


























































































































conjunction	12100 Nov 28 01:22	16°♊54'14	0°52'30			12105 Nov 13 18:19	0°♏	
minimum elong	12100 Nov 28 03:16	16°♊57'34	0°53'18	asc. node		12105 Dec 21 10:01	22°♏05'53	
	12100 Dec 16 22:31	0°♊				12106 Jan 06 16:37	0°♏	
max. Earth dist.	12100 Dec 30 23:52	9°♊33'50	2.55385 AU	retrograde		12106 Feb 15 18:06	9°♏49'03	
morning rise	12101 Jan 19 20:43	22°♊50'06		min. Earth dist.		12106 Mar 13 23:32	5°♏33'45	0.37569 AU
	12101 Jan 30 18:25	0°♊		opposition		12106 Mar 18 22:45	4°♏10'04	5°44'54
desc. node	12101 Mar 13 15:25	26°♊48'11		greatest brilliancy		12106 Mar 17 20:53	4°♏28'17	-2.9m
	12101 Mar 18 18:08	0°♊				12106 Apr 05 22:48	30°♏♏	
	12101 May 07 04:15	0°♊		direct		12106 Apr 17 06:13	29°♏08'22	
	12101 Jun 29 23:16	0°♊				12106 Apr 28 18:18	0°♏	
retrograde	12101 Sep 27 03:34	29°♊55'51				12106 Jul 09 23:55	0°♏	
opposition	12101 Nov 02 16:24	22°♊06'35	-5°08'55			12106 Aug 29 14:08	0°♊	
greatest brilliancy	12101 Nov 04 02:37	21°♊35'00	-1.8m			12106 Oct 17 05:41	0°♊	
min. Earth dist.	12101 Nov 10 10:40	19°♊15'27	0.55362 AU	desc. node		12106 Nov 03 03:34	10°♊28'42	
direct	12101 Dec 12 10:28	12°♊41'25				12106 Dec 04 14:52	0°♊	
	12102 Feb 07 18:00	0°♊				12107 Jan 21 18:16	0°♊	
asc. node	12102 Mar 17 23:38	22°♊47'52		evening set		12107 Feb 07 19:47	10°♊43'26	
	12102 Mar 28 16:19	0°♊				12107 Mar 10 04:44	0°♊	
	12102 May 09 03:50	0°♊		max. Earth dist.		12107 Mar 11 18:18	1°♊00'04	2.66491 AU
	12102 Jun 17 09:06	0°♊						
	12102 Jul 26 07:28	0°♊		conjunction		12107 Mar 23 21:04	8°♊46'53	-1°01'51
	12102 Sep 04 03:35	0°♊		minimum elong		12107 Mar 23 20:07	8°♊45'21	1°01'53
	12102 Oct 15 14:58	0°♊				12107 Apr 25 10:41	0°♊	
evening set	12102 Nov 23 03:43	26°♊41'26		morning rise		12107 May 06 23:52	7°♊38'37	
	12102 Nov 28 00:59	0°♊				12107 Jun 09 04:36	0°♊	
conjunction	12103 Jan 12 02:20	29°♊51'39	0°09'23			12107 Jul 22 08:21	0°♊	
minimum elong	12103 Jan 12 02:43	29°♊52'15	0°10'09			12107 Sep 02 00:35	0°♊	
behind sun begin	12103 Jan 11 11:15	29°♊27'05		asc. node		12107 Oct 12 14:04	0°♊	
behind sun end	12103 Jan 12 18:11	0°♊17'25				12107 Nov 08 06:10	19°♊54'45	
	12103 Jan 12 07:28	0°♊				12107 Nov 21 19:50	0°♊	
max. Earth dist.	12103 Jan 26 18:28	9°♊22'04	2.64554 AU			12108 Jan 02 10:06	0°♊	
desc. node	12103 Jan 29 04:44	10°♊55'56		retrograde		12108 Feb 19 04:11	0°♊	
morning rise	12103 Feb 26 22:07	29°♊17'08		min. Earth dist.		12108 Apr 14 13:54	17°♊30'45	
	12103 Feb 28 01:09	0°♊		greatest brilliancy		12108 May 14 01:29	11°♊30'40	0.50001 AU
	12103 Apr 16 19:47	0°♊		opposition		12108 May 20 19:09	9°♊01'45	-2.1m
	12103 Jun 04 12:38	0°♊		direct		12108 May 22 03:10	8°♊32'10	4°49'53
	12103 Jul 24 19:15	0°♊				12108 Jun 25 08:48	1°♊12'33	
	12103 Sep 17 20:33	0°♊		desc. node		12108 Sep 18 16:34	0°♊	
retrograde	12103 Nov 27 03:00	21°♊35'02				12108 Sep 20 11:13	0°♊55'04	
opposition	12103 Dec 28 18:35	15°♊49'25	-2°27'01			12108 Nov 12 03:04	0°♊	
greatest brilliancy	12103 Dec 29 15:00	15°♊33'41	-2.7m			12109 Jan 01 16:34	0°♊	
min. Earth dist.	12104 Jan 05 10:30	13°♊28'27	0.41424 AU	evening set		12109 Feb 18 23:51	0°♊	
direct	12104 Jan 31 21:56	8°♊58'12		max. Earth dist.		12109 Mar 14 17:04	15°♊14'03	
asc. node	12104 Feb 03 05:57	9°♊00'35				12109 Apr 04 13:15	28°♊55'27	2.59317 AU
	12104 Apr 02 04:23	0°♊				12109 Apr 06 04:05	0°♊	
	12104 May 18 14:36	0°♊		conjunction		12109 Apr 29 19:54	15°♊56'35	-1°08'45
	12104 Jun 29 23:44	0°♊		minimum elong		12109 Apr 29 20:20	15°♊57'20	1°09'18
	12104 Aug 11 05:55	0°♊				12109 May 20 04:31	0°♊	
	12104 Sep 23 15:41	0°♊		morning rise		12109 Jun 18 05:50	20°♊37'03	
	12104 Nov 07 13:49	0°♊				12109 Jul 01 04:04	0°♊	
desc. node	12104 Dec 16 00:52	24°♊58'51				12109 Aug 10 10:26	0°♊	
	12104 Dec 23 20:26	0°♊				12109 Sep 18 12:11	0°♊	
evening set	12105 Jan 02 16:47	6°♊18'09		asc. node		12109 Sep 24 20:39	4°♊55'47	
	12105 Feb 08 22:58	0°♊				12109 Oct 27 02:50	0°♊	
conjunction	12105 Feb 16 22:16	5°♊03'16	-0°32'37			12109 Dec 05 06:13	0°♊	
minimum elong	12105 Feb 16 21:22	5°♊01'50	0°32'11			12110 Jan 15 07:48	0°♊	
max. Earth dist.	12105 Feb 17 13:54	5°♊28'04	2.68298 AU			12110 Mar 01 23:21	0°♊	
	12105 Mar 28 05:49	0°♊		retrograde		12110 May 07 23:59	0°♊	
morning rise	12105 Apr 01 06:21	2°♊33'28				12110 May 25 13:56	1°♊57'50	
	12105 May 14 04:28	0°♊		min. Earth dist.		12110 Jun 11 09:45	30°♊♏	
	12105 Jun 29 12:14	0°♊		opposition		12110 Jun 29 19:23	23°♊57'13	0.61874 AU
	12105 Aug 14 04:41	0°♊		greatest brilliancy		12110 Jul 04 18:14	21°♊59'58	1°21'35
	12105 Sep 28 13:02	0°♊		desc. node		12110 Jul 04 12:37	22°♊05'30	-1.6m
						12110 Aug 08 19:48	13°♊12'37	

direct	12110 Aug 12 03:04	13°  08'34		evening set	12115 Aug 31 21:43	5°  02'48	
	12110 Oct 13 14:23	0° 			12115 Oct 03 06:07	0° 	
	12110 Dec 11 03:35	0° 					
	12111 Jan 30 19:24	0° 		conjunction	12115 Nov 06 21:22	25°  49'32	1°03'38
	12111 Mar 18 14:33	0° 		minimum elong	12115 Nov 06 22:42	25°  51'59	1°04'16
evening set	12111 Apr 24 13:04	25°  09'38			12115 Nov 12 14:57	0° 	
	12111 May 01 10:30	0° 		max. Earth dist.	12115 Dec 18 12:20	25°  28'32	2.50408 AU
max. Earth dist.	12111 May 08 09:11	4°  55'20	2.47383 AU		12115 Dec 25 01:23	0° 	
	12111 Jun 11 19:56	0° 		morning rise	12116 Jan 03 11:34	6°  327'04	
					12116 Feb 07 19:44	0° 	
conjunction	12111 Jun 17 00:16	3°  51'45	-0°37'26		12116 Mar 26 02:52	0° 	
minimum elong	12111 Jun 17 02:25	3°  55'46	0°38'16	desc. node	12116 Mar 30 09:45	2°  37'50	
	12111 Jul 21 08:55	0° 			12116 May 15 19:46	0° 	
asc. node	12111 Aug 12 12:23	17°  014'02			12116 Jul 13 23:16	0° 	
morning rise	12111 Aug 19 15:30	22°  049'38		retrograde	12116 Sep 09 02:01	14°  331'43	
	12111 Aug 28 18:20	0° 		opposition	12116 Oct 16 21:54	6°  09'29	-5°02'50
greatest brilliancy	12111 Sep 10 24:00	10°  026'29	1.2m	greatest brilliancy	12116 Oct 18 00:36	5°  44'09	-1.6m
	12111 Oct 05 19:30	0° 		min. Earth dist.	12116 Oct 23 08:31	3°  43'08	0.59947 AU
	12111 Nov 13 09:50	0° 			12116 Nov 03 05:10	30° 	
	12111 Dec 23 12:28	0° 		direct	12116 Nov 26 16:26	26°  020'48	
	12112 Feb 04 06:25	0° 			12116 Dec 21 11:16	0° 	
	12112 Mar 22 15:51	0° 			12117 Feb 22 11:28	0° 	
	12112 May 23 04:02	0° 		asc. node	12117 Apr 03 12:36	26°  38'55	
desc. node	12112 Jun 25 23:39	6°  56'28			12117 Apr 08 05:26	0° 	
retrograde	12112 Jun 28 10:28	6°  58'45			12117 May 18 12:40	0° 	
	12112 Jul 31 19:11	30° 			12117 Jun 26 03:55	0° 	
min. Earth dist.	12112 Aug 06 23:22	27°  35'24	0.67879 AU		12117 Aug 03 15:34	0° 	
opposition	12112 Aug 08 04:09	27°  06'52	-1°31'14		12117 Sep 12 01:15	0° 	
greatest brilliancy	12112 Aug 08 01:47	27°  09'13	-1.3m		12117 Oct 23 02:24	0° 	
direct	12112 Sep 17 22:25	17°  26'39		evening set	12117 Nov 03 17:57	8°  215'44	
	12112 Nov 09 08:27	0° 			12117 Dec 05 03:23	0° 	
	12113 Jan 07 22:23	0° 					
	12113 Feb 25 20:58	0° 		conjunction	12117 Dec 26 23:49	14°  342'54	0°27'01
	12113 Apr 11 04:19	0° 		minimum elong	12117 Dec 27 00:55	14°  344'45	0°27'51
	12113 May 22 10:17	0° 		max. Earth dist.	12118 Jan 17 04:41	28°  342'42	2.61599 AU
evening set	12113 Jun 17 06:07	19°  537'54			12118 Jan 19 04:00	0° 	
asc. node	12113 Jun 29 06:48	28°  57'09		morning rise	12118 Feb 12 20:36	15°  358'26	
	12113 Jun 30 15:04	0° 		desc. node	12118 Feb 14 22:47	17°  318'49	
	12113 Aug 07 16:55	0° 			12118 Mar 06 21:34	0° 	
					12118 Apr 24 02:35	0° 	
conjunction	12113 Aug 25 04:17	13°  052'02	0°38'45		12118 Jun 13 02:11	0° 	
minimum elong	12113 Aug 25 00:32	13°  044'35	0°38'23		12118 Aug 05 23:16	0° 	
	12113 Sep 14 13:44	0° 		retrograde	12118 Oct 31 03:47	28°  356'19	
max. Earth dist.	12113 Sep 28 22:11	11°  016'01	2.36709 AU	opposition	12118 Dec 03 22:44	22°  316'05	-4°15'24
	12113 Oct 23 02:53	0° 		greatest brilliancy	12118 Dec 05 10:29	21°  345'49	-2.3m
morning rise	12113 Nov 06 09:31	10°  051'10		min. Earth dist.	12118 Dec 12 18:20	19°  317'48	0.46888 AU
	12113 Dec 02 03:59	0° 		direct	12119 Jan 09 22:42	14°  305'29	
	12114 Jan 13 09:56	0° 		asc. node	12119 Feb 19 20:20	24°  318'47	
	12114 Feb 27 14:20	0° 			12119 Mar 03 12:12	0° 	
	12114 Apr 18 03:31	0° 			12119 Apr 20 15:25	0° 	
desc. node	12114 May 13 19:32	13°  052'58			12119 Jun 01 03:40	0° 	
	12114 Jun 18 12:37	0° 			12119 Jul 11 11:05	0° 	
retrograde	12114 Aug 01 22:32	9°  032'51			12119 Aug 21 09:15	0° 	
opposition	12114 Sep 10 21:20	0°  013'27	-3°42'43		12119 Oct 02 19:11	0° 	
greatest brilliancy	12114 Sep 11 04:08	0°  006'48	-1.3m		12119 Nov 15 23:34	0° 	
	12114 Sep 11 11:04	30° 		evening set	12119 Dec 19 12:52	22°  304'15	
min. Earth dist.	12114 Sep 13 12:35	29°  011'30	0.67260 AU		12119 Dec 31 18:30	0° 	
direct	12114 Oct 22 12:36	20°  011'36		desc. node	12120 Jan 02 14:56	1°  311'44	
	12114 Dec 05 23:10	0° 					
	12115 Feb 02 21:23	0° 		conjunction	12120 Feb 04 02:02	22°  300'07	-0°17'25
	12115 Mar 21 08:10	0° 		minimum elong	12120 Feb 04 01:29	21°  359'16	0°16'50
	12115 May 02 03:17	0° 		max. Earth dist.	12120 Feb 09 19:49	25°  339'28	2.67498 AU
asc. node	12115 May 17 06:42	11°  024'01			12120 Feb 16 15:47	0° 	
	12115 Jun 10 09:51	0°		morning rise	12120 Mar 18 23:49	19°  351'00	
greatest brilliancy	12115 Jul 01 02:32	16°  014'41	1.2m		12120 Apr 04 01:09	0°	
	12115 Jul 18 11:47	0°			12120 May 21 11:59	0°	
	12115 Aug 25 11:03	0°			12120 Jul 07 21:26	0°	

	12120 Aug 24 13:25	0°☾		desc. node	12125 Aug 25 05:28	3°☾12'24	
	12120 Oct 12 20:05	0°♊			12125 Oct 26 15:11	0°♊	
	12120 Dec 11 03:27	0°♋			12125 Dec 19 15:33	0°♋	
asc. node	12121 Jan 07 00:29	6°♋45'56			12126 Feb 07 03:02	0°♋	
retrograde	12121 Jan 15 09:52	7°♋13'30			12126 Mar 25 14:26	0°♋	
opposition	12121 Feb 13 23:30	2°♋20'07	2°54'58	evening set	12126 Apr 07 16:04	8°♋45'47	
greatest brilliancy	12121 Feb 13 23:17	2°♋20'15	-3.1m	max. Earth dist.	12126 Apr 23 08:50	19°♋28'59	2.52528 AU
min. Earth dist.	12121 Feb 14 18:19	2°♋07'40	0.36477 AU		12126 May 08 11:12	0°♋	
	12121 Feb 23 02:51	30°♋♊					
direct	12121 Mar 15 14:19	27°♊22'43		conjunction	12126 May 27 08:07	13°♊25'33	-0°55'28
	12121 Apr 04 13:34	0°♋		minimum elong	12126 May 27 09:53	13°♊28'42	0°56'15
	12121 Jun 07 00:29	0°♊			12126 Jun 19 01:31	0°☾	
	12121 Jul 24 16:01	0°♋		morning rise	12126 Jul 23 00:10	25°☾31'13	
	12121 Sep 08 22:10	0°♊			12126 Jul 28 20:34	0°♊	
	12121 Oct 25 14:22	0°☾		asc. node	12126 Aug 29 07:15	24°♊22'55	
desc. node	12121 Nov 19 14:58	15°☾54'03			12126 Sep 05 11:31	0°♋	
	12121 Dec 11 22:38	0°♊			12126 Oct 13 16:49	0°♊	
evening set	12122 Jan 25 01:22	27°♊46'56			12126 Nov 21 10:08	0°♋	
	12122 Jan 28 13:50	0°♋			12126 Dec 31 17:11	0°♊	
max. Earth dist.	12122 Mar 03 03:47	21°♋14'47	2.67867 AU		12127 Feb 13 00:53	0°☾	
					12127 Apr 03 18:23	0°♊	
conjunction	12122 Mar 10 04:49	25°♋43'44	-0°52'36	retrograde	12127 Jun 16 04:38	24°♊08'28	
minimum elong	12122 Mar 10 03:44	25°♋41'59	0°52'27	desc. node	12127 Jul 13 11:48	19°♊15'30	
	12122 Mar 16 21:28	0°♋		min. Earth dist.	12127 Jul 24 04:55	15°♊14'11	0.66283 AU
morning rise	12122 Apr 22 14:12	23°♋38'24		opposition	12127 Jul 26 21:20	14°♊10'16	-0°29'31
	12122 May 02 08:20	0°♋		greatest brilliancy	12127 Jul 26 19:58	14°♊11'38	-1.4m
	12122 Jun 16 14:03	0°♋		direct	12127 Sep 04 21:31	4°♊45'33	
	12122 Jul 30 11:49	0°☾			12127 Nov 24 06:40	0°♋	
	12122 Sep 11 03:04	0°♊			12128 Jan 17 15:08	0°♋	
	12122 Oct 22 20:56	0°♋			12128 Mar 05 11:17	0°♋	
asc. node	12122 Nov 25 00:37	23°♋48'34			12128 Apr 18 12:15	0°♋	
	12122 Dec 03 18:51	0°♊		evening set	12128 May 24 11:44	26°♋03'34	
	12123 Jan 18 02:23	0°♋			12128 May 29 18:44	0°☾	
retrograde	12123 Mar 26 20:25	25°♋01'05		max. Earth dist.	12128 Jun 14 08:13	11°☾44'05	2.39052 AU
min. Earth dist.	12123 Apr 22 23:06	19°♋56'25	0.44509 AU		12128 Jul 08 02:00	0°♊	
greatest brilliancy	12123 Apr 29 15:10	17°♋40'08	-2.4m	asc. node	12128 Jul 15 23:29	6°♊09'14	
opposition	12123 May 01 08:01	17°♋05'00	6°00'02				
direct	12123 Jun 02 13:37	10°♋38'21		conjunction	12128 Jul 25 21:26	13°♊55'36	0°07'10
	12123 Aug 06 11:15	0°♊		minimum elong	12128 Jul 25 20:48	13°♊54'20	0°06'29
	12123 Oct 01 11:21	0°☾		behind sun begin	12128 Jul 24 17:53	13°♊01'28	
desc. node	12123 Oct 07 21:16	3°☾40'55		behind sun end	12128 Jul 26 23:42	14°♊47'13	
	12123 Nov 21 14:07	0°♊			12128 Aug 15 06:06	0°♋	
	12124 Jan 09 22:43	0°♋			12128 Sep 22 03:54	0°♊	
	12124 Feb 26 19:39	0°♋		morning rise	12128 Oct 07 08:08	11°♊54'54	
evening set	12124 Feb 29 11:57	1°♋42'34			12128 Oct 30 16:30	0°♋	
max. Earth dist.	12124 Mar 25 08:13	17°♋44'38	2.62768 AU		12128 Dec 09 16:33	0°♊	
	12124 Apr 12 23:29	0°♋			12129 Jan 20 23:59	0°☾	
					12129 Mar 07 15:47	0°♊	
conjunction	12124 Apr 14 08:01	0°♋54'01	-1°09'33		12129 Apr 28 06:53	0°♋	
minimum elong	12124 Apr 14 07:45	0°♋53'33	1°09'55	desc. node	12129 May 30 12:10	15°♋14'59	
	12124 May 27 05:40	0°♋		retrograde	12129 Jul 19 06:14	27°♋03'21	
morning rise	12124 May 30 21:51	2°♋33'00		opposition	12129 Aug 28 16:06	17°♋28'46	-2°56'50
	12124 Jul 08 14:49	0°☾		greatest brilliancy	12129 Aug 28 17:35	17°♋27'18	-1.3m
	12124 Aug 18 08:07	0°♊		min. Earth dist.	12129 Aug 29 19:09	17°♋02'07	0.68299 AU
	12124 Sep 26 20:30	0°♋		direct	12129 Oct 09 03:39	7°♋32'17	
asc. node	12124 Oct 11 17:54	11°♋26'33			12129 Dec 21 10:42	0°♋	
	12124 Nov 04 21:08	0°♊			12130 Feb 12 04:49	0°♋	
	12124 Dec 14 12:29	0°♋			12130 Mar 29 11:52	0°♋	
	12125 Jan 25 15:08	0°♊			12130 May 09 23:35	0°☾	
	12125 Mar 16 07:06	0°☾		asc. node	12130 Jun 02 22:14	18°☾10'30	
retrograde	12125 May 10 19:32	16°☾35'18			12130 Jun 18 04:14	0°♊	
min. Earth dist.	12125 Jun 12 22:47	9°☾16'51	0.57817 AU		12130 Jul 26 05:07	0°♋	
opposition	12125 Jun 19 07:26	6°☾48'21	2°39'49	evening set	12130 Aug 01 04:02	4°♋43'34	
greatest brilliancy	12125 Jun 18 17:22	7°☾02'03	-1.8m		12130 Sep 02 02:24	0°♊	
	12125 Jul 10 18:37	30°♋♊			12130 Oct 10 17:56	0°♋	
direct	12125 Jul 26 07:07	28°♊26'08					
	12125 Aug 11 18:29	0°☾		conjunction	12130 Oct 11 21:32	0°♋52'38	1°05'36

minimum elong	12130 Oct 11 20:28	0°♄50'37	1°05'58		12135 Sep 07 09:08	0°♄	
	12130 Nov 19 22:19	0°♂			12135 Nov 08 20:24	0°♂	
max. Earth dist.	12130 Dec 01 10:27	8°♂19'30	2.44887 AU	retrograde	12135 Dec 14 04:09	6°♂50'55	
morning rise	12130 Dec 14 16:48	17°♂46'23		opposition	12136 Jan 13 19:07	1°♂33'53	-0°47'53
	12131 Jan 01 05:16	0°♄		greatest brilliancy	12136 Jan 14 01:01	1°♂29'38	-2.9m
	12131 Feb 15 00:26	0°♂			12136 Jan 19 05:59	30°♂	
	12131 Apr 03 20:29	0°♂		min. Earth dist.	12136 Jan 19 19:08	29°♂50'45	0.38926 AU
desc. node	12131 Apr 17 03:36	7°♂55'04		asc. node	12136 Jan 24 16:31	28°♂31'59	
	12131 May 26 15:55	0°♂		direct	12136 Feb 15 00:41	25°♂31'49	
	12131 Aug 15 17:16	0°♂			12136 Mar 11 23:55	0°♂	
retrograde	12131 Aug 24 22:05	0°♂29'39			12136 May 08 18:40	0°♂	
	12131 Sep 02 19:41	30°♂			12136 Jun 22 12:01	0°♂	
opposition	12131 Oct 02 18:24	21°♂41'21	-4°40'03		12136 Aug 04 22:04	0°♄	
greatest brilliancy	12131 Oct 03 12:42	21°♂23'42	-1.4m		12136 Sep 18 01:11	0°♂	
min. Earth dist.	12131 Oct 07 17:52	19°♂46'14	0.63586 AU		12136 Nov 02 11:04	0°♄	
direct	12131 Nov 13 03:09	11°♂41'42		desc. node	12136 Dec 06 03:09	21°♄44'33	
	12132 Jan 14 04:56	0°♂			12136 Dec 19 01:11	0°♂	
	12132 Mar 05 09:34	0°♂		evening set	12137 Jan 11 00:11	14°♂36'07	
	12132 Apr 17 10:31	0°♄			12137 Feb 04 07:24	0°♂	
asc. node	12132 Apr 20 01:24	1°♄55'24		max. Earth dist.	12137 Feb 22 13:28	11°♂33'39	2.68390 AU
	12132 May 27 03:47	0°♂					
	12132 Jul 04 11:30	0°♂		conjunction	12137 Feb 24 16:54	12°♂55'10	-0°40'41
	12132 Aug 11 16:34	0°♂		minimum elong	12137 Feb 24 15:52	12°♂53'32	0°40'21
	12132 Sep 19 18:47	0°♄			12137 Mar 23 14:08	0°♂	
evening set	12132 Oct 12 09:39	16°♄50'27		morning rise	12137 Apr 08 21:59	10°♂25'35	
	12132 Oct 30 11:46	0°♂			12137 May 09 07:58	0°♂	
					12137 Jun 24 05:15	0°♂	
conjunction	12132 Dec 09 03:45	27°♂53'44	0°43'52		12137 Aug 08 03:56	0°♄	
minimum elong	12132 Dec 09 05:28	27°♂56'43	0°44'43		12137 Sep 21 06:56	0°♂	
	12132 Dec 12 05:20	0°♄			12137 Nov 04 05:43	0°♂	
max. Earth dist.	12133 Jan 06 14:59	17°♄09'47	2.57809 AU	asc. node	12137 Dec 11 18:09	24°♂38'35	
	12133 Jan 26 01:30	0°♂			12137 Dec 20 10:48	0°♂	
morning rise	12133 Jan 28 21:45	1°♂51'27		retrograde	12138 Mar 03 06:10	27°♂39'15	
desc. node	12133 Mar 03 15:57	23°♂33'05		min. Earth dist.	12138 Mar 28 22:39	23°♂18'14	0.39546 AU
	12133 Mar 13 21:24	0°♂		greatest brilliancy	12138 Apr 03 09:20	21°♂40'13	-2.8m
	12133 May 01 18:11	0°♂		opposition	12138 Apr 04 22:18	21°♂12'13	6°20'46
	12133 Jun 22 17:53	0°♂		direct	12138 May 05 03:04	15°♂44'29	
	12133 Aug 23 23:12	0°♂			12138 Jun 26 17:14	0°♄	
retrograde	12133 Oct 08 11:07	9°♂58'53			12138 Aug 21 23:10	0°♂	
opposition	12133 Nov 13 03:18	2°♂31'37	-5°00'47		12138 Oct 11 07:37	0°♄	
greatest brilliancy	12133 Nov 14 16:22	1°♂58'14	-2.0m	desc. node	12138 Oct 24 07:09	7°♄53'01	
	12133 Nov 20 03:50	30°♂			12138 Nov 29 11:15	0°♂	
min. Earth dist.	12133 Nov 21 12:29	29°♂31'16	0.52461 AU		12139 Jan 16 23:31	0°♂	
direct	12133 Dec 22 03:02	23°♂26'42		evening set	12139 Feb 15 16:11	18°♂38'05	
	12134 Jan 23 20:42	0°♂			12139 Mar 05 13:30	0°♂	
asc. node	12134 Mar 08 08:51	22°♂03'31		max. Earth dist.	12139 Mar 16 23:33	7°♂19'18	2.65395 AU
	12134 Mar 20 21:46	0°♄					
	12134 May 02 16:30	0°♂		conjunction	12139 Mar 31 20:35	16°♂56'39	-1°05'49
	12134 Jun 11 10:50	0°♂		minimum elong	12139 Mar 31 19:49	16°♂55'24	1°05'59
	12134 Jul 20 17:44	0°♂			12139 Apr 20 18:44	0°♂	
	12134 Aug 29 20:49	0°♄		morning rise	12139 May 15 15:11	16°♂35'06	
	12134 Oct 10 14:25	0°♂			12139 Jun 04 08:25	0°♂	
	12134 Nov 23 05:36	0°♄			12139 Jul 17 05:12	0°♄	
evening set	12134 Dec 03 04:46	6°♄40'41			12139 Aug 27 12:24	0°♂	
	12135 Jan 07 15:23	0°♂			12139 Oct 06 15:21	0°♂	
desc. node	12135 Jan 19 06:50	7°♂32'25		asc. node	12139 Oct 29 12:23	17°♂18'17	
					12139 Nov 15 07:52	0°♂	
conjunction	12135 Jan 20 16:42	8°♂27'03	-0°00'46		12139 Dec 25 22:14	0°♄	
minimum elong	12135 Jan 20 16:43	8°♂27'04	0°00'03		12140 Feb 08 10:23	0°♂	
behind sun begin	12135 Jan 19 22:45	7°♂58'06		retrograde	12140 Apr 24 14:28	29°♂07'06	
behind sun end	12135 Jan 21 10:41	8°♂56'01		min. Earth dist.	12140 May 25 10:18	22°♂37'34	0.52961 AU
max. Earth dist.	12135 Feb 01 00:51	15°♂44'28	2.65845 AU	greatest brilliancy	12140 May 31 22:59	20°♂09'31	-2.0m
	12135 Feb 23 09:20	0°♂		opposition	12140 Jun 02 00:15	19°♂45'37	4°02'58
morning rise	12135 Mar 06 16:03	7°♂08'50		direct	12140 Jul 07 07:39	12°♂00'57	
	12135 Apr 11 23:35	0°♂			12140 Sep 09 02:30	0°♄	
	12135 May 30 03:31	0°♂		desc. node	12140 Sep 10 16:22	0°♄43'29	
	12135 Jul 18 03:11	0°♂			12140 Nov 05 23:26	0°♂	

	12140 Dec 27 12:39	0°♏			12145 Oct 18 05:41	0°♍	
	12141 Feb 14 05:06	0°♐		max. Earth dist.	12145 Nov 03 18:52	12°♍33'42	2.39270 AU
evening set	12141 Mar 23 03:17	23°♐48'23		morning rise	12145 Nov 21 10:42	25°♍42'35	
	12141 Apr 01 12:06	0°♑			12145 Nov 27 07:01	0°♑	
max. Earth dist.	12141 Apr 10 22:37	6°♑18'36	2.57108 AU		12146 Jan 08 12:06	0°♑	
					12146 Feb 22 10:54	0°♑	
conjunction	12141 May 09 06:04	25°♑39'11	-1°05'49		12146 Apr 12 03:53	0°♏	
minimum elong	12141 May 09 06:59	25°♑40'47	1°06'28	desc. node	12146 May 03 21:30	12°♏18'50	
	12141 May 15 11:41	0°♒			12146 Jun 07 20:54	0°♐	
	12141 Jun 26 08:24	0°♑		retrograde	12146 Aug 09 23:48	17°♐18'13	
morning rise	12141 Jun 29 18:39	2°♑31'04		opposition	12146 Sep 18 15:02	8°♐08'41	-4°06'13
	12141 Aug 05 10:52	0°♓		greatest brilliancy	12146 Sep 19 01:34	7°♐58'25	-1.3m
	12141 Sep 13 08:28	0°♑		min. Earth dist.	12146 Sep 22 02:29	6°♐47'22	0.66255 AU
asc. node	12141 Sep 15 03:41	1°♑24'08			12146 Oct 13 01:11	30°♑♏	
	12141 Oct 21 19:05	0°♒		direct	12146 Oct 30 06:18	28°♏05'52	
	12141 Nov 29 17:20	0°♍			12146 Nov 17 09:43	0°♐	
	12142 Jan 09 09:01	0°♑			12147 Jan 27 02:40	0°♑	
	12142 Feb 22 19:12	0°♑			12147 Mar 15 18:40	0°♒	
	12142 Apr 19 04:49	0°♑			12147 Apr 26 22:43	0°♑	
retrograde	12142 Jun 02 14:31	10°♑37'43		asc. node	12147 May 07 16:29	8°♑01'32	
min. Earth dist.	12142 Jul 08 21:44	2°♑16'24	0.63716 AU		12147 Jun 05 08:28	0°♓	
opposition	12142 Jul 13 01:15	0°♑37'54	0°38'48		12147 Jul 13 11:45	0°♑	
greatest brilliancy	12142 Jul 12 23:03	0°♑40'05	-1.5m		12147 Aug 20 12:14	0°♒	
	12142 Jul 14 15:41	30°♑♑		evening set	12147 Sep 17 07:58	21°♒34'58	
desc. node	12142 Jul 30 00:16	24°♑39'05			12147 Sep 28 08:48	0°♍	
direct	12142 Aug 21 01:58	21°♑33'01			12147 Nov 07 19:17	0°♑	
	12142 Oct 01 18:33	0°♑					
	12142 Dec 04 21:29	0°♏		conjunction	12147 Nov 19 21:09	8°♑41'04	0°58'00
	12143 Jan 25 15:01	0°♐		minimum elong	12147 Nov 19 23:00	8°♑44'22	0°58'45
	12143 Mar 13 18:29	0°♑			12147 Dec 20 07:06	0°♑	
	12143 Apr 26 16:28	0°♒		max. Earth dist.	12147 Dec 26 12:12	4°♑15'35	2.53251 AU
evening set	12143 May 05 00:47	5°♒55'12		morning rise	12148 Jan 13 15:01	16°♑30'18	
max. Earth dist.	12143 May 19 01:48	16°♒02'04	2.44380 AU		12148 Feb 03 00:41	0°♑	
	12143 Jun 07 01:22	0°♑		desc. node	12148 Mar 20 09:58	29°♑35'17	
					12148 Mar 21 01:52	0°♏	
conjunction	12143 Jun 30 06:05	17°♑29'24	-0°23'16		12148 May 09 22:08	0°♐	
minimum elong	12143 Jun 30 07:51	17°♑32'46	0°24'05		12148 Jul 04 08:46	0°♑	
	12143 Jul 16 12:43	0°♓		retrograde	12148 Sep 19 00:42	23°♑34'10	
asc. node	12143 Aug 02 18:20	13°♓25'03		opposition	12148 Oct 26 04:49	15°♑29'12	-5°08'34
	12143 Aug 23 20:23	0°♑		greatest brilliancy	12148 Oct 27 11:57	15°♑00'04	-1.7m
morning rise	12143 Sep 06 01:16	10°♑25'48		min. Earth dist.	12148 Nov 02 10:09	12°♑47'38	0.57529 AU
	12143 Sep 30 20:13	0°♒		direct	12148 Dec 05 12:05	5°♑51'38	
	12143 Nov 08 09:17	0°♍			12149 Feb 14 02:02	0°♒	
	12143 Dec 18 09:35	0°♑		asc. node	12149 Mar 24 23:00	24°♒32'36	
	12144 Jan 29 21:18	0°♑			12149 Apr 01 20:10	0°♑	
	12144 Mar 16 09:11	0°♑			12149 May 12 18:29	0°♓	
	12144 May 11 04:49	0°♏			12149 Jun 20 16:51	0°♑	
desc. node	12144 Jun 16 02:38	12°♏22'44			12149 Jul 29 09:32	0°♒	
retrograde	12144 Jul 05 22:49	14°♏38'17			12149 Sep 06 23:40	0°♍	
opposition	12144 Aug 15 15:24	4°♏51'36	-2°04'40		12149 Oct 18 04:49	0°♑	
min. Earth dist.	12144 Aug 15 06:36	5°♏00'19	0.68314 AU	evening set	12149 Nov 15 01:22	19°♑30'33	
greatest brilliancy	12144 Aug 15 13:43	4°♏53'17	-1.3m		12149 Nov 30 09:20	0°♑	
	12144 Aug 28 14:07	30°♑♑					
direct	12144 Sep 25 17:34	25°♑04'24		conjunction	12150 Jan 05 08:13	24°♑00'26	0°16'44
	12144 Oct 26 13:15	0°♏		minimum elong	12150 Jan 05 08:54	24°♑01'33	0°17'33
	12145 Jan 01 14:06	0°♐			12150 Jan 14 11:49	0°♑	
	12145 Feb 20 14:29	0°♑		max. Earth dist.	12150 Jan 22 22:02	5°♑28'52	2.63335 AU
	12145 Apr 06 05:26	0°♒		desc. node	12150 Feb 04 22:40	13°♑53'40	
	12145 May 17 13:28	0°♑		morning rise	12150 Feb 20 23:41	24°♑09'29	
asc. node	12145 Jun 19 13:30	25°♑10'43			12150 Mar 02 04:23	0°♏	
	12145 Jun 25 18:13	0°♓			12150 Apr 19 02:33	0°♐	
evening set	12145 Jul 02 11:36	5°♓15'28			12150 Jun 07 06:42	0°♑	
	12145 Aug 02 19:32	0°♑			12150 Jul 28 19:07	0°♒	
	12145 Sep 09 16:13	0°♒			12150 Sep 26 19:39	0°♑	
				retrograde	12150 Nov 14 18:32	11°♑39'23	
conjunction	12145 Sep 11 23:49	1°♒49'27	0°53'01	opposition	12150 Dec 17 08:41	5°♑28'52	-3°22'56
minimum elong	12145 Sep 11 19:58	1°♒41'54	0°52'56	greatest brilliancy	12150 Dec 18 13:42	5°♑05'25	-2.5m

min. Earth dist.	12150 Dec 25 18:45	2°☾46'24	0.43779 AU	evening set	12156 Mar 08 12:59	9°Υ51'47	
	12151 Jan 04 21:15	30°♈II		max. Earth dist.	12156 Mar 31 01:32	24°Υ31'57	2.60949 AU
direct	12151 Jan 21 20:52	27°♈59'22			12156 Apr 08 08:02	0°♋	
	12151 Feb 07 21:11	0°☾					
asc. node	12151 Feb 10 05:34	0°☾34'01		conjunction	12156 Apr 23 00:07	9°♋48'40	-1°09'44
	12151 Apr 11 06:04	0°♌		minimum elong	12156 Apr 23 00:13	9°♋48'51	1°10'13
	12151 May 24 20:15	0°♍			12156 May 22 12:01	0°♈	
	12151 Jul 05 02:29	0°♊		morning rise	12156 Jun 10 00:30	13°♈00'14	
	12151 Aug 15 15:43	0°♋			12156 Jul 03 16:37	0°☾	
	12151 Sep 27 12:34	0°♌			12156 Aug 13 04:28	0°♌	
	12151 Nov 11 01:12	0°♍			12156 Sep 21 11:02	0°♍	
desc. node	12151 Dec 23 17:27	27°♍51'20		asc. node	12156 Oct 01 22:35	8°♍05'54	
	12151 Dec 27 01:20	0°♎			12156 Oct 30 05:45	0°♊	
evening set	12151 Dec 28 07:15	0°♎48'08			12156 Dec 08 13:02	0°♋	
					12157 Jan 18 21:39	0°♌	
conjunction	12152 Feb 12 01:07	0°♋00'29	-0°26'33		12157 Mar 06 15:28	0°♍	
minimum elong	12152 Feb 12 00:20	29°♎59'15	0°26'02	retrograde	12157 May 19 08:53	26°♍02'23	
	12152 Feb 12 00:48	0°♋		min. Earth dist.	12157 Jun 22 16:47	18°♍19'49	0.60174 AU
max. Earth dist.	12152 Feb 14 21:40	1°♋49'17	2.68042 AU	opposition	12157 Jun 28 06:55	16°♍08'15	1°53'46
morning rise	12152 Mar 26 13:57	27°♋36'25		greatest brilliancy	12157 Jun 27 22:06	16°♍16'54	-1.7m
	12152 Mar 30 08:32	0°Υ		direct	12157 Aug 05 02:01	7°♍28'54	
	12152 May 16 12:18	0°♋		desc. node	12157 Aug 15 11:02	8°♍07'07	
	12152 Jul 02 06:49	0°♈			12157 Oct 18 14:57	0°♎	
	12152 Aug 17 17:56	0°☾			12157 Dec 13 23:48	0°♋	
	12152 Oct 03 10:47	0°♌			12158 Feb 02 04:02	0°Υ	
	12152 Nov 21 18:01	0°♍			12158 Mar 20 21:03	0°♋	
asc. node	12152 Dec 28 10:05	18°♍08'30		evening set	12158 Apr 17 00:34	18°♋20'28	
retrograde	12153 Feb 02 11:19	26°♍01'29		max. Earth dist.	12158 May 01 09:14	28°♋19'03	2.49745 AU
min. Earth dist.	12153 Mar 02 01:50	21°♍34'13	0.36629 AU		12158 May 03 18:42	0°♈	
opposition	12153 Mar 04 16:40	20°♍51'52	4°47'00				
greatest brilliancy	12153 Mar 04 03:18	21°♍00'53	-3.0m	conjunction	12158 Jun 07 14:55	25°♈04'04	-0°46'11
direct	12153 Apr 02 19:47	16°♍00'48		minimum elong	12158 Jun 07 17:00	25°♈07'53	0°47'00
	12153 May 23 09:11	0°♊			12158 Jun 14 07:23	0°☾	
	12153 Jul 16 05:32	0°♋			12158 Jul 23 23:48	0°♌	
	12153 Sep 02 11:12	0°♌		morning rise	12158 Aug 06 23:23	10°♌49'15	
	12153 Oct 20 02:45	0°♍		asc. node	12158 Aug 19 13:55	20°♌39'14	
desc. node	12153 Nov 09 18:56	12°♍58'34			12158 Aug 31 11:49	0°♍	
	12153 Dec 06 23:33	0°♎			12158 Oct 08 14:31	0°♊	
	12154 Jan 23 21:07	0°♋			12158 Nov 16 05:20	0°♋	
evening set	12154 Feb 01 22:55	5°♋42'30			12158 Dec 26 08:09	0°♌	
max. Earth dist.	12154 Mar 08 05:14	27°♋24'39	2.67207 AU		12159 Feb 07 05:07	0°♍	
	12154 Mar 12 06:35	0°Υ			12159 Mar 27 05:58	0°♎	
					12159 Jun 05 03:11	0°♋	
conjunction	12154 Mar 17 23:46	3°Υ39'29	-0°58'24	retrograde	12159 Jun 23 18:47	2°♋03'30	
minimum elong	12154 Mar 17 22:44	3°Υ37'49	0°58'22	desc. node	12159 Jul 03 15:57	1°♋25'13	
	12154 Apr 27 15:06	0°♋			12159 Jul 11 11:33	30°♋	
morning rise	12154 Apr 30 17:09	2°♋01'36		min. Earth dist.	12159 Aug 01 16:44	22°♎52'27	0.67302 AU
	12154 Jun 11 14:50	0°♈		opposition	12159 Aug 03 13:11	22°♎08'23	-1°06'30
	12154 Jul 25 02:54	0°☾		greatest brilliancy	12159 Aug 03 10:48	22°♎10'44	-1.3m
	12154 Sep 05 05:18	0°♌		direct	12159 Sep 13 00:20	12°♎34'28	
	12154 Oct 16 06:09	0°♍			12159 Nov 15 19:52	0°♋	
asc. node	12154 Nov 15 07:53	22°♍08'18			12160 Jan 11 21:45	0°Υ	
	12154 Nov 26 02:15	0°♊			12160 Feb 29 10:06	0°♋	
	12155 Jan 07 18:13	0°♋			12160 Apr 13 16:15	0°♈	
	12155 Mar 01 10:57	0°♌			12160 May 24 23:45	0°☾	
retrograde	12155 Apr 07 08:27	8°♌42'35		evening set	12160 Jun 06 09:07	9°☾19'36	
min. Earth dist.	12155 May 05 17:56	3°♌07'53	0.47532 AU		12160 Jul 03 06:34	0°♌	
greatest brilliancy	12155 May 12 13:40	0°♌41'33	-2.3m	asc. node	12160 Jul 06 07:41	2°♌22'25	
opposition	12155 May 14 02:25	0°♌08'32	5°23'25	max. Earth dist.	12160 Jul 15 11:02	9°♌31'29	2.36758 AU
	12155 May 14 11:58	30°♋♋			12160 Aug 10 09:38	0°♍	
direct	12155 Jun 16 10:28	23°♋11'34					
	12155 Jul 21 23:05	0°♌		conjunction	12160 Aug 11 12:43	0°♍53'39	0°25'35
	12155 Sep 24 04:13	0°♍		minimum elong	12160 Aug 11 10:05	0°♍48'26	0°25'03
desc. node	12155 Sep 28 01:56	2°♍07'39			12160 Sep 17 06:35	0°♊	
	12155 Nov 15 23:25	0°♎		morning rise	12160 Oct 24 17:19	29°♊11'24	
	12156 Jan 04 23:48	0°♋			12160 Oct 25 18:39	0°♋	
	12156 Feb 22 03:08	0°Υ			12160 Dec 04 17:45	0°♌	

	12161 Jan 15 22:25	0°♁			12166 Mar 11 12:49	0°♁
	12161 Mar 02 04:44	0°♁			12166 Apr 25 15:05	0°♁
	12161 Apr 21 08:30	0°♁			12166 Jun 05 05:32	0°♁
desc. node	12161 May 20 13:01	15°♁08'10			12166 Jul 14 23:53	0°♁
	12161 Jun 27 04:51	0°♁			12166 Aug 24 11:45	0°♁
retrograde	12161 Jul 26 23:54	4°♁41'33			12166 Oct 05 12:32	0°♁
	12161 Aug 23 09:12	30°♁♁			12166 Nov 18 09:33	0°♁
opposition	12161 Sep 05 04:57	25°♁14'55 -3°24'32	evening set		12166 Dec 12 16:15	16°♁06'26
greatest brilliancy	12161 Sep 05 09:11	25°♁10'45 -1.3m			12167 Jan 02 23:09	0°♁
min. Earth dist.	12161 Sep 07 04:21	24°♁28'23 0.67862 AU	desc. node		12167 Jan 09 08:10	4°♁07'31
direct	12161 Oct 16 19:50	15°♁14'49				
	12161 Dec 12 09:00	0°♁	conjunction		12167 Jan 29 00:05	16°♁46'00 -0°10'41
	12162 Feb 06 05:35	0°♁	minimum elong		12167 Jan 28 23:45	16°♁45'28 0°10'02
	12162 Mar 24 05:27	0°♁	behind sun begin		12167 Jan 28 08:46	16°♁21'30
	12162 May 04 22:30	0°♁	behind sun end		12167 Jan 29 14:43	17°♁09'25
asc. node	12162 May 24 06:13	14°♁35'26	max. Earth dist.		12167 Feb 06 05:11	22°♁00'52 2.66860 AU
	12162 Jun 13 05:04	0°♁			12167 Feb 18 18:14	0°♁
	12162 Jul 21 06:40	0°♁	morning rise		12167 Mar 14 07:42	14°♁55'37
evening set	12162 Aug 18 12:48	22°♁23'06			12167 Apr 07 05:09	0°♁
	12162 Aug 28 04:44	0°♁			12167 May 24 22:41	0°♁
	12162 Oct 05 21:28	0°♁			12167 Jul 11 23:00	0°♁
					12167 Aug 29 21:18	0°♁
conjunction	12162 Oct 27 01:12	15°♁56'56 1°05'55			12167 Oct 21 10:17	0°♁
minimum elong	12162 Oct 27 01:45	15°♁57'57 1°06'29	retrograde		12168 Jan 01 17:34	23°♁50'58
	12162 Nov 15 02:58	0°♁	asc. node		12168 Jan 15 00:24	22°♁43'08
max. Earth dist.	12162 Dec 11 15:47	19°♁00'14 2.47986 AU	opposition		12168 Jan 31 10:39	18°♁54'00 1°15'49
morning rise	12162 Dec 26 06:14	29°♁11'33	greatest brilliancy		12168 Jan 31 13:40	18°♁51'57 -3.0m
	12162 Dec 27 10:18	0°♁	min. Earth dist.		12168 Feb 03 20:37	17°♁58'35 0.37174 AU
	12163 Feb 10 03:04	0°♁	direct		12168 Mar 02 00:06	13°♁34'39
	12163 Mar 29 13:25	0°♁			12168 Apr 24 20:14	0°♁
desc. node	12163 Apr 07 03:43	5°♁13'30			12168 Jun 13 20:10	0°♁
	12163 May 19 22:20	0°♁			12168 Jul 29 02:54	0°♁
	12163 Jul 22 01:39	0°♁			12168 Sep 12 06:11	0°♁
retrograde	12163 Sep 02 21:42	8°♁51'57			12168 Oct 28 06:44	0°♁
opposition	12163 Oct 11 05:56	0°♁17'17 -4°54'40	desc. node		12168 Nov 26 06:48	18°♁35'11
greatest brilliancy	12163 Oct 12 04:55	29°♁55'18 -1.5m			12168 Dec 14 05:38	0°♁
	12163 Oct 12 00:01	30°♁♁	evening set		12169 Jan 19 01:47	22°♁40'02
min. Earth dist.	12163 Oct 17 01:35	28°♁04'01 0.61702 AU			12169 Jan 30 16:25	0°♁
direct	12163 Nov 21 08:35	20°♁22'25	max. Earth dist.		12169 Feb 27 13:17	17°♁38'18 2.68210 AU
	12164 Jan 02 17:35	0°♁				
	12164 Feb 27 17:39	0°♁	conjunction		12169 Mar 04 09:37	20°♁42'57 -0°47'58
asc. node	12164 Apr 10 11:16	29°♁06'43	minimum elong		12169 Mar 04 08:31	20°♁41'12 0°47'44
	12164 Apr 11 16:46	0°♁			12169 Mar 18 23:42	0°♁
	12164 May 21 18:09	0°♁	morning rise		12169 Apr 16 15:41	18°♁23'07
	12164 Jun 29 05:48	0°♁			12169 May 04 13:53	0°♁
	12164 Aug 06 13:49	0°♁			12169 Jun 19 02:48	0°♁
	12164 Sep 14 19:10	0°♁			12169 Aug 02 11:11	0°♁
evening set	12164 Oct 25 10:37	29°♁51'40			12169 Sep 14 16:55	0°♁
	12164 Oct 25 15:16	0°♁			12169 Oct 27 05:45	0°♁
	12164 Dec 07 11:34	0°♁	asc. node		12169 Dec 02 01:26	24°♁59'09
					12169 Dec 09 10:52	0°♁
conjunction	12164 Dec 19 12:50	8°♁11'15 0°34'17			12170 Jan 27 18:02	0°♁
minimum elong	12164 Dec 19 14:14	8°♁13'36 0°35'08	retrograde		12170 Mar 17 02:57	14°♁12'19
max. Earth dist.	12165 Jan 12 20:34	24°♁24'35 2.60008 AU	min. Earth dist.		12170 Apr 12 10:06	9°♁30'02 0.42155 AU
	12165 Jan 21 08:47	0°♁	greatest brilliancy		12170 Apr 18 17:24	7°♁27'29 -2.6m
morning rise	12165 Feb 06 13:43	10°♁31'51	opposition		12170 Apr 20 10:55	6°♁53'29 6°19'13
desc. node	12165 Feb 21 16:45	20°♁14'21	direct		12170 May 21 18:22	0°♁53'13
	12165 Mar 09 02:08	0°♁			12170 Aug 13 01:04	0°♁
	12165 Apr 26 12:17	0°♁			12170 Oct 05 00:53	0°♁
	12165 Jun 16 04:40	0°♁	desc. node		12170 Oct 14 12:16	5°♁35'33
	12165 Aug 11 12:04	0°♁			12170 Nov 24 04:48	0°♁
retrograde	12165 Oct 20 19:31	20°♁49'25			12171 Jan 12 04:11	0°♁
opposition	12165 Nov 24 11:32	13°♁46'58 -4°40'16	evening set		12171 Feb 23 12:41	26°♁33'29
greatest brilliancy	12165 Nov 26 01:06	13°♁14'08 -2.1m			12171 Feb 28 22:30	0°♁
min. Earth dist.	12165 Dec 03 05:12	10°♁44'27 0.49423 AU	max. Earth dist.		12171 Mar 22 07:53	13°♁44'58 2.64051 AU
direct	12166 Jan 01 11:31	5°♁08'42				
asc. node	12166 Feb 26 19:29	22°♁47'06	conjunction		12171 Apr 08 23:51	25°♁16'39 -1°08'31

minimum elong	12171 Apr 08 23:19	25° $\Upsilon$ 15'48	1°08'49		12176 Jan 24 15:10	0° $\Xi$	
	12171 Apr 16 03:41	0° $\mathcal{B}$			12176 Mar 10 11:47	0° $\approx$	
morning rise	12171 May 24 15:52	25° $\mathcal{B}$ 55'25			12176 May 02 07:09	0° $\mathcal{H}$	
	12171 May 30 14:13	0° $\Pi$		desc. node	12176 Jun 06 05:21	15° $\mathcal{H}$ 05'48	
	12171 Jul 12 05:14	0° $\mathcal{G}$		retrograde	12176 Jul 13 12:32	22° $\mathcal{H}$ 16'11	
	12171 Aug 22 05:17	0° $\Omega$		opposition	12176 Aug 23 02:31	12° $\mathcal{H}$ 35'53	-2°36'04
	12171 Sep 30 23:59	0° $\mathcal{M}$		greatest brilliancy	12176 Aug 23 02:18	12° $\mathcal{H}$ 36'05	-1.3m
asc. node	12171 Oct 19 19:59	14° $\mathcal{M}$ 22'52		min. Earth dist.	12176 Aug 23 13:46	12° $\mathcal{H}$ 24'47	0.68436 AU
	12171 Nov 09 06:36	0° $\mathcal{L}$		direct	12176 Oct 03 10:48	2° $\mathcal{H}$ 43'01	
	12171 Dec 19 05:23	0° $\mathcal{M}$			12176 Dec 25 13:18	0° $\Upsilon$	
	12172 Jan 31 00:08	0° $\mathcal{A}$			12177 Feb 15 02:31	0° $\mathcal{B}$	
	12172 Mar 24 07:11	0° $\Xi$			12177 Apr 01 04:15	0° $\Pi$	
retrograde	12172 May 04 01:15	9° $\Xi$ 50'55			12177 May 12 15:36	0° $\mathcal{G}$	
min. Earth dist.	12172 Jun 05 04:03	2° $\Xi$ 53'42	0.55736 AU	asc. node	12177 Jun 09 22:21	21° $\mathcal{G}$ 30'05	
greatest brilliancy	12172 Jun 11 08:14	0° $\Xi$ 31'12	-1.9m		12177 Jun 20 21:11	0° $\Omega$	
opposition	12172 Jun 12 02:52	0° $\Xi$ 13'16	3°14'45	evening set	12177 Jul 18 18:43	21° $\Omega$ 56'49	
	12172 Jun 12 16:41	30° $\mathcal{R}$ $\mathcal{A}$			12177 Jul 28 22:28	0° $\mathcal{M}$	
direct	12172 Jul 18 10:00	22° $\mathcal{A}$ 06'33			12177 Sep 04 19:02	0° $\mathcal{L}$	
	12172 Aug 26 20:52	0° $\Xi$					
desc. node	12172 Aug 31 20:45	1° $\Xi$ 49'17		conjunction	12177 Sep 29 04:13	19° $\mathcal{L}$ 04'08	1°02'11
	12172 Oct 30 08:02	0° $\approx$		minimum elong	12177 Sep 29 01:46	18° $\mathcal{L}$ 59'23	1°02'23
	12172 Dec 22 05:21	0° $\mathcal{H}$			12177 Oct 13 08:48	0° $\mathcal{M}$	
	12173 Feb 09 09:16	0° $\Upsilon$		max. Earth dist.	12177 Nov 21 13:19	29° $\mathcal{M}$ 21'13	2.42331 AU
	12173 Mar 27 19:49	0° $\mathcal{B}$			12177 Nov 22 10:31	0° $\mathcal{A}$	
evening set	12173 Mar 31 19:58	2° $\mathcal{B}$ 40'00		morning rise	12177 Dec 05 01:21	9° $\mathcal{A}$ 09'00	
max. Earth dist.	12173 Apr 17 17:52	14° $\mathcal{B}$ 04'14	2.54665 AU		12178 Jan 03 14:57	0° $\Xi$	
	12173 May 10 19:08	0° $\Pi$			12178 Feb 17 09:40	0° $\approx$	
					12178 Apr 06 11:28	0° $\mathcal{H}$	
conjunction	12173 May 19 05:18	5° $\Pi$ 56'04	-1°00'45	desc. node	12178 Apr 23 22:04	10° $\mathcal{H}$ 13'13	
minimum elong	12173 May 19 06:43	5° $\Pi$ 58'35	1°01'30		12178 May 30 10:58	0° $\Upsilon$	
	12173 Jun 21 13:18	0° $\mathcal{G}$		retrograde	12178 Aug 18 08:30	25° $\Upsilon$ 16'09	
morning rise	12173 Jul 12 08:46	15° $\mathcal{G}$ 28'41		opposition	12178 Sep 26 14:34	16° $\Upsilon$ 17'53	-4°26'58
	12173 Jul 31 12:30	0° $\Omega$		greatest brilliancy	12178 Sep 27 05:20	16° $\Upsilon$ 03'34	-1.4m
asc. node	12173 Sep 05 09:38	27° $\Omega$ 45'04		min. Earth dist.	12178 Sep 30 22:26	14° $\Upsilon$ 37'19	0.64904 AU
	12173 Sep 08 06:44	0° $\mathcal{M}$		direct	12178 Nov 07 03:40	6° $\Upsilon$ 15'59	
	12173 Oct 16 14:06	0° $\mathcal{L}$			12179 Jan 19 07:57	0° $\mathcal{B}$	
	12173 Nov 24 08:44	0° $\mathcal{M}$			12179 Mar 09 20:35	0° $\Pi$	
	12174 Jan 03 17:28	0° $\mathcal{A}$			12179 Apr 21 13:05	0° $\mathcal{G}$	
	12174 Feb 16 08:00	0° $\Xi$		asc. node	12179 Apr 28 00:51	4° $\mathcal{G}$ 47'57	
	12174 Apr 08 12:52	0° $\approx$			12179 May 31 03:51	0° $\Omega$	
retrograde	12174 Jun 10 10:30	18° $\approx$ 57'47			12179 Jul 08 09:48	0° $\mathcal{M}$	
min. Earth dist.	12174 Jul 17 17:20	10° $\approx$ 17'34	0.65255 AU		12179 Aug 15 12:21	0° $\mathcal{L}$	
desc. node	12174 Jul 20 03:51	9° $\approx$ 19'35			12179 Sep 23 11:10	0° $\mathcal{M}$	
opposition	12174 Jul 21 01:18	8° $\approx$ 58'18	-0°02'00	evening set	12179 Oct 02 11:53	6° $\mathcal{M}$ 48'05	
greatest brilliancy	12174 Jul 21 01:18	8° $\approx$ 58'18	-1.4m		12179 Nov 02 23:55	0° $\mathcal{A}$	
	12174 Aug 22 15:43	30° $\mathcal{R}$ $\Xi$					
direct	12174 Aug 29 15:41	29° $\Xi$ 41'44		conjunction	12179 Dec 01 16:41	20° $\mathcal{A}$ 23'41	0°50'22
	12174 Sep 05 19:58	0° $\approx$		minimum elong	12179 Dec 01 18:35	20° $\mathcal{A}$ 27'00	0°51'11
	12174 Nov 28 02:09	0° $\mathcal{H}$			12179 Dec 15 13:21	0° $\Xi$	
	12175 Jan 20 06:50	0° $\Upsilon$		max. Earth dist.	12180 Jan 02 14:46	12° $\Xi$ 17'16	2.55852 AU
	12175 Mar 08 21:02	0° $\mathcal{B}$		morning rise	12180 Jan 23 01:43	25° $\Xi$ 55'01	
	12175 Apr 21 22:15	0° $\Pi$			12180 Jan 29 06:49	0° $\approx$	
evening set	12175 May 16 05:12	17° $\Pi$ 24'52		desc. node	12180 Mar 10 10:20	26° $\approx$ 24'59	
max. Earth dist.	12175 Jun 01 03:57	29° $\Pi$ 09'52	2.41366 AU		12180 Mar 16 03:24	0° $\mathcal{H}$	
	12175 Jun 02 06:53	0° $\mathcal{G}$			12180 May 04 07:48	0° $\Upsilon$	
	12175 Jul 11 16:47	0° $\Omega$			12180 Jun 26 10:43	0° $\mathcal{B}$	
					12180 Sep 05 16:57	0° $\Pi$	
conjunction	12175 Jul 14 16:42	2° $\Omega$ 19'32	-0°06'42	retrograde	12180 Sep 29 16:44	3° $\Pi$ 07'44	
minimum elong	12175 Jul 14 17:22	2° $\Omega$ 20'50	0°07'28		12180 Oct 22 02:26	30° $\mathcal{R}$ $\mathcal{B}$	
behind sun begin	12175 Jul 13 16:30	1° $\Omega$ 32'33		opposition	12180 Nov 05 02:00	25° $\mathcal{B}$ 22'38	-5°07'11
behind sun end	12175 Jul 15 18:15	3° $\Omega$ 09'10		greatest brilliancy	12180 Nov 06 13:00	24° $\mathcal{B}$ 50'30	-1.8m
asc. node	12175 Jul 24 00:58	9° $\Omega$ 36'42		min. Earth dist.	12180 Nov 13 00:11	22° $\mathcal{B}$ 28'41	0.54809 AU
	12175 Aug 18 22:45	0° $\mathcal{M}$		direct	12180 Dec 14 17:58	16° $\mathcal{B}$ 00'42	
morning rise	12175 Sep 24 04:00	28° $\mathcal{M}$ 38'53			12181 Feb 03 05:13	0° $\Pi$	
	12175 Sep 25 21:10	0° $\mathcal{L}$		asc. node	12181 Mar 15 07:54	23° $\Pi$ 05'07	
	12175 Nov 03 09:16	0° $\mathcal{M}$			12181 Mar 25 18:10	0° $\mathcal{G}$	
	12175 Dec 13 08:04	0° $\mathcal{A}$			12181 May 06 14:47	0° $\Omega$	



	12181 Jun 14 23:24	0°♎	morning rise	12186 May 09 01:55	10°♎39'55	
	12181 Jul 23 22:49	0°♏		12186 Jun 06 18:12	0°♐	
	12181 Sep 01 18:52	0°♑		12186 Jul 19 22:12	0°♑	
	12181 Oct 13 05:32	0°♒		12186 Aug 30 14:00	0°♒	
evening set	12181 Nov 25 14:33	0°♓00'03		12186 Oct 10 02:06	0°♓	
	12181 Nov 25 14:32	0°♓	asc. node	12186 Nov 05 14:08	19°♓50'33	
	12182 Jan 09 19:51	0°♈		12186 Nov 19 04:38	0°♏	
				12186 Dec 30 10:42	0°♑	
conjunction	12182 Jan 14 05:17	2°♈51'34 0°06'30		12187 Feb 14 21:19	0°♒	
minimum elong	12182 Jan 14 05:32	2°♈51'58 0°07'17	retrograde	12187 Apr 18 00:03	21°♒09'49	
behind sun begin	12182 Jan 13 11:46	2°♈23'07	min. Earth dist.	12187 May 17 17:23	15°♒04'44	0.50576 AU
behind sun end	12182 Jan 14 23:18	3°♈20'49	greatest brilliancy	12187 May 24 11:38	12°♒34'46	-2.1m
desc. node	12182 Jan 26 00:43	10°♈30'12	opposition	12187 May 25 18:06	12°♒06'31	4°38'46
max. Earth dist.	12182 Jan 28 07:57	11°♈59'10 2.64830 AU	direct	12187 Jun 29 05:43	4°♒41'52	
	12182 Feb 25 12:16	0°♉		12187 Sep 15 18:53	0°♓	
morning rise	12182 Feb 28 20:30	2°♉07'15	desc. node	12187 Sep 18 07:03	1°♓15'38	
	12182 Apr 14 05:05	0°♐		12187 Nov 10 02:02	0°♈	
	12182 Jun 01 18:19	0°♑		12187 Dec 30 22:32	0°♉	
	12182 Jul 21 16:17	0°♒		12188 Feb 17 09:45	0°♐	
	12182 Sep 13 11:59	0°♑	evening set	12188 Mar 16 18:40	18°♐12'56	
retrograde	12182 Nov 30 15:17	25°♑40'31		12188 Apr 03 16:52	0°♑	
opposition	12183 Jan 01 03:18	20°♑00'26 -2°05'34	max. Earth dist.	12188 Apr 06 03:16	1°♑37'03	2.58928 AU
greatest brilliancy	12183 Jan 01 20:28	19°♑47'21 -2.7m				
min. Earth dist.	12183 Jan 08 13:43	17°♑45'36 0.40903 AU	conjunction	12188 May 02 01:11	19°♑06'29 -1°08'12	
asc. node	12183 Jan 31 16:07	13°♑22'58	minimum elong	12188 May 02 01:44	19°♑07'25 1°08'48	
direct	12183 Feb 03 20:36	13°♑18'32		12188 May 17 19:36	0°♒	
	12183 Mar 29 09:19	0°♒	morning rise	12188 Jun 20 19:55	24°♒09'34	
	12183 May 16 09:49	0°♓		12188 Jun 28 20:47	0°♑	
	12183 Jun 28 04:35	0°♏		12188 Aug 08 04:06	0°♒	
	12183 Aug 09 14:26	0°♑		12188 Sep 16 05:56	0°♓	
	12183 Sep 22 01:37	0°♒	asc. node	12188 Sep 22 05:39	4°♓38'57	
	12183 Nov 06 00:17	0°♓		12188 Oct 24 19:39	0°♏	
desc. node	12183 Dec 13 19:48	24°♓33'34		12188 Dec 02 20:38	0°♑	
	12183 Dec 22 07:07	0°♈		12189 Jan 12 16:54	0°♒	
evening set	12184 Jan 05 19:08	9°♈16'13		12189 Feb 26 18:24	0°♓	
	12184 Feb 07 09:52	0°♉		12189 Apr 28 13:29	0°♈	
			retrograde	12189 May 27 14:57	5°♈01'24	
conjunction	12184 Feb 19 21:11	7°♉54'25 -0°35'05		12189 Jun 23 21:24	30°♉♓	
minimum elong	12184 Feb 19 20:14	7°♉52'55 0°34'40	min. Earth dist.	12189 Jul 02 01:57	26°♉56'27	0.62251 AU
max. Earth dist.	12184 Feb 19 21:13	7°♉54'29 2.68347 AU	opposition	12189 Jul 06 20:47	25°♉03'08	1°09'17
	12184 Mar 25 16:50	0°♐	greatest brilliancy	12189 Jul 06 16:11	25°♉07'40	-1.6m
morning rise	12184 Apr 03 04:12	5°♐23'27	desc. node	12189 Aug 05 15:54	16°♉37'31	
	12184 May 11 15:08	0°♑	direct	12189 Aug 14 08:56	16°♉08'46	
	12184 Jun 26 21:35	0°♒		12189 Oct 08 21:15	0°♈	
	12184 Aug 11 11:05	0°♑		12189 Dec 08 00:18	0°♉	
	12184 Sep 25 13:22	0°♒		12190 Jan 28 01:55	0°♐	
	12184 Nov 10 04:00	0°♓		12190 Mar 16 02:06	0°♑	
asc. node	12184 Dec 18 18:54	23°♓26'43	evening set	12190 Apr 26 23:45	28°♓32'50	
	12184 Dec 31 03:44	0°♏		12190 Apr 29 01:23	0°♒	
retrograde	12185 Feb 19 08:18	14°♏36'45	max. Earth dist.	12190 May 10 16:29	8°♒14'49	2.46822 AU
min. Earth dist.	12185 Mar 17 07:30	10°♏21'41 0.37882 AU		12190 Jun 09 13:09	0°♑	
opposition	12185 Mar 22 17:24	8°♏49'42 5°58'10				
greatest brilliancy	12185 Mar 21 13:01	9°♏09'53 -2.9m	conjunction	12190 Jun 19 22:40	7°♏45'30 -0°34'07	
direct	12185 Apr 21 04:04	3°♏44'00	minimum elong	12190 Jun 20 00:45	7°♏49'25 0°34'57	
	12185 Jul 05 20:30	0°♑		12190 Jul 19 03:38	0°♒	
	12185 Aug 26 10:40	0°♒	asc. node	12190 Aug 09 20:11	16°♒51'42	
	12185 Oct 14 09:42	0°♓	morning rise	12190 Aug 23 08:57	27°♒28'54	
desc. node	12185 Oct 30 22:09	10°♓11'55		12190 Aug 26 13:44	0°♓	
	12185 Dec 01 22:16	0°♈		12190 Oct 03 14:39	0°♏	
	12186 Jan 19 03:49	0°♉		12190 Nov 11 03:41	0°♑	
evening set	12186 Feb 09 19:30	13°♉35'51		12190 Dec 21 03:38	0°♒	
	12186 Mar 07 16:03	0°♐		12191 Feb 01 16:35	0°♓	
max. Earth dist.	12186 Mar 13 07:57	3°♐37'15 2.66314 AU		12191 Mar 20 14:31	0°♈	
				12191 May 18 09:00	0°♉	
conjunction	12186 Mar 25 20:38	11°♐40'39 -1°03'11	desc. node	12191 Jun 23 18:59	9°♉27'25	
minimum elong	12186 Mar 25 19:43	11°♐39'11 1°03'16	retrograde	12191 Jul 01 07:42	9°♉48'21	
	12186 Apr 22 23:24	0°♑	min. Earth dist.	12191 Aug 10 01:30	0°♉21'44	0.67985 AU

	12191 Aug 10 23:26	30° $\mathbb{R}$ $\approx$			12196 Sep 09 18:04	0° $\mathbb{M}$	
opposition	12191 Aug 11 01:54	29° $\approx$ 57'33 -1°41'29			12196 Oct 20 17:45	0° $\mathbb{X}$	
greatest brilliancy	12191 Aug 10 23:33	29° $\approx$ 59'54 -1.3m	evening set		12196 Nov 06 11:32	11° $\mathbb{X}$ 51'37	
direct	12191 Sep 20 21:58	20° $\approx$ 15'42			12196 Dec 02 16:59	0° $\mathbb{Z}$	
	12191 Nov 05 02:52	0° $\mathbb{H}$					
	12192 Jan 05 20:00	0° $\mathbb{Y}$	conjunction		12196 Dec 29 07:33	17° $\mathbb{Z}$ 54'27	0°24'08
	12192 Feb 24 05:43	0° $\mathbb{B}$	minimum elong		12196 Dec 29 08:33	17° $\mathbb{Z}$ 56'05	0°24'58
	12192 Apr 08 18:22	0° $\mathbb{II}$			12197 Jan 16 15:51	0° $\approx$	
	12192 May 20 03:20	0° $\mathbb{E}$	max. Earth dist.		12197 Jan 18 19:22	1° $\approx$ 24'12	2.61955 AU
evening set	12192 Jun 20 14:23	23° $\mathbb{E}$ 56'24	desc. node		12197 Feb 11 16:31	16° $\approx$ 51'25	
asc. node	12192 Jun 26 13:44	28° $\mathbb{E}$ 34'19	morning rise		12197 Feb 14 22:08	18° $\approx$ 55'47	
	12192 Jun 28 09:47	0° $\mathbb{Q}$			12197 Mar 04 07:33	0° $\mathbb{H}$	
	12192 Aug 05 12:16	0° $\mathbb{P}$			12197 Apr 21 09:43	0° $\mathbb{Y}$	
					12197 Jun 10 03:06	0° $\mathbb{B}$	
conjunction	12192 Aug 29 04:03	18° $\mathbb{P}$ 46'16 0°42'37			12197 Aug 02 05:19	0° $\mathbb{II}$	
minimum elong	12192 Aug 29 00:07	18° $\mathbb{P}$ 38'28 0°42'19			12197 Oct 12 16:40	0° $\mathbb{E}$	
	12192 Sep 12 08:49	0° $\mathbb{L}$	retrograde		12197 Nov 03 08:36	2° $\mathbb{E}$ 37'36	
max. Earth dist.	12192 Oct 10 07:08	21° $\mathbb{L}$ 50'54 2.37128 AU			12197 Nov 23 18:03	30° $\mathbb{R}$ $\mathbb{II}$	
	12192 Oct 20 20:55	0° $\mathbb{M}$	opposition		12197 Dec 06 21:14	26° $\mathbb{II}$ 02'53	-4°03'37
morning rise	12192 Nov 09 21:49	15° $\mathbb{M}$ 12'46	greatest brilliancy		12197 Dec 08 07:41	25° $\mathbb{II}$ 33'52	-2.3m
	12192 Nov 29 20:07	0° $\mathbb{X}$	min. Earth dist.		12197 Dec 15 14:43	23° $\mathbb{II}$ 07'23	0.46280 AU
	12193 Jan 10 23:12	0° $\mathbb{Z}$	direct		12198 Jan 12 14:26	17° $\mathbb{II}$ 59'15	
	12193 Feb 24 22:53	0° $\approx$	asc. node		12198 Feb 17 04:50	25° $\mathbb{II}$ 57'56	
	12193 Apr 15 01:45	0° $\mathbb{H}$			12198 Feb 26 06:54	0° $\mathbb{E}$	
desc. node	12193 May 10 15:05	14° $\mathbb{H}$ 04'15			12198 Apr 17 11:52	0° $\mathbb{Q}$	
	12193 Jun 13 07:40	0° $\mathbb{Y}$			12198 May 29 10:52	0° $\mathbb{P}$	
retrograde	12193 Aug 03 21:03	12° $\mathbb{Y}$ 21'59			12198 Jul 08 22:12	0° $\mathbb{L}$	
opposition	12193 Sep 12 19:38	3° $\mathbb{Y}$ 04'24 -3°49'46			12198 Aug 18 21:45	0° $\mathbb{M}$	
greatest brilliancy	12193 Sep 13 03:14	2° $\mathbb{Y}$ 56'59 -1.3m			12198 Sep 30 07:50	0° $\mathbb{X}$	
min. Earth dist.	12193 Sep 15 15:22	1° $\mathbb{Y}$ 58'12 0.67106 AU			12198 Nov 13 11:47	0° $\mathbb{Z}$	
	12193 Sep 20 18:37	30° $\mathbb{R}$ $\mathbb{H}$	evening set		12198 Dec 21 17:38	25° $\mathbb{Z}$ 07'50	
direct	12193 Oct 24 11:55	23° $\mathbb{H}$ 02'03			12198 Dec 29 06:05	0° $\approx$	
	12193 Nov 30 02:16	0° $\mathbb{Y}$	desc. node		12198 Dec 30 10:03	0° $\approx$ 45'12	
	12194 Jan 30 20:12	0° $\mathbb{B}$					
	12194 Mar 18 19:11	0° $\mathbb{II}$	conjunction		12199 Feb 06 02:29	24° $\approx$ 54'13	-0°20'11
	12194 Apr 29 19:24	0° $\mathbb{E}$	minimum elong		12199 Feb 06 01:52	24° $\approx$ 53'13	0°19'35
asc. node	12194 May 14 15:24	11° $\mathbb{E}$ 07'47	max. Earth dist.		12199 Feb 11 07:45	28° $\approx$ 13'28	2.67615 AU
	12194 Jun 08 04:21	0° $\mathbb{Q}$			12199 Feb 14 02:48	0° $\mathbb{H}$	
	12194 Jul 16 07:01	0° $\mathbb{P}$	morning rise		12199 Mar 21 22:07	22° $\mathbb{H}$ 41'17	
	12194 Aug 23 05:53	0° $\mathbb{L}$			12199 Apr 02 11:32	0° $\mathbb{Y}$	
evening set	12194 Sep 04 16:17	9° $\mathbb{L}$ 43'34			12199 May 19 21:06	0° $\mathbb{B}$	
	12194 Sep 30 23:45	0° $\mathbb{M}$			12199 Jul 06 03:39	0° $\mathbb{II}$	
					12199 Aug 22 13:07	0° $\mathbb{E}$	
conjunction	12194 Nov 10 00:28	29° $\mathbb{M}$ 48'27 1°02'25			12199 Oct 10 02:53	0° $\mathbb{Q}$	
minimum elong	12194 Nov 10 02:00	29° $\mathbb{M}$ 51'14 1°03'07			12199 Dec 04 11:10	0° $\mathbb{P}$	
	12194 Nov 10 06:49	0° $\mathbb{X}$	asc. node		12200 Jan 05 09:48	10° $\mathbb{P}$ 39'53	
max. Earth dist.	12194 Dec 20 12:31	28° $\mathbb{X}$ 32'40 2.50983 AU	retrograde		12200 Jan 20 07:24	12° $\mathbb{P}$ 06'34	
	12194 Dec 22 15:05	0° $\mathbb{Z}$	opposition		12200 Feb 19 00:09	7° $\mathbb{P}$ 12'04	3°23'52
morning rise	12195 Jan 05 23:55	9° $\mathbb{Z}$ 49'38	greatest brilliancy		12200 Feb 18 21:59	7° $\mathbb{P}$ 13'30	-3.1m
	12195 Feb 05 06:45	0° $\approx$	min. Earth dist.		12200 Feb 19 02:23	7° $\mathbb{P}$ 10'34	0.36403 AU
	12195 Mar 24 09:50	0° $\mathbb{H}$	direct		12200 Mar 20 11:48	2° $\mathbb{P}$ 17'44	
desc. node	12195 Mar 28 04:27	2° $\mathbb{H}$ 19'43			12200 Jun 03 20:34	0° $\mathbb{L}$	
	12195 May 13 17:52	0° $\mathbb{Y}$			12200 Jul 22 12:17	0° $\mathbb{M}$	
	12195 Jul 10 08:57	0° $\mathbb{B}$			12200 Sep 07 02:22	0° $\mathbb{X}$	
retrograde	12195 Sep 12 09:19	17° $\mathbb{B}$ 34'41			12200 Oct 23 21:55	0° $\mathbb{Z}$	
opposition	12195 Oct 20 03:11	9° $\mathbb{B}$ 15'38 -5°04'27	desc. node		12200 Nov 17 10:30	15° $\mathbb{Z}$ 33'27	
greatest brilliancy	12195 Oct 21 06:52	8° $\mathbb{B}$ 49'28 -1.6m			12200 Dec 10 07:53	0° $\approx$	
min. Earth dist.	12195 Oct 26 18:13	6° $\mathbb{B}$ 45'39 0.59518 AU			12201 Jan 27 00:12	0° $\mathbb{H}$	
	12195 Nov 21 00:35	30° $\mathbb{R}$ $\mathbb{Y}$	evening set		12201 Jan 28 01:07	0° $\mathbb{H}$ 39'13	
direct	12195 Nov 29 20:58	29° $\mathbb{Y}$ 28'42	max. Earth dist.		12201 Mar 05 14:30	23° $\mathbb{H}$ 46'49	2.67761 AU
	12195 Dec 08 21:13	0° $\mathbb{B}$					
	12196 Feb 20 05:21	0° $\mathbb{II}$	conjunction		12201 Mar 13 03:36	28° $\mathbb{H}$ 35'12	-0°54'26
asc. node	12196 Mar 31 21:56	26° $\mathbb{II}$ 40'12	minimum elong		12201 Mar 13 02:31	28° $\mathbb{H}$ 33'28	0°54'19
	12196 Apr 05 15:03	0° $\mathbb{E}$			12201 Mar 15 08:45	0° $\mathbb{Y}$	
	12196 May 16 03:51	0° $\mathbb{Q}$	morning rise		12201 Apr 25 14:24	26° $\mathbb{Y}$ 34'40	
	12196 Jun 23 21:14	0° $\mathbb{P}$			12201 Apr 30 20:17	0° $\mathbb{B}$	
	12196 Aug 01 09:11	0° $\mathbb{L}$			12201 Jun 15 02:14	0° $\mathbb{II}$	

	12201 Jul 28 23:36	0°☿			12207 Mar 04 22:09	0°♄		
	12201 Sep 09 13:36	0°♊			12207 Apr 18 03:35	0°♋		
	12201 Oct 21 04:37	0°♌		evening set	12207 May 29 06:07	29°♋47'22		
asc. node	12201 Nov 23 09:24	23°♌59'09			12207 May 29 12:53	0°☿		
	12201 Dec 01 19:44	0°♍		max. Earth dist.	12207 Jun 21 10:49	17°☿18'42	2.38565 AU	
	12202 Jan 15 05:02	0°♎			12207 Jul 07 21:48	0°♊		
retrograde	12202 Mar 30 12:46	29°♎04'04		asc. node	12207 Jul 15 08:55	5°♊48'36		
min. Earth dist.	12202 Apr 26 21:45	23°♎54'21	0.45065 AU					
greatest brilliancy	12202 May 03 15:26	21°♎35'16	-2.4m	conjunction	12207 Jul 31 09:15	18°♊22'23	0°11'31	
opposition	12202 May 05 07:50	21°♎00'16	5°53'12	minimum elong	12207 Jul 31 08:08	18°♊20'10	0°10'52	
direct	12202 Jun 06 17:36	14°♎27'58		behind sun begin	12207 Jul 30 10:03	17°♊36'43		
	12202 Aug 02 14:51	0°♈		behind sun end	12207 Aug 01 06:12	19°♊03'38		
	12202 Sep 29 05:36	0°♉			12207 Aug 15 02:29	0°♌		
desc. node	12202 Oct 05 16:44	3°♉40'07			12207 Sep 21 23:47	0°♍		
	12202 Nov 19 17:59	0°♊		morning rise	12207 Oct 13 04:50	16°♍38'32		
	12203 Jan 08 06:58	0°♋			12207 Oct 30 10:53	0°♎		
	12203 Feb 25 06:43	0°♌			12207 Dec 09 08:28	0°♏		
evening set	12203 Mar 04 11:32	4°♌35'35			12208 Jan 20 12:07	0°♐		
max. Earth dist.	12203 Mar 28 20:46	20°♌21'27	2.62427 AU		12208 Mar 05 21:26	0°♑		
	12203 Apr 12 12:38	0°♒			12208 Apr 25 19:27	0°♓		
				desc. node	12208 May 28 06:35	15°♓55'04		
conjunction	12203 Apr 18 10:07	3°♒54'58	-1°09'49	retrograde	12208 Jul 22 04:12	29°♓52'43		
minimum elong	12203 Apr 18 09:56	3°♒54'39	1°10'14	opposition	12208 Aug 31 14:14	20°♓19'38	-3°05'18	
	12203 May 26 20:20	0°♈		greatest brilliancy	12208 Aug 31 16:17	20°♓17'37	-1.3m	
morning rise	12203 Jun 04 06:37	5°♈51'25		min. Earth dist.	12208 Sep 01 21:53	19°♓48'29	0.68256 AU	
	12203 Jul 08 06:26	0°☿		direct	12208 Oct 12 02:58	10°♓22'09		
	12203 Aug 18 00:10	0°♊			12208 Dec 18 12:51	0°♌		
	12203 Sep 26 12:21	0°♌			12209 Feb 10 08:53	0°♍		
asc. node	12203 Oct 11 00:52	11°♌10'02			12209 Mar 28 00:19	0°♎		
	12203 Nov 04 11:49	0°♍			12209 May 08 16:11	0°☿		
	12203 Dec 14 00:09	0°♎		asc. node	12209 Jun 01 06:15	17°☿51'07		
	12204 Jan 24 18:56	0°♏			12209 Jun 16 23:02	0°♊		
	12204 Mar 13 04:22	0°♐			12209 Jul 25 00:49	0°♌		
retrograde	12204 May 13 22:53	19°♐46'00		evening set	12209 Aug 05 21:48	9°♌25'25		
min. Earth dist.	12204 Jun 16 07:44	12°♐22'40	0.58292 AU		12209 Aug 31 21:57	0°♍		
opposition	12204 Jun 22 12:31	9°♐57'46	2°27'21		12209 Oct 09 12:26	0°♎		
greatest brilliancy	12204 Jun 21 23:53	10°♐10'06	-1.7m					
direct	12204 Jul 29 16:25	1°♐31'58		conjunction	12209 Oct 16 08:18	5°♎12'06	1°06'06	
desc. node	12204 Aug 23 02:13	4°♐48'51		minimum elong	12209 Oct 16 07:42	5°♎10'57	1°06'31	
	12204 Oct 24 00:40	0°♑			12209 Nov 18 15:00	0°♏		
	12204 Dec 17 18:01	0°♒		max. Earth dist.	12209 Dec 04 18:54	11°♏41'19	2.45475 AU	
	12205 Feb 05 12:11	0°♓		morning rise	12209 Dec 18 11:04	21°♏23'18		
	12205 Mar 24 03:39	0°♄			12209 Dec 30 19:22	0°♐		
evening set	12205 Apr 10 20:18	11°♄51'51			12210 Feb 13 11:00	0°♑		
max. Earth dist.	12205 Apr 26 02:07	22°♄18'17	2.52017 AU		12210 Apr 02 01:09	0°♒		
	12205 May 07 03:14	0°♈		desc. node	12210 Apr 14 22:04	7°♒43'37		
					12210 May 24 05:33	0°♓		
conjunction	12205 May 30 20:41	16°♈53'47	-0°53'22		12210 Aug 02 17:13	0°♄		
minimum elong	12205 May 30 22:33	16°♈57'08	0°54'11	retrograde	12210 Aug 28 00:43	3°♄25'30		
	12205 Jun 17 19:24	0°☿			12210 Sep 20 11:45	30°♄♌		
morning rise	12205 Jul 27 05:26	29°☿40'55		opposition	12210 Oct 05 19:47	24°♌39'41	-4°44'18	
	12205 Jul 27 15:23	0°♊		greatest brilliancy	12210 Oct 06 15:09	24°♌21'04	-1.5m	
asc. node	12205 Aug 27 15:41	24°♊02'21		min. Earth dist.	12210 Oct 11 00:06	22°♌40'15	0.63264 AU	
	12205 Sep 04 06:25	0°♌		direct	12210 Nov 16 04:32	14°♌40'31		
	12205 Oct 12 10:55	0°♍			12211 Jan 10 22:48	0°♎		
	12205 Nov 20 02:26	0°♎			12211 Mar 04 13:30	0°♏		
	12205 Dec 30 06:12	0°♏			12211 Apr 16 23:28	0°☿		
	12206 Feb 11 07:17	0°♐		asc. node	12211 Apr 19 10:16	1°☿47'21		
	12206 Apr 01 05:25	0°♑			12211 May 26 20:26	0°♊		
retrograde	12206 Jun 19 02:48	27°♑01'18			12211 Jul 04 05:34	0°♌		
desc. node	12206 Jul 11 08:19	23°♑45'11			12211 Aug 11 10:38	0°♍		
min. Earth dist.	12206 Jul 27 08:21	18°♑03'12	0.66520 AU		12211 Sep 19 11:59	0°♎		
opposition	12206 Jul 29 20:13	17°♑03'48	-0°40'37	evening set	12211 Oct 17 11:14	20°♎47'29		
greatest brilliancy	12206 Jul 29 18:24	17°♑05'36	-1.4m		12211 Oct 30 03:31	0°♏		
direct	12206 Sep 07 22:37	7°♑37'00			12211 Dec 11 19:16	0°♐		
	12206 Nov 21 11:14	0°♒						
	12207 Jan 15 18:03	0°♓		conjunction	12211 Dec 13 16:07	1°♐16'53	0°41'22	

minimum elong	12211 Dec 13 17:48	1° $\text{Z}$ 19'45	0°42'13		12216 Dec 17 08:02	0° $\text{L}$	
max. Earth dist.	12212 Jan 10 04:26	19° $\text{Z}$ 50'57	2.58245 AU		12217 Feb 17 04:07	0° $\text{M}$	
	12212 Jan 25 13:21	0° $\approx$		retrograde	12217 Mar 07 12:14	2° $\text{M}$ 21'20	
morning rise	12212 Feb 02 01:28	4° $\approx$ 54'09			12217 Mar 25 18:22	30° $\text{R}$ $\text{L}$	
desc. node	12212 Mar 01 11:12	23° $\approx$ 09'59		min. Earth dist.	12217 Apr 02 07:56	27° $\text{L}$ 56'16	0.40016 AU
	12212 Mar 12 06:32	0° $\text{H}$		greatest brilliancy	12217 Apr 07 22:38	26° $\text{L}$ 13'21	-2.7m
	12212 Apr 29 22:40	0° $\text{Y}$		opposition	12217 Apr 09 13:02	25° $\text{L}$ 43'39	6°24'36
	12212 Jun 20 11:04	0° $\text{B}$		direct	12217 May 09 23:26	20° $\text{L}$ 09'39	
	12212 Aug 19 07:42	0° $\text{I}$			12217 Jun 21 09:58	0° $\text{M}$	
retrograde	12212 Oct 12 05:30	13° $\text{I}$ 20'41			12217 Aug 19 11:29	0° $\text{J}$	
opposition	12212 Nov 16 16:47	5° $\text{I}$ 57'56	-4°55'58		12217 Oct 09 09:11	0° $\text{Z}$	
greatest brilliancy	12212 Nov 18 06:05	5° $\text{I}$ 24'29	-2.0m	desc. node	12217 Oct 22 03:17	7° $\text{Z}$ 42'06	
min. Earth dist.	12212 Nov 25 03:27	2° $\text{I}$ 56'47	0.51907 AU		12217 Nov 27 18:02	0° $\approx$	
	12212 Dec 04 09:54	30° $\text{R}$ $\text{B}$			12218 Jan 15 09:08	0° $\text{H}$	
direct	12212 Dec 25 12:48	26° $\text{B}$ 57'01		evening set	12218 Feb 18 15:08	21° $\text{H}$ 28'39	
	12213 Jan 16 04:55	0° $\text{I}$			12218 Mar 04 01:09	0° $\text{Y}$	
asc. node	12213 Mar 06 18:47	22° $\text{I}$ 40'21		max. Earth dist.	12218 Mar 19 13:26	9° $\text{Y}$ 56'32	2.65170 AU
	12213 Mar 18 15:38	0° $\text{G}$					
	12213 May 01 00:51	0° $\text{Q}$		conjunction	12218 Apr 03 20:02	19° $\text{Y}$ 50'22	-1°06'47
	12213 Jun 10 00:01	0° $\text{M}$		minimum elong	12218 Apr 03 19:19	19° $\text{Y}$ 49'13	1°06'59
	12213 Jul 19 08:28	0° $\text{L}$			12218 Apr 19 08:05	0° $\text{B}$	
	12213 Aug 28 11:30	0° $\text{M}$		morning rise	12218 May 18 18:18	19° $\text{B}$ 38'58	
	12213 Oct 09 04:19	0° $\text{J}$			12218 Jun 02 23:04	0° $\text{I}$	
	12213 Nov 21 18:25	0° $\text{Z}$			12218 Jul 15 20:38	0° $\text{G}$	
evening set	12213 Dec 06 12:21	9° $\text{Z}$ 52'17			12218 Aug 26 03:57	0° $\text{Q}$	
	12214 Jan 06 03:09	0° $\approx$			12218 Oct 05 06:07	0° $\text{M}$	
desc. node	12214 Jan 17 01:50	7° $\approx$ 05'45		asc. node	12218 Oct 27 21:53	17° $\text{M}$ 10'23	
					12218 Nov 13 20:15	0° $\text{L}$	
conjunction	12214 Jan 23 18:16	11° $\approx$ 24'28	-0°03'42		12218 Dec 24 04:50	0° $\text{M}$	
minimum elong	12214 Jan 23 18:11	11° $\approx$ 24'20	0°03'00		12219 Feb 06 00:01	0° $\text{J}$	
behind sun begin	12214 Jan 22 23:10	10° $\approx$ 53'44			12219 Apr 09 05:54	0° $\text{Z}$	
behind sun end	12214 Jan 24 13:13	11° $\approx$ 54'56		retrograde	12219 Apr 28 23:25	2° $\text{Z}$ 37'06	
max. Earth dist.	12214 Feb 03 14:52	18° $\approx$ 22'41	2.66057 AU		12219 May 17 23:34	30° $\text{R}$ $\text{J}$	
	12214 Feb 21 20:05	0° $\text{H}$		min. Earth dist.	12219 May 30 00:34	26° $\text{J}$ 02'25	0.53504 AU
morning rise	12214 Mar 09 14:21	9° $\text{H}$ 59'23		opposition	12219 Jun 06 12:10	23° $\text{J}$ 12'14	3°50'42
	12214 Apr 10 08:57	0° $\text{Y}$		greatest brilliancy	12219 Jun 05 12:34	23° $\text{J}$ 34'40	-2.0m
	12214 May 28 10:07	0° $\text{B}$		direct	12219 Jul 12 01:21	15° $\text{J}$ 22'54	
	12214 Jul 16 03:32	0° $\text{I}$			12219 Sep 06 07:31	0° $\text{Z}$	
	12214 Sep 04 17:01	0° $\text{G}$		desc. node	12219 Sep 09 11:51	1° $\text{Z}$ 23'15	
	12214 Nov 02 04:42	0° $\text{Q}$			12219 Nov 04 18:49	0° $\approx$	
retrograde	12214 Dec 19 05:06	11° $\text{Q}$ 22'18			12219 Dec 26 17:48	0° $\text{H}$	
opposition	12215 Jan 18 13:52	6° $\text{Q}$ 10'00	-0°19'47		12220 Feb 13 15:04	0° $\text{Y}$	
greatest brilliancy	12215 Jan 18 16:18	6° $\text{Q}$ 08'17	-2.9m	evening set	12220 Mar 26 05:36	26° $\text{Y}$ 48'48	
asc. node	12215 Jan 23 00:28	4° $\text{Q}$ 54'33			12220 Mar 31 01:15	0° $\text{B}$	
min. Earth dist.	12215 Jan 24 04:26	4° $\text{Q}$ 35'02	0.38536 AU	max. Earth dist.	12220 Apr 13 13:14	9° $\text{B}$ 01'27	2.56664 AU
direct	12215 Feb 19 10:59	0° $\text{Q}$ 17'05					
	12215 May 06 20:13	0° $\text{M}$		conjunction	12220 May 12 13:16	28° $\text{B}$ 53'51	-1°04'43
	12215 Jun 21 10:56	0° $\text{L}$		minimum elong	12220 May 12 14:18	28° $\text{B}$ 55'40	1°05'25
	12215 Aug 04 04:13	0° $\text{M}$			12220 May 14 03:11	0° $\text{I}$	
	12215 Sep 17 10:15	0° $\text{J}$			12220 Jun 25 01:36	0° $\text{G}$	
	12215 Nov 01 21:15	0° $\text{Z}$		morning rise	12220 Jul 03 13:00	6° $\text{G}$ 14'04	
desc. node	12215 Dec 04 22:49	21° $\text{Z}$ 20'43			12220 Aug 04 05:09	0° $\text{Q}$	
	12215 Dec 18 11:51	0° $\approx$			12220 Sep 12 03:08	0° $\text{M}$	
evening set	12216 Jan 15 00:11	17° $\approx$ 29'07		asc. node	12220 Sep 13 11:59	1° $\text{M}$ 03'56	
	12216 Feb 03 18:26	0° $\text{H}$			12220 Oct 20 13:12	0° $\text{L}$	
max. Earth dist.	12216 Feb 25 21:08	14° $\text{H}$ 00'10	2.68377 AU		12220 Nov 28 09:33	0° $\text{M}$	
					12221 Jan 07 21:00	0° $\text{J}$	
conjunction	12216 Feb 28 14:37	15° $\text{H}$ 43'56	-0°42'55		12221 Feb 20 21:00	0° $\text{Z}$	
minimum elong	12216 Feb 28 13:33	15° $\text{H}$ 42'15	0°42'37		12221 Apr 15 07:42	0° $\approx$	
	12216 Mar 22 01:35	0° $\text{Y}$		retrograde	12221 Jun 05 15:08	13° $\approx$ 36'31	
morning rise	12216 Apr 11 19:48	13° $\text{Y}$ 15'40		min. Earth dist.	12221 Jul 12 02:54	5° $\approx$ 11'12	0.64028 AU
	12216 May 07 19:35	0° $\text{B}$		opposition	12221 Jul 16 02:12	3° $\approx$ 36'48	0°26'45
	12216 Jun 22 16:12	0° $\text{I}$		greatest brilliancy	12221 Jul 16 00:45	3° $\approx$ 38'14	-1.5m
	12216 Aug 06 12:56	0° $\text{G}$			12221 Jul 25 14:10	30° $\text{R}$ $\text{Z}$	
	12216 Sep 19 11:53	0° $\text{Q}$		desc. node	12221 Jul 27 19:31	29° $\text{Z}$ 14'05	
	12216 Nov 02 02:19	0° $\text{M}$		direct	12221 Aug 24 05:12	24° $\text{Z}$ 29'24	
asc. node	12216 Dec 10 01:56	25° $\text{M}$ 23'19			12221 Sep 26 00:39	0° $\approx$	

	12221 Dec 02 14:18	0°♏			12226 Dec 18 21:24	0°♁	
	12222 Jan 23 20:53	0°♑		max. Earth dist.	12226 Dec 29 06:12	7°♁06'27	2.53751 AU
	12222 Mar 12 06:23	0°♒		morning rise	12227 Jan 16 22:13	19°♁41'20	
	12222 Apr 25 08:02	0°♓			12227 Feb 01 12:22	0°♐	
evening set	12222 May 08 13:23	9°♓23'03		desc. node	12227 Mar 19 04:44	29°♐14'20	
max. Earth dist.	12222 May 22 13:27	19°♓30'43	2.43797 AU		12227 Mar 20 10:00	0°♏	
	12222 Jun 05 19:16	0°♑			12227 May 08 23:24	0°♑	
					12227 Jul 02 12:20	0°♒	
conjunction	12222 Jul 04 08:56	21°♑33'55	-0°19'24	retrograde	12227 Sep 23 12:13	26°♒43'07	
minimum elong	12222 Jul 04 10:29	21°♑36'54	0°20'13	opposition	12227 Oct 30 12:47	18°♒42'01	-5°08'27
	12222 Jul 15 07:56	0°♓		greatest brilliancy	12227 Oct 31 20:55	18°♒12'05	-1.7m
asc. node	12222 Aug 01 02:09	13°♓02'10		min. Earth dist.	12227 Nov 06 21:51	15°♒57'25	0.57007 AU
	12222 Aug 22 16:02	0°♑		direct	12227 Dec 09 17:45	9°♒06'54	
morning rise	12222 Sep 10 23:04	15°♑14'52			12228 Feb 12 05:38	0°♓	
	12222 Sep 29 15:29	0°♒		asc. node	12228 Mar 23 06:34	24°♓41'36	
	12222 Nov 07 03:16	0°♓			12228 Mar 31 00:46	0°♑	
	12222 Dec 17 01:12	0°♒			12228 May 11 06:22	0°♓	
	12223 Jan 28 08:41	0°♁			12228 Jun 19 07:35	0°♑	
	12223 Mar 15 11:41	0°♐			12228 Jul 28 01:10	0°♒	
	12223 May 08 21:25	0°♏			12228 Sep 05 15:04	0°♓	
desc. node	12223 Jun 14 21:51	13°♏59'32			12228 Oct 16 19:23	0°♒	
retrograde	12223 Jul 09 20:53	17°♏27'43		evening set	12228 Nov 18 14:51	22°♒56'40	
opposition	12223 Aug 19 13:20	7°♏42'29	-2°14'24		12228 Nov 28 22:39	0°♁	
greatest brilliancy	12223 Aug 19 11:51	7°♏43'57	-1.3m				
min. Earth dist.	12223 Aug 19 08:56	7°♏46'50	0.68361 AU	conjunction	12229 Jan 08 12:40	27°♁04'46	0°13'52
	12223 Sep 11 10:04	30°♒		minimum elong	12229 Jan 08 13:14	27°♁05'42	0°14'40
direct	12223 Sep 29 16:34	27°♐54'01		behind sun begin	12229 Jan 08 05:26	26°♁52'55	
	12223 Oct 19 03:49	0°♏		behind sun end	12229 Jan 08 21:01	27°♁18'28	
	12223 Dec 31 06:35	0°♑			12229 Jan 12 23:45	0°♐	
	12224 Feb 19 21:53	0°♒		max. Earth dist.	12229 Jan 25 09:53	8°♐04'51	2.63653 AU
	12224 Apr 04 19:21	0°♓		desc. node	12229 Feb 02 18:20	13°♐28'35	
	12224 May 16 07:03	0°♑		morning rise	12229 Feb 23 22:50	27°♐02'09	
asc. node	12224 Jun 17 22:15	24°♑50'13			12229 Feb 28 14:47	0°♏	
	12224 Jun 24 13:46	0°♓			12229 Apr 17 10:44	0°♑	
evening set	12224 Jul 06 23:20	9°♓42'04			12229 Jun 05 10:24	0°♒	
	12224 Aug 01 15:45	0°♑			12229 Jul 26 11:09	0°♓	
	12224 Sep 08 12:02	0°♒			12229 Sep 22 05:11	0°♑	
				retrograde	12229 Nov 19 01:39	15°♑32'41	
conjunction	12224 Sep 16 19:21	6°♒32'16	0°55'41	opposition	12229 Dec 21 11:55	9°♑27'47	-3°06'09
minimum elong	12224 Sep 16 15:43	6°♒25'08	0°55'40	greatest brilliancy	12229 Dec 22 14:29	9°♑06'29	-2.5m
	12224 Oct 17 00:10	0°♓		min. Earth dist.	12229 Dec 29 18:55	6°♑49'36	0.43197 AU
max. Earth dist.	12224 Nov 09 15:20	17°♓54'10	2.39822 AU	direct	12230 Jan 25 15:09	2°♑06'49	
morning rise	12224 Nov 25 15:00	29°♓44'33		asc. node	12230 Feb 08 15:09	3°♑29'00	
	12224 Nov 25 23:26	0°♒			12230 Apr 08 11:18	0°♓	
	12225 Jan 07 01:40	0°♁			12230 May 22 21:15	0°♑	
	12225 Feb 20 20:15	0°♐			12230 Jul 03 09:42	0°♒	
	12225 Apr 10 05:01	0°♏			12230 Aug 14 01:20	0°♓	
desc. node	12225 May 01 16:09	12°♏19'12			12230 Sep 25 23:03	0°♒	
	12225 Jun 04 16:59	0°♑			12230 Nov 09 11:52	0°♁	
retrograde	12225 Aug 13 00:44	20°♑11'06		desc. node	12230 Dec 21 12:23	27°♁25'59	
opposition	12225 Sep 21 15:06	11°♑03'51	-4°12'29		12230 Dec 25 12:00	0°♐	
greatest brilliancy	12225 Sep 22 02:36	10°♑52'40	-1.3m	evening set	12230 Dec 31 10:59	3°♐49'48	
min. Earth dist.	12225 Sep 25 07:16	9°♑38'05	0.66013 AU		12231 Feb 10 11:26	0°♏	
direct	12225 Nov 02 06:32	1°♑00'59					
	12226 Jan 24 17:49	0°♒		conjunction	12231 Feb 15 00:43	2°♏53'25	-0°29'08
	12226 Mar 14 02:37	0°♓		minimum elong	12231 Feb 14 23:53	2°♏52'05	0°28'39
	12226 Apr 25 13:09	0°♑		max. Earth dist.	12231 Feb 17 07:24	4°♏20'09	2.68131 AU
asc. node	12226 May 06 00:11	7°♑46'53			12231 Mar 29 18:59	0°♑	
	12226 Jun 04 02:03	0°♓		morning rise	12231 Mar 30 11:39	0°♑26'26	
	12226 Jul 12 06:42	0°♑			12231 May 15 22:02	0°♒	
	12226 Aug 19 07:17	0°♒			12231 Jul 01 14:40	0°♓	
evening set	12226 Sep 21 18:58	25°♒56'17			12231 Aug 16 21:41	0°♑	
	12226 Sep 27 02:56	0°♓			12231 Oct 02 05:29	0°♓	
	12226 Nov 06 11:45	0°♒			12231 Nov 19 10:04	0°♑	
				asc. node	12231 Dec 27 19:15	20°♑17'58	
conjunction	12226 Nov 23 16:01	12°♒20'21	0°56'11		12232 Jan 27 14:07	0°♒	
minimum elong	12226 Nov 23 17:55	12°♒23'44	0°56'59	retrograde	12232 Feb 08 07:24	0°♒55'11	

	12232 Feb 20 00:46	30° $\mathbb{R}$ $\mathbb{M}$			12237 May 02 10:14	0° $\mathbb{I}$	
min. Earth dist.	12232 Mar 06 09:58	26° $\mathbb{M}$ 32'27	0.36782 AU	max. Earth dist.	12237 May 04 10:06	1° $\mathbb{I}$ 24'06	2.49209 AU
opposition	12232 Mar 09 15:10	25° $\mathbb{M}$ 40'19	5°08'05				
greatest brilliancy	12232 Mar 08 22:43	25° $\mathbb{M}$ 51'26	-3.0m	conjunction	12237 Jun 11 09:06	28° $\mathbb{I}$ 46'02	-0°43'22
direct	12232 Apr 07 16:36	20° $\mathbb{M}$ 48'06		minimum elong	12237 Jun 11 11:13	28° $\mathbb{I}$ 49'55	0°44'14
	12232 May 17 15:37	0° $\mathbb{L}$			12237 Jun 13 01:11	0° $\mathbb{S}$	
	12232 Jul 13 15:16	0° $\mathbb{M}$			12237 Jul 22 19:02	0° $\mathbb{Q}$	
	12232 Aug 31 11:11	0° $\mathbb{J}$		morning rise	12237 Aug 11 11:12	15° $\mathbb{Q}$ 14'16	
	12232 Oct 18 08:03	0° $\mathbb{Z}$		asc. node	12237 Aug 17 22:12	20° $\mathbb{Q}$ 16'46	
desc. node	12232 Nov 07 13:24	12° $\mathbb{Z}$ 39'37			12237 Aug 30 07:40	0° $\mathbb{M}$	
	12232 Dec 05 07:26	0° $\mathbb{A}$			12237 Oct 07 10:03	0° $\mathbb{L}$	
	12233 Jan 22 06:46	0° $\mathbb{H}$		greatest brilliancy	12237 Nov 09 00:12	25° $\mathbb{L}$ 24'33	1.2m
evening set	12233 Feb 04 22:35	8° $\mathbb{H}$ 35'03			12237 Nov 14 23:25	0° $\mathbb{M}$	
	12233 Mar 10 17:43	0° $\mathbb{Y}$			12237 Dec 24 23:20	0° $\mathbb{J}$	
max. Earth dist.	12233 Mar 10 16:01	29° $\mathbb{H}$ 57'17	2.67074 AU		12238 Feb 05 14:46	0° $\mathbb{Z}$	
					12238 Mar 25 01:54	0° $\mathbb{A}$	
conjunction	12233 Mar 20 22:39	6° $\mathbb{Y}$ 31'50	-0°59'57		12238 May 28 00:35	0° $\mathbb{H}$	
minimum elong	12233 Mar 20 21:38	6° $\mathbb{Y}$ 30'14	0°59'57	retrograde	12238 Jun 26 17:04	4° $\mathbb{H}$ 53'17	
	12233 Apr 26 03:26	0° $\mathbb{B}$		desc. node	12238 Jul 01 11:30	4° $\mathbb{H}$ 44'32	
morning rise	12233 May 03 17:49	4° $\mathbb{B}$ 59'43			12238 Jul 24 04:44	30° $\mathbb{R}$ $\mathbb{A}$	
	12233 Jun 10 03:48	0° $\mathbb{I}$		min. Earth dist.	12238 Aug 04 19:17	25° $\mathbb{A}$ 38'41	0.67451 AU
	12233 Jul 23 15:53	0° $\mathbb{S}$		opposition	12238 Aug 06 11:13	24° $\mathbb{A}$ 59'04	-1°17'11
	12233 Sep 03 17:29	0° $\mathbb{Q}$		greatest brilliancy	12238 Aug 06 08:40	25° $\mathbb{A}$ 01'36	-1.3m
	12233 Oct 14 16:27	0° $\mathbb{M}$		direct	12238 Sep 15 23:32	15° $\mathbb{A}$ 23'21	
asc. node	12233 Nov 13 15:50	22° $\mathbb{M}$ 09'09			12238 Nov 12 09:29	0° $\mathbb{H}$	
	12233 Nov 24 08:12	0° $\mathbb{L}$			12239 Jan 09 22:09	0° $\mathbb{Y}$	
	12234 Jan 05 12:30	0° $\mathbb{M}$			12239 Feb 27 20:00	0° $\mathbb{B}$	
	12234 Feb 24 13:25	0° $\mathbb{J}$			12239 Apr 13 06:53	0° $\mathbb{I}$	
retrograde	12234 Apr 10 22:15	12° $\mathbb{J}$ 32'13			12239 May 24 17:14	0° $\mathbb{S}$	
min. Earth dist.	12234 May 09 12:59	6° $\mathbb{J}$ 52'14	0.48120 AU	evening set	12239 Jun 11 12:05	13° $\mathbb{S}$ 24'16	
greatest brilliancy	12234 May 16 09:51	4° $\mathbb{J}$ 24'05	-2.2m		12239 Jul 03 01:39	0° $\mathbb{Q}$	
opposition	12234 May 17 21:17	3° $\mathbb{J}$ 52'06	5°13'31	asc. node	12239 Jul 05 14:30	1° $\mathbb{Q}$ 58'22	
	12234 May 29 15:21	30° $\mathbb{R}$ $\mathbb{M}$		max. Earth dist.	12239 Jul 31 21:27	22° $\mathbb{Q}$ 36'50	2.36487 AU
direct	12234 Jun 20 11:47	26° $\mathbb{M}$ 49'34			12239 Aug 10 05:24	0° $\mathbb{M}$	
	12234 Jul 13 21:17	0° $\mathbb{J}$					
	12234 Sep 21 14:33	0° $\mathbb{Z}$		conjunction	12239 Aug 17 09:28	5° $\mathbb{M}$ 41'01	0°29'56
desc. node	12234 Sep 25 21:39	2° $\mathbb{Z}$ 17'51		minimum elong	12239 Aug 17 06:24	5° $\mathbb{M}$ 34'56	0°29'27
	12234 Nov 14 00:34	0° $\mathbb{A}$			12239 Sep 17 02:11	0° $\mathbb{L}$	
	12235 Jan 03 06:45	0° $\mathbb{H}$			12239 Oct 25 13:15	0° $\mathbb{M}$	
	12235 Feb 20 13:36	0° $\mathbb{Y}$		morning rise	12239 Oct 30 10:14	3° $\mathbb{M}$ 44'13	
evening set	12235 Mar 12 13:41	12° $\mathbb{Y}$ 47'44			12239 Dec 04 10:29	0° $\mathbb{J}$	
max. Earth dist.	12235 Apr 03 16:09	27° $\mathbb{Y}$ 13'04	2.60597 AU		12240 Jan 15 12:06	0° $\mathbb{Z}$	
	12235 Apr 07 21:11	0° $\mathbb{B}$			12240 Feb 29 13:12	0° $\mathbb{A}$	
					12240 Apr 19 04:42	0° $\mathbb{H}$	
conjunction	12235 Apr 27 03:36	12° $\mathbb{B}$ 53'24	-1°09'33	desc. node	12240 May 18 08:45	15° $\mathbb{H}$ 28'31	
minimum elong	12235 Apr 27 03:50	12° $\mathbb{B}$ 53'47	1°10'05		12240 Jun 21 08:41	0° $\mathbb{Y}$	
	12235 May 22 03:16	0° $\mathbb{I}$		retrograde	12240 Jul 29 22:18	7° $\mathbb{Y}$ 28'48	
morning rise	12235 Jun 14 11:20	16° $\mathbb{I}$ 24'03			12240 Sep 03 03:03	30° $\mathbb{R}$ $\mathbb{H}$	
	12235 Jul 03 09:22	0° $\mathbb{S}$		opposition	12240 Sep 08 02:45	28° $\mathbb{H}$ 03'56	-3°32'12
	12235 Aug 12 22:00	0° $\mathbb{Q}$		greatest brilliancy	12240 Sep 08 07:42	27° $\mathbb{H}$ 59'04	-1.3m
	12235 Sep 21 04:33	0° $\mathbb{M}$		min. Earth dist.	12240 Sep 10 06:37	27° $\mathbb{H}$ 13'04	0.67753 AU
asc. node	12235 Oct 01 07:44	7° $\mathbb{M}$ 49'58		direct	12240 Oct 19 18:00	18° $\mathbb{H}$ 03'03	
	12235 Oct 29 22:13	0° $\mathbb{L}$			12240 Dec 08 16:32	0° $\mathbb{Y}$	
	12235 Dec 08 02:48	0° $\mathbb{M}$			12241 Feb 04 07:26	0° $\mathbb{B}$	
	12236 Jan 18 05:17	0° $\mathbb{J}$			12241 Mar 22 17:30	0° $\mathbb{I}$	
	12236 Mar 04 04:48	0° $\mathbb{Z}$			12241 May 03 15:08	0° $\mathbb{S}$	
retrograde	12236 May 22 11:32	29° $\mathbb{Z}$ 09'00		asc. node	12241 May 22 14:46	14° $\mathbb{S}$ 17'37	
min. Earth dist.	12236 Jun 26 00:48	21° $\mathbb{Z}$ 21'28	0.60592 AU		12241 Jun 11 23:51	0° $\mathbb{Q}$	
opposition	12236 Jul 01 10:34	19° $\mathbb{Z}$ 13'54	1°41'15		12241 Jul 20 02:08	0° $\mathbb{M}$	
greatest brilliancy	12236 Jul 01 02:58	19° $\mathbb{Z}$ 21'23	-1.6m	greatest brilliancy	12241 Aug 21 14:21	25° $\mathbb{M}$ 45'00	1.1m
direct	12236 Aug 08 08:42	10° $\mathbb{Z}$ 31'17		evening set	12241 Aug 23 09:37	27° $\mathbb{M}$ 10'19	
desc. node	12236 Aug 13 07:19	10° $\mathbb{Z}$ 40'14			12241 Aug 26 23:50	0° $\mathbb{L}$	
	12236 Oct 15 11:54	0° $\mathbb{A}$			12241 Oct 04 15:24	0° $\mathbb{M}$	
	12236 Dec 11 23:13	0° $\mathbb{H}$					
	12237 Jan 31 11:47	0° $\mathbb{Y}$		conjunction	12241 Oct 31 08:56	20° $\mathbb{M}$ 07'18	1°05'22
	12237 Mar 19 09:25	0° $\mathbb{B}$		minimum elong	12241 Oct 31 09:49	20° $\mathbb{M}$ 08'56	1°05'58
evening set	12237 Apr 20 08:52	21° $\mathbb{B}$ 36'22			12241 Nov 13 19:11	0° $\mathbb{J}$	

max. Earth dist.	12241 Dec 14 21:37	22°♄15'26	2.48594 AU	opposition	12247 Feb 05 09:31	23°♎41'08	1°46'19
	12241 Dec 26 00:22	0°♄		greatest brilliancy	12247 Feb 05 12:43	23°♎38'59	-3.0m
morning rise	12241 Dec 29 21:30	2°♄40'40		min. Earth dist.	12247 Feb 08 04:40	22°♎55'52	0.36932 AU
	12242 Feb 08 14:17	0°♄		direct	12247 Mar 07 18:05	18°♎28'06	
	12242 Mar 27 20:03	0°♄			12247 Apr 20 17:00	0°♎	
desc. node	12242 Apr 04 23:18	4°♄58'31			12247 Jun 12 07:14	0°♎	
	12242 May 17 18:17	0°♄			12247 Jul 28 03:33	0°♎	
	12242 Jul 17 12:32	0°♄			12247 Sep 11 12:02	0°♄	
retrograde	12242 Sep 06 02:58	11°♄50'07			12247 Oct 27 14:52	0°♄	
opposition	12242 Oct 14 08:57	3°♄18'26	-4°57'28	desc. node	12247 Nov 25 02:15	18°♄13'46	
greatest brilliancy	12242 Oct 15 09:01	2°♄55'29	-1.5m		12247 Dec 13 14:54	0°♄	
min. Earth dist.	12242 Oct 20 08:49	1°♄01'24	0.61323 AU	evening set	12248 Jan 23 01:58	25°♄34'08	
	12242 Oct 23 02:50	30°♄			12248 Jan 30 02:25	0°♄	
direct	12242 Nov 24 10:41	23°♄24'36		max. Earth dist.	12248 Mar 01 21:50	20°♄07'40	2.68141 AU
	12242 Dec 28 16:22	0°♄					
	12243 Feb 25 16:57	0°♄		conjunction	12248 Mar 07 08:23	23°♄35'00	-0°50'00
asc. node	12243 Apr 09 21:04	29°♄04'02		minimum elong	12248 Mar 07 07:17	23°♄33'16	0°49'49
	12243 Apr 11 04:18	0°♄			12248 Mar 17 10:20	0°♄	
	12243 May 21 10:21	0°♄		morning rise	12248 Apr 19 15:16	21°♄18'27	
	12243 Jun 28 23:45	0°♄			12248 May 03 00:58	0°♄	
	12243 Aug 06 07:54	0°♄			12248 Jun 17 13:52	0°♄	
	12243 Sep 14 12:18	0°♄			12248 Jul 31 21:28	0°♄	
	12243 Oct 25 06:47	0°♄			12248 Sep 13 01:15	0°♄	
evening set	12243 Oct 30 08:10	3°♄37'30			12248 Oct 25 09:52	0°♄	
	12243 Dec 07 01:14	0°♄		asc. node	12248 Nov 30 10:27	25°♄21'19	
					12248 Dec 07 04:25	0°♄	
conjunction	12243 Dec 23 22:56	11°♄28'31	0°31'30		12249 Jan 23 15:04	0°♄	
minimum elong	12243 Dec 24 00:14	11°♄30'43	0°32'22	retrograde	12249 Mar 20 23:46	18°♄29'27	
max. Earth dist.	12244 Jan 16 09:57	27°♄05'00	2.60400 AU	min. Earth dist.	12249 Apr 16 11:49	13°♄42'50	0.42671 AU
	12244 Jan 20 20:30	0°♄		greatest brilliancy	12249 Apr 22 21:55	11°♄36'21	-2.6m
morning rise	12244 Feb 10 16:14	13°♄31'50		opposition	12249 Apr 24 15:43	11°♄01'46	6°15'53
desc. node	12244 Feb 20 11:01	19°♄48'40		direct	12249 May 26 02:39	4°♄55'43	
	12244 Mar 07 11:40	0°♄			12249 Aug 09 23:13	0°♄	
	12244 Apr 24 18:23	0°♄			12249 Oct 02 22:09	0°♄	
	12244 Jun 14 02:55	0°♄		desc. node	12249 Oct 12 07:44	5°♄30'06	
	12244 Aug 08 06:52	0°♄			12249 Nov 22 09:25	0°♄	
retrograde	12244 Oct 24 19:28	24°♄20'59			12250 Jan 10 12:28	0°♄	
opposition	12244 Nov 28 05:29	17°♄23'32	-4°31'53	evening set	12250 Feb 26 12:29	29°♄27'00	
greatest brilliancy	12244 Nov 29 18:25	16°♄51'22	-2.2m		12250 Feb 27 09:14	0°♄	
min. Earth dist.	12244 Dec 06 22:40	14°♄22'14	0.48826 AU	max. Earth dist.	12250 Mar 24 22:45	16°♄25'39	2.63744 AU
direct	12245 Jan 04 23:28	8°♄50'58					
asc. node	12245 Feb 25 04:21	23°♄51'45		conjunction	12250 Apr 12 01:31	28°♄16'31	-1°09'06
	12245 Mar 08 12:54	0°♄		minimum elong	12250 Apr 12 01:06	28°♄15'50	1°09'26
	12245 Apr 23 17:36	0°♄			12250 Apr 14 16:15	0°♄	
	12245 Jun 03 15:30	0°♄		morning rise	12250 May 27 22:53	29°♄09'44	
	12245 Jul 13 12:35	0°♄			12250 May 29 04:06	0°♄	
	12245 Aug 23 01:09	0°♄			12250 Jul 10 19:57	0°♄	
	12245 Oct 04 01:35	0°♄			12250 Aug 20 20:20	0°♄	
	12245 Nov 16 21:47	0°♄			12250 Sep 29 14:47	0°♄	
evening set	12245 Dec 15 22:06	19°♄13'46		asc. node	12250 Oct 18 03:08	14°♄09'04	
	12246 Jan 01 10:27	0°♄			12250 Nov 07 20:06	0°♄	
desc. node	12246 Jan 07 03:03	3°♄41'10			12250 Dec 17 15:15	0°♄	
					12251 Jan 28 24:00	0°♄	
conjunction	12246 Feb 01 01:02	19°♄42'11	-0°13'30		12251 Mar 21 03:15	0°♄	
minimum elong	12246 Feb 01 00:37	19°♄41'30	0°12'53	retrograde	12251 May 08 06:52	13°♄07'45	
behind sun begin	12246 Jan 31 13:19	19°♄23'27		min. Earth dist.	12251 Jun 09 15:18	6°♄05'01	0.56236 AU
behind sun end	12246 Feb 01 11:54	19°♄59'31		opposition	12251 Jun 16 10:01	3°♄28'04	3°02'21
max. Earth dist.	12246 Feb 08 19:15	24°♄39'19	2.67021 AU	greatest brilliancy	12251 Jun 15 16:59	3°♄44'32	-1.8m
	12246 Feb 17 04:43	0°♄			12251 Jun 25 21:26	30°♄	
morning rise	12246 Mar 17 05:55	17°♄46'33		direct	12251 Jul 22 21:14	25°♄17'25	
	12246 Apr 05 14:44	0°♄			12251 Aug 21 11:24	0°♄	
	12246 May 23 06:32	0°♄		desc. node	12251 Aug 30 17:15	2°♄57'06	
	12246 Jul 10 02:56	0°♄			12251 Oct 28 22:23	0°♄	
	12246 Aug 27 15:53	0°♄			12251 Dec 21 08:56	0°♄	
	12246 Oct 17 23:18	0°♄			12252 Feb 08 18:38	0°♄	
retrograde	12247 Jan 06 17:14	28°♄36'01			12252 Mar 26 08:51	0°♄	
asc. node	12247 Jan 13 09:34	28°♄18'27		evening set	12252 Apr 03 23:02	5°♄43'07	

max. Earth dist.	12252 Apr 20 09:42	16°♄50'17	2.54169 AU			12257 Apr 04 15:17	0°♄		
	12252 May 09 10:45	0°♄		desc. node		12257 Apr 21 16:13	10°♄04'53		
						12257 May 27 19:58	0°♄		
conjunction	12252 May 22 15:30	9°♄18'21	-0°59'06	retrograde		12257 Aug 21 10:45	28°♄09'29		
minimum elong	12252 May 22 17:02	9°♄21'03	0°59'52	opposition		12257 Sep 29 15:09	19°♄13'35	-4°32'09	
	12252 Jun 20 06:37	0°♄		greatest brilliancy		12257 Sep 30 06:59	18°♄58'16	-1.4m	
morning rise	12252 Jul 16 09:33	19°♄27'33		min. Earth dist.		12257 Oct 04 03:42	17°♄28'38	0.64623 AU	
	12252 Jul 30 06:43	0°♄		direct		12257 Nov 10 03:41	9°♄11'42		
asc. node	12252 Sep 03 17:19	27°♄24'14				12258 Jan 16 14:03	0°♄		
	12252 Sep 07 01:04	0°♄				12258 Mar 08 03:03	0°♄		
	12252 Oct 15 07:45	0°♄				12258 Apr 20 03:08	0°♄		
	12252 Nov 23 00:38	0°♄		asc. node		12258 Apr 26 09:13	4°♄36'06		
	12253 Jan 02 05:52	0°♄				12258 May 29 21:10	0°♄		
	12253 Feb 14 12:53	0°♄				12258 Jul 07 04:20	0°♄		
	12253 Apr 05 16:14	0°♄				12258 Aug 14 06:52	0°♄		
retrograde	12253 Jun 13 10:11	21°♄52'32				12258 Sep 22 04:49	0°♄		
desc. node	12253 Jul 18 00:19	14°♄16'10		evening set		12258 Oct 06 18:01	10°♄56'36		
min. Earth dist.	12253 Jul 20 21:41	13°♄08'09	0.65535 AU			12258 Nov 01 16:06	0°♄		
opposition	12253 Jul 24 00:59	11°♄53'24	-0°13'30						
greatest brilliancy	12253 Jul 24 00:19	11°♄54'03	-1.4m	conjunction		12258 Dec 05 08:11	23°♄54'03	0°48'04	
direct	12253 Sep 01 17:04	2°♄34'37		minimum elong		12258 Dec 05 10:03	23°♄57'18	0°48'55	
	12253 Nov 25 12:55	0°♄				12258 Dec 14 03:40	0°♄		
	12254 Jan 18 11:15	0°♄		max. Earth dist.		12259 Jan 05 06:49	15°♄03'21	2.56328 AU	
	12254 Mar 07 08:31	0°♄		morning rise		12259 Jan 26 07:15	29°♄01'30		
	12254 Apr 20 13:53	0°♄				12259 Jan 27 18:52	0°♄		
evening set	12254 May 19 20:23	20°♄59'47		desc. node		12259 Mar 09 05:31	26°♄02'29		
	12254 Jun 01 01:13	0°♄				12259 Mar 15 12:24	0°♄		
max. Earth dist.	12254 Jun 05 15:52	3°♄26'13	2.40818 AU			12259 May 03 11:20	0°♄		
	12254 Jul 10 12:41	0°♄				12259 Jun 24 23:49	0°♄		
						12259 Aug 29 21:13	0°♄		
conjunction	12254 Jul 19 00:29	6°♄35'55	-0°02'28	retrograde		12259 Oct 04 08:17	6°♄23'07		
minimum elong	12254 Jul 19 00:47	6°♄36'29	0°03'13			12259 Nov 05 22:03	30°♄		
behind sun begin	12254 Jul 17 21:14	5°♄42'51		opposition		12259 Nov 09 12:49	28°♄42'02	-5°04'31	
behind sun end	12254 Jul 20 04:19	7°♄30'10		greatest brilliancy		12259 Nov 11 00:23	28°♄09'30	-1.9m	
asc. node	12254 Jul 22 09:44	9°♄14'28		min. Earth dist.		12259 Nov 17 13:03	25°♄46'32	0.54284 AU	
	12254 Aug 17 19:09	0°♄		direct		12259 Dec 19 01:10	19°♄23'10		
	12254 Sep 24 17:04	0°♄				12260 Jan 31 02:12	0°♄		
morning rise	12254 Sep 29 03:22	3°♄29'26		asc. node		12260 Mar 13 17:28	23°♄27'33		
	12254 Nov 02 03:43	0°♄				12260 Mar 23 18:29	0°♄		
	12254 Dec 12 00:01	0°♄				12260 May 05 01:37	0°♄		
	12255 Jan 23 03:12	0°♄				12260 Jun 13 13:54	0°♄		
	12255 Mar 09 16:35	0°♄				12260 Jul 22 14:21	0°♄		
	12255 Apr 30 14:34	0°♄				12260 Aug 31 10:07	0°♄		
desc. node	12255 Jun 04 23:45	16°♄04'12				12260 Oct 11 19:45	0°♄		
retrograde	12255 Jul 17 11:12	25°♄04'58				12260 Nov 24 03:31	0°♄		
opposition	12255 Aug 27 00:34	15°♄26'07	-2°45'07	evening set		12260 Nov 29 00:41	3°♄17'54		
greatest brilliancy	12255 Aug 27 00:49	15°♄25'53	-1.3m			12261 Jan 08 07:37	0°♄		
min. Earth dist.	12255 Aug 27 16:28	15°♄10'27	0.68437 AU						
direct	12255 Oct 07 09:16	5°♄32'03		conjunction		12261 Jan 17 08:30	5°♄52'41	0°03'35	
	12255 Dec 23 22:58	0°♄		minimum elong		12261 Jan 17 08:38	5°♄52'54	0°04'21	
	12256 Feb 14 08:24	0°♄		behind sun begin		12261 Jan 16 13:35	5°♄22'01		
	12256 Mar 30 17:34	0°♄		behind sun end		12261 Jan 18 03:41	6°♄23'46		
	12256 May 11 08:50	0°♄		desc. node		12261 Jan 23 19:14	10°♄03'00		
asc. node	12256 Jun 08 06:15	21°♄08'51		max. Earth dist.		12261 Jan 30 20:13	14°♄35'17	2.65092 AU	
	12256 Jun 19 16:34	0°♄				12261 Feb 23 22:49	0°♄		
evening set	12256 Jul 23 11:06	26°♄34'28		morning rise		12261 Mar 03 19:39	4°♄59'35		
	12256 Jul 27 18:44	0°♄				12261 Apr 12 13:52	0°♄		
	12256 Sep 03 15:10	0°♄				12261 May 30 23:36	0°♄		
						12261 Jul 19 13:23	0°♄		
conjunction	12256 Oct 03 19:52	23°♄35'23	1°03'36			12261 Sep 10 07:54	0°♄		
minimum elong	12256 Oct 03 17:49	23°♄31'26	1°03'52	retrograde		12261 Dec 05 09:11	29°♄55'46		
	12256 Oct 12 03:51	0°♄		opposition		12262 Jan 05 15:37	24°♄21'24	-1°42'00	
	12256 Nov 21 03:37	0°♄		greatest brilliancy		12262 Jan 06 05:22	24°♄11'06	-2.8m	
max. Earth dist.	12256 Nov 25 09:15	3°♄05'43	2.42915 AU	min. Earth dist.		12262 Jan 12 20:09	22°♄13'02	0.40415 AU	
morning rise	12256 Dec 08 23:59	12°♄55'49		asc. node		12262 Jan 30 00:06	18°♄23'49		
	12257 Jan 02 05:18	0°♄		direct		12262 Feb 08 00:14	17°♄49'11		
	12257 Feb 15 20:10	0°♄				12262 Mar 24 17:50	0°♄		



	12262 May 14 01:22	0°♎			12267 Jun 28 13:25	0°♎		
	12262 Jun 26 08:20	0°♏			12267 Aug 07 21:49	0°♏		
	12262 Aug 07 22:46	0°♐			12267 Sep 16 00:00	0°♎		
	12262 Sep 20 11:42	0°♑	asc. node		12267 Sep 21 14:24	4°♎20'53		
	12262 Nov 04 10:52	0°♒			12267 Oct 24 13:04	0°♏		
desc. node	12262 Dec 11 14:47	24°♒08'22			12267 Dec 02 11:54	0°♐		
	12262 Dec 20 17:47	0°♑			12268 Jan 12 03:13	0°♑		
evening set	12263 Jan 08 20:25	12°♑12'25			12268 Feb 25 16:07	0°♒		
	12263 Feb 05 20:38	0°♓			12268 Apr 22 20:47	0°♑		
			retrograde		12268 May 30 16:51	8°♑04'06		
conjunction	12263 Feb 22 19:36	10°♓44'56 -0°37'29		min. Earth dist.	12268 Jul 05 08:05	29°♒54'43 0.62604 AU		
minimum elong	12263 Feb 22 18:36	10°♓43'22 0°37'06			12268 Jul 05 02:41	30°♓		
max. Earth dist.	12263 Feb 22 06:58	10°♓24'56 2.68368 AU	opposition		12268 Jul 09 22:38	28°♒05'22 0°56'58		
	12263 Mar 25 03:42	0°♑	greatest brilliancy		12268 Jul 09 18:59	28°♒08'59 -1.6m		
morning rise	12263 Apr 07 01:52	8°♑13'37	desc. node		12268 Aug 03 11:00	20°♒24'42		
	12263 May 11 01:44	0°♒	direct		12268 Aug 17 12:51	19°♒08'18		
	12263 Jun 26 06:58	0°♑			12268 Oct 04 16:38	0°♑		
	12263 Aug 10 17:34	0°♎			12268 Dec 05 19:46	0°♓		
	12263 Sep 24 14:00	0°♏			12269 Jan 26 08:25	0°♑		
	12263 Nov 08 15:31	0°♎			12269 Mar 14 14:04	0°♒		
asc. node	12263 Dec 18 02:12	24°♎39'25			12269 Apr 27 16:49	0°♑		
	12263 Dec 27 13:04	0°♏	evening set		12269 Apr 30 09:50	1°♑54'15		
retrograde	12264 Feb 24 21:32	19°♏32'21	max. Earth dist.		12269 May 13 21:50	11°♑30'06 2.46245 AU		
min. Earth dist.	12264 Mar 21 18:56	15°♏16'02 0.38244 AU			12269 Jun 08 06:47	0°♎		
greatest brilliancy	12264 Mar 26 07:21	13°♏58'09 -2.9m						
opposition	12264 Mar 27 14:14	13°♏35'46 6°09'25	conjunction		12269 Jun 23 21:06	11°♎39'06 -0°30'42		
direct	12264 Apr 26 06:37	8°♏25'10	minimum elong		12269 Jun 23 23:06	11°♎42'53 0°31'34		
	12264 Jul 02 06:51	0°♐			12269 Jul 17 22:34	0°♏		
	12264 Aug 24 04:42	0°♑	asc. node		12269 Aug 08 03:41	16°♏28'40		
	12264 Oct 12 12:53	0°♒			12269 Aug 25 09:06	0°♎		
desc. node	12264 Oct 28 18:25	9°♒58'44	morning rise		12269 Aug 28 03:02	2°♎09'53		
	12264 Nov 30 05:22	0°♑			12269 Oct 02 09:39	0°♏		
	12265 Jan 17 13:10	0°♓			12269 Nov 09 21:27	0°♐		
evening set	12265 Feb 12 18:03	16°♓26'32			12269 Dec 19 18:54	0°♑		
	12265 Mar 06 03:09	0°♑			12270 Jan 31 03:15	0°♒		
max. Earth dist.	12265 Mar 15 19:49	6°♑11'53 2.66132 AU			12270 Mar 18 14:50	0°♑		
					12270 May 14 07:50	0°♓		
conjunction	12265 Mar 28 19:10	14°♑33'06 -1°04'22	desc. node		12270 Jun 21 14:29	11°♓40'49		
minimum elong	12265 Mar 28 18:18	14°♑31'43 1°04'31	retrograde		12270 Jul 04 06:25	12°♓38'06		
	12265 Apr 21 11:58	0°♒	opposition		12270 Aug 13 23:46	2°♓48'31 -1°51'36		
morning rise	12265 May 12 03:20	13°♓40'35	min. Earth dist.		12270 Aug 13 03:39	3°♓08'27 0.68076 AU		
	12265 Jun 05 07:54	0°♑	greatest brilliancy		12270 Aug 13 21:27	2°♓50'49 -1.3m		
	12265 Jul 18 12:26	0°♎			12270 Aug 21 04:42	30°♓		
	12265 Aug 29 04:03	0°♏	direct		12270 Sep 23 20:22	23°♑05'15		
	12265 Oct 08 14:52	0°♎			12270 Oct 31 02:24	0°♓		
asc. node	12265 Nov 03 23:30	19°♎47'30			12271 Jan 03 16:03	0°♑		
	12265 Nov 17 14:17	0°♏			12271 Feb 22 14:19	0°♒		
	12265 Dec 28 12:42	0°♐			12271 Apr 08 08:50	0°♑		
	12266 Feb 11 21:23	0°♑			12271 May 19 21:10	0°♎		
retrograde	12266 Apr 21 12:19	24°♑50'36	evening set		12271 Jun 25 20:53	28°♎10'09		
min. Earth dist.	12266 May 21 10:55	18°♑39'41 0.51156 AU	asc. node		12271 Jun 25 22:33	28°♎13'22		
greatest brilliancy	12266 May 28 04:43	16°♑09'28 -2.1m			12271 Jun 28 05:27	0°♏		
opposition	12266 May 29 09:32	15°♑42'36 4°27'01			12271 Aug 05 08:32	0°♎		
direct	12266 Jul 03 03:13	8°♑12'38						
	12266 Sep 12 15:01	0°♒	conjunction		12271 Sep 04 00:13	23°♎31'34 0°46'06		
desc. node	12266 Sep 16 02:48	1°♒41'56	minimum elong		12271 Sep 03 20:12	23°♎23'36 0°45'53		
	12266 Nov 07 23:33	0°♑			12271 Sep 12 04:42	0°♏		
	12266 Dec 29 04:04	0°♓	max. Earth dist.		12271 Oct 20 06:48	29°♏43'13 2.37555 AU		
	12267 Feb 15 19:33	0°♑			12271 Oct 20 15:33	0°♐		
evening set	12267 Mar 20 19:51	21°♑11'10	morning rise		12271 Nov 15 07:17	19°♐27'25		
	12267 Apr 03 05:36	0°♒			12271 Nov 29 12:43	0°♑		
max. Earth dist.	12267 Apr 09 18:46	4°♒21'08 2.58522 AU			12272 Jan 10 12:53	0°♒		
					12272 Feb 24 08:01	0°♑		
conjunction	12267 May 06 06:15	22°♒16'23 -1°07'30			12272 Apr 13 01:26	0°♓		
minimum elong	12267 May 06 06:56	22°♒17'33 1°08'08	desc. node		12272 May 08 10:22	14°♓11'46		
	12267 May 17 10:34	0°♑			12272 Jun 09 14:46	0°♑		
morning rise	12267 Jun 25 10:21	27°♑43'26	retrograde		12272 Aug 06 21:50	15°♑12'38		

opposition	12272 Sep 15 18:56	5°Υ57'09 -3°56'40			12277 Nov 11 23:27	0°Ξ
greatest brilliancy	12272 Sep 16 03:24	5°Υ48'53 -1.3m	evening set		12277 Dec 24 21:58	28°Ξ10'48
min. Earth dist.	12272 Sep 18 19:05	4°Υ46'39 0.66919 AU			12277 Dec 27 17:27	0°≈
	12272 Oct 02 00:51	30°ϞϞ	desc. node		12277 Dec 28 05:19	0°≈19'10
direct	12272 Oct 27 10:34	25°Ϟ54'26				
	12272 Nov 23 18:36	0°Υ	conjunction		12278 Feb 09 02:15	27°≈47'05 -0°22'51
	12273 Jan 28 16:15	0°Ϣ	minimum elong		12278 Feb 09 01:33	27°≈45'59 0°22'18
	12273 Mar 17 04:59	0°Π			12278 Feb 12 13:53	0°Ϟ
	12273 Apr 28 11:01	0°ϩ	max. Earth dist.		12278 Feb 13 20:02	0°Ϟ47'54 2.67746 AU
asc. node	12273 May 12 23:55	10°ϩ51'50	morning rise		12278 Mar 24 19:28	25°Ϟ30'00
	12273 Jun 06 22:55	0°Ω			12278 Mar 31 22:06	0°Υ
	12273 Jul 15 02:49	0°ϣ			12278 May 18 06:33	0°Ϣ
	12273 Aug 22 01:41	0°ϩ			12278 Jul 04 10:29	0°Π
evening set	12273 Sep 09 06:53	14°ϩ13'56			12278 Aug 20 14:11	0°ϩ
	12273 Sep 29 18:34	0°ϣ			12278 Oct 07 13:52	0°Ω
	12273 Nov 08 23:54	0°ϣ			12278 Nov 29 09:04	0°ϣ
			asc. node		12279 Jan 03 19:27	14°ϣ03'02
conjunction	12273 Nov 13 23:17	3°ϣ36'48 1°01'03	retrograde		12279 Jan 25 06:02	16°ϣ57'57
minimum elong	12273 Nov 14 00:58	3°ϣ39'52 1°01'47	opposition		12279 Feb 23 23:41	12°ϣ01'36 3°51'08
	12273 Dec 21 05:57	0°Ξ	min. Earth dist.		12279 Feb 23 10:02	12°ϣ10'38 0.36385 AU
max. Earth dist.	12273 Dec 23 12:26	1°Ξ34'06 2.51514 AU	greatest brilliancy		12279 Feb 23 19:10	12°ϣ04'36 -3.1m
morning rise	12274 Jan 09 09:40	13°Ξ05'44	direct		12279 Mar 25 06:02	7°ϣ09'31
	12274 Feb 03 18:54	0°≈			12279 May 31 08:35	0°ϩ
	12274 Mar 22 18:03	0°Ϟ			12279 Jul 20 06:22	0°ϣ
desc. node	12274 Mar 25 23:33	2°Ϟ00'05			12279 Sep 05 05:21	0°ϣ
	12274 May 11 17:57	0°Υ			12279 Oct 22 04:35	0°Ξ
	12274 Jul 07 03:12	0°Ϣ	desc. node		12279 Nov 15 04:59	15°Ξ12'29
retrograde	12274 Sep 15 18:36	20°Ϣ38'02			12279 Dec 08 16:26	0°≈
opposition	12274 Oct 23 08:48	12°Ϣ22'30 -5°05'48			12280 Jan 25 10:07	0°Ϟ
greatest brilliancy	12274 Oct 24 13:35	11°Ϣ55'22 -1.6m	evening set		12280 Jan 31 01:00	3°Ϟ32'16
min. Earth dist.	12274 Oct 30 03:25	9°Ϣ49'20 0.59040 AU	max. Earth dist.		12280 Mar 06 22:27	26°Ϟ14'52 2.67663 AU
direct	12274 Dec 02 23:55	2°Ϣ37'17			12280 Mar 12 19:48	0°Υ
	12275 Feb 17 19:19	0°Π				
asc. node	12275 Mar 31 05:31	26°Π41'43	conjunction		12280 Mar 15 02:21	1°Υ27'00 -0°56'12
	12275 Apr 04 22:51	0°ϩ	minimum elong		12280 Mar 15 01:16	1°Υ25'17 0°56'08
	12275 May 15 17:42	0°Ω	morning rise		12280 Apr 27 14:19	29°Υ30'47
	12275 Jun 23 13:34	0°ϣ			12280 Apr 28 08:13	0°Ϣ
	12275 Aug 01 02:15	0°ϩ			12280 Jun 12 14:30	0°Π
	12275 Sep 09 10:50	0°ϣ			12280 Jul 26 11:29	0°ϩ
	12275 Oct 20 09:31	0°ϣ			12280 Sep 07 00:14	0°Ω
evening set	12275 Nov 11 03:47	15°ϣ23'33			12280 Oct 18 12:35	0°ϣ
	12275 Dec 02 07:19	0°Ξ	asc. node		12280 Nov 20 17:16	24°ϣ06'53
					12280 Nov 28 21:38	0°ϩ
conjunction	12276 Jan 02 13:31	21°Ξ01'22 0°21'18			12281 Jan 11 12:44	0°ϣ
minimum elong	12276 Jan 02 14:23	21°Ξ02'49 0°22'09			12281 Mar 12 06:16	0°ϣ
	12276 Jan 16 04:32	0°≈	retrograde		12281 Apr 02 06:18	3°ϣ04'52
max. Earth dist.	12276 Jan 22 05:44	3°≈57'17 2.62299 AU			12281 Apr 22 21:36	30°Ϟϣ
desc. node	12276 Feb 10 12:26	16°≈26'03	min. Earth dist.		12281 Apr 29 19:17	27°ϣ50'12 0.45640 AU
morning rise	12276 Feb 18 21:44	21°≈48'43	greatest brilliancy		12281 May 06 15:10	25°ϣ28'15 -2.4m
	12276 Mar 02 18:24	0°Ϟ	opposition		12281 May 08 06:35	24°ϣ53'52 5°45'21
	12276 Apr 19 17:51	0°Υ	direct		12281 Jun 09 22:20	18°ϣ15'42
	12276 Jun 08 05:38	0°Ϣ			12281 Jul 28 03:37	0°ϣ
	12276 Jul 30 15:55	0°Π			12281 Sep 25 21:12	0°Ξ
	12276 Oct 03 18:57	0°ϩ	desc. node		12281 Oct 02 12:28	3°Ξ43'04
retrograde	12276 Nov 07 10:51	6°ϩ18'22			12281 Nov 16 20:28	0°≈
opposition	12276 Dec 10 19:23	29°Π48'55 -3°51'02			12282 Jan 05 14:15	0°Ϟ
	12276 Dec 10 06:04	30°ϞΠ			12282 Feb 22 17:04	0°Υ
greatest brilliancy	12276 Dec 12 04:13	29°Π21'27 -2.4m	evening set		12282 Mar 06 11:58	7°Υ30'55
min. Earth dist.	12276 Dec 19 12:07	26°Π55'41 0.45672 AU	max. Earth dist.		12282 Mar 30 12:52	23°Υ04'50 2.62105 AU
direct	12277 Jan 16 04:45	21°Π52'44			12282 Apr 10 01:23	0°Ϣ
asc. node	12277 Feb 15 14:12	27°Π50'37				
	12277 Feb 21 03:00	0°ϩ	conjunction		12282 Apr 20 12:41	6°Ϣ57'27 -1°09'58
	12277 Apr 15 05:36	0°Ω	minimum elong		12282 Apr 20 12:37	6°Ϣ57'20 1°10'26
	12277 May 27 16:39	0°ϣ			12282 May 24 10:56	0°Π
	12277 Jul 07 08:09	0°ϩ	morning rise		12282 Jun 06 15:03	9°Π09'46
	12277 Aug 17 09:13	0°ϣ			12282 Jul 05 22:15	0°ϩ
	12277 Sep 28 19:39	0°ϣ			12282 Aug 15 16:34	0°Ω

	12282 Sep 24 04:35	0°♍	direct	12287 Oct 15 00:10	13°♎10'29	
asc. node	12282 Oct 08 09:38	10°♍56'13		12287 Dec 15 10:00	0°♍	
	12282 Nov 02 02:50	0°♎		12288 Feb 08 12:16	0°♎	
	12282 Dec 11 12:06	0°♏		12288 Mar 25 12:35	0°♏	
	12283 Jan 21 23:30	0°♐		12288 May 06 08:40	0°♐	
	12283 Mar 10 07:20	0°♑	asc. node	12288 May 29 14:06	17°♐31'51	
retrograde	12283 May 17 03:17	22°♑58'23		12288 Jun 14 17:36	0°♑	
min. Earth dist.	12283 Jun 19 17:27	15°♑29'39	0.58748 AU	12288 Jul 22 20:05	0°♑	
opposition	12283 Jun 25 17:53	13°♑08'31	2°14'45	12288 Aug 09 20:09	14°♑17'18	
greatest brilliancy	12283 Jun 25 06:36	13°♑19'34	-1.7m	12288 Aug 29 16:52	0°♑	
direct	12283 Aug 02 00:37	4°♑39'14		12288 Oct 07 06:16	0°♏	
desc. node	12283 Aug 20 22:30	6°♑40'52				
	12283 Oct 21 05:28	0°♐	conjunction	12288 Oct 19 21:46	9°♏37'09	1°06'19
	12283 Dec 15 18:29	0°♑	minimum elong	12288 Oct 19 21:35	9°♏36'48	1°06'49
	12284 Feb 03 19:48	0°♒		12288 Nov 16 07:09	0°♒	
	12284 Mar 21 15:29	0°♓	max. Earth dist.	12288 Dec 07 09:08	15°♒13'50	2.46104 AU
evening set	12284 Apr 13 02:34	15°♓03'37	morning rise	12288 Dec 21 05:54	25°♒01'25	
max. Earth dist.	12284 Apr 28 00:36	25°♓18'42		12288 Dec 28 09:16	0°♓	
	12284 May 04 18:07	0°♏		12289 Feb 10 21:50	0°♐	
				12289 Mar 30 06:47	0°♑	
conjunction	12284 Jun 02 11:18	20°♏27'48	-0°51'03	12289 Apr 11 17:47	7°♑31'58	
minimum elong	12284 Jun 02 13:14	20°♏31'18	0°51'53	12289 May 20 22:07	0°♒	
	12284 Jun 15 12:29	0°♓		12289 Jul 25 16:34	0°♓	
	12284 Jul 25 09:54	0°♑	retrograde	12289 Aug 30 05:00	6°♓21'03	
morning rise	12284 Jul 30 11:53	3°♑54'07		12289 Oct 01 13:52	30°♒♑	
asc. node	12284 Aug 25 00:01	23°♑41'26	opposition	12289 Oct 07 21:35	27°♒37'56	-4°48'08
	12284 Sep 02 01:31	0°♑	greatest brilliancy	12289 Oct 08 18:01	27°♒18'19	-1.5m
	12284 Oct 10 05:36	0°♎	min. Earth dist.	12289 Oct 13 05:44	25°♒34'51	0.62928 AU
	12284 Nov 17 19:35	0°♏	direct	12289 Nov 18 04:49	17°♒39'16	
	12284 Dec 27 20:12	0°♐		12290 Jan 06 07:37	0°♓	
	12285 Feb 08 15:00	0°♑		12290 Mar 01 16:28	0°♏	
	12285 Mar 28 20:02	0°♐		12290 Apr 14 12:23	0°♓	
retrograde	12285 Jun 21 02:24	29°♐54'20	asc. node	12290 Apr 16 19:57	1°♓40'50	
desc. node	12285 Jul 08 03:45	27°♐58'08		12290 May 24 13:21	0°♑	
min. Earth dist.	12285 Jul 29 11:22	20°♐52'38	0.66717 AU	12290 Jul 01 23:57	0°♑	
opposition	12285 Jul 31 19:01	19°♐57'20	-0°51'40	12290 Aug 09 04:57	0°♎	
greatest brilliancy	12285 Jul 31 16:49	19°♐59'31	-1.4m	12290 Sep 17 05:16	0°♏	
direct	12285 Sep 09 22:13	10°♐28'39	evening set	12290 Oct 20 13:20	24°♏44'47	
	12285 Nov 17 10:34	0°♑		12290 Oct 27 19:12	0°♒	
	12286 Jan 12 19:19	0°♒		12290 Dec 09 09:04	0°♓	
	12286 Mar 02 07:48	0°♓				
	12286 Apr 15 17:43	0°♏	conjunction	12290 Dec 16 05:15	4°♓41'09	0°38'42
	12286 May 27 05:48	0°♓	minimum elong	12290 Dec 16 06:51	4°♓43'52	0°39'35
evening set	12286 Jun 01 05:05	3°♓42'34	max. Earth dist.	12291 Jan 11 20:32	22°♓36'36	2.58684 AU
max. Earth dist.	12286 Jun 26 21:52	23°♓13'25		12291 Jan 23 01:11	0°♐	
	12286 Jul 05 16:23	0°♑	morning rise	12291 Feb 04 05:43	7°♐57'43	
asc. node	12286 Jul 12 15:12	5°♑24'11	desc. node	12291 Feb 27 05:20	22°♐44'39	
				12291 Mar 10 15:57	0°♑	
conjunction	12286 Aug 04 02:23	23°♑02'13	0°16'04	12291 Apr 28 04:01	0°♒	
minimum elong	12286 Aug 04 00:47	22°♑59'03	0°15'27	12291 Jun 18 06:35	0°♓	
behind sun begin	12286 Aug 03 15:52	22°♑41'28		12291 Aug 15 08:04	0°♏	
behind sun end	12286 Aug 04 09:41	23°♑16'38	retrograde	12291 Oct 16 01:56	16°♏44'22	
	12286 Aug 12 21:51	0°♑	opposition	12291 Nov 20 07:32	9°♏26'02	-4°50'17
	12286 Sep 19 19:04	0°♎	greatest brilliancy	12291 Nov 21 20:42	8°♏52'47	-2.0m
morning rise	12286 Oct 17 02:41	21°♎24'38	min. Earth dist.	12291 Nov 28 18:51	6°♏24'56	0.51334 AU
	12286 Oct 28 05:13	0°♏	direct	12291 Dec 28 22:08	0°♏29'45	
	12286 Dec 07 00:52	0°♐	asc. node	12292 Mar 04 03:18	23°♏21'11	
	12287 Jan 18 01:13	0°♓		12292 Mar 15 05:33	0°♓	
	12287 Mar 04 04:38	0°♐		12292 Apr 28 07:46	0°♑	
	12287 Apr 23 11:42	0°♑		12292 Jun 07 12:30	0°♑	
desc. node	12287 May 26 02:04	16°♑28'33		12292 Jul 16 22:53	0°♎	
	12287 Jul 03 03:52	0°♒		12292 Aug 26 02:10	0°♏	
retrograde	12287 Jul 25 03:06	2°♒40'23		12292 Oct 06 18:19	0°♒	
	12287 Aug 14 15:41	30°♒♑		12292 Nov 19 07:18	0°♓	
opposition	12287 Sep 03 11:47	23°♑08'55	-3°13'33	12292 Dec 08 20:19	13°♓04'02	
greatest brilliancy	12287 Sep 03 14:25	23°♑06'19	-1.3m	12293 Jan 03 14:57	0°♐	
min. Earth dist.	12287 Sep 04 23:36	22°♑33'39	0.68186 AU	12293 Jan 13 19:42	6°♐37'09	

conjunction	12293 Jan 25 20:39	14° $\approx$ 22'59	-0°06'37		12297 Dec 21 12:38	0° $\mathbb{M}$	
minimum elong	12293 Jan 25 20:27	14° $\approx$ 22'40	0°05'55		12298 Feb 02 18:08	0° $\mathcal{A}$	
behind sun begin	12293 Jan 25 02:23	13° $\approx$ 53'38			12298 Mar 31 10:01	0° $\mathcal{Z}$	
behind sun end	12293 Jan 26 14:31	14° $\approx$ 51'41		retrograde	12298 May 01 07:17	6° $\mathcal{Z}$ 01'19	
max. Earth dist.	12293 Feb 05 03:44	20° $\approx$ 59'02	2.66268 AU		12298 May 30 19:25	30° $\mathcal{R}$ $\mathcal{A}$	
	12293 Feb 19 06:55	0° $\mathcal{H}$		min. Earth dist.	12298 Jun 01 14:14	29° $\mathcal{A}$ 20'32	0.54036 AU
morning rise	12293 Mar 11 13:14	12° $\mathcal{H}$ 50'49		opposition	12298 Jun 08 21:51	26° $\mathcal{A}$ 33'21	3°38'24
	12293 Apr 07 18:37	0° $\mathcal{Y}$		greatest brilliancy	12298 Jun 07 23:55	26° $\mathcal{A}$ 54'19	-1.9m
	12293 May 25 17:32	0° $\mathcal{B}$		direct	12298 Jul 14 14:56	18° $\mathcal{A}$ 39'39	
	12293 Jul 13 05:43	0° $\mathbb{I}$			12298 Sep 01 01:31	0° $\mathcal{Z}$	
	12293 Sep 01 05:39	0° $\mathcal{G}$		desc. node	12298 Sep 06 07:59	2° $\mathcal{Z}$ 09'21	
	12293 Oct 27 03:09	0° $\mathcal{Q}$			12298 Nov 01 12:50	0° $\approx$	
retrograde	12293 Dec 23 04:59	15° $\mathcal{Q}$ 53'23			12298 Dec 23 22:22	0° $\mathcal{H}$	
asc. node	12294 Jan 20 08:55	11° $\mathcal{Q}$ 18'42			12299 Feb 11 00:39	0° $\mathcal{Y}$	
opposition	12294 Jan 22 08:30	10° $\mathcal{Q}$ 45'35	0°08'56	evening set	12299 Mar 29 07:36	29° $\mathcal{Y}$ 49'10	
greatest brilliancy	12294 Jan 22 09:09	10° $\mathcal{Q}$ 45'07	-3.0m		12299 Mar 29 14:09	0° $\mathcal{B}$	
min. Earth dist.	12294 Jan 27 11:28	9° $\mathcal{Q}$ 19'25	0.38146 AU	max. Earth dist.	12299 Apr 16 05:56	11° $\mathcal{B}$ 48'14	2.56193 AU
direct	12294 Feb 22 23:27	5° $\mathcal{Q}$ 01'13			12299 May 12 18:26	0° $\mathbb{I}$	
	12294 May 02 14:06	0° $\mathbb{M}$					
	12294 Jun 18 07:10	0° $\mathcal{L}$		conjunction	12299 May 15 21:20	2° $\mathbb{I}$ 10'45	-1°03'29
	12294 Aug 01 08:48	0° $\mathbb{M}$		minimum elong	12299 May 15 22:31	2° $\mathbb{I}$ 12'49	1°04'13
	12294 Sep 14 18:19	0° $\mathcal{A}$			12299 Jun 23 18:25	0° $\mathcal{G}$	
	12294 Oct 30 06:47	0° $\mathcal{Z}$		morning rise	12299 Jul 07 09:39	10° $\mathcal{G}$ 02'52	
desc. node	12294 Dec 01 17:50	20° $\mathcal{Z}$ 56'39			12299 Aug 02 22:47	0° $\mathcal{Q}$	
	12294 Dec 15 22:03	0° $\approx$			12299 Sep 10 20:53	0° $\mathbb{M}$	
evening set	12295 Jan 17 01:24	20° $\approx$ 24'31		asc. node	12299 Sep 11 19:07	0° $\mathbb{M}$ 43'18	
	12295 Feb 01 05:03	0° $\mathcal{H}$			12299 Oct 19 06:15	0° $\mathcal{L}$	
max. Earth dist.	12295 Feb 27 06:57	16° $\mathcal{H}$ 30'46	2.68345 AU		12299 Nov 27 00:46	0° $\mathbb{M}$	
					12300 Jan 06 08:26	0° $\mathcal{A}$	
conjunction	12295 Mar 02 13:48	18° $\mathcal{H}$ 35'46	-0°45'08		12300 Feb 18 23:32	0° $\mathcal{Z}$	
minimum elong	12295 Mar 02 12:43	18° $\mathcal{H}$ 34'03	0°44'51		12300 Apr 11 21:50	0° $\approx$	
	12295 Mar 20 12:32	0° $\mathcal{Y}$		retrograde	12300 Jun 08 15:21	16° $\approx$ 33'46	
morning rise	12295 Apr 14 18:50	16° $\mathcal{Y}$ 08'48		min. Earth dist.	12300 Jul 15 07:23	8° $\approx$ 04'16	0.64349 AU
	12295 May 06 06:40	0° $\mathcal{B}$		opposition	12300 Jul 19 02:19	6° $\approx$ 34'01	0°14'59
	12295 Jun 21 02:53	0° $\mathbb{I}$		greatest brilliancy	12300 Jul 19 01:34	6° $\approx$ 34'46	-1.5m
	12295 Aug 04 22:13	0° $\mathcal{G}$		desc. node	12300 Jul 25 15:59	4° $\approx$ 00'57	
	12295 Sep 17 18:09	0° $\mathcal{Q}$			12300 Aug 07 04:07	30° $\mathcal{R}$ $\mathcal{Z}$	
	12295 Oct 31 02:04	0° $\mathbb{M}$		direct	12300 Aug 27 07:00	27° $\mathcal{Z}$ 24'23	
asc. node	12295 Dec 08 11:07	26° $\mathbb{M}$ 01'02			12300 Sep 18 03:19	0° $\approx$	
	12295 Dec 14 13:51	0° $\mathcal{L}$			12300 Nov 30 05:08	0° $\mathcal{H}$	
	12296 Feb 07 07:29	0° $\mathbb{M}$			12301 Jan 22 02:07	0° $\mathcal{Y}$	
retrograde	12296 Mar 10 14:33	6° $\mathbb{M}$ 53'25			12301 Mar 10 17:59	0° $\mathcal{B}$	
min. Earth dist.	12296 Apr 05 13:07	2° $\mathbb{M}$ 25'32	0.40467 AU		12301 Apr 23 23:33	0° $\mathbb{I}$	
greatest brilliancy	12296 Apr 11 08:22	0° $\mathbb{M}$ 37'25	-2.7m	evening set	12301 May 12 01:30	12° $\mathbb{I}$ 50'22	
opposition	12296 Apr 13 00:10	0° $\mathbb{M}$ 06'15	6°26'25	max. Earth dist.	12301 May 26 08:37	23° $\mathbb{I}$ 13'18	2.43227 AU
	12296 Apr 13 08:11	30° $\mathcal{R}$ $\mathcal{L}$			12301 Jun 04 13:19	0° $\mathcal{G}$	
direct	12296 May 13 13:38	24° $\mathcal{L}$ 26'39					
	12296 Jun 13 12:10	0° $\mathbb{M}$		conjunction	12301 Jul 08 12:01	25° $\mathcal{G}$ 39'11	-0°15'29
	12296 Aug 15 20:37	0° $\mathcal{A}$		minimum elong	12301 Jul 08 13:20	25° $\mathcal{G}$ 41'42	0°16'19
	12296 Oct 06 09:22	0° $\mathcal{Z}$			12301 Jul 14 03:23	0° $\mathcal{Q}$	
desc. node	12296 Oct 18 22:51	7° $\mathcal{Z}$ 32'16		asc. node	12301 Jul 30 10:51	12° $\mathcal{Q}$ 40'35	
	12296 Nov 24 23:50	0° $\approx$			12301 Aug 21 11:52	0° $\mathbb{M}$	
	12297 Jan 12 17:55	0° $\mathcal{H}$		morning rise	12301 Sep 15 21:25	20° $\mathbb{M}$ 05'03	
evening set	12297 Feb 20 14:35	24° $\mathcal{H}$ 21'10			12301 Sep 28 10:43	0° $\mathcal{L}$	
	12297 Mar 01 12:00	0° $\mathcal{Y}$			12301 Nov 05 20:58	0° $\mathbb{M}$	
max. Earth dist.	12297 Mar 21 02:48	12° $\mathcal{Y}$ 34'15	2.64910 AU		12301 Dec 15 16:19	0° $\mathcal{A}$	
					12302 Jan 26 19:36	0° $\mathcal{Z}$	
conjunction	12297 Apr 05 20:47	22° $\mathcal{Y}$ 47'40	-1°07'37		12302 Mar 13 14:26	0° $\approx$	
minimum elong	12297 Apr 05 20:09	22° $\mathcal{Y}$ 46'38	1°07'54		12302 May 05 20:08	0° $\mathcal{H}$	
	12297 Apr 16 20:32	0° $\mathcal{B}$		desc. node	12302 Jun 12 17:05	15° $\mathcal{H}$ 24'10	
morning rise	12297 May 20 23:19	22° $\mathcal{B}$ 48'10		retrograde	12302 Jul 12 20:04	20° $\mathcal{H}$ 17'20	
	12297 May 31 12:39	0° $\mathbb{I}$		opposition	12302 Aug 22 11:15	10° $\mathcal{H}$ 33'19	-2°23'48
	12297 Jul 13 10:55	0° $\mathcal{G}$		greatest brilliancy	12302 Aug 22 10:03	10° $\mathcal{H}$ 34'31	-1.3m
	12297 Aug 23 18:26	0° $\mathcal{Q}$		min. Earth dist.	12302 Aug 22 11:05	10° $\mathcal{H}$ 33'29	0.68411 AU
	12297 Oct 02 20:09	0° $\mathbb{M}$		direct	12302 Oct 02 14:34	0° $\mathcal{H}$ 43'39	
asc. node	12297 Oct 25 05:18	16° $\mathbb{M}$ 59'15			12302 Dec 28 20:51	0° $\mathcal{Y}$	
	12297 Nov 11 08:36	0° $\mathcal{L}$			12303 Feb 18 04:35	0° $\mathcal{B}$	

	12303 Apr 04 08:45	0°♊		desc. node	12308 Feb 01 13:14	13°♊02'01
	12303 May 16 00:10	0°♋		morning rise	12308 Feb 27 22:17	29°♊55'14
asc. node	12303 Jun 17 06:44	24°♋30'02			12308 Feb 28 01:17	0°♋
	12303 Jun 24 08:57	0°♌			12308 Apr 15 19:04	0°♋
evening set	12303 Jul 12 11:01	14°♌09'24			12308 Jun 03 14:24	0°♌
	12303 Aug 01 11:50	0°♍			12308 Jul 24 04:26	0°♌
	12303 Sep 08 07:56	0°♎			12308 Sep 18 04:18	0°♍
				retrograde	12308 Nov 23 11:57	19°♍32'08
conjunction	12303 Sep 22 13:33	11°♎11'52 0°58'03		opposition	12308 Dec 25 17:46	13°♍32'57 -2°47'31
minimum elong	12303 Sep 22 10:12	11°♎05'19 0°58'07		greatest brilliancy	12308 Dec 26 17:36	13°♍14'07 -2.6m
	12303 Oct 16 18:54	0°♏		min. Earth dist.	12309 Jan 02 22:19	10°♍58'59 0.42654 AU
max. Earth dist.	12303 Nov 15 07:04	22°♏19'34 2.40379 AU		direct	12309 Jan 29 12:52	6°♍21'05
	12303 Nov 25 16:08	0°♐		asc. node	12309 Feb 06 23:48	6°♍51'13
morning rise	12303 Nov 30 18:17	3°♐43'37			12309 Apr 05 09:58	0°♎
	12304 Jan 06 15:26	0°♑			12309 May 20 21:27	0°♐
	12304 Feb 20 05:50	0°♒			12309 Jul 01 17:32	0°♑
	12304 Apr 08 06:57	0°♓			12309 Aug 12 11:59	0°♒
desc. node	12304 Apr 29 10:33	12°♓17'00			12309 Sep 24 10:34	0°♓
	12304 Jun 01 18:32	0°♈			12309 Nov 07 23:23	0°♑
retrograde	12304 Aug 16 02:38	23°♈03'16		desc. node	12309 Dec 19 07:17	26°♈59'29
opposition	12304 Sep 24 14:48	13°♈58'09 -4°18'20			12309 Dec 23 23:19	0°♒
greatest brilliancy	12304 Sep 25 03:15	13°♈46'02 -1.4m		evening set	12310 Jan 03 12:44	6°♒47'02
min. Earth dist.	12304 Sep 28 11:03	12°♈28'24 0.65784 AU			12310 Feb 08 22:37	0°♓
direct	12304 Nov 05 04:59	3°♈55'01				
	12305 Jan 22 06:49	0°♉		conjunction	12310 Feb 17 23:22	5°♓43'54 -0°31'40
	12305 Mar 12 10:23	0°♊		minimum elong	12310 Feb 17 22:29	5°♓42'28 0°31'12
	12305 Apr 24 03:36	0°♋		max. Earth dist.	12310 Feb 19 19:46	6°♓54'16 2.68192 AU
asc. node	12305 May 04 08:38	7°♋33'48			12310 Mar 28 06:01	0°♈
	12305 Jun 02 19:31	0°♌		morning rise	12310 Apr 02 09:05	3°♈15'19
	12305 Jul 11 01:21	0°♍			12310 May 14 08:26	0°♉
	12305 Aug 18 01:55	0°♎			12310 Jun 29 23:10	0°♊
	12305 Sep 25 20:41	0°♏			12310 Aug 15 02:06	0°♋
evening set	12305 Sep 26 05:10	0°♏16'07			12310 Sep 30 01:24	0°♌
	12305 Nov 05 04:02	0°♐			12310 Nov 16 07:38	0°♍
				asc. node	12310 Dec 26 02:33	22°♍12'51
conjunction	12305 Nov 27 10:49	15°♐59'15 0°54'13			12311 Jan 13 09:56	0°♎
minimum elong	12305 Nov 27 12:47	16°♐02'43 0°55'02		retrograde	12311 Feb 13 03:47	5°♎56'48
	12305 Dec 17 11:43	0°♑		min. Earth dist.	12311 Mar 11 22:21	1°♎36'12 0.37009 AU
max. Earth dist.	12306 Jan 01 03:35	10°♑02'49 2.54258 AU		opposition	12311 Mar 15 16:17	0°♎34'51 5°27'36
morning rise	12306 Jan 20 05:46	22°♑52'44		greatest brilliancy	12311 Mar 14 20:48	0°♎48'11 -3.0m
	12306 Jan 31 00:14	0°♒			12311 Mar 17 19:25	30°♒♐
desc. node	12306 Mar 17 00:03	28°♒53'36		direct	12311 Apr 13 20:42	25°♒40'07
	12306 Mar 18 18:25	0°♓			12311 May 10 08:23	0°♑
	12306 May 07 01:24	0°♈			12311 Jul 11 20:45	0°♒
	12306 Jun 29 19:38	0°♉			12311 Aug 30 10:35	0°♓
retrograde	12306 Sep 27 00:25	29°♉52'19			12311 Oct 17 13:45	0°♑
opposition	12306 Nov 02 20:30	21°♉54'45 -5°07'38		desc. node	12311 Nov 06 09:53	12°♉22'57
greatest brilliancy	12306 Nov 04 05:21	21°♉24'11 -1.8m			12311 Dec 04 16:01	0°♒
min. Earth dist.	12306 Nov 10 07:57	19°♉08'06 0.56522 AU			12312 Jan 21 17:04	0°♓
direct	12306 Dec 12 22:00	12°♉21'54		evening set	12312 Feb 08 20:57	11°♓42'27
	12307 Feb 09 03:53	0°♊			12312 Mar 09 05:26	0°♈
asc. node	12307 Mar 22 16:11	24°♊54'18		max. Earth dist.	12312 Mar 13 00:47	2°♈25'45 2.66926 AU
	12307 Mar 30 05:22	0°♋				
	12307 May 10 19:04	0°♌		conjunction	12312 Mar 23 20:47	9°♈22'04 -1°01'23
	12307 Jun 18 23:15	0°♍		minimum elong	12312 Mar 23 19:48	9°♈20'30 1°01'26
	12307 Jul 27 17:34	0°♎			12312 Apr 24 16:23	0°♉
	12307 Sep 05 06:59	0°♏		morning rise	12312 May 06 18:12	7°♉56'37
	12307 Oct 16 10:10	0°♐			12312 Jun 08 17:34	0°♊
evening set	12307 Nov 23 03:28	26°♐20'33			12312 Jul 22 05:49	0°♋
	12307 Nov 28 12:04	0°♑			12312 Sep 02 06:43	0°♌
					12312 Oct 13 03:49	0°♍
conjunction	12308 Jan 12 17:13	0°♒08'55 0°10'56		asc. node	12312 Nov 12 00:46	22°♍09'45
minimum elong	12308 Jan 12 17:40	0°♒09'39 0°11'45			12312 Nov 22 15:21	0°♎
behind sun begin	12308 Jan 12 03:58	29°♓47'16			12313 Jan 03 09:09	0°♏
behind sun end	12308 Jan 13 07:22	0°♓32'02			12313 Feb 20 11:42	0°♐
	12308 Jan 12 11:45	0°♔		retrograde	12313 Apr 14 13:34	16°♐22'27
max. Earth dist.	12308 Jan 28 19:52	10°♔37'39 2.63948 AU		min. Earth dist.	12313 May 13 09:16	10°♐36'26 0.48717 AU

greatest brilliancy	12313 May 20 06:28	8°♂07'06	-2.2m			12318 Jul 01 20:56	0°♂	
opposition	12313 May 21 16:19	7°♂36'17	5°02'50	asc. node		12318 Jul 03 22:46	1°♂36'48	
direct	12313 Jun 24 13:09	0°♂27'53				12318 Aug 09 01:16	0°♂	
	12313 Sep 18 21:17	0°♂		max. Earth dist.		12318 Aug 20 22:36	9°♂25'39	2.36322 AU
desc. node	12313 Sep 23 17:58	2°♂32'35						
	12313 Nov 12 01:02	0°♂		conjunction		12318 Aug 22 05:05	10°♂26'06	0°34'04
	12314 Jan 01 13:43	0°♂		minimum elong		12318 Aug 22 01:40	10°♂19'20	0°33'38
	12314 Feb 19 00:14	0°♂				12318 Sep 15 21:41	0°♂	
evening set	12314 Mar 15 14:13	15°♂43'08				12318 Oct 24 07:31	0°♂	
max. Earth dist.	12314 Apr 06 09:19	29°♂58'10	2.60224 AU	morning rise		12318 Nov 04 01:58	8°♂14'50	
	12314 Apr 06 10:25	0°♂				12318 Dec 03 02:42	0°♂	
						12319 Jan 14 01:16	0°♂	
conjunction	12314 Apr 30 07:13	15°♂58'26	-1°09'13			12319 Feb 27 21:19	0°♂	
minimum elong	12314 Apr 30 07:33	15°♂59'00	1°09'48			12319 Apr 18 01:32	0°♂	
	12314 May 20 18:29	0°♂		desc. node		12319 May 17 04:10	15°♂45'51	
morning rise	12314 Jun 17 22:29	19°♂49'01				12319 Jun 17 14:08	0°♂	
	12314 Jul 02 02:05	0°♂		retrograde		12319 Aug 02 23:12	10°♂19'28	
	12314 Aug 11 15:38	0°♂		opposition		12319 Sep 12 01:31	0°♂56'31	-3°39'40
	12314 Sep 19 22:23	0°♂		greatest brilliancy		12319 Sep 12 07:12	0°♂50'55	-1.3m
asc. node	12314 Sep 29 16:39	7°♂32'54		min. Earth dist.		12319 Sep 14 09:20	0°♂01'43	0.67614 AU
	12314 Oct 28 15:14	0°♂				12319 Sep 14 11:05	30°♂	
	12314 Dec 06 17:19	0°♂		direct		12319 Oct 23 15:45	20°♂55'11	
	12315 Jan 16 14:04	0°♂				12319 Dec 05 07:56	0°♂	
	12315 Mar 02 21:32	0°♂				12320 Feb 03 06:07	0°♂	
	12315 May 07 15:33	0°♂				12320 Mar 21 03:54	0°♂	
retrograde	12315 May 26 14:33	2°♂15'45				12320 May 02 06:54	0°♂	
	12315 Jun 13 12:49	30°♂		asc. node		12320 May 20 23:33	14°♂01'24	
min. Earth dist.	12315 Jun 30 08:14	24°♂23'34	0.60987 AU			12320 Jun 10 18:22	0°♂	
opposition	12315 Jul 05 14:01	22°♂19'34	1°28'40			12320 Jul 18 21:47	0°♂	
greatest brilliancy	12315 Jul 05 07:30	22°♂26'00	-1.6m	greatest brilliancy		12320 Aug 07 16:05	15°♂40'06	1.2m
direct	12315 Aug 12 14:29	13°♂34'09				12320 Aug 25 19:22	0°♂	
desc. node	12315 Aug 12 02:22	13°♂34'15		evening set		12320 Aug 28 03:54	1°♂51'11	
	12315 Oct 13 01:47	0°♂				12320 Oct 03 09:47	0°♂	
	12315 Dec 10 21:16	0°♂						
	12316 Jan 30 19:04	0°♂		conjunction		12320 Nov 04 12:51	24°♂09'20	1°04'33
	12316 Mar 17 21:35	0°♂		minimum elong		12320 Nov 04 14:00	24°♂11'27	1°05'14
evening set	12316 Apr 23 16:37	24°♂51'50				12320 Nov 12 11:43	0°♂	
	12316 May 01 01:33	0°♂		max. Earth dist.		12320 Dec 18 05:48	25°♂34'10	2.49150 AU
max. Earth dist.	12316 May 07 13:03	4°♂33'20	2.48647 AU			12320 Dec 24 14:30	0°♂	
	12316 Jun 11 18:37	0°♂		morning rise		12321 Jan 02 10:21	6°♂05'21	
						12321 Feb 07 01:27	0°♂	
conjunction	12316 Jun 15 03:29	2°♂29'28	-0°40'26			12321 Mar 26 02:44	0°♂	
minimum elong	12316 Jun 15 05:36	2°♂33'23	0°41'18	desc. node		12321 Apr 02 18:00	4°♂41'50	
	12316 Jul 21 13:44	0°♂				12321 May 15 15:08	0°♂	
morning rise	12316 Aug 16 00:37	19°♂44'08				12321 Jul 13 12:47	0°♂	
asc. node	12316 Aug 16 05:23	19°♂53'29		retrograde		12321 Sep 09 11:07	14°♂51'51	
	12316 Aug 29 02:51	0°♂		opposition		12321 Oct 17 13:19	6°♂23'21	-4°59'59
	12316 Oct 06 04:56	0°♂		greatest brilliancy		12321 Oct 18 14:26	5°♂59'25	-1.6m
greatest brilliancy	12316 Oct 19 15:18	10°♂32'24	1.2m	min. Earth dist.		12321 Oct 23 16:34	4°♂03'09	0.60888 AU
	12316 Nov 13 17:00	0°♂				12321 Nov 04 12:39	30°♂	
	12316 Dec 23 14:17	0°♂		direct		12321 Nov 27 12:04	26°♂30'51	
	12317 Feb 04 00:35	0°♂				12321 Dec 21 18:11	0°♂	
	12317 Mar 22 23:21	0°♂				12322 Feb 23 12:12	0°♂	
	12317 May 22 07:54	0°♂		asc. node		12322 Apr 08 04:23	29°♂01'12	
retrograde	12317 Jun 29 16:23	7°♂44'36				12322 Apr 09 13:27	0°♂	
desc. node	12317 Jun 29 06:52	7°♂44'33				12322 May 20 00:43	0°♂	
	12317 Aug 03 22:48	30°♂				12322 Jun 27 16:21	0°♂	
min. Earth dist.	12317 Aug 07 21:18	28°♂27'04	0.67592 AU			12322 Aug 05 01:07	0°♂	
opposition	12317 Aug 09 09:24	27°♂51'12	-1°27'42			12322 Sep 13 05:03	0°♂	
greatest brilliancy	12317 Aug 09 06:42	27°♂53'53	-1.3m			12322 Oct 23 22:22	0°♂	
direct	12317 Sep 18 22:26	18°♂14'02		evening set		12322 Nov 03 03:47	7°♂19'02	
	12317 Nov 08 12:11	0°♂				12322 Dec 05 15:12	0°♂	
	12318 Jan 07 20:29	0°♂						
	12318 Feb 26 05:06	0°♂		conjunction		12322 Dec 27 07:09	14°♂41'43	0°28'43
	12318 Apr 11 21:20	0°♂		minimum elong		12322 Dec 27 08:20	14°♂43'44	0°29'35
	12318 May 23 10:50	0°♂		max. Earth dist.		12323 Jan 18 22:37	29°♂43'34	2.60778 AU
evening set	12318 Jun 15 14:20	17°♂27'41				12323 Jan 19 08:37	0°♂	

morning rise	12323 Feb 13 17:11	16° $\approx$ 28'39	min. Earth dist.	12328 Apr 20 12:31	17° $\mathbb{M}$ 53'01	0.43214 AU
desc. node	12323 Feb 18 06:13	19° $\approx$ 23'45	greatest brilliancy	12328 Apr 27 02:17	15° $\mathbb{M}$ 42'26	-2.5m
	12323 Mar 06 21:38	0° $\mathbb{H}$	opposition	12328 Apr 28 19:54	15° $\mathbb{M}$ 07'43	6°11'11
	12323 Apr 24 01:08	0° $\mathbb{Y}$	direct	12328 May 30 12:24	8° $\mathbb{M}$ 55'37	
	12323 Jun 13 02:38	0° $\mathbb{B}$		12328 Aug 06 14:51	0° $\mathbb{Z}$	
	12323 Aug 06 07:46	0° $\mathbb{II}$		12328 Sep 30 18:04	0° $\mathbb{Z}$	
retrograde	12323 Oct 29 18:16	27° $\mathbb{II}$ 54'14	desc. node	12328 Oct 10 03:14	5° $\mathbb{Z}$ 26'23	
opposition	12323 Dec 03 00:05	21° $\mathbb{II}$ 01'38 -4°22'41		12328 Nov 20 13:31	0° $\approx$	
greatest brilliancy	12323 Dec 04 12:09	20° $\mathbb{II}$ 30'23 -2.2m		12329 Jan 08 20:33	0° $\mathbb{H}$	
min. Earth dist.	12323 Dec 11 17:57	18° $\mathbb{II}$ 01'08 0.48213 AU		12329 Feb 25 20:02	0° $\mathbb{Y}$	
direct	12324 Jan 09 10:59	12° $\mathbb{II}$ 35'24	evening set	12329 Mar 01 12:17	2° $\mathbb{Y}$ 20'18	
asc. node	12324 Feb 24 12:36	25° $\mathbb{II}$ 05'18	max. Earth dist.	12329 Mar 27 13:05	19° $\mathbb{Y}$ 05'03	2.63467 AU
	12324 Mar 05 04:10	0° $\mathbb{G}$		12329 Apr 13 05:14	0° $\mathbb{B}$	
	12324 Apr 21 17:34	0° $\mathbb{Q}$				
	12324 Jun 01 23:46	0° $\mathbb{P}$	conjunction	12329 Apr 15 02:53	1° $\mathbb{B}$ 15'19 -1°09'33	
	12324 Jul 11 23:52	0° $\mathbb{A}$	minimum elong	12329 Apr 15 02:33	1° $\mathbb{B}$ 14'45 1°09'56	
	12324 Aug 21 13:24	0° $\mathbb{M}$		12329 May 27 18:44	0° $\mathbb{II}$	
	12324 Oct 02 13:49	0° $\mathbb{Z}$	morning rise	12329 May 31 05:00	2° $\mathbb{II}$ 21'42	
	12324 Nov 15 09:36	0° $\mathbb{Z}$		12329 Jul 09 11:37	0° $\mathbb{G}$	
evening set	12324 Dec 19 03:58	22° $\mathbb{Z}$ 21'02		12329 Aug 19 12:23	0° $\mathbb{Q}$	
	12324 Dec 30 21:45	0° $\approx$		12329 Sep 28 06:26	0° $\mathbb{P}$	
desc. node	12325 Jan 04 21:54	3° $\approx$ 14'40	asc. node	12329 Oct 16 11:21	13° $\mathbb{P}$ 55'46	
				12329 Nov 06 10:18	0° $\mathbb{A}$	
conjunction	12325 Feb 04 01:48	22° $\approx$ 37'35 -0°16'18		12329 Dec 16 01:53	0° $\mathbb{M}$	
minimum elong	12325 Feb 04 01:17	22° $\approx$ 36'46 0°15'40		12330 Jan 27 01:27	0° $\mathbb{Z}$	
behind sun begin	12325 Feb 03 22:08	22° $\approx$ 31'43		12330 Mar 17 12:50	0° $\mathbb{Z}$	
behind sun end	12325 Feb 04 04:27	22° $\approx$ 41'49	retrograde	12330 May 11 12:38	16° $\mathbb{Z}$ 25'25	
max. Earth dist.	12325 Feb 11 06:48	27° $\approx$ 13'23 2.67199 AU	min. Earth dist.	12330 Jun 13 02:54	9° $\mathbb{Z}$ 16'44	0.56737 AU
	12325 Feb 15 15:29	0° $\mathbb{H}$	opposition	12330 Jun 19 17:21	6° $\mathbb{Z}$ 43'10	2°49'36
morning rise	12325 Mar 20 03:39	20° $\mathbb{H}$ 36'16	greatest brilliancy	12330 Jun 19 01:48	6° $\mathbb{Z}$ 58'16	-1.8m
	12325 Apr 04 00:46	0° $\mathbb{Y}$		12330 Jul 11 02:46	30° $\mathbb{R}$ $\mathbb{Z}$	
	12325 May 21 15:01	0° $\mathbb{B}$	direct	12330 Jul 26 07:29	28° $\mathbb{Z}$ 28'42	
	12325 Jul 08 07:55	0° $\mathbb{II}$		12330 Aug 11 12:13	0° $\mathbb{Z}$	
	12325 Aug 25 12:48	0° $\mathbb{G}$	desc. node	12330 Aug 28 13:13	4° $\mathbb{Z}$ 15'44	
	12325 Oct 14 20:43	0° $\mathbb{Q}$		12330 Oct 26 09:47	0° $\approx$	
	12325 Dec 19 06:46	0° $\mathbb{P}$		12330 Dec 19 11:25	0° $\mathbb{H}$	
retrograde	12326 Jan 11 15:03	3° $\mathbb{P}$ 20'05		12331 Feb 07 03:20	0° $\mathbb{Y}$	
asc. node	12326 Jan 11 19:05	3° $\mathbb{P}$ 20'04		12331 Mar 25 21:25	0° $\mathbb{B}$	
	12326 Feb 04 09:16	30° $\mathbb{R}$ $\mathbb{Q}$	evening set	12331 Apr 08 03:32	8° $\mathbb{B}$ 49'23	
opposition	12326 Feb 10 07:37	28° $\mathbb{Q}$ 26'39 2°16'26	max. Earth dist.	12331 Apr 24 07:37	19° $\mathbb{B}$ 47'18	2.53689 AU
greatest brilliancy	12326 Feb 10 10:20	28° $\mathbb{Q}$ 24'49 -3.0m		12331 May 09 02:11	0° $\mathbb{II}$	
min. Earth dist.	12326 Feb 12 11:18	27° $\mathbb{Q}$ 52'01 0.36733 AU				
direct	12326 Mar 12 09:09	23° $\mathbb{Q}$ 19'14	conjunction	12331 May 27 03:00	12° $\mathbb{II}$ 43'23 -0°57'15	
	12326 Apr 13 23:12	0° $\mathbb{P}$	minimum elong	12331 May 27 04:39	12° $\mathbb{II}$ 46'20 0°58'04	
	12326 Jun 09 14:26	0° $\mathbb{A}$		12331 Jun 20 00:09	0° $\mathbb{G}$	
	12326 Jul 26 02:48	0° $\mathbb{M}$	morning rise	12331 Jul 21 10:52	23° $\mathbb{G}$ 27'09	
	12326 Sep 09 17:08	0° $\mathbb{Z}$		12331 Jul 30 01:34	0° $\mathbb{Q}$	
	12326 Oct 25 22:36	0° $\mathbb{Z}$	asc. node	12331 Sep 03 01:51	27° $\mathbb{Q}$ 03'14	
desc. node	12326 Nov 22 20:30	17° $\mathbb{Z}$ 50'53		12331 Sep 06 20:22	0° $\mathbb{P}$	
	12326 Dec 12 00:01	0° $\approx$		12331 Oct 15 02:34	0° $\mathbb{A}$	
evening set	12327 Jan 26 02:42	28° $\approx$ 28'45		12331 Nov 22 17:44	0° $\mathbb{M}$	
	12327 Jan 28 12:33	0° $\mathbb{H}$		12332 Jan 01 19:31	0° $\mathbb{Z}$	
max. Earth dist.	12327 Mar 05 06:19	22° $\mathbb{H}$ 36'23 2.68076 AU		12332 Feb 13 19:24	0° $\mathbb{Z}$	
				12332 Apr 03 00:46	0° $\approx$	
conjunction	12327 Mar 11 07:22	26° $\mathbb{H}$ 26'47 -0°51'58	retrograde	12332 Jun 16 10:01	24° $\approx$ 47'06	
minimum elong	12327 Mar 11 06:15	26° $\mathbb{H}$ 25'02 0°51'48	desc. node	12332 Jul 15 19:45	19° $\approx$ 07'07	
	12327 Mar 16 21:22	0° $\mathbb{Y}$	min. Earth dist.	12332 Jul 24 00:42	15° $\approx$ 59'18	0.65780 AU
morning rise	12327 Apr 23 14:24	24° $\mathbb{Y}$ 12'31	opposition	12332 Jul 27 00:21	14° $\approx$ 48'02 -0°24'57	
	12327 May 02 12:34	0° $\mathbb{B}$	greatest brilliancy	12332 Jul 26 23:05	14° $\approx$ 49'18	-1.4m
	12327 Jun 17 01:27	0° $\mathbb{II}$	direct	12332 Sep 04 17:48	5° $\approx$ 27'22	
	12327 Jul 31 08:16	0° $\mathbb{G}$		12332 Nov 22 20:02	0° $\mathbb{H}$	
	12327 Sep 12 10:10	0° $\mathbb{Q}$		12333 Jan 16 14:24	0° $\mathbb{Y}$	
	12327 Oct 24 14:59	0° $\mathbb{P}$		12333 Mar 05 19:04	0° $\mathbb{B}$	
asc. node	12327 Nov 29 18:31	25° $\mathbb{P}$ 38'41		12333 Apr 19 04:37	0° $\mathbb{II}$	
	12327 Dec 06 00:30	0° $\mathbb{A}$	evening set	12333 May 23 15:22	24° $\mathbb{II}$ 43'45	
	12328 Jan 21 01:57	0° $\mathbb{M}$		12333 May 30 18:39	0° $\mathbb{G}$	
retrograde	12328 Mar 24 21:54	22° $\mathbb{M}$ 43'47	max. Earth dist.	12333 Jun 10 21:55	8° $\mathbb{G}$ 19'02	2.40265 AU

	12333 Jul 09 07:45	0°♈			12338 Mar 13 21:19	0°♏	
asc. node	12333 Jul 20 16:29	8°♈49'48			12338 May 01 15:24	0°♐	
					12338 Jun 22 15:22	0°♑	
conjunction	12333 Jul 23 12:14	11°♈02'05 0°02'03			12338 Aug 24 04:26	0°♒	
minimum elong	12333 Jul 23 12:05	11°♈01'48 0°01'18		retrograde	12338 Oct 08 00:18	9°♒39'46	
behind sun begin	12333 Jul 22 07:57	10°♈06'51		opposition	12338 Nov 12 23:58	2°♒02'38 -5°01'08	
behind sun end	12333 Jul 24 16:14	11°♈56'47		greatest brilliancy	12338 Nov 14 11:44	1°♒29'56 -1.9m	
	12333 Aug 16 14:57	0°♐			12338 Nov 18 13:57	30°♒♑	
	12333 Sep 23 12:47	0°♑		min. Earth dist.	12338 Nov 21 01:32	29°♒06'23 0.53747 AU	
morning rise	12333 Oct 04 02:48	8°♑20'08		direct	12338 Dec 22 07:28	22°♒47'30	
	12333 Oct 31 22:24	0°♒			12339 Jan 26 00:10	0°♒	
	12333 Dec 10 16:36	0°♑		asc. node	12339 Mar 13 02:19	23°♒53'34	
	12334 Jan 21 16:14	0°♑			12339 Mar 22 15:59	0°♑	
	12334 Mar 07 22:58	0°♑			12339 May 04 11:19	0°♈	
	12334 Apr 28 02:30	0°♏			12339 Jun 13 03:54	0°♐	
desc. node	12334 Jun 02 19:33	16°♏54'14			12339 Jul 22 05:44	0°♑	
retrograde	12334 Jul 20 10:20	27°♏52'18			12339 Aug 31 01:22	0°♒	
opposition	12334 Aug 29 21:59	18°♏14'49 -2°53'50			12339 Oct 11 10:00	0°♑	
greatest brilliancy	12334 Aug 29 22:38	18°♏14'09 -1.3m			12339 Nov 23 16:24	0°♑	
min. Earth dist.	12334 Aug 30 17:28	17°♏55'33 0.68410 AU		evening set	12339 Dec 03 10:35	6°♑35'13	
direct	12334 Oct 10 06:31	8°♏19'50			12340 Jan 07 19:08	0°♑	
	12334 Dec 21 05:08	0°♐					
	12335 Feb 12 13:30	0°♑		conjunction	12340 Jan 21 11:48	8°♑54'12 0°00'37	
	12335 Mar 30 06:23	0°♒		minimum elong	12340 Jan 21 11:50	8°♑54'15 0°01'22	
	12335 May 11 01:31	0°♑		behind sun begin	12340 Jan 20 16:24	8°♑22'50	
asc. node	12335 Jun 07 13:53	20°♑48'31		behind sun end	12340 Jan 22 07:15	9°♑25'40	
	12335 Jun 19 11:13	0°♈		desc. node	12340 Jan 22 13:19	9°♑35'28	
	12335 Jul 27 14:05	0°♐		max. Earth dist.	12340 Feb 03 06:52	17°♑09'18 2.65336 AU	
evening set	12335 Jul 29 06:59	1°♐21'09			12340 Feb 23 09:06	0°♏	
	12335 Sep 03 10:16	0°♑		morning rise	12340 Mar 06 18:36	7°♏52'08	
					12340 Apr 10 22:37	0°♐	
conjunction	12335 Oct 09 13:41	28°♑11'57 1°04'46			12340 May 29 05:23	0°♑	
minimum elong	12335 Oct 09 12:07	28°♑08'57 1°05'06			12340 Jul 17 12:14	0°♒	
	12335 Oct 11 21:56	0°♒			12340 Sep 07 10:19	0°♑	
	12335 Nov 20 20:01	0°♑			12340 Nov 12 22:00	0°♈	
max. Earth dist.	12335 Nov 30 09:18	6°♑58'22 2.43550 AU		retrograde	12340 Dec 10 05:26	4°♈12'24	
morning rise	12335 Dec 13 22:35	16°♑43'05			12341 Jan 05 19:18	30°♑♐	
	12336 Jan 01 19:23	0°♑		opposition	12341 Jan 10 04:36	28°♑43'53 -1°17'28	
	12336 Feb 15 06:52	0°♑		greatest brilliancy	12341 Jan 10 14:56	28°♑36'16 -2.8m	
	12336 Apr 02 20:02	0°♏		min. Earth dist.	12341 Jan 17 01:47	26°♑42'19 0.39919 AU	
desc. node	12336 Apr 19 12:18	9°♏57'13		asc. node	12341 Jan 28 08:30	23°♑52'47	
	12336 May 25 08:27	0°♐		direct	12341 Feb 12 06:19	22°♑21'10	
	12336 Aug 11 00:08	0°♑			12341 Mar 18 18:32	0°♈	
retrograde	12336 Aug 24 14:00	1°♑02'31			12341 May 11 12:32	0°♐	
	12336 Sep 06 12:34	30°♑♐			12341 Jun 24 10:01	0°♑	
opposition	12336 Oct 02 15:36	22°♐08'58 -4°36'46			12341 Aug 06 05:48	0°♒	
greatest brilliancy	12336 Oct 03 08:25	21°♐52'42 -1.4m			12341 Sep 18 20:54	0°♑	
min. Earth dist.	12336 Oct 07 07:28	20°♐20'43 0.64339 AU			12341 Nov 02 20:52	0°♑	
direct	12336 Nov 13 02:19	12°♐07'19		desc. node	12341 Dec 09 10:07	23°♑44'29	
	12337 Jan 13 14:44	0°♑			12341 Dec 19 03:59	0°♑	
	12337 Mar 06 08:30	0°♒		evening set	12342 Jan 11 21:47	15°♑09'17	
	12337 Apr 18 16:56	0°♑			12342 Feb 04 06:58	0°♏	
asc. node	12337 Apr 24 18:59	4°♑27'15					
	12337 May 28 14:29	0°♈		conjunction	12342 Feb 25 18:42	13°♏37'09 -0°39'51	
	12337 Jul 05 22:53	0°♐		minimum elong	12342 Feb 25 17:40	13°♏35'31 0°39'29	
	12337 Aug 13 01:16	0°♑		max. Earth dist.	12342 Feb 24 19:28	13°♏00'22 2.68378 AU	
	12337 Sep 20 22:07	0°♒			12342 Mar 23 14:10	0°♐	
evening set	12337 Oct 11 00:33	15°♒05'49		morning rise	12342 Apr 10 00:15	11°♐05'44	
	12337 Oct 31 07:45	0°♑			12342 May 09 12:03	0°♑	
					12342 Jun 24 16:28	0°♒	
conjunction	12337 Dec 09 00:27	27°♑26'14 0°45'38			12342 Aug 09 00:53	0°♑	
minimum elong	12337 Dec 09 02:18	27°♑29'25 0°46'30			12342 Sep 22 16:46	0°♈	
	12337 Dec 12 17:25	0°♑			12342 Nov 06 07:56	0°♐	
max. Earth dist.	12338 Jan 08 03:36	17°♑58'05 2.56810 AU		asc. node	12342 Dec 16 11:42	25°♐41'49	
	12338 Jan 26 06:30	0°♑			12342 Dec 23 17:59	0°♑	
morning rise	12338 Jan 29 13:16	2°♑09'22		retrograde	12343 Mar 01 05:11	24°♑18'01	
desc. node	12338 Mar 07 00:01	25°♑38'58		min. Earth dist.	12343 Mar 27 03:05	20°♑00'37 0.38603 AU	



greatest brilliancy	12343 Mar 31 21:45	18° $\Omega$ 36'43	-2.8m	conjunction	12348 Jun 27 19:44	15° $\Omega$ 32'39	-0°27'12
opposition	12343 Apr 02 07:03	18° $\Omega$ 12'09	6°18'08	minimum elong	12348 Jun 27 21:37	15° $\Omega$ 36'13	0°28'03
direct	12343 May 02 02:16	12° $\Omega$ 56'42			12348 Jul 16 18:05	0° $\Omega$	
	12343 Jun 29 07:01	0° $\mathbb{M}$		asc. node	12348 Aug 06 12:07	16° $\Omega$ 06'28	
	12343 Aug 22 20:48	0° $\mathcal{A}$			12348 Aug 24 04:56	0° $\mathbb{M}$	
	12343 Oct 11 15:14	0° $\mathcal{B}$		morning rise	12348 Sep 01 22:39	6° $\mathbb{M}$ 53'35	
desc. node	12343 Oct 27 14:23	9° $\mathcal{B}$ 46'14			12348 Oct 01 04:53	0° $\Omega$	
	12343 Nov 29 11:58	0° $\approx$			12348 Nov 08 15:09	0° $\mathbb{M}$	
	12344 Jan 16 22:10	0° $\mathcal{H}$			12348 Dec 18 10:00	0° $\mathcal{A}$	
evening set	12344 Feb 16 17:16	19° $\mathcal{H}$ 18'42			12349 Jan 29 13:56	0° $\mathcal{B}$	
	12344 Mar 04 13:55	0° $\mathcal{Y}$			12349 Mar 16 16:12	0° $\approx$	
max. Earth dist.	12344 Mar 18 05:54	8° $\mathcal{Y}$ 44'12	2.65912 AU		12349 May 10 18:26	0° $\mathcal{H}$	
				desc. node	12349 Jun 19 10:14	13° $\mathcal{H}$ 37'49	
conjunction	12344 Mar 31 19:19	17° $\mathcal{Y}$ 28'48	-1°05'30	retrograde	12349 Jul 07 05:35	15° $\mathcal{H}$ 27'39	
minimum elong	12344 Mar 31 18:31	17° $\mathcal{Y}$ 27'29	1°05'40	opposition	12349 Aug 16 21:45	5° $\mathcal{H}$ 38'54	-2°01'28
	12344 Apr 20 00:07	0° $\mathcal{B}$		min. Earth dist.	12349 Aug 16 05:17	5° $\mathcal{H}$ 55'15	0.68181 AU
morning rise	12344 May 15 06:52	16° $\mathcal{B}$ 45'58		greatest brilliancy	12349 Aug 16 19:31	5° $\mathcal{H}$ 41'07	-1.3m
	12344 Jun 03 21:03	0° $\mathbb{I}$			12349 Sep 01 06:56	30° $\mathcal{R}\approx$	
	12344 Jul 17 02:06	0° $\Omega$		direct	12349 Sep 26 19:03	25° $\approx$ 54'25	
	12344 Aug 27 17:45	0° $\Omega$			12349 Oct 24 17:58	0° $\mathcal{H}$	
	12344 Oct 07 03:49	0° $\mathbb{M}$			12350 Jan 01 10:37	0° $\mathcal{Y}$	
asc. node	12344 Nov 02 07:20	19° $\mathbb{M}$ 40'11			12350 Feb 20 22:30	0° $\mathcal{B}$	
	12344 Nov 16 01:00	0° $\Omega$			12350 Apr 06 23:06	0° $\mathbb{I}$	
	12344 Dec 26 17:24	0° $\mathbb{M}$			12350 May 18 14:55	0° $\Omega$	
	12345 Feb 09 05:56	0° $\mathcal{A}$		asc. node	12350 Jun 24 07:09	27° $\Omega$ 51'55	
retrograde	12345 Apr 24 22:09	28° $\mathcal{A}$ 22'57			12350 Jun 27 01:14	0° $\Omega$	
min. Earth dist.	12345 May 25 02:56	22° $\mathcal{A}$ 05'33	0.51706 AU	evening set	12350 Jun 30 04:06	2° $\Omega$ 25'29	
opposition	12345 Jun 01 21:58	19° $\mathcal{A}$ 10'39	4°15'13		12350 Aug 04 05:08	0° $\mathbb{M}$	
greatest brilliancy	12345 May 31 18:50	19° $\mathcal{A}$ 36'08	-2.1m				
direct	12345 Jul 06 19:43	11° $\mathcal{A}$ 35'53		conjunction	12350 Sep 08 20:18	28° $\mathbb{M}$ 15'44	0°49'23
	12345 Sep 09 06:30	0° $\mathcal{B}$		minimum elong	12350 Sep 08 16:17	28° $\mathbb{M}$ 07'48	0°49'12
	12345 Sep 13 23:02	2° $\mathcal{B}$ 11'45			12350 Sep 11 01:04	0° $\Omega$	
desc. node	12345 Nov 05 20:45	0° $\approx$			12350 Oct 19 10:43	0° $\mathbb{M}$	
	12345 Dec 27 09:47	0° $\mathcal{H}$		max. Earth dist.	12350 Oct 28 16:29	7° $\mathbb{M}$ 04'53	2.38025 AU
	12346 Feb 14 05:39	0° $\mathcal{Y}$		morning rise	12350 Nov 19 16:34	23° $\mathbb{M}$ 40'12	
evening set	12346 Mar 23 21:15	24° $\mathcal{Y}$ 09'13			12350 Nov 28 05:45	0° $\mathcal{A}$	
	12346 Apr 01 18:38	0° $\mathcal{B}$			12351 Jan 09 02:51	0° $\mathcal{B}$	
max. Earth dist.	12346 Apr 12 12:45	7° $\mathcal{B}$ 08'49	2.58074 AU		12351 Feb 22 17:27	0° $\approx$	
					12351 Apr 12 02:02	0° $\mathcal{H}$	
conjunction	12346 May 09 12:43	25° $\mathcal{B}$ 28'30	-1°06'40	desc. node	12351 May 07 04:39	14° $\mathcal{H}$ 15'17	
minimum elong	12346 May 09 13:31	25° $\mathcal{B}$ 29'54	1°07'21		12351 Jun 07 06:25	0° $\mathcal{Y}$	
	12346 May 16 01:42	0° $\mathbb{I}$		retrograde	12351 Aug 10 23:25	18° $\mathcal{Y}$ 03'21	
	12346 Jun 27 05:54	0° $\Omega$		opposition	12351 Sep 19 18:06	8° $\mathcal{Y}$ 49'44	-4°03'14
morning rise	12346 Jun 29 03:12	1° $\Omega$ 22'32		greatest brilliancy	12351 Sep 20 03:24	8° $\mathcal{Y}$ 40'39	-1.3m
	12346 Aug 06 15:03	0° $\Omega$		min. Earth dist.	12351 Sep 22 21:44	7° $\mathcal{Y}$ 35'46	0.66735 AU
	12346 Sep 14 17:20	0° $\mathbb{M}$			12351 Oct 17 14:36	30° $\mathcal{R}\mathcal{H}$	
asc. node	12346 Sep 19 21:02	4° $\mathbb{M}$ 00'12		direct	12351 Oct 31 08:35	28° $\mathcal{H}$ 46'45	
	12346 Oct 23 05:44	0° $\Omega$			12351 Nov 14 19:23	0° $\mathcal{Y}$	
	12346 Dec 01 02:44	0° $\mathbb{M}$			12352 Jan 27 10:28	0° $\mathcal{B}$	
	12347 Jan 10 13:52	0° $\mathcal{A}$			12352 Mar 15 14:18	0° $\mathbb{I}$	
	12347 Feb 23 16:11	0° $\mathcal{B}$			12352 Apr 27 02:16	0° $\Omega$	
	12347 Apr 19 09:59	0° $\approx$		asc. node	12352 May 11 08:03	10° $\Omega$ 36'01	
retrograde	12347 Jun 03 17:13	11° $\approx$ 03'40			12352 Jun 05 17:00	0° $\Omega$	
min. Earth dist.	12347 Jul 09 13:02	2° $\approx$ 50'14	0.62964 AU		12352 Jul 13 22:03	0° $\mathbb{M}$	
opposition	12347 Jul 13 23:47	1° $\approx$ 04'27	0°44'51		12352 Aug 20 20:53	0° $\Omega$	
greatest brilliancy	12347 Jul 13 21:00	1° $\approx$ 07'12	-1.5m	evening set	12352 Sep 13 21:41	18° $\Omega$ 45'12	
	12347 Jul 16 17:16	30° $\mathcal{R}\mathcal{B}$			12352 Sep 28 12:52	0° $\mathbb{M}$	
desc. node	12347 Aug 02 07:33	24° $\mathcal{B}$ 30'13			12352 Nov 07 16:36	0° $\mathcal{A}$	
direct	12347 Aug 21 16:16	22° $\mathcal{B}$ 05'07					
	12347 Sep 30 21:07	0° $\approx$		conjunction	12352 Nov 17 22:09	7° $\mathcal{A}$ 25'26	0°59'30
	12347 Dec 04 14:32	0° $\mathcal{H}$		minimum elong	12352 Nov 17 23:58	7° $\mathcal{A}$ 28'43	1°00'17
	12348 Jan 25 15:00	0° $\mathcal{Y}$			12352 Dec 19 20:30	0° $\mathcal{B}$	
	12348 Mar 13 02:19	0° $\mathcal{B}$		max. Earth dist.	12352 Dec 26 15:53	4° $\mathcal{B}$ 41'59	2.52047 AU
	12348 Apr 26 08:40	0° $\mathbb{I}$		morning rise	12353 Jan 12 19:31	16° $\mathcal{B}$ 22'26	
evening set	12348 May 03 19:07	5° $\mathbb{I}$ 13'48			12353 Feb 02 06:43	0° $\approx$	
max. Earth dist.	12348 May 17 08:25	14° $\mathbb{I}$ 54'06	2.45672 AU		12353 Mar 21 01:58	0° $\mathcal{H}$	
	12348 Jun 07 00:59	0° $\Omega$		desc. node	12353 Mar 23 18:12	1° $\mathcal{H}$ 40'01	

	12353 May 09 18:17	0°♃			12358 Oct 20 11:12	0°♄	
	12353 Jul 04 02:24	0°♄	desc. node		12358 Nov 13 01:07	14°♄54'06	
retrograde	12353 Sep 19 04:40	23°♄43'08			12358 Dec 07 01:04	0°♄	
opposition	12353 Oct 26 14:43	15°♄30'46 -5°06'27			12359 Jan 23 20:03	0°♄	
greatest brilliancy	12353 Oct 27 20:17	15°♄02'53 -1.7m	evening set		12359 Feb 02 23:55	6°♄23'37	
min. Earth dist.	12353 Nov 02 11:50	12°♄55'20 0.58590 AU	max. Earth dist.		12359 Mar 10 07:05	28°♄43'56 2.67544 AU	
direct	12353 Dec 06 02:38	5°♄47'24			12359 Mar 12 06:51	0°♃	
	12354 Feb 15 05:49	0°♂					
asc. node	12354 Mar 29 14:36	26°♂46'43	conjunction		12359 Mar 19 00:28	4°♃17'45 -0°57'52	
	12354 Apr 03 06:12	0°♄	minimum elong		12359 Mar 18 23:25	4°♃16'05 0°57'49	
	12354 May 14 07:34	0°♂			12359 Apr 27 20:13	0°♄	
	12354 Jun 22 05:51	0°♄	morning rise		12359 May 01 13:44	2°♄26'16	
	12354 Jul 30 19:02	0°♂			12359 Jun 12 03:02	0°♂	
	12354 Sep 08 03:01	0°♄			12359 Jul 25 23:46	0°♄	
	12354 Oct 19 00:27	0°♄			12359 Sep 06 11:18	0°♂	
evening set	12354 Nov 14 19:28	18°♄55'26			12359 Oct 17 20:57	0°♄	
	12354 Nov 30 20:47	0°♄	asc. node		12359 Nov 20 01:41	24°♄14'42	
conjunction	12355 Jan 05 20:06	24°♄10'28 0°18'23			12359 Nov 28 00:12	0°♂	
minimum elong	12355 Jan 05 20:52	24°♄11'44 0°19'13			12360 Jan 09 23:27	0°♄	
	12355 Jan 14 16:26	0°♄	retrograde		12360 Mar 03 23:40	0°♄	
max. Earth dist.	12355 Jan 24 17:09	6°♄33'22 2.62633 AU	min. Earth dist.		12360 Apr 06 01:45	7°♄09'37	
desc. node	12355 Feb 08 06:59	15°♄59'37			12360 May 03 19:26	1°♄48'49 0.46243 AU	
morning rise	12355 Feb 21 22:22	24°♄44'34	greatest brilliancy		12360 May 09 00:31	30°♄	
	12355 Mar 02 04:30	0°♄	opposition		12360 May 10 16:29	29°♄24'41 -2.3m	
	12355 Apr 19 01:16	0°♃	direct		12360 May 12 06:43	28°♄50'59 5°36'24	
	12355 Jun 07 07:39	0°♄			12360 Jun 14 05:36	22°♄06'25	
	12355 Jul 29 03:33	0°♂			12360 Jul 22 14:34	0°♄	
	12355 Sep 28 12:23	0°♄	desc. node		12360 Sep 23 09:54	0°♄	
retrograde	12355 Nov 12 15:31	10°♄06'18			12360 Sep 30 08:52	3°♄50'13	
opposition	12355 Dec 15 20:10	3°♄42'14 -3°36'42			12360 Nov 14 22:09	0°♄	
greatest brilliancy	12355 Dec 17 03:09	3°♄16'37 -2.4m			12361 Jan 03 21:18	0°♄	
min. Earth dist.	12355 Dec 24 12:32	0°♄51'23 0.45103 AU	evening set		12361 Feb 21 03:21	0°♃	
	12355 Dec 27 07:03	30°♄	max. Earth dist.		12361 Mar 09 11:35	10°♃24'58	
direct	12356 Jan 20 22:17	25°♂53'59			12361 Apr 02 04:37	25°♃47'40 2.61781 AU	
asc. node	12356 Feb 14 22:46	0°♄02'14			12361 Apr 08 14:05	0°♄	
	12356 Feb 14 19:55	0°♄	conjunction		12361 Apr 23 14:46	9°♄59'13 -1°09'59	
	12356 Apr 12 19:34	0°♂	minimum elong		12361 Apr 23 14:48	9°♄59'17 1°10'29	
	12356 May 25 21:37	0°♄			12361 May 23 01:36	0°♂	
	12356 Jul 05 18:07	0°♂	morning rise		12361 Jun 09 23:20	12°♂28'10	
	12356 Aug 15 20:53	0°♄			12361 Jul 04 14:19	0°♄	
	12356 Sep 27 07:32	0°♄			12361 Aug 14 09:27	0°♂	
	12356 Nov 10 10:55	0°♄			12361 Sep 22 21:31	0°♄	
desc. node	12356 Dec 25 23:36	29°♄52'12	asc. node		12361 Oct 06 18:31	10°♄41'12	
	12356 Dec 26 04:26	0°♄			12361 Oct 31 18:40	0°♂	
evening set	12356 Dec 28 01:15	1°♄12'27			12361 Dec 10 01:02	0°♄	
	12357 Feb 11 00:30	0°♄			12362 Jan 20 05:30	0°♄	
conjunction	12357 Feb 12 02:02	0°♄40'33 -0°25'32	retrograde		12362 Mar 07 15:30	0°♄	
minimum elong	12357 Feb 12 01:16	0°♄39'20 0°25'00	min. Earth dist.		12362 May 20 06:53	26°♄11'09	
max. Earth dist.	12357 Feb 16 08:08	3°♄22'44 2.67855 AU	opposition		12362 Jun 23 02:24	18°♄37'29 0.59194 AU	
morning rise	12357 Mar 27 17:27	28°♄20'29	greatest brilliancy		12362 Jun 28 23:09	16°♄19'27 2°01'51	
	12357 Mar 30 08:19	0°♃	direct		12362 Jun 28 13:08	16°♄29'18 -1.7m	
	12357 May 16 15:40	0°♄	desc. node		12362 Aug 05 08:46	7°♄47'02	
	12357 Jul 02 16:59	0°♂			12362 Aug 18 17:19	8°♄49'08	
	12357 Aug 18 15:01	0°♄			12362 Oct 18 05:48	0°♄	
	12357 Oct 05 01:52	0°♂			12362 Dec 13 18:15	0°♄	
	12357 Nov 24 23:32	0°♄			12363 Feb 02 03:32	0°♃	
asc. node	12358 Jan 02 02:29	17°♄05'58	evening set		12363 Mar 21 03:40	0°♄	
retrograde	12358 Jan 30 08:51	22°♄00'58	max. Earth dist.		12363 Apr 17 08:26	18°♄14'17	
min. Earth dist.	12358 Feb 27 22:04	17°♄20'29 0.36439 AU			12363 May 02 02:47	28°♄25'00 2.50971 AU	
opposition	12358 Mar 01 02:59	17°♄01'22 4°17'50			12363 May 04 09:18	0°♂	
greatest brilliancy	12358 Feb 28 19:51	17°♄06'05 -3.0m	conjunction		12363 Jun 07 02:08	24°♂02'11 -0°48'35	
direct	12358 Mar 30 06:43	12°♄10'26	minimum elong		12363 Jun 07 04:08	24°♂05'48 0°49'27	
	12358 May 27 06:05	0°♂			12363 Jun 15 05:45	0°♄	
	12358 Jul 17 21:29	0°♄			12363 Jul 25 04:29	0°♂	
	12358 Sep 03 07:36	0°♄	morning rise		12363 Aug 04 19:55	8°♂10'49	

asc. node	12363 Aug 24 07:19	23°♏18'25	greatest brilliancy	12368 Oct 11 21:51	0°♄18'03	-1.5m
	12363 Sep 01 20:39	0°♍		12368 Oct 12 16:36	30°♋	
	12363 Oct 10 00:26	0°♌	min. Earth dist.	12368 Oct 16 11:38	28°♍32'36	0.62549 AU
	12363 Nov 17 13:05	0°♍	direct	12368 Nov 21 04:56	20°♍40'59	
	12363 Dec 27 10:48	0°♎		12369 Jan 02 00:46	0°♄	
	12364 Feb 07 23:47	0°♎		12369 Feb 27 16:30	0°♌	
	12364 Mar 26 13:40	0°♍		12369 Apr 12 23:38	0°♌	
	12364 Jun 02 03:32	0°♋	asc. node	12369 Apr 15 03:25	1°♌33'19	
retrograde	12364 Jun 24 01:15	2°♋47'07		12369 May 23 05:14	0°♏	
desc. node	12364 Jul 05 22:55	1°♋50'34		12369 Jun 30 17:51	0°♍	
	12364 Jul 14 12:13	30°♋		12369 Aug 07 23:21	0°♌	
min. Earth dist.	12364 Aug 01 13:12	23°♌42'36	0.66905 AU	12369 Sep 15 23:07	0°♍	
opposition	12364 Aug 03 17:33	22°♌50'30	-1°02'41	evening set	12369 Oct 24 12:24	28°♍34'14
greatest brilliancy	12364 Aug 03 15:00	22°♌53'03	-1.4m		12369 Oct 26 11:47	0°♎
direct	12364 Sep 12 22:33	13°♌20'20			12369 Dec 07 23:53	0°♎
	12364 Nov 14 04:08	0°♋				
	12365 Jan 10 19:58	0°♍	conjunction	12369 Dec 19 15:48	7°♎58'54	0°36'03
	12365 Feb 28 17:51	0°♄	minimum elong	12369 Dec 19 17:19	8°♎01'28	0°36'56
	12365 Apr 14 08:43	0°♌	max. Earth dist.	12370 Jan 14 13:43	25°♎22'18	2.59095 AU
	12365 May 25 23:42	0°♌		12370 Jan 21 13:59	0°♌	
evening set	12365 Jun 05 03:09	7°♌34'36	morning rise	12370 Feb 07 08:01	10°♌56'31	
max. Earth dist.	12365 Jul 03 08:29	29°♌06'57	2.37605 AU	desc. node	12370 Feb 25 00:25	22°♌19'10
	12365 Jul 04 11:54	0°♏		12370 Mar 09 02:20	0°♋	
asc. node	12365 Jul 10 23:23	5°♏01'50		12370 Apr 26 10:33	0°♍	
				12370 Jun 16 04:18	0°♄	
conjunction	12365 Aug 08 18:21	27°♏38'34	0°20'29	12370 Aug 11 19:33	0°♌	
minimum elong	12365 Aug 08 16:16	27°♏34'27	0°19'53	retrograde	12370 Oct 19 20:31	20°♌08'41
	12365 Aug 11 17:53	0°♍		opposition	12370 Nov 23 22:23	12°♌54'51
	12365 Sep 18 14:43	0°♌	greatest brilliancy	12370 Nov 25 11:16	12°♌22'00	-4°43'59
morning rise	12365 Oct 21 22:30	26°♌05'52	min. Earth dist.	12370 Dec 02 11:25	9°♌53'24	0.50730 AU
	12365 Oct 26 23:42	0°♍	direct	12371 Jan 01 06:55	4°♌03'56	
	12365 Dec 05 17:18	0°♎	asc. node	12371 Mar 03 11:04	24°♌08'03	
	12366 Jan 16 14:27	0°♎		12371 Mar 13 14:24	0°♌	
	12366 Mar 02 12:23	0°♍		12371 Apr 27 12:31	0°♏	
	12366 Apr 21 06:05	0°♋		12371 Jun 06 23:24	0°♍	
desc. node	12366 May 23 21:56	16°♋57'06		12371 Jul 16 12:03	0°♌	
	12366 Jun 25 15:58	0°♍		12371 Aug 25 15:55	0°♍	
retrograde	12366 Jul 28 03:33	5°♍29'48		12371 Oct 06 07:48	0°♎	
	12366 Aug 26 19:49	30°♋		12371 Nov 18 20:06	0°♎	
opposition	12366 Sep 06 10:09	25°♋59'54	-3°21'37	evening set	12371 Dec 13 03:22	16°♎13'55
greatest brilliancy	12366 Sep 06 13:22	25°♋56'44	-1.3m		12372 Jan 03 02:55	0°♌
min. Earth dist.	12366 Sep 08 01:21	25°♋21'16	0.68098 AU	desc. node	12372 Jan 12 15:25	6°♌11'08
direct	12366 Oct 17 22:07	16°♋01'02				
	12366 Dec 11 22:45	0°♍	conjunction	12372 Jan 29 21:44	17°♌18'54	-0°09'26
	12367 Feb 06 14:01	0°♄	minimum elong	12372 Jan 29 21:26	17°♌18'25	0°08'46
	12367 Mar 25 00:25	0°♌	behind sun begin	12372 Jan 29 05:13	16°♌52'25	
	12367 May 06 01:21	0°♌	behind sun end	12372 Jan 30 13:39	17°♌44'25	
asc. node	12367 May 28 23:13	17°♌14'06	max. Earth dist.	12372 Feb 08 12:32	23°♌28'30	2.66476 AU
	12367 Jun 14 12:52	0°♏		12372 Feb 18 18:01	0°♋	
	12367 Jul 22 16:22	0°♍	morning rise	12372 Mar 14 10:39	15°♋39'34	
evening set	12367 Aug 15 14:47	18°♍59'22		12372 Apr 06 04:36	0°♍	
	12367 Aug 29 12:58	0°♌		12372 May 24 01:26	0°♄	
	12367 Oct 07 01:14	0°♍		12372 Jul 11 08:59	0°♌	
				12372 Aug 29 21:21	0°♌	
conjunction	12367 Oct 25 06:26	13°♍50'28	1°06'15	12372 Oct 22 22:04	0°♏	
minimum elong	12367 Oct 25 06:39	13°♍50'53	1°06'48	retrograde	12372 Dec 28 01:12	20°♏24'56
	12367 Nov 16 00:15	0°♎	asc. node	12373 Jan 18 18:44	17°♏33'28	
max. Earth dist.	12367 Dec 12 02:12	18°♎49'30	2.46681 AU	opposition	12373 Jan 27 02:49	15°♏21'05
morning rise	12367 Dec 25 22:06	28°♎33'17		greatest brilliancy	12373 Jan 27 05:08	15°♏19'28
	12367 Dec 27 23:54	0°♎	min. Earth dist.	12373 Jan 31 17:00	14°♏04'31	-3.0m
	12368 Feb 10 09:20	0°♌	direct	12373 Feb 27 10:09	9°♏44'48	0.37787 AU
	12368 Mar 28 13:16	0°♋		12373 Apr 28 22:03	0°♍	
desc. node	12368 Apr 09 12:32	7°♋17'13		12373 Jun 16 00:40	0°♌	
	12368 May 18 16:46	0°♍		12373 Jul 30 11:49	0°♍	
	12368 Jul 20 08:20	0°♄		12373 Sep 13 01:13	0°♎	
retrograde	12368 Sep 02 11:37	9°♄19'01		12373 Oct 28 15:24	0°♎	
opposition	12368 Oct 11 00:27	0°♄38'38	-4°51'38	desc. node	12373 Nov 29 12:51	20°♎33'45

	12373 Dec 14 07:37	0°♊			12378 Sep 09 15:19	0°♎		
evening set	12374 Jan 20 02:09	23°♊19'40		asc. node	12378 Sep 10 03:45	0°♎24'12		
	12374 Jan 30 15:19	0°♋			12378 Oct 18 00:04	0°♏		
max. Earth dist.	12374 Mar 01 17:51	19°♋03'18	2.68322 AU		12378 Nov 25 16:47	0°♐		
					12379 Jan 04 20:41	0°♑		
conjunction	12374 Mar 05 12:29	21°♋26'59	-0°47'15		12379 Feb 17 03:27	0°♒		
minimum elong	12374 Mar 05 11:23	21°♋25'15	0°47'01		12379 Apr 08 19:35	0°♓		
	12374 Mar 18 23:23	0°♌		retrograde	12379 Jun 11 15:03	19°♓31'58		
morning rise	12374 Apr 17 17:06	19°♌00'58		min. Earth dist.	12379 Jul 18 10:54	10°♓59'12	0.64642 AU	
	12374 May 04 17:48	0°♍		opposition	12379 Jul 22 02:45	9°♓31'54	0°03'08	
	12374 Jun 19 13:37	0°♎		greatest brilliancy	12379 Jul 22 02:38	9°♓32'00	-1.5m	
	12374 Aug 03 07:37	0°♏		desc. node	12379 Jul 23 11:43	8°♓59'13		
	12374 Sep 16 00:47	0°♐		direct	12379 Aug 30 09:49	0°♓20'16		
	12374 Oct 29 03:00	0°♑			12379 Nov 27 16:51	0°♋		
asc. node	12374 Dec 06 19:49	26°♑33'25			12380 Jan 20 05:53	0°♌		
	12374 Dec 12 00:07	0°♒			12380 Mar 08 04:24	0°♍		
	12375 Feb 01 02:38	0°♓			12380 Apr 21 13:58	0°♎		
retrograde	12375 Mar 15 17:13	11°♓21'26		evening set	12380 May 14 16:35	16°♎25'17		
min. Earth dist.	12375 Apr 10 16:27	6°♓50'31	0.40953 AU	max. Earth dist.	12380 May 29 17:38	27°♎23'36	2.42659 AU	
greatest brilliancy	12375 Apr 16 16:48	4°♓57'16	-2.7m		12380 Jun 02 06:24	0°♏		
opposition	12375 Apr 18 09:28	4°♓25'06	6°26'22					
	12375 May 05 00:45	30°♋♏		conjunction	12380 Jul 11 18:09	29°♏52'17	-0°11'22	
direct	12375 May 19 02:49	28°♏39'41		minimum elong	12380 Jul 11 19:10	29°♏54'15	0°12'10	
	12375 Jun 02 17:57	0°♐		behind sun begin	12380 Jul 11 01:06	29°♏19'25		
	12375 Aug 14 01:44	0°♑		behind sun end	12380 Jul 12 13:15	0°♐29'05		
	12375 Oct 05 08:08	0°♒			12380 Jul 11 22:10	0°♑		
desc. node	12375 Oct 17 18:22	7°♒24'19		asc. node	12380 Jul 27 18:09	12°♑17'14		
	12375 Nov 24 04:46	0°♓			12380 Aug 19 07:29	0°♒		
	12376 Jan 12 02:07	0°♋		morning rise	12380 Sep 19 20:15	24°♒55'59		
evening set	12376 Feb 24 13:54	27°♋13'55			12380 Sep 26 06:14	0°♓		
	12376 Feb 28 22:34	0°♌			12380 Nov 03 15:23	0°♔		
max. Earth dist.	12376 Mar 23 13:10	15°♌07'24	2.64671 AU		12380 Dec 13 08:30	0°♑		
					12381 Jan 24 07:55	0°♒		
conjunction	12376 Apr 08 21:18	25°♌44'40	-1°08'23		12381 Mar 10 19:13	0°♓		
minimum elong	12376 Apr 08 20:45	25°♌43'47	1°08'41		12381 May 02 01:13	0°♋		
	12376 Apr 15 09:02	0°♍		desc. node	12381 Jun 09 12:51	16°♋36'47		
morning rise	12376 May 24 03:40	25°♍56'10		retrograde	12381 Jul 14 18:38	23°♋05'37		
	12376 May 30 02:34	0°♎		opposition	12381 Aug 24 08:38	13°♋22'35	-2°33'05	
	12376 Jul 12 01:38	0°♏		greatest brilliancy	12381 Aug 24 07:41	13°♋23'32	-1.3m	
	12376 Aug 22 09:18	0°♐		min. Earth dist.	12381 Aug 24 11:39	13°♋19'36	0.68433 AU	
	12376 Oct 01 10:25	0°♑		direct	12381 Oct 04 12:45	3°♋31'55		
asc. node	12376 Oct 23 13:07	16°♑48'33			12381 Dec 25 08:41	0°♌		
	12376 Nov 09 21:01	0°♒			12382 Feb 15 10:40	0°♍		
	12376 Dec 19 20:40	0°♓			12382 Apr 01 21:46	0°♎		
	12377 Jan 31 14:01	0°♔			12382 May 13 16:49	0°♏		
	12377 Mar 25 22:15	0°♒		asc. node	12382 Jun 14 13:43	24°♏08'10		
retrograde	12377 May 04 14:02	9°♒26'18			12382 Jun 22 03:33	0°♐		
min. Earth dist.	12377 Jun 05 03:36	2°♒39'17	0.54567 AU	evening set	12382 Jul 16 03:38	18°♐48'13		
greatest brilliancy	12377 Jun 11 10:56	0°♒14'25	-1.9m		12382 Jul 30 07:14	0°♑		
opposition	12377 Jun 12 07:20	29°♑54'51	3°25'51		12382 Sep 06 03:13	0°♒		
	12377 Jun 12 01:57	30°♋♑						
direct	12377 Jul 18 03:45	21°♑56'59		conjunction	12382 Sep 26 11:27	15°♒59'08	1°00'13	
	12377 Aug 26 23:38	0°♒		minimum elong	12382 Sep 26 08:26	15°♒53'16	1°00'21	
desc. node	12377 Sep 04 04:12	3°♒04'26			12382 Oct 14 13:16	0°♓		
	12377 Oct 30 04:15	0°♓		max. Earth dist.	12382 Nov 18 23:26	26°♓45'26	2.41001 AU	
	12377 Dec 22 01:39	0°♋			12382 Nov 23 08:52	0°♑		
	12378 Feb 09 09:22	0°♌		morning rise	12382 Dec 03 21:51	7°♑42'31		
	12378 Mar 28 02:25	0°♍			12383 Jan 04 05:43	0°♒		
evening set	12378 Apr 01 10:47	2°♍52'35			12383 Feb 17 16:25	0°♓		
max. Earth dist.	12378 Apr 19 03:50	14°♍44'38	2.55743 AU		12383 Apr 06 10:40	0°♋		
	12378 May 11 09:22	0°♎		desc. node	12383 Apr 27 06:31	12°♋13'27		
					12383 May 30 01:34	0°♌		
conjunction	12378 May 19 06:10	5°♎29'44	-1°02'06	retrograde	12383 Aug 19 04:48	25°♌54'23		
minimum elong	12378 May 19 07:27	5°♎32'00	1°02'51	opposition	12383 Sep 27 14:20	16°♌51'14	-4°23'51	
	12378 Jun 22 11:18	0°♏		greatest brilliancy	12383 Sep 28 03:41	16°♌38'15	-1.4m	
morning rise	12378 Jul 11 06:00	13°♏51'18		min. Earth dist.	12383 Oct 01 13:37	15°♌18'28	0.65543 AU	
	12378 Aug 01 16:51	0°♐		direct	12383 Nov 08 03:12	6°♌48'14		

	12384 Jan 19 16:55	0°♄			12389 Feb 06 09:22	0°♄
	12384 Mar 09 17:58	0°♄				
asc. node	12384 Apr 21 18:21	0°♄	conjunction	12389 Feb 19 23:15	8°♄36'53	-0°34'11
	12384 May 01 17:49	7°♄21'29	minimum elong	12389 Feb 19 22:19	8°♄35'24	0°33'46
	12384 May 31 13:25	0°♄	max. Earth dist.	12389 Feb 21 08:48	9°♄30'02	2.68250 AU
	12384 Jul 08 20:23	0°♄		12389 Mar 25 16:40	0°♄	
	12384 Aug 15 20:44	0°♄	morning rise	12389 Apr 04 07:38	6°♄06'45	
evening set	12384 Sep 23 14:24	0°♄		12389 May 11 18:39	0°♄	
	12384 Sep 29 16:57	4°♄38'18		12389 Jun 27 07:59	0°♄	
	12384 Nov 02 20:08	0°♄		12389 Aug 12 07:42	0°♄	
conjunction	12384 Nov 30 06:44	19°♄39'52	0°52'04	12389 Sep 27 00:06	0°♄	
minimum elong	12384 Nov 30 08:42	19°♄43'20	0°52'55	12389 Nov 12 12:44	0°♄	
	12384 Dec 15 01:50	0°♄	asc. node	12389 Dec 23 11:43	23°♄51'30	
max. Earth dist.	12385 Jan 03 04:50	13°♄05'50	2.54782 AU	12390 Jan 05 03:22	0°♄	
morning rise	12385 Jan 22 13:38	26°♄04'33		12390 Feb 16 18:48	10°♄52'46	
	12385 Jan 28 12:08	0°♄	retrograde	12390 Mar 15 08:43	6°♄34'18	0.37229 AU
desc. node	12385 Mar 13 18:29	28°♄30'42	opposition	12390 Mar 19 14:46	5°♄23'35	5°44'32
	12385 Mar 16 03:16	0°♄	greatest brilliancy	12390 Mar 18 16:12	5°♄39'17	-3.0m
	12385 May 04 04:36	0°♄	direct	12390 Apr 17 22:11	0°♄26'07	
	12385 Jun 26 06:47	0°♄		12390 Jul 07 20:20	0°♄	
	12385 Sep 05 18:25	0°♄		12390 Aug 27 07:42	0°♄	
retrograde	12385 Sep 29 13:18	3°♄02'58	desc. node	12390 Oct 14 18:02	0°♄	
	12385 Oct 21 13:34	30°♄		12390 Nov 03 05:36	12°♄07'10	
opposition	12385 Nov 05 05:18	25°♄08'52	-5°06'06	12390 Dec 01 23:31	0°♄	
greatest brilliancy	12385 Nov 06 14:38	24°♄37'54	-1.8m	12391 Jan 19 02:25	0°♄	
min. Earth dist.	12385 Nov 12 18:41	22°♄20'52	0.56019 AU	12391 Feb 10 20:36	14°♄17'12	
direct	12385 Dec 15 02:35	15°♄39'08		12391 Mar 07 16:10	0°♄	
	12386 Feb 04 16:55	0°♄	max. Earth dist.	12391 Mar 15 10:07	4°♄56'39	2.66742 AU
asc. node	12386 Mar 20 01:05	25°♄08'44	conjunction	12391 Mar 26 20:37	12°♄16'39	-1°02'45
	12386 Mar 27 08:20	0°♄	minimum elong	12391 Mar 26 19:42	12°♄15'10	1°02'51
	12386 May 08 07:15	0°♄		12391 Apr 23 04:15	0°♄	
	12386 Jun 16 14:52	0°♄	morning rise	12391 May 09 20:19	10°♄58'32	
	12386 Jul 25 10:09	0°♄		12391 Jun 07 06:12	0°♄	
	12386 Sep 02 23:09	0°♄		12391 Jul 20 18:47	0°♄	
evening set	12386 Oct 14 01:11	0°♄		12391 Aug 31 19:24	0°♄	
	12386 Nov 25 16:07	29°♄43'52		12391 Oct 11 15:20	0°♄	
	12386 Nov 26 01:35	0°♄	asc. node	12391 Nov 10 09:00	22°♄07'22	
	12387 Jan 09 23:48	0°♄		12391 Nov 20 23:44	0°♄	
conjunction	12387 Jan 14 22:18	3°♄13'43	0°07'57	12392 Jan 01 09:05	0°♄	
minimum elong	12387 Jan 14 22:39	3°♄14'16	0°08'44	12392 Feb 17 01:24	0°♄	
behind sun begin	12387 Jan 14 05:45	2°♄46'42	retrograde	12392 Apr 17 02:36	20°♄06'31	
behind sun end	12387 Jan 15 15:32	3°♄41'48	min. Earth dist.	12392 May 16 04:56	14°♄13'39	0.49281 AU
desc. node	12387 Jan 29 06:46	12°♄33'07	greatest brilliancy	12392 May 23 00:36	11°♄44'23	-2.2m
max. Earth dist.	12387 Jan 30 07:38	13°♄13'19	2.64232 AU	12392 May 24 08:58	11°♄14'39	4°51'49
	12387 Feb 25 11:52	0°♄	opposition	12392 Jun 27 10:07	4°♄01'03	
morning rise	12387 Mar 01 22:15	2°♄49'03	direct	12392 Sep 15 00:02	0°♄	
	12387 Apr 14 03:46	0°♄	desc. node	12392 Sep 20 13:42	2°♄50'25	
	12387 Jun 01 19:22	0°♄		12392 Nov 09 00:05	0°♄	
	12387 Jul 22 00:13	0°♄		12392 Dec 29 19:43	0°♄	
	12387 Sep 14 15:04	0°♄		12393 Feb 16 10:02	0°♄	
retrograde	12387 Nov 28 02:51	23°♄34'33	evening set	12393 Mar 17 14:55	18°♄40'01	
opposition	12387 Dec 30 01:24	17°♄41'36	-2°27'31	12393 Apr 03 22:55	0°♄	
greatest brilliancy	12387 Dec 30 22:28	17°♄25'12	-2.6m	12393 Apr 08 02:06	2°♄43'54	2.59819 AU
min. Earth dist.	12388 Jan 07 01:50	15°♄12'30	0.42092 AU	12393 May 02 12:14	19°♄07'17	-1°08'46
direct	12388 Feb 02 14:01	10°♄38'55	conjunction	12393 May 02 12:43	19°♄08'06	1°09'22
asc. node	12388 Feb 05 07:38	10°♄42'06	minimum elong	12393 May 18 08:54	0°♄	
	12388 Mar 31 22:26	0°♄	morning rise	12393 Jun 20 12:13	23°♄20'46	
	12388 May 17 18:31	0°♄		12393 Jun 29 17:48	0°♄	
	12388 Jun 28 23:35	0°♄		12393 Aug 09 08:03	0°♄	
	12388 Aug 09 21:31	0°♄		12393 Sep 17 14:55	0°♄	
	12388 Sep 21 21:23	0°♄	asc. node	12393 Sep 26 22:48	7°♄12'57	
	12388 Nov 05 10:25	0°♄		12393 Oct 26 07:05	0°♄	
desc. node	12388 Dec 16 02:12	26°♄33'40		12393 Dec 04 07:08	0°♄	
	12388 Dec 21 10:12	0°♄		12394 Jan 13 23:06	0°♄	
evening set	12389 Jan 05 15:22	9°♄46'06		12394 Feb 27 17:05	0°♄	

	12394 Apr 28 16:50	0°♊			12399 Mar 19 13:54	0°♊		
retrograde	12394 May 28 14:57	5°♊19'46			12399 Apr 30 22:20	0°♊		
	12394 Jun 25 15:25	30°♊		asc. node	12399 May 19 07:31	13°♊44'25		
min. Earth dist.	12394 Jul 02 13:48	27°♊23'42	0.61389 AU		12399 Jun 09 12:31	0°♊		
opposition	12394 Jul 07 16:21	25°♊22'41	1°16'14		12399 Jul 17 17:07	0°♊		
greatest brilliancy	12394 Jul 07 10:52	25°♊28'05	-1.6m	greatest brilliancy	12399 Jul 25 18:56	6°♊23'58	1.2m	
desc. node	12394 Aug 08 22:34	16°♊47'53			12399 Aug 24 14:44	0°♊		
direct	12394 Aug 14 19:47	16°♊34'47		evening set	12399 Sep 01 21:18	6°♊30'11		
	12394 Oct 08 07:34	0°♊			12399 Oct 02 04:16	0°♊		
	12394 Dec 07 18:04	0°♊						
	12395 Jan 28 01:50	0°♊		conjunction	12399 Nov 08 15:47	28°♊08'31	1°03'34	
	12395 Mar 16 09:31	0°♊		minimum elong	12399 Nov 08 17:11	28°♊11'05	1°04'16	
evening set	12395 Apr 26 23:55	28°♊06'51			12399 Nov 11 04:33	0°♊		
	12395 Apr 29 16:51	0°♊		max. Earth dist.	12399 Dec 21 13:52	28°♊51'48	2.49707 AU	
max. Earth dist.	12395 May 10 19:18	7°♊48'30	2.48087 AU		12399 Dec 23 05:03	0°♊		
	12395 Jun 10 12:10	0°♊		morning rise	12400 Jan 05 22:43	9°♊28'18		
					12400 Feb 05 13:02	0°♊		
conjunction	12395 Jun 18 22:28	6°♊14'23	-0°37'22		12400 Mar 23 09:58	0°♊		
minimum elong	12395 Jun 19 00:33	6°♊18'16	0°38'15	desc. node	12400 Mar 30 12:25	4°♊23'33		
	12395 Jul 20 08:31	0°♊			12400 May 12 13:27	0°♊		
asc. node	12395 Aug 14 13:25	19°♊31'53			12400 Jul 08 23:43	0°♊		
morning rise	12395 Aug 20 16:11	24°♊19'02		retrograde	12400 Sep 11 18:30	17°♊52'54		
	12395 Aug 27 21:56	0°♊		opposition	12400 Oct 19 17:11	9°♊27'03	-5°01'56	
	12395 Oct 04 23:25	0°♊		greatest brilliancy	12400 Oct 20 19:10	9°♊02'17	-1.6m	
greatest brilliancy	12395 Oct 05 01:31	0°♊04'07	1.2m	min. Earth dist.	12400 Oct 25 23:04	7°♊04'26	0.60485 AU	
	12395 Nov 12 09:57	0°♊			12400 Nov 21 20:02	30°♊		
	12395 Dec 22 04:31	0°♊		direct	12400 Nov 29 13:24	29°♊35'56		
	12396 Feb 02 09:58	0°♊			12400 Dec 07 11:29	0°♊		
	12396 Mar 19 21:43	0°♊			12401 Feb 20 06:09	0°♊		
	12396 May 16 17:48	0°♊		asc. node	12401 Apr 05 13:03	29°♊00'11		
desc. node	12396 Jun 26 02:54	10°♊24'41			12401 Apr 06 22:58	0°♊		
retrograde	12396 Jul 01 14:45	10°♊35'55			12401 May 17 15:41	0°♊		
min. Earth dist.	12396 Aug 09 22:32	1°♊15'52	0.67745 AU		12401 Jun 25 09:23	0°♊		
opposition	12396 Aug 11 07:32	0°♊43'05	-1°38'02		12401 Aug 02 18:33	0°♊		
greatest brilliancy	12396 Aug 11 04:43	0°♊45'53	-1.3m		12401 Sep 10 21:51	0°♊		
	12396 Aug 13 02:58	30°♊			12401 Oct 21 13:58	0°♊		
direct	12396 Sep 20 22:20	21°♊04'39		evening set	12401 Nov 05 22:43	10°♊58'38		
	12396 Nov 03 01:22	0°♊			12401 Dec 03 05:17	0°♊		
	12397 Jan 04 17:23	0°♊						
	12397 Feb 23 13:41	0°♊		conjunction	12401 Dec 29 15:44	17°♊54'55	0°25'52	
	12397 Apr 09 11:33	0°♊		minimum elong	12401 Dec 29 16:49	17°♊56'45	0°26'45	
	12397 May 21 04:24	0°♊			12402 Jan 16 21:01	0°♊		
evening set	12397 Jun 18 16:51	21°♊31'49		max. Earth dist.	12402 Jan 20 13:41	2°♊25'35	2.61151 AU	
	12397 Jun 29 16:25	0°♊		morning rise	12402 Feb 15 18:52	19°♊26'10		
asc. node	12397 Jul 01 07:45	1°♊16'16		desc. node	12402 Feb 15 01:08	18°♊57'39		
	12397 Aug 06 21:31	0°♊			12402 Mar 04 07:59	0°♊		
					12402 Apr 21 08:19	0°♊		
conjunction	12397 Aug 25 23:55	15°♊09'02	0°37'59		12402 Jun 10 03:12	0°♊		
minimum elong	12397 Aug 25 20:13	15°♊01'42	0°37'37		12402 Aug 02 12:43	0°♊		
	12397 Sep 13 17:38	0°♊			12402 Oct 16 15:38	0°♊		
max. Earth dist.	12397 Sep 14 02:44	0°♊17'58	2.36357 AU	retrograde	12402 Nov 01 17:16	1°♊30'03		
	12397 Oct 22 02:09	0°♊			12402 Nov 17 03:59	30°♊		
morning rise	12397 Nov 07 16:08	12°♊41'17		opposition	12402 Dec 05 19:47	24°♊42'26	-4°12'08	
	12397 Nov 30 19:07	0°♊		greatest brilliancy	12402 Dec 07 06:49	24°♊12'23	-2.3m	
	12398 Jan 11 14:29	0°♊		min. Earth dist.	12402 Dec 14 15:04	21°♊42'34	0.47635 AU	
	12398 Feb 25 05:36	0°♊		direct	12403 Jan 12 01:10	16°♊22'54		
	12398 Apr 14 23:35	0°♊		asc. node	12403 Feb 21 21:39	26°♊30'01		
desc. node	12398 May 13 22:45	15°♊58'29			12403 Mar 01 08:00	0°♊		
	12398 Jun 12 12:17	0°♊			12403 Apr 19 16:38	0°♊		
retrograde	12398 Aug 04 23:56	13°♊10'08			12403 May 31 08:40	0°♊		
opposition	12398 Sep 14 00:18	3°♊48'43	-3°46'54		12403 Jul 10 12:13	0°♊		
greatest brilliancy	12398 Sep 14 06:41	3°♊42'28	-1.3m		12403 Aug 20 02:43	0°♊		
min. Earth dist.	12398 Sep 16 11:10	2°♊50'55	0.67478 AU		12403 Oct 01 02:57	0°♊		
	12398 Sep 23 22:41	30°♊			12403 Nov 13 22:05	0°♊		
direct	12398 Oct 25 14:15	23°♊47'06		evening set	12403 Dec 22 08:26	25°♊24'53		
	12398 Nov 29 02:52	0°♊			12403 Dec 29 09:30	0°♊		
	12399 Jan 31 03:32	0°♊		desc. node	12404 Jan 02 16:55	2°♊47'40		

conjunction	12404 Feb 07 01:54	25° $\approx$ 31'10	-0°19'03			12409 Mar 13 07:30	0° $\mathcal{Z}$	
minimum elong	12404 Feb 07 01:18	25° $\approx$ 30'13	0°18'28	retrograde		12409 May 13 16:51	19° $\mathcal{Z}$ 43'46	
max. Earth dist.	12404 Feb 13 15:52	29° $\approx$ 42'52	2.67345 AU	min. Earth dist.		12409 Jun 15 13:12	12° $\mathcal{Z}$ 30'13	0.57226 AU
	12404 Feb 14 02:38	0° $\mathcal{H}$		greatest brilliancy		12409 Jun 21 10:29	10° $\mathcal{Z}$ 12'49	-1.8m
morning rise	12404 Mar 22 01:20	23° $\mathcal{H}$ 25'23		opposition		12409 Jun 22 00:41	9° $\mathcal{Z}$ 58'59	2°36'39
	12404 Apr 01 11:12	0° $\mathcal{Y}$		direct		12409 Jul 28 18:24	1° $\mathcal{Z}$ 41'03	
	12404 May 18 23:54	0° $\mathcal{B}$		desc. node		12409 Aug 25 08:36	5° $\mathcal{Z}$ 47'19	
	12404 Jul 05 13:19	0° $\mathcal{II}$				12409 Oct 22 17:48	0° $\approx$	
	12404 Aug 22 10:31	0° $\mathcal{E}$				12409 Dec 16 13:04	0° $\mathcal{H}$	
	12404 Oct 10 22:13	0° $\mathcal{O}$				12410 Feb 04 11:46	0° $\mathcal{Y}$	
	12404 Dec 08 17:09	0° $\mathcal{M}$				12410 Mar 23 09:49	0° $\mathcal{B}$	
asc. node	12405 Jan 09 02:40	7° $\mathcal{M}$ 56'48		evening set		12410 Apr 10 07:49	11° $\mathcal{B}$ 55'41	
retrograde	12405 Jan 15 19:25	8° $\mathcal{M}$ 14'01		max. Earth dist.		12410 Apr 26 08:59	22° $\mathcal{B}$ 50'39	2.53187 AU
opposition	12405 Feb 14 09:33	3° $\mathcal{M}$ 21'09	2°46'55			12410 May 06 17:19	0° $\mathcal{II}$	
greatest brilliancy	12405 Feb 14 11:13	3° $\mathcal{M}$ 20'03	-3.0m					
min. Earth dist.	12405 Feb 15 22:03	2° $\mathcal{M}$ 56'57	0.36607 AU	conjunction		12410 May 29 14:29	16° $\mathcal{II}$ 09'22	-0°55'16
	12405 Feb 28 04:18	30° $\mathcal{R}$ $\mathcal{O}$		minimum elong		12410 May 29 16:13	16° $\mathcal{II}$ 12'28	0°56'06
direct	12405 Mar 16 03:52	28° $\mathcal{O}$ 18'45				12410 Jun 17 17:15	0° $\mathcal{E}$	
	12405 Apr 01 02:20	0° $\mathcal{M}$		morning rise		12410 Jul 24 13:04	27° $\mathcal{E}$ 29'51	
	12405 Jun 05 16:16	0° $\mathcal{L}$				12410 Jul 27 19:57	0° $\mathcal{O}$	
	12405 Jul 23 01:14	0° $\mathcal{M}$		asc. node		12410 Aug 31 09:34	26° $\mathcal{O}$ 41'23	
	12405 Sep 06 22:39	0° $\mathcal{X}$				12410 Sep 04 15:18	0° $\mathcal{M}$	
	12405 Oct 23 07:04	0° $\mathcal{Z}$				12410 Oct 12 21:12	0° $\mathcal{L}$	
desc. node	12405 Nov 19 16:54	17° $\mathcal{Z}$ 30'14				12410 Nov 20 10:55	0° $\mathcal{M}$	
	12405 Dec 09 09:52	0° $\approx$				12410 Dec 30 09:30	0° $\mathcal{X}$	
	12406 Jan 25 23:20	0° $\mathcal{H}$				12411 Feb 11 02:44	0° $\mathcal{Z}$	
evening set	12406 Jan 28 01:33	1° $\mathcal{H}$ 19'10				12411 Mar 31 12:50	0° $\approx$	
max. Earth dist.	12406 Mar 06 17:11	25° $\mathcal{H}$ 07'48	2.67995 AU	retrograde		12411 Jun 19 08:31	27° $\approx$ 42'23	
				desc. node		12411 Jul 13 14:58	23° $\approx$ 47'07	
conjunction	12406 Mar 13 05:06	29° $\mathcal{H}$ 15'36	-0°53'49	min. Earth dist.		12411 Jul 27 02:53	18° $\approx$ 51'55	0.66015 AU
minimum elong	12406 Mar 13 04:01	29° $\mathcal{H}$ 13'51	0°53'43	opposition		12411 Jul 29 23:43	17° $\approx$ 43'27	-0°36'22
	12406 Mar 14 09:01	0° $\mathcal{Y}$		greatest brilliancy		12411 Jul 29 21:53	17° $\approx$ 45'16	-1.4m
morning rise	12406 Apr 25 12:54	27° $\mathcal{Y}$ 04'42		direct		12411 Sep 07 20:02	8° $\approx$ 21'10	
	12406 Apr 30 00:53	0° $\mathcal{B}$				12411 Nov 19 22:28	0° $\mathcal{H}$	
	12406 Jun 14 13:53	0° $\mathcal{II}$				12412 Jan 14 16:20	0° $\mathcal{Y}$	
	12406 Jul 28 19:57	0° $\mathcal{E}$				12412 Mar 03 05:14	0° $\mathcal{B}$	
	12406 Sep 09 19:53	0° $\mathcal{O}$				12412 Apr 16 19:17	0° $\mathcal{II}$	
	12406 Oct 21 20:51	0° $\mathcal{M}$		evening set		12412 May 26 09:20	28° $\mathcal{II}$ 26'12	
asc. node	12406 Nov 27 02:38	25° $\mathcal{M}$ 54'25				12412 May 28 12:05	0° $\mathcal{E}$	
	12406 Dec 02 21:58	0° $\mathcal{L}$		max. Earth dist.		12412 Jun 14 14:12	12° $\mathcal{E}$ 46'58	2.39718 AU
	12407 Jan 16 20:38	0° $\mathcal{M}$				12412 Jul 07 02:45	0° $\mathcal{O}$	
retrograde	12407 Mar 28 21:28	27° $\mathcal{M}$ 00'54		asc. node		12412 Jul 18 00:30	8° $\mathcal{O}$ 27'54	
min. Earth dist.	12407 Apr 24 15:41	22° $\mathcal{M}$ 04'19	0.43803 AU					
greatest brilliancy	12407 May 01 07:48	19° $\mathcal{M}$ 50'26	-2.5m	conjunction		12412 Jul 26 23:28	15° $\mathcal{O}$ 27'57	0°06'27
opposition	12407 May 03 00:48	19° $\mathcal{M}$ 15'47	6°05'03	minimum elong		12412 Jul 26 22:55	15° $\mathcal{O}$ 26'51	0°05'45
direct	12407 Jun 04 00:44	12° $\mathcal{M}$ 56'58		behind sun begin		12412 Jul 25 19:48	14° $\mathcal{O}$ 33'45	
	12407 Aug 02 20:30	0° $\mathcal{X}$		behind sun end		12412 Jul 28 02:02	16° $\mathcal{O}$ 19'59	
	12407 Sep 28 12:25	0° $\mathcal{Z}$				12412 Aug 14 10:31	0° $\mathcal{M}$	
desc. node	12407 Oct 07 23:55	5° $\mathcal{Z}$ 26'07				12412 Sep 21 08:02	0° $\mathcal{L}$	
	12407 Nov 18 17:25	0° $\approx$		morning rise		12412 Oct 08 01:35	13° $\mathcal{L}$ 10'17	
	12408 Jan 07 04:45	0° $\mathcal{H}$				12412 Oct 29 16:30	0° $\mathcal{M}$	
	12408 Feb 24 07:01	0° $\mathcal{Y}$				12412 Dec 08 08:36	0° $\mathcal{X}$	
evening set	12408 Mar 03 11:08	5° $\mathcal{Y}$ 11'43				12413 Jan 19 04:52	0° $\mathcal{Z}$	
max. Earth dist.	12408 Mar 29 00:55	21° $\mathcal{Y}$ 40'05	2.63184 AU			12413 Mar 05 05:24	0° $\approx$	
	12408 Apr 10 18:23	0° $\mathcal{B}$				12413 Apr 24 16:27	0° $\mathcal{H}$	
				desc. node		12413 May 30 15:26	17° $\mathcal{H}$ 38'28	
conjunction	12408 Apr 17 03:45	4° $\mathcal{B}$ 13'02	-1°09'53			12413 Jul 11 10:30	0° $\mathcal{Y}$	
minimum elong	12408 Apr 17 03:31	4° $\mathcal{B}$ 12'39	1°10'19	retrograde		12413 Jul 22 09:41	0° $\mathcal{Y}$ 42'13	
	12408 May 25 09:38	0° $\mathcal{II}$				12413 Aug 01 21:42	30° $\mathcal{R}$ $\mathcal{H}$	
morning rise	12408 Jun 02 11:00	5° $\mathcal{II}$ 33'24		opposition		12413 Aug 31 19:52	21° $\mathcal{H}$ 05'58	-3°02'26
	12408 Jul 07 03:45	0° $\mathcal{E}$		greatest brilliancy		12413 Aug 31 20:56	21° $\mathcal{H}$ 04'55	-1.3m
	12408 Aug 17 05:05	0° $\mathcal{O}$		min. Earth dist.		12413 Sep 01 18:24	20° $\mathcal{H}$ 43'42	0.68376 AU
	12408 Sep 25 22:54	0° $\mathcal{M}$		direct		12413 Oct 12 05:01	11° $\mathcal{H}$ 10'28	
asc. node	12408 Oct 13 20:22	13° $\mathcal{M}$ 42'25				12413 Dec 17 04:52	0° $\mathcal{Y}$	
	12408 Nov 04 01:20	0° $\mathcal{L}$				12414 Feb 09 16:40	0° $\mathcal{B}$	
	12408 Dec 13 13:21	0° $\mathcal{M}$				12414 Mar 27 18:25	0° $\mathcal{II}$	
	12409 Jan 24 04:21	0° $\mathcal{X}$				12414 May 08 18:04	0° $\mathcal{E}$	

asc. node	12414 Jun 04 22:47	20°☾30'20		behind sun begin	12419 Jan 22 18:40	11°≈21'42	
	12414 Jun 17 06:10	0°♊		behind sun end	12419 Jan 24 09:18	12°≈24'04	
	12414 Jul 25 09:59	0°♍		max. Earth dist.	12419 Feb 04 16:01	19°≈39'54	2.65578 AU
evening set	12414 Aug 02 00:40	6°♍02'26			12419 Feb 20 20:01	0°♋	
	12414 Sep 01 05:58	0°♌		morning rise	12419 Mar 09 16:39	10°♋42'16	
	12414 Oct 09 16:29	0°♍			12419 Apr 09 08:06	0°♍	
					12419 May 27 12:13	0°♌	
conjunction	12414 Oct 13 03:50	2°♍39'58	1°05'34		12419 Jul 15 12:59	0°♌	
minimum elong	12414 Oct 13 02:43	2°♍37'49	1°05'58		12419 Sep 04 18:02	0°☾	
	12414 Nov 18 12:40	0°♌			12419 Nov 04 21:33	0°♊	
max. Earth dist.	12414 Dec 03 14:38	10°♌59'38	2.44140 AU	retrograde	12419 Dec 14 23:35	8°♊30'17	
morning rise	12414 Dec 16 19:16	20°♌26'22		opposition	12420 Jan 14 18:01	3°♊07'04	-0°51'57
	12414 Dec 30 09:29	0°♌		greatest brilliancy	12420 Jan 15 00:50	3°♊02'05	-2.8m
	12415 Feb 12 17:30	0°≈		min. Earth dist.	12420 Jan 21 05:35	1°♊13'30	0.39439 AU
	12415 Apr 01 00:56	0°♋			12420 Jan 25 16:43	30°♋☾	
desc. node	12415 Apr 17 07:01	9°♋46'51		asc. node	12420 Jan 26 17:51	29°☾43'53	
	12415 May 22 22:40	0°♍		direct	12420 Feb 16 12:15	26°☾53'19	
	12415 Jul 31 05:24	0°♌			12420 Mar 08 19:52	0°♊	
retrograde	12415 Aug 27 18:58	3°♌59'21			12420 May 07 19:07	0°♍	
	12415 Sep 22 01:17	30°♋♍			12420 Jun 21 09:50	0°♌	
opposition	12415 Oct 05 17:20	25°♍08'08	-4°41'16		12420 Aug 03 11:40	0°♍	
greatest brilliancy	12415 Oct 06 11:02	24°♍51'00	-1.4m		12420 Sep 16 05:18	0°♌	
min. Earth dist.	12415 Oct 10 12:07	23°♍17'06	0.64011 AU		12420 Oct 31 06:25	0°♌	
direct	12415 Nov 16 02:11	15°♍07'20		desc. node	12420 Dec 06 05:03	23°♌20'12	
	12416 Jan 10 05:46	0°♌			12420 Dec 16 14:08	0°≈	
	12416 Mar 03 11:03	0°♌		evening set	12421 Jan 13 23:38	18°≈06'25	
	12416 Apr 16 05:02	0°☾			12421 Feb 01 17:36	0°♋	
asc. node	12416 Apr 22 02:31	4°☾17'23		max. Earth dist.	12421 Feb 26 07:39	15°♋34'34	2.68403 AU
	12416 May 26 06:48	0°♊					
	12416 Jul 03 17:03	0°♍		conjunction	12421 Feb 27 17:57	16°♋28'54	-0°42'08
	12416 Aug 10 19:49	0°♌		minimum elong	12421 Feb 27 16:53	16°♋27'13	0°41'50
	12416 Sep 18 15:59	0°♍			12421 Mar 21 01:09	0°♍	
evening set	12416 Oct 14 03:54	19°♍07'05		morning rise	12421 Apr 11 22:32	13°♍56'59	
	12416 Oct 29 00:08	0°♌			12421 May 06 23:01	0°♌	
	12416 Dec 10 07:52	0°♌			12421 Jun 22 02:40	0°♌	
					12421 Aug 06 09:06	0°☾	
conjunction	12416 Dec 11 13:42	0°♌51'32	0°43'09		12421 Sep 19 20:55	0°♊	
minimum elong	12416 Dec 11 15:29	0°♌54'36	0°44'03		12421 Nov 03 03:18	0°♍	
max. Earth dist.	12417 Jan 10 00:49	20°♌52'24	2.57255 AU	asc. node	12421 Dec 13 20:34	26°♍34'23	
	12417 Jan 23 18:43	0°≈			12421 Dec 19 10:21	0°♌	
morning rise	12417 Jan 31 17:08	5°≈12'41		retrograde	12422 Mar 04 13:41	28°♌59'16	
desc. node	12417 Mar 03 18:34	25°≈14'31		min. Earth dist.	12422 Mar 30 08:45	24°♌41'19	0.38990 AU
	12417 Mar 11 06:48	0°♋		greatest brilliancy	12422 Apr 04 10:56	23°♌10'54	-2.8m
	12417 Apr 28 20:21	0°♍		opposition	12422 Apr 05 22:24	22°♌44'29	6°24'35
	12417 Jun 19 09:10	0°♌		direct	12422 May 05 19:47	17°♌24'03	
	12417 Aug 18 12:38	0°♌			12422 Jun 23 15:14	0°♍	
retrograde	12417 Oct 10 16:09	12°♌58'56			12422 Aug 19 10:36	0°♌	
opposition	12417 Nov 15 12:20	5°♌25'54	-4°57'10		12422 Oct 08 16:48	0°♌	
greatest brilliancy	12417 Nov 17 00:17	4°♌53'12	-1.9m	desc. node	12422 Oct 24 09:09	9°♌32'53	
min. Earth dist.	12417 Nov 23 16:42	2°♌28'12	0.53159 AU		12422 Nov 26 18:16	0°≈	
	12417 Dec 01 04:35	30°♋♌			12423 Jan 14 07:08	0°♋	
direct	12417 Dec 24 14:59	26°♌15'18		evening set	12423 Feb 18 16:51	22°♋11'04	
	12418 Jan 18 00:15	0°♌			12423 Mar 03 00:54	0°♍	
asc. node	12418 Mar 10 09:33	24°♌23'22		max. Earth dist.	12423 Mar 20 14:38	11°♍13'51	2.65704 AU
	12418 Mar 19 09:33	0°☾					
	12418 May 01 18:46	0°♊		conjunction	12423 Apr 03 19:20	20°♍23'42	-1°06'31
	12418 Jun 10 16:10	0°♍		minimum elong	12423 Apr 03 18:36	20°♍22'30	1°06'45
	12418 Jul 19 19:48	0°♌			12423 Apr 18 12:44	0°♌	
	12418 Aug 28 15:47	0°♍		morning rise	12423 May 18 09:41	19°♌49'33	
	12418 Oct 08 23:57	0°♌			12423 Jun 02 10:50	0°♌	
	12418 Nov 21 05:30	0°♌			12423 Jul 15 16:26	0°☾	
evening set	12418 Dec 05 19:37	9°♌50'14			12423 Aug 26 08:02	0°♊	
	12419 Jan 05 07:10	0°≈			12423 Oct 05 17:14	0°♍	
desc. node	12419 Jan 19 08:53	9°≈09'23		asc. node	12423 Oct 31 14:44	19°♍31'11	
					12423 Nov 14 12:10	0°♌	
conjunction	12419 Jan 23 14:03	11°≈52'59	-0°02'21		12423 Dec 24 22:59	0°♍	
minimum elong	12419 Jan 23 13:59	11°≈52'53	0°01'37		12424 Feb 06 18:20	0°♌	



	12424 Apr 10 11:58	0°♄			12429 Apr 04 12:18	0°♄	
retrograde	12424 Apr 27 06:57	1°♄56'00			12429 May 16 07:32	0°♄	
	12424 May 13 10:46	30°♄♂		asc. node	12429 Jun 21 13:50	27°♄29'14	
min. Earth dist.	12424 May 27 19:00	25°♄32'12	0.52263 AU		12429 Jun 24 19:44	0°♄	
greatest brilliancy	12424 Jun 03 09:07	23°♄03'23	-2.0m	evening set	12429 Jul 03 16:20	6°♄53'35	
opposition	12424 Jun 04 10:45	22°♄39'11	4°02'55		12429 Aug 02 00:27	0°♄	
direct	12424 Jul 09 12:00	14°♄59'55			12429 Sep 08 20:19	0°♄	
	12424 Sep 04 12:34	0°♄					
desc. node	12424 Sep 10 18:44	2°♄47'38		conjunction	12429 Sep 12 19:26	3°♄07'51	0°52'29
	12424 Nov 02 15:57	0°♄		minimum elong	12429 Sep 12 15:31	3°♄00'06	0°52'25
	12424 Dec 24 14:27	0°♄			12429 Oct 17 05:06	0°♄	
	12425 Feb 11 15:04	0°♄		max. Earth dist.	12429 Nov 02 21:26	12°♄45'22	2.38586 AU
evening set	12425 Mar 25 23:20	27°♄09'05		morning rise	12429 Nov 23 00:35	27°♄50'50	
	12425 Mar 30 07:18	0°♄			12429 Nov 25 22:27	0°♄	
max. Earth dist.	12425 Apr 14 08:16	9°♄59'32	2.57665 AU		12430 Jan 06 16:58	0°♄	
					12430 Feb 20 03:29	0°♄	
conjunction	12425 May 11 19:29	28°♄41'26	-1°05'41		12430 Apr 09 04:09	0°♄	
minimum elong	12425 May 11 20:26	28°♄43'04	1°06'24	desc. node	12430 May 04 00:41	14°♄17'41	
	12425 May 13 16:53	0°♄			12430 Jun 03 05:12	0°♄	
	12425 Jun 24 22:54	0°♄		retrograde	12430 Aug 13 00:25	20°♄53'36	
morning rise	12425 Jul 01 19:44	5°♄00'39		opposition	12430 Sep 21 16:58	11°♄41'39	-4°09'28
	12425 Aug 04 09:06	0°♄		greatest brilliancy	12430 Sep 22 03:02	11°♄31'49	-1.3m
	12425 Sep 12 11:37	0°♄		min. Earth dist.	12430 Sep 24 23:32	10°♄24'49	0.66539 AU
asc. node	12425 Sep 17 05:16	3°♄40'43		direct	12430 Nov 02 07:02	1°♄38'44	
	12425 Oct 20 23:21	0°♄			12431 Jan 24 02:10	0°♄	
	12425 Nov 28 18:24	0°♄			12431 Mar 13 22:53	0°♄	
	12426 Jan 08 01:21	0°♄			12431 Apr 25 17:06	0°♄	
	12426 Feb 20 17:46	0°♄		asc. node	12431 May 09 16:32	10°♄21'41	
	12426 Apr 14 14:18	0°♄			12431 Jun 04 10:43	0°♄	
retrograde	12426 Jun 05 16:58	14°♄04'29			12431 Jul 12 16:46	0°♄	
min. Earth dist.	12426 Jul 11 17:16	5°♄47'49	0.63308 AU		12431 Aug 19 15:24	0°♄	
opposition	12426 Jul 16 01:16	4°♄04'44	0°32'40	evening set	12431 Sep 18 14:01	23°♄20'11	
greatest brilliancy	12426 Jul 15 23:18	4°♄06'41	-1.5m		12431 Sep 27 06:23	0°♄	
	12426 Jul 26 22:51	30°♄♂			12431 Nov 06 08:30	0°♄	
desc. node	12426 Jul 30 03:12	28°♄58'02					
direct	12426 Aug 23 21:18	25°♄03'06		conjunction	12431 Nov 21 21:59	11°♄16'31	0°57'45
	12426 Sep 23 19:35	0°♄		minimum elong	12431 Nov 21 23:54	11°♄19'59	0°58'33
	12426 Dec 01 06:27	0°♄			12431 Dec 18 10:24	0°♄	
	12427 Jan 22 20:00	0°♄		max. Earth dist.	12431 Dec 29 18:45	7°♄49'44	2.52612 AU
	12427 Mar 11 13:15	0°♄		morning rise	12432 Jan 16 05:27	19°♄39'50	
	12427 Apr 24 23:23	0°♄			12432 Jan 31 18:13	0°♄	
evening set	12427 May 07 07:24	8°♄40'49			12432 Mar 18 10:04	0°♄	
max. Earth dist.	12427 May 21 05:46	18°♄39'39	2.45113 AU	desc. node	12432 Mar 20 13:04	1°♄19'45	
	12427 Jun 05 18:19	0°♄			12432 May 06 19:41	0°♄	
					12432 Jun 30 06:37	0°♄	
conjunction	12427 Jul 01 21:09	19°♄33'18	-0°23'28	retrograde	12432 Sep 21 14:05	26°♄48'57	
minimum elong	12427 Jul 01 22:52	19°♄36'34	0°24'20	opposition	12432 Oct 28 20:47	18°♄39'33	-5°06'31
	12427 Jul 15 13:08	0°♄		greatest brilliancy	12432 Oct 30 03:00	18°♄11'06	-1.7m
asc. node	12427 Aug 04 19:50	15°♄43'17		min. Earth dist.	12432 Nov 04 20:39	16°♄01'59	0.58136 AU
	12427 Aug 23 00:47	0°♄		direct	12432 Dec 08 05:31	8°♄58'36	
morning rise	12427 Sep 06 18:48	11°♄38'22			12433 Feb 11 11:06	0°♄	
	12427 Sep 30 00:35	0°♄		asc. node	12433 Mar 26 23:46	26°♄54'13	
	12427 Nov 07 09:40	0°♄			12433 Mar 31 12:17	0°♄	
	12427 Dec 17 02:03	0°♄			12433 May 11 21:01	0°♄	
	12428 Jan 28 01:43	0°♄			12433 Jun 19 22:03	0°♄	
	12428 Mar 13 19:16	0°♄			12433 Jul 28 11:51	0°♄	
	12428 May 06 13:38	0°♄			12433 Sep 05 19:15	0°♄	
desc. node	12428 Jun 16 05:43	15°♄19'51			12433 Oct 16 15:24	0°♄	
retrograde	12428 Jul 09 03:24	18°♄16'52		evening set	12433 Nov 17 11:13	22°♄27'05	
opposition	12428 Aug 18 19:20	8°♄28'52	-2°11'14		12433 Nov 28 10:09	0°♄	
min. Earth dist.	12428 Aug 18 05:46	8°♄42'20	0.68251 AU				
greatest brilliancy	12428 Aug 18 17:11	8°♄31'01	-1.3m	conjunction	12434 Jan 08 03:03	27°♄20'09	0°15'24
	12428 Sep 14 12:29	30°♄♂		minimum elong	12434 Jan 08 03:42	27°♄21'12	0°16'15
direct	12428 Sep 28 18:35	28°♄43'19			12434 Jan 12 04:11	0°♄	
	12428 Oct 13 21:02	0°♄		max. Earth dist.	12434 Jan 26 08:34	9°♄16'05	2.62961 AU
	12428 Dec 29 02:37	0°♄		desc. node	12434 Feb 05 00:51	15°♄32'07	
	12429 Feb 18 05:27	0°♄		morning rise	12434 Feb 23 23:15	27°♄40'54	

	12434 Feb 27 14:37	0°♄			12439 May 23 23:15	30°♍	
	12434 Apr 16 09:03	0°♂	direct		12439 Jun 18 06:41	25°♍48'30	
	12434 Jun 04 10:45	0°♂			12439 Jul 15 08:14	0°♄	
	12434 Jul 25 18:22	0°♂			12439 Sep 20 20:50	0°♄	
	12434 Sep 22 13:33	0°♄	desc. node		12439 Sep 28 04:32	3°♄58'04	
retrograde	12434 Nov 15 23:35	13°♄56'03			12439 Nov 12 23:31	0°♄	
opposition	12434 Dec 18 22:07	7°♄38'02 -3°21'11			12440 Jan 02 04:21	0°♄	
greatest brilliancy	12434 Dec 20 03:12	7°♄14'19 -2.5m			12440 Feb 19 13:44	0°♂	
min. Earth dist.	12434 Dec 27 13:14	4°♄49'59 0.44505 AU	evening set		12440 Mar 11 11:42	13°♂19'33	
	12435 Jan 21 15:40	30°♍	max. Earth dist.		12440 Apr 03 17:37	28°♂25'52 2.61416 AU	
direct	12435 Jan 23 18:56	29°♂58'03			12440 Apr 06 02:52	0°♂	
	12435 Jan 25 22:15	0°♄					
asc. node	12435 Feb 12 06:56	2°♄33'32	conjunction		12440 Apr 25 18:29	13°♂03'50 -1°09'52	
	12435 Apr 10 04:18	0°♂	minimum elong		12440 Apr 25 18:38	13°♂04'06 1°10'25	
	12435 May 24 00:29	0°♍			12440 May 20 16:09	0°♂	
	12435 Jul 04 02:56	0°♂	morning rise		12440 Jun 12 10:20	15°♂52'07	
	12435 Aug 14 07:58	0°♍			12440 Jul 02 06:02	0°♄	
	12435 Sep 25 19:10	0°♄			12440 Aug 12 01:51	0°♂	
	12435 Nov 08 22:20	0°♄			12440 Sep 20 13:59	0°♍	
desc. node	12435 Dec 23 19:04	29°♄27'10	asc. node		12440 Oct 04 00:55	10°♍22'03	
	12435 Dec 24 15:21	0°♄			12440 Oct 29 10:22	0°♂	
evening set	12435 Dec 31 04:42	4°♄14'09			12440 Dec 07 14:29	0°♍	
	12436 Feb 09 11:03	0°♄			12441 Jan 17 13:15	0°♄	
					12441 Mar 04 05:32	0°♄	
conjunction	12436 Feb 15 01:50	3°♄34'10 -0°28'09	retrograde		12441 May 22 07:45	29°♄18'12	
minimum elong	12436 Feb 15 01:01	3°♄32'51 0°27'40	min. Earth dist.		12441 Jun 25 08:41	21°♄40'47 0.59630 AU	
max. Earth dist.	12436 Feb 18 18:11	5°♄54'26 2.67954 AU	opposition		12441 Jul 01 02:49	19°♄25'12 1°49'15	
	12436 Mar 27 18:30	0°♂	greatest brilliancy		12441 Jun 30 17:59	19°♄33'52 -1.7m	
morning rise	12436 Mar 29 15:21	1°♂11'01	direct		12441 Aug 07 16:23	10°♄49'54	
	12436 May 14 01:07	0°♂	desc. node		12441 Aug 15 13:52	11°♄12'04	
	12436 Jun 30 00:27	0°♂			12441 Oct 14 02:37	0°♄	
	12436 Aug 15 17:58	0°♄			12441 Dec 10 17:59	0°♄	
	12436 Oct 01 18:24	0°♂			12442 Jan 30 11:38	0°♂	
	12436 Nov 20 06:38	0°♍			12442 Mar 18 16:18	0°♂	
asc. node	12436 Dec 30 11:44	19°♍42'38	evening set		12442 Apr 19 13:57	21°♄23'40	
retrograde	12437 Feb 03 06:56	27°♍00'10			12442 May 02 01:00	0°♂	
min. Earth dist.	12437 Mar 03 09:42	22°♍25'25 0.36491 AU	max. Earth dist.		12442 May 04 05:26	1°♂31'24 2.50424 AU	
opposition	12437 Mar 05 04:42	21°♍56'45 4°42'33					
greatest brilliancy	12437 Mar 04 18:45	22°♍03'23 -3.0m	conjunction		12442 Jun 09 17:26	27°♂37'07 -0°46'00	
direct	12437 Apr 03 09:14	17°♍06'23	minimum elong		12442 Jun 09 19:28	27°♂40'50 0°46'52	
	12437 May 21 08:49	0°♂			12442 Jun 12 23:26	0°♄	
	12437 Jul 14 09:13	0°♍			12442 Jul 22 23:18	0°♂	
	12437 Aug 31 08:22	0°♄	morning rise		12442 Aug 08 05:58	12°♂31'52	
	12437 Oct 17 17:02	0°♄	asc. node		12442 Aug 21 15:03	22°♂56'13	
desc. node	12437 Nov 09 21:10	14°♄36'32			12442 Aug 30 15:45	0°♍	
	12437 Dec 04 09:19	0°♄			12442 Oct 07 18:59	0°♂	
	12438 Jan 21 05:45	0°♄			12442 Nov 15 06:11	0°♍	
evening set	12438 Feb 04 23:24	9°♄15'59			12442 Dec 25 01:10	0°♄	
	12438 Mar 09 17:42	0°♂			12443 Feb 05 08:54	0°♄	
max. Earth dist.	12438 Mar 11 18:12	1°♂17'13 2.67405 AU			12443 Mar 24 09:40	0°♄	
					12443 May 25 22:16	0°♄	
conjunction	12438 Mar 20 23:39	7°♂10'35 -0°59'26	retrograde		12443 Jun 26 23:05	5°♄38'32	
minimum elong	12438 Mar 20 22:37	7°♂08'56 0°59'28	desc. node		12443 Jul 03 19:29	5°♄19'58	
	12438 Apr 25 07:59	0°♂			12443 Jul 26 12:28	30°♍	
morning rise	12438 May 03 14:27	5°♄24'32	min. Earth dist.		12443 Aug 04 14:33	26°♄31'36 0.67106 AU	
	12438 Jun 09 15:24	0°♂	opposition		12443 Aug 06 16:05	25°♄42'22 -1°13'23	
	12438 Jul 23 12:11	0°♄	greatest brilliancy		12443 Aug 06 13:14	25°♄45'12 -1.3m	
	12438 Sep 03 23:07	0°♂	direct		12443 Sep 15 23:48	16°♄10'45	
	12438 Oct 15 06:55	0°♍			12443 Nov 10 14:51	0°♄	
asc. node	12438 Nov 17 10:33	24°♍18'36			12444 Jan 08 19:47	0°♂	
	12438 Nov 25 05:44	0°♂			12444 Feb 27 03:37	0°♄	
	12439 Jan 06 16:25	0°♍			12444 Apr 11 23:36	0°♂	
	12439 Feb 26 12:28	0°♄			12444 May 23 17:44	0°♄	
retrograde	12439 Apr 09 17:35	11°♄04'33	evening set		12444 Jun 08 00:53	11°♄26'06	
min. Earth dist.	12439 May 07 17:55	5°♄36'52 0.46806 AU			12444 Jul 02 07:45	0°♂	
greatest brilliancy	12439 May 14 14:13	3°♄11'47 -2.3m	asc. node		12444 Jul 08 08:36	4°♂40'45	
opposition	12439 May 16 03:13	2°♄38'48 5°26'55	max. Earth dist.		12444 Jul 10 19:46	6°♂35'50 2.37187 AU	

	12444 Aug 09 14:26	0°♎			12449 Jun 13 02:05	0°♎		
					12449 Aug 07 12:59	0°♎		
conjunction	12444 Aug 12 10:16	2°♎14'15	0°24'46	retrograde	12449 Oct 22 15:48	23°♎36'38		
minimum elong	12444 Aug 12 07:45	2°♎09'15	0°24'14	opposition	12449 Nov 26 14:30	16°♎27'23	-4°36'31	
	12444 Sep 16 10:53	0°♎		greatest brilliancy	12449 Nov 28 03:00	15°♎55'08	-2.1m	
	12444 Oct 24 18:32	0°♎		min. Earth dist.	12449 Dec 05 06:20	13°♎25'03	0.50157 AU	
morning rise	12444 Oct 25 17:30	0°♎44'20		direct	12450 Jan 03 18:53	7°♎42'02		
	12444 Dec 03 09:53	0°♎		asc. node	12450 Feb 28 20:22	25°♎04'15		
	12445 Jan 14 03:45	0°♎			12450 Mar 09 17:46	0°♎		
	12445 Feb 27 20:22	0°♎			12450 Apr 24 16:23	0°♎		
	12445 Apr 18 02:02	0°♎			12450 Jun 04 10:15	0°♎		
desc. node	12445 May 20 16:44	17°♎19'35			12450 Jul 14 01:17	0°♎		
	12445 Jun 19 04:18	0°♎			12450 Aug 23 05:35	0°♎		
retrograde	12445 Jul 30 02:55	8°♎19'07			12450 Oct 03 20:58	0°♎		
	12445 Sep 05 09:29	30°♎			12450 Nov 16 08:21	0°♎		
opposition	12445 Sep 08 08:19	28°♎50'32	-3°29'22	evening set	12450 Dec 15 09:53	19°♎23'29		
greatest brilliancy	12445 Sep 08 12:05	28°♎46'50	-1.3m		12450 Dec 31 14:16	0°♎		
min. Earth dist.	12445 Sep 10 02:30	28°♎09'00	0.68016 AU	desc. node	12451 Jan 09 10:17	5°♎44'43		
direct	12445 Oct 19 21:08	18°♎51'17						
	12445 Dec 07 01:40	0°♎		conjunction	12451 Jan 31 23:02	20°♎16'05	-0°12'18	
	12446 Feb 03 14:27	0°♎		minimum elong	12451 Jan 31 22:38	20°♎15'27	0°11'38	
	12446 Mar 22 11:32	0°♎		behind sun begin	12451 Jan 31 09:26	19°♎54'17		
	12446 May 03 17:23	0°♎		behind sun end	12451 Feb 01 11:51	20°♎36'36		
asc. node	12446 May 26 07:03	16°♎55'16		max. Earth dist.	12451 Feb 09 21:02	25°♎58'27	2.66660 AU	
	12446 Jun 12 07:30	0°♎			12451 Feb 16 04:30	0°♎		
	12446 Jul 20 12:10	0°♎		morning rise	12451 Mar 17 08:59	18°♎30'50		
evening set	12446 Aug 19 09:45	23°♎42'29			12451 Apr 04 14:00	0°♎		
	12446 Aug 27 08:49	0°♎			12451 May 22 08:46	0°♎		
	12446 Oct 04 20:10	0°♎			12451 Jul 09 11:47	0°♎		
					12451 Aug 27 13:30	0°♎		
conjunction	12446 Oct 28 14:24	18°♎01'51	1°05'56		12451 Oct 19 02:39	0°♎		
minimum elong	12446 Oct 28 14:58	18°♎02'55	1°06'33	retrograde	12452 Jan 02 01:07	25°♎06'22		
	12446 Nov 13 17:26	0°♎		asc. node	12452 Jan 17 02:25	23°♎41'46		
max. Earth dist.	12446 Dec 14 14:25	22°♎16'05	2.47254 AU	opposition	12452 Feb 01 00:28	20°♎05'45	1°08'13	
	12446 Dec 25 14:37	0°♎		greatest brilliancy	12452 Feb 01 03:55	20°♎03'22	-3.0m	
morning rise	12446 Dec 28 13:57	2°♎04'08		min. Earth dist.	12452 Feb 05 01:17	18°♎59'22	0.37504 AU	
	12447 Feb 07 20:48	0°♎		direct	12452 Mar 02 22:16	14°♎37'11		
	12447 Mar 26 19:48	0°♎			12452 Apr 23 13:39	0°♎		
desc. node	12447 Apr 07 06:43	7°♎01'07			12452 Jun 12 15:18	0°♎		
	12447 May 16 12:34	0°♎			12452 Jul 27 14:14	0°♎		
	12447 Jul 15 21:30	0°♎			12452 Sep 10 08:09	0°♎		
retrograde	12447 Sep 05 16:48	12°♎17'12			12452 Oct 26 00:12	0°♎		
opposition	12447 Oct 14 02:53	3°♎39'08	-4°54'42	desc. node	12452 Nov 26 08:29	20°♎11'40		
greatest brilliancy	12447 Oct 15 01:08	3°♎17'45	-1.5m		12452 Dec 11 17:17	0°♎		
min. Earth dist.	12447 Oct 19 17:02	1°♎30'27	0.62190 AU	evening set	12453 Jan 22 02:05	26°♎13'12		
	12447 Oct 23 18:21	30°♎			12453 Jan 28 01:37	0°♎		
direct	12447 Nov 24 05:48	23°♎42'38		max. Earth dist.	12453 Mar 03 06:32	21°♎38'33	2.68282 AU	
	12447 Dec 27 20:19	0°♎						
	12448 Feb 25 15:08	0°♎		conjunction	12453 Mar 07 10:52	24°♎17'41	-0°49'19	
	12448 Apr 10 10:33	0°♎		minimum elong	12453 Mar 07 09:45	24°♎15'55	0°49'07	
asc. node	12448 Apr 12 11:39	1°♎27'52			12453 Mar 16 10:19	0°♎		
	12448 May 20 20:51	0°♎		morning rise	12453 Apr 19 15:43	21°♎53'42		
	12448 Jun 28 11:17	0°♎			12453 May 02 05:06	0°♎		
	12448 Aug 05 17:03	0°♎			12453 Jun 17 00:38	0°♎		
	12448 Sep 13 16:07	0°♎			12453 Jul 31 17:16	0°♎		
	12448 Oct 24 03:28	0°♎			12453 Sep 13 07:35	0°♎		
evening set	12448 Oct 27 11:05	2°♎23'56			12453 Oct 26 04:14	0°♎		
	12448 Dec 05 13:54	0°♎		asc. node	12453 Dec 04 03:03	27°♎01'48		
					12453 Dec 08 12:22	0°♎		
conjunction	12448 Dec 22 02:30	11°♎17'55	0°33'19		12454 Jan 26 04:29	0°♎		
minimum elong	12448 Dec 22 03:55	11°♎20'18	0°34'12	retrograde	12454 Mar 18 22:16	15°♎54'29		
max. Earth dist.	12449 Jan 16 07:43	28°♎10'30	2.59506 AU	min. Earth dist.	12454 Apr 13 22:24	11°♎19'11	0.41496 AU	
	12449 Jan 19 02:05	0°♎		greatest brilliancy	12454 Apr 20 03:24	9°♎21'01	-2.6m	
morning rise	12449 Feb 09 10:54	13°♎57'20		opposition	12454 Apr 21 20:25	8°♎48'08	6°24'34	
desc. node	12449 Feb 21 19:18	21°♎54'20		direct	12454 May 22 21:12	2°♎55'59		
	12449 Mar 06 12:02	0°♎			12454 Aug 10 01:15	0°♎		
	12449 Apr 23 16:30	0°♎			12454 Oct 02 05:44	0°♎		

desc. node	12454 Oct 14 14:34	7°♄18'39		asc. node	12459 Jul 26 01:39	11°♊53'52	
	12454 Nov 21 09:34	0°♊			12459 Aug 18 03:14	0°♊	
	12455 Jan 09 10:24	0°♋		morning rise	12459 Sep 24 20:13	29°♊49'06	
evening set	12455 Feb 26 12:41	0°♊05'31			12459 Sep 25 01:44	0°♊	
	12455 Feb 26 09:12	0°♊			12459 Nov 02 09:47	0°♋	
max. Earth dist.	12455 Mar 25 23:02	17°♊39'31	2.64419 AU		12459 Dec 12 00:48	0°♋	
					12460 Jan 22 20:34	0°♋	
conjunction	12455 Apr 11 21:20	28°♊40'48	-1°09'00		12460 Mar 08 00:55	0°♋	
minimum elong	12455 Apr 11 20:52	28°♊40'02	1°09'22		12460 Apr 28 10:20	0°♋	
	12455 Apr 13 21:37	0°♋		desc. node	12460 Jun 06 08:26	17°♋39'49	
morning rise	12455 May 27 07:50	29°♋03'48		retrograde	12460 Jul 16 16:56	25°♋54'53	
	12455 May 28 16:45	0°♋		opposition	12460 Aug 26 06:23	16°♋12'53	-2°42'10
	12455 Jul 10 16:52	0°♌		greatest brilliancy	12460 Aug 26 05:42	16°♋13'34	-1.3m
	12455 Aug 21 00:55	0°♌		min. Earth dist.	12460 Aug 26 12:23	16°♋06'57	0.68451 AU
	12455 Sep 30 01:34	0°♌		direct	12460 Oct 06 12:12	6°♋21'26	
asc. node	12455 Oct 21 21:49	16°♌37'47			12460 Dec 21 16:45	0°♌	
	12455 Nov 08 10:22	0°♌			12461 Feb 12 16:00	0°♌	
	12455 Dec 18 05:43	0°♍			12461 Mar 30 10:54	0°♍	
	12456 Jan 29 11:56	0°♍			12461 May 11 10:02	0°♍	
	12456 Mar 20 11:51	0°♍		asc. node	12461 Jun 11 22:21	23°♍48'03	
retrograde	12456 May 06 20:06	12°♍52'53			12461 Jun 19 22:56	0°♍	
min. Earth dist.	12456 Jun 07 16:10	6°♍01'00	0.55099 AU	evening set	12461 Jul 19 18:25	23°♍22'08	
opposition	12456 Jun 14 17:44	3°♍18'04	3°12'45		12461 Jul 28 03:27	0°♍	
greatest brilliancy	12456 Jun 13 22:47	3°♍36'17	-1.9m		12461 Sep 03 23:10	0°♍	
	12456 Jun 23 19:44	30°♍					
direct	12456 Jul 20 18:14	25°♍16'16		conjunction	12461 Sep 30 05:41	20°♍37'34	1°01'59
	12456 Aug 19 10:00	0°♍		minimum elong	12461 Sep 30 03:06	20°♍32'33	1°02'13
desc. node	12456 Aug 31 23:34	4°♍08'52			12461 Oct 12 08:05	0°♍	
	12456 Oct 26 17:17	0°♍			12461 Nov 21 01:50	0°♍	
	12456 Dec 19 04:28	0°♎		max. Earth dist.	12461 Nov 22 22:42	1°♍22'38	2.41588 AU
	12457 Feb 06 18:03	0°♎		morning rise	12461 Dec 06 23:01	11°♍36'12	
	12457 Mar 25 14:45	0°♎			12462 Jan 01 20:07	0°♎	
evening set	12457 Apr 03 13:49	5°♎55'37			12462 Feb 15 03:13	0°♎	
max. Earth dist.	12457 Apr 21 01:54	17°♎41'13	2.55281 AU		12462 Apr 03 15:00	0°♎	
	12457 May 09 00:21	0°♎		desc. node	12462 Apr 24 01:32	12°♎06'51	
					12462 May 26 11:39	0°♎	
conjunction	12457 May 21 15:12	8°♎49'19	-1°00'32	retrograde	12462 Aug 21 07:58	28°♎48'32	
minimum elong	12457 May 21 16:37	8°♎51'49	1°01'21	opposition	12462 Sep 29 15:09	19°♎47'24	-4°29'05
	12457 Jun 20 04:13	0°♎		greatest brilliancy	12462 Sep 30 05:18	19°♎33'38	-1.4m
morning rise	12457 Jul 14 03:39	17°♎42'31		min. Earth dist.	12462 Oct 03 17:26	18°♎11'51	0.65270 AU
	12457 Jul 30 11:04	0°♎		direct	12462 Nov 10 03:17	9°♎45'03	
asc. node	12457 Sep 07 11:27	0°♎02'36			12463 Jan 15 20:47	0°♎	
	12457 Sep 07 10:07	0°♎			12463 Mar 07 23:19	0°♎	
	12457 Oct 15 18:32	0°♏			12463 Apr 20 07:53	0°♏	
	12457 Nov 23 09:41	0°♏		asc. node	12463 Apr 30 01:32	7°♏08'34	
	12458 Jan 02 10:05	0°♏			12463 May 30 06:43	0°♏	
	12458 Feb 14 09:06	0°♏			12463 Jul 07 15:22	0°♏	
	12458 Apr 04 23:49	0°♏			12463 Aug 14 16:00	0°♏	
retrograde	12458 Jun 13 13:38	22°♏29'31			12463 Sep 22 08:52	0°♏	
desc. node	12458 Jul 20 06:38	14°♏01'05		evening set	12463 Oct 04 00:52	8°♏50'50	
min. Earth dist.	12458 Jul 20 13:54	13°♏53'54	0.64926 AU		12463 Nov 01 13:02	0°♏	
opposition	12458 Jul 24 03:00	12°♏29'25	-0°08'43				
greatest brilliancy	12458 Jul 24 02:34	12°♏29'51	-1.5m	conjunction	12463 Dec 03 23:13	23°♏12'38	0°49'50
direct	12458 Sep 01 13:48	3°♏15'45		minimum elong	12463 Dec 04 01:12	23°♏16'06	0°50'43
	12458 Nov 24 01:55	0°♏			12463 Dec 13 16:41	0°♏	
	12459 Jan 17 09:26	0°♏		max. Earth dist.	12464 Jan 06 02:47	16°♏02'01	2.55267 AU
	12459 Mar 06 15:12	0°♏		morning rise	12464 Jan 25 19:25	29°♏11'45	
	12459 Apr 20 04:56	0°♏			12464 Jan 27 00:37	0°♏	
evening set	12459 May 18 07:42	19°♏59'30		desc. node	12464 Mar 10 12:57	28°♏06'42	
	12459 May 31 24:00	0°♏			12464 Mar 13 12:44	0°♏	
max. Earth dist.	12459 Jun 02 20:14	1°♏21'46	2.42083 AU		12464 May 01 08:47	0°♏	
	12459 Jul 10 17:17	0°♏			12464 Jun 22 20:49	0°♏	
					12464 Aug 27 23:20	0°♏	
conjunction	12459 Jul 16 01:06	4°♏06'44	-0°07'09	retrograde	12464 Oct 02 01:47	6°♏15'34	
minimum elong	12459 Jul 16 01:47	4°♏08'04	0°07'58		12464 Nov 03 06:13	30°♏	
behind sun begin	12459 Jul 15 01:41	3°♏21'29		opposition	12464 Nov 07 14:45	28°♏25'13	-5°04'06
behind sun end	12459 Jul 17 01:53	4°♏54'42		greatest brilliancy	12464 Nov 09 00:33	27°♏53'56	-1.8m

min. Earth dist.	12464 Nov 15 07:53	25°♄34'43	0.55471 AU			12470 Mar 05 02:46	0°♑	
direct	12464 Dec 17 08:43	18°♄59'07		max. Earth dist.		12470 Mar 16 20:12	7°♑28'47	2.66572 AU
	12465 Jan 30 15:29	0°♄						
asc. node	12465 Mar 17 08:09	25°♄25'49		conjunction		12470 Mar 28 19:53	15°♑10'25	-1°04'01
	12465 Mar 24 07:57	0°♄		minimum elong		12470 Mar 28 19:00	15°♑08'59	1°04'09
	12465 May 05 17:13	0°♄				12470 Apr 20 16:14	0°♄	
	12465 Jun 14 04:44	0°♄		morning rise		12470 May 11 21:38	13°♄59'07	
	12465 Jul 23 01:26	0°♄				12470 Jun 04 19:05	0°♄	
	12465 Aug 31 14:34	0°♄				12470 Jul 18 08:00	0°♄	
	12465 Oct 11 15:59	0°♄				12470 Aug 29 08:18	0°♄	
	12465 Nov 23 15:17	0°♄				12470 Oct 09 03:04	0°♄	
evening set	12465 Nov 28 03:27	3°♄04'12		asc. node		12470 Nov 07 16:32	22°♄03'04	
	12466 Jan 07 12:15	0°♄				12470 Nov 18 08:32	0°♄	
						12470 Dec 29 10:26	0°♄	
conjunction	12466 Jan 17 01:49	6°♄15'07	0°05'02			12471 Feb 12 23:42	0°♄	
minimum elong	12466 Jan 17 02:01	6°♄15'27	0°05'49	retrograde		12471 Apr 20 12:48	23°♄48'31	
behind sun begin	12466 Jan 16 07:22	5°♄45'05		min. Earth dist.		12471 May 19 22:49	17°♄49'23	0.49849 AU
behind sun end	12466 Jan 17 20:40	6°♄45'48		greatest brilliancy		12471 May 26 17:33	15°♄19'43	-2.2m
desc. node	12466 Jan 26 02:44	12°♄07'23		opposition		12471 May 28 00:28	14°♄51'08	4°40'19
max. Earth dist.	12466 Jan 31 20:04	15°♄49'16	2.64509 AU	direct		12471 Jul 01 05:13	7°♄32'35	
	12466 Feb 22 22:55	0°♄				12471 Sep 11 21:24	0°♄	
morning rise	12466 Mar 03 20:51	5°♄40'02		desc. node		12471 Sep 18 09:23	3°♄12'59	
	12466 Apr 11 12:58	0°♄				12471 Nov 06 21:35	0°♄	
	12466 May 30 01:11	0°♄				12471 Dec 28 00:53	0°♄	
	12466 Jul 18 22:00	0°♄				12472 Feb 14 19:24	0°♄	
	12466 Sep 10 10:26	0°♄		evening set		12472 Mar 19 16:01	21°♄37'49	
retrograde	12466 Dec 01 17:05	27°♄38'03				12472 Apr 01 11:20	0°♄	
opposition	12467 Jan 02 09:08	21°♄51'03	-2°06'38	max. Earth dist.		12472 Apr 09 16:40	5°♄26'02	2.59447 AU
greatest brilliancy	12467 Jan 03 03:10	21°♄37'09	-2.7m					
min. Earth dist.	12467 Jan 10 03:33	19°♄27'48	0.41526 AU	conjunction		12472 May 04 17:10	22°♄15'56	-1°08'10
asc. node	12467 Feb 02 16:55	15°♄00'55		minimum elong		12472 May 04 17:45	22°♄16'56	1°08'50
direct	12467 Feb 05 14:41	14°♄57'17				12472 May 15 23:39	0°♄	
	12467 Mar 27 21:42	0°♄		morning rise		12472 Jun 23 01:21	26°♄50'52	
	12467 May 15 12:17	0°♄				12472 Jun 27 10:12	0°♄	
	12467 Jun 27 03:36	0°♄				12472 Aug 07 01:21	0°♄	
	12467 Aug 08 05:27	0°♄				12472 Sep 15 08:21	0°♄	
	12467 Sep 20 06:56	0°♄		asc. node		12472 Sep 24 07:06	6°♄55'24	
	12467 Nov 03 20:34	0°♄				12472 Oct 23 23:44	0°♄	
desc. node	12467 Dec 13 21:58	26°♄10'08				12472 Dec 01 21:38	0°♄	
	12467 Dec 19 20:35	0°♄				12473 Jan 11 08:53	0°♄	
evening set	12468 Jan 08 17:42	12°♄45'00				12473 Feb 24 14:37	0°♄	
	12468 Feb 04 19:53	0°♄		retrograde		12473 Apr 22 03:41	0°♄	
						12473 May 30 15:02	8°♄24'07	
conjunction	12468 Feb 22 22:08	11°♄28'34	-0°36'37	min. Earth dist.		12473 Jul 04 19:04	0°♄24'31	0.61779 AU
minimum elong	12468 Feb 22 21:08	11°♄27'00	0°36'13			12473 Jul 05 20:01	30°♄30'39	
max. Earth dist.	12468 Feb 23 18:16	12°♄00'29	2.68318 AU	opposition		12473 Jul 09 18:53	28°♄26'15	1°03'45
	12468 Mar 23 03:14	0°♄		greatest brilliancy		12473 Jul 09 14:25	28°♄30'39	-1.6m
morning rise	12468 Apr 06 05:03	8°♄56'38		desc. node		12473 Aug 05 18:58	20°♄24'25	
	12468 May 09 04:54	0°♄		direct		12473 Aug 17 02:44	19°♄35'36	
	12468 Jun 24 17:00	0°♄				12473 Oct 03 00:43	0°♄	
	12468 Aug 09 13:56	0°♄				12473 Dec 04 12:56	0°♄	
	12468 Sep 24 00:25	0°♄				12474 Jan 25 07:35	0°♄	
	12468 Nov 08 22:43	0°♄				12474 Mar 13 20:39	0°♄	
asc. node	12468 Dec 20 21:07	25°♄16'33				12474 Apr 27 07:31	0°♄	
	12468 Dec 29 19:39	0°♄		evening set		12474 Apr 29 09:23	1°♄26'54	
retrograde	12469 Feb 20 08:01	15°♄44'21		max. Earth dist.		12474 May 13 07:59	11°♄16'20	2.47543 AU
min. Earth dist.	12469 Mar 18 16:16	11°♄28'20	0.37479 AU			12474 Jun 08 05:22	0°♄	
greatest brilliancy	12469 Mar 22 09:24	10°♄25'52	-2.9m					
opposition	12469 Mar 23 11:08	10°♄07'46	5°58'58	conjunction		12474 Jun 21 18:50	10°♄02'56	-0°34'08
direct	12469 Apr 21 18:27	5°♄07'14		minimum elong		12474 Jun 21 20:51	10°♄06'43	0°35'01
	12469 Jul 03 13:00	0°♄				12474 Jul 18 03:22	0°♄	
	12469 Aug 24 02:40	0°♄		asc. node		12474 Aug 11 21:45	19°♄10'08	
	12469 Oct 11 21:06	0°♄		morning rise		12474 Aug 24 07:04	28°♄52'14	
desc. node	12469 Oct 31 00:22	11°♄51'34				12474 Aug 25 17:35	0°♄	
	12469 Nov 29 06:13	0°♄		greatest brilliancy		12474 Sep 21 14:31	21°♄10'53	1.2m
	12470 Jan 16 11:18	0°♄				12474 Oct 02 18:53	0°♄	
evening set	12470 Feb 12 20:00	17°♄09'51				12474 Nov 10 04:10	0°♄	

	12474 Dec 19 20:11	0°♊			12480 Feb 17 21:28	0°♊	
	12475 Jan 30 20:59	0°♊	asc. node		12480 Apr 02 22:27	29°♊01'07	
	12475 Mar 17 22:37	0°♊			12480 Apr 04 08:09	0°♊	
	12475 May 12 20:35	0°♊			12480 May 15 06:50	0°♊	
desc. node	12475 Jun 23 22:35	12°♊45'31			12480 Jun 23 02:47	0°♊	
retrograde	12475 Jul 04 12:04	13°♊26'14			12480 Jul 31 12:18	0°♊	
min. Earth dist.	12475 Aug 12 23:38	4°♊03'43	0.67865 AU		12480 Sep 08 14:50	0°♊	
opposition	12475 Aug 14 05:34	3°♊34'00	-1°48'15		12480 Oct 19 05:32	0°♊	
greatest brilliancy	12475 Aug 14 02:42	3°♊36'51	-1.3m	evening set	12480 Nov 08 17:49	14°♊38'11	
	12475 Aug 23 12:16	30°♊			12480 Nov 30 19:11	0°♊	
direct	12475 Sep 23 23:05	23°♊54'13					
	12475 Oct 28 17:36	0°♊	conjunction		12481 Jan 01 00:32	21°♊08'36	0°22'56
	12476 Jan 02 12:38	0°♊	minimum elong		12481 Jan 01 01:30	21°♊10'13	0°23'48
	12476 Feb 21 21:28	0°♊			12481 Jan 14 09:12	0°♊	
	12476 Apr 07 01:00	0°♊	max. Earth dist.		12481 Jan 22 08:21	5°♊13'43	2.61526 AU
	12476 May 18 21:09	0°♊	desc. node		12481 Feb 11 19:08	18°♊30'13	
evening set	12476 Jun 21 23:47	25°♊46'32	morning rise		12481 Feb 17 20:48	22°♊24'12	
	12476 Jun 27 11:05	0°♊			12481 Mar 01 18:19	0°♊	
asc. node	12476 Jun 28 14:24	0°♊52'54			12481 Apr 18 15:54	0°♊	
	12476 Aug 04 17:06	0°♊			12481 Jun 07 05:00	0°♊	
					12481 Jul 29 21:48	0°♊	
conjunction	12476 Aug 29 22:04	19°♊59'37	0°41'51		12481 Oct 04 18:57	0°♊	
minimum elong	12476 Aug 29 18:11	19°♊51'54	0°41'33	retrograde	12481 Nov 04 20:23	5°♊08'45	
	12476 Sep 11 13:15	0°♊			12481 Dec 04 00:47	30°♊	
max. Earth dist.	12476 Sep 30 21:31	15°♊14'08	2.36646 AU	opposition	12481 Dec 08 17:25	28°♊26'46	-4°00'28
	12476 Oct 19 20:56	0°♊		greatest brilliancy	12481 Dec 10 03:22	27°♊57'56	-2.3m
morning rise	12476 Nov 11 05:06	17°♊04'02		min. Earth dist.	12481 Dec 17 13:16	25°♊27'59	0.47030 AU
	12476 Nov 28 12:14	0°♊		direct	12482 Jan 14 18:12	20°♊14'15	
	12477 Jan 09 04:54	0°♊		asc. node	12482 Feb 19 06:08	28°♊07'56	
	12477 Feb 22 15:35	0°♊			12482 Feb 23 16:01	0°♊	
	12477 Apr 12 00:23	0°♊			12482 Apr 16 12:20	0°♊	
desc. node	12477 May 10 18:40	16°♊07'11			12482 May 28 15:59	0°♊	
	12477 Jun 07 23:29	0°♊			12482 Jul 07 23:38	0°♊	
retrograde	12477 Aug 06 23:16	15°♊58'25			12482 Aug 17 15:29	0°♊	
opposition	12477 Sep 15 22:16	6°♊38'26	-3°53'45		12482 Sep 28 15:44	0°♊	
greatest brilliancy	12477 Sep 16 05:20	6°♊31'31	-1.3m		12482 Nov 11 10:15	0°♊	
min. Earth dist.	12477 Sep 18 12:23	5°♊37'31	0.67330 AU	evening set	12482 Dec 24 13:33	28°♊30'00	
	12477 Oct 04 11:44	30°♊			12482 Dec 26 20:55	0°♊	
direct	12477 Oct 27 12:50	26°♊36'37		desc. node	12482 Dec 30 11:47	2°♊20'58	
	12477 Nov 21 08:44	0°♊					
	12478 Jan 27 23:55	0°♊	conjunction		12483 Feb 09 02:34	28°♊26'18	-0°21'48
	12478 Mar 16 23:58	0°♊	minimum elong		12483 Feb 09 01:54	28°♊25'14	0°21'14
	12478 Apr 28 13:56	0°♊			12483 Feb 11 13:23	0°♊	
asc. node	12478 May 16 15:18	13°♊26'58		max. Earth dist.	12483 Feb 15 01:06	2°♊13'14	2.67481 AU
	12478 Jun 07 06:42	0°♊		morning rise	12483 Mar 24 23:39	26°♊16'09	
greatest brilliancy	12478 Jul 10 08:21	25°♊54'47	1.2m		12483 Mar 30 21:20	0°♊	
	12478 Jul 15 12:18	0°♊			12483 May 17 08:50	0°♊	
	12478 Aug 22 09:48	0°♊			12483 Jul 03 19:29	0°♊	
evening set	12478 Sep 05 17:42	11°♊15'11			12483 Aug 20 10:19	0°♊	
	12478 Sep 29 22:24	0°♊			12483 Oct 08 05:37	0°♊	
	12478 Nov 08 21:09	0°♊			12483 Dec 02 10:13	0°♊	
				asc. node	12484 Jan 07 11:09	11°♊58'36	
conjunction	12478 Nov 11 20:25	2°♊10'32	1°02'19	retrograde	12484 Jan 20 22:33	13°♊07'49	
minimum elong	12478 Nov 11 22:01	2°♊13'27	1°03'05	opposition	12484 Feb 19 11:01	8°♊15'02	3°16'32
	12478 Dec 20 19:39	0°♊		greatest brilliancy	12484 Feb 19 11:18	8°♊14'51	-3.1m
max. Earth dist.	12478 Dec 23 16:53	2°♊00'26	2.50304 AU	min. Earth dist.	12484 Feb 20 09:21	8°♊00'17	0.36487 AU
morning rise	12479 Jan 08 11:22	12°♊51'10		direct	12484 Mar 20 01:20	3°♊17'00	
	12479 Feb 03 01:03	0°♊			12484 Jun 01 10:07	0°♊	
	12479 Mar 21 18:08	0°♊			12484 Jul 19 20:35	0°♊	
desc. node	12479 Mar 28 07:49	4°♊05'01			12484 Sep 04 02:16	0°♊	
	12479 May 10 13:41	0°♊			12484 Oct 20 14:09	0°♊	
	12479 Jul 05 19:05	0°♊		desc. node	12484 Nov 16 12:27	17°♊10'10	
retrograde	12479 Sep 15 01:08	20°♊53'39			12484 Dec 06 18:39	0°♊	
opposition	12479 Oct 22 21:15	12°♊30'25	-5°03'17		12485 Jan 23 09:08	0°♊	
greatest brilliancy	12479 Oct 23 23:59	12°♊04'59	-1.6m	evening set	12485 Jan 30 01:56	4°♊13'18	
min. Earth dist.	12479 Oct 29 06:35	10°♊05'00	0.60077 AU	max. Earth dist.	12485 Mar 08 06:34	27°♊44'43	2.67898 AU
direct	12479 Dec 02 15:36	2°♊41'06			12485 Mar 11 19:40	0°♊	

conjunction	12485 Mar 15 04:35	2°Υ08'47	-0°55'38	retrograde	12490 Jun 21 06:09	0°κ36'06	
minimum elong	12485 Mar 15 03:30	2°Υ07'04	0°55'33		12490 Jun 30 17:58	30°κ≈	
morning rise	12485 Apr 27 13:16	0°Ϡ01'44		desc. node	12490 Jul 10 11:32	28°≈08'02	
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	12485 Jun 12 01:29	0°Π		opposition	12490 Jul 31 22:42	20°≈37'38	-0°47'32
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	12485 Sep 07 05:54	0°Ω		direct	12490 Sep 09 22:15	11°≈13'31	
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asc. node	12485 Nov 24 11:15	26°η06'25			12491 Jan 11 17:23	0°Υ	
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retrograde	12486 Mar 31 17:22	1°♊10'33		evening set	12491 May 30 03:40	2°ϙ09'24	
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min. Earth dist.	12486 Apr 27 17:42	26°♌07'34	0.44351 AU		12491 Jul 05 22:06	0°Ω	
greatest brilliancy	12486 May 04 10:21	23°♌51'28	-2.5m	asc. node	12491 Jul 16 09:15	8°Ω06'45	
opposition	12486 May 06 02:39	23°♌16'56	5°58'02				
direct	12486 Jun 07 07:43	16°♌51'56		conjunction	12491 Jul 31 12:08	19°Ω56'21	0°10'51
	12486 Jul 28 13:22	0°♊		minimum elong	12491 Jul 31 11:06	19°Ω54'20	0°10'10
	12486 Sep 25 04:14	0°ϙ		behind sun begin	12491 Jul 30 12:11	19°Ω09'20	
desc. node	12486 Oct 04 19:07	5°ϙ26'51		behind sun end	12491 Aug 01 10:02	20°Ω39'21	
	12486 Nov 15 19:51	0°≈			12491 Aug 13 06:28	0°η	
	12487 Jan 04 11:48	0°κ			12491 Sep 20 03:35	0°♁	
	12487 Feb 21 16:54	0°Υ		morning rise	12491 Oct 13 00:55	18°♁00'54	
evening set	12487 Mar 06 11:11	8°Υ06'42			12491 Oct 28 10:40	0°♌	
max. Earth dist.	12487 Mar 31 11:29	24°Υ14'53	2.62851 AU		12491 Dec 07 00:29	0°♊	
	12487 Apr 09 06:22	0°Ϡ			12492 Jan 17 17:18	0°ϙ	
					12492 Mar 02 11:59	0°≈	
conjunction	12487 Apr 20 06:27	7°Ϡ15'57	-1°10'06		12492 Apr 21 08:34	0°κ	
minimum elong	12487 Apr 20 06:19	7°Ϡ15'43	1°10'34	desc. node	12492 May 27 10:17	18°κ15'02	
	12487 May 23 23:11	0°Π			12492 Jun 28 20:33	0°Υ	
morning rise	12487 Jun 05 19:43	8°Π52'33		retrograde	12492 Jul 24 07:50	3°Υ31'49	
	12487 Jul 05 18:25	0°ϙ			12492 Aug 16 21:01	30°κκ	
	12487 Aug 15 20:23	0°Ω		opposition	12492 Sep 02 17:52	23°κ56'43	-3°10'44
	12487 Sep 24 14:15	0°η		greatest brilliancy	12492 Sep 02 19:24	23°κ55'13	-1.3m
asc. node	12487 Oct 12 02:53	13°η25'54		min. Earth dist.	12492 Sep 03 19:44	23°κ31'13	0.68349 AU
	12487 Nov 02 15:50	0°♁		direct	12492 Oct 14 04:49	14°κ00'31	
	12487 Dec 12 01:08	0°♌			12492 Dec 12 23:02	0°Υ	
	12488 Jan 22 09:04	0°♊			12493 Feb 06 19:04	0°Ϡ	
	12488 Mar 09 10:43	0°ϙ			12493 Mar 25 06:07	0°Π	
retrograde	12488 May 15 19:30	22°ϙ57'37			12493 May 06 10:21	0°ϙ	
min. Earth dist.	12488 Jun 17 21:24	15°ϙ40'14	0.57700 AU	asc. node	12493 Jun 02 06:41	20°ϙ10'46	
opposition	12488 Jun 24 06:40	13°ϙ11'05	2°23'44		12493 Jun 15 00:55	0°Ω	
greatest brilliancy	12488 Jun 23 17:51	13°ϙ23'34	-1.8m		12493 Jul 23 05:49	0°η	
direct	12488 Jul 31 05:08	4°ϙ49'51		evening set	12493 Aug 05 18:48	10°η44'34	
desc. node	12488 Aug 22 04:48	7°ϙ31'28			12493 Aug 30 01:49	0°♁	
	12488 Oct 18 22:29	0°≈			12493 Oct 07 11:21	0°♌	
	12488 Dec 13 13:40	0°κ					
	12489 Feb 01 19:34	0°Υ		conjunction	12493 Oct 16 16:32	7°♌03'58	1°06'04
	12489 Mar 20 21:47	0°Ϡ		minimum elong	12493 Oct 16 15:53	7°♌02'44	1°06'33
evening set	12489 Apr 12 12:13	15°Ϡ02'56			12493 Nov 16 05:43	0°♊	
max. Earth dist.	12489 Apr 28 07:04	25°Ϡ49'05	2.52661 AU	max. Earth dist.	12493 Dec 06 10:37	14°♊42'52	2.44728 AU
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					12493 Dec 27 24:00	0°ϙ	
conjunction	12489 Jun 01 03:20	19°Π38'53	-0°53'07		12494 Feb 10 04:34	0°≈	
minimum elong	12489 Jun 01 05:09	19°Π42'10	0°53'59		12494 Mar 29 06:34	0°κ	
	12489 Jun 15 09:57	0°ϙ		desc. node	12494 Apr 14 01:04	9°κ33'43	
	12489 Jul 25 13:43	0°Ω			12494 May 19 15:22	0°Υ	
morning rise	12489 Jul 27 18:36	1°Ω40'50			12494 Jul 23 15:25	0°Ϡ	
asc. node	12489 Aug 28 16:18	26°Ω19'16		retrograde	12494 Aug 29 22:09	6°Ϡ55'07	
	12489 Sep 02 09:22	0°η			12494 Oct 02 18:44	30°κΥ	
	12489 Oct 10 14:49	0°♁		opposition	12494 Oct 07 18:48	28°Υ05'56	-4°45'14
	12489 Nov 18 03:08	0°♌		greatest brilliancy	12494 Oct 08 13:24	27°Υ47'58	-1.4m
	12489 Dec 27 22:52	0°♊		min. Earth dist.	12494 Oct 12 17:05	26°Υ11'47	0.63699 AU
	12490 Feb 08 10:14	0°ϙ		direct	12494 Nov 18 03:06	18°Υ05'56	
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


































































































































	12495 Apr 14 17:15	0°☾		conjunction	12500 Mar 02 16:02	19°☿18'26	-0°44'22
asc. node	12495 Apr 20 10:19	4°☾07'51		minimum elong	12500 Mar 02 14:58	19°☿16'43	0°44'05
	12495 May 24 23:08	0°♈			12500 Mar 19 12:24	0°♈	
	12495 Jul 02 11:02	0°♍		morning rise	12500 Apr 14 20:26	16°♈47'19	
	12495 Aug 09 14:04	0°♊			12500 May 05 10:19	0°♊	
	12495 Sep 17 09:33	0°♋			12500 Jun 20 13:13	0°♋	
evening set	12495 Oct 18 06:56	23°♋07'26			12500 Aug 04 17:36	0°☾	
	12495 Oct 27 16:22	0°♌			12500 Sep 18 01:21	0°♈	
	12495 Dec 08 22:22	0°♍			12500 Oct 31 23:31	0°♍	
				asc. node	12500 Dec 12 03:30	27°♍20'20	
conjunction	12495 Dec 15 03:06	4°♍16'38	0°40'35		12500 Dec 16 08:15	0°♊	
minimum elong	12495 Dec 15 04:49	4°♍19'35	0°41'29		12501 Feb 13 12:32	0°♋	
max. Earth dist.	12496 Jan 12 18:38	23°♍40'41	2.57709 AU	retrograde	12501 Mar 09 00:16	3°♋45'08	
	12496 Jan 22 07:08	0°♌			12501 Apr 01 16:06	30°♋♊	
morning rise	12496 Feb 03 21:34	8°♌16'30		min. Earth dist.	12501 Apr 03 16:52	29°♊24'56	0.39451 AU
desc. node	12496 Feb 29 13:28	24°♌49'59		greatest brilliancy	12501 Apr 09 02:05	27°♊48'16	-2.8m
	12496 Mar 08 16:37	0°♋		opposition	12501 Apr 10 15:12	27°♊20'16	6°28'53
	12496 Apr 26 01:54	0°♈		direct	12501 May 10 17:47	21°♊53'55	
	12496 Jun 16 04:43	0°♊			12501 Jun 17 17:35	0°♋	
	12496 Aug 13 12:29	0°♋			12501 Aug 16 21:23	0°♌	
retrograde	12496 Oct 13 07:08	16°♋17'44			12501 Oct 06 17:49	0°♍	
opposition	12496 Nov 18 00:35	8°♋48'51	-4°52'15	desc. node	12501 Oct 22 05:31	9°♍22'32	
greatest brilliancy	12496 Nov 19 12:40	8°♋16'14	-2.0m		12501 Nov 25 00:36	0°♌	
min. Earth dist.	12496 Nov 26 08:37	5°♋49'05	0.52614 AU		12502 Jan 12 16:16	0°♋	
	12496 Dec 20 12:54	30°♋♊		evening set	12502 Feb 21 15:14	25°♋01'07	
direct	12496 Dec 27 00:29	29°♋42'31			12502 Mar 01 12:02	0°♈	
	12497 Jan 02 14:14	0°♋		max. Earth dist.	12502 Mar 23 01:15	13°♈46'10	2.65487 AU
asc. node	12497 Mar 07 18:57	24°♋58'50					
	12497 Mar 16 01:28	0°☾		conjunction	12502 Apr 06 18:20	23°♈16'46	-1°07'25
	12497 Apr 29 02:43	0°♈		minimum elong	12502 Apr 06 17:40	23°♈15'41	1°07'41
	12497 Jun 08 05:14	0°♍			12502 Apr 17 01:31	0°♊	
	12497 Jul 17 10:34	0°♊		morning rise	12502 May 21 12:04	22°♊52'13	
	12497 Aug 26 06:40	0°♋			12502 Jun 01 00:57	0°♋	
	12497 Oct 06 14:09	0°♌			12502 Jul 14 07:19	0°☾	
	12497 Nov 18 18:41	0°♍			12502 Aug 24 22:59	0°♈	
evening set	12497 Dec 08 04:30	13°♍04'20			12502 Oct 04 07:20	0°♍	
	12498 Jan 02 19:18	0°♌		asc. node	12502 Oct 29 23:25	19°♍23'19	
desc. node	12498 Jan 16 03:58	8°♌42'13			12502 Nov 12 23:59	0°♊	
					12502 Dec 23 05:23	0°♋	
conjunction	12498 Jan 25 16:35	14°♌51'57	-0°05'17		12503 Feb 04 09:36	0°♌	
minimum elong	12498 Jan 25 16:26	14°♌51'42	0°04'34		12503 Apr 02 10:08	0°♍	
behind sun begin	12498 Jan 24 21:43	14°♌21'32		retrograde	12503 May 01 14:36	5°♍29'41	
behind sun end	12498 Jan 26 11:08	15°♌21'51			12503 May 29 16:22	30°♋♌	
max. Earth dist.	12498 Feb 06 03:08	22°♌13'23	2.65802 AU	min. Earth dist.	12503 Jun 01 09:18	29°♌01'00	0.52827 AU
	12498 Feb 18 07:06	0°♋		opposition	12503 Jun 08 23:35	26°♌08'42	3°50'08
morning rise	12498 Mar 11 15:30	13°♋33'28		greatest brilliancy	12503 Jun 07 23:27	26°♌31'32	-2.0m
	12498 Apr 06 17:45	0°♈		direct	12503 Jul 14 05:37	18°♌24'58	
	12498 May 24 19:12	0°♊			12503 Sep 01 05:11	0°♍	
	12498 Jul 12 14:09	0°♋		desc. node	12503 Sep 09 14:41	3°♍31'26	
	12498 Sep 01 04:11	0°☾			12503 Nov 01 09:12	0°♌	
	12498 Oct 29 00:32	0°♈			12503 Dec 23 18:31	0°♋	
retrograde	12498 Dec 18 17:44	12°♈54'32			12504 Feb 11 00:13	0°♈	
opposition	12499 Jan 18 09:41	7°♈36'00	-0°24'57		12504 Mar 28 19:46	0°♊	
greatest brilliancy	12499 Jan 18 12:55	7°♈33'40	-2.9m	evening set	12504 Mar 29 01:05	0°♊08'45	
min. Earth dist.	12499 Jan 24 11:09	5°♈51'09	0.39028 AU	max. Earth dist.	12504 Apr 17 01:08	12°♊46'15	2.57243 AU
asc. node	12499 Jan 24 02:09	5°♈57'31			12504 May 12 07:49	0°♋	
direct	12499 Feb 19 18:21	1°♈31'11					
	12499 May 04 20:28	0°♍		conjunction	12504 May 15 02:08	1°♋54'50	-1°04'33
	12499 Jun 19 09:02	0°♊		minimum elong	12504 May 15 03:11	1°♋56'40	1°05'19
	12499 Aug 01 18:01	0°♋			12504 Jun 23 15:39	0°☾	
	12499 Sep 14 14:26	0°♌		morning rise	12504 Jul 05 12:59	8°☾41'01	
	12499 Oct 29 16:36	0°♍			12504 Aug 03 03:04	0°♈	
desc. node	12499 Dec 04 00:40	22°♍56'14			12504 Sep 11 06:02	0°♍	
	12499 Dec 15 00:43	0°♌		asc. node	12504 Sep 15 13:43	3°♍21'21	
evening set	12500 Jan 17 00:01	21°♌00'24			12504 Oct 19 17:18	0°♊	
	12500 Jan 31 04:30	0°♋			12504 Nov 27 10:33	0°♋	
max. Earth dist.	12500 Feb 28 17:41	18°♋04'58	2.68405 AU		12505 Jan 06 13:30	0°♌	



	12505 Feb 18 20:42	0°♄			12510 Jul 11 11:57	0°♍		
	12505 Apr 11 05:03	0°♊			12510 Aug 18 10:46	0°♌		
retrograde	12505 Jun 08 16:00	17°♊05'10		evening set	12510 Sep 23 02:37	27°♌45'24		
min. Earth dist.	12505 Jul 14 21:26	8°♊45'15	0.63640 AU		12510 Sep 26 00:52	0°♍		
opposition	12505 Jul 19 02:28	7°♊05'15	0°20'26		12510 Nov 05 01:19	0°♎		
greatest brilliancy	12505 Jul 19 01:18	7°♊06'24	-1.5m					
desc. node	12505 Jul 27 22:41	3°♊43'14		conjunction	12510 Nov 25 18:33	14°♎59'38	0°55'51	
	12505 Aug 09 10:57	30°♋♄		minimum elong	12510 Nov 25 20:32	15°♎03'12	0°56'43	
direct	12505 Aug 27 02:28	28°♄01'07			12510 Dec 17 01:03	0°♄		
	12505 Sep 14 23:36	0°♋		max. Earth dist.	12511 Jan 01 16:20	10°♄47'08	2.53126 AU	
	12505 Nov 28 19:58	0°♌		morning rise	12511 Jan 19 13:37	22°♄53'03		
	12506 Jan 21 00:25	0°♍			12511 Jan 30 06:17	0°♋		
	12506 Mar 10 00:03	0°♎			12511 Mar 17 18:45	0°♌		
	12506 Apr 23 13:59	0°♏		desc. node	12511 Mar 19 07:42	0°♌58'01		
evening set	12506 May 10 19:18	12°♏07'36			12511 May 05 22:05	0°♍		
max. Earth dist.	12506 May 24 21:03	22°♏15'00	2.44532 AU		12511 Jun 28 14:35	0°♎		
	12506 Jun 04 11:24	0°♐		retrograde	12511 Sep 25 23:42	29°♎57'22		
conjunction	12506 Jul 05 22:37	23°♐35'18	-0°19'39	opposition	12511 Nov 02 04:08	21°♎51'22	-5°06'06	
minimum elong	12506 Jul 06 00:09	23°♐38'13	0°20'30	greatest brilliancy	12511 Nov 03 11:04	21°♎22'21	-1.7m	
	12506 Jul 14 07:43	0°♑		min. Earth dist.	12511 Nov 09 08:09	19°♎10'42	0.57630 AU	
asc. node	12506 Aug 03 03:18	15°♑20'45		direct	12511 Dec 12 10:58	12°♏13'13		
	12506 Aug 21 20:00	0°♍		asc. node	12512 Feb 09 08:29	0°♏		
morning rise	12506 Sep 11 16:00	16°♍26'41			12512 Mar 25 06:59	27°♏02'51		
	12506 Sep 28 19:39	0°♌			12512 Mar 29 15:48	0°♐		
	12506 Nov 06 03:41	0°♍			12512 May 10 08:51	0°♑		
	12506 Dec 15 17:52	0°♎			12512 Jun 18 13:11	0°♍		
	12507 Jan 26 13:36	0°♄			12512 Jul 27 04:08	0°♌		
	12507 Mar 12 23:05	0°♋			12512 Sep 04 11:29	0°♍		
	12507 May 04 14:30	0°♌		evening set	12512 Oct 15 06:45	0°♎		
desc. node	12507 Jun 15 01:22	16°♌49'53			12512 Nov 21 00:48	25°♎53'18		
retrograde	12507 Jul 13 00:55	21°♌07'10			12512 Nov 27 00:12	0°♄		
opposition	12507 Aug 22 17:12	11°♌20'09	-2°20'49		12513 Jan 10 16:44	0°♋		
min. Earth dist.	12507 Aug 22 06:55	11°♌30'20	0.68320 AU	conjunction	12513 Jan 11 07:41	0°♋24'36	0°12'29	
greatest brilliancy	12507 Aug 22 15:11	11°♌22'09	-1.3m	minimum elong	12513 Jan 11 08:13	0°♋25'27	0°13'19	
direct	12507 Oct 02 18:38	1°♌33'29		behind sun begin	12513 Jan 10 21:01	0°♋07'03		
	12507 Dec 27 15:28	0°♍		behind sun end	12513 Jan 11 19:24	0°♋43'50		
	12508 Feb 17 11:32	0°♎		max. Earth dist.	12513 Jan 28 23:58	11°♋57'26	2.63275 AU	
	12508 Apr 03 01:23	0°♏		desc. node	12513 Feb 02 20:41	15°♋06'24		
	12508 May 15 00:26	0°♐		morning rise	12513 Feb 26 22:34	0°♌33'27		
asc. node	12508 Jun 19 22:20	27°♐09'16			12513 Feb 26 01:34	0°♍		
	12508 Jun 23 14:43	0°♑			12513 Apr 14 17:48	0°♎		
evening set	12508 Jul 08 02:32	11°♑17'22			12513 Jun 02 15:17	0°♎		
	12508 Jul 31 20:12	0°♍			12513 Jul 23 12:13	0°♏		
	12508 Sep 07 15:47	0°♌			12513 Sep 18 09:46	0°♐		
conjunction	12508 Sep 17 16:00	7°♌54'03	0°55'15	retrograde	12513 Nov 20 10:13	17°♐47'44		
minimum elong	12508 Sep 17 12:16	7°♌46'42	0°55'14	opposition	12513 Dec 23 01:18	11°♐35'46	-3°04'42	
	12508 Oct 15 23:29	0°♍		greatest brilliancy	12513 Dec 24 04:13	11°♐13'58	-2.5m	
max. Earth dist.	12508 Nov 09 02:19	18°♍24'20	2.39126 AU	min. Earth dist.	12513 Dec 31 12:59	8°♐51'38	0.43890 AU	
	12508 Nov 24 15:00	0°♎		direct	12514 Jan 27 15:29	4°♐03'52		
morning rise	12508 Nov 27 06:55	1°♎58'03		asc. node	12514 Feb 10 15:43	5°♐26'34		
	12509 Jan 05 06:54	0°♄			12514 Apr 07 07:10	0°♑		
	12509 Feb 18 13:30	0°♋			12514 May 22 01:07	0°♍		
	12509 Apr 07 06:47	0°♌			12514 Jul 02 10:17	0°♌		
desc. node	12509 May 01 19:58	14°♌17'17			12514 Aug 12 17:59	0°♍		
	12509 May 31 08:17	0°♍			12514 Sep 24 06:10	0°♎		
retrograde	12509 Aug 16 01:19	23°♍46'20		desc. node	12514 Nov 07 09:34	0°♄		
opposition	12509 Sep 24 16:34	14°♍36'14	-4°15'25		12514 Dec 21 14:42	29°♄02'04		
greatest brilliancy	12509 Sep 25 03:25	14°♍25'39	-1.3m	evening set	12514 Dec 23 02:30	0°♋		
min. Earth dist.	12509 Sep 28 02:38	13°♍16'10	0.66323 AU		12515 Jan 03 08:10	7°♋15'06		
direct	12509 Nov 05 07:04	4°♍33'35			12515 Feb 07 22:04	0°♌		
	12510 Jan 21 13:20	0°♎		conjunction	12515 Feb 18 01:08	6°♌26'11	-0°30'43	
	12510 Mar 12 05:48	0°♏		minimum elong	12515 Feb 18 00:16	6°♌24'47	0°30'15	
	12510 Apr 24 07:14	0°♐		max. Earth dist.	12515 Feb 21 02:04	8°♌21'55	2.68055 AU	
asc. node	12510 May 08 00:41	10°♐07'42			12515 Mar 27 05:16	0°♍		
	12510 Jun 03 04:22	0°♑		morning rise	12515 Apr 02 12:54	4°♍00'12		

	12515 May 13 11:12	0°♄		min. Earth dist.	12520 Jun 28 16:00	24°♄45'36	0.60069 AU
	12515 Jun 29 08:48	0°♂		opposition	12520 Jul 04 07:16	22°♄32'54	1°36'24
	12515 Aug 14 22:21	0°♂		greatest brilliancy	12520 Jul 03 23:40	22°♄40'21	-1.7m
	12515 Sep 30 13:59	0°♂		direct	12520 Aug 11 01:36	13°♄54'24	
	12515 Nov 18 00:33	0°♄		desc. node	12520 Aug 13 10:13	13°♄56'26	
asc. node	12515 Dec 29 20:51	21°♄56'02			12520 Oct 10 15:11	0°♄	
	12516 Jan 23 01:35	0°♄			12520 Dec 08 15:18	0°♄	
retrograde	12516 Feb 09 00:46	1°♄54'57			12521 Jan 28 18:07	0°♄	
	12516 Feb 26 06:59	30°♄			12521 Mar 17 03:40	0°♄	
min. Earth dist.	12516 Mar 07 18:13	27°♄26'05	0.36578 AU	evening set	12521 Apr 22 21:29	24°♄38'23	
opposition	12516 Mar 10 04:12	26°♄47'03	5°04'54		12521 Apr 30 15:43	0°♂	
greatest brilliancy	12516 Mar 09 15:08	26°♄55'52	-3.0m	max. Earth dist.	12521 May 07 10:18	4°♂43'32	2.49902 AU
direct	12516 Apr 08 07:58	21°♄56'27			12521 Jun 11 16:32	0°♂	
	12516 May 15 04:39	0°♄					
	12516 Jul 11 17:34	0°♂		conjunction	12521 Jun 13 10:13	1°♂16'25	-0°43'13
	12516 Aug 29 07:53	0°♄		minimum elong	12521 Jun 13 12:16	1°♂20'11	0°44'08
	12516 Oct 15 22:13	0°♄			12521 Jul 21 17:59	0°♂	
desc. node	12516 Nov 07 15:32	14°♄17'09		morning rise	12521 Aug 12 16:10	16°♂53'52	
	12516 Dec 02 17:14	0°♄		asc. node	12521 Aug 19 23:06	22°♂34'19	
	12517 Jan 19 15:28	0°♄			12521 Aug 29 11:07	0°♄	
evening set	12517 Feb 07 23:33	12°♄09'02			12521 Oct 06 14:06	0°♄	
	12517 Mar 08 04:48	0°♄			12521 Nov 13 23:58	0°♂	
max. Earth dist.	12517 Mar 14 06:56	3°♄52'33	2.67271 AU		12521 Dec 23 16:14	0°♄	
					12522 Feb 03 18:50	0°♄	
conjunction	12517 Mar 23 23:02	10°♄03'18	-1°00'57		12522 Mar 22 07:30	0°♄	
minimum elong	12517 Mar 23 22:03	10°♄01'44	1°01'00		12522 May 20 14:26	0°♄	
	12517 Apr 23 20:09	0°♄		retrograde	12522 Jun 29 20:23	8°♄30'42	
morning rise	12517 May 06 15:15	8°♄22'29		desc. node	12522 Jul 01 14:57	8°♄29'29	
	12517 Jun 08 04:08	0°♂			12522 Aug 06 01:05	30°♄	
	12517 Jul 22 00:53	0°♂		min. Earth dist.	12522 Aug 07 16:45	29°♄20'48	0.67276 AU
	12517 Sep 02 11:06	0°♂		opposition	12522 Aug 09 14:42	28°♄35'13	-1°24'07
	12517 Oct 13 17:10	0°♄		greatest brilliancy	12522 Aug 09 11:37	28°♄38'16	-1.3m
asc. node	12517 Nov 15 17:48	24°♄18'28		direct	12522 Sep 19 01:19	19°♄01'52	
	12517 Nov 23 12:01	0°♄			12522 Nov 06 13:58	0°♄	
	12518 Jan 04 12:04	0°♂			12523 Jan 06 17:08	0°♄	
	12518 Feb 22 04:09	0°♄			12523 Feb 25 11:42	0°♄	
retrograde	12518 Apr 13 06:40	14°♄56'56			12523 Apr 11 12:58	0°♂	
min. Earth dist.	12518 May 11 14:52	9°♄23'04	0.47375 AU		12523 May 23 10:16	0°♂	
greatest brilliancy	12518 May 18 10:58	6°♄56'38	-2.3m	evening set	12523 Jun 13 03:29	15°♄29'59	
opposition	12518 May 19 22:50	6°♄24'26	5°16'42		12523 Jul 02 02:14	0°♂	
	12518 Jun 13 11:24	30°♄		asc. node	12523 Jul 07 15:01	4°♂16'57	
direct	12518 Jun 22 06:10	29°♄28'45		max. Earth dist.	12523 Jul 21 03:17	14°♂49'18	2.36831 AU
	12518 Jul 01 08:28	0°♄			12523 Aug 09 09:51	0°♄	
	12518 Sep 18 04:16	0°♄					
desc. node	12518 Sep 25 23:47	4°♄08'57		conjunction	12523 Aug 18 06:18	7°♄00'35	0°29'08
	12518 Nov 10 23:39	0°♄		minimum elong	12523 Aug 18 03:21	6°♄54'44	0°28'38
	12518 Dec 31 10:40	0°♄			12523 Sep 16 06:20	0°♄	
	12519 Feb 17 23:39	0°♄			12523 Oct 24 13:06	0°♄	
evening set	12519 Mar 15 12:16	16°♄15'19		morning rise	12523 Oct 31 11:41	5°♄21'04	
	12519 Apr 05 15:28	0°♄			12523 Dec 03 02:38	0°♄	
max. Earth dist.	12519 Apr 07 04:57	1°♄01'38	2.61071 AU		12524 Jan 13 17:31	0°♄	
					12524 Feb 27 05:11	0°♄	
conjunction	12519 Apr 29 21:55	16°♄08'18	-1°09'38		12524 Apr 15 23:58	0°♄	
minimum elong	12519 Apr 29 22:11	16°♄08'45	1°10'13	desc. node	12524 May 18 12:08	17°♄37'45	
	12519 May 20 06:50	0°♂			12524 Jun 14 16:48	0°♄	
morning rise	12519 Jun 16 20:46	19°♄15'01		retrograde	12524 Aug 02 01:07	11°♄07'45	
	12519 Jul 01 22:08	0°♂		opposition	12524 Sep 11 06:02	1°♄40'34	-3°36'53
	12519 Aug 11 18:42	0°♂		greatest brilliancy	12524 Sep 11 10:26	1°♄36'14	-1.3m
	12519 Sep 20 06:51	0°♄		min. Earth dist.	12524 Sep 13 04:03	0°♄55'21	0.67917 AU
asc. node	12519 Oct 03 08:47	10°♄05'02			12524 Sep 15 12:44	30°♄	
	12519 Oct 29 02:20	0°♄		direct	12524 Oct 22 20:15	21°♄40'43	
	12519 Dec 07 04:05	0°♄			12524 Dec 02 14:05	0°♄	
	12520 Jan 16 21:20	0°♄			12525 Feb 01 13:19	0°♄	
	12520 Mar 01 21:55	0°♄			12525 Mar 20 21:55	0°♂	
	12520 May 05 19:43	0°♄			12525 May 02 08:44	0°♂	
retrograde	12520 May 25 09:25	2°♄26'59		asc. node	12525 May 24 14:14	16°♄36'45	
	12520 Jun 13 02:16	30°♄			12525 Jun 11 01:16	0°♂	

	12525 Jul 19 06:52	0°♍		morning rise	12530 Mar 20 07:34	21°♋22'13	
evening set	12525 Aug 24 08:20	28°♍34'58			12530 Apr 02 23:43	0°♍	
	12525 Aug 26 03:23	0°♌			12530 May 20 16:50	0°♌	
	12525 Oct 03 13:51	0°♍			12530 Jul 07 16:08	0°♍	
					12530 Aug 25 08:55	0°♌	
conjunction	12525 Nov 01 23:54	22°♍17'24	1°05'21		12530 Oct 15 18:23	0°♌	
minimum elong	12525 Nov 02 00:49	22°♍19'07	1°06'02	retrograde	12531 Jan 07 04:50	29°♌48'23	
	12525 Nov 12 09:37	0°♌		asc. node	12531 Jan 15 10:36	29°♌22'18	
max. Earth dist.	12525 Dec 17 20:16	25°♌32'28	2.47883 AU	opposition	12531 Feb 05 22:39	24°♌51'01	1°38'37
	12525 Dec 24 04:44	0°♌		greatest brilliancy	12531 Feb 06 02:44	24°♌48'15	-3.0m
morning rise	12526 Jan 01 05:47	5°♌35'34		min. Earth dist.	12531 Feb 09 11:35	23°♌53'34	0.37223 AU
	12526 Feb 06 08:09	0°♌		direct	12531 Mar 08 12:39	19°♌30'03	
	12526 Mar 25 02:49	0°♋			12531 Apr 19 04:36	0°♍	
desc. node	12526 Apr 05 02:23	6°♋46'05			12531 Jun 11 01:53	0°♌	
	12526 May 14 10:03	0°♍			12531 Jul 26 14:57	0°♍	
	12526 Jul 12 00:46	0°♌			12531 Sep 09 14:16	0°♌	
retrograde	12526 Sep 08 21:05	15°♌15'34			12531 Oct 25 08:36	0°♌	
opposition	12526 Oct 17 05:33	6°♌39'53	-4°57'12	desc. node	12531 Nov 25 04:09	19°♌50'02	
greatest brilliancy	12526 Oct 18 04:42	6°♌17'43	-1.5m		12531 Dec 11 02:45	0°♌	
min. Earth dist.	12526 Oct 22 23:48	4°♌27'45	0.61830 AU	evening set	12532 Jan 26 02:37	29°♌07'38	
	12526 Nov 05 02:35	30°♋♍			12532 Jan 27 11:47	0°♋	
direct	12526 Nov 27 07:52	26°♍44'38		max. Earth dist.	12532 Mar 05 18:04	24°♋12'12	2.68232 AU
	12526 Dec 20 20:27	0°♌					
	12527 Feb 23 11:45	0°♍		conjunction	12532 Mar 10 09:44	27°♋09'25	-0°51'18
	12527 Apr 09 21:00	0°♌		minimum elong	12532 Mar 10 08:38	27°♋07'40	0°51'10
asc. node	12527 Apr 11 20:57	1°♌25'10			12532 Mar 14 21:05	0°♍	
	12527 May 20 12:22	0°♌		morning rise	12532 Apr 22 14:59	24°♍47'47	
	12527 Jun 28 04:42	0°♍			12532 Apr 30 16:21	0°♌	
	12527 Aug 05 10:38	0°♌			12532 Jun 15 11:54	0°♍	
	12527 Sep 13 08:51	0°♍			12532 Jul 30 03:45	0°♌	
	12527 Oct 23 18:43	0°♌			12532 Sep 11 16:04	0°♌	
evening set	12527 Nov 01 10:24	6°♌14'58			12532 Oct 24 08:25	0°♍	
	12527 Dec 05 03:23	0°♌		asc. node	12532 Dec 02 11:51	27°♍24'53	
					12532 Dec 06 06:12	0°♌	
conjunction	12527 Dec 26 13:47	14°♌38'27	0°30'27		12533 Jan 22 05:44	0°♍	
minimum elong	12527 Dec 26 15:05	14°♌40'40	0°31'22	retrograde	12533 Mar 22 22:51	20°♍18'24	
	12528 Jan 18 13:47	0°♌		min. Earth dist.	12533 Apr 18 03:56	15°♍37'27	0.42009 AU
max. Earth dist.	12528 Jan 20 01:59	0°♌59'44	2.59935 AU	greatest brilliancy	12533 Apr 24 10:56	13°♍35'50	-2.6m
morning rise	12528 Feb 13 14:14	16°♌59'18		opposition	12533 Apr 26 04:03	13°♍02'18	6°21'18
desc. node	12528 Feb 20 13:27	21°♌28'29		direct	12533 May 27 10:45	7°♍03'47	
	12528 Mar 04 21:42	0°♋			12533 Aug 06 19:17	0°♌	
	12528 Apr 21 22:57	0°♍			12533 Sep 30 02:07	0°♌	
	12528 Jun 11 01:26	0°♌		desc. node	12533 Oct 12 10:07	7°♌13'29	
	12528 Aug 04 12:53	0°♍			12533 Nov 19 13:54	0°♌	
retrograde	12528 Oct 26 13:24	27°♍05'45			12534 Jan 07 18:31	0°♋	
opposition	12528 Nov 30 07:28	20°♍01'37	-4°28'03		12534 Feb 24 19:45	0°♍	
greatest brilliancy	12528 Dec 01 19:36	19°♍29'58	-2.1m	evening set	12534 Mar 01 12:21	2°♍58'32	
min. Earth dist.	12528 Dec 09 01:03	16°♍58'58	0.49570 AU	max. Earth dist.	12534 Mar 28 10:07	20°♍13'47	2.64126 AU
direct	12529 Jan 07 08:15	11°♍21'47			12534 Apr 12 10:00	0°♌	
asc. node	12529 Feb 27 05:07	26°♍08'11					
	12529 Mar 06 13:23	0°♌		conjunction	12534 Apr 14 22:46	1°♌39'43	-1°09'31
	12529 Apr 22 18:22	0°♌		minimum elong	12534 Apr 14 22:24	1°♌39'06	1°09'55
	12529 Jun 02 20:21	0°♍			12534 May 27 06:33	0°♍	
	12529 Jul 12 14:16	0°♌		morning rise	12534 May 30 14:15	2°♍16'13	
	12529 Aug 21 19:18	0°♍			12534 Jul 09 07:39	0°♌	
	12529 Oct 02 10:18	0°♌			12534 Aug 19 16:14	0°♌	
	12529 Nov 14 20:48	0°♌			12534 Sep 28 16:49	0°♍	
evening set	12529 Dec 18 17:04	22°♌33'31		asc. node	12534 Oct 20 05:12	16°♍23'34	
	12529 Dec 30 01:44	0°♌			12534 Nov 07 00:30	0°♌	
desc. node	12530 Jan 07 04:43	5°♌17'22			12534 Dec 16 16:35	0°♍	
					12535 Jan 27 13:45	0°♌	
conjunction	12530 Feb 04 00:43	23°♌13'39	-0°15'08		12535 Mar 17 21:02	0°♌	
minimum elong	12530 Feb 04 00:14	23°♌12'52	0°14'31	retrograde	12535 May 11 00:25	16°♌11'18	
behind sun begin	12530 Feb 03 16:23	23°♌00'19		min. Earth dist.	12535 Jun 12 02:05	9°♌15'13	0.55601 AU
behind sun end	12530 Feb 04 08:05	23°♌25'26		greatest brilliancy	12535 Jun 18 08:07	6°♌50'55	-1.9m
max. Earth dist.	12530 Feb 12 08:56	28°♌33'36	2.66834 AU	opposition	12535 Jun 19 01:32	6°♌34'10	2°59'54
	12530 Feb 14 15:08	0°♋			12535 Jul 10 01:17	30°♋♌	

direct	12535 Jul 25 07:31	28°  28'34		conjunction	12540 Oct 04 22:17	25°  12'03	1°03'27
	12535 Aug 10 11:54	0°  0		minimum elong	12540 Oct 04 20:08	25°  07'52	1°03'45
desc. node	12535 Aug 30 19:52	5°  21'07			12540 Oct 11 03:05	0°  0	
	12535 Oct 25 04:58	0°  0			12540 Nov 19 18:57	0°  0	
	12535 Dec 18 07:13	0°  0		max. Earth dist.	12540 Nov 27 11:56	5°  40'24	2.42169 AU
	12536 Feb 06 02:58	0°  0		morning rise	12540 Dec 10 23:18	15°  27'41	
	12536 Mar 24 03:25	0°  0			12540 Dec 31 10:33	0°  0	
evening set	12536 Apr 06 17:04	8°  58'32			12541 Feb 13 13:59	0°  0	
max. Earth dist.	12536 Apr 23 18:36	20°  28'19	2.54783 AU		12541 Apr 01 19:38	0°  0	
	12536 May 07 15:36	0°  0		desc. node	12541 Apr 21 19:36	11°  57'40	
					12541 May 24 00:18	0°  0	
conjunction	12536 May 25 01:33	12°  11'15	-0°58'50		12541 Aug 06 21:53	0°  0	
minimum elong	12536 May 25 03:04	12°  13'56	0°59'40	retrograde	12541 Aug 24 09:13	1°  42'09	
	12536 Jun 18 21:10	0°  0			12541 Sep 09 20:05	30°  R  0	
morning rise	12536 Jul 18 04:16	21°  04'24		opposition	12541 Oct 02 15:24	22°  43'01	-4°33'57
	12536 Jul 29 04:58	0°  0		greatest brilliancy	12541 Oct 03 06:28	22°  28'23	-1.4m
asc. node	12536 Sep 05 18:08	29°  04'14		min. Earth dist.	12541 Oct 06 21:54	21°  03'39	0.65006 AU
	12536 Sep 06 04:18	0°  0		direct	12541 Nov 13 03:58	12°  41'03	
	12536 Oct 14 12:16	0°  0			12542 Jan 12 19:19	0°  0	
	12536 Nov 22 02:00	0°  0			12542 Mar 06 03:42	0°  0	
	12536 Dec 31 23:24	0°  0			12542 Apr 18 20:49	0°  0	
	12537 Feb 12 15:46	0°  0		asc. node	12542 Apr 28 09:19	6°  05'54	
	12537 Apr 02 09:36	0°  0			12542 May 28 23:25	0°  0	
retrograde	12537 Jun 16 11:30	25°  23'44			12542 Jul 06 09:40	0°  0	
desc. node	12537 Jul 18 03:49	18°  53'39			12542 Aug 13 10:31	0°  0	
min. Earth dist.	12537 Jul 23 16:56	16°  44'53	0.65215 AU		12542 Sep 21 02:40	0°  0	
opposition	12537 Jul 27 02:28	15°  24'05	-0°20'14	evening set	12542 Oct 08 08:25	13°  03'07	
greatest brilliancy	12537 Jul 27 01:20	15°  25'12	-1.4m		12542 Oct 31 05:26	0°  0	
direct	12537 Sep 04 16:34	6°  08'14					
	12537 Nov 21 08:29	0°  0		conjunction	12542 Dec 07 15:42	26°  45'43	0°47'29
	12538 Jan 15 12:40	0°  0		minimum elong	12542 Dec 07 17:38	26°  49'05	0°48'24
	12538 Mar 05 02:02	0°  0			12542 Dec 12 07:08	0°  0	
	12538 Apr 18 20:06	0°  0		max. Earth dist.	12543 Jan 08 19:17	18°  03'39	2.55745 AU
evening set	12538 May 21 22:06	23°  12'32'12			12543 Jan 25 12:43	0°  0	
	12538 May 30 17:55	0°  0		morning rise	12543 Jan 29 01:31	2°  20'03	
max. Earth dist.	12538 Jun 06 15:13	5°  05'48	2.41512 AU	desc. node	12543 Mar 09 08:03	27°  44'13	
	12538 Jul 09 12:47	0°  0			12543 Mar 12 21:47	0°  0	
					12543 Apr 30 12:45	0°  0	
conjunction	12538 Jul 20 08:22	8°  02'14'44	-0°02'57		12543 Jun 21 12:12	0°  0	
minimum elong	12538 Jul 20 08:40	8°  02'21'19	0°03'43		12543 Aug 23 06:08	0°  0	
behind sun begin	12538 Jul 19 05:35	7°  02'29'47		retrograde	12543 Oct 06 13:38	9°  02'28'56	
behind sun end	12538 Jul 21 11:45	9°  02'14'54		opposition	12543 Nov 12 00:10	1°  02'42'22	-5°01'16
asc. node	12538 Jul 24 10:18	11°  02'32'06		greatest brilliancy	12543 Nov 13 10:33	1°  02'10'44	-1.8m
	12538 Aug 16 23:16	0°  0			12543 Nov 16 15:18	30°  R  0	
	12538 Sep 23 21:18	0°  0		min. Earth dist.	12543 Nov 19 21:22	28°  03'49'04	0.54955 AU
morning rise	12538 Sep 29 20:34	4°  04'25'55		direct	12543 Dec 21 16:21	22°  03'19'27	
	12538 Nov 01 04:01	0°  0			12544 Jan 26 18:39	0°  0	
	12538 Dec 10 16:46	0°  0		asc. node	12544 Jan 15 17:29	25°  02'48'31	
	12539 Jan 21 08:56	0°  0			12544 Mar 22 06:20	0°  0	
	12539 Mar 07 06:49	0°  0			12544 May 04 03:14	0°  0	
	12539 Apr 26 22:29	0°  0			12544 Jun 12 18:47	0°  0	
desc. node	12539 Jun 05 03:52	18°  03'33'55			12544 Jul 21 16:43	0°  0	
retrograde	12539 Jul 20 14:15	28°  03'43'49			12544 Aug 30 05:39	0°  0	
opposition	12539 Aug 30 04:19	19°  03'00'00	-2°50'58		12544 Oct 10 06:11	0°  0	
greatest brilliancy	12539 Aug 30 04:00	19°  03'03'19	-1.3m		12544 Nov 22 04:16	0°  0	
min. Earth dist.	12539 Aug 30 14:08	18°  03'53'19	0.68477 AU	evening set	12544 Dec 01 14:17	6°  03'24'22	
direct	12539 Oct 10 12:18	9°  03'10'33			12545 Jan 05 23:59	0°  0	
	12539 Dec 19 20:47	0°  0					
	12540 Feb 11 20:17	0°  0		conjunction	12545 Jan 20 05:22	9°  03'17'39	0°02'05
	12540 Mar 28 23:23	0°  0		minimum elong	12545 Jan 20 05:27	9°  03'17'46	0°02'51
	12540 May 10 02:46	0°  0		behind sun begin	12545 Jan 19 09:59	8°  03'46'09	
asc. node	12540 Jun 10 06:44	23°  02'28'10		behind sun end	12545 Jan 21 00:54	9°  03'49'22	
	12540 Jun 18 18:03	0°  0		desc. node	12545 Jan 23 21:56	11°  03'41'26	
evening set	12540 Jul 24 09:05	27°  02'56'11		max. Earth dist.	12545 Feb 03 10:12	18°  03'29'01	2.64775 AU
	12540 Jul 26 23:37	0°  0			12545 Feb 21 09:19	0°  0	
	12540 Sep 02 19:14	0°  0		morning rise	12545 Mar 06 20:14	8°  03'33'21	
					12545 Apr 09 21:34	0°  0	

	12545 May 28 06:27	0°♄	desc. node	12550 Sep 16 05:35	3°♄41'18	
	12545 Jul 16 19:43	0°♂		12550 Nov 04 18:09	0°♂	
	12545 Sep 07 09:41	0°♄		12550 Dec 26 06:05	0°♄	
	12545 Nov 18 19:03	0°♂		12551 Feb 13 04:58	0°♄	
retrograde	12545 Dec 06 06:51	1°♂48'48	evening set	12551 Mar 23 16:49	24°♄34'47	
	12545 Dec 23 06:11	30°♄		12551 Mar 31 23:53	0°♄	
opposition	12546 Jan 06 19:20	26°♄07'01 -1°44'00	max. Earth dist.	12551 Apr 13 05:54	8°♄05'41	2.59057 AU
greatest brilliancy	12546 Jan 07 09:54	25°♄55'52 -2.7m				
min. Earth dist.	12546 Jan 14 06:27	23°♄50'48 0.41030 AU	conjunction	12551 May 08 21:47	25°♄24'03 -1°07'25	
asc. node	12546 Feb 01 01:32	19°♄54'04	minimum elong	12551 May 08 22:30	25°♄25'17 1°08'08	
direct	12546 Feb 09 15:48	19°♄22'07		12551 May 15 14:31	0°♂	
	12546 Mar 22 23:47	0°♂	morning rise	12551 Jun 27 15:04	0°♄22'07	
	12546 May 13 03:38	0°♄		12551 Jun 27 02:49	0°♄	
	12546 Jun 25 07:28	0°♂		12551 Aug 06 19:03	0°♂	
	12546 Aug 06 13:48	0°♄		12551 Sep 15 02:27	0°♄	
	12546 Sep 18 16:57	0°♄	asc. node	12551 Sep 23 15:44	6°♄37'10	
	12546 Nov 02 06:59	0°♄		12551 Oct 23 17:12	0°♂	
desc. node	12546 Dec 11 16:57	25°♄45'09		12551 Dec 01 13:02	0°♄	
	12546 Dec 18 07:02	0°♄		12552 Jan 10 19:44	0°♄	
evening set	12547 Jan 11 19:11	15°♄42'16		12552 Feb 23 14:18	0°♄	
	12547 Feb 03 06:21	0°♄		12552 Apr 17 16:48	0°♄	
			retrograde	12552 Jun 02 15:52	11°♄28'46	
conjunction	12547 Feb 25 20:43	14°♄19'54 -0°39'00	min. Earth dist.	12552 Jul 08 01:20	3°♄25'21	0.62166 AU
minimum elong	12547 Feb 25 19:41	14°♄18'16 0°38'39	opposition	12552 Jul 12 21:54	1°♄30'24 0°51'07	
max. Earth dist.	12547 Feb 26 01:56	14°♄28'10 2.68353 AU	greatest brilliancy	12552 Jul 12 18:27	1°♄33'48 -1.6m	
	12547 Mar 22 13:46	0°♄		12552 Jul 16 18:37	30°♄	
morning rise	12547 Apr 10 03:10	11°♄47'46	desc. node	12552 Aug 03 14:17	24°♄25'02	
	12547 May 08 15:08	0°♄	direct	12552 Aug 20 09:44	22°♄36'45	
	12547 Jun 24 01:59	0°♂		12552 Sep 27 22:55	0°♄	
	12547 Aug 08 20:00	0°♄		12552 Dec 02 06:19	0°♄	
	12547 Sep 23 00:43	0°♂		12553 Jan 23 13:14	0°♄	
	12547 Nov 07 10:16	0°♄		12553 Mar 12 08:01	0°♄	
asc. node	12547 Dec 20 03:29	26°♄30'42		12553 Apr 25 22:25	0°♂	
	12547 Dec 26 08:14	0°♂	evening set	12553 May 02 19:03	4°♂47'02	
retrograde	12548 Feb 26 00:42	20°♂41'08	max. Earth dist.	12553 May 16 14:09	14°♂32'32	2.46973 AU
min. Earth dist.	12548 Mar 23 01:20	16°♂26'09 0.37821 AU		12553 Jun 06 22:39	0°♄	
greatest brilliancy	12548 Mar 27 04:24	15°♂16'11 -2.9m				
opposition	12548 Mar 28 08:58	14°♂55'54 6°11'00	conjunction	12553 Jun 25 16:11	13°♄53'46 -0°30'43	
direct	12548 Apr 26 18:28	9°♂51'06	minimum elong	12553 Jun 25 18:07	13°♄57'24 0°31'38	
	12548 Jun 29 20:06	0°♄		12553 Jul 16 22:06	0°♂	
	12548 Aug 21 20:14	0°♄	asc. node	12553 Aug 10 04:37	18°♂45'56	
	12548 Oct 10 00:15	0°♄		12553 Aug 24 13:02	0°♄	
desc. node	12548 Oct 28 20:32	11°♄37'49	morning rise	12553 Aug 29 00:37	3°♄31'23	
	12548 Nov 27 13:20	0°♄	greatest brilliancy	12553 Aug 29 18:52	4°♄07'17	1.2m
	12549 Jan 14 20:39	0°♄		12553 Oct 01 14:14	0°♂	
evening set	12549 Feb 15 18:51	20°♄00'42		12553 Nov 08 22:28	0°♄	
	12549 Mar 03 13:48	0°♄		12553 Dec 18 12:12	0°♄	
max. Earth dist.	12549 Mar 19 09:13	10°♄04'49 2.66386 AU		12554 Jan 29 08:41	0°♄	
				12554 Mar 16 01:00	0°♄	
conjunction	12549 Mar 31 18:44	18°♄02'53 -1°05'10		12554 May 09 09:55	0°♄	
minimum elong	12549 Mar 31 17:55	18°♄01'33 1°05'23	desc. node	12554 Jun 21 17:42	14°♄49'31	
	12549 Apr 19 04:41	0°♄	retrograde	12554 Jul 07 09:26	16°♄16'43	
morning rise	12549 May 14 23:11	16°♄59'27	min. Earth dist.	12554 Aug 16 01:34	6°♄51'26	0.67982 AU
	12549 Jun 03 08:32	0°♂	opposition	12554 Aug 17 03:44	6°♄25'31 -1°58'21	
	12549 Jul 16 21:53	0°♄	greatest brilliancy	12554 Aug 17 00:53	6°♄28'21 -1.3m	
	12549 Aug 27 21:50	0°♂		12554 Sep 04 04:14	30°♄	
	12549 Oct 07 15:18	0°♄	direct	12554 Sep 26 23:36	26°♄44'13	
asc. node	12549 Nov 06 00:30	21°♄58'44		12554 Oct 21 16:01	0°♄	
	12549 Nov 16 17:46	0°♂		12554 Dec 31 05:56	0°♄	
	12549 Dec 27 12:40	0°♄		12555 Feb 20 05:02	0°♄	
	12550 Feb 10 03:21	0°♄		12555 Apr 06 14:51	0°♂	
retrograde	12550 Apr 23 23:39	27°♄32'12		12555 May 18 14:32	0°♄	
min. Earth dist.	12550 May 23 16:14	21°♄27'50 0.50443 AU	evening set	12555 Jun 27 05:59	29°♄59'13	
greatest brilliancy	12550 May 30 11:32	18°♄56'52 -2.1m	asc. node	12555 Jun 27 22:15	0°♂30'41	
opposition	12550 May 31 17:02	18°♄29'32 4°28'03		12555 Jun 27 06:23	0°♂	
direct	12550 Jul 05 03:20	11°♄05'55		12555 Aug 04 13:07	0°♄	
	12550 Sep 08 11:54	0°♄				

conjunction	12555 Sep 04 19:41	24° $\mathbb{M}$ 48'29	0°45'28	retrograde	12560 Nov 09 01:31	8° $\mathbb{G}$ 49'36	
minimum elong	12555 Sep 04 15:38	24° $\mathbb{M}$ 40'28	0°45'15	opposition	12560 Dec 12 15:37	2° $\mathbb{G}$ 13'26	-3°47'53
	12555 Sep 11 09:00	0° $\mathbb{L}$		greatest brilliancy	12560 Dec 14 00:18	1° $\mathbb{G}$ 45'54	-2.3m
max. Earth dist.	12555 Oct 16 09:20	27° $\mathbb{L}$ 28'27	2.37009 AU		12560 Dec 19 05:43	30° $\mathbb{R}$ $\mathbb{II}$	
	12555 Oct 19 15:35	0° $\mathbb{M}$		min. Earth dist.	12560 Dec 21 10:12	29° $\mathbb{II}$ 16'44	0.46396 AU
morning rise	12555 Nov 16 17:22	21° $\mathbb{M}$ 25'21		direct	12561 Jan 18 10:38	24° $\mathbb{II}$ 07'50	
	12555 Nov 28 05:01	0° $\mathbb{J}$		asc. node	12561 Feb 17 14:08	0° $\mathbb{G}$ 00'38	
	12556 Jan 08 18:57	0° $\mathbb{Z}$			12561 Feb 17 13:25	0° $\mathbb{G}$	
	12556 Feb 22 01:25	0° $\approx$			12561 Apr 14 03:40	0° $\mathbb{Q}$	
	12556 Apr 10 01:41	0° $\mathbb{H}$			12561 May 26 20:44	0° $\mathbb{M}$	
desc. node	12556 May 08 13:48	16° $\mathbb{H}$ 12'45			12561 Jul 06 09:06	0° $\mathbb{L}$	
	12556 Jun 04 17:25	0° $\mathbb{Y}$			12561 Aug 16 02:45	0° $\mathbb{M}$	
retrograde	12556 Aug 09 22:43	18° $\mathbb{Y}$ 49'28			12561 Sep 27 03:31	0° $\mathbb{J}$	
opposition	12556 Sep 18 21:21	9° $\mathbb{Y}$ 31'18	-4°00'24		12561 Nov 09 21:53	0° $\mathbb{Z}$	
greatest brilliancy	12556 Sep 19 05:10	9° $\mathbb{Y}$ 23'39	-1.3m		12561 Dec 25 08:10	0° $\approx$	
min. Earth dist.	12556 Sep 21 15:31	8° $\mathbb{Y}$ 26'35	0.67167 AU	evening set	12561 Dec 27 18:28	1° $\approx$ 34'42	
	12556 Oct 21 12:43	30° $\mathbb{R}$ $\mathbb{H}$		desc. node	12561 Dec 28 07:28	1° $\approx$ 55'48	
direct	12556 Oct 30 13:10	29° $\mathbb{H}$ 29'19			12562 Feb 10 00:09	0° $\mathbb{H}$	
	12556 Nov 08 19:41	0° $\mathbb{Y}$					
	12557 Jan 25 16:49	0° $\mathbb{B}$		conjunction	12562 Feb 12 02:25	1° $\mathbb{H}$ 20'02	-0°24'29
	12557 Mar 15 08:42	0° $\mathbb{II}$		minimum elong	12562 Feb 12 01:40	1° $\mathbb{H}$ 18'51	0°23'56
	12557 Apr 27 05:03	0° $\mathbb{G}$		max. Earth dist.	12562 Feb 17 10:33	4° $\mathbb{H}$ 43'53	2.67616 AU
asc. node	12557 May 14 23:46	13° $\mathbb{G}$ 11'15		morning rise	12562 Mar 27 21:04	29° $\mathbb{H}$ 05'30	
	12557 Jun 06 00:58	0° $\mathbb{Q}$			12562 Mar 29 07:32	0° $\mathbb{Y}$	
	12557 Jul 14 07:55	0° $\mathbb{M}$			12562 May 15 17:58	0° $\mathbb{B}$	
	12557 Aug 21 05:27	0° $\mathbb{L}$			12562 Jul 02 02:09	0° $\mathbb{II}$	
evening set	12557 Sep 10 10:05	15° $\mathbb{L}$ 50'38			12562 Aug 18 11:29	0° $\mathbb{G}$	
	12557 Sep 28 17:02	0° $\mathbb{M}$			12562 Oct 05 17:12	0° $\mathbb{Q}$	
	12557 Nov 07 14:04	0° $\mathbb{J}$			12562 Nov 27 13:00	0° $\mathbb{M}$	
				asc. node	12563 Jan 05 20:23	15° $\mathbb{M}$ 28'32	
conjunction	12557 Nov 15 21:34	6° $\mathbb{J}$ 04'57	1°00'54	retrograde	12563 Jan 25 20:51	18° $\mathbb{M}$ 00'24	
minimum elong	12557 Nov 15 23:21	6° $\mathbb{J}$ 08'12	1°01'42	opposition	12563 Feb 24 11:16	13° $\mathbb{M}$ 06'50	3°44'41
	12557 Dec 19 10:20	0° $\mathbb{Z}$		greatest brilliancy	12563 Feb 24 09:40	13° $\mathbb{M}$ 07'53	-3.1m
max. Earth dist.	12557 Dec 26 16:14	5° $\mathbb{Z}$ 02'23	2.50853 AU	min. Earth dist.	12563 Feb 24 18:37	13° $\mathbb{M}$ 01'58	0.36393 AU
morning rise	12558 Jan 11 22:36	16° $\mathbb{Z}$ 11'17		direct	12563 Mar 25 23:33	8° $\mathbb{M}$ 12'07	
	12558 Feb 01 13:02	0° $\approx$			12563 May 29 18:29	0° $\mathbb{L}$	
	12558 Mar 20 02:21	0° $\mathbb{H}$			12563 Jul 18 13:11	0° $\mathbb{M}$	
desc. node	12558 Mar 26 02:21	3° $\mathbb{H}$ 44'51			12563 Sep 03 04:21	0° $\mathbb{J}$	
	12558 May 08 14:29	0° $\mathbb{Y}$			12563 Oct 19 20:13	0° $\mathbb{Z}$	
	12558 Jul 02 19:10	0° $\mathbb{B}$		desc. node	12563 Nov 15 07:13	16° $\mathbb{Z}$ 50'14	
retrograde	12558 Sep 18 08:41	23° $\mathbb{B}$ 58'25			12563 Dec 06 02:44	0° $\approx$	
opposition	12558 Oct 26 03:05	15° $\mathbb{B}$ 38'22	-5°04'16		12564 Jan 22 18:36	0° $\mathbb{H}$	
greatest brilliancy	12558 Oct 27 06:44	15° $\mathbb{B}$ 12'11	-1.6m	evening set	12564 Feb 03 02:02	7° $\mathbb{H}$ 07'14	
min. Earth dist.	12558 Nov 01 16:54	13° $\mathbb{B}$ 09'21	0.59619 AU		12564 Mar 10 06:15	0° $\mathbb{Y}$	
direct	12558 Dec 05 20:32	5° $\mathbb{B}$ 51'09		max. Earth dist.	12564 Mar 10 18:02	0° $\mathbb{Y}$ 18'43	2.67812 AU
	12559 Feb 15 06:38	0° $\mathbb{II}$					
asc. node	12559 Apr 02 05:39	29° $\mathbb{II}$ 03'12		conjunction	12564 Mar 18 03:12	5° $\mathbb{Y}$ 00'46	-0°57'19
	12559 Apr 03 14:30	0° $\mathbb{G}$		minimum elong	12564 Mar 18 02:08	4° $\mathbb{Y}$ 59'04	0°57'19
	12559 May 14 20:04	0° $\mathbb{Q}$			12564 Apr 25 23:37	0° $\mathbb{B}$	
	12559 Jun 22 18:54	0° $\mathbb{M}$		morning rise	12564 Apr 30 12:49	2° $\mathbb{B}$ 57'29	
	12559 Jul 31 05:23	0° $\mathbb{L}$			12564 Jun 10 13:13	0° $\mathbb{II}$	
	12559 Sep 08 07:37	0° $\mathbb{M}$			12564 Jul 24 18:39	0° $\mathbb{G}$	
	12559 Oct 18 21:16	0° $\mathbb{J}$			12564 Sep 05 16:10	0° $\mathbb{Q}$	
evening set	12559 Nov 13 10:29	18° $\mathbb{J}$ 12'25			12564 Oct 17 11:49	0° $\mathbb{M}$	
	12559 Nov 30 09:22	0° $\mathbb{Z}$		asc. node	12564 Nov 22 19:03	26° $\mathbb{M}$ 14'51	
					12564 Nov 28 00:33	0° $\mathbb{L}$	
conjunction	12560 Jan 05 07:01	24° $\mathbb{Z}$ 17'45	0°20'02		12565 Jan 10 09:47	0° $\mathbb{M}$	
minimum elong	12560 Jan 05 07:52	24° $\mathbb{Z}$ 19'10	0°20'55		12565 Mar 07 12:37	0° $\mathbb{J}$	
	12560 Jan 13 21:41	0° $\approx$		retrograde	12565 Apr 04 10:01	5° $\mathbb{J}$ 16'00	
max. Earth dist.	12560 Jan 25 23:16	7° $\approx$ 55'14	2.61884 AU	min. Earth dist.	12565 May 01 17:56	0° $\mathbb{J}$ 06'55	0.44909 AU
desc. node	12560 Feb 10 14:29	18° $\approx$ 04'22			12565 May 02 02:14	30° $\mathbb{R}$ $\mathbb{M}$	
morning rise	12560 Feb 21 21:17	25° $\approx$ 19'30		greatest brilliancy	12565 May 08 11:10	27° $\mathbb{M}$ 48'30	-2.4m
	12560 Feb 29 04:55	0° $\mathbb{H}$		opposition	12565 May 10 02:48	27° $\mathbb{M}$ 14'12	5°49'54
	12560 Apr 16 23:55	0° $\mathbb{Y}$		direct	12565 Jun 11 11:43	20° $\mathbb{M}$ 43'20	
	12560 Jun 05 07:47	0° $\mathbb{B}$			12565 Jul 23 10:51	0° $\mathbb{J}$	
	12560 Jul 27 10:10	0° $\mathbb{II}$			12565 Sep 22 17:43	0° $\mathbb{Z}$	
	12560 Sep 28 01:22	0° $\mathbb{G}$		desc. node	12565 Oct 02 14:31	5° $\mathbb{Z}$ 30'31	

	12565 Nov 13 21:27	0°♊			12570 Aug 12 02:22	0°♎		
	12566 Jan 02 18:29	0°♋			12570 Sep 18 23:34	0°♏		
	12566 Feb 20 02:46	0°♌	morning rise		12570 Oct 17 21:59	22°♏45'13		
evening set	12566 Mar 09 11:07	11°♌01'10			12570 Oct 27 05:45	0°♎		
max. Earth dist.	12566 Apr 02 22:45	26°♌50'21	2.62540 AU		12570 Dec 05 17:39	0°♏		
	12566 Apr 07 18:42	0°♋			12571 Jan 16 07:19	0°♏		
					12571 Mar 01 20:30	0°♊		
conjunction	12566 Apr 23 08:21	10°♋17'01	-1°10'11		12571 Apr 20 04:12	0°♋		
minimum elong	12566 Apr 23 08:20	10°♋16'59	1°10'43	desc. node	12571 May 26 05:43	18°♋44'26		
	12566 May 22 13:23	0°♌			12571 Jun 23 05:57	0°♌		
morning rise	12566 Jun 09 03:31	12°♌09'16		retrograde	12571 Jul 28 05:18	6°♌19'20		
	12566 Jul 04 09:53	0°♍			12571 Aug 29 05:08	30°♋♋		
	12566 Aug 14 12:27	0°♎		opposition	12571 Sep 06 15:30	26°♋45'38	-3°18'47	
	12566 Sep 23 06:14	0°♎		greatest brilliancy	12571 Sep 06 17:35	26°♋43'35	-1.3m	
asc. node	12566 Oct 10 10:50	13°♎11'04		min. Earth dist.	12571 Sep 07 21:36	26°♋16'01	0.68296 AU	
	12566 Nov 01 06:47	0°♏		direct	12571 Oct 18 04:01	16°♋48'29		
	12566 Dec 10 13:23	0°♎			12571 Dec 10 10:15	0°♌		
	12567 Jan 20 14:44	0°♏			12572 Feb 05 20:42	0°♋		
	12567 Mar 07 18:55	0°♏			12572 Mar 23 17:34	0°♌		
retrograde	12567 May 19 22:36	26°♏10'50			12572 May 05 02:22	0°♍		
min. Earth dist.	12567 Jun 22 06:21	18°♏48'55	0.58176 AU	asc. node	12572 May 31 13:38	19°♍50'09		
opposition	12567 Jun 28 12:27	16°♏22'49	2°10'48		12572 Jun 13 19:16	0°♎		
greatest brilliancy	12567 Jun 28 01:04	16°♏33'54	-1.7m		12572 Jul 22 01:08	0°♎		
direct	12567 Aug 04 15:42	7°♏57'54		evening set	12572 Aug 10 16:48	15°♎35'29		
desc. node	12567 Aug 21 01:24	9°♏31'06			12572 Aug 28 21:07	0°♏		
	12567 Oct 16 22:32	0°♊			12572 Oct 06 05:51	0°♎		
	12567 Dec 12 13:01	0°♋						
	12568 Feb 01 02:47	0°♌		conjunction	12572 Oct 21 06:26	11°♎30'10	1°06'19	
	12568 Mar 19 09:31	0°♋		minimum elong	12572 Oct 21 06:13	11°♎29'44	1°06'52	
evening set	12568 Apr 15 17:52	18°♋12'23			12572 Nov 14 22:45	0°♏		
max. Earth dist.	12568 May 01 04:34	28°♋46'32	2.52167 AU	max. Earth dist.	12572 Dec 09 21:50	18°♏09'38	2.45371 AU	
	12568 May 02 23:02	0°♌		morning rise	12572 Dec 23 10:19	27°♏45'30		
					12572 Dec 26 14:57	0°♏		
conjunction	12568 Jun 04 16:36	23°♌08'57	-0°50'49		12573 Feb 08 16:34	0°♊		
minimum elong	12568 Jun 04 18:29	23°♌12'22	0°51'43		12573 Mar 27 13:41	0°♋		
	12568 Jun 14 03:10	0°♍		desc. node	12573 Apr 11 21:06	9°♋20'45		
	12568 Jul 24 08:21	0°♎			12573 May 17 11:03	0°♌		
morning rise	12568 Jul 31 23:02	5°♎48'48			12573 Jul 18 14:15	0°♋		
asc. node	12568 Aug 27 00:49	25°♎58'29		retrograde	12573 Sep 02 00:16	9°♋49'14		
	12568 Sep 01 04:35	0°♎		opposition	12573 Oct 10 19:52	1°♋02'23	-4°48'46	
	12568 Oct 09 09:41	0°♏		greatest brilliancy	12573 Oct 11 15:25	0°♋43'34	-1.4m	
	12568 Nov 16 20:33	0°♎			12573 Oct 13 12:35	30°♋♌		
	12568 Dec 26 13:24	0°♏		min. Earth dist.	12573 Oct 15 22:42	29°♌04'14	0.63381 AU	
	12569 Feb 06 19:05	0°♏		direct	12573 Nov 21 04:29	21°♌03'02		
	12569 Mar 25 22:15	0°♊			12574 Jan 01 05:52	0°♋		
	12569 May 30 15:27	0°♋			12574 Feb 27 14:22	0°♌		
retrograde	12569 Jun 24 03:59	3°♋29'22			12574 Apr 13 05:31	0°♍		
desc. node	12569 Jul 08 07:34	2°♋09'48		asc. node	12574 Apr 18 19:33	4°♍00'48		
	12569 Jul 17 03:45	30°♋♋			12574 May 23 15:47	0°♎		
min. Earth dist.	12569 Aug 01 08:16	24°♋32'36	0.66480 AU		12574 Jul 01 05:19	0°♎		
opposition	12569 Aug 03 21:51	23°♋31'32	-0°58'37		12574 Aug 08 08:28	0°♏		
greatest brilliancy	12569 Aug 03 19:08	23°♋34'13	-1.4m		12574 Sep 16 03:04	0°♎		
direct	12569 Sep 13 00:09	14°♋05'20		evening set	12574 Oct 22 10:43	27°♎08'50		
	12569 Nov 12 11:52	0°♋			12574 Oct 26 08:23	0°♏		
	12570 Jan 09 17:11	0°♌			12574 Dec 07 12:36	0°♏		
	12570 Feb 28 00:05	0°♋						
	12570 Apr 13 23:46	0°♌		conjunction	12574 Dec 18 16:58	7°♏42'40	0°37'52	
	12570 May 25 22:41	0°♍		minimum elong	12574 Dec 18 18:35	7°♏45'26	0°38'47	
evening set	12570 Jun 03 01:04	5°♍59'50		max. Earth dist.	12575 Jan 15 10:45	26°♏26'28	2.58172 AU	
max. Earth dist.	12570 Jun 25 13:43	22°♍59'27	2.38682 AU		12575 Jan 20 19:24	0°♊		
	12570 Jul 04 17:00	0°♎		morning rise	12575 Feb 07 02:04	11°♋20'31		
asc. node	12570 Jul 14 16:08	7°♎42'41		desc. node	12575 Feb 27 08:23	24°♋25'14		
					12575 Mar 08 02:33	0°♋		
conjunction	12570 Aug 05 02:50	24°♎29'40	0°15'19		12575 Apr 25 08:00	0°♌		
minimum elong	12570 Aug 05 01:21	24°♎26'44	0°14'41		12575 Jun 15 01:59	0°♋		
behind sun begin	12570 Aug 04 12:51	24°♎02'08			12575 Aug 10 22:59	0°♌		
behind sun end	12570 Aug 05 13:51	24°♎51'20		retrograde	12575 Oct 18 00:51	19°♌38'22		

opposition	12575 Nov 22 13:56	12°II14'05	-4°46'29		12580 Nov 22 05:39	0°≈	
greatest brilliancy	12575 Nov 24 02:12	11°II41'32	-2.0m		12581 Jan 10 00:21	0°✠	
min. Earth dist.	12575 Dec 01 00:30	9°II12'57	0.52050 AU	evening set	12581 Feb 23 15:13	27°✠55'04	
direct	12575 Dec 31 10:57	3°II12'01			12581 Feb 26 22:10	0°Υ	
asc. node	12576 Mar 06 03:56	25°II39'52		max. Earth dist.	12581 Mar 24 15:03	16°Υ25'09	2.65231 AU
	12576 Mar 13 12:57	0°☾					
	12576 Apr 27 09:21	0°Ω		conjunction	12581 Apr 08 19:16	26°Υ14'50	-1°08'13
	12576 Jun 06 17:49	0°♐		minimum elong	12581 Apr 08 18:40	26°Υ13'52	1°08'33
	12576 Jul 16 01:13	0°♊			12581 Apr 14 13:14	0°♋	
	12576 Aug 24 21:32	0°♌		morning rise	12581 May 23 16:56	26°♋01'20	
	12576 Oct 05 04:15	0°♍			12581 May 29 13:52	0°II	
	12576 Nov 17 07:39	0°♎			12581 Jul 11 21:02	0°☾	
evening set	12576 Dec 11 13:16	16°♎18'19			12581 Aug 22 13:03	0°Ω	
	12577 Jan 01 07:04	0°≈			12581 Oct 01 21:04	0°♐	
desc. node	12577 Jan 13 22:11	8°≈14'14		asc. node	12581 Oct 27 07:07	19°♐13'21	
					12581 Nov 10 12:12	0°♊	
conjunction	12577 Jan 28 19:05	17°≈51'22	-0°08'12		12581 Dec 20 13:21	0°♌	
minimum elong	12577 Jan 28 18:50	17°≈50'57	0°07'30		12582 Feb 01 05:12	0°♍	
behind sun begin	12577 Jan 28 01:35	17°≈23'12			12582 Mar 26 15:55	0°♎	
behind sun end	12577 Jan 29 12:04	18°≈18'42		retrograde	12582 May 03 21:59	8°♎57'28	
max. Earth dist.	12577 Feb 08 18:21	24°≈54'01	2.66020 AU	min. Earth dist.	12582 Jun 03 22:09	2°♎24'09	0.53360 AU
	12577 Feb 16 17:48	0°✠		greatest brilliancy	12582 Jun 10 12:03	29°♎54'41	-2.0m
morning rise	12577 Mar 14 14:26	16°✠25'24			12582 Jun 10 06:27	30°♎♎	
	12577 Apr 05 03:16	0°Υ		opposition	12582 Jun 11 10:31	29°♎33'22	3°37'19
	12577 May 23 02:28	0°♋		direct	12582 Jul 16 22:31	21°♎45'18	
	12577 Jul 10 16:25	0°II			12582 Aug 26 04:04	0°♎	
	12577 Aug 29 17:36	0°☾		desc. node	12582 Sep 06 10:44	4°♎21'51	
	12577 Oct 24 06:40	0°Ω			12582 Oct 29 00:33	0°≈	
retrograde	12577 Dec 23 16:42	17°Ω23'19			12582 Dec 20 21:42	0°✠	
asc. node	12578 Jan 22 09:56	12°Ω22'14			12583 Feb 08 08:44	0°Υ	
opposition	12578 Jan 23 03:24	12°Ω09'49	0°03'14		12583 Mar 27 07:39	0°♋	
greatest brilliancy	12578 Jan 23 03:40	12°Ω09'37	-2.9m	evening set	12583 Apr 01 03:28	3°♋10'18	
min. Earth dist.	12578 Jan 28 19:38	10°Ω33'17	0.38619 AU	max. Earth dist.	12583 Apr 19 14:32	15°♋28'10	2.56771 AU
direct	12578 Feb 24 01:59	6°Ω14'29			12583 May 10 22:06	0°II	
	12578 May 01 12:18	0°♐					
	12578 Jun 17 04:51	0°♊		conjunction	12583 May 18 10:20	5°II12'28	-1°03'16
	12578 Jul 30 22:28	0°♌		minimum elong	12583 May 18 11:31	5°II14'32	1°04'04
	12578 Sep 12 22:22	0°♍			12583 Jun 22 07:34	0°☾	
	12578 Oct 28 01:55	0°♎		morning rise	12583 Jul 09 09:31	12°☾29'46	
desc. node	12578 Dec 01 20:00	22°♎33'05			12583 Aug 01 19:56	0°Ω	
	12578 Dec 13 10:32	0°≈			12583 Sep 09 23:13	0°♐	
evening set	12579 Jan 20 01:14	23°≈56'40		asc. node	12583 Sep 13 19:58	3°♐00'04	
	12579 Jan 29 14:37	0°✠			12583 Oct 18 10:06	0°♊	
max. Earth dist.	12579 Mar 03 02:46	20°✠35'08	2.68393 AU		12583 Nov 26 01:53	0°♌	
					12584 Jan 05 01:29	0°♍	
conjunction	12579 Mar 05 15:01	22°✠10'38	-0°46'32		12584 Feb 17 00:54	0°♎	
minimum elong	12579 Mar 05 13:55	22°✠08'53	0°46'18		12584 Apr 07 04:25	0°≈	
	12579 Mar 17 22:52	0°Υ		retrograde	12584 Jun 10 15:26	20°≈03'16	
morning rise	12579 Apr 17 19:27	19°Υ40'47		min. Earth dist.	12584 Jul 17 02:14	11°≈39'26	0.63976 AU
	12579 May 03 20:57	0°♋		opposition	12584 Jul 21 03:08	10°≈03'33	0°08'29
	12579 Jun 18 23:30	0°II		greatest brilliancy	12584 Jul 21 02:41	10°≈03'59	-1.5m
	12579 Aug 03 02:28	0°☾		desc. node	12584 Jul 24 19:27	8°≈36'57	
	12579 Sep 16 07:04	0°Ω		direct	12584 Aug 29 06:16	0°≈56'51	
	12579 Oct 29 22:36	0°♐			12584 Nov 25 07:21	0°✠	
asc. node	12579 Dec 10 11:59	28°♐00'14			12585 Jan 18 04:20	0°Υ	
	12579 Dec 13 13:43	0°♊			12585 Mar 07 10:46	0°♋	
	12580 Feb 05 02:30	0°♌			12585 Apr 21 04:47	0°II	
retrograde	12580 Mar 12 07:16	8°♌24'43		evening set	12585 May 13 07:09	15°II34'06	
min. Earth dist.	12580 Apr 07 01:06	4°♌00'49	0.39894 AU	max. Earth dist.	12585 May 27 05:45	25°II38'18	2.43945 AU
greatest brilliancy	12580 Apr 12 14:46	2°♌19'20	-2.8m		12585 Jun 02 04:48	0°☾	
opposition	12580 Apr 14 05:02	1°♌49'55	6°31'13				
	12580 Apr 20 09:13	30°♌♊		conjunction	12585 Jul 09 01:39	27°☾40'14	-0°15'43
direct	12580 May 14 14:14	26°♊17'38		minimum elong	12585 Jul 09 02:56	27°☾42'43	0°16'35
	12580 Jun 08 07:22	0°♌			12585 Jul 12 02:37	0°Ω	
	12580 Aug 13 03:43	0°♍		asc. node	12585 Jul 31 10:56	14°Ω58'05	
	12580 Oct 03 16:50	0°♎			12585 Aug 19 15:23	0°♐	
desc. node	12580 Oct 19 01:21	9°♎14'02		morning rise	12585 Sep 15 16:08	21°♐21'06	



	12585 Sep 26 14:37	0°♊		asc. node	12591 Mar 23 15:41	27°♊14'29	
	12585 Nov 03 21:22	0°♋			12591 Mar 27 19:01	0°♌	
	12585 Dec 13 09:16	0°♍			12591 May 08 21:01	0°♎	
	12586 Jan 24 01:13	0°♎			12591 Jun 17 04:38	0°♏	
	12586 Mar 10 03:24	0°♐			12591 Jul 25 20:31	0°♑	
	12586 Apr 30 20:13	0°♒			12591 Sep 03 03:34	0°♓	
desc. node	12586 Jun 11 20:51	18°♒07'44			12591 Oct 13 21:50	0°♈	
retrograde	12586 Jul 14 22:09	23°♒56'46		evening set	12591 Nov 24 14:25	29°♈19'31	
opposition	12586 Aug 24 15:15	14°♒11'01 -2°30'07			12591 Nov 25 13:59	0°♉	
min. Earth dist.	12586 Aug 24 09:22	14°♒16'51 0.68394 AU			12592 Jan 09 05:07	0°♊	
greatest brilliancy	12586 Aug 24 13:31	14°♒12'44 -1.3m					
direct	12586 Oct 04 18:43	4°♒22'59		conjunction	12592 Jan 14 12:55	3°♊30'07 0°09'30	
	12586 Dec 24 01:43	0°♓		minimum elong	12592 Jan 14 13:19	3°♊30'46 0°10'21	
	12587 Feb 14 17:05	0°♈		behind sun begin	12592 Jan 13 21:48	3°♊05'19	
	12587 Apr 01 14:20	0°♊		behind sun end	12592 Jan 15 04:50	3°♊56'12	
	12587 May 13 17:27	0°♌		desc. node	12592 Jan 31 15:40	14°♊39'26	
asc. node	12587 Jun 18 06:40	26°♌48'25		max. Earth dist.	12592 Jan 31 13:52	14°♊36'30 2.63589 AU	
	12587 Jun 22 10:02	0°♍			12592 Feb 24 12:25	0°♋	
evening set	12587 Jul 12 13:34	15°♍42'15		morning rise	12592 Feb 29 22:55	3°♋27'51	
	12587 Jul 30 16:29	0°♎			12592 Apr 12 02:31	0°♌	
	12587 Sep 06 11:56	0°♏			12592 May 30 19:57	0°♍	
					12592 Jul 20 07:10	0°♎	
conjunction	12587 Sep 22 12:18	12°♏38'09 0°57'42			12592 Sep 13 16:49	0°♏	
minimum elong	12587 Sep 22 08:50	12°♏31'21 0°57'47		retrograde	12592 Nov 23 18:26	21°♏43'04	
	12587 Oct 14 18:29	0°♐		opposition	12592 Dec 26 05:22	15°♏36'23 -2°46'40	
max. Earth dist.	12587 Nov 15 06:34	23°♐59'41 2.39661 AU		greatest brilliancy	12592 Dec 27 05:36	15°♏16'55 -2.5m	
	12587 Nov 23 07:58	0°♑		min. Earth dist.	12593 Jan 03 12:45	12°♏57'07 0.43339 AU	
morning rise	12587 Dec 01 12:35	6°♑02'47		direct	12593 Jan 30 11:36	8°♏12'35	
	12588 Jan 03 21:05	0°♒		asc. node	12593 Feb 08 00:20	8°♏43'56	
	12588 Feb 16 23:45	0°♓			12593 Apr 03 03:37	0°♑	
	12588 Apr 04 10:08	0°♈			12593 May 19 01:04	0°♒	
desc. node	12588 Apr 28 13:47	14°♈12'39			12593 Jun 29 18:02	0°♓	
	12588 May 27 15:33	0°♉			12593 Aug 10 04:37	0°♔	
retrograde	12588 Aug 18 01:31	26°♉38'26			12593 Sep 21 17:40	0°♕	
opposition	12588 Sep 26 16:22	17°♉30'20 -4°21'00			12593 Nov 04 21:03	0°♖	
greatest brilliancy	12588 Sep 27 04:08	17°♉18'52 -1.3m		desc. node	12593 Dec 18 09:21	28°♖35'14	
min. Earth dist.	12588 Sep 30 07:11	16°♉05'52 0.66106 AU			12593 Dec 20 13:42	0°♗	
direct	12588 Nov 07 07:43	7°♉27'35		evening set	12594 Jan 05 11:07	10°♗14'50	
	12589 Jan 17 21:34	0°♈			12594 Feb 05 09:02	0°♘	
	12589 Mar 09 12:19	0°♊					
	12589 Apr 21 21:11	0°♌		conjunction	12594 Feb 20 00:24	9°♘18'09 -0°33'15	
asc. node	12589 May 05 08:24	9°♌53'27		minimum elong	12594 Feb 19 23:28	9°♘16'40 0°32'49	
	12589 May 31 21:45	0°♍		max. Earth dist.	12594 Feb 22 10:39	10°♘50'34 2.68125 AU	
	12589 Jul 09 06:49	0°♎			12594 Mar 24 15:58	0°♏	
	12589 Aug 16 05:53	0°♏		morning rise	12594 Apr 04 10:54	6°♏50'21	
	12589 Sep 23 19:16	0°♐			12594 May 10 21:12	0°♑	
evening set	12589 Sep 26 14:33	2°♐08'44			12594 Jun 26 16:56	0°♒	
	12589 Nov 02 18:14	0°♑			12594 Aug 12 02:30	0°♓	
					12594 Sep 27 09:52	0°♔	
conjunction	12589 Nov 28 14:44	18°♑41'18 0°53'50			12594 Nov 13 22:57	0°♕	
minimum elong	12589 Nov 28 16:47	18°♑44'56 0°54'42		asc. node	12594 Dec 27 03:34	23°♕53'54	
	12589 Dec 14 15:57	0°♒			12595 Jan 10 09:41	0°♖	
max. Earth dist.	12590 Jan 03 09:57	13°♒37'18 2.53635 AU		retrograde	12595 Feb 12 21:43	6°♒56'01	
morning rise	12590 Jan 21 22:05	26°♒06'10		min. Earth dist.	12595 Mar 12 03:38	2°♒32'18 0.36759 AU	
	12590 Jan 27 18:40	0°♓		opposition	12595 Mar 15 05:31	1°♒42'20 5°25'20	
	12590 Mar 15 03:47	0°♈		greatest brilliancy	12595 Mar 14 13:02	1°♒53'29 -3.0m	
desc. node	12590 Mar 16 02:24	0°♈35'38			12595 Mar 21 17:37	30°♒♎	
	12590 May 03 01:15	0°♉		direct	12595 Apr 13 07:21	26°♒50'20	
	12590 Jun 25 01:48	0°♊			12595 May 05 17:08	0°♓	
	12590 Sep 04 12:43	0°♋			12595 Jul 08 21:29	0°♔	
retrograde	12590 Sep 28 09:37	3°♋05'13			12595 Aug 27 06:37	0°♕	
	12590 Oct 20 15:49	30°♋♌			12595 Oct 14 03:25	0°♖	
opposition	12590 Nov 04 11:33	25°♌02'41 -5°05'01		desc. node	12595 Nov 05 11:52	14°♌00'44	
greatest brilliancy	12590 Nov 05 19:19	24°♌33'03 -1.7m			12595 Dec 01 01:18	0°♗	
min. Earth dist.	12590 Nov 11 19:55	22°♌18'38 0.57150 AU			12596 Jan 18 01:13	0°♘	
direct	12590 Dec 14 17:04	15°♌26'48		evening set	12596 Feb 10 22:11	14°♌59'23	
	12591 Feb 04 22:49	0°♊			12596 Mar 05 15:56	0°♉	

max. Earth dist.	12596 Mar 15 19:05	6°♈26'52	2.67130 AU		12601 Mar 20 06:57	0°♊
					12601 May 16 05:26	0°♋
conjunction	12596 Mar 25 21:07	12°♈53'56	-1°02'20	desc. node	12601 Jun 29 10:16	11°♋18'40
minimum elong	12596 Mar 25 20:10	12°♈52'24	1°02'27	retrograde	12601 Jul 02 18:22	11°♋22'52
	12596 Apr 21 08:26	0°♌		min. Earth dist.	12601 Aug 10 19:28	2°♋09'43 0.67436 AU
morning rise	12596 May 08 15:32	11°♌19'32		opposition	12601 Aug 12 13:11	1°♋28'22 -1°34'38
	12596 Jun 05 17:10	0°♍		greatest brilliancy	12601 Aug 12 09:59	1°♋31'32 -1.3m
	12596 Jul 19 13:57	0°♎			12601 Aug 16 06:53	30°♋
	12596 Aug 30 23:24	0°♏		direct	12601 Sep 22 01:45	21°♋53'13
	12596 Oct 11 03:31	0°♐			12601 Nov 01 21:12	0°♋
asc. node	12596 Nov 13 01:33	24°♐19'14			12602 Jan 04 13:02	0°♌
	12596 Nov 20 18:21	0°♑				
	12597 Jan 01 08:40	0°♒				
	12597 Feb 17 09:18	0°♓				
retrograde	12597 Apr 15 20:56	18°♓51'44				
min. Earth dist.	12597 May 14 11:15	13°♓12'26	0.47990 AU			
greatest brilliancy	12597 May 21 08:42	10°♓43'46	-2.3m			
opposition	12597 May 22 19:18	10°♓12'34	5°05'28			
direct	12597 Jun 25 08:09	3°♓11'11				
	12597 Sep 14 07:06	0°♐				
desc. node	12597 Sep 22 20:35	4°♐26'15				
	12597 Nov 07 22:41	0°♑				
	12597 Dec 28 16:39	0°♒				
	12598 Feb 15 09:23	0°♓				
evening set	12598 Mar 17 12:07	19°♓10'03				
	12598 Apr 03 03:55	0°♌				
max. Earth dist.	12598 Apr 08 17:39	3°♌39'49	2.60720 AU			
conjunction	12598 May 02 00:38	19°♌11'55	-1°09'15			
minimum elong	12598 May 02 01:01	19°♌12'34	1°09'54			
	12598 May 17 21:27	0°♍				
morning rise	12598 Jun 19 07:11	22°♍38'18				
	12598 Jun 29 14:22	0°♎				
	12598 Aug 09 11:56	0°♏				
	12598 Sep 18 00:16	0°♐				
asc. node	12598 Sep 30 17:52	9°♐49'12				
	12598 Oct 26 18:55	0°♑				
	12598 Dec 04 18:16	0°♒				
	12599 Jan 14 06:08	0°♓				
	12599 Feb 27 16:33	0°♐				
	12599 Apr 27 22:27	0°♑				
retrograde	12599 May 28 11:58	5°♑36'18				
	12599 Jun 26 06:23	30°♑				
min. Earth dist.	12599 Jul 01 23:57	27°♑50'29	0.60500 AU			
opposition	12599 Jul 07 11:35	25°♑41'17	1°23'28			
greatest brilliancy	12599 Jul 07 05:11	25°♑47'33	-1.6m			
desc. node	12599 Aug 11 05:46	17°♑03'11				
direct	12599 Aug 14 09:41	16°♑59'25				
	12599 Oct 06 17:45	0°♒				
	12599 Dec 06 11:06	0°♓				
	12600 Jan 27 00:12	0°♌				
	12600 Mar 15 14:55	0°♌				
evening set	12600 Apr 26 05:00	27°♌53'18				
	12600 Apr 29 06:19	0°♍				
max. Earth dist.	12600 May 10 09:40	7°♍46'26	2.49357 AU			
	12600 Jun 10 09:26	0°♎				
conjunction	12600 Jun 17 03:23	4°♎57'14	-0°40'18			
minimum elong	12600 Jun 17 05:27	5°♎01'01	0°41'13			
	12600 Jul 20 12:21	0°♏				
morning rise	12600 Aug 17 03:32	21°♏19'14				
asc. node	12600 Aug 18 06:26	22°♏11'36				
	12600 Aug 28 06:11	0°♐				
	12600 Oct 05 09:02	0°♑				
	12600 Nov 12 17:48	0°♒				
	12600 Dec 22 07:33	0°♓				
	12601 Feb 02 05:19	0°♐				