	0°37'48
	3377 Jul 28 00:52	0° M			3382 Jan 29 10:18	0° \approx	
evening set	3377 Aug 22 22:42	16° M 20'59		morning rise	3382 Feb 19 18:58	16° \approx 14'07	
	3377 Sep 13 12:11	0° A			3382 Mar 09 15:18	0° H	
max. Earth dist.	3377 Sep 28 17:11	9° A 40'37 2.67100 AU			3382 Apr 17 01:55	0° Y	
					3382 May 25 14:25	0° B	
conjunction	3377 Oct 07 08:27	15° A 11'43 0°48'45			3382 Jul 04 03:25	0° II	
minimum elong	3377 Oct 07 09:32	15° A 13'26 0°48'45			3382 Aug 14 19:43	0° E	
	3377 Oct 30 08:33	0° M		asc. node	3382 Aug 23 07:50	5° E 51'11	
morning rise	3377 Nov 20 14:15	13° M 49'41			3382 Sep 29 09:17	0° Ω	
	3377 Dec 15 02:02	0° x			3382 Nov 24 02:22	0° M	

retrograde	3383 Jan 11 19:08	12° \cap 08'30			3388 Jan 07 01:23	0° H	
min. Earth dist.	3383 Feb 18 17:11	3° \cap 08'50	0.66097 AU		3388 Feb 14 08:35	0° Y	
opposition	3383 Feb 21 00:46	2° \cap 13'08	4°35'17		3388 Mar 23 23:37	0° B	
greatest brilliancy	3383 Feb 20 15:20	2° \cap 22'35	-1.4m	asc. node	3388 Apr 14 05:02	16° B 07'50	
	3383 Feb 26 15:31	30° R Ω			3388 May 02 19:51	0° II	
direct	3383 Apr 01 17:31	22° Ω 46'25		evening set	3388 May 07 14:57	3° II 31'39	
	3383 May 09 18:26	0° \cap			3388 Jun 13 11:39	0° E	
	3383 Jul 13 14:02	0° $\underline{\text{A}}$					
	3383 Sep 02 16:19	0° M		conjunction	3388 Jul 04 22:34	14° E 54'06	0°46'53
desc. node	3383 Sep 06 03:30	2° M 09'47		minimum elong	3388 Jul 04 20:43	14° E 50'55	0°46'53
	3383 Oct 18 20:20	0° X			3388 Jul 27 04:47	0° Ω	
	3383 Nov 30 15:56	0° Z		max. Earth dist.	3388 Aug 02 05:25	4° Ω 01'48	2.57861 AU
evening set	3383 Dec 24 20:16	17° Z 47'34		morning rise	3388 Aug 26 01:28	19° Ω 44'44	
	3384 Jan 10 00:39	0° \approx			3388 Sep 10 21:16	0° \cap	
max. Earth dist.	3384 Jan 20 04:08	7° \approx 45'44	2.38709 AU		3388 Oct 28 08:11	0° $\underline{\text{A}}$	
	3384 Feb 17 18:49	0° H			3388 Dec 16 18:43	0° M	
					3389 Feb 08 04:43	0° X	
conjunction	3384 Feb 23 13:03	4° H 31'22	-1°04'36	desc. node	3389 Apr 28 00:12	29° X 23'44	
minimum elong	3384 Feb 23 13:37	4° H 32'29	1°04'36	retrograde	3389 May 07 17:39	29° X 57'00	
	3384 Mar 26 19:58	0° Y		opposition	3389 Jun 12 00:26	22° X 40'05	-2°03'48
morning rise	3384 May 03 22:00	29° Y 52'49		greatest brilliancy	3389 Jun 12 15:03	22° X 27'05	-2.1m
	3384 May 04 01:42	0° B		min. Earth dist.	3389 Jun 20 05:41	19° X 45'17	0.51521 AU
	3384 Jun 12 08:41	0° II		direct	3389 Jul 20 20:07	13° X 44'21	
asc. node	3384 Jul 10 06:29	20° II 31'52			3389 Sep 13 12:41	0° Z	
	3384 Jul 23 11:59	0° E			3389 Nov 01 11:42	0° \approx	
	3384 Sep 05 06:04	0° Ω			3389 Dec 13 02:16	0° H	
	3384 Oct 22 20:14	0° \cap			3390 Jan 21 18:53	0° Y	
	3384 Dec 18 00:31	0° $\underline{\text{A}}$		asc. node	3390 Mar 02 02:57	29° Y 41'44	
retrograde	3385 Feb 14 03:00	15° $\underline{\text{A}}$ 33'50			3390 Mar 02 12:44	0° B	
opposition	3385 Mar 26 01:24	6° $\underline{\text{A}}$ 04'12	3°41'13		3390 Apr 12 09:40	0° II	
greatest brilliancy	3385 Mar 26 06:11	5° $\underline{\text{A}}$ 59'28	-1.3m		3390 May 24 23:49	0° E	
min. Earth dist.	3385 Mar 27 14:54	5° $\underline{\text{A}}$ 27'02	0.67630 AU	evening set	3390 Jun 29 01:36	23° E 46'34	
	3385 Apr 11 14:32	30° R \cap			3390 Jul 08 10:15	0° Ω	
direct	3385 May 06 07:27	26° \cap 06'42					
	3385 Jun 02 04:10	0° $\underline{\text{A}}$		conjunction	3390 Aug 17 22:22	26° Ω 27'32	1°08'08
desc. node	3385 Jul 24 02:28	21° $\underline{\text{A}}$ 26'46		minimum elong	3390 Aug 17 22:07	26° Ω 27'08	1°08'07
	3385 Aug 08 22:55	0° M			3390 Aug 23 10:15	0° \cap	
	3385 Sep 27 02:30	0° X		max. Earth dist.	3390 Aug 28 18:23	3° \cap 25'57	2.65512 AU
	3385 Nov 09 17:55	0° Z		morning rise	3390 Oct 03 03:13	25° \cap 59'51	
	3385 Dec 20 05:41	0° \approx			3390 Oct 09 10:43	0° $\underline{\text{A}}$	
	3386 Jan 27 21:41	0° H			3390 Nov 25 23:50	0° M	
evening set	3386 Feb 28 03:34	24° H 41'15			3391 Jan 12 22:47	0° X	
	3386 Mar 06 20:46	0° Y			3391 Mar 02 21:47	0° Z	
	3386 Apr 14 02:52	0° B		desc. node	3391 Mar 15 23:33	7° Z 47'02	
					3391 Apr 24 05:33	0° \approx	
conjunction	3386 May 07 15:35	18° B 03'22	-0°13'44	retrograde	3391 Jul 14 18:33	27° \approx 57'33	
minimum elong	3386 May 07 16:50	18° B 05'42	0°13'42	opposition	3391 Aug 14 07:51	22° \approx 46'34	-6°33'33
behind sun begin	3386 May 07 01:58	17° B 37'32		greatest brilliancy	3391 Aug 15 12:56	22° \approx 26'10	-2.8m
behind sun end	3386 May 08 07:41	18° B 33'52		min. Earth dist.	3391 Aug 19 12:44	21° \approx 19'12	0.39071 AU
	3386 May 23 12:31	0° II		direct	3391 Sep 15 09:29	16° \approx 58'17	
asc. node	3386 May 28 05:18	3° II 29'45			3391 Nov 01 09:43	0° H	
max. Earth dist.	3386 Jun 26 00:16	24° II 29'30	2.45448 AU		3391 Dec 22 07:51	0° Y	
	3386 Jul 03 17:43	0° E		asc. node	3392 Jan 18 01:24	17° Y 53'57	
morning rise	3386 Jul 10 16:22	4° E 54'16			3392 Feb 04 18:12	0° B	
	3386 Aug 16 04:35	0° Ω			3392 Mar 19 14:04	0° II	
	3386 Oct 01 04:07	0° \cap			3392 May 03 06:13	0° E	
	3386 Nov 19 08:37	0° $\underline{\text{A}}$			3392 Jun 18 03:32	0° Ω	
	3387 Jan 14 07:17	0° M			3392 Aug 04 00:24	0° \cap	
retrograde	3387 Mar 23 05:34	19° M 37'38		evening set	3392 Aug 08 08:35	2° \cap 45'36	
opposition	3387 Apr 30 15:45	10° M 56'48	1°34'58	max. Earth dist.	3392 Sep 19 20:26	29° \cap 44'50	2.67723 AU
greatest brilliancy	3387 Apr 30 23:46	10° M 49'07	-1.5m		3392 Sep 20 05:59	0° $\underline{\text{A}}$	
min. Earth dist.	3387 May 05 23:44	8° M 53'45	0.62555 AU				
direct	3387 Jun 10 22:26	0° M 58'45		conjunction	3392 Sep 23 08:49	1° $\underline{\text{A}}$ 58'57	0°58'41
desc. node	3387 Jun 11 00:37	0° M 58'45		minimum elong	3392 Sep 23 09:46	2° $\underline{\text{A}}$ 00'28	0°58'40
	3387 Sep 01 00:01	0° X		morning rise	3392 Nov 06 13:06	0° M 14'39	
	3387 Oct 18 06:25	0° Z			3392 Nov 06 04:01	0° M	
	3387 Nov 28 21:45	0° \approx			3392 Dec 22 06:51	0° X	

desc. node	3393 Jan 30 22:21	26°♊18'32			3398 May 27 07:15	0°♎	
	3393 Feb 05 10:25	0°♊			3398 Jul 22 19:57	0°♎	
	3393 Mar 21 16:53	0°♊			3398 Sep 10 09:22	0°♎	
	3393 May 04 10:02	0°♊		desc. node	3398 Sep 22 18:15	7°♎54'01	
	3393 Jun 17 15:33	0°♊			3398 Oct 26 02:59	0°♊	
	3393 Aug 05 17:05	0°♊		evening set	3398 Dec 04 03:52	27°♊18'23	
retrograde	3393 Sep 29 13:37	17°♊15'18			3398 Dec 07 21:32	0°♊	
min. Earth dist.	3393 Oct 26 02:20	12°♊40'40	0.40378 AU	max. Earth dist.	3398 Dec 19 17:20	8°♊36'43	2.43576 AU
opposition	3393 Nov 02 01:05	10°♊31'58	-2°09'15		3399 Jan 17 08:55	0°♊	
greatest brilliancy	3393 Nov 01 13:31	10°♊40'55	-2.8m				
direct	3393 Dec 02 13:53	4°♊54'25		conjunction	3399 Jan 28 19:55	8°♊44'18	-1°00'55
asc. node	3393 Dec 05 01:50	4°♊56'56		minimum elong	3399 Jan 28 18:27	8°♊41'28	1°00'54
	3394 Feb 15 01:56	0°♊			3399 Feb 25 06:41	0°♊	
	3394 Apr 08 16:20	0°♊		morning rise	3399 Apr 03 23:57	29°♊38'59	
	3394 May 28 04:47	0°♊			3399 Apr 04 10:37	0°♊	
	3394 Jul 15 22:49	0°♊			3399 May 12 17:50	0°♊	
	3394 Sep 02 00:33	0°♊			3399 Jun 21 01:26	0°♊	
evening set	3394 Sep 14 09:44	7°♊49'48		asc. node	3399 Jul 27 22:56	26°♊56'25	
max. Earth dist.	3394 Oct 13 09:33	26°♊23'35	2.64484 AU		3399 Aug 01 06:34	0°♊	
	3394 Oct 18 23:08	0°♊			3399 Sep 14 09:45	0°♊	
					3399 Nov 02 12:23	0°♊	
conjunction	3394 Oct 29 17:40	7°♊01'19	0°27'11		3400 Jan 10 01:32	0°♊	
minimum elong	3394 Oct 29 18:30	7°♊02'40	0°27'11	retrograde	3400 Feb 01 17:51	2°♊55'45	
	3394 Dec 03 08:11	0°♊			3400 Feb 22 20:00	30°♊	
morning rise	3394 Dec 14 01:49	7°♊16'11		opposition	3400 Mar 13 22:09	23°♊13'16	4°10'36
desc. node	3394 Dec 18 21:00	10°♊32'36		greatest brilliancy	3400 Mar 13 22:01	23°♊13'24	-1.3m
	3395 Jan 15 23:36	0°♊		min. Earth dist.	3400 Mar 13 23:12	23°♊12'13	0.67822 AU
	3395 Feb 26 23:53	0°♊		direct	3400 Apr 23 17:18	13°♊24'44	
	3395 Apr 08 16:22	0°♊			3400 Jun 24 03:03	0°♊	
	3395 May 18 14:27	0°♊		desc. node	3400 Aug 10 17:37	24°♊46'12	
	3395 Jun 27 17:01	0°♊			3400 Aug 19 16:18	0°♊	
	3395 Aug 08 17:53	0°♊			3400 Oct 06 05:31	0°♊	
	3395 Sep 26 15:44	0°♊			3400 Nov 18 10:19	0°♊	
asc. node	3395 Oct 23 01:27	11°♊37'06			3400 Dec 28 19:40	0°♊	
retrograde	3395 Nov 21 03:04	16°♊59'56		evening set	3401 Feb 01 04:25	26°♊37'04	
min. Earth dist.	3395 Dec 22 02:07	10°♊24'37	0.53387 AU		3401 Feb 05 11:45	0°♊	
opposition	3395 Dec 29 11:18	7°♊35'46	3°09'30		3401 Mar 15 10:51	0°♊	
greatest brilliancy	3395 Dec 28 13:45	7°♊56'23	-2.0m				
	3396 Jan 27 20:48	30°♊		conjunction	3401 Apr 10 01:06	20°♊09'32	-0°41'35
direct	3396 Feb 02 18:25	29°♊46'06		minimum elong	3401 Apr 10 04:25	20°♊16'02	0°41'34
	3396 Feb 08 19:02	0°♊			3401 Apr 22 15:55	0°♊	
	3396 Apr 30 20:54	0°♊		max. Earth dist.	3401 May 30 20:11	29°♊09'02	2.40054 AU
	3396 Jun 23 21:44	0°♊			3401 May 31 23:25	0°♊	
	3396 Aug 13 00:26	0°♊		asc. node	3401 Jun 14 22:01	10°♊20'36	
	3396 Sep 29 15:09	0°♊		morning rise	3401 Jun 18 05:35	12°♊46'37	
evening set	3396 Oct 21 02:57	14°♊03'19			3401 Jul 12 02:12	0°♊	
desc. node	3396 Nov 04 19:34	23°♊52'02			3401 Aug 24 13:08	0°♊	
max. Earth dist.	3396 Nov 08 10:59	26°♊19'31	2.56052 AU		3401 Oct 09 21:05	0°♊	
	3396 Nov 13 20:59	0°♊			3401 Nov 29 13:09	0°♊	
					3402 Feb 02 12:19	0°♊	
conjunction	3396 Dec 07 23:46	16°♊39'17	-0°18'59	retrograde	3402 Mar 09 02:50	6°♊10'29	
minimum elong	3396 Dec 07 23:00	16°♊37'57	0°18'58		3402 Apr 09 16:49	30°♊	
	3396 Dec 26 19:56	0°♊		opposition	3402 Apr 17 07:03	27°♊07'19	2°33'04
morning rise	3397 Jan 28 03:18	23°♊32'54		greatest brilliancy	3402 Apr 17 15:59	26°♊58'36	-1.4m
	3397 Feb 05 19:20	0°♊		min. Earth dist.	3402 Apr 21 04:13	25°♊36'20	0.65328 AU
	3397 Mar 17 07:17	0°♊		direct	3402 May 28 18:43	17°♊04'38	
	3397 Apr 25 00:04	0°♊		desc. node	3402 Jun 28 16:38	22°♊15'38	
	3397 Jun 02 17:57	0°♊			3402 Jul 19 08:17	0°♊	
	3397 Jul 12 13:23	0°♊			3402 Sep 13 02:50	0°♊	
	3397 Aug 23 19:38	0°♊			3402 Oct 28 07:21	0°♊	
asc. node	3397 Sep 08 23:32	10°♊44'49			3402 Dec 08 07:12	0°♊	
	3397 Oct 10 08:39	0°♊			3403 Jan 16 03:59	0°♊	
retrograde	3397 Dec 29 03:56	28°♊28'44			3403 Feb 23 06:13	0°♊	
min. Earth dist.	3398 Feb 03 08:42	20°♊02'43	0.63710 AU		3403 Apr 02 16:11	0°♊	
opposition	3398 Feb 07 04:40	18°♊30'43	4°35'09	evening set	3403 Apr 14 08:39	8°♊58'15	
greatest brilliancy	3398 Feb 06 13:15	18°♊46'08	-1.5m	asc. node	3403 May 02 20:14	22°♊57'29	
direct	3398 Mar 17 21:49	9°♊23'36			3403 May 12 06:52	0°♊	

conjunction	3403 Jun 16 07:10	25° Π 27'12	0°27'57		3408 May 18 16:32	0° H	
minimum elong	3403 Jun 16 05:28	25° Π 24'10	0°27'56		3408 Jul 09 08:39	0° Υ	
	3403 Jun 22 17:01	0° S		retrograde	3408 Sep 03 02:23	16° Υ 44'47	
max. Earth dist.	3403 Jul 22 20:12	20° S 55'09	2.53489 AU	min. Earth dist.	3408 Sep 30 20:33	12° Υ 12'01	0.37467 AU
	3403 Aug 05 06:03	0° Ω		opposition	3408 Oct 03 21:49	11° Υ 22'11	-5°07'57
morning rise	3403 Aug 11 06:49	4° Ω 02'35		greatest brilliancy	3408 Oct 03 13:18	11° Υ 28'00	-2.9m
	3403 Sep 19 22:37	0° M		direct	3408 Nov 02 08:44	6° Υ 25'39	
	3403 Nov 06 19:45	0° A		asc. node	3408 Dec 22 17:47	20° Υ 10'02	
	3403 Dec 27 18:09	0° M			3409 Jan 11 02:43	0° B	
	3404 Feb 25 07:58	0° A			3409 Mar 02 23:24	0° Π	
retrograde	3404 Apr 18 21:08	13° A 10'07			3409 Apr 19 18:46	0° S	
desc. node	3404 May 15 14:51	8° A 43'32			3409 Jun 06 09:19	0° Ω	
opposition	3404 May 25 15:07	5° A 14'23	-0°25'48		3409 Jul 24 04:55	0° M	
greatest brilliancy	3404 May 25 17:55	5° A 11'47	-1.8m	evening set	3409 Sep 01 04:04	24° M 30'17	
min. Earth dist.	3404 Jun 01 22:35	2° A 31'53	0.56464 AU		3409 Sep 09 20:33	0° A	
	3404 Jun 09 07:28	30° R M		max. Earth dist.	3409 Oct 05 00:24	16° A 01'01	2.66391 AU
direct	3404 Jul 04 20:02	25° M 42'03					
	3404 Jul 31 14:18	0° A		conjunction	3409 Oct 16 10:26	23° A 20'55	0°41'34
	3404 Sep 30 14:22	0° S		minimum elong	3409 Oct 16 11:29	23° A 22'37	0°41'33
	3404 Nov 13 17:48	0° \approx			3409 Oct 26 17:32	0° M	
	3404 Dec 23 21:31	0° H		morning rise	3409 Nov 29 21:55	22° M 24'00	
	3405 Jan 31 19:09	0° Υ			3409 Dec 11 07:51	0° A	
	3405 Mar 11 22:24	0° B		desc. node	3410 Jan 05 11:52	16° A 59'23	
asc. node	3405 Mar 19 19:42	5° B 57'17			3410 Jan 24 10:40	0° S	
	3405 Apr 21 06:31	0° Π			3410 Mar 08 03:04	0° \approx	
	3405 Jun 02 09:20	0° S			3410 Apr 18 15:08	0° H	
evening set	3405 Jun 11 11:42	6° S 18'05			3410 May 29 11:57	0° Υ	
	3405 Jul 16 11:03	0° Ω			3410 Jul 09 22:35	0° B	
					3410 Aug 24 00:50	0° Π	
conjunction	3405 Aug 03 00:26	11° Ω 37'13	1°04'10	retrograde	3410 Nov 04 01:35	26° Π 59'42	
minimum elong	3405 Aug 02 23:29	11° Ω 35'41	1°04'10	asc. node	3410 Nov 09 17:09	26° Π 45'30	
max. Earth dist.	3405 Aug 20 01:56	22° Ω 45'57	2.63158 AU	min. Earth dist.	3410 Dec 02 18:33	21° Π 16'57	0.48150 AU
	3405 Aug 31 06:16	0° M		greatest brilliancy	3410 Dec 10 10:40	18° Π 31'02	-2.3m
morning rise	3405 Sep 19 23:20	12° M 38'29		opposition	3410 Dec 11 00:30	18° Π 18'30	1°42'45
	3405 Oct 17 08:24	0° A		direct	3411 Jan 13 13:58	11° Π 14'23	
	3405 Dec 04 09:47	0° M			3411 Mar 18 12:29	0° S	
	3406 Jan 22 17:11	0° A			3411 May 13 23:34	0° Ω	
	3406 Mar 16 04:39	0° S			3411 Jul 04 03:50	0° M	
desc. node	3406 Apr 02 13:57	9° S 02'03			3411 Aug 22 06:17	0° A	
	3406 May 26 17:07	0° \approx		evening set	3411 Oct 08 01:24	29° A 41'35	
retrograde	3406 Jun 15 16:48	2° \approx 17'37			3411 Oct 08 12:46	0° M	
	3406 Jul 05 00:50	30° R S		max. Earth dist.	3411 Oct 30 05:53	14° M 13'26	2.59924 AU
opposition	3406 Jul 18 04:52	26° S 17'30	-5°03'39		3411 Nov 22 18:38	0° A	
greatest brilliancy	3406 Jul 19 13:53	25° S 51'36	-2.5m				
min. Earth dist.	3406 Jul 26 03:26	23° S 49'04	0.43399 AU	conjunction	3411 Nov 23 11:30	0° A 28'36	-0°00'01
direct	3406 Aug 22 09:05	19° S 04'23		minimum elong	3411 Nov 23 11:29	0° A 28'35	0°00'01
	3406 Oct 03 21:36	0° \approx		behind sun begin	3411 Nov 22 21:05	0° A 04'10	
	3406 Nov 24 02:50	0° H		behind sun end	3411 Nov 24 01:53	0° A 53'01	
	3407 Jan 05 23:11	0° Υ		desc. node	3411 Nov 23 10:45	0° A 27'21	
asc. node	3407 Feb 04 19:04	21° Υ 32'03			3412 Jan 04 22:54	0° S	
	3407 Feb 16 12:48	0° B		morning rise	3412 Jan 10 14:13	4° S 01'18	
	3407 Mar 30 17:27	0° Π			3412 Feb 15 06:29	0° \approx	
	3407 May 13 07:38	0° S			3412 Mar 26 03:40	0° H	
	3407 Jun 27 11:39	0° Ω			3412 May 04 05:11	0° Υ	
evening set	3407 Jul 26 02:57	18° Ω 34'35			3412 Jun 12 07:28	0° B	
	3407 Aug 12 22:00	0° M			3412 Jul 22 14:18	0° Π	
					3412 Sep 03 23:01	0° S	
conjunction	3407 Sep 11 05:24	18° M 41'46	1°05'19	asc. node	3412 Sep 26 16:44	14° S 10'28	
minimum elong	3407 Sep 11 06:03	18° M 42'47	1°05'19		3412 Oct 26 05:04	0° Ω	
max. Earth dist.	3407 Sep 13 03:55	19° M 55'44	2.67500 AU	retrograde	3412 Dec 15 20:50	13° Ω 48'16	
	3407 Sep 28 23:53	0° A		min. Earth dist.	3413 Jan 19 03:53	6° Ω 01'07	0.60340 AU
morning rise	3407 Oct 25 19:43	17° A 04'28		opposition	3413 Jan 24 11:31	3° Ω 54'33	4°19'33
	3407 Nov 15 01:38	0° M		greatest brilliancy	3413 Jan 23 15:11	4° Ω 14'45	-1.6m
	3407 Dec 31 17:15	0° A			3413 Feb 03 22:09	30° R S	
	3408 Feb 15 21:38	0° S		direct	3413 Mar 03 00:18	25° S 12'23	
desc. node	3408 Feb 18 13:21	1° S 43'53			3413 Apr 01 23:31	0° Ω	
	3408 Apr 01 22:01	0° \approx			3413 Jun 09 04:58	0° M	

	3413 Aug 01 04:30	0°♊			3418 Jun 29 23:28	0°♊	
	3413 Sep 18 18:38	0°♋		max. Earth dist.	3418 Jul 07 18:33	5°♊30'12	2.48414 AU
desc. node	3413 Oct 10 10:02	14°♋02'33		morning rise	3418 Jul 23 11:40	16°♊26'16	
	3413 Nov 03 05:56	0°♌			3418 Aug 12 09:37	0°♋	
evening set	3413 Nov 16 18:29	9°♌17'29			3418 Sep 27 04:36	0°♌	
max. Earth dist.	3413 Dec 01 04:51	19°♌23'51	2.48744 AU		3418 Nov 14 17:57	0°♍	
	3413 Dec 16 01:18	0°♎			3419 Jan 07 04:17	0°♎	
				retrograde	3419 Apr 02 10:16	28°♎08'22	
conjunction	3414 Jan 07 13:21	16°♎26'34	-0°47'42	opposition	3419 May 10 07:43	19°♎41'51	0°54'57
minimum elong	3414 Jan 07 11:32	16°♎23'12	0°47'42	greatest brilliancy	3419 May 10 13:13	19°♎36'37	-1.6m
	3414 Jan 25 16:25	0°♏		min. Earth dist.	3419 May 16 09:30	17°♎23'03	0.60628 AU
	3414 Mar 05 18:43	0°♐		desc. node	3419 Jun 02 05:56	12°♎00'08	
morning rise	3414 Mar 07 07:41	1°♐11'54		direct	3419 Jun 20 07:52	9°♎49'40	
	3414 Apr 13 02:30	0°♑			3419 Aug 24 08:37	0°♑	
	3414 May 21 12:23	0°♒			3419 Oct 13 00:34	0°♓	
	3414 Jun 29 22:24	0°♈			3419 Nov 24 07:32	0°♈	
	3414 Aug 10 08:32	0°♉			3420 Jan 02 17:57	0°♐	
asc. node	3414 Aug 14 14:26	2°♉57'47			3420 Feb 10 05:05	0°♑	
	3414 Sep 24 04:34	0°♋			3420 Mar 19 23:18	0°♒	
	3414 Nov 15 06:34	0°♌		asc. node	3420 Apr 05 12:24	12°♒33'33	
retrograde	3415 Jan 20 11:25	20°♌07'39			3420 Apr 28 22:41	0°♈	
min. Earth dist.	3415 Feb 28 06:08	10°♌51'18	0.67004 AU	evening set	3420 May 21 14:52	16°♈27'39	
opposition	3415 Mar 01 17:36	10°♌15'46	4°29'29		3420 Jun 09 17:11	0°♉	
greatest brilliancy	3415 Mar 01 11:36	10°♌21'47	-1.3m				
direct	3415 Apr 10 20:56	0°♌40'17		conjunction	3420 Jul 16 15:15	25°♉22'50	0°54'55
	3415 Jul 07 18:12	0°♍		minimum elong	3420 Jul 16 13:38	25°♉20'06	0°54'54
desc. node	3415 Aug 28 08:58	29°♍25'00			3420 Jul 23 12:13	0°♋	
	3415 Aug 29 07:50	0°♎		max. Earth dist.	3420 Aug 09 15:39	11°♋23'48	2.59962 AU
	3415 Oct 14 22:40	0°♏		morning rise	3420 Sep 05 00:56	28°♋37'02	
	3415 Nov 26 21:51	0°♐			3420 Sep 07 04:20	0°♌	
	3416 Jan 06 07:04	0°♑			3420 Oct 24 10:33	0°♍	
evening set	3416 Jan 07 17:26	1°♑05'27			3420 Dec 12 05:56	0°♎	
	3416 Feb 14 00:36	0°♒			3421 Feb 01 16:47	0°♏	
max. Earth dist.	3416 Feb 29 20:11	12°♒27'34	2.36992 AU		3421 Apr 03 11:43	0°♓	
				desc. node	3421 Apr 19 04:50	5°♓34'33	
conjunction	3416 Mar 11 10:12	20°♒49'27	-1°00'29	retrograde	3421 May 21 06:14	10°♓59'32	
minimum elong	3416 Mar 11 12:24	20°♒53'48	1°00'28	opposition	3421 Jun 24 15:52	4°♓07'26	-3°07'11
	3416 Mar 23 00:38	0°♑		greatest brilliancy	3421 Jun 25 14:11	3°♓48'16	-2.2m
	3416 Apr 30 05:20	0°♒		min. Earth dist.	3421 Jul 03 02:56	1°♓13'55	0.48634 AU
morning rise	3416 May 21 20:49	16°♒40'55			3421 Jul 06 23:04	30°♒♌	
	3416 Jun 08 11:27	0°♈		direct	3421 Aug 01 09:44	25°♌41'11	
asc. node	3416 Jul 01 13:53	17°♈04'14			3421 Aug 27 10:37	0°♓	
	3416 Jul 19 13:03	0°♉			3421 Oct 25 02:49	0°♈	
	3416 Sep 01 02:27	0°♋			3421 Dec 07 08:31	0°♐	
	3416 Oct 18 01:13	0°♌			3422 Jan 16 18:27	0°♑	
	3416 Dec 10 08:23	0°♍		asc. node	3422 Feb 21 10:42	26°♑39'16	
retrograde	3417 Feb 22 23:55	23°♍18'25			3422 Feb 25 23:05	0°♒	
opposition	3417 Apr 03 16:48	13°♍57'10	3°19'08		3422 Apr 08 04:19	0°♈	
greatest brilliancy	3417 Apr 03 23:38	13°♍50'26	-1.3m		3422 May 21 00:50	0°♉	
min. Earth dist.	3417 Apr 06 02:05	13°♍00'38	0.67096 AU		3422 Jul 04 16:06	0°♋	
direct	3417 May 15 02:09	3°♍56'30		evening set	3422 Jul 09 21:29	3°♋26'31	
desc. node	3417 Jul 15 07:26	20°♍50'50			3422 Aug 19 18:43	0°♌	
	3417 Aug 02 17:06	0°♎					
	3417 Sep 22 11:59	0°♏		conjunction	3422 Aug 27 14:36	5°♏01'25	1°08'18
	3417 Nov 05 14:54	0°♐		minimum elong	3422 Aug 27 14:44	5°♏01'38	1°08'17
	3417 Dec 16 06:45	0°♑		max. Earth dist.	3422 Sep 04 03:22	9°♏50'42	2.66455 AU
	3418 Jan 24 00:29	0°♒			3422 Oct 05 18:56	0°♍	
	3418 Mar 03 00:25	0°♑		morning rise	3422 Oct 12 02:17	4°♍00'12	
evening set	3418 Mar 17 07:58	11°♑16'55			3422 Nov 22 02:52	0°♎	
	3418 Apr 10 07:16	0°♒			3423 Jan 08 12:16	0°♏	
asc. node	3418 May 19 14:05	29°♒53'04			3423 Feb 25 05:20	0°♓	
	3418 May 19 17:48	0°♈		desc. node	3423 Mar 07 04:10	6°♓11'18	
					3423 Apr 15 07:58	0°♈	
conjunction	3418 May 23 12:07	2°♈47'55	0°02'39		3423 Jun 09 13:22	0°♐	
minimum elong	3418 May 23 11:53	2°♈47'29	0°02'39	retrograde	3423 Aug 02 23:07	15°♐00'25	
behind sun begin	3418 May 22 09:06	1°♈57'46		opposition	3423 Sep 02 02:06	10°♐02'54	-6°42'54
behind sun end	3418 May 24 14:41	3°♈37'09		greatest brilliancy	3423 Sep 02 18:43	9°♐51'45	-2.9m

min. Earth dist.	3423 Sep 04 13:53	9° H 22'53	0.37644 AU	conjunction	3428 Dec 19 01:53	27° X 05'04	-0°29'57
direct	3423 Oct 02 13:41	4° H 50'45		minimum elong	3428 Dec 19 00:40	27° X 02'52	0°29'56
	3423 Dec 11 23:35	0° Y			3428 Dec 23 03:41	0° Z	
asc. node	3424 Jan 09 10:37	17° Y 21'36			3429 Feb 02 00:29	0° \approx	
	3424 Jan 28 23:59	0° B		morning rise	3429 Feb 10 11:31	6° \approx 22'04	
	3424 Mar 14 07:12	0° II			3429 Mar 13 09:12	0° H	
	3424 Apr 28 18:36	0° E			3429 Apr 20 22:38	0° Y	
	3424 Jun 14 03:26	0° O			3429 May 29 12:52	0° B	
	3424 Jul 31 06:49	0° M			3429 Jul 08 03:22	0° II	
evening set	3424 Aug 17 18:14	11° M 03'43			3429 Aug 18 22:52	0° E	
	3424 Sep 16 15:26	0° E		asc. node	3429 Aug 31 08:03	8° E 25'48	
max. Earth dist.	3424 Sep 26 00:13	5° E 57'23	2.67481 AU		3429 Oct 04 01:40	0° O	
					3429 Dec 02 22:27	0° M	
conjunction	3424 Oct 02 09:09	10° E 00'57	0°53'15	retrograde	3430 Jan 07 01:26	6° M 53'27	
minimum elong	3424 Oct 02 10:12	10° E 02'38	0°53'14		3430 Feb 08 11:38	30° R O	
	3424 Nov 02 12:48	0° M		min. Earth dist.	3430 Feb 13 05:18	28° O 08'22	0.65153 AU
morning rise	3424 Nov 15 12:48	8° M 25'16		opposition	3430 Feb 16 05:27	26° O 56'01	4°37'03
	3424 Dec 18 10:42	0° X		greatest brilliancy	3430 Feb 15 17:14	27° O 08'16	-1.4m
desc. node	3425 Jan 22 03:44	23° X 12'25		direct	3430 Mar 27 12:14	17° O 37'35	
	3425 Feb 01 04:22	0° Z			3430 May 18 07:38	0° M	
	3425 Mar 16 18:39	0° \approx			3430 Jul 17 19:53	0° E	
	3425 Apr 28 11:52	0° H			3430 Sep 06 06:55	0° M	
	3425 Jun 10 00:48	0° Y		desc. node	3430 Sep 13 23:37	4° M 51'02	
	3425 Jul 24 13:26	0° B			3430 Oct 22 07:43	0° X	
	3425 Sep 22 14:35	0° II			3430 Dec 04 04:16	0° Z	
retrograde	3425 Oct 14 03:04	3° II 11'31		evening set	3430 Dec 16 13:06	9° Z 00'45	
	3425 Nov 04 09:54	30° R B		max. Earth dist.	3431 Jan 04 20:34	23° Z 22'12	2.40761 AU
min. Earth dist.	3425 Nov 10 00:39	28° B 18'02	0.42930 AU		3431 Jan 13 15:04	0° \approx	
opposition	3425 Nov 18 00:57	25° B 39'45	-0°31'09				
greatest brilliancy	3425 Nov 17 21:30	25° B 42'35	-2.6m	conjunction	3431 Feb 12 21:14	23° \approx 17'32	-1°04'33
asc. node	3425 Nov 26 09:19	23° B 03'14		minimum elong	3431 Feb 12 20:42	23° \approx 16'29	1°04'33
direct	3425 Dec 19 14:35	19° B 30'33			3431 Feb 21 11:26	0° H	
	3426 Feb 02 01:50	0° II			3431 Mar 31 13:55	0° Y	
	3426 Apr 02 06:32	0° E		morning rise	3431 Apr 22 08:26	17° Y 08'08	
	3426 May 23 11:00	0° O			3431 May 08 19:48	0° B	
	3426 Jul 11 21:49	0° M			3431 Jun 17 02:08	0° II	
	3426 Aug 29 07:21	0° E		asc. node	3431 Jul 19 07:02	23° II 38'41	
evening set	3426 Sep 23 13:16	15° E 58'18			3431 Jul 28 04:40	0° E	
	3426 Oct 15 08:42	0° M			3431 Sep 10 00:08	0° O	
max. Earth dist.	3426 Oct 20 00:44	3° M 02'03	2.63096 AU		3431 Oct 28 00:26	0° M	
					3431 Dec 25 23:57	0° E	
conjunction	3426 Nov 08 02:48	15° M 33'56	0°17'46	retrograde	3432 Feb 10 10:05	10° E 39'53	
minimum elong	3426 Nov 08 03:23	15° M 34'54	0°17'45	opposition	3432 Mar 21 11:14	1° E 04'01	3°54'35
	3426 Nov 29 16:50	0° X		greatest brilliancy	3432 Mar 21 13:56	1° E 01'19	-1.3m
desc. node	3426 Dec 10 02:15	7° X 03'15		min. Earth dist.	3432 Mar 22 08:09	0° E 43'12	0.67841 AU
morning rise	3426 Dec 24 04:57	16° X 44'59			3432 Mar 24 03:39	30° R M	
	3427 Jan 12 04:30	0° Z		direct	3432 May 01 12:44	21° M 10'07	
	3427 Feb 22 22:34	0° \approx			3432 Jun 12 22:23	0° E	
	3427 Apr 04 07:29	0° H		desc. node	3432 Jul 31 22:30	22° E 58'11	
	3427 May 13 20:45	0° Y			3432 Aug 13 11:50	0° M	
	3427 Jun 22 11:43	0° B			3432 Sep 30 23:30	0° X	
	3427 Aug 02 14:56	0° II			3432 Nov 13 11:49	0° Z	
	3427 Sep 17 08:34	0° E			3432 Dec 23 23:28	0° \approx	
asc. node	3427 Oct 14 08:01	14° E 31'59			3433 Jan 31 16:02	0° H	
retrograde	3427 Dec 01 13:30	27° E 39'01		evening set	3433 Feb 16 16:39	12° H 38'33	
min. Earth dist.	3428 Jan 02 18:24	20° E 36'11	0.56083 AU		3433 Mar 10 15:03	0° Y	
opposition	3428 Jan 09 11:13	17° E 59'50	3°43'23		3433 Apr 17 20:00	0° B	
greatest brilliancy	3428 Jan 08 12:36	18° E 21'53	-1.8m				
direct	3428 Feb 14 14:38	9° E 49'06		conjunction	3433 Apr 26 10:57	6° B 40'22	-0°26'13
	3428 Apr 23 02:05	0° O		minimum elong	3433 Apr 26 13:20	6° B 44'57	0°26'12
	3428 Jun 18 23:42	0° M			3433 May 27 03:40	0° II	
	3428 Aug 08 22:56	0° E		asc. node	3433 Jun 05 05:25	6° II 44'54	
	3428 Sep 25 21:28	0° M		max. Earth dist.	3433 Jun 16 23:37	15° II 23'23	2.42990 AU
desc. node	3428 Oct 27 00:44	20° M 25'24		morning rise	3433 Jul 01 23:03	26° II 12'48	
evening set	3428 Oct 31 02:16	23° M 08'51			3433 Jul 07 06:24	0° E	
	3428 Nov 10 05:27	0° X			3433 Aug 19 15:34	0° O	
max. Earth dist.	3428 Nov 16 17:36	4° X 26'39	2.53621 AU		3433 Oct 04 16:31	0° M	

	3433 Nov 23 07:57	0°♄			3439 Mar 24 23:38	0°♄		
	3434 Jan 20 15:54	0°♄			3439 May 08 02:14	0°♄		
retrograde	3434 Mar 17 15:48	14°♄16'04			3439 Jun 22 14:29	0°♄		
opposition	3434 Apr 25 10:08	5°♄24'40	2°00'35	evening set	3439 Aug 03 22:50	27°♄15'34		
greatest brilliancy	3434 Apr 25 18:52	5°♄16'12	-1.5m		3439 Aug 08 05:50	0°♄		
min. Earth dist.	3434 Apr 30 02:16	3°♄35'56	0.63914 AU	max. Earth dist.	3439 Sep 18 07:51	26°♄08'27	2.67734 AU	
	3434 May 10 00:55	30°♄						
direct	3434 Jun 05 19:23	25°♄23'40		conjunction	3439 Sep 19 09:04	26°♄48'30	1°01'51	
desc. node	3434 Jun 18 20:38	26°♄25'09		minimum elong	3439 Sep 19 09:55	26°♄49'52	1°01'50	
	3434 Jul 04 14:22	0°♄			3439 Sep 24 09:32	0°♄		
	3434 Sep 06 07:35	0°♄		morning rise	3439 Nov 02 16:04	25°♄03'15		
	3434 Oct 22 15:48	0°♄			3439 Nov 10 09:09	0°♄		
	3434 Dec 03 00:58	0°♄			3439 Dec 26 17:41	0°♄		
	3435 Jan 11 02:00	0°♄		desc. node	3440 Feb 08 18:28	28°♄58'02		
	3435 Feb 18 06:50	0°♄			3440 Feb 10 07:51	0°♄		
	3435 Mar 28 18:48	0°♄			3440 Mar 26 06:53	0°♄		
asc. node	3435 Apr 23 05:08	19°♄21'29			3440 May 10 02:24	0°♄		
evening set	3435 Apr 28 23:41	23°♄41'11			3440 Jun 25 09:36	0°♄		
	3435 May 07 11:24	0°♄			3440 Aug 23 04:46	0°♄		
	3435 Jun 17 23:16	0°♄		retrograde	3440 Sep 19 03:40	4°♄45'27		
				min. Earth dist.	3440 Oct 15 20:33	0°♄18'29	0.38737 AU	
conjunction	3435 Jun 28 07:59	7°♄16'10	0°39'38		3440 Oct 16 22:14	30°♄		
minimum elong	3435 Jun 28 06:03	7°♄12'48	0°39'37	opposition	3440 Oct 21 09:22	28°♄41'47	-3°29'28	
max. Earth dist.	3435 Jul 30 07:11	29°♄09'45	2.55988 AU	greatest brilliancy	3440 Oct 20 19:50	28°♄51'40	-2.9m	
	3435 Jul 31 13:04	0°♄		direct	3440 Nov 20 06:52	23°♄26'52		
morning rise	3435 Aug 21 01:09	13°♄38'34		asc. node	3440 Dec 13 01:59	26°♄39'40		
	3435 Sep 15 04:08	0°♄			3440 Dec 23 18:38	0°♄		
	3435 Nov 01 17:57	0°♄			3441 Feb 22 10:21	0°♄		
	3435 Dec 21 16:36	0°♄			3441 Apr 13 10:50	0°♄		
	3436 Feb 14 23:28	0°♄			3441 Jun 01 00:13	0°♄		
retrograde	3436 Apr 29 19:47	22°♄55'56			3441 Jul 19 07:26	0°♄		
desc. node	3436 May 05 20:00	22°♄42'20			3441 Sep 05 04:49	0°♄		
opposition	3436 Jun 04 19:10	15°♄20'28	-1°20'09	evening set	3441 Sep 09 08:09	2°♄36'58		
greatest brilliancy	3436 Jun 05 04:17	15°♄12'12	-1.9m	max. Earth dist.	3441 Oct 10 09:11	22°♄24'45	2.65445 AU	
min. Earth dist.	3436 Jun 12 15:52	12°♄29'31	0.53797 AU		3441 Oct 22 03:10	0°♄		
direct	3436 Jul 14 06:59	6°♄06'08						
	3436 Sep 21 16:08	0°♄		conjunction	3441 Oct 24 13:55	1°♄35'16	0°33'29	
	3436 Nov 07 00:55	0°♄		minimum elong	3441 Oct 24 14:52	1°♄36'48	0°33'28	
	3436 Dec 17 22:19	0°♄			3441 Dec 06 15:16	0°♄		
	3437 Jan 26 05:37	0°♄		morning rise	3441 Dec 08 10:46	1°♄13'04		
	3437 Mar 06 15:42	0°♄		desc. node	3441 Dec 26 17:01	13°♄35'05		
asc. node	3437 Mar 10 03:26	2°♄37'20			3442 Jan 19 12:23	0°♄		
	3437 Apr 16 05:35	0°♄			3442 Mar 02 20:07	0°♄		
	3437 May 28 13:14	0°♄			3442 Apr 12 21:08	0°♄		
evening set	3437 Jun 22 07:00	16°♄56'20			3442 May 23 04:20	0°♄		
	3437 Jul 11 18:24	0°♄			3442 Jul 02 17:51	0°♄		
					3442 Aug 14 16:26	0°♄		
conjunction	3437 Aug 12 05:56	20°♄41'16	1°07'02		3442 Oct 06 22:21	0°♄		
minimum elong	3437 Aug 12 05:25	20°♄40'25	1°07'03	asc. node	3442 Oct 31 01:45	7°♄43'44		
max. Earth dist.	3437 Aug 25 17:39	29°♄25'18	2.64565 AU	retrograde	3442 Nov 14 15:25	9°♄11'40		
	3437 Aug 26 15:10	0°♄		min. Earth dist.	3442 Dec 14 14:19	2°♄59'02	0.51085 AU	
morning rise	3437 Sep 28 03:34	20°♄48'20		opposition	3442 Dec 22 10:02	0°♄03'38	2°37'50	
	3437 Oct 12 15:40	0°♄		greatest brilliancy	3442 Dec 21 14:33	0°♄21'55	-2.1m	
	3437 Nov 29 09:19	0°♄			3442 Dec 22 13:55	30°♄		
	3438 Jan 16 20:38	0°♄		direct	3443 Jan 25 22:40	22°♄33'05		
	3438 Mar 08 01:20	0°♄			3443 Mar 04 07:55	0°♄		
desc. node	3438 Mar 23 19:42	8°♄58'18			3443 May 07 00:39	0°♄		
	3438 May 03 10:32	0°♄			3443 Jun 28 16:35	0°♄		
retrograde	3438 Jul 02 03:27	16°♄35'58			3443 Aug 17 08:48	0°♄		
opposition	3438 Aug 02 10:30	11°♄05'13	-6°01'53		3443 Oct 03 20:45	0°♄		
greatest brilliancy	3438 Aug 03 20:24	10°♄40'13	-2.7m	evening set	3443 Oct 16 13:54	8°♄16'26		
min. Earth dist.	3438 Aug 09 04:54	9°♄05'58	0.40790 AU	max. Earth dist.	3443 Nov 05 14:50	21°♄32'40	2.57880 AU	
direct	3438 Sep 04 22:28	4°♄39'36		desc. node	3443 Nov 13 15:48	26°♄57'10		
	3438 Nov 13 05:18	0°♄			3443 Nov 18 03:44	0°♄		
	3438 Dec 29 03:41	0°♄						
asc. node	3439 Jan 26 01:34	19°♄28'40		conjunction	3443 Dec 02 17:02	9°♄57'56	-0°10'55	
	3439 Feb 10 00:34	0°♄		minimum elong	3443 Dec 02 16:37	9°♄57'12	0°10'55	

behind sun begin	3443 Dec 02 01:23	9°♂30'57		opposition	3449 Apr 11 10:21	21°♂54'30	2°53'29
behind sun end	3443 Dec 03 07:50	10°♂23'29		greatest brilliancy	3449 Apr 11 18:34	21°♂46'26	-1.4m
	3443 Dec 31 06:10	0°♂		min. Earth dist.	3449 Apr 14 15:08	20°♂39'04	0.66246 AU
morning rise	3444 Jan 21 08:15	15°♂12'43		direct	3449 May 22 21:25	11°♂52'03	
	3444 Feb 10 09:59	0°♂		desc. node	3449 Jul 05 12:54	21°♂24'36	
	3444 Mar 21 02:24	0°♂			3449 Jul 25 06:05	0°♂	
	3444 Apr 28 23:03	0°♂			3449 Sep 16 14:01	0°♂	
	3444 Jun 06 19:51	0°♂			3449 Oct 31 08:11	0°♂	
	3444 Jul 16 18:31	0°♂			3449 Dec 11 05:18	0°♂	
	3444 Aug 28 08:09	0°♂			3450 Jan 19 01:03	0°♂	
asc. node	3444 Sep 16 23:48	12°♂48'13			3450 Feb 26 02:09	0°♂	
	3444 Oct 16 03:33	0°♂		evening set	3450 Apr 02 10:01	27°♂40'30	
retrograde	3444 Dec 24 03:52	22°♂49'30			3450 Apr 05 10:03	0°♂	
min. Earth dist.	3445 Jan 28 12:38	14°♂40'20	0.62322 AU	asc. node	3450 May 09 20:31	26°♂13'42	
greatest brilliancy	3445 Feb 01 07:02	13°♂10'07	-1.5m		3450 May 14 21:48	0°♂	
opposition	3445 Feb 02 00:56	12°♂52'15	4°31'00				
direct	3445 Mar 12 05:58	3°♂55'41		conjunction	3450 Jun 06 09:39	16°♂31'35	0°17'51
	3445 Jun 01 18:55	0°♂		minimum elong	3450 Jun 06 08:23	16°♂29'17	0°17'50
	3445 Jul 26 15:53	0°♂			3450 Jun 25 04:46	0°♂	
	3445 Sep 13 20:05	0°♂		max. Earth dist.	3450 Jul 16 22:56	15°♂13'18	2.51309 AU
desc. node	3445 Sep 30 14:33	10°♂46'43		morning rise	3450 Aug 03 11:19	27°♂11'42	
	3445 Oct 29 12:18	0°♂			3450 Aug 07 15:02	0°♂	
evening set	3445 Nov 26 23:33	19°♂43'59			3450 Sep 22 07:11	0°♂	
max. Earth dist.	3445 Dec 11 11:41	0°♂05'26	2.45912 AU		3450 Nov 09 09:07	0°♂	
	3445 Dec 11 08:40	0°♂			3450 Dec 31 03:03	0°♂	
					3451 Mar 05 19:50	0°♂	
conjunction	3446 Jan 19 18:09	29°♂05'59	-0°56'06	retrograde	3451 Apr 12 02:45	6°♂59'36	
minimum elong	3446 Jan 19 16:22	29°♂02'36	0°56'06		3451 May 16 05:10	30°♂	
	3446 Jan 20 22:44	0°♂		opposition	3451 May 19 09:37	28°♂49'02	0°10'09
	3446 Feb 28 23:06	0°♂		greatest brilliancy	3451 Mar 07 00:01	0°♂23'23	-2.4m
morning rise	3446 Mar 23 00:11	17°♂15'49		desc. node	3451 May 23 11:08	27°♂17'06	
	3446 Apr 08 04:52	0°♂		min. Earth dist.	3451 May 26 03:56	26°♂16'33	0.58442 AU
	3446 May 16 12:42	0°♂		direct	3451 Jun 29 00:02	19°♂06'09	
	3446 Jun 24 20:10	0°♂			3451 Aug 13 00:02	0°♂	
asc. node	3446 Aug 04 23:05	29°♂55'26			3451 Oct 06 04:50	0°♂	
	3446 Aug 05 01:40	0°♂			3451 Nov 18 11:12	0°♂	
	3446 Sep 18 08:40	0°♂			3451 Dec 28 06:47	0°♂	
	3446 Nov 07 07:34	0°♂			3452 Feb 04 23:12	0°♂	
retrograde	3447 Jan 28 02:37	27°♂59'35			3452 Mar 14 21:20	0°♂	
opposition	3447 Mar 09 08:08	18°♂12'19	4°19'48	asc. node	3452 Mar 26 19:47	9°♂02'46	
greatest brilliancy	3447 Mar 09 05:26	18°♂15'01	-1.3m		3452 Apr 24 00:07	0°♂	
min. Earth dist.	3447 Mar 08 16:34	18°♂27'54	0.67580 AU	evening set	3452 Jun 02 19:21	28°♂31'37	
direct	3447 Apr 18 20:50	8°♂29'13			3452 Jun 04 21:51	0°♂	
	3447 Jun 29 23:58	0°♂			3452 Jul 18 19:08	0°♂	
desc. node	3447 Aug 18 13:38	26°♂56'30					
	3447 Aug 23 16:42	0°♂		conjunction	3452 Jul 26 18:35	5°♂18'59	1°00'58
	3447 Oct 09 21:24	0°♂		minimum elong	3452 Jul 26 17:20	5°♂16'55	1°00'58
	3447 Nov 22 01:12	0°♂		max. Earth dist.	3452 Aug 15 19:54	18°♂31'40	2.61834 AU
	3448 Jan 01 11:30	0°♂			3452 Sep 02 11:54	0°♂	
evening set	3448 Jan 21 17:19	15°♂33'51		morning rise	3452 Sep 13 16:55	7°♂12'39	
	3448 Feb 09 04:49	0°♂			3452 Oct 19 14:49	0°♂	
	3448 Mar 18 04:30	0°♂			3452 Dec 06 22:38	0°♂	
					3453 Jan 26 00:35	0°♂	
conjunction	3448 Mar 28 01:00	7°♂47'10	-0°51'23		3453 Mar 21 22:49	0°♂	
minimum elong	3448 Mar 28 04:17	7°♂53'39	0°51'22	desc. node	3453 Apr 09 10:12	8°♂37'41	
	3448 Apr 25 08:57	0°♂		retrograde	3453 Jun 04 00:37	23°♂00'44	
max. Earth dist.	3448 May 07 23:24	9°♂45'04	2.37977 AU	opposition	3453 Jul 07 10:20	16°♂36'35	-4°13'27
	3448 Jun 03 14:52	0°♂		greatest brilliancy	3453 Jul 08 15:43	16°♂12'29	-2.4m
morning rise	3448 Jun 06 18:46	2°♂21'55		min. Earth dist.	3453 Jul 15 19:57	13°♂52'22	0.45705 AU
asc. node	3448 Jun 21 22:38	13°♂35'06		direct	3453 Aug 12 21:08	8°♂47'55	
	3448 Jul 14 15:47	0°♂			3453 Oct 14 10:17	0°♂	
	3448 Aug 27 01:47	0°♂			3453 Nov 29 19:00	0°♂	
	3448 Oct 12 13:19	0°♂			3454 Jan 10 07:50	0°♂	
	3448 Dec 03 00:27	0°♂		asc. node	3454 Feb 11 19:30	23°♂53'15	
	3449 Feb 17 03:42	0°♂			3454 Feb 20 04:01	0°♂	
retrograde	3449 Mar 03 00:13	1°♂06'21			3454 Apr 02 19:54	0°♂	
	3449 Mar 16 03:56	30°♂			3454 May 16 00:28	0°♂	

	3454 Jun 29 21:15	0°♈			3459 Feb 17 22:58	0°♏	
evening set	3454 Jul 19 07:32	12°♏41'29			3459 Mar 30 01:39	0°♏	
	3454 Aug 15 03:15	0°♏			3459 May 08 08:20	0°♏	
					3459 Jun 16 15:18	0°♏	
conjunction	3454 Sep 05 01:32	13°♏23'08 1°07'01			3459 Jul 27 04:21	0°♏	
minimum elong	3454 Sep 05 01:59	13°♏23'52 1°07'01			3459 Sep 09 05:32	0°♏	
max. Earth dist.	3454 Sep 09 11:47	16°♏12'29 2.67140 AU	asc. node		3459 Oct 04 17:04	15°♏11'58	
	3454 Oct 01 03:56	0°♏			3459 Nov 04 19:25	0°♏	
morning rise	3454 Oct 19 23:40	11°♏57'48	retrograde		3459 Dec 10 10:48	7°♏32'19	
	3454 Nov 17 08:09	0°♏	min. Earth dist.		3460 Jan 12 19:59	0°♏04'29 0.58531 AU	
	3455 Jan 03 07:17	0°♏			3460 Jan 13 00:36	30°♏	
	3455 Feb 19 02:12	0°♏	opposition		3460 Jan 18 19:09	27°♏43'30 4°07'30	
desc. node	3455 Feb 25 09:40	4°♏02'26	greatest brilliancy		3460 Jan 17 21:11	28°♏05'09 -1.7m	
	3455 Apr 07 05:24	0°♏	direct		3460 Feb 24 17:17	19°♏14'41	
	3455 May 26 09:55	0°♏			3460 Apr 11 20:50	0°♏	
	3455 Jul 29 22:31	0°♏			3460 Jun 12 16:50	0°♏	
retrograde	3455 Aug 21 10:52	3°♏07'46			3460 Aug 03 18:38	0°♏	
	3455 Sep 13 04:15	30°♏			3460 Sep 21 02:45	0°♏	
opposition	3455 Sep 20 13:49	28°♏05'32 -6°06'01	desc. node		3460 Oct 17 06:14	17°♏02'02	
min. Earth dist.	3455 Sep 19 23:44	28°♏14'51 0.37125 AU			3460 Nov 05 13:52	0°♏	
greatest brilliancy	3455 Sep 20 15:21	28°♏04'32 -3.0m	evening set		3460 Nov 09 09:55	2°♏36'52	
direct	3455 Oct 20 02:41	23°♏11'07	max. Earth dist.		3460 Nov 24 16:07	13°♏08'41 2.50978 AU	
	3455 Nov 22 18:06	0°♏			3460 Dec 18 11:35	0°♏	
asc. node	3455 Dec 30 18:28	18°♏19'03					
	3456 Jan 19 17:46	0°♏	conjunction		3460 Dec 29 19:58	8°♏12'37 -0°40'29	
	3456 Mar 07 11:05	0°♏	minimum elong		3460 Dec 29 18:21	8°♏09'40 0°40'28	
	3456 Apr 23 01:24	0°♏			3461 Jan 28 06:07	0°♏	
	3456 Jun 09 00:45	0°♏	morning rise		3461 Feb 24 00:41	20°♏22'40	
	3456 Jul 26 12:18	0°♏			3461 Mar 08 11:38	0°♏	
evening set	3456 Aug 26 01:23	19°♏15'44			3461 Apr 15 21:58	0°♏	
	3456 Sep 12 00:40	0°♏			3461 May 24 09:19	0°♏	
max. Earth dist.	3456 Oct 01 05:54	12°♏13'33 2.66981 AU			3461 Jul 02 20:03	0°♏	
					3461 Aug 13 08:11	0°♏	
conjunction	3456 Oct 10 10:19	18°♏05'53 0°46'46	asc. node		3461 Aug 21 15:05	5°♏44'19	
minimum elong	3456 Oct 10 11:24	18°♏07'37 0°46'45			3461 Sep 27 12:28	0°♏	
	3456 Oct 28 22:03	0°♏			3461 Nov 20 13:32	0°♏	
morning rise	3456 Nov 23 16:40	16°♏47'35	retrograde		3462 Jan 14 19:12	15°♏01'43	
	3456 Dec 13 16:21	0°♏	min. Earth dist.		3462 Feb 21 20:41	5°♏59'07 0.66306 AU	
desc. node	3457 Jan 12 07:59	19°♏55'40	opposition		3462 Feb 24 00:59	5°♏06'41 4°34'11	
	3457 Jan 27 02:06	0°♏	greatest brilliancy		3462 Feb 23 16:10	5°♏15'31 -1.3m	
	3457 Mar 11 04:15	0°♏			3462 Mar 09 18:01	30°♏	
	3457 Apr 22 04:13	0°♏	direct		3462 Apr 04 19:49	25°♏38'26	
	3457 Jun 02 16:00	0°♏			3462 May 03 14:29	0°♏	
	3457 Jul 15 01:34	0°♏			3462 Jul 11 09:10	0°♏	
	3457 Sep 01 00:31	0°♏			3462 Sep 01 00:55	0°♏	
retrograde	3457 Oct 26 10:39	17°♏37'00	desc. node		3462 Sep 04 05:04	1°♏57'56	
asc. node	3457 Nov 16 17:20	14°♏20'23			3462 Oct 17 11:09	0°♏	
min. Earth dist.	3457 Nov 23 05:04	12°♏17'22 0.45757 AU			3462 Nov 29 10:34	0°♏	
opposition	3457 Dec 01 12:54	9°♏23'33 0°51'49	evening set		3462 Dec 28 16:40	21°♏32'27	
greatest brilliancy	3457 Dec 01 05:37	9°♏29'55 -2.4m			3463 Jan 08 21:33	0°♏	
direct	3458 Jan 03 05:52	2°♏43'02	max. Earth dist.		3463 Jan 26 19:16	13°♏43'35 2.38271 AU	
	3458 Mar 24 16:22	0°♏			3463 Feb 16 16:45	0°♏	
	3458 May 17 09:16	0°♏					
	3458 Jul 06 17:55	0°♏	conjunction		3463 Feb 28 00:08	8°♏53'09 -1°04'05	
	3458 Aug 24 13:00	0°♏	minimum elong		3463 Feb 28 01:05	8°♏55'01 1°04'04	
evening set	3458 Oct 01 19:38	24°♏14'27			3463 Mar 26 17:50	0°♏	
	3458 Oct 10 17:46	0°♏			3463 May 03 22:30	0°♏	
max. Earth dist.	3458 Oct 25 20:35	9°♏51'40 2.61434 AU	morning rise		3463 May 09 19:01	4°♏32'45	
					3463 Jun 12 03:32	0°♏	
conjunction	3458 Nov 16 19:01	24°♏25'26 0°07'39	asc. node		3463 Jul 09 13:58	20°♏14'35	
minimum elong	3458 Nov 16 19:18	24°♏25'54 0°07'38			3463 Jul 23 04:00	0°♏	
behind sun begin	3458 Nov 16 01:52	23°♏56'42			3463 Sep 04 17:44	0°♏	
behind sun end	3458 Nov 17 12:43	24°♏55'08			3463 Oct 21 23:29	0°♏	
	3458 Nov 25 01:36	0°♏			3463 Dec 15 20:28	0°♏	
desc. node	3458 Nov 30 06:43	3°♏32'16	retrograde		3464 Feb 18 04:16	18°♏23'38	
morning rise	3459 Jan 02 21:17	26°♏48'12	opposition		3464 Mar 29 01:09	8°♏55'21 3°35'00	
	3459 Jan 07 09:58	0°♏	greatest brilliancy		3464 Mar 29 06:18	8°♏50'15 -1.3m	

min. Earth dist.	3464 Mar 30 17:47	8°♏15'04	0.67561 AU		3469 Apr 11 01:54	0°♐	
	3464 Apr 26 13:06	30°♏♐			3469 May 23 15:09	0°♐	
direct	3464 May 09 07:35	28°♐57'16		evening set	3469 Jul 02 12:39	27°♐00'51	
	3464 May 22 18:46	0°♏			3469 Jul 07 00:31	0°♏	
desc. node	3464 Jul 22 03:20	21°♏47'00					
	3464 Aug 06 17:34	0°♐		conjunction	3469 Aug 21 03:47	29°♏28'03	1°08'18
	3464 Sep 25 12:32	0°♐		minimum elong	3469 Aug 21 03:39	29°♏27'50	1°08'19
	3464 Nov 08 10:23	0°♐			3469 Aug 21 23:37	0°♐	
	3464 Dec 19 01:34	0°♐		max. Earth dist.	3469 Aug 31 05:15	5°♐56'14	2.65716 AU
	3465 Jan 26 19:17	0°♐		morning rise	3469 Oct 06 04:55	28°♐52'57	
evening set	3465 Mar 04 17:34	29°♐10'07			3469 Oct 07 23:12	0°♏	
	3465 Mar 05 18:49	0°♐			3469 Nov 24 10:50	0°♐	
	3465 Apr 13 00:14	0°♐			3470 Jan 11 06:25	0°♐	
					3470 Feb 28 21:19	0°♐	
conjunction	3465 May 12 02:27	22°♐17'57	-0°09'42	desc. node	3470 Mar 14 00:01	7°♐54'00	
minimum elong	3465 May 12 03:19	22°♐19'35	0°09'42		3470 Apr 21 05:14	0°♐	
behind sun begin	3465 May 11 04:37	21°♐36'42			3470 Jun 29 07:47	0°♐	
behind sun end	3465 May 13 02:01	23°♐02'26		retrograde	3470 Jul 19 15:49	2°♐27'29	
	3465 May 22 08:17	0°♐			3470 Aug 08 20:44	30°♐	
asc. node	3465 May 26 14:06	3°♐09'48		opposition	3470 Aug 19 03:56	27°♐19'44	-6°38'44
max. Earth dist.	3465 Jun 29 22:17	28°♐11'32	2.45997 AU	greatest brilliancy	3470 Aug 20 07:02	27°♐00'51	-2.8m
	3465 Jul 02 11:11	0°♐		min. Earth dist.	3470 Aug 23 20:29	26°♐01'37	0.38754 AU
morning rise	3465 Jul 14 13:25	8°♐32'16		direct	3470 Sep 19 21:31	21°♐39'00	
	3465 Aug 14 19:06	0°♏			3470 Oct 26 14:53	0°♐	
	3465 Sep 29 14:42	0°♐			3470 Dec 19 21:13	0°♐	
	3465 Nov 17 11:48	0°♏		asc. node	3471 Jan 16 10:44	18°♐09'30	
	3466 Jan 11 09:20	0°♐			3471 Feb 02 22:25	0°♐	
retrograde	3466 Mar 26 12:08	22°♐34'16			3471 Mar 18 23:37	0°♐	
opposition	3466 May 03 19:24	13°♐55'50	1°23'59		3471 May 02 17:49	0°♐	
greatest brilliancy	3466 May 04 02:44	13°♐48'47	-1.5m		3471 Jun 17 15:51	0°♏	
min. Earth dist.	3466 May 09 05:57	11°♐50'21	0.62218 AU		3471 Aug 03 13:06	0°♐	
desc. node	3466 Jun 09 01:55	4°♐08'10		evening set	3471 Aug 12 12:12	5°♐41'42	
direct	3466 Jun 14 00:24	3°♐58'36			3471 Sep 19 19:12	0°♏	
	3466 Aug 29 15:01	0°♐		max. Earth dist.	3471 Sep 23 11:02	2°♏19'34	2.67695 AU
	3466 Oct 16 16:22	0°♐					
	3466 Nov 27 14:12	0°♐		conjunction	3471 Sep 27 10:20	4°♏51'05	0°57'12
	3467 Jan 05 20:35	0°♐		minimum elong	3471 Sep 27 11:20	4°♏52'40	0°57'12
	3467 Feb 13 04:39	0°♐			3471 Nov 05 17:42	0°♐	
	3467 Mar 23 19:23	0°♐		morning rise	3471 Nov 10 13:57	3°♐07'23	
asc. node	3467 Apr 13 12:52	15°♐46'18			3471 Dec 21 20:30	0°♐	
	3467 May 02 14:32	0°♐		desc. node	3472 Jan 29 23:33	25°♐59'12	
evening set	3467 May 12 17:24	7°♐25'52			3472 Feb 04 22:56	0°♐	
	3467 Jun 13 04:45	0°♐			3472 Mar 20 02:41	0°♐	
					3472 May 02 14:39	0°♐	
conjunction	3467 Jul 09 14:09	18°♐18'47	0°49'13		3472 Jun 15 09:04	0°♐	
minimum elong	3467 Jul 09 12:19	18°♐15'40	0°49'11		3472 Aug 01 19:20	0°♐	
	3467 Jul 26 19:57	0°♏		retrograde	3472 Oct 03 20:34	21°♐48'01	
max. Earth dist.	3467 Aug 06 02:17	6°♏51'40	2.58275 AU	min. Earth dist.	3472 Oct 30 07:54	17°♐11'15	0.40849 AU
morning rise	3467 Aug 30 08:24	22°♏49'17		opposition	3472 Nov 06 14:29	14°♐55'07	-1°44'23
	3467 Sep 10 10:17	0°♐		greatest brilliancy	3472 Nov 06 04:36	15°♐02'51	-2.7m
	3467 Oct 27 18:17	0°♏		asc. node	3472 Dec 03 09:55	9°♐17'39	
	3467 Dec 15 23:07	0°♐		direct	3472 Dec 07 07:39	9°♐11'31	
	3468 Feb 06 16:26	0°♐			3473 Feb 11 17:33	0°♐	
	3468 Apr 16 19:46	0°♐			3473 Apr 06 14:14	0°♐	
desc. node	3468 Apr 26 00:53	1°♐57'08			3473 May 26 11:02	0°♏	
retrograde	3468 May 11 12:36	3°♐19'54			3473 Jul 14 08:42	0°♐	
	3468 Jun 03 16:16	30°♐♐			3473 Aug 31 12:48	0°♏	
opposition	3468 Jun 15 16:37	26°♐07'04	-2°19'34	evening set	3473 Sep 17 10:56	10°♏41'43	
greatest brilliancy	3468 Jun 16 09:04	25°♐52'32	-2.1m	max. Earth dist.	3473 Oct 15 20:52	28°♏54'22	2.64253 AU
min. Earth dist.	3468 Jun 23 23:52	23°♐11'51	0.51001 AU		3473 Oct 17 13:23	0°♐	
direct	3468 Jul 24 07:36	17°♐16'28					
	3468 Sep 09 18:13	0°♐		conjunction	3473 Nov 01 19:33	9°♐56'42	0°24'36
	3468 Oct 30 13:47	0°♐		minimum elong	3473 Nov 01 20:19	9°♐57'57	0°24'35
	3468 Dec 11 14:16	0°♐			3473 Dec 02 00:10	0°♐	
	3469 Jan 20 10:24	0°♐		desc. node	3473 Dec 16 22:20	10°♐06'49	
asc. node	3469 Feb 28 10:58	29°♐25'50		morning rise	3473 Dec 17 06:29	10°♐20'43	
	3469 Mar 01 05:15	0°♐			3474 Jan 14 16:43	0°♐	

	3474 Feb 25 17:23	0°♊		direct	3479 Apr 26 17:55	16°♏15'09	
	3474 Apr 07 09:20	0°♋			3479 Jun 20 15:44	0°♌	
	3474 May 17 05:45	0°♍		desc. node	3479 Aug 08 18:36	24°♌48'43	
	3474 Jun 26 04:38	0°♎			3479 Aug 17 18:31	0°♍	
	3474 Aug 06 20:51	0°♏			3479 Oct 04 17:58	0°♐	
	3474 Sep 23 10:39	0°♑			3479 Nov 17 03:51	0°♒	
asc. node	3474 Oct 21 08:02	13°♑15'42			3479 Dec 27 16:01	0°♓	
retrograde	3474 Nov 24 12:35	20°♑29'33			3480 Feb 04 09:22	0°♋	
min. Earth dist.	3474 Dec 25 18:08	13°♑48'22	0.53936 AU	evening set	3480 Feb 05 13:42	0°♋55'42	
greatest brilliancy	3475 Jan 01 01:50	11°♑22'58	-2.0m		3480 Mar 13 08:33	0°♍	
opposition	3475 Jan 02 00:09	11°♑01'31	3°20'10				
direct	3475 Feb 06 10:20	3°♑07'35		conjunction	3480 Apr 13 17:51	24°♍42'37	-0°38'07
	3475 Apr 29 04:29	0°♏		minimum elong	3480 Apr 13 21:04	24°♍48'53	0°38'05
	3475 Jun 23 00:05	0°♐			3480 Apr 20 12:45	0°♎	
	3475 Aug 12 09:36	0°♌			3480 May 29 18:35	0°♏	
	3475 Sep 29 04:19	0°♍		max. Earth dist.	3480 Jun 03 23:57	3°♏54'15	2.40589 AU
evening set	3475 Oct 25 07:27	17°♍05'12		asc. node	3480 Jun 12 05:48	10°♏00'58	
desc. node	3475 Nov 03 21:02	23°♍28'21		morning rise	3480 Jun 21 12:07	16°♏48'40	
max. Earth dist.	3475 Nov 12 10:18	29°♍14'34	2.55619 AU		3480 Jul 09 19:02	0°♑	
	3475 Nov 13 13:05	0°♐			3480 Aug 22 02:51	0°♏	
					3480 Oct 07 05:51	0°♐	
conjunction	3475 Dec 12 08:42	19°♐54'41	-0°21'55		3480 Nov 26 10:25	0°♌	
minimum elong	3475 Dec 12 07:49	19°♐53'07	0°21'55		3481 Jan 27 07:31	0°♍	
	3475 Dec 26 14:15	0°♒		retrograde	3481 Mar 11 07:16	9°♍04'04	
morning rise	3476 Feb 01 21:44	27°♒13'25		opposition	3481 Apr 19 08:53	0°♍02'54	2°23'55
	3476 Feb 05 15:09	0°♊			3481 Apr 19 11:51	30°♌	
	3476 Mar 16 03:48	0°♋		greatest brilliancy	3481 Apr 19 17:38	29°♌54'21	-1.4m
	3476 Apr 23 20:24	0°♍		min. Earth dist.	3481 Apr 23 08:49	28°♌29'15	0.65083 AU
	3476 Jun 01 12:58	0°♎		direct	3481 May 30 19:33	20°♌00'35	
	3476 Jul 11 05:25	0°♏		desc. node	3481 Jun 25 16:59	23°♌44'34	
	3476 Aug 22 05:32	0°♑			3481 Jul 14 06:43	0°♍	
asc. node	3476 Sep 07 07:57	10°♑48'41			3481 Sep 10 04:36	0°♐	
	3476 Oct 08 02:10	0°♏			3481 Oct 25 20:28	0°♒	
	3476 Dec 16 21:00	0°♐			3481 Dec 06 01:22	0°♊	
retrograde	3477 Jan 01 04:56	1°♐28'43			3482 Jan 14 00:30	0°♋	
	3477 Jan 15 18:47	30°♌			3482 Feb 21 03:28	0°♍	
min. Earth dist.	3477 Feb 06 14:00	22°♌59'24	0.64011 AU		3482 Mar 31 12:56	0°♎	
opposition	3477 Feb 10 06:54	21°♌30'24	4°36'34	evening set	3482 Apr 17 17:23	13°♎10'42	
greatest brilliancy	3477 Feb 09 15:57	21°♌45'22	-1.4m	asc. node	3482 Apr 30 05:11	22°♎37'18	
direct	3477 Mar 21 03:10	12°♌21'14			3482 May 10 02:10	0°♏	
	3477 May 24 03:18	0°♐					
	3477 Jul 20 21:18	0°♌		conjunction	3482 Jun 19 04:29	29°♏07'05	0°31'08
	3477 Sep 08 19:44	0°♍		minimum elong	3482 Jun 19 02:40	29°♏03'53	0°31'07
desc. node	3477 Sep 20 19:47	7°♍37'23			3482 Jun 20 10:21	0°♑	
	3477 Oct 24 18:16	0°♐		max. Earth dist.	3482 Jul 25 01:22	24°♑01'36	2.53977 AU
	3477 Dec 06 15:57	0°♒			3482 Aug 02 21:08	0°♏	
evening set	3477 Dec 07 18:54	0°♒48'37		morning rise	3482 Aug 13 17:14	7°♏15'38	
max. Earth dist.	3477 Dec 23 18:51	12°♒28'59	2.43025 AU		3482 Sep 17 11:07	0°♐	
	3478 Jan 16 05:15	0°♊			3482 Nov 04 04:18	0°♌	
					3482 Dec 24 17:28	0°♍	
conjunction	3478 Feb 01 22:32	12°♊45'57	-1°02'09		3483 Feb 20 14:06	0°♐	
minimum elong	3478 Feb 01 21:14	12°♊43'26	1°02'09	retrograde	3483 Apr 22 10:54	16°♐20'24	
	3478 Feb 24 03:54	0°♋		desc. node	3483 May 13 16:02	13°♐30'05	
	3478 Apr 03 07:52	0°♍		opposition	3483 May 29 01:20	8°♐28'12	-0°39'55
morning rise	3478 Apr 08 19:27	4°♍19'06		greatest brilliancy	3483 May 29 05:39	8°♐24'12	-1.8m
	3478 May 11 14:14	0°♎		min. Earth dist.	3483 Jun 05 11:12	5°♐44'10	0.55959 AU
	3478 Jun 19 20:02	0°♏			3483 Jun 25 22:43	30°♌	
asc. node	3478 Jul 26 07:36	26°♏43'26		direct	3483 Jul 08 02:25	28°♌59'13	
	3478 Jul 30 22:07	0°♑			3483 Jul 20 16:39	0°♐	
	3478 Sep 12 19:48	0°♏			3483 Sep 28 08:24	0°♒	
	3478 Oct 31 09:18	0°♐			3483 Nov 12 03:32	0°♊	
	3479 Jan 03 00:23	0°♌			3483 Dec 22 12:49	0°♋	
retrograde	3479 Feb 04 17:56	5°♌46'04			3484 Jan 30 12:44	0°♍	
	3479 Mar 06 17:12	30°♌			3484 Mar 09 16:36	0°♎	
opposition	3479 Mar 16 21:24	26°♏04'34	4°06'16	asc. node	3484 Mar 17 04:15	5°♎39'10	
greatest brilliancy	3479 Mar 16 21:47	26°♏04'12	-1.3m		3484 Apr 19 00:13	0°♏	
min. Earth dist.	3479 Mar 17 01:35	26°♏00'24	0.67851 AU		3484 May 31 01:55	0°♑	

evening set	3484 Jun 14 03:22	9°☾43'35			3489 May 26 23:37	0°♊	
	3484 Jul 14 02:12	0°♊			3489 Jul 07 04:08	0°♋	
					3489 Aug 20 11:22	0°♌	
conjunction	3484 Aug 05 07:58	14°♊42'40	1°05'06		3489 Oct 27 14:15	0°☾	
minimum elong	3484 Aug 05 07:07	14°♊41'18	1°05'06	retrograde	3489 Nov 06 16:06	0°☾43'27	
max. Earth dist.	3484 Aug 21 15:38	25°♊21'12	2.63441 AU	asc. node	3489 Nov 07 02:05	0°☾43'23	
	3484 Aug 28 20:00	0°♎			3489 Nov 16 11:31	30°♎♊	
morning rise	3484 Sep 22 01:08	15°♎31'51		min. Earth dist.	3489 Dec 05 15:10	24°♊54'20	0.48703 AU
	3484 Oct 14 20:38	0°♊		opposition	3489 Dec 13 18:36	21°♊56'27	1°58'31
	3484 Dec 01 19:35	0°♌		greatest brilliancy	3489 Dec 13 02:55	22°♊10'47	-2.3m
	3485 Jan 19 21:15	0°♍		direct	3490 Jan 16 11:43	14°♊47'05	
	3485 Mar 12 15:36	0°♋			3490 Mar 13 20:35	0°☾	
desc. node	3485 Mar 30 15:57	9°♋37'33			3490 May 10 20:38	0°♊	
	3485 May 16 01:12	0°♌			3490 Jul 01 10:05	0°♎	
retrograde	3485 Jun 19 07:06	6°♌13'13			3490 Aug 19 17:02	0°♊	
opposition	3485 Jul 21 12:00	0°♌19'10	-5°18'13		3490 Oct 06 02:42	0°♌	
	3485 Jul 22 12:46	30°♎♋		evening set	3490 Oct 10 04:42	2°♌38'45	
greatest brilliancy	3485 Jul 22 22:09	29°♋52'42	-2.5m	max. Earth dist.	3490 Oct 31 22:47	16°♌55'07	2.59569 AU
min. Earth dist.	3485 Jul 29 07:09	27°♋54'49	0.42852 AU	desc. node	3490 Nov 20 11:56	0°♍01'24	
direct	3485 Aug 25 10:08	23°♋14'49			3490 Nov 20 11:06	0°♍	
	3485 Sep 26 23:00	0°♌					
	3485 Nov 20 18:05	0°♎		conjunction	3490 Nov 25 17:24	3°♍34'27	-0°03'01
	3486 Jan 03 04:28	0°♊		minimum elong	3490 Nov 25 17:18	3°♍34'17	0°03'01
asc. node	3486 Feb 02 02:11	21°♊28'00		behind sun begin	3490 Nov 24 21:41	3°♍00'54	
	3486 Feb 13 23:12	0°♋		behind sun end	3490 Nov 26 12:56	4°♍07'43	
	3486 Mar 28 05:54	0°♌			3491 Jan 02 17:09	0°♋	
	3486 May 10 20:45	0°☾		morning rise	3491 Jan 13 01:56	7°♋24'05	
	3486 Jun 25 00:50	0°♊			3491 Feb 13 01:44	0°♌	
evening set	3486 Jul 28 08:50	21°♊35'59			3491 Mar 24 23:07	0°♎	
	3486 Aug 10 11:10	0°♎			3491 May 02 24:00	0°♊	
					3491 Jun 11 00:31	0°♋	
conjunction	3486 Sep 13 07:27	21°♎34'53	1°04'26		3491 Jul 21 03:32	0°♌	
minimum elong	3486 Sep 13 08:09	21°♎36'00	1°04'26		3491 Sep 02 03:16	0°☾	
max. Earth dist.	3486 Sep 14 16:51	22°♎28'01	2.67581 AU	asc. node	3491 Sep 25 00:23	14°☾30'04	
	3486 Sep 26 13:05	0°♊			3491 Oct 22 20:36	0°♊	
morning rise	3486 Oct 27 19:34	19°♊54'29		retrograde	3491 Dec 18 23:34	16°♊54'25	
	3486 Nov 12 14:46	0°♌		min. Earth dist.	3492 Jan 22 11:40	9°♊03'18	0.60739 AU
	3486 Dec 29 05:37	0°♍		opposition	3492 Jan 27 16:11	6°♊59'38	4°23'49
	3487 Feb 13 07:42	0°♋		greatest brilliancy	3492 Jan 26 20:05	7°♊19'38	-1.6m
desc. node	3487 Feb 15 14:46	1°♋30'04			3492 Feb 18 01:16	30°♎☾	
	3487 Mar 31 02:54	0°♌		direct	3492 Mar 05 08:26	28°☾14'50	
	3487 May 16 09:25	0°♎			3492 Mar 22 20:31	0°♊	
	3487 Jul 05 06:05	0°♊			3492 Jun 05 19:42	0°♎	
retrograde	3487 Sep 07 17:14	21°♊31'53			3492 Jul 29 09:47	0°♊	
min. Earth dist.	3487 Oct 05 06:33	17°♊01'24	0.37613 AU	desc. node	3492 Sep 16 06:12	0°♌	
opposition	3487 Oct 08 19:38	16°♊02'38	-4°47'03		3492 Oct 07 10:49	13°♌41'28	
greatest brilliancy	3487 Oct 08 09:39	16°♊09'33	-2.9m		3492 Oct 31 21:33	0°♍	
direct	3487 Nov 07 08:17	11°♊03'44		evening set	3492 Nov 19 04:40	12°♍34'27	
asc. node	3487 Dec 21 02:11	21°♊48'05		max. Earth dist.	3492 Dec 03 16:58	22°♍46'18	2.48232 AU
	3488 Jan 07 10:01	0°♋			3492 Dec 13 19:49	0°♋	
	3488 Feb 28 18:52	0°♌					
	3488 Apr 16 23:52	0°☾		conjunction	3493 Jan 10 07:35	20°♋06'12	-0°50'02
	3488 Jun 03 18:16	0°♊		minimum elong	3493 Jan 10 05:46	20°♋02'49	0°50'00
	3488 Jul 21 15:59	0°♎			3493 Jan 23 12:53	0°♌	
evening set	3488 Sep 03 06:21	27°♎23'40			3493 Mar 03 16:10	0°♎	
	3488 Sep 07 09:17	0°♊		morning rise	3493 Mar 10 16:59	5°♎28'44	
max. Earth dist.	3488 Oct 06 12:20	18°♊32'05	2.66239 AU		3493 Apr 10 23:56	0°♊	
					3493 May 19 08:47	0°♋	
conjunction	3488 Oct 18 12:02	26°♊14'22	0°39'20	greatest brilliancy	3493 May 25 05:27	4°♋32'05	1.2m
minimum elong	3488 Oct 18 13:04	26°♊16'02	0°39'20		3493 Jun 27 16:35	0°♌	
	3488 Oct 24 07:43	0°♌			3493 Aug 07 22:52	0°☾	
morning rise	3488 Dec 02 00:34	25°♌22'31		asc. node	3493 Aug 11 23:19	2°☾49'09	
	3488 Dec 08 23:09	0°♍			3493 Sep 21 11:22	0°♊	
desc. node	3489 Jan 02 13:03	16°♍34'45			3493 Nov 11 13:33	0°♎	
	3489 Jan 22 02:26	0°♋		retrograde	3494 Jan 22 11:05	22°♎59'33	
	3489 Mar 05 18:33	0°♌		min. Earth dist.	3494 Mar 02 09:03	13°♎40'38	0.67136 AU
	3489 Apr 16 05:25	0°♎		opposition	3494 Mar 03 17:28	13°♎08'10	4°27'10

greatest brilliancy	3494 Mar 03 12:03	13° \mathbb{M} 13'35	-1.3m	evening set	3499 May 25 14:47	20° \mathbb{I} 14'53	
direct	3494 Apr 12 23:11	3° \mathbb{M} 31'19			3499 Jun 08 09:19	0° \mathbb{G}	
	3494 Jul 04 06:10	0° \mathbb{L}					
desc. node	3494 Aug 25 09:24	29° \mathbb{L} 16'34		conjunction	3499 Jul 20 05:01	28° \mathbb{G} 43'29	0°56'45
	3494 Aug 26 14:02	0° \mathbb{M}		minimum elong	3499 Jul 20 03:30	28° \mathbb{G} 40'55	0°56'44
	3494 Oct 12 12:01	0° \mathbb{J}			3499 Jul 22 02:36	0° \mathbb{Q}	
	3494 Nov 24 15:15	0° \mathbb{Z}		max. Earth dist.	3499 Aug 12 12:58	14° \mathbb{Q} 14'34	2.60351 AU
	3495 Jan 04 02:58	0° \approx			3499 Sep 05 16:59	0° \mathbb{M}	
evening set	3495 Jan 10 21:11	5° \approx 09'14		morning rise	3499 Sep 08 06:42	1° \mathbb{M} 39'35	
	3495 Feb 11 21:49	0° \mathbb{H}			3499 Oct 22 21:03	0° \mathbb{L}	
					3499 Dec 10 12:18	0° \mathbb{M}	
conjunction	3495 Mar 16 02:53	25° \mathbb{H} 24'32	-0°58'45		3500 Jan 30 12:11	0° \mathbb{J}	
minimum elong	3495 Mar 16 05:23	25° \mathbb{H} 29'30	0°58'44		3500 Mar 30 00:56	0° \mathbb{Z}	
max. Earth dist.	3495 Mar 18 09:55	27° \mathbb{H} 13'23	2.36941 AU	desc. node	3500 Apr 17 06:04	7° \mathbb{Z} 09'45	
	3495 Mar 21 22:11	0° \mathbb{Y}		retrograde	3500 May 25 07:10	14° \mathbb{Z} 33'20	
	3495 Apr 29 02:20	0° \mathbb{B}		opposition	3500 Jun 28 13:08	7° \mathbb{Z} 46'18	-3°23'24
morning rise	3495 May 26 12:56	21° \mathbb{B} 07'25		greatest brilliancy	3500 Jun 29 13:17	7° \mathbb{Z} 25'45	-2.2m
	3495 Jun 07 06:57	0° \mathbb{I}		min. Earth dist.	3500 Jul 07 01:42	4° \mathbb{Z} 53'19	0.48087 AU
asc. node	3495 Jun 29 23:07	16° \mathbb{I} 47'45			3500 Jul 27 04:43	30° \mathbb{R} \mathbb{J}	
	3495 Jul 18 06:06	0° \mathbb{G}		direct	3500 Aug 05 02:18	29° \mathbb{J} 26'51	
	3495 Aug 30 15:46	0° \mathbb{Q}			3500 Aug 14 03:00	0° \mathbb{Z}	
	3495 Oct 16 07:43	0° \mathbb{M}			3500 Oct 22 17:10	0° \approx	
	3495 Dec 07 18:56	0° \mathbb{L}			3500 Dec 05 15:55	0° \mathbb{H}	
retrograde	3496 Feb 26 01:04	26° \mathbb{L} 07'34			3501 Jan 15 07:30	0° \mathbb{Y}	
opposition	3496 Apr 05 16:22	16° \mathbb{L} 47'47	3°11'55	asc. node	3501 Feb 19 19:47	26° \mathbb{Y} 28'28	
greatest brilliancy	3496 Apr 05 23:23	16° \mathbb{L} 40'51	-1.3m		3501 Feb 24 14:07	0° \mathbb{B}	
min. Earth dist.	3496 Apr 08 04:38	15° \mathbb{L} 48'18	0.66957 AU		3501 Apr 06 19:35	0° \mathbb{I}	
direct	3496 May 17 02:05	6° \mathbb{L} 46'48			3501 May 19 15:26	0° \mathbb{G}	
desc. node	3496 Jul 12 08:39	21° \mathbb{L} 27'56			3501 Jul 03 05:45	0° \mathbb{Q}	
	3496 Jul 30 03:38	0° \mathbb{M}		evening set	3501 Jul 13 06:53	6° \mathbb{Q} 36'52	
	3496 Sep 19 19:51	0° \mathbb{J}			3501 Aug 18 07:35	0° \mathbb{M}	
	3496 Nov 03 06:11	0° \mathbb{Z}					
	3496 Dec 14 01:36	0° \approx		conjunction	3501 Aug 30 19:10	8° \mathbb{M} 00'30	1°08'02
	3497 Jan 21 20:57	0° \mathbb{H}		minimum elong	3501 Aug 30 19:23	8° \mathbb{M} 00'51	1°08'03
	3497 Feb 28 21:12	0° \mathbb{Y}		max. Earth dist.	3501 Sep 06 15:47	12° \mathbb{M} 23'44	2.66613 AU
evening set	3497 Mar 21 01:30	15° \mathbb{Y} 53'37			3501 Oct 04 07:16	0° \mathbb{L}	
	3497 Apr 08 03:24	0° \mathbb{B}		morning rise	3501 Oct 15 03:42	6° \mathbb{L} 53'22	
asc. node	3497 May 16 20:52	29° \mathbb{B} 30'40			3501 Nov 20 14:28	0° \mathbb{M}	
	3497 May 17 12:35	0° \mathbb{I}			3502 Jan 06 21:50	0° \mathbb{J}	
					3502 Feb 23 09:48	0° \mathbb{Z}	
conjunction	3497 May 26 20:19	6° \mathbb{I} 55'29	0°06'38	desc. node	3502 Mar 05 05:25	6° \mathbb{Z} 08'59	
minimum elong	3497 May 26 19:48	6° \mathbb{I} 54'31	0°06'37		3502 Apr 12 23:35	0° \approx	
behind sun begin	3497 May 25 19:05	6° \mathbb{I} 08'51			3502 Jun 05 02:53	0° \mathbb{H}	
behind sun end	3497 May 27 20:30	7° \mathbb{I} 40'06		retrograde	3502 Aug 08 03:04	19° \mathbb{H} 45'19	
	3497 Jun 27 16:21	0° \mathbb{G}		opposition	3502 Sep 07 03:07	14° \mathbb{H} 48'48	-6°38'12
max. Earth dist.	3497 Jul 10 08:48	8° \mathbb{G} 56'51	2.49004 AU	greatest brilliancy	3502 Sep 07 16:59	14° \mathbb{H} 39'36	-2.9m
morning rise	3497 Jul 26 04:48	19° \mathbb{G} 55'30		min. Earth dist.	3502 Sep 09 01:50	14° \mathbb{H} 17'52	0.37460 AU
	3497 Aug 10 00:08	0° \mathbb{Q}		direct	3502 Oct 07 07:23	9° \mathbb{H} 42'01	
	3497 Sep 24 15:56	0° \mathbb{M}			3502 Dec 08 07:51	0° \mathbb{Y}	
	3497 Nov 11 23:35	0° \mathbb{L}		asc. node	3503 Jan 07 18:46	17° \mathbb{Y} 55'07	
	3498 Jan 03 17:37	0° \mathbb{M}			3503 Jan 26 19:27	0° \mathbb{B}	
	3498 Mar 21 15:30	0° \mathbb{J}			3503 Mar 13 12:43	0° \mathbb{I}	
retrograde	3498 Apr 04 18:15	1° \mathbb{J} 08'04			3503 Apr 28 04:01	0° \mathbb{G}	
	3498 Apr 18 02:58	30° \mathbb{R} \mathbb{M}			3503 Jun 13 14:29	0° \mathbb{Q}	
opposition	3498 May 12 12:44	22° \mathbb{M} 44'05	0°42'55		3503 Jul 30 18:42	0° \mathbb{M}	
greatest brilliancy	3498 May 12 17:10	22° \mathbb{M} 39'53	-1.6m	evening set	3503 Aug 21 21:55	14° \mathbb{M} 00'07	
min. Earth dist.	3498 May 18 17:05	20° \mathbb{M} 23'09	0.60248 AU		3503 Sep 16 04:04	0° \mathbb{L}	
desc. node	3498 May 30 07:19	16° \mathbb{M} 25'45		max. Earth dist.	3503 Sep 29 15:58	8° \mathbb{L} 34'49	2.67402 AU
direct	3498 Jun 22 10:42	12° \mathbb{M} 53'28					
	3498 Aug 20 08:28	0° \mathbb{J}		conjunction	3503 Oct 06 11:18	12° \mathbb{L} 55'07	0°51'27
	3498 Oct 10 07:11	0° \mathbb{Z}		minimum elong	3503 Oct 06 12:22	12° \mathbb{L} 56'49	0°51'27
	3498 Nov 21 22:38	0° \approx			3503 Nov 02 02:14	0° \mathbb{M}	
	3498 Dec 31 12:23	0° \mathbb{H}		morning rise	3503 Nov 19 14:47	11° \mathbb{M} 21'26	
	3499 Feb 08 00:30	0° \mathbb{Y}			3503 Dec 18 00:39	0° \mathbb{J}	
	3499 Mar 18 18:21	0° \mathbb{B}		desc. node	3504 Jan 21 03:55	22° \mathbb{J} 49'13	
asc. node	3499 Apr 03 19:53	12° \mathbb{B} 12'35			3504 Jan 31 18:10	0° \mathbb{Z}	
	3499 Apr 27 16:29	0° \mathbb{I}			3504 Mar 15 07:15	0° \approx	

	3504 Apr 26 21:42	0°♂		opposition	3509 Feb 19 06:07	29°♂50'25	4°36'52
	3504 Jun 08 04:39	0°♂		greatest brilliancy	3509 Feb 18 18:29	0°♂02'04	-1.4m
	3504 Jul 22 01:00	0°♂		direct	3509 Mar 30 15:58	20°♂30'14	
	3504 Sep 14 07:52	0°♂			3509 May 14 01:56	0°♂	
retrograde	3504 Oct 18 03:56	7°♂24'05			3509 Jul 15 18:28	0°♂	
min. Earth dist.	3504 Nov 14 03:32	2°♂25'58	0.43440 AU		3509 Sep 04 16:47	0°♂	
	3504 Nov 21 11:09	30°♂♂		desc. node	3509 Sep 12 01:11	4°♂36'10	
opposition	3504 Nov 22 06:16	29°♂43'59	-0°09'08		3509 Oct 20 23:14	0°♂	
greatest brilliancy	3505 Aug 05 14:16	16°♂11'18	1.8m		3509 Dec 02 23:18	0°♂	
asc. node	3504 Nov 24 17:24	28°♂55'00		evening set	3509 Dec 20 06:36	12°♂37'04	
direct	3504 Dec 24 02:27	23°♂28'38		max. Earth dist.	3510 Jan 09 05:47	27°♂31'38	2.40239 AU
	3505 Jan 27 01:23	0°♂			3510 Jan 12 12:12	0°♂	
	3505 Mar 30 20:34	0°♂					
	3505 May 21 14:26	0°♂		conjunction	3510 Feb 17 04:47	27°♂♂30'11	-1°04'51
	3505 Jul 10 06:22	0°♂		minimum elong	3510 Feb 17 04:34	27°♂♂29'45	1°04'52
	3505 Aug 27 18:52	0°♂			3510 Feb 20 09:28	0°♂	
evening set	3505 Sep 26 15:45	18°♂♂53'16			3510 Mar 30 11:44	0°♂	
	3505 Oct 13 22:29	0°♂		morning rise	3510 Apr 27 06:50	21°♂♂52'38	
max. Earth dist.	3505 Oct 22 13:03	5°♂♂35'38	2.62790 AU		3510 May 07 16:30	0°♂	
					3510 Jun 15 20:51	0°♂	
conjunction	3505 Nov 11 07:05	18°♂♂35'15	0°14'57	asc. node	3510 Jul 17 14:10	23°♂♂21'51	
minimum elong	3505 Nov 11 07:35	18°♂♂36'05	0°14'57		3510 Jul 26 20:24	0°♂	
behind sun begin	3505 Nov 11 00:23	18°♂♂24'10			3510 Sep 08 11:14	0°♂	
behind sun end	3505 Nov 11 14:46	18°♂♂48'01			3510 Oct 26 01:47	0°♂	
	3505 Nov 28 08:24	0°♂			3510 Dec 22 04:11	0°♂	
desc. node	3505 Dec 08 02:40	6°♂♂36'49		retrograde	3511 Feb 13 10:09	13°♂♂29'04	
morning rise	3505 Dec 27 13:24	19°♂♂59'01		opposition	3511 Mar 25 10:39	3°♂♂54'22	3°49'07
	3506 Jan 10 21:22	0°♂		greatest brilliancy	3511 Mar 25 13:47	3°♂♂51'15	-1.3m
	3506 Feb 21 16:09	0°♂		min. Earth dist.	3511 Mar 26 10:36	3°♂♂30'33	0.67826 AU
	3506 Apr 03 01:09	0°♂			3511 Apr 04 13:46	30°♂♂♂	
	3506 May 12 13:39	0°♂		direct	3511 May 05 13:40	23°♂♂59'49	
	3506 Jun 21 02:23	0°♂			3511 Jun 08 17:03	0°♂	
	3506 Aug 01 00:03	0°♂		desc. node	3511 Jul 30 23:26	23°♂♂09'20	
	3506 Sep 15 00:41	0°♂			3511 Aug 12 10:18	0°♂	
asc. node	3506 Oct 12 17:04	15°♂♂28'40			3511 Sep 30 10:45	0°♂	
	3506 Nov 23 04:55	0°♂			3511 Nov 13 04:51	0°♂	
retrograde	3506 Dec 04 18:50	0°♂♂55'06			3511 Dec 23 19:42	0°♂	
	3506 Dec 15 23:54	30°♂♂♂			3512 Jan 31 13:53	0°♂	
min. Earth dist.	3507 Jan 06 05:28	23°♂♂47'44	0.56566 AU	evening set	3512 Feb 22 04:24	17°♂♂02'43	
opposition	3507 Jan 12 19:30	21°♂♂13'36	3°51'13		3512 Mar 09 13:14	0°♂	
greatest brilliancy	3507 Jan 11 20:36	21°♂♂35'58	-1.8m		3512 Apr 16 17:25	0°♂	
direct	3507 Feb 18 02:17	12°♂♂59'29					
	3507 Apr 20 19:07	0°♂		conjunction	3512 May 01 00:46	11°♂♂03'38	-0°22'18
	3507 Jun 17 23:30	0°♂		minimum elong	3512 May 01 02:49	11°♂♂07'34	0°22'16
	3507 Aug 08 07:24	0°♂			3512 May 25 23:25	0°♂	
	3507 Sep 25 10:37	0°♂		asc. node	3512 Jun 03 14:13	6°♂♂25'32	
desc. node	3507 Oct 26 02:16	20°♂♂02'16		max. Earth dist.	3512 Jun 21 11:33	19°♂♂33'35	2.43536 AU
evening set	3507 Nov 04 08:21	26°♂♂14'24			3512 Jul 05 23:43	0°♂	
	3507 Nov 09 21:47	0°♂		morning rise	3512 Jul 06 00:04	0°♂♂00'39	
max. Earth dist.	3507 Nov 20 18:00	7°♂♂24'33	2.53116 AU		3512 Aug 18 05:47	0°♂	
	3507 Dec 22 22:11	0°♂			3512 Oct 03 02:22	0°♂	
					3512 Nov 21 09:06	0°♂	
conjunction	3507 Dec 23 14:31	0°♂♂29'16	-0°32'48		3513 Jan 17 05:53	0°♂	
minimum elong	3507 Dec 23 13:11	0°♂♂26'53	0°32'48	retrograde	3513 Mar 20 20:26	17°♂♂10'38	
	3508 Feb 01 20:18	0°♂		opposition	3513 Apr 28 12:36	8°♂♂21'17	1°50'26
morning rise	3508 Feb 15 13:13	10°♂♂♂19'50		greatest brilliancy	3513 Apr 28 20:53	8°♂♂13'15	-1.5m
	3508 Mar 12 05:31	0°♂		min. Earth dist.	3513 May 03 07:32	6°♂♂30'00	0.63627 AU
	3508 Apr 19 18:41	0°♂			3513 May 24 00:45	30°♂♂♂	
	3508 May 28 07:48	0°♂		direct	3513 Jun 08 21:06	28°♂♂20'57	
	3508 Jul 06 19:57	0°♂		desc. node	3513 Jun 16 22:11	28°♂♂44'45	
	3508 Aug 17 10:51	0°♂			3513 Jun 25 14:47	0°♂	
asc. node	3508 Aug 29 15:34	8°♂♂21'46			3513 Sep 04 04:03	0°♂	
	3508 Oct 02 02:33	0°♂			3513 Oct 21 03:08	0°♂	
	3508 Nov 28 05:33	0°♂			3513 Dec 01 17:59	0°♂	
retrograde	3509 Jan 10 01:07	9°♂♂47'37			3514 Jan 09 21:33	0°♂	
min. Earth dist.	3509 Feb 16 08:57	0°♂♂59'42	0.65410 AU		3514 Feb 17 03:11	0°♂	
	3509 Feb 18 20:33	30°♂♂♂			3514 Mar 27 14:48	0°♂	

asc. node	3514 Apr 21 13:24	19°8'00"40			3519 May 09 02:17	0°8'
evening set	3514 May 03 05:03	27°8'44"05			3519 Jun 23 15:29	0°9'
	3514 May 06 06:15	0°II			3519 Aug 16 09:43	0°8'
	3514 Jun 16 16:22	0°☾		retrograde	3519 Sep 24 14:54	9°8'29"16
				min. Earth dist.	3519 Oct 21 04:07	5°8'01"57 0.39109 AU
conjunction	3514 Jul 02 02:07	10°☾47'41 0°42'20		opposition	3519 Oct 27 03:41	3°8'16"12 -3°04'15
minimum elong	3514 Jul 02 00:11	10°☾44'19 0°42'19		greatest brilliancy	3519 Oct 26 14:30	3°8'25"55 -2.9m
	3514 Jul 30 04:07	0°Ω			3519 Nov 08 09:55	30°8'9'
max. Earth dist.	3514 Aug 02 07:11	2°Ω06'12 2.56440 AU		direct	3519 Nov 26 03:09	27°9'56"04
morning rise	3514 Aug 24 09:47	16°Ω47'17		asc. node	3519 Dec 12 10:32	29°9'36"32
	3514 Sep 13 16:47	0°♊			3519 Dec 14 07:36	0°8'
	3514 Oct 31 03:14	0°♊			3520 Feb 20 18:07	0°II
	3514 Dec 19 19:01	0°♊			3520 Apr 11 12:33	0°☾
	3515 Feb 12 03:04	0°♊			3520 May 30 07:56	0°Ω
retrograde	3515 May 04 10:30	26°♊11'26			3520 Jul 17 17:57	0°♊
desc. node	3515 May 04 21:09	26°♊11'22			3520 Sep 03 17:17	0°♊
opposition	3515 Jun 09 07:35	18°♊39'47 -1°35'04		evening set	3520 Sep 12 09:05	5°♊28'14
greatest brilliancy	3515 Jun 09 18:26	18°♊29'59 -2.0m		max. Earth dist.	3520 Oct 12 20:52	24°♊55'43 2.65248 AU
min. Earth dist.	3515 Jun 17 07:12	15°♊47'19 0.53298 AU			3520 Oct 20 17:25	0°♊
direct	3515 Jul 18 16:06	9°♊29'33				
	3515 Sep 19 20:18	0°♊		conjunction	3520 Oct 27 15:01	4°♊28'35 0°31'02
	3515 Nov 06 07:17	0°♊		minimum elong	3520 Oct 27 15:55	4°♊30'02 0°31'03
	3515 Dec 17 12:05	0°8'			3520 Dec 05 07:01	0°♊
	3516 Jan 25 22:04	0°9'		morning rise	3520 Dec 11 14:09	4°♊13'59
	3516 Mar 05 08:46	0°8'		desc. node	3520 Dec 24 18:28	13°♊09'49
asc. node	3516 Mar 08 11:40	2°8'20"46			3521 Jan 18 05:04	0°♊
	3516 Apr 14 22:09	0°II			3521 Mar 01 12:53	0°♊
	3516 May 27 04:42	0°☾			3521 Apr 11 13:02	0°8'
evening set	3516 Jun 25 20:05	20°☾16'15			3521 May 21 18:04	0°9'
	3516 Jul 10 08:38	0°Ω			3521 Jul 01 03:00	0°8'
					3521 Aug 12 14:04	0°II
conjunction	3516 Aug 15 12:20	23°Ω44'47 1°07'32			3521 Oct 02 08:45	0°☾
minimum elong	3516 Aug 15 11:55	23°Ω44'06 1°07'31		asc. node	3521 Oct 29 08:24	10°☾10'14
	3516 Aug 25 04:14	0°♊		retrograde	3521 Nov 18 02:09	12°☾48'31
max. Earth dist.	3516 Aug 28 06:03	1°♊59'01 2.64799 AU		min. Earth dist.	3521 Dec 18 07:56	6°☾30'08 0.51657 AU
morning rise	3516 Oct 01 05:28	23°♊42'34		greatest brilliancy	3521 Dec 25 04:41	3°☾55'11 -2.1m
	3516 Oct 11 03:31	0°♊		opposition	3521 Dec 26 01:25	3°☾35'36 2°50'45
	3516 Nov 27 19:15	0°♊			3522 Jan 05 07:12	30°8'II
	3517 Jan 15 02:17	0°♊		direct	3522 Jan 29 17:30	26°II00'19
	3517 Mar 05 20:06	0°♊			3522 Feb 25 07:14	0°☾
desc. node	3517 Mar 21 20:06	9°♊15'26			3522 May 04 15:06	0°Ω
	3517 Apr 29 11:51	0°♊			3522 Jun 26 20:58	0°♊
retrograde	3517 Jul 06 20:33	20°♊50'46			3522 Aug 15 18:55	0°♊
opposition	3517 Aug 07 00:37	15°♊24'34 -6°12'22			3522 Oct 02 10:29	0°♊
greatest brilliancy	3517 Aug 08 09:51	15°♊00'16 -2.7m		evening set	3522 Oct 19 17:31	11°♊15'03
min. Earth dist.	3517 Aug 13 10:09	13°♊32'47 0.40373 AU		max. Earth dist.	3522 Nov 08 09:15	24°♊17'49 2.57484 AU
direct	3517 Sep 09 04:51	9°♊07'25		desc. node	3522 Nov 11 17:14	26°♊32'17
	3517 Nov 09 20:38	0°8'			3522 Nov 16 20:12	0°♊
	3517 Dec 27 02:25	0°9'				
asc. node	3518 Jan 24 11:03	19°9'35"35		conjunction	3522 Dec 06 00:03	13°♊07'32 -0°13'53
	3518 Feb 08 08:16	0°8'		minimum elong	3522 Dec 05 23:30	13°♊06'35 0°13'52
	3518 Mar 23 10:43	0°II		behind sun begin	3522 Dec 05 12:51	12°♊48'08
	3518 May 06 14:25	0°☾		behind sun end	3522 Dec 06 10:10	13°♊25'02
	3518 Jun 21 02:55	0°Ω			3522 Dec 30 00:43	0°♊
	3518 Aug 06 18:22	0°♊		morning rise	3523 Jan 24 22:59	18°♊43'21
evening set	3518 Aug 07 02:47	0°♊13'27			3523 Feb 09 05:54	0°♊
max. Earth dist.	3518 Sep 20 20:46	28°♊41'13 2.67749 AU			3523 Mar 20 22:54	0°8'
					3523 Apr 28 19:14	0°9'
conjunction	3518 Sep 22 10:23	29°♊40'59 1°00'37			3523 Jun 06 14:30	0°8'
minimum elong	3518 Sep 22 11:16	29°♊42'25 1°00'37			3523 Jul 16 09:52	0°II
	3518 Sep 22 22:20	0°♊			3523 Aug 27 16:24	0°☾
morning rise	3518 Nov 05 16:25	27°♊55'13		asc. node	3523 Sep 16 08:10	12°☾57'37
	3518 Nov 08 22:13	0°♊			3523 Oct 14 14:24	0°Ω
	3518 Dec 25 06:20	0°♊		retrograde	3523 Dec 28 05:17	25°Ω52'08
desc. node	3519 Feb 06 19:34	28°♊41'30		min. Earth dist.	3524 Feb 01 18:57	17°Ω39'34 0.62669 AU
	3519 Feb 08 18:49	0°♊		greatest brilliancy	3524 Feb 05 10:56	16°Ω11'46 -1.5m
	3519 Mar 25 14:08	0°♊		opposition	3524 Feb 06 04:26	15°Ω54'19 4°33'32

direct	3524 Mar 15 13:25	6°♏55'22		3529 May 13 17:23	0°♐		
	3524 May 30 00:45	0°♐					
	3524 Jul 24 19:24	0°♏	conjunction	3529 Jun 10 10:40	20°♐20'43	0°21'23	
	3524 Sep 12 07:22	0°♐	minimum elong	3529 Jun 10 09:12	20°♐18'05	0°21'21	
desc. node	3524 Sep 28 15:56	10°♐27'43		3529 Jun 23 22:15	0°♏		
	3524 Oct 28 04:03	0°♐	max. Earth dist.	3529 Jul 20 06:24	18°♏25'07	2.51824 AU	
evening set	3524 Nov 30 11:50	23°♐06'27		3529 Aug 06 06:06	0°♏		
	3524 Dec 10 03:22	0°♐	morning rise	3529 Aug 07 00:07	0°♏30'23		
max. Earth dist.	3524 Dec 15 04:06	3°♐37'47	2.45366 AU	3529 Sep 20 19:20	0°♐		
	3525 Jan 19 19:19	0°♐		3529 Nov 07 16:38	0°♏		
				3529 Dec 28 23:01	0°♐		
conjunction	3525 Jan 23 16:21	2°♐55'58	-0°57'53	3530 Feb 28 16:12	0°♐		
minimum elong	3525 Jan 23 14:39	2°♐52'45	0°57'52	retrograde	3530 Apr 15 13:50	10°♐06'13	
	3525 Feb 27 20:39	0°♐		desc. node	3530 May 21 11:59	2°♐26'55	
morning rise	3525 Mar 27 15:30	21°♐46'18		opposition	3530 May 22 17:59	1°♐58'55	-0°03'08
	3525 Apr 07 02:30	0°♐		greatest brilliancy	3531 Jul 10 11:01	24°♏38'38	1.5m
	3525 May 15 09:31	0°♐			3530 May 28 00:45	30°♐	
	3525 Jun 23 15:09	0°♐		min. Earth dist.	3530 May 29 15:29	29°♐24'09	0.57972 AU
asc. node	3525 Aug 03 08:11	29°♐43'46		direct	3530 Jul 02 06:00	22°♐18'48	
	3525 Aug 03 17:21	0°♏			3530 Aug 08 05:08	0°♐	
	3525 Sep 16 18:12	0°♏			3530 Oct 04 04:29	0°♐	
	3525 Nov 05 00:55	0°♐			3530 Nov 16 22:57	0°♐	
	3526 Jan 19 09:19	0°♏			3530 Dec 26 23:15	0°♐	
retrograde	3526 Jan 31 02:03	0°♏49'59			3531 Feb 03 17:36	0°♐	
	3526 Feb 11 06:53	30°♐			3531 Mar 14 16:05	0°♐	
opposition	3526 Mar 12 07:36	21°♐03'29	4°16'11	asc. node	3531 Mar 26 04:51	8°♐44'43	
greatest brilliancy	3526 Mar 12 05:27	21°♐05'38	-1.3m		3531 Apr 23 18:11	0°♐	
min. Earth dist.	3526 Mar 11 19:04	21°♐16'01	0.67660 AU		3531 Jun 04 14:32	0°♏	
direct	3526 Apr 21 22:34	11°♐19'16		evening set	3531 Jun 07 13:18	2°♏03'44	
	3526 Jun 27 01:08	0°♏			3531 Jul 18 10:11	0°♏	
desc. node	3526 Aug 16 14:27	26°♏53'07					
	3526 Aug 21 21:14	0°♐		conjunction	3531 Jul 31 03:43	8°♏28'47	1°02'15
	3526 Oct 08 10:48	0°♐		minimum elong	3531 Jul 31 02:35	8°♏26'54	1°02'14
	3526 Nov 20 19:16	0°♐		max. Earth dist.	3531 Aug 19 13:46	21°♏14'45	2.62154 AU
	3526 Dec 31 08:12	0°♐			3531 Sep 02 01:18	0°♐	
evening set	3527 Jan 25 23:18	19°♐43'28		morning rise	3531 Sep 17 19:52	10°♐08'50	
	3527 Feb 08 02:43	0°♐			3531 Oct 19 02:25	0°♏	
	3527 Mar 18 02:30	0°♐			3531 Dec 06 07:07	0°♐	
					3532 Jan 25 01:33	0°♐	
conjunction	3527 Apr 02 18:07	12°♐21'52	-0°48'34		3532 Mar 18 22:01	0°♐	
minimum elong	3527 Apr 02 21:30	12°♐28'30	0°48'32	desc. node	3532 Apr 07 11:43	9°♐33'31	
	3527 Apr 25 06:08	0°♐		retrograde	3532 Jun 08 10:26	26°♐47'04	
max. Earth dist.	3527 May 18 02:30	17°♐37'42	2.38416 AU	opposition	3532 Jul 11 13:21	20°♐29'00	-4°29'25
	3527 Jun 03 10:28	0°♐		greatest brilliancy	3532 Jul 12 20:29	20°♐03'46	-2.4m
morning rise	3527 Jun 12 06:16	6°♐35'34		min. Earth dist.	3532 Jul 19 21:39	17°♐47'18	0.45122 AU
asc. node	3527 Jun 21 06:19	13°♐14'59		direct	3532 Aug 16 18:31	12°♐48'20	
	3527 Jul 14 09:03	0°♏			3532 Oct 10 21:50	0°♐	
	3527 Aug 26 15:43	0°♏			3532 Nov 27 18:01	0°♐	
	3527 Oct 11 21:40	0°♐			3533 Jan 08 16:07	0°♐	
	3527 Dec 01 18:43	0°♏		asc. node	3533 Feb 10 02:41	23°♐45'31	
	3528 Feb 07 23:08	0°♐			3533 Feb 18 15:54	0°♐	
retrograde	3528 Mar 06 02:55	3°♐58'09			3533 Apr 01 09:08	0°♐	
	3528 Mar 31 02:02	30°♐			3533 May 14 13:55	0°♏	
opposition	3528 Apr 14 11:17	24°♏48'05	2°45'03		3533 Jun 28 10:26	0°♏	
greatest brilliancy	3528 Apr 14 19:28	24°♏40'03	-1.4m	evening set	3533 Jul 22 14:41	15°♏46'39	
min. Earth dist.	3528 Apr 17 18:59	23°♏29'54	0.66047 AU		3533 Aug 13 16:06	0°♐	
direct	3528 May 25 22:31	14°♏45'51					
desc. node	3528 Jul 03 13:00	22°♏26'57		conjunction	3533 Sep 08 04:12	16°♐18'24	1°06'23
	3528 Jul 22 00:24	0°♐		minimum elong	3533 Sep 08 04:43	16°♐19'14	1°06'23
	3528 Sep 14 18:39	0°♐		max. Earth dist.	3533 Sep 11 22:11	18°♐41'46	2.67260 AU
	3528 Oct 29 22:32	0°♐			3533 Sep 29 16:34	0°♏	
	3528 Dec 10 00:13	0°♐		morning rise	3533 Oct 22 23:54	14°♏48'59	
	3529 Jan 17 22:09	0°♐			3533 Nov 15 20:24	0°♐	
	3529 Feb 24 23:51	0°♐			3534 Jan 01 18:19	0°♐	
	3529 Apr 04 07:07	0°♐			3534 Feb 17 09:59	0°♐	
evening set	3529 Apr 06 21:48	2°♐01'16		desc. node	3534 Feb 23 10:34	3°♐52'27	
asc. node	3529 May 08 05:11	25°♐52'49			3534 Apr 05 05:42	0°♐	

	3534 May 23 14:15	0° H			3539 Apr 07 22:00	0° Ω	
	3534 Jul 20 09:25	0° Υ			3539 Jun 11 11:14	0° M	
retrograde	3534 Aug 26 08:15	7° Υ 58'18			3539 Aug 03 00:51	0° Ω	
min. Earth dist.	3534 Sep 24 11:15	3° Υ 10'58	0.37110 AU		3539 Sep 20 14:38	0° M	
opposition	3534 Sep 25 14:34	2° Υ 52'46	-5°51'07	desc. node	3539 Oct 16 06:53	16° M 39'40	
greatest brilliancy	3534 Sep 25 13:37	2° Υ 53'24	-3.0m		3539 Nov 05 05:34	0° H	
	3534 Oct 07 05:10	30° R H		evening set	3539 Nov 13 18:19	5° H 48'57	
direct	3534 Oct 25 03:22	27° H 59'13		max. Earth dist.	3539 Nov 28 21:06	16° H 16'47	2.50489 AU
	3534 Nov 11 18:03	0° Υ			3539 Dec 18 06:06	0° Ω	
asc. node	3534 Dec 29 01:53	19° Υ 21'56					
	3535 Jan 16 22:05	0° B		conjunction	3540 Jan 03 11:08	11° Ω 44'09	-0°43'05
	3535 Mar 06 10:52	0° II		minimum elong	3540 Jan 03 09:27	11° Ω 41'05	0°43'04
	3535 Apr 22 07:50	0° Ω			3540 Jan 28 02:30	0° \approx	
	3535 Jun 08 10:02	0° Ω		morning rise	3540 Feb 29 05:36	24° \approx 28'47	
	3535 Jul 25 23:14	0° M			3540 Mar 07 08:55	0° H	
evening set	3535 Aug 30 04:29	22° M 11'23			3540 Apr 14 19:11	0° Υ	
	3535 Sep 11 12:56	0° Ω			3540 May 23 05:23	0° B	
max. Earth dist.	3535 Oct 04 20:37	14° Ω 49'46	2.66866 AU		3540 Jul 01 13:47	0° II	
					3540 Aug 11 21:43	0° Ω	
conjunction	3535 Oct 14 11:56	20° Ω 59'53	0°44'42	asc. node	3540 Aug 19 23:20	5° Ω 37'13	
minimum elong	3535 Oct 14 13:00	21° Ω 01'36	0°44'42		3540 Sep 25 17:15	0° Ω	
	3535 Oct 28 11:29	0° M			3540 Nov 17 09:36	0° M	
morning rise	3535 Nov 27 18:37	19° M 44'58		retrograde	3541 Jan 17 18:28	17° M 55'06	
	3535 Dec 13 06:36	0° H		min. Earth dist.	3541 Feb 25 00:19	8° M 49'36	0.66492 AU
desc. node	3536 Jan 11 09:00	19° H 32'50		opposition	3541 Feb 27 01:23	8° M 00'28	4°32'44
	3536 Jan 26 16:34	0° Ω		greatest brilliancy	3541 Feb 26 17:13	8° M 08'39	-1.3m
	3536 Mar 09 18:04	0° \approx			3541 Mar 23 16:50	30° R Ω	
	3536 Apr 20 16:21	0° H		direct	3541 Apr 07 23:25	28° Ω 30'33	
	3536 Jun 01 00:31	0° Υ			3541 Apr 24 05:09	0° M	
	3536 Jul 13 01:21	0° B			3541 Jul 09 01:48	0° Ω	
	3536 Aug 28 15:09	0° II			3541 Aug 30 08:26	0° M	
retrograde	3536 Oct 30 04:18	21° II 33'39		desc. node	3541 Sep 02 05:19	1° M 45'52	
asc. node	3536 Nov 15 02:06	19° II 40'44			3541 Oct 16 01:09	0° H	
min. Earth dist.	3536 Nov 27 04:58	16° II 07'50	0.46300 AU		3541 Nov 28 04:27	0° Ω	
opposition	3536 Dec 05 11:34	13° II 13'02	1°10'18	evening set	3542 Jan 01 16:42	25° Ω 25'40	
greatest brilliancy	3536 Dec 05 01:47	13° II 21'42	-2.4m		3542 Jan 07 17:53	0° \approx	
direct	3537 Jan 07 08:33	6° II 26'54		max. Earth dist.	3542 Feb 04 00:18	20° \approx 57'18	2.37901 AU
	3537 Mar 21 16:36	0° Ω			3542 Feb 15 14:25	0° H	
	3537 May 15 08:42	0° Ω					
	3537 Jul 05 00:36	0° M		conjunction	3542 Mar 04 13:34	13° H 20'10	-1°03'16
	3537 Aug 22 23:35	0° Ω		minimum elong	3542 Mar 04 14:54	13° H 22'49	1°03'16
evening set	3537 Oct 04 22:19	27° Ω 10'44			3542 Mar 25 15:50	0° Υ	
	3537 Oct 09 07:15	0° M			3542 May 02 19:51	0° B	
max. Earth dist.	3537 Oct 28 09:48	12° M 27'29	2.61113 AU	morning rise	3542 May 14 13:46	9° B 06'43	
					3542 Jun 10 23:17	0° II	
conjunction	3537 Nov 19 23:34	27° M 28'34	0°04'46	asc. node	3542 Jul 07 23:25	19° II 58'50	
minimum elong	3537 Nov 19 23:45	27° M 28'51	0°04'46		3542 Jul 21 21:09	0° Ω	
behind sun begin	3537 Nov 19 04:53	26° M 57'09			3542 Sep 03 06:47	0° Ω	
behind sun end	3537 Nov 20 18:36	28° M 00'34			3542 Oct 20 04:48	0° M	
	3537 Nov 23 17:25	0° H			3542 Dec 12 23:49	0° Ω	
desc. node	3537 Nov 28 07:58	3° H 07'10		retrograde	3543 Feb 21 04:14	21° Ω 11'46	
morning rise	3538 Jan 06 06:45	0° Ω 05'50		opposition	3543 Apr 02 00:26	11° Ω 44'45	3°28'30
	3538 Jan 06 03:27	0° Ω		greatest brilliancy	3543 Apr 02 05:53	11° Ω 39'21	-1.3m
	3538 Feb 16 17:19	0° \approx		min. Earth dist.	3543 Apr 03 20:21	11° Ω 01'17	0.67469 AU
	3538 Mar 28 20:05	0° H		direct	3543 May 13 08:14	1° Ω 46'11	
	3538 May 07 02:01	0° Υ		desc. node	3543 Jul 21 04:35	22° Ω 10'50	
	3538 Jun 15 06:58	0° B			3543 Aug 05 10:16	0° M	
	3538 Jul 25 15:38	0° II			3543 Sep 24 22:06	0° H	
	3538 Sep 07 05:33	0° Ω			3543 Nov 08 02:29	0° Ω	
asc. node	3538 Oct 03 00:48	15° Ω 44'24			3543 Dec 18 20:55	0° \approx	
	3538 Oct 31 02:58	0° Ω			3544 Jan 26 16:12	0° H	
retrograde	3538 Dec 13 14:36	10° Ω 43'45			3544 Mar 04 16:05	0° Υ	
min. Earth dist.	3539 Jan 16 05:18	3° Ω 11'47	0.58982 AU	evening set	3544 Mar 09 10:57	3° Υ 46'56	
greatest brilliancy	3539 Jan 21 03:45	1° Ω 15'00	-1.7m		3544 Apr 11 20:57	0° B	
opposition	3539 Jan 22 01:37	0° Ω 53'26	4°13'13				
	3539 Jan 24 08:16	30° R Ω		conjunction	3544 May 16 14:11	26° B 34'27	-0°05'36
direct	3539 Feb 28 04:09	22° Ω 21'30		minimum elong	3544 May 16 14:41	26° B 35'22	0°05'35

behind sun begin	3544 May 15 12:17	25°♄45'42			3549 Jun 19 01:35	0°♄
behind sun end	3544 May 17 17:04	27°♄24'58		retrograde	3549 Jul 24 15:45	6°♄59'10
	3544 May 21 03:43	0°♄		opposition	3549 Aug 24 00:45	1°♄55'01 -6°41'58
asc. node	3544 May 24 21:29	2°♄47'40		greatest brilliancy	3549 Aug 25 01:46	1°♄37'51 -2.8m
	3544 Jul 01 04:44	0°♄		min. Earth dist.	3549 Aug 28 06:32	0°♄45'28 0.38436 AU
max. Earth dist.	3544 Jul 03 18:44	1°♄50'18 2.46605 AU			3549 Aug 31 03:01	30°♄
morning rise	3544 Jul 18 09:35	12°♄08'00		direct	3549 Sep 24 08:35	26°♄22'24
	3544 Aug 13 10:10	0°♄			3549 Oct 17 23:29	0°♄
	3544 Sep 28 02:16	0°♄			3549 Dec 17 04:50	0°♄
	3544 Nov 15 16:45	0°♄		asc. node	3550 Jan 14 19:15	18°♄28'37
	3545 Jan 08 17:11	0°♄			3550 Feb 01 00:15	0°♄
retrograde	3545 Mar 29 17:33	25°♄29'41			3550 Mar 17 07:50	0°♄
opposition	3545 May 06 22:44	16°♄53'29 1°12'47			3550 May 01 04:31	0°♄
greatest brilliancy	3545 May 07 05:17	16°♄47'12 -1.6m			3550 Jun 16 03:27	0°♄
min. Earth dist.	3545 May 12 12:28	14°♄45'18 0.61885 AU			3550 Aug 02 01:08	0°♄
desc. node	3545 Jun 07 03:42	7°♄36'36		evening set	3550 Aug 15 15:58	8°♄38'51
direct	3545 Jun 17 02:47	6°♄57'22			3550 Sep 18 07:44	0°♄
	3545 Aug 27 02:52	0°♄		max. Earth dist.	3550 Sep 26 02:00	4°♄55'56 2.67664 AU
	3545 Oct 15 01:57	0°♄				
	3545 Nov 26 06:45	0°♄		conjunction	3550 Sep 30 11:58	7°♄44'31 0°55'38
	3546 Jan 04 15:57	0°♄		minimum elong	3550 Sep 30 12:59	7°♄46'09 0°55'37
	3546 Feb 12 00:49	0°♄			3550 Nov 04 06:48	0°♄
	3546 Mar 22 15:05	0°♄		morning rise	3550 Nov 13 15:05	6°♄01'37
asc. node	3546 Apr 11 20:06	15°♄23'55			3550 Dec 20 09:54	0°♄
	3546 May 01 08:57	0°♄		desc. node	3551 Jan 28 00:09	25°♄38'28
evening set	3546 May 16 20:36	11°♄21'16			3551 Feb 03 11:45	0°♄
	3546 Jun 11 21:31	0°♄			3551 Mar 19 13:35	0°♄
					3551 May 01 21:27	0°♄
conjunction	3546 Jul 13 06:19	21°♄44'32 0°51'27			3551 Jun 14 06:46	0°♄
minimum elong	3546 Jul 13 04:33	21°♄41'31 0°51'26			3551 Jul 30 11:38	0°♄
	3546 Jul 25 10:57	0°♄		retrograde	3551 Oct 09 01:58	26°♄13'58
max. Earth dist.	3546 Aug 09 01:48	9°♄46'06 2.58714 AU		min. Earth dist.	3551 Nov 04 13:19	21°♄33'39 0.41301 AU
morning rise	3546 Sep 02 15:37	25°♄54'07		opposition	3551 Nov 12 01:00	19°♄11'53 -1°20'08
	3546 Sep 08 23:26	0°♄		greatest brilliancy	3551 Nov 11 17:04	19°♄18'10 -2.7m
	3546 Oct 26 04:56	0°♄		asc. node	3551 Dec 02 17:44	14°♄04'32
	3546 Dec 14 04:46	0°♄		direct	3551 Dec 13 00:17	13°♄22'20
	3547 Feb 04 07:44	0°♄			3552 Feb 08 22:45	0°♄
	3547 Apr 10 03:54	0°♄			3552 Apr 04 09:41	0°♄
desc. node	3547 Apr 25 02:11	4°♄11'34			3552 May 24 15:58	0°♄
retrograde	3547 May 16 08:21	6°♄43'12			3552 Jul 12 17:38	0°♄
	3547 Jun 19 04:38	30°♄			3552 Aug 30 00:12	0°♄
opposition	3547 Jun 20 09:17	29°♄35'04 -2°35'15		evening set	3552 Sep 20 13:04	13°♄36'19
greatest brilliancy	3547 Jun 21 03:38	29°♄18'59 -2.1m			3552 Oct 16 02:45	0°♄
min. Earth dist.	3547 Jun 28 18:55	26°♄39'13 0.50468 AU		max. Earth dist.	3552 Oct 18 09:37	1°♄28'51 2.63988 AU
direct	3547 Jul 28 20:48	20°♄49'55				
	3547 Sep 06 05:26	0°♄		conjunction	3552 Nov 04 22:47	12°♄55'54 0°21'55
	3547 Oct 29 13:26	0°♄		minimum elong	3552 Nov 04 23:28	12°♄57'02 0°21'55
	3547 Dec 11 01:26	0°♄			3552 Nov 30 15:12	0°♄
	3548 Jan 20 01:41	0°♄		desc. node	3552 Dec 14 22:48	9°♄41'12
asc. node	3548 Feb 27 20:14	29°♄12'18		morning rise	3552 Dec 20 13:08	13°♄30'28
	3548 Feb 28 21:47	0°♄			3553 Jan 13 08:57	0°♄
	3548 Apr 09 18:13	0°♄			3553 Feb 24 10:13	0°♄
	3548 May 22 06:30	0°♄			3553 Apr 06 02:06	0°♄
evening set	3548 Jul 05 23:51	0°♄15'13			3553 May 15 21:31	0°♄
	3548 Jul 05 14:41	0°♄			3553 Jun 24 17:35	0°♄
	3548 Aug 20 12:47	0°♄			3553 Aug 05 02:38	0°♄
					3553 Sep 20 15:18	0°♄
conjunction	3548 Aug 24 09:04	2°♄28'38 1°08'21		asc. node	3553 Oct 19 17:20	14°♄40'55
minimum elong	3548 Aug 24 09:03	2°♄28'36 1°08'21		retrograde	3553 Nov 27 19:15	23°♄52'16
max. Earth dist.	3548 Sep 02 18:43	8°♄30'57 2.65908 AU		min. Earth dist.	3553 Dec 29 06:31	17°♄06'41 0.54442 AU
	3548 Oct 06 11:34	0°♄		greatest brilliancy	3554 Jan 04 11:29	14°♄43'26 -1.9m
morning rise	3548 Oct 09 06:21	1°♄45'53		opposition	3554 Jan 05 10:27	14°♄21'19 3°29'56
	3548 Nov 22 22:04	0°♄		direct	3554 Feb 10 00:50	6°♄23'38
	3549 Jan 09 14:53	0°♄			3554 Apr 26 08:31	0°♄
	3549 Feb 26 22:53	0°♄			3554 Jun 21 01:32	0°♄
desc. node	3549 Mar 12 01:20	7°♄58'28			3554 Aug 10 18:20	0°♄
	3549 Apr 18 11:11	0°♄			3554 Sep 27 17:11	0°♄

evening set	3554 Oct 28 12:47	20° \mathbb{M} 08'55	asc. node	3559 Jun 11 14:18	9° \mathbb{I} 41'16
desc. node	3554 Nov 01 22:13	23° \mathbb{M} 04'48	morning rise	3559 Jun 26 17:54	20° \mathbb{I} 47'45
	3554 Nov 12 04:53	0° \mathbb{X}		3559 Jul 09 12:28	0° \mathbb{G}
max. Earth dist.	3554 Nov 15 05:43	2° \mathbb{X} 03'36 2.55140 AU		3559 Aug 21 17:02	0° Ω
				3559 Oct 06 15:15	0° \mathbb{M}
conjunction	3554 Dec 15 19:16	23° \mathbb{X} 14'02 -0°24'53		3559 Nov 25 09:28	0° Ω
minimum elong	3554 Dec 15 18:16	23° \mathbb{X} 12'16 0°24'51		3560 Jan 24 00:53	0° \mathbb{M}
	3554 Dec 25 08:05	0° \mathbb{Z}	retrograde	3560 Mar 14 09:58	11° \mathbb{M} 56'40
	3555 Feb 04 10:14	0° \approx	opposition	3560 Apr 22 10:27	2° \mathbb{M} 57'21 2°14'30
morning rise	3555 Feb 05 19:03	1° \approx 01'14	greatest brilliancy	3560 Apr 22 18:58	2° \mathbb{M} 49'03 -1.4m
	3555 Mar 15 23:22	0° \mathbb{X}	min. Earth dist.	3560 Apr 26 13:44	1° \mathbb{M} 20'40 0.64836 AU
	3555 Apr 23 15:46	0° \mathbb{Y}		3560 Apr 30 02:14	30° \mathbb{R} Ω
	3555 Jun 01 07:13	0° \mathbb{B}	direct	3560 Jun 02 21:25	22° Ω 55'27
	3555 Jul 10 21:12	0° \mathbb{I}	desc. node	3560 Jun 23 18:11	25° Ω 25'00
	3555 Aug 21 16:10	0° \mathbb{G}		3560 Jul 09 11:38	0° \mathbb{M}
asc. node	3555 Sep 06 16:29	10° \mathbb{G} 50'38		3560 Sep 08 05:11	0° \mathbb{X}
	3555 Oct 06 23:03	0° Ω		3560 Oct 24 09:14	0° \mathbb{Z}
	3555 Dec 08 19:40	0° \mathbb{M}		3560 Dec 04 19:15	0° \approx
retrograde	3556 Jan 05 04:47	4° \mathbb{M} 25'23		3561 Jan 12 20:45	0° \mathbb{X}
	3556 Jan 30 17:31	30° \mathbb{R} Ω		3561 Feb 20 00:31	0° \mathbb{Y}
min. Earth dist.	3556 Feb 10 18:32	25° Ω 52'59 0.64307 AU		3561 Mar 30 09:39	0° \mathbb{B}
opposition	3556 Feb 14 08:20	24° Ω 27'14 4°37'24	evening set	3561 Apr 22 02:02	17° \mathbb{B} 22'04
greatest brilliancy	3556 Feb 13 17:59	24° Ω 41'34 -1.4m	asc. node	3561 Apr 28 13:49	22° \mathbb{B} 16'07
direct	3556 Mar 24 08:12	15° Ω 15'58		3561 May 08 21:40	0° \mathbb{I}
	3556 May 20 17:11	0° \mathbb{M}		3561 Jun 19 04:02	0° \mathbb{G}
	3556 Jul 18 21:53	0° Ω			
	3556 Sep 07 05:56	0° \mathbb{M}	conjunction	3561 Jun 23 01:33	2° \mathbb{G} 45'29 0°34'12
desc. node	3556 Sep 18 21:16	7° \mathbb{M} 21'00	minimum elong	3561 Jun 22 23:40	2° \mathbb{G} 42'09 0°34'10
	3556 Oct 23 09:38	0° \mathbb{X}	max. Earth dist.	3561 Jul 28 01:37	26° \mathbb{G} 59'01 2.54455 AU
	3556 Dec 05 10:37	0° \mathbb{Z}		3561 Aug 01 12:33	0° Ω
evening set	3556 Dec 11 09:28	4° \mathbb{Z} 17'49	morning rise	3561 Aug 17 03:35	10° Ω 27'56
max. Earth dist.	3556 Dec 27 13:54	16° \mathbb{Z} 09'19 2.42474 AU		3561 Sep 15 23:53	0° \mathbb{M}
	3557 Jan 15 01:55	0° \approx		3561 Nov 02 13:12	0° Ω
				3561 Dec 22 18:02	0° \mathbb{M}
conjunction	3557 Feb 06 01:54	16° \approx 48'54 -1°03'10		3562 Feb 17 05:52	0° \mathbb{X}
minimum elong	3557 Feb 06 00:49	16° \approx 46'49 1°03'10	retrograde	3562 Apr 25 22:45	19° \mathbb{X} 30'02
	3557 Feb 23 01:26	0° \mathbb{X}	desc. node	3562 May 11 17:17	17° \mathbb{X} 56'08
	3557 Apr 02 05:15	0° \mathbb{Y}	opposition	3562 Jun 01 11:22	11° \mathbb{X} 41'23 -0°54'06
morning rise	3557 Apr 13 16:42	9° \mathbb{Y} 02'40	greatest brilliancy	3562 Jun 01 17:15	11° \mathbb{X} 35'58 -1.9m
	3557 May 10 10:32	0° \mathbb{B}	min. Earth dist.	3562 Jun 09 00:52	8° \mathbb{X} 54'59 0.55478 AU
	3557 Jun 18 14:22	0° \mathbb{I}	direct	3562 Jul 11 10:29	2° \mathbb{X} 15'39
asc. node	3557 Jul 24 14:34	26° \mathbb{I} 27'46		3562 Sep 26 00:18	0° \mathbb{Z}
	3557 Jul 29 13:25	0° \mathbb{G}		3562 Nov 10 13:14	0° \approx
	3557 Sep 11 06:04	0° Ω		3562 Dec 21 04:18	0° \mathbb{X}
	3557 Oct 29 08:02	0° \mathbb{M}		3563 Jan 29 06:21	0° \mathbb{Y}
	3557 Dec 28 19:59	0° Ω		3563 Mar 09 10:35	0° \mathbb{B}
retrograde	3558 Feb 07 16:55	8° Ω 35'26	asc. node	3563 Mar 16 12:17	5° \mathbb{B} 20'33
	3558 Mar 17 03:16	30° \mathbb{R} \mathbb{M}		3563 Apr 18 17:33	0° \mathbb{I}
opposition	3558 Mar 19 20:43	28° \mathbb{M} 54'57 4°01'31		3563 May 30 18:06	0° \mathbb{G}
greatest brilliancy	3558 Mar 19 21:38	28° \mathbb{M} 54'03 -1.3m	evening set	3563 Jun 18 18:38	13° \mathbb{G} 08'36
min. Earth dist.	3558 Mar 20 04:16	28° \mathbb{M} 47'27 0.67887 AU		3563 Jul 13 17:02	0° Ω
direct	3558 Apr 29 19:35	19° \mathbb{M} 04'35			
	3558 Jun 16 18:41	0° Ω	conjunction	3563 Aug 09 15:47	17° Ω 48'53 1°05'55
	3558 Aug 06 19:27	24° Ω 52'59	minimum elong	3563 Aug 09 15:04	17° Ω 47'43 1°05'55
desc. node	3558 Aug 15 19:37	0° \mathbb{M}	max. Earth dist.	3563 Aug 25 07:46	28° Ω 00'44 2.63717 AU
	3558 Oct 03 06:01	0° \mathbb{X}		3563 Aug 28 09:31	0° \mathbb{M}
	3558 Nov 15 21:16	0° \mathbb{Z}	morning rise	3563 Sep 26 03:58	18° \mathbb{M} 27'13
	3558 Dec 26 12:30	0° \approx		3563 Oct 14 08:38	0° Ω
	3559 Feb 03 07:23	0° \mathbb{X}		3563 Dec 01 05:08	0° \mathbb{M}
evening set	3559 Feb 09 22:45	5° \mathbb{X} 13'20		3564 Jan 19 01:23	0° \mathbb{X}
	3559 Mar 13 06:53	0° \mathbb{Y}		3564 Mar 10 04:40	0° \mathbb{Z}
			desc. node	3564 Mar 28 15:51	10° \mathbb{Z} 06'35
conjunction	3559 Apr 19 10:08	29° \mathbb{Y} 12'54 -0°34'31		3564 May 09 15:10	0° \approx
minimum elong	3559 Apr 19 13:09	29° \mathbb{Y} 18'47 0°34'29	retrograde	3564 Jun 23 21:12	10° \approx 14'20
	3559 Apr 20 10:19	0° \mathbb{B}	opposition	3564 Jul 25 20:59	4° \approx 25'26 -5°31'59
	3559 May 29 14:27	0° \mathbb{I}	greatest brilliancy	3564 Jul 27 07:42	3° \approx 58'43 -2.6m
max. Earth dist.	3559 Jun 10 05:35	8° \mathbb{I} 40'43 2.41111 AU	min. Earth dist.	3564 Aug 02 09:59	2° \approx 06'50 0.42367 AU

	3564 Aug 10 02:47	30° κ 3		desc. node	3569 Nov 18 13:19	29° \mathbb{M} 36'46	
direct	3564 Aug 29 11:45	27° \mathfrak{Z} 29'20			3569 Nov 19 03:04	0° \mathfrak{X}	
	3564 Sep 17 17:12	0° \approx					
	3564 Nov 18 05:49	0° \mathfrak{H}		conjunction	3569 Nov 28 22:40	6° \mathfrak{X} 40'16	-0°05'58
	3565 Jan 01 09:15	0° Υ		minimum elong	3569 Nov 28 22:27	6° \mathfrak{X} 39'54	0°05'57
asc. node	3565 Jan 31 11:05	21° Υ 27'03		behind sun begin	3569 Nov 28 03:41	6° \mathfrak{X} 07'51	
	3565 Feb 12 09:47	0° \mathfrak{B}		behind sun end	3569 Nov 29 17:14	7° \mathfrak{X} 11'59	
	3565 Mar 26 18:34	0° \mathbb{I}			3570 Jan 01 11:04	0° \mathfrak{Z}	
	3565 May 09 09:55	0° \mathfrak{E}		morning rise	3570 Jan 16 13:48	10° \mathfrak{Z} 48'02	
	3565 Jun 23 13:51	0° \mathcal{O}			3570 Feb 11 20:57	0° \approx	
evening set	3565 Jul 31 14:10	24° \mathcal{O} 36'34			3570 Mar 23 18:46	0° \mathfrak{H}	
	3565 Aug 09 00:04	0° \mathfrak{M}			3570 May 01 19:08	0° Υ	
					3570 Jun 09 17:53	0° \mathfrak{B}	
conjunction	3565 Sep 16 09:32	24° \mathfrak{M} 28'31	1°03'26		3570 Jul 19 17:04	0° \mathbb{I}	
minimum elong	3565 Sep 16 10:18	24° \mathfrak{M} 29'44	1°03'25		3570 Aug 31 08:18	0° \mathfrak{E}	
max. Earth dist.	3565 Sep 17 03:10	24° \mathfrak{M} 56'33	2.67638 AU	asc. node	3570 Sep 23 08:13	14° \mathfrak{E} 47'59	
	3565 Sep 25 02:01	0° \mathfrak{L}			3570 Oct 19 19:12	0° \mathcal{O}	
morning rise	3565 Oct 30 20:24	22° \mathfrak{L} 46'36		retrograde	3570 Dec 22 02:12	20° \mathcal{O} 02'21	
	3565 Nov 11 03:38	0° \mathbb{M}		min. Earth dist.	3571 Jan 25 19:37	12° \mathcal{O} 07'33	0.61145 AU
	3565 Dec 27 17:39	0° \mathfrak{X}		opposition	3571 Jan 30 21:22	10° \mathcal{O} 06'44	4°27'41
	3566 Feb 11 17:18	0° \mathfrak{Z}		greatest brilliancy	3571 Jan 30 01:35	10° \mathcal{O} 26'22	-1.6m
desc. node	3566 Feb 13 15:12	1° \mathfrak{Z} 15'19		direct	3571 Mar 09 17:59	1° \mathcal{O} 18'59	
	3566 Mar 29 07:22	0° \approx			3571 Jun 04 07:05	0° \mathfrak{M}	
	3566 May 14 02:55	0° \mathfrak{H}			3571 Jul 28 14:06	0° \mathfrak{L}	
	3566 Jul 01 13:47	0° Υ			3571 Sep 15 17:22	0° \mathbb{M}	
retrograde	3566 Sep 12 09:17	26° Υ 24'04		desc. node	3571 Oct 06 11:52	13° \mathbb{M} 21'30	
min. Earth dist.	3566 Oct 09 15:36	21° Υ 56'15	0.37846 AU		3571 Oct 31 12:52	0° \mathfrak{X}	
opposition	3566 Oct 13 18:37	20° Υ 47'06	-4°24'08	evening set	3571 Nov 23 14:58	15° \mathfrak{X} 52'16	
greatest brilliancy	3566 Oct 13 07:18	20° Υ 55'01	-2.9m	max. Earth dist.	3571 Dec 08 01:18	26° \mathfrak{X} 02'54	2.47701 AU
direct	3566 Nov 12 07:08	15° Υ 44'57			3571 Dec 13 13:58	0° \mathfrak{Z}	
asc. node	3566 Dec 19 10:40	23° Υ 43'16					
	3567 Jan 03 01:21	0° \mathfrak{B}		conjunction	3572 Jan 15 02:21	23° \mathfrak{Z} 48'00	-0°52'13
	3567 Feb 26 11:56	0° \mathbb{I}		minimum elong	3572 Jan 15 00:31	23° \mathfrak{Z} 44'36	0°52'12
	3567 Apr 16 04:26	0° \mathfrak{E}			3572 Jan 23 08:57	0° \approx	
	3567 Jun 03 03:09	0° \mathcal{O}			3572 Mar 02 13:14	0° \mathfrak{H}	
	3567 Jul 21 02:59	0° \mathfrak{M}		morning rise	3572 Mar 15 04:01	9° \mathfrak{H} 50'03	
	3567 Sep 06 21:49	0° \mathfrak{L}			3572 Apr 09 21:07	0° Υ	
evening set	3567 Sep 07 07:56	0° \mathfrak{L} 15'58		greatest brilliancy	3572 Apr 28 09:36	14° Υ 32'08	1.2m
max. Earth dist.	3567 Oct 10 02:40	21° \mathfrak{L} 07'11	2.66073 AU		3572 May 18 05:09	0° \mathfrak{B}	
					3572 Jun 26 10:56	0° \mathbb{I}	
conjunction	3567 Oct 22 13:00	29° \mathfrak{L} 07'07	0°37'03		3572 Aug 06 13:32	0° \mathfrak{E}	
minimum elong	3567 Oct 22 13:59	29° \mathfrak{L} 08'43	0°37'02	asc. node	3572 Aug 10 08:22	2° \mathfrak{E} 40'05	
	3567 Oct 23 21:44	0° \mathbb{M}			3572 Sep 19 18:54	0° \mathcal{O}	
morning rise	3567 Dec 06 03:08	28° \mathbb{M} 21'15			3572 Nov 09 00:22	0° \mathfrak{M}	
	3567 Dec 08 14:23	0° \mathfrak{X}		retrograde	3573 Jan 25 10:03	25° \mathfrak{M} 51'57	
desc. node	3568 Jan 01 14:30	16° \mathfrak{X} 10'36		opposition	3573 Mar 06 17:17	16° \mathfrak{M} 01'20	4°24'25
	3568 Jan 21 18:13	0° \mathfrak{Z}		min. Earth dist.	3573 Mar 05 12:16	16° \mathfrak{M} 30'20	0.67267 AU
	3568 Mar 04 10:02	0° \approx		greatest brilliancy	3573 Mar 06 12:31	16° \mathfrak{M} 06'05	-1.3m
	3568 Apr 14 19:32	0° \mathfrak{H}		direct	3573 Apr 16 01:50	6° \mathfrak{M} 23'00	
	3568 May 25 10:57	0° Υ			3573 Jul 01 14:25	0° \mathfrak{L}	
	3568 Jul 05 09:28	0° \mathfrak{B}		desc. node	3573 Aug 23 10:23	29° \mathfrak{L} 10'08	
	3568 Aug 18 00:03	0° \mathbb{I}			3573 Aug 24 19:35	0° \mathbb{M}	
	3568 Oct 15 03:43	0° \mathfrak{E}			3573 Oct 11 01:30	0° \mathfrak{X}	
asc. node	3568 Nov 05 08:47	4° \mathfrak{E} 20'46			3573 Nov 23 09:04	0° \mathfrak{Z}	
retrograde	3568 Nov 10 05:46	4° \mathfrak{E} 31'16			3574 Jan 02 23:17	0° \approx	
	3568 Dec 05 10:54	30° \mathfrak{R} \mathbb{I}		evening set	3574 Jan 14 23:59	9° \approx 10'57	
min. Earth dist.	3568 Dec 09 11:53	28° \mathbb{I} 36'21	0.49293 AU		3574 Feb 10 19:17	0° \mathfrak{H}	
opposition	3568 Dec 17 13:58	25° \mathbb{I} 38'12	2°13'55				
greatest brilliancy	3568 Dec 16 20:27	25° \mathbb{I} 54'19	-2.2m	conjunction	3574 Mar 20 18:45	29° \mathfrak{H} 58'03	-0°56'45
direct	3569 Jan 20 10:54	18° \mathbb{I} 23'39		minimum elong	3574 Mar 20 21:35	0° Υ 03'38	0°56'44
	3569 Mar 09 13:39	0° \mathfrak{E}			3574 Mar 20 19:44	0° Υ	
	3569 May 08 15:19	0° \mathcal{O}		max. Earth dist.	3574 Apr 06 15:13	13° Υ 16'35	2.36985 AU
	3569 Jun 29 15:25	0° \mathfrak{M}			3574 Apr 27 23:05	0° \mathfrak{B}	
	3569 Aug 18 03:10	0° \mathfrak{L}		morning rise	3574 May 31 04:34	25° \mathfrak{B} 32'58	
	3569 Oct 04 16:04	0° \mathbb{M}			3574 Jun 06 02:07	0° \mathbb{I}	
evening set	3569 Oct 13 07:23	5° \mathbb{M} 35'41		asc. node	3574 Jun 28 06:53	16° \mathbb{I} 29'11	
max. Earth dist.	3569 Nov 03 13:11	19° \mathbb{M} 33'31	2.59209 AU		3574 Jul 16 22:51	0° \mathfrak{E}	

	3574 Aug 29 04:56	0°♏			3579 Oct 20 01:54	0°♁		
	3574 Oct 14 14:34	0°♐			3579 Dec 03 20:54	0°♐		
	3574 Dec 05 08:14	0°♑			3580 Jan 13 18:59	0°♑		
retrograde	3575 Mar 01 02:03	28°♑58'44		asc. node	3580 Feb 18 03:27	26°♑16'56		
opposition	3575 Apr 09 16:44	19°♑40'36	3°04'15		3580 Feb 23 04:13	0°♐		
greatest brilliancy	3575 Apr 09 23:54	19°♑33'32	-1.3m		3580 Apr 04 10:31	0°♐		
min. Earth dist.	3575 Apr 12 08:24	18°♑37'56	0.66810 AU		3580 May 17 06:14	0°♑		
direct	3575 May 21 03:45	9°♑39'31			3580 Jun 30 19:59	0°♏		
desc. node	3575 Jul 11 09:09	22°♑11'43		evening set	3580 Jul 15 15:15	9°♏44'04		
	3575 Jul 28 08:50	0°♐			3580 Aug 15 21:13	0°♐		
	3575 Sep 19 02:27	0°♐						
	3575 Nov 02 21:13	0°♐		conjunction	3580 Sep 01 22:05	10°♐55'38	1°07'41	
	3575 Dec 13 20:48	0°♁		minimum elong	3580 Sep 01 22:25	10°♐56'09	1°07'41	
	3576 Jan 21 18:08	0°♐		max. Earth dist.	3580 Sep 08 02:28	14°♐52'41	2.66763 AU	
	3576 Feb 28 18:51	0°♑			3580 Oct 01 20:24	0°♑		
greatest brilliancy	3576 Mar 05 05:02	4°♑17'03	1.2m	morning rise	3580 Oct 17 03:40	9°♑43'01		
evening set	3576 Mar 25 14:52	20°♑20'04			3580 Nov 18 02:56	0°♐		
	3576 Apr 07 00:24	0°♐			3581 Jan 04 08:34	0°♐		
asc. node	3576 May 15 05:24	29°♐10'06			3581 Feb 20 16:08	0°♐		
	3576 May 16 08:03	0°♐		desc. node	3581 Mar 02 06:31	6°♐03'04		
					3581 Apr 09 19:09	0°♁		
conjunction	3576 May 31 01:11	10°♐55'00	0°10'27		3581 May 31 09:31	0°♐		
minimum elong	3576 May 31 00:22	10°♐53'30	0°10'26	retrograde	3581 Aug 12 05:15	24°♐28'36		
behind sun begin	3576 May 30 03:58	10°♐15'59		opposition	3581 Sep 11 03:20	19°♐32'31	-6°31'30	
behind sun end	3576 May 31 20:46	11°♐30'58		greatest brilliancy	3581 Sep 11 14:43	19°♐25'00	-2.9m	
	3576 Jun 26 09:44	0°♑		min. Earth dist.	3581 Sep 12 13:48	19°♐09'45	0.37282 AU	
max. Earth dist.	3576 Jul 13 18:00	12°♑13'36	2.49549 AU	direct	3581 Oct 11 04:07	14°♐30'18		
morning rise	3576 Jul 29 20:32	23°♑21'16			3581 Dec 03 01:50	0°♑		
	3576 Aug 08 15:02	0°♏		asc. node	3582 Jan 05 01:55	18°♑32'46		
	3576 Sep 23 03:41	0°♐			3582 Jan 23 11:55	0°♐		
	3576 Nov 10 05:59	0°♑			3582 Mar 10 16:50	0°♐		
	3577 Jan 01 09:34	0°♐			3582 Apr 25 12:39	0°♑		
	3577 Mar 11 01:25	0°♐			3582 Jun 11 01:10	0°♏		
retrograde	3577 Apr 08 02:18	4°♐10'30			3582 Jul 28 06:36	0°♐		
	3577 May 03 23:02	30°♐		evening set	3582 Aug 24 00:56	16°♐54'58		
opposition	3577 May 15 19:06	25°♐49'26	0°30'28		3582 Sep 13 16:59	0°♑		
greatest brilliancy	3577 May 15 22:22	25°♐46'21	-1.7m	max. Earth dist.	3582 Oct 01 06:11	11°♑09'13	2.67335 AU	
min. Earth dist.	3577 May 22 03:06	23°♐25'40	0.59830 AU					
desc. node	3577 May 28 08:03	21°♐12'08		conjunction	3582 Oct 08 12:18	15°♑46'57	0°49'36	
direct	3577 Jun 25 16:07	16°♐00'51		minimum elong	3582 Oct 08 13:23	15°♑48'40	0°49'35	
	3577 Aug 16 22:03	0°♐			3582 Oct 30 16:06	0°♐		
	3577 Oct 08 11:10	0°♐		morning rise	3582 Nov 21 15:49	14°♐15'28		
	3577 Nov 20 12:22	0°♁			3582 Dec 15 15:05	0°♐		
	3577 Dec 30 06:11	0°♐		desc. node	3583 Jan 18 05:12	22°♐27'02		
	3578 Feb 06 19:56	0°♑			3583 Jan 29 08:29	0°♐		
	3578 Mar 17 13:57	0°♐			3583 Mar 13 20:30	0°♁		
asc. node	3578 Apr 02 05:18	11°♐53'50			3583 Apr 25 08:31	0°♐		
	3578 Apr 26 11:13	0°♐			3583 Jun 06 10:22	0°♑		
evening set	3578 May 29 11:24	23°♐53'44			3583 Jul 19 17:26	0°♐		
	3578 Jun 07 02:34	0°♑			3583 Sep 08 18:41	0°♐		
	3578 Jul 20 18:06	0°♏		retrograde	3583 Oct 22 00:55	11°♐31'05		
conjunction	3578 Jul 23 16:07	1°♏57'30	0°58'23	min. Earth dist.	3583 Nov 18 06:01	6°♐27'12	0.43949 AU	
minimum elong	3578 Jul 23 14:40	1°♏55'05	0°58'23	asc. node	3583 Nov 23 02:18	4°♐49'43		
max. Earth dist.	3578 Aug 15 08:49	17°♏01'00	2.60713 AU	opposition	3583 Nov 26 09:02	3°♐42'37	0°12'00	
	3578 Sep 04 06:43	0°♐		greatest brilliancy	3580 Aug 26 21:46	7°♐04'37	1.6m	
morning rise	3578 Sep 11 10:58	4°♐37'54		direct	3583 Dec 08 11:36	30°♐		
	3578 Oct 21 08:41	0°♑			3583 Dec 28 09:25	27°♐21'23		
	3578 Dec 08 20:11	0°♐			3584 Jan 18 05:05	0°♐		
	3579 Jan 28 10:23	0°♐			3584 Mar 27 07:32	0°♑		
	3579 Mar 26 05:51	0°♐			3584 May 18 16:51	0°♏		
desc. node	3579 Apr 15 07:32	8°♐31'40			3584 Jul 07 14:26	0°♐		
retrograde	3579 May 29 11:03	18°♐08'11		evening set	3584 Aug 25 06:12	0°♑		
opposition	3579 Jul 02 11:16	11°♐26'56	-3°39'33		3584 Sep 28 17:57	21°♑47'36		
greatest brilliancy	3579 Jul 03 13:27	11°♐04'54	-2.3m	max. Earth dist.	3584 Oct 11 12:22	0°♐		
min. Earth dist.	3579 Jul 11 00:03	8°♐35'03	0.47492 AU		3584 Oct 24 01:48	8°♐09'36	2.62502 AU	
direct	3579 Aug 08 19:45	3°♐14'18		conjunction	3584 Nov 13 10:30	21°♐34'49	0°12'10	

minimum elong	3584 Nov 13 10:54	21°♍35'30	0°12'09		3589 Jul 24 12:59	0°♎	
behind sun begin	3584 Nov 12 22:04	21°♍14'09			3589 Sep 05 23:20	0°♏	
behind sun end	3584 Nov 13 23:45	21°♍56'51			3589 Oct 23 04:52	0°♐	
	3584 Nov 26 00:23	0°♑			3589 Dec 17 19:07	0°♒	
desc. node	3584 Dec 05 04:05	6°♑11'27		retrograde	3590 Feb 15 09:09	16°♒17'52	
morning rise	3584 Dec 29 20:57	23°♑10'59		opposition	3590 Mar 27 09:45	6°♒44'25	3°43'22
	3585 Jan 08 14:46	0°♓		greatest brilliancy	3590 Mar 27 13:21	6°♒40'51	-1.3m
	3585 Feb 19 10:15	0°♊		min. Earth dist.	3590 Mar 28 13:34	6°♒16'50	0.67781 AU
	3585 Mar 31 19:12	0°♋			3590 Apr 15 06:17	30°♋♐	
	3585 May 10 06:47	0°♌		direct	3590 May 07 14:45	26°♐49'00	
	3585 Jun 18 17:16	0°♍			3590 May 31 18:10	0°♑	
	3585 Jul 29 09:41	0°♎		desc. node	3590 Jul 28 00:25	23°♑24'22	
	3585 Sep 11 19:34	0°♏			3590 Aug 09 06:18	0°♒	
asc. node	3585 Oct 10 01:38	16°♏18'19			3590 Sep 27 20:41	0°♑	
	3585 Nov 11 08:54	0°♐			3590 Nov 10 20:41	0°♓	
retrograde	3585 Dec 06 23:41	4°♐10'25			3590 Dec 21 14:41	0°♊	
	3585 Dec 31 07:01	30°♋♏			3591 Jan 29 10:27	0°♋	
min. Earth dist.	3586 Jan 08 15:51	26°♏58'54	0.57046 AU	evening set	3591 Feb 25 20:44	21°♋38'25	
greatest brilliancy	3586 Jan 14 04:21	24°♏49'37	-1.8m		3591 Mar 08 10:14	0°♌	
opposition	3586 Jan 15 03:24	24°♏27'06	3°58'32		3591 Apr 15 13:58	0°♍	
direct	3586 Feb 20 15:03	16°♏09'30					
	3586 Apr 16 02:38	0°♐		conjunction	3591 May 05 16:05	15°♋30'37	-0°18'12
	3586 Jun 14 21:12	0°♐		minimum elong	3591 May 05 17:46	15°♋33'49	0°18'12
	3586 Aug 05 14:43	0°♑			3591 May 24 18:45	0°♎	
	3586 Sep 22 22:57	0°♒		asc. node	3591 Jun 01 22:12	6°♎05'06	
desc. node	3586 Oct 23 02:50	19°♒38'38		max. Earth dist.	3591 Jun 25 17:19	23°♎32'13	2.44151 AU
evening set	3586 Nov 06 15:21	29°♒22'18			3591 Jul 04 17:06	0°♏	
	3586 Nov 07 13:39	0°♑		morning rise	3591 Jul 09 23:56	3°♏45'54	
max. Earth dist.	3586 Nov 22 16:45	10°♑20'19	2.52648 AU		3591 Aug 16 20:30	0°♐	
	3586 Dec 20 16:37	0°♓			3591 Oct 01 13:06	0°♐	
					3591 Nov 19 11:58	0°♑	
conjunction	3586 Dec 26 02:51	3°♓53'28	-0°35'35		3592 Jan 14 03:56	0°♒	
minimum elong	3586 Dec 26 01:26	3°♓50'55	0°35'33	retrograde	3592 Mar 22 23:36	20°♒04'18	
	3587 Jan 30 16:26	0°♊		opposition	3592 Apr 30 14:40	11°♒17'04	1°40'02
morning rise	3587 Feb 18 13:09	14°♊14'15		greatest brilliancy	3592 Apr 30 22:26	11°♒09'33	-1.5m
	3587 Mar 11 02:25	0°♋		min. Earth dist.	3592 May 05 13:28	9°♒22'25	0.63329 AU
	3587 Apr 18 15:24	0°♌		direct	3592 Jun 10 23:27	1°♒17'25	
	3587 May 27 03:20	0°♍		desc. node	3592 Jun 13 23:45	1°♒20'49	
	3587 Jul 05 13:03	0°♎			3592 Aug 31 22:10	0°♑	
	3587 Aug 15 23:20	0°♏			3592 Oct 18 13:57	0°♓	
asc. node	3587 Aug 27 23:54	8°♏18'03			3592 Nov 29 10:48	0°♊	
	3587 Sep 30 04:43	0°♐			3593 Jan 07 16:55	0°♋	
	3587 Nov 24 06:08	0°♐			3593 Feb 14 23:13	0°♌	
retrograde	3588 Jan 13 00:35	12°♐42'58			3593 Mar 25 10:20	0°♍	
min. Earth dist.	3588 Feb 19 13:41	3°♐51'44	0.65641 AU	asc. node	3593 Apr 18 20:24	18°♋38'26	
opposition	3588 Feb 22 07:12	2°♐46'12	4°36'24		3593 May 04 00:31	0°♎	
greatest brilliancy	3588 Feb 21 20:16	2°♐57'08	-1.4m	evening set	3593 May 06 12:09	1°♎50'33	
	3588 Feb 29 09:21	30°♋♐			3593 Jun 14 08:56	0°♏	
direct	3588 Apr 01 20:25	23°♐24'02					
	3588 May 07 22:46	0°♐		conjunction	3593 Jul 04 20:53	14°♏20'42	0°44'58
	3588 Jul 12 14:09	0°♑		minimum elong	3593 Jul 04 18:57	14°♏17'22	0°44'56
	3588 Sep 02 00:48	0°♒			3593 Jul 27 18:50	0°♐	
desc. node	3588 Sep 09 01:21	4°♒22'06		max. Earth dist.	3593 Aug 04 05:27	5°♐00'10	2.56918 AU
	3588 Oct 18 13:10	0°♑		morning rise	3593 Aug 26 18:16	19°♐55'54	
	3588 Nov 30 16:56	0°♓			3593 Sep 11 05:25	0°♐	
evening set	3588 Dec 23 02:42	16°♓20'52			3593 Oct 28 12:57	0°♑	
	3589 Jan 10 08:16	0°♊			3593 Dec 16 22:40	0°♒	
max. Earth dist.	3589 Jan 13 19:12	2°♊37'09	2.39761 AU		3594 Feb 08 11:24	0°♑	
	3589 Feb 18 06:53	0°♋		desc. node	3594 May 01 22:14	29°♑18'30	
				retrograde	3594 May 07 02:56	29°♑28'14	
conjunction	3589 Feb 20 13:51	1°♋47'28	-1°04'56	opposition	3594 Jun 11 21:05	22°♑00'53	-1°50'11
minimum elong	3589 Feb 20 13:59	1°♋47'44	1°04'55	greatest brilliancy	3594 Jun 12 09:47	21°♑49'30	-2.0m
	3589 Mar 28 09:29	0°♌		min. Earth dist.	3594 Jun 19 23:54	19°♑06'45	0.52780 AU
morning rise	3589 May 01 02:35	26°♌31'16		direct	3594 Jul 21 03:19	12°♑54'55	
	3589 May 05 13:35	0°♍			3594 Sep 15 16:43	0°♓	
	3589 Jun 13 16:14	0°♎			3594 Nov 03 12:07	0°♊	
asc. node	3589 Jul 14 23:38	23°♎07'38			3594 Dec 15 01:25	0°♋	

	3595 Jan 23 14:27	0°♿		3600 Jan 16 21:11	0°♿
	3595 Mar 04 01:55	0°♿		3600 Feb 28 05:24	0°♿
asc. node	3595 Mar 06 20:24	2°♿04'59		3600 Apr 09 05:15	0°♿
	3595 Apr 13 14:48	0°♿		3600 May 19 08:52	0°♿
	3595 May 25 20:11	0°♿		3600 Jun 28 14:12	0°♿
evening set	3595 Jun 29 09:30	23°♿36'19		3600 Aug 09 15:40	0°♿
	3595 Jul 08 22:51	0°♿		3600 Sep 27 15:37	0°♿
			asc. node	3600 Oct 26 17:32	12°♿16'47
conjunction	3595 Aug 18 19:00	26°♿48'39 1°07'54	retrograde	3600 Nov 20 11:44	16°♿19'36
minimum elong	3595 Aug 18 18:42	26°♿48'10 1°07'54	min. Earth dist.	3600 Dec 20 23:02	9°♿56'49 0.52188 AU
	3595 Aug 23 17:19	0°♿	opposition	3600 Dec 28 15:12	7°♿02'55 3°02'41
max. Earth dist.	3595 Aug 30 23:09	4°♿40'10 2.65037 AU	greatest brilliancy	3600 Dec 27 17:22	7°♿23'33 -2.0m
morning rise	3595 Oct 04 07:41	26°♿37'04		3601 Jan 22 22:51	30°♿♿
	3595 Oct 09 15:38	0°♿	direct	3601 Feb 01 11:53	29°♿♿23'27
	3595 Nov 26 05:49	0°♿		3601 Feb 11 10:22	0°♿
	3596 Jan 13 09:12	0°♿		3601 May 01 02:50	0°♿
	3596 Mar 02 17:38	0°♿		3601 Jun 24 00:22	0°♿
desc. node	3596 Mar 18 20:59	9°♿28'25		3601 Aug 13 04:24	0°♿
	3596 Apr 25 00:45	0°♿		3601 Sep 29 23:40	0°♿
retrograde	3596 Jul 10 15:29	25°♿09'15	evening set	3601 Oct 21 22:03	14°♿16'03
opposition	3596 Aug 10 16:38	19°♿47'51 -6°21'29	desc. node	3601 Nov 08 17:58	26°♿07'22
greatest brilliancy	3596 Aug 12 00:51	19°♿24'34 -2.7m	max. Earth dist.	3601 Nov 10 01:13	26°♿59'54 2.57039 AU
min. Earth dist.	3596 Aug 16 17:43	18°♿03'45 0.39955 AU		3601 Nov 14 12:01	0°♿
direct	3596 Sep 12 10:24	13°♿39'54			
	3596 Nov 04 22:09	0°♿	conjunction	3601 Dec 08 08:51	16°♿21'44 -0°16'53
	3596 Dec 23 21:49	0°♿	minimum elong	3601 Dec 08 08:11	16°♿20'35 0°16'52
asc. node	3597 Jan 21 19:30	19°♿43'53		3601 Dec 27 18:28	0°♿
	3597 Feb 05 14:32	0°♿			
	3597 Mar 20 21:10	0°♿			
	3597 May 04 02:22	0°♿			
	3597 Jun 18 15:15	0°♿			
	3597 Aug 04 06:49	0°♿			
evening set	3597 Aug 09 07:41	3°♿12'38			
	3597 Sep 20 11:06	0°♿			
max. Earth dist.	3597 Sep 22 09:05	1°♿13'04 2.67763 AU			
conjunction	3597 Sep 24 12:33	2°♿34'53 0°59'15			
minimum elong	3597 Sep 24 13:30	2°♿36'23 0°59'15			
	3597 Nov 06 11:23	0°♿			
morning rise	3597 Nov 07 17:43	0°♿48'41			
	3597 Dec 22 19:29	0°♿			
desc. node	3598 Feb 03 20:05	28°♿22'12			
	3598 Feb 06 06:52	0°♿			
	3598 Mar 22 23:16	0°♿			
	3598 May 06 05:19	0°♿			
	3598 Jun 20 03:52	0°♿			
	3598 Aug 09 22:55	0°♿			
retrograde	3598 Sep 28 02:49	14°♿08'21			
min. Earth dist.	3598 Oct 24 11:42	9°♿39'54 0.39466 AU			
opposition	3598 Oct 30 20:22	7°♿46'20 -2°39'03			
greatest brilliancy	3598 Oct 30 08:05	7°♿55'30 -2.8m			
direct	3598 Nov 30 00:31	2°♿21'09			
asc. node	3598 Dec 09 17:59	2°♿57'42			
	3599 Feb 16 20:16	0°♿			
	3599 Apr 09 12:30	0°♿			
	3599 May 28 14:47	0°♿			
	3599 Jul 16 03:56	0°♿			
	3599 Sep 02 05:16	0°♿			
evening set	3599 Sep 15 11:41	8°♿22'41			
max. Earth dist.	3599 Oct 15 12:35	27°♿33'57 2.65019 AU			
	3599 Oct 19 07:06	0°♿			
conjunction	3599 Oct 30 17:45	7°♿25'37 0°28'30			
minimum elong	3599 Oct 30 18:36	7°♿26'59 0°28'29			
	3599 Dec 03 22:07	0°♿			
morning rise	3599 Dec 14 19:25	7°♿19'23			
desc. node	3599 Dec 22 18:51	12°♿43'54			