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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| superior conj | 10601 Jul 25 20:07 | 11°Ω34'05 | -0°37'00 | evening set | 10603 Dec 12 05:26 | 2°З41'57 | |
| minimum elong | 10601 Jul 26 04:41 | 12°Ω00'53 | 0°37'03 | inferior conj | 10603 Dec 15 20:06 | 0°З27'50 | -7°59'03 |
| max. Earth dist. | 10601 Jul 28 12:27 | 14°Ω55'11 | 1.71754 AU | minimum elong | 10603 Dec 16 03:38 | 0°З16'01 | 7°57'37 |
| | 10601 Aug 09 14:15 | 0°൬ | | min. Earth dist. | 10603 Dec 16 05:19 | 0°З13'23 | 0.29003 AU |
| asc. node | 10601 Aug 10 11:45 | 1°൬07'05 | | | 10603 Dec 16 13:51 | 30°Rꠤ | |
| evening rise | 10601 Sep 02 20:56 | 0°Δ13'00 | | morning rise | 10603 Dec 20 01:45 | 27°ꠤ51'14 | |
| | 10601 Sep 02 16:45 | 0°Δ | | direct | 10604 Jan 06 07:21 | 22°ꠤ10'41 | |
| | 10601 Sep 26 22:31 | 0°ℓ | | greatest brilliancy | 10604 Jan 17 03:11 | 24°ꠤ19'24 | -4.8m |
| | 10601 Oct 21 08:55 | 0°ꠤ | | asc. node | 10604 Jan 26 10:58 | 28°ꠤ59'11 | |
| | 10601 Nov 15 02:03 | 0°З | | | 10604 Jan 28 01:47 | 0°З | |
| desc. node | 10601 Nov 30 06:21 | 18°З12'27 | | morning max el | 10604 Feb 24 20:20 | 23°З25'11 | 46°05'35 |
| | 10601 Dec 10 04:21 | 0°≈ | | | 10604 Mar 02 09:04 | 0°≈ | |
| | 10602 Jan 04 19:01 | 0°ꠤ | | | 10604 Mar 29 20:56 | 0°ꠤ | |
| | 10602 Jan 31 05:28 | 0°Υ | | | 10604 Apr 24 13:24 | 0°Υ | |
| | 10602 Feb 28 13:45 | 0°ꠤ | | desc. node | 10604 May 17 06:55 | 27°Υ24'33 | |
| evening max el | 10602 Feb 28 22:14 | 0°ꠤ20'59 | 46°26'41 | | 10604 May 19 09:55 | 0°ꠤ | |
| asc. node | 10602 Mar 23 06:12 | 20°ꠤ12'51 | | | 10604 Jun 12 19:45 | 0°Π | |
| | 10602 Apr 08 15:27 | 0°Π | | | 10604 Jul 07 00:12 | 0°☾ | |
| greatest brilliancy | 10602 Apr 10 06:42 | 0°Π36'50 | -4.9m | | 10604 Jul 31 02:52 | 0°Ω | |
| retrograde | 10602 Apr 19 22:08 | 2°Π22'30 | | | 10604 Aug 24 05:50 | 0°൬ | |
| | 10602 Apr 30 17:50 | 30°Rꠤ | | morning set | 10604 Aug 28 09:04 | 5°൬08'07 | |
| evening set | 10602 May 07 15:15 | 26°ꠤ23'11 | | asc. node | 10604 Sep 07 00:48 | 17°൬07'29 | |
| inferior conj | 10602 May 10 14:56 | 24°ꠤ34'00 | 9°00'39 | | 10604 Sep 17 09:53 | 0°Δ | |
| minimum elong | 10602 May 10 10:05 | 24°ꠤ41'29 | 8°59'54 | | | | |
| min. Earth dist. | 10602 May 10 16:02 | 24°ꠤ32'20 | 0.27242 AU | superior conj | 10604 Oct 05 11:27 | 22°Δ22'59 | 1°01'55 |
| morning rise | 10602 May 13 04:52 | 22°ꠤ59'11 | | minimum elong | 10604 Oct 05 01:35 | 21°Δ52'26 | 1°01'43 |
| direct | 10602 May 31 07:43 | 16°ꠤ41'59 | | max. Earth dist. | 10604 Oct 07 07:49 | 24°Δ40'21 | 1.72846 AU |
| greatest brilliancy | 10602 Jun 10 03:25 | 18°ꠤ31'06 | -4.9m | | 10604 Oct 11 15:07 | 0°ℓ | |
| | 10602 Jun 29 09:36 | 0°Π | | | 10604 Nov 04 21:56 | 0°ꠤ | |
| desc. node | 10602 Jul 13 04:46 | 12°Π01'31 | | evening rise | 10604 Nov 11 06:19 | 7°ꠤ49'37 | |
| morning max el | 10602 Jul 20 18:13 | 19°Π23'15 | 46°51'57 | | 10604 Nov 29 07:08 | 0°З | |
| | 10602 Jul 31 00:56 | 0°☾ | | | 10604 Dec 23 19:33 | 0°≈ | |
| | 10602 Aug 27 03:49 | 0°Ω | | desc. node | 10604 Dec 27 18:02 | 4°≈47'59 | |
| | 10602 Sep 21 23:56 | 0°൬ | | | 10605 Jan 17 11:27 | 0°ꠤ | |
| | 10602 Oct 17 06:30 | 0°Δ | | | 10605 Feb 11 06:56 | 0°Υ | |
| asc. node | 10602 Nov 03 01:20 | 20°Δ09'49 | | | 10605 Mar 08 07:39 | 0°ꠤ | |
| | 10602 Nov 11 04:46 | 0°ℓ | | | 10605 Apr 02 19:47 | 0°Π | |
| | 10602 Dec 05 20:47 | 0°ꠤ | | asc. node | 10605 Apr 19 16:35 | 19°Π12'25 | |
| | 10602 Dec 30 08:09 | 0°З | | | 10605 Apr 29 12:25 | 0°☾ | |
| morning set | 10603 Jan 17 07:42 | 22°З08'52 | | evening max el | 10605 May 13 02:45 | 14°☾12'44 | 46°53'29 |
| | 10603 Jan 23 16:20 | 0°≈ | | | 10605 May 30 00:50 | 0°Ω | |
| | 10603 Feb 16 22:12 | 0°ꠤ | | greatest brilliancy | 10605 Jun 22 06:22 | 14°Ω54'24 | -4.9m |
| max. Earth dist. | 10603 Feb 21 15:35 | 5°ꠤ51'34 | 1.72493 AU | retrograde | 10605 Jul 02 11:56 | 16°Ω51'57 | |
| desc. node | 10603 Feb 22 17:21 | 7°ꠤ11'33 | | evening set | 10605 Jul 17 23:04 | 12°Ω09'44 | |
| | | | | inferior conj | 10605 Jul 23 05:54 | 9°Ω00'49 | 4°19'19 |
| superior conj | 10603 Feb 24 07:27 | 9°ꠤ09'44 | -0°03'53 | minimum elong | 10605 Jul 23 14:57 | 8°Ω46'57 | 4°16'15 |
| minimum elong | 10603 Feb 24 06:34 | 9°ꠤ07'02 | 0°03'36 | min. Earth dist. | 10605 Jul 23 06:14 | 9°Ω00'18 | 0.27156 AU |
| behind sun begin | 10603 Feb 23 06:45 | 7°ꠤ53'06 | | morning rise | 10605 Jul 29 07:12 | 5°Ω27'48 | |
| behind sun end | 10603 Feb 25 06:24 | 10°ꠤ20'59 | | desc. node | 10605 Aug 09 15:31 | 1°Ω27'54 | |
| | 10603 Mar 13 01:49 | 0°Υ | | direct | 10605 Aug 13 00:42 | 1°Ω14'05 | |
| evening rise | 10603 Apr 04 10:04 | 27°Υ51'29 | | greatest brilliancy | 10605 Aug 22 21:02 | 3°Ω02'25 | -4.8m |
| | 10603 Apr 06 03:13 | 0°ꠤ | | | 10605 Sep 29 03:38 | 0°൬ | |
| | 10603 Apr 30 03:13 | 0°Π | | morning max el | 10605 Oct 01 13:10 | 2°൬18'26 | 46°08'26 |
| | 10603 May 24 03:40 | 0°☾ | | | 10605 Oct 28 04:56 | 0°Δ | |
| asc. node | 10603 Jun 15 12:55 | 27°☾48'58 | | | 10605 Nov 23 21:34 | 0°ℓ | |
| | 10603 Jun 17 07:17 | 0°Ω | | asc. node | 10605 Nov 30 14:00 | 7°ℓ44'01 | |
| | 10603 Jul 11 17:21 | 0°൬ | | | 10605 Dec 19 12:50 | 0°ꠤ | |
| | 10603 Aug 05 14:36 | 0°Δ | | | 10606 Jan 13 13:12 | 0°З | |
| | 10603 Aug 31 08:20 | 0°ℓ | | | 10606 Feb 07 04:09 | 0°≈ | |
| | 10603 Sep 27 22:18 | 0°ꠤ | | | 10606 Mar 03 12:55 | 0°ꠤ | |
| desc. node | 10603 Oct 05 10:32 | 7°ꠤ31'33 | | desc. node | 10606 Mar 22 06:37 | 23°ꠤ14'00 | |
| evening max el | 10603 Oct 06 06:32 | 8°ꠤ20'12 | 45°55'09 | | 10606 Mar 27 17:07 | 0°Υ | |
| | 10603 Nov 01 01:03 | 0°З | | morning set | 10606 Mar 29 22:02 | 2°Υ44'50 | |
| greatest brilliancy | 10603 Nov 14 07:52 | 6°З53'09 | -4.7m | | 10606 Apr 20 17:38 | 0°ꠤ | |
| retrograde | 10603 Nov 24 08:56 | 8°З43'02 | | max. Earth dist. | 10606 May 07 10:53 | 20°ꠤ57'55 | 1.71391 AU |




































































































































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|---------------------|--------------------|----------------------|------------|---------------------|--|--------------------|-----------------------|------------|
| superior conj | 10606 May 09 06:01 | 23° J 13'19 | -1°25'18 | | | 10608 Nov 28 19:15 | 0° M | |
| minimum elong | 10606 May 09 00:29 | 22° J 55'57 | 1°25'38 | morning max el | | 10608 Dec 12 08:52 | 12° M 13'21 | 45°41'45 |
| | 10606 May 14 15:32 | 0° II | | asc. node | | 10608 Dec 28 01:49 | 28° M 04'20 | |
| | 10606 Jun 07 12:35 | 0° G | | | | 10608 Dec 29 21:41 | 0° J | |
| evening rise | 10606 Jun 18 15:50 | 13° G 58'34 | | | | 10609 Jan 25 23:53 | 0° Z | |
| | 10606 Jul 01 10:48 | 0° Q | | | | 10609 Feb 20 15:14 | 0° \approx | |
| asc. node | 10606 Jul 13 00:57 | 14° Q 28'36 | | | | 10609 Mar 17 13:00 | 0° H | |
| | 10606 Jul 25 12:08 | 0° M | | | | 10609 Apr 11 00:20 | 0° Y | |
| | 10606 Aug 18 18:19 | 0° L | | desc. node | | 10609 Apr 18 19:53 | 9° Y 39'43 | |
| | 10606 Sep 12 07:43 | 0° M | | | | 10609 May 05 04:46 | 0° B | |
| | 10606 Oct 07 08:37 | 0° J | | | | 10609 May 29 04:45 | 0° II | |
| desc. node | 10606 Nov 01 21:09 | 29° J 38'28 | | morning set | | 10609 Jun 13 14:06 | 19° II 17'58 | |
| | 10606 Nov 02 04:44 | 0° Z | | | | 10609 Jun 22 02:42 | 0° G | |
| | 10606 Nov 29 12:27 | 0° \approx | | | | 10609 Jul 16 00:50 | 0° Q | |
| evening max el | 10606 Dec 16 13:41 | 17° \approx 12'08 | 45°51'20 | | | | | |
| | 10606 Dec 30 19:08 | 0° H | | superior conj | | 10609 Jul 23 09:07 | 9° Q 11'47 | -0°40'23 |
| greatest brilliancy | 10607 Jan 24 17:29 | 15° H 34'08 | -4.8m | minimum elong | | 10609 Jul 23 18:19 | 9° Q 40'34 | 0°40'25 |
| retrograde | 10607 Feb 03 10:39 | 17° H 17'42 | | max. Earth dist. | | 10609 Jul 25 22:26 | 12° Q 23'33 | 1.71717 AU |
| evening set | 10607 Feb 18 03:48 | 13° H 05'41 | | | | 10609 Aug 09 00:44 | 0° M | |
| asc. node | 10607 Feb 22 21:46 | 10° H 19'03 | | asc. node | | 10609 Aug 09 13:39 | 0° M 40'16 | |
| inferior conj | 10607 Feb 24 11:04 | 9° H 21'10 | 0°23'31 | evening rise | | 10609 Aug 31 12:14 | 27° M 58'56 | |
| minimum elong | 10607 Feb 24 10:09 | 9° H 22'35 | 0°23'28 | | | 10609 Sep 02 03:14 | 0° L | |
| min. Earth dist. | 10607 Feb 24 20:44 | 9° H 06'06 | 0.27796 AU | | | 10609 Sep 26 09:07 | 0° M | |
| morning rise | 10607 Mar 02 15:54 | 5° H 38'31 | | | | 10609 Oct 20 19:45 | 0° J | |
| direct | 10607 Mar 17 12:56 | 1° H 17'17 | | | | 10609 Nov 14 13:19 | 0° Z | |
| greatest brilliancy | 10607 Mar 28 05:14 | 3° H 24'32 | -4.8m | desc. node | | 10609 Nov 29 08:13 | 17° Z 43'18 | |
| | 10607 May 02 23:44 | 0° Y | | | | 10609 Dec 09 16:21 | 0° \approx | |
| morning max el | 10607 May 06 19:38 | 3° Y 47'30 | 46°49'16 | | | 10610 Jan 04 08:20 | 0° H | |
| | 10607 May 31 07:29 | 0° B | | | | 10610 Jan 30 21:23 | 0° Y | |
| desc. node | 10607 Jun 14 19:15 | 16° B 33'31 | | evening max el | | 10610 Feb 26 12:07 | 28° Y 01'06 | 46°25'20 |
| | 10607 Jun 26 06:39 | 0° II | | | | 10610 Feb 28 12:40 | 0° B | |
| | 10607 Jul 21 08:01 | 0° G | | asc. node | | 10610 Mar 22 08:16 | 18° B 58'42 | |
| | 10607 Aug 15 00:08 | 0° Q | | greatest brilliancy | | 10610 Apr 07 18:34 | 28° B 11'51 | -4.9m |
| | 10607 Sep 08 12:36 | 0° M | | retrograde | | 10610 Apr 17 11:35 | 29° B 58'47 | |
| | 10607 Oct 02 23:26 | 0° L | | evening set | | 10610 May 05 00:23 | 24° B 04'41 | |
| asc. node | 10607 Oct 05 14:12 | 3° L 12'51 | | inferior conj | | 10610 May 08 03:56 | 22° B 09'48 | 8°54'50 |
| | 10607 Oct 27 08:54 | 0° M | | minimum elong | | 10610 May 07 22:14 | 22° B 18'35 | 8°53'58 |
| morning set | 10607 Nov 07 09:54 | 13° M 36'12 | | min. Earth dist. | | 10610 May 08 04:17 | 22° B 09'15 | 0.27252 AU |
| | 10607 Nov 20 17:08 | 0° J | | morning rise | | 10610 May 10 20:02 | 20° B 31'51 | |
| | | | | direct | | 10610 May 28 21:19 | 14° B 17'28 | |
| superior conj | 10607 Dec 14 01:08 | 28° J 47'07 | 1°19'50 | greatest brilliancy | | 10610 Jun 07 16:17 | 16° B 06'32 | -4.9m |
| minimum elong | 10607 Dec 14 07:50 | 29° J 07'47 | 1°20'15 | | | 10610 Jun 29 22:17 | 0° II | |
| max. Earth dist. | 10607 Dec 13 22:28 | 28° J 38'55 | 1.73217 AU | desc. node | | 10610 Jul 12 06:37 | 11° II 04'58 | |
| | 10607 Dec 15 00:46 | 0° Z | | morning max el | | 10610 Jul 18 08:53 | 17° II 03'30 | 46°53'03 |
| | 10608 Jan 08 08:32 | 0° \approx | | | | 10610 Jul 30 19:54 | 0° G | |
| evening rise | 10608 Jan 20 10:42 | 14° \approx 54'17 | | | | 10610 Aug 26 18:32 | 0° Q | |
| desc. node | 10608 Jan 25 06:21 | 20° \approx 50'40 | | | | 10610 Sep 21 12:44 | 0° M | |
| | 10608 Feb 01 16:33 | 0° H | | | | 10610 Oct 16 18:14 | 0° L | |
| | 10608 Feb 26 00:23 | 0° Y | | asc. node | | 10610 Nov 02 03:14 | 19° L 41'29 | |
| | 10608 Mar 21 07:50 | 0° B | | | | 10610 Nov 10 15:52 | 0° M | |
| | 10608 Apr 14 16:17 | 0° II | | | | 10610 Dec 05 07:31 | 0° J | |
| | 10608 May 09 05:17 | 0° G | | | | 10610 Dec 29 18:42 | 0° Z | |
| asc. node | 10608 May 17 03:27 | 9° G 35'15 | | morning set | | 10611 Jan 15 00:24 | 20° Z 00'07 | |
| | 10608 Jun 03 05:13 | 0° Q | | | | 10611 Jan 23 02:48 | 0° \approx | |
| | 10608 Jun 29 04:20 | 0° M | | | | 10611 Feb 16 08:39 | 0° H | |
| evening max el | 10608 Jul 23 23:59 | 26° M 30'11 | 46°32'44 | max. Earth dist. | | 10611 Feb 19 09:16 | 3° H 45'08 | 1.72530 AU |
| | 10608 Jul 27 13:03 | 0° L | | | | | | |
| greatest brilliancy | 10608 Sep 01 01:07 | 26° L 24'13 | -4.8m | superior conj | | 10611 Feb 21 21:48 | 6° H 52'50 | -0°00'15 |
| desc. node | 10608 Sep 06 02:12 | 27° L 57'47 | | minimum elong | | 10611 Feb 21 21:48 | 6° H 52'53 | 0°00'00 |
| retrograde | 10608 Sep 12 01:37 | 28° L 38'55 | | behind sun begin | | 10611 Feb 21 18:44 | 6° H 43'20 | |
| evening set | 10608 Sep 27 22:55 | 23° L 46'38 | | behind sun end | | 10611 Feb 22 00:53 | 7° H 02'26 | |
| min. Earth dist. | 10608 Oct 02 15:13 | 20° L 57'53 | 0.28390 AU | desc. node | | 10611 Feb 21 19:20 | 6° H 45'10 | |
| inferior conj | 10608 Oct 03 10:44 | 20° L 27'28 | -6°07'42 | | | 10611 Mar 12 12:20 | 0° Y | |
| minimum elong | 10608 Oct 03 00:29 | 20° L 43'27 | 6°05'20 | evening rise | | 10611 Apr 01 23:13 | 25° Y 29'34 | |
| morning rise | 10608 Oct 08 02:27 | 17° L 37'38 | | | | 10611 Apr 05 13:52 | 0° B | |
| direct | 10608 Oct 24 15:32 | 12° L 25'14 | | | | 10611 Apr 29 14:02 | 0° II | |
| greatest brilliancy | 10608 Nov 03 07:28 | 14° L 06'13 | -4.7m | | | 10611 May 23 14:44 | 0° G | |

| | | | | | | | | |
|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|--|
| asc. node | 10611 Jun 14 14:46 | 27°☿19'38 | | | 10613 Nov 23 10:55 | 0°♊ | | |
| | 10611 Jun 16 18:39 | 0°♊ | | asc. node | 10613 Nov 29 15:52 | 7°♊11'50 | | |
| | 10611 Jul 11 05:11 | 0°♊ | | | 10613 Dec 19 00:52 | 0°♊ | | |
| | 10611 Aug 05 03:18 | 0°♊ | | | 10614 Jan 13 00:33 | 0°♊ | | |
| | 10611 Aug 30 22:49 | 0°♊ | | | 10614 Feb 06 15:08 | 0°♊ | | |
| | 10611 Sep 27 17:27 | 0°♊ | | | 10614 Mar 02 23:44 | 0°♊ | | |
| evening max el | 10611 Oct 03 22:47 | 6°♊10'52 | 45°56'03 | desc. node | 10614 Mar 21 08:35 | 22°♊46'36 | | |
| desc. node | 10611 Oct 04 12:36 | 6°♊44'23 | | morning set | 10614 Mar 27 10:27 | 0°♊20'26 | | |
| | 10611 Nov 02 02:44 | 0°♊ | | | 10614 Mar 27 03:53 | 0°♊ | | |
| greatest brilliancy | 10611 Nov 11 22:31 | 4°♊43'14 | -4.7m | | 10614 Apr 20 04:24 | 0°♊ | | |
| retrograde | 10611 Nov 22 01:10 | 6°♊34'04 | | max. Earth dist. | 10614 May 04 14:35 | 18°♊05'11 | 1.71414 AU | |
| evening set | 10611 Dec 09 23:42 | 0°♊29'36 | | | | | | |
| | 10611 Dec 10 19:08 | 30°♊♊ | | superior conj | 10614 May 06 17:35 | 20°♊45'11 | -1°24'17 | |
| inferior conj | 10611 Dec 13 12:16 | 28°♊18'24 | -8°06'38 | minimum elong | 10614 May 06 11:07 | 20°♊24'55 | 1°24'36 | |
| minimum elong | 10611 Dec 13 19:16 | 28°♊07'25 | 8°05'20 | | 10614 May 14 02:19 | 0°♊ | | |
| min. Earth dist. | 10611 Dec 13 20:07 | 28°♊06'05 | 0.29025 AU | | 10614 Jun 06 23:23 | 0°♊ | | |
| morning rise | 10611 Dec 17 14:48 | 25°♊46'24 | | evening rise | 10614 Jun 16 02:40 | 11°♊28'01 | | |
| direct | 10612 Jan 04 00:16 | 20°♊01'27 | | | 10614 Jun 30 21:41 | 0°♊ | | |
| greatest brilliancy | 10612 Jan 14 17:54 | 22°♊08'17 | -4.8m | asc. node | 10614 Jul 12 02:53 | 14°♊00'32 | | |
| asc. node | 10612 Jan 25 12:58 | 27°♊42'12 | | | 10614 Jul 24 23:10 | 0°♊ | | |
| | 10612 Jan 28 23:08 | 0°♊ | | | 10614 Aug 18 05:36 | 0°♊ | | |
| morning max el | 10612 Feb 22 12:10 | 21°♊13'12 | 46°04'01 | | 10614 Sep 11 19:26 | 0°♊ | | |
| | 10612 Mar 02 04:07 | 0°♊ | | | 10614 Oct 06 21:08 | 0°♊ | | |
| | 10612 Mar 29 11:31 | 0°♊ | | desc. node | 10614 Oct 31 23:04 | 29°♊04'05 | | |
| | 10612 Apr 24 02:14 | 0°♊ | | | 10614 Nov 01 18:49 | 0°♊ | | |
| desc. node | 10612 May 16 08:50 | 26°♊53'46 | | | 10614 Nov 29 06:16 | 0°♊ | | |
| | 10612 May 18 21:52 | 0°♊ | | evening max el | 10614 Dec 14 03:08 | 14°♊55'04 | 45°50'46 | |
| | 10612 Jun 12 07:12 | 0°♊ | | | 10614 Dec 31 03:58 | 0°♊ | | |
| | 10612 Jul 06 11:20 | 0°♊ | | greatest brilliancy | 10615 Jan 22 08:19 | 13°♊18'38 | -4.8m | |
| | 10612 Jul 30 13:44 | 0°♊ | | retrograde | 10615 Feb 01 00:30 | 15°♊01'44 | | |
| | 10612 Aug 23 16:31 | 0°♊ | | evening set | 10615 Feb 15 19:04 | 10°♊48'03 | | |
| morning set | 10612 Aug 25 23:49 | 2°♊51'46 | | asc. node | 10615 Feb 21 23:49 | 7°♊07'35 | | |
| asc. node | 10612 Sep 06 02:50 | 16°♊40'51 | | inferior conj | 10615 Feb 22 01:44 | 7°♊04'36 | 0°01'12 | |
| | 10612 Sep 16 20:25 | 0°♊ | | minimum elong | 10615 Feb 22 01:40 | 7°♊04'42 | 0°01'27 | |
| | | | | transit middle | 10615 Feb 22 01:40 | 7°♊04'42 | 0°01'27 | |
| superior conj | 10612 Oct 03 03:47 | 20°♊12'31 | 0°59'30 | transit begin | 10615 Feb 21 21:38 | 7°♊10'59 | | |
| minimum elong | 10612 Oct 02 17:55 | 19°♊41'58 | 0°59'17 | transit end | 10615 Feb 22 05:43 | 6°♊58'24 | | |
| max. Earth dist. | 10612 Oct 05 03:57 | 22°♊41'41 | 1.72812 AU | min. Earth dist. | 10615 Feb 22 12:27 | 6°♊47'55 | 0.27837 AU | |
| | 10612 Oct 11 01:35 | 0°♊ | | morning rise | 10615 Feb 28 07:35 | 3°♊20'25 | | |
| | 10612 Nov 04 08:24 | 0°♊ | | | 10615 Mar 08 02:59 | 30°♊♊ | | |
| evening rise | 10612 Nov 08 23:30 | 5°♊42'26 | | direct | 10615 Mar 15 03:26 | 28°♊59'49 | | |
| | 10612 Nov 28 17:43 | 0°♊ | | | 10615 Mar 22 09:31 | 0°♊ | | |
| | 10612 Dec 23 06:24 | 0°♊ | | greatest brilliancy | 10615 Mar 25 21:57 | 1°♊08'52 | -4.8m | |
| desc. node | 10612 Dec 26 19:56 | 4°♊20'32 | | | 10615 May 02 22:57 | 0°♊ | | |
| | 10613 Jan 16 22:44 | 0°♊ | | morning max el | 10615 May 04 09:37 | 1°♊26'31 | 46°48'08 | |
| | 10613 Feb 10 18:52 | 0°♊ | | | 10615 May 30 23:47 | 0°♊ | | |
| | 10613 Mar 07 20:36 | 0°♊ | | desc. node | 10615 Jun 13 21:09 | 15°♊56'13 | | |
| | 10613 Apr 02 10:30 | 0°♊ | | | 10615 Jun 25 20:30 | 0°♊ | | |
| asc. node | 10613 Apr 18 18:34 | 18°♊31'23 | | | 10615 Jul 20 20:38 | 0°♊ | | |
| | 10613 Apr 29 07:07 | 0°♊ | | | 10615 Aug 14 12:01 | 0°♊ | | |
| evening max el | 10613 May 10 16:32 | 11°♊50'23 | 46°53'13 | | 10615 Sep 07 24:00 | 0°♊ | | |
| | 10613 May 30 11:38 | 0°♊ | | | 10615 Oct 02 10:29 | 0°♊ | | |
| greatest brilliancy | 10613 Jun 19 21:21 | 12°♊32'46 | -4.9m | asc. node | 10615 Oct 04 16:03 | 2°♊44'39 | | |
| retrograde | 10613 Jun 30 01:05 | 14°♊28'28 | | | 10615 Oct 26 19:43 | 0°♊ | | |
| evening set | 10613 Jul 15 15:18 | 9°♊42'51 | | morning set | 10615 Nov 05 02:35 | 11°♊26'31 | | |
| inferior conj | 10613 Jul 20 19:04 | 6°♊38'02 | 4°40'20 | | 10615 Nov 20 03:49 | 0°♊ | | |
| minimum elong | 10613 Jul 21 04:38 | 6°♊23'19 | 4°37'10 | | | | | |
| min. Earth dist. | 10613 Jul 20 20:21 | 6°♊36'03 | 0.27141 AU | superior conj | 10615 Dec 11 18:24 | 26°♊39'27 | 1°21'01 | |
| morning rise | 10613 Jul 26 18:18 | 3°♊07'24 | | minimum elong | 10615 Dec 12 00:32 | 26°♊58'23 | 1°21'27 | |
| | 10613 Aug 03 00:51 | 30°♊♊ | | max. Earth dist. | 10615 Dec 11 16:27 | 26°♊33'27 | 1.73221 AU | |
| desc. node | 10613 Aug 08 17:39 | 28°♊55'33 | | | 10615 Dec 14 11:26 | 0°♊ | | |
| direct | 10613 Aug 10 13:42 | 28°♊51'31 | | | 10616 Jan 07 19:15 | 0°♊ | | |
| | 10613 Aug 18 08:17 | 0°♊ | | evening rise | 10616 Jan 18 02:47 | 12°♊42'44 | | |
| greatest brilliancy | 10613 Aug 20 10:15 | 0°♊39'46 | -4.8m | desc. node | 10616 Jan 24 08:22 | 20°♊23'35 | | |
| morning max el | 10613 Sep 29 02:13 | 29°♊57'47 | 46°10'00 | | 10616 Feb 01 03:26 | 0°♊ | | |
| | 10613 Sep 29 03:08 | 0°♊ | | | 10616 Feb 25 11:29 | 0°♊ | | |
| | 10613 Oct 27 20:59 | 0°♊ | | | 10616 Mar 20 19:17 | 0°♊ | | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|--|
| | 10616 Apr 14 04:12 | 0°♄ | | | 10618 Dec 04 18:42 | 0°♁ | | |
| | 10616 May 08 17:57 | 0°♅ | | | 10618 Dec 29 05:40 | 0°♄ | | |
| asc. node | 10616 May 16 05:16 | 9°♅01'40 | | morning set | 10619 Jan 12 16:59 | 17°♄49'37 | | |
| | 10616 Jun 02 19:10 | 0°♄ | | | 10619 Jan 22 13:42 | 0°♁ | | |
| | 10616 Jun 28 20:51 | 0°♅ | | | 10619 Feb 15 19:33 | 0°♁ | | |
| evening max el | 10616 Jul 21 14:14 | 24°♅10'36 | 46°34'08 | max. Earth dist. | 10619 Feb 17 00:45 | 1°♁30'30 | 1.72565 AU | |
| | 10616 Jul 27 13:10 | 0°♄ | | | | | | |
| greatest brilliancy | 10616 Aug 29 16:05 | 24°♄08'10 | -4.8m | superior conj | 10619 Feb 19 12:15 | 4°♁34'57 | 0°03'22 | |
| desc. node | 10616 Sep 05 04:14 | 25°♄59'50 | | minimum elong | 10619 Feb 19 13:06 | 4°♁37'36 | 0°03'36 | |
| retrograde | 10616 Sep 09 17:17 | 26°♄24'00 | | behind sun begin | 10619 Feb 18 13:25 | 3°♁24'09 | | |
| evening set | 10616 Sep 25 11:18 | 21°♄35'31 | | behind sun end | 10619 Feb 20 12:48 | 5°♁51'04 | | |
| min. Earth dist. | 10616 Sep 30 06:07 | 18°♄43'36 | 0.28339 AU | desc. node | 10619 Feb 20 21:16 | 6°♁17'22 | | |
| inferior conj | 10616 Oct 01 01:51 | 18°♄12'57 | -5°52'22 | | 10619 Mar 11 23:17 | 0°♅ | | |
| minimum elong | 10616 Sep 30 15:39 | 18°♄28'49 | 5°49'56 | evening rise | 10619 Mar 30 12:31 | 23°♅06'51 | | |
| morning rise | 10616 Oct 05 20:25 | 15°♄19'25 | | | 10619 Apr 05 00:55 | 0°♁ | | |
| direct | 10616 Oct 22 05:59 | 10°♄11'14 | | | 10619 Apr 29 01:14 | 0°♄ | | |
| greatest brilliancy | 10616 Oct 31 22:12 | 11°♄52'40 | -4.7m | | 10619 May 23 02:07 | 0°♅ | | |
| | 10616 Nov 29 01:04 | 0°♄ | | asc. node | 10619 Jun 13 16:46 | 26°♅49'48 | | |
| morning max el | 10616 Dec 10 00:08 | 10°♄00'36 | 45°41'58 | | 10619 Jun 16 06:21 | 0°♄ | | |
| asc. node | 10616 Dec 27 03:49 | 27°♄22'49 | | | 10619 Jul 10 17:26 | 0°♅ | | |
| | 10616 Dec 29 15:00 | 0°♁ | | | 10619 Aug 04 16:32 | 0°♄ | | |
| | 10617 Jan 25 13:52 | 0°♄ | | | 10619 Aug 30 14:01 | 0°♄ | | |
| | 10617 Feb 20 03:47 | 0°♁ | | | 10619 Sep 27 13:52 | 0°♁ | | |
| | 10617 Mar 17 00:50 | 0°♁ | | evening max el | 10619 Oct 01 14:35 | 3°♁58'42 | 45°56'54 | |
| | 10617 Apr 10 11:46 | 0°♅ | | desc. node | 10619 Oct 03 14:32 | 5°♁54'24 | | |
| desc. node | 10617 Apr 17 21:46 | 9°♅10'27 | | | 10619 Nov 03 16:58 | 0°♄ | | |
| | 10617 May 04 15:58 | 0°♁ | | greatest brilliancy | 10619 Nov 09 13:44 | 2°♄32'07 | -4.7m | |
| | 10617 May 28 15:50 | 0°♄ | | retrograde | 10619 Nov 19 16:50 | 4°♄23'09 | | |
| morning set | 10617 Jun 11 01:34 | 16°♄48'44 | | | 10619 Dec 04 17:54 | 30°♁♁ | | |
| | 10617 Jun 21 13:42 | 0°♅ | | evening set | 10619 Dec 07 17:41 | 28°♁15'49 | | |
| | 10617 Jul 15 11:48 | 0°♄ | | inferior conj | 10619 Dec 11 04:19 | 26°♁07'17 | -8°13'28 | |
| | | | | minimum elong | 10619 Dec 11 10:43 | 25°♁57'13 | 8°12'19 | |
| superior conj | 10617 Jul 20 21:35 | 6°♄46'21 | -0°43'43 | min. Earth dist. | 10619 Dec 11 11:00 | 25°♁56'46 | 0.29042 AU | |
| minimum elong | 10617 Jul 21 07:22 | 7°♄16'57 | 0°43'46 | morning rise | 10619 Dec 15 03:44 | 23°♁39'40 | | |
| max. Earth dist. | 10617 Jul 23 08:56 | 9°♄52'03 | 1.71685 AU | direct | 10620 Jan 01 16:42 | 17°♁50'36 | | |
| | 10617 Aug 08 11:40 | 0°♅ | | greatest brilliancy | 10620 Jan 12 08:32 | 19°♁55'29 | -4.8m | |
| asc. node | 10617 Aug 08 15:39 | 0°♅12'24 | | asc. node | 10620 Jan 24 15:04 | 26°♁26'08 | | |
| evening rise | 10617 Aug 29 03:00 | 25°♅41'51 | | | 10620 Jan 29 15:37 | 0°♄ | | |
| | 10617 Sep 01 14:10 | 0°♄ | | morning max el | 10620 Feb 20 02:58 | 18°♄57'20 | 46°02'29 | |
| | 10617 Sep 25 20:08 | 0°♄ | | | 10620 Mar 01 23:07 | 0°♁ | | |
| | 10617 Oct 20 07:02 | 0°♁ | | | 10620 Mar 29 02:20 | 0°♁ | | |
| | 10617 Nov 14 01:03 | 0°♄ | | | 10620 Apr 23 15:21 | 0°♅ | | |
| desc. node | 10617 Nov 28 10:09 | 17°♄12'56 | | desc. node | 10620 May 15 10:42 | 26°♅21'51 | | |
| | 10617 Dec 09 04:53 | 0°♁ | | | 10620 May 18 10:07 | 0°♁ | | |
| | 10618 Jan 03 22:14 | 0°♁ | | | 10620 Jun 11 18:55 | 0°♄ | | |
| | 10618 Jan 30 14:02 | 0°♅ | | | 10620 Jul 05 22:41 | 0°♅ | | |
| evening max el | 10618 Feb 24 02:54 | 25°♅42'30 | 46°24'06 | | 10620 Jul 30 00:50 | 0°♄ | | |
| | 10618 Feb 28 13:05 | 0°♁ | | | 10620 Aug 23 03:26 | 0°♅ | | |
| asc. node | 10618 Mar 21 10:14 | 17°♁41'10 | | morning set | 10620 Aug 23 14:40 | 0°♅34'54 | | |
| greatest brilliancy | 10618 Apr 05 06:30 | 25°♁46'33 | -4.9m | asc. node | 10620 Sep 05 04:40 | 16°♅12'46 | | |
| retrograde | 10618 Apr 15 01:17 | 27°♁34'30 | | | 10620 Sep 16 07:14 | 0°♄ | | |
| evening set | 10618 May 02 09:29 | 21°♁46'16 | | | | | | |
| inferior conj | 10618 May 05 17:05 | 19°♁45'12 | 8°48'05 | superior conj | 10620 Sep 30 20:02 | 18°♄00'48 | 0°57'00 | |
| minimum elong | 10618 May 05 10:35 | 19°♁55'13 | 8°47'05 | minimum elong | 10620 Sep 30 10:14 | 17°♄30'28 | 0°56'45 | |
| min. Earth dist. | 10618 May 05 16:31 | 19°♁46'04 | 0.27259 AU | max. Earth dist. | 10620 Oct 02 22:04 | 20°♄35'43 | 1.72781 AU | |
| morning rise | 10618 May 08 11:40 | 18°♁03'34 | | | 10620 Oct 10 12:23 | 0°♄ | | |
| direct | 10618 May 26 11:14 | 11°♁52'51 | | | 10620 Nov 03 19:13 | 0°♁ | | |
| greatest brilliancy | 10618 Jun 05 04:51 | 13°♁41'01 | -4.9m | evening rise | 10620 Nov 06 16:27 | 3°♁33'21 | | |
| | 10618 Jun 30 08:02 | 0°♄ | | | 10620 Nov 28 04:40 | 0°♄ | | |
| desc. node | 10618 Jul 11 08:46 | 10°♄09'21 | | | 10620 Dec 22 17:37 | 0°♁ | | |
| morning max el | 10618 Jul 15 23:23 | 14°♄42'15 | 46°53'46 | desc. node | 10620 Dec 25 21:55 | 3°♁52'19 | | |
| | 10618 Jul 30 14:48 | 0°♅ | | | 10621 Jan 16 10:24 | 0°♁ | | |
| | 10618 Aug 26 09:33 | 0°♄ | | | 10621 Feb 10 07:13 | 0°♅ | | |
| | 10618 Sep 21 01:58 | 0°♅ | | | 10621 Mar 07 10:01 | 0°♁ | | |
| | 10618 Oct 16 06:25 | 0°♄ | | | 10621 Apr 02 01:47 | 0°♄ | | |
| asc. node | 10618 Nov 01 05:08 | 19°♄11'42 | | asc. node | 10621 Apr 17 20:30 | 17°♄48'42 | | |
| | 10618 Nov 10 03:25 | 0°♄ | | | 10621 Apr 29 02:41 | 0°♅ | | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| evening max el | 10621 May 08 05:32 | 9°☾25'08 | 46°53'02 | | 10623 Oct 26 06:25 | 0°♊ | |
| | 10621 May 31 02:27 | 0°♊ | | morning set | 10623 Nov 02 19:39 | 9°♊18'21 | |
| greatest brilliancy | 10621 Jun 17 12:50 | 10°♊11'15 | -4.9m | | 10623 Nov 19 14:24 | 0°♊ | |
| retrograde | 10621 Jun 27 14:06 | 12°♊05'02 | | | | | |
| evening set | 10621 Jul 13 07:46 | 7°♊15'41 | | superior conj | 10623 Dec 09 11:54 | 24°♊32'46 | 1°22'03 |
| inferior conj | 10621 Jul 18 08:25 | 4°♊15'19 | 5°00'38 | minimum elong | 10623 Dec 09 17:28 | 24°♊49'57 | 1°22'31 |
| minimum elong | 10621 Jul 18 18:27 | 3°♊59'55 | 4°57'26 | max. Earth dist. | 10623 Dec 09 12:41 | 24°♊35'12 | 1.73230 AU |
| min. Earth dist. | 10621 Jul 18 10:48 | 4°♊11'40 | 0.27125 AU | | 10623 Dec 13 22:00 | 0°♊ | |
| morning rise | 10621 Jul 24 05:20 | 0°♊47'27 | | | 10624 Jan 07 05:55 | 0°♊ | |
| | 10621 Jul 25 17:36 | 30°☾ | | evening rise | 10624 Jan 15 18:58 | 10°♊31'44 | |
| desc. node | 10621 Aug 07 19:34 | 26°☾28'58 | | desc. node | 10624 Jan 23 10:17 | 19°♊56'22 | |
| direct | 10621 Aug 08 02:22 | 26°☾28'53 | | | 10624 Jan 31 14:16 | 0°♊ | |
| greatest brilliancy | 10621 Aug 17 23:57 | 28°☾17'41 | -4.8m | | 10624 Feb 24 22:34 | 0°♊ | |
| | 10621 Aug 22 03:13 | 0°♊ | | | 10624 Mar 20 06:41 | 0°♊ | |
| morning max el | 10621 Sep 26 15:05 | 27°♊36'14 | 46°11'32 | | 10624 Apr 13 16:07 | 0°♊ | |
| | 10621 Sep 29 01:43 | 0°♊ | | | 10624 May 08 06:38 | 0°☾ | |
| | 10621 Oct 27 12:54 | 0°♊ | | asc. node | 10624 May 15 07:19 | 8°☾28'49 | |
| | 10621 Nov 23 00:21 | 0°♊ | | | 10624 Jun 02 09:10 | 0°♊ | |
| asc. node | 10621 Nov 28 17:51 | 6°♊39'31 | | | 10624 Jun 28 13:35 | 0°♊ | |
| | 10621 Dec 18 13:05 | 0°♊ | | evening max el | 10624 Jul 19 05:28 | 21°♊53'47 | 46°35'33 |
| | 10622 Jan 12 12:06 | 0°♊ | | | 10624 Jul 27 14:23 | 0°♊ | |
| | 10622 Feb 06 02:20 | 0°♊ | | greatest brilliancy | 10624 Aug 27 06:59 | 21°♊52'29 | -4.8m |
| | 10622 Mar 02 10:45 | 0°♊ | | desc. node | 10624 Sep 04 06:09 | 23°♊57'49 | |
| desc. node | 10622 Mar 20 10:20 | 22°♊17'59 | | retrograde | 10624 Sep 07 09:32 | 24°♊09'29 | |
| morning set | 10622 Mar 24 22:47 | 27°♊55'18 | | evening set | 10624 Sep 22 23:56 | 19°♊24'47 | |
| | 10622 Mar 26 14:50 | 0°♊ | | min. Earth dist. | 10624 Sep 27 20:51 | 16°♊30'09 | 0.28282 AU |
| | 10622 Apr 19 15:20 | 0°♊ | | inferior conj | 10624 Sep 28 16:58 | 15°♊58'56 | -5°36'32 |
| max. Earth dist. | 10622 May 01 20:40 | 15°♊19'23 | 1.71441 AU | minimum elong | 10624 Sep 28 06:53 | 16°♊14'35 | 5°34'03 |
| | | | | morning rise | 10624 Oct 03 14:22 | 13°♊01'51 | |
| superior conj | 10622 May 04 05:04 | 18°♊16'19 | -1°23'07 | direct | 10624 Oct 19 20:51 | 7°♊58'01 | |
| minimum elong | 10622 May 03 21:45 | 17°♊53'22 | 1°23'23 | greatest brilliancy | 10624 Oct 29 12:17 | 9°♊39'16 | -4.7m |
| | 10622 May 13 13:16 | 0°♊ | | | 10624 Nov 29 04:32 | 0°♊ | |
| | 10622 Jun 06 10:22 | 0°☾ | | morning max el | 10624 Dec 07 15:50 | 7°♊49'57 | 45°42'12 |
| evening rise | 10622 Jun 13 13:34 | 8°☾57'10 | | asc. node | 10624 Dec 26 05:51 | 26°♊42'47 | |
| | 10622 Jun 30 08:44 | 0°♊ | | | 10624 Dec 29 07:37 | 0°♊ | |
| asc. node | 10622 Jul 11 04:53 | 13°♊32'14 | | | 10625 Jan 25 03:26 | 0°♊ | |
| | 10622 Jul 24 10:19 | 0°♊ | | | 10625 Feb 19 16:04 | 0°♊ | |
| | 10622 Aug 17 16:57 | 0°♊ | | | 10625 Mar 16 12:27 | 0°♊ | |
| | 10622 Sep 11 07:13 | 0°♊ | | | 10625 Apr 09 23:01 | 0°♊ | |
| | 10622 Oct 06 09:43 | 0°♊ | | desc. node | 10625 Apr 16 23:42 | 8°♊41'48 | |
| desc. node | 10622 Oct 31 01:00 | 28°♊29'24 | | | 10625 May 04 02:59 | 0°♊ | |
| | 10622 Nov 01 09:06 | 0°♊ | | | 10625 May 28 02:43 | 0°♊ | |
| | 10622 Nov 29 00:39 | 0°♊ | | morning set | 10625 Jun 08 12:51 | 14°♊19'32 | |
| evening max el | 10622 Dec 11 17:03 | 12°♊38'59 | 45°50'11 | | 10625 Jun 21 00:31 | 0°☾ | |
| | 10622 Dec 31 16:11 | 0°♊ | | | 10625 Jul 14 22:33 | 0°♊ | |
| greatest brilliancy | 10623 Jan 19 22:45 | 11°♊02'27 | -4.8m | | | | |
| retrograde | 10623 Jan 29 14:56 | 12°♊45'43 | | superior conj | 10625 Jul 18 09:52 | 4°♊20'55 | -0°47'00 |
| evening set | 10623 Feb 13 10:32 | 8°♊29'59 | | minimum elong | 10625 Jul 18 20:10 | 4°♊53'10 | 0°47'03 |
| inferior conj | 10623 Feb 19 16:26 | 4°♊47'49 | -0°20'57 | max. Earth dist. | 10625 Jul 20 21:26 | 7°♊27'22 | 1.71653 AU |
| minimum elong | 10623 Feb 19 17:13 | 4°♊46'35 | 0°20'26 | asc. node | 10625 Aug 07 17:28 | 29°♊44'39 | |
| min. Earth dist. | 10623 Feb 20 03:57 | 4°♊29'54 | 0.27881 AU | | 10625 Aug 07 22:23 | 0°♊ | |
| asc. node | 10623 Feb 21 01:43 | 3°♊56'08 | | evening rise | 10625 Aug 26 17:42 | 23°♊25'08 | |
| morning rise | 10623 Feb 25 23:10 | 1°♊02'35 | | | 10625 Sep 01 00:53 | 0°♊ | |
| | 10623 Feb 27 23:06 | 30°☾ | | | 10625 Sep 25 06:57 | 0°♊ | |
| direct | 10623 Mar 12 18:15 | 26°☾42'12 | | | 10625 Oct 19 18:03 | 0°♊ | |
| greatest brilliancy | 10623 Mar 23 14:24 | 28°☾52'54 | -4.8m | | 10625 Nov 13 12:30 | 0°♊ | |
| | 10623 Mar 26 06:02 | 0°♊ | | desc. node | 10625 Nov 27 12:13 | 16°♊43'59 | |
| morning max el | 10623 May 02 00:32 | 29°♊07'54 | 46°46'57 | | 10625 Dec 08 17:06 | 0°♊ | |
| | 10623 May 02 21:16 | 0°♊ | | | 10626 Jan 03 11:52 | 0°♊ | |
| | 10623 May 30 15:50 | 0°♊ | | | 10626 Jan 30 06:38 | 0°♊ | |
| desc. node | 10623 Jun 12 23:12 | 15°♊19'31 | | evening max el | 10626 Feb 21 17:43 | 23°♊24'51 | 46°22'31 |
| | 10623 Jun 25 10:14 | 0°♊ | | | 10626 Feb 28 14:28 | 0°♊ | |
| | 10623 Jul 20 09:11 | 0°☾ | | asc. node | 10626 Mar 20 12:11 | 16°♊21'32 | |
| | 10623 Aug 13 23:51 | 0°♊ | | greatest brilliancy | 10626 Apr 02 18:56 | 23°♊22'13 | -4.9m |
| | 10623 Sep 07 11:20 | 0°♊ | | retrograde | 10626 Apr 12 14:29 | 25°♊10'11 | |
| | 10623 Oct 01 21:26 | 0°♊ | | evening set | 10626 Apr 29 18:16 | 19°♊28'34 | |
| asc. node | 10623 Oct 03 17:55 | 2°♊16'47 | | inferior conj | 10626 May 03 06:08 | 17°♊20'53 | 8°40'19 |

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|---------------------|--------------------|----------------------|------------|---------------------|--------------------|----------------------|------------|
| minimum elong | 10626 May 02 22:51 | 17° ♄ 32'07 | 8°39'10 | minimum elong | 10628 Sep 28 02:17 | 15° ♁ 19'03 | 0°54'06 |
| min. Earth dist. | 10626 May 03 05:01 | 17° ♄ 22'37 | 0.27267 AU | max. Earth dist. | 10628 Sep 30 14:21 | 18° ♁ 25'05 | 1.72747 AU |
| morning rise | 10626 May 06 03:27 | 15° ♄ 34'57 | | | 10628 Oct 09 22:51 | 0° ♎ | |
| direct | 10626 May 24 00:53 | 9° ♄ 28'35 | | | 10628 Nov 03 05:43 | 0° ♊ | |
| greatest brilliancy | 10626 Jun 02 17:40 | 11° ♄ 15'58 | -4.9m | evening rise | 10628 Nov 04 09:18 | 1° ♊ 25'01 | |
| | 10626 Jun 30 14:56 | 0° ♈ | | | 10628 Nov 27 15:18 | 0° ♊ | |
| desc. node | 10626 Jul 10 10:41 | 9° ♈ 14'52 | | | 10628 Dec 22 04:30 | 0° ♋ | |
| morning max el | 10626 Jul 13 12:50 | 12° ♈ 19'00 | 46°54'29 | desc. node | 10628 Dec 24 23:50 | 3° ♋ 24'53 | |
| | 10626 Jul 30 08:57 | 0° ♌ | | | 10629 Jan 15 21:42 | 0° ♋ | |
| | 10626 Aug 26 00:04 | 0° ♍ | | | 10629 Feb 09 19:11 | 0° ♌ | |
| | 10626 Sep 20 14:45 | 0° ♍ | | | 10629 Mar 06 23:02 | 0° ♌ | |
| | 10626 Oct 15 18:13 | 0° ♎ | | | 10629 Apr 01 16:47 | 0° ♈ | |
| asc. node | 10626 Oct 31 07:05 | 18° ♎ 43'11 | | asc. node | 10629 Apr 16 22:33 | 17° ♈ 07'05 | |
| | 10626 Nov 09 14:36 | 0° ♎ | | | 10629 Apr 28 22:24 | 0° ♌ | |
| | 10626 Dec 04 05:29 | 0° ♏ | | evening max el | 10629 May 05 17:40 | 6° ♌ 58'48 | 46°52'32 |
| | 10626 Dec 28 16:14 | 0° ♏ | | | 10629 May 31 22:02 | 0° ♍ | |
| morning set | 10627 Jan 10 10:00 | 15° ♏ 41'46 | | greatest brilliancy | 10629 Jun 15 03:47 | 7° ♍ 49'08 | -4.9m |
| | 10627 Jan 22 00:10 | 0° ♐ | | retrograde | 10629 Jun 25 02:52 | 9° ♍ 41'27 | |
| max. Earth dist. | 10627 Feb 14 16:05 | 29° ♐ 16'51 | 1.72603 AU | evening set | 10629 Jul 10 23:59 | 4° ♍ 47'43 | |
| | 10627 Feb 15 06:01 | 0° ♑ | | inferior conj | 10629 Jul 15 21:27 | 1° ♍ 52'08 | 5°20'38 |
| | | | | minimum elong | 10629 Jul 16 07:51 | 1° ♍ 36'10 | 5°17'24 |
| superior conj | 10627 Feb 17 03:10 | 2° ♑ 19'53 | 0°06'53 | min. Earth dist. | 10629 Jul 16 00:59 | 1° ♍ 46'43 | 0.27118 AU |
| minimum elong | 10627 Feb 17 04:51 | 2° ♑ 25'06 | 0°07'06 | | 10629 Jul 18 23:14 | 30° ♎ | |
| behind sun begin | 10627 Feb 16 07:00 | 1° ♑ 17'23 | | morning rise | 10629 Jul 21 15:49 | 28° ♎ 27'35 | |
| behind sun end | 10627 Feb 18 02:41 | 3° ♑ 32'48 | | direct | 10629 Aug 05 14:33 | 24° ♎ 05'26 | |
| desc. node | 10627 Feb 19 23:05 | 5° ♑ 50'25 | | desc. node | 10629 Aug 06 21:30 | 24° ♎ 07'23 | |
| | 10627 Mar 11 09:51 | 0° ♒ | | greatest brilliancy | 10629 Aug 15 13:39 | 25° ♎ 55'21 | -4.8m |
| evening rise | 10627 Mar 28 01:59 | 20° ♒ 45'48 | | | 10629 Aug 24 04:47 | 0° ♏ | |
| | 10627 Apr 04 11:39 | 0° ♒ | | morning max el | 10629 Sep 24 04:26 | 25° ♏ 16'01 | 46°13'15 |
| | 10627 Apr 28 12:10 | 0° ♈ | | | 10629 Sep 28 23:17 | 0° ♏ | |
| | 10627 May 22 13:16 | 0° ♌ | | | 10629 Oct 27 04:20 | 0° ♎ | |
| asc. node | 10627 Jun 12 18:44 | 26° ♌ 20'30 | | | 10629 Nov 22 13:25 | 0° ♎ | |
| | 10627 Jun 15 17:50 | 0° ♏ | | asc. node | 10629 Nov 27 19:50 | 6° ♎ 08'06 | |
| | 10627 Jul 10 05:28 | 0° ♏ | | | 10629 Dec 18 00:57 | 0° ♏ | |
| | 10627 Aug 04 05:33 | 0° ♐ | | | 10630 Jan 11 23:18 | 0° ♏ | |
| | 10627 Aug 30 05:05 | 0° ♐ | | | 10630 Feb 05 13:11 | 0° ♐ | |
| | 10627 Sep 27 10:34 | 0° ♑ | | | 10630 Mar 01 21:26 | 0° ♑ | |
| evening max el | 10627 Sep 29 05:35 | 1° ♑ 45'28 | 45°57'49 | desc. node | 10630 Mar 19 12:21 | 21° ♑ 51'14 | |
| desc. node | 10627 Oct 02 16:32 | 5° ♑ 04'41 | | morning set | 10630 Mar 22 11:43 | 25° ♑ 33'11 | |
| | 10627 Nov 06 04:35 | 0° ♒ | | | 10630 Mar 26 01:26 | 0° ♒ | |
| greatest brilliancy | 10627 Nov 07 05:37 | 0° ♒ 22'55 | -4.7m | | 10630 Apr 19 01:54 | 0° ♒ | |
| retrograde | 10627 Nov 17 08:20 | 2° ♒ 13'49 | | max. Earth dist. | 10630 Apr 29 07:13 | 12° ♒ 48'46 | 1.71469 AU |
| | 10627 Nov 27 23:29 | 30° ♒ | | | | | |
| evening set | 10627 Dec 05 11:35 | 26° ♒ 03'57 | | superior conj | 10630 May 01 17:01 | 15° ♒ 50'04 | -1°21'48 |
| inferior conj | 10627 Dec 08 20:30 | 23° ♒ 57'53 | -8°19'42 | minimum elong | 10630 May 01 08:55 | 15° ♒ 24'39 | 1°22'01 |
| minimum elong | 10627 Dec 09 02:15 | 23° ♒ 48'50 | 8°18'40 | | 10630 May 12 23:50 | 0° ♈ | |
| min. Earth dist. | 10627 Dec 09 02:20 | 23° ♒ 48'41 | 0.29052 AU | | 10630 Jun 05 21:00 | 0° ♌ | |
| morning rise | 10627 Dec 12 16:54 | 21° ♒ 34'33 | | evening rise | 10630 Jun 11 00:47 | 6° ♌ 28'22 | |
| direct | 10627 Dec 30 08:41 | 15° ♒ 41'25 | | | 10630 Jun 29 19:29 | 0° ♏ | |
| greatest brilliancy | 10628 Jan 09 23:41 | 17° ♒ 44'55 | -4.8m | asc. node | 10630 Jul 10 06:42 | 13° ♏ 04'13 | |
| asc. node | 10628 Jan 23 16:53 | 25° ♒ 13'22 | | | 10630 Jul 23 21:15 | 0° ♏ | |
| | 10628 Jan 30 03:06 | 0° ♒ | | | 10630 Aug 17 04:09 | 0° ♎ | |
| morning max el | 10628 Feb 17 17:16 | 16° ♒ 41'49 | 46°01'09 | | 10630 Sep 10 18:51 | 0° ♎ | |
| | 10628 Mar 01 17:01 | 0° ♋ | | | 10630 Oct 05 22:14 | 0° ♏ | |
| | 10628 Mar 28 16:27 | 0° ♋ | | desc. node | 10630 Oct 30 03:05 | 27° ♏ 55'20 | |
| | 10628 Apr 23 03:56 | 0° ♌ | | | 10630 Oct 31 23:24 | 0° ♒ | |
| desc. node | 10628 May 14 12:43 | 25° ♌ 51'39 | | | 10630 Nov 28 19:20 | 0° ♋ | |
| | 10628 May 17 21:57 | 0° ♌ | | evening max el | 10630 Dec 09 07:42 | 10° ♋ 25'25 | 45°49'47 |
| | 10628 Jun 11 06:18 | 0° ♈ | | | 10631 Jan 01 08:16 | 0° ♋ | |
| | 10628 Jul 05 09:45 | 0° ♌ | | greatest brilliancy | 10631 Jan 17 12:43 | 8° ♋ 46'32 | -4.8m |
| | 10628 Jul 29 11:40 | 0° ♏ | | retrograde | 10631 Jan 27 05:43 | 10° ♋ 30'19 | |
| morning set | 10628 Aug 21 05:01 | 28° ♏ 17'10 | | evening set | 10631 Feb 11 02:11 | 6° ♋ 12'25 | |
| | 10628 Aug 22 14:05 | 0° ♏ | | inferior conj | 10631 Feb 17 07:03 | 2° ♋ 31'36 | -0°43'06 |
| asc. node | 10628 Sep 04 06:31 | 15° ♏ 45'43 | | minimum elong | 10631 Feb 17 08:41 | 2° ♋ 29'04 | 0°42'18 |
| | 10628 Sep 15 17:46 | 0° ♐ | | min. Earth dist. | 10631 Feb 17 19:05 | 2° ♋ 12'55 | 0.27922 AU |
| | | | | asc. node | 10631 Feb 20 03:45 | 0° ♋ 45'42 | |
| superior conj | 10628 Sep 28 11:57 | 15° ♐ 49'02 | 0°54'23 | | 10631 Feb 21 10:17 | 30° ♎ | |

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|---------------------|--------------------|---|---------------------|--------------------|--|--|
| morning rise | 10631 Feb 23 14:30 | 28°  45'40 | | 10633 Sep 24 17:46 | 0°  | |
| direct | 10631 Mar 10 09:27 | 24°  25'17 | | 10633 Oct 19 05:10 | 0°  | |
| greatest brilliancy | 10631 Mar 21 06:12 | 26°  36'57 -4.8m | | 10633 Nov 13 00:06 | 0°  | |
| | 10631 Mar 28 06:52 | 0°  | desc. node | 10633 Nov 26 14:03 | 16°  13'46 | |
| morning max el | 10631 Apr 29 16:21 | 26°  52'37 46°45'53 | | 10633 Dec 08 05:32 | 0°  | |
| | 10631 May 02 18:21 | 0°  | | 10634 Jan 03 01:50 | 0°  | |
| | 10631 May 30 07:15 | 0°  | | 10634 Jan 29 23:48 | 0°  | |
| desc. node | 10631 Jun 12 01:07 | 14°  34'46 | evening max el | 10634 Feb 19 07:54 | 21°  05'10 46°21'02 | |
| | 10631 Jun 24 23:30 | 0°  | | 10634 Feb 28 17:32 | 0°  | |
| | 10631 Jul 19 21:23 | 0°  | asc. node | 10634 Mar 19 14:15 | 14°  38'57 | |
| | 10631 Aug 13 11:26 | 0°  | greatest brilliancy | 10634 Mar 31 07:58 | 20°  38'11 -4.9m | |
| | 10631 Sep 06 22:29 | 0°  | retrograde | 10634 Apr 10 03:04 | 22°  34'53 | |
| | 10631 Oct 01 08:17 | 0°  | evening set | 10634 Apr 27 02:58 | 17°  31'04 | |
| asc. node | 10631 Oct 02 19:56 | 1°  49'40 | inferior conj | 10634 Apr 30 19:12 | 14°  36'24 8°31'42 | |
| | 10631 Oct 25 17:02 | 0°  | minimum elong | 10634 Apr 30 11:13 | 15°  38'45 8°30'22 | |
| morning set | 10631 Oct 31 12:12 | 7°  38'08'47 | min. Earth dist. | 10634 Apr 30 17:57 | 14°  38'20 0.27273 AU | |
| | 10631 Nov 19 00:53 | 0°  | morning rise | 10634 May 03 19:28 | 13°  38'05'49 | |
| | | | direct | 10634 May 21 14:06 | 7°  38'03'59 | |
| superior conj | 10631 Dec 07 04:54 | 22°  32'44'49 1°23'00 | greatest brilliancy | 10634 May 31 07:11 | 8°  38'51'14 -4.9m | |
| minimum elong | 10631 Dec 07 09:50 | 22°  32'40'04 1°23'28 | | 10634 Jun 30 19:51 | 0°  | |
| max. Earth dist. | 10631 Dec 07 09:49 | 22°  32'40'00 1.73232 AU | desc. node | 10634 Jul 09 12:34 | 8°  32'20'59 | |
| | 10631 Dec 13 08:28 | 0°  | morning max el | 10634 Jul 11 01:31 | 9°  32'53'19 46°55'20 | |
| | 10632 Jan 06 16:29 | 0°  | | 10634 Jul 30 02:45 | 0°  | |
| evening rise | 10632 Jan 13 10:50 | 8°  20'06 | | 10634 Aug 25 14:28 | 0°  | |
| desc. node | 10632 Jan 22 12:05 | 19°  29'05 | | 10634 Sep 20 03:31 | 0°  | |
| | 10632 Jan 31 01:01 | 0°  | | 10634 Oct 15 06:03 | 0°  | |
| | 10632 Feb 24 09:34 | 0°  | asc. node | 10634 Oct 30 09:00 | 18°  32'14'14 | |
| | 10632 Mar 19 18:01 | 0°  | | 10634 Nov 09 01:53 | 0°  | |
| | 10632 Apr 13 03:56 | 0°  | | 10634 Dec 03 16:27 | 0°  | |
| | 10632 May 07 19:13 | 0°  | | 10634 Dec 28 03:02 | 0°  | |
| asc. node | 10632 May 14 09:18 | 7°  32'56'12 | morning set | 10635 Jan 08 02:45 | 13°  32'32'17 | |
| | 10632 Jun 01 23:05 | 0°  | | 10635 Jan 21 10:54 | 0°  | |
| | 10632 Jun 28 06:23 | 0°  | max. Earth dist. | 10635 Feb 12 06:31 | 26°  32'59'35 1.72641 AU | |
| evening max el | 10632 Jul 16 21:23 | 19°  39'18 46°36'47 | | | | |
| | 10632 Jul 27 16:45 | 0°  | superior conj | 10635 Feb 14 17:51 | 0°  32'03'20 0°10'25 | |
| greatest brilliancy | 10632 Aug 24 21:52 | 19°  36'56 -4.8m | minimum elong | 10635 Feb 14 20:21 | 0°  32'11'05 0°10'37 | |
| desc. node | 10632 Sep 03 08:11 | 21°  32'51'02 | behind sun begin | 10635 Feb 14 02:06 | 29°  32'14'33 | |
| retrograde | 10632 Sep 05 01:33 | 21°  32'54'34 | behind sun end | 10635 Feb 15 14:35 | 1°  32'07'36 | |
| evening set | 10632 Sep 20 12:37 | 17°  32'13'40 | | 10635 Feb 14 16:46 | 0°  | |
| min. Earth dist. | 10632 Sep 25 11:28 | 14°  32'16'17 0.28230 AU | desc. node | 10635 Feb 19 01:03 | 5°  32'23'09 | |
| inferior conj | 10632 Sep 26 07:57 | 13°  32'44'32 -5°19'56 | | 10635 Mar 10 20:42 | 0°  | |
| minimum elong | 10632 Sep 25 22:04 | 13°  32'59'51 5°17'26 | evening rise | 10635 Mar 25 15:17 | 18°  32'23'34 | |
| morning rise | 10632 Oct 01 08:09 | 10°  32'43'47 | | 10635 Apr 03 22:38 | 0°  | |
| direct | 10632 Oct 17 11:58 | 5°  32'44'28 | | 10635 Apr 27 23:20 | 0°  | |
| greatest brilliancy | 10632 Oct 27 01:58 | 7°  32'24'54 -4.8m | | 10635 May 22 00:41 | 0°  | |
| | 10632 Nov 29 06:33 | 0°  | asc. node | 10635 Jun 11 20:34 | 25°  32'50'02 | |
| morning max el | 10632 Dec 05 07:19 | 5°  32'38'27 45°42'21 | | 10635 Jun 15 05:36 | 0°  | |
| asc. node | 10632 Dec 25 07:43 | 26°  32'38'02'26 | | 10635 Jul 09 17:47 | 0°  | |
| | 10632 Dec 29 00:02 | 0°  | | 10635 Aug 03 18:53 | 0°  | |
| | 10633 Jan 24 16:57 | 0°  | | 10635 Aug 29 20:33 | 0°  | |
| | 10633 Feb 19 04:18 | 0°  | evening max el | 10635 Sep 26 19:53 | 29°  32'30'00 45°58'50 | |
| | 10633 Mar 16 00:02 | 0°  | | 10635 Sep 27 08:13 | 0°  | |
| | 10633 Apr 09 10:14 | 0°  | desc. node | 10635 Oct 01 18:35 | 4°  32'13'45 | |
| desc. node | 10633 Apr 16 01:37 | 8°  32'07'13'09 | greatest brilliancy | 10635 Nov 04 21:17 | 28°  32'12'59 -4.7m | |
| | 10633 May 03 14:00 | 0°  | | 10635 Nov 13 01:48 | 0°  | |
| | 10633 May 27 13:35 | 0°  | retrograde | 10635 Nov 14 23:50 | 0°  32'04'14 | |
| morning set | 10633 Jun 06 00:20 | 11°  32'38'51'05 | | 10635 Nov 16 21:27 | 30°  32'38'32'17 | |
| | 10633 Jun 20 11:17 | 0°  | evening set | 10635 Dec 03 05:17 | 23°  32'37'51'50 | |
| | 10633 Jul 14 09:15 | 0°  | inferior conj | 10635 Dec 06 12:47 | 21°  32'37'48'00 -8°25'06 | |
| | | | minimum elong | 10635 Dec 06 17:51 | 21°  32'37'40'01 8°24'10 | |
| superior conj | 10633 Jul 15 22:27 | 1°  32'38'56'30 -0°50'11 | min. Earth dist. | 10635 Dec 06 17:55 | 21°  32'37'39'54 0.29067 AU | |
| minimum elong | 10633 Jul 16 09:10 | 2°  32'38'30'06 0°50'13 | morning rise | 10635 Dec 10 06:22 | 19°  32'37'28'45 | |
| max. Earth dist. | 10633 Jul 18 11:17 | 5°  32'38'07'03 1.71617 AU | direct | 10635 Dec 28 00:26 | 13°  32'37'31'28 | |
| asc. node | 10633 Aug 06 19:22 | 29°  32'38'17'24 | greatest brilliancy | 10636 Jan 07 15:34 | 15°  32'37'34'27 -4.8m | |
| | 10633 Aug 07 09:02 | 0°  | asc. node | 10636 Jan 22 18:57 | 24°  32'37'02'03 | |
| evening rise | 10633 Aug 24 08:33 | 21°  32'38'08'57 | | 10636 Jan 30 11:58 | 0°  | |
| | 10633 Aug 31 11:34 | 0°  | morning max el | 10636 Feb 15 07:48 | 14°  32'37'25'43 45°59'45 | |

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|---------------------|--------------------|-----------|---------------------|--|--------------------|-----------|------------|
| | 10636 Mar 01 10:58 | 0°♊ | | | 10638 Oct 05 11:11 | 0°♊ | |
| | 10636 Mar 28 06:51 | 0°♋ | desc. node | | 10638 Oct 29 04:58 | 27°♊19'29 | |
| | 10636 Apr 22 16:51 | 0°♌ | | | 10638 Oct 31 14:13 | 0°♋ | |
| desc. node | 10636 May 13 14:37 | 25°♌20'05 | | | 10638 Nov 28 14:52 | 0°♌ | |
| | 10636 May 17 10:05 | 0°♍ | evening max el | | 10638 Dec 06 23:22 | 8°♌13'40 | 45°49'28 |
| | 10636 Jun 10 17:58 | 0°♎ | | | 10639 Jan 02 06:19 | 0°♍ | |
| | 10636 Jul 04 21:06 | 0°♏ | greatest brilliancy | | 10639 Jan 15 02:40 | 6°♍30'36 | -4.8m |
| | 10636 Jul 28 22:48 | 0°♐ | retrograde | | 10639 Jan 24 20:41 | 8°♍14'47 | |
| morning set | 10636 Aug 18 19:21 | 25°♐58'21 | evening set | | 10639 Feb 08 18:16 | 3°♍54'48 | |
| | 10636 Aug 22 01:03 | 0°♑ | inferior conj | | 10639 Feb 14 21:54 | 0°♍15'18 | -1°04'58 |
| asc. node | 10636 Sep 03 08:31 | 15°♑18'08 | minimum elong | | 10639 Feb 15 00:21 | 0°♍11'30 | 1°03'53 |
| | 10636 Sep 15 04:36 | 0°♒ | | | 10639 Feb 15 07:45 | 30°♒♊ | |
| | | | min. Earth dist. | | 10639 Feb 15 10:11 | 29°♊56'14 | 0.27967 AU |
| superior conj | 10636 Sep 26 04:02 | 13°♒36'46 | asc. node | | 10639 Feb 19 05:45 | 27°♊36'58 | |
| minimum elong | 10636 Sep 25 18:31 | 13°♒07'17 | morning rise | | 10639 Feb 21 05:51 | 26°♊28'49 | |
| max. Earth dist. | 10636 Sep 28 05:20 | 16°♒09'31 | direct | | 10639 Mar 08 01:20 | 22°♊08'28 | |
| | 10636 Oct 09 09:36 | 0°♓ | greatest brilliancy | | 10639 Mar 18 21:43 | 24°♊20'15 | -4.8m |
| evening rise | 10636 Nov 02 02:27 | 29°♓16'44 | | | 10639 Mar 29 15:39 | 0°♋ | |
| | 10636 Nov 02 16:29 | 0°♌ | morning max el | | 10639 Apr 27 08:18 | 24°♋36'39 | 46°44'25 |
| | 10636 Nov 27 02:13 | 0°♍ | | | 10639 May 02 15:11 | 0°♌ | |
| | 10636 Dec 21 15:43 | 0°♎ | | | 10639 May 29 22:56 | 0°♍ | |
| desc. node | 10636 Dec 24 01:44 | 2°♎56'24 | desc. node | | 10639 Jun 11 03:00 | 14°♍06'38 | |
| | 10637 Jan 15 09:26 | 0°♋ | | | 10639 Jun 24 13:10 | 0°♎ | |
| | 10637 Feb 09 07:39 | 0°♌ | | | 10639 Jul 19 09:59 | 0°♏ | |
| | 10637 Mar 06 12:40 | 0°♍ | | | 10639 Aug 12 23:22 | 0°♐ | |
| | 10637 Apr 01 08:33 | 0°♎ | | | 10639 Sep 06 09:57 | 0°♑ | |
| asc. node | 10637 Apr 16 00:31 | 16°♎23'12 | | | 10639 Sep 30 19:24 | 0°♒ | |
| | 10637 Apr 28 19:20 | 0°♏ | asc. node | | 10639 Oct 01 21:45 | 1°♒21'03 | |
| evening max el | 10637 May 03 06:03 | 4°♏31'48 | | | 10639 Oct 25 03:56 | 0°♓ | |
| | 10637 Jun 02 01:42 | 0°♐ | morning set | | 10639 Oct 29 04:51 | 4°♓58'40 | |
| greatest brilliancy | 10637 Jun 12 18:08 | 5°♐25'03 | | | 10639 Nov 18 11:40 | 0°♌ | |
| retrograde | 10637 Jun 22 16:05 | 7°♐16'43 | | | | | |
| evening set | 10637 Jul 08 16:17 | 2°♐18'06 | superior conj | | 10639 Dec 04 22:13 | 20°♌16'59 | 1°23'49 |
| | 10637 Jul 12 13:16 | 30°♑♏ | minimum elong | | 10639 Dec 05 02:30 | 20°♌30'12 | 1°24'18 |
| inferior conj | 10637 Jul 13 10:26 | 29°♏27'34 | max. Earth dist. | | 10639 Dec 05 06:52 | 20°♌43'38 | 1.73229 AU |
| minimum elong | 10637 Jul 13 21:10 | 29°♏11'07 | | | 10639 Dec 12 19:14 | 0°♍ | |
| min. Earth dist. | 10637 Jul 13 14:51 | 29°♏20'48 | | | 10640 Jan 06 03:19 | 0°♎ | |
| morning rise | 10637 Jul 19 02:05 | 26°♏06'53 | evening rise | | 10640 Jan 11 03:06 | 6°♎08'57 | |
| direct | 10637 Aug 03 02:56 | 21°♏40'30 | desc. node | | 10640 Jan 21 14:07 | 19°♎01'46 | |
| desc. node | 10637 Aug 05 23:36 | 21°♏50'06 | | | 10640 Jan 30 12:00 | 0°♋ | |
| greatest brilliancy | 10637 Aug 13 03:04 | 23°♏31'31 | | | 10640 Feb 23 20:47 | 0°♌ | |
| | 10637 Aug 25 14:31 | 0°♐ | | | 10640 Mar 19 05:38 | 0°♍ | |
| morning max el | 10637 Sep 21 18:49 | 22°♐57'09 | | | 10640 Apr 12 16:06 | 0°♎ | |
| | 10637 Sep 28 20:29 | 0°♑ | | | 10640 May 07 08:14 | 0°♏ | |
| | 10637 Oct 26 19:54 | 0°♒ | asc. node | | 10640 May 13 11:08 | 7°♏21'48 | |
| | 10637 Nov 22 02:41 | 0°♓ | | | 10640 Jun 01 13:34 | 0°♐ | |
| asc. node | 10637 Nov 26 21:39 | 5°♓35'28 | | | 10640 Jun 28 00:02 | 0°♑ | |
| | 10637 Dec 17 13:03 | 0°♌ | evening max el | | 10640 Jul 14 13:28 | 17°♑23'44 | 46°38'02 |
| | 10638 Jan 11 10:47 | 0°♍ | | | 10640 Jul 27 21:23 | 0°♒ | |
| | 10638 Feb 05 00:22 | 0°♎ | greatest brilliancy | | 10640 Aug 22 13:24 | 17°♒20'49 | -4.8m |
| | 10638 Mar 01 08:29 | 0°♋ | desc. node | | 10640 Sep 02 10:10 | 19°♒38'02 | |
| desc. node | 10638 Mar 18 14:16 | 21°♋22'59 | retrograde | | 10640 Sep 02 17:12 | 19°♒38'09 | |
| morning set | 10638 Mar 20 00:36 | 23°♋09'40 | evening set | | 10640 Sep 18 01:26 | 15°♒01'12 | |
| | 10638 Mar 25 12:27 | 0°♌ | min. Earth dist. | | 10640 Sep 23 02:17 | 12°♒00'52 | 0.28171 AU |
| | 10638 Apr 18 12:55 | 0°♍ | inferior conj | | 10640 Sep 23 22:51 | 11°♒28'58 | -5°02'45 |
| max. Earth dist. | 10638 Apr 26 17:54 | 10°♍17'08 | minimum elong | | 10640 Sep 23 13:14 | 11°♒43'53 | 5°00'16 |
| | | | morning rise | | 10640 Sep 29 01:44 | 8°♒24'29 | |
| superior conj | 10638 Apr 29 04:33 | 13°♍21'04 | direct | | 10640 Oct 15 02:57 | 3°♒29'59 | |
| minimum elong | 10638 Apr 28 19:43 | 12°♍53'20 | greatest brilliancy | | 10640 Oct 24 15:35 | 5°♒09'24 | -4.8m |
| | 10638 May 12 10:53 | 0°♎ | | | 10640 Nov 29 07:29 | 0°♓ | |
| | 10638 Jun 05 08:05 | 0°♏ | morning max el | | 10640 Dec 02 22:06 | 3°♓24'39 | 45°42'36 |
| evening rise | 10638 Jun 08 11:36 | 3°♏56'56 | asc. node | | 10640 Dec 24 09:43 | 25°♓22'20 | |
| | 10638 Jun 29 06:39 | 0°♐ | | | 10640 Dec 28 16:19 | 0°♌ | |
| asc. node | 10638 Jul 09 08:39 | 12°♐35'21 | | | 10641 Jan 24 06:30 | 0°♍ | |
| | 10638 Jul 23 08:34 | 0°♑ | | | 10641 Feb 18 16:37 | 0°♎ | |
| | 10638 Aug 16 15:44 | 0°♒ | | | 10641 Mar 15 11:41 | 0°♋ | |
| | 10638 Sep 10 06:54 | 0°♓ | | | 10641 Apr 08 21:31 | 0°♌ | |

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|---------------------|--------------------|---------------------------------|---------------------|--------------------|---------------------------------|------------|
| desc. node | 10641 Apr 15 03:29 | 7° Υ 44'04 | greatest brilliancy | 10643 Nov 02 12:23 | 26° ♁ 02'16 | -4.7m |
| | 10641 May 03 01:06 | 0° ♄ | retrograde | 10643 Nov 12 15:39 | 27° ♁ 54'42 | |
| | 10641 May 27 00:37 | 0° ♁ | evening set | 10643 Nov 30 22:36 | 21° ♁ 39'59 | |
| morning set | 10641 Jun 03 11:44 | 9° ♁ 21'45 | inferior conj | 10643 Dec 04 04:57 | 19° ♁ 38'06 | -8°29'42 |
| | 10641 Jun 19 22:16 | 0° ♄ | minimum elong | 10643 Dec 04 09:19 | 19° ♁ 31'14 | 8°28'53 |
| | | | min. Earth dist. | 10643 Dec 04 09:16 | 19° ♁ 31'19 | 0.29078 AU |
| superior conj | 10641 Jul 13 10:39 | 29° ♄ 30'10 -0°53'17 | morning rise | 10643 Dec 07 19:58 | 17° ♁ 22'50 | |
| minimum elong | 10641 Jul 13 21:43 | 0° Ω 04'49 0°53'20 | direct | 10643 Dec 25 16:00 | 11° ♁ 21'29 | |
| | 10641 Jul 13 20:11 | 0° Ω | greatest brilliancy | 10644 Jan 05 07:26 | 13° ♁ 24'26 | -4.7m |
| max. Earth dist. | 10641 Jul 15 22:51 | 2° Ω 38'42 1.71584 AU | asc. node | 10644 Jan 21 21:00 | 22° ♁ 53'08 | |
| asc. node | 10641 Aug 05 21:22 | 28° Ω 49'38 | | 10644 Jan 30 18:05 | 0° ♄ | |
| | 10641 Aug 06 19:55 | 0° ♄ | morning max el | 10644 Feb 12 22:58 | 12° ♁ 11'56 | 45°58'30 |
| evening rise | 10641 Aug 21 22:45 | 18° ♄ 49'59 | | 10644 Mar 01 04:13 | 0° \approx | |
| | 10641 Aug 30 22:29 | 0° ♄ | | 10644 Mar 27 20:50 | 0° ♄ | |
| | 10641 Sep 24 04:48 | 0° ♄ | | 10644 Apr 22 05:25 | 0° Υ | |
| | 10641 Oct 18 16:27 | 0° ♁ | desc. node | 10644 May 12 16:29 | 24° Υ 49'26 | |
| | 10641 Nov 12 11:51 | 0° ♄ | | 10644 May 16 21:54 | 0° ♄ | |
| desc. node | 10641 Nov 25 16:01 | 15° ♄ 43'30 | | 10644 Jun 10 05:18 | 0° ♁ | |
| | 10641 Dec 07 18:09 | 0° \approx | | 10644 Jul 04 08:07 | 0° ♄ | |
| | 10642 Jan 02 16:01 | 0° ♄ | | 10644 Jul 28 09:35 | 0° Ω | |
| | 10642 Jan 29 17:20 | 0° Υ | morning set | 10644 Aug 16 09:48 | 23° Ω 40'45 | |
| evening max el | 10642 Feb 16 21:30 | 18° Υ 44'18 46°19'38 | | 10644 Aug 21 11:41 | 0° ♄ | |
| | 10642 Feb 28 22:13 | 0° ♄ | asc. node | 10644 Sep 02 10:20 | 14° ♄ 50'55 | |
| asc. node | 10642 Mar 18 16:11 | 13° ♄ 33'53 | | 10644 Sep 14 15:09 | 0° ♄ | |
| greatest brilliancy | 10642 Mar 28 21:31 | 18° ♄ 35'34 -4.8m | | | | |
| retrograde | 10642 Apr 07 15:39 | 20° ♄ 22'16 | superior conj | 10644 Sep 23 19:58 | 11° ♄ 24'47 0°48'54 | |
| evening set | 10642 Apr 24 11:54 | 14° ♄ 54'12 | minimum elong | 10644 Sep 23 10:41 | 10° ♄ 56'01 0°48'35 | |
| inferior conj | 10642 Apr 28 08:35 | 12° ♄ 33'16 8°22'05 | max. Earth dist. | 10644 Sep 25 20:20 | 13° ♄ 54'42 1.72682 AU | |
| minimum elong | 10642 Apr 27 23:59 | 12° ♄ 46'36 8°20'35 | | 10644 Oct 08 20:08 | 0° ♄ | |
| min. Earth dist. | 10642 Apr 28 07:29 | 12° ♄ 34'59 0.27282 AU | evening rise | 10644 Oct 30 19:26 | 27° ♄ 08'37 | |
| morning rise | 10642 May 01 11:59 | 10° ♄ 37'47 | | 10644 Nov 02 03:03 | 0° ♁ | |
| direct | 10642 May 19 03:08 | 4° ♄ 40'30 | | 10644 Nov 26 12:55 | 0° ♄ | |
| greatest brilliancy | 10642 May 28 21:34 | 6° ♄ 28'27 -4.9m | | 10644 Dec 21 02:43 | 0° \approx | |
| | 10642 Jun 30 22:52 | 0° ♁ | desc. node | 10644 Dec 23 03:44 | 2° \approx 28'59 | |
| morning max el | 10642 Jul 08 14:02 | 7° ♁ 27'15 46°55'55 | | 10645 Jan 14 20:54 | 0° ♄ | |
| desc. node | 10642 Jul 08 14:42 | 7° ♁ 28'56 | | 10645 Feb 08 19:51 | 0° Υ | |
| | 10642 Jul 29 20:10 | 0° ♄ | | 10645 Mar 06 02:03 | 0° ♄ | |
| | 10642 Aug 25 04:47 | 0° Ω | | 10645 Apr 01 00:09 | 0° ♁ | |
| | 10642 Sep 19 16:19 | 0° ♄ | asc. node | 10645 Apr 15 02:27 | 15° ♁ 39'50 | |
| | 10642 Oct 14 17:56 | 0° ♄ | | 10645 Apr 28 16:32 | 0° ♄ | |
| asc. node | 10642 Oct 29 10:53 | 17° ♄ 45'07 | evening max el | 10645 Apr 30 19:40 | 2° ♄ 09'17 46°51'58 | |
| | 10642 Nov 08 13:11 | 0° ♄ | | 10645 Jun 03 16:06 | 0° Ω | |
| | 10642 Dec 03 03:23 | 0° ♁ | greatest brilliancy | 10645 Jun 10 08:02 | 3° Ω 02'08 -4.9m | |
| | 10642 Dec 27 13:45 | 0° ♄ | retrograde | 10645 Jun 20 05:55 | 4° Ω 53'51 | |
| morning set | 10643 Jan 05 19:30 | 11° ♄ 23'03 | evening set | 10645 Jul 06 08:50 | 29° ♄ 50'14 | |
| | 10643 Jan 20 21:32 | 0° \approx | | 10645 Jul 06 01:57 | 30° ♄ | |
| max. Earth dist. | 10643 Feb 09 22:22 | 24° \approx 46'59 1.72679 AU | inferior conj | 10645 Jul 10 23:35 | 27° ♄ 04'45 5°58'41 | |
| | | | minimum elong | 10645 Jul 11 10:34 | 26° ♄ 47'57 5°55'28 | |
| superior conj | 10643 Feb 12 08:48 | 27° \approx 47'59 0°13'55 | min. Earth dist. | 10645 Jul 11 04:27 | 26° ♄ 57'19 0.27106 AU | |
| minimum elong | 10643 Feb 12 12:06 | 27° \approx 58'10 0°14'05 | morning rise | 10645 Jul 16 12:19 | 23° ♄ 48'25 | |
| behind sun begin | 10643 Feb 12 00:30 | 27° \approx 22'16 | direct | 10645 Jul 31 16:06 | 19° ♄ 17'33 | |
| behind sun end | 10643 Feb 12 23:41 | 28° \approx 34'05 | desc. node | 10645 Aug 05 01:32 | 19° ♄ 40'06 | |
| | 10643 Feb 14 03:26 | 0° ♄ | greatest brilliancy | 10645 Aug 10 16:01 | 21° ♄ 08'59 -4.8m | |
| desc. node | 10643 Feb 18 02:59 | 4° ♄ 56'04 | | 10645 Aug 26 13:46 | 0° Ω | |
| | 10643 Mar 10 07:27 | 0° Υ | morning max el | 10645 Sep 19 09:56 | 20° Ω 41'36 46°16'36 | |
| evening rise | 10643 Mar 23 05:04 | 16° Υ 03'20 | | 10645 Sep 28 16:24 | 0° ♄ | |
| | 10643 Apr 03 09:30 | 0° ♄ | | 10645 Oct 26 10:46 | 0° ♄ | |
| | 10643 Apr 27 10:20 | 0° ♁ | | 10645 Nov 21 15:29 | 0° ♄ | |
| | 10643 May 21 11:55 | 0° ♄ | asc. node | 10645 Nov 25 23:40 | 5° ♄ 04'32 | |
| asc. node | 10643 Jun 10 22:36 | 25° ♄ 20'41 | | 10645 Dec 17 00:48 | 0° ♁ | |
| | 10643 Jun 14 17:12 | 0° Ω | | 10646 Jan 10 21:57 | 0° ♄ | |
| | 10643 Jul 09 06:00 | 0° ♄ | | 10646 Feb 04 11:12 | 0° \approx | |
| | 10643 Aug 03 08:13 | 0° ♄ | | 10646 Feb 28 19:10 | 0° ♄ | |
| | 10643 Aug 29 12:13 | 0° ♄ | morning set | 10646 Mar 17 13:37 | 20° ♄ 47'58 | |
| evening max el | 10643 Sep 24 10:07 | 27° ♄ 14'19 45°59'53 | desc. node | 10646 Mar 17 16:04 | 20° ♄ 55'33 | |
| | 10643 Sep 27 06:45 | 0° ♁ | | 10646 Mar 24 23:04 | 0° Υ | |
| desc. node | 10643 Sep 30 20:30 | 3° ♁ 21'27 | | 10646 Apr 17 23:32 | 0° ♄ | |

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|---------------------|--------------------|---------------|------------|---------------------|--------------------|-------------|------------|
| max. Earth dist. | 10646 Apr 24 04:59 | 7°8'48"05 | 1.71527 AU | minimum elong | 10648 Sep 21 04:27 | 9°28'52" | 4°42'33" |
| | | | | morning rise | 10648 Sep 26 19:12 | 6°20'06"10 | |
| superior conj | 10646 Apr 26 16:12 | 10°8'53"43 | -1°18'39" | direct | 10648 Oct 12 17:32 | 1°21'16"29 | |
| minimum elong | 10646 Apr 26 06:43 | 10°8'23"59 | 1°18'47" | greatest brilliancy | 10648 Oct 22 05:44 | 2°21'55"21 | -4.8m |
| | 10646 May 11 21:31 | 0°11' | | | 10648 Nov 29 06:45 | 0°11' | |
| | 10646 Jun 04 18:47 | 0°26' | | morning max el | 10648 Nov 30 11:51 | 1°11'09"26 | 45°42'56" |
| evening rise | 10646 Jun 05 22:35 | 1°26'27"15 | | asc. node | 10648 Dec 23 11:45 | 24°11'43"54 | |
| | 10646 Jun 28 17:27 | 0°01' | | | 10648 Dec 28 07:55 | 0°01' | |
| asc. node | 10646 Jul 08 10:38 | 12°01'07"48 | | | 10649 Jan 23 19:37 | 0°01' | |
| | 10646 Jul 22 19:29 | 0°01' | | | 10649 Feb 18 04:36 | 0°01' | |
| | 10646 Aug 16 02:53 | 0°01' | | | 10649 Mar 14 23:05 | 0°01' | |
| | 10646 Sep 09 18:33 | 0°11' | | | 10649 Apr 08 08:36 | 0°01' | |
| | 10646 Oct 04 23:47 | 0°01' | | desc. node | 10649 Apr 14 05:27 | 7°01'16"02 | |
| desc. node | 10646 Oct 28 06:57 | 26°01'44"47 | | | 10649 May 02 11:59 | 0°01' | |
| | 10646 Oct 31 04:49 | 0°01' | | | 10649 May 26 11:23 | 0°01' | |
| | 10646 Nov 28 10:39 | 0°01' | | morning set | 10649 May 31 22:48 | 6°11'52"16 | |
| evening max el | 10646 Dec 04 15:22 | 6°01'03"39 | 45°48'57" | | 10649 Jun 19 08:57 | 0°01' | |
| | 10647 Jan 03 12:23 | 0°01' | | | | | |
| greatest brilliancy | 10647 Jan 12 17:00 | 4°01'15"52 | -4.8m | superior conj | 10649 Jul 10 22:46 | 27°26'04"29 | -0°56'17" |
| retrograde | 10647 Jan 22 11:16 | 5°01'59"48 | | minimum elong | 10649 Jul 11 10:06 | 27°26'39"58 | 0°56'22" |
| evening set | 10647 Feb 06 10:29 | 1°01'37"52 | | | 10649 Jul 13 06:48 | 0°01' | |
| | 10647 Feb 09 06:28 | 30°01'00" | | max. Earth dist. | 10649 Jul 13 08:49 | 0°01'06"19 | 1.71551 AU |
| inferior conj | 10647 Feb 12 12:41 | 27°01'59"49 | -1°26'43" | asc. node | 10649 Aug 04 23:10 | 28°01'22"08 | |
| minimum elong | 10647 Feb 12 15:56 | 27°01'54"45 | 1°25'22" | | 10649 Aug 06 06:32 | 0°01' | |
| min. Earth dist. | 10647 Feb 13 01:17 | 27°01'40"12 | 0.28009 AU | evening rise | 10649 Aug 19 12:54 | 16°01'31"32 | |
| asc. node | 10647 Feb 18 07:41 | 24°01'31"03 | | | 10649 Aug 30 09:09 | 0°01' | |
| morning rise | 10647 Feb 18 20:52 | 24°01'12"53 | | | 10649 Sep 23 15:36 | 0°01' | |
| direct | 10647 Mar 05 17:09 | 19°01'52"41 | | | 10649 Oct 18 03:30 | 0°01' | |
| greatest brilliancy | 10647 Mar 16 13:00 | 22°01'04"08 | -4.8m | | 10649 Nov 11 23:23 | 0°01' | |
| | 10647 Mar 30 14:34 | 0°01' | | desc. node | 10649 Nov 24 18:05 | 15°01'14"15 | |
| morning max el | 10647 Apr 24 23:17 | 22°01'19"29 | 46°42'59" | | 10649 Dec 07 06:34 | 0°01' | |
| | 10647 May 02 10:52 | 0°01' | | | 10650 Jan 02 06:07 | 0°01' | |
| | 10647 May 29 13:56 | 0°01' | | | 10650 Jan 29 11:07 | 0°01' | |
| desc. node | 10647 Jun 10 05:05 | 13°01'31"45 | | evening max el | 10650 Feb 14 10:12 | 16°01'21"42 | 46°18'03" |
| | 10647 Jun 24 02:16 | 0°01' | | | 10650 Mar 01 04:57 | 0°01' | |
| | 10647 Jul 18 22:05 | 0°01' | | asc. node | 10650 Mar 17 18:10 | 12°01'05"46 | |
| | 10647 Aug 12 10:50 | 0°01' | | greatest brilliancy | 10650 Mar 26 10:44 | 16°01'12"15 | -4.8m |
| | 10647 Sep 05 20:58 | 0°01' | | retrograde | 10650 Apr 05 04:06 | 17°01'58"43 | |
| | 10647 Sep 30 06:05 | 0°01' | | evening set | 10650 Apr 21 20:30 | 12°01'37"03 | |
| asc. node | 10647 Sep 30 23:38 | 0°01'54"03 | | inferior conj | 10650 Apr 25 21:46 | 10°01'09"39 | 8°11'25" |
| | 10647 Oct 24 14:23 | 0°01' | | minimum elong | 10650 Apr 25 12:33 | 10°01'23"54 | 8°09'46" |
| morning set | 10647 Oct 26 21:42 | 2°01'15"02"29 | | min. Earth dist. | 10650 Apr 25 20:53 | 10°01'11"01 | 0.27292 AU |
| | 10647 Nov 17 22:02 | 0°01' | | morning rise | 10650 Apr 29 04:31 | 8°01'09"08 | |
| | | | | direct | 10650 May 16 15:52 | 2°01'16"18 | |
| superior conj | 10647 Dec 02 15:41 | 18°01'10"48 | 1°24'30" | greatest brilliancy | 10650 May 26 12:09 | 4°01'05"39 | -4.9m |
| minimum elong | 10647 Dec 02 19:17 | 18°01'21"56 | 1°25'01" | | 10650 Jul 01 00:22 | 0°01' | |
| max. Earth dist. | 10647 Dec 03 03:00 | 18°01'45"45 | 1.73229 AU | morning max el | 10650 Jul 06 02:43 | 5°01'01"46 | 46°56'39" |
| | 10647 Dec 12 05:37 | 0°01' | | desc. node | 10650 Jul 07 16:38 | 6°01'17"31 | |
| | 10648 Jan 05 13:49 | 0°01' | | | 10650 Jul 29 13:04 | 0°01' | |
| evening rise | 10648 Jan 08 19:16 | 3°01'58"31 | | | 10650 Aug 24 18:47 | 0°01' | |
| desc. node | 10648 Jan 20 16:02 | 18°01'35"02 | | | 10650 Sep 19 04:51 | 0°01' | |
| | 10648 Jan 29 22:41 | 0°01' | | | 10650 Oct 14 05:37 | 0°01' | |
| | 10648 Feb 23 07:44 | 0°01' | | asc. node | 10650 Oct 28 12:51 | 17°01'16"45 | |
| | 10648 Mar 18 16:57 | 0°01' | | | 10650 Nov 08 00:20 | 0°01' | |
| | 10648 Apr 12 03:58 | 0°01' | | | 10650 Dec 02 14:12 | 0°01' | |
| | 10648 May 06 20:57 | 0°01' | | | 10650 Dec 27 00:22 | 0°01' | |
| asc. node | 10648 May 12 13:13 | 6°01'49"05 | | morning set | 10651 Jan 03 12:33 | 9°01'14"58 | |
| | 10648 Jun 01 03:48 | 0°01' | | | 10651 Jan 20 08:05 | 0°01' | |
| | 10648 Jun 27 17:39 | 0°01' | | max. Earth dist. | 10651 Feb 07 16:50 | 22°01'42"52 | 1.72718 AU |
| evening max el | 10648 Jul 12 04:53 | 15°01'07"27 | 46°39'09" | | | | |
| | 10648 Jul 28 03:32 | 0°01' | | superior conj | 10651 Feb 09 23:59 | 25°01'33"35 | 0°17'22" |
| greatest brilliancy | 10648 Aug 20 05:32 | 15°01'06"19 | -4.8m | minimum elong | 10651 Feb 10 04:02 | 25°01'46"07 | 0°17'31" |
| retrograde | 10648 Aug 31 08:20 | 17°01'22"34 | | | 10651 Feb 13 14:00 | 0°01' | |
| desc. node | 10648 Sep 01 12:09 | 17°01'20"57 | | desc. node | 10651 Feb 17 04:48 | 4°01'28"54 | |
| evening set | 10648 Sep 15 14:24 | 12°01'49"28 | | | 10651 Mar 09 18:08 | 0°01' | |
| min. Earth dist. | 10648 Sep 20 17:30 | 9°01'45"51 | 0.28111 AU | evening rise | 10651 Mar 20 18:56 | 13°01'43"37 | |
| inferior conj | 10648 Sep 21 13:44 | 9°01'14"26 | -4°45'00" | | 10651 Apr 02 20:22 | 0°01' | |

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| | 10651 Apr 26 21:24 | 0°♐ | | | 10653 Nov 21 04:28 | 0°♐ | | |
| | 10651 May 20 23:14 | 0°♌ | | asc. node | 10653 Nov 25 01:37 | 4°♐32'48 | | |
| asc. node | 10651 Jun 10 00:32 | 24°♌50'47 | | | 10653 Dec 16 12:44 | 0°♌ | | |
| | 10651 Jun 14 04:54 | 0°♌ | | | 10654 Jan 10 09:19 | 0°♌ | | |
| | 10651 Jul 08 18:20 | 0°♍ | | | 10654 Feb 03 22:17 | 0°♍ | | |
| | 10651 Aug 02 21:42 | 0°♎ | | | 10654 Feb 28 06:07 | 0°♎ | | |
| | 10651 Aug 29 04:09 | 0°♐ | | morning set | 10654 Mar 15 03:04 | 18°♎26'51 | | |
| evening max el | 10651 Sep 22 00:45 | 24°♐59'39 | 46°01'03 | desc. node | 10654 Mar 16 18:04 | 20°♎28'01 | | |
| | 10651 Sep 27 06:17 | 0°♌ | | | 10654 Mar 24 09:56 | 0°♍ | | |
| desc. node | 10651 Sep 29 22:32 | 2°♌28'23 | | | 10654 Apr 17 10:22 | 0°♌ | | |
| greatest brilliancy | 10651 Oct 31 02:52 | 23°♌50'52 | -4.7m | max. Earth dist. | 10654 Apr 21 14:45 | 5°♌14'17 | 1.71555 AU | |
| retrograde | 10651 Nov 10 07:55 | 25°♌45'10 | | | | | | |
| evening set | 10651 Nov 28 15:38 | 19°♌28'23 | | superior conj | 10654 Apr 24 04:14 | 8°♌26'55 | -1°16'52 | |
| inferior conj | 10651 Dec 01 21:05 | 17°♌28'03 | -8°33'35 | minimum elong | 10654 Apr 23 18:13 | 7°♌55'31 | 1°16'56 | |
| minimum elong | 10651 Dec 02 00:43 | 17°♌22'21 | 8°32'52 | | 10654 May 11 08:24 | 0°♐ | | |
| min. Earth dist. | 10651 Dec 02 00:13 | 17°♌23'09 | 0.29086 AU | evening rise | 10654 Jun 03 09:45 | 28°♐57'16 | | |
| morning rise | 10651 Dec 05 09:47 | 15°♌16'33 | | | 10654 Jun 04 05:45 | 0°♌ | | |
| direct | 10651 Dec 23 07:56 | 9°♌11'23 | | | 10654 Jun 28 04:32 | 0°♌ | | |
| greatest brilliancy | 10652 Jan 02 22:57 | 11°♌14'07 | -4.7m | asc. node | 10654 Jul 07 12:27 | 11°♌38'47 | | |
| asc. node | 10652 Jan 20 22:50 | 21°♌45'39 | | | 10654 Jul 22 06:45 | 0°♍ | | |
| | 10652 Jan 30 22:11 | 0°♌ | | | 10654 Aug 15 14:26 | 0°♎ | | |
| morning max el | 10652 Feb 10 14:57 | 10°♌00'15 | 45°57'21 | | 10654 Sep 09 06:37 | 0°♐ | | |
| | 10652 Feb 29 21:08 | 0°♍ | | | 10654 Oct 04 12:52 | 0°♌ | | |
| | 10652 Mar 27 10:42 | 0°♎ | | desc. node | 10654 Oct 27 09:01 | 26°♌09'00 | | |
| | 10652 Apr 21 18:00 | 0°♍ | | | 10654 Oct 30 20:02 | 0°♌ | | |
| desc. node | 10652 May 11 18:31 | 24°♍18'59 | | | 10654 Nov 28 07:30 | 0°♍ | | |
| | 10652 May 16 09:47 | 0°♌ | | evening max el | 10654 Dec 02 06:48 | 3°♍51'21 | 45°48'34 | |
| | 10652 Jun 09 16:47 | 0°♐ | | | 10655 Jan 05 09:16 | 0°♎ | | |
| | 10652 Jul 03 19:19 | 0°♌ | | greatest brilliancy | 10655 Jan 10 07:58 | 2°♎01'21 | -4.8m | |
| | 10652 Jul 27 20:34 | 0°♌ | | retrograde | 10655 Jan 20 01:33 | 3°♎44'23 | | |
| morning set | 10652 Aug 13 23:52 | 21°♌21'18 | | | 10655 Feb 02 21:15 | 30°♎ | | |
| | 10652 Aug 20 22:31 | 0°♍ | | evening set | 10655 Feb 04 02:59 | 29°♍20'20 | | |
| asc. node | 10652 Sep 01 12:14 | 14°♍23'26 | | inferior conj | 10655 Feb 10 03:37 | 25°♍43'59 | -1°48'07 | |
| | 10652 Sep 14 01:52 | 0°♎ | | minimum elong | 10655 Feb 10 07:38 | 25°♍37'43 | 1°46'32 | |
| | | | | min. Earth dist. | 10655 Feb 10 16:46 | 25°♍23'29 | 0.28050 AU | |
| superior conj | 10652 Sep 21 11:35 | 9°♎11'18 | 0°46'01 | morning rise | 10655 Feb 16 11:47 | 21°♍56'38 | | |
| minimum elong | 10652 Sep 21 02:35 | 8°♎43'25 | 0°45'40 | asc. node | 10655 Feb 17 09:43 | 21°♍27'22 | | |
| max. Earth dist. | 10652 Sep 23 13:21 | 11°♎45'35 | 1.72649 AU | direct | 10655 Mar 03 08:41 | 17°♍36'28 | | |
| | 10652 Oct 08 06:47 | 0°♐ | | greatest brilliancy | 10655 Mar 14 04:40 | 19°♍47'43 | -4.8m | |
| evening rise | 10652 Oct 28 12:25 | 25°♐00'06 | | | 10655 Mar 31 07:51 | 0°♎ | | |
| | 10652 Nov 01 13:45 | 0°♌ | | morning max el | 10655 Apr 22 13:30 | 19°♎59'29 | 46°41'39 | |
| | 10652 Nov 25 23:48 | 0°♌ | | | 10655 May 02 06:18 | 0°♍ | | |
| | 10652 Dec 20 13:55 | 0°♍ | | | 10655 May 29 05:00 | 0°♌ | | |
| desc. node | 10652 Dec 22 05:38 | 2°♍00'40 | | desc. node | 10655 Jun 09 06:57 | 12°♌55'40 | | |
| | 10653 Jan 14 08:35 | 0°♎ | | | 10655 Jun 23 15:32 | 0°♐ | | |
| | 10653 Feb 08 08:16 | 0°♍ | | | 10655 Jul 18 10:25 | 0°♌ | | |
| | 10653 Mar 05 15:42 | 0°♌ | | | 10655 Aug 11 22:35 | 0°♌ | | |
| | 10653 Mar 31 16:10 | 0°♐ | | | 10655 Sep 05 08:19 | 0°♍ | | |
| asc. node | 10653 Apr 14 04:31 | 14°♐55'40 | | | 10655 Sep 29 17:08 | 0°♎ | | |
| evening max el | 10653 Apr 28 09:53 | 29°♐47'39 | 46°51'25 | asc. node | 10655 Sep 30 01:38 | 0°♎26'10 | | |
| | 10653 Apr 28 14:48 | 0°♌ | | | 10655 Oct 24 01:15 | 0°♐ | | |
| | 10653 Jun 06 06:23 | 0°♌ | | morning set | 10655 Oct 24 14:18 | 0°♐40'16 | | |
| greatest brilliancy | 10653 Jun 07 21:18 | 0°♌37'20 | -4.9m | | 10655 Nov 17 08:47 | 0°♌ | | |
| retrograde | 10653 Jun 17 19:39 | 2°♌29'11 | | | | | | |
| | 10653 Jun 28 20:46 | 30°♌ | | superior conj | 10655 Nov 30 09:01 | 16°♌03'10 | 1°25'04 | |
| evening set | 10653 Jul 04 01:17 | 27°♌20'37 | | minimum elong | 10655 Nov 30 11:57 | 16°♌12'10 | 1°25'35 | |
| inferior conj | 10653 Jul 08 12:30 | 24°♌40'05 | 6°16'48 | max. Earth dist. | 10655 Nov 30 21:13 | 16°♌40'46 | 1.73223 AU | |
| minimum elong | 10653 Jul 08 23:37 | 24°♌23'04 | 6°13'39 | | 10655 Dec 11 16:22 | 0°♌ | | |
| min. Earth dist. | 10653 Jul 08 17:31 | 24°♌32'25 | 0.27104 AU | | 10656 Jan 05 00:39 | 0°♍ | | |
| morning rise | 10653 Jul 13 22:03 | 21°♌28'25 | | evening rise | 10656 Jan 06 11:25 | 1°♍46'59 | | |
| direct | 10653 Jul 29 05:34 | 16°♌52'55 | | desc. node | 10656 Jan 19 17:51 | 18°♍06'59 | | |
| desc. node | 10653 Aug 04 03:29 | 17°♌33'32 | | | 10656 Jan 29 09:42 | 0°♎ | | |
| greatest brilliancy | 10653 Aug 08 04:20 | 18°♌44'01 | -4.8m | | 10656 Feb 22 19:03 | 0°♍ | | |
| | 10653 Aug 27 07:37 | 0°♌ | | | 10656 Mar 18 04:40 | 0°♌ | | |
| morning max el | 10653 Sep 17 00:52 | 18°♌24'19 | 46°18'13 | | 10656 Apr 11 16:15 | 0°♐ | | |
| | 10653 Sep 28 12:08 | 0°♍ | | | 10656 May 06 10:05 | 0°♌ | | |
| | 10653 Oct 26 01:47 | 0°♎ | | asc. node | 10656 May 11 15:11 | 6°♌14'52 | | |

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| | 10656 May 31 18:31 | 0°♈ | | | 10658 Nov 07 11:38 | 0°♍ | | |
| | 10656 Jun 27 11:59 | 0°♍ | | | 10658 Dec 02 01:11 | 0°♊ | | |
| evening max el | 10656 Jul 09 19:18 | 12°♍47'47 | 46°40'13 | | 10658 Dec 26 11:11 | 0°♊ | | |
| | 10656 Jul 28 12:33 | 0°♊ | | morning set | 10659 Jan 01 05:36 | 7°♊06'18 | | |
| greatest brilliancy | 10656 Aug 17 21:50 | 12°♊51'02 | -4.8m | | 10659 Jan 19 18:50 | 0°♊ | | |
| retrograde | 10656 Aug 28 23:06 | 15°♊06'11 | | max. Earth dist. | 10659 Feb 05 12:20 | 20°♊41'12 | 1.72753 AU | |
| desc. node | 10656 Aug 31 14:09 | 14°♊57'54 | | | | | | |
| evening set | 10656 Sep 13 03:33 | 10°♊36'23 | | superior conj | 10659 Feb 07 15:06 | 23°♊18'22 | 0°20'47 | |
| min. Earth dist. | 10656 Sep 18 09:05 | 7°♊29'30 | 0.28057 AU | minimum elong | 10659 Feb 07 19:53 | 23°♊33'10 | 0°20'55 | |
| inferior conj | 10656 Sep 19 04:41 | 6°♊59'04 | -4°26'47 | | 10659 Feb 13 00:48 | 0°♋ | | |
| minimum elong | 10656 Sep 18 19:47 | 7°♊12'54 | 4°24'23 | desc. node | 10659 Feb 16 06:48 | 4°♋01'37 | | |
| morning rise | 10656 Sep 24 12:39 | 3°♊47'05 | | | 10659 Mar 09 05:02 | 0°♋ | | |
| | 10656 Oct 03 07:28 | 30°♋♍ | | evening rise | 10659 Mar 18 08:49 | 11°♋23'25 | | |
| direct | 10656 Oct 10 07:43 | 29°♋01'52 | | | 10659 Apr 02 07:24 | 0°♌ | | |
| | 10656 Oct 17 13:31 | 0°♊ | | | 10659 Apr 26 08:38 | 0°♌ | | |
| greatest brilliancy | 10656 Oct 19 20:38 | 0°♊40'56 | -4.8m | | 10659 May 20 10:45 | 0°♌ | | |
| morning max el | 10656 Nov 28 01:21 | 28°♊52'13 | 45°43'21 | asc. node | 10659 Jun 09 02:24 | 24°♌19'55 | | |
| | 10656 Nov 29 05:31 | 0°♍ | | | 10659 Jun 13 16:50 | 0°♍ | | |
| asc. node | 10656 Dec 22 13:35 | 24°♍04'09 | | | 10659 Jul 08 06:56 | 0°♍ | | |
| | 10656 Dec 27 23:43 | 0°♊ | | | 10659 Aug 02 11:29 | 0°♊ | | |
| | 10657 Jan 23 08:59 | 0°♊ | | | 10659 Aug 28 20:31 | 0°♍ | | |
| | 10657 Feb 17 16:51 | 0°♊ | | evening max el | 10659 Sep 19 16:18 | 22°♍46'57 | 46°02'21 | |
| | 10657 Mar 14 10:45 | 0°♋ | | | 10659 Sep 27 07:03 | 0°♊ | | |
| | 10657 Apr 07 19:57 | 0°♋ | | desc. node | 10659 Sep 29 00:34 | 1°♊34'06 | | |
| desc. node | 10657 Apr 13 07:21 | 6°♋46'51 | | greatest brilliancy | 10659 Oct 28 17:00 | 21°♊39'09 | -4.7m | |
| | 10657 May 01 23:11 | 0°♌ | | retrograde | 10659 Nov 08 00:35 | 23°♊35'37 | | |
| | 10657 May 25 22:28 | 0°♌ | | evening set | 10659 Nov 26 08:28 | 17°♊17'17 | | |
| morning set | 10657 May 29 09:54 | 4°♌21'45 | | inferior conj | 10659 Nov 29 13:18 | 15°♊17'59 | -8°36'48 | |
| | 10657 Jun 18 19:57 | 0°♌ | | minimum elong | 10659 Nov 29 16:11 | 15°♊13'27 | 8°36'09 | |
| | | | | min. Earth dist. | 10659 Nov 29 14:50 | 15°♊15'34 | 0.29092 AU | |
| superior conj | 10657 Jul 08 11:07 | 24°♌38'30 | -0°59'10 | morning rise | 10659 Dec 02 23:54 | 13°♊09'54 | | |
| minimum elong | 10657 Jul 08 22:38 | 25°♌14'36 | 0°59'15 | direct | 10659 Dec 21 00:29 | 7°♊01'31 | | |
| max. Earth dist. | 10657 Jul 10 16:19 | 27°♌25'13 | 1.71517 AU | greatest brilliancy | 10659 Dec 31 13:57 | 9°♊03'17 | -4.7m | |
| | 10657 Jul 12 17:43 | 0°♍ | | asc. node | 10660 Jan 20 00:54 | 20°♊40'12 | | |
| asc. node | 10657 Aug 04 01:07 | 27°♍54'14 | | | 10660 Jan 31 00:42 | 0°♊ | | |
| | 10657 Aug 05 17:26 | 0°♍ | | morning max el | 10660 Feb 08 07:25 | 7°♊49'40 | 45°56'03 | |
| evening rise | 10657 Aug 17 03:14 | 14°♍12'53 | | | 10660 Feb 29 13:51 | 0°♊ | | |
| | 10657 Aug 29 20:05 | 0°♊ | | | 10660 Mar 27 00:35 | 0°♋ | | |
| | 10657 Sep 23 02:40 | 0°♍ | | | 10660 Apr 21 06:35 | 0°♋ | | |
| | 10657 Oct 17 14:52 | 0°♊ | | desc. node | 10660 May 10 20:23 | 23°♋47'59 | | |
| | 10657 Nov 11 11:16 | 0°♊ | | | 10660 May 15 21:41 | 0°♌ | | |
| desc. node | 10657 Nov 23 19:54 | 14°♊43'10 | | | 10660 Jun 09 04:16 | 0°♌ | | |
| | 10657 Dec 06 19:23 | 0°♊ | | | 10660 Jul 03 06:31 | 0°♌ | | |
| | 10658 Jan 01 20:43 | 0°♋ | | | 10660 Jul 27 07:36 | 0°♍ | | |
| | 10658 Jan 29 05:40 | 0°♋ | | morning set | 10660 Aug 11 13:51 | 19°♍01'18 | | |
| evening max el | 10658 Feb 11 23:06 | 13°♋59'05 | 46°16'42 | | 10660 Aug 20 09:24 | 0°♍ | | |
| | 10658 Mar 01 14:37 | 0°♌ | | asc. node | 10660 Aug 31 14:13 | 13°♍56'01 | | |
| asc. node | 10658 Mar 16 20:13 | 10°♌34'07 | | | 10660 Sep 13 12:38 | 0°♊ | | |
| greatest brilliancy | 10658 Mar 23 23:29 | 13°♌48'03 | -4.8m | | | | | |
| retrograde | 10658 Apr 02 17:05 | 15°♌35'07 | | superior conj | 10660 Sep 19 03:06 | 6°♌57'13 | 0°43'02 | |
| evening set | 10658 Apr 19 05:16 | 10°♌19'20 | | minimum elong | 10660 Sep 18 18:27 | 6°♌30'24 | 0°42'40 | |
| inferior conj | 10658 Apr 23 11:04 | 7°♌45'38 | 7°59'57 | max. Earth dist. | 10660 Sep 21 07:20 | 9°♌39'14 | 1.72613 AU | |
| minimum elong | 10658 Apr 23 01:20 | 8°♌00'39 | 7°58'06 | | 10660 Oct 07 17:29 | 0°♍ | | |
| min. Earth dist. | 10658 Apr 23 10:07 | 7°♌47'06 | 0.27306 AU | evening rise | 10660 Oct 26 05:27 | 22°♍51'36 | | |
| morning rise | 10658 Apr 26 21:18 | 5°♌40'06 | | | 10660 Nov 01 00:28 | 0°♊ | | |
| | 10658 May 11 14:22 | 30°♋♋ | | | 10660 Nov 25 10:40 | 0°♊ | | |
| direct | 10658 May 14 05:03 | 29°♋51'39 | | | 10660 Dec 20 01:06 | 0°♊ | | |
| | 10658 May 16 20:34 | 0°♌ | | desc. node | 10660 Dec 21 07:33 | 1°♊32'27 | | |
| greatest brilliancy | 10658 May 24 02:32 | 1°♌42'13 | -4.9m | | 10661 Jan 13 20:17 | 0°♋ | | |
| | 10658 Jul 01 00:54 | 0°♌ | | | 10661 Feb 07 20:46 | 0°♋ | | |
| morning max el | 10658 Jul 03 16:32 | 2°♌38'24 | 46°57'21 | | 10661 Mar 05 05:31 | 0°♌ | | |
| desc. node | 10658 Jul 06 18:31 | 5°♌46'10 | | | 10661 Mar 31 08:32 | 0°♌ | | |
| | 10658 Jul 29 05:55 | 0°♌ | | asc. node | 10661 Apr 13 06:27 | 14°♌10'27 | | |
| | 10658 Aug 24 08:52 | 0°♍ | | evening max el | 10661 Apr 26 00:19 | 27°♌26'30 | 46°50'52 | |
| | 10658 Sep 18 17:31 | 0°♍ | | | 10661 Apr 28 14:06 | 0°♌ | | |
| | 10658 Oct 13 17:27 | 0°♊ | | greatest brilliancy | 10661 Jun 05 10:46 | 28°♌12'48 | -4.9m | |
| asc. node | 10658 Oct 27 14:45 | 16°♊47'41 | | | 10661 Jun 13 12:25 | 0°♍ | | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| retrograde | 10661 Jun 15 09:09 | 0°♌04'10 | | superior conj | 10663 Nov 28 02:19 | 13°♊56'06 | 1°25'32 |
| | 10661 Jun 17 05:28 | 30°♋00' | | minimum elong | 10663 Nov 28 04:31 | 14°♊02'53 | 1°26'02 |
| evening set | 10661 Jul 01 17:48 | 24°♊50'51 | | max. Earth dist. | 10663 Nov 28 13:29 | 14°♊30'32 | 1.73218 AU |
| inferior conj | 10661 Jul 06 01:21 | 22°♊15'16 | 6°34'18 | | 10663 Dec 11 02:53 | 0°♊ | |
| minimum elong | 10661 Jul 06 12:32 | 21°♊58'07 | 6°31'12 | evening rise | 10664 Jan 04 03:38 | 29°♊36'34 | |
| min. Earth dist. | 10661 Jul 06 06:27 | 22°♊07'27 | 0.27102 AU | | 10664 Jan 04 11:14 | 0°♊ | |
| morning rise | 10661 Jul 11 07:26 | 19°♊08'23 | | desc. node | 10664 Jan 18 19:52 | 17°♊40'22 | |
| direct | 10661 Jul 26 19:00 | 14°♊28'19 | | | 10664 Jan 28 20:26 | 0°♊ | |
| desc. node | 10661 Aug 03 05:35 | 15°♊31'59 | | | 10664 Feb 22 06:03 | 0°♊ | |
| greatest brilliancy | 10661 Aug 05 16:26 | 16°♊18'34 | -4.8m | | 10664 Mar 17 16:05 | 0°♊ | |
| | 10661 Aug 27 20:57 | 0°♌ | | | 10664 Apr 11 04:16 | 0°♌ | |
| morning max el | 10661 Sep 14 14:57 | 16°♌04'50 | 46°19'46 | | 10664 May 05 23:03 | 0°♌ | |
| | 10661 Sep 28 07:15 | 0°♍ | | asc. node | 10664 May 10 17:02 | 5°♌40'55 | |
| | 10661 Oct 25 16:32 | 0°♍ | | | 10664 May 31 09:11 | 0°♌ | |
| | 10661 Nov 20 17:17 | 0°♍ | | | 10664 Jun 27 06:37 | 0°♍ | |
| asc. node | 10661 Nov 24 03:28 | 4°♍01'05 | | evening max el | 10664 Jul 07 08:45 | 10°♍26'02 | 46°41'17 |
| | 10661 Dec 16 00:31 | 0°♎ | | | 10664 Jul 29 00:36 | 0°♍ | |
| | 10662 Jan 09 20:32 | 0°♎ | | greatest brilliancy | 10664 Aug 15 13:49 | 10°♍35'16 | -4.8m |
| | 10662 Feb 03 09:13 | 0°♎ | | retrograde | 10664 Aug 26 13:43 | 12°♍49'44 | |
| | 10662 Feb 27 16:55 | 0°♎ | | desc. node | 10664 Aug 30 16:09 | 12°♍29'24 | |
| morning set | 10662 Mar 12 16:32 | 16°♎06'09 | | evening set | 10664 Sep 10 16:35 | 8°♍22'40 | |
| desc. node | 10662 Mar 15 19:59 | 20°♎00'32 | | min. Earth dist. | 10664 Sep 16 00:29 | 5°♍12'49 | 0.28002 AU |
| | 10662 Mar 23 20:42 | 0°♏ | | inferior conj | 10664 Sep 16 19:21 | 4°♍43'32 | -4°07'50 |
| | 10662 Apr 16 21:09 | 0°♏ | | minimum elong | 10664 Sep 16 10:54 | 4°♍56'40 | 4°05'30 |
| max. Earth dist. | 10662 Apr 18 21:36 | 2°♏31'40 | 1.71587 AU | morning rise | 10664 Sep 22 05:48 | 1°♍28'05 | |
| | | | | | 10664 Sep 25 01:08 | 30°♋00' | |
| superior conj | 10662 Apr 21 16:05 | 5°♏59'54 | -1°14'56 | direct | 10664 Oct 07 21:18 | 26°♋46'57 | |
| minimum elong | 10662 Apr 21 05:36 | 5°♏27'04 | 1°14'56 | greatest brilliancy | 10664 Oct 17 11:35 | 28°♋26'50 | -4.8m |
| | 10662 May 10 19:12 | 0°♐ | | | 10664 Oct 21 10:52 | 0°♍ | |
| evening rise | 10662 May 31 20:31 | 26°♐26'17 | | morning max el | 10664 Nov 25 15:03 | 26°♍36'13 | 45°43'54 |
| | 10662 Jun 03 16:37 | 0°♑ | | | 10664 Nov 29 03:04 | 0°♍ | |
| | 10662 Jun 27 15:31 | 0°♑ | | asc. node | 10664 Dec 21 15:38 | 23°♍26'16 | |
| asc. node | 10662 Jul 06 14:25 | 11°♑10'33 | | | 10664 Dec 27 14:55 | 0°♎ | |
| | 10662 Jul 21 17:54 | 0°♒ | | | 10665 Jan 22 21:56 | 0°♎ | |
| | 10662 Aug 15 01:53 | 0°♒ | | | 10665 Feb 17 04:42 | 0°♎ | |
| | 10662 Sep 08 18:38 | 0°♒ | | | 10665 Mar 13 22:01 | 0°♎ | |
| | 10662 Oct 04 01:56 | 0°♎ | | | 10665 Apr 07 06:54 | 0°♏ | |
| desc. node | 10662 Oct 26 10:54 | 25°♎32'51 | | desc. node | 10665 Apr 12 09:12 | 6°♏18'47 | |
| | 10662 Oct 30 11:17 | 0°♏ | | | 10665 May 01 09:58 | 0°♏ | |
| | 10662 Nov 28 04:52 | 0°♏ | | | 10665 May 25 09:10 | 0°♐ | |
| evening max el | 10662 Nov 29 21:24 | 1°♏37'39 | 45°48'17 | morning set | 10665 May 26 21:01 | 1°♐52'28 | |
| greatest brilliancy | 10663 Jan 07 23:27 | 29°♏48'22 | -4.8m | | 10665 Jun 18 06:35 | 0°♑ | |
| | 10663 Jan 08 13:37 | 0°♐ | | | | | |
| retrograde | 10663 Jan 17 15:37 | 1°♐30'17 | | superior conj | 10665 Jul 05 23:11 | 22°♑12'34 | -1°01'58 |
| | 10663 Jan 26 08:41 | 30°♑00' | | minimum elong | 10665 Jul 06 10:47 | 22°♑48'58 | 1°02'04 |
| evening set | 10663 Feb 01 19:42 | 27°♑03'45 | | max. Earth dist. | 10665 Jul 07 22:25 | 24°♑40'38 | 1.71492 AU |
| inferior conj | 10663 Feb 07 18:42 | 23°♑29'33 | -2°09'13 | | 10665 Jul 12 04:20 | 0°♒ | |
| minimum elong | 10663 Feb 07 23:27 | 23°♑22'07 | 2°07'24 | asc. node | 10665 Aug 03 03:04 | 27°♒27'13 | |
| min. Earth dist. | 10663 Feb 08 08:35 | 23°♑07'50 | 0.28093 AU | | 10665 Aug 05 04:02 | 0°♒ | |
| morning rise | 10663 Feb 14 02:38 | 19°♑42'00 | | evening rise | 10665 Aug 14 17:02 | 11°♒53'25 | |
| asc. node | 10663 Feb 16 11:43 | 18°♑28'26 | | | 10665 Aug 29 06:45 | 0°♒ | |
| direct | 10663 Feb 28 23:48 | 15°♑21'29 | | | 10665 Sep 22 13:28 | 0°♒ | |
| greatest brilliancy | 10663 Mar 11 20:52 | 17°♑33'07 | -4.8m | | 10665 Oct 17 01:56 | 0°♎ | |
| | 10663 Mar 31 20:16 | 0°♐ | | | 10665 Nov 10 22:53 | 0°♎ | |
| morning max el | 10663 Apr 20 03:01 | 17°♐38'31 | 46°40'08 | desc. node | 10665 Nov 22 21:53 | 14°♎13'22 | |
| | 10663 May 02 00:56 | 0°♑ | | | 10665 Dec 06 08:00 | 0°♎ | |
| | 10663 May 28 19:42 | 0°♑ | | | 10666 Jan 01 11:12 | 0°♐ | |
| desc. node | 10663 Jun 08 08:51 | 12°♑20'26 | | | 10666 Jan 29 00:23 | 0°♑ | |
| | 10663 Jun 23 04:34 | 0°♒ | | evening max el | 10666 Feb 09 12:54 | 11°♑39'53 | 46°15'30 |
| | 10663 Jul 17 22:33 | 0°♒ | | | 10666 Mar 02 03:00 | 0°♑ | |
| | 10663 Aug 11 10:07 | 0°♒ | | asc. node | 10666 Mar 15 22:10 | 9°♑00'21 | |
| | 10663 Sep 04 19:25 | 0°♒ | | greatest brilliancy | 10666 Mar 21 11:50 | 11°♑24'53 | -4.8m |
| asc. node | 10663 Sep 29 03:27 | 29°♒58'31 | | retrograde | 10666 Mar 31 06:46 | 13°♑13'04 | |
| | 10663 Sep 29 03:56 | 0°♒ | | evening set | 10666 Apr 16 14:11 | 8°♑03'00 | |
| morning set | 10663 Oct 22 06:37 | 28°♒29'50 | | inferior conj | 10666 Apr 21 00:23 | 5°♑23'06 | 7°47'37 |
| | 10663 Oct 23 11:51 | 0°♒ | | minimum elong | 10666 Apr 20 14:15 | 5°♑38'44 | 7°45'36 |
| | 10663 Nov 16 19:19 | 0°♎ | | min. Earth dist. | 10666 Apr 20 23:04 | 5°♑25'07 | 0.27316 AU |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| morning rise | 10666 Apr 24 14:11 | 3°♄12'30 | | | 10668 Oct 31 10:59 | 0°♁ | |
| | 10666 Apr 30 16:16 | 30°♁ | | | 10668 Nov 24 21:22 | 0°♄ | |
| direct | 10666 May 11 18:42 | 27°♁28'43 | | | 10668 Dec 19 12:09 | 0°♁ | |
| greatest brilliancy | 10666 May 21 16:14 | 29°♁19'46 | -4.9m | desc. node | 10668 Dec 20 09:32 | 1°♁04'54 | |
| | 10666 May 23 10:06 | 0°♄ | | | 10669 Jan 13 07:52 | 0°♁ | |
| | 10666 Jun 30 23:45 | 0°♄ | | | 10669 Feb 07 09:10 | 0°♁ | |
| morning max el | 10666 Jul 01 07:08 | 0°♄18'33 | 46°57'49 | | 10669 Mar 04 19:18 | 0°♄ | |
| desc. node | 10666 Jul 05 20:38 | 4°♄57'47 | | | 10669 Mar 31 01:04 | 0°♄ | |
| | 10666 Jul 28 22:00 | 0°♄ | | asc. node | 10669 Apr 12 08:24 | 13°♄25'01 | |
| | 10666 Aug 23 22:27 | 0°♄ | | evening max el | 10669 Apr 23 14:27 | 25°♄04'53 | 46°50'11 |
| | 10666 Sep 18 05:49 | 0°♄ | | | 10669 Apr 28 14:19 | 0°♄ | |
| | 10666 Oct 13 04:58 | 0°♄ | | greatest brilliancy | 10669 Jun 03 00:59 | 25°♄49'40 | -4.9m |
| asc. node | 10666 Oct 26 16:37 | 16°♄19'27 | | retrograde | 10669 Jun 12 22:18 | 27°♄39'44 | |
| | 10666 Nov 06 22:38 | 0°♄ | | evening set | 10669 Jun 29 10:27 | 22°♄21'53 | |
| | 10666 Dec 01 11:51 | 0°♁ | | inferior conj | 10669 Jul 03 14:18 | 19°♄51'21 | 6°51'00 |
| | 10666 Dec 25 21:41 | 0°♄ | | minimum elong | 10669 Jul 04 01:28 | 19°♄34'12 | 6°48'01 |
| morning set | 10666 Dec 29 22:27 | 4°♄58'02 | | min. Earth dist. | 10669 Jul 03 19:43 | 19°♄43'01 | 0.27095 AU |
| | 10667 Jan 19 05:18 | 0°♁ | | morning rise | 10669 Jul 08 16:38 | 16°♄49'24 | |
| max. Earth dist. | 10667 Feb 03 07:40 | 18°♁40'03 | 1.72787 AU | direct | 10669 Jul 24 08:01 | 12°♄04'41 | |
| | | | | desc. node | 10669 Aug 02 07:28 | 13°♄35'58 | |
| superior conj | 10667 Feb 05 06:08 | 21°♁03'49 | 0°24'11 | greatest brilliancy | 10669 Aug 03 04:49 | 13°♄54'10 | -4.8m |
| minimum elong | 10667 Feb 05 11:36 | 21°♁20'46 | 0°24'18 | | 10669 Aug 28 06:27 | 0°♄ | |
| | 10667 Feb 12 11:19 | 0°♁ | | morning max el | 10669 Sep 12 04:07 | 13°♄43'49 | 46°21'24 |
| desc. node | 10667 Feb 15 08:41 | 3°♁34'51 | | | 10669 Sep 28 01:32 | 0°♄ | |
| | 10667 Mar 08 15:39 | 0°♁ | | | 10669 Oct 25 06:50 | 0°♄ | |
| evening rise | 10667 Mar 15 22:44 | 9°♁04'16 | | | 10669 Nov 20 05:49 | 0°♄ | |
| | 10667 Apr 01 18:09 | 0°♄ | | asc. node | 10669 Nov 23 05:28 | 3°♄30'32 | |
| | 10667 Apr 25 19:32 | 0°♄ | | | 10669 Dec 15 12:08 | 0°♁ | |
| | 10667 May 19 21:54 | 0°♄ | | | 10670 Jan 09 07:40 | 0°♄ | |
| asc. node | 10667 Jun 08 04:26 | 23°♄50'51 | | | 10670 Feb 02 20:05 | 0°♁ | |
| | 10667 Jun 13 04:24 | 0°♄ | | | 10670 Feb 27 03:39 | 0°♁ | |
| | 10667 Jul 07 19:11 | 0°♄ | | morning set | 10670 Mar 10 05:57 | 13°♁45'36 | |
| | 10667 Aug 02 00:59 | 0°♄ | | desc. node | 10670 Mar 14 21:46 | 19°♁32'51 | |
| | 10667 Aug 28 12:50 | 0°♄ | | | 10670 Mar 23 07:23 | 0°♁ | |
| evening max el | 10667 Sep 17 08:33 | 20°♄36'35 | 46°03'29 | max. Earth dist. | 10670 Apr 16 04:17 | 29°♁48'50 | 1.71624 AU |
| | 10667 Sep 27 08:54 | 0°♁ | | | 10670 Apr 16 07:51 | 0°♄ | |
| desc. node | 10667 Sep 28 02:29 | 0°♁39'00 | | | | | |
| greatest brilliancy | 10667 Oct 26 07:23 | 19°♁28'05 | -4.8m | superior conj | 10670 Apr 19 03:58 | 3°♄33'14 | -1°12'51 |
| retrograde | 10667 Nov 05 17:10 | 21°♁26'04 | | minimum elong | 10670 Apr 18 17:06 | 2°♄59'11 | 1°12'49 |
| evening set | 10667 Nov 24 00:53 | 15°♁06'59 | | | 10670 May 10 05:59 | 0°♄ | |
| inferior conj | 10667 Nov 27 05:21 | 13°♁08'06 | -8°39'13 | evening rise | 10670 May 29 07:20 | 23°♄55'30 | |
| minimum elong | 10667 Nov 27 07:30 | 13°♁04'44 | 8°38'38 | | 10670 Jun 03 03:30 | 0°♄ | |
| min. Earth dist. | 10667 Nov 27 05:12 | 13°♁08'20 | 0.29093 AU | | 10670 Jun 27 02:29 | 0°♄ | |
| morning rise | 10667 Nov 30 14:10 | 11°♁02'50 | | asc. node | 10670 Jul 05 16:22 | 10°♄42'19 | |
| direct | 10667 Dec 18 17:05 | 4°♁52'05 | | | 10670 Jul 21 05:00 | 0°♄ | |
| greatest brilliancy | 10667 Dec 29 04:08 | 6°♁51'59 | -4.7m | | 10670 Aug 14 13:16 | 0°♄ | |
| asc. node | 10668 Jan 19 02:55 | 19°♁36'59 | | | 10670 Sep 08 06:34 | 0°♄ | |
| | 10668 Jan 31 01:33 | 0°♄ | | | 10670 Oct 03 14:57 | 0°♁ | |
| morning max el | 10668 Feb 05 23:27 | 5°♄38'48 | 45°54'43 | desc. node | 10670 Oct 25 12:53 | 24°♁57'01 | |
| | 10668 Feb 29 05:59 | 0°♁ | | | 10670 Oct 30 02:41 | 0°♄ | |
| | 10668 Mar 26 14:04 | 0°♁ | | evening max el | 10670 Nov 27 11:24 | 29°♄22'35 | 45°47'54 |
| | 10668 Apr 20 18:52 | 0°♁ | | | 10670 Nov 28 03:03 | 0°♁ | |
| desc. node | 10668 May 09 22:15 | 23°♁17'50 | | greatest brilliancy | 10671 Jan 05 14:58 | 27°♁35'20 | -4.8m |
| | 10668 May 15 09:18 | 0°♄ | | retrograde | 10671 Jan 15 05:44 | 29°♁16'26 | |
| | 10668 Jun 08 15:27 | 0°♄ | | evening set | 10671 Jan 30 12:35 | 24°♁46'49 | |
| | 10668 Jul 02 17:25 | 0°♄ | | inferior conj | 10671 Feb 05 09:51 | 21°♁15'09 | -2°30'01 |
| | 10668 Jul 26 18:18 | 0°♄ | | minimum elong | 10671 Feb 05 15:18 | 21°♁06'37 | 2°27'59 |
| morning set | 10668 Aug 09 04:12 | 16°♄43'31 | | min. Earth dist. | 10671 Feb 06 00:38 | 20°♁52'02 | 0.28140 AU |
| | 10668 Aug 19 19:58 | 0°♄ | | morning rise | 10671 Feb 11 17:22 | 17°♁27'48 | |
| asc. node | 10668 Aug 30 16:01 | 13°♄28'59 | | asc. node | 10671 Feb 15 13:37 | 15°♁33'34 | |
| | 10668 Sep 12 23:06 | 0°♄ | | direct | 10671 Feb 26 14:45 | 13°♁06'18 | |
| | | | | greatest brilliancy | 10671 Mar 09 13:36 | 15°♁19'05 | -4.8m |
| superior conj | 10668 Sep 16 18:44 | 4°♄44'23 | 0°40'00 | | 10671 Apr 01 05:32 | 0°♁ | |
| minimum elong | 10668 Sep 16 10:31 | 4°♄18'52 | 0°39'38 | morning max el | 10671 Apr 17 16:53 | 15°♁18'08 | 46°38'41 |
| max. Earth dist. | 10668 Sep 19 02:35 | 7°♄37'38 | 1.72581 AU | | 10671 May 01 19:11 | 0°♁ | |
| | 10668 Oct 07 03:56 | 0°♄ | | | 10671 May 28 10:18 | 0°♄ | |
| evening rise | 10668 Oct 23 22:26 | 20°♄43'34 | | desc. node | 10671 Jun 07 10:55 | 11°♄45'39 | |

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| | 10671 Jun 22 17:36 | 0°♄ | | | 10674 Jan 28 19:57 | 0°♅ | |
| | 10671 Jul 17 10:43 | 0°♅ | | evening max el | 10674 Feb 07 03:35 | 9°♅22'12 | 46°14'06 |
| | 10671 Aug 10 21:43 | 0°♆ | | | 10674 Mar 02 20:16 | 0°♄ | |
| | 10671 Sep 04 06:35 | 0°♅ | | asc. node | 10674 Mar 15 00:08 | 7°♄21'53 | |
| asc. node | 10671 Sep 28 05:21 | 29°♅30'54 | | greatest brilliancy | 10674 Mar 18 23:56 | 9°♄00'21 | -4.8m |
| | 10671 Sep 28 14:48 | 0°♄ | | retrograde | 10674 Mar 28 20:32 | 10°♄49'28 | |
| morning set | 10671 Oct 19 23:13 | 26°♄20'01 | | evening set | 10674 Apr 13 23:11 | 5°♄45'14 | |
| | 10671 Oct 22 22:31 | 0°♆ | | inferior conj | 10674 Apr 18 13:39 | 2°♄59'03 | 7°34'17 |
| | 10671 Nov 16 05:53 | 0°♄ | | minimum elong | 10674 Apr 18 03:10 | 3°♄15'12 | 7°32'08 |
| | | | | min. Earth dist. | 10674 Apr 18 11:55 | 3°♄01'44 | 0.27329 AU |
| superior conj | 10671 Nov 25 19:56 | 11°♄49'52 | 1°25'51 | morning rise | 10674 Apr 22 07:06 | 0°♄43'10 | |
| minimum elong | 10671 Nov 25 21:25 | 11°♄54'24 | 1°26'21 | | 10674 Apr 23 12:56 | 30°♅♄ | |
| max. Earth dist. | 10671 Nov 26 07:02 | 12°♄24'05 | 1.73215 AU | direct | 10674 May 09 08:45 | 25°♅04'24 | |
| | 10671 Dec 10 13:29 | 0°♄ | | greatest brilliancy | 10674 May 19 05:41 | 26°♅55'19 | -4.9m |
| evening rise | 10672 Jan 01 20:09 | 27°♄26'48 | | | 10674 May 25 23:51 | 0°♄ | |
| | 10672 Jan 03 21:57 | 0°♄ | | morning max el | 10674 Jun 28 21:54 | 27°♄57'35 | 46°58'12 |
| desc. node | 10672 Jan 17 21:45 | 17°♄12'51 | | | 10674 Jun 30 22:16 | 0°♄ | |
| | 10672 Jan 28 07:22 | 0°♄ | | desc. node | 10674 Jul 04 22:32 | 4°♄08'06 | |
| | 10672 Feb 21 17:18 | 0°♅ | | | 10674 Jul 28 14:18 | 0°♅ | |
| | 10672 Mar 17 03:46 | 0°♄ | | | 10674 Aug 23 12:22 | 0°♆ | |
| | 10672 Apr 10 16:34 | 0°♄ | | | 10674 Sep 17 18:28 | 0°♅ | |
| | 10672 May 05 12:19 | 0°♅ | | | 10674 Oct 12 16:50 | 0°♄ | |
| asc. node | 10672 May 09 19:06 | 5°♅06'44 | | asc. node | 10674 Oct 25 18:36 | 15°♄50'23 | |
| | 10672 May 31 00:17 | 0°♆ | | | 10674 Nov 06 10:00 | 0°♆ | |
| | 10672 Jun 27 02:04 | 0°♅ | | | 10674 Nov 30 22:53 | 0°♄ | |
| evening max el | 10672 Jul 04 22:19 | 8°♅03'53 | 46°42'24 | | 10674 Dec 25 08:32 | 0°♄ | |
| | 10672 Jul 29 17:13 | 0°♄ | | morning set | 10674 Dec 27 15:46 | 2°♄50'07 | |
| greatest brilliancy | 10672 Aug 13 05:26 | 8°♄18'09 | -4.8m | | 10675 Jan 18 16:05 | 0°♄ | |
| retrograde | 10672 Aug 24 04:45 | 10°♄32'37 | | max. Earth dist. | 10675 Feb 01 02:52 | 16°♄37'31 | 1.72816 AU |
| desc. node | 10672 Aug 29 18:06 | 9°♄55'03 | | | | | |
| evening set | 10672 Sep 08 05:46 | 6°♄07'43 | | superior conj | 10675 Feb 02 21:44 | 18°♄50'06 | 0°27'29 |
| min. Earth dist. | 10672 Sep 13 15:45 | 2°♄55'26 | 0.27947 AU | minimum elong | 10675 Feb 03 03:51 | 19°♄09'01 | 0°27'35 |
| inferior conj | 10672 Sep 14 10:01 | 2°♄27'10 | -3°48'21 | | 10675 Feb 11 22:09 | 0°♄ | |
| minimum elong | 10672 Sep 14 02:03 | 2°♄39'30 | 3°46'09 | desc. node | 10675 Feb 14 10:31 | 3°♄06'59 | |
| | 10672 Sep 18 10:54 | 30°♅♄ | | | 10675 Mar 08 02:36 | 0°♅ | |
| morning rise | 10672 Sep 19 22:53 | 29°♅08'38 | | evening rise | 10675 Mar 13 13:04 | 6°♅45'24 | |
| direct | 10672 Oct 05 10:58 | 24°♅31'04 | | | 10675 Apr 01 05:16 | 0°♄ | |
| greatest brilliancy | 10672 Oct 15 02:23 | 26°♅11'58 | -4.8m | | 10675 Apr 25 06:53 | 0°♄ | |
| | 10672 Oct 23 12:56 | 0°♄ | | | 10675 May 19 09:33 | 0°♅ | |
| morning max el | 10672 Nov 23 05:40 | 24°♄21'58 | 45°44'39 | asc. node | 10675 Jun 07 06:21 | 23°♅19'46 | |
| | 10672 Nov 28 24:00 | 0°♆ | | | 10675 Jun 12 16:30 | 0°♆ | |
| asc. node | 10672 Dec 20 17:36 | 22°♆48'10 | | | 10675 Jul 07 08:01 | 0°♅ | |
| | 10672 Dec 27 06:04 | 0°♄ | | | 10675 Aug 01 15:10 | 0°♄ | |
| | 10673 Jan 22 10:57 | 0°♄ | | | 10675 Aug 28 06:02 | 0°♆ | |
| | 10673 Feb 16 16:44 | 0°♄ | | evening max el | 10675 Sep 15 00:42 | 18°♆24'29 | 46°04'40 |
| | 10673 Mar 13 09:33 | 0°♄ | | desc. node | 10675 Sep 27 04:31 | 29°♆41'38 | |
| | 10673 Apr 06 18:11 | 0°♅ | | | 10675 Sep 27 12:59 | 0°♄ | |
| desc. node | 10673 Apr 11 11:11 | 5°♅50'05 | | greatest brilliancy | 10675 Oct 23 22:28 | 17°♄16'27 | -4.8m |
| | 10673 Apr 30 21:06 | 0°♄ | | retrograde | 10675 Nov 03 09:25 | 19°♄15'03 | |
| morning set | 10673 May 24 07:56 | 29°♄21'29 | | evening set | 10675 Nov 21 17:02 | 12°♄56'04 | |
| | 10673 May 24 20:12 | 0°♄ | | inferior conj | 10675 Nov 24 21:26 | 10°♄57'04 | -8°40'57 |
| | 10673 Jun 17 17:33 | 0°♅ | | minimum elong | 10675 Nov 24 22:48 | 10°♄54'56 | 8°40'26 |
| | | | | min. Earth dist. | 10675 Nov 24 19:50 | 10°♄59'36 | 0.29086 AU |
| superior conj | 10673 Jul 03 11:00 | 19°♅44'47 | -1°04'38 | morning rise | 10675 Nov 28 04:39 | 8°♄54'06 | |
| minimum elong | 10673 Jul 03 22:38 | 20°♅21'15 | 1°04'47 | direct | 10675 Dec 16 09:32 | 2°♄41'38 | |
| max. Earth dist. | 10673 Jul 05 06:20 | 22°♅00'39 | 1.71469 AU | greatest brilliancy | 10675 Dec 26 18:11 | 4°♄39'19 | -4.7m |
| | 10673 Jul 11 15:16 | 0°♆ | | asc. node | 10676 Jan 18 04:46 | 18°♄33'58 | |
| asc. node | 10673 Aug 02 04:52 | 26°♆58'40 | | | 10676 Jan 31 01:36 | 0°♄ | |
| | 10673 Aug 04 15:00 | 0°♅ | | morning max el | 10676 Feb 03 14:50 | 3°♄25'25 | 45°53'36 |
| evening rise | 10673 Aug 12 06:45 | 9°♅32'37 | | | 10676 Feb 28 22:09 | 0°♄ | |
| | 10673 Aug 28 17:46 | 0°♄ | | | 10676 Mar 26 03:43 | 0°♄ | |
| | 10673 Sep 22 00:38 | 0°♆ | | | 10676 Apr 20 07:23 | 0°♅ | |
| | 10673 Oct 16 13:23 | 0°♄ | | desc. node | 10676 May 09 00:17 | 22°♅47'14 | |
| | 10673 Nov 10 10:52 | 0°♄ | | | 10676 May 14 21:13 | 0°♄ | |
| desc. node | 10673 Nov 21 23:56 | 13°♄42'48 | | | 10676 Jun 08 03:00 | 0°♄ | |
| | 10673 Dec 05 20:59 | 0°♄ | | | 10676 Jul 02 04:45 | 0°♅ | |
| | 10674 Jan 01 02:09 | 0°♄ | | | 10676 Jul 26 05:27 | 0°♆ | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| morning set | 10676 Aug 06 18:00 | 14°Ω22'26 | | min. Earth dist. | 10679 Feb 03 16:27 | 18°≈35'47 | 0.28187 AU |
| | 10676 Aug 19 06:58 | 0°♍ | | morning rise | 10679 Feb 09 07:52 | 15°≈13'26 | |
| asc. node | 10676 Aug 29 17:57 | 13°♍00'55 | | asc. node | 10679 Feb 14 15:41 | 12°≈42'08 | |
| | 10676 Sep 12 10:00 | 0°♌ | | direct | 10679 Feb 24 05:38 | 10°≈50'19 | |
| | | | | greatest brilliancy | 10679 Mar 07 06:17 | 13°≈04'37 | -4.8m |
| superior conj | 10676 Sep 14 09:52 | 2°♌28'32 | 0°36'52 | | 10679 Apr 01 12:24 | 0°♋ | |
| minimum elong | 10676 Sep 14 02:07 | 2°♌04'31 | 0°36'29 | morning max el | 10679 Apr 15 07:47 | 13°♋00'12 | 46°37'28 |
| max. Earth dist. | 10676 Sep 16 20:54 | 5°♌31'45 | 1.72542 AU | | 10679 May 01 13:04 | 0°♐ | |
| | 10676 Oct 06 14:47 | 0°♍ | | | 10679 May 28 00:44 | 0°♏ | |
| evening rise | 10676 Oct 21 15:06 | 18°♍33'13 | | desc. node | 10679 Jun 06 12:47 | 11°♏10'37 | |
| | 10676 Oct 30 21:54 | 0°♎ | | | 10679 Jun 22 06:30 | 0°♐ | |
| | 10676 Nov 24 08:29 | 0°♏ | | | 10679 Jul 16 22:46 | 0°♑ | |
| | 10676 Dec 18 23:36 | 0°≈ | | | 10679 Aug 10 09:14 | 0°♒ | |
| desc. node | 10676 Dec 19 11:25 | 0°≈35'51 | | | 10679 Sep 03 17:44 | 0°♑ | |
| | 10677 Jan 12 19:49 | 0°♋ | | asc. node | 10679 Sep 27 07:20 | 29°♑03'24 | |
| | 10677 Feb 06 21:57 | 0°♐ | | | 10679 Sep 28 01:41 | 0°♌ | |
| | 10677 Mar 04 09:29 | 0°♏ | | morning set | 10679 Oct 17 15:27 | 24°♌08'50 | |
| | 10677 Mar 30 18:08 | 0°♐ | | | 10679 Oct 22 09:15 | 0°♍ | |
| asc. node | 10677 Apr 11 10:29 | 12°♐38'45 | | | 10679 Nov 15 16:32 | 0°♎ | |
| evening max el | 10677 Apr 21 03:32 | 22°♐40'06 | 46°49'20 | | | | |
| | 10677 Apr 28 16:03 | 0°♑ | | superior conj | 10679 Nov 23 13:10 | 9°♎42'07 | 1°26'02 |
| greatest brilliancy | 10677 May 31 15:30 | 23°♑26'05 | -4.9m | minimum elong | 10679 Nov 23 13:54 | 9°♎44'25 | 1°26'33 |
| retrograde | 10677 Jun 10 10:53 | 25°♑14'26 | | max. Earth dist. | 10679 Nov 24 01:21 | 10°♎19'41 | 1.73212 AU |
| evening set | 10677 Jun 27 03:06 | 19°♑51'52 | | | 10679 Dec 10 00:08 | 0°♏ | |
| inferior conj | 10677 Jul 01 03:16 | 17°♑26'31 | 7°06'49 | evening rise | 10679 Dec 30 12:24 | 25°♏16'07 | |
| minimum elong | 10677 Jul 01 14:19 | 17°♑09'31 | 7°03'59 | | 10680 Jan 03 08:41 | 0°≈ | |
| min. Earth dist. | 10677 Jul 01 09:17 | 17°♑17'16 | 0.27097 AU | desc. node | 10680 Jan 16 23:36 | 16°≈45'08 | |
| morning rise | 10677 Jul 06 01:38 | 14°♑29'42 | | | 10680 Jan 27 18:19 | 0°♋ | |
| direct | 10677 Jul 21 20:36 | 9°♑39'44 | | | 10680 Feb 21 04:34 | 0°♐ | |
| greatest brilliancy | 10677 Jul 31 17:55 | 11°♑29'14 | -4.9m | | 10680 Mar 16 15:28 | 0°♏ | |
| desc. node | 10677 Aug 01 09:27 | 11°♑43'23 | | | 10680 Apr 10 04:52 | 0°♐ | |
| | 10677 Aug 28 13:54 | 0°♒ | | | 10680 May 05 01:35 | 0°♑ | |
| morning max el | 10677 Sep 09 16:52 | 11°♒20'07 | 46°23'00 | asc. node | 10680 May 08 21:03 | 4°♑32'27 | |
| | 10677 Sep 27 19:50 | 0°♑ | | | 10680 May 30 15:23 | 0°♒ | |
| | 10677 Oct 24 21:23 | 0°♌ | | | 10680 Jun 26 21:47 | 0°♑ | |
| | 10677 Nov 19 18:38 | 0°♍ | | evening max el | 10680 Jul 02 12:50 | 5°♑44'57 | 46°43'35 |
| asc. node | 10677 Nov 22 07:25 | 2°♍58'54 | | | 10680 Jul 30 15:06 | 0°♌ | |
| | 10677 Dec 15 00:01 | 0°♎ | | greatest brilliancy | 10680 Aug 10 20:26 | 6°♌01'12 | -4.8m |
| | 10678 Jan 08 19:02 | 0°♏ | | retrograde | 10680 Aug 21 20:18 | 8°♌16'21 | |
| | 10678 Feb 02 07:11 | 0°≈ | | desc. node | 10680 Aug 28 20:09 | 7°♌16'29 | |
| | 10678 Feb 26 14:36 | 0°♋ | | evening set | 10680 Sep 05 19:14 | 3°♌53'13 | |
| morning set | 10678 Mar 07 19:44 | 11°♋25'27 | | min. Earth dist. | 10680 Sep 11 06:45 | 0°♌39'06 | 0.27899 AU |
| desc. node | 10678 Mar 13 23:47 | 19°♋05'15 | | inferior conj | 10680 Sep 12 00:42 | 0°♌11'22 | -3°28'31 |
| | 10678 Mar 22 18:16 | 0°♐ | | minimum elong | 10680 Sep 11 17:18 | 0°♌22'49 | 3°26'25 |
| max. Earth dist. | 10678 Apr 13 13:16 | 27°♐12'45 | 1.71658 AU | | 10680 Sep 12 08:04 | 30°♎♑ | |
| | 10678 Apr 15 18:43 | 0°♏ | | morning rise | 10680 Sep 17 15:58 | 26°♑50'02 | |
| | | | | direct | 10680 Oct 03 01:10 | 22°♑15'46 | |
| superior conj | 10678 Apr 16 16:21 | 1°♏07'43 | -1°10'39 | greatest brilliancy | 10680 Oct 12 16:51 | 23°♑57'14 | -4.8m |
| minimum elong | 10678 Apr 16 05:11 | 0°♏32'46 | 1°10'34 | | 10680 Oct 24 21:50 | 0°♌ | |
| | 10678 May 09 16:53 | 0°♐ | | morning max el | 10680 Nov 20 21:17 | 22°♌10'25 | 45°45'12 |
| evening rise | 10678 May 26 18:39 | 21°♐26'02 | | | 10680 Nov 28 20:08 | 0°♍ | |
| | 10678 Jun 02 14:28 | 0°♑ | | asc. node | 10680 Dec 19 19:27 | 22°♍10'17 | |
| | 10678 Jun 26 13:35 | 0°♒ | | | 10680 Dec 26 20:57 | 0°♎ | |
| asc. node | 10678 Jul 04 18:13 | 10°♒13'14 | | | 10681 Jan 21 23:49 | 0°♏ | |
| | 10678 Jul 20 16:18 | 0°♑ | | | 10681 Feb 16 04:36 | 0°≈ | |
| | 10678 Aug 14 00:55 | 0°♌ | | | 10681 Mar 12 20:55 | 0°♋ | |
| | 10678 Sep 07 18:51 | 0°♍ | | | 10681 Apr 06 05:16 | 0°♐ | |
| | 10678 Oct 03 04:24 | 0°♎ | | desc. node | 10681 Apr 10 13:04 | 5°♐21'42 | |
| desc. node | 10678 Oct 24 14:58 | 24°♎20'18 | | | 10681 Apr 30 08:02 | 0°♏ | |
| | 10678 Oct 29 18:39 | 0°♏ | | morning set | 10681 May 21 18:53 | 26°♏51'22 | |
| evening max el | 10678 Nov 25 01:02 | 27°♏06'00 | 45°47'45 | | 10681 May 24 07:02 | 0°♐ | |
| | 10678 Nov 28 02:34 | 0°≈ | | | 10681 Jun 17 04:17 | 0°♑ | |
| greatest brilliancy | 10679 Jan 03 05:54 | 25°≈21'03 | -4.8m | | | | |
| retrograde | 10679 Jan 12 20:12 | 27°≈02'06 | | superior conj | 10681 Jun 30 22:58 | 17°♑18'09 | -1°07'12 |
| evening set | 10679 Jan 28 05:29 | 22°≈28'54 | | minimum elong | 10681 Jul 01 10:32 | 17°♑54'26 | 1°07'22 |
| inferior conj | 10679 Feb 03 00:54 | 19°≈00'03 | -2°50'30 | max. Earth dist. | 10681 Jul 02 16:39 | 19°♑28'56 | 1.71442 AU |
| minimum elong | 10679 Feb 03 07:02 | 18°≈50'28 | 2°48'18 | | 10681 Jul 11 01:56 | 0°♒ | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|--|
| asc. node | 10681 Aug 01 06:50 | 26°Ω31'33 | | | 10684 Jan 31 00:05 | 0°☿ | | |
| | 10681 Aug 04 01:39 | 0°♊ | | morning max el | 10684 Feb 01 05:29 | 1°☿11'28 | 45°52'17 | |
| evening rise | 10681 Aug 09 20:42 | 7°♊13'27 | | | 10684 Feb 28 13:42 | 0°≈ | | |
| | 10681 Aug 28 04:28 | 0°♊ | | | 10684 Mar 25 16:58 | 0°♋ | | |
| | 10681 Sep 21 11:29 | 0°♌ | | | 10684 Apr 19 19:33 | 0°♍ | | |
| | 10681 Oct 16 00:33 | 0°♎ | | desc. node | 10684 May 08 02:09 | 22°♍17'14 | | |
| | 10681 Nov 09 22:38 | 0°☿ | | | 10684 May 14 08:45 | 0°♋ | | |
| desc. node | 10681 Nov 21 01:46 | 13°☿12'13 | | | 10684 Jun 07 14:10 | 0°♌ | | |
| | 10681 Dec 05 09:50 | 0°≈ | | | 10684 Jul 01 15:40 | 0°♍ | | |
| | 10681 Dec 31 17:06 | 0°♋ | | | 10684 Jul 25 16:12 | 0°♎ | | |
| | 10682 Jan 28 15:56 | 0°♍ | | morning set | 10684 Aug 04 07:43 | 12°♎02'20 | | |
| evening max el | 10682 Feb 04 18:49 | 7°♍06'34 | 46°12'44 | | 10684 Aug 18 17:34 | 0°♊ | | |
| | 10682 Mar 03 19:13 | 0°♋ | | asc. node | 10684 Aug 28 19:55 | 12°♊34'14 | | |
| asc. node | 10682 Mar 14 02:12 | 5°♋40'33 | | | 10684 Sep 11 20:29 | 0°♊ | | |
| greatest brilliancy | 10682 Mar 16 12:21 | 6°♋37'03 | -4.8m | | | | | |
| retrograde | 10682 Mar 26 10:00 | 8°♋26'29 | | superior conj | 10684 Sep 12 01:09 | 0°♊14'27 | 0°33'40 | |
| evening set | 10682 Apr 11 08:21 | 3°♋28'13 | | minimum elong | 10684 Sep 11 17:56 | 29°♊52'04 | 0°33'16 | |
| inferior conj | 10682 Apr 16 02:54 | 0°♋35'54 | 7°20'18 | max. Earth dist. | 10684 Sep 14 13:17 | 3°♊21'05 | 1.72500 AU | |
| minimum elong | 10682 Apr 15 16:10 | 0°♋52'28 | 7°17'59 | | 10684 Oct 06 01:13 | 0°♌ | | |
| min. Earth dist. | 10682 Apr 16 00:52 | 0°♋39'03 | 0.27339 AU | evening rise | 10684 Oct 19 08:01 | 16°♌25'02 | | |
| | 10682 Apr 17 02:10 | 30°♋♍ | | | 10684 Oct 30 08:24 | 0°♎ | | |
| morning rise | 10682 Apr 19 23:55 | 28°♍14'40 | | | 10684 Nov 23 19:09 | 0°☿ | | |
| direct | 10682 May 06 22:49 | 22°♍41'11 | | | 10684 Dec 18 10:37 | 0°≈ | | |
| greatest brilliancy | 10682 May 16 19:04 | 24°♍31'39 | -4.9m | desc. node | 10684 Dec 18 13:23 | 0°≈08'23 | | |
| | 10682 May 27 14:12 | 0°♋ | | | 10685 Jan 12 07:24 | 0°♋ | | |
| morning max el | 10682 Jun 26 12:08 | 25°♋36'20 | 46°58'32 | | 10685 Feb 06 10:26 | 0°♍ | | |
| | 10682 Jun 30 19:32 | 0°♌ | | | 10685 Mar 03 23:31 | 0°♋ | | |
| desc. node | 10682 Jul 04 00:28 | 3°♌20'25 | | | 10685 Mar 30 11:19 | 0°♌ | | |
| | 10682 Jul 28 05:56 | 0°♍ | | asc. node | 10685 Apr 10 12:24 | 11°♌52'05 | | |
| | 10682 Aug 23 01:44 | 0°♎ | | evening max el | 10685 Apr 18 15:53 | 20°♌14'07 | 46°48'33 | |
| | 10682 Sep 17 06:36 | 0°♊ | | | 10685 Apr 28 19:00 | 0°♍ | | |
| | 10682 Oct 12 04:14 | 0°♊ | | greatest brilliancy | 10685 May 29 06:08 | 21°♍03'09 | -4.9m | |
| asc. node | 10682 Oct 24 20:28 | 15°♊22'25 | | retrograde | 10685 Jun 07 23:20 | 22°♍50'00 | | |
| | 10682 Nov 05 20:54 | 0°♌ | | evening set | 10685 Jun 24 19:40 | 17°♍22'21 | | |
| | 10682 Nov 30 09:31 | 0°♎ | | inferior conj | 10685 Jun 28 16:12 | 15°♍02'28 | 7°21'54 | |
| | 10682 Dec 24 19:02 | 0°☿ | | minimum elong | 10685 Jun 29 03:03 | 14°♍45'47 | 7°19'14 | |
| morning set | 10682 Dec 25 08:59 | 0°☿42'59 | | min. Earth dist. | 10685 Jun 28 22:58 | 14°♍52'03 | 0.27097 AU | |
| | 10683 Jan 18 02:34 | 0°≈ | | morning rise | 10685 Jul 03 10:26 | 12°♍11'14 | | |
| max. Earth dist. | 10683 Jan 29 19:20 | 14°≈27'30 | 1.72846 AU | direct | 10685 Jul 19 08:48 | 7°♍15'20 | | |
| | | | | greatest brilliancy | 10685 Jul 29 07:22 | 9°♍05'37 | -4.9m | |
| superior conj | 10683 Jan 31 13:11 | 16°≈36'54 | 0°30'45 | desc. node | 10685 Jul 31 11:33 | 9°♍56'14 | | |
| minimum elong | 10683 Jan 31 19:53 | 16°≈57'38 | 0°30'52 | | 10685 Aug 28 18:41 | 0°♎ | | |
| | 10683 Feb 11 08:42 | 0°♋ | | morning max el | 10685 Sep 07 05:49 | 8°♎57'53 | 46°24'44 | |
| desc. node | 10683 Feb 13 12:32 | 2°♋40'31 | | | 10685 Sep 27 13:15 | 0°♊ | | |
| | 10683 Mar 07 13:15 | 0°♍ | | | 10685 Oct 24 11:20 | 0°♊ | | |
| evening rise | 10683 Mar 11 03:02 | 4°♍26'29 | | | 10685 Nov 19 06:56 | 0°♌ | | |
| | 10683 Mar 31 16:03 | 0°♋ | | asc. node | 10685 Nov 21 09:15 | 2°♌28'19 | | |
| | 10683 Apr 24 17:53 | 0°♌ | | | 10685 Dec 14 11:26 | 0°♎ | | |
| | 10683 May 18 20:52 | 0°♍ | | | 10686 Jan 08 05:59 | 0°☿ | | |
| asc. node | 10683 Jun 06 08:13 | 22°♍49'39 | | | 10686 Feb 01 17:53 | 0°≈ | | |
| | 10683 Jun 12 04:17 | 0°♎ | | | 10686 Feb 26 01:11 | 0°♋ | | |
| | 10683 Jul 06 20:32 | 0°♊ | | morning set | 10686 Mar 05 09:42 | 9°♋07'01 | | |
| | 10683 Aug 01 05:01 | 0°♊ | | desc. node | 10686 Mar 13 01:41 | 18°♋38'16 | | |
| | 10683 Aug 27 23:03 | 0°♌ | | | 10686 Mar 22 04:51 | 0°♍ | | |
| evening max el | 10683 Sep 12 16:28 | 16°♌12'45 | 46°05'55 | max. Earth dist. | 10686 Apr 11 00:03 | 24°♍43'06 | 1.71701 AU | |
| desc. node | 10683 Sep 26 06:34 | 28°♌44'44 | | | | | | |
| | 10683 Sep 27 18:12 | 0°♎ | | superior conj | 10686 Apr 14 04:29 | 28°♍42'13 | -1°08'18 | |
| greatest brilliancy | 10683 Oct 21 14:07 | 15°♎07'14 | -4.8m | minimum elong | 10686 Apr 13 17:07 | 28°♍06'38 | 1°08'09 | |
| retrograde | 10683 Nov 01 01:15 | 17°♎06'03 | | | 10686 Apr 15 05:21 | 0°♋ | | |
| evening set | 10683 Nov 19 09:00 | 10°♎47'49 | | | 10686 May 09 03:36 | 0°♌ | | |
| inferior conj | 10683 Nov 22 13:43 | 8°♎48'10 | -8°41'57 | evening rise | 10686 May 24 05:34 | 18°♌55'57 | | |
| minimum elong | 10683 Nov 22 14:16 | 8°♎47'17 | 8°41'27 | | 10686 Jun 02 01:16 | 0°♍ | | |
| min. Earth dist. | 10683 Nov 22 10:55 | 8°♎52'33 | 0.29080 AU | | 10686 Jun 26 00:28 | 0°♎ | | |
| morning rise | 10683 Nov 25 19:38 | 6°♎46'56 | | asc. node | 10686 Jul 03 20:12 | 9°♎45'17 | | |
| direct | 10683 Dec 14 01:50 | 0°♎33'15 | | | 10686 Jul 20 03:23 | 0°♊ | | |
| greatest brilliancy | 10683 Dec 24 08:50 | 2°♎29'04 | -4.7m | | 10686 Aug 13 12:21 | 0°♊ | | |
| asc. node | 10684 Jan 17 06:51 | 17°♎34'25 | | | 10686 Sep 07 06:54 | 0°♌ | | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 10686 Oct 02 17:39 | 0°♊ | | desc. node | 10689 Apr 09 14:56 | 4°♊53'26 | |
| desc. node | 10686 Oct 23 16:50 | 23°♊43'42 | | | 10689 Apr 29 18:55 | 0°♊ | |
| | 10686 Oct 29 10:32 | 0°♊ | | morning set | 10689 May 19 06:07 | 24°♊22'11 | |
| evening max el | 10686 Nov 22 15:35 | 24°♊52'54 | 45°47'48 | | 10689 May 23 17:50 | 0°♊ | |
| | 10686 Nov 28 02:39 | 0°♊ | | | 10689 Jun 16 15:04 | 0°♊ | |
| greatest brilliancy | 10686 Dec 31 20:28 | 23°♊08'14 | -4.8m | | | | |
| retrograde | 10687 Jan 10 11:25 | 24°♊49'55 | | superior conj | 10689 Jun 28 10:46 | 14°♊50'39 | -1°09'38 |
| evening set | 10687 Jan 25 22:48 | 20°♊12'57 | | minimum elong | 10689 Jun 28 22:09 | 15°♊26'22 | 1°09'50 |
| inferior conj | 10687 Jan 31 16:15 | 16°♊46'58 | -3°10'27 | max. Earth dist. | 10689 Jun 30 04:07 | 17°♊00'26 | 1.71424 AU |
| minimum elong | 10687 Jan 31 23:00 | 16°♊36'25 | 3°08'05 | | 10689 Jul 10 12:43 | 0°♊ | |
| min. Earth dist. | 10687 Feb 01 08:08 | 16°♊22'11 | 0.28235 AU | asc. node | 10689 Jul 31 08:47 | 26°♊03'52 | |
| morning rise | 10687 Feb 06 22:31 | 13°♊01'31 | | | 10689 Aug 03 12:28 | 0°♊ | |
| asc. node | 10687 Feb 13 17:40 | 9°♊57'55 | | evening rise | 10689 Aug 07 10:06 | 4°♊51'57 | |
| direct | 10687 Feb 21 21:17 | 8°♊36'27 | | | 10689 Aug 27 15:21 | 0°♊ | |
| greatest brilliancy | 10687 Mar 04 22:47 | 10°♊51'50 | -4.8m | | 10689 Sep 20 22:31 | 0°♊ | |
| | 10687 Apr 01 16:37 | 0°♊ | | | 10689 Oct 15 11:54 | 0°♊ | |
| morning max el | 10687 Apr 12 23:37 | 10°♊45'45 | 46°35'52 | | 10689 Nov 09 10:36 | 0°♊ | |
| | 10687 May 01 06:16 | 0°♊ | | desc. node | 10689 Nov 20 03:46 | 12°♊41'39 | |
| | 10687 May 27 14:52 | 0°♊ | | | 10689 Dec 04 22:55 | 0°♊ | |
| desc. node | 10687 Jun 05 14:43 | 10°♊36'20 | | | 10689 Dec 31 08:23 | 0°♊ | |
| | 10687 Jun 21 19:15 | 0°♊ | | | 10690 Jan 28 12:39 | 0°♊ | |
| | 10687 Jul 16 10:43 | 0°♊ | | evening max el | 10690 Feb 02 09:59 | 4°♊50'42 | 46°11'26 |
| | 10687 Aug 09 20:38 | 0°♊ | | | 10690 Mar 05 02:58 | 0°♊ | |
| asc. node | 10687 Sep 03 04:44 | 0°♊ | | asc. node | 10690 Mar 13 04:08 | 3°♊55'41 | |
| | 10687 Sep 26 09:08 | 28°♊35'50 | | greatest brilliancy | 10690 Mar 14 01:41 | 4°♊15'22 | -4.8m |
| | 10687 Sep 27 12:25 | 0°♊ | | retrograde | 10690 Mar 23 23:16 | 6°♊04'24 | |
| morning set | 10687 Oct 15 07:39 | 21°♊57'58 | | evening set | 10690 Apr 08 18:05 | 1°♊12'01 | |
| | 10687 Oct 21 19:49 | 0°♊ | | | 10690 Apr 10 19:15 | 30°♊ | |
| | 10687 Nov 15 03:01 | 0°♊ | | inferior conj | 10690 Apr 13 16:30 | 28°♊13'52 | 7°05'41 |
| | | | | minimum elong | 10690 Apr 13 05:36 | 28°♊30'44 | 7°03'13 |
| superior conj | 10687 Nov 21 06:30 | 7°♊35'11 | 1°26'07 | min. Earth dist. | 10690 Apr 13 14:29 | 28°♊16'58 | 0.27346 AU |
| minimum elong | 10687 Nov 21 06:31 | 7°♊35'13 | 1°26'37 | morning rise | 10690 Apr 17 17:03 | 25°♊47'11 | |
| max. Earth dist. | 10687 Nov 21 21:16 | 8°♊20'45 | 1.73205 AU | direct | 10690 May 04 12:53 | 20°♊19'06 | |
| | 10687 Dec 09 10:37 | 0°♊ | | greatest brilliancy | 10690 May 14 09:11 | 22°♊09'24 | -4.9m |
| evening rise | 10687 Dec 28 05:00 | 23°♊07'02 | | | 10690 May 28 16:47 | 0°♊ | |
| | 10688 Jan 02 19:16 | 0°♊ | | morning max el | 10690 Jun 24 01:28 | 23°♊12'48 | 46°58'36 |
| desc. node | 10688 Jan 16 01:38 | 16°♊18'30 | | | 10690 Jun 30 16:05 | 0°♊ | |
| | 10688 Jan 27 05:05 | 0°♊ | | desc. node | 10690 Jul 03 02:35 | 2°♊33'55 | |
| | 10688 Feb 20 15:39 | 0°♊ | | | 10690 Jul 27 21:27 | 0°♊ | |
| | 10688 Mar 16 03:00 | 0°♊ | | | 10690 Aug 22 15:12 | 0°♊ | |
| | 10688 Apr 09 17:04 | 0°♊ | | | 10690 Sep 16 18:59 | 0°♊ | |
| | 10688 May 04 14:53 | 0°♊ | | | 10690 Oct 11 15:54 | 0°♊ | |
| asc. node | 10688 May 07 22:55 | 3°♊57'50 | | asc. node | 10690 Oct 23 22:22 | 14°♊53'34 | |
| | 10688 May 30 06:46 | 0°♊ | | | 10690 Nov 05 08:06 | 0°♊ | |
| | 10688 Jun 26 18:21 | 0°♊ | | | 10690 Nov 29 20:23 | 0°♊ | |
| evening max el | 10688 Jun 30 04:11 | 3°♊27'37 | 46°44'35 | morning set | 10690 Dec 23 02:03 | 28°♊34'42 | |
| | 10688 Jul 31 22:10 | 0°♊ | | | 10690 Dec 24 05:45 | 0°♊ | |
| greatest brilliancy | 10688 Aug 08 11:13 | 3°♊42'58 | -4.8m | | 10691 Jan 17 13:16 | 0°♊ | |
| retrograde | 10688 Aug 19 11:50 | 5°♊58'34 | | max. Earth dist. | 10691 Jan 27 10:46 | 12°♊13'47 | 1.72876 AU |
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| | 10688 Sep 06 04:36 | 30°♊ | | minimum elong | 10691 Jan 29 12:01 | 14°♊46'02 | 0°34'04 |
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| inferior conj | 10688 Sep 09 15:04 | 27°♊54'13 | -3°08'02 | desc. node | 10691 Feb 12 14:23 | 2°♊12'56 | |
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| direct | 10688 Sep 30 15:26 | 19°♊59'21 | | | 10691 Mar 31 03:05 | 0°♊ | |
| greatest brilliancy | 10688 Oct 10 06:29 | 21°♊40'45 | -4.8m | | 10691 Apr 24 05:07 | 0°♊ | |
| | 10688 Oct 25 21:34 | 0°♊ | | | 10691 May 18 08:24 | 0°♊ | |
| morning max el | 10688 Nov 18 12:50 | 19°♊58'40 | 45°45'53 | asc. node | 10691 Jun 05 10:16 | 22°♊19'31 | |
| | 10688 Nov 28 15:38 | 0°♊ | | | 10691 Jun 11 16:17 | 0°♊ | |
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


























































































































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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| greatest brilliancy | 10691 Oct 19 05:54 | 12°♊56'20 | -4.8m | superior conj | 10694 Apr 11 16:32 | 26°♊15'26 | -1°05'49 |
| retrograde | 10691 Oct 29 16:43 | 14°♊55'19 | | minimum elong | 10694 Apr 11 05:02 | 25°♊39'28 | 1°05'38 |
| evening set | 10691 Nov 17 00:25 | 8°♊38'19 | | | 10694 Apr 14 16:18 | 0°♊ | |
| inferior conj | 10691 Nov 20 05:50 | 6°♊37'36 | -8°42'11 | | 10694 May 08 14:38 | 0°♊ | |
| minimum elong | 10691 Nov 20 05:35 | 6°♊37'58 | 8°41'41 | evening rise | 10694 May 21 16:39 | 16°♊25'24 | |
| min. Earth dist. | 10691 Nov 20 02:13 | 6°♊43'18 | 0.29070 AU | | 10694 Jun 01 12:23 | 0°♊ | |
| morning rise | 10691 Nov 23 10:49 | 4°♊37'39 | | | 10694 Jun 25 11:43 | 0°♊ | |
| | 10691 Dec 02 16:38 | 30°♋♌ | | asc. node | 10694 Jul 02 22:07 | 9°♊16'05 | |
| direct | 10691 Dec 11 17:29 | 28°♋23'06 | | | 10694 Jul 19 14:49 | 0°♋ | |
| | 10691 Dec 21 03:11 | 0°♋ | | | 10694 Aug 13 00:08 | 0°♋ | |
| greatest brilliancy | 10691 Dec 21 24:00 | 0°♋17'54 | -4.7m | | 10694 Sep 06 19:19 | 0°♋ | |
| asc. node | 10692 Jan 16 08:51 | 16°♋34'56 | | | 10694 Oct 02 07:20 | 0°♋ | |
| morning max el | 10692 Jan 29 19:37 | 28°♋55'08 | 45°51'14 | desc. node | 10694 Oct 22 18:51 | 23°♋06'14 | |
| | 10692 Jan 30 22:06 | 0°♋ | | | 10694 Oct 29 03:03 | 0°♋ | |
| | 10692 Feb 28 05:19 | 0°♋ | | evening max el | 10694 Nov 20 06:49 | 22°♋40'22 | 45°47'42 |
| | 10692 Mar 25 06:23 | 0°♋ | | | 10694 Nov 28 04:35 | 0°♋ | |
| | 10692 Apr 19 07:54 | 0°♋ | | greatest brilliancy | 10694 Dec 29 10:25 | 20°♋53'18 | -4.7m |
| desc. node | 10692 May 07 04:03 | 21°♋46'33 | | retrograde | 10695 Jan 08 02:41 | 22°♋35'51 | |
| | 10692 May 13 20:31 | 0°♋ | | evening set | 10695 Jan 23 16:06 | 17°♋55'08 | |
| | 10692 Jun 07 01:34 | 0°♋ | | inferior conj | 10695 Jan 29 07:23 | 14°♋31'59 | -3°30'15 |
| | 10692 Jul 01 02:49 | 0°♋ | | minimum elong | 10695 Jan 29 14:44 | 14°♋20'32 | 3°27'44 |
| | 10692 Jul 25 03:11 | 0°♋ | | min. Earth dist. | 10695 Jan 29 23:18 | 14°♋07'11 | 0.28284 AU |
| morning set | 10692 Aug 01 21:41 | 9°♋42'08 | | morning rise | 10695 Feb 04 12:46 | 10°♋48'02 | |
| | 10692 Aug 18 04:25 | 0°♋ | | asc. node | 10695 Feb 12 19:34 | 7°♋16'41 | |
| asc. node | 10692 Aug 27 21:42 | 12°♋06'10 | | direct | 10695 Feb 19 13:18 | 6°♋20'55 | |
| | | | | greatest brilliancy | 10695 Mar 02 14:35 | 8°♋36'39 | -4.8m |
| superior conj | 10692 Sep 09 16:31 | 27°♋59'41 | 0°30'25 | | 10695 Apr 01 19:43 | 0°♋ | |
| minimum elong | 10692 Sep 09 09:52 | 27°♋39'05 | 0°30'02 | morning max el | 10695 Apr 10 15:41 | 8°♋30'48 | 46°34'21 |
| | 10692 Sep 11 07:16 | 0°♋ | | | 10695 Apr 30 23:31 | 0°♋ | |
| max. Earth dist. | 10692 Sep 12 04:19 | 1°♋05'23 | 1.72464 AU | | 10695 May 27 05:09 | 0°♋ | |
| | 10692 Oct 05 12:00 | 0°♋ | | desc. node | 10695 Jun 04 16:46 | 10°♋01'47 | |
| evening rise | 10692 Oct 17 00:52 | 14°♋15'27 | | | 10695 Jun 21 08:10 | 0°♋ | |
| | 10692 Oct 29 19:16 | 0°♋ | | | 10695 Jul 15 22:52 | 0°♋ | |
| | 10692 Nov 23 06:15 | 0°♋ | | | 10695 Aug 09 08:16 | 0°♋ | |
| desc. node | 10692 Dec 17 15:21 | 29°♋39'42 | | | 10695 Sep 02 16:01 | 0°♋ | |
| | 10692 Dec 17 22:03 | 0°♋ | | asc. node | 10695 Sep 25 11:03 | 28°♋07'43 | |
| | 10693 Jan 11 19:25 | 0°♋ | | | 10695 Sep 26 23:26 | 0°♋ | |
| | 10693 Feb 05 23:22 | 0°♋ | | morning set | 10695 Oct 12 23:59 | 19°♋46'43 | |
| | 10693 Mar 03 14:04 | 0°♋ | | | 10695 Oct 21 06:39 | 0°♋ | |
| | 10693 Mar 30 05:16 | 0°♋ | | | 10695 Nov 14 13:45 | 0°♋ | |
| asc. node | 10693 Apr 09 14:23 | 11°♋03'50 | | | | | |
| evening max el | 10693 Apr 16 04:06 | 17°♋46'56 | 46°47'47 | superior conj | 10695 Nov 18 23:55 | 5°♋27'40 | 1°26'04 |
| | 10693 Apr 29 00:09 | 0°♋ | | minimum elong | 10695 Nov 18 23:11 | 5°♋25'24 | 1°26'33 |
| greatest brilliancy | 10693 May 26 20:13 | 18°♋38'40 | -4.9m | max. Earth dist. | 10695 Nov 19 18:48 | 6°♋25'57 | 1.73197 AU |
| retrograde | 10693 Jun 05 12:06 | 20°♋24'52 | | | 10695 Dec 08 21:22 | 0°♋ | |
| evening set | 10693 Jun 22 12:13 | 14°♋51'46 | | evening rise | 10695 Dec 25 21:35 | 20°♋57'03 | |
| inferior conj | 10693 Jun 26 05:08 | 12°♋37'25 | 7°36'07 | | 10696 Jan 02 06:09 | 0°♋ | |
| minimum elong | 10693 Jun 26 15:43 | 12°♋21'10 | 7°33'37 | desc. node | 10696 Jan 15 03:30 | 15°♋50'27 | |
| min. Earth dist. | 10693 Jun 26 12:27 | 12°♋26'11 | 0.27100 AU | | 10696 Jan 26 16:13 | 0°♋ | |
| morning rise | 10693 Jun 30 19:10 | 9°♋52'14 | | | 10696 Feb 20 03:07 | 0°♋ | |
| direct | 10693 Jul 16 21:06 | 4°♋49'49 | | | 10696 Mar 15 14:55 | 0°♋ | |
| greatest brilliancy | 10693 Jul 26 20:41 | 6°♋41'03 | -4.9m | | 10696 Apr 09 05:39 | 0°♋ | |
| desc. node | 10693 Jul 30 13:26 | 8°♋12'07 | | | 10696 May 04 04:34 | 0°♋ | |
| | 10693 Aug 28 22:02 | 0°♋ | | asc. node | 10696 May 07 01:00 | 3°♋22'54 | |
| morning max el | 10693 Sep 04 19:32 | 6°♋36'36 | 46°26'31 | | 10696 May 29 22:38 | 0°♋ | |
| | 10693 Sep 27 06:36 | 0°♋ | | | 10696 Jun 26 15:55 | 0°♋ | |
| | 10693 Oct 24 01:28 | 0°♋ | | evening max el | 10696 Jun 27 19:53 | 1°♋10'29 | 46°45'32 |
| | 10693 Nov 18 19:33 | 0°♋ | | | 10696 Aug 02 20:49 | 0°♋ | |
| asc. node | 10693 Nov 20 11:16 | 1°♋57'17 | | greatest brilliancy | 10696 Aug 06 02:17 | 1°♋24'20 | -4.8m |
| | 10693 Dec 13 23:15 | 0°♋ | | retrograde | 10696 Aug 17 03:05 | 3°♋39'40 | |
| | 10694 Jan 07 17:20 | 0°♋ | | desc. node | 10696 Aug 27 00:05 | 1°♋40'36 | |
| | 10694 Feb 01 04:58 | 0°♋ | | | 10696 Aug 30 16:09 | 30°♋♌ | |
| | 10694 Feb 25 12:09 | 0°♋ | | evening set | 10696 Aug 31 22:13 | 29°♋20'15 | |
| morning set | 10694 Mar 02 23:37 | 6°♋47'19 | | min. Earth dist. | 10696 Sep 06 11:58 | 26°♋02'55 | 0.27790 AU |
| desc. node | 10694 Mar 12 03:29 | 18°♋09'51 | | inferior conj | 10696 Sep 07 05:20 | 25°♋36'07 | -2°47'01 |
| | 10694 Mar 21 15:46 | 0°♋ | | minimum elong | 10696 Sep 06 23:13 | 25°♋45'33 | 2°45'17 |
| max. Earth dist. | 10694 Apr 08 13:18 | 22°♋20'11 | 1.71740 AU | morning rise | 10696 Sep 13 01:00 | 22°♋09'29 | |

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|---------------------|--------------------|-------------------------------------|------------|---------------------|--------------------|--------------------------------|------------|
| direct | 10696 Sep 28 05:55 | 17° \mathbb{M} 42'08 | | | 10699 Mar 30 14:02 | 0° \mathcal{B} | |
| greatest brilliancy | 10696 Oct 07 19:55 | 19° \mathbb{M} 23'04 | -4.8m | | 10699 Apr 23 16:19 | 0° \mathbb{I} | |
| | 10696 Oct 26 15:21 | 0° $\underline{\mathcal{B}}$ | | | 10699 May 17 19:57 | 0° \mathcal{B} | |
| morning max el | 10696 Nov 16 03:41 | 17° $\underline{\mathcal{B}}$ 44'40 | 45°46'38 | asc. node | 10699 Jun 04 12:10 | 21° \mathcal{B} 48'49 | |
| | 10696 Nov 28 10:45 | 0° \mathbb{M} | | | 10699 Jun 11 04:19 | 0° Ω | |
| asc. node | 10696 Dec 17 23:27 | 20° \mathbb{M} 56'06 | | | 10699 Jul 05 22:09 | 0° \mathbb{M} | |
| | 10696 Dec 26 02:10 | 0° \mathcal{X} | | | 10699 Jul 31 09:40 | 0° $\underline{\mathcal{B}}$ | |
| | 10697 Jan 21 01:18 | 0° \mathcal{B} | | | 10699 Aug 27 10:57 | 0° \mathbb{M} | |
| | 10697 Feb 15 04:17 | 0° \approx | | evening max el | 10699 Sep 07 21:21 | 11° \mathbb{M} 40'19 | 46°08'15 |
| | 10697 Mar 11 19:40 | 0° \mathcal{H} | | desc. node | 10699 Sep 24 10:30 | 26° \mathbb{M} 44'07 | |
| | 10697 Apr 05 03:32 | 0° \mathcal{Y} | | | 10699 Sep 28 13:25 | 0° \mathcal{X} | |
| desc. node | 10697 Apr 08 16:54 | 4° \mathcal{Y} 24'46 | | greatest brilliancy | 10699 Oct 16 21:22 | 10° \mathcal{X} 45'29 | -4.8m |
| | 10697 Apr 29 06:01 | 0° \mathcal{B} | | retrograde | 10699 Oct 27 08:23 | 12° \mathcal{X} 45'15 | |
| morning set | 10697 May 16 16:59 | 21° \mathcal{B} 51'18 | | evening set | 10699 Nov 14 15:28 | 6° \mathcal{X} 29'44 | |
| | 10697 May 23 04:49 | 0° \mathbb{I} | | inferior conj | 10699 Nov 17 21:57 | 4° \mathcal{X} 27'32 | -8°41'35 |
| | 10697 Jun 16 01:59 | 0° \mathcal{B} | | minimum elong | 10699 Nov 17 20:54 | 4° \mathcal{X} 29'11 | 8°41'06 |
| | | | | min. Earth dist. | 10699 Nov 17 17:31 | 4° \mathcal{X} 34'32 | 0.29059 AU |
| superior conj | 10697 Jun 25 22:22 | 12° \mathcal{B} 22'07 | -1°11'56 | morning rise | 10699 Nov 21 02:23 | 2° \mathcal{X} 28'26 | |
| minimum elong | 10697 Jun 26 09:26 | 12° \mathcal{B} 56'54 | 1°12'10 | | 10699 Nov 25 10:37 | 30° \mathcal{R} \mathbb{M} | |
| max. Earth dist. | 10697 Jun 27 15:02 | 14° \mathcal{B} 29'47 | 1.71400 AU | direct | 10699 Dec 09 08:50 | 26° \mathbb{M} 13'16 | |
| | 10697 Jul 09 23:37 | 0° Ω | | greatest brilliancy | 10699 Dec 19 15:38 | 28° \mathbb{M} 07'52 | -4.7m |
| asc. node | 10697 Jul 30 10:35 | 25° Ω 35'25 | | | 10699 Dec 24 02:34 | 0° \mathcal{X} | |
| | 10697 Aug 02 23:23 | 0° \mathbb{M} | | asc. node | 10700 Jan 15 10:42 | 15° \mathcal{X} 37'04 | |
| evening rise | 10697 Aug 04 23:19 | 2° \mathbb{M} 29'29 | | morning max el | 10700 Jan 27 10:09 | 26° \mathcal{X} 40'27 | 45°50'21 |
| | 10697 Aug 27 02:21 | 0° $\underline{\mathcal{B}}$ | | | 10700 Jan 30 19:03 | 0° \mathcal{B} | |
| | 10697 Sep 20 09:40 | 0° \mathbb{M} | | | 10700 Feb 27 20:27 | 0° \approx | |
| | 10697 Oct 14 23:22 | 0° \mathcal{X} | | | 10700 Mar 25 19:25 | 0° \mathcal{H} | |
| | 10697 Nov 08 22:41 | 0° \mathcal{B} | | | 10700 Apr 19 19:57 | 0° \mathcal{Y} | |
| desc. node | 10697 Nov 19 05:48 | 12° \mathcal{B} 10'54 | | desc. node | 10700 May 07 06:02 | 21° \mathcal{Y} 16'57 | |
| | 10697 Dec 04 12:10 | 0° \approx | | | 10700 May 14 08:01 | 0° \mathcal{B} | |
| | 10697 Dec 30 23:57 | 0° \mathcal{H} | | | 10700 Jun 07 12:46 | 0° \mathbb{I} | |
| | 10698 Jan 28 10:13 | 0° \mathcal{Y} | | | 10700 Jul 01 13:49 | 0° \mathcal{B} | |
| evening max el | 10698 Jan 30 23:59 | 2° \mathcal{Y} 31'47 | 46°09'57 | | 10700 Jul 25 14:01 | 0° Ω | |
| | 10698 Mar 07 02:37 | 0° \mathcal{B} | | morning set | 10700 Jul 31 11:07 | 7° Ω 20'37 | |
| greatest brilliancy | 10698 Mar 11 15:13 | 1° \mathcal{B} 53'17 | -4.8m | | 10700 Aug 18 15:06 | 0° \mathbb{M} | |
| asc. node | 10698 Mar 12 06:07 | 2° \mathcal{B} 05'59 | | asc. node | 10700 Aug 27 23:39 | 11° \mathbb{M} 39'07 | |
| retrograde | 10698 Mar 21 11:52 | 3° \mathcal{B} 41'29 | | | | | |
| | 10698 Apr 04 03:25 | 30° \mathcal{R} \mathcal{Y} | | superior conj | 10700 Sep 08 07:25 | 25° \mathbb{M} 44'04 | 0°27'05 |
| evening set | 10698 Apr 06 03:43 | 28° \mathcal{Y} 54'39 | | minimum elong | 10700 Sep 08 01:25 | 25° \mathbb{M} 25'25 | 0°26'42 |
| inferior conj | 10698 Apr 11 05:55 | 25° \mathcal{Y} 51'00 | 6°50'03 | max. Earth dist. | 10700 Sep 10 18:11 | 28° \mathbb{M} 46'35 | 1.72424 AU |
| minimum elong | 10698 Apr 10 18:56 | 26° \mathcal{Y} 08'02 | 6°47'30 | | 10700 Sep 11 17:50 | 0° $\underline{\mathcal{B}}$ | |
| min. Earth dist. | 10698 Apr 11 04:22 | 25° \mathcal{Y} 53'24 | 0.27359 AU | | 10700 Oct 05 22:32 | 0° \mathbb{M} | |
| morning rise | 10698 Apr 15 10:01 | 23° \mathcal{Y} 18'50 | | evening rise | 10700 Oct 15 17:31 | 12° \mathbb{M} 06'04 | |
| direct | 10698 May 02 02:18 | 17° \mathcal{Y} 55'55 | | | 10700 Oct 30 05:54 | 0° \mathcal{X} | |
| greatest brilliancy | 10698 May 11 23:55 | 19° \mathcal{Y} 46'55 | -4.9m | | 10700 Nov 23 17:05 | 0° \mathcal{B} | |
| | 10698 May 29 12:39 | 0° \mathcal{B} | | desc. node | 10700 Dec 17 17:13 | 29° \mathcal{B} 11'28 | |
| morning max el | 10698 Jun 21 13:49 | 20° \mathcal{B} 46'03 | 46°58'48 | | 10700 Dec 18 09:15 | 0° \approx | |
| | 10698 Jun 30 12:10 | 0° \mathbb{I} | | | 10701 Jan 12 07:11 | 0° \mathcal{H} | |
| desc. node | 10698 Jul 02 04:26 | 1° \mathbb{I} 46'55 | | | 10701 Feb 06 12:04 | 0° \mathcal{Y} | |
| | 10698 Jul 27 12:50 | 0° \mathcal{B} | | | 10701 Mar 04 04:26 | 0° \mathcal{B} | |
| | 10698 Aug 22 04:35 | 0° Ω | | | 10701 Mar 30 23:14 | 0° \mathbb{I} | |
| | 10698 Sep 16 07:15 | 0° \mathbb{M} | | asc. node | 10701 Apr 09 16:27 | 10° \mathbb{I} 16'14 | |
| | 10698 Oct 11 03:28 | 0° $\underline{\mathcal{B}}$ | | evening max el | 10701 Apr 14 16:46 | 15° \mathbb{I} 22'13 | 46°46'58 |
| asc. node | 10698 Oct 23 00:20 | 14° $\underline{\mathcal{B}}$ 25'06 | | | 10701 Apr 30 06:56 | 0° \mathcal{B} | |
| | 10698 Nov 04 19:12 | 0° \mathbb{M} | | greatest brilliancy | 10701 May 25 09:23 | 16° \mathcal{B} 14'10 | -4.9m |
| | 10698 Nov 29 07:12 | 0° \mathcal{X} | | retrograde | 10701 Jun 04 01:15 | 18° \mathcal{B} 00'37 | |
| morning set | 10698 Dec 20 19:14 | 26° \mathcal{X} 26'53 | | evening set | 10701 Jun 21 04:40 | 12° \mathcal{B} 21'49 | |
| | 10698 Dec 23 16:25 | 0° \mathcal{B} | | inferior conj | 10701 Jun 24 17:59 | 10° \mathcal{B} 12'57 | 7°49'23 |
| | 10699 Jan 16 23:54 | 0° \approx | | minimum elong | 10701 Jun 25 04:13 | 9° \mathcal{B} 57'15 | 7°47'04 |
| max. Earth dist. | 10699 Jan 25 03:04 | 10° \approx 03'01 | 1.72905 AU | min. Earth dist. | 10701 Jun 25 01:25 | 10° \mathcal{B} 01'34 | 0.27109 AU |
| | | | | morning rise | 10701 Jun 29 03:44 | 7° \mathcal{B} 34'09 | |
| superior conj | 10699 Jan 26 20:38 | 12° \approx 11'28 | 0°37'06 | direct | 10701 Jul 15 09:56 | 2° \mathcal{B} 24'52 | |
| minimum elong | 10699 Jan 27 04:23 | 12° \approx 35'26 | 0°37'11 | greatest brilliancy | 10701 Jul 25 09:34 | 4° \mathcal{B} 16'39 | -4.9m |
| | 10699 Feb 10 06:08 | 0° \mathcal{H} | | desc. node | 10701 Jul 30 15:25 | 6° \mathcal{B} 32'44 | |
| desc. node | 10699 Feb 11 16:14 | 1° \mathcal{H} 45'36 | | | 10701 Aug 29 23:37 | 0° Ω | |
| evening rise | 10699 Mar 06 07:47 | 29° \mathcal{H} 50'17 | | morning max el | 10701 Sep 03 10:05 | 4° Ω 17'57 | 46°28'13 |
| | 10699 Mar 06 10:54 | 0° \mathcal{Y} | | | 10701 Sep 27 23:20 | 0° \mathbb{M} | |

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|---------------------|--------------------|-----------|---------------------|--------------------|--------------------|--------------------|------------|------------|
| asc. node | 10701 Oct 24 15:10 | 0°♄ | evening max el | 10704 Jun 26 11:23 | 28°♄54'07 | 46°46'27 | | |
| | 10701 Nov 19 07:46 | 0°♍ | | 10704 Jun 27 13:44 | 0°♎ | | | |
| | 10701 Nov 20 13:11 | 1°♍26'59 | | 10704 Aug 04 17:58 | 29°♎08'09 | -4.8m | | |
| | 10701 Dec 14 10:39 | 0°♊ | | 10704 Aug 07 05:15 | 0°♄ | | | |
| | 10702 Jan 08 04:17 | 0°♈ | | 10704 Aug 15 18:04 | 1°♄22'26 | | | |
| morning set | 10702 Feb 01 15:41 | 0°♉ | retrograde | 10704 Aug 23 23:18 | 30°♎ | | | |
| | 10702 Feb 25 22:44 | 0°♊ | | 10704 Aug 27 02:06 | 28°♎46'57 | | | |
| | 10702 Mar 01 13:54 | 4°♊30'00 | | 10704 Aug 30 12:11 | 27°♎04'50 | | | |
| desc. node | 10702 Mar 12 05:29 | 17°♊43'12 | min. Earth dist. | 10704 Sep 05 02:58 | 23°♎45'46 | 0.27737 AU | | |
| max. Earth dist. | 10702 Mar 22 02:20 | 0°♑ | inferior conj | 10704 Sep 05 19:47 | 23°♎19'50 | -2°25'53 | | |
| | 10702 Apr 07 02:54 | 19°♑59'36 | 1.71776 AU | minimum elong | 10704 Sep 05 14:22 | 23°♎28'11 | 2°24'21 | |
| superior conj | 10702 Apr 10 04:58 | 23°♑51'07 | -1°03'13 | morning rise | 10704 Sep 11 17:22 | 19°♎50'34 | | |
| minimum elong | 10702 Apr 09 17:27 | 23°♑15'05 | 1°03'01 | direct | 10704 Sep 26 20:27 | 15°♎26'48 | | |
| evening rise | 10702 Apr 15 02:53 | 0°♋ | greatest brilliancy | 10704 Oct 06 09:45 | 17°♎07'13 | -4.8m | | |
| | 10702 May 09 01:15 | 0°♌ | morning max el | 10704 Oct 28 03:56 | 0°♄ | | | |
| | 10702 May 20 04:10 | 13°♌57'33 | | 10704 Nov 14 17:48 | 15°♄29'54 | 45°47'17 | | |
| | 10702 Jun 01 23:05 | 0°♎ | | 10704 Nov 29 04:56 | 0°♍ | | | |
| | 10702 Jun 25 22:33 | 0°♏ | | 10704 Dec 18 01:19 | 20°♍19'53 | | | |
| asc. node | 10702 Jul 02 23:58 | 8°♏47'54 | | 10704 Dec 26 16:14 | 0°♊ | | | |
| | 10702 Jul 20 01:53 | 0°♎ | 10705 Jan 21 13:40 | 0°♈ | | | | |
| | 10702 Aug 13 11:35 | 0°♄ | 10705 Feb 15 15:49 | 0°♉ | | | | |
| | 10702 Sep 07 07:27 | 0°♍ | 10705 Mar 12 06:46 | 0°♊ | | | | |
| | 10702 Oct 02 20:47 | 0°♊ | 10705 Apr 05 14:24 | 0°♑ | | | | |
| desc. node | 10702 Oct 22 20:53 | 22°♊29'31 | desc. node | 10705 Apr 08 18:46 | 3°♑56'53 | | | |
| evening max el | 10702 Oct 29 19:31 | 0°♈ | morning set | 10705 Apr 29 16:46 | 0°♋ | | | |
| | 10702 Nov 18 22:39 | 20°♈30'29 | | 45°47'47 | 10705 May 15 03:52 | 19°♋21'26 | | |
| | 10702 Nov 29 07:29 | 0°♉ | | 10705 May 23 15:30 | 0°♌ | | | |
| greatest brilliancy | 10702 Dec 28 00:43 | 18°♉40'30 | -4.7m | 10705 Jun 16 12:37 | 0°♎ | | | |
| retrograde | 10703 Jan 06 18:02 | 20°♉23'27 | superior conj | 10705 Jun 24 10:07 | 9°♎55'01 | -1°14'05 | | |
| evening set | 10703 Jan 22 09:43 | 15°♉39'10 | | 10705 Jun 24 20:49 | 10°♎28'38 | 1°14'22 | | |
| inferior conj | 10703 Jan 27 22:40 | 12°♉18'49 | | -3°49'31 | max. Earth dist. | 10705 Jun 25 22:43 | 11°♎49'53 | 1.71376 AU |
| minimum elong | 10703 Jan 28 06:34 | 12°♉06'30 | | 3°46'52 | 10705 Jul 10 10:14 | 0°♏ | | |
| min. Earth dist. | 10703 Jan 28 14:25 | 11°♉54'16 | | 0.28331 AU | asc. node | 10705 Jul 30 12:34 | 25°♏08'29 | |
| morning rise | 10703 Feb 03 02:57 | 8°♉36'27 | evening rise | 10705 Aug 03 09:59 | 0°♎ | | | |
| asc. node | 10703 Feb 12 21:38 | 4°♉42'13 | | 10705 Aug 03 12:34 | 0°♎08'02 | | | |
| direct | 10703 Feb 18 05:39 | 4°♉07'24 | | 10705 Aug 27 13:00 | 0°♄ | | | |
| greatest brilliancy | 10703 Mar 01 05:58 | 6°♉22'35 | | -4.8m | 10705 Sep 20 20:29 | 0°♍ | | |
| morning max el | 10703 Apr 02 20:47 | 0°♊ | | 10705 Oct 15 10:33 | 0°♊ | | | |
| | 10703 Apr 09 07:35 | 6°♊16'52 | 46°32'46 | 10705 Nov 09 10:33 | 0°♈ | | | |
| | 10703 May 01 15:57 | 0°♑ | desc. node | 10705 Nov 19 07:37 | 11°♈40'14 | | | |
| desc. node | 10703 May 27 18:51 | 0°♋ | 10705 Dec 05 01:16 | 0°♉ | | | | |
| | 10703 Jun 04 18:35 | 9°♋28'02 | 10705 Dec 31 15:32 | 0°♊ | | | | |
| | 10703 Jun 21 20:34 | 0°♌ | 10706 Jan 29 08:21 | 0°♑ | | | | |
| | 10703 Jul 16 10:30 | 0°♎ | evening max el | 10706 Jan 29 13:16 | 0°♑12'00 | 46°08'36 | | |
| | 10703 Aug 09 19:25 | 0°♏ | greatest brilliancy | 10706 Mar 10 05:00 | 29°♑32'28 | -4.8m | | |
| asc. node | 10703 Sep 03 02:50 | 0°♎ | asc. node | 10706 Mar 11 14:31 | 0°♋ | | | |
| | 10703 Sep 25 13:01 | 27°♎41'00 | | 10706 Mar 12 08:10 | 0°♋12'59 | | | |
| | 10703 Sep 27 10:02 | 0°♄ | | retrograde | 10706 Mar 20 00:35 | 1°♋20'02 | | |
| morning set | 10703 Oct 11 16:13 | 17°♄36'17 | 10706 Mar 28 03:43 | 30°♎ | | | | |
| | 10703 Oct 21 17:06 | 0°♍ | evening set | 10706 Apr 04 13:39 | 26°♑38'05 | | | |
| | 10703 Nov 15 00:07 | 0°♊ | inferior conj | 10706 Apr 09 19:30 | 23°♑29'28 | 6°33'48 | | |
| superior conj | 10703 Nov 17 17:10 | 3°♊20'44 | 1°25'53 | minimum elong | 10706 Apr 09 08:29 | 23°♑46'33 | 6°31'09 | |
| | | | | min. Earth dist. | 10706 Apr 09 18:31 | 23°♑30'59 | 0.27375 AU | |
| | | | | morning rise | 10706 Apr 14 03:06 | 20°♑52'00 | | |
| max. Earth dist. | 10703 Nov 18 15:24 | 4°♊29'22 | 1.73185 AU | direct | 10706 Apr 30 15:30 | 15°♑33'48 | | |
| evening rise | 10703 Dec 09 07:44 | 0°♈ | greatest brilliancy | 10706 May 10 15:09 | 17°♑26'09 | -4.9m | | |
| | 10703 Dec 24 14:00 | 18°♈47'41 | 10706 May 31 03:01 | 0°♋ | | | | |
| | 10704 Jan 02 16:38 | 0°♉ | morning max el | 10706 Jun 20 02:26 | 18°♋20'39 | 46°58'55 | | |
| desc. node | 10704 Jan 15 05:21 | 15°♉23'31 | desc. node | 10706 Jul 01 07:24 | 0°♌ | | | |
| | 10704 Jan 27 02:57 | 0°♊ | | 10706 Jul 02 06:24 | 1°♌01'35 | | | |
| | 10704 Feb 20 14:12 | 0°♑ | | 10706 Jul 28 03:49 | 0°♎ | | | |
| | 10704 Mar 16 02:30 | 0°♋ | | 10706 Aug 22 17:41 | 0°♏ | | | |
| | 10704 Apr 09 17:55 | 0°♌ | | 10706 Sep 16 19:17 | 0°♎ | | | |
| asc. node | 10704 May 04 17:59 | 0°♎ | 10706 Oct 11 14:48 | 0°♄ | | | | |
| | 10704 May 07 02:55 | 2°♎48'26 | asc. node | 10706 Oct 23 02:12 | 13°♄57'02 | | | |
| | 10704 May 30 14:18 | 0°♏ | 10706 Nov 05 06:05 | 0°♍ | | | | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 10706 Nov 29 17:49 | 0°♊ | | retrograde | 10709 Jun 01 14:46 | 15°♊35'19 | |
| morning set | 10706 Dec 19 12:30 | 24°♊19'46 | | evening set | 10709 Jun 18 21:02 | 9°♊51'00 | |
| | 10706 Dec 24 02:56 | 0°♊ | | inferior conj | 10709 Jun 22 06:47 | 7°♊47'23 | 8°01'47 |
| | 10707 Jan 17 10:25 | 0°♊ | | minimum elong | 10709 Jun 22 16:35 | 7°♊32'23 | 7°59'40 |
| max. Earth dist. | 10707 Jan 23 20:37 | 7°♊56'21 | 1.72937 AU | min. Earth dist. | 10709 Jun 22 13:52 | 7°♊36'33 | 0.27116 AU |
| | | | | morning rise | 10709 Jun 26 12:07 | 5°♊15'13 | |
| superior conj | 10707 Jan 25 12:33 | 9°♊59'47 | 0°40'09 | | 10709 Jul 12 03:15 | 30°♊11 | |
| minimum elong | 10707 Jan 25 20:46 | 10°♊25'09 | 0°40'15 | direct | 10709 Jul 12 23:14 | 29°♊59'09 | |
| | 10707 Feb 10 16:43 | 0°♊ | | | 10709 Jul 13 19:17 | 0°♊ | |
| desc. node | 10707 Feb 11 18:15 | 1°♊19'01 | | greatest brilliancy | 10709 Jul 22 21:41 | 1°♊50'33 | -4.9m |
| evening rise | 10707 Mar 04 22:17 | 27°♊33'11 | | desc. node | 10709 Jul 29 17:31 | 4°♊56'23 | |
| | 10707 Mar 06 21:37 | 0°♊ | | | 10709 Aug 30 00:12 | 0°♊ | |
| | 10707 Mar 31 00:55 | 0°♊ | | morning max el | 10709 Sep 01 00:51 | 1°♊59'04 | 46°29'46 |
| | 10707 Apr 24 03:27 | 0°♊ | | | 10709 Sep 27 16:01 | 0°♊ | |
| | 10707 May 18 07:27 | 0°♊ | | | 10709 Oct 24 05:01 | 0°♊ | |
| asc. node | 10707 Jun 04 14:03 | 21°♊18'15 | | | 10709 Nov 18 20:13 | 0°♊ | |
| | 10707 Jun 11 16:21 | 0°♊ | | asc. node | 10709 Nov 19 15:02 | 0°♊55'43 | |
| | 10707 Jul 06 11:02 | 0°♊ | | | 10709 Dec 13 22:19 | 0°♊ | |
| | 10707 Aug 01 00:12 | 0°♊ | | | 10710 Jan 07 15:29 | 0°♊ | |
| | 10707 Aug 28 05:30 | 0°♊ | | | 10710 Feb 01 02:38 | 0°♊ | |
| evening max el | 10707 Sep 06 11:39 | 9°♊24'01 | 46°09'40 | | 10710 Feb 25 09:36 | 0°♊ | |
| desc. node | 10707 Sep 24 12:33 | 25°♊42'10 | | morning set | 10710 Feb 27 04:27 | 2°♊12'43 | |
| | 10707 Sep 30 04:06 | 0°♊ | | desc. node | 10710 Mar 11 07:22 | 17°♊15'15 | |
| greatest brilliancy | 10707 Oct 15 12:19 | 8°♊34'16 | -4.8m | | 10710 Mar 21 13:12 | 0°♊ | |
| retrograde | 10707 Oct 26 00:34 | 10°♊35'41 | | max. Earth dist. | 10710 Apr 04 15:12 | 17°♊33'59 | 1.71816 AU |
| evening set | 10707 Nov 13 06:12 | 4°♊21'58 | | | | | |
| inferior conj | 10707 Nov 16 14:08 | 2°♊17'49 | -8°40'14 | superior conj | 10710 Apr 07 17:22 | 21°♊25'40 | -1°00'31 |
| minimum elong | 10707 Nov 16 12:17 | 2°♊20'44 | 8°39'44 | minimum elong | 10710 Apr 07 05:55 | 20°♊49'55 | 1°00'16 |
| min. Earth dist. | 10707 Nov 16 08:34 | 2°♊26'34 | 0.29046 AU | | 10710 Apr 14 13:49 | 0°♊ | |
| morning rise | 10707 Nov 19 18:24 | 0°♊19'11 | | | 10710 May 08 12:16 | 0°♊ | |
| | 10707 Nov 20 07:05 | 30°♊11 | | evening rise | 10710 May 17 15:21 | 11°♊27'23 | |
| direct | 10707 Dec 08 00:24 | 24°♊03'46 | | | 10710 Jun 01 10:11 | 0°♊ | |
| greatest brilliancy | 10707 Dec 18 07:08 | 25°♊58'13 | -4.7m | | 10710 Jun 25 09:46 | 0°♊ | |
| | 10707 Dec 26 20:32 | 0°♊ | | asc. node | 10710 Jul 02 01:58 | 8°♊18'57 | |
| asc. node | 10708 Jan 15 12:48 | 14°♊41'13 | | | 10710 Jul 19 13:21 | 0°♊ | |
| morning max el | 10708 Jan 26 01:29 | 24°♊27'54 | 45°49'24 | | 10710 Aug 12 23:28 | 0°♊ | |
| | 10708 Jan 31 15:17 | 0°♊ | | | 10710 Sep 06 20:04 | 0°♊ | |
| | 10708 Feb 28 11:27 | 0°♊ | | | 10710 Oct 02 10:48 | 0°♊ | |
| | 10708 Mar 25 08:29 | 0°♊ | | desc. node | 10710 Oct 21 22:46 | 21°♊50'43 | |
| | 10708 Apr 19 08:03 | 0°♊ | | | 10710 Oct 29 12:47 | 0°♊ | |
| desc. node | 10708 May 06 07:54 | 20°♊46'38 | | evening max el | 10710 Nov 16 14:30 | 18°♊19'21 | 45°47'50 |
| | 10708 May 13 19:36 | 0°♊ | | | 10710 Nov 29 12:45 | 0°♊ | |
| | 10708 Jun 07 00:02 | 0°♊ | | greatest brilliancy | 10710 Dec 25 15:38 | 16°♊27'23 | -4.7m |
| | 10708 Jul 01 00:53 | 0°♊ | | retrograde | 10711 Jan 04 09:04 | 18°♊09'58 | |
| | 10708 Jul 25 00:56 | 0°♊ | | evening set | 10711 Jan 20 03:27 | 13°♊22'18 | |
| morning set | 10708 Jul 29 00:23 | 4°♊58'08 | | inferior conj | 10711 Jan 25 14:01 | 10°♊04'50 | -4°08'17 |
| | 10708 Aug 18 01:54 | 0°♊ | | minimum elong | 10711 Jan 25 22:23 | 9°♊51'45 | 4°05'33 |
| asc. node | 10708 Aug 27 01:36 | 11°♊11'36 | | min. Earth dist. | 10711 Jan 26 05:41 | 9°♊40'21 | 0.28374 AU |
| | | | | morning rise | 10711 Jan 31 16:54 | 6°♊24'09 | |
| superior conj | 10708 Sep 05 22:10 | 23°♊27'24 | 0°23'42 | asc. node | 10711 Feb 11 23:36 | 2°♊11'55 | |
| minimum elong | 10708 Sep 05 16:51 | 23°♊10'50 | 0°23'18 | direct | 10711 Feb 15 21:46 | 1°♊53'14 | |
| max. Earth dist. | 10708 Sep 08 07:56 | 26°♊26'51 | 1.72387 AU | greatest brilliancy | 10711 Feb 26 21:11 | 4°♊07'25 | -4.8m |
| | 10708 Sep 11 04:34 | 0°♊ | | | 10711 Apr 02 21:03 | 0°♊ | |
| | 10708 Oct 05 09:16 | 0°♊ | | morning max el | 10711 Apr 06 22:28 | 3°♊59'22 | 46°31'04 |
| evening rise | 10708 Oct 13 10:13 | 9°♊56'20 | | | 10711 May 01 08:30 | 0°♊ | |
| | 10708 Oct 29 16:42 | 0°♊ | | | 10711 May 27 08:52 | 0°♊ | |
| | 10708 Nov 23 04:04 | 0°♊ | | desc. node | 10711 Jun 03 20:33 | 8°♊53'31 | |
| desc. node | 10708 Dec 16 19:12 | 28°♊43'11 | | | 10711 Jun 21 09:22 | 0°♊ | |
| | 10708 Dec 17 20:36 | 0°♊ | | | 10711 Jul 15 22:35 | 0°♊ | |
| | 10709 Jan 11 19:09 | 0°♊ | | | 10711 Aug 09 07:02 | 0°♊ | |
| | 10709 Feb 06 01:04 | 0°♊ | | | 10711 Sep 02 14:07 | 0°♊ | |
| | 10709 Mar 03 19:16 | 0°♊ | | asc. node | 10711 Sep 24 14:49 | 27°♊12'28 | |
| | 10709 Mar 30 18:01 | 0°♊ | | | 10711 Sep 26 21:04 | 0°♊ | |
| asc. node | 10709 Apr 08 18:22 | 9°♊26'29 | | morning set | 10711 Oct 09 08:11 | 15°♊23'41 | |
| evening max el | 10709 Apr 12 06:29 | 12°♊59'17 | 46°46'09 | | 10711 Oct 21 03:58 | 0°♊ | |
| | 10709 Apr 30 16:50 | 0°♊ | | | 10711 Nov 14 10:56 | 0°♊ | |
| greatest brilliancy | 10709 May 22 22:07 | 13°♊48'18 | -4.9m | | | | |

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|---------------------|--------------------|-----------|------------|---------------------|--|--------------------|-----------|------------|
| superior conj | 10711 Nov 15 10:20 | 1°♌12'15 | 1°25'35 | | | 10714 May 31 13:59 | 0°♏ | |
| minimum elong | 10711 Nov 15 08:09 | 1°♌05'30 | 1°26'03 | morning max el | | 10714 Jun 17 15:54 | 15°♏56'51 | 46°59'05 |
| max. Earth dist. | 10711 Nov 16 10:20 | 2°♌26'19 | 1.73172 AU | desc. node | | 10714 Jul 01 08:30 | 0°♐16'39 | |
| | 10711 Dec 08 18:34 | 0°♑ | | | | 10714 Jul 01 02:19 | 0°♐ | |
| evening rise | 10711 Dec 22 06:27 | 16°♑37'01 | | | | 10714 Jul 27 18:48 | 0°♑ | |
| | 10712 Jan 02 03:36 | 0°♒ | | | | 10714 Aug 22 06:56 | 0°♒ | |
| desc. node | 10712 Jan 14 07:23 | 14°♒55'50 | | | | 10714 Sep 16 07:33 | 0°♓ | |
| | 10712 Jan 26 14:08 | 0°♈ | | | | 10714 Oct 11 02:26 | 0°♐ | |
| | 10712 Feb 20 01:43 | 0°♑ | | asc. node | | 10714 Oct 22 04:06 | 13°♐28'03 | |
| | 10712 Mar 15 14:29 | 0°♏ | | | | 10714 Nov 04 17:17 | 0°♑ | |
| | 10712 Apr 09 06:37 | 0°♐ | | | | 10714 Nov 29 04:45 | 0°♌ | |
| | 10712 May 04 07:56 | 0°♑ | | morning set | | 10714 Dec 17 05:34 | 22°♌11'05 | |
| asc. node | 10712 May 06 04:50 | 2°♑12'26 | | | | 10714 Dec 23 13:45 | 0°♑ | |
| | 10712 May 30 06:47 | 0°♒ | | | | 10715 Jan 16 21:13 | 0°♒ | |
| evening max el | 10712 Jun 24 01:48 | 26°♒33'14 | 46°47'09 | max. Earth dist. | | 10715 Jan 21 16:09 | 5°♒55'02 | 1.72966 AU |
| | 10712 Jun 27 13:12 | 0°♓ | | | | | | |
| greatest brilliancy | 10712 Aug 02 10:09 | 26°♓50'09 | -4.8m | superior conj | | 10715 Jan 23 04:21 | 7°♒46'53 | 0°43'09 |
| retrograde | 10712 Aug 13 08:25 | 29°♓02'40 | | minimum elong | | 10715 Jan 23 12:58 | 8°♒13'32 | 0°43'16 |
| desc. node | 10712 Aug 26 04:05 | 25°♓46'10 | | | | 10715 Feb 10 03:35 | 0°♈ | |
| evening set | 10712 Aug 28 02:07 | 24°♓46'36 | | desc. node | | 10715 Feb 10 20:06 | 0°♈51'09 | |
| inferior conj | 10712 Sep 03 10:00 | 21°♓01'11 | -2°04'14 | evening rise | | 10715 Mar 02 12:50 | 25°♈15'28 | |
| minimum elong | 10712 Sep 03 05:21 | 21°♓08'23 | 2°02'56 | | | 10715 Mar 06 08:35 | 0°♑ | |
| min. Earth dist. | 10712 Sep 02 18:11 | 21°♓25'38 | 0.27685 AU | | | 10715 Mar 30 12:04 | 0°♏ | |
| morning rise | 10712 Sep 09 09:21 | 17°♓29'18 | | | | 10715 Apr 23 14:50 | 0°♐ | |
| direct | 10712 Sep 24 10:07 | 13°♓08'59 | | | | 10715 May 17 19:09 | 0°♑ | |
| greatest brilliancy | 10712 Oct 03 23:54 | 14°♓49'27 | -4.8m | asc. node | | 10715 Jun 03 16:07 | 20°♑47'48 | |
| | 10712 Oct 28 14:01 | 0°♒ | | | | 10715 Jun 11 04:32 | 0°♒ | |
| morning max el | 10712 Nov 12 06:56 | 13°♒11'00 | 45°48'04 | | | 10715 Jul 06 00:04 | 0°♓ | |
| | 10712 Nov 28 23:12 | 0°♑ | | | | 10715 Jul 31 14:59 | 0°♒ | |
| asc. node | 10712 Dec 17 03:24 | 19°♑43'10 | | | | 10715 Aug 28 00:43 | 0°♑ | |
| | 10712 Dec 26 06:38 | 0°♌ | | evening max el | | 10715 Sep 04 02:44 | 7°♑09'12 | 46°10'56 |
| | 10713 Jan 21 02:25 | 0°♑ | | desc. node | | 10715 Sep 23 14:26 | 24°♑37'42 | |
| | 10713 Feb 15 03:45 | 0°♒ | | | | 10715 Oct 01 00:21 | 0°♌ | |
| | 10713 Mar 11 18:16 | 0°♈ | | greatest brilliancy | | 10715 Oct 13 02:46 | 6°♌21'41 | -4.8m |
| | 10713 Apr 05 01:39 | 0°♑ | | retrograde | | 10715 Oct 23 17:08 | 8°♌25'10 | |
| desc. node | 10713 Apr 07 20:39 | 3°♑27'53 | | evening set | | 10715 Nov 10 20:31 | 2°♌13'40 | |
| | 10713 Apr 29 03:51 | 0°♏ | | inferior conj | | 10715 Nov 14 06:11 | 0°♌07'04 | -8°38'08 |
| morning set | 10713 May 12 15:00 | 16°♏51'18 | | minimum elong | | 10715 Nov 14 03:34 | 0°♌11'11 | 8°37'34 |
| | 10713 May 23 02:30 | 0°♐ | | min. Earth dist. | | 10715 Nov 13 23:14 | 0°♌17'58 | 0.29032 AU |
| | 10713 Jun 15 23:36 | 0°♑ | | | | 10715 Nov 14 10:41 | 30°♑ | |
| | | | | morning rise | | 10715 Nov 17 10:41 | 28°♑08'22 | |
| superior conj | 10713 Jun 21 21:57 | 7°♑27'02 | -1°16'06 | direct | | 10715 Dec 05 16:16 | 21°♑53'20 | |
| minimum elong | 10713 Jun 22 08:12 | 7°♑59'14 | 1°16'25 | greatest brilliancy | | 10715 Dec 15 22:02 | 23°♑47'13 | -4.7m |
| max. Earth dist. | 10713 Jun 23 03:55 | 9°♑01'06 | 1.71360 AU | | | 10715 Dec 28 01:37 | 0°♌ | |
| | 10713 Jul 09 21:14 | 0°♒ | | asc. node | | 10716 Jan 14 14:46 | 13°♌45'39 | |
| asc. node | 10713 Jul 29 14:30 | 24°♒40'08 | | morning max el | | 10716 Jan 23 17:31 | 22°♌16'42 | 45°48'30 |
| evening rise | 10713 Aug 01 01:30 | 27°♒44'14 | | | | 10716 Jan 31 11:04 | 0°♑ | |
| | 10713 Aug 02 21:01 | 0°♓ | | | | 10716 Feb 28 02:22 | 0°♒ | |
| | 10713 Aug 27 00:07 | 0°♒ | | | | 10716 Mar 24 21:32 | 0°♈ | |
| | 10713 Sep 20 07:47 | 0°♑ | | | | 10716 Apr 18 20:12 | 0°♑ | |
| | 10713 Oct 14 22:13 | 0°♌ | | desc. node | | 10716 May 05 09:49 | 20°♑16'16 | |
| | 10713 Nov 08 22:55 | 0°♑ | | | | 10716 May 13 07:14 | 0°♏ | |
| desc. node | 10713 Nov 18 09:40 | 11°♑08'48 | | | | 10716 Jun 06 11:21 | 0°♐ | |
| | 10713 Dec 04 14:56 | 0°♒ | | | | 10716 Jun 30 11:58 | 0°♑ | |
| | 10713 Dec 31 07:51 | 0°♈ | | | | 10716 Jul 24 11:48 | 0°♒ | |
| evening max el | 10714 Jan 27 02:19 | 27°♈50'32 | 46°07'21 | morning set | | 10716 Jul 26 14:00 | 2°♒36'48 | |
| | 10714 Jan 29 07:58 | 0°♑ | | | | 10716 Aug 17 12:38 | 0°♓ | |
| greatest brilliancy | 10714 Mar 07 18:37 | 27°♑10'26 | -4.8m | asc. node | | 10716 Aug 26 03:24 | 10°♓43'53 | |
| asc. node | 10714 Mar 11 10:06 | 28°♑14'20 | | | | | | |
| retrograde | 10714 Mar 17 13:43 | 28°♑57'58 | | superior conj | | 10716 Sep 03 13:10 | 21°♓11'35 | 0°20'16 |
| evening set | 10714 Apr 01 23:49 | 24°♑20'15 | | minimum elong | | 10716 Sep 03 08:32 | 20°♓57'12 | 0°19'54 |
| inferior conj | 10714 Apr 07 09:07 | 21°♑07'09 | 6°16'56 | max. Earth dist. | | 10716 Sep 06 00:26 | 24°♓15'49 | 1.72351 AU |
| minimum elong | 10714 Apr 06 22:09 | 21°♑24'08 | 6°14'12 | | | 10716 Sep 10 15:13 | 0°♒ | |
| min. Earth dist. | 10714 Apr 07 08:40 | 21°♑07'52 | 0.27388 AU | | | 10716 Oct 04 19:56 | 0°♑ | |
| morning rise | 10714 Apr 11 20:13 | 18°♑24'41 | | evening rise | | 10716 Oct 11 03:08 | 7°♑47'23 | |
| direct | 10714 Apr 28 04:45 | 13°♑10'52 | | | | 10716 Oct 29 03:28 | 0°♌ | |
| greatest brilliancy | 10714 May 08 06:21 | 15°♑04'51 | -4.9m | | | 10716 Nov 22 15:04 | 0°♑ | |

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|---------------------|--------------------|---|------------|--|---------------------|--|---|------------|
| desc. node | 10716 Dec 15 21:10 | 28°  14'51 | | | 10719 May 26 22:26 | 0°  | | |
| | 10716 Dec 17 07:59 | 0°  | | | desc. node | 10719 Jun 02 22:37 | 8°  20'23 | |
| | 10717 Jan 11 07:10 | 0°  | | | | 10719 Jun 20 21:46 | 0°  | |
| | 10717 Feb 05 14:10 | 0°  | | | | 10719 Jul 15 10:18 | 0°  | |
| | 10717 Mar 03 10:16 | 0°  | | | | 10719 Aug 08 18:18 | 0°  | |
| | 10717 Mar 30 13:17 | 0°  | | | | 10719 Sep 02 01:03 | 0°  | |
| asc. node | 10717 Apr 07 20:20 | 8°  36'06 | | | asc. node | 10719 Sep 23 16:45 | 26°  45'23 | |
| evening max el | 10717 Apr 09 20:52 | 10°  38'13 | 46°45'12 | | | 10719 Sep 26 07:45 | 0°  | |
| | 10717 May 01 06:05 | 0°  | | | morning set | 10719 Oct 07 00:24 | 13°  12'54 | |
| greatest brilliancy | 10717 May 20 10:54 | 11°  22'44 | -4.9m | | | 10719 Oct 20 14:27 | 0°  | |
| retrograde | 10717 May 30 04:18 | 13°  09'55 | | | | | | |
| evening set | 10717 Jun 16 13:23 | 7°  20'29 | | | superior conj | 10719 Nov 13 03:56 | 29°  06'19 | 1°25'10 |
| inferior conj | 10717 Jun 19 19:34 | 5°  21'57 | 8°13'27 | | minimum elong | 10719 Nov 13 01:01 | 28°  05'20 | 1°25'36 |
| minimum elong | 10717 Jun 20 04:50 | 5°  20'43 | 8°11'31 | | | 10719 Nov 13 21:19 | 0°  | |
| min. Earth dist. | 10717 Jun 20 02:11 | 5°  21'48 | 0.27118 AU | | max. Earth dist. | 10719 Nov 14 04:37 | 0°  22'32 | 1.73156 AU |
| morning rise | 10717 Jun 23 20:21 | 2°  25'23 | | | | 10719 Dec 08 04:59 | 0°  | |
| | 10717 Jun 29 13:36 | 30°  08'11 | | | evening rise | 10719 Dec 19 23:18 | 14°  28'57 | |
| direct | 10717 Jul 10 12:35 | 27°  13'35 | | | | 10720 Jan 01 14:10 | 0°  | |
| greatest brilliancy | 10717 Jul 20 09:22 | 29°  12'47 | -4.9m | | desc. node | 10720 Jan 13 09:15 | 14°  28'51 | |
| | 10717 Jul 21 23:05 | 0°  | | | | 10720 Jan 26 00:57 | 0°  | |
| desc. node | 10717 Jul 28 19:23 | 3°  23'30 | | | | 10720 Feb 19 12:55 | 0°  | |
| morning max el | 10717 Aug 29 15:15 | 29°  39'50 | 46°31'27 | | | 10720 Mar 15 02:10 | 0°  | |
| | 10717 Aug 29 23:25 | 0°  | | | | 10720 Apr 08 19:05 | 0°  | |
| | 10717 Sep 27 08:06 | 0°  | | | | 10720 May 03 21:42 | 0°  | |
| | 10717 Oct 23 18:28 | 0°  | | | asc. node | 10720 May 05 06:55 | 1°  37'44 | |
| | 10717 Nov 18 08:22 | 0°  | | | | 10720 May 29 23:12 | 0°  | |
| asc. node | 10717 Nov 18 17:04 | 0°  25'48 | | | evening max el | 10720 Jun 21 15:15 | 24°  09'49 | 46°47'52 |
| | 10717 Dec 13 09:44 | 0°  | | | | 10720 Jun 27 13:20 | 0°  | |
| | 10718 Jan 07 02:30 | 0°  | | | greatest brilliancy | 10720 Jul 31 02:26 | 24°  09'33 | -4.8m |
| | 10718 Jan 31 13:26 | 0°  | | | retrograde | 10720 Aug 10 22:28 | 26°  09'43 | 5'1 |
| morning set | 10718 Feb 24 19:03 | 29°  56'10 | | | desc. node | 10720 Aug 25 06:04 | 22°  09'42 | 0'9 |
| | 10718 Feb 24 20:18 | 0°  | | | evening set | 10720 Aug 25 16:08 | 22°  09'28 | 4'1 |
| desc. node | 10718 Mar 10 09:12 | 16°  08'47 | 44 | | min. Earth dist. | 10720 Aug 31 09:37 | 19°  05'54 | 0.27635 AU |
| | 10718 Mar 20 23:54 | 0°  | | | inferior conj | 10720 Sep 01 00:10 | 18°  09'43 | -1°42'09 |
| max. Earth dist. | 10718 Apr 02 01:50 | 15°  03'55 | 1.71855 AU | | minimum elong | 10720 Aug 31 20:18 | 18°  09'49 | 24'07 |
| | | | | | morning rise | 10720 Sep 07 01:08 | 15°  09'08 | |
| superior conj | 10718 Apr 05 05:46 | 19°  01'00 | -0°57'43 | | direct | 10720 Sep 21 23:16 | 10°  09'51 | 44 |
| minimum elong | 10718 Apr 04 18:30 | 18°  05'25 | 47 | | greatest brilliancy | 10720 Oct 01 14:31 | 12°  09'33 | 0'3 |
| | 10718 Apr 14 00:34 | 0°  | | | | 10720 Oct 28 20:50 | 0°  | |
| | 10718 May 07 23:05 | 0°  | | | morning max el | 10720 Nov 09 20:14 | 10°  09'53 | 41 |
| evening rise | 10718 May 15 02:31 | 8°  12'57 | 48 | | | 10720 Nov 28 16:31 | 0°  | |
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| | 10718 Jun 24 20:50 | 0°  | | | | 10720 Dec 25 20:20 | 0°  | |
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| evening set | 10719 Jan 17 21:26 | 11°  06'42 | | | minimum elong | 10721 Jun 19 19:09 | 5°  09'29 | 1°18'19 |
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| minimum elong | 10719 Jan 23 14:20 | 7°  08'38 | 39 | | | 10721 Jul 09 07:52 | 0°  | |
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| morning rise | 10719 Jan 29 06:50 | 4°  08'13 | 28 | | evening rise | 10721 Jul 29 14:10 | 25°  09'20 | 44 |
| | 10719 Feb 09 13:00 | 30°  08'03 | | | | 10721 Aug 02 07:42 | 0°  | |
| asc. node | 10719 Feb 11 01:31 | 29°  08'47 | 59 | | | 10721 Aug 26 10:52 | 0°  | |
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| | 10719 Feb 17 15:55 | 0°  | | | | 10721 Oct 14 09:32 | 0°  | |
| greatest brilliancy | 10719 Feb 24 13:02 | 1° 05'54 | 04 | | | 10721 Nov 08 10:55 | 0° | |
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| morning max el | 10719 Apr 04 12:45 | 1° 08'41 | 13 | | | 10721 Dec 04 04:14 | 0° | |
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


































































































































| | | | | | | | |
|---------------------|--------------------|---------------------------|------------|---------------------|--------------------|----------------------------|------------|
| evening max el | 10722 Jan 24 16:02 | 25° H 32'39 | 46°06'11 | morning set | 10724 Jul 24 03:12 | 0° Ω 14'31 | |
| | 10722 Jan 29 08:00 | 0° Υ | | | 10724 Aug 16 23:16 | 0° M | |
| greatest brilliancy | 10722 Mar 05 07:36 | 24° Υ 49'29 | -4.8m | asc. node | 10724 Aug 25 05:21 | 10° M 16'56 | |
| asc. node | 10722 Mar 10 12:05 | 26° Υ 12'34 | | | | | |
| retrograde | 10722 Mar 15 03:21 | 26° Υ 37'42 | | superior conj | 10724 Sep 01 03:31 | 18° M 54'00 | 0°16'45 |
| evening set | 10722 Mar 30 10:16 | 22° Υ 03'38 | | minimum elong | 10724 Aug 31 23:40 | 18° M 41'59 | 0°16'24 |
| inferior conj | 10722 Apr 04 22:48 | 18° Υ 46'18 | 5°59'18 | max. Earth dist. | 10724 Sep 03 17:21 | 22° M 06'16 | 1.72314 AU |
| minimum elong | 10722 Apr 04 11:58 | 19° Υ 03'02 | 5°56'31 | | 10724 Sep 10 01:48 | 0° Ω | |
| min. Earth dist. | 10722 Apr 04 22:38 | 18° Υ 46'35 | 0.27409 AU | | 10724 Oct 04 06:31 | 0° M | |
| morning rise | 10722 Apr 09 13:24 | 15° Υ 59'00 | | evening rise | 10724 Oct 08 19:32 | 5° M 37'05 | |
| direct | 10722 Apr 25 18:39 | 10° Υ 49'19 | | | 10724 Oct 28 14:09 | 0° H | |
| greatest brilliancy | 10722 May 05 21:24 | 12° Υ 44'39 | -4.9m | | 10724 Nov 22 01:58 | 0° Z | |
| | 10722 May 31 21:39 | 0° H | | desc. node | 10724 Dec 14 23:02 | 27° Z 46'26 | |
| morning max el | 10722 Jun 15 06:32 | 13° H 36'54 | 46°59'02 | | 10724 Dec 16 19:17 | 0° \approx | |
| desc. node | 10722 Jun 30 10:21 | 29° H 32'24 | | | 10725 Jan 10 19:08 | 0° H | |
| | 10722 Jun 30 20:30 | 0° II | | | 10725 Feb 05 03:12 | 0° Υ | |
| | 10722 Jul 27 09:21 | 0° G | | | 10725 Mar 03 01:15 | 0° H | |
| | 10722 Aug 21 19:48 | 0° Ω | | | 10725 Mar 30 08:48 | 0° II | |
| | 10722 Sep 15 19:26 | 0° M | | asc. node | 10725 Apr 06 22:26 | 7° II 45'57 | |
| | 10722 Oct 10 13:41 | 0° Ω | | evening max el | 10725 Apr 07 11:14 | 8° II 18'00 | 46°44'14 |
| asc. node | 10722 Oct 21 06:04 | 13° Ω 00'18 | | | 10725 May 01 23:17 | 0° G | |
| | 10722 Nov 04 04:07 | 0° M | | greatest brilliancy | 10725 May 18 00:06 | 8° G 58'47 | -4.9m |
| | 10722 Nov 28 15:20 | 0° H | | retrograde | 10725 May 27 17:31 | 10° G 45'23 | |
| morning set | 10722 Dec 14 22:50 | 20° H 04'10 | | evening set | 10725 Jun 14 05:44 | 4° G 51'17 | |
| | 10722 Dec 23 00:12 | 0° Z | | inferior conj | 10725 Jun 17 08:30 | 2° G 57'33 | 8°24'00 |
| | 10723 Jan 16 07:38 | 0° \approx | | minimum elong | 10725 Jun 17 17:11 | 2° G 44'11 | 8°22'15 |
| max. Earth dist. | 10723 Jan 19 13:12 | 3° \approx 59'36 | 1.72989 AU | min. Earth dist. | 10725 Jun 17 14:49 | 2° G 47'50 | 0.27127 AU |
| | | | | morning rise | 10725 Jun 21 04:42 | 0° G 38'21 | |
| superior conj | 10723 Jan 20 20:30 | 5° \approx 36'20 | 0°46'04 | | 10725 Jun 22 07:28 | 30° R II | |
| minimum elong | 10723 Jan 21 05:29 | 6° \approx 04'03 | 0°46'10 | direct | 10725 Jul 08 01:56 | 25° II 09'27 | |
| desc. node | 10723 Feb 09 21:58 | 0° H 24'33 | | greatest brilliancy | 10725 Jul 17 21:34 | 26° II 58'39 | -4.9m |
| | 10723 Feb 09 14:02 | 0° H | | | 10725 Jul 24 14:09 | 0° G | |
| evening rise | 10723 Feb 28 03:48 | 23° H 00'24 | | desc. node | 10725 Jul 27 21:25 | 1° G 54'30 | |
| | 10723 Mar 05 19:10 | 0° Υ | | morning max el | 10725 Aug 27 04:56 | 27° G 18'33 | 46°32'50 |
| | 10723 Mar 29 22:51 | 0° H | | | 10725 Aug 29 21:42 | 0° Ω | |
| | 10723 Apr 23 01:55 | 0° II | | | 10725 Sep 27 00:01 | 0° M | |
| | 10723 May 17 06:37 | 0° G | | | 10725 Oct 23 07:55 | 0° Ω | |
| asc. node | 10723 Jun 02 17:59 | 20° G 17'18 | | asc. node | 10725 Nov 17 18:57 | 29° Ω 55'18 | |
| | 10723 Jun 10 16:34 | 0° Ω | | | 10725 Nov 17 20:32 | 0° M | |
| | 10723 Jul 05 13:03 | 0° M | | | 10725 Dec 12 21:10 | 0° H | |
| | 10723 Jul 31 05:49 | 0° Ω | | | 10726 Jan 06 13:30 | 0° Z | |
| | 10723 Aug 27 20:21 | 0° M | | | 10726 Jan 31 00:13 | 0° \approx | |
| evening max el | 10723 Sep 01 18:32 | 4° M 56'34 | 46°12'22 | morning set | 10726 Feb 22 09:40 | 27° \approx 39'37 | |
| desc. node | 10723 Sep 22 16:30 | 23° M 32'15 | | | 10726 Feb 24 07:00 | 0° H | |
| | 10723 Oct 02 04:00 | 0° H | | desc. node | 10726 Mar 09 11:12 | 16° H 20'42 | |
| greatest brilliancy | 10723 Oct 10 17:03 | 4° H 09'18 | -4.8m | | 10726 Mar 20 10:35 | 0° Υ | |
| retrograde | 10723 Oct 21 09:48 | 6° H 14'39 | | max. Earth dist. | 10726 Mar 30 10:49 | 12° Υ 28'49 | 1.71891 AU |
| evening set | 10723 Nov 08 10:25 | 0° H 06'00 | | | | | |
| | 10723 Nov 08 14:23 | 30° R M | | superior conj | 10726 Apr 02 18:30 | 16° Υ 37'27 | -0°54'48 |
| inferior conj | 10723 Nov 11 22:04 | 27° M 56'26 | -8°35'18 | minimum elong | 10726 Apr 02 07:27 | 16° Υ 02'59 | 0°54'29 |
| minimum elong | 10723 Nov 11 18:42 | 28° M 01'43 | 8°34'41 | | 10726 Apr 13 11:17 | 0° H | |
| min. Earth dist. | 10723 Nov 11 13:34 | 28° M 09'45 | 0.29011 AU | | 10726 May 07 09:50 | 0° II | |
| morning rise | 10723 Nov 15 03:05 | 25° M 57'09 | | evening rise | 10726 May 12 14:07 | 6° II 29'46 | |
| direct | 10723 Dec 03 08:20 | 19° M 43'14 | | | 10726 May 31 07:56 | 0° G | |
| greatest brilliancy | 10723 Dec 13 12:09 | 21° M 35'46 | -4.7m | | 10726 Jun 24 07:51 | 0° Ω | |
| | 10723 Dec 28 22:19 | 0° H | | asc. node | 10726 Jun 30 05:45 | 7° Ω 21'44 | |
| asc. node | 10724 Jan 13 16:39 | 12° H 51'42 | | | 10726 Jul 18 11:56 | 0° M | |
| morning max el | 10724 Jan 21 09:47 | 20° H 06'56 | 45°47'45 | | 10726 Aug 11 22:53 | 0° Ω | |
| | 10724 Jan 31 05:57 | 0° Z | | | 10726 Sep 05 20:57 | 0° M | |
| | 10724 Feb 27 16:45 | 0° \approx | | | 10726 Oct 01 14:40 | 0° H | |
| | 10724 Mar 24 10:10 | 0° H | | desc. node | 10726 Oct 20 02:50 | 20° H 34'30 | |
| | 10724 Apr 18 07:58 | 0° Υ | | | 10726 Oct 28 23:52 | 0° Z | |
| desc. node | 10724 May 04 11:48 | 19° Υ 47'11 | | evening max el | 10726 Nov 11 20:10 | 13° Z 53'37 | 45°47'51 |
| | 10724 May 12 18:32 | 0° H | | | 10726 Nov 30 05:37 | 0° \approx | |
| | 10724 Jun 05 22:24 | 0° II | | greatest brilliancy | 10726 Dec 20 22:49 | 12° \approx 04'21 | -4.7m |
| | 10724 Jun 29 22:51 | 0° G | | retrograde | 10726 Dec 30 14:05 | 13° \approx 45'17 | |
| | 10724 Jul 23 22:33 | 0° Ω | | evening set | 10727 Jan 15 15:21 | 8° \approx 50'04 | |

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|---------------------|--------------------|--------------------------------|------------|---------------------|--------------------|-------------------------------|------------|
| inferior conj | 10727 Jan 20 21:00 | 5° \approx 39'18 | -4°44'28 | max. Earth dist. | 10729 Jun 17 13:38 | 3° \approx 22'25 | 1.71332 AU |
| minimum elong | 10727 Jan 21 06:09 | 5° \approx 24'56 | 4°41'36 | | 10729 Jul 08 18:49 | 0° Ω | |
| min. Earth dist. | 10727 Jan 21 13:20 | 5° \approx 13'41 | 0.28464 AU | evening rise | 10729 Jul 27 02:59 | 22° Ω 56'50 | |
| morning rise | 10727 Jan 26 20:28 | 2° \approx 02'23 | | asc. node | 10729 Jul 27 18:18 | 23° Ω 44'39 | |
| | 10727 Jan 30 21:40 | 30° \mathbb{R} \mathcal{Z} | | | 10729 Aug 01 18:38 | 0° \mathbb{M} | |
| asc. node | 10727 Feb 10 03:36 | 27° \mathcal{Z} 28'04 | | | 10729 Aug 25 21:52 | 0° Ω | |
| direct | 10727 Feb 11 04:55 | 27° \mathcal{Z} 26'45 | | | 10729 Sep 19 05:55 | 0° \mathbb{M} | |
| greatest brilliancy | 10727 Feb 22 05:18 | 29° \mathcal{Z} 40'36 | -4.8m | | 10729 Oct 13 21:09 | 0° \mathcal{X} | |
| | 10727 Feb 23 00:44 | 0° \approx | | | 10729 Nov 07 23:19 | 0° \mathcal{Z} | |
| morning max el | 10727 Apr 02 02:48 | 29° \approx 21'59 | 46°27'53 | desc. node | 10729 Nov 16 13:30 | 10° \mathcal{Z} 06'24 | |
| | 10727 Apr 02 18:01 | 0° \mathcal{H} | | | 10729 Dec 03 18:04 | 0° \approx | |
| | 10727 Apr 30 16:16 | 0° \mathcal{Y} | | | 10729 Dec 30 16:43 | 0° \mathcal{H} | |
| | 10727 May 26 11:59 | 0° \mathcal{B} | | evening max el | 10730 Jan 22 06:42 | 23° \mathcal{H} 15'48 | 46°05'02 |
| desc. node | 10727 Jun 02 00:24 | 7° \mathcal{B} 46'22 | | | 10730 Jan 29 09:58 | 0° \mathcal{Y} | |
| | 10727 Jun 20 10:10 | 0° \mathbb{I} | | greatest brilliancy | 10730 Mar 02 20:10 | 22° \mathcal{Y} 26'41 | -4.8m |
| | 10727 Jul 14 22:01 | 0° \mathcal{E} | | asc. node | 10730 Mar 09 14:07 | 24° \mathcal{Y} 04'12 | |
| | 10727 Aug 08 05:35 | 0° Ω | | retrograde | 10730 Mar 12 17:17 | 24° \mathcal{Y} 15'46 | |
| | 10727 Sep 01 12:03 | 0° \mathbb{M} | | evening set | 10730 Mar 27 20:53 | 19° \mathcal{Y} 45'17 | |
| asc. node | 10727 Sep 22 18:42 | 26° \mathbb{M} 17'55 | | inferior conj | 10730 Apr 02 12:22 | 16° \mathcal{Y} 23'49 | 5°40'59 |
| | 10727 Sep 25 18:34 | 0° Ω | | minimum elong | 10730 Apr 02 01:45 | 16° \mathcal{Y} 40'13 | 5°38'12 |
| morning set | 10727 Oct 04 16:20 | 11° Ω 00'38 | | min. Earth dist. | 10730 Apr 02 12:13 | 16° \mathcal{Y} 24'03 | 0.27428 AU |
| | 10727 Oct 20 01:09 | 0° \mathbb{M} | | morning rise | 10730 Apr 07 06:23 | 13° \mathcal{Y} 31'51 | |
| | | | | direct | 10730 Apr 23 08:53 | 8° \mathcal{Y} 26'25 | |
| superior conj | 10727 Nov 10 21:07 | 26° \mathbb{M} 58'24 | 1°24'36 | greatest brilliancy | 10730 May 03 11:45 | 10° \mathcal{Y} 22'20 | -4.9m |
| minimum elong | 10727 Nov 10 17:30 | 26° \mathbb{M} 47'14 | 1°25'02 | | 10730 Jun 01 03:34 | 0° \mathcal{B} | |
| max. Earth dist. | 10727 Nov 11 20:51 | 28° \mathbb{M} 11'39 | 1.73143 AU | morning max el | 10730 Jun 12 21:42 | 11° \mathcal{B} 17'15 | 46°58'53 |
| | 10727 Nov 13 07:57 | 0° \mathcal{X} | | desc. node | 10730 Jun 29 12:20 | 28° \mathcal{B} 47'58 | |
| | 10727 Dec 07 15:40 | 0° \mathcal{Z} | | | 10730 Jun 30 14:37 | 0° \mathbb{I} | |
| evening rise | 10727 Dec 17 15:44 | 12° \mathcal{Z} 18'48 | | | 10730 Jul 27 00:05 | 0° \mathcal{E} | |
| | 10728 Jan 01 01:00 | 0° \approx | | | 10730 Aug 21 08:55 | 0° Ω | |
| desc. node | 10728 Jan 12 11:07 | 14° \approx 01'03 | | | 10730 Sep 15 07:35 | 0° \mathbb{M} | |
| | 10728 Jan 25 12:03 | 0° \mathcal{H} | | | 10730 Oct 10 01:12 | 0° Ω | |
| | 10728 Feb 19 00:22 | 0° \mathcal{Y} | | asc. node | 10730 Oct 20 07:56 | 12° Ω 31'26 | |
| | 10728 Mar 14 14:10 | 0° \mathcal{B} | | | 10730 Nov 03 15:13 | 0° \mathbb{M} | |
| | 10728 Apr 08 07:52 | 0° \mathbb{I} | | | 10730 Nov 28 02:13 | 0° \mathcal{X} | |
| | 10728 May 03 11:51 | 0° \mathcal{E} | | morning set | 10730 Dec 12 16:12 | 17° \mathcal{X} 56'34 | |
| asc. node | 10728 May 04 08:49 | 1° \mathcal{E} 01'33 | | | 10730 Dec 22 11:00 | 0° \mathcal{Z} | |
| | 10728 May 29 16:09 | 0° Ω | | | 10731 Jan 15 18:26 | 0° \approx | |
| evening max el | 10728 Jun 19 04:29 | 21° Ω 47'31 | 46°48'44 | max. Earth dist. | 10731 Jan 17 09:19 | 2° \approx 00'03 | 1.73015 AU |
| | 10728 Jun 27 14:52 | 0° \mathbb{M} | | | | | |
| greatest brilliancy | 10728 Jul 28 18:17 | 22° \mathbb{M} 15'10 | -4.9m | superior conj | 10731 Jan 18 12:36 | 3° \approx 24'19 | 0°48'55 |
| retrograde | 10728 Aug 08 12:47 | 24° \mathbb{M} 25'10 | | minimum elong | 10731 Jan 18 21:50 | 3° \approx 52'52 | 0°49'02 |
| evening set | 10728 Aug 23 06:25 | 20° \mathbb{M} 10'10 | | desc. node | 10731 Feb 08 23:59 | 29° \approx 57'06 | |
| desc. node | 10728 Aug 24 08:05 | 19° \mathbb{M} 34'48 | | | 10731 Feb 09 00:55 | 0° \mathcal{H} | |
| min. Earth dist. | 10728 Aug 29 01:02 | 16° \mathbb{M} 46'11 | 0.27590 AU | evening rise | 10731 Feb 25 18:28 | 20° \mathcal{H} 43'02 | |
| inferior conj | 10728 Aug 29 14:26 | 16° \mathbb{M} 25'30 | -1°19'59 | | 10731 Mar 05 06:12 | 0° \mathcal{Y} | |
| minimum elong | 10728 Aug 29 11:22 | 16° \mathbb{M} 30'13 | 1°19'13 | | 10731 Mar 29 10:05 | 0° \mathcal{B} | |
| morning rise | 10728 Sep 04 16:54 | 12° \mathbb{M} 49'15 | | | 10731 Apr 22 13:26 | 0° \mathbb{I} | |
| direct | 10728 Sep 19 12:27 | 8° \mathbb{M} 34'07 | | | 10731 May 16 18:31 | 0° \mathcal{E} | |
| greatest brilliancy | 10728 Sep 29 05:21 | 10° \mathbb{M} 16'39 | -4.8m | asc. node | 10731 Jun 01 19:54 | 19° \mathcal{E} 45'38 | |
| | 10728 Oct 29 01:44 | 0° Ω | | | 10731 Jun 10 05:02 | 0° Ω | |
| morning max el | 10728 Nov 07 10:30 | 8° Ω 37'54 | 45°50'06 | | 10731 Jul 05 02:30 | 0° \mathbb{M} | |
| | 10728 Nov 28 09:45 | 0° \mathbb{M} | | | 10731 Jul 30 21:15 | 0° Ω | |
| asc. node | 10728 Dec 15 07:11 | 18° \mathbb{M} 31'19 | | | 10731 Aug 27 17:00 | 0° \mathbb{M} | |
| | 10728 Dec 25 10:17 | 0° \mathcal{X} | | evening max el | 10731 Aug 30 11:09 | 2° \mathbb{M} 44'56 | 46°13'51 |
| | 10729 Jan 20 03:05 | 0° \mathcal{Z} | | desc. node | 10731 Sep 21 18:31 | 22° \mathbb{M} 24'10 | |
| | 10729 Feb 14 02:57 | 0° \approx | | | 10731 Oct 03 20:34 | 0° \mathcal{X} | |
| | 10729 Mar 10 16:41 | 0° \mathcal{H} | | greatest brilliancy | 10731 Oct 08 07:53 | 1° \mathcal{X} 57'03 | -4.8m |
| | 10729 Apr 03 23:40 | 0° \mathcal{Y} | | retrograde | 10731 Oct 19 02:25 | 4° \mathcal{X} 03'39 | |
| desc. node | 10729 Apr 06 00:29 | 2° \mathcal{Y} 31'31 | | | 10731 Nov 02 11:25 | 30° \mathbb{R} \mathbb{M} | |
| | 10729 Apr 28 01:38 | 0° \mathcal{B} | | evening set | 10731 Nov 06 00:15 | 27° \mathbb{M} 58'36 | |
| morning set | 10729 May 07 12:31 | 11° \mathcal{B} 49'50 | | min. Earth dist. | 10731 Nov 09 04:05 | 26° \mathbb{M} 01'18 | 0.28985 AU |
| | 10729 May 22 00:10 | 0° \mathbb{I} | | inferior conj | 10731 Nov 09 14:08 | 25° \mathbb{M} 45'32 | -8°31'43 |
| | 10729 Jun 14 21:12 | 0° \mathcal{E} | | minimum elong | 10731 Nov 09 10:01 | 25° \mathbb{M} 51'59 | 8°31'02 |
| | | | | morning rise | 10731 Nov 12 19:55 | 23° \mathbb{M} 45'06 | |
| superior conj | 10729 Jun 16 20:59 | 2° \mathcal{E} 30'05 | -1°19'41 | direct | 10731 Dec 01 00:44 | 17° \mathbb{M} 33'07 | |
| minimum elong | 10729 Jun 17 06:03 | 2° \mathcal{E} 58'35 | 1°20'04 | greatest brilliancy | 10731 Dec 11 02:01 | 19° \mathbb{M} 23'39 | -4.7m |

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|---------------------|--------------------|----------------------|---------------------|--------------------|----------------------|
| | 10731 Dec 29 13:51 | 0°♊ | | 10734 May 30 19:04 | 0°♋ |
| asc. node | 10732 Jan 12 18:44 | 11°♊58'37 | | 10734 Jun 23 19:08 | 0°♌ |
| morning max el | 10732 Jan 19 01:34 | 17°♊55'20 45°46'46 | asc. node | 10734 Jun 29 07:44 | 6°♌52'43 |
| | 10732 Jan 31 00:38 | 0°♋ | | 10734 Jul 17 23:28 | 0°♍ |
| | 10732 Feb 27 07:21 | 0°♌ | | 10734 Aug 11 10:51 | 0°♎ |
| | 10732 Mar 23 23:08 | 0°♍ | | 10734 Sep 05 09:43 | 0°♏ |
| | 10732 Apr 17 20:07 | 0°♎ | | 10734 Oct 01 05:03 | 0°♐ |
| desc. node | 10732 May 03 13:39 | 19°♎16'24 | desc. node | 10734 Oct 19 04:42 | 19°♐54'42 |
| | 10732 May 12 06:15 | 0°♏ | | 10734 Oct 28 18:16 | 0°♑ |
| | 10732 Jun 05 09:49 | 0°♐ | evening max el | 10734 Nov 09 10:12 | 11°♑38'21 45°48'07 |
| | 10732 Jun 29 10:03 | 0°♒ | | 10734 Nov 30 19:02 | 0°♓ |
| morning set | 10732 Jul 21 16:18 | 27°♒50'57 | greatest brilliancy | 10734 Dec 18 14:22 | 9°♓52'52 -4.7m |
| | 10732 Jul 23 09:35 | 0°♓ | retrograde | 10734 Dec 28 04:56 | 11°♓33'42 |
| | 10732 Aug 16 10:12 | 0°♔ | evening set | 10735 Jan 13 09:34 | 6°♓34'06 |
| asc. node | 10732 Aug 24 07:17 | 9°♔48'57 | inferior conj | 10735 Jan 18 12:43 | 3°♓27'07 -5°01'35 |
| | | | minimum elong | 10735 Jan 18 22:11 | 3°♓12'16 4°58'43 |
| superior conj | 10732 Aug 29 17:54 | 16°♔35'28 0°13'13 | min. Earth dist. | 10735 Jan 19 05:26 | 3°♓00'54 0.28508 AU |
| minimum elong | 10732 Aug 29 14:50 | 16°♔25'57 0°12'53 | morning rise | 10735 Jan 24 10:16 | 29°♑52'43 |
| behind sun begin | 10732 Aug 29 00:09 | 15°♔40'13 | | 10735 Jan 24 05:06 | 30°♑♊ |
| behind sun end | 10732 Aug 30 05:32 | 17°♔11'41 | direct | 10735 Feb 08 20:21 | 25°♑13'54 |
| max. Earth dist. | 10732 Sep 01 10:36 | 19°♔56'45 1.72273 AU | asc. node | 10735 Feb 09 05:33 | 25°♑14'05 |
| | 10732 Sep 09 12:40 | 0°♕ | greatest brilliancy | 10735 Feb 19 22:05 | 27°♑28'40 -4.8m |
| | 10732 Oct 03 17:23 | 0°♖ | | 10735 Feb 25 08:45 | 0°♒ |
| evening rise | 10732 Oct 06 12:04 | 3°♖26'10 | morning max el | 10735 Mar 30 17:22 | 27°♒04'27 46°26'17 |
| | 10732 Oct 28 01:06 | 0°♊ | | 10735 Apr 02 15:12 | 0°♋ |
| | 10732 Nov 21 13:07 | 0°♋ | | 10735 Apr 30 07:49 | 0°♌ |
| desc. node | 10732 Dec 14 01:01 | 27°♋17'39 | | 10735 May 26 01:27 | 0°♍ |
| | 10732 Dec 16 06:50 | 0°♌ | desc. node | 10735 Jun 01 02:22 | 7°♍12'50 |
| | 10733 Jan 10 07:24 | 0°♍ | | 10735 Jun 19 22:36 | 0°♎ |
| | 10733 Feb 04 16:38 | 0°♎ | | 10735 Jul 14 09:51 | 0°♏ |
| | 10733 Mar 02 16:50 | 0°♏ | | 10735 Aug 07 17:00 | 0°♐ |
| | 10733 Mar 30 05:30 | 0°♐ | | 10735 Aug 31 23:09 | 0°♑ |
| evening max el | 10733 Apr 05 00:52 | 5°♐54'28 46°43'01 | asc. node | 10735 Sep 21 20:30 | 25°♑49'54 |
| asc. node | 10733 Apr 06 00:18 | 6°♐52'48 | | 10735 Sep 25 05:24 | 0°♒ |
| | 10733 May 02 23:39 | 0°♑ | morning set | 10735 Oct 02 08:01 | 8°♒47'26 |
| greatest brilliancy | 10733 May 15 13:46 | 6°♑33'30 -4.9m | | 10735 Oct 19 11:49 | 0°♓ |
| retrograde | 10733 May 25 05:55 | 8°♑18'54 | | | |
| evening set | 10733 Jun 11 21:43 | 2°♑20'34 | superior conj | 10735 Nov 08 14:17 | 24°♓50'28 1°23'56 |
| inferior conj | 10733 Jun 14 21:15 | 0°♑31'28 8°33'36 | minimum elong | 10735 Nov 08 10:00 | 24°♓37'12 1°24'20 |
| minimum elong | 10733 Jun 15 05:16 | 0°♑19'08 8°32'04 | max. Earth dist. | 10735 Nov 09 13:46 | 26°♓02'57 1.73129 AU |
| min. Earth dist. | 10733 Jun 15 03:36 | 0°♑21'41 0.27131 AU | | 10735 Nov 12 18:34 | 0°♊ |
| | 10733 Jun 15 17:42 | 30°♒♐ | | 10735 Dec 07 02:19 | 0°♋ |
| morning rise | 10733 Jun 18 12:50 | 28°♐18'43 | evening rise | 10735 Dec 15 08:27 | 10°♑09'42 |
| direct | 10733 Jul 05 14:37 | 22°♐43'21 | | 10735 Dec 31 11:48 | 0°♌ |
| greatest brilliancy | 10733 Jul 15 10:10 | 24°♐32'08 -4.9m | desc. node | 10736 Jan 11 13:08 | 13°♓33'55 |
| | 10733 Jul 26 06:26 | 0°♑ | | 10736 Jan 24 23:05 | 0°♍ |
| desc. node | 10733 Jul 26 23:28 | 0°♑27'15 | | 10736 Feb 18 11:45 | 0°♎ |
| morning max el | 10733 Aug 24 17:32 | 24°♑53'32 46°34'23 | | 10736 Mar 14 02:03 | 0°♏ |
| | 10733 Aug 29 19:27 | 0°♒ | | 10736 Apr 07 20:35 | 0°♐ |
| | 10733 Sep 26 15:55 | 0°♑ | asc. node | 10736 May 03 10:45 | 0°♑25'30 |
| | 10733 Oct 22 21:26 | 0°♒ | | 10736 May 03 02:02 | 0°♑ |
| asc. node | 10733 Nov 16 20:48 | 29°♒24'16 | | 10736 May 29 09:25 | 0°♓ |
| | 10733 Nov 17 08:49 | 0°♓ | evening max el | 10736 Jun 16 18:05 | 19°♓25'03 46°49'21 |
| | 10733 Dec 12 08:43 | 0°♊ | | 10736 Jun 27 18:00 | 0°♔ |
| | 10734 Jan 06 00:38 | 0°♋ | greatest brilliancy | 10736 Jul 26 09:27 | 19°♔55'34 -4.9m |
| | 10734 Jan 30 11:07 | 0°♌ | retrograde | 10736 Aug 06 03:19 | 22°♔05'22 |
| morning set | 10734 Feb 20 00:39 | 25°♌23'53 | evening set | 10736 Aug 20 20:36 | 17°♔50'08 |
| | 10734 Feb 23 17:50 | 0°♍ | desc. node | 10736 Aug 23 10:02 | 16°♔23'20 |
| desc. node | 10734 Mar 08 13:03 | 15°♍52'49 | min. Earth dist. | 10736 Aug 26 15:59 | 14°♔25'25 0.27546 AU |
| | 10734 Mar 19 21:27 | 0°♎ | inferior conj | 10736 Aug 27 04:22 | 14°♔06'22 -0°57'24 |
| max. Earth dist. | 10734 Mar 27 21:13 | 9°♎57'38 1.71939 AU | minimum elong | 10736 Aug 27 02:09 | 14°♔09'46 0°56'53 |
| | | | morning rise | 10736 Sep 02 08:14 | 10°♔28'34 |
| superior conj | 10734 Mar 31 07:21 | 14°♎13'51 -0°51'48 | direct | 10736 Sep 17 01:39 | 6°♔15'15 |
| minimum elong | 10734 Mar 30 20:38 | 13°♎40'24 0°51'28 | greatest brilliancy | 10736 Sep 26 19:41 | 7°♔59'02 -4.8m |
| | 10734 Apr 12 22:12 | 0°♏ | | 10736 Oct 29 04:52 | 0°♕ |
| | 10734 May 06 20:51 | 0°♐ | morning max el | 10736 Nov 05 01:22 | 6°♕23'39 45°51'13 |
| evening rise | 10734 May 10 01:31 | 4°♐00'24 | | 10736 Nov 28 02:31 | 0°♖ |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| asc. node | 10736 Dec 14 09:16 | 17°♌56'17 | | | 10739 Aug 27 13:54 | 0°♌ | |
| | 10736 Dec 24 23:54 | 0°♊ | | evening max el | 10739 Aug 28 03:18 | 0°♌33'12 | 46°15'00 |
| | 10737 Jan 19 15:19 | 0°♊ | | desc. node | 10739 Sep 20 20:25 | 21°♌14'53 | |
| | 10737 Feb 13 14:28 | 0°♊ | | greatest brilliancy | 10739 Oct 05 23:14 | 29°♌45'57 | -4.8m |
| | 10737 Mar 10 03:48 | 0°♊ | | | 10739 Oct 06 14:38 | 0°♊ | |
| | 10737 Apr 03 10:33 | 0°♊ | | retrograde | 10739 Oct 16 18:22 | 1°♊52'55 | |
| desc. node | 10737 Apr 05 02:21 | 2°♊03'33 | | | 10739 Oct 26 11:04 | 30°♊♌ | |
| | 10737 Apr 27 12:23 | 0°♊ | | evening set | 10739 Nov 03 13:42 | 25°♌52'07 | |
| morning set | 10737 May 04 23:51 | 9°♊21'22 | | inferior conj | 10739 Nov 07 06:02 | 23°♌35'09 | -8°27'23 |
| | 10737 May 21 10:52 | 0°♊ | | minimum elong | 10739 Nov 07 01:12 | 23°♌42'45 | 8°26'37 |
| | | | | min. Earth dist. | 10739 Nov 06 18:49 | 23°♌52'47 | 0.28958 AU |
| superior conj | 10737 Jun 14 08:42 | 0°♊02'31 | -1°21'14 | morning rise | 10739 Nov 10 12:52 | 21°♌33'02 | |
| minimum elong | 10737 Jun 14 17:05 | 0°♊28'51 | 1°21'39 | direct | 10739 Nov 28 16:49 | 15°♌23'32 | |
| | 10737 Jun 14 07:54 | 0°♊ | | greatest brilliancy | 10739 Dec 08 16:06 | 17°♌12'14 | -4.7m |
| max. Earth dist. | 10737 Jun 14 23:03 | 0°♊47'35 | 1.71327 AU | | 10739 Dec 30 01:00 | 0°♊ | |
| | 10737 Jul 08 05:32 | 0°♊ | | asc. node | 10740 Jan 11 20:40 | 11°♊07'00 | |
| evening rise | 10737 Jul 24 15:38 | 20°♊32'59 | | morning max el | 10740 Jan 16 16:23 | 15°♊42'17 | 45°45'56 |
| asc. node | 10737 Jul 26 20:13 | 23°♊17'05 | | | 10740 Jan 30 18:27 | 0°♊ | |
| | 10737 Aug 01 05:24 | 0°♊ | | | 10740 Feb 26 21:22 | 0°♊ | |
| | 10737 Aug 25 08:44 | 0°♊ | | | 10740 Mar 23 11:35 | 0°♊ | |
| | 10737 Sep 18 16:59 | 0°♊ | | | 10740 Apr 17 07:48 | 0°♊ | |
| | 10737 Oct 13 08:38 | 0°♊ | | desc. node | 10740 May 02 15:34 | 18°♊47'14 | |
| | 10737 Nov 07 11:34 | 0°♊ | | | 10740 May 11 17:30 | 0°♊ | |
| desc. node | 10737 Nov 15 15:33 | 9°♊35'32 | | | 10740 Jun 04 20:47 | 0°♊ | |
| | 10737 Dec 03 07:46 | 0°♊ | | | 10740 Jun 28 20:48 | 0°♊ | |
| | 10737 Dec 30 09:35 | 0°♊ | | morning set | 10740 Jul 19 05:37 | 25°♊29'22 | |
| evening max el | 10738 Jan 19 22:07 | 21°♊01'56 | 46°03'55 | | 10740 Jul 22 20:11 | 0°♊ | |
| | 10738 Jan 29 12:59 | 0°♊ | | | 10740 Aug 15 20:41 | 0°♊ | |
| greatest brilliancy | 10738 Feb 28 09:04 | 20°♊05'51 | -4.8m | asc. node | 10740 Aug 23 09:05 | 9°♊22'01 | |
| asc. node | 10738 Mar 08 16:04 | 21°♊52'13 | | | | | |
| retrograde | 10738 Mar 10 07:20 | 21°♊55'24 | | superior conj | 10740 Aug 27 08:27 | 14°♊18'54 | 0°09'40 |
| evening set | 10738 Mar 25 07:59 | 17°♊28'32 | | minimum elong | 10740 Aug 27 06:13 | 14°♊11'56 | 0°09'21 |
| inferior conj | 10738 Mar 31 02:06 | 14°♊03'08 | 5°22'15 | behind sun begin | 10740 Aug 26 10:14 | 13°♊09'42 | |
| minimum elong | 10738 Mar 30 15:47 | 14°♊19'04 | 5°19'29 | behind sun end | 10740 Aug 28 02:12 | 15°♊14'09 | |
| min. Earth dist. | 10738 Mar 31 01:59 | 14°♊03'19 | 0.27443 AU | max. Earth dist. | 10740 Aug 30 03:50 | 17°♊48'33 | 1.72233 AU |
| morning rise | 10738 Apr 04 23:24 | 11°♊06'32 | | | 10740 Sep 08 23:06 | 0°♊ | |
| direct | 10738 Apr 20 23:33 | 6°♊05'34 | | | 10740 Oct 03 03:51 | 0°♊ | |
| greatest brilliancy | 10738 May 01 01:58 | 8°♊01'26 | -4.9m | evening rise | 10740 Oct 04 04:37 | 1°♊16'34 | |
| | 10738 Jun 01 06:56 | 0°♊ | | | 10740 Oct 27 11:40 | 0°♊ | |
| morning max el | 10738 Jun 10 12:29 | 8°♊58'14 | 46°58'40 | | 10740 Nov 20 23:56 | 0°♊ | |
| desc. node | 10738 Jun 28 14:23 | 28°♊05'41 | | desc. node | 10740 Dec 13 02:59 | 26°♊49'46 | |
| | 10738 Jun 30 07:50 | 0°♊ | | | 10740 Dec 15 18:06 | 0°♊ | |
| | 10738 Jul 26 14:12 | 0°♊ | | | 10741 Jan 09 19:22 | 0°♊ | |
| | 10738 Aug 20 21:34 | 0°♊ | | | 10741 Feb 04 05:49 | 0°♊ | |
| | 10738 Sep 14 19:22 | 0°♊ | | | 10741 Mar 02 08:16 | 0°♊ | |
| | 10738 Oct 09 12:24 | 0°♊ | | | 10741 Mar 30 02:25 | 0°♊ | |
| asc. node | 10738 Oct 19 09:49 | 12°♊03'31 | | evening max el | 10741 Apr 02 13:30 | 3°♊29'42 | 46°41'51 |
| | 10738 Nov 03 02:03 | 0°♊ | | asc. node | 10741 Apr 05 02:19 | 6°♊00'15 | |
| | 10738 Nov 27 12:49 | 0°♊ | | | 10741 May 04 08:45 | 0°♊ | |
| morning set | 10738 Dec 10 09:22 | 15°♊49'20 | | greatest brilliancy | 10741 May 13 03:43 | 4°♊09'57 | -4.9m |
| | 10738 Dec 21 21:28 | 0°♊ | | retrograde | 10741 May 22 18:08 | 5°♊54'11 | |
| max. Earth dist. | 10739 Jan 15 04:13 | 29°♊57'57 | 1.73035 AU | | 10741 Jun 09 08:01 | 30°♊♌ | |
| | 10739 Jan 15 04:52 | 0°♊ | | evening set | 10741 Jun 09 13:36 | 29°♊51'40 | |
| | | | | inferior conj | 10741 Jun 12 10:09 | 28°♊07'02 | 8°42'17 |
| superior conj | 10739 Jan 16 04:41 | 1°♊13'32 | 0°51'40 | minimum elong | 10741 Jun 12 17:24 | 27°♊55'51 | 8°40'56 |
| minimum elong | 10739 Jan 16 14:09 | 1°♊42'46 | 0°51'48 | min. Earth dist. | 10741 Jun 12 16:43 | 27°♊56'54 | 0.27137 AU |
| desc. node | 10739 Feb 08 01:47 | 29°♊30'13 | | morning rise | 10741 Jun 15 21:11 | 26°♊00'45 | |
| | 10739 Feb 08 11:26 | 0°♊ | | direct | 10741 Jul 03 02:59 | 20°♊18'36 | |
| evening rise | 10739 Feb 23 09:16 | 18°♊27'17 | | greatest brilliancy | 10741 Jul 12 23:25 | 22°♊07'47 | -4.9m |
| | 10739 Mar 04 16:51 | 0°♊ | | desc. node | 10741 Jul 26 01:20 | 29°♊04'00 | |
| | 10739 Mar 28 20:58 | 0°♊ | | | 10741 Jul 27 09:46 | 0°♊ | |
| | 10739 Apr 22 00:34 | 0°♊ | | morning max el | 10741 Aug 22 06:04 | 22°♊29'31 | 46°36'03 |
| | 10739 May 16 05:59 | 0°♊ | | | 10741 Aug 29 15:54 | 0°♊ | |
| asc. node | 10739 May 31 21:57 | 19°♊15'49 | | | 10741 Sep 26 07:04 | 0°♊ | |
| | 10739 Jun 09 17:03 | 0°♊ | | | 10741 Oct 22 10:24 | 0°♊ | |
| | 10739 Jul 04 15:32 | 0°♊ | | asc. node | 10741 Nov 15 22:50 | 28°♊55'05 | |
| | 10739 Jul 30 12:23 | 0°♊ | | | 10741 Nov 16 20:38 | 0°♊ | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 10741 Dec 11 19:53 | 0°♊ | | | 10744 Jun 27 22:48 | 0°♎ | |
| | 10742 Jan 05 11:26 | 0°♋ | | greatest brilliancy | 10744 Jul 24 00:03 | 17°♎35'35 | -4.9m |
| | 10742 Jan 29 21:45 | 0°♌ | | retrograde | 10744 Aug 03 18:11 | 19°♎45'37 | |
| morning set | 10742 Feb 17 15:32 | 23°♌08'39 | | evening set | 10744 Aug 18 11:01 | 15°♎29'54 | |
| | 10742 Feb 23 04:24 | 0°♍ | | desc. node | 10744 Aug 22 12:02 | 13°♎09'56 | |
| desc. node | 10742 Mar 07 14:54 | 15°♍25'49 | | inferior conj | 10744 Aug 24 18:16 | 11°♎47'04 | -0°34'31 |
| | 10742 Mar 19 08:01 | 0°♎ | | minimum elong | 10744 Aug 24 16:55 | 11°♎49'08 | 0°34'19 |
| max. Earth dist. | 10742 Mar 25 09:56 | 7°♎34'39 | 1.71983 AU | min. Earth dist. | 10744 Aug 24 06:34 | 12°♎05'02 | 0.27504 AU |
| | | | | morning rise | 10744 Aug 30 23:24 | 8°♎08'05 | |
| superior conj | 10742 Mar 28 20:06 | 11°♎50'53 | -0°48'43 | direct | 10744 Sep 14 15:25 | 3°♎56'21 | |
| minimum elong | 10742 Mar 28 09:46 | 11°♎18'40 | 0°48'21 | greatest brilliancy | 10744 Sep 24 09:30 | 5°♎40'45 | -4.8m |
| | 10742 Apr 12 08:48 | 0°♏ | | | 10744 Oct 29 06:26 | 0°♏ | |
| | 10742 May 06 07:32 | 0°♐ | | morning max el | 10744 Nov 02 16:46 | 4°♏10'46 | 45°52'21 |
| evening rise | 10742 May 07 13:02 | 1°♐32'29 | | | 10744 Nov 27 18:55 | 0°♐ | |
| | 10742 May 30 05:53 | 0°♑ | | asc. node | 10744 Dec 13 11:08 | 17°♐20'59 | |
| | 10742 Jun 23 06:08 | 0°♒ | | | 10744 Dec 24 13:23 | 0°♑ | |
| asc. node | 10742 Jun 28 09:39 | 6°♒24'19 | | | 10745 Jan 19 03:28 | 0°♋ | |
| | 10742 Jul 17 10:45 | 0°♎ | | | 10745 Feb 13 01:58 | 0°♌ | |
| | 10742 Aug 10 22:34 | 0°♏ | | | 10745 Mar 09 14:59 | 0°♍ | |
| | 10742 Sep 04 22:14 | 0°♐ | | | 10745 Apr 02 21:32 | 0°♎ | |
| desc. node | 10742 Sep 30 19:15 | 0°♊ | | desc. node | 10745 Apr 04 04:21 | 1°♎35'38 | |
| | 10742 Oct 18 06:48 | 19°♊16'02 | | | 10745 Apr 26 23:17 | 0°♏ | |
| | 10742 Oct 28 12:49 | 0°♋ | | morning set | 10745 May 02 10:49 | 6°♏51'19 | |
| evening max el | 10742 Nov 07 00:11 | 9°♋23'56 | 45°48'20 | | 10745 May 20 21:44 | 0°♐ | |
| | 10742 Dec 01 12:39 | 0°♌ | | | | | |
| greatest brilliancy | 10742 Dec 16 05:04 | 7°♌41'02 | -4.7m | superior conj | 10745 Jun 11 19:57 | 27°♐32'58 | -1°22'39 |
| retrograde | 10742 Dec 25 20:08 | 9°♌22'36 | | minimum elong | 10745 Jun 12 03:33 | 27°♐56'49 | 1°23'05 |
| evening set | 10743 Jan 11 03:42 | 4°♌18'13 | | max. Earth dist. | 10745 Jun 12 08:59 | 28°♐13'54 | 1.71317 AU |
| inferior conj | 10743 Jan 16 04:17 | 1°♌15'05 | -5°18'18 | | 10745 Jun 13 18:45 | 0°♑ | |
| minimum elong | 10743 Jan 16 14:01 | 0°♌59'51 | 5°15'26 | | 10745 Jul 07 16:22 | 0°♒ | |
| min. Earth dist. | 10743 Jan 16 21:06 | 0°♌48'46 | 0.28557 AU | evening rise | 10745 Jul 22 03:56 | 18°♒07'34 | |
| | 10743 Jan 18 04:23 | 30°♒3 | | asc. node | 10745 Jul 25 22:01 | 22°♒48'52 | |
| morning rise | 10743 Jan 21 23:48 | 27°♒43'42 | | | 10745 Jul 31 16:15 | 0°♎ | |
| direct | 10743 Feb 06 11:57 | 23°♒01'07 | | | 10745 Aug 24 19:42 | 0°♏ | |
| asc. node | 10743 Feb 08 07:29 | 23°♒04'59 | | | 10745 Sep 18 04:13 | 0°♐ | |
| greatest brilliancy | 10743 Feb 17 14:43 | 25°♒16'51 | -4.8m | | 10745 Oct 12 20:18 | 0°♊ | |
| | 10743 Feb 26 20:30 | 0°♋ | | | 10745 Nov 07 00:01 | 0°♋ | |
| morning max el | 10743 Mar 28 08:49 | 24°♋49'26 | 46°24'46 | desc. node | 10745 Nov 14 17:33 | 9°♋03'55 | |
| | 10743 Apr 02 11:34 | 0°♍ | | | 10745 Dec 02 21:45 | 0°♌ | |
| | 10743 Apr 29 23:00 | 0°♎ | | | 10745 Dec 30 02:56 | 0°♍ | |
| desc. node | 10743 May 25 14:39 | 0°♏ | | evening max el | 10746 Jan 17 13:27 | 18°♍47'34 | 46°02'42 |
| | 10743 May 31 04:25 | 6°♏40'15 | | | 10746 Jan 29 17:56 | 0°♎ | |
| | 10743 Jun 19 10:47 | 0°♐ | | greatest brilliancy | 10746 Feb 25 22:17 | 17°♎45'01 | -4.8m |
| | 10743 Jul 13 21:26 | 0°♑ | | retrograde | 10746 Mar 07 20:50 | 19°♎34'19 | |
| | 10743 Aug 07 04:11 | 0°♒ | | asc. node | 10746 Mar 07 18:03 | 19°♎34'18 | |
| asc. node | 10743 Aug 31 10:03 | 0°♎ | | evening set | 10746 Mar 22 19:18 | 15°♎10'58 | |
| | 10743 Sep 20 22:27 | 25°♎22'52 | | inferior conj | 10746 Mar 28 15:49 | 11°♎41'49 | 5°02'58 |
| | 10743 Sep 24 16:05 | 0°♏ | | minimum elong | 10746 Mar 28 05:52 | 11°♎57'13 | 5°00'14 |
| morning set | 10743 Sep 29 23:48 | 6°♏34'57 | | min. Earth dist. | 10746 Mar 28 15:57 | 11°♎41'36 | 0.27463 AU |
| | 10743 Oct 18 22:20 | 0°♐ | | morning rise | 10746 Apr 02 16:16 | 8°♎40'30 | |
| | | | | direct | 10746 Apr 18 14:09 | 3°♎44'04 | |
| superior conj | 10743 Nov 06 07:36 | 22°♐43'23 | 1°23'08 | greatest brilliancy | 10746 Apr 28 16:25 | 5°♎39'49 | -4.9m |
| minimum elong | 10743 Nov 06 02:38 | 22°♐28'04 | 1°23'30 | | 10746 Jun 01 09:13 | 0°♏ | |
| max. Earth dist. | 10743 Nov 07 08:32 | 24°♐00'24 | 1.73114 AU | morning max el | 10746 Jun 08 02:20 | 6°♏35'38 | 46°58'16 |
| | 10743 Nov 12 05:01 | 0°♊ | | desc. node | 10746 Jun 27 16:15 | 27°♏22'13 | |
| | 10743 Dec 06 12:50 | 0°♋ | | | 10746 Jun 30 01:06 | 0°♐ | |
| evening rise | 10743 Dec 13 01:23 | 8°♋01'46 | | | 10746 Jul 26 04:31 | 0°♑ | |
| | 10743 Dec 30 22:29 | 0°♌ | | | 10746 Aug 20 10:25 | 0°♒ | |
| desc. node | 10744 Jan 10 15:00 | 13°♌06'36 | | | 10746 Sep 14 07:20 | 0°♎ | |
| | 10744 Jan 24 10:03 | 0°♍ | | | 10746 Oct 08 23:48 | 0°♏ | |
| | 10744 Feb 17 23:07 | 0°♎ | | asc. node | 10746 Oct 18 11:48 | 11°♏35'11 | |
| | 10744 Mar 13 13:59 | 0°♏ | | | 10746 Nov 02 13:06 | 0°♐ | |
| | 10744 Apr 07 09:24 | 0°♐ | | | 10746 Nov 26 23:39 | 0°♊ | |
| asc. node | 10744 May 02 12:49 | 29°♐49'37 | | morning set | 10746 Dec 08 02:40 | 13°♊41'43 | |
| | 10744 May 02 16:22 | 0°♑ | | | 10746 Dec 21 08:12 | 0°♋ | |
| | 10744 May 29 03:02 | 0°♒ | | max. Earth dist. | 10747 Jan 12 21:30 | 27°♋50'07 | 1.73053 AU |
| evening max el | 10744 Jun 14 08:28 | 17°♒04'48 | 46°50'08 | | | | |

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|---------------------|--------------------|--|------------|---------------------|--------------------|--|------------|
| superior conj | 10747 Jan 13 21:10 | 29°  03'11 | 0°54'20 | min. Earth dist. | 10749 Jun 10 05:52 | 25°  31'40 | 0.27149 AU |
| minimum elong | 10747 Jan 14 06:48 | 29°  32'54 | 0°54'29 | morning rise | 10749 Jun 13 05:56 | 23°  42'02 | |
| | 10747 Jan 14 15:35 | 0°  ≈ | | direct | 10749 Jun 30 15:26 | 17°  52'59 | |
| desc. node | 10747 Feb 07 03:42 | 29°  ≈02'49 | | greatest brilliancy | 10749 Jul 10 12:57 | 19°  42'58 | -4.9m |
| | 10747 Feb 07 22:12 | 0°  ✕ | | desc. node | 10749 Jul 25 03:23 | 27°  42'43 | |
| evening rise | 10747 Feb 21 00:21 | 16°  ✕11'44 | | | 10749 Jul 28 06:17 | 0°  ☾ | |
| | 10747 Mar 04 03:47 | 0°  Υ | | morning max el | 10749 Aug 19 19:15 | 20°  ☾05'37 | 46°37'35 |
| | 10747 Mar 28 08:07 | 0°  ♄ | | | 10749 Aug 29 12:14 | 0°  ♁ | |
| | 10747 Apr 21 12:02 | 0°  ♁ | | | 10749 Sep 25 22:31 | 0°  ♊ | |
| | 10747 May 15 17:52 | 0°  ☾ | | | 10749 Oct 21 23:46 | 0°  ♊ | |
| asc. node | 10747 May 30 23:49 | 18°  ☾44'00 | | asc. node | 10749 Nov 15 00:43 | 28°  ♊24'11 | |
| | 10747 Jun 09 05:34 | 0°  ♁ | | | 10749 Nov 16 08:50 | 0°  ♋ | |
| | 10747 Jul 04 05:09 | 0°  ♊ | | | 10749 Dec 11 07:25 | 0°  ♋ | |
| | 10747 Jul 30 04:14 | 0°  ♊ | | | 10750 Jan 04 22:35 | 0°  ♋ | |
| evening max el | 10747 Aug 25 18:30 | 28°  ♊17'42 | 46°16'22 | | 10750 Jan 29 08:43 | 0°  ≈ | |
| | 10747 Aug 27 12:07 | 0°  ♋ | | morning set | 10750 Feb 15 06:39 | 20°  ≈53'04 | |
| desc. node | 10747 Sep 19 22:30 | 20°  ♋02'49 | | | 10750 Feb 22 15:19 | 0°  ✕ | |
| greatest brilliancy | 10747 Oct 03 15:06 | 27°  ♋34'18 | -4.8m | desc. node | 10750 Mar 06 16:55 | 14°  ✕58'11 | |
| retrograde | 10747 Oct 14 09:59 | 29°  ♋41'15 | | | 10750 Mar 18 18:56 | 0°  Υ | |
| evening set | 10747 Nov 01 03:01 | 23°  ♋44'59 | | max. Earth dist. | 10750 Mar 23 00:47 | 5°  Υ17'16 | 1.72025 AU |
| inferior conj | 10747 Nov 04 22:01 | 21°  ♋23'54 | -8°22'23 | | | | |
| minimum elong | 10747 Nov 04 16:29 | 21°  ♋32'35 | 8°21'30 | superior conj | 10750 Mar 26 09:06 | 9°  Υ27'41 | -0°45'33 |
| min. Earth dist. | 10747 Nov 04 09:56 | 21°  ♋42'53 | 0.28927 AU | minimum elong | 10750 Mar 25 23:13 | 8°  Υ56'50 | 0°45'10 |
| morning rise | 10747 Nov 08 06:08 | 19°  ♋19'41 | | | 10750 Apr 11 19:46 | 0°  ♄ | |
| direct | 10747 Nov 26 08:32 | 13°  ♋13'01 | | evening rise | 10750 May 05 01:00 | 29°  ♄05'00 | |
| greatest brilliancy | 10747 Dec 06 06:48 | 15°  ♋00'27 | -4.7m | | 10750 May 05 18:33 | 0°  ♁ | |
| | 10747 Dec 30 09:36 | 0°  ♋ | | | 10750 May 29 17:00 | 0°  ☾ | |
| asc. node | 10748 Jan 10 22:35 | 10°  ♋15'17 | | | 10750 Jun 22 17:27 | 0°  ♁ | |
| morning max el | 10748 Jan 14 06:28 | 13°  ♋26'20 | 45°45'15 | asc. node | 10750 Jun 27 11:31 | 5°  ♁54'51 | |
| | 10748 Jan 30 12:13 | 0°  ♋ | | | 10750 Jul 16 22:22 | 0°  ♊ | |
| | 10748 Feb 26 11:34 | 0°  ≈ | | | 10750 Aug 10 10:40 | 0°  ♊ | |
| | 10748 Mar 23 00:18 | 0°  ✕ | | | 10750 Sep 04 11:14 | 0°  ♋ | |
| | 10748 Apr 16 19:46 | 0°  Υ | | | 10750 Sep 30 10:05 | 0°  ♋ | |
| desc. node | 10748 May 01 17:34 | 18°  Υ17'23 | | desc. node | 10750 Oct 17 08:47 | 18°  ♋35'22 | |
| | 10748 May 11 05:04 | 0°  ♄ | | | 10750 Oct 28 08:24 | 0°  ♋ | |
| | 10748 Jun 04 08:06 | 0°  ♁ | | evening max el | 10750 Nov 04 14:58 | 7°  ♋10'18 | 45°48'46 |
| | 10748 Jun 28 07:57 | 0°  ☾ | | | 10750 Dec 02 13:25 | 0°  ≈ | |
| morning set | 10748 Jul 16 18:28 | 23°  ☾04'52 | | greatest brilliancy | 10750 Dec 13 19:24 | 5°  ≈28'03 | -4.7m |
| | 10748 Jul 22 07:13 | 0°  ♁ | | retrograde | 10750 Dec 23 11:55 | 7°  ≈10'46 | |
| | 10748 Aug 15 07:37 | 0°  ♊ | | evening set | 10751 Jan 08 22:00 | 2°  ≈01'37 | |
| asc. node | 10748 Aug 22 11:04 | 8°  ♊54'14 | | | 10751 Jan 12 06:56 | 30°  ♋ | |
| | | | | inferior conj | 10751 Jan 13 19:57 | 29°  ♋02'19 | -5°34'29 |
| superior conj | 10748 Aug 24 22:34 | 11°  ♊59'29 | 0°06'03 | minimum elong | 10751 Jan 14 05:53 | 28°  ♋46'47 | 5°31'37 |
| minimum elong | 10748 Aug 24 21:11 | 11°  ♊55'09 | 0°05'46 | min. Earth dist. | 10751 Jan 14 12:25 | 28°  ♋36'33 | 0.28603 AU |
| behind sun begin | 10748 Aug 23 22:16 | 10°  ♊43'48 | | morning rise | 10751 Jan 19 13:17 | 25°  ♋34'16 | |
| behind sun end | 10748 Aug 25 20:06 | 13°  ♊06'30 | | direct | 10751 Feb 04 04:04 | 20°  ♋47'47 | |
| max. Earth dist. | 10748 Aug 27 18:08 | 15°  ♊29'47 | 1.72188 AU | asc. node | 10751 Feb 07 09:33 | 21°  ♋00'01 | |
| | 10748 Sep 08 10:00 | 0°  ♊ | | greatest brilliancy | 10751 Feb 15 06:47 | 23°  ♋03'52 | -4.8m |
| evening rise | 10748 Oct 01 20:48 | 29°  ♊04'31 | | | 10751 Feb 27 22:01 | 0°  ≈ | |
| | 10748 Oct 02 14:44 | 0°  ♋ | | morning max el | 10751 Mar 26 01:02 | 22°  ≈35'45 | 46°23'10 |
| | 10748 Oct 26 22:40 | 0°  ♋ | | | 10751 Apr 02 07:34 | 0°  ✕ | |
| | 10748 Nov 20 11:11 | 0°  ♋ | | | 10751 Apr 29 14:15 | 0°  Υ | |
| desc. node | 10748 Dec 12 04:51 | 26°  ♋20'18 | | | 10751 May 25 03:59 | 0°  ♄ | |
| | 10748 Dec 15 05:48 | 0°  ≈ | | desc. node | 10751 May 30 06:12 | 6°  ♄06'16 | |
| | 10749 Jan 09 07:50 | 0°  ✕ | | | 10751 Jun 18 23:08 | 0°  ♁ | |
| | 10749 Feb 03 19:31 | 0°  Υ | | | 10751 Jul 13 09:12 | 0°  ☾ | |
| | 10749 Mar 02 00:19 | 0°  ♄ | | | 10751 Aug 06 15:34 | 0°  ♁ | |
| | 10749 Mar 30 00:30 | 0°  ♁ | | | 10751 Aug 30 21:09 | 0°  ♊ | |
| evening max el | 10749 Mar 31 01:34 | 1°  ♁02'46 | 46°40'46 | asc. node | 10751 Sep 20 00:22 | 24°  ♊55'05 | |
| asc. node | 10749 Apr 04 04:24 | 5°  ♁05'53 | | | 10751 Sep 24 02:58 | 0°  ♊ | |
| | 10749 May 06 11:06 | 0°  ☾ | | morning set | 10751 Sep 27 15:37 | 4°  ♊21'49 | |
| greatest brilliancy | 10749 May 10 17:22 | 1°  ☾45'26 | -4.9m | | 10751 Oct 18 09:06 | 0°  ♋ | |
| retrograde | 10749 May 20 06:41 | 3°  ☾29'10 | | | | | |
| | 10749 Jun 02 12:13 | 30°  ♋ | | superior conj | 10751 Nov 04 00:45 | 20°  ♋34'56 | 1°22'13 |
| evening set | 10749 Jun 07 05:19 | 27°  ♋22'27 | | minimum elong | 10751 Nov 03 19:09 | 20°  ♋17'38 | 1°22'32 |
| inferior conj | 10749 Jun 09 23:10 | 25°  ♋41'58 | 8°49'51 | max. Earth dist. | 10751 Nov 05 04:07 | 21°  ♋59'28 | 1.73100 AU |
| minimum elong | 10749 Jun 10 05:38 | 25°  ♋32'00 | 8°48'40 | | 10751 Nov 11 15:44 | 0°  ♋ | |

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| | 10751 Dec 05 23:36 | 0° Z | | 10754 Jun 01 09:59 | 0° Z | |
| evening rise | 10751 Dec 10 18:10 | 5° Z 52'33 | | morning max el | 10754 Jun 05 15:20 | 4° Z 11'17 46°57'45 |
| | 10751 Dec 30 09:25 | 0° \approx | | desc. node | 10754 Jun 26 18:16 | 26° Z 40'08 |
| desc. node | 10752 Jan 09 16:54 | 12° \approx 38'38 | | | 10754 Jun 29 17:54 | 0° II |
| | 10752 Jan 23 21:14 | 0° X | | | 10754 Jul 25 18:36 | 0° E |
| | 10752 Feb 17 10:42 | 0° Y | | | 10754 Aug 19 23:07 | 0° O |
| | 10752 Mar 13 02:10 | 0° Z | | | 10754 Sep 13 19:11 | 0° P |
| | 10752 Apr 06 22:30 | 0° II | | | 10754 Oct 08 11:05 | 0° A |
| asc. node | 10752 May 01 14:42 | 29° II 12'17 | | asc. node | 10754 Oct 17 13:38 | 11° A 06'53 |
| | 10752 May 02 07:06 | 0° E | | | 10754 Nov 01 24:00 | 0° M |
| | 10752 May 28 21:15 | 0° O | | | 10754 Nov 26 10:20 | 0° X |
| evening max el | 10752 Jun 11 23:44 | 14° O 46'17 46°50'52 | | morning set | 10754 Dec 05 20:04 | 11° X 34'51 |
| | 10752 Jun 28 05:54 | 0° P | | | 10754 Dec 20 18:46 | 0° Z |
| greatest brilliancy | 10752 Jul 21 14:47 | 15° P 15'36 -4.9m | | max. Earth dist. | 10755 Jan 10 14:00 | 25° Z 40'15 1.73075 AU |
| retrograde | 10752 Aug 01 09:15 | 17° P 25'35 | | | | |
| evening set | 10752 Aug 16 01:46 | 13° P 09'29 | | superior conj | 10755 Jan 11 13:46 | 26° Z 53'35 0°56'54 |
| desc. node | 10752 Aug 21 14:03 | 9° P 55'28 | | minimum elong | 10755 Jan 11 23:29 | 27° Z 23'36 0°57'03 |
| inferior conj | 10752 Aug 22 08:13 | 9° P 27'37 -0°11'35 | | | 10755 Jan 14 02:10 | 0° \approx |
| minimum elong | 10752 Aug 22 07:45 | 9° P 28'19 0°11'42 | | desc. node | 10755 Feb 06 05:43 | 28° \approx 36'03 |
| transit middle | 10752 Aug 22 07:45 | 9° P 28'19 0°11'42 | | | 10755 Feb 07 08:53 | 0° X |
| transit begin | 10752 Aug 22 04:53 | 9° P 32'44 | | evening rise | 10755 Feb 18 15:22 | 13° X 56'22 |
| transit end | 10752 Aug 22 10:38 | 9° P 23'55 | | | 10755 Mar 03 14:37 | 0° Y |
| min. Earth dist. | 10752 Aug 21 21:01 | 9° P 44'47 0.27462 AU | | | 10755 Mar 27 19:10 | 0° Z |
| morning rise | 10752 Aug 28 14:25 | 5° P 47'39 | | | 10755 Apr 20 23:21 | 0° II |
| direct | 10752 Sep 12 05:37 | 1° P 37'34 | | | 10755 May 15 05:37 | 0° E |
| greatest brilliancy | 10752 Sep 21 22:49 | 3° P 21'47 -4.8m | | asc. node | 10755 May 30 01:45 | 18° E 12'49 |
| | 10752 Oct 29 06:49 | 0° A | | | 10755 Jun 08 17:58 | 0° O |
| morning max el | 10752 Oct 31 07:59 | 1° A 57'11 45°53'21 | | | 10755 Jul 03 18:44 | 0° P |
| | 10752 Nov 27 11:08 | 0° M | | | 10755 Jul 29 20:13 | 0° A |
| asc. node | 10752 Dec 12 13:02 | 16° M 45'36 | | evening max el | 10755 Aug 23 08:54 | 26° A 00'27 46°17'43 |
| | 10752 Dec 24 02:53 | 0° X | | | 10755 Aug 27 11:06 | 0° M |
| | 10753 Jan 18 15:44 | 0° Z | | desc. node | 10755 Sep 19 00:30 | 18° M 48'55 |
| | 10753 Feb 12 13:34 | 0° \approx | | greatest brilliancy | 10755 Oct 01 07:02 | 25° M 22'58 -4.8m |
| | 10753 Mar 09 02:13 | 0° X | | retrograde | 10755 Oct 12 01:33 | 27° M 30'07 |
| | 10753 Apr 02 08:34 | 0° Y | | evening set | 10755 Oct 29 16:01 | 21° M 38'35 |
| desc. node | 10753 Apr 03 06:12 | 1° Y 07'07 | | min. Earth dist. | 10755 Nov 02 01:12 | 19° M 33'15 0.28892 AU |
| | 10753 Apr 26 10:14 | 0° Z | | inferior conj | 10755 Nov 02 13:56 | 19° M 13'14 -8°16'30 |
| morning set | 10753 Apr 29 21:51 | 4° Z 21'28 | | minimum elong | 10755 Nov 02 07:44 | 19° M 22'58 8°15'31 |
| | 10753 May 20 08:39 | 0° II | | morning rise | 10755 Nov 05 23:36 | 17° M 06'38 |
| | | | | direct | 10755 Nov 23 23:40 | 11° M 03'00 |
| superior conj | 10753 Jun 09 07:18 | 25° II 03'33 -1°23'53 | | greatest brilliancy | 10755 Dec 03 21:51 | 12° M 49'52 -4.7m |
| minimum elong | 10753 Jun 09 14:01 | 25° II 24'39 1°24'21 | | | 10755 Dec 30 15:20 | 0° X |
| max. Earth dist. | 10753 Jun 09 17:38 | 25° II 35'59 1.71310 AU | | asc. node | 10756 Jan 10 00:40 | 9° X 25'50 |
| | 10753 Jun 13 05:39 | 0° E | | morning max el | 10756 Jan 11 20:19 | 11° X 10'45 45°44'39 |
| | 10753 Jul 07 03:16 | 0° O | | | 10756 Jan 30 05:16 | 0° Z |
| evening rise | 10753 Jul 19 16:13 | 15° O 41'52 | | | 10756 Feb 26 01:21 | 0° \approx |
| asc. node | 10753 Jul 25 00:02 | 22° O 21'07 | | | 10756 Mar 22 12:43 | 0° X |
| | 10753 Jul 31 03:10 | 0° P | | | 10756 Apr 16 07:30 | 0° Y |
| | 10753 Aug 24 06:42 | 0° A | | desc. node | 10756 Apr 30 19:24 | 17° Y 47'44 |
| | 10753 Sep 17 15:26 | 0° M | | | 10756 May 10 16:23 | 0° Z |
| | 10753 Oct 12 07:59 | 0° X | | | 10756 Jun 03 19:09 | 0° II |
| | 10753 Nov 06 12:32 | 0° Z | | | 10756 Jun 27 18:49 | 0° E |
| desc. node | 10753 Nov 13 19:24 | 8° Z 31'47 | | morning set | 10756 Jul 14 07:07 | 20° E 40'32 |
| | 10753 Dec 02 11:52 | 0° \approx | | | 10756 Jul 21 17:57 | 0° O |
| | 10753 Dec 29 20:42 | 0° X | | | 10756 Aug 14 18:17 | 0° P |
| evening max el | 10754 Jan 15 04:20 | 16° X 32'08 46°01'29 | | asc. node | 10756 Aug 21 12:58 | 8° P 27'01 |
| | 10754 Jan 30 01:03 | 0° Y | | | | |
| greatest brilliancy | 10754 Feb 23 12:24 | 15° Y 25'35 -4.8m | | superior conj | 10756 Aug 22 12:35 | 9° P 40'34 0°02'25 |
| retrograde | 10754 Mar 05 10:08 | 17° Y 13'55 | | minimum elong | 10756 Aug 22 12:03 | 9° P 38'56 0°02'09 |
| asc. node | 10754 Mar 06 20:06 | 17° Y 11'32 | | behind sun begin | 10756 Aug 21 11:51 | 8° P 23'33 |
| evening set | 10754 Mar 20 07:04 | 12° Y 53'50 | | behind sun end | 10756 Aug 23 12:15 | 10° P 54'19 |
| inferior conj | 10754 Mar 26 05:45 | 9° Y 21'24 4°43'12 | | max. Earth dist. | 10756 Aug 25 06:19 | 13° P 05'14 1.72149 AU |
| minimum elong | 10754 Mar 25 20:15 | 9° Y 36'09 4°40'33 | | | 10756 Sep 07 20:37 | 0° A |
| min. Earth dist. | 10754 Mar 26 06:29 | 9° Y 20'16 0.27481 AU | | evening rise | 10756 Sep 29 12:58 | 26° A 53'10 |
| morning rise | 10754 Mar 31 09:12 | 6° Y 15'28 | | | 10756 Oct 02 01:22 | 0° M |
| direct | 10754 Apr 16 04:18 | 1° Y 23'27 | | | 10756 Oct 26 09:23 | 0° X |
| greatest brilliancy | 10754 Apr 26 07:29 | 3° Y 19'32 -4.9m | | | 10756 Nov 19 22:08 | 0° Z |

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|---------------------|--------------------|----------------------|------------|---------------------|--------------------|----------------------|------------|--|
| desc. node | 10756 Dec 11 06:52 | 25° ♄ 52'13 | | | 10759 May 24 16:52 | 0° ♄ | | |
| | 10756 Dec 14 17:12 | 0° ♄ | | desc. node | 10759 May 29 08:13 | 5° ♄ 34'13 | | |
| | 10757 Jan 08 20:00 | 0° ♄ | | | 10759 Jun 18 11:07 | 0° ♄ | | |
| | 10757 Feb 03 09:00 | 0° ♄ | | | 10759 Jul 12 20:40 | 0° ♄ | | |
| | 10757 Mar 01 16:20 | 0° ♄ | | | 10759 Aug 06 02:40 | 0° ♄ | | |
| evening max el | 10757 Mar 28 13:55 | 28° ♄ 37'22 | 46°39'35 | | 10759 Aug 30 07:58 | 0° ♄ | | |
| | 10757 Mar 29 23:13 | 0° ♄ | | asc. node | 10759 Sep 19 02:12 | 24° ♄ 27'53 | | |
| asc. node | 10757 Apr 03 06:16 | 4° ♄ 10'30 | | | 10759 Sep 23 13:33 | 0° ♄ | | |
| greatest brilliancy | 10757 May 08 06:19 | 29° ♄ 20'19 | -4.9m | morning set | 10759 Sep 25 07:07 | 2° ♄ 08'32 | | |
| | 10757 May 10 08:48 | 0° ♄ | | | 10759 Oct 17 19:33 | 0° ♄ | | |
| retrograde | 10757 May 17 19:31 | 1° ♄ 04'19 | | | | | | |
| | 10757 May 25 01:08 | 30° ♄ | | superior conj | 10759 Nov 01 17:37 | 18° ♄ 26'30 | 1°21'09 | |
| evening set | 10757 Jun 04 20:28 | 24° ♄ 53'41 | | minimum elong | 10759 Nov 01 11:25 | 18° ♄ 07'21 | 1°21'28 | |
| inferior conj | 10757 Jun 07 11:58 | 23° ♄ 16'53 | 8°56'20 | max. Earth dist. | 10759 Nov 03 00:32 | 20° ♄ 02'01 | 1.73083 AU | |
| minimum elong | 10757 Jun 07 17:37 | 23° ♄ 08'14 | 8°55'19 | | 10759 Nov 11 02:10 | 0° ♄ | | |
| min. Earth dist. | 10757 Jun 07 18:27 | 23° ♄ 06'55 | 0.27160 AU | | 10759 Dec 05 10:07 | 0° ♄ | | |
| morning rise | 10757 Jun 10 14:43 | 21° ♄ 23'06 | | evening rise | 10759 Dec 08 10:49 | 3° ♄ 43'45 | | |
| direct | 10757 Jun 28 03:59 | 15° ♄ 27'24 | | | 10759 Dec 29 20:05 | 0° ♄ | | |
| greatest brilliancy | 10757 Jul 08 01:49 | 17° ♄ 17'55 | -4.9m | desc. node | 10760 Jan 08 18:54 | 12° ♄ 11'51 | | |
| desc. node | 10757 Jul 24 05:25 | 26° ♄ 24'37 | | | 10760 Jan 23 08:09 | 0° ♄ | | |
| | 10757 Jul 28 21:14 | 0° ♄ | | | 10760 Feb 16 21:59 | 0° ♄ | | |
| morning max el | 10757 Aug 17 09:04 | 17° ♄ 44'10 | 46°39'07 | | 10760 Mar 12 14:02 | 0° ♄ | | |
| | 10757 Aug 29 07:35 | 0° ♄ | | | 10760 Apr 06 11:19 | 0° ♄ | | |
| | 10757 Sep 25 13:25 | 0° ♄ | | asc. node | 10760 Apr 30 16:41 | 28° ♄ 36'03 | | |
| | 10757 Oct 21 12:40 | 0° ♄ | | | 10760 May 01 21:37 | 0° ♄ | | |
| asc. node | 10757 Nov 14 02:35 | 27° ♄ 54'19 | | | 10760 May 28 15:36 | 0° ♄ | | |
| | 10757 Nov 15 20:40 | 0° ♄ | | evening max el | 10760 Jun 09 14:54 | 12° ♄ 28'11 | 46°51'14 | |
| | 10757 Dec 10 18:36 | 0° ♄ | | | 10760 Jun 28 15:25 | 0° ♄ | | |
| | 10758 Jan 04 09:23 | 0° ♄ | | greatest brilliancy | 10760 Jul 19 05:51 | 12° ♄ 56'02 | -4.9m | |
| | 10758 Jan 28 19:19 | 0° ♄ | | retrograde | 10760 Jul 29 23:44 | 15° ♄ 04'54 | | |
| morning set | 10758 Feb 12 22:05 | 18° ♄ 39'44 | | evening set | 10760 Aug 13 16:27 | 10° ♄ 48'30 | | |
| | 10758 Feb 22 01:52 | 0° ♄ | | inferior conj | 10760 Aug 19 21:52 | 7° ♄ 07'45 | 0°11'36 | |
| desc. node | 10758 Mar 05 18:45 | 14° ♄ 31'14 | | minimum elong | 10760 Aug 19 22:19 | 7° ♄ 07'04 | 0°11'12 | |
| | 10758 Mar 18 05:30 | 0° ♄ | | transit middle | 10760 Aug 19 22:19 | 7° ♄ 07'04 | 0°11'12 | |
| max. Earth dist. | 10758 Mar 20 17:27 | 3° ♄ 06'41 | 1.72070 AU | transit begin | 10760 Aug 19 19:19 | 7° ♄ 11'40 | | |
| | | | | transit end | 10760 Aug 20 01:18 | 7° ♄ 02'28 | | |
| superior conj | 10758 Mar 23 22:11 | 7° ♄ 05'49 | -0°42'19 | min. Earth dist. | 10760 Aug 19 11:27 | 7° ♄ 23'45 | 0.27421 AU | |
| minimum elong | 10758 Mar 23 12:49 | 6° ♄ 36'38 | 0°41'55 | desc. node | 10760 Aug 20 16:01 | 6° ♄ 39'55 | | |
| | 10758 Apr 11 06:23 | 0° ♄ | | morning rise | 10760 Aug 26 04:54 | 3° ♄ 26'48 | | |
| evening rise | 10758 May 02 12:52 | 26° ♄ 38'13 | | | 10760 Sep 03 22:24 | 30° ♄ | | |
| | 10758 May 05 05:17 | 0° ♄ | | direct | 10760 Sep 09 19:33 | 29° ♄ 18'28 | | |
| | 10758 May 29 03:52 | 0° ♄ | | | 10760 Sep 15 20:24 | 0° ♄ | | |
| | 10758 Jun 22 04:31 | 0° ♄ | | greatest brilliancy | 10760 Sep 19 11:57 | 1° ♄ 02'14 | -4.8m | |
| asc. node | 10758 Jun 26 13:32 | 5° ♄ 26'34 | | morning max el | 10760 Oct 28 22:05 | 29° ♄ 41'11 | 45°54'24 | |
| | 10758 Jul 16 09:43 | 0° ♄ | | | 10760 Oct 29 05:54 | 0° ♄ | | |
| | 10758 Aug 09 22:30 | 0° ♄ | | | 10760 Nov 27 02:51 | 0° ♄ | | |
| | 10758 Sep 03 23:59 | 0° ♄ | | asc. node | 10760 Dec 11 15:08 | 16° ♄ 11'43 | | |
| | 10758 Sep 30 00:46 | 0° ♄ | | | 10760 Dec 23 16:02 | 0° ♄ | | |
| desc. node | 10758 Oct 16 10:40 | 17° ♄ 54'54 | | | 10761 Jan 18 03:41 | 0° ♄ | | |
| | 10758 Oct 28 04:14 | 0° ♄ | | | 10761 Feb 12 00:54 | 0° ♄ | | |
| evening max el | 10758 Nov 02 06:36 | 4° ♄ 59'39 | 45°49'13 | | 10761 Mar 08 13:11 | 0° ♄ | | |
| | 10758 Dec 03 23:40 | 0° ♄ | | | 10761 Apr 01 19:20 | 0° ♄ | | |
| greatest brilliancy | 10758 Dec 11 09:40 | 3° ♄ 16'05 | -4.7m | desc. node | 10761 Apr 02 08:04 | 0° ♄ 39'30 | | |
| retrograde | 10758 Dec 21 03:47 | 4° ♄ 59'47 | | | 10761 Apr 25 20:54 | 0° ♄ | | |
| | 10759 Jan 06 06:41 | 30° ♄ | | morning set | 10761 Apr 27 09:15 | 1° ♄ 53'39 | | |
| evening set | 10759 Jan 06 16:22 | 29° ♄ 46'05 | | | 10761 May 19 19:16 | 0° ♄ | | |
| inferior conj | 10759 Jan 11 11:33 | 26° ♄ 50'32 | -5°50'06 | | | | | |
| minimum elong | 10759 Jan 11 21:38 | 26° ♄ 34'46 | 5°47'17 | superior conj | 10761 Jun 06 19:00 | 22° ♄ 36'09 | -1°24'56 | |
| min. Earth dist. | 10759 Jan 12 03:24 | 26° ♄ 25'46 | 0.28644 AU | minimum elong | 10761 Jun 07 00:48 | 22° ♄ 54'24 | 1°25'26 | |
| morning rise | 10759 Jan 17 02:32 | 23° ♄ 26'03 | | max. Earth dist. | 10761 Jun 07 00:51 | 22° ♄ 54'32 | 1.71304 AU | |
| direct | 10759 Feb 01 20:30 | 18° ♄ 35'47 | | | 10761 Jun 12 16:16 | 0° ♄ | | |
| asc. node | 10759 Feb 06 11:29 | 19° ♄ 00'43 | | | 10761 Jul 06 13:54 | 0° ♄ | | |
| greatest brilliancy | 10759 Feb 12 22:02 | 20° ♄ 51'10 | -4.8m | evening rise | 10761 Jul 17 04:26 | 13° ♄ 16'40 | | |
| | 10759 Feb 28 16:03 | 0° ♄ | | asc. node | 10761 Jul 24 01:56 | 21° ♄ 53'41 | | |
| morning max el | 10759 Mar 23 17:13 | 20° ♄ 23'26 | 46°21'33 | | 10761 Jul 30 13:52 | 0° ♄ | | |
| | 10759 Apr 02 02:29 | 0° ♄ | | | 10761 Aug 23 17:33 | 0° ♄ | | |
| | 10759 Apr 29 04:51 | 0° ♄ | | | 10761 Sep 17 02:32 | 0° ♄ | | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 10761 Oct 11 19:33 | 0°♁ | | desc. node | 10764 Apr 29 21:20 | 17°♁18'15 | |
| | 10761 Nov 06 00:57 | 0°♁ | | | 10764 May 10 03:46 | 0°♁ | |
| desc. node | 10761 Nov 12 21:27 | 8°♁00'27 | | | 10764 Jun 03 06:17 | 0°♁ | |
| | 10761 Dec 02 02:00 | 0°♁ | | | 10764 Jun 27 05:45 | 0°♁ | |
| | 10761 Dec 29 14:47 | 0°♁ | | morning set | 10764 Jul 11 19:57 | 18°♁16'30 | |
| evening max el | 10762 Jan 12 18:12 | 14°♁14'36 | 46°00'19 | | 10764 Jul 21 04:44 | 0°♁ | |
| | 10762 Jan 30 10:42 | 0°♁ | | | 10764 Aug 14 04:58 | 0°♁ | |
| greatest brilliancy | 10762 Feb 21 02:53 | 13°♁06'48 | -4.8m | | | | |
| retrograde | 10762 Mar 02 23:07 | 14°♁53'56 | | superior conj | 10764 Aug 20 02:53 | 7°♁22'26 | -0°01'14 |
| asc. node | 10762 Mar 05 22:02 | 14°♁43'29 | | minimum elong | 10764 Aug 20 03:14 | 7°♁23'29 | 0°01'29 |
| evening set | 10762 Mar 17 18:55 | 10°♁36'29 | | behind sun begin | 10764 Aug 19 02:53 | 6°♁07'37 | |
| inferior conj | 10762 Mar 23 19:37 | 7°♁01'24 | 4°22'57 | behind sun end | 10764 Aug 21 03:34 | 8°♁39'20 | |
| minimum elong | 10762 Mar 23 10:36 | 7°♁15'25 | 4°20'24 | asc. node | 10764 Aug 20 14:47 | 7°♁59'31 | |
| min. Earth dist. | 10762 Mar 23 21:21 | 6°♁58'43 | 0.27499 AU | max. Earth dist. | 10764 Aug 22 18:53 | 10°♁41'48 | 1.72107 AU |
| morning rise | 10762 Mar 29 01:56 | 3°♁51'00 | | | 10764 Sep 07 07:15 | 0°♁ | |
| | 10762 Apr 06 21:50 | 30°♁ | | evening rise | 10764 Sep 27 05:29 | 24°♁42'52 | |
| direct | 10762 Apr 13 17:53 | 29°♁02'55 | | | 10764 Oct 01 12:02 | 0°♁ | |
| | 10762 Apr 20 18:54 | 0°♁ | | | 10764 Oct 25 20:11 | 0°♁ | |
| greatest brilliancy | 10762 Apr 23 23:05 | 1°♁00'14 | -4.9m | | 10764 Nov 19 09:13 | 0°♁ | |
| | 10762 Jun 01 09:22 | 0°♁ | | desc. node | 10764 Dec 10 08:48 | 25°♁23'21 | |
| morning max el | 10762 Jun 03 03:59 | 1°♁46'37 | 46°57'30 | | 10764 Dec 14 04:48 | 0°♁ | |
| desc. node | 10762 Jun 25 20:17 | 25°♁59'16 | | | 10765 Jan 08 08:25 | 0°♁ | |
| | 10762 Jun 29 10:07 | 0°♁ | | | 10765 Feb 02 22:48 | 0°♁ | |
| | 10762 Jul 25 08:16 | 0°♁ | | | 10765 Mar 01 08:51 | 0°♁ | |
| | 10762 Aug 19 11:30 | 0°♁ | | evening max el | 10765 Mar 26 03:10 | 26°♁13'49 | 46°38'25 |
| | 10762 Sep 13 06:49 | 0°♁ | | | 10765 Mar 29 23:13 | 0°♁ | |
| | 10762 Oct 07 22:14 | 0°♁ | | asc. node | 10765 Apr 02 08:18 | 3°♁13'45 | |
| asc. node | 10762 Oct 16 15:34 | 10°♁39'07 | | greatest brilliancy | 10765 May 05 18:39 | 26°♁53'59 | -4.9m |
| | 10762 Nov 01 10:50 | 0°♁ | | retrograde | 10765 May 15 08:49 | 28°♁38'47 | |
| | 10762 Nov 25 20:57 | 0°♁ | | evening set | 10765 Jun 02 11:13 | 22°♁24'40 | |
| morning set | 10762 Dec 03 13:07 | 9°♁26'59 | | inferior conj | 10765 Jun 05 00:43 | 20°♁50'57 | 9°01'53 |
| | 10762 Dec 20 05:17 | 0°♁ | | minimum elong | 10765 Jun 05 05:28 | 20°♁43'40 | 9°01'01 |
| max. Earth dist. | 10763 Jan 08 07:06 | 23°♁32'28 | 1.73097 AU | min. Earth dist. | 10765 Jun 05 06:39 | 20°♁41'52 | 0.27171 AU |
| | | | | morning rise | 10765 Jun 07 23:41 | 19°♁02'58 | |
| superior conj | 10763 Jan 09 06:07 | 24°♁43'29 | 0°59'23 | direct | 10765 Jun 25 17:02 | 13°♁01'04 | |
| minimum elong | 10763 Jan 09 15:53 | 25°♁13'39 | 0°59'34 | greatest brilliancy | 10765 Jul 05 14:07 | 14°♁51'27 | -4.9m |
| | 10763 Jan 13 12:41 | 0°♁ | | desc. node | 10765 Jul 23 07:17 | 25°♁07'58 | |
| desc. node | 10763 Feb 05 07:30 | 28°♁08'44 | | | 10765 Jul 29 08:42 | 0°♁ | |
| | 10763 Feb 06 19:30 | 0°♁ | | morning max el | 10765 Aug 14 23:49 | 15°♁24'24 | 46°40'47 |
| evening rise | 10763 Feb 16 06:18 | 11°♁41'01 | | | 10765 Aug 29 02:36 | 0°♁ | |
| | 10763 Mar 03 01:26 | 0°♁ | | | 10765 Sep 25 04:15 | 0°♁ | |
| | 10763 Mar 27 06:13 | 0°♁ | | | 10765 Oct 21 01:37 | 0°♁ | |
| | 10763 Apr 20 10:42 | 0°♁ | | asc. node | 10765 Nov 13 04:37 | 27°♁24'43 | |
| | 10763 May 14 17:21 | 0°♁ | | | 10765 Nov 15 08:34 | 0°♁ | |
| asc. node | 10763 May 29 03:48 | 17°♁42'06 | | | 10765 Dec 10 05:54 | 0°♁ | |
| | 10763 Jun 08 06:21 | 0°♁ | | | 10766 Jan 03 20:23 | 0°♁ | |
| | 10763 Jul 03 08:17 | 0°♁ | | | 10766 Jan 28 06:11 | 0°♁ | |
| | 10763 Jul 29 12:18 | 0°♁ | | morning set | 10766 Feb 10 13:35 | 16°♁25'48 | |
| evening max el | 10763 Aug 20 22:54 | 23°♁42'40 | 46°19'02 | | 10766 Feb 21 12:41 | 0°♁ | |
| | 10763 Aug 27 10:59 | 0°♁ | | desc. node | 10766 Mar 04 20:37 | 14°♁03'28 | |
| desc. node | 10763 Sep 18 02:24 | 17°♁32'55 | | | 10766 Mar 17 16:20 | 0°♁ | |
| greatest brilliancy | 10763 Sep 28 22:32 | 23°♁11'11 | -4.8m | max. Earth dist. | 10766 Mar 18 08:44 | 0°♁51'05 | 1.72111 AU |
| retrograde | 10763 Oct 09 17:22 | 25°♁19'14 | | | | | |
| evening set | 10763 Oct 27 04:51 | 19°♁32'18 | | superior conj | 10766 Mar 21 11:12 | 4°♁43'00 | -0°39'00 |
| min. Earth dist. | 10763 Oct 30 16:28 | 17°♁23'38 | 0.28861 AU | minimum elong | 10766 Mar 21 02:26 | 4°♁15'42 | 0°38'36 |
| inferior conj | 10763 Oct 31 05:53 | 17°♁02'35 | -8°09'51 | | 10766 Apr 10 17:17 | 0°♁ | |
| minimum elong | 10763 Oct 30 23:02 | 17°♁13'19 | 8°08'45 | evening rise | 10766 Apr 30 00:44 | 24°♁10'34 | |
| morning rise | 10763 Nov 03 17:23 | 14°♁53'19 | | | 10766 May 04 16:17 | 0°♁ | |
| direct | 10763 Nov 21 14:40 | 8°♁52'45 | | | 10766 May 28 15:02 | 0°♁ | |
| greatest brilliancy | 10763 Dec 01 13:16 | 10°♁39'36 | -4.7m | | 10766 Jun 21 15:54 | 0°♁ | |
| | 10763 Dec 30 19:12 | 0°♁ | | asc. node | 10766 Jun 25 15:25 | 4°♁56'56 | |
| asc. node | 10764 Jan 09 02:35 | 8°♁36'37 | | | 10766 Jul 15 21:24 | 0°♁ | |
| morning max el | 10764 Jan 09 11:01 | 8°♁57'00 | 45°44'06 | | 10766 Aug 09 10:40 | 0°♁ | |
| | 10764 Jan 29 22:03 | 0°♁ | | | 10766 Sep 03 13:05 | 0°♁ | |
| | 10764 Feb 25 15:05 | 0°♁ | | | 10766 Sep 29 15:53 | 0°♁ | |
| | 10764 Mar 22 01:09 | 0°♁ | | desc. node | 10766 Oct 15 12:46 | 17°♁14'02 | |
| | 10764 Apr 15 19:16 | 0°♁ | | | 10766 Oct 28 00:55 | 0°♁ | |

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|---------------------|--------------------|---------------------------|------------|---------------------|--------------------|---------------------------|------------|
| evening max el | 10766 Oct 30 22:46 | 2° Z 49'51 | 45°49'41 | morning set | 10769 Apr 24 20:26 | 29° Y 23'57 | |
| | 10766 Dec 06 04:28 | 0° \approx | | | 10769 Apr 25 07:58 | 0° B | |
| greatest brilliancy | 10766 Dec 09 00:21 | 1° \approx 04'29 | -4.7m | | 10769 May 19 06:19 | 0° II | |
| retrograde | 10766 Dec 18 19:35 | 2° \approx 48'37 | | | | | |
| | 10766 Dec 30 17:31 | 30° R Z | | superior conj | 10769 Jun 04 06:22 | 20° II 06'26 | -1°25'50 |
| evening set | 10767 Jan 04 10:59 | 27° Z 30'37 | | minimum elong | 10769 Jun 04 11:13 | 20° II 21'39 | 1°26'20 |
| inferior conj | 10767 Jan 09 03:23 | 24° Z 38'41 | -6°05'01 | max. Earth dist. | 10769 Jun 04 04:32 | 20° II 00'40 | 1.71301 AU |
| minimum elong | 10767 Jan 09 13:32 | 24° Z 22'47 | 6°02'16 | | 10769 Jun 12 03:18 | 0° G | |
| min. Earth dist. | 10767 Jan 09 18:31 | 24° Z 14'58 | 0.28686 AU | | 10769 Jul 06 00:56 | 0° Ω | |
| morning rise | 10767 Jan 14 15:50 | 21° Z 17'43 | | evening rise | 10769 Jul 14 16:11 | 10° Ω 48'41 | |
| direct | 10767 Jan 30 13:12 | 16° Z 23'45 | | asc. node | 10769 Jul 23 03:45 | 21° Ω 24'47 | |
| asc. node | 10767 Feb 05 13:26 | 17° Z 05'24 | | | 10769 Jul 30 00:57 | 0° np | |
| greatest brilliancy | 10767 Feb 10 13:09 | 18° Z 37'44 | -4.8m | | 10769 Aug 23 04:47 | 0° A | |
| | 10767 Mar 01 05:49 | 0° \approx | | | 10769 Sep 16 14:03 | 0° M | |
| morning max el | 10767 Mar 21 09:11 | 18° \approx 09'30 | 46°19'47 | | 10769 Oct 11 07:32 | 0° J | |
| | 10767 Apr 01 21:19 | 0° H | | | 10769 Nov 05 13:49 | 0° Z | |
| | 10767 Apr 28 19:41 | 0° Y | | desc. node | 10769 Nov 11 23:25 | 7° Z 27'46 | |
| | 10767 May 24 06:01 | 0° B | | | 10769 Dec 01 16:37 | 0° \approx | |
| desc. node | 10767 May 28 10:13 | 5° B 01'09 | | | 10769 Dec 29 09:35 | 0° H | |
| | 10767 Jun 17 23:25 | 0° II | | evening max el | 10770 Jan 10 07:42 | 11° H 55'51 | 45°59'19 |
| | 10767 Jul 12 08:26 | 0° G | | | 10770 Jan 30 23:54 | 0° Y | |
| | 10767 Aug 05 14:06 | 0° Ω | | greatest brilliancy | 10770 Feb 18 17:11 | 10° Y 47'46 | -4.8m |
| | 10767 Aug 29 19:07 | 0° np | | retrograde | 10770 Feb 28 12:22 | 12° Y 34'23 | |
| asc. node | 10767 Sep 18 04:08 | 23° np 59'56 | | asc. node | 10770 Mar 05 00:02 | 12° Y 10'10 | |
| morning set | 10767 Sep 22 22:43 | 29° np 54'29 | | evening set | 10770 Mar 15 07:13 | 8° Y 18'43 | |
| | 10767 Sep 23 00:30 | 0° A | | inferior conj | 10770 Mar 21 09:44 | 4° Y 41'31 | 4°02'27 |
| | 10767 Oct 17 06:20 | 0° M | | minimum elong | 10770 Mar 21 01:15 | 4° Y 54'41 | 4°00'01 |
| | | | | min. Earth dist. | 10770 Mar 21 12:26 | 4° Y 37'20 | 0.27526 AU |
| superior conj | 10767 Oct 30 10:44 | 16° M 17'51 | 1°20'00 | morning rise | 10770 Mar 26 18:51 | 1° Y 27'00 | |
| minimum elong | 10767 Oct 30 03:59 | 15° M 56'59 | 1°20'15 | | 10770 Mar 29 12:20 | 30° R H | |
| max. Earth dist. | 10767 Oct 31 20:56 | 18° M 03'30 | 1.73058 AU | direct | 10770 Apr 11 07:42 | 26° H 42'13 | |
| | 10767 Nov 10 12:54 | 0° J | | greatest brilliancy | 10770 Apr 21 15:15 | 28° H 41'22 | -4.9m |
| | 10767 Dec 04 20:54 | 0° Z | | | 10770 Apr 24 18:53 | 0° Y | |
| evening rise | 10767 Dec 06 03:48 | 1° Z 35'05 | | morning max el | 10770 May 31 17:31 | 29° Y 23'05 | 46°56'58 |
| | 10767 Dec 29 07:02 | 0° \approx | | | 10770 Jun 01 08:10 | 0° B | |
| desc. node | 10768 Jan 07 20:45 | 11° \approx 43'38 | | desc. node | 10770 Jun 24 22:07 | 25° B 17'06 | |
| | 10768 Jan 22 19:24 | 0° H | | | 10770 Jun 29 02:30 | 0° II | |
| | 10768 Feb 16 09:41 | 0° Y | | | 10770 Jul 24 22:15 | 0° G | |
| | 10768 Mar 12 02:24 | 0° B | | | 10770 Aug 19 00:14 | 0° Ω | |
| | 10768 Apr 06 00:42 | 0° II | | | 10770 Sep 12 18:46 | 0° np | |
| asc. node | 10768 Apr 29 18:44 | 27° II 58'20 | | | 10770 Oct 07 09:40 | 0° A | |
| | 10768 May 01 12:49 | 0° G | | asc. node | 10770 Oct 15 17:31 | 10° A 10'35 | |
| | 10768 May 28 10:57 | 0° Ω | | | 10770 Oct 31 21:55 | 0° M | |
| evening max el | 10768 Jun 07 05:24 | 10° Ω 07'02 | 46°51'36 | | 10770 Nov 25 07:50 | 0° J | |
| | 10768 Jun 29 04:58 | 0° np | | morning set | 10770 Dec 01 06:12 | 7° J 18'22 | |
| greatest brilliancy | 10768 Jul 16 21:30 | 10° np 35'47 | -4.9m | | 10770 Dec 19 16:03 | 0° Z | |
| retrograde | 10768 Jul 27 13:43 | 12° np 42'47 | | max. Earth dist. | 10771 Jan 06 01:48 | 21° Z 28'50 | 1.73114 AU |
| evening set | 10768 Aug 11 07:19 | 8° np 25'54 | | | | | |
| inferior conj | 10768 Aug 17 11:31 | 4° np 46'36 | 0°34'51 | superior conj | 10771 Jan 06 22:47 | 22° Z 33'37 | 1°01'46 |
| minimum elong | 10768 Aug 17 12:51 | 4° np 44'32 | 0°34'08 | minimum elong | 10771 Jan 07 08:34 | 23° Z 03'49 | 1°01'58 |
| min. Earth dist. | 10768 Aug 17 02:12 | 5° np 00'56 | 0.27381 AU | | 10771 Jan 12 23:26 | 0° \approx | |
| desc. node | 10768 Aug 19 18:00 | 3° np 23'24 | | desc. node | 10771 Feb 04 09:25 | 27° \approx 41'13 | |
| morning rise | 10768 Aug 23 19:06 | 1° np 04'42 | | | 10771 Feb 06 06:20 | 0° H | |
| | 10768 Aug 25 22:39 | 30° R Ω | | evening rise | 10771 Feb 13 21:45 | 9° H 26'47 | |
| direct | 10768 Sep 07 08:57 | 26° Ω 57'59 | | | 10771 Mar 02 12:25 | 0° Y | |
| greatest brilliancy | 10768 Sep 17 01:29 | 28° Ω 41'38 | -4.8m | | 10771 Mar 26 17:26 | 0° B | |
| | 10768 Sep 20 09:34 | 0° np | | | 10771 Apr 19 22:13 | 0° II | |
| morning max el | 10768 Oct 26 11:32 | 27° np 22'17 | 45°55'40 | | 10771 May 14 05:20 | 0° G | |
| | 10768 Oct 29 04:29 | 0° A | | asc. node | 10771 May 28 05:39 | 17° G 09'56 | |
| | 10768 Nov 26 18:40 | 0° M | | | 10771 Jun 07 19:05 | 0° Ω | |
| asc. node | 10768 Dec 10 16:57 | 15° M 36'23 | | | 10771 Jul 02 22:19 | 0° np | |
| | 10768 Dec 23 05:24 | 0° J | | | 10771 Jul 29 05:05 | 0° A | |
| | 10769 Jan 17 15:52 | 0° Z | | evening max el | 10771 Aug 18 13:24 | 21° A 24'59 | 46°20'31 |
| | 10769 Feb 11 12:28 | 0° \approx | | | 10771 Aug 27 12:35 | 0° M | |
| | 10769 Mar 08 00:26 | 0° H | | desc. node | 10771 Sep 17 04:29 | 16° M 13'45 | |
| desc. node | 10769 Apr 01 10:03 | 0° Y 11'09 | | greatest brilliancy | 10771 Sep 26 13:21 | 20° M 57'18 | -4.8m |
| | 10769 Apr 01 06:27 | 0° Y | | retrograde | 10771 Oct 07 09:28 | 23° M 06'59 | |

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|---------------------|--------------------|-------------------------|------------|---------------------|--------------------|---------------------------------|------------|
| evening set | 10771 Oct 24 17:22 | 17° \mathbb{M} 24'37 | | superior conj | 10774 Mar 19 00:23 | 2° Υ 21'13 | -0°35'38 |
| inferior conj | 10771 Oct 28 21:36 | 14° \mathbb{M} 50'28 | -8°02'29 | minimum elong | 10774 Mar 18 16:17 | 1° Υ 55'57 | 0°35'13 |
| minimum elong | 10771 Oct 28 14:11 | 15° \mathbb{M} 02'06 | 8°01'15 | | 10774 Apr 10 04:01 | 0° \mathcal{B} | |
| min. Earth dist. | 10771 Oct 28 07:18 | 15° \mathbb{M} 12'53 | 0.28827 AU | evening rise | 10774 Apr 27 12:51 | 21° \mathcal{B} 44'21 | |
| morning rise | 10771 Nov 01 11:09 | 12° \mathbb{M} 38'25 | | | 10774 May 04 03:05 | 0° \mathbb{I} | |
| direct | 10771 Nov 19 05:42 | 6° \mathbb{M} 41'03 | | | 10774 May 28 01:58 | 0° \mathcal{G} | |
| greatest brilliancy | 10771 Nov 29 04:13 | 8° \mathbb{M} 27'54 | -4.7m | | 10774 Jun 21 03:01 | 0° \mathcal{Q} | |
| | 10771 Dec 30 21:42 | 0° \mathcal{A} | | asc. node | 10774 Jun 24 17:18 | 4° \mathcal{Q} 28'11 | |
| morning max el | 10772 Jan 07 02:34 | 6° \mathcal{A} 44'49 | 45°43'43 | | 10774 Jul 15 08:49 | 0° \mathbb{M} | |
| asc. node | 10772 Jan 08 04:30 | 7° \mathcal{A} 47'45 | | | 10774 Aug 08 22:38 | 0° \mathcal{L} | |
| | 10772 Jan 29 14:39 | 0° \mathcal{Z} | | | 10774 Sep 03 02:05 | 0° \mathbb{M} | |
| | 10772 Feb 25 04:47 | 0° \approx | | | 10774 Sep 29 07:05 | 0° \mathcal{A} | |
| | 10772 Mar 21 13:34 | 0° \mathcal{H} | | desc. node | 10774 Oct 14 14:44 | 16° \mathcal{A} 32'38 | |
| | 10772 Apr 15 07:01 | 0° Υ | | | 10774 Oct 27 22:19 | 0° \mathcal{Z} | |
| desc. node | 10772 Apr 28 23:17 | 16° Υ 48'52 | | evening max el | 10774 Oct 28 14:35 | 0° \mathcal{Z} 39'16 | 45°50'03 |
| | 10772 May 09 15:08 | 0° \mathcal{B} | | greatest brilliancy | 10774 Dec 06 15:32 | 28° \mathcal{Z} 53'29 | -4.7m |
| | 10772 Jun 02 17:25 | 0° \mathbb{I} | | | 10774 Dec 10 15:57 | 0° \approx | |
| | 10772 Jun 26 16:45 | 0° \mathcal{G} | | retrograde | 10774 Dec 16 10:46 | 0° \approx 37'19 | |
| morning set | 10772 Jul 09 08:31 | 15° \mathcal{G} 51'16 | | | 10774 Dec 22 01:18 | 30° \mathcal{R} \mathcal{Z} | |
| | 10772 Jul 20 15:38 | 0° \mathcal{Q} | | evening set | 10775 Jan 02 05:29 | 25° \mathcal{Z} 15'13 | |
| | 10772 Aug 13 15:49 | 0° \mathbb{M} | | inferior conj | 10775 Jan 06 19:06 | 22° \mathcal{Z} 27'01 | -6°19'29 |
| | | | | minimum elong | 10775 Jan 07 05:14 | 22° \mathcal{Z} 11'05 | 6°16'49 |
| superior conj | 10772 Aug 17 16:33 | 5° \mathbb{M} 01'41 | -0°04'55 | min. Earth dist. | 10775 Jan 07 09:47 | 22° \mathcal{Z} 03'57 | 0.28724 AU |
| minimum elong | 10772 Aug 17 17:48 | 5° \mathbb{M} 05'35 | 0°05'09 | morning rise | 10775 Jan 12 04:46 | 19° \mathcal{Z} 09'38 | |
| behind sun begin | 10772 Aug 16 18:22 | 3° \mathbb{M} 52'30 | | direct | 10775 Jan 28 05:26 | 14° \mathcal{Z} 11'59 | |
| behind sun end | 10772 Aug 18 17:14 | 6° \mathbb{M} 18'38 | | asc. node | 10775 Feb 04 15:30 | 15° \mathcal{Z} 14'35 | |
| asc. node | 10772 Aug 19 16:47 | 7° \mathbb{M} 32'01 | | greatest brilliancy | 10775 Feb 08 04:16 | 16° \mathcal{Z} 24'35 | -4.8m |
| max. Earth dist. | 10772 Aug 20 07:19 | 8° \mathbb{M} 17'18 | 1.72070 AU | | 10775 Mar 01 15:47 | 0° \approx | |
| | 10772 Sep 06 18:03 | 0° \mathcal{L} | | morning max el | 10775 Mar 19 00:04 | 15° \approx 53'37 | 46°18'05 |
| evening rise | 10772 Sep 24 21:24 | 22° \mathcal{L} 30'13 | | | 10775 Apr 01 15:23 | 0° \mathcal{H} | |
| | 10772 Sep 30 22:50 | 0° \mathbb{M} | | | 10775 Apr 28 10:02 | 0° Υ | |
| | 10772 Oct 25 07:06 | 0° \mathcal{A} | | | 10775 May 23 18:47 | 0° \mathcal{B} | |
| | 10772 Nov 18 20:26 | 0° \mathcal{Z} | | desc. node | 10775 May 27 12:00 | 4° \mathcal{B} 28'34 | |
| desc. node | 10772 Dec 09 10:40 | 24° \mathcal{Z} 54'01 | | | 10775 Jun 17 11:19 | 0° \mathbb{I} | |
| | 10772 Dec 13 16:31 | 0° \approx | | | 10775 Jul 11 19:49 | 0° \mathcal{G} | |
| | 10773 Jan 07 20:58 | 0° \mathcal{H} | | | 10775 Aug 05 01:06 | 0° \mathcal{Q} | |
| | 10773 Feb 02 12:46 | 0° Υ | | | 10775 Aug 29 05:51 | 0° \mathbb{M} | |
| | 10773 Mar 01 01:38 | 0° \mathcal{B} | | asc. node | 10775 Sep 17 06:03 | 23° \mathbb{M} 33'08 | |
| evening max el | 10773 Mar 23 17:34 | 23° \mathcal{B} 53'41 | 46°37'23 | morning set | 10775 Sep 20 14:24 | 27° \mathbb{M} 41'52 | |
| | 10773 Mar 30 00:13 | 0° \mathbb{I} | | | 10775 Sep 22 11:02 | 0° \mathcal{L} | |
| asc. node | 10773 Apr 01 10:22 | 2° \mathbb{I} 16'23 | | | 10775 Oct 16 16:48 | 0° \mathbb{M} | |
| greatest brilliancy | 10773 May 03 06:52 | 24° \mathbb{I} 28'41 | -4.9m | | | | |
| retrograde | 10773 May 12 22:27 | 26° \mathbb{I} 14'18 | | superior conj | 10775 Oct 28 03:46 | 14° \mathbb{M} 09'56 | 1°18'43 |
| evening set | 10773 May 31 01:47 | 19° \mathbb{I} 57'33 | | minimum elong | 10775 Oct 27 20:29 | 13° \mathbb{M} 47'25 | 1°18'55 |
| inferior conj | 10773 Jun 02 13:41 | 18° \mathbb{I} 26'11 | 9°06'27 | max. Earth dist. | 10775 Oct 29 15:33 | 16° \mathbb{M} 00'28 | 1.73038 AU |
| minimum elong | 10773 Jun 02 17:31 | 18° \mathbb{I} 20'18 | 9°05'41 | | 10775 Nov 09 23:21 | 0° \mathcal{A} | |
| min. Earth dist. | 10773 Jun 02 18:45 | 18° \mathbb{I} 18'24 | 0.27181 AU | evening rise | 10775 Dec 03 20:31 | 29° \mathcal{A} 26'27 | |
| morning rise | 10773 Jun 05 09:15 | 16° \mathbb{I} 43'20 | | | 10775 Dec 04 07:26 | 0° \mathcal{Z} | |
| direct | 10773 Jun 23 06:41 | 10° \mathbb{I} 36'12 | | | 10775 Dec 28 17:43 | 0° \approx | |
| greatest brilliancy | 10773 Jul 03 02:11 | 12° \mathbb{I} 25'40 | -4.9m | desc. node | 10776 Jan 06 22:40 | 11° \approx 16'29 | |
| desc. node | 10773 Jul 22 09:21 | 23° \mathbb{I} 54'48 | | | 10776 Jan 22 06:23 | 0° \mathcal{H} | |
| | 10773 Jul 29 16:53 | 0° \mathcal{G} | | | 10776 Feb 15 21:07 | 0° Υ | |
| morning max el | 10773 Aug 12 14:35 | 13° \mathcal{G} 05'09 | 46°42'02 | | 10776 Mar 11 14:30 | 0° \mathcal{B} | |
| | 10773 Aug 28 21:00 | 0° \mathcal{Q} | | | 10776 Apr 05 13:51 | 0° \mathbb{I} | |
| | 10773 Sep 24 18:52 | 0° \mathbb{M} | | asc. node | 10776 Apr 28 20:36 | 27° \mathbb{I} 20'58 | |
| | 10773 Oct 20 14:28 | 0° \mathcal{L} | | | 10776 May 01 03:50 | 0° \mathcal{G} | |
| asc. node | 10773 Nov 12 06:28 | 26° \mathcal{L} 54'38 | | | 10776 May 28 06:24 | 0° \mathcal{Q} | |
| | 10773 Nov 14 20:24 | 0° \mathbb{M} | | evening max el | 10776 Jun 04 19:13 | 7° \mathcal{Q} 45'19 | 46°52'03 |
| | 10773 Dec 09 17:09 | 0° \mathcal{A} | | | 10776 Jun 29 22:11 | 0° \mathbb{M} | |
| | 10774 Jan 03 07:17 | 0° \mathcal{Z} | | greatest brilliancy | 10776 Jul 14 13:43 | 8° \mathbb{M} 17'50 | -4.9m |
| | 10774 Jan 27 16:55 | 0° \approx | | retrograde | 10776 Jul 25 03:31 | 10° \mathbb{M} 22'44 | |
| morning set | 10774 Feb 08 05:02 | 14° \approx 12'12 | | evening set | 10776 Aug 08 22:32 | 6° \mathbb{M} 04'55 | |
| | 10774 Feb 20 23:22 | 0° \mathcal{H} | | min. Earth dist. | 10776 Aug 14 17:26 | 2° \mathbb{M} 39'52 | 0.27342 AU |
| desc. node | 10774 Mar 03 22:36 | 13° \mathcal{H} 36'28 | | inferior conj | 10776 Aug 15 01:24 | 2° \mathbb{M} 27'37 | 0°57'59 |
| max. Earth dist. | 10774 Mar 15 21:39 | 28° \mathcal{H} 28'35 | 1.72150 AU | minimum elong | 10776 Aug 15 03:37 | 2° \mathbb{M} 24'11 | 0°56'58 |
| | 10774 Mar 17 03:02 | 0° Υ | | desc. node | 10776 Aug 18 20:02 | 0° \mathbb{M} 10'35 | |
| | | | | | 10776 Aug 19 03:19 | 30° \mathcal{R} \mathcal{Q} | |

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|---------------------|--------------------|----------------------|------------|---------------------|--------------------|----------------------|------------|
| morning rise | 10776 Aug 21 09:17 | 28° Ω 44'58 | | evening rise | 10779 Feb 11 13:09 | 7° Υ 13'21 | |
| direct | 10776 Sep 04 22:00 | 24° Ω 39'28 | | | 10779 Mar 01 23:09 | 0° Υ | |
| greatest brilliancy | 10776 Sep 14 15:41 | 26° Ω 23'40 | -4.8m | | 10779 Mar 26 04:24 | 0° Υ | |
| | 10776 Sep 22 14:27 | 0° Π | | | 10779 Apr 19 09:30 | 0° Π | |
| morning max el | 10776 Oct 24 00:47 | 25° Π 04'20 | 45°56'50 | | 10779 May 13 17:04 | 0° Ξ | |
| | 10776 Oct 29 01:33 | 0° Ξ | | asc. node | 10779 May 27 07:36 | 16° Ξ 38'54 | |
| | 10776 Nov 26 09:46 | 0° Π | | | 10779 Jun 07 07:35 | 0° Ω | |
| asc. node | 10776 Dec 09 18:54 | 15° Π 02'51 | | | 10779 Jul 02 12:10 | 0° Π | |
| | 10776 Dec 22 18:16 | 0° Υ | | | 10779 Jul 28 21:50 | 0° Ξ | |
| | 10777 Jan 17 03:40 | 0° Ξ | | evening max el | 10779 Aug 16 05:02 | 19° Ξ 11'07 | 46°22'03 |
| | 10777 Feb 10 23:41 | 0° \approx | | | 10779 Aug 27 15:11 | 0° Π | |
| | 10777 Mar 07 11:20 | 0° Υ | | desc. node | 10779 Sep 16 06:29 | 14° Π 53'10 | |
| desc. node | 10777 Mar 31 11:54 | 29° Υ 43'33 | | greatest brilliancy | 10779 Sep 24 03:56 | 18° Π 44'24 | -4.8m |
| | 10777 Mar 31 17:12 | 0° Υ | | retrograde | 10779 Oct 05 02:05 | 20° Π 56'01 | |
| morning set | 10777 Apr 22 07:31 | 26° Υ 55'07 | | evening set | 10779 Oct 22 05:56 | 15° Π 18'23 | |
| | 10777 Apr 24 18:38 | 0° Υ | | min. Earth dist. | 10779 Oct 25 21:56 | 13° Π 03'50 | 0.28787 AU |
| | 10777 May 18 16:58 | 0° Π | | inferior conj | 10779 Oct 26 13:25 | 12° Π 39'39 | -7°54'19 |
| | | | | minimum elong | 10779 Oct 26 05:28 | 12° Π 52'05 | 7°52'57 |
| superior conj | 10777 Jun 01 17:44 | 17° Π 37'55 | -1°26'34 | morning rise | 10779 Oct 30 05:12 | 10° Π 24'34 | |
| minimum elong | 10777 Jun 01 21:33 | 17° Π 49'55 | 1°27'05 | direct | 10779 Nov 16 21:19 | 4° Π 30'53 | |
| max. Earth dist. | 10777 Jun 01 07:41 | 17° Π 06'22 | 1.71303 AU | greatest brilliancy | 10779 Nov 26 18:36 | 6° Π 17'04 | -4.7m |
| | 10777 Jun 11 13:56 | 0° Ξ | | | 10779 Dec 30 22:13 | 0° Υ | |
| | 10777 Jul 05 11:34 | 0° Ω | | morning max el | 10780 Jan 04 18:44 | 4° Υ 35'34 | 45°43'16 |
| evening rise | 10777 Jul 12 03:57 | 8° Ω 22'02 | | asc. node | 10780 Jan 07 06:35 | 7° Υ 01'22 | |
| asc. node | 10777 Jul 22 05:46 | 20° Ω 57'46 | | | 10780 Jan 29 06:33 | 0° Ξ | |
| | 10777 Jul 29 11:38 | 0° Π | | | 10780 Feb 24 18:04 | 0° \approx | |
| | 10777 Aug 22 15:34 | 0° Ξ | | | 10780 Mar 21 01:43 | 0° Υ | |
| | 10777 Sep 16 01:05 | 0° Π | | | 10780 Apr 14 18:35 | 0° Υ | |
| | 10777 Oct 10 19:03 | 0° Υ | | desc. node | 10780 Apr 28 01:09 | 16° Υ 19'38 | |
| | 10777 Nov 05 02:17 | 0° Ξ | | | 10780 May 09 02:21 | 0° Υ | |
| desc. node | 10777 Nov 11 01:17 | 6° Ξ 56'01 | | | 10780 Jun 02 04:23 | 0° Π | |
| | 10777 Dec 01 06:59 | 0° \approx | | | 10780 Jun 26 03:33 | 0° Ξ | |
| | 10777 Dec 29 04:33 | 0° Υ | | morning set | 10780 Jul 06 20:52 | 13° Ξ 25'56 | |
| evening max el | 10778 Jan 07 21:21 | 9° Υ 38'30 | 45°58'15 | | 10780 Jul 20 02:21 | 0° Ω | |
| | 10778 Jan 31 17:13 | 0° Υ | | | 10780 Aug 13 02:27 | 0° Π | |
| greatest brilliancy | 10778 Feb 16 06:56 | 8° Υ 28'46 | -4.8m | | | | |
| retrograde | 10778 Feb 26 01:58 | 10° Υ 15'33 | | superior conj | 10780 Aug 15 06:04 | 2° Π 41'01 | -0°08'36 |
| asc. node | 10778 Mar 04 02:04 | 9° Υ 31'56 | | minimum elong | 10780 Aug 15 08:13 | 2° Π 47'45 | 0°08'48 |
| evening set | 10778 Mar 12 19:36 | 6° Υ 01'10 | | behind sun begin | 10780 Aug 14 11:21 | 1° Π 42'40 | |
| inferior conj | 10778 Mar 18 23:42 | 2° Υ 22'09 | 3°41'22 | behind sun end | 10780 Aug 16 05:05 | 3° Π 52'49 | |
| minimum elong | 10778 Mar 18 15:49 | 2° Υ 34'22 | 3°39'05 | max. Earth dist. | 10780 Aug 17 21:59 | 6° Π 00'20 | 1.72033 AU |
| min. Earth dist. | 10778 Mar 19 03:12 | 2° Υ 16'44 | 0.27554 AU | asc. node | 10780 Aug 18 18:39 | 7° Π 04'44 | |
| | 10778 Mar 22 20:45 | 30° Υ | | | 10780 Sep 06 04:39 | 0° Ξ | |
| morning rise | 10778 Mar 24 11:32 | 29° Υ 03'58 | | evening rise | 10780 Sep 22 13:25 | 20° Ξ 18'24 | |
| direct | 10778 Apr 08 21:41 | 24° Υ 22'04 | | | 10780 Sep 30 09:27 | 0° Π | |
| greatest brilliancy | 10778 Apr 19 07:06 | 26° Υ 23'05 | -4.9m | | 10780 Oct 24 17:50 | 0° Υ | |
| | 10778 Apr 26 20:52 | 0° Υ | | | 10780 Nov 18 07:27 | 0° Ξ | |
| morning max el | 10778 May 29 07:51 | 27° Υ 02'49 | 46°56'27 | desc. node | 10780 Dec 08 12:42 | 24° Ξ 25'50 | |
| | 10778 Jun 01 05:39 | 0° Υ | | | 10780 Dec 13 04:02 | 0° \approx | |
| desc. node | 10778 Jun 24 00:12 | 24° Υ 37'18 | | | 10781 Jan 07 09:21 | 0° Υ | |
| | 10778 Jun 28 18:11 | 0° Π | | | 10781 Feb 02 02:39 | 0° Υ | |
| | 10778 Jul 24 11:40 | 0° Ξ | | | 10781 Feb 28 18:38 | 0° Υ | |
| | 10778 Aug 18 12:28 | 0° Ω | | evening max el | 10781 Mar 21 08:18 | 21° Υ 34'27 | 46°35'58 |
| | 10778 Sep 12 06:16 | 0° Π | | | 10781 Mar 30 02:37 | 0° Π | |
| | 10778 Oct 06 20:40 | 0° Ξ | | asc. node | 10781 Mar 31 12:14 | 1° Π 17'12 | |
| asc. node | 10778 Oct 14 19:21 | 9° Ξ 43'04 | | greatest brilliancy | 10781 Apr 30 19:14 | 22° Π 03'06 | -4.9m |
| | 10778 Oct 31 08:34 | 0° Π | | retrograde | 10781 May 10 11:34 | 23° Π 48'52 | |
| | 10778 Nov 24 18:16 | 0° Υ | | evening set | 10781 May 28 15:41 | 17° Π 30'35 | |
| morning set | 10778 Nov 28 23:34 | 5° Υ 11'56 | | inferior conj | 10781 May 31 02:28 | 16° Π 00'44 | 9°09'57 |
| | 10778 Dec 19 02:24 | 0° Ξ | | minimum elong | 10781 May 31 05:22 | 15° Π 56'17 | 9°09'17 |
| max. Earth dist. | 10779 Jan 03 22:17 | 19° Ξ 31'50 | 1.73136 AU | min. Earth dist. | 10781 May 31 06:50 | 15° Π 54'00 | 0.27190 AU |
| | | | | morning rise | 10781 Jun 02 19:04 | 14° Π 22'13 | |
| superior conj | 10779 Jan 04 15:36 | 20° Ξ 25'17 | 1°04'03 | direct | 10781 Jun 20 20:08 | 8° Π 10'47 | |
| minimum elong | 10779 Jan 05 01:19 | 20° Ξ 55'17 | 1°04'16 | greatest brilliancy | 10781 Jun 30 14:12 | 9° Π 59'07 | -4.9m |
| | 10779 Jan 12 09:50 | 0° \approx | | desc. node | 10781 Jul 21 11:23 | 22° Π 43'26 | |
| desc. node | 10779 Feb 03 11:26 | 27° \approx 14'55 | | | 10781 Jul 29 22:49 | 0° Ξ | |
| | 10779 Feb 05 16:52 | 0° Υ | | morning max el | 10781 Aug 10 04:25 | 10° Ξ 43'17 | 46°43'21 |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|------------|------------|--|
| | 10781 Aug 28 14:58 | 0°♈ | | | 10784 Apr 30 19:15 | 0°♊ | | |
| | 10781 Sep 24 09:16 | 0°♍ | | | 10784 May 28 02:46 | 0°♈ | | |
| | 10781 Oct 20 03:09 | 0°♊ | | evening max el | 10784 Jun 02 08:03 | 5°♈20'13 | 46°52'10 | |
| asc. node | 10781 Nov 11 08:21 | 26°♊24'59 | | | 10784 Jun 30 22:29 | 0°♍ | | |
| | 10781 Nov 14 08:07 | 0°♌ | | greatest brilliancy | 10784 Jul 12 05:28 | 5°♍57'24 | -4.9m | |
| | 10781 Dec 09 04:18 | 0°♌ | | retrograde | 10784 Jul 22 16:52 | 8°♍00'38 | | |
| | 10782 Jan 02 18:07 | 0°♊ | | evening set | 10784 Aug 06 13:36 | 3°♍41'11 | | |
| | 10782 Jan 27 03:36 | 0°♌ | | inferior conj | 10784 Aug 12 14:58 | 0°♍06'21 | 1°21'17 | |
| morning set | 10782 Feb 05 21:04 | 12°♌00'37 | | minimum elong | 10784 Aug 12 18:05 | 0°♍01'34 | 1°19'57 | |
| | 10782 Feb 20 10:00 | 0°♋ | | min. Earth dist. | 10784 Aug 12 08:35 | 0°♍16'11 | 0.27312 AU | |
| desc. node | 10782 Mar 03 00:27 | 13°♋09'12 | | | 10784 Aug 12 19:06 | 30°♋♊ | | |
| max. Earth dist. | 10782 Mar 13 10:05 | 26°♋04'51 | 1.72194 AU | desc. node | 10784 Aug 17 21:59 | 26°♋♊57'20 | | |
| | | | | morning rise | 10784 Aug 18 23:00 | 26°♋♊23'18 | | |
| superior conj | 10782 Mar 16 14:03 | 0°♍01'10 | -0°32'14 | direct | 10784 Sep 02 10:40 | 22°♋♊18'17 | | |
| minimum elong | 10782 Mar 16 06:38 | 29°♋38'05 | 0°31'50 | greatest brilliancy | 10784 Sep 12 06:12 | 24°♋♊03'53 | -4.8m | |
| | 10782 Mar 16 13:41 | 0°♍ | | | 10784 Sep 24 02:14 | 0°♍ | | |
| | 10782 Apr 09 14:46 | 0°♋ | | morning max el | 10784 Oct 21 14:13 | 22°♍45'09 | 45°58'15 | |
| evening rise | 10782 Apr 25 01:05 | 19°♋18'22 | | | 10784 Oct 28 22:29 | 0°♊ | | |
| | 10782 May 03 13:59 | 0°♌ | | | 10784 Nov 26 01:05 | 0°♌ | | |
| | 10782 May 27 13:02 | 0°♊ | | asc. node | 10784 Dec 08 20:58 | 14°♌28'49 | | |
| | 10782 Jun 20 14:18 | 0°♈ | | | 10784 Dec 22 07:24 | 0°♌ | | |
| asc. node | 10782 Jun 23 19:19 | 3°♈59'12 | | | 10785 Jan 16 15:44 | 0°♊ | | |
| | 10782 Jul 14 20:26 | 0°♍ | | | 10785 Feb 10 11:10 | 0°♌ | | |
| | 10782 Aug 08 10:49 | 0°♊ | | | 10785 Mar 06 22:31 | 0°♋ | | |
| | 10782 Sep 02 15:21 | 0°♌ | | desc. node | 10785 Mar 30 13:46 | 29°♋15'09 | | |
| | 10782 Sep 28 22:40 | 0°♌ | | | 10785 Mar 31 04:13 | 0°♍ | | |
| desc. node | 10782 Oct 13 16:39 | 15°♌50'19 | | morning set | 10785 Apr 19 19:07 | 24°♍27'12 | | |
| evening max el | 10782 Oct 26 05:44 | 28°♌26'46 | 45°50'32 | | 10785 Apr 24 05:35 | 0°♋ | | |
| | 10782 Oct 27 20:40 | 0°♊ | | | 10785 May 18 03:52 | 0°♌ | | |
| greatest brilliancy | 10782 Dec 04 07:20 | 26°♊43'19 | -4.7m | max. Earth dist. | 10785 May 29 14:07 | 14°♌21'33 | 1.71310 AU | |
| retrograde | 10782 Dec 14 01:43 | 28°♊26'40 | | | | | | |
| evening set | 10782 Dec 31 00:13 | 23°♊00'20 | | superior conj | 10785 May 30 05:29 | 15°♌09'50 | -1°27'06 | |
| inferior conj | 10783 Jan 04 11:03 | 20°♊16'03 | -6°33'15 | minimum elong | 10785 May 30 08:16 | 15°♌18'34 | 1°27'38 | |
| minimum elong | 10783 Jan 04 21:09 | 20°♊00'11 | 6°30'40 | | 10785 Jun 11 00:50 | 0°♊ | | |
| min. Earth dist. | 10783 Jan 05 01:33 | 19°♊53'15 | 0.28758 AU | | 10785 Jul 04 22:31 | 0°♈ | | |
| morning rise | 10783 Jan 09 17:50 | 17°♊02'24 | | evening rise | 10785 Jul 09 15:55 | 5°♈54'58 | | |
| direct | 10783 Jan 25 21:27 | 12°♊00'50 | | asc. node | 10785 Jul 21 07:38 | 20°♈29'14 | | |
| asc. node | 10783 Feb 03 17:26 | 13°♊28'11 | | | 10785 Jul 28 22:41 | 0°♍ | | |
| greatest brilliancy | 10783 Feb 05 20:04 | 14°♊12'40 | -4.8m | | 10785 Aug 22 02:48 | 0°♊ | | |
| | 10783 Mar 01 22:56 | 0°♌ | | | 10785 Sep 15 12:36 | 0°♌ | | |
| morning max el | 10783 Mar 16 14:22 | 13°♌36'19 | 46°16'29 | | 10785 Oct 10 07:05 | 0°♌ | | |
| | 10783 Apr 01 09:01 | 0°♋ | | | 10785 Nov 04 15:18 | 0°♊ | | |
| | 10783 Apr 28 00:17 | 0°♍ | | desc. node | 10785 Nov 10 03:22 | 6°♊23'23 | | |
| | 10783 May 23 07:35 | 0°♋ | | | 10785 Nov 30 22:00 | 0°♌ | | |
| desc. node | 10783 May 26 14:02 | 3°♋56'30 | | | 10785 Dec 29 00:32 | 0°♋ | | |
| | 10783 Jun 16 23:23 | 0°♌ | | evening max el | 10786 Jan 05 11:43 | 7°♋22'05 | 45°57'25 | |
| | 10783 Jul 11 07:26 | 0°♊ | | | 10786 Feb 01 17:16 | 0°♍ | | |
| | 10783 Aug 04 12:23 | 0°♈ | | greatest brilliancy | 10786 Feb 13 20:20 | 6°♍08'53 | -4.8m | |
| | 10783 Aug 28 16:52 | 0°♍ | | retrograde | 10786 Feb 23 16:13 | 7°♍56'20 | | |
| asc. node | 10783 Sep 16 07:52 | 23°♍05'07 | | asc. node | 10786 Mar 03 04:00 | 6°♍48'08 | | |
| morning set | 10783 Sep 18 05:40 | 25°♍26'57 | | evening set | 10786 Mar 10 08:25 | 3°♍42'57 | | |
| | 10783 Sep 21 21:51 | 0°♊ | | inferior conj | 10786 Mar 16 13:48 | 0°♍02'14 | 3°20'00 | |
| | 10783 Oct 16 03:30 | 0°♌ | | minimum elong | 10786 Mar 16 06:34 | 0°♍13'26 | 3°17'54 | |
| | | | | min. Earth dist. | 10786 Mar 16 17:47 | 29°♋56'06 | 0.27580 AU | |
| superior conj | 10783 Oct 25 20:38 | 12°♌00'43 | 1°17'18 | | 10786 Mar 16 15:15 | 30°♋♋ | | |
| minimum elong | 10783 Oct 25 12:51 | 11°♌36'42 | 1°17'29 | morning rise | 10786 Mar 22 04:15 | 26°♋40'42 | | |
| max. Earth dist. | 10783 Oct 27 08:45 | 13°♌52'20 | 1.73013 AU | direct | 10786 Apr 06 12:20 | 22°♋01'32 | | |
| | 10783 Nov 09 10:02 | 0°♌ | | greatest brilliancy | 10786 Apr 16 22:36 | 24°♋03'50 | -4.9m | |
| evening rise | 10783 Dec 01 13:20 | 27°♌17'25 | | | 10786 Apr 28 06:19 | 0°♍ | | |
| | 10783 Dec 03 18:11 | 0°♊ | | morning max el | 10786 May 26 23:04 | 24°♍44'10 | 46°55'56 | |
| | 10783 Dec 28 04:39 | 0°♌ | | | 10786 Jun 01 02:38 | 0°♋ | | |
| desc. node | 10784 Jan 06 00:40 | 10°♌48'51 | | desc. node | 10786 Jun 23 02:10 | 23°♋56'56 | | |
| | 10784 Jan 21 17:35 | 0°♋ | | | 10786 Jun 28 09:51 | 0°♌ | | |
| | 10784 Feb 15 08:46 | 0°♍ | | | 10786 Jul 24 01:14 | 0°♊ | | |
| | 10784 Mar 11 02:48 | 0°♋ | | | 10786 Aug 18 00:56 | 0°♈ | | |
| | 10784 Apr 05 03:14 | 0°♌ | | | 10786 Sep 11 18:05 | 0°♍ | | |
| asc. node | 10784 Apr 27 22:37 | 26°♌43'09 | | | 10786 Oct 06 08:03 | 0°♊ | | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| asc. node | 10786 Oct 13 21:17 | 9°♌14'28 | | greatest brilliancy | 10789 Apr 28 08:08 | 19°♊37'40 | -4.9m |
| | 10786 Oct 30 19:39 | 0°♌ | | retrograde | 10789 May 08 00:12 | 21°♊22'55 | |
| | 10786 Nov 24 05:09 | 0°♌ | | evening set | 10789 May 26 05:05 | 15°♊04'12 | |
| morning set | 10786 Nov 26 16:37 | 3°♌03'08 | | inferior conj | 10789 May 28 15:21 | 13°♊34'57 | 9°12'23 |
| | 10786 Dec 18 13:12 | 0°♌ | | minimum elong | 10789 May 28 17:15 | 13°♊32'01 | 9°11'49 |
| | | | | min. Earth dist. | 10789 May 28 19:15 | 13°♊28'55 | 0.27197 AU |
| superior conj | 10787 Jan 02 08:09 | 18°♌14'57 | 1°06'14 | morning rise | 10789 May 31 05:26 | 11°♊59'58 | |
| minimum elong | 10787 Jan 02 17:45 | 18°♌44'33 | 1°06'29 | direct | 10789 Jun 18 09:15 | 5°♊44'57 | |
| max. Earth dist. | 10787 Jan 01 19:10 | 17°♌34'51 | 1.73149 AU | greatest brilliancy | 10789 Jun 28 02:47 | 7°♊32'36 | -4.9m |
| | 10787 Jan 11 20:38 | 0°♌ | | desc. node | 10789 Jul 20 13:15 | 21°♊33'14 | |
| desc. node | 10787 Feb 02 13:13 | 26°♌46'47 | | | 10789 Jul 30 03:03 | 0°♌ | |
| | 10787 Feb 05 03:47 | 0°♌ | | morning max el | 10789 Aug 07 17:19 | 8°♌18'25 | 46°44'42 |
| evening rise | 10787 Feb 09 04:26 | 4°♌58'33 | | | 10789 Aug 28 08:41 | 0°♌ | |
| | 10787 Mar 01 10:15 | 0°♌ | | | 10789 Sep 23 23:38 | 0°♌ | |
| | 10787 Mar 25 15:44 | 0°♌ | | | 10789 Oct 19 15:53 | 0°♌ | |
| | 10787 Apr 18 21:09 | 0°♌ | | asc. node | 10789 Nov 10 10:23 | 25°♌55'25 | |
| | 10787 May 13 05:12 | 0°♌ | | | 10789 Nov 13 19:57 | 0°♌ | |
| asc. node | 10787 May 26 09:39 | 16°♌07'06 | | | 10789 Dec 08 15:35 | 0°♌ | |
| | 10787 Jun 06 20:28 | 0°♌ | | | 10790 Jan 02 05:08 | 0°♌ | |
| | 10787 Jul 02 02:27 | 0°♌ | | | 10790 Jan 26 14:29 | 0°♌ | |
| | 10787 Jul 28 15:15 | 0°♌ | | morning set | 10790 Feb 03 12:47 | 9°♌47'22 | |
| evening max el | 10787 Aug 13 21:09 | 16°♌57'29 | 46°23'23 | | 10790 Feb 19 20:50 | 0°♌ | |
| | 10787 Aug 27 19:57 | 0°♌ | | desc. node | 10790 Mar 02 02:21 | 12°♌41'25 | |
| desc. node | 10787 Sep 15 08:23 | 13°♌28'32 | | max. Earth dist. | 10790 Mar 10 21:46 | 23°♌38'13 | 1.72236 AU |
| greatest brilliancy | 10787 Sep 21 18:25 | 16°♌30'00 | -4.8m | | | | |
| retrograde | 10787 Oct 02 18:33 | 18°♌43'07 | | superior conj | 10790 Mar 14 03:28 | 27°♌39'50 | -0°28'45 |
| evening set | 10787 Oct 19 18:16 | 13°♌10'36 | | minimum elong | 10790 Mar 13 20:48 | 27°♌19'04 | 0°28'22 |
| min. Earth dist. | 10787 Oct 23 12:21 | 10°♌53'02 | 0.28748 AU | | 10790 Mar 16 00:32 | 0°♌ | |
| inferior conj | 10787 Oct 24 05:02 | 10°♌26'59 | -7°45'21 | | 10790 Apr 09 01:40 | 0°♌ | |
| minimum elong | 10787 Oct 23 20:35 | 10°♌40'11 | 7°43'52 | evening rise | 10790 Apr 22 13:10 | 16°♌51'32 | |
| morning rise | 10787 Oct 27 23:11 | 8°♌08'35 | | | 10790 May 03 01:00 | 0°♌ | |
| direct | 10787 Nov 14 13:08 | 2°♌19'00 | | | 10790 May 27 00:14 | 0°♌ | |
| greatest brilliancy | 10787 Nov 24 08:32 | 4°♌03'57 | -4.7m | | 10790 Jun 20 01:43 | 0°♌ | |
| | 10787 Dec 30 22:13 | 0°♌ | | asc. node | 10790 Jun 22 21:11 | 3°♌29'28 | |
| morning max el | 10788 Jan 02 10:38 | 2°♌24'14 | 45°42'49 | | 10790 Jul 14 08:11 | 0°♌ | |
| asc. node | 10788 Jan 06 08:29 | 6°♌13'49 | | | 10790 Aug 07 23:09 | 0°♌ | |
| | 10788 Jan 28 22:40 | 0°♌ | | | 10790 Sep 02 04:47 | 0°♌ | |
| | 10788 Feb 24 07:39 | 0°♌ | | | 10790 Sep 28 14:32 | 0°♌ | |
| | 10788 Mar 20 14:09 | 0°♌ | | desc. node | 10790 Oct 12 18:45 | 15°♌07'55 | |
| | 10788 Apr 14 06:24 | 0°♌ | | evening max el | 10790 Oct 23 19:49 | 26°♌11'32 | 45°51'03 |
| desc. node | 10788 Apr 27 03:06 | 15°♌49'54 | | | 10790 Oct 27 20:01 | 0°♌ | |
| | 10788 May 08 13:48 | 0°♌ | | greatest brilliancy | 10790 Dec 01 22:51 | 24°♌32'39 | -4.7m |
| | 10788 Jun 01 15:37 | 0°♌ | | retrograde | 10790 Dec 11 16:39 | 26°♌15'58 | |
| | 10788 Jun 25 14:38 | 0°♌ | | evening set | 10790 Dec 28 18:49 | 20°♌45'05 | |
| morning set | 10788 Jul 04 09:25 | 11°♌00'22 | | inferior conj | 10791 Jan 02 02:58 | 18°♌04'49 | -6°46'16 |
| | 10788 Jul 19 13:18 | 0°♌ | | minimum elong | 10791 Jan 02 12:56 | 17°♌49'08 | 6°43'49 |
| | | | | min. Earth dist. | 10791 Jan 02 17:19 | 17°♌42'14 | 0.28797 AU |
| superior conj | 10788 Aug 12 19:48 | 0°♌20'14 | -0°12'14 | morning rise | 10791 Jan 07 06:46 | 14°♌55'12 | |
| minimum elong | 10788 Aug 12 22:51 | 0°♌29'44 | 0°12'25 | direct | 10791 Jan 23 13:07 | 9°♌49'10 | |
| behind sun begin | 10788 Aug 12 06:54 | 29°♌39'58 | | asc. node | 10791 Feb 02 19:23 | 11°♌45'14 | |
| behind sun end | 10788 Aug 13 14:47 | 1°♌19'30 | | greatest brilliancy | 10791 Feb 03 12:24 | 12°♌01'04 | -4.8m |
| | 10788 Aug 12 13:19 | 0°♌ | | | 10791 Mar 02 04:05 | 0°♌ | |
| max. Earth dist. | 10788 Aug 15 14:50 | 3°♌49'22 | 1.71993 AU | morning max el | 10791 Mar 14 04:41 | 11°♌18'37 | 46°14'52 |
| asc. node | 10788 Aug 17 20:29 | 6°♌36'39 | | | 10791 Apr 01 02:26 | 0°♌ | |
| | 10788 Sep 05 15:28 | 0°♌ | | | 10791 Apr 27 14:30 | 0°♌ | |
| evening rise | 10788 Sep 20 05:35 | 18°♌06'13 | | | 10791 May 22 20:23 | 0°♌ | |
| | 10788 Sep 29 20:18 | 0°♌ | | desc. node | 10791 May 25 16:01 | 3°♌24'12 | |
| | 10788 Oct 24 04:52 | 0°♌ | | | 10791 Jun 16 11:25 | 0°♌ | |
| | 10788 Nov 17 18:48 | 0°♌ | | | 10791 Jul 10 18:59 | 0°♌ | |
| desc. node | 10788 Dec 07 14:38 | 23°♌56'15 | | | 10791 Aug 03 23:36 | 0°♌ | |
| | 10788 Dec 12 15:57 | 0°♌ | | | 10791 Aug 28 03:49 | 0°♌ | |
| | 10789 Jan 06 22:09 | 0°♌ | | asc. node | 10791 Sep 15 09:50 | 22°♌37'40 | |
| | 10789 Feb 01 17:02 | 0°♌ | | morning set | 10791 Sep 15 20:53 | 23°♌11'52 | |
| | 10789 Feb 28 12:19 | 0°♌ | | | 10791 Sep 21 08:38 | 0°♌ | |
| evening max el | 10789 Mar 18 22:16 | 19°♌12'36 | 46°34'39 | | 10791 Oct 15 14:10 | 0°♌ | |
| | 10789 Mar 30 06:59 | 0°♌ | | | | | |
| asc. node | 10789 Mar 30 14:17 | 0°♌16'23 | | superior conj | 10791 Oct 23 13:33 | 9°♌51'51 | 1°15'47 |

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|---------------------|--------------------|-------------------------------|------------|---------------------|--------------------|------------------------|------------|
| minimum elong | 10791 Oct 23 05:21 | 9° \mathbb{M} 26'28 | 1°15'55 | morning rise | 10794 Mar 19 20:49 | 24° \mathbb{H} 18'41 | |
| max. Earth dist. | 10791 Oct 25 00:53 | 11° \mathbb{M} 41'03 | 1.72988 AU | direct | 10794 Apr 04 03:23 | 19° \mathbb{H} 42'20 | |
| | 10791 Nov 08 20:40 | 0° \mathbb{A} | | greatest brilliancy | 10794 Apr 14 13:31 | 21° \mathbb{H} 44'57 | -4.9m |
| evening rise | 10791 Nov 29 06:19 | 25° \mathbb{A} 09'11 | | | 10794 Apr 29 05:43 | 0° \mathbb{Y} | |
| | 10791 Dec 03 04:51 | 0° \mathbb{Z} | | morning max el | 10794 May 24 14:22 | 22° \mathbb{Y} 26'30 | 46°55'06 |
| | 10791 Dec 27 15:30 | 0° \approx | | | 10794 May 31 22:42 | 0° \mathbb{B} | |
| desc. node | 10792 Jan 05 02:31 | 10° \approx 20'58 | | desc. node | 10794 Jun 22 04:01 | 23° \mathbb{B} 17'10 | |
| | 10792 Jan 21 04:46 | 0° \mathbb{H} | | | 10794 Jun 28 01:06 | 0° \mathbb{I} | |
| | 10792 Feb 14 20:26 | 0° \mathbb{Y} | | | 10794 Jul 23 14:31 | 0° \mathbb{G} | |
| | 10792 Mar 10 15:12 | 0° \mathbb{B} | | | 10794 Aug 17 13:08 | 0° \mathbb{O} | |
| | 10792 Apr 04 16:46 | 0° \mathbb{I} | | | 10794 Sep 11 05:36 | 0° \mathbb{N} | |
| asc. node | 10792 Apr 27 00:39 | 26° \mathbb{I} 05'03 | | | 10794 Oct 05 19:05 | 0° \mathbb{L} | |
| | 10792 Apr 30 10:55 | 0° \mathbb{G} | | asc. node | 10794 Oct 12 23:14 | 8° \mathbb{L} 47'01 | |
| | 10792 May 27 23:48 | 0° \mathbb{O} | | | 10794 Oct 30 06:22 | 0° \mathbb{M} | |
| evening max el | 10792 May 30 20:47 | 2° \mathbb{O} 55'02 | 46°52'32 | | 10794 Nov 23 15:40 | 0° \mathbb{A} | |
| | 10792 Jul 02 08:21 | 0° \mathbb{N} | | morning set | 10794 Nov 24 09:42 | 0° \mathbb{A} 55'32 | |
| greatest brilliancy | 10792 Jul 09 20:32 | 3° \mathbb{N} 36'25 | -4.9m | | 10794 Dec 17 23:38 | 0° \mathbb{Z} | |
| retrograde | 10792 Jul 20 06:31 | 5° \mathbb{N} 38'56 | | max. Earth dist. | 10794 Dec 30 15:25 | 15° \mathbb{Z} 36'59 | 1.73160 AU |
| evening set | 10792 Aug 04 04:47 | 1° \mathbb{N} 17'14 | | | | | |
| | 10792 Aug 06 11:20 | 30° \mathbb{R} \mathbb{O} | | superior conj | 10794 Dec 31 00:55 | 16° \mathbb{Z} 06'16 | 1°08'19 |
| inferior conj | 10792 Aug 10 04:29 | 27° \mathbb{O} 45'10 | 1°44'26 | minimum elong | 10794 Dec 31 10:20 | 16° \mathbb{Z} 35'20 | 1°08'36 |
| minimum elong | 10792 Aug 10 08:28 | 27° \mathbb{O} 39'04 | 1°42'49 | | 10795 Jan 11 07:06 | 0° \approx | |
| min. Earth dist. | 10792 Aug 09 23:21 | 27° \mathbb{O} 53'04 | 0.27283 AU | desc. node | 10795 Feb 01 15:09 | 26° \approx 20'09 | |
| morning rise | 10792 Aug 16 12:29 | 24° \mathbb{O} 02'19 | | | 10795 Feb 04 14:21 | 0° \mathbb{H} | |
| desc. node | 10792 Aug 16 23:59 | 23° \mathbb{O} 47'10 | | evening rise | 10795 Feb 06 19:56 | 2° \mathbb{H} 45'28 | |
| direct | 10792 Aug 30 23:23 | 19° \mathbb{O} 57'06 | | | 10795 Feb 28 20:58 | 0° \mathbb{Y} | |
| greatest brilliancy | 10792 Sep 09 20:26 | 21° \mathbb{O} 44'09 | -4.8m | | 10795 Mar 25 02:42 | 0° \mathbb{B} | |
| | 10792 Sep 25 03:25 | 0° \mathbb{N} | | | 10795 Apr 18 08:28 | 0° \mathbb{I} | |
| morning max el | 10792 Oct 19 04:32 | 20° \mathbb{N} 28'31 | 45°59'42 | | 10795 May 12 17:03 | 0° \mathbb{G} | |
| | 10792 Oct 28 18:30 | 0° \mathbb{L} | | asc. node | 10795 May 25 11:30 | 15° \mathbb{G} 35'29 | |
| | 10792 Nov 25 15:59 | 0° \mathbb{M} | | | 10795 Jun 06 09:09 | 0° \mathbb{O} | |
| asc. node | 10792 Dec 07 22:47 | 13° \mathbb{M} 54'50 | | | 10795 Jul 01 16:38 | 0° \mathbb{N} | |
| | 10792 Dec 21 20:14 | 0° \mathbb{A} | | | 10795 Jul 28 08:49 | 0° \mathbb{L} | |
| | 10793 Jan 16 03:31 | 0° \mathbb{Z} | | evening max el | 10795 Aug 11 13:23 | 14° \mathbb{L} 44'43 | 46°24'48 |
| | 10793 Feb 09 22:25 | 0° \approx | | | 10795 Aug 28 02:28 | 0° \mathbb{M} | |
| | 10793 Mar 06 09:29 | 0° \mathbb{H} | | desc. node | 10795 Sep 14 10:29 | 12° \mathbb{M} 02'07 | |
| desc. node | 10793 Mar 29 15:46 | 28° \mathbb{H} 47'36 | | greatest brilliancy | 10795 Sep 19 09:33 | 14° \mathbb{M} 17'06 | -4.8m |
| | 10793 Mar 30 15:04 | 0° \mathbb{Y} | | retrograde | 10795 Sep 30 10:42 | 16° \mathbb{M} 30'48 | |
| morning set | 10793 Apr 17 06:29 | 21° \mathbb{Y} 58'59 | | evening set | 10795 Oct 17 06:36 | 11° \mathbb{M} 03'44 | |
| | 10793 Apr 23 16:23 | 0° \mathbb{B} | | min. Earth dist. | 10795 Oct 21 02:52 | 8° \mathbb{M} 42'53 | 0.28702 AU |
| | 10793 May 17 14:39 | 0° \mathbb{I} | | inferior conj | 10795 Oct 21 20:36 | 8° \mathbb{M} 15'12 | -7°35'49 |
| max. Earth dist. | 10793 May 26 21:40 | 11° \mathbb{I} 40'33 | 1.71317 AU | minimum elong | 10795 Oct 21 11:43 | 8° \mathbb{M} 29'04 | 7°34'10 |
| | | | | morning rise | 10795 Oct 25 17:12 | 5° \mathbb{M} 53'14 | |
| superior conj | 10793 May 27 16:43 | 12° \mathbb{I} 40'25 | -1°27'28 | direct | 10795 Nov 12 04:58 | 0° \mathbb{M} 08'13 | |
| minimum elong | 10793 May 27 18:26 | 12° \mathbb{I} 45'50 | 1°28'00 | greatest brilliancy | 10795 Nov 21 22:14 | 1° \mathbb{M} 51'34 | -4.7m |
| | 10793 Jun 10 11:36 | 0° \mathbb{G} | | | 10795 Dec 30 20:39 | 0° \mathbb{A} | |
| | 10793 Jul 04 09:18 | 0° \mathbb{O} | | morning max el | 10795 Dec 31 01:37 | 0° \mathbb{A} 11'58 | 45°42'23 |
| evening rise | 10793 Jul 07 03:24 | 3° \mathbb{O} 26'56 | | asc. node | 10796 Jan 05 10:27 | 5° \mathbb{A} 28'28 | |
| asc. node | 10793 Jul 20 09:29 | 20° \mathbb{O} 01'08 | | | 10796 Jan 28 14:04 | 0° \mathbb{Z} | |
| | 10793 Jul 28 09:32 | 0° \mathbb{N} | | | 10796 Feb 23 20:42 | 0° \approx | |
| | 10793 Aug 21 13:48 | 0° \mathbb{L} | | | 10796 Mar 20 02:06 | 0° \mathbb{H} | |
| | 10793 Sep 14 23:53 | 0° \mathbb{M} | | | 10796 Apr 13 17:45 | 0° \mathbb{Y} | |
| | 10793 Oct 09 18:54 | 0° \mathbb{A} | | desc. node | 10796 Apr 26 05:01 | 15° \mathbb{Y} 21'21 | |
| | 10793 Nov 04 04:08 | 0° \mathbb{Z} | | | 10796 May 08 00:49 | 0° \mathbb{B} | |
| desc. node | 10793 Nov 09 05:18 | 5° \mathbb{Z} 51'01 | | | 10796 Jun 01 02:26 | 0° \mathbb{I} | |
| | 10793 Nov 30 12:55 | 0° \approx | | | 10796 Jun 25 01:20 | 0° \mathbb{G} | |
| | 10793 Dec 28 20:49 | 0° \mathbb{H} | | morning set | 10796 Jul 01 21:48 | 8° \mathbb{G} 35'23 | |
| evening max el | 10794 Jan 03 02:56 | 5° \mathbb{H} 08'53 | 45°56'37 | | 10796 Jul 18 23:56 | 0° \mathbb{O} | |
| | 10794 Feb 03 02:06 | 0° \mathbb{Y} | | | | | |
| greatest brilliancy | 10794 Feb 11 09:29 | 3° \mathbb{Y} 50'05 | -4.8m | superior conj | 10796 Aug 10 09:10 | 27° \mathbb{O} 59'12 | -0°15'54 |
| retrograde | 10794 Feb 21 06:37 | 5° \mathbb{Y} 38'10 | | minimum elong | 10796 Aug 10 13:06 | 28° \mathbb{O} 11'29 | 0°16'04 |
| asc. node | 10794 Mar 02 06:01 | 4° \mathbb{Y} 00'16 | | behind sun begin | 10796 Aug 10 10:38 | 28° \mathbb{O} 03'48 | |
| evening set | 10794 Mar 07 21:33 | 1° \mathbb{Y} 25'46 | | behind sun end | 10796 Aug 10 15:33 | 28° \mathbb{O} 19'09 | |
| | 10794 Mar 10 10:10 | 30° \mathbb{R} \mathbb{H} | | | 10796 Aug 11 23:52 | 0° \mathbb{N} | |
| inferior conj | 10794 Mar 14 03:55 | 27° \mathbb{H} 43'26 | 2°58'26 | max. Earth dist. | 10796 Aug 13 06:13 | 1° \mathbb{N} 34'39 | 1.71953 AU |
| minimum elong | 10794 Mar 13 21:22 | 27° \mathbb{H} 53'33 | 2°56'32 | asc. node | 10796 Aug 16 22:29 | 6° \mathbb{N} 09'57 | |
| min. Earth dist. | 10794 Mar 14 08:06 | 27° \mathbb{H} 36'58 | 0.27609 AU | | 10796 Sep 05 01:59 | 0° \mathbb{L} | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| evening rise | 10796 Sep 17 21:13 | 15°♄53'18 | | | 10799 May 22 08:53 | 0°♄ | |
| | 10796 Sep 29 06:51 | 0°♌ | | desc. node | 10799 May 24 17:47 | 2°♄52'03 | |
| | 10796 Oct 23 15:33 | 0°♌ | | | 10799 Jun 15 23:11 | 0°♌ | |
| | 10796 Nov 17 05:49 | 0°♄ | | | 10799 Jul 10 06:17 | 0°♄ | |
| desc. node | 10796 Dec 06 16:30 | 23°♄27'35 | | | 10799 Aug 03 10:33 | 0°♌ | |
| | 10796 Dec 12 03:31 | 0°♌ | | | 10799 Aug 27 14:31 | 0°♌ | |
| | 10797 Jan 06 10:39 | 0°♌ | | morning set | 10799 Sep 13 12:16 | 20°♌58'02 | |
| | 10797 Feb 01 07:11 | 0°♌ | | asc. node | 10799 Sep 14 11:43 | 22°♌10'42 | |
| | 10797 Feb 28 05:58 | 0°♄ | | | 10799 Sep 20 19:10 | 0°♄ | |
| evening max el | 10797 Mar 16 11:29 | 16°♄50'12 | 46°33'20 | | 10799 Oct 15 00:38 | 0°♌ | |
| asc. node | 10797 Mar 29 16:21 | 29°♄15'31 | | | | | |
| | 10797 Mar 30 12:42 | 0°♌ | | superior conj | 10799 Oct 21 06:30 | 7°♌43'34 | 1°14'09 |
| greatest brilliancy | 10797 Apr 25 21:37 | 17°♌14'36 | -4.9m | minimum elong | 10799 Oct 20 21:53 | 7°♌16'56 | 1°14'14 |
| retrograde | 10797 May 05 12:37 | 18°♌59'02 | | max. Earth dist. | 10799 Oct 22 17:21 | 9°♌31'19 | 1.72967 AU |
| evening set | 10797 May 23 18:03 | 12°♌40'48 | | | 10799 Nov 08 07:08 | 0°♌ | |
| inferior conj | 10797 May 26 04:25 | 11°♌11'15 | 9°13'49 | evening rise | 10799 Nov 26 23:17 | 23°♌01'24 | |
| minimum elong | 10797 May 26 05:19 | 11°♌09'53 | 9°13'17 | | 10799 Dec 02 15:24 | 0°♄ | |
| min. Earth dist. | 10797 May 26 08:07 | 11°♌05'32 | 0.27205 AU | | 10799 Dec 27 02:13 | 0°♌ | |
| morning rise | 10797 May 28 16:35 | 9°♌39'00 | | desc. node | 10800 Jan 04 04:26 | 9°♌53'45 | |
| direct | 10797 Jun 15 22:04 | 3°♌21'02 | | | 10800 Jan 20 15:49 | 0°♌ | |
| greatest brilliancy | 10797 Jun 25 16:04 | 5°♌08'40 | -4.9m | | 10800 Feb 14 08:00 | 0°♌ | |
| desc. node | 10797 Jul 19 15:19 | 20°♌26'51 | | | 10800 Mar 10 03:32 | 0°♄ | |
| | 10797 Jul 30 05:04 | 0°♄ | | | 10800 Apr 04 06:18 | 0°♌ | |
| morning max el | 10797 Aug 05 05:35 | 5°♄53'02 | 46°45'54 | asc. node | 10800 Apr 26 02:31 | 25°♌26'26 | |
| | 10797 Aug 28 01:36 | 0°♌ | | | 10800 Apr 30 02:44 | 0°♄ | |
| | 10797 Sep 23 13:31 | 0°♌ | | | 10800 May 27 21:31 | 0°♌ | |
| | 10797 Oct 19 04:16 | 0°♄ | | evening max el | 10800 May 28 10:20 | 0°♌32'15 | 46°52'51 |
| asc. node | 10797 Nov 09 12:13 | 25°♄26'05 | | | 10800 Jul 04 11:17 | 0°♌ | |
| | 10797 Nov 13 07:26 | 0°♌ | | greatest brilliancy | 10800 Jul 07 11:12 | 1°♌15'17 | -4.9m |
| | 10797 Dec 08 02:33 | 0°♌ | | retrograde | 10800 Jul 17 20:51 | 3°♌17'41 | |
| | 10798 Jan 01 15:48 | 0°♄ | | | 10800 Jul 30 16:49 | 30°♌ | |
| | 10798 Jan 26 01:01 | 0°♌ | | evening set | 10800 Aug 01 20:11 | 28°♌53'26 | |
| morning set | 10798 Feb 01 04:35 | 7°♌35'26 | | inferior conj | 10800 Aug 07 18:00 | 25°♌24'17 | 2°07'29 |
| | 10798 Feb 19 07:20 | 0°♌ | | minimum elong | 10800 Aug 07 22:49 | 25°♌16'53 | 2°05'35 |
| desc. node | 10798 Mar 01 04:18 | 12°♌14'48 | | min. Earth dist. | 10800 Aug 07 13:46 | 25°♌30'46 | 0.27254 AU |
| max. Earth dist. | 10798 Mar 08 11:34 | 21°♌19'11 | 1.72282 AU | morning rise | 10800 Aug 14 01:48 | 21°♌42'09 | |
| | | | | desc. node | 10800 Aug 16 01:59 | 20°♌41'12 | |
| superior conj | 10798 Mar 11 17:06 | 25°♌20'11 | -0°25'16 | direct | 10800 Aug 28 12:34 | 17°♌36'20 | |
| minimum elong | 10798 Mar 11 11:11 | 25°♌01'49 | 0°24'52 | greatest brilliancy | 10800 Sep 07 10:04 | 19°♌24'16 | -4.8m |
| | 10798 Mar 15 11:04 | 0°♌ | | | 10800 Sep 25 21:38 | 0°♌ | |
| | 10798 Apr 08 12:17 | 0°♄ | | morning max el | 10800 Oct 16 19:34 | 18°♌14'06 | 46°01'08 |
| evening rise | 10798 Apr 20 01:36 | 14°♄26'52 | | | 10800 Oct 28 13:44 | 0°♄ | |
| | 10798 May 02 11:44 | 0°♌ | | | 10800 Nov 25 06:35 | 0°♌ | |
| | 10798 May 26 11:06 | 0°♄ | | asc. node | 10800 Dec 07 00:44 | 13°♌21'40 | |
| | 10798 Jun 19 12:47 | 0°♌ | | | 10800 Dec 21 08:55 | 0°♌ | |
| asc. node | 10798 Jun 21 23:06 | 3°♌00'57 | | | 10801 Jan 15 15:15 | 0°♄ | |
| | 10798 Jul 13 19:36 | 0°♌ | | | 10801 Feb 09 09:38 | 0°♌ | |
| | 10798 Aug 07 11:12 | 0°♄ | | | 10801 Mar 05 20:27 | 0°♌ | |
| | 10798 Sep 01 18:02 | 0°♌ | | desc. node | 10801 Mar 28 17:35 | 28°♌19'34 | |
| | 10798 Sep 28 06:24 | 0°♌ | | | 10801 Mar 30 01:54 | 0°♌ | |
| desc. node | 10798 Oct 11 20:41 | 14°♌25'11 | | morning set | 10801 Apr 14 18:02 | 19°♌31'29 | |
| evening max el | 10798 Oct 21 09:43 | 23°♌56'30 | 45°51'39 | | 10801 Apr 23 03:11 | 0°♄ | |
| | 10798 Oct 27 20:14 | 0°♄ | | | 10801 May 17 01:27 | 0°♌ | |
| greatest brilliancy | 10798 Nov 29 14:09 | 22°♄22'28 | -4.7m | max. Earth dist. | 10801 May 24 07:03 | 9°♌05'16 | 1.71329 AU |
| retrograde | 10798 Dec 09 08:09 | 24°♄06'23 | | | | | |
| evening set | 10798 Dec 26 13:28 | 18°♄30'45 | | superior conj | 10801 May 25 03:59 | 10°♌11'02 | -1°27'40 |
| inferior conj | 10798 Dec 30 18:59 | 15°♄54'34 | -6°58'39 | minimum elong | 10801 May 25 04:37 | 10°♌13'03 | 1°28'12 |
| minimum elong | 10798 Dec 31 04:46 | 15°♄39'11 | 6°56'19 | | 10801 Jun 09 22:25 | 0°♄ | |
| min. Earth dist. | 10798 Dec 31 09:02 | 15°♄32'28 | 0.28834 AU | | 10801 Jul 03 20:09 | 0°♌ | |
| morning rise | 10799 Jan 04 19:46 | 12°♄49'22 | | evening rise | 10801 Jul 04 14:54 | 0°♌58'40 | |
| direct | 10799 Jan 21 04:47 | 7°♄38'28 | | asc. node | 10801 Jul 19 11:30 | 19°♌33'23 | |
| greatest brilliancy | 10799 Feb 01 04:53 | 9°♄50'48 | -4.8m | | 10801 Jul 27 20:28 | 0°♌ | |
| asc. node | 10799 Feb 01 21:27 | 10°♄07'04 | | | 10801 Aug 21 00:52 | 0°♄ | |
| | 10799 Mar 02 07:01 | 0°♌ | | | 10801 Sep 14 11:14 | 0°♌ | |
| morning max el | 10799 Mar 11 19:41 | 9°♌03'32 | 46°13'18 | | 10801 Oct 09 06:48 | 0°♌ | |
| | 10799 Mar 31 19:09 | 0°♌ | | | 10801 Nov 03 17:06 | 0°♄ | |
| | 10799 Apr 27 04:18 | 0°♌ | | desc. node | 10801 Nov 08 07:11 | 5°♄18'11 | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|------------|------------|
| | 10801 Nov 30 04:09 | 0°♊ | | | 10804 May 07 12:15 | 0°♋ | |
| | 10801 Dec 28 17:59 | 0°♌ | | | 10804 May 31 13:40 | 0°♍ | |
| evening max el | 10801 Dec 31 18:37 | 2°♌56'29 | 45°55'41 | | 10804 Jun 24 12:25 | 0°♎ | |
| | 10802 Feb 05 04:02 | 0°♏ | | morning set | 10804 Jun 29 09:53 | 6°♎08'11 | |
| greatest brilliancy | 10802 Feb 08 23:13 | 1°♏31'36 | -4.8m | | 10804 Jul 18 10:56 | 0°♏ | |
| retrograde | 10802 Feb 18 20:50 | 3°♏19'28 | | | | | |
| asc. node | 10802 Mar 01 08:01 | 1°♏07'05 | | superior conj | 10804 Aug 07 22:22 | 25°♏36'27 | -0°19'33 |
| | 10802 Mar 03 18:55 | 30°♌♌ | | minimum elong | 10804 Aug 08 03:09 | 25°♏51'25 | 0°19'41 |
| evening set | 10802 Mar 05 11:00 | 29°♌08'09 | | max. Earth dist. | 10804 Aug 10 20:01 | 29°♏13'49 | 1.71913 AU |
| inferior conj | 10802 Mar 11 18:05 | 25°♌24'20 | 2°36'37 | | 10804 Aug 11 10:49 | 0°♐ | |
| minimum elong | 10802 Mar 11 12:17 | 25°♌33'20 | 2°34'56 | asc. node | 10804 Aug 16 00:20 | 5°♐41'38 | |
| min. Earth dist. | 10802 Mar 11 22:37 | 25°♌17'19 | 0.27638 AU | | 10804 Sep 04 12:54 | 0°♑ | |
| morning rise | 10802 Mar 17 13:15 | 21°♌56'24 | | evening rise | 10804 Sep 15 12:43 | 13°♑♑38'38 | |
| direct | 10802 Apr 01 18:31 | 17°♌23'01 | | | 10804 Sep 28 17:50 | 0°♒ | |
| greatest brilliancy | 10802 Apr 12 04:17 | 19°♌25'28 | -4.9m | | 10804 Oct 23 02:42 | 0°♓ | |
| | 10802 Apr 29 23:10 | 0°♏ | | | 10804 Nov 16 17:17 | 0°♓ | |
| morning max el | 10802 May 22 05:00 | 20°♏06'47 | 46°54'10 | desc. node | 10804 Dec 05 18:33 | 22°♓58'13 | |
| | 10802 May 31 18:18 | 0°♋ | | | 10804 Dec 11 15:32 | 0°♊ | |
| desc. node | 10802 Jun 21 06:05 | 22°♋37'58 | | | 10805 Jan 05 23:37 | 0°♌ | |
| | 10802 Jun 27 16:18 | 0°♍ | | | 10805 Jan 31 21:54 | 0°♏ | |
| | 10802 Jul 23 03:52 | 0°♎ | | | 10805 Feb 28 00:32 | 0°♋ | |
| | 10802 Aug 17 01:29 | 0°♏ | | evening max el | 10805 Mar 13 23:49 | 14°♋24'16 | 46°31'51 |
| | 10802 Sep 10 17:17 | 0°♐ | | asc. node | 10805 Mar 28 18:12 | 28°♋11'03 | |
| | 10802 Oct 05 06:19 | 0°♑ | | | 10805 Mar 30 21:33 | 0°♍ | |
| asc. node | 10802 Oct 12 01:03 | 8°♑18'32 | | greatest brilliancy | 10805 Apr 23 10:57 | 14°♍49'22 | -4.9m |
| | 10802 Oct 29 17:16 | 0°♒ | | retrograde | 10805 May 03 00:54 | 16°♍33'14 | |
| morning set | 10802 Nov 22 03:00 | 28°♒48'03 | | evening set | 10805 May 21 06:09 | 10°♍16'11 | |
| | 10802 Nov 23 02:22 | 0°♓ | | inferior conj | 10805 May 23 17:21 | 8°♍45'28 | 9°14'10 |
| | 10802 Dec 17 10:16 | 0°♓ | | minimum elong | 10805 May 23 17:14 | 8°♍45'39 | 9°13'38 |
| | | | | min. Earth dist. | 10805 May 23 21:00 | 8°♍39'48 | 0.27216 AU |
| superior conj | 10802 Dec 28 17:56 | 13°♓57'49 | 1°10'17 | morning rise | 10805 May 26 04:17 | 7°♍15'00 | |
| minimum elong | 10802 Dec 29 03:07 | 14°♓26'08 | 1°10'36 | direct | 10805 Jun 13 10:23 | 0°♍54'46 | |
| max. Earth dist. | 10802 Dec 28 10:57 | 13°♓36'18 | 1.73171 AU | greatest brilliancy | 10805 Jun 23 05:37 | 2°♍43'05 | -4.9m |
| | 10803 Jan 10 17:48 | 0°♊ | | desc. node | 10805 Jul 18 17:19 | 19°♍20'25 | |
| desc. node | 10803 Jan 31 17:09 | 25°♊52'56 | | | 10805 Jul 30 06:23 | 0°♎ | |
| evening rise | 10803 Feb 04 11:29 | 0°♌31'49 | | morning max el | 10805 Aug 02 18:04 | 3°♎26'26 | 46°47'14 |
| | 10803 Feb 04 01:11 | 0°♌ | | | 10805 Aug 27 18:42 | 0°♏ | |
| | 10803 Feb 28 08:00 | 0°♏ | | | 10805 Sep 23 03:43 | 0°♐ | |
| | 10803 Mar 24 13:59 | 0°♋ | | | 10805 Oct 18 16:59 | 0°♑ | |
| | 10803 Apr 17 20:07 | 0°♍ | | asc. node | 10805 Nov 08 14:08 | 24°♑55'50 | |
| | 10803 May 12 05:14 | 0°♎ | | | 10805 Nov 12 19:19 | 0°♒ | |
| asc. node | 10803 May 24 13:28 | 15°♎03'18 | | | 10805 Dec 07 13:56 | 0°♓ | |
| | 10803 Jun 05 22:13 | 0°♏ | | | 10806 Jan 01 02:54 | 0°♓ | |
| | 10803 Jul 01 07:18 | 0°♐ | | | 10806 Jan 25 11:57 | 0°♊ | |
| | 10803 Jul 28 03:09 | 0°♑ | | morning set | 10806 Jan 29 20:43 | 5°♊23'22 | |
| evening max el | 10803 Aug 09 05:02 | 12°♑29'15 | 46°26'04 | | 10806 Feb 18 18:12 | 0°♌ | |
| | 10803 Aug 28 12:07 | 0°♒ | | desc. node | 10806 Feb 28 06:08 | 11°♌46'44 | |
| desc. node | 10803 Sep 13 12:26 | 10°♒31'23 | | max. Earth dist. | 10806 Mar 06 04:27 | 19°♌08'37 | 1.72326 AU |
| greatest brilliancy | 10803 Sep 17 01:24 | 12°♒03'45 | -4.8m | | | | |
| retrograde | 10803 Sep 28 02:22 | 14°♒17'11 | | superior conj | 10806 Mar 09 07:01 | 23°♌00'22 | -0°21'45 |
| evening set | 10803 Oct 14 18:55 | 8°♒55'45 | | minimum elong | 10806 Mar 09 01:54 | 22°♌44'27 | 0°21'22 |
| min. Earth dist. | 10803 Oct 18 17:48 | 6°♒31'00 | 0.28652 AU | | 10806 Mar 14 21:58 | 0°♏ | |
| inferior conj | 10803 Oct 19 12:08 | 6°♒02'18 | -7°25'28 | | 10806 Apr 07 23:18 | 0°♋ | |
| minimum elong | 10803 Oct 19 02:54 | 6°♒16'46 | 7°23'42 | evening rise | 10806 Apr 17 14:17 | 12°♋01'50 | |
| morning rise | 10803 Oct 23 11:15 | 3°♒36'31 | | | 10806 May 01 22:54 | 0°♍ | |
| | 10803 Oct 30 14:45 | 30°♌♑ | | | 10806 May 25 22:26 | 0°♎ | |
| direct | 10803 Nov 09 20:25 | 27°♑56'22 | | | 10806 Jun 19 00:21 | 0°♏ | |
| greatest brilliancy | 10803 Nov 19 12:15 | 29°♑38'20 | -4.7m | asc. node | 10806 Jun 21 01:06 | 2°♏31'10 | |
| | 10803 Nov 20 12:48 | 0°♒ | | | 10806 Jul 13 07:33 | 0°♐ | |
| morning max el | 10803 Dec 28 15:40 | 27°♒56'29 | 45°42'07 | | 10806 Aug 06 23:48 | 0°♑ | |
| | 10803 Dec 30 18:33 | 0°♓ | | | 10806 Sep 01 07:54 | 0°♒ | |
| asc. node | 10804 Jan 04 12:30 | 4°♓43'09 | | | 10806 Sep 27 23:05 | 0°♓ | |
| | 10804 Jan 28 05:33 | 0°♓ | | desc. node | 10806 Oct 10 22:37 | 13°♓40'26 | |
| | 10804 Feb 23 09:59 | 0°♊ | | evening max el | 10806 Oct 19 00:02 | 21°♓41'11 | 45°52'23 |
| | 10804 Mar 19 14:22 | 0°♌ | | | 10806 Oct 27 22:23 | 0°♓ | |
| | 10804 Apr 13 05:30 | 0°♏ | | greatest brilliancy | 10806 Nov 27 04:45 | 20°♓10'08 | -4.7m |
| desc. node | 10804 Apr 25 06:53 | 14°♏51'22 | | retrograde | 10806 Dec 07 00:01 | 21°♓55'18 | |

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|---------------------|--------------------|-------------------------|------------|---------------------|--------------------|---------------------------|------------|
| evening set | 10806 Dec 24 08:00 | 16° Z 14'48 | | superior conj | 10809 May 22 15:38 | 7° II 42'46 | -1°27'42 |
| inferior conj | 10806 Dec 28 10:52 | 13° Z 42'42 | -7°10'31 | minimum elong | 10809 May 22 15:11 | 7° II 41'20 | 1°28'13 |
| minimum elong | 10806 Dec 28 20:25 | 13° Z 27'42 | 7°08'18 | | 10809 Jun 09 09:15 | 0° G | |
| min. Earth dist. | 10806 Dec 29 00:19 | 13° Z 21'36 | 0.28868 AU | evening rise | 10809 Jul 02 02:36 | 28° G 30'57 | |
| morning rise | 10807 Jan 02 08:34 | 10° Z 42'13 | | | 10809 Jul 03 07:02 | 0° Ω | |
| direct | 10807 Jan 18 20:36 | 5° Z 26'12 | | asc. node | 10809 Jul 18 13:21 | 19° Ω 05'03 | |
| greatest brilliancy | 10807 Jan 29 20:50 | 7° Z 38'45 | -4.8m | | 10809 Jul 27 07:28 | 0° M | |
| asc. node | 10807 Jan 31 23:23 | 8° Z 30'52 | | | 10809 Aug 20 12:03 | 0° L | |
| | 10807 Mar 02 08:54 | 0° \approx | | | 10809 Sep 13 22:43 | 0° M | |
| morning max el | 10807 Mar 09 11:32 | 6° \approx 49'44 | 46°11'55 | | 10809 Oct 08 18:52 | 0° X | |
| | 10807 Mar 31 11:54 | 0° H | | | 10809 Nov 03 06:19 | 0° Z | |
| | 10807 Apr 26 18:16 | 0° Y | | desc. node | 10809 Nov 07 09:16 | 4° Z 45'25 | |
| | 10807 May 21 21:37 | 0° B | | | 10809 Nov 29 19:44 | 0° \approx | |
| desc. node | 10807 May 23 19:51 | 2° B 20'01 | | | 10809 Dec 28 16:06 | 0° H | |
| | 10807 Jun 15 11:15 | 0° II | | evening max el | 10809 Dec 29 09:56 | 0° H 43'00 | 45°54'47 |
| | 10807 Jul 09 17:55 | 0° G | | greatest brilliancy | 10810 Feb 06 13:34 | 29° H 13'48 | -4.8m |
| | 10807 Aug 02 21:52 | 0° Ω | | | 10810 Feb 09 01:50 | 0° Y | |
| | 10807 Aug 27 01:37 | 0° M | | retrograde | 10810 Feb 16 10:33 | 1° Y 00'41 | |
| morning set | 10807 Sep 11 03:12 | 18° M 41'28 | | | 10810 Feb 23 12:44 | 30° R H | |
| asc. node | 10807 Sep 13 13:33 | 21° M 42'24 | | asc. node | 10810 Feb 28 09:58 | 28° H 09'11 | |
| | 10807 Sep 20 06:05 | 0° L | | evening set | 10810 Mar 03 00:41 | 26° H 50'16 | |
| | 10807 Oct 14 11:26 | 0° M | | inferior conj | 10810 Mar 09 08:17 | 23° H 05'22 | 2°14'29 |
| | | | | minimum elong | 10810 Mar 09 03:15 | 23° H 13'10 | 2°13'04 |
| superior conj | 10807 Oct 18 23:01 | 5° M 32'50 | 1°12'22 | min. Earth dist. | 10810 Mar 09 13:33 | 22° H 57'11 | 0.27665 AU |
| minimum elong | 10807 Oct 18 14:02 | 5° M 05'02 | 1°12'25 | morning rise | 10810 Mar 15 05:28 | 19° H 34'13 | |
| max. Earth dist. | 10807 Oct 20 11:16 | 7° M 24'55 | 1.72945 AU | direct | 10810 Mar 30 09:17 | 15° H 03'45 | |
| | 10807 Nov 07 17:55 | 0° X | | greatest brilliancy | 10810 Apr 09 19:29 | 17° H 06'19 | -4.9m |
| evening rise | 10807 Nov 24 16:08 | 20° X 52'10 | | | 10810 Apr 30 12:11 | 0° Y | |
| | 10807 Dec 02 02:17 | 0° Z | | morning max el | 10810 May 19 18:50 | 17° Y 45'06 | 46°53'24 |
| | 10807 Dec 26 13:19 | 0° \approx | | | 10810 May 31 13:17 | 0° B | |
| desc. node | 10808 Jan 03 06:26 | 9° \approx 25'39 | | desc. node | 10810 Jun 20 08:03 | 21° B 59'07 | |
| | 10808 Jan 20 03:15 | 0° H | | | 10810 Jun 27 07:10 | 0° II | |
| | 10808 Feb 13 19:54 | 0° Y | | | 10810 Jul 22 16:57 | 0° G | |
| | 10808 Mar 09 16:10 | 0° B | | | 10810 Aug 16 13:35 | 0° Ω | |
| | 10808 Apr 03 20:09 | 0° II | | | 10810 Sep 10 04:47 | 0° M | |
| asc. node | 10808 Apr 25 04:34 | 24° II 47'30 | | | 10810 Oct 04 17:24 | 0° L | |
| | 10808 Apr 29 18:58 | 0° G | | asc. node | 10810 Oct 11 03:00 | 7° L 50'45 | |
| evening max el | 10808 May 26 00:40 | 28° G 11'01 | 46°53'00 | | 10810 Oct 29 04:04 | 0° M | |
| | 10808 May 27 20:19 | 0° Ω | | morning set | 10810 Nov 19 20:06 | 26° M 40'10 | |
| greatest brilliancy | 10808 Jul 05 01:25 | 28° Ω 52'44 | -4.9m | | 10810 Nov 22 12:59 | 0° X | |
| | 10808 Jul 08 14:08 | 0° M | | | 10810 Dec 16 20:50 | 0° Z | |
| retrograde | 10808 Jul 15 11:15 | 0° M 55'00 | | | | | |
| | 10808 Jul 22 03:29 | 30° R Ω | | superior conj | 10810 Dec 26 10:50 | 11° Z 49'23 | 1°12'09 |
| evening set | 10808 Jul 30 11:41 | 26° Ω 28'09 | | minimum elong | 10810 Dec 26 19:43 | 12° Z 16'45 | 1°12'29 |
| inferior conj | 10808 Aug 05 07:21 | 23° Ω 01'55 | 2°30'31 | max. Earth dist. | 10810 Dec 26 04:37 | 11° Z 30'10 | 1.73181 AU |
| minimum elong | 10808 Aug 05 13:01 | 22° Ω 53'16 | 2°28'21 | | 10811 Jan 10 04:23 | 0° \approx | |
| min. Earth dist. | 10808 Aug 05 03:47 | 23° Ω 07'22 | 0.27230 AU | desc. node | 10811 Jan 30 18:56 | 25° \approx 25'27 | |
| morning rise | 10808 Aug 11 14:44 | 19° Ω 20'47 | | evening rise | 10811 Feb 02 02:55 | 28° \approx 18'14 | |
| desc. node | 10808 Aug 15 03:57 | 17° Ω 37'59 | | | 10811 Feb 03 11:54 | 0° H | |
| direct | 10808 Aug 26 02:10 | 15° Ω 14'14 | | | 10811 Feb 27 18:55 | 0° Y | |
| greatest brilliancy | 10808 Sep 04 23:07 | 17° Ω 02'19 | -4.8m | | 10811 Mar 24 01:10 | 0° B | |
| | 10808 Sep 26 11:44 | 0° M | | | 10811 Apr 17 07:40 | 0° II | |
| morning max el | 10808 Oct 14 10:42 | 15° M 58'51 | 46°02'30 | | 10811 May 11 17:19 | 0° G | |
| | 10808 Oct 28 08:47 | 0° L | | asc. node | 10811 May 23 15:30 | 14° G 31'47 | |
| | 10808 Nov 24 21:16 | 0° M | | | 10811 Jun 05 11:09 | 0° Ω | |
| asc. node | 10808 Dec 06 02:48 | 12° M 48'17 | | | 10811 Jun 30 21:50 | 0° M | |
| | 10808 Dec 20 21:44 | 0° X | | | 10811 Jul 27 21:32 | 0° L | |
| | 10809 Jan 15 03:08 | 0° Z | | evening max el | 10811 Aug 06 19:50 | 10° L 12'43 | 46°27'23 |
| | 10809 Feb 08 21:01 | 0° \approx | | | 10811 Aug 29 00:25 | 0° M | |
| | 10809 Mar 05 07:34 | 0° H | | desc. node | 10811 Sep 12 14:23 | 8° M 58'43 | |
| desc. node | 10809 Mar 27 19:29 | 27° H 51'18 | | greatest brilliancy | 10811 Sep 14 17:43 | 9° M 52'07 | -4.8m |
| | 10809 Mar 29 12:54 | 0° Y | | retrograde | 10811 Sep 25 17:53 | 12° M 05'04 | |
| morning set | 10809 Apr 12 05:58 | 17° Y 04'53 | | evening set | 10811 Oct 12 07:24 | 6° M 49'04 | |
| | 10809 Apr 22 14:05 | 0° B | | min. Earth dist. | 10811 Oct 16 09:16 | 4° M 20'02 | 0.28606 AU |
| | 10809 May 16 12:18 | 0° II | | inferior conj | 10811 Oct 17 03:52 | 3° M 50'55 | -7°14'24 |
| max. Earth dist. | 10809 May 21 16:57 | 6° II 31'28 | 1.71335 AU | minimum elong | 10811 Oct 16 18:18 | 4° M 05'53 | 7°12'31 |
| | | | | morning rise | 10811 Oct 21 05:34 | 1° M 21'08 | |

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|---------------------|--------------------|---------------------------------|---------------------|--------------------|---------------------------------|--|
| | 10811 Oct 23 14:57 | 30° RA | evening rise | 10814 Apr 15 02:56 | 9° S 38'03 | |
| direct | 10811 Nov 07 11:28 | 25° A 45'47 | | 10814 May 01 09:39 | 0° II | |
| greatest brilliancy | 10811 Nov 17 03:10 | 27° A 27'07 -4.7m | | 10814 May 25 09:22 | 0° S | |
| | 10811 Nov 23 04:07 | 0° M | | 10814 Jun 18 11:33 | 0° Q | |
| morning max el | 10811 Dec 26 05:32 | 25° M 41'14 45°41'51 | asc. node | 10814 Jun 20 02:58 | 2° Q 02'12 | |
| | 10811 Dec 30 15:20 | 0° A | | 10814 Jul 12 19:09 | 0° M | |
| asc. node | 10812 Jan 03 14:23 | 3° A 58'47 | | 10814 Aug 06 12:05 | 0° A | |
| | 10812 Jan 27 20:33 | 0° S | | 10814 Aug 31 21:27 | 0° M | |
| | 10812 Feb 22 22:55 | 0° \approx | | 10814 Sep 27 15:33 | 0° A | |
| | 10812 Mar 19 02:19 | 0° H | desc. node | 10814 Oct 10 00:45 | 12° A 57'09 | |
| | 10812 Apr 12 16:54 | 0° Y | evening max el | 10814 Oct 16 15:28 | 19° A 30'13 45°53'16 | |
| desc. node | 10812 Apr 24 08:51 | 14° Y 22'40 | | 10814 Oct 28 01:17 | 0° S | |
| | 10812 May 06 23:21 | 0° B | greatest brilliancy | 10814 Nov 24 19:03 | 17° S 59'42 -4.7m | |
| | 10812 May 31 00:35 | 0° II | retrograde | 10814 Dec 04 16:24 | 19° S 46'28 | |
| | 10812 Jun 23 23:13 | 0° S | evening set | 10814 Dec 22 02:42 | 14° S 01'18 | |
| morning set | 10812 Jun 26 21:56 | 3° S 41'44 | inferior conj | 10814 Dec 26 02:58 | 11° S 33'04 -7°21'31 | |
| | 10812 Jul 17 21:36 | 0° Q | minimum elong | 10814 Dec 26 12:15 | 11° S 18'31 7°19'27 | |
| | | | min. Earth dist. | 10814 Dec 26 15:23 | 11° S 13'35 0.28902 AU | |
| superior conj | 10812 Aug 05 11:47 | 23° Q 15'27 -0°23'09 | morning rise | 10814 Dec 30 21:35 | 8° S 37'21 | |
| minimum elong | 10812 Aug 05 17:24 | 23° Q 33'01 0°23'16 | direct | 10815 Jan 16 13:10 | 3° S 16'20 | |
| max. Earth dist. | 10812 Aug 08 07:30 | 26° Q 46'54 1.71868 AU | greatest brilliancy | 10815 Jan 27 12:21 | 5° S 28'15 -4.8m | |
| | 10812 Aug 10 21:23 | 0° M | asc. node | 10815 Jan 31 01:20 | 6° S 59'54 | |
| asc. node | 10812 Aug 15 02:11 | 5° M 14'26 | | 10815 Mar 02 08:54 | 0° \approx | |
| | 10812 Sep 03 23:25 | 0° A | morning max el | 10815 Mar 07 04:16 | 4° \approx 39'35 46°10'16 | |
| evening rise | 10812 Sep 13 04:30 | 11° A 26'04 | | 10815 Mar 31 03:55 | 0° H | |
| | 10812 Sep 28 04:24 | 0° M | | 10815 Apr 26 07:46 | 0° Y | |
| | 10812 Oct 22 13:27 | 0° A | | 10815 May 21 09:56 | 0° B | |
| | 10812 Nov 16 04:22 | 0° S | desc. node | 10815 May 22 21:48 | 1° B 48'43 | |
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| | 10812 Dec 11 03:13 | 0° \approx | | 10815 Jul 09 05:08 | 0° S | |
| | 10813 Jan 05 12:18 | 0° H | | 10815 Aug 02 08:47 | 0° Q | |
| | 10813 Jan 31 12:26 | 0° Y | | 10815 Aug 26 12:19 | 0° M | |
| | 10813 Feb 27 19:12 | 0° B | morning set | 10815 Sep 08 18:10 | 16° M 26'06 | |
| evening max el | 10813 Mar 11 12:09 | 11° B 59'41 46°30'31 | asc. node | 10815 Sep 12 15:31 | 21° M 15'37 | |
| asc. node | 10813 Mar 27 20:17 | 27° B 06'34 | | 10815 Sep 19 16:39 | 0° A | |
| | 10813 Mar 31 08:54 | 0° II | | 10815 Oct 13 21:54 | 0° M | |
| greatest brilliancy | 10813 Apr 20 23:54 | 12° II 24'59 -4.9m | | | | |
| retrograde | 10813 Apr 30 13:36 | 14° II 09'01 | superior conj | 10815 Oct 16 15:39 | 3° M 23'29 1°10'29 | |
| evening set | 10813 May 18 17:37 | 7° II 53'52 | minimum elong | 10815 Oct 16 06:23 | 2° M 54'47 1°10'30 | |
| inferior conj | 10813 May 21 06:19 | 6° II 21'00 9°13'21 | max. Earth dist. | 10815 Oct 18 06:28 | 5° M 23'33 1.72917 AU | |
| minimum elong | 10813 May 21 05:12 | 6° II 22'44 9°12'50 | | 10815 Nov 07 04:20 | 0° A | |
| min. Earth dist. | 10813 May 21 09:46 | 6° II 15'40 0.27228 AU | evening rise | 10815 Nov 22 09:17 | 18° A 45'05 | |
| morning rise | 10813 May 23 16:45 | 4° II 51'22 | | 10815 Dec 01 12:45 | 0° S | |
| | 10813 Jun 02 09:24 | 30° RA | | 10815 Dec 25 23:58 | 0° \approx | |
| direct | 10813 Jun 10 22:54 | 28° B 29'39 | desc. node | 10816 Jan 02 08:18 | 8° \approx 58'32 | |
| | 10813 Jun 19 21:00 | 0° II | | 10816 Jan 19 14:16 | 0° H | |
| greatest brilliancy | 10813 Jun 20 19:09 | 0° II 18'50 -4.9m | | 10816 Feb 13 07:28 | 0° Y | |
| desc. node | 10813 Jul 17 19:13 | 18° II 16'37 | | 10816 Mar 09 04:31 | 0° B | |
| | 10813 Jul 30 06:02 | 0° S | | 10816 Apr 03 09:50 | 0° II | |
| morning max el | 10813 Jul 31 07:43 | 1° S 03'57 46°48'37 | asc. node | 10816 Apr 24 06:34 | 24° II 08'49 | |
| | 10813 Aug 27 11:01 | 0° Q | | 10816 Apr 29 11:15 | 0° S | |
| | 10813 Sep 22 17:17 | 0° M | evening max el | 10816 May 23 15:39 | 25° S 52'03 46°53'06 | |
| | 10813 Oct 18 05:09 | 0° A | | 10816 May 27 19:53 | 0° Q | |
| asc. node | 10813 Nov 07 16:08 | 24° A 27'24 | greatest brilliancy | 10816 Jul 02 15:50 | 26° Q 31'07 -4.9m | |
| | 10813 Nov 12 06:40 | 0° M | retrograde | 10816 Jul 13 01:27 | 28° Q 32'39 | |
| | 10813 Dec 07 00:48 | 0° A | evening set | 10816 Jul 28 03:18 | 24° Q 03'19 | |
| | 10813 Dec 31 13:31 | 0° S | inferior conj | 10816 Aug 02 20:37 | 20° Q 40'02 2°53'16 | |
| | 10814 Jan 24 22:27 | 0° \approx | minimum elong | 10816 Aug 03 03:04 | 20° Q 30'10 2°50'52 | |
| morning set | 10814 Jan 27 13:00 | 3° \approx 13'00 | min. Earth dist. | 10816 Aug 02 17:42 | 20° Q 44'30 0.27205 AU | |
| | 10814 Feb 18 04:41 | 0° H | morning rise | 10816 Aug 09 03:17 | 17° Q 00'03 | |
| desc. node | 10814 Feb 27 08:04 | 11° H 20'04 | desc. node | 10816 Aug 14 05:58 | 14° Q 39'44 | |
| max. Earth dist. | 10814 Mar 03 21:57 | 17° H 01'12 1.72369 AU | direct | 10816 Aug 23 15:50 | 12° Q 52'49 | |
| | | | greatest brilliancy | 10816 Sep 02 11:46 | 14° Q 40'24 -4.8m | |
| superior conj | 10814 Mar 06 20:53 | 20° H 41'34 -0°18'11 | | 10816 Sep 26 21:54 | 0° M | |
| minimum elong | 10814 Mar 06 16:35 | 20° H 28'13 0°17'50 | morning max el | 10816 Oct 12 01:23 | 13° M 43'12 46°03'53 | |
| | 10814 Mar 14 08:30 | 0° Y | | 10816 Oct 28 03:01 | 0° A | |
| | 10814 Apr 07 09:56 | 0° B | | 10816 Nov 24 11:27 | 0° M | |

| | | | | | | |
|---------------------|--------------------|-----------|---------------------|---------------------|--------------------|------------|
| asc. node | 10816 Dec 05 04:35 | 12°♌15'10 | evening max el | 10819 Aug 04 09:53 | 7°♊53'18 | 46°28'39 |
| | 10816 Dec 20 10:09 | 0°♊ | | 10819 Aug 29 17:43 | 0°♌ | |
| | 10817 Jan 14 14:38 | 0°♊ | desc. node | 10819 Sep 11 16:28 | 7°♌21'21 | |
| | 10817 Feb 08 08:02 | 0°♊ | greatest brilliancy | 10819 Sep 12 09:35 | 7°♌38'18 | -4.8m |
| | 10817 Mar 04 18:21 | 0°♊ | retrograde | 10819 Sep 23 09:04 | 9°♌51'15 | |
| desc. node | 10817 Mar 26 21:28 | 27°♊24'14 | evening set | 10819 Oct 09 19:29 | 4°♌40'23 | |
| | 10817 Mar 28 23:35 | 0°♊ | min. Earth dist. | 10819 Oct 14 00:33 | 2°♌07'01 | 0.28557 AU |
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| | 10817 Apr 22 00:45 | 0°♊ | minimum elong | 10819 Oct 14 09:23 | 1°♌53'12 | 7°00'33 |
| | 10817 May 15 22:58 | 0°♊ | | 10819 Oct 17 10:17 | 30°♋♊ | |
| max. Earth dist. | 10817 May 18 23:30 | 3°♊47'44 | 1.71347 AU | morning rise | 10819 Oct 18 23:36 | 29°♊04'04 |
| | | | | direct | 10819 Nov 05 01:46 | 23°♊33'16 |
| superior conj | 10817 May 20 03:02 | 5°♊14'12 | -1°27'32 | greatest brilliancy | 10819 Nov 14 18:09 | 25°♊14'44 |
| minimum elong | 10817 May 20 01:30 | 5°♊09'24 | 1°28'03 | | 10819 Nov 24 19:59 | 0°♌ |
| | 10817 Jun 08 19:58 | 0°♊ | | morning max el | 10819 Dec 23 19:29 | 23°♌25'31 |
| evening rise | 10817 Jun 29 13:43 | 26°♊01'42 | | | 10819 Dec 30 11:40 | 0°♊ |
| | 10817 Jul 02 17:48 | 0°♊ | | asc. node | 10820 Jan 02 16:23 | 3°♊14'45 |
| asc. node | 10817 Jul 17 15:13 | 18°♊37'09 | | | 10820 Jan 27 11:32 | 0°♊ |
| | 10817 Jul 26 18:19 | 0°♊ | | | 10820 Feb 22 11:53 | 0°♊ |
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| | 10817 Nov 29 11:22 | 0°♊ | | | 10820 Jun 23 10:06 | 0°♊ |
| evening max el | 10817 Dec 27 00:48 | 28°♊29'15 | 45°54'02 | morning set | 10820 Jun 24 10:00 | 1°♊14'57 |
| | 10817 Dec 28 14:48 | 0°♊ | | | 10820 Jul 17 08:26 | 0°♊ |
| greatest brilliancy | 10818 Feb 04 04:33 | 26°♊58'12 | -4.8m | | | |
| retrograde | 10818 Feb 14 00:09 | 28°♊43'52 | | superior conj | 10820 Aug 03 00:56 | 20°♊52'54 |
| asc. node | 10818 Feb 27 11:59 | 25°♊09'04 | | minimum elong | 10820 Aug 03 07:22 | 21°♊13'03 |
| evening set | 10818 Feb 28 14:52 | 24°♊33'53 | | max. Earth dist. | 10820 Aug 05 16:35 | 24°♊11'44 |
| inferior conj | 10818 Mar 06 22:49 | 20°♊48'25 | 1°52'30 | | 10820 Aug 10 08:10 | 0°♊ |
| minimum elong | 10818 Mar 06 18:35 | 20°♊55'01 | 1°51'20 | asc. node | 10820 Aug 14 04:12 | 4°♊47'05 |
| min. Earth dist. | 10818 Mar 07 05:03 | 20°♊38'43 | 0.27695 AU | | 10820 Sep 03 10:12 | 0°♊ |
| morning rise | 10818 Mar 12 21:50 | 17°♊14'15 | | evening rise | 10820 Sep 10 19:48 | 9°♊11'09 |
| direct | 10818 Mar 27 23:51 | 12°♊46'20 | | | 10820 Sep 27 15:15 | 0°♊ |
| greatest brilliancy | 10818 Apr 07 11:28 | 14°♊49'35 | -4.9m | | 10820 Oct 22 00:30 | 0°♊ |
| | 10818 Apr 30 21:23 | 0°♊ | | | 10820 Nov 15 15:46 | 0°♊ |
| morning max el | 10818 May 17 08:10 | 15°♊22'50 | 46°52'18 | desc. node | 10820 Dec 03 22:21 | 21°♊59'49 |
| | 10818 May 31 07:35 | 0°♊ | | | 10820 Dec 10 15:13 | 0°♊ |
| desc. node | 10818 Jun 19 09:55 | 21°♊20'33 | | | 10821 Jan 05 01:22 | 0°♊ |
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| | 10818 Sep 09 16:16 | 0°♊ | | asc. node | 10821 Mar 26 22:19 | 25°♊59'46 |
| | 10818 Oct 04 04:28 | 0°♊ | | | 10821 Apr 01 00:22 | 0°♊ |
| asc. node | 10818 Oct 10 04:56 | 7°♊23'02 | | greatest brilliancy | 10821 Apr 18 12:24 | 10°♊00'04 |
| | 10818 Oct 28 14:50 | 0°♊ | | retrograde | 10821 Apr 28 02:58 | 11°♊45'02 |
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| | | | | min. Earth dist. | 10821 May 18 22:17 | 3°♊52'15 |
| superior conj | 10818 Dec 24 03:50 | 9°♊41'14 | 1°13'54 | morning rise | 10821 May 21 06:01 | 2°♊26'58 |
| minimum elong | 10818 Dec 24 12:22 | 10°♊07'34 | 1°14'17 | | 10821 May 25 12:49 | 30°♋♊ |
| max. Earth dist. | 10818 Dec 23 21:12 | 9°♊20'47 | 1.73188 AU | direct | 10821 Jun 08 12:12 | 26°♊04'49 |
| | 10819 Jan 09 14:59 | 0°♊ | | greatest brilliancy | 10821 Jun 18 08:15 | 27°♊54'19 |
| desc. node | 10819 Jan 29 20:53 | 24°♊58'39 | | | 10821 Jun 23 05:53 | 0°♊ |
| evening rise | 10819 Jan 30 18:37 | 26°♊05'38 | | desc. node | 10821 Jul 16 21:18 | 17°♊14'36 |
| | 10819 Feb 02 22:35 | 0°♊ | | morning max el | 10821 Jul 28 22:16 | 28°♊43'27 |
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





























































































































| | | | | | | | |
|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 10822 Jan 24 09:17 | 0°≈ | | evening set | 10824 Jul 25 19:09 | 21°♄37'29 | |
| morning set | 10822 Jan 25 05:04 | 1°≈01'02 | | inferior conj | 10824 Jul 31 09:57 | 18°♄17'24 | 3°15'44 |
| | 10822 Feb 17 15:30 | 0°♄ | | minimum elong | 10824 Jul 31 17:07 | 18°♄06'23 | 3°13'08 |
| desc. node | 10822 Feb 26 10:00 | 10°♄52'29 | | min. Earth dist. | 10824 Jul 31 07:55 | 18°♄20'30 | 0.27178 AU |
| max. Earth dist. | 10822 Mar 01 15:19 | 14°♄52'24 | 1.72409 AU | morning rise | 10824 Aug 06 15:34 | 14°♄38'37 | |
| | | | | desc. node | 10824 Aug 13 07:59 | 11°♄45'42 | |
| superior conj | 10822 Mar 04 10:38 | 18°♄21'26 | -0°14'36 | direct | 10824 Aug 21 05:12 | 10°♄30'43 | |
| minimum elong | 10822 Mar 04 07:12 | 18°♄10'45 | 0°14'15 | greatest brilliancy | 10824 Aug 31 00:43 | 12°♄17'53 | -4.8m |
| behind sun begin | 10822 Mar 03 19:43 | 17°♄35'07 | | | 10824 Sep 27 05:33 | 0°♄ | |
| behind sun end | 10822 Mar 04 18:40 | 18°♄46'23 | | morning max el | 10824 Oct 09 15:07 | 11°♄24'26 | 46°05'17 |
| | 10822 Mar 13 19:22 | 0°♄ | | | 10824 Oct 27 21:02 | 0°♁ | |
| | 10822 Apr 06 20:54 | 0°♄ | | | 10824 Nov 24 01:45 | 0°♂ | |
| evening rise | 10822 Apr 12 15:42 | 7°♄13'37 | | asc. node | 10824 Dec 04 06:35 | 11°♂41'54 | |
| | 10822 Apr 30 20:44 | 0°♂ | | | 10824 Dec 19 22:50 | 0°♄ | |
| | 10822 May 24 20:35 | 0°♁ | | | 10825 Jan 14 02:29 | 0°♁ | |
| | 10822 Jun 17 23:00 | 0°♄ | | | 10825 Feb 07 19:27 | 0°≈ | |
| asc. node | 10822 Jun 19 04:54 | 1°♄32'39 | | | 10825 Mar 04 05:32 | 0°♄ | |
| | 10822 Jul 12 07:01 | 0°♄ | | desc. node | 10825 Mar 25 23:17 | 26°♄55'29 | |
| | 10822 Aug 06 00:41 | 0°♁ | | | 10825 Mar 28 10:39 | 0°♄ | |
| | 10822 Aug 31 11:27 | 0°♂ | | morning set | 10825 Apr 07 05:40 | 12°♄11'47 | |
| | 10822 Sep 27 08:49 | 0°♄ | | | 10825 Apr 21 11:46 | 0°♄ | |
| desc. node | 10822 Oct 09 02:39 | 12°♄11'14 | | | 10825 May 15 09:58 | 0°♂ | |
| evening max el | 10822 Oct 14 07:36 | 17°♄19'29 | 45°53'57 | max. Earth dist. | 10825 May 16 03:43 | 0°♂55'44 | 1.71361 AU |
| | 10822 Oct 28 06:45 | 0°♁ | | | | | |
| greatest brilliancy | 10822 Nov 22 09:18 | 15°♄47'22 | -4.7m | superior conj | 10825 May 17 14:21 | 2°♂44'27 | -1°27'13 |
| retrograde | 10822 Dec 02 08:30 | 17°♄35'19 | | minimum elong | 10825 May 17 11:46 | 2°♂36'20 | 1°27'42 |
| evening set | 10822 Dec 19 21:09 | 11°♄45'53 | | | 10825 Jun 08 06:59 | 0°♁ | |
| inferior conj | 10822 Dec 23 18:49 | 9°♄21'18 | -7°31'57 | evening rise | 10825 Jun 27 00:46 | 23°♁31'12 | |
| minimum elong | 10822 Dec 24 03:45 | 9°♄07'18 | 7°30'02 | | 10825 Jul 02 04:53 | 0°♄ | |
| min. Earth dist. | 10822 Dec 24 06:05 | 9°♄03'38 | 0.28932 AU | asc. node | 10825 Jul 16 17:14 | 18°♄08'46 | |
| morning rise | 10822 Dec 28 10:14 | 6°♄30'23 | | | 10825 Jul 26 05:29 | 0°♄ | |
| direct | 10823 Jan 14 05:48 | 1°♄04'35 | | | 10825 Aug 19 10:23 | 0°♁ | |
| greatest brilliancy | 10823 Jan 25 03:08 | 3°♄15'06 | -4.8m | | 10825 Sep 12 21:41 | 0°♂ | |
| asc. node | 10823 Jan 30 03:25 | 5°♄30'20 | | | 10825 Oct 07 19:04 | 0°♄ | |
| | 10823 Mar 02 08:23 | 0°≈ | | | 10825 Nov 02 08:57 | 0°♁ | |
| morning max el | 10823 Mar 04 20:29 | 2°≈26'56 | 46°08'40 | desc. node | 10825 Nov 05 13:07 | 3°♄38'38 | |
| | 10823 Mar 30 20:07 | 0°♄ | | | 10825 Nov 29 03:35 | 0°≈ | |
| | 10823 Apr 25 21:32 | 0°♄ | | evening max el | 10825 Dec 24 14:41 | 26°≈12'09 | 45°53'04 |
| | 10823 May 20 22:33 | 0°♄ | | | 10825 Dec 28 15:01 | 0°♄ | |
| desc. node | 10823 May 21 23:35 | 1°♄16'01 | | greatest brilliancy | 10826 Feb 01 19:26 | 24°♄40'58 | -4.8m |
| | 10823 Jun 14 10:51 | 0°♂ | | retrograde | 10826 Feb 11 13:28 | 26°♄25'38 | |
| | 10823 Jul 08 16:38 | 0°♁ | | evening set | 10826 Feb 26 05:03 | 22°♄15'23 | |
| | 10823 Aug 01 19:59 | 0°♄ | | asc. node | 10826 Feb 26 14:00 | 22°♄03'17 | |
| | 10823 Aug 25 23:17 | 0°♄ | | inferior conj | 10826 Mar 04 13:12 | 18°♄29'55 | 1°30'14 |
| morning set | 10823 Sep 06 09:27 | 14°♄10'52 | | minimum elong | 10826 Mar 04 09:47 | 18°♄35'14 | 1°29'20 |
| asc. node | 10823 Sep 11 17:24 | 20°♄47'47 | | min. Earth dist. | 10826 Mar 04 20:38 | 18°♄18'19 | 0.27730 AU |
| | 10823 Sep 19 03:28 | 0°♁ | | morning rise | 10826 Mar 10 13:55 | 14°♄53'01 | |
| | 10823 Oct 13 08:39 | 0°♂ | | direct | 10826 Mar 25 14:00 | 10°♄27'04 | |
| | | | | greatest brilliancy | 10826 Apr 05 03:57 | 12°♄32'01 | -4.8m |
| superior conj | 10823 Oct 14 08:19 | 1°♂13'13 | 1°08'31 | | 10826 May 01 04:33 | 0°♄ | |
| minimum elong | 10823 Oct 13 22:48 | 0°♂43'48 | 1°08'29 | morning max el | 10826 May 14 21:25 | 12°♄59'11 | 46°51'23 |
| max. Earth dist. | 10823 Oct 16 02:49 | 3°♂24'44 | 1.72895 AU | | 10826 May 31 01:48 | 0°♄ | |
| | 10823 Nov 06 15:06 | 0°♄ | | desc. node | 10826 Jun 18 12:00 | 20°♄42'05 | |
| evening rise | 10823 Nov 20 02:16 | 16°♄36'12 | | | 10826 Jun 26 12:30 | 0°♂ | |
| | 10823 Nov 30 23:37 | 0°♁ | | | 10826 Jul 21 19:05 | 0°♁ | |
| | 10823 Dec 25 11:05 | 0°≈ | | | 10826 Aug 15 13:56 | 0°♄ | |
| desc. node | 10824 Jan 01 10:14 | 8°≈30'18 | | | 10826 Sep 09 03:56 | 0°♄ | |
| | 10824 Jan 19 01:45 | 0°♄ | | | 10826 Oct 03 15:41 | 0°♁ | |
| | 10824 Feb 12 19:30 | 0°♄ | | asc. node | 10826 Oct 09 06:45 | 6°♁54'26 | |
| | 10824 Mar 08 17:23 | 0°♄ | | | 10826 Oct 28 01:44 | 0°♂ | |
| | 10824 Apr 03 00:04 | 0°♂ | | morning set | 10826 Nov 15 06:09 | 22°♂23'25 | |
| asc. node | 10824 Apr 23 08:27 | 23°♂28'08 | | | 10826 Nov 21 10:19 | 0°♄ | |
| | 10824 Apr 29 04:17 | 0°♁ | | | 10826 Dec 15 18:03 | 0°♁ | |
| evening max el | 10824 May 21 06:25 | 23°♁31'18 | 46°53'08 | | | | |
| | 10824 May 27 21:04 | 0°♄ | | superior conj | 10826 Dec 21 21:08 | 7°♄33'37 | 1°15'32 |
| greatest brilliancy | 10824 Jun 30 06:54 | 24°♄09'17 | -4.9m | minimum elong | 10826 Dec 22 05:18 | 7°♄58'48 | 1°15'56 |
| retrograde | 10824 Jul 10 15:20 | 26°♄09'14 | | max. Earth dist. | 10826 Dec 21 15:20 | 7°♄15'46 | 1.73200 AU |




























































































































| | | | | | | | |
|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 10827 Jan 09 01:43 | 0°≈ | | greatest brilliancy | 10829 Jun 15 20:46 | 25°♄28'19 | -4.9m |
| evening rise | 10827 Jan 28 10:29 | 23°≈53'05 | | | 10829 Jun 25 04:31 | 0°♄ | |
| desc. node | 10827 Jan 28 22:52 | 24°≈31'17 | | desc. node | 10829 Jul 15 23:15 | 16°♄13'21 | |
| | 10827 Feb 02 09:28 | 0°♄ | | morning max el | 10829 Jul 26 12:59 | 26°♄23'03 | 46°50'48 |
| | 10827 Feb 26 16:52 | 0°♄ | | | 10829 Jul 30 02:42 | 0°♄ | |
| | 10827 Mar 22 23:41 | 0°♄ | | | 10829 Aug 26 19:10 | 0°♄ | |
| | 10827 Apr 16 06:59 | 0°♄ | | | 10829 Sep 21 20:35 | 0°♄ | |
| | 10827 May 10 17:51 | 0°♄ | | | 10829 Oct 17 05:53 | 0°♄ | |
| asc. node | 10827 May 21 19:20 | 13°♄26'55 | | asc. node | 10829 Nov 05 19:53 | 23°♄28'00 | |
| | 10827 Jun 04 13:37 | 0°♄ | | | 10829 Nov 11 05:53 | 0°♄ | |
| | 10827 Jun 30 03:57 | 0°♄ | | | 10829 Dec 05 23:06 | 0°♄ | |
| | 10827 Jul 27 12:39 | 0°♄ | | | 10829 Dec 30 11:15 | 0°♄ | |
| evening max el | 10827 Aug 01 23:59 | 5°♄33'41 | 46°30'03 | morning set | 10830 Jan 22 21:41 | 28°♄51'29 | |
| | 10827 Aug 30 17:20 | 0°♄ | | | 10830 Jan 23 19:54 | 0°≈ | |
| greatest brilliancy | 10827 Sep 10 01:00 | 5°♄23'42 | -4.8m | | 10830 Feb 17 02:05 | 0°♄ | |
| desc. node | 10827 Sep 10 18:25 | 5°♄40'05 | | desc. node | 10830 Feb 25 11:50 | 10°♄25'17 | |
| retrograde | 10827 Sep 21 00:41 | 7°♄37'29 | | max. Earth dist. | 10830 Feb 27 08:18 | 12°♄43'14 | 1.72447 AU |
| evening set | 10827 Oct 07 07:43 | 2°♄31'18 | | | | | |
| | 10827 Oct 11 11:58 | 30°♄ | | superior conj | 10830 Mar 02 00:57 | 16°♄03'53 | -0°11'02 |
| min. Earth dist. | 10827 Oct 11 15:46 | 29°♄54'05 | 0.28506 AU | minimum elong | 10830 Mar 01 22:21 | 15°♄55'51 | 0°10'42 |
| inferior conj | 10827 Oct 12 10:40 | 29°♄24'36 | -6°50'05 | behind sun begin | 10830 Mar 01 03:57 | 14°♄58'41 | |
| minimum elong | 10827 Oct 12 00:36 | 29°♄40'18 | 6°47'56 | behind sun end | 10830 Mar 02 16:46 | 16°♄53'02 | |
| morning rise | 10827 Oct 16 17:48 | 26°♄47'01 | | | 10830 Mar 13 06:00 | 0°♄ | |
| direct | 10827 Nov 02 16:09 | 21°♄20'38 | | | 10830 Apr 06 07:39 | 0°♄ | |
| greatest brilliancy | 10827 Nov 12 09:13 | 23°♄02'33 | -4.7m | evening rise | 10830 Apr 10 04:48 | 4°♄50'55 | |
| | 10827 Nov 25 23:32 | 0°♄ | | | 10830 Apr 30 07:38 | 0°♄ | |
| morning max el | 10827 Dec 21 10:22 | 21°♄12'17 | 45°41'53 | | 10830 May 24 07:42 | 0°♄ | |
| | 10827 Dec 30 07:17 | 0°♄ | | | 10830 Jun 17 10:23 | 0°♄ | |
| asc. node | 10828 Jan 01 18:24 | 2°♄31'31 | | asc. node | 10830 Jun 18 06:54 | 1°♄03'31 | |
| | 10828 Jan 27 02:16 | 0°♄ | | | 10830 Jul 11 18:50 | 0°♄ | |
| | 10828 Feb 22 00:46 | 0°≈ | | | 10830 Aug 05 13:15 | 0°♄ | |
| | 10828 Mar 18 02:19 | 0°♄ | | | 10830 Aug 31 01:27 | 0°♄ | |
| | 10828 Apr 11 15:54 | 0°♄ | | | 10830 Sep 27 02:12 | 0°♄ | |
| desc. node | 10828 Apr 22 12:36 | 13°♄24'03 | | desc. node | 10830 Oct 08 04:35 | 11°♄25'21 | |
| | 10828 May 05 21:46 | 0°♄ | | evening max el | 10830 Oct 11 23:49 | 15°♄09'35 | 45°54'47 |
| | 10828 May 29 22:40 | 0°♄ | | | 10830 Oct 28 14:02 | 0°♄ | |
| morning set | 10828 Jun 21 21:39 | 28°♄46'31 | | greatest brilliancy | 10830 Nov 20 00:11 | 13°♄36'55 | -4.7m |
| | 10828 Jun 22 21:05 | 0°♄ | | retrograde | 10830 Nov 30 00:25 | 15°♄25'24 | |
| | 10828 Jul 16 19:18 | 0°♄ | | evening set | 10830 Dec 17 15:44 | 9°♄32'05 | |
| | | | | inferior conj | 10830 Dec 21 10:52 | 7°♄11'01 | -7°41'49 |
| superior conj | 10828 Jul 31 13:46 | 18°♄29'14 | -0°30'18 | minimum elong | 10830 Dec 21 19:23 | 6°♄57'37 | 7°40'02 |
| minimum elong | 10828 Jul 31 21:00 | 18°♄51'50 | 0°30'23 | min. Earth dist. | 10830 Dec 21 21:01 | 6°♄55'04 | 0.28955 AU |
| max. Earth dist. | 10828 Aug 03 02:58 | 21°♄40'28 | 1.71797 AU | morning rise | 10830 Dec 25 22:59 | 4°♄24'48 | |
| | 10828 Aug 09 18:58 | 0°♄ | | | 10831 Jan 04 13:42 | 30°♄ | |
| asc. node | 10828 Aug 13 06:01 | 4°♄19'04 | | direct | 10831 Jan 11 22:30 | 28°♄54'29 | |
| | 10828 Sep 02 21:00 | 0°♄ | | | 10831 Jan 19 13:07 | 0°♄ | |
| evening rise | 10828 Sep 08 11:05 | 6°♄56'13 | | greatest brilliancy | 10831 Jan 22 17:50 | 1°♄03'10 | -4.8m |
| | 10828 Sep 27 02:07 | 0°♄ | | asc. node | 10831 Jan 29 05:19 | 4°♄04'43 | |
| | 10828 Oct 21 11:31 | 0°♄ | | | 10831 Mar 02 06:23 | 0°≈ | |
| | 10828 Nov 15 03:07 | 0°♄ | | morning max el | 10831 Mar 02 12:04 | 0°≈14'00 | 46°07'09 |
| desc. node | 10828 Dec 03 00:23 | 21°♄30'48 | | | 10831 Mar 30 11:35 | 0°♄ | |
| | 10828 Dec 10 03:10 | 0°≈ | | | 10831 Apr 25 10:46 | 0°♄ | |
| | 10829 Jan 04 14:23 | 0°♄ | | | 10831 May 20 10:44 | 0°♄ | |
| | 10829 Jan 30 18:32 | 0°♄ | | desc. node | 10831 May 21 01:38 | 0°♄45'18 | |
| | 10829 Feb 27 10:40 | 0°♄ | | | 10831 Jun 13 22:27 | 0°♄ | |
| evening max el | 10829 Mar 06 15:40 | 7°♄17'10 | 46°27'57 | | 10831 Jul 08 03:52 | 0°♄ | |
| asc. node | 10829 Mar 26 00:11 | 24°♄50'35 | | | 10831 Aug 01 06:56 | 0°♄ | |
| | 10829 Apr 01 21:19 | 0°♄ | | | 10831 Aug 25 10:03 | 0°♄ | |
| greatest brilliancy | 10829 Apr 16 00:05 | 7°♄33'56 | -4.9m | morning set | 10831 Sep 04 00:13 | 11°♄54'40 | |
| retrograde | 10829 Apr 25 16:20 | 9°♄20'08 | | asc. node | 10831 Sep 10 19:14 | 20°♄20'28 | |
| evening set | 10829 May 13 14:52 | 3°♄11'05 | | | 10831 Sep 18 14:04 | 0°♄ | |
| inferior conj | 10829 May 16 08:19 | 1°♄31'15 | 9°08'43 | | | | |
| minimum elong | 10829 May 16 05:15 | 1°♄35'59 | 9°08'06 | superior conj | 10831 Oct 12 00:34 | 29°♄02'32 | 1°06'24 |
| min. Earth dist. | 10829 May 16 10:19 | 1°♄28'11 | 0.27252 AU | minimum elong | 10831 Oct 11 14:52 | 28°♄32'31 | 1°06'20 |
| morning rise | 10829 May 18 19:38 | 0°♄00'35 | | | 10831 Oct 12 19:08 | 0°♄ | |
| | 10829 May 18 20:01 | 30°♄ | | max. Earth dist. | 10831 Oct 13 22:18 | 1°♄24'04 | 1.72863 AU |
| direct | 10829 Jun 06 01:46 | 23°♄39'11 | | | 10831 Nov 06 01:34 | 0°♄ | |

| | | | | | | |
|---------------------|--------------------|-------------------------|------------|---------------------|-------------------------|--|
| evening rise | 10831 Nov 17 19:04 | 14° \nearrow 27'44 | | 10834 Jun 26 02:35 | 0° Π | |
| | 10831 Nov 30 10:11 | 0° \searrow | | 10834 Jul 21 07:41 | 0° \searrow | |
| | 10831 Dec 24 21:53 | 0° \approx | | 10834 Aug 15 01:41 | 0° Ω | |
| desc. node | 10831 Dec 31 12:12 | 8° \approx 03'08 | | 10834 Sep 08 15:08 | 0° \P | |
| | 10832 Jan 18 12:54 | 0° \times | | 10834 Oct 03 02:30 | 0° $\underline{\Omega}$ | |
| | 10832 Feb 12 07:11 | 0° Υ | | asc. node | 10834 Oct 08 08:42 | 6° $\underline{\Omega}$ 27'20 |
| | 10832 Mar 08 05:53 | 0° \mathcal{B} | | | 10834 Oct 27 12:19 | 0° \mathcal{M} |
| | 10832 Apr 02 13:58 | 0° Π | | morning set | 10834 Nov 12 22:57 | 20° \mathcal{M} 14'59 |
| asc. node | 10832 Apr 22 10:31 | 22° Π 49'02 | | | 10834 Nov 20 20:45 | 0° \nearrow |
| | 10832 Apr 28 21:08 | 0° \searrow | | | 10834 Dec 15 04:27 | 0° \searrow |
| evening max el | 10832 May 18 20:11 | 21° \searrow 09'20 | 46°52'53 | | | |
| | 10832 May 27 23:04 | 0° Ω | | superior conj | 10834 Dec 19 14:06 | 5° \searrow 25'52 |
| greatest brilliancy | 10832 Jun 27 22:13 | 21° Ω 48'37 | -4.9m | minimum elong | 10834 Dec 19 21:49 | 5° \searrow 49'42 |
| retrograde | 10832 Jul 08 04:26 | 23° Ω 46'31 | | max. Earth dist. | 10834 Dec 19 10:00 | 5° \searrow 13'15 |
| evening set | 10832 Jul 23 11:02 | 19° Ω 12'03 | | | 10835 Jan 08 12:09 | 0° \approx |
| inferior conj | 10832 Jul 28 23:12 | 15° Ω 55'30 | 3°37'59 | evening rise | 10835 Jan 26 02:09 | 21° \approx 41'03 |
| minimum elong | 10832 Jul 29 07:05 | 15° Ω 43'24 | 3°35'11 | desc. node | 10835 Jan 28 00:38 | 24° \approx 04'18 |
| min. Earth dist. | 10832 Jul 28 22:24 | 15° Ω 56'44 | 0.27160 AU | | 10835 Feb 01 20:02 | 0° \times |
| morning rise | 10832 Aug 04 03:29 | 12° Ω 18'04 | | | 10835 Feb 26 03:38 | 0° Υ |
| desc. node | 10832 Aug 12 09:55 | 8° Ω 57'26 | | | 10835 Mar 22 10:45 | 0° \mathcal{B} |
| direct | 10832 Aug 18 18:08 | 8° Ω 09'02 | | | 10835 Apr 15 18:30 | 0° Π |
| greatest brilliancy | 10832 Aug 28 14:19 | 9° Ω 56'30 | -4.8m | | 10835 May 10 05:57 | 0° \searrow |
| | 10832 Sep 27 10:43 | 0° \P | | asc. node | 10835 May 20 21:21 | 12° \searrow 55'16 |
| morning max el | 10832 Oct 07 04:07 | 9° \P 04'14 | 46°06'46 | | 10835 Jun 04 02:42 | 0° Ω |
| | 10832 Oct 27 14:22 | 0° $\underline{\Omega}$ | | | 10835 Jun 29 18:58 | 0° \P |
| | 10832 Nov 23 15:35 | 0° \mathcal{M} | | | 10835 Jul 27 08:41 | 0° $\underline{\Omega}$ |
| asc. node | 10832 Dec 03 08:37 | 11° \mathcal{M} 09'50 | | evening max el | 10835 Jul 30 14:42 | 3° $\underline{\Omega}$ 16'56 |
| | 10832 Dec 19 11:04 | 0° \nearrow | | | 10835 Sep 01 01:29 | 0° \mathcal{M} |
| | 10833 Jan 13 13:53 | 0° \searrow | | greatest brilliancy | 10835 Sep 07 15:44 | 3° \mathcal{M} 09'29 |
| | 10833 Feb 07 06:25 | 0° \approx | | desc. node | 10835 Sep 09 20:21 | 3° \mathcal{M} 56'15 |
| | 10833 Mar 03 16:17 | 0° \times | | retrograde | 10835 Sep 18 16:42 | 5° \mathcal{M} 24'47 |
| desc. node | 10833 Mar 25 01:10 | 26° \times 28'16 | | evening set | 10835 Oct 04 20:00 | 0° \mathcal{M} 22'57 |
| | 10833 Mar 27 21:17 | 0° Υ | | | 10835 Oct 05 11:55 | 30° \mathcal{R} $\underline{\Omega}$ |
| morning set | 10833 Apr 04 17:52 | 9° Υ 47'07 | | min. Earth dist. | 10835 Oct 09 06:39 | 27° $\underline{\Omega}$ 42'23 |
| | 10833 Apr 20 22:20 | 0° \mathcal{B} | | inferior conj | 10835 Oct 10 02:03 | 27° $\underline{\Omega}$ 12'12 |
| max. Earth dist. | 10833 May 13 08:08 | 28° \mathcal{B} 05'48 | 1.71377 AU | minimum elong | 10835 Oct 09 15:51 | 27° $\underline{\Omega}$ 28'05 |
| | 10833 May 14 20:31 | 0° Π | | morning rise | 10835 Oct 14 12:02 | 24° $\underline{\Omega}$ 30'52 |
| | | | | direct | 10835 Oct 31 07:04 | 19° $\underline{\Omega}$ 08'45 |
| superior conj | 10833 May 15 02:13 | 0° Π 17'54 | -1°26'43 | greatest brilliancy | 10835 Nov 10 00:00 | 20° $\underline{\Omega}$ 50'53 |
| minimum elong | 10833 May 14 22:35 | 0° Π 06'30 | 1°27'10 | | 10835 Nov 26 19:09 | 0° \mathcal{M} |
| | 10833 Jun 07 17:33 | 0° \searrow | | morning max el | 10835 Dec 19 02:01 | 19° \mathcal{M} 01'34 |
| evening rise | 10833 Jun 24 12:13 | 21° \searrow 03'20 | | | 10835 Dec 30 02:08 | 0° \nearrow |
| | 10833 Jul 01 15:31 | 0° Ω | | asc. node | 10835 Dec 31 20:17 | 1° \nearrow 48'59 |
| asc. node | 10833 Jul 15 19:05 | 17° Ω 41'13 | | | 10836 Jan 26 16:37 | 0° \searrow |
| | 10833 Jul 25 16:14 | 0° \P | | | 10836 Feb 21 13:21 | 0° \approx |
| | 10833 Aug 18 21:20 | 0° $\underline{\Omega}$ | | | 10836 Mar 17 14:02 | 0° \times |
| | 10833 Sep 12 09:00 | 0° \mathcal{M} | | | 10836 Apr 11 03:08 | 0° Υ |
| | 10833 Oct 07 07:04 | 0° \nearrow | | desc. node | 10836 Apr 21 14:35 | 12° Υ 55'45 |
| | 10833 Nov 01 22:15 | 0° \searrow | | | 10836 May 05 08:45 | 0° \mathcal{B} |
| desc. node | 10833 Nov 04 15:11 | 3° \searrow 05'56 | | | 10836 May 29 09:31 | 0° Π |
| | 10833 Nov 28 19:43 | 0° \approx | | morning set | 10836 Jun 19 09:20 | 26° Π 18'54 |
| evening max el | 10833 Dec 22 04:11 | 23° \approx 55'26 | 45°52'26 | | 10836 Jun 22 07:49 | 0° \searrow |
| | 10833 Dec 28 15:59 | 0° \times | | | 10836 Jul 16 05:57 | 0° Ω |
| greatest brilliancy | 10834 Jan 30 09:59 | 22° \times 24'57 | -4.8m | | | |
| retrograde | 10834 Feb 09 03:14 | 24° \times 09'23 | | superior conj | 10836 Jul 29 02:39 | 16° Ω 06'14 |
| evening set | 10834 Feb 23 19:32 | 19° \times 58'14 | | minimum elong | 10836 Jul 29 10:37 | 16° Ω 31'10 |
| asc. node | 10834 Feb 25 15:56 | 18° \times 56'21 | | max. Earth dist. | 10836 Jul 31 15:22 | 19° Ω 16'04 |
| inferior conj | 10834 Mar 02 03:41 | 16° \times 13'04 | 1°07'54 | | 10836 Aug 09 05:32 | 0° \P |
| minimum elong | 10834 Mar 02 01:06 | 16° \times 17'05 | 1°07'16 | asc. node | 10836 Aug 12 07:53 | 3° \P 51'56 |
| min. Earth dist. | 10834 Mar 02 12:09 | 15° \times 59'54 | 0.27766 AU | | 10836 Sep 02 07:33 | 0° $\underline{\Omega}$ |
| morning rise | 10834 Mar 08 05:59 | 12° \times 33'58 | | evening rise | 10836 Sep 06 02:28 | 4° $\underline{\Omega}$ 42'16 |
| direct | 10834 Mar 23 04:24 | 8° \times 09'21 | | | 10836 Sep 26 12:45 | 0° \mathcal{M} |
| greatest brilliancy | 10834 Apr 02 20:35 | 10° \times 16'19 | -4.8m | | 10836 Oct 20 22:22 | 0° \nearrow |
| | 10834 May 01 08:59 | 0° Υ | | | 10836 Nov 14 14:21 | 0° \searrow |
| morning max el | 10834 May 12 11:36 | 10° Υ 39'19 | 46°50'32 | desc. node | 10836 Dec 02 02:17 | 21° \searrow 01'37 |
| | 10834 May 30 19:05 | 0° \mathcal{B} | | | 10836 Dec 09 15:04 | 0° \approx |
| desc. node | 10834 Jun 17 13:54 | 20° \mathcal{B} 04'47 | | | 10837 Jan 04 03:27 | 0° \times |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 10837 Jan 30 09:49 | 0°Υ | | desc. node | 10839 May 20 03:34 | 0°Ϡ13'33 | |
| | 10837 Feb 27 07:16 | 0°Ϡ | | | 10839 Jun 13 10:13 | 0°Π | |
| evening max el | 10837 Mar 04 06:17 | 4°Ϡ58'34 | 46°26'38 | | 10839 Jul 07 15:15 | 0°Ϟ | |
| asc. node | 10837 Mar 25 02:16 | 23°Ϡ40'11 | | | 10839 Jul 31 18:04 | 0°Ω | |
| | 10837 Apr 03 01:52 | 0°Π | | | 10839 Aug 24 20:59 | 0°ϯ | |
| greatest brilliancy | 10837 Apr 13 11:57 | 5°Π08'37 | -4.9m | morning set | 10839 Sep 01 14:54 | 9°ϯ37'30 | |
| retrograde | 10837 Apr 23 05:42 | 6°Π55'35 | | asc. node | 10839 Sep 09 21:12 | 19°ϯ52'56 | |
| evening set | 10837 May 11 00:44 | 0°Π51'04 | | | 10839 Sep 18 00:53 | 0°ϱ | |
| | 10837 May 12 10:25 | 30°κϠ | | | | | |
| inferior conj | 10837 May 13 21:15 | 29°Ϡ06'28 | 9°04'54 | superior conj | 10839 Oct 09 16:54 | 26°ϱ51'19 | 1°04'12 |
| minimum elong | 10837 May 13 17:16 | 29°Ϡ12'36 | 9°04'12 | minimum elong | 10839 Oct 09 07:05 | 26°ϱ20'56 | 1°04'05 |
| min. Earth dist. | 10837 May 13 22:22 | 29°Ϡ04'46 | 0.27261 AU | max. Earth dist. | 10839 Oct 11 16:00 | 29°ϱ17'05 | 1.72830 AU |
| morning rise | 10837 May 16 09:49 | 27°Ϡ33'52 | | | 10839 Oct 12 05:52 | 0°ϯ | |
| direct | 10837 Jun 03 15:31 | 21°Ϡ14'22 | | | 10839 Nov 05 12:16 | 0°ϡ | |
| greatest brilliancy | 10837 Jun 13 09:08 | 23°Ϡ02'34 | -4.9m | evening rise | 10839 Nov 15 12:01 | 12°ϡ18'59 | |
| | 10837 Jun 26 11:49 | 0°Π | | | 10839 Nov 29 20:59 | 0°Ϣ | |
| desc. node | 10837 Jul 15 01:11 | 15°Π13'48 | | | 10839 Dec 24 08:55 | 0°≈ | |
| morning max el | 10837 Jul 24 03:09 | 24°Π01'38 | 46°51'47 | desc. node | 10839 Dec 30 14:04 | 7°≈34'56 | |
| | 10837 Jul 29 23:42 | 0°Ϟ | | | 10840 Jan 18 00:20 | 0°Ϡ | |
| | 10837 Aug 26 10:45 | 0°Ω | | | 10840 Feb 11 19:12 | 0°Υ | |
| | 10837 Sep 21 09:54 | 0°ϯ | | | 10840 Mar 07 18:48 | 0°Ϡ | |
| | 10837 Oct 16 18:00 | 0°ϱ | | | 10840 Apr 02 04:26 | 0°Π | |
| asc. node | 10837 Nov 04 21:54 | 22°ϱ59'20 | | asc. node | 10840 Apr 21 12:30 | 22°Π07'54 | |
| | 10837 Nov 10 17:17 | 0°ϯ | | | 10840 Apr 28 14:50 | 0°Ϟ | |
| | 10837 Dec 05 10:04 | 0°ϡ | | evening max el | 10840 May 16 08:55 | 18°Ϟ43'23 | 46°52'44 |
| | 10837 Dec 29 21:58 | 0°Ϣ | | | 10840 May 28 03:16 | 0°Ω | |
| morning set | 10838 Jan 20 14:13 | 26°Ϣ41'34 | | greatest brilliancy | 10840 Jun 25 13:36 | 19°Ω26'38 | -4.9m |
| | 10838 Jan 23 06:32 | 0°≈ | | retrograde | 10840 Jul 05 17:15 | 21°Ω22'39 | |
| | 10838 Feb 16 12:44 | 0°Ϡ | | evening set | 10840 Jul 21 03:00 | 16°Ω44'54 | |
| desc. node | 10838 Feb 24 13:46 | 9°Ϡ58'13 | | inferior conj | 10840 Jul 26 12:26 | 13°Ω32'21 | 3°59'49 |
| max. Earth dist. | 10838 Feb 24 22:32 | 10°Ϡ25'22 | 1.72486 AU | minimum elong | 10840 Jul 26 20:57 | 13°Ω19'16 | 3°56'51 |
| | | | | min. Earth dist. | 10840 Jul 26 12:57 | 13°Ω31'33 | 0.27141 AU |
| superior conj | 10838 Feb 27 15:07 | 13°Ϡ45'44 | -0°07'26 | morning rise | 10840 Aug 01 15:09 | 9°Ω56'41 | |
| minimum elong | 10838 Feb 27 13:24 | 13°Ϡ40'23 | 0°07'08 | desc. node | 10840 Aug 11 11:57 | 6°Ω13'18 | |
| behind sun begin | 10838 Feb 26 15:23 | 12°Ϡ32'05 | | direct | 10840 Aug 16 06:35 | 5°Ω45'54 | |
| behind sun end | 10838 Feb 28 11:25 | 14°Ϡ48'42 | | greatest brilliancy | 10840 Aug 26 04:12 | 7°Ω34'19 | -4.8m |
| | 10838 Mar 12 16:43 | 0°Υ | | | 10840 Sep 27 14:26 | 0°ϯ | |
| | 10838 Apr 05 18:28 | 0°Ϡ | | morning max el | 10840 Oct 04 17:05 | 6°ϯ42'48 | 46°08'19 |
| evening rise | 10838 Apr 07 17:38 | 2°Ϡ27'15 | | | 10840 Oct 27 07:39 | 0°ϱ | |
| | 10838 Apr 29 18:35 | 0°Π | | | 10840 Nov 23 05:37 | 0°ϯ | |
| | 10838 May 23 18:50 | 0°Ϟ | | asc. node | 10840 Dec 02 10:24 | 10°ϯ36'16 | |
| | 10838 Jun 16 21:50 | 0°Ω | | | 10840 Dec 18 23:34 | 0°ϡ | |
| asc. node | 10838 Jun 17 08:45 | 0°Ω33'47 | | | 10841 Jan 13 01:36 | 0°Ϣ | |
| | 10838 Jul 11 06:46 | 0°ϯ | | | 10841 Feb 06 17:43 | 0°≈ | |
| | 10838 Aug 05 01:57 | 0°ϱ | | | 10841 Mar 03 03:22 | 0°Ϡ | |
| | 10838 Aug 30 15:40 | 0°ϯ | | desc. node | 10841 Mar 24 03:10 | 26°Ϡ00'18 | |
| | 10838 Sep 26 20:06 | 0°ϡ | | | 10841 Mar 27 08:17 | 0°Υ | |
| desc. node | 10838 Oct 07 06:44 | 10°ϡ39'04 | | morning set | 10841 Apr 02 06:06 | 7°Υ21'24 | |
| evening max el | 10838 Oct 09 15:21 | 12°ϡ57'41 | 45°55'38 | | 10841 Apr 20 09:19 | 0°Ϡ | |
| | 10838 Oct 29 00:10 | 0°Ϣ | | max. Earth dist. | 10841 May 10 13:44 | 25°Ϡ18'13 | 1.71401 AU |
| greatest brilliancy | 10838 Nov 17 15:36 | 11°Ϣ26'58 | -4.7m | | | | |
| retrograde | 10838 Nov 27 15:54 | 13°Ϣ15'29 | | superior conj | 10841 May 12 13:45 | 27°Ϡ48'56 | -1°26'02 |
| evening set | 10838 Dec 15 10:15 | 7°Ϣ18'31 | | minimum elong | 10841 May 12 09:06 | 27°Ϡ34'20 | 1°26'28 |
| inferior conj | 10838 Dec 19 02:59 | 5°Ϣ00'49 | -7°50'52 | | 10841 May 14 07:30 | 0°Π | |
| minimum elong | 10838 Dec 19 11:03 | 4°Ϣ48'06 | 7°49'14 | | 10841 Jun 07 04:36 | 0°Ϟ | |
| min. Earth dist. | 10838 Dec 19 12:13 | 4°Ϣ46'15 | 0.28978 AU | evening rise | 10841 Jun 21 23:09 | 18°Ϟ32'28 | |
| morning rise | 10838 Dec 23 11:48 | 2°Ϣ19'09 | | | 10841 Jul 01 02:37 | 0°Ω | |
| | 10838 Dec 27 18:03 | 30°κϡ | | asc. node | 10841 Jul 14 20:57 | 17°Ω12'19 | |
| direct | 10839 Jan 09 14:55 | 26°ϡ44'23 | | | 10841 Jul 25 03:26 | 0°ϯ | |
| greatest brilliancy | 10839 Jan 20 08:54 | 28°ϡ51'25 | -4.8m | | 10841 Aug 18 08:43 | 0°ϱ | |
| | 10839 Jan 23 02:53 | 0°Ϣ | | | 10841 Sep 11 20:46 | 0°ϯ | |
| asc. node | 10839 Jan 28 07:18 | 2°Ϣ41'37 | | | 10841 Oct 06 19:33 | 0°ϡ | |
| morning max el | 10839 Feb 28 02:43 | 27°Ϣ58'09 | 46°05'31 | | 10841 Nov 01 12:07 | 0°Ϣ | |
| | 10839 Mar 02 03:48 | 0°≈ | | desc. node | 10841 Nov 03 17:06 | 2°Ϣ31'19 | |
| | 10839 Mar 30 03:07 | 0°Ϡ | | | 10841 Nov 28 12:38 | 0°≈ | |
| | 10839 Apr 25 00:12 | 0°Υ | | evening max el | 10841 Dec 19 18:15 | 21°≈39'08 | 45°51'55 |
| | 10839 May 19 23:07 | 0°Ϡ | | | 10841 Dec 28 18:51 | 0°Ϡ | |

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|---------------------|--------------------|-------------------------|------------|---------------------|--------------------|---------------------------|------------|
| greatest brilliancy | 10842 Jan 28 00:04 | 20° H 07'41 | -4.8m | superior conj | 10844 Jul 26 15:26 | 13° Ω 41'50 | -0°37'16 |
| retrograde | 10842 Feb 06 17:44 | 21° H 52'33 | | minimum elong | 10844 Jul 27 00:05 | 14° Ω 08'55 | 0°37'20 |
| evening set | 10842 Feb 21 10:20 | 17° H 40'09 | | max. Earth dist. | 10844 Jul 29 05:08 | 16° Ω 54'52 | 1.71729 AU |
| asc. node | 10842 Feb 24 17:58 | 15° H 46'19 | | | 10844 Aug 08 16:27 | 0° M | |
| inferior conj | 10842 Feb 27 18:15 | 13° H 55'26 | 0°45'34 | asc. node | 10844 Aug 11 09:54 | 3° M 24'10 | |
| minimum elong | 10842 Feb 27 16:30 | 13° H 58'09 | 0°45'14 | | 10844 Sep 01 18:30 | 0° Ω | |
| min. Earth dist. | 10842 Feb 28 03:23 | 13° H 41'15 | 0.27804 AU | evening rise | 10844 Sep 03 17:32 | 2° Ω 26'04 | |
| morning rise | 10842 Mar 05 22:00 | 10° H 14'36 | | | 10844 Sep 25 23:46 | 0° M | |
| direct | 10842 Mar 20 19:14 | 5° H 50'57 | | | 10844 Oct 20 09:34 | 0° H | |
| greatest brilliancy | 10842 Mar 31 12:43 | 7° H 59'23 | -4.8m | | 10844 Nov 14 01:55 | 0° Ω | |
| | 10842 May 01 12:08 | 0° Y | | desc. node | 10844 Dec 01 04:12 | 20° Ω 31'29 | |
| morning max el | 10842 May 10 02:41 | 8° Y 20'42 | 46°49'26 | | 10844 Dec 09 03:19 | 0° \approx | |
| | 10842 May 30 12:29 | 0° H | | | 10845 Jan 03 16:55 | 0° H | |
| desc. node | 10842 Jun 16 15:47 | 19° H 26'18 | | | 10845 Jan 30 01:37 | 0° Y | |
| | 10842 Jun 25 17:01 | 0° II | | | 10845 Feb 27 04:54 | 0° H | |
| | 10842 Jul 20 20:45 | 0° Ω | | evening max el | 10845 Mar 01 21:02 | 2° H 39'37 | 46°25'14 |
| | 10842 Aug 14 13:55 | 0° Ω | | asc. node | 10845 Mar 24 04:17 | 22° H 27'00 | |
| | 10842 Sep 08 02:48 | 0° M | | | 10845 Apr 04 19:28 | 0° II | |
| | 10842 Oct 02 13:45 | 0° Ω | | greatest brilliancy | 10845 Apr 11 00:39 | 2° II 44'07 | -4.9m |
| asc. node | 10842 Oct 07 10:38 | 5° Ω 58'54 | | retrograde | 10845 Apr 20 18:53 | 4° II 31'04 | |
| | 10842 Oct 26 23:17 | 0° M | | | 10845 May 05 21:40 | 30° R H | |
| morning set | 10842 Nov 10 15:43 | 18° M 05'12 | | evening set | 10845 May 08 10:27 | 28° H 32'03 | |
| | 10842 Nov 20 07:35 | 0° H | | inferior conj | 10845 May 11 10:26 | 26° H 42'02 | 9°00'04 |
| | 10842 Dec 14 15:16 | 0° Ω | | minimum elong | 10845 May 11 05:33 | 26° H 49'34 | 8°59'17 |
| | | | | min. Earth dist. | 10845 May 11 10:54 | 26° H 41'19 | 0.27266 AU |
| superior conj | 10842 Dec 17 07:11 | 3° Ω 17'12 | 1°18'29 | morning rise | 10845 May 14 00:39 | 25° H 06'45 | |
| minimum elong | 10842 Dec 17 14:26 | 3° Ω 39'34 | 1°18'56 | direct | 10845 Jun 01 05:11 | 18° H 50'01 | |
| max. Earth dist. | 10842 Dec 17 06:15 | 3° Ω 14'19 | 1.73216 AU | greatest brilliancy | 10845 Jun 10 21:56 | 20° H 37'20 | -4.9m |
| | 10843 Jan 07 23:00 | 0° \approx | | | 10845 Jun 27 10:23 | 0° II | |
| evening rise | 10843 Jan 23 18:07 | 19° \approx 28'39 | | desc. node | 10845 Jul 14 03:14 | 14° II 15'44 | |
| desc. node | 10843 Jan 27 02:37 | 23° \approx 36'44 | | morning max el | 10845 Jul 21 16:24 | 21° II 37'35 | 46°52'38 |
| | 10843 Feb 01 07:00 | 0° H | | | 10845 Jul 29 20:05 | 0° Ω | |
| | 10843 Feb 25 14:48 | 0° Y | | | 10845 Aug 26 02:13 | 0° Ω | |
| | 10843 Mar 21 22:14 | 0° H | | | 10845 Sep 20 23:19 | 0° M | |
| | 10843 Apr 15 06:24 | 0° II | | | 10845 Oct 16 06:17 | 0° Ω | |
| | 10843 May 09 18:30 | 0° Ω | | asc. node | 10845 Nov 03 23:42 | 22° Ω 29'23 | |
| asc. node | 10843 May 19 23:12 | 12° Ω 21'48 | | | 10845 Nov 10 04:52 | 0° M | |
| | 10843 Jun 03 16:21 | 0° Ω | | | 10845 Dec 04 21:12 | 0° H | |
| | 10843 Jun 29 10:44 | 0° M | | | 10845 Dec 29 08:51 | 0° Ω | |
| | 10843 Jul 27 06:06 | 0° Ω | | morning set | 10846 Jan 18 06:45 | 24° Ω 31'20 | |
| evening max el | 10843 Jul 28 06:22 | 1° Ω 00'49 | 46°32'51 | | 10846 Jan 22 17:18 | 0° \approx | |
| | 10843 Sep 03 03:41 | 0° M | | | 10846 Feb 15 23:30 | 0° H | |
| greatest brilliancy | 10843 Sep 05 06:23 | 0° M 53'15 | -4.8m | max. Earth dist. | 10846 Feb 22 12:38 | 8° H 06'53 | 1.72526 AU |
| desc. node | 10843 Sep 08 22:28 | 2° M 06'43 | | desc. node | 10846 Feb 23 15:42 | 9° H 30'50 | |
| retrograde | 10843 Sep 16 08:58 | 3° M 09'58 | | | | | |
| | 10843 Sep 28 23:03 | 30° R Ω | | superior conj | 10846 Feb 25 05:31 | 11° H 28'04 | -0°03'51 |
| evening set | 10843 Oct 02 08:18 | 28° Ω 12'36 | | minimum elong | 10846 Feb 25 04:39 | 11° H 25'22 | 0°03'35 |
| min. Earth dist. | 10843 Oct 06 21:09 | 25° Ω 29'02 | 0.28406 AU | behind sun begin | 10846 Feb 24 04:53 | 10° H 11'40 | |
| inferior conj | 10843 Oct 07 17:17 | 24° Ω 57'47 | -6°22'47 | behind sun end | 10846 Feb 26 04:24 | 12° H 39'04 | |
| minimum elong | 10843 Oct 07 06:59 | 25° Ω 13'46 | 6°20'26 | | 10846 Mar 12 03:34 | 0° Y | |
| morning rise | 10843 Oct 12 06:09 | 22° Ω 12'43 | | evening rise | 10846 Apr 05 06:45 | 0° H 04'10 | |
| direct | 10843 Oct 28 22:15 | 16° Ω 55'11 | | | 10846 Apr 05 05:25 | 0° H | |
| greatest brilliancy | 10843 Nov 07 14:00 | 18° Ω 36'49 | -4.7m | | 10846 Apr 29 05:40 | 0° II | |
| | 10843 Nov 27 10:19 | 0° M | | | 10846 May 23 06:05 | 0° Ω | |
| morning max el | 10843 Dec 16 17:45 | 16° M 50'01 | 45°41'51 | asc. node | 10846 Jun 16 10:43 | 0° Ω 04'12 | |
| | 10843 Dec 29 20:52 | 0° H | | | 10846 Jun 16 09:21 | 0° Ω | |
| asc. node | 10843 Dec 30 22:18 | 1° H 06'18 | | | 10846 Jul 10 18:44 | 0° M | |
| | 10844 Jan 26 07:10 | 0° Ω | | | 10846 Aug 04 14:44 | 0° Ω | |
| | 10844 Feb 21 02:12 | 0° \approx | | | 10846 Aug 30 06:03 | 0° M | |
| | 10844 Mar 17 02:02 | 0° H | | | 10846 Sep 26 14:29 | 0° H | |
| | 10844 Apr 10 14:41 | 0° Y | | desc. node | 10846 Oct 06 08:37 | 9° H 51'09 | |
| desc. node | 10844 Apr 20 16:28 | 12° Y 26'14 | | evening max el | 10846 Oct 07 06:05 | 10° H 43'30 | 45°56'22 |
| | 10844 May 04 20:02 | 0° H | | | 10846 Oct 29 14:02 | 0° Ω | |
| | 10844 May 28 20:38 | 0° II | | greatest brilliancy | 10846 Nov 15 07:28 | 9° Ω 17'05 | -4.7m |
| morning set | 10844 Jun 16 21:16 | 23° II 51'13 | | retrograde | 10846 Nov 25 07:14 | 11° Ω 05'29 | |
| | 10844 Jun 21 18:50 | 0° Ω | | evening set | 10846 Dec 13 04:38 | 5° Ω 05'03 | |
| | 10844 Jul 15 16:53 | 0° Ω | | inferior conj | 10846 Dec 16 19:09 | 2° Ω 50'36 | -7°59'08 |

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|---------------------|--------------------|---|------------|---------------------|--|--------------------|---|------------|--|
| minimum elong | 10846 Dec 17 02:43 | 2°  38'42 | 7°57'40 | | | 10849 Jun 06 15:21 | 0°  | | |
| min. Earth dist. | 10846 Dec 17 03:46 | 2°  37'03 | 0.28998 AU | evening rise | | 10849 Jun 19 10:10 | 16°  02'46 | | |
| morning rise | 10846 Dec 21 00:43 | 0°  13'32 | | | | 10849 Jun 30 13:27 | 0°  | | |
| | 10846 Dec 21 09:52 | 30°  R  | | asc. node | | 10849 Jul 13 22:58 | 16°  044'42 | | |
| direct | 10847 Jan 07 06:52 | 24°  34'13 | | | | 10849 Jul 24 14:22 | 0°  | | |
| greatest brilliancy | 10847 Jan 18 00:32 | 26°  340'21 | -4.8m | | | 10849 Aug 17 19:50 | 0°  | | |
| | 10847 Jan 25 01:58 | 0°  | | | | 10849 Sep 11 08:15 | 0°  | | |
| asc. node | 10847 Jan 27 09:20 | 1°  321'07 | | | | 10849 Oct 06 07:45 | 0°  | | |
| morning max el | 10847 Feb 25 16:49 | 25°  341'01 | 46°04'02 | | | 10849 Nov 01 01:43 | 0°  | | |
| | 10847 Mar 02 00:25 | 0°  | | desc. node | | 10849 Nov 02 19:03 | 1°  357'42 | | |
| | 10847 Mar 29 18:21 | 0°  | | | | 10849 Nov 28 05:28 | 0°  | | |
| | 10847 Apr 24 13:27 | 0°  | | evening max el | | 10849 Dec 17 09:10 | 19°  26'10 | 45°51'19 | |
| desc. node | 10847 May 19 05:22 | 29°  Y41'44 | | | | 10849 Dec 28 22:57 | 0°  | | |
| | 10847 May 19 11:22 | 0°  | | greatest brilliancy | | 10850 Jan 25 13:54 | 17°  351'20 | -4.8m | |
| | 10847 Jun 12 21:54 | 0°  | | retrograde | | 10850 Feb 04 08:36 | 19°  36'43 | | |
| | 10847 Jul 07 02:32 | 0°  | | evening set | | 10850 Feb 19 01:25 | 15°  323'03 | | |
| | 10847 Jul 31 05:04 | 0°  | | asc. node | | 10850 Feb 23 19:57 | 12°  335'53 | | |
| | 10847 Aug 24 07:47 | 0°  | | inferior conj | | 10850 Feb 25 08:50 | 11°  338'50 | 0°23'15 | |
| morning set | 10847 Aug 30 05:51 | 7°  321'28 | | minimum elong | | 10850 Feb 25 07:57 | 11°  340'14 | 0°23'12 | |
| asc. node | 10847 Sep 08 23:04 | 19°  323'36 | | min. Earth dist. | | 10850 Feb 25 18:24 | 11°  324'00 | 0.27844 AU | |
| | 10847 Sep 17 11:31 | 0°  | | morning rise | | 10850 Mar 03 13:52 | 7°  356'31 | | |
| | | | | direct | | 10850 Mar 18 10:34 | 3°  333'46 | | |
| superior conj | 10847 Oct 07 09:27 | 24°  341'14 | 1°01'54 | greatest brilliancy | | 10850 Mar 29 04:23 | 5°  342'59 | -4.8m | |
| minimum elong | 10847 Oct 06 23:34 | 24°  310'40 | 1°01'45 | | | 10850 May 01 13:23 | 0°  | | |
| max. Earth dist. | 10847 Oct 09 08:25 | 27°  306'37 | 1.72801 AU | morning max el | | 10850 May 07 18:22 | 6°  304'46 | 46°48'17 | |
| | 10847 Oct 11 16:26 | 0°  | | | | 10850 May 30 05:08 | 0°  | | |
| | 10847 Nov 04 22:51 | 0°  | | desc. node | | 10850 Jun 15 17:53 | 18°  349'57 | | |
| evening rise | 10847 Nov 13 05:06 | 10°  311'04 | | | | 10850 Jun 25 06:54 | 0°  | | |
| | 10847 Nov 29 07:42 | 0°  | | | | 10850 Jul 20 09:19 | 0°  | | |
| | 10847 Dec 23 19:52 | 0°  | | | | 10850 Aug 14 01:42 | 0°  | | |
| desc. node | 10847 Dec 29 16:03 | 7°  307'24 | | | | 10850 Sep 07 14:03 | 0°  | | |
| | 10848 Jan 17 11:40 | 0°  | | | | 10850 Oct 02 00:37 | 0°  | | |
| | 10848 Feb 11 07:07 | 0°  | | asc. node | | 10850 Oct 06 12:27 | 5°  301'16 | | |
| | 10848 Mar 07 07:38 | 0°  | | | | 10850 Oct 26 09:54 | 0°  | | |
| | 10848 Apr 01 18:54 | 0°  | | morning set | | 10850 Nov 08 08:41 | 15°  305'12 | | |
| asc. node | 10848 Apr 20 14:23 | 21°  302'35 | | | | 10850 Nov 19 18:03 | 0°  | | |
| | 10848 Apr 28 08:45 | 0°  | | | | 10850 Dec 14 01:40 | 0°  | | |
| evening max el | 10848 May 13 21:08 | 16°  316'44 | 46°52'31 | | | | | | |
| | 10848 May 28 09:11 | 0°  | | superior conj | | 10850 Dec 15 00:28 | 1°  310'20 | 1°19'47 | |
| greatest brilliancy | 10848 Jun 23 04:46 | 17°  304'49 | -4.9m | minimum elong | | 10850 Dec 15 07:13 | 1°  331'10 | 1°20'15 | |
| retrograde | 10848 Jul 03 06:25 | 18°  3059'35 | | max. Earth dist. | | 10850 Dec 15 03:49 | 1°  320'40 | 1.73220 AU | |
| evening set | 10848 Jul 18 19:04 | 14°  3017'59 | | | | 10851 Jan 07 09:28 | 0°  | | |
| inferior conj | 10848 Jul 24 01:39 | 11°  3009'46 | 4°21'09 | evening rise | | 10851 Jan 21 10:12 | 17°  3017'47 | | |
| minimum elong | 10848 Jul 24 10:45 | 10°  3055'48 | 4°18'04 | desc. node | | 10851 Jan 26 04:36 | 23°  3010'16 | | |
| min. Earth dist. | 10848 Jul 24 03:26 | 11°  3007'03 | 0.27126 AU | | | 10851 Jan 31 17:36 | 0°  | | |
| morning rise | 10848 Jul 30 02:36 | 7°  3036'28 | | | | 10851 Feb 25 01:39 | 0°  | | |
| desc. node | 10848 Aug 10 13:57 | 3°  3035'32 | | | | 10851 Mar 21 09:24 | 0°  | | |
| direct | 10848 Aug 13 18:58 | 3°  3023'10 | | | | 10851 Apr 14 18:01 | 0°  | | |
| greatest brilliancy | 10848 Aug 23 18:08 | 5°  3012'53 | -4.8m | | | 10851 May 09 06:46 | 0°  | | |
| | 10848 Sep 27 16:12 | 0°  | | asc. node | | 10851 May 19 01:13 | 11°  3049'43 | | |
| morning max el | 10848 Oct 02 06:43 | 4°  3023'48 | 46°10'02 | | | 10851 Jun 03 05:43 | 0°  | | |
| | 10848 Oct 27 00:14 | 0°  | | | | 10851 Jun 29 02:22 | 0°  | | |
| | 10848 Nov 22 19:10 | 0°  | | evening max el | | 10851 Jul 25 22:19 | 28°  3046'25 | 46°34'06 | |
| asc. node | 10848 Dec 01 12:25 | 10°  3004'24 | | | | 10851 Jul 27 03:54 | 0°  | | |
| | 10848 Dec 18 11:44 | 0°  | | greatest brilliancy | | 10851 Sep 02 21:20 | 28°  3038'06 | -4.8m | |
| | 10849 Jan 12 13:02 | 0°  | | | | 10851 Sep 07 02:01 | 0°  | | |
| | 10849 Feb 06 04:46 | 0°  | | desc. node | | 10851 Sep 08 00:24 | 0°  | | |
| | 10849 Mar 02 14:13 | 0°  | | retrograde | | 10851 Sep 14 01:00 | 0°  | | |
| desc. node | 10849 Mar 23 05:00 | 25°  3032'40 | | | | 10851 Sep 20 18:32 | 30°  30R  | | |
| | 10849 Mar 26 19:01 | 0°  | | evening set | | 10851 Sep 29 20:33 | 26°  3002'38 | | |
| morning set | 10849 Mar 30 18:27 | 4°  30Y57'00 | | min. Earth dist. | | 10851 Oct 04 11:35 | 23°  3015'55 | 0.28350 AU | |
| | 10849 Apr 19 19:59 | 0°  | | inferior conj | | 10851 Oct 05 08:17 | 22°  3043'46 | -6°08'07 | |
| max. Earth dist. | 10849 May 07 23:12 | 22°  3043'41 | 1.71427 AU | minimum elong | | 10851 Oct 04 22:00 | 22°  3059'45 | 6°05'41 | |
| | | | | morning rise | | 10851 Oct 10 00:01 | 19° 3045'50 | | |
| superior conj | 10849 May 10 01:16 | 25° 3020'50 | -1°25'11 | direct | | 10851 Oct 26 13:26 | 14° 3042'10 | | |
| minimum elong | 10849 May 09 19:40 | 25° 3003'15 | 1°25'35 | greatest brilliancy | | 10851 Nov 05 03:25 | 16° 3022'40 | -4.7m | |
| | 10849 May 13 18:12 | 0° | | | | 10851 Nov 27 21:08 | 0° | | |

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|---------------------|--------------------|--|------------|---------------------|--|--------------------|---|------------|--|
| morning max el | 10851 Dec 14 08:57 | 14°  38'16 | 45°42'00 | | | 10854 May 22 17:08 | 0°  | | |
| | 10851 Dec 29 14:41 | 0°  | | asc. node | | 10854 Jun 15 12:42 | 29°  35'06 | | |
| asc. node | 10851 Dec 30 00:18 | 0°  25'17 | | | | 10854 Jun 15 20:45 | 0°  | | |
| | 10852 Jan 25 21:06 | 0°  | | | | 10854 Jul 10 06:37 | 0°  | | |
| | 10852 Feb 20 14:33 | 0°  | | | | 10854 Aug 04 03:29 | 0°  | | |
| | 10852 Mar 16 13:36 | 0°  | | | | 10854 Aug 29 20:29 | 0°  | | |
| | 10852 Apr 10 01:51 | 0°  | | | | 10854 Sep 26 09:14 | 0°  | | |
| desc. node | 10852 Apr 19 18:21 | 11°  57'49 | | evening max el | | 10854 Oct 04 19:59 | 8°  27'36 | 45°57'16 | |
| | 10852 May 04 06:59 | 0°  | | desc. node | | 10854 Oct 05 10:36 | 9°  20'03 | | |
| | 10852 May 28 07:27 | 0°  | | | | 10854 Oct 30 08:32 | 0°  | | |
| morning set | 10852 Jun 14 08:48 | 21°  23'14 | | greatest brilliancy | | 10854 Nov 12 22:56 | 7°  06'58 | -4.7m | |
| | 10852 Jun 21 05:32 | 0°  | | retrograde | | 10854 Nov 22 22:38 | 8°  55'46 | | |
| | 10852 Jul 15 03:30 | 0°  | | evening set | | 10854 Dec 10 22:44 | 2°  51'45 | | |
| | | | | inferior conj | | 10854 Dec 14 11:12 | 0°  40'30 | -8°06'50 | |
| superior conj | 10852 Jul 24 03:53 | 11°  17'27 | -0°40'40 | minimum elong | | 10854 Dec 14 18:11 | 0°  29'29 | 8°05'29 | |
| minimum elong | 10852 Jul 24 13:10 | 11°  46'31 | 0°40'45 | min. Earth dist. | | 10854 Dec 14 19:13 | 0°  27'53 | 0.29018 AU | |
| max. Earth dist. | 10852 Jul 26 19:22 | 14°  36'07 | 1.71693 AU | | | 10854 Dec 15 12:55 | 30°  18'27 | | |
| | 10852 Aug 08 03:01 | 0°  | | morning rise | | 10854 Dec 18 13:33 | 28°  28'09 | | |
| asc. node | 10852 Aug 10 11:42 | 2°  56'51 | | direct | | 10855 Jan 04 22:23 | 22°  23'56 | | |
| evening rise | 10852 Sep 01 08:20 | 0°  10'05 | | greatest brilliancy | | 10855 Jan 15 16:26 | 24°  29'51 | -4.8m | |
| | 10852 Sep 01 05:05 | 0°  | | asc. node | | 10855 Jan 26 11:17 | 0°  30'09 | | |
| | 10852 Sep 25 10:28 | 0°  | | | | 10855 Jan 26 09:18 | 0°  | | |
| | 10852 Oct 19 20:27 | 0°  | | morning max el | | 10855 Feb 23 07:25 | 23°  25'33 | 46°02'47 | |
| | 10852 Nov 13 13:11 | 0°  | | | | 10855 Mar 01 20:13 | 0°  | | |
| desc. node | 10852 Nov 30 06:15 | 20°  02'40 | | | | 10855 Mar 29 09:12 | 0°  | | |
| | 10852 Dec 08 15:16 | 0°  | | | | 10855 Apr 24 02:24 | 0°  | | |
| | 10853 Jan 03 06:07 | 0°  | | desc. node | | 10855 May 18 07:27 | 29°  11'27 | | |
| | 10853 Jan 29 17:15 | 0°  | | | | 10855 May 18 23:23 | 0°  | | |
| | 10853 Feb 27 02:56 | 0°  | | | | 10855 Jun 12 09:22 | 0°  | | |
| evening max el | 10853 Feb 27 10:48 | 0°  19'25 | 46°23'42 | | | 10855 Jul 06 13:41 | 0°  | | |
| asc. node | 10853 Mar 23 06:10 | 21°  12'15 | | | | 10855 Jul 30 16:00 | 0°  | | |
| | 10853 Apr 07 14:53 | 0°  | | | | 10855 Aug 23 18:33 | 0°  | | |
| greatest brilliancy | 10853 Apr 08 13:44 | 0°  20'48 | -4.9m | morning set | | 10855 Aug 27 20:19 | 5°  20'57 | | |
| retrograde | 10853 Apr 18 07:24 | 2°  07'06 | | asc. node | | 10855 Sep 08 00:56 | 18°  28'18 | | |
| | 10853 Apr 28 12:43 | 30°  18'08 | | | | 10855 Sep 16 22:09 | 0°  | | |
| evening set | 10853 May 05 19:42 | 26°  14'07 | | | | | | | |
| inferior conj | 10853 May 08 23:31 | 24°  18'11 | 8°54'17 | superior conj | | 10855 Oct 05 01:32 | 22°  29'46 | 0°59'29 | |
| minimum elong | 10853 May 08 17:46 | 24°  27'06 | 8°53'21 | minimum elong | | 10855 Oct 04 15:38 | 21°  29'07 | 0°59'17 | |
| min. Earth dist. | 10853 May 08 23:45 | 24°  17'50 | 0.27275 AU | max. Earth dist. | | 10855 Oct 06 23:13 | 24°  29'15 | 1.72769 AU | |
| morning rise | 10853 May 11 15:49 | 22°  39'32 | | | | 10855 Oct 11 02:58 | 0°  | | |
| direct | 10853 May 29 18:14 | 16°  26'00 | | | | 10855 Nov 04 09:24 | 0°  | | |
| greatest brilliancy | 10853 Jun 08 11:24 | 18°  13'11 | -4.9m | evening rise | | 10855 Nov 10 21:56 | 8°  20'29 | | |
| | 10853 Jun 28 02:54 | 0°  | | | | 10855 Nov 28 18:23 | 0°  | | |
| desc. node | 10853 Jul 13 05:13 | 13°  19'12 | | | | 10855 Dec 23 06:49 | 0°  | | |
| morning max el | 10853 Jul 19 04:50 | 19°  11'51 | 46°53'30 | desc. node | | 10855 Dec 28 17:59 | 6°  39'42 | | |
| | 10853 Jul 29 15:38 | 0°  | | | | 10856 Jan 16 23:02 | 0°  | | |
| | 10853 Aug 25 17:14 | 0°  | | | | 10856 Feb 10 19:05 | 0°  | | |
| | 10853 Sep 20 12:21 | 0°  | | | | 10856 Mar 06 20:31 | 0°  | | |
| | 10853 Oct 15 18:14 | 0°  | | | | 10856 Apr 01 09:26 | 0°  | | |
| asc. node | 10853 Nov 03 01:40 | 22°  20'53 | | asc. node | | 10856 Apr 19 16:29 | 20°  29'47 | | |
| | 10853 Nov 09 16:09 | 0°  | | | | 10856 Apr 28 02:59 | 0°  | | |
| | 10853 Dec 04 08:04 | 0°  | | evening max el | | 10856 May 11 09:49 | 13°  25'52 | 46°52'22 | |
| | 10853 Dec 28 19:28 | 0°  | | | | 10856 May 28 17:16 | 0°  | | |
| morning set | 10854 Jan 15 23:23 | 22°  22'08 | | greatest brilliancy | | 10856 Jun 20 19:08 | 14°  42'24 | -4.9m | |
| | 10854 Jan 22 03:49 | 0°  | | retrograde | | 10856 Jun 30 19:59 | 16°  42'46 | | |
| | 10854 Feb 15 10:00 | 0°  | | evening set | | 10856 Jul 16 11:12 | 11°  45'04 | | |
| max. Earth dist. | 10854 Feb 20 03:40 | 5°  52'11 | 1.72564 AU | inferior conj | | 10856 Jul 21 14:51 | 8°  47'03 | 4°42'05 | |
| | | | | minimum elong | | 10856 Jul 22 00:28 | 8°  42'19 | 4°38'54 | |
| superior conj | 10854 Feb 22 20:08 | 9°  12'03 | -0°00'16 | min. Earth dist. | | 10856 Jul 21 17:30 | 8°  42'59 | 0.27119 AU | |
| minimum elong | 10854 Feb 22 20:09 | 9°  12'04 | 0°00'00 | morning rise | | 10856 Jul 27 13:50 | 5°  42'39 | | |
| behind sun begin | 10854 Feb 22 12:22 | 8°  47'55 | | desc. node | | 10856 Aug 09 15:54 | 1°  42'29 | | |
| behind sun end | 10854 Feb 23 03:56 | 9°  36'12 | | direct | | 10856 Aug 11 07:44 | 1°  42'10 | | |
| desc. node | 10854 Feb 22 17:33 | 9°  03'58 | | greatest brilliancy | | 10856 Aug 21 07:41 | 2°  42'53 | -4.8m | |
| | 10854 Mar 11 14:07 | 0° | | | | 10856 Sep 27 16:47 | 0° | | |
| evening rise | 10854 Apr 02 20:07 | 27° 09'42'52 | | morning max el | | 10856 Sep 29 21:23 | 2° 42'51 | 46°11'38 | |
| | 10854 Apr 04 16:05 | 0° | | | | 10856 Oct 26 16:39 | 0° | | |
| | 10854 Apr 28 16:29 | 0° | | | | 10856 Nov 22 08:44 | 0° | | |

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|---------------------|--------------------|-------------------------|---------------------|---------------------|-------------------------|-------------------------|------------|
| asc. node | 10856 Nov 30 14:26 | 9° \mathbb{M} 32'20 | | 10859 Jun 02 19:31 | 0° \mathcal{O} | | |
| | 10856 Dec 17 23:56 | 0° \mathcal{A} | | 10859 Jun 28 18:31 | 0° \mathbb{M} | | |
| | 10857 Jan 12 00:31 | 0° \mathcal{Z} | evening max el | 10859 Jul 23 14:17 | 26° \mathbb{M} 31'24 | 46°35'26 | |
| | 10857 Feb 05 15:53 | 0° \approx | | 10859 Jul 27 02:49 | 0° \mathcal{A} | | |
| | 10857 Mar 02 01:08 | 0° \mathcal{H} | greatest brilliancy | 10859 Aug 31 13:06 | 26° \mathcal{A} 23'44 | -4.8m | |
| desc. node | 10857 Mar 22 06:53 | 25° \mathcal{H} 04'53 | desc. node | 10859 Sep 07 02:20 | 28° \mathcal{A} 16'05 | | |
| | 10857 Mar 26 05:50 | 0° \mathcal{Y} | retrograde | 10859 Sep 11 16:48 | 28° \mathcal{A} 40'37 | | |
| morning set | 10857 Mar 28 06:55 | 2° \mathcal{Y} 32'42 | evening set | 10859 Sep 27 09:14 | 23° \mathcal{A} 52'35 | | |
| | 10857 Apr 19 06:46 | 0° \mathcal{B} | min. Earth dist. | 10859 Oct 02 02:35 | 21° \mathcal{A} 02'25 | 0.28294 AU | |
| max. Earth dist. | 10857 May 05 10:28 | 20° \mathcal{B} 14'35 | 1.71447 AU | inferior conj | 10859 Oct 02 23:31 | 20° \mathcal{A} 29'52 | -5°52'55 |
| | | | | minimum elong | 10859 Oct 02 13:19 | 20° \mathcal{A} 45'44 | 5°50'26 |
| superior conj | 10857 May 07 12:56 | 22° \mathcal{B} 52'58 | -1°24'11 | morning rise | 10859 Oct 07 18:02 | 17° \mathcal{A} 36'55 | |
| minimum elong | 10857 May 07 06:25 | 22° \mathcal{B} 32'31 | 1°24'32 | direct | 10859 Oct 24 04:44 | 12° \mathcal{A} 29'20 | |
| | 10857 May 13 04:59 | 0° \mathbb{I} | | greatest brilliancy | 10859 Nov 02 17:18 | 14° \mathcal{A} 08'39 | -4.7m |
| | 10857 Jun 06 02:09 | 0° \mathcal{G} | | | 10859 Nov 28 05:15 | 0° \mathbb{M} | |
| evening rise | 10857 Jun 16 21:30 | 13° \mathcal{G} 33'53 | | morning max el | 10859 Dec 11 23:31 | 12° \mathbb{M} 24'14 | 45°42'01 |
| | 10857 Jun 30 00:19 | 0° \mathcal{O} | | asc. node | 10859 Dec 29 02:09 | 29° \mathbb{M} 43'33 | |
| asc. node | 10857 Jul 13 00:48 | 16° \mathcal{O} 16'22 | | | 10859 Dec 29 08:23 | 0° \mathcal{A} | |
| | 10857 Jul 24 01:21 | 0° \mathbb{M} | | | 10860 Jan 25 11:14 | 0° \mathcal{Z} | |
| | 10857 Aug 17 07:03 | 0° \mathcal{A} | | | 10860 Feb 20 03:10 | 0° \approx | |
| | 10857 Sep 10 19:53 | 0° \mathbb{M} | | | 10860 Mar 16 01:28 | 0° \mathcal{H} | |
| | 10857 Oct 05 20:10 | 0° \mathcal{A} | | | 10860 Apr 09 13:20 | 0° \mathcal{Y} | |
| | 10857 Oct 31 15:40 | 0° \mathcal{Z} | desc. node | 10860 Apr 18 20:19 | 11° \mathcal{Y} 28'44 | | |
| desc. node | 10857 Nov 01 21:06 | 1° \mathcal{Z} 23'34 | | | 10860 May 03 18:15 | 0° \mathcal{B} | |
| | 10857 Nov 27 22:56 | 0° \approx | | | 10860 May 27 18:34 | 0° \mathbb{I} | |
| evening max el | 10857 Dec 15 00:50 | 17° \approx 14'25 | 45°50'50 | morning set | 10860 Jun 11 20:11 | 18° \mathbb{I} 53'45 | |
| | 10857 Dec 29 05:23 | 0° \mathcal{H} | | | 10860 Jun 20 16:33 | 0° \mathcal{G} | |
| greatest brilliancy | 10858 Jan 23 03:47 | 15° \mathcal{H} 34'36 | -4.8m | | 10860 Jul 14 14:27 | 0° \mathcal{O} | |
| retrograde | 10858 Feb 01 23:14 | 17° \mathcal{H} 20'06 | | | | | |
| evening set | 10858 Feb 16 16:42 | 13° \mathcal{H} 05'13 | | superior conj | 10860 Jul 21 16:26 | 8° \mathcal{O} 52'17 | -0°44'01 |
| inferior conj | 10858 Feb 22 23:23 | 9° \mathcal{H} 21'33 | 0°00'56 | minimum elong | 10860 Jul 22 02:17 | 9° \mathcal{O} 23'06 | 0°44'04 |
| minimum elong | 10858 Feb 22 23:20 | 9° \mathcal{H} 21'37 | 0°01'11 | max. Earth dist. | 10860 Jul 24 07:20 | 12° \mathcal{O} 09'10 | 1.71652 AU |
| transit middle | 10858 Feb 22 23:20 | 9° \mathcal{H} 21'37 | 0°01'11 | | 10860 Aug 07 13:55 | 0° \mathbb{M} | |
| transit begin | 10858 Feb 22 19:17 | 9° \mathcal{H} 27'54 | | asc. node | 10860 Aug 09 13:36 | 2° \mathbb{M} 28'47 | |
| transit end | 10858 Feb 23 03:23 | 9° \mathcal{H} 15'20 | | evening rise | 10860 Aug 29 23:14 | 27° \mathbb{M} 53'24 | |
| asc. node | 10858 Feb 22 21:53 | 9° \mathcal{H} 23'52 | | | 10860 Aug 31 15:59 | 0° \mathcal{A} | |
| min. Earth dist. | 10858 Feb 23 09:16 | 9° \mathcal{H} 06'12 | 0.27882 AU | | 10860 Sep 24 21:25 | 0° \mathbb{M} | |
| morning rise | 10858 Mar 01 05:29 | 5° \mathcal{H} 37'51 | | | 10860 Oct 19 07:36 | 0° \mathcal{A} | |
| direct | 10858 Mar 16 02:09 | 1° \mathcal{H} 16'02 | | | 10860 Nov 13 00:45 | 0° \mathcal{Z} | |
| greatest brilliancy | 10858 Mar 26 19:34 | 3° \mathcal{H} 25'13 | -4.8m | desc. node | 10860 Nov 29 08:07 | 19° \mathcal{Z} 32'23 | |
| | 10858 May 01 13:42 | 0° \mathcal{Y} | | | 10860 Dec 08 03:36 | 0° \approx | |
| morning max el | 10858 May 05 09:54 | 3° \mathcal{Y} 47'54 | 46°47'08 | | 10861 Jan 02 19:48 | 0° \mathcal{H} | |
| | 10858 May 29 21:42 | 0° \mathcal{B} | | | 10861 Jan 29 09:36 | 0° \mathcal{Y} | |
| desc. node | 10858 Jun 14 19:45 | 18° \mathcal{B} 12'37 | | evening max el | 10861 Feb 24 23:52 | 27° \mathcal{Y} 56'22 | 46°22'13 |
| | 10858 Jun 24 20:51 | 0° \mathbb{I} | | | 10861 Feb 27 02:25 | 0° \mathcal{B} | |
| | 10858 Jul 19 21:57 | 0° \mathcal{G} | | asc. node | 10861 Mar 22 08:16 | 19° \mathcal{B} 54'28 | |
| | 10858 Aug 13 13:34 | 0° \mathcal{O} | | greatest brilliancy | 10861 Apr 06 03:12 | 27° \mathcal{B} 56'50 | -4.9m |
| | 10858 Sep 07 01:23 | 0° \mathbb{M} | | retrograde | 10861 Apr 15 19:48 | 29° \mathcal{B} 42'25 | |
| | 10858 Oct 01 11:37 | 0° \mathcal{A} | | evening set | 10861 May 03 04:45 | 23° \mathcal{B} 55'39 | |
| asc. node | 10858 Oct 05 14:24 | 5° \mathcal{A} 03'36 | | inferior conj | 10861 May 06 12:42 | 21° \mathcal{B} 53'33 | 8°47'27 |
| | 10858 Oct 25 20:41 | 0° \mathbb{M} | | minimum elong | 10861 May 06 06:07 | 22° \mathcal{B} 03'44 | 8°46'22 |
| morning set | 10858 Nov 06 01:37 | 13° \mathbb{M} 48'25 | | min. Earth dist. | 10861 May 06 13:01 | 21° \mathcal{B} 53'03 | 0.27286 AU |
| | 10858 Nov 19 04:44 | 0° \mathcal{A} | | morning rise | 10861 May 09 07:28 | 20° \mathcal{B} 11'02 | |
| | | | | direct | 10861 May 27 06:56 | 14° \mathcal{B} 00'53 | |
| superior conj | 10858 Dec 12 17:38 | 29° \mathcal{A} 02'21 | 1°20'58 | greatest brilliancy | 10861 Jun 06 01:33 | 15° \mathcal{B} 48'51 | -4.9m |
| minimum elong | 10858 Dec 12 23:49 | 29° \mathcal{A} 21'27 | 1°21'27 | | 10861 Jun 28 15:42 | 0° \mathbb{I} | |
| max. Earth dist. | 10858 Dec 13 00:16 | 29° \mathcal{A} 22'50 | 1.73222 AU | desc. node | 10861 Jul 12 07:08 | 12° \mathbb{I} 22'37 | |
| | 10858 Dec 13 12:19 | 0° \mathcal{Z} | | morning max el | 10861 Jul 16 17:17 | 16° \mathbb{I} 44'53 | 46°54'22 |
| | 10859 Jan 06 20:10 | 0° \approx | | | 10861 Jul 29 11:03 | 0° \mathcal{G} | |
| evening rise | 10859 Jan 19 02:02 | 15° \approx 05'26 | | | 10861 Aug 25 08:26 | 0° \mathcal{O} | |
| desc. node | 10859 Jan 25 06:21 | 22° \approx 42'21 | | | 10861 Sep 20 01:39 | 0° \mathbb{M} | |
| | 10859 Jan 31 04:27 | 0° \mathcal{H} | | | 10861 Oct 15 06:26 | 0° \mathcal{A} | |
| | 10859 Feb 24 12:46 | 0° \mathcal{Y} | | asc. node | 10861 Nov 02 03:38 | 21° \mathcal{A} 31'36 | |
| | 10859 Mar 20 20:53 | 0° \mathcal{B} | | | 10861 Nov 09 03:41 | 0° \mathbb{M} | |
| | 10859 Apr 14 05:58 | 0° \mathbb{I} | | | 10861 Dec 03 19:11 | 0° \mathcal{A} | |
| | 10859 May 08 19:25 | 0° \mathcal{G} | | | 10861 Dec 28 06:21 | 0° \mathcal{Z} | |
| asc. node | 10859 May 18 03:12 | 11° \mathcal{G} 16'27 | | morning set | 10862 Jan 13 16:13 | 20° \mathcal{Z} 12'34 | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 10862 Jan 21 14:38 | 0°♊ | | retrograde | 10864 Jun 28 09:48 | 14°♏12'09 | |
| | 10862 Feb 14 20:51 | 0°♋ | | evening set | 10864 Jul 14 03:17 | 9°♏21'45 | |
| max. Earth dist. | 10862 Feb 17 20:00 | 3°♋40'27 | 1.72608 AU | inferior conj | 10864 Jul 19 03:46 | 6°♏22'33 | 5°02'39 |
| | | | | minimum elong | 10864 Jul 19 13:52 | 6°♏07'07 | 4°59'23 |
| superior conj | 10862 Feb 20 10:50 | 6°♋55'09 | 0°03'20 | min. Earth dist. | 10864 Jul 19 06:59 | 6°♏17'37 | 0.27110 AU |
| minimum elong | 10862 Feb 20 11:41 | 6°♋57'48 | 0°03'34 | morning rise | 10864 Jul 25 00:33 | 2°♏55'31 | |
| behind sun begin | 10862 Feb 19 12:02 | 5°♋44'28 | | | 10864 Jul 31 13:20 | 30°♋☾ | |
| behind sun end | 10862 Feb 21 11:21 | 8°♋11'07 | | direct | 10864 Aug 08 20:46 | 28°♋35'36 | |
| desc. node | 10862 Feb 21 19:29 | 8°♋36'20 | | desc. node | 10864 Aug 08 17:55 | 28°♋35'37 | |
| | 10862 Mar 11 01:03 | 0°♌ | | | 10864 Aug 17 12:28 | 0°♏ | |
| evening rise | 10862 Mar 31 09:27 | 25°♌20'25 | | greatest brilliancy | 10864 Aug 18 20:23 | 0°♏26'37 | -4.8m |
| | 10862 Apr 04 03:07 | 0°♍ | | morning max el | 10864 Sep 27 12:30 | 29°♏50'16 | 46°13'15 |
| | 10862 Apr 28 03:41 | 0°♎ | | | 10864 Sep 27 16:30 | 0°♎ | |
| | 10862 May 22 04:34 | 0°♏ | | | 10864 Oct 26 08:56 | 0°♎ | |
| asc. node | 10862 Jun 14 14:33 | 29°♏04'27 | | | 10864 Nov 21 22:19 | 0°♎ | |
| | 10862 Jun 15 08:31 | 0°♏ | | asc. node | 10864 Nov 29 16:12 | 8°♎59'21 | |
| | 10862 Jul 09 18:56 | 0°♎ | | | 10864 Dec 17 12:11 | 0°♎ | |
| | 10862 Aug 03 16:40 | 0°♎ | | | 10865 Jan 11 12:03 | 0°♎ | |
| | 10862 Aug 29 11:28 | 0°♎ | | | 10865 Feb 05 03:01 | 0°♊ | |
| | 10862 Sep 26 04:51 | 0°♎ | | | 10865 Mar 01 12:04 | 0°♋ | |
| evening max el | 10862 Oct 02 10:17 | 6°♎11'53 | 45°58'25 | desc. node | 10865 Mar 21 08:51 | 24°♋37'20 | |
| desc. node | 10862 Oct 04 12:42 | 8°♎13'41 | | morning set | 10865 Mar 25 19:51 | 0°♌09'53 | |
| | 10862 Oct 31 10:08 | 0°♎ | | | 10865 Mar 25 16:40 | 0°♌ | |
| greatest brilliancy | 10862 Nov 10 14:03 | 4°♎56'12 | -4.7m | | 10865 Apr 18 17:37 | 0°♍ | |
| retrograde | 10862 Nov 20 14:43 | 6°♎46'15 | | max. Earth dist. | 10865 May 02 20:59 | 17°♎42'53 | 1.71475 AU |
| evening set | 10862 Dec 08 16:53 | 0°♎38'42 | | | | | |
| | 10862 Dec 09 18:13 | 30°♎♎ | | superior conj | 10865 May 05 00:38 | 20°♎24'53 | -1°23'01 |
| inferior conj | 10862 Dec 12 03:30 | 28°♎30'29 | -8°13'43 | minimum elong | 10865 May 04 17:15 | 20°♎01'45 | 1°23'19 |
| minimum elong | 10862 Dec 12 09:54 | 28°♎20'24 | 8°12'29 | | 10865 May 12 15:53 | 0°♎ | |
| min. Earth dist. | 10862 Dec 12 10:39 | 28°♎19'13 | 0.29035 AU | | 10865 Jun 05 13:07 | 0°♏ | |
| morning rise | 10862 Dec 16 02:49 | 26°♎02'48 | | evening rise | 10865 Jun 14 08:25 | 11°♏03'11 | |
| direct | 10863 Jan 02 14:08 | 20°♎13'45 | | | 10865 Jun 29 11:21 | 0°♏ | |
| greatest brilliancy | 10863 Jan 13 08:24 | 22°♎19'36 | -4.8m | asc. node | 10865 Jul 12 02:42 | 15°♏47'40 | |
| asc. node | 10863 Jan 25 13:14 | 28°♎47'26 | | | 10865 Jul 23 12:29 | 0°♎ | |
| | 10863 Jan 27 07:48 | 0°♎ | | | 10865 Aug 16 18:25 | 0°♎ | |
| morning max el | 10863 Feb 20 23:03 | 21°♎12'13 | 46°01'21 | | 10865 Sep 10 07:42 | 0°♎ | |
| | 10863 Mar 01 15:40 | 0°♊ | | | 10865 Oct 05 08:47 | 0°♎ | |
| | 10863 Mar 29 00:09 | 0°♋ | | | 10865 Oct 31 05:52 | 0°♎ | |
| | 10863 Apr 23 15:36 | 0°♌ | | desc. node | 10865 Oct 31 23:00 | 0°♎48'29 | |
| desc. node | 10863 May 17 09:19 | 28°♌39'34 | | | 10865 Nov 27 16:50 | 0°♊ | |
| | 10863 May 18 11:41 | 0°♍ | | evening max el | 10865 Dec 12 16:52 | 15°♊03'36 | 45°50'26 |
| | 10863 Jun 11 21:09 | 0°♎ | | | 10865 Dec 29 14:13 | 0°♋ | |
| | 10863 Jul 06 01:07 | 0°♏ | | greatest brilliancy | 10866 Jan 20 18:23 | 13°♋19'28 | -4.8m |
| | 10863 Jul 30 03:13 | 0°♏ | | retrograde | 10866 Jan 30 13:46 | 15°♋04'25 | |
| | 10863 Aug 23 05:34 | 0°♎ | | evening set | 10866 Feb 14 08:26 | 10°♋48'25 | |
| morning set | 10863 Aug 25 10:37 | 2°♎44'56 | | inferior conj | 10866 Feb 20 14:11 | 7°♋05'30 | -0°21'12 |
| asc. node | 10863 Sep 07 02:53 | 18°♎30'30 | | minimum elong | 10866 Feb 20 14:59 | 7°♋04'16 | 0°20'40 |
| | 10863 Sep 16 09:02 | 0°♎ | | min. Earth dist. | 10866 Feb 21 00:31 | 6°♋49'26 | 0.27917 AU |
| | | | | asc. node | 10866 Feb 21 23:56 | 6°♋13'06 | |
| superior conj | 10863 Oct 02 17:31 | 20°♎17'05 | 0°56'57 | morning rise | 10866 Feb 26 21:05 | 3°♋20'29 | |
| minimum elong | 10863 Oct 02 07:40 | 19°♎46'34 | 0°56'44 | | 10866 Mar 06 17:27 | 30°♋♊ | |
| max. Earth dist. | 10863 Oct 04 14:34 | 22°♎36'39 | 1.72738 AU | direct | 10866 Mar 13 17:47 | 28°♊59'46 | |
| | 10863 Oct 10 13:46 | 0°♎ | | | 10866 Mar 20 23:06 | 0°♋ | |
| | 10863 Nov 03 20:12 | 0°♎ | | greatest brilliancy | 10866 Mar 24 10:51 | 1°♋08'35 | -4.8m |
| evening rise | 10863 Nov 08 14:57 | 5°♎53'43 | | | 10866 May 01 12:42 | 0°♌ | |
| | 10863 Nov 28 05:17 | 0°♎ | | morning max el | 10866 May 03 00:42 | 1°♌29'46 | 46°45'42 |
| | 10863 Dec 22 17:58 | 0°♊ | | | 10866 May 29 13:51 | 0°♍ | |
| desc. node | 10863 Dec 27 19:50 | 6°♊11'17 | | desc. node | 10866 Jun 13 21:39 | 17°♍35'54 | |
| | 10864 Jan 16 10:34 | 0°♋ | | | 10866 Jun 24 10:38 | 0°♎ | |
| | 10864 Feb 10 07:14 | 0°♌ | | | 10866 Jul 19 10:33 | 0°♏ | |
| | 10864 Mar 06 09:43 | 0°♍ | | | 10866 Aug 13 01:27 | 0°♏ | |
| | 10864 Apr 01 00:28 | 0°♎ | | | 10866 Sep 06 12:46 | 0°♎ | |
| asc. node | 10864 Apr 18 18:25 | 20°♎03'01 | | | 10866 Sep 30 22:38 | 0°♎ | |
| | 10864 Apr 27 22:07 | 0°♏ | | asc. node | 10866 Oct 04 16:19 | 4°♎35'47 | |
| evening max el | 10864 May 08 23:32 | 11°♏28'29 | 46°52'04 | | 10866 Oct 25 07:28 | 0°♎ | |
| | 10864 May 29 04:59 | 0°♏ | | morning set | 10866 Nov 03 18:11 | 11°♎38'37 | |
| greatest brilliancy | 10864 Jun 18 08:53 | 12°♏17'50 | -4.9m | | 10866 Nov 18 15:22 | 0°♎ | |

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|---------------------|--------------------|----------------------|------------|---------------------|--------------------|----------------------|------------|
| superior conj | 10866 Dec 10 10:43 | 26° ♊ 54'20 | 1°22'02 | greatest brilliancy | 10869 Jun 03 15:47 | 13° ♋ 26'20 | -4.9m |
| minimum elong | 10866 Dec 10 16:18 | 27° ♊ 11'33 | 1°22'33 | | 10869 Jun 29 00:30 | 0° ♋ | |
| max. Earth dist. | 10866 Dec 10 19:15 | 27° ♊ 20'40 | 1.73220 AU | desc. node | 10869 Jul 11 09:11 | 11° ♋ 29'13 | |
| | 10866 Dec 12 22:55 | 0° ♋ | | morning max el | 10869 Jul 14 06:23 | 14° ♋ 21'10 | 46°55'16 |
| | 10867 Jan 06 06:49 | 0° ♋ | | | 10869 Jul 29 05:20 | 0° ♋ | |
| evening rise | 10867 Jan 16 17:57 | 12° ♋ 53'34 | | | 10869 Aug 24 22:56 | 0° ♋ | |
| desc. node | 10867 Jan 24 08:21 | 22° ♋ 15'24 | | | 10869 Sep 19 14:25 | 0° ♋ | |
| | 10867 Jan 30 15:14 | 0° ♋ | | | 10869 Oct 14 18:14 | 0° ♋ | |
| | 10867 Feb 23 23:45 | 0° ♋ | | asc. node | 10869 Nov 01 05:26 | 21° ♋ 02'48 | |
| | 10867 Mar 20 08:11 | 0° ♋ | | | 10869 Nov 08 14:52 | 0° ♋ | |
| | 10867 Apr 13 17:43 | 0° ♋ | | | 10869 Dec 03 05:58 | 0° ♋ | |
| | 10867 May 08 07:52 | 0° ♋ | | | 10869 Dec 27 16:55 | 0° ♋ | |
| asc. node | 10867 May 17 05:04 | 10° ♋ 43'22 | | morning set | 10870 Jan 11 08:45 | 18° ♋ 03'08 | |
| | 10867 Jun 02 09:14 | 0° ♋ | | | 10870 Jan 21 01:07 | 0° ♋ | |
| | 10867 Jun 28 10:50 | 0° ♋ | | | 10870 Feb 14 07:20 | 0° ♋ | |
| evening max el | 10867 Jul 21 05:27 | 24° ♋ 14'17 | 46°36'27 | max. Earth dist. | 10870 Feb 15 14:12 | 1° ♋ 35'35 | 1.72647 AU |
| | 10867 Jul 27 02:48 | 0° ♋ | | | | | |
| greatest brilliancy | 10867 Aug 29 05:11 | 24° ♋ 08'58 | -4.8m | superior conj | 10870 Feb 18 01:21 | 4° ♋ 38'50 | 0°06'54 |
| desc. node | 10867 Sep 06 04:26 | 26° ♋ 13'20 | | minimum elong | 10870 Feb 18 03:02 | 4° ♋ 44'03 | 0°07'06 |
| retrograde | 10867 Sep 09 07:48 | 26° ♋ 24'51 | | behind sun begin | 10870 Feb 17 05:13 | 3° ♋ 36'25 | |
| evening set | 10867 Sep 24 21:40 | 21° ♋ 41'25 | | behind sun end | 10870 Feb 19 00:52 | 5° ♋ 51'41 | |
| min. Earth dist. | 10867 Sep 29 17:44 | 18° ♋ 47'23 | 0.28237 AU | desc. node | 10870 Feb 20 21:23 | 8° ♋ 09'40 | |
| inferior conj | 10867 Sep 30 14:27 | 18° ♋ 15'09 | -5°36'51 | | 10870 Mar 10 11:38 | 0° ♋ | |
| minimum elong | 10867 Sep 30 04:23 | 18° ♋ 30'50 | 5°34'20 | evening rise | 10870 Mar 28 22:53 | 22° ♋ 59'29 | |
| morning rise | 10867 Oct 05 11:42 | 15° ♋ 18'08 | | | 10870 Apr 03 13:49 | 0° ♋ | |
| direct | 10867 Oct 21 19:12 | 10° ♋ 15'38 | | | 10870 Apr 27 14:31 | 0° ♋ | |
| greatest brilliancy | 10867 Oct 31 07:29 | 11° ♋ 54'23 | -4.8m | | 10870 May 21 15:37 | 0° ♋ | |
| | 10867 Nov 28 10:58 | 0° ♋ | | asc. node | 10870 Jun 13 16:31 | 28° ♋ 35'30 | |
| morning max el | 10867 Dec 09 13:05 | 10° ♋ 07'54 | 45°42'12 | | 10870 Jun 14 19:52 | 0° ♋ | |
| asc. node | 10867 Dec 28 04:13 | 29° ♋ 03'16 | | | 10870 Jul 09 06:46 | 0° ♋ | |
| | 10867 Dec 29 01:31 | 0° ♋ | | | 10870 Aug 03 05:25 | 0° ♋ | |
| | 10868 Jan 25 01:00 | 0° ♋ | | | 10870 Aug 29 02:06 | 0° ♋ | |
| | 10868 Feb 19 15:30 | 0° ♋ | | | 10870 Sep 26 00:36 | 0° ♋ | |
| | 10868 Mar 15 13:03 | 0° ♋ | | evening max el | 10870 Sep 30 01:16 | 3° ♋ 59'03 | 45°59'23 |
| | 10868 Apr 09 00:30 | 0° ♋ | | desc. node | 10870 Oct 03 14:35 | 7° ♋ 24'02 | |
| desc. node | 10868 Apr 17 22:10 | 11° ♋ 00'15 | | | 10870 Nov 01 22:03 | 0° ♋ | |
| | 10868 May 03 05:11 | 0° ♋ | | greatest brilliancy | 10870 Nov 08 04:20 | 2° ♋ 45'06 | -4.7m |
| | 10868 May 27 05:20 | 0° ♋ | | retrograde | 10870 Nov 18 06:57 | 4° ♋ 37'01 | |
| morning set | 10868 Jun 09 07:53 | 16° ♋ 26'16 | | | 10870 Dec 03 18:10 | 30° ♋ | |
| | 10868 Jun 20 03:13 | 0° ♋ | | evening set | 10870 Dec 06 10:35 | 28° ♋ 26'13 | |
| | 10868 Jul 14 01:04 | 0° ♋ | | inferior conj | 10870 Dec 09 19:33 | 26° ♋ 20'39 | -8°19'47 |
| | | | | minimum elong | 10870 Dec 10 01:20 | 26° ♋ 11'34 | 8°18'42 |
| superior conj | 10868 Jul 19 05:04 | 6° ♋ 28'22 | -0°47'15 | min. Earth dist. | 10870 Dec 10 01:34 | 26° ♋ 11'11 | 0.29053 AU |
| minimum elong | 10868 Jul 19 15:24 | 7° ♋ 00'42 | 0°47'20 | morning rise | 10870 Dec 13 16:00 | 23° ♋ 57'31 | |
| max. Earth dist. | 10868 Jul 21 17:14 | 9° ♋ 36'42 | 1.71621 AU | direct | 10870 Dec 31 06:13 | 18° ♋ 03'48 | |
| | 10868 Aug 07 00:32 | 0° ♋ | | greatest brilliancy | 10871 Jan 10 23:52 | 20° ♋ 09'20 | -4.8m |
| asc. node | 10868 Aug 08 15:35 | 2° ♋ 01'53 | | asc. node | 10871 Jan 24 15:17 | 27° ♋ 34'42 | |
| evening rise | 10868 Aug 27 13:46 | 25° ♋ 36'19 | | | 10871 Jan 28 00:03 | 0° ♋ | |
| | 10868 Aug 31 02:38 | 0° ♋ | | morning max el | 10871 Feb 18 15:14 | 19° ♋ 01'16 | 46°00'01 |
| | 10868 Sep 24 08:10 | 0° ♋ | | | 10871 Mar 01 10:14 | 0° ♋ | |
| | 10868 Oct 18 18:35 | 0° ♋ | | | 10871 Mar 28 14:33 | 0° ♋ | |
| | 10868 Nov 12 12:09 | 0° ♋ | | | 10871 Apr 23 04:19 | 0° ♋ | |
| desc. node | 10868 Nov 28 10:02 | 19° ♋ 02'46 | | desc. node | 10871 May 16 11:09 | 28° ♋ 08'54 | |
| | 10868 Dec 07 15:46 | 0° ♋ | | | 10871 May 17 23:33 | 0° ♋ | |
| | 10869 Jan 02 09:22 | 0° ♋ | | | 10871 Jun 11 08:30 | 0° ♋ | |
| | 10869 Jan 29 01:57 | 0° ♋ | | | 10871 Jul 05 12:08 | 0° ♋ | |
| evening max el | 10869 Feb 22 12:37 | 25° ♋ 33'38 | 46°20'52 | | 10871 Jul 29 13:58 | 0° ♋ | |
| | 10869 Feb 27 02:39 | 0° ♋ | | | 10871 Aug 22 16:08 | 0° ♋ | |
| asc. node | 10869 Mar 21 10:16 | 18° ♋ 35'07 | | morning set | 10871 Aug 23 01:14 | 0° ♋ 28'19 | |
| greatest brilliancy | 10869 Apr 03 16:26 | 25° ♋ 33'47 | -4.9m | asc. node | 10871 Sep 06 04:44 | 18° ♋ 03'44 | |
| retrograde | 10869 Apr 13 08:29 | 27° ♋ 19'21 | | | 10871 Sep 15 19:27 | 0° ♋ | |
| evening set | 10869 Apr 30 13:37 | 21° ♋ 38'44 | | | | | |
| inferior conj | 10869 May 04 01:56 | 19° ♋ 30'24 | 8°39'36 | superior conj | 10871 Sep 30 09:41 | 18° ♋ 06'15 | 0°54'21 |
| minimum elong | 10869 May 03 18:35 | 19° ♋ 41'46 | 8°38'23 | minimum elong | 10871 Sep 29 23:56 | 17° ♋ 36'04 | 0°54'07 |
| min. Earth dist. | 10869 May 04 02:17 | 19° ♋ 29'53 | 0.27294 AU | max. Earth dist. | 10871 Oct 02 08:41 | 20° ♋ 31'56 | 1.72709 AU |
| morning rise | 10869 May 06 23:28 | 17° ♋ 43'45 | | | 10871 Oct 10 00:07 | 0° ♋ | |
| direct | 10869 May 24 19:39 | 11° ♋ 37'11 | | | 10871 Nov 03 06:36 | 0° ♋ | |

| | | | | | | | |
|---------------------|--------------------|----------------------|------------|---------------------|--------------------|----------------------|------------|
| evening rise | 10871 Nov 06 08:06 | 3° ♁ 46'34 | | morning max el | 10874 Apr 30 14:30 | 29° ♁ 09'04 | 46°44'21 |
| | 10871 Nov 27 15:51 | 0° ♁ | | | 10874 May 01 10:47 | 0° ♁ | |
| | 10871 Dec 22 04:49 | 0° ♁ | | | 10874 May 29 05:43 | 0° ♁ | |
| desc. node | 10871 Dec 26 21:50 | 5° ♁ 44'06 | | desc. node | 10874 Jun 12 23:45 | 17° ♁ 00'12 | |
| | 10872 Jan 15 21:50 | 0° ♁ | | | 10874 Jun 24 00:13 | 0° ♁ | |
| | 10872 Feb 09 19:10 | 0° ♁ | | | 10874 Jul 18 22:59 | 0° ♁ | |
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| | 10872 Mar 31 15:24 | 0° ♁ | | | 10874 Sep 06 00:00 | 0° ♁ | |
| asc. node | 10872 Apr 17 20:20 | 19° ♁ 20'41 | | | 10874 Sep 30 09:32 | 0° ♁ | |
| | 10872 Apr 27 17:26 | 0° ♁ | | asc. node | 10874 Oct 03 18:08 | 4° ♁ 07'58 | |
| evening max el | 10872 May 06 14:04 | 9° ♁ 08'14 | 46°51'45 | | 10874 Oct 24 18:07 | 0° ♁ | |
| | 10872 May 29 20:03 | 0° ♁ | | morning set | 10874 Nov 01 11:01 | 9° ♁ 29'57 | |
| greatest brilliancy | 10872 Jun 15 22:37 | 9° ♁ 54'29 | -4.9m | | 10874 Nov 18 01:53 | 0° ♁ | |
| retrograde | 10872 Jun 25 23:41 | 11° ♁ 48'31 | | | | | |
| evening set | 10872 Jul 11 19:36 | 6° ♁ 53'48 | | superior conj | 10874 Dec 08 04:14 | 24° ♁ 48'03 | 1°22'58 |
| inferior conj | 10872 Jul 16 16:45 | 3° ♁ 59'09 | 5°22'38 | minimum elong | 10874 Dec 08 09:12 | 25° ♁ 03'21 | 1°23'30 |
| minimum elong | 10872 Jul 17 03:14 | 3° ♁ 43'07 | 5°19'20 | max. Earth dist. | 10874 Dec 08 13:30 | 25° ♁ 16'38 | 1.73217 AU |
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| morning rise | 10872 Jul 22 11:02 | 0° ♁ 35'43 | | | 10875 Jan 05 17:21 | 0° ♁ | |
| | 10872 Jul 23 13:58 | 30° ♁ | | evening rise | 10875 Jan 14 10:12 | 10° ♁ 43'07 | |
| direct | 10872 Aug 06 10:13 | 26° ♁ 12'24 | | desc. node | 10875 Jan 23 10:18 | 21° ♁ 48'30 | |
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| greatest brilliancy | 10872 Aug 16 08:43 | 28° ♁ 03'01 | -4.8m | | 10875 Feb 23 10:47 | 0° ♁ | |
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| morning max el | 10872 Sep 25 03:21 | 27° ♁ 34'15 | 46°14'54 | | 10875 Apr 13 05:37 | 0° ♁ | |
| | 10872 Sep 27 14:41 | 0° ♁ | | | 10875 May 07 20:31 | 0° ♁ | |
| | 10872 Oct 26 00:28 | 0° ♁ | | asc. node | 10875 May 16 07:05 | 10° ♁ 10'16 | |
| | 10872 Nov 21 11:22 | 0° ♁ | | | 10875 Jun 01 23:11 | 0° ♁ | |
| asc. node | 10872 Nov 28 18:14 | 8° ♁ 28'28 | | | 10875 Jun 28 03:33 | 0° ♁ | |
| | 10872 Dec 17 00:03 | 0° ♁ | | evening max el | 10875 Jul 18 19:38 | 21° ♁ 54'26 | 46°37'37 |
| | 10873 Jan 10 23:18 | 0° ♁ | | | 10875 Jul 27 04:03 | 0° ♁ | |
| | 10873 Feb 04 13:56 | 0° ♁ | | greatest brilliancy | 10875 Aug 26 21:27 | 21° ♁ 54'15 | -4.8m |
| | 10873 Feb 28 22:48 | 0° ♁ | | desc. node | 10875 Sep 05 06:21 | 24° ♁ 05'55 | |
| desc. node | 10873 Mar 20 10:41 | 24° ♁ 09'51 | | retrograde | 10875 Sep 06 22:40 | 24° ♁ 09'15 | |
| morning set | 10873 Mar 23 08:39 | 27° ♁ 47'19 | | evening set | 10875 Sep 22 10:19 | 19° ♁ 29'52 | |
| | 10873 Mar 25 03:20 | 0° ♁ | | min. Earth dist. | 10875 Sep 27 09:16 | 16° ♁ 32'00 | 0.28179 AU |
| | 10873 Apr 18 04:15 | 0° ♁ | | inferior conj | 10875 Sep 28 05:29 | 16° ♁ 00'33 | -5°20'18 |
| max. Earth dist. | 10873 Apr 30 05:14 | 15° ♁ 04'51 | 1.71500 AU | minimum elong | 10875 Sep 27 19:35 | 16° ♁ 15'57 | 5°17'46 |
| | | | | morning rise | 10875 Oct 03 05:25 | 12° ♁ 59'32 | |
| superior conj | 10873 May 02 12:13 | 17° ♁ 57'14 | -1°21'40 | direct | 10875 Oct 19 09:14 | 8° ♁ 01'47 | |
| minimum elong | 10873 May 02 04:04 | 17° ♁ 31'41 | 1°21'56 | greatest brilliancy | 10875 Oct 28 22:24 | 9° ♁ 40'48 | -4.8m |
| | 10873 May 12 02:33 | 0° ♁ | | | 10875 Nov 28 14:43 | 0° ♁ | |
| | 10873 Jun 04 23:51 | 0° ♁ | | morning max el | 10875 Dec 07 02:43 | 7° ♁ 51'42 | 45°42'38 |
| evening rise | 10873 Jun 11 19:17 | 8° ♁ 32'56 | | asc. node | 10875 Dec 27 06:11 | 28° ♁ 23'15 | |
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| asc. node | 10873 Jul 11 04:42 | 15° ♁ 20'00 | | | 10876 Jan 24 14:38 | 0° ♁ | |
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| | 10873 Sep 09 19:18 | 0° ♁ | | | 10876 Apr 08 11:49 | 0° ♁ | |
| | 10873 Oct 04 21:11 | 0° ♁ | | desc. node | 10876 Apr 17 00:05 | 10° ♁ 31'25 | |
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| | 10873 Nov 27 10:52 | 0° ♁ | | morning set | 10876 Jun 06 19:02 | 13° ♁ 56'16 | |
| evening max el | 10873 Dec 10 08:08 | 12° ♁ 51'39 | 45°49'49 | | 10876 Jun 19 14:08 | 0° ♁ | |
| | 10873 Dec 30 01:54 | 0° ♁ | | | 10876 Jul 13 11:55 | 0° ♁ | |
| greatest brilliancy | 10874 Jan 18 09:23 | 11° ♁ 05'11 | -4.8m | | | | |
| retrograde | 10874 Jan 28 03:42 | 12° ♁ 49'02 | | superior conj | 10876 Jul 16 17:18 | 4° ♁ 02'24 | -0°50'26 |
| evening set | 10874 Feb 12 00:16 | 8° ♁ 31'34 | | minimum elong | 10876 Jul 17 04:03 | 4° ♁ 36'06 | 0°50'31 |
| inferior conj | 10874 Feb 18 04:58 | 4° ♁ 49'47 | -0°43'14 | max. Earth dist. | 10876 Jul 19 01:00 | 6° ♁ 56'52 | 1.71587 AU |
| minimum elong | 10874 Feb 18 06:36 | 4° ♁ 47'15 | 0°42'25 | | 10876 Aug 06 11:22 | 0° ♁ | |
| min. Earth dist. | 10874 Feb 18 16:05 | 4° ♁ 32'27 | 0.27959 AU | asc. node | 10876 Aug 07 17:23 | 1° ♁ 33'41 | |
| asc. node | 10874 Feb 21 01:54 | 3° ♁ 03'10 | | evening rise | 10876 Aug 25 04:06 | 23° ♁ 17'55 | |
| morning rise | 10874 Feb 24 12:26 | 1° ♁ 03'28 | | | 10876 Aug 30 13:30 | 0° ♁ | |
| | 10874 Feb 26 13:21 | 30° ♁ | | | 10876 Sep 23 19:08 | 0° ♁ | |
| direct | 10874 Mar 11 09:01 | 26° ♁ 43'34 | | | 10876 Oct 18 05:46 | 0° ♁ | |
| greatest brilliancy | 10874 Mar 22 02:46 | 28° ♁ 52'35 | -4.8m | | 10876 Nov 11 23:47 | 0° ♁ | |
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


































































































































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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|--|
| | 10876 Dec 07 04:11 | 0°≈ | | | 10879 May 17 11:39 | 0°♄ | | |
| | 10877 Jan 01 23:12 | 0°♁ | | | 10879 Jun 10 20:09 | 0°♂ | | |
| | 10877 Jan 28 18:45 | 0°♂ | | | 10879 Jul 04 23:31 | 0°♄ | | |
| evening max el | 10877 Feb 20 01:40 | 23°♂11'31 | 46°19'28 | | 10879 Jul 29 01:10 | 0°♂ | | |
| | 10877 Feb 27 04:17 | 0°♄ | | morning set | 10879 Aug 20 15:29 | 28°♂08'59 | | |
| asc. node | 10877 Mar 20 12:08 | 17°♄12'28 | | | 10879 Aug 22 03:10 | 0°♁ | | |
| greatest brilliancy | 10877 Apr 01 04:53 | 23°♄09'21 | -4.8m | asc. node | 10879 Sep 05 06:37 | 17°♁35'34 | | |
| retrograde | 10877 Apr 10 21:32 | 24°♄55'47 | | | 10879 Sep 15 06:21 | 0°♂ | | |
| evening set | 10877 Apr 27 22:20 | 19°♄21'05 | | | | | | |
| inferior conj | 10877 May 01 15:10 | 17°♄06'20 | 8°30'44 | superior conj | 10879 Sep 28 01:20 | 15°♂52'16 | 0°51'38 | |
| minimum elong | 10877 May 01 07:06 | 17°♄18'47 | 8°29'21 | minimum elong | 10879 Sep 27 15:46 | 15°♂22'38 | 0°51'21 | |
| min. Earth dist. | 10877 May 01 15:13 | 17°♄06'15 | 0.27310 AU | max. Earth dist. | 10879 Sep 30 03:27 | 18°♂27'39 | 1.72676 AU | |
| morning rise | 10877 May 04 15:47 | 15°♄15'13 | | | 10879 Oct 09 10:57 | 0°♂ | | |
| direct | 10877 May 22 08:57 | 9°♄12'26 | | | 10879 Nov 02 17:28 | 0°♄ | | |
| greatest brilliancy | 10877 Jun 01 05:51 | 11°♄02'35 | -4.9m | evening rise | 10879 Nov 04 00:56 | 1°♄37'00 | | |
| | 10877 Jun 29 07:23 | 0°♂ | | | 10879 Nov 27 02:51 | 0°♄ | | |
| desc. node | 10877 Jul 10 11:09 | 10°♂35'17 | | | 10879 Dec 21 16:05 | 0°≈ | | |
| morning max el | 10877 Jul 11 20:33 | 11°♂58'45 | 46°56'02 | desc. node | 10879 Dec 25 23:46 | 5°≈15'27 | | |
| | 10877 Jul 28 23:41 | 0°♄ | | | 10880 Jan 15 09:32 | 0°♁ | | |
| | 10877 Aug 24 13:42 | 0°♂ | | | 10880 Feb 09 07:33 | 0°♂ | | |
| | 10877 Sep 19 03:30 | 0°♁ | | | 10880 Mar 05 12:10 | 0°♄ | | |
| | 10877 Oct 14 06:19 | 0°♂ | | | 10880 Mar 31 06:50 | 0°♂ | | |
| asc. node | 10877 Oct 31 07:25 | 20°♂33'45 | | asc. node | 10880 Apr 16 22:27 | 18°♂37'40 | | |
| | 10877 Nov 08 02:19 | 0°♂ | | | 10880 Apr 27 13:37 | 0°♄ | | |
| | 10877 Dec 02 17:02 | 0°♄ | | evening max el | 10880 May 04 04:47 | 6°♄47'44 | 46°51'18 | |
| | 10877 Dec 27 03:47 | 0°♄ | | | 10880 May 30 16:43 | 0°♂ | | |
| morning set | 10878 Jan 09 01:45 | 15°♄54'16 | | greatest brilliancy | 10880 Jun 13 12:35 | 7°♂30'55 | -4.9m | |
| | 10878 Jan 20 11:53 | 0°≈ | | retrograde | 10880 Jun 23 13:16 | 9°♂24'08 | | |
| max. Earth dist. | 10878 Feb 13 09:49 | 29°≈34'16 | 1.72681 AU | evening set | 10880 Jul 09 12:05 | 4°♂25'15 | | |
| | 10878 Feb 13 18:07 | 0°♁ | | inferior conj | 10880 Jul 14 05:50 | 1°♂35'04 | 5°41'55 | |
| | | | | minimum elong | 10880 Jul 14 16:36 | 1°♂18'33 | 5°38'38 | |
| superior conj | 10878 Feb 15 16:26 | 2°♁23'27 | 0°10'23 | min. Earth dist. | 10880 Jul 14 09:48 | 1°♂28'59 | 0.27095 AU | |
| minimum elong | 10878 Feb 15 18:56 | 2°♁31'11 | 0°10'35 | | 10880 Jul 16 20:26 | 30°♁ | | |
| behind sun begin | 10878 Feb 15 00:39 | 1°♁34'34 | | morning rise | 10880 Jul 19 21:20 | 28°♄15'19 | | |
| behind sun end | 10878 Feb 16 13:12 | 3°♁27'47 | | direct | 10880 Aug 03 23:49 | 23°♄48'32 | | |
| desc. node | 10878 Feb 19 23:14 | 7°♁41'59 | | desc. node | 10880 Aug 06 21:52 | 23°♄58'37 | | |
| | 10878 Mar 09 22:28 | 0°♂ | | greatest brilliancy | 10880 Aug 13 21:16 | 25°♄38'26 | -4.8m | |
| evening rise | 10878 Mar 26 12:53 | 20°♂39'33 | | | 10880 Aug 22 23:31 | 0°♂ | | |
| | 10878 Apr 03 00:46 | 0°♄ | | morning max el | 10880 Sep 22 17:26 | 25°♂14'46 | 46°16'21 | |
| | 10878 Apr 27 01:40 | 0°♂ | | | 10880 Sep 27 12:34 | 0°♁ | | |
| | 10878 May 21 03:02 | 0°♄ | | | 10880 Oct 25 16:18 | 0°♂ | | |
| asc. node | 10878 Jun 12 18:30 | 28°♄05'13 | | | 10880 Nov 21 00:50 | 0°♂ | | |
| | 10878 Jun 14 07:41 | 0°♂ | | asc. node | 10880 Nov 27 20:13 | 7°♂56'08 | | |
| | 10878 Jul 08 19:09 | 0°♁ | | | 10880 Dec 16 12:18 | 0°♄ | | |
| | 10878 Aug 02 18:46 | 0°♂ | | | 10881 Jan 10 10:54 | 0°♄ | | |
| | 10878 Aug 28 17:29 | 0°♂ | | | 10881 Feb 04 01:10 | 0°≈ | | |
| | 10878 Sep 25 21:36 | 0°♄ | | | 10881 Feb 28 09:50 | 0°♁ | | |
| evening max el | 10878 Sep 27 17:02 | 1°♄46'41 | 46°00'33 | desc. node | 10881 Mar 19 12:35 | 23°♁41'40 | | |
| desc. node | 10878 Oct 02 16:35 | 6°♄32'27 | | morning set | 10881 Mar 20 21:41 | 25°♁24'30 | | |
| | 10878 Nov 04 07:31 | 0°♄ | | | 10881 Mar 24 14:17 | 0°♂ | | |
| greatest brilliancy | 10878 Nov 05 18:25 | 0°♄32'48 | -4.7m | | 10881 Apr 17 15:12 | 0°♄ | | |
| retrograde | 10878 Nov 15 23:29 | 2°♄26'41 | | max. Earth dist. | 10881 Apr 27 11:11 | 12°♄18'49 | 1.71525 AU | |
| | 10878 Nov 27 01:26 | 30°♁ | | | | | | |
| evening set | 10878 Dec 04 04:11 | 26°♄13'02 | | superior conj | 10881 Apr 30 00:11 | 15°♄29'59 | -1°20'11 | |
| inferior conj | 10878 Dec 07 11:39 | 24°♄09'44 | -8°25'16 | minimum elong | 10881 Apr 29 15:21 | 15°♄02'17 | 1°20'23 | |
| minimum elong | 10878 Dec 07 16:45 | 24°♄01'43 | 8°24'18 | | 10881 May 11 13:31 | 0°♂ | | |
| min. Earth dist. | 10878 Dec 07 16:09 | 24°♄02'40 | 0.29064 AU | | 10881 Jun 04 10:50 | 0°♄ | | |
| morning rise | 10878 Dec 11 05:19 | 21°♄51'00 | | evening rise | 10881 Jun 09 06:27 | 6°♄02'52 | | |
| direct | 10878 Dec 28 22:50 | 15°♄53'02 | | | 10881 Jun 28 09:12 | 0°♂ | | |
| greatest brilliancy | 10879 Jan 08 14:41 | 17°♄57'26 | -4.7m | asc. node | 10881 Jul 10 06:32 | 14°♂50'59 | | |
| asc. node | 10879 Jan 23 17:13 | 26°♄22'55 | | | 10881 Jul 22 10:38 | 0°♁ | | |
| | 10879 Jan 28 12:34 | 0°♄ | | | 10881 Aug 15 17:05 | 0°♂ | | |
| morning max el | 10879 Feb 16 07:50 | 16°♄50'27 | 45°58'46 | | 10881 Sep 09 07:16 | 0°♂ | | |
| | 10879 Mar 01 04:41 | 0°≈ | | | 10881 Oct 04 10:02 | 0°♄ | | |
| | 10879 Mar 28 05:06 | 0°♁ | | desc. node | 10881 Oct 30 03:02 | 29°♄38'57 | | |
| | 10879 Apr 22 17:15 | 0°♂ | | | 10881 Oct 30 10:31 | 0°♄ | | |
| desc. node | 10879 May 15 13:14 | 27°♂38'11 | | | 10881 Nov 27 05:51 | 0°≈ | | |

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|---------------------|--------------------|------------------------------|------------|---------------------|--------------------|-----------------------------------|------------|
| evening max el | 10881 Dec 07 22:31 | 10° \approx 36'24 | 45°49'23 | | 10884 Jun 19 01:01 | 0° \mathfrak{C} | |
| | 10881 Dec 30 18:14 | 0° \mathfrak{H} | | | 10884 Jul 12 22:45 | 0° \mathcal{O} | |
| greatest brilliancy | 10882 Jan 16 00:45 | 8° \mathfrak{H} 50'30 | -4.8m | | | | |
| retrograde | 10882 Jan 25 17:28 | 10° \mathfrak{H} 33'15 | | superior conj | 10884 Jul 14 05:33 | 1° \mathcal{O} 36'33 | -0°53'32 |
| evening set | 10882 Feb 09 16:20 | 6° \mathfrak{H} 13'52 | | minimum elong | 10884 Jul 14 16:40 | 2° \mathcal{O} 11'23 | 0°53'37 |
| inferior conj | 10882 Feb 15 19:52 | 2° \mathfrak{H} 33'41 | -1°05'00 | max. Earth dist. | 10884 Jul 16 08:20 | 4° \mathcal{O} 15'38 | 1.71556 AU |
| minimum elong | 10882 Feb 15 22:19 | 2° \mathfrak{H} 29'52 | 1°03'55 | | 10884 Aug 05 22:10 | 0° \mathfrak{M} | |
| min. Earth dist. | 10882 Feb 16 07:56 | 2° \mathfrak{H} 14'50 | 0.27998 AU | asc. node | 10884 Aug 06 19:18 | 1° \mathfrak{M} 05'58 | |
| asc. node | 10882 Feb 20 03:51 | 29° \approx 54'22 | | evening rise | 10884 Aug 22 18:32 | 21° \mathfrak{M} 00'03 | |
| | 10882 Feb 20 00:02 | 30° \mathfrak{R} \approx | | | 10884 Aug 30 00:18 | 0° \mathfrak{L} | |
| morning rise | 10882 Feb 22 03:41 | 28° \approx 46'22 | | | 10884 Sep 23 06:01 | 0° \mathfrak{M} | |
| direct | 10882 Mar 08 23:52 | 24° \approx 26'51 | | | 10884 Oct 17 16:53 | 0° \mathfrak{A} | |
| greatest brilliancy | 10882 Mar 19 19:13 | 26° \approx 36'48 | -4.8m | | 10884 Nov 11 11:22 | 0° \mathfrak{Z} | |
| | 10882 Mar 26 20:04 | 0° \mathfrak{H} | | desc. node | 10884 Nov 26 13:59 | 18° \mathfrak{Z} 02'47 | |
| morning max el | 10882 Apr 28 03:58 | 26° \mathfrak{H} 46'53 | 46°43'04 | | 10884 Dec 06 16:38 | 0° \approx | |
| | 10882 May 01 08:15 | 0° \mathfrak{Y} | | | 10885 Jan 01 13:11 | 0° \mathfrak{H} | |
| | 10882 May 28 21:31 | 0° \mathfrak{B} | | | 10885 Jan 28 11:57 | 0° \mathfrak{Y} | |
| desc. node | 10882 Jun 12 01:36 | 16° \mathfrak{B} 23'36 | | evening max el | 10885 Feb 17 15:37 | 20° \mathfrak{Y} 51'44 | 46°18'12 |
| | 10882 Jun 23 13:50 | 0° \mathfrak{II} | | | 10885 Feb 27 07:28 | 0° \mathfrak{B} | |
| | 10882 Jul 18 11:28 | 0° \mathfrak{C} | | asc. node | 10885 Mar 19 14:16 | 15° \mathfrak{B} 47'29 | |
| | 10882 Aug 12 00:57 | 0° \mathcal{O} | | greatest brilliancy | 10885 Mar 29 16:53 | 20° \mathfrak{B} 44'39 | -4.8m |
| | 10882 Sep 05 11:21 | 0° \mathfrak{M} | | retrograde | 10885 Apr 08 11:07 | 22° \mathfrak{B} 32'20 | |
| | 10882 Sep 29 20:35 | 0° \mathfrak{L} | | evening set | 10885 Apr 25 07:01 | 17° \mathfrak{B} 03'37 | |
| asc. node | 10882 Oct 02 20:06 | 3° \mathfrak{L} 40'11 | | inferior conj | 10885 Apr 29 04:21 | 14° \mathfrak{B} 42'23 | 8°21'02 |
| | 10882 Oct 24 04:59 | 0° \mathfrak{M} | | minimum elong | 10885 Apr 28 19:39 | 14° \mathfrak{B} 55'47 | 8°19'28 |
| morning set | 10882 Oct 30 03:39 | 7° \mathfrak{M} 19'56 | | min. Earth dist. | 10885 Apr 29 03:48 | 14° \mathfrak{B} 43'14 | 0.27321 AU |
| | 10882 Nov 17 12:38 | 0° \mathfrak{A} | | morning rise | 10885 May 02 08:13 | 12° \mathfrak{B} 46'37 | |
| | | | | direct | 10885 May 19 22:41 | 6° \mathfrak{B} 48'10 | |
| superior conj | 10882 Dec 05 21:32 | 22° \mathfrak{A} 40'18 | 1°23'47 | greatest brilliancy | 10885 May 29 19:13 | 8° \mathfrak{B} 38'32 | -4.9m |
| minimum elong | 10882 Dec 06 01:51 | 22° \mathfrak{A} 53'37 | 1°24'20 | | 10885 Jun 29 11:57 | 0° \mathfrak{II} | |
| max. Earth dist. | 10882 Dec 06 05:49 | 23° \mathfrak{A} 05'51 | 1.73217 AU | morning max el | 10885 Jul 09 11:11 | 9° \mathfrak{II} 38'10 | 46°56'39 |
| | 10882 Dec 11 20:07 | 0° \mathfrak{Z} | | desc. node | 10885 Jul 09 13:06 | 9° \mathfrak{II} 42'59 | |
| | 10883 Jan 05 04:08 | 0° \approx | | | 10885 Jul 28 17:23 | 0° \mathfrak{C} | |
| evening rise | 10883 Jan 12 02:11 | 8° \approx 31'12 | | | 10885 Aug 24 04:06 | 0° \mathcal{O} | |
| desc. node | 10883 Jan 22 12:05 | 21° \approx 20'27 | | | 10885 Sep 18 16:17 | 0° \mathfrak{M} | |
| | 10883 Jan 29 12:55 | 0° \mathfrak{H} | | | 10885 Oct 13 18:09 | 0° \mathfrak{L} | |
| | 10883 Feb 22 21:59 | 0° \mathfrak{Y} | | asc. node | 10885 Oct 30 09:22 | 20° \mathfrak{L} 05'13 | |
| | 10883 Mar 19 07:08 | 0° \mathfrak{B} | | | 10885 Nov 07 13:32 | 0° \mathfrak{M} | |
| | 10883 Apr 12 17:40 | 0° \mathfrak{II} | | | 10885 Dec 02 03:52 | 0° \mathfrak{A} | |
| | 10883 May 07 09:21 | 0° \mathfrak{C} | | | 10885 Dec 26 14:26 | 0° \mathfrak{Z} | |
| asc. node | 10883 May 15 09:04 | 9° \mathfrak{C} 36'35 | | morning set | 10886 Jan 06 18:44 | 13° \mathfrak{Z} 46'02 | |
| | 10883 Jun 01 13:24 | 0° \mathcal{O} | | | 10886 Jan 19 22:29 | 0° \approx | |
| | 10883 Jun 27 20:41 | 0° \mathfrak{M} | | max. Earth dist. | 10886 Feb 11 04:23 | 27° \approx 30'13 | 1.72718 AU |
| evening max el | 10883 Jul 16 09:21 | 19° \mathfrak{M} 33'17 | 46°38'50 | | | | |
| | 10883 Jul 27 06:46 | 0° \mathfrak{L} | | superior conj | 10886 Feb 13 07:18 | 0° \mathfrak{H} 07'53 | 0°13'53 |
| greatest brilliancy | 10883 Aug 24 13:16 | 19° \mathfrak{L} 38'52 | -4.8m | minimum elong | 10886 Feb 13 10:35 | 0° \mathfrak{H} 18'04 | 0°14'04 |
| desc. node | 10883 Sep 04 08:21 | 21° \mathfrak{L} 53'43 | | behind sun begin | 10886 Feb 12 23:00 | 29° \approx 42'11 | |
| retrograde | 10883 Sep 04 13:39 | 21° \mathfrak{L} 53'47 | | behind sun end | 10886 Feb 13 22:11 | 0° \mathfrak{H} 53'58 | |
| evening set | 10883 Sep 19 23:07 | 17° \mathfrak{L} 17'47 | | | 10886 Feb 13 04:45 | 0° \mathfrak{H} | |
| min. Earth dist. | 10883 Sep 25 00:45 | 14° \mathfrak{L} 16'35 | 0.28126 AU | desc. node | 10886 Feb 19 01:12 | 7° \mathfrak{H} 15'02 | |
| inferior conj | 10883 Sep 25 20:30 | 13° \mathfrak{L} 45'53 | -5°03'10 | | 10886 Mar 09 09:11 | 0° \mathfrak{Y} | |
| minimum elong | 10883 Sep 25 10:52 | 14° \mathfrak{L} 00'52 | 5°00'37 | evening rise | 10886 Mar 24 02:28 | 18° \mathfrak{Y} 18'47 | |
| morning rise | 10883 Sep 30 23:08 | 10° \mathfrak{L} 41'08 | | | 10886 Apr 02 11:36 | 0° \mathfrak{B} | |
| direct | 10883 Oct 16 23:12 | 5° \mathfrak{L} 47'39 | | | 10886 Apr 26 12:40 | 0° \mathfrak{II} | |
| greatest brilliancy | 10883 Oct 26 13:39 | 7° \mathfrak{L} 27'32 | -4.8m | | 10886 May 20 14:17 | 0° \mathfrak{C} | |
| | 10883 Nov 28 16:56 | 0° \mathfrak{M} | | asc. node | 10886 Jun 11 20:21 | 27° \mathfrak{C} 35'13 | |
| morning max el | 10883 Dec 04 16:53 | 5° \mathfrak{M} 36'27 | 45°42'59 | | 10886 Jun 13 19:17 | 0° \mathcal{O} | |
| asc. node | 10883 Dec 26 08:04 | 27° \mathfrak{M} 43'09 | | | 10886 Jul 08 07:19 | 0° \mathfrak{M} | |
| | 10883 Dec 28 10:51 | 0° \mathfrak{A} | | | 10886 Aug 02 07:58 | 0° \mathfrak{L} | |
| | 10884 Jan 24 04:17 | 0° \mathfrak{Z} | | | 10886 Aug 28 08:49 | 0° \mathfrak{M} | |
| | 10884 Feb 18 16:08 | 0° \approx | | evening max el | 10886 Sep 25 09:18 | 29° \mathfrak{M} 36'16 | 46°01'43 |
| | 10884 Mar 14 12:23 | 0° \mathfrak{H} | | | 10886 Sep 25 19:02 | 0° \mathfrak{A} | |
| | 10884 Apr 07 23:08 | 0° \mathfrak{Y} | | desc. node | 10886 Oct 01 18:42 | 5° \mathfrak{A} 41'02 | |
| desc. node | 10884 Apr 16 02:04 | 10° \mathfrak{Y} 02'51 | | greatest brilliancy | 10886 Oct 03 08:56 | 28° \mathfrak{A} 21'59 | -4.7m |
| | 10884 May 02 03:25 | 0° \mathfrak{B} | | | 10886 Nov 09 19:06 | 0° \mathfrak{Z} | |
| | 10884 May 26 03:18 | 0° \mathfrak{II} | | retrograde | 10886 Nov 13 15:56 | 0° \mathfrak{Z} 17'08 | |
| morning set | 10884 Jun 04 06:06 | 11° \mathfrak{II} 26'03 | | | 10886 Nov 17 10:52 | 30° \mathfrak{R} \mathfrak{A} | |

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|---------------------|--------------------|----------------------|------------|---------------------|--------------------|----------------------|------------|
| evening set | 10886 Dec 01 21:34 | 24° ♊ 01'25 | | superior conj | 10889 Apr 27 12:06 | 13° ♋ 03'36 | -1°18'32 |
| inferior conj | 10886 Dec 05 03:45 | 21° ♊ 59'53 | -8°30'02 | minimum elong | 10889 Apr 27 02:37 | 12° ♋ 33'55 | 1°18'41 |
| minimum elong | 10886 Dec 05 08:10 | 21° ♊ 52'57 | 8°29'09 | | 10889 May 11 00:11 | 0° ♌ | |
| min. Earth dist. | 10886 Dec 05 06:39 | 21° ♊ 55'20 | 0.29071 AU | | 10889 Jun 03 21:34 | 0° ♍ | |
| morning rise | 10886 Dec 08 18:48 | 19° ♊ 45'07 | | evening rise | 10889 Jun 06 17:13 | 3° ♍ 32'19 | |
| direct | 10886 Dec 26 15:33 | 13° ♊ 43'38 | | | 10889 Jun 27 20:00 | 0° ♎ | |
| greatest brilliancy | 10887 Jan 06 04:58 | 15° ♊ 46'03 | -4.7m | asc. node | 10889 Jul 09 08:27 | 14° ♎ 23'02 | |
| asc. node | 10887 Jan 22 19:12 | 25° ♊ 14'21 | | | 10889 Jul 21 21:35 | 0° ♏ | |
| | 10887 Jan 28 21:18 | 0° ♋ | | | 10889 Aug 15 04:17 | 0° ♐ | |
| morning max el | 10887 Feb 13 23:42 | 14° ♋ 38'55 | 45°57'19 | | 10889 Sep 08 18:57 | 0° ♑ | |
| | 10887 Feb 28 22:21 | 0° ♌ | | | 10889 Oct 03 22:36 | 0° ♒ | |
| | 10887 Mar 27 19:14 | 0° ♍ | | desc. node | 10889 Oct 29 04:55 | 29° ♒ 03'58 | |
| | 10887 Apr 22 05:54 | 0° ♎ | | | 10889 Oct 30 00:55 | 0° ♓ | |
| desc. node | 10887 May 14 15:05 | 27° ♎ 07'24 | | | 10889 Nov 27 00:55 | 0° ♈ | |
| | 10887 May 16 23:31 | 0° ♏ | | evening max el | 10889 Dec 05 12:15 | 8° ♈ 20'54 | 45°49'04 |
| | 10887 Jun 10 07:33 | 0° ♐ | | | 10889 Dec 31 15:23 | 0° ♉ | |
| | 10887 Jul 04 10:36 | 0° ♑ | | greatest brilliancy | 10890 Jan 13 16:05 | 6° ♉ 37'19 | -4.8m |
| | 10887 Jul 28 12:01 | 0° ♒ | | retrograde | 10890 Jan 23 07:39 | 8° ♉ 19'29 | |
| morning set | 10887 Aug 18 05:39 | 25° ♒ 50'26 | | evening set | 10890 Feb 07 08:39 | 3° ♉ 57'34 | |
| | 10887 Aug 21 13:50 | 0° ♑ | | inferior conj | 10890 Feb 13 10:55 | 0° ♉ 19'22 | -1°26'35 |
| asc. node | 10887 Sep 04 08:34 | 17° ♑ 08'40 | | minimum elong | 10890 Feb 13 14:09 | 0° ♊ 14'19 | 1°25'14 |
| | 10887 Sep 14 16:54 | 0° ♒ | | | 10890 Feb 13 23:19 | 30° ♊ | |
| | | | | min. Earth dist. | 10890 Feb 13 23:56 | 29° ♊ 59'03 | 0.28040 AU |
| superior conj | 10887 Sep 25 16:57 | 13° ♒ 39'14 | 0°48'49 | asc. node | 10890 Feb 19 05:54 | 26° ♊ 49'37 | |
| minimum elong | 10887 Sep 25 07:38 | 13° ♒ 10'20 | 0°48'31 | morning rise | 10890 Feb 19 18:57 | 26° ♊ 31'33 | |
| max. Earth dist. | 10887 Sep 27 22:40 | 16° ♒ 25'47 | 1.72642 AU | direct | 10890 Mar 06 14:39 | 22° ♊ 11'46 | |
| | 10887 Oct 08 21:27 | 0° ♓ | | greatest brilliancy | 10890 Mar 17 11:58 | 24° ♊ 23'11 | -4.8m |
| evening rise | 10887 Nov 01 17:50 | 29° ♓ 28'37 | | | 10890 Mar 28 03:58 | 0° ♋ | |
| | 10887 Nov 02 04:00 | 0° ♊ | | morning max el | 10890 Apr 25 17:55 | 24° ♋ 27'21 | 46°41'43 |
| | 10887 Nov 26 13:31 | 0° ♋ | | | 10890 May 01 04:30 | 0° ♌ | |
| | 10887 Dec 21 02:59 | 0° ♌ | | | 10890 May 28 12:41 | 0° ♍ | |
| desc. node | 10887 Dec 25 01:38 | 4° ♌ 47'47 | | desc. node | 10890 Jun 11 03:31 | 15° ♍ 48'25 | |
| | 10888 Jan 14 20:53 | 0° ♍ | | | 10890 Jun 23 03:03 | 0° ♎ | |
| | 10888 Feb 08 19:36 | 0° ♎ | | | 10890 Jul 17 23:39 | 0° ♏ | |
| | 10888 Mar 05 01:25 | 0° ♏ | | | 10890 Aug 11 12:30 | 0° ♐ | |
| | 10888 Mar 30 22:15 | 0° ♐ | | | 10890 Sep 04 22:26 | 0° ♑ | |
| asc. node | 10888 Apr 16 00:22 | 17° ♐ 54'11 | | | 10890 Sep 29 07:21 | 0° ♒ | |
| | 10888 Apr 27 10:17 | 0° ♑ | | asc. node | 10890 Oct 01 22:00 | 3° ♒ 12'59 | |
| evening max el | 10888 May 01 18:37 | 4° ♑ 25'25 | 46°50'41 | | 10890 Oct 23 15:31 | 0° ♓ | |
| | 10888 May 31 20:56 | 0° ♒ | | morning set | 10890 Oct 27 20:06 | 5° ♓ 10'14 | |
| greatest brilliancy | 10888 Jun 11 03:02 | 5° ♒ 08'02 | -4.9m | | 10890 Nov 16 23:02 | 0° ♊ | |
| retrograde | 10888 Jun 21 02:13 | 6° ♒ 59'39 | | | | | |
| evening set | 10888 Jul 07 04:31 | 1° ♒ 56'36 | | superior conj | 10890 Dec 03 14:50 | 20° ♊ 33'35 | 1°24'29 |
| | 10888 Jul 10 10:53 | 30° ♒ | | minimum elong | 10890 Dec 03 18:28 | 20° ♊ 44'48 | 1°25'02 |
| inferior conj | 10888 Jul 11 18:44 | 29° ♓ 11'11 | 6°00'46 | max. Earth dist. | 10890 Dec 03 23:16 | 20° ♊ 59'39 | 1.73217 AU |
| minimum elong | 10888 Jul 12 05:44 | 28° ♓ 54'19 | 5°57'30 | | 10890 Dec 11 06:30 | 0° ♋ | |
| min. Earth dist. | 10888 Jul 11 23:20 | 29° ♓ 04'07 | 0.27086 AU | | 10891 Jan 04 14:37 | 0° ♌ | |
| morning rise | 10888 Jul 17 07:08 | 25° ♓ 55'21 | | evening rise | 10891 Jan 09 18:25 | 6° ♌ 21'04 | |
| direct | 10888 Aug 01 12:40 | 21° ♓ 24'53 | | desc. node | 10891 Jan 21 14:05 | 20° ♌ 53'59 | |
| desc. node | 10888 Aug 05 23:54 | 21° ♓ 48'10 | | | 10891 Jan 28 23:34 | 0° ♍ | |
| greatest brilliancy | 10888 Aug 11 09:57 | 23° ♓ 14'25 | -4.8m | | 10891 Feb 22 08:53 | 0° ♎ | |
| | 10888 Aug 24 07:22 | 0° ♒ | | | 10891 Mar 18 18:23 | 0° ♏ | |
| morning max el | 10888 Sep 20 06:21 | 22° ♒ 53'15 | 46°17'55 | | 10891 Apr 12 05:26 | 0° ♐ | |
| | 10888 Sep 27 09:14 | 0° ♑ | | | 10891 May 06 21:56 | 0° ♑ | |
| | 10888 Oct 25 07:27 | 0° ♒ | | asc. node | 10891 May 14 10:57 | 9° ♑ 03'27 | |
| | 10888 Nov 20 13:45 | 0° ♓ | | | 10891 Jun 01 03:27 | 0° ♒ | |
| asc. node | 10888 Nov 26 22:00 | 7° ♓ 24'34 | | | 10891 Jun 27 13:57 | 0° ♓ | |
| | 10888 Dec 16 00:06 | 0° ♊ | | evening max el | 10891 Jul 13 23:18 | 17° ♓ 13'10 | 46°39'55 |
| | 10889 Jan 09 22:04 | 0° ♋ | | | 10891 Jul 27 11:02 | 0° ♌ | |
| | 10889 Feb 03 11:59 | 0° ♌ | | greatest brilliancy | 10891 Aug 22 04:27 | 17° ♌ 22'30 | -4.8m |
| | 10889 Feb 27 20:28 | 0° ♍ | | retrograde | 10891 Sep 02 04:51 | 19° ♌ 38'00 | |
| morning set | 10889 Mar 18 10:54 | 23° ♍ 03'31 | | desc. node | 10891 Sep 03 10:24 | 19° ♌ 36'10 | |
| desc. node | 10889 Mar 18 14:33 | 23° ♍ 14'50 | | evening set | 10891 Sep 17 11:48 | 15° ♌ 04'57 | |
| | 10889 Mar 24 00:52 | 0° ♎ | | min. Earth dist. | 10891 Sep 22 15:46 | 12° ♌ 00'55 | 0.28072 AU |
| | 10889 Apr 17 01:49 | 0° ♏ | | inferior conj | 10891 Sep 23 11:15 | 11° ♌ 30'44 | -4°45'12 |
| max. Earth dist. | 10889 Apr 24 16:55 | 9° ♏ 33'11 | 1.71560 AU | minimum elong | 10891 Sep 23 01:56 | 11° ♌ 45'10 | 4°42'43 |
| | | | | morning rise | 10891 Sep 28 16:35 | 8° ♌ 22'33 | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| direct | 10891 Oct 14 13:08 | 3°♌33'02 | | asc. node | 10894 Jun 10 22:20 | 27°♏05'30 | |
| greatest brilliancy | 10891 Oct 24 04:21 | 5°♌13'43 | -4.8m | | 10894 Jun 13 06:56 | 0°♌ | |
| | 10891 Nov 28 17:33 | 0°♌ | | | 10894 Jul 07 19:32 | 0°♍ | |
| morning max el | 10891 Dec 02 07:43 | 3°♌23'25 | 45°43'31 | | 10894 Aug 01 21:14 | 0°♌ | |
| asc. node | 10891 Dec 25 10:06 | 27°♌04'39 | | | 10894 Aug 28 00:23 | 0°♌ | |
| | 10891 Dec 28 02:49 | 0°♌ | | evening max el | 10894 Sep 23 01:23 | 27°♌25'15 | 46°02'41 |
| | 10892 Jan 23 17:31 | 0°♌ | | | 10894 Sep 25 17:22 | 0°♌ | |
| | 10892 Feb 18 04:09 | 0°♌ | | desc. node | 10894 Sep 30 20:32 | 4°♌47'51 | |
| | 10892 Mar 13 23:47 | 0°♌ | | greatest brilliancy | 10894 Nov 01 00:09 | 26°♌11'39 | -4.7m |
| | 10892 Apr 07 10:12 | 0°♌ | | retrograde | 10894 Nov 11 07:59 | 28°♌07'15 | |
| desc. node | 10892 Apr 15 03:52 | 9°♌34'26 | | evening set | 10894 Nov 29 14:46 | 21°♌50'07 | |
| | 10892 May 01 14:16 | 0°♌ | | inferior conj | 10894 Dec 02 19:55 | 19°♌49'55 | -8°34'01 |
| | 10892 May 25 14:01 | 0°♌ | | minimum elong | 10894 Dec 02 23:38 | 19°♌44'05 | 8°33'15 |
| morning set | 10892 Jun 01 17:33 | 8°♌57'48 | | min. Earth dist. | 10894 Dec 02 21:29 | 19°♌47'27 | 0.29075 AU |
| | 10892 Jun 18 11:39 | 0°♌ | | morning rise | 10894 Dec 06 08:33 | 17°♌38'39 | |
| | | | | direct | 10894 Dec 24 08:09 | 11°♌34'08 | |
| superior conj | 10892 Jul 11 17:55 | 29°♌11'35 | -0°56'31 | greatest brilliancy | 10895 Jan 03 19:25 | 13°♌34'28 | -4.7m |
| minimum elong | 10892 Jul 12 05:18 | 29°♌47'15 | 0°56'37 | asc. node | 10895 Jan 21 21:14 | 24°♌07'22 | |
| | 10892 Jul 12 09:22 | 0°♌ | | | 10895 Jan 29 03:42 | 0°♌ | |
| max. Earth dist. | 10892 Jul 13 18:06 | 1°♌42'35 | 1.71532 AU | morning max el | 10895 Feb 11 14:45 | 12°♌25'01 | 45°55'58 |
| | 10892 Aug 05 08:48 | 0°♌ | | | 10895 Feb 28 15:44 | 0°♌ | |
| asc. node | 10892 Aug 05 21:17 | 0°♌39'01 | | | 10895 Mar 27 09:18 | 0°♌ | |
| evening rise | 10892 Aug 20 08:52 | 18°♌42'15 | | | 10895 Apr 21 18:32 | 0°♌ | |
| | 10892 Aug 29 10:57 | 0°♌ | | desc. node | 10895 May 13 16:57 | 26°♌36'29 | |
| | 10892 Sep 22 16:47 | 0°♌ | | | 10895 May 16 11:26 | 0°♌ | |
| | 10892 Oct 17 03:54 | 0°♌ | | | 10895 Jun 09 19:02 | 0°♌ | |
| | 10892 Nov 10 22:52 | 0°♌ | | | 10895 Jul 03 21:49 | 0°♌ | |
| desc. node | 10892 Nov 25 15:53 | 17°♌32'59 | | | 10895 Jul 27 23:01 | 0°♌ | |
| | 10892 Dec 06 05:00 | 0°♌ | | morning set | 10895 Aug 15 20:01 | 23°♌32'01 | |
| | 10893 Jan 01 03:10 | 0°♌ | | | 10895 Aug 21 00:39 | 0°♌ | |
| | 10893 Jan 28 05:20 | 0°♌ | | asc. node | 10895 Sep 03 10:24 | 16°♌41'00 | |
| evening max el | 10893 Feb 15 06:28 | 18°♌34'49 | 46°16'53 | | 10895 Sep 14 03:35 | 0°♌ | |
| | 10893 Feb 27 12:11 | 0°♌ | | | | | |
| asc. node | 10893 Mar 18 16:13 | 14°♌19'50 | | superior conj | 10895 Sep 23 08:49 | 11°♌26'29 | 0°45'56 |
| greatest brilliancy | 10893 Mar 27 04:59 | 18°♌20'49 | -4.8m | minimum elong | 10895 Sep 22 23:48 | 10°♌58'32 | 0°45'38 |
| retrograde | 10893 Apr 06 00:54 | 20°♌09'28 | | max. Earth dist. | 10895 Sep 25 17:25 | 14°♌22'04 | 1.72605 AU |
| evening set | 10893 Apr 22 15:52 | 14°♌47'01 | | | 10895 Oct 08 08:06 | 0°♌ | |
| inferior conj | 10893 Apr 26 17:36 | 12°♌19'08 | 8°10'24 | evening rise | 10895 Oct 30 10:53 | 27°♌20'12 | |
| minimum elong | 10893 Apr 26 08:22 | 12°♌33'22 | 8°08'40 | | 10895 Nov 01 14:42 | 0°♌ | |
| min. Earth dist. | 10893 Apr 26 16:22 | 12°♌21'02 | 0.27329 AU | | 10895 Nov 26 00:23 | 0°♌ | |
| morning rise | 10893 Apr 30 00:51 | 10°♌18'24 | | | 10895 Dec 20 14:09 | 0°♌ | |
| direct | 10893 May 17 12:43 | 4°♌24'50 | | desc. node | 10895 Dec 24 03:38 | 4°♌19'44 | |
| greatest brilliancy | 10893 May 27 08:11 | 6°♌14'36 | -4.9m | | 10896 Jan 14 08:31 | 0°♌ | |
| | 10893 Jun 29 14:35 | 0°♌ | | | 10896 Feb 08 07:59 | 0°♌ | |
| morning max el | 10893 Jul 07 01:45 | 7°♌18'01 | 46°57'14 | | 10896 Mar 04 15:01 | 0°♌ | |
| desc. node | 10893 Jul 08 15:07 | 8°♌52'24 | | | 10896 Mar 30 14:10 | 0°♌ | |
| | 10893 Jul 28 10:31 | 0°♌ | | asc. node | 10896 Apr 15 02:17 | 17°♌09'28 | |
| | 10893 Aug 23 18:12 | 0°♌ | | | 10896 Apr 27 07:59 | 0°♌ | |
| | 10893 Sep 18 04:54 | 0°♌ | | evening max el | 10896 Apr 29 07:21 | 1°♌59'36 | 46°49'58 |
| | 10893 Oct 13 05:53 | 0°♌ | | | 10896 Jun 02 14:17 | 0°♌ | |
| asc. node | 10893 Oct 29 11:10 | 19°♌36'19 | | greatest brilliancy | 10896 Jun 08 17:53 | 2°♌44'40 | -4.9m |
| | 10893 Nov 07 00:42 | 0°♌ | | retrograde | 10896 Jun 18 14:43 | 4°♌34'24 | |
| | 10893 Dec 01 14:42 | 0°♌ | | | 10896 Jul 03 21:30 | 30°♌ | |
| | 10893 Dec 26 01:04 | 0°♌ | | evening set | 10896 Jul 04 20:59 | 29°♌26'51 | |
| morning set | 10894 Jan 04 11:43 | 11°♌37'49 | | inferior conj | 10896 Jul 09 07:39 | 26°♌46'28 | 6°18'53 |
| | 10894 Jan 19 09:04 | 0°♌ | | minimum elong | 10896 Jul 09 18:47 | 26°♌29'22 | 6°15'40 |
| max. Earth dist. | 10894 Feb 08 22:11 | 25°♌24'01 | 1.72750 AU | min. Earth dist. | 10896 Jul 09 13:11 | 26°♌37'58 | 0.27082 AU |
| | | | | morning rise | 10896 Jul 14 16:41 | 23°♌34'51 | |
| superior conj | 10894 Feb 10 22:17 | 27°♌52'53 | 0°17'21 | direct | 10896 Jul 30 01:04 | 19°♌00'03 | |
| minimum elong | 10894 Feb 11 02:20 | 28°♌05'24 | 0°17'31 | desc. node | 10896 Aug 05 01:54 | 19°♌41'55 | |
| | 10894 Feb 12 15:21 | 0°♌ | | greatest brilliancy | 10896 Aug 08 23:13 | 20°♌49'57 | -4.8m |
| desc. node | 10894 Feb 18 03:05 | 6°♌47'59 | | | 10896 Aug 25 06:46 | 0°♌ | |
| | 10894 Mar 08 19:52 | 0°♌ | | morning max el | 10896 Sep 17 18:53 | 20°♌29'43 | 46°19'43 |
| evening rise | 10894 Mar 21 16:14 | 15°♌58'41 | | | 10896 Sep 27 05:32 | 0°♌ | |
| | 10894 Apr 01 22:26 | 0°♌ | | | 10896 Oct 24 22:39 | 0°♌ | |
| | 10894 Apr 25 23:43 | 0°♌ | | | 10896 Nov 20 02:50 | 0°♌ | |
| | 10894 May 20 01:35 | 0°♌ | | asc. node | 10896 Nov 26 00:04 | 6°♌53'15 | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 10896 Dec 15 12:07 | 0°♊ | | evening max el | 10899 Jul 11 13:51 | 14°♎53'25 | 46°41'06 |
| | 10897 Jan 09 09:30 | 0°♋ | | | 10899 Jul 27 17:57 | 0°♌ | |
| | 10897 Feb 02 23:06 | 0°♌ | | greatest brilliancy | 10899 Aug 19 19:11 | 15°♍04'13 | -4.8m |
| | 10897 Feb 27 07:26 | 0°♍ | | retrograde | 10899 Aug 30 20:30 | 17°♍20'33 | |
| morning set | 10897 Mar 16 00:11 | 20°♍41'42 | | desc. node | 10899 Sep 02 12:19 | 17°♍11'56 | |
| desc. node | 10897 Mar 17 16:22 | 22°♍46'32 | | evening set | 10899 Sep 15 00:33 | 12°♍50'13 | |
| | 10897 Mar 23 11:47 | 0°♎ | | min. Earth dist. | 10899 Sep 20 06:24 | 9°♍43'49 | 0.28018 AU |
| | 10897 Apr 16 12:44 | 0°♏ | | inferior conj | 10899 Sep 21 01:51 | 9°♍13'46 | -4°26'40 |
| max. Earth dist. | 10897 Apr 22 01:33 | 6°♏55'45 | 1.71595 AU | minimum elong | 10899 Sep 20 16:55 | 9°♍27'35 | 4°24'13 |
| | | | | morning rise | 10899 Sep 26 09:51 | 6°♍02'22 | |
| superior conj | 10897 Apr 25 00:02 | 10°♏36'28 | -1°16'44 | direct | 10899 Oct 12 03:23 | 1°♍16'41 | |
| minimum elong | 10897 Apr 24 14:00 | 10°♏05'01 | 1°16'50 | greatest brilliancy | 10899 Oct 21 18:23 | 2°♍57'38 | -4.8m |
| | 10897 May 10 11:08 | 0°♐ | | | 10899 Nov 28 17:30 | 0°♎ | |
| | 10897 Jun 03 08:35 | 0°♑ | | morning max el | 10899 Nov 29 23:13 | 1°♎10'48 | 45°44'08 |
| evening rise | 10897 Jun 04 04:07 | 1°♑01'18 | | asc. node | 10899 Dec 24 12:03 | 26°♎25'09 | |
| | 10897 Jun 27 07:08 | 0°♒ | | | 10899 Dec 27 18:55 | 0°♏ | |
| asc. node | 10897 Jul 08 10:26 | 13°♒54'15 | | | 10900 Jan 23 07:01 | 0°♋ | |
| | 10897 Jul 21 08:54 | 0°♎ | | | 10900 Feb 17 16:28 | 0°♌ | |
| | 10897 Aug 14 15:53 | 0°♍ | | | 10900 Mar 14 11:30 | 0°♍ | |
| | 10897 Sep 08 07:02 | 0°♎ | | | 10900 Apr 07 21:36 | 0°♎ | |
| | 10897 Oct 03 11:36 | 0°♏ | | desc. node | 10900 Apr 15 05:48 | 9°♎05'17 | |
| desc. node | 10897 Oct 28 06:55 | 28°♏28'06 | | | 10900 May 02 01:29 | 0°♏ | |
| | 10897 Oct 29 15:51 | 0°♋ | | | 10900 May 26 01:08 | 0°♐ | |
| | 10897 Nov 26 20:57 | 0°♌ | | morning set | 10900 May 31 04:38 | 6°♐27'13 | |
| evening max el | 10897 Dec 03 01:59 | 6°♌04'34 | 45°48'48 | | 10900 Jun 18 22:42 | 0°♑ | |
| | 10898 Jan 01 21:27 | 0°♍ | | | | | |
| greatest brilliancy | 10898 Jan 11 06:50 | 4°♍22'31 | -4.8m | superior conj | 10900 Jul 10 05:47 | 26°♑43'49 | -0°59'25 |
| retrograde | 10898 Jan 20 22:16 | 6°♍04'46 | | minimum elong | 10900 Jul 10 17:21 | 27°♑20'05 | 0°59'33 |
| evening set | 10898 Feb 05 01:06 | 1°♍39'50 | | max. Earth dist. | 10900 Jul 12 05:18 | 29°♑12'47 | 1.71506 AU |
| | 10898 Feb 07 22:26 | 30°♎ | | | 10900 Jul 12 20:21 | 0°♒ | |
| inferior conj | 10898 Feb 11 01:56 | 28°♎03'50 | -1°47'58 | asc. node | 10900 Aug 05 23:04 | 0°♎10'18 | |
| minimum elong | 10898 Feb 11 05:57 | 27°♎57'35 | 1°46'22 | | 10900 Aug 05 19:46 | 0°♎ | |
| min. Earth dist. | 10898 Feb 11 15:42 | 27°♎42'23 | 0.28087 AU | evening rise | 10900 Aug 18 22:47 | 16°♎22'02 | |
| morning rise | 10898 Feb 17 10:03 | 24°♎15'58 | | | 10900 Aug 29 21:58 | 0°♍ | |
| asc. node | 10898 Feb 18 07:51 | 23°♎46'41 | | | 10900 Sep 23 03:55 | 0°♎ | |
| direct | 10898 Mar 04 05:41 | 19°♎55'21 | | | 10900 Oct 17 15:18 | 0°♏ | |
| greatest brilliancy | 10898 Mar 15 04:42 | 22°♎08'21 | -4.8m | | 10900 Nov 11 10:47 | 0°♋ | |
| | 10898 Mar 29 03:29 | 0°♍ | | desc. node | 10900 Nov 25 17:56 | 17°♋02'28 | |
| morning max el | 10898 Apr 23 08:53 | 22°♍09'05 | 46°40'23 | | 10900 Dec 06 17:48 | 0°♌ | |
| | 10898 May 01 00:37 | 0°♎ | | | 10901 Jan 01 17:37 | 0°♍ | |
| | 10898 May 28 04:05 | 0°♏ | | | 10901 Jan 28 23:25 | 0°♎ | |
| desc. node | 10898 Jun 10 05:35 | 15°♏12'43 | | evening max el | 10901 Feb 13 21:28 | 16°♎17'42 | 46°15'32 |
| | 10898 Jun 22 16:32 | 0°♐ | | | 10901 Feb 28 19:21 | 0°♏ | |
| | 10898 Jul 17 12:08 | 0°♑ | | asc. node | 10901 Mar 18 18:07 | 12°♏48'17 | |
| | 10898 Aug 11 00:22 | 0°♒ | | greatest brilliancy | 10901 Mar 25 17:28 | 15°♏56'53 | -4.8m |
| | 10898 Sep 04 09:54 | 0°♎ | | retrograde | 10901 Apr 04 14:21 | 17°♏45'44 | |
| | 10898 Sep 28 18:30 | 0°♍ | | evening set | 10901 Apr 21 00:46 | 12°♏29'52 | |
| asc. node | 10898 Sep 30 23:49 | 2°♍44'16 | | inferior conj | 10901 Apr 25 06:53 | 9°♏55'16 | 7°58'50 |
| | 10898 Oct 23 02:27 | 0°♎ | | minimum elong | 10901 Apr 24 21:10 | 10°♏10'17 | 7°56'57 |
| morning set | 10898 Oct 25 12:30 | 2°♎59'03 | | min. Earth dist. | 10901 Apr 25 05:12 | 9°♏57'52 | 0.27340 AU |
| | 10898 Nov 16 09:50 | 0°♏ | | morning rise | 10901 Apr 28 17:34 | 7°♏49'15 | |
| | | | | direct | 10901 May 16 02:43 | 2°♏00'55 | |
| superior conj | 10898 Dec 01 08:11 | 18°♏25'51 | 1°25'03 | greatest brilliancy | 10901 May 25 21:26 | 3°♏50'01 | -4.9m |
| minimum elong | 10898 Dec 01 11:07 | 18°♏34'55 | 1°25'37 | | 10901 Jun 30 16:13 | 0°♐ | |
| max. Earth dist. | 10898 Dec 01 18:31 | 18°♏57'44 | 1.73213 AU | morning max el | 10901 Jul 05 15:40 | 4°♐55'03 | 46°57'35 |
| | 10898 Dec 10 17:15 | 0°♋ | | desc. node | 10901 Jul 08 17:04 | 8°♐01'25 | |
| | 10899 Jan 04 01:27 | 0°♌ | | | 10901 Jul 29 03:42 | 0°♑ | |
| evening rise | 10899 Jan 07 10:49 | 4°♌10'24 | | | 10901 Aug 24 08:30 | 0°♒ | |
| desc. node | 10899 Jan 20 16:01 | 20°♌26'09 | | | 10901 Sep 18 17:44 | 0°♎ | |
| | 10899 Jan 28 10:36 | 0°♍ | | | 10901 Oct 13 17:50 | 0°♍ | |
| | 10899 Feb 21 20:13 | 0°♎ | | asc. node | 10901 Oct 29 13:10 | 19°♍07'20 | |
| | 10899 Mar 18 06:06 | 0°♏ | | | 10901 Nov 07 12:05 | 0°♎ | |
| | 10899 Apr 11 17:42 | 0°♐ | | | 10901 Dec 02 01:44 | 0°♏ | |
| | 10899 May 06 11:03 | 0°♑ | | | 10901 Dec 26 11:56 | 0°♋ | |
| asc. node | 10899 May 13 12:58 | 8°♑29'12 | | morning set | 10902 Jan 03 04:41 | 9°♋28'56 | |
| | 10899 May 31 18:09 | 0°♒ | | | 10902 Jan 19 19:51 | 0°♌ | |
| | 10899 Jun 27 08:05 | 0°♎ | | max. Earth dist. | 10902 Feb 07 14:06 | 23°♌11'28 | 1.72778 AU |

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|---------------------|--------------------|--|------------|---------------------|--------------------|--|------------|
| superior conj | 10902 Feb 09 13:34 | 25°  38'16 | 0°20'46 | direct | 10904 Jul 28 13:24 | 16°  36'22 | |
| minimum elong | 10902 Feb 09 18:19 | 25°  52'59 | 0°20'54 | desc. node | 10904 Aug 05 03:50 | 17°  41'53 | |
| | 10902 Feb 13 02:08 | 0°  ✕ | | greatest brilliancy | 10904 Aug 07 12:52 | 18°  27'09 | -4.8m |
| desc. node | 10902 Feb 18 04:55 | 6°  ✕20'12 | | | 10904 Aug 26 23:38 | 0°  Ω | |
| | 10902 Mar 09 06:43 | 0°  Υ | | morning max el | 10904 Sep 16 08:13 | 18°  Ω08'37 | 46°21'20 |
| evening rise | 10902 Mar 20 06:18 | 13°  Υ39'07 | | | 10904 Sep 28 00:58 | 0°  ൬ | |
| | 10902 Apr 02 09:24 | 0°  ♄ | | | 10904 Oct 25 13:28 | 0°  ♌ | |
| | 10902 Apr 26 10:53 | 0°  ♌ | | | 10904 Nov 20 15:41 | 0°  ♍ | |
| | 10902 May 20 13:02 | 0°  ♍ | | asc. node | 10904 Nov 26 01:59 | 6°  ♍22'04 | |
| asc. node | 10902 Jun 11 00:18 | 26°  ♍35'15 | | | 10904 Dec 15 23:55 | 0°  ♊ | |
| | 10902 Jun 13 18:47 | 0°  Ω | | | 10905 Jan 09 20:42 | 0°  ♊ | |
| | 10902 Jul 08 08:00 | 0°  ൬ | | | 10905 Feb 03 09:58 | 0°  ♋ | |
| | 10902 Aug 02 10:51 | 0°  ♌ | | | 10905 Feb 27 18:10 | 0°  ♋ | |
| | 10902 Aug 28 16:27 | 0°  ♍ | | morning set | 10905 Mar 14 13:30 | 18°  ♋20'43 | |
| evening max el | 10902 Sep 21 16:33 | 25°  ♍11'06 | 46°03'46 | desc. node | 10905 Mar 17 18:16 | 22°  ♋19'10 | |
| | 10902 Sep 26 16:59 | 0°  ♊ | | | 10905 Mar 23 22:29 | 0°  Υ | |
| desc. node | 10902 Sep 30 22:35 | 3°  ♊53'24 | | | 10905 Apr 16 23:26 | 0°  ♄ | |
| greatest brilliancy | 10902 Oct 30 15:48 | 24°  ♊01'01 | -4.8m | max. Earth dist. | 10905 Apr 20 12:07 | 4°  ♄25'01 | 1.71629 AU |
| retrograde | 10902 Nov 09 23:30 | 25°  ♊56'36 | | | | | |
| evening set | 10902 Nov 28 07:32 | 19°  ♊38'35 | | superior conj | 10905 Apr 23 12:02 | 8°  ♄10'15 | -1°14'47 |
| inferior conj | 10902 Dec 01 12:00 | 17°  ♊39'18 | -8°37'17 | minimum elong | 10905 Apr 23 01:32 | 7°  ♄37'20 | 1°14'50 |
| minimum elong | 10902 Dec 01 14:56 | 17°  ♊34'39 | 8°36'35 | | 10905 May 10 21:50 | 0°  ♌ | |
| min. Earth dist. | 10902 Dec 01 12:31 | 17°  ♊38'29 | 0.29075 AU | evening rise | 10905 Jun 02 15:18 | 28°  ♌32'11 | |
| morning rise | 10902 Dec 04 22:24 | 15°  ♊31'10 | | | 10905 Jun 03 19:18 | 0°  ♍ | |
| direct | 10902 Dec 23 00:06 | 9°  ♊23'53 | | | 10905 Jun 27 17:56 | 0°  Ω | |
| greatest brilliancy | 10903 Jan 02 10:10 | 11°  ♊22'35 | -4.7m | asc. node | 10905 Jul 08 12:15 | 13°  Ω26'05 | |
| asc. node | 10903 Jan 21 23:09 | 23°  ♊01'30 | | | 10905 Jul 21 19:51 | 0°  ൬ | |
| | 10903 Jan 30 08:13 | 0°  ♊ | | | 10905 Aug 15 03:08 | 0°  ♌ | |
| morning max el | 10903 Feb 10 05:08 | 10°  ♊09'06 | 45°54'47 | | 10905 Sep 08 18:48 | 0°  ♍ | |
| | 10903 Mar 01 08:49 | 0°  ♋ | | | 10905 Oct 04 00:21 | 0°  ♊ | |
| | 10903 Mar 27 23:15 | 0°  ♋ | | desc. node | 10905 Oct 28 08:57 | 27°  ♊52'55 | |
| | 10903 Apr 22 07:06 | 0°  Υ | | | 10905 Oct 30 06:41 | 0°  ♊ | |
| desc. node | 10903 May 13 19:00 | 26°  Υ06'19 | | | 10905 Nov 27 17:21 | 0°  ♋ | |
| | 10903 May 16 23:16 | 0°  ♄ | | evening max el | 10905 Dec 01 16:40 | 3°  ♋51'27 | 45°48'38 |
| | 10903 Jun 10 06:27 | 0°  ♌ | | | 10906 Jan 04 16:45 | 0°  ♋ | |
| | 10903 Jul 04 08:59 | 0°  ♍ | | greatest brilliancy | 10906 Jan 09 21:05 | 2°  ♋08'13 | -4.8m |
| | 10903 Jul 28 09:58 | 0°  Ω | | retrograde | 10906 Jan 19 13:19 | 3°  ♋51'05 | |
| morning set | 10903 Aug 14 10:02 | 21°  Ω12'24 | | | 10906 Feb 02 14:04 | 30°  ♋ | |
| | 10903 Aug 21 11:27 | 0°  ൬ | | evening set | 10906 Feb 03 17:45 | 29°  ♋23'00 | |
| asc. node | 10903 Sep 03 12:17 | 16°  ൬13'24 | | inferior conj | 10906 Feb 09 16:57 | 25°  ♋49'15 | -2°09'00 |
| | 10903 Sep 14 14:17 | 0°  ♌ | | minimum elong | 10906 Feb 09 21:42 | 25°  ♋41'51 | 2°07'11 |
| | | | | min. Earth dist. | 10906 Feb 10 07:06 | 25°  ♋27'13 | 0.28135 AU |
| superior conj | 10903 Sep 22 00:13 | 9°  ♌12'14 | 0°42'58 | morning rise | 10906 Feb 16 00:59 | 22°  ♋01'46 | |
| minimum elong | 10903 Sep 21 15:34 | 8°  ♌45'27 | 0°42'37 | asc. node | 10906 Feb 18 09:48 | 20°  ♋48'16 | |
| max. Earth dist. | 10903 Sep 24 09:14 | 12°  ♌09'07 | 1.72567 AU | direct | 10906 Mar 02 21:09 | 17°  ♋40'03 | |
| | 10903 Oct 08 18:45 | 0°  ♍ | | greatest brilliancy | 10906 Mar 13 20:52 | 19°  ♋54'02 | -4.8m |
| evening rise | 10903 Oct 29 03:30 | 25°  ♍10'27 | | | 10906 Mar 30 20:19 | 0°  ♋ | |
| | 10903 Nov 02 01:24 | 0°  ♊ | | morning max el | 10906 Apr 22 00:49 | 19°  ♋54'25 | 46°38'58 |
| | 10903 Nov 26 11:13 | 0°  ♊ | | | 10906 May 01 19:46 | 0°  Υ | |
| | 10903 Dec 21 01:17 | 0°  ♋ | | | 10906 May 28 18:55 | 0°  ♄ | |
| desc. node | 10903 Dec 24 05:32 | 3°  ♋51'31 | | desc. node | 10906 Jun 10 07:25 | 14°  ♋37'35 | |
| | 10904 Jan 14 20:09 | 0°  ♋ | | | 10906 Jun 23 05:33 | 0°  ♌ | |
| | 10904 Feb 08 20:23 | 0°  Υ | | | 10906 Jul 18 00:09 | 0°  ♍ | |
| | 10904 Mar 05 04:40 | 0°  ♄ | | | 10906 Aug 11 11:45 | 0°  Ω | |
| | 10904 Mar 31 06:11 | 0°  ♌ | | | 10906 Sep 04 20:52 | 0°  ൬ | |
| asc. node | 10904 Apr 15 04:24 | 16°  ♌25'15 | | | 10906 Sep 29 05:11 | 0°  ♌ | |
| evening max el | 10904 Apr 27 19:35 | 29°  ♌33'16 | 46°49'26 | asc. node | 10906 Oct 01 01:47 | 2°  ♌17'31 | |
| | 10904 Apr 28 06:15 | 0°  ♍ | | | 10906 Oct 23 12:56 | 0°  ♍ | |
| | 10904 Jun 06 08:31 | 0°  Ω | | morning set | 10906 Oct 24 05:05 | 0°  ♍49'52 | |
| greatest brilliancy | 10904 Jun 07 08:38 | 0°  Ω22'21 | -4.9m | | 10906 Nov 16 20:13 | 0°  ♊ | |
| retrograde | 10904 Jun 17 03:26 | 2°  Ω10'45 | | | | | |
| | 10904 Jun 27 12:46 | 30°  ♋ | | superior conj | 10906 Nov 30 01:34 | 16°  ♊19'20 | 1°25'30 |
| evening set | 10904 Jul 03 13:37 | 26°  ♋58'14 | | minimum elong | 10906 Nov 30 03:48 | 16°  ♊26'15 | 1°26'04 |
| inferior conj | 10904 Jul 07 20:46 | 24°  ♋23'07 | 6°36'04 | max. Earth dist. | 10906 Nov 30 15:01 | 17°  ♊00'50 | 1.73211 AU |
| minimum elong | 10904 Jul 08 07:57 | 24°  ♋05'57 | 6°32'58 | | 10906 Dec 11 03:38 | 0°  ♊ | |
| min. Earth dist. | 10904 Jul 08 03:09 | 24°  ♋13'19 | 0.27082 AU | | 10907 Jan 04 11:56 | 0°  ♋ | |
| morning rise | 10904 Jul 13 02:17 | 21°  ♋16'12 | | evening rise | 10907 Jan 06 03:09 | 2°  ♋00'41 | |

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|---------------------|--------------------|---------------------------|----------------|---------------------|--------------------|---------------------------------|
| desc. node | 10907 Jan 20 17:49 | 19° \approx 59'08 | morning max el | 10909 Jul 03 04:36 | 2° Π 30'41 | 46°57'51 |
| | 10907 Jan 28 21:16 | 0° H | desc. node | 10909 Jul 07 19:02 | 7° Π 12'28 | |
| | 10907 Feb 22 07:10 | 0° Y | | 10909 Jul 28 20:11 | 0° E | |
| | 10907 Mar 18 17:27 | 0° B | | 10909 Aug 23 22:17 | 0° Ω | |
| | 10907 Apr 12 05:37 | 0° Π | | 10909 Sep 18 06:08 | 0° M | |
| | 10907 May 06 23:53 | 0° E | | 10909 Oct 13 05:22 | 0° Ω | |
| asc. node | 10907 May 13 14:55 | 7° E 55'45 | asc. node | 10909 Oct 28 15:05 | 18° Ω 39'15 | |
| | 10907 Jun 01 08:36 | 0° Ω | | 10909 Nov 06 23:04 | 0° M | |
| | 10907 Jun 28 02:11 | 0° M | | 10909 Dec 01 12:23 | 0° X | |
| evening max el | 10907 Jul 10 05:38 | 12° M 38'10 | 46°42'22 | | 0° Z | |
| | 10907 Jul 29 02:36 | 0° Ω | | morning set | 10909 Dec 31 21:59 | 7° Z 22'12 |
| greatest brilliancy | 10907 Aug 18 10:12 | 12° Ω 48'13 | -4.8m | | 10910 Jan 19 06:17 | 0° \approx |
| retrograde | 10907 Aug 29 12:29 | 15° Ω 05'04 | | max. Earth dist. | 10910 Feb 05 05:39 | 20° \approx 58'48 1.72814 AU |
| desc. node | 10907 Sep 02 14:20 | 14° Ω 44'43 | | | | |
| evening set | 10907 Sep 13 13:48 | 10° Ω 37'30 | | superior conj | 10910 Feb 07 05:07 | 23° \approx 25'35 0°24'06 |
| min. Earth dist. | 10907 Sep 18 21:07 | 7° Ω 29'03 | 0.27961 AU | minimum elong | 10910 Feb 07 10:34 | 23° \approx 42'25 0°24'15 |
| inferior conj | 10907 Sep 19 16:38 | 6° Ω 58'55 | -4°07'50 | | 10910 Feb 12 12:37 | 0° H |
| minimum elong | 10907 Sep 19 08:08 | 7° Ω 12'03 | 4°05'28 | desc. node | 10910 Feb 17 06:54 | 5° H 53'50 |
| morning rise | 10907 Sep 25 03:11 | 3° Ω 44'24 | | | 10910 Mar 08 17:18 | 0° Y |
| | 10907 Oct 03 20:18 | 30° R M | | evening rise | 10910 Mar 17 20:23 | 11° Y 20'31 |
| direct | 10907 Oct 10 18:11 | 29° M 02'43 | | | 10910 Apr 01 20:09 | 0° B |
| | 10907 Oct 17 22:00 | 0° Ω | | | 10910 Apr 25 21:51 | 0° Π |
| greatest brilliancy | 10907 Oct 20 08:04 | 0° Ω 43'10 | -4.8m | | 10910 May 20 00:16 | 0° E |
| morning max el | 10907 Nov 28 14:48 | 29° Ω 00'12 | 45°44'34 | asc. node | 10910 Jun 10 02:09 | 26° E 05'17 |
| | 10907 Nov 29 15:41 | 0° M | | | 10910 Jun 13 06:25 | 0° Ω |
| asc. node | 10907 Dec 24 13:56 | 25° M 47'23 | | | 10910 Jul 07 20:18 | 0° M |
| | 10907 Dec 28 10:12 | 0° X | | | 10910 Aug 02 00:22 | 0° Ω |
| | 10908 Jan 23 19:56 | 0° Z | | | 10910 Aug 28 08:36 | 0° M |
| | 10908 Feb 18 04:19 | 0° \approx | | evening max el | 10910 Sep 19 07:08 | 22° M 56'06 46°04'57 |
| | 10908 Mar 13 22:47 | 0° H | | | 10910 Sep 26 17:27 | 0° X |
| | 10908 Apr 07 08:34 | 0° Y | | desc. node | 10910 Sep 30 00:40 | 2° X 58'38 |
| desc. node | 10908 Apr 14 07:47 | 8° Y 37'38 | | greatest brilliancy | 10910 Oct 28 07:45 | 21° X 51'36 -4.8m |
| | 10908 May 01 12:16 | 0° B | | retrograde | 10910 Nov 07 15:08 | 23° X 47'23 |
| | 10908 May 25 11:49 | 0° Π | | evening set | 10910 Nov 26 00:08 | 17° X 28'52 |
| morning set | 10908 May 28 15:39 | 3° Π 57'45 | | inferior conj | 10910 Nov 29 04:16 | 15° X 30'07 -8°39'50 |
| | 10908 Jun 18 09:20 | 0° E | | minimum elong | 10910 Nov 29 06:25 | 15° X 26'43 8°39'12 |
| | | | | min. Earth dist. | 10910 Nov 29 03:58 | 15° X 30'34 0.29071 AU |
| superior conj | 10908 Jul 07 17:37 | 24° E 17'06 | -1°02'13 | morning rise | 10910 Dec 02 12:42 | 13° X 24'49 |
| minimum elong | 10908 Jul 08 05:17 | 24° E 53'41 | 1°02'23 | direct | 10910 Dec 20 15:45 | 7° X 14'59 |
| max. Earth dist. | 10908 Jul 09 16:40 | 26° E 44'38 | 1.71479 AU | greatest brilliancy | 10910 Dec 31 01:33 | 9° X 12'49 -4.7m |
| | 10908 Jul 12 06:58 | 0° Ω | | asc. node | 10911 Jan 21 01:09 | 21° X 58'35 |
| asc. node | 10908 Aug 05 01:01 | 29° Ω 43'17 | | | 10911 Jan 30 10:31 | 0° Z |
| | 10908 Aug 05 06:22 | 0° M | | morning max el | 10911 Feb 07 19:27 | 7° Z 54'04 45°53'38 |
| evening rise | 10908 Aug 16 12:40 | 14° M 02'53 | | | 10911 Mar 01 01:15 | 0° \approx |
| | 10908 Aug 29 08:34 | 0° Ω | | | 10911 Mar 27 12:51 | 0° H |
| | 10908 Sep 22 14:36 | 0° M | | | 10911 Apr 21 19:28 | 0° Y |
| | 10908 Oct 17 02:15 | 0° X | | desc. node | 10911 May 12 20:51 | 25° Y 35'49 |
| | 10908 Nov 10 22:15 | 0° Z | | | 10911 May 16 10:59 | 0° B |
| desc. node | 10908 Nov 24 19:50 | 16° Z 32'50 | | | 10911 Jun 09 17:48 | 0° Π |
| | 10908 Dec 06 06:13 | 0° \approx | | | 10911 Jul 03 20:03 | 0° E |
| | 10909 Jan 01 07:48 | 0° H | | | 10911 Jul 27 20:49 | 0° Ω |
| | 10909 Jan 28 17:33 | 0° Y | | morning set | 10911 Aug 11 23:47 | 18° Ω 52'08 |
| evening max el | 10909 Feb 11 12:13 | 14° Y 01'00 | 46°14'04 | | 10911 Aug 20 22:09 | 0° M |
| | 10909 Mar 01 04:41 | 0° B | | asc. node | 10911 Sep 02 14:15 | 15° M 46'18 |
| asc. node | 10909 Mar 17 20:15 | 11° B 14'42 | | | 10911 Sep 14 00:54 | 0° Ω |
| greatest brilliancy | 10909 Mar 23 06:41 | 13° B 34'56 | -4.8m | | | |
| retrograde | 10909 Apr 02 03:15 | 15° B 23'12 | | superior conj | 10911 Sep 19 15:32 | 6° Ω 57'59 0°39'54 |
| evening set | 10909 Apr 18 09:50 | 10° B 13'56 | | minimum elong | 10911 Sep 19 07:19 | 6° Ω 32'28 0°39'32 |
| inferior conj | 10909 Apr 22 20:16 | 7° B 32'50 | 7°46'31 | max. Earth dist. | 10911 Sep 21 23:19 | 9° Ω 51'04 1.72531 AU |
| minimum elong | 10909 Apr 22 10:08 | 7° B 48'32 | 7°44'27 | | 10911 Oct 08 05:21 | 0° M |
| min. Earth dist. | 10909 Apr 22 18:34 | 7° B 35'29 | 0.27350 AU | evening rise | 10911 Oct 26 20:17 | 23° M 01'24 |
| morning rise | 10909 Apr 26 10:24 | 5° B 21'25 | | | 10911 Nov 01 12:02 | 0° X |
| | 10909 May 09 11:33 | 30° R Y | | | 10911 Nov 25 22:00 | 0° Z |
| direct | 10909 May 13 16:23 | 29° Y 38'22 | | | 10911 Dec 20 12:20 | 0° \approx |
| | 10909 May 17 23:01 | 0° B | | desc. node | 10911 Dec 23 07:26 | 3° \approx 23'37 |
| greatest brilliancy | 10909 May 23 11:24 | 1° B 27'23 | -4.9m | | 10912 Jan 14 07:41 | 0° H |
| | 10909 Jun 30 16:10 | 0° Π | | | 10912 Feb 08 08:43 | 0° Y |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 10912 Mar 04 18:21 | 0°♄ | | | 10914 Sep 28 16:13 | 0°♎ | |
| | 10912 Mar 30 22:29 | 0°♈ | | asc. node | 10914 Sep 30 03:41 | 1°♎49'20 | |
| asc. node | 10912 Apr 14 06:19 | 15°♈39'41 | | morning set | 10914 Oct 21 21:18 | 28°♎38'19 | |
| evening max el | 10912 Apr 25 07:54 | 27°♈07'00 | 46°48'41 | | 10914 Oct 22 23:46 | 0°♎ | |
| | 10912 Apr 28 05:37 | 0°♊ | | | 10914 Nov 16 06:56 | 0°♊ | |
| greatest brilliancy | 10912 Jun 04 22:46 | 27°♊58'23 | -4.9m | | | | |
| retrograde | 10912 Jun 14 16:23 | 29°♊46'08 | | superior conj | 10914 Nov 27 18:40 | 14°♊10'51 | 1°25'50 |
| evening set | 10912 Jul 01 06:05 | 24°♊28'13 | | minimum elong | 10914 Nov 27 20:10 | 14°♊15'30 | 1°26'24 |
| inferior conj | 10912 Jul 05 09:40 | 21°♊58'33 | 6°52'40 | max. Earth dist. | 10914 Nov 28 12:14 | 15°♊05'04 | 1.73205 AU |
| minimum elong | 10912 Jul 05 20:49 | 21°♊41'27 | 6°49'40 | | 10914 Dec 10 14:22 | 0°♊ | |
| min. Earth dist. | 10912 Jul 05 16:43 | 21°♊47'44 | 0.27085 AU | evening rise | 10915 Jan 03 19:22 | 29°♊49'30 | |
| morning rise | 10912 Jul 10 11:30 | 18°♊56'54 | | | 10915 Jan 03 22:47 | 0°♊ | |
| direct | 10912 Jul 26 01:42 | 14°♊11'18 | | desc. node | 10915 Jan 19 19:50 | 19°♊31'41 | |
| desc. node | 10912 Aug 04 05:54 | 15°♊45'43 | | | 10915 Jan 28 08:18 | 0°♋ | |
| greatest brilliancy | 10912 Aug 05 02:10 | 16°♊03'06 | -4.9m | | 10915 Feb 21 18:28 | 0°♋ | |
| | 10912 Aug 27 12:30 | 0°♈ | | | 10915 Mar 18 05:06 | 0°♄ | |
| morning max el | 10912 Sep 13 22:16 | 15°♈48'47 | 46°23'03 | | 10915 Apr 11 17:50 | 0°♈ | |
| | 10912 Sep 27 20:01 | 0°♎ | | | 10915 May 06 13:03 | 0°♊ | |
| | 10912 Oct 25 04:13 | 0°♎ | | asc. node | 10915 May 12 16:50 | 7°♊21'17 | |
| | 10912 Nov 20 04:32 | 0°♎ | | | 10915 May 31 23:30 | 0°♈ | |
| asc. node | 10912 Nov 25 03:48 | 5°♎50'23 | | | 10915 Jun 27 21:08 | 0°♎ | |
| | 10912 Dec 15 11:45 | 0°♊ | | evening max el | 10915 Jul 07 21:34 | 10°♎21'58 | 46°43'13 |
| | 10913 Jan 09 07:58 | 0°♊ | | | 10915 Jul 29 15:16 | 0°♎ | |
| | 10913 Feb 02 20:54 | 0°♋ | | greatest brilliancy | 10915 Aug 16 01:25 | 10°♎30'18 | -4.8m |
| | 10913 Feb 27 04:57 | 0°♋ | | retrograde | 10915 Aug 27 03:45 | 12°♎46'44 | |
| morning set | 10913 Mar 12 03:25 | 16°♋01'34 | | desc. node | 10915 Sep 01 16:24 | 12°♎09'22 | |
| desc. node | 10913 Mar 16 20:15 | 21°♋51'54 | | evening set | 10915 Sep 11 02:53 | 8°♎22'00 | |
| | 10913 Mar 23 09:13 | 0°♋ | | min. Earth dist. | 10915 Sep 16 11:46 | 5°♎11'11 | 0.27907 AU |
| | 10913 Apr 16 10:12 | 0°♄ | | inferior conj | 10915 Sep 17 07:03 | 4°♎41'25 | -3°48'10 |
| max. Earth dist. | 10913 Apr 18 01:22 | 2°♄02'32 | 1.71668 AU | minimum elong | 10915 Sep 16 23:05 | 4°♎53'43 | 3°45'55 |
| | | | | morning rise | 10915 Sep 22 20:03 | 1°♎23'38 | |
| superior conj | 10913 Apr 21 00:16 | 5°♄44'29 | -1°12'43 | | 10915 Sep 25 12:28 | 30°♎ | |
| minimum elong | 10913 Apr 20 13:23 | 5°♄10'24 | 1°12'42 | direct | 10915 Oct 08 08:47 | 26°♎46'09 | |
| | 10913 May 10 08:40 | 0°♈ | | greatest brilliancy | 10915 Oct 17 21:30 | 28°♎25'53 | -4.8m |
| evening rise | 10913 May 31 02:27 | 26°♈02'19 | | | 10915 Oct 21 21:28 | 0°♎ | |
| | 10913 Jun 03 06:14 | 0°♊ | | morning max el | 10915 Nov 26 05:28 | 26°♎45'33 | 45°45'06 |
| | 10913 Jun 27 05:00 | 0°♈ | | | 10915 Nov 29 13:41 | 0°♎ | |
| asc. node | 10913 Jul 07 14:12 | 12°♈57'27 | | asc. node | 10915 Dec 23 16:01 | 25°♎09'00 | |
| | 10913 Jul 21 07:06 | 0°♎ | | | 10915 Dec 28 01:47 | 0°♊ | |
| | 10913 Aug 14 14:42 | 0°♎ | | | 10916 Jan 23 09:14 | 0°♊ | |
| | 10913 Sep 08 06:54 | 0°♎ | | | 10916 Feb 17 16:32 | 0°♋ | |
| | 10913 Oct 03 13:30 | 0°♊ | | | 10916 Mar 13 10:27 | 0°♋ | |
| desc. node | 10913 Oct 27 10:51 | 27°♊16'12 | | | 10916 Apr 06 19:54 | 0°♋ | |
| | 10913 Oct 29 22:02 | 0°♊ | | desc. node | 10916 Apr 13 09:35 | 8°♋08'15 | |
| | 10913 Nov 27 14:48 | 0°♋ | | | 10916 Apr 30 23:24 | 0°♄ | |
| evening max el | 10913 Nov 29 08:14 | 1°♋39'48 | 45°48'35 | | 10916 May 24 22:49 | 0°♈ | |
| greatest brilliancy | 10914 Jan 07 11:16 | 29°♋53'32 | -4.8m | morning set | 10916 May 26 03:02 | 1°♈28'29 | |
| | 10914 Jan 07 19:00 | 0°♋ | | | 10916 Jun 17 20:16 | 0°♊ | |
| retrograde | 10914 Jan 17 04:35 | 1°♋36'58 | | | | | |
| | 10914 Jan 26 04:04 | 30°♋ | | superior conj | 10916 Jul 05 05:48 | 21°♊50'33 | -1°04'52 |
| evening set | 10914 Feb 01 10:39 | 27°♋05'53 | | minimum elong | 10916 Jul 05 17:27 | 22°♊27'04 | 1°05'03 |
| inferior conj | 10914 Feb 07 08:02 | 23°♋34'24 | -2°29'49 | max. Earth dist. | 10916 Jul 07 04:26 | 24°♊16'48 | 1.71454 AU |
| minimum elong | 10914 Feb 07 13:30 | 23°♋25'53 | 2°27'48 | | 10916 Jul 11 17:53 | 0°♈ | |
| min. Earth dist. | 10914 Feb 07 22:18 | 23°♋12'11 | 0.28177 AU | asc. node | 10916 Aug 04 02:59 | 29°♈15'22 | |
| morning rise | 10914 Feb 13 15:46 | 19°♋47'33 | | | 10916 Aug 04 17:17 | 0°♎ | |
| asc. node | 10914 Feb 17 11:53 | 17°♋53'25 | | evening rise | 10916 Aug 14 02:33 | 11°♎42'29 | |
| direct | 10914 Feb 28 13:07 | 15°♋24'44 | | | 10916 Aug 28 19:33 | 0°♎ | |
| greatest brilliancy | 10914 Mar 11 12:26 | 17°♋38'50 | -4.8m | | 10916 Sep 22 01:45 | 0°♎ | |
| | 10914 Mar 31 08:56 | 0°♋ | | | 10916 Oct 16 13:43 | 0°♊ | |
| morning max el | 10914 Apr 19 16:57 | 17°♋40'06 | 46°37'31 | | 10916 Nov 10 10:16 | 0°♊ | |
| | 10914 May 01 14:30 | 0°♋ | | desc. node | 10916 Nov 23 21:46 | 16°♊01'46 | |
| | 10914 May 28 09:41 | 0°♄ | | | 10916 Dec 05 19:13 | 0°♋ | |
| desc. node | 10914 Jun 09 09:23 | 14°♄02'32 | | | 10916 Dec 31 22:40 | 0°♋ | |
| | 10914 Jun 22 18:40 | 0°♈ | | | 10917 Jan 28 12:42 | 0°♋ | |
| | 10914 Jul 17 12:24 | 0°♊ | | evening max el | 10917 Feb 09 02:02 | 11°♋40'43 | 46°12'39 |
| | 10914 Aug 10 23:28 | 0°♈ | | | 10917 Mar 01 18:02 | 0°♄ | |
| | 10914 Sep 04 08:12 | 0°♎ | | asc. node | 10917 Mar 16 22:12 | 9°♄36'00 | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| greatest brilliancy | 10917 Mar 20 20:20 | 11°♄12'12 | -4.8m | superior conj | 10919 Sep 17 07:06 | 4°♄43'57 | 0°36'47 |
| retrograde | 10917 Mar 30 15:51 | 12°♄59'40 | | minimum elong | 10919 Sep 16 23:20 | 4°♄19'52 | 0°36'26 |
| evening set | 10917 Apr 15 19:02 | 7°♄56'40 | | max. Earth dist. | 10919 Sep 19 14:01 | 7°♄34'27 | 1.72494 AU |
| inferior conj | 10917 Apr 20 09:42 | 5°♄09'27 | 7°33'23 | | 10919 Oct 07 16:05 | 0°♄ | |
| minimum elong | 10917 Apr 19 23:14 | 5°♄25'40 | 7°31'09 | evening rise | 10919 Oct 24 13:22 | 20°♄52'50 | |
| min. Earth dist. | 10917 Apr 20 08:20 | 5°♄11'33 | 0.27357 AU | | 10919 Oct 31 22:49 | 0°♄ | |
| morning rise | 10917 Apr 24 03:20 | 2°♄52'35 | | | 10919 Nov 25 08:58 | 0°♄ | |
| | 10917 Apr 29 13:00 | 30°♄ | | | 10919 Dec 19 23:38 | 0°♄ | |
| direct | 10917 May 11 05:33 | 27°♄14'41 | | desc. node | 10919 Dec 22 09:27 | 2°♄55'18 | |
| greatest brilliancy | 10917 May 21 02:01 | 29°♄04'29 | -4.9m | | 10920 Jan 13 19:32 | 0°♄ | |
| | 10917 May 23 10:30 | 0°♄ | | | 10920 Feb 07 21:25 | 0°♄ | |
| morning max el | 10917 Jun 30 17:02 | 0°♄04'07 | 46°58'19 | | 10920 Mar 04 08:26 | 0°♄ | |
| | 10917 Jun 30 15:24 | 0°♄ | | | 10920 Mar 30 15:20 | 0°♄ | |
| desc. node | 10917 Jul 06 21:04 | 6°♄23'40 | | asc. node | 10920 Apr 13 08:15 | 14°♄52'52 | |
| | 10917 Jul 28 12:36 | 0°♄ | | evening max el | 10920 Apr 22 20:55 | 24°♄42'01 | 46°48'03 |
| | 10917 Aug 23 12:12 | 0°♄ | | | 10920 Apr 28 06:21 | 0°♄ | |
| | 10917 Sep 17 18:44 | 0°♄ | | greatest brilliancy | 10920 Jun 02 12:08 | 25°♄32'59 | -4.9m |
| | 10917 Oct 12 17:12 | 0°♄ | | retrograde | 10920 Jun 12 05:41 | 27°♄20'49 | |
| asc. node | 10917 Oct 27 16:53 | 18°♄09'43 | | evening set | 10920 Jun 28 22:32 | 21°♄57'17 | |
| | 10917 Nov 06 10:25 | 0°♄ | | inferior conj | 10920 Jul 02 22:27 | 19°♄33'08 | 7°08'32 |
| | 10917 Nov 30 23:27 | 0°♄ | | minimum elong | 10920 Jul 03 09:30 | 19°♄16'12 | 7°05'40 |
| | 10917 Dec 25 09:19 | 0°♄ | | min. Earth dist. | 10920 Jul 03 05:49 | 19°♄21'52 | 0.27089 AU |
| morning set | 10917 Dec 29 14:56 | 5°♄12'59 | | morning rise | 10920 Jul 07 20:26 | 16°♄37'10 | |
| | 10918 Jan 18 17:07 | 0°♄ | | direct | 10920 Jul 23 14:33 | 11°♄45'31 | |
| max. Earth dist. | 10918 Feb 02 21:52 | 18°♄47'00 | 1.72847 AU | greatest brilliancy | 10920 Aug 02 14:53 | 13°♄37'48 | -4.9m |
| | | | | desc. node | 10920 Aug 03 07:52 | 13°♄53'26 | |
| superior conj | 10918 Feb 04 20:25 | 21°♄10'55 | 0°27'26 | | 10920 Aug 27 22:13 | 0°♄ | |
| minimum elong | 10918 Feb 05 02:30 | 21°♄29'45 | 0°27'34 | morning max el | 10920 Sep 11 13:03 | 13°♄30'28 | 46°24'53 |
| | 10918 Feb 11 23:28 | 0°♄ | | | 10920 Sep 27 14:35 | 0°♄ | |
| desc. node | 10918 Feb 16 08:47 | 5°♄25'57 | | | 10920 Oct 24 18:46 | 0°♄ | |
| | 10918 Mar 08 04:15 | 0°♄ | | | 10920 Nov 19 17:17 | 0°♄ | |
| evening rise | 10918 Mar 15 10:22 | 9°♄00'34 | | asc. node | 10920 Nov 24 05:51 | 5°♄19'32 | |
| | 10918 Apr 01 07:17 | 0°♄ | | | 10920 Dec 14 23:33 | 0°♄ | |
| | 10918 Apr 25 09:11 | 0°♄ | | | 10921 Jan 08 19:14 | 0°♄ | |
| | 10918 May 19 11:52 | 0°♄ | | | 10921 Feb 02 07:55 | 0°♄ | |
| asc. node | 10918 Jun 09 04:10 | 25°♄34'48 | | | 10921 Feb 26 15:51 | 0°♄ | |
| | 10918 Jun 12 18:24 | 0°♄ | | morning set | 10921 Mar 09 17:10 | 13°♄41'38 | |
| | 10918 Jul 07 08:56 | 0°♄ | | desc. node | 10921 Mar 15 22:03 | 21°♄23'45 | |
| | 10918 Aug 01 14:14 | 0°♄ | | | 10921 Mar 22 20:05 | 0°♄ | |
| | 10918 Aug 28 01:16 | 0°♄ | | max. Earth dist. | 10921 Apr 15 13:43 | 29°♄37'00 | 1.71702 AU |
| evening max el | 10918 Sep 16 21:16 | 20°♄39'18 | 46°06'02 | | 10921 Apr 15 21:04 | 0°♄ | |
| | 10918 Sep 26 19:35 | 0°♄ | | | | | |
| desc. node | 10918 Sep 29 02:31 | 2°♄01'18 | | superior conj | 10921 Apr 18 12:10 | 3°♄17'26 | -1°10'29 |
| greatest brilliancy | 10918 Oct 25 22:58 | 19°♄40'13 | -4.8m | minimum elong | 10921 Apr 18 01:00 | 2°♄42'27 | 1°10'25 |
| retrograde | 10918 Nov 05 06:51 | 21°♄37'03 | | | 10921 May 09 19:34 | 0°♄ | |
| evening set | 10918 Nov 23 16:15 | 15°♄18'14 | | evening rise | 10921 May 28 13:22 | 23°♄31'37 | |
| inferior conj | 10918 Nov 26 20:25 | 13°♄19'36 | -8°41'32 | | 10921 Jun 02 17:12 | 0°♄ | |
| minimum elong | 10918 Nov 26 21:47 | 13°♄17'27 | 8°40'56 | | 10921 Jun 26 16:05 | 0°♄ | |
| min. Earth dist. | 10918 Nov 26 19:19 | 13°♄21'20 | 0.29072 AU | asc. node | 10921 Jul 06 16:11 | 12°♄28'53 | |
| morning rise | 10918 Nov 30 03:20 | 11°♄16'42 | | | 10921 Jul 20 18:23 | 0°♄ | |
| direct | 10918 Dec 18 07:13 | 5°♄04'31 | | | 10921 Aug 14 02:17 | 0°♄ | |
| greatest brilliancy | 10918 Dec 28 17:20 | 7°♄02'14 | -4.7m | | 10921 Sep 07 19:01 | 0°♄ | |
| asc. node | 10919 Jan 20 03:10 | 20°♄55'58 | | | 10921 Oct 03 02:38 | 0°♄ | |
| | 10919 Jan 30 11:56 | 0°♄ | | desc. node | 10921 Oct 26 12:52 | 26°♄39'56 | |
| morning max el | 10919 Feb 05 10:19 | 5°♄39'10 | 45°52'34 | | 10921 Oct 29 13:28 | 0°♄ | |
| | 10919 Feb 28 17:47 | 0°♄ | | evening max el | 10921 Nov 27 00:12 | 29°♄29'42 | 45°48'28 |
| | 10919 Mar 27 02:40 | 0°♄ | | | 10921 Nov 27 12:53 | 0°♄ | |
| | 10919 Apr 21 08:04 | 0°♄ | | greatest brilliancy | 10922 Jan 05 01:37 | 27°♄39'48 | -4.8m |
| desc. node | 10919 May 11 22:44 | 25°♄04'43 | | retrograde | 10922 Jan 14 19:38 | 29°♄23'22 | |
| | 10919 May 15 22:56 | 0°♄ | | evening set | 10922 Jan 30 03:48 | 24°♄49'21 | |
| | 10919 Jun 09 05:22 | 0°♄ | | inferior conj | 10922 Feb 04 23:13 | 21°♄20'06 | -2°50'18 |
| | 10919 Jul 03 07:19 | 0°♄ | | minimum elong | 10922 Feb 05 05:21 | 21°♄10'32 | 2°48'04 |
| | 10919 Jul 27 07:53 | 0°♄ | | min. Earth dist. | 10922 Feb 05 13:32 | 20°♄57'46 | 0.28224 AU |
| morning set | 10919 Aug 09 13:42 | 16°♄31'43 | | morning rise | 10922 Feb 11 06:25 | 17°♄33'56 | |
| | 10919 Aug 20 09:02 | 0°♄ | | asc. node | 10922 Feb 16 13:48 | 15°♄03'29 | |
| asc. node | 10919 Sep 01 16:05 | 15°♄18'20 | | direct | 10922 Feb 26 05:24 | 13°♄10'05 | |
| | 10919 Sep 13 11:40 | 0°♄ | | greatest brilliancy | 10922 Mar 09 03:54 | 15°♄23'42 | -4.8m |

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|---------------------|--------------------|---------------------------|------------|---------------------|--------------------|---------------------------|------------|--|
| | 10922 Mar 31 18:17 | 0° H | | | 10924 Oct 16 00:53 | 0° X | | |
| morning max el | 10922 Apr 17 08:30 | 15° H 24'17 | 46°35'53 | | 10924 Nov 09 21:59 | 0° Z | | |
| | 10922 May 01 08:48 | 0° Y | | desc. node | 10924 Nov 22 23:48 | 15° Z 31'57 | | |
| | 10922 May 28 00:19 | 0° B | | | 10924 Dec 05 07:54 | 0° \approx | | |
| desc. node | 10922 Jun 08 11:26 | 13° B 27'52 | | | 10924 Dec 31 13:14 | 0° H | | |
| | 10922 Jun 22 07:40 | 0° II | | | 10925 Jan 28 07:49 | 0° Y | | |
| | 10922 Jul 17 00:30 | 0° G | | evening max el | 10925 Feb 06 15:07 | 9° Y 20'21 | 46°11'20 | |
| | 10922 Aug 10 11:01 | 0° Q | | | 10925 Mar 02 10:53 | 0° B | | |
| | 10922 Sep 03 19:22 | 0° P | | asc. node | 10925 Mar 16 00:06 | 7° B 55'19 | | |
| | 10922 Sep 28 03:06 | 0° L | | greatest brilliancy | 10925 Mar 18 09:54 | 8° B 51'14 | -4.8m | |
| asc. node | 10922 Sep 29 05:30 | 1° L 21'27 | | retrograde | 10925 Mar 28 04:37 | 10° B 38'25 | | |
| morning set | 10922 Oct 19 13:43 | 26° L 27'57 | | evening set | 10925 Apr 13 04:28 | 5° B 40'58 | | |
| | 10922 Oct 22 10:25 | 0° M | | inferior conj | 10925 Apr 17 23:18 | 2° B 48'01 | 7°19'19 | |
| | 10922 Nov 15 17:28 | 0° X | | minimum elong | 10925 Apr 17 12:35 | 3° B 04'38 | 7°16'58 | |
| | | | | min. Earth dist. | 10925 Apr 17 22:20 | 2° B 49'31 | 0.27374 AU | |
| superior conj | 10922 Nov 25 12:08 | 12° X 04'13 | 1°26'02 | morning rise | 10925 Apr 21 20:31 | 0° B 25'46 | | |
| minimum elong | 10922 Nov 25 12:54 | 12° X 06'34 | 1°26'36 | | 10925 Apr 22 14:10 | 30° R Y | | |
| max. Earth dist. | 10922 Nov 26 08:57 | 13° X 08'25 | 1.73193 AU | direct | 10925 May 08 18:46 | 24° Y 52'36 | | |
| | 10922 Dec 10 00:53 | 0° Z | | greatest brilliancy | 10925 May 18 17:15 | 26° Y 43'51 | -4.9m | |
| evening rise | 10923 Jan 01 11:57 | 27° Z 40'14 | | | 10925 May 25 19:31 | 0° B | | |
| | 10923 Jan 03 09:23 | 0° \approx | | morning max el | 10925 Jun 28 05:56 | 27° B 39'29 | 46°58'32 | |
| desc. node | 10923 Jan 18 21:44 | 19° \approx 04'36 | | | 10925 Jun 30 13:22 | 0° II | | |
| | 10923 Jan 27 19:07 | 0° H | | desc. node | 10925 Jul 05 23:00 | 5° II 36'07 | | |
| | 10923 Feb 21 05:34 | 0° Y | | | 10925 Jul 28 04:31 | 0° G | | |
| | 10923 Mar 17 16:39 | 0° B | | | 10925 Aug 23 01:46 | 0° Q | | |
| | 10923 Apr 11 06:01 | 0° II | | | 10925 Sep 17 07:01 | 0° P | | |
| | 10923 May 06 02:14 | 0° G | | | 10925 Oct 12 04:41 | 0° L | | |
| asc. node | 10923 May 11 18:51 | 6° G 47'10 | | asc. node | 10925 Oct 26 18:54 | 17° L 41'54 | | |
| | 10923 May 31 14:32 | 0° Q | | | 10925 Nov 05 21:24 | 0° M | | |
| | 10923 Jun 27 16:31 | 0° P | | | 10925 Nov 30 10:07 | 0° X | | |
| evening max el | 10923 Jul 05 12:49 | 8° P 04'19 | 46°44'10 | | 10925 Dec 24 19:49 | 0° Z | | |
| | 10923 Jul 30 07:56 | 0° L | | morning set | 10925 Dec 27 08:00 | 3° Z 05'23 | | |
| greatest brilliancy | 10923 Aug 13 17:15 | 8° L 13'38 | -4.8m | | 10926 Jan 18 03:33 | 0° \approx | | |
| retrograde | 10923 Aug 24 18:35 | 10° L 28'51 | | max. Earth dist. | 10926 Jan 31 15:49 | 16° \approx 41'50 | 1.72876 AU | |
| desc. node | 10923 Aug 31 18:16 | 9° L 29'23 | | | | | | |
| evening set | 10923 Sep 08 16:12 | 6° L 06'53 | | superior conj | 10926 Feb 02 12:06 | 18° \approx 58'45 | 0°30'41 | |
| min. Earth dist. | 10923 Sep 14 02:48 | 2° L 53'29 | 0.27849 AU | minimum elong | 10926 Feb 02 18:48 | 19° \approx 19'27 | 0°30'48 | |
| inferior conj | 10923 Sep 14 21:29 | 2° L 24'36 | -3°28'05 | | 10926 Feb 11 09:54 | 0° H | | |
| minimum elong | 10923 Sep 14 14:05 | 2° L 36'03 | 3°25'59 | desc. node | 10926 Feb 15 10:36 | 4° H 59'14 | | |
| | 10923 Sep 18 20:57 | 30° R P | | | 10926 Mar 07 14:47 | 0° Y | | |
| morning rise | 10923 Sep 20 12:46 | 29° P 03'34 | | evening rise | 10926 Mar 13 00:54 | 6° Y 43'53 | | |
| direct | 10923 Oct 05 23:03 | 24° P 30'19 | | | 10926 Mar 31 17:58 | 0° B | | |
| greatest brilliancy | 10923 Oct 15 11:24 | 26° P 09'39 | -4.8m | | 10926 Apr 24 20:05 | 0° II | | |
| | 10923 Oct 23 23:34 | 0° L | | | 10926 May 18 23:05 | 0° G | | |
| morning max el | 10923 Nov 23 19:19 | 24° L 29'46 | 45°45'48 | asc. node | 10926 Jun 08 06:06 | 25° G 05'09 | | |
| | 10923 Nov 29 10:29 | 0° M | | | 10926 Jun 12 06:04 | 0° Q | | |
| asc. node | 10923 Dec 22 17:55 | 24° M 31'31 | | | 10926 Jul 06 21:20 | 0° P | | |
| | 10923 Dec 27 16:45 | 0° X | | | 10926 Aug 01 04:00 | 0° L | | |
| | 10924 Jan 22 22:03 | 0° Z | | | 10926 Aug 27 18:01 | 0° M | | |
| | 10924 Feb 17 04:20 | 0° \approx | | evening max el | 10926 Sep 14 11:43 | 18° M 23'55 | 46°07'24 | |
| | 10924 Mar 12 21:43 | 0° H | | | 10926 Sep 26 22:59 | 0° X | | |
| | 10924 Apr 06 06:54 | 0° Y | | desc. node | 10926 Sep 28 04:35 | 1° X 03'51 | | |
| desc. node | 10924 Apr 12 11:31 | 7° Y 40'16 | | greatest brilliancy | 10926 Oct 23 13:34 | 17° X 28'57 | -4.8m | |
| | 10924 Apr 30 10:15 | 0° B | | retrograde | 10926 Nov 02 23:02 | 19° X 27'38 | | |
| morning set | 10924 May 23 13:58 | 28° B 58'24 | | evening set | 10926 Nov 21 07:58 | 13° X 08'51 | | |
| | 10924 May 24 09:36 | 0° II | | inferior conj | 10926 Nov 24 12:31 | 11° X 09'54 | -8°42'29 | |
| | 10924 Jun 17 07:02 | 0° G | | minimum elong | 10926 Nov 24 13:05 | 11° X 08'59 | 8°41'56 | |
| | | | | min. Earth dist. | 10926 Nov 24 10:13 | 11° X 13'29 | 0.29065 AU | |
| superior conj | 10924 Jul 02 17:31 | 19° G 23'05 | -1°07'25 | morning rise | 10926 Nov 27 18:13 | 9° X 09'03 | | |
| minimum elong | 10924 Jul 03 05:02 | 19° G 59'14 | 1°07'38 | direct | 10926 Dec 15 22:51 | 2° X 54'55 | | |
| max. Earth dist. | 10924 Jul 04 12:16 | 21° G 37'14 | 1.71427 AU | greatest brilliancy | 10926 Dec 26 08:46 | 4° X 52'29 | -4.7m | |
| | 10924 Jul 11 04:36 | 0° Q | | asc. node | 10927 Jan 19 05:06 | 19° X 55'52 | | |
| asc. node | 10924 Aug 03 04:46 | 28° Q 47'34 | | | 10927 Jan 30 11:35 | 0° Z | | |
| | 10924 Aug 04 03:58 | 0° P | | morning max el | 10927 Feb 03 02:04 | 3° Z 27'51 | 45°51'37 | |
| evening rise | 10924 Aug 11 15:52 | 9° P 21'04 | | | 10927 Feb 28 09:32 | 0° \approx | | |
| | 10924 Aug 28 06:16 | 0° L | | | 10927 Mar 26 15:54 | 0° H | | |
| | 10924 Sep 21 12:36 | 0° M | | | 10927 Apr 20 20:08 | 0° Y | | |

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|---------------------|--------------------|---------------------------------|---------------------|--------------------|---------------------------|------------|
| desc. node | 10927 May 11 00:45 | 24° Υ 35'33 | greatest brilliancy | 10930 Jan 02 16:36 | 25° \approx 27'03 | -4.7m |
| | 10927 May 15 10:23 | 0° B | retrograde | 10930 Jan 12 10:19 | 27° \approx 09'59 | |
| | 10927 Jun 08 16:27 | 0° II | evening set | 10930 Jan 27 21:06 | 22° \approx 33'05 | |
| | 10927 Jul 02 18:10 | 0° E | inferior conj | 10930 Feb 02 14:25 | 19° \approx 06'17 | -3°10'22 |
| | 10927 Jul 26 18:34 | 0° Ω | minimum elong | 10930 Feb 02 21:11 | 18° \approx 55'43 | 3°07'58 |
| morning set | 10927 Aug 07 03:22 | 14° Ω 11'23 | min. Earth dist. | 10930 Feb 03 04:57 | 18° \approx 43'35 | 0.28266 AU |
| | 10927 Aug 19 19:37 | 0° M | morning rise | 10930 Feb 08 20:49 | 15° \approx 20'52 | |
| asc. node | 10927 Aug 31 17:59 | 14° M 51'26 | asc. node | 10930 Feb 15 15:46 | 12° \approx 18'17 | |
| | 10927 Sep 12 22:11 | 0° A | direct | 10930 Feb 23 21:19 | 10° \approx 56'01 | |
| | | | greatest brilliancy | 10930 Mar 06 19:23 | 13° \approx 09'00 | -4.8m |
| superior conj | 10927 Sep 14 22:07 | 2° A 28'53 0°33'34 | | 10930 Apr 01 00:48 | 0° H | |
| minimum elong | 10927 Sep 14 14:53 | 2° A 06'26 0°33'12 | morning max el | 10930 Apr 14 23:01 | 13° H 06'25 | 46°34'15 |
| max. Earth dist. | 10927 Sep 17 04:45 | 5° A 18'35 1.72460 AU | | 10930 May 01 02:28 | 0° Υ | |
| | 10927 Oct 07 02:34 | 0° M | | 10930 May 27 14:35 | 0° B | |
| evening rise | 10927 Oct 22 05:59 | 18° M 43'38 | desc. node | 10930 Jun 07 13:14 | 12° B 53'13 | |
| | 10927 Oct 31 09:21 | 0° A | | 10930 Jun 21 20:25 | 0° II | |
| | 10927 Nov 24 19:38 | 0° B | | 10930 Jul 16 12:25 | 0° E | |
| | 10927 Dec 19 10:38 | 0° \approx | | 10930 Aug 09 22:24 | 0° Ω | |
| desc. node | 10927 Dec 21 11:19 | 2° \approx 27'31 | | 10930 Sep 03 06:22 | 0° M | |
| | 10928 Jan 13 07:05 | 0° H | | 10930 Sep 27 13:50 | 0° A | |
| | 10928 Feb 07 09:49 | 0° Υ | asc. node | 10930 Sep 28 07:28 | 0° A 54'26 | |
| | 10928 Mar 03 22:17 | 0° B | morning set | 10930 Oct 17 06:04 | 24° A 17'38 | |
| | 10928 Mar 30 08:04 | 0° II | | 10930 Oct 21 20:59 | 0° M | |
| asc. node | 10928 Apr 12 10:23 | 14° II 07'07 | | 10930 Nov 15 03:58 | 0° A | |
| evening max el | 10928 Apr 20 11:02 | 22° II 21'18 46°47'26 | | | | |
| | 10928 Apr 28 07:46 | 0° E | superior conj | 10930 Nov 23 05:27 | 9° A 57'06 | 1°26'07 |
| greatest brilliancy | 10928 May 31 01:02 | 23° E 09'00 -4.9m | minimum elong | 10930 Nov 23 05:29 | 9° A 57'11 | 1°26'41 |
| retrograde | 10928 Jun 09 19:22 | 24° E 57'19 | max. Earth dist. | 10930 Nov 24 03:26 | 11° A 04'56 | 1.73184 AU |
| evening set | 10928 Jun 26 15:10 | 19° E 28'18 | | 10930 Dec 09 11:25 | 0° B | |
| inferior conj | 10928 Jun 30 11:24 | 17° E 09'26 7°23'23 | evening rise | 10930 Dec 30 04:12 | 25° B 29'48 | |
| minimum elong | 10928 Jun 30 22:17 | 16° E 52'48 7°20'41 | | 10931 Jan 02 20:02 | 0° \approx | |
| min. Earth dist. | 10928 Jun 30 18:35 | 16° E 58'26 0.27095 AU | desc. node | 10931 Jan 17 23:32 | 18° \approx 37'10 | |
| morning rise | 10928 Jul 05 05:24 | 14° E 19'21 | | 10931 Jan 27 05:58 | 0° H | |
| direct | 10928 Jul 21 04:07 | 9° E 21'43 | | 10931 Feb 20 16:43 | 0° Υ | |
| greatest brilliancy | 10928 Jul 31 03:09 | 11° E 13'30 -4.9m | | 10931 Mar 17 04:14 | 0° B | |
| desc. node | 10928 Aug 02 09:48 | 12° E 06'58 | | 10931 Apr 10 18:15 | 0° II | |
| | 10928 Aug 28 04:47 | 0° Ω | | 10931 May 05 15:32 | 0° E | |
| morning max el | 10928 Sep 09 04:03 | 11° Ω 13'35 46°26'22 | asc. node | 10931 May 10 20:47 | 6° E 12'35 | |
| | 10928 Sep 27 08:25 | 0° M | | 10931 May 31 05:46 | 0° Ω | |
| | 10928 Oct 24 08:57 | 0° A | | 10931 Jun 27 12:28 | 0° M | |
| | 10928 Nov 19 05:47 | 0° M | evening max el | 10931 Jul 03 03:14 | 5° M 44'29 | 46°45'05 |
| asc. node | 10928 Nov 23 07:46 | 4° M 48'51 | | 10931 Jul 31 06:24 | 0° A | |
| | 10928 Dec 14 11:06 | 0° A | greatest brilliancy | 10931 Aug 11 09:31 | 5° A 57'29 | -4.8m |
| | 10929 Jan 08 06:15 | 0° B | retrograde | 10931 Aug 22 09:02 | 8° A 11'12 | |
| | 10929 Feb 01 18:39 | 0° \approx | desc. node | 10931 Aug 30 20:19 | 6° A 44'16 | |
| | 10929 Feb 26 02:28 | 0° H | evening set | 10931 Sep 06 05:45 | 3° A 51'33 | |
| morning set | 10929 Mar 07 07:08 | 11° H 23'17 | inferior conj | 10931 Sep 12 11:59 | 0° A 08'05 | -3°07'42 |
| desc. node | 10929 Mar 14 23:58 | 20° H 56'46 | minimum elong | 10931 Sep 12 05:12 | 0° A 18'34 | 3°05'45 |
| | 10929 Mar 22 06:41 | 0° Υ | min. Earth dist. | 10931 Sep 11 18:11 | 0° A 35'37 | 0.27793 AU |
| max. Earth dist. | 10929 Apr 13 00:16 | 27° Υ 06'45 1.71736 AU | | 10931 Sep 12 17:12 | 30° R M | |
| | 10929 Apr 15 07:40 | 0° B | morning rise | 10931 Sep 18 05:24 | 26° M 43'53 | |
| | | | direct | 10931 Oct 03 12:52 | 22° M 14'37 | |
| superior conj | 10929 Apr 16 00:24 | 0° B 52'21 -1°08'07 | greatest brilliancy | 10931 Oct 13 01:53 | 23° M 54'08 | -4.8m |
| minimum elong | 10929 Apr 15 13:03 | 0° B 16'48 1°08'02 | | 10931 Oct 25 08:40 | 0° A | |
| | 10929 May 09 06:12 | 0° II | morning max el | 10931 Nov 21 08:30 | 22° A 12'10 | 45°46'26 |
| evening rise | 10929 May 26 00:41 | 21° II 02'59 | | 10931 Nov 29 06:36 | 0° M | |
| | 10929 Jun 02 03:54 | 0° E | asc. node | 10931 Dec 21 19:49 | 23° M 54'03 | |
| | 10929 Jun 26 02:54 | 0° Ω | | 10931 Dec 27 07:38 | 0° A | |
| asc. node | 10929 Jul 05 18:00 | 12° Ω 00'42 | | 10932 Jan 22 10:56 | 0° B | |
| | 10929 Jul 20 05:24 | 0° M | | 10932 Feb 16 16:17 | 0° \approx | |
| | 10929 Aug 13 13:37 | 0° A | | 10932 Mar 12 09:09 | 0° H | |
| | 10929 Sep 07 06:57 | 0° M | | 10932 Apr 05 18:02 | 0° Υ | |
| | 10929 Oct 02 15:44 | 0° A | desc. node | 10932 Apr 11 13:29 | 7° Υ 11'55 | |
| desc. node | 10929 Oct 25 14:53 | 26° A 03'35 | | 10932 Apr 29 21:13 | 0° B | |
| | 10929 Oct 29 05:03 | 0° B | morning set | 10932 May 21 00:47 | 26° B 27'38 | |
| evening max el | 10929 Nov 24 15:57 | 27° B 19'08 45°48'20 | | 10932 May 23 20:30 | 0° II | |
| | 10929 Nov 27 11:54 | 0° \approx | | 10932 Jun 16 17:54 | 0° E | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| superior conj | 10932 Jun 30 05:16 | 16°☿55'20 | -1°09'50 | morning rise | 10934 Nov 25 09:26 | 6°♂59'43 | |
| minimum elong | 10932 Jun 30 16:36 | 17°☿30'54 | 1°10'06 | direct | 10934 Dec 13 14:58 | 0°♂44'20 | |
| max. Earth dist. | 10932 Jul 01 17:29 | 18°☿49'00 | 1.71405 AU | greatest brilliancy | 10934 Dec 23 23:31 | 2°♂41'06 | -4.7m |
| | 10932 Jul 10 15:27 | 0°♂ | | asc. node | 10935 Jan 18 07:05 | 18°♂56'15 | |
| asc. node | 10932 Aug 02 06:43 | 28°♂19'48 | | | 10935 Jan 30 10:36 | 0°♂ | |
| | 10932 Aug 03 14:49 | 0°♂ | | morning max el | 10935 Jan 31 18:13 | 1°♂16'39 | 45°50'37 |
| evening rise | 10932 Aug 09 05:10 | 6°♂59'02 | | | 10935 Feb 28 01:26 | 0°♂ | |
| | 10932 Aug 27 17:09 | 0°♂ | | | 10935 Mar 26 05:27 | 0°♂ | |
| | 10932 Sep 20 23:38 | 0°♂ | | | 10935 Apr 20 08:38 | 0°♂ | |
| | 10932 Oct 15 12:13 | 0°♂ | | desc. node | 10935 May 10 02:34 | 24°♂04'15 | |
| | 10932 Nov 09 09:54 | 0°♂ | | | 10935 May 14 22:19 | 0°♂ | |
| desc. node | 10932 Nov 22 01:40 | 15°♂00'59 | | | 10935 Jun 08 04:01 | 0°♂ | |
| | 10932 Dec 04 20:53 | 0°♂ | | | 10935 Jul 02 05:29 | 0°♂ | |
| | 10932 Dec 31 04:20 | 0°♂ | | | 10935 Jul 26 05:41 | 0°♂ | |
| | 10933 Jan 28 03:59 | 0°♂ | | morning set | 10935 Aug 04 16:52 | 11°♂49'15 | |
| evening max el | 10933 Feb 04 04:07 | 6°♂58'48 | 46°09'59 | | 10935 Aug 19 06:35 | 0°♂ | |
| | 10933 Mar 03 10:37 | 0°♂ | | asc. node | 10935 Aug 30 19:55 | 14°♂23'30 | |
| asc. node | 10933 Mar 15 02:14 | 6°♂09'22 | | | 10935 Sep 12 09:05 | 0°♂ | |
| greatest brilliancy | 10933 Mar 15 22:58 | 6°♂28'17 | -4.8m | | | | |
| retrograde | 10933 Mar 25 17:39 | 8°♂15'49 | | superior conj | 10935 Sep 12 12:59 | 0°♂12'08 | 0°30'17 |
| evening set | 10933 Apr 10 13:51 | 3°♂23'27 | | minimum elong | 10935 Sep 12 06:20 | 29°♂51'29 | 0°29'54 |
| inferior conj | 10933 Apr 15 12:44 | 0°♂25'04 | 7°04'26 | max. Earth dist. | 10935 Sep 14 21:44 | 3°♂08'27 | 1.72425 AU |
| minimum elong | 10933 Apr 15 01:49 | 0°♂41'57 | 7°01'57 | | 10935 Oct 06 13:27 | 0°♂ | |
| min. Earth dist. | 10933 Apr 15 11:59 | 0°♂26'14 | 0.27388 AU | evening rise | 10935 Oct 19 22:42 | 16°♂33'24 | |
| | 10933 Apr 16 04:56 | 30°♂ | | | 10935 Oct 30 20:17 | 0°♂ | |
| morning rise | 10933 Apr 19 13:34 | 27°♂57'40 | | | 10935 Nov 24 06:44 | 0°♂ | |
| direct | 10933 May 06 08:02 | 22°♂29'01 | | | 10935 Dec 18 22:04 | 0°♂ | |
| greatest brilliancy | 10933 May 16 08:03 | 24°♂21'43 | -4.9m | desc. node | 10935 Dec 20 13:14 | 1°♂58'37 | |
| | 10933 May 27 08:43 | 0°♂ | | | 10936 Jan 12 19:04 | 0°♂ | |
| morning max el | 10933 Jun 25 19:27 | 25°♂15'39 | 46°58'47 | | 10936 Feb 06 22:43 | 0°♂ | |
| | 10933 Jun 30 10:50 | 0°♂ | | | 10936 Mar 03 12:44 | 0°♂ | |
| desc. node | 10933 Jul 05 00:58 | 4°♂48'36 | | | 10936 Mar 30 01:43 | 0°♂ | |
| | 10933 Jul 27 20:26 | 0°♂ | | asc. node | 10936 Apr 11 12:15 | 13°♂18'14 | |
| | 10933 Aug 22 15:27 | 0°♂ | | evening max el | 10936 Apr 18 01:22 | 19°♂59'24 | 46°46'28 |
| | 10933 Sep 16 19:30 | 0°♂ | | | 10936 Apr 28 11:29 | 0°♂ | |
| | 10933 Oct 11 16:25 | 0°♂ | | greatest brilliancy | 10936 May 28 13:59 | 20°♂42'47 | -4.9m |
| asc. node | 10933 Oct 25 20:47 | 17°♂12'51 | | retrograde | 10936 Jun 07 08:43 | 22°♂30'57 | |
| | 10933 Nov 05 08:38 | 0°♂ | | evening set | 10936 Jun 24 07:35 | 16°♂56'49 | |
| | 10933 Nov 29 21:03 | 0°♂ | | inferior conj | 10936 Jun 28 00:05 | 14°♂43'09 | 7°37'37 |
| | 10933 Dec 24 06:36 | 0°♂ | | minimum elong | 10936 Jun 28 10:40 | 14°♂26'56 | 7°35'05 |
| morning set | 10933 Dec 25 01:13 | 0°♂57'21 | | min. Earth dist. | 10936 Jun 28 07:04 | 14°♂32'28 | 0.27098 AU |
| | 10934 Jan 17 14:17 | 0°♂ | | morning rise | 10936 Jul 02 13:49 | 11°♂59'08 | |
| max. Earth dist. | 10934 Jan 29 11:46 | 14°♂41'50 | 1.72910 AU | direct | 10936 Jul 18 17:25 | 6°♂55'35 | |
| | | | | greatest brilliancy | 10936 Jul 28 14:58 | 8°♂46'22 | -4.9m |
| superior conj | 10934 Jan 31 03:47 | 16°♂45'32 | 0°33'53 | desc. node | 10936 Aug 01 11:51 | 10°♂22'31 | |
| minimum elong | 10934 Jan 31 11:02 | 17°♂07'56 | 0°34'00 | | 10936 Aug 28 09:59 | 0°♂ | |
| | 10934 Feb 10 20:43 | 0°♂ | | morning max el | 10936 Sep 06 18:04 | 8°♂52'41 | 46°27'57 |
| desc. node | 10934 Feb 14 12:36 | 4°♂31'54 | | | 10936 Sep 27 02:18 | 0°♂ | |
| | 10934 Mar 07 01:44 | 0°♂ | | | 10936 Oct 23 23:23 | 0°♂ | |
| evening rise | 10934 Mar 10 15:18 | 4°♂25'31 | | | 10936 Nov 18 18:33 | 0°♂ | |
| | 10934 Mar 31 05:06 | 0°♂ | | asc. node | 10936 Nov 22 09:35 | 4°♂16'58 | |
| | 10934 Apr 24 07:26 | 0°♂ | | | 10936 Dec 13 22:59 | 0°♂ | |
| | 10934 May 18 10:43 | 0°♂ | | | 10937 Jan 07 17:37 | 0°♂ | |
| asc. node | 10934 Jun 07 07:58 | 24°♂33'58 | | | 10937 Feb 01 05:44 | 0°♂ | |
| | 10934 Jun 11 18:09 | 0°♂ | | | 10937 Feb 25 13:26 | 0°♂ | |
| | 10934 Jul 06 10:11 | 0°♂ | | morning set | 10937 Mar 04 21:31 | 9°♂05'14 | |
| | 10934 Jul 31 18:17 | 0°♂ | | desc. node | 10937 Mar 14 01:55 | 20°♂28'57 | |
| | 10934 Aug 27 11:33 | 0°♂ | | | 10937 Mar 21 17:36 | 0°♂ | |
| evening max el | 10934 Sep 12 03:02 | 16°♂09'32 | 46°08'46 | max. Earth dist. | 10937 Apr 10 09:52 | 24°♂32'35 | 1.71775 AU |
| desc. node | 10934 Sep 27 06:38 | 0°♂03'53 | | | | | |
| | 10934 Sep 27 04:47 | 0°♂ | | superior conj | 10937 Apr 13 12:54 | 28°♂27'07 | -1°05'40 |
| greatest brilliancy | 10934 Oct 21 03:52 | 15°♂16'13 | -4.8m | minimum elong | 10937 Apr 13 01:28 | 27°♂51'20 | 1°05'31 |
| retrograde | 10934 Oct 31 15:39 | 17°♂17'03 | | | 10937 Apr 14 18:37 | 0°♂ | |
| evening set | 10934 Nov 18 23:19 | 10°♂58'54 | | | 10937 May 08 17:13 | 0°♂ | |
| inferior conj | 10934 Nov 22 04:35 | 8°♂58'59 | -8°42'41 | evening rise | 10937 May 23 11:54 | 18°♂32'42 | |
| minimum elong | 10934 Nov 22 04:21 | 8°♂59'20 | 8°42'09 | | 10937 Jun 01 15:00 | 0°♂ | |
| min. Earth dist. | 10934 Nov 22 00:45 | 9°♂04'59 | 0.29056 AU | | 10937 Jun 25 14:10 | 0°♂ | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|----------------------|
| asc. node | 10937 Jul 04 19:57 | 11°Ω31'34 | | 10940 Jan 21 23:47 | 0°♄ | |
| | 10937 Jul 19 16:51 | 0°♍ | | 10940 Feb 16 04:11 | 0°♎ | |
| | 10937 Aug 13 01:24 | 0°♌ | | 10940 Mar 11 20:34 | 0°♏ | |
| | 10937 Sep 06 19:20 | 0°♍ | | 10940 Apr 05 05:10 | 0°♐ | |
| | 10937 Oct 02 05:18 | 0°♎ | | 10940 Apr 10 15:16 | 6°♐43'06 | |
| desc. node | 10937 Oct 24 16:46 | 25°♎25'31 | | 10940 Apr 29 08:11 | 0°♑ | |
| | 10937 Oct 28 21:17 | 0°♏ | | 10940 May 18 12:00 | 23°♑58'12 | |
| evening max el | 10937 Nov 22 06:53 | 25°♏05'38 | 45°48'15 | 10940 May 23 07:22 | 0°♒ | |
| | 10937 Nov 27 12:23 | 0°♐ | | 10940 Jun 16 04:42 | 0°♓ | |
| greatest brilliancy | 10937 Dec 31 08:17 | 23°♐14'27 | -4.7m | | | |
| retrograde | 10938 Jan 10 00:47 | 24°♐56'21 | | superior conj | 10940 Jun 27 17:22 | 14°♓28'52 -1°12'07 |
| evening set | 10938 Jan 25 14:38 | 20°♐16'18 | | minimum elong | 10940 Jun 28 04:25 | 15°♓03'36 1°12'24 |
| inferior conj | 10938 Jan 31 05:47 | 16°♐52'19 | -3°29'59 | max. Earth dist. | 10940 Jun 28 23:22 | 16°♓03'02 1.71387 AU |
| minimum elong | 10938 Jan 31 13:07 | 16°♐40'50 | 3°27'27 | | 10940 Jul 10 02:13 | 0°♑ |
| min. Earth dist. | 10938 Jan 31 20:48 | 16°♐28'48 | 0.28307 AU | asc. node | 10940 Aug 01 08:41 | 27°♑52'21 |
| morning rise | 10938 Feb 06 11:08 | 13°♐07'50 | | | 10940 Aug 03 01:35 | 0°♒ |
| asc. node | 10938 Feb 14 17:50 | 9°♐37'28 | | evening rise | 10940 Aug 06 18:38 | 4°♒37'47 |
| direct | 10938 Feb 21 12:47 | 8°♐41'38 | | | 10940 Aug 27 04:00 | 0°♓ |
| greatest brilliancy | 10938 Mar 04 11:24 | 10°♐54'31 | -4.8m | | 10940 Sep 20 10:40 | 0°♌ |
| | 10938 Apr 01 05:29 | 0°♏ | | | 10940 Oct 14 23:34 | 0°♎ |
| morning max el | 10938 Apr 12 12:52 | 10°♏46'18 | 46°32'44 | | 10940 Nov 08 21:50 | 0°♏ |
| | 10938 Apr 30 19:57 | 0°♐ | | desc. node | 10940 Nov 21 03:38 | 14°♏30'15 |
| | 10938 May 27 04:54 | 0°♑ | | | 10940 Dec 04 09:55 | 0°♐ |
| desc. node | 10938 Jun 06 15:13 | 12°♑18'35 | | | 10940 Dec 30 19:32 | 0°♏ |
| | 10938 Jun 21 09:20 | 0°♒ | | | 10941 Jan 28 00:39 | 0°♐ |
| | 10938 Jul 16 00:34 | 0°♓ | | evening max el | 10941 Feb 01 17:55 | 4°♐39'55 46°08'47 |
| | 10938 Aug 09 10:04 | 0°♑ | | | 10941 Mar 04 19:15 | 0°♑ |
| asc. node | 10938 Sep 02 17:41 | 0°♒ | | greatest brilliancy | 10941 Mar 13 11:41 | 4°♑05'49 -4.8m |
| | 10938 Sep 27 09:20 | 0°♓26'12 | | asc. node | 10941 Mar 14 04:09 | 4°♑19'52 |
| | 10938 Sep 27 00:51 | 0°♓ | | retrograde | 10941 Mar 23 07:25 | 5°♑54'16 |
| morning set | 10938 Oct 14 22:08 | 22°♓05'32 | | evening set | 10941 Apr 07 23:36 | 1°♑06'34 |
| | 10938 Oct 21 07:48 | 0°♌ | | | 10941 Apr 09 21:32 | 30°♒♐ |
| | 10938 Nov 14 14:41 | 0°♎ | | inferior conj | 10941 Apr 13 02:17 | 28°♐02'58 6°48'55 |
| | | | | minimum elong | 10941 Apr 12 15:16 | 28°♐19'59 6°46'18 |
| superior conj | 10938 Nov 20 22:42 | 7°♎49'13 | 1°26'04 | min. Earth dist. | 10941 Apr 13 01:30 | 28°♐04'11 0.27403 AU |
| minimum elong | 10938 Nov 20 22:00 | 7°♎47'02 | 1°26'37 | morning rise | 10941 Apr 17 06:44 | 25°♐30'31 |
| max. Earth dist. | 10938 Nov 21 20:42 | 8°♎57'05 | 1.73172 AU | direct | 10941 May 03 21:53 | 20°♐06'24 |
| | 10938 Dec 08 22:08 | 0°♏ | | greatest brilliancy | 10941 May 13 22:29 | 22°♐00'01 -4.9m |
| evening rise | 10938 Dec 27 20:37 | 23°♏19'20 | | | 10941 May 28 10:33 | 0°♑ |
| | 10939 Jan 02 06:53 | 0°♐ | | morning max el | 10941 Jun 23 10:11 | 22°♑55'40 46°59'05 |
| desc. node | 10939 Jan 17 01:34 | 18°♐09'46 | | | 10941 Jun 30 07:17 | 0°♒ |
| | 10939 Jan 26 17:01 | 0°♏ | | desc. node | 10941 Jul 04 02:59 | 4°♒02'38 |
| | 10939 Feb 20 04:04 | 0°♐ | | | 10941 Jul 27 11:49 | 0°♓ |
| | 10939 Mar 16 16:00 | 0°♑ | | | 10941 Aug 22 04:44 | 0°♑ |
| | 10939 Apr 10 06:39 | 0°♒ | | | 10941 Sep 16 07:39 | 0°♒ |
| | 10939 May 05 05:00 | 0°♓ | | | 10941 Oct 11 03:52 | 0°♓ |
| asc. node | 10939 May 09 22:43 | 5°♓37'32 | | asc. node | 10941 Oct 24 22:37 | 16°♓44'22 |
| | 10939 May 30 21:18 | 0°♑ | | | 10941 Nov 04 19:39 | 0°♌ |
| | 10939 Jun 27 09:12 | 0°♒ | | | 10941 Nov 29 07:48 | 0°♎ |
| evening max el | 10939 Jun 30 16:40 | 3°♒21'45 | 46°45'48 | morning set | 10941 Dec 22 18:26 | 28°♎49'56 |
| | 10939 Aug 01 14:10 | 0°♓ | | | 10941 Dec 23 17:10 | 0°♏ |
| greatest brilliancy | 10939 Aug 09 01:37 | 3°♓40'09 | -4.8m | | 10942 Jan 17 00:49 | 0°♐ |
| retrograde | 10939 Aug 19 23:18 | 5°♓52'40 | | max. Earth dist. | 10942 Jan 27 08:27 | 12°♐44'51 1.72938 AU |
| desc. node | 10939 Aug 29 22:21 | 3°♓53'03 | | | | |
| evening set | 10939 Sep 03 19:19 | 1°♓34'41 | | superior conj | 10942 Jan 28 19:29 | 14°♐33'05 0°37'01 |
| | 10939 Sep 06 13:39 | 30°♒♐ | | minimum elong | 10942 Jan 29 03:14 | 14°♐57'04 0°37'08 |
| min. Earth dist. | 10939 Sep 09 09:40 | 28°♐16'24 | 0.27742 AU | | 10942 Feb 10 07:16 | 0°♏ |
| inferior conj | 10939 Sep 10 02:22 | 27°♐50'34 | -2°46'45 | desc. node | 10942 Feb 13 14:28 | 4°♏04'58 |
| minimum elong | 10939 Sep 09 20:16 | 28°♐00'01 | 2°45'00 | | 10942 Mar 06 12:25 | 0°♐ |
| morning rise | 10939 Sep 15 21:51 | 24°♐23'27 | | evening rise | 10942 Mar 08 05:48 | 2°♐08'23 |
| direct | 10939 Oct 01 02:12 | 19°♐57'38 | | | 10942 Mar 30 15:58 | 0°♑ |
| greatest brilliancy | 10939 Oct 10 16:46 | 21°♐38'07 | -4.8m | | 10942 Apr 23 18:32 | 0°♒ |
| | 10939 Oct 26 08:43 | 0°♓ | | | 10942 May 17 22:07 | 0°♓ |
| morning max el | 10939 Nov 18 21:59 | 19°♓54'41 | 45°47'19 | asc. node | 10942 Jun 06 09:59 | 24°♓04'03 |
| | 10939 Nov 29 02:17 | 0°♌ | | | 10942 Jun 11 05:59 | 0°♑ |
| asc. node | 10939 Dec 20 21:53 | 23°♌17'06 | | | 10942 Jul 05 22:47 | 0°♒ |
| | 10939 Dec 26 22:24 | 0°♎ | | | 10942 Jul 31 08:20 | 0°♓ |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 10942 Aug 27 05:02 | 0°♌ | | morning set | 10945 Mar 02 11:51 | 6°♎48'08 | |
| evening max el | 10942 Sep 09 19:10 | 13°♌58'22 | 46°10'03 | desc. node | 10945 Mar 13 03:44 | 20°♎01'49 | |
| desc. node | 10942 Sep 26 08:30 | 29°♌03'18 | | | 10945 Mar 21 04:11 | 0°♎ | |
| | 10942 Sep 27 12:19 | 0°♎ | | max. Earth dist. | 10945 Apr 07 18:25 | 21°♎56'22 | 1.71814 AU |
| greatest brilliancy | 10942 Oct 18 18:13 | 13°♎04'49 | -4.8m | | | | |
| retrograde | 10942 Oct 29 08:24 | 15°♎07'26 | | superior conj | 10945 Apr 11 01:20 | 26°♎02'53 | -1°03'05 |
| evening set | 10942 Nov 16 14:25 | 8°♎50'37 | | minimum elong | 10945 Apr 10 13:52 | 25°♎27'04 | 1°02'53 |
| inferior conj | 10942 Nov 19 20:40 | 6°♎49'08 | -8°42'11 | | 10945 Apr 14 05:12 | 0°♎ | |
| minimum elong | 10942 Nov 19 19:40 | 6°♎50'43 | 8°41'38 | | 10945 May 08 03:50 | 0°♌ | |
| min. Earth dist. | 10942 Nov 19 15:09 | 6°♎57'47 | 0.29045 AU | evening rise | 10945 May 20 23:00 | 16°♌03'25 | |
| morning rise | 10942 Nov 23 01:00 | 4°♎50'50 | | | 10945 Jun 01 01:44 | 0°♌ | |
| | 10942 Dec 02 21:35 | 30°♎♌ | | | 10945 Jun 25 01:03 | 0°♌ | |
| direct | 10942 Dec 11 07:29 | 28°♌35'02 | | asc. node | 10945 Jul 03 21:55 | 11°♌03'37 | |
| | 10942 Dec 20 01:41 | 0°♎ | | | 10945 Jul 19 03:58 | 0°♌ | |
| greatest brilliancy | 10942 Dec 21 13:46 | 0°♎30'10 | -4.7m | | 10945 Aug 12 12:52 | 0°♌ | |
| asc. node | 10943 Jan 17 09:06 | 17°♎58'56 | | | 10945 Sep 06 07:26 | 0°♌ | |
| morning max el | 10943 Jan 29 10:28 | 29°♎06'42 | 45°49'35 | | 10945 Oct 01 18:37 | 0°♎ | |
| | 10943 Jan 30 08:17 | 0°♎ | | desc. node | 10945 Oct 23 18:50 | 24°♎48'47 | |
| | 10943 Feb 27 16:43 | 0°♎ | | | 10945 Oct 28 13:23 | 0°♎ | |
| | 10943 Mar 25 18:32 | 0°♎ | | evening max el | 10945 Nov 19 20:58 | 22°♎51'24 | 45°48'16 |
| | 10943 Apr 19 20:41 | 0°♎ | | | 10945 Nov 27 13:35 | 0°♎ | |
| desc. node | 10943 May 09 04:31 | 23°♎34'38 | | greatest brilliancy | 10945 Dec 28 23:58 | 21°♎03'15 | -4.7m |
| | 10943 May 14 09:49 | 0°♎ | | retrograde | 10946 Jan 07 15:09 | 22°♎44'23 | |
| | 10943 Jun 07 15:10 | 0°♌ | | evening set | 10946 Jan 23 08:16 | 18°♎00'40 | |
| | 10943 Jul 01 16:23 | 0°♌ | | inferior conj | 10946 Jan 28 21:14 | 14°♎39'50 | -3°49'12 |
| | 10943 Jul 25 16:25 | 0°♌ | | minimum elong | 10946 Jan 29 05:06 | 14°♎27'31 | 3°46'33 |
| morning set | 10943 Aug 02 06:29 | 9°♌28'34 | | min. Earth dist. | 10946 Jan 29 12:52 | 14°♎15'20 | 0.28353 AU |
| | 10943 Aug 18 17:11 | 0°♌ | | morning rise | 10946 Feb 04 01:22 | 10°♎56'37 | |
| asc. node | 10943 Aug 29 21:44 | 13°♌56'25 | | asc. node | 10946 Feb 13 19:45 | 7°♎03'01 | |
| | | | | direct | 10946 Feb 19 04:03 | 6°♎28'29 | |
| superior conj | 10943 Sep 10 03:59 | 27°♌56'58 | 0°26'56 | greatest brilliancy | 10946 Mar 02 04:01 | 8°♎42'02 | -4.8m |
| minimum elong | 10943 Sep 09 21:58 | 27°♌38'16 | 0°26'34 | | 10946 Apr 01 08:02 | 0°♎ | |
| | 10943 Sep 11 19:34 | 0°♌ | | morning max el | 10946 Apr 10 02:54 | 8°♎27'28 | 46°31'10 |
| max. Earth dist. | 10943 Sep 12 16:05 | 1°♌03'44 | 1.72385 AU | | 10946 Apr 30 12:45 | 0°♎ | |
| | 10943 Oct 05 23:54 | 0°♌ | | | 10946 May 26 18:48 | 0°♎ | |
| evening rise | 10943 Oct 17 15:36 | 14°♌25'03 | | desc. node | 10946 Jun 05 17:15 | 11°♎45'12 | |
| | 10943 Oct 30 06:47 | 0°♎ | | | 10946 Jun 20 21:52 | 0°♌ | |
| | 10943 Nov 23 17:26 | 0°♎ | | | 10946 Jul 15 12:21 | 0°♌ | |
| | 10943 Dec 18 09:08 | 0°♎ | | | 10946 Aug 08 21:22 | 0°♌ | |
| desc. node | 10943 Dec 19 15:15 | 1°♎31'11 | | asc. node | 10946 Sep 02 04:38 | 0°♌ | |
| | 10944 Jan 12 06:43 | 0°♎ | | | 10946 Sep 26 11:11 | 29°♌58'53 | |
| | 10944 Feb 06 11:17 | 0°♎ | | morning set | 10946 Sep 26 11:32 | 0°♌ | |
| | 10944 Mar 03 02:54 | 0°♎ | | | 10946 Oct 12 14:06 | 19°♌53'59 | |
| | 10944 Mar 29 19:16 | 0°♌ | | | 10946 Oct 20 18:19 | 0°♌ | |
| asc. node | 10944 Apr 10 14:14 | 12°♌30'16 | | | 10946 Nov 14 01:07 | 0°♎ | |
| evening max el | 10944 Apr 15 15:25 | 17°♌38'13 | 46°45'31 | | | | |
| | 10944 Apr 28 16:23 | 0°♌ | | superior conj | 10946 Nov 18 16:04 | 5°♎42'32 | 1°25'54 |
| greatest brilliancy | 10944 May 26 03:34 | 18°♌18'58 | -4.9m | minimum elong | 10946 Nov 18 14:37 | 5°♎38'02 | 1°26'25 |
| retrograde | 10944 Jun 04 21:43 | 20°♌06'11 | | max. Earth dist. | 10946 Nov 19 12:54 | 6°♎46'50 | 1.73159 AU |
| evening set | 10944 Jun 22 00:08 | 14°♌27'11 | | | 10946 Dec 08 08:35 | 0°♎ | |
| inferior conj | 10944 Jun 25 12:56 | 12°♌18'37 | 7°50'58 | evening rise | 10946 Dec 25 13:14 | 21°♎10'32 | |
| minimum elong | 10944 Jun 25 23:08 | 12°♌02'57 | 7°48'37 | | 10947 Jan 01 17:25 | 0°♎ | |
| min. Earth dist. | 10944 Jun 25 19:53 | 12°♌07'56 | 0.27104 AU | desc. node | 10947 Jan 16 03:28 | 17°♎42'55 | |
| morning rise | 10944 Jun 29 22:12 | 9°♌40'39 | | | 10947 Jan 26 03:45 | 0°♎ | |
| direct | 10944 Jul 16 06:32 | 4°♌31'07 | | | 10947 Feb 19 15:08 | 0°♎ | |
| greatest brilliancy | 10944 Jul 26 03:14 | 6°♌21'02 | -4.9m | | 10947 Mar 16 03:33 | 0°♎ | |
| desc. node | 10944 Jul 31 13:52 | 8°♌43'15 | | | 10947 Apr 09 18:56 | 0°♌ | |
| | 10944 Aug 28 12:51 | 0°♌ | | | 10947 May 04 18:25 | 0°♌ | |
| morning max el | 10944 Sep 04 07:23 | 6°♌31'05 | 46°29'33 | asc. node | 10947 May 09 00:45 | 5°♌03'05 | |
| | 10944 Sep 26 19:20 | 0°♌ | | | 10947 May 30 12:54 | 0°♌ | |
| | 10944 Oct 23 13:11 | 0°♌ | | | 10947 Jun 27 06:29 | 0°♌ | |
| | 10944 Nov 18 06:47 | 0°♌ | | evening max el | 10947 Jun 28 05:46 | 0°♌58'40 | 46°46'42 |
| asc. node | 10944 Nov 21 11:39 | 3°♌47'17 | | | 10947 Aug 03 13:04 | 0°♌ | |
| | 10944 Dec 13 10:21 | 0°♎ | | greatest brilliancy | 10947 Aug 06 17:11 | 1°♌22'25 | -4.8m |
| | 10945 Jan 07 04:31 | 0°♎ | | retrograde | 10947 Aug 17 13:46 | 3°♌34'27 | |
| | 10945 Jan 31 16:25 | 0°♎ | | desc. node | 10947 Aug 29 00:16 | 0°♌57'17 | |
| | 10945 Feb 25 00:02 | 0°♎ | | | 10947 Aug 31 00:25 | 30°♌♌ | |

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|---------------------|--------------------|----------------------------------|------------|---------------------|--------------------|---------------------------|------------|
| evening set | 10947 Sep 01 08:55 | 29° \cap 17'28 | | minimum elong | 10950 Jan 26 19:29 | 12° \approx 46'00 | 0°40'13 |
| min. Earth dist. | 10947 Sep 07 00:51 | 25° \cap 57'22 | 0.27694 AU | | 10950 Feb 09 17:56 | 0° H | |
| inferior conj | 10947 Sep 07 16:36 | 25° \cap 33'04 | -2°25'17 | desc. node | 10950 Feb 12 16:19 | 3° H 37'40 | |
| minimum elong | 10947 Sep 07 11:12 | 25° \cap 41'24 | 2°23'45 | evening rise | 10950 Mar 05 20:26 | 29° H 51'27 | |
| morning rise | 10947 Sep 13 14:03 | 22° \cap 03'26 | | | 10950 Mar 05 23:11 | 0° Y | |
| direct | 10947 Sep 28 15:25 | 17° \cap 40'27 | | | 10950 Mar 30 02:54 | 0° B | |
| greatest brilliancy | 10947 Oct 08 07:30 | 19° \cap 22'10 | -4.8m | | 10950 Apr 23 05:42 | 0° II | |
| | 10947 Oct 27 02:14 | 0° $\underline{\text{A}}$ | | | 10950 May 17 09:36 | 0° E | |
| morning max el | 10947 Nov 16 12:19 | 17° $\underline{\text{A}}$ 39'38 | 45°48'16 | asc. node | 10950 Jun 05 11:55 | 23° E 33'30 | |
| | 10947 Nov 28 21:12 | 0° M | | | 10950 Jun 10 18:00 | 0° Ω | |
| asc. node | 10947 Dec 19 23:47 | 22° M 40'30 | | | 10950 Jul 05 11:39 | 0° \cap | |
| | 10947 Dec 26 12:48 | 0° X | | | 10950 Jul 30 22:48 | 0° $\underline{\text{A}}$ | |
| | 10948 Jan 21 12:21 | 0° Z | | | 10950 Aug 26 23:15 | 0° M | |
| | 10948 Feb 15 15:51 | 0° \approx | | evening max el | 10950 Sep 07 11:27 | 11° M 46'32 | 46°11'21 |
| | 10948 Mar 11 07:45 | 0° H | | desc. node | 10950 Sep 25 10:35 | 28° M 00'41 | |
| | 10948 Apr 04 16:06 | 0° Y | | | 10950 Sep 27 23:15 | 0° X | |
| desc. node | 10948 Apr 09 17:14 | 6° Y 15'22 | | greatest brilliancy | 10950 Oct 16 09:05 | 10° X 52'49 | -4.8m |
| | 10948 Apr 28 19:00 | 0° B | | retrograde | 10950 Oct 27 00:45 | 12° X 56'20 | |
| morning set | 10948 May 15 22:53 | 21° B 28'02 | | evening set | 10950 Nov 14 05:03 | 6° X 41'44 | |
| | 10948 May 22 18:09 | 0° II | | min. Earth dist. | 10950 Nov 17 05:34 | 4° X 49'08 | 0.29027 AU |
| | 10948 Jun 15 15:27 | 0° E | | inferior conj | 10950 Nov 17 12:36 | 4° X 38'05 | -8°40'55 |
| | | | | minimum elong | 10950 Nov 17 10:49 | 4° X 40'53 | 8°40'20 |
| superior conj | 10948 Jun 25 04:53 | 12° E 00'42 | -1°14'16 | morning rise | 10950 Nov 20 16:43 | 2° X 40'03 | |
| minimum elong | 10948 Jun 25 15:34 | 12° E 34'15 | 1°14'35 | | 10950 Nov 25 10:37 | 30° R M | |
| max. Earth dist. | 10948 Jun 26 05:44 | 13° E 18'42 | 1.71372 AU | direct | 10950 Dec 08 23:47 | 26° M 24'41 | |
| | 10948 Jul 09 12:55 | 0° Ω | | greatest brilliancy | 10950 Dec 19 03:31 | 28° M 17'37 | -4.7m |
| asc. node | 10948 Jul 31 10:27 | 27° Ω 24'27 | | | 10950 Dec 23 06:38 | 0° X | |
| | 10948 Aug 02 12:18 | 0° \cap | | asc. node | 10951 Jan 16 11:02 | 17° X 01'54 | |
| evening rise | 10948 Aug 04 07:34 | 2° \cap 15'00 | | morning max el | 10951 Jan 27 01:57 | 26° X 54'12 | 45°48'34 |
| | 10948 Aug 26 14:47 | 0° $\underline{\text{A}}$ | | | 10951 Jan 30 05:28 | 0° Z | |
| | 10948 Sep 19 21:39 | 0° M | | | 10951 Feb 27 08:02 | 0° \approx | |
| | 10948 Oct 14 10:54 | 0° X | | | 10951 Mar 25 07:46 | 0° H | |
| | 10948 Nov 08 09:48 | 0° Z | | | 10951 Apr 19 08:54 | 0° Y | |
| desc. node | 10948 Nov 20 05:40 | 13° Z 59'41 | | desc. node | 10951 May 08 06:31 | 23° Y 04'44 | |
| | 10948 Dec 03 23:01 | 0° \approx | | | 10951 May 13 21:28 | 0° B | |
| | 10948 Dec 30 10:55 | 0° H | | | 10951 Jun 07 02:28 | 0° II | |
| | 10949 Jan 27 21:58 | 0° Y | | | 10951 Jul 01 03:27 | 0° E | |
| evening max el | 10949 Jan 30 08:41 | 2° Y 23'54 | 46°07'42 | | 10951 Jul 25 03:20 | 0° Ω | |
| | 10949 Mar 06 19:41 | 0° B | | morning set | 10951 Jul 30 20:04 | 7° Ω 07'07 | |
| greatest brilliancy | 10949 Mar 11 00:08 | 1° B 43'43 | -4.8m | | 10951 Aug 18 04:01 | 0° \cap | |
| asc. node | 10949 Mar 13 06:06 | 2° B 26'31 | | asc. node | 10951 Aug 28 23:40 | 13° \cap 28'51 | |
| retrograde | 10949 Mar 20 21:27 | 3° B 33'07 | | | | | |
| | 10949 Apr 03 05:16 | 30° R Y | | superior conj | 10951 Sep 07 18:43 | 25° \cap 40'03 | 0°23'32 |
| evening set | 10949 Apr 05 09:39 | 28° Y 49'59 | | minimum elong | 10951 Sep 07 13:24 | 25° \cap 23'31 | 0°23'11 |
| inferior conj | 10949 Apr 10 15:52 | 25° Y 41'17 | 6°32'38 | max. Earth dist. | 10951 Sep 10 09:33 | 28° \cap 55'22 | 1.72347 AU |
| minimum elong | 10949 Apr 10 04:51 | 25° Y 58'18 | 6°29'57 | | 10951 Sep 11 06:21 | 0° $\underline{\text{A}}$ | |
| min. Earth dist. | 10949 Apr 10 14:51 | 25° Y 42'51 | 0.27419 AU | | 10951 Oct 05 10:39 | 0° M | |
| morning rise | 10949 Apr 14 23:54 | 23° Y 03'48 | | evening rise | 10951 Oct 15 08:05 | 12° M 14'24 | |
| direct | 10949 May 01 12:12 | 17° Y 44'23 | | | 10951 Oct 29 17:36 | 0° X | |
| greatest brilliancy | 10949 May 11 12:30 | 19° Y 38'09 | -4.9m | | 10951 Nov 23 04:27 | 0° Z | |
| | 10949 May 29 05:22 | 0° B | | | 10951 Dec 17 20:32 | 0° \approx | |
| morning max el | 10949 Jun 21 01:15 | 20° B 36'34 | 46°59'01 | desc. node | 10951 Dec 18 17:06 | 1° \approx 02'13 | |
| | 10949 Jun 30 03:08 | 0° II | | | 10952 Jan 11 18:45 | 0° H | |
| desc. node | 10949 Jul 03 04:55 | 3° II 16'56 | | | 10952 Feb 06 00:18 | 0° Y | |
| | 10949 Jul 27 03:05 | 0° E | | | 10952 Mar 02 17:36 | 0° B | |
| | 10949 Aug 21 18:02 | 0° Ω | | | 10952 Mar 29 13:36 | 0° II | |
| | 10949 Sep 15 19:51 | 0° \cap | | asc. node | 10952 Apr 09 16:21 | 11° II 40'53 | |
| | 10949 Oct 10 15:23 | 0° $\underline{\text{A}}$ | | evening max el | 10952 Apr 13 04:50 | 15° II 14'32 | 46°44'37 |
| asc. node | 10949 Oct 24 00:38 | 16° $\underline{\text{A}}$ 16'19 | | | 10952 Apr 28 23:49 | 0° E | |
| | 10949 Nov 04 06:44 | 0° M | | greatest brilliancy | 10952 May 23 17:47 | 15° E 55'25 | -4.9m |
| | 10949 Nov 28 18:36 | 0° X | | retrograde | 10952 Jun 02 10:22 | 17° E 41'13 | |
| morning set | 10949 Dec 20 11:32 | 26° X 41'59 | | evening set | 10952 Jun 19 16:45 | 11° E 57'28 | |
| | 10949 Dec 23 03:50 | 0° Z | | inferior conj | 10952 Jun 23 01:57 | 9° E 54'04 | 8°03'17 |
| | 10950 Jan 16 11:26 | 0° \approx | | minimum elong | 10952 Jun 23 11:43 | 9° E 39'03 | 8°01'07 |
| max. Earth dist. | 10950 Jan 25 03:47 | 10° \approx 43'21 | 1.72960 AU | min. Earth dist. | 10952 Jun 23 09:09 | 9° E 43'00 | 0.27107 AU |
| | | | | morning rise | 10952 Jun 27 06:42 | 7° E 22'14 | |
| superior conj | 10950 Jan 26 11:16 | 12° \approx 20'37 | 0°40'06 | direct | 10952 Jul 13 19:15 | 2° E 06'28 | |

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|---------------------|--------------------|-----------|------------|---------------------|--|--------------------|-----------|------------|
| greatest brilliancy | 10952 Jul 23 16:08 | 3°☿56'05 | -4.9m | | | 10955 Mar 15 15:29 | 0°♄ | |
| desc. node | 10952 Jul 30 15:46 | 7°☿07'11 | | | | 10955 Apr 09 07:37 | 0°♄ | |
| | 10952 Aug 28 14:29 | 0°♄ | | | | 10955 May 04 08:19 | 0°☿ | |
| morning max el | 10952 Sep 01 20:09 | 4°♄07'18 | 46°31'04 | asc. node | | 10955 May 08 02:40 | 4°☿26'54 | |
| | 10952 Sep 26 12:17 | 0°♄ | | | | 10955 May 30 05:08 | 0°♄ | |
| | 10952 Oct 23 03:10 | 0°♄ | | evening max el | | 10955 Jun 25 19:52 | 28°♄37'05 | 46°47'37 |
| | 10952 Nov 17 19:20 | 0°♄ | | | | 10955 Jun 27 05:02 | 0°♄ | |
| asc. node | 10952 Nov 20 13:32 | 3°♄16'02 | | greatest brilliancy | | 10955 Aug 04 08:19 | 29°♄03'12 | -4.8m |
| | 10952 Dec 12 22:04 | 0°♄ | | | | 10955 Aug 07 02:19 | 0°♄ | |
| | 10953 Jan 06 15:47 | 0°♄ | | retrograde | | 10955 Aug 15 04:48 | 1°♄15'24 | |
| | 10953 Jan 31 03:26 | 0°♄ | | | | 10955 Aug 23 01:14 | 30°♄ | |
| | 10953 Feb 24 10:57 | 0°♄ | | desc. node | | 10955 Aug 28 02:19 | 27°♄56'24 | |
| morning set | 10953 Feb 28 02:06 | 4°♄29'48 | | evening set | | 10955 Aug 29 22:46 | 26°♄59'05 | |
| desc. node | 10953 Mar 12 05:40 | 19°♄33'59 | | min. Earth dist. | | 10955 Sep 04 15:47 | 23°♄37'48 | 0.27643 AU |
| | 10953 Mar 20 15:05 | 0°♄ | | inferior conj | | 10955 Sep 05 06:49 | 23°♄14'40 | -2°03'35 |
| max. Earth dist. | 10953 Apr 05 03:58 | 19°♄22'15 | 1.71856 AU | minimum elong | | 10955 Sep 05 02:10 | 23°♄21'50 | 2°02'17 |
| | | | | morning rise | | 10955 Sep 11 06:09 | 19°♄42'58 | |
| superior conj | 10953 Apr 08 13:46 | 23°♄37'39 | -1°00'22 | direct | | 10955 Sep 26 04:59 | 15°♄22'31 | |
| minimum elong | 10953 Apr 08 02:21 | 23°♄02'03 | 1°00'09 | greatest brilliancy | | 10955 Oct 05 21:42 | 17°♄05'06 | -4.8m |
| | 10953 Apr 13 16:07 | 0°♄ | | | | 10955 Oct 27 15:29 | 0°♄ | |
| | 10953 May 07 14:50 | 0°♄ | | morning max el | | 10955 Nov 14 03:32 | 15°♄26'17 | 45°49'15 |
| evening rise | 10953 May 18 10:16 | 13°♄33'35 | | | | 10955 Nov 28 15:47 | 0°♄ | |
| | 10953 May 31 12:49 | 0°☿ | | asc. node | | 10955 Dec 19 01:41 | 22°♄03'40 | |
| | 10953 Jun 24 12:15 | 0°♄ | | | | 10955 Dec 26 03:15 | 0°♄ | |
| asc. node | 10953 Jul 02 23:44 | 10°♄34'16 | | | | 10956 Jan 21 01:06 | 0°♄ | |
| | 10953 Jul 18 15:22 | 0°♄ | | | | 10956 Feb 15 03:46 | 0°♄ | |
| | 10953 Aug 12 00:37 | 0°♄ | | | | 10956 Mar 10 19:12 | 0°♄ | |
| | 10953 Sep 05 19:50 | 0°♄ | | | | 10956 Apr 04 03:18 | 0°♄ | |
| | 10953 Oct 01 08:22 | 0°♄ | | desc. node | | 10956 Apr 08 19:11 | 5°♄46'45 | |
| desc. node | 10953 Oct 22 20:49 | 24°♄10'25 | | | | 10956 Apr 28 06:05 | 0°♄ | |
| | 10953 Oct 28 06:11 | 0°♄ | | morning set | | 10956 May 13 09:45 | 18°♄57'09 | |
| evening max el | 10953 Nov 17 10:54 | 20°♄35'41 | 45°48'19 | | | 10956 May 22 05:10 | 0°♄ | |
| | 10953 Nov 27 16:48 | 0°♄ | | | | 10956 Jun 15 02:26 | 0°☿ | |
| greatest brilliancy | 10953 Dec 26 15:16 | 18°♄50'28 | -4.7m | | | | | |
| retrograde | 10954 Jan 05 05:54 | 20°♄31'34 | | superior conj | | 10956 Jun 22 16:19 | 9°☿31'21 | -1°16'16 |
| evening set | 10954 Jan 21 02:00 | 15°♄43'41 | | minimum elong | | 10956 Jun 23 02:32 | 10°☿03'27 | 1°16'38 |
| inferior conj | 10954 Jan 26 12:42 | 12°♄26'17 | -4°07'56 | max. Earth dist. | | 10956 Jun 23 14:49 | 10°☿42'01 | 1.71361 AU |
| minimum elong | 10954 Jan 26 21:03 | 12°♄13'12 | 4°05'10 | | | 10956 Jul 08 23:54 | 0°♄ | |
| min. Earth dist. | 10954 Jan 27 04:52 | 12°♄00'58 | 0.28400 AU | asc. node | | 10956 Jul 30 12:26 | 26°♄56'15 | |
| morning rise | 10954 Feb 01 15:30 | 8°♄44'50 | | evening rise | | 10956 Aug 01 20:28 | 29°♄51'09 | |
| asc. node | 10954 Feb 12 21:44 | 4°♄32'31 | | | | 10956 Aug 01 23:18 | 0°♄ | |
| direct | 10954 Feb 16 19:16 | 4°♄14'10 | | | | 10956 Aug 26 01:51 | 0°♄ | |
| greatest brilliancy | 10954 Feb 27 20:47 | 6°♄28'50 | -4.8m | | | 10956 Sep 19 08:51 | 0°♄ | |
| | 10954 Apr 01 09:35 | 0°♄ | | | | 10956 Oct 13 22:26 | 0°♄ | |
| morning max el | 10954 Apr 07 17:42 | 6°♄09'37 | 46°29'36 | | | 10956 Nov 07 21:56 | 0°♄ | |
| | 10954 Apr 30 05:36 | 0°♄ | | desc. node | | 10956 Nov 19 07:33 | 13°♄28'08 | |
| | 10954 May 26 08:54 | 0°♄ | | | | 10956 Dec 03 12:21 | 0°♄ | |
| desc. node | 10954 Jun 04 19:03 | 11°♄10'14 | | | | 10956 Dec 30 02:44 | 0°♄ | |
| | 10954 Jun 20 10:41 | 0°♄ | | | | 10957 Jan 27 20:24 | 0°♄ | |
| | 10954 Jul 15 00:26 | 0°☿ | | evening max el | | 10957 Jan 28 00:15 | 0°♄09'19 | 46°06'24 |
| | 10954 Aug 08 08:57 | 0°♄ | | greatest brilliancy | | 10957 Mar 08 12:55 | 29°♄21'25 | -4.8m |
| | 10954 Sep 01 15:50 | 0°♄ | | | | 10957 Mar 10 12:59 | 0°♄ | |
| asc. node | 10954 Sep 25 13:10 | 29°♄31'15 | | asc. node | | 10957 Mar 12 08:13 | 0°♄28'01 | |
| | 10954 Sep 25 22:28 | 0°♄ | | retrograde | | 10957 Mar 18 11:16 | 1°♄11'08 | |
| morning set | 10954 Oct 10 06:20 | 17°♄42'20 | | | | 10957 Mar 26 02:10 | 30°♄ | |
| | 10954 Oct 20 05:05 | 0°♄ | | evening set | | 10957 Apr 02 19:57 | 26°♄32'42 | |
| | 10954 Nov 13 11:50 | 0°♄ | | inferior conj | | 10957 Apr 08 05:29 | 23°♄19'02 | 6°15'37 |
| | | | | minimum elong | | 10957 Apr 07 18:32 | 23°♄35'57 | 6°12'52 |
| superior conj | 10954 Nov 16 09:33 | 3°♄35'16 | 1°25'36 | min. Earth dist. | | 10957 Apr 08 04:21 | 23°♄20'47 | 0.27435 AU |
| minimum elong | 10954 Nov 16 07:21 | 3°♄28'30 | 1°26'07 | morning rise | | 10957 Apr 12 17:01 | 20°♄36'26 | |
| max. Earth dist. | 10954 Nov 17 06:35 | 4°♄40'12 | 1.73151 AU | direct | | 10957 Apr 29 02:42 | 15°♄22'01 | |
| | 10954 Dec 07 19:20 | 0°♄ | | greatest brilliancy | | 10957 May 09 02:26 | 17°♄15'30 | -4.9m |
| evening rise | 10954 Dec 23 05:54 | 19°♄00'56 | | | | 10957 May 29 19:42 | 0°♄ | |
| | 10955 Jan 01 04:18 | 0°♄ | | morning max el | | 10957 Jun 18 15:45 | 18°♄15'30 | 46°58'49 |
| desc. node | 10955 Jan 15 05:17 | 17°♄14'47 | | | | 10957 Jun 29 22:35 | 0°♄ | |
| | 10955 Jan 25 14:51 | 0°♄ | | desc. node | | 10957 Jul 02 06:54 | 2°♄31'29 | |
| | 10955 Feb 19 02:33 | 0°♄ | | | | 10957 Jul 26 18:18 | 0°☿ | |

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| | 10957 Aug 21 07:23 | 0°♊ | | | 10960 Mar 29 08:13 | 0°♊ | |
| | 10957 Sep 15 08:09 | 0°♎ | | asc. node | 10960 Apr 08 18:13 | 10°♊50'25 | |
| | 10957 Oct 10 03:01 | 0°♊ | | evening max el | 10960 Apr 10 17:10 | 12°♊48'31 | 46°43'25 |
| asc. node | 10957 Oct 23 02:29 | 15°♊47'22 | | | 10960 Apr 29 09:56 | 0°♊ | |
| | 10957 Nov 03 17:54 | 0°♎ | | greatest brilliancy | 10960 May 21 07:53 | 13°♊31'19 | -4.9m |
| | 10957 Nov 28 05:28 | 0°♊ | | retrograde | 10960 May 30 22:32 | 15°♊15'46 | |
| morning set | 10957 Dec 18 05:02 | 24°♊35'03 | | evening set | 10960 Jun 17 08:59 | 9°♊27'09 | |
| | 10957 Dec 22 14:31 | 0°♊ | | inferior conj | 10960 Jun 20 14:45 | 7°♊28'52 | 8°14'38 |
| | 10958 Jan 15 22:05 | 0°♊ | | minimum elong | 10960 Jun 20 23:57 | 7°♊14'42 | 8°12'42 |
| max. Earth dist. | 10958 Jan 22 22:32 | 8°♊40'02 | 1.72985 AU | min. Earth dist. | 10960 Jun 20 22:26 | 7°♊17'03 | 0.27117 AU |
| | | | | morning rise | 10960 Jun 24 14:54 | 5°♊03'27 | |
| superior conj | 10958 Jan 24 03:26 | 10°♊09'19 | 0°43'04 | | 10960 Jul 07 08:08 | 30°♎♊ | |
| minimum elong | 10958 Jan 24 12:02 | 10°♊35'52 | 0°43'12 | direct | 10960 Jul 11 07:26 | 29°♊40'51 | |
| | 10958 Feb 09 04:41 | 0°♊ | | | 10960 Jul 15 08:32 | 0°♊ | |
| desc. node | 10958 Feb 11 18:18 | 3°♊10'36 | | greatest brilliancy | 10960 Jul 21 05:28 | 1°♊31'07 | -4.9m |
| evening rise | 10958 Mar 03 11:11 | 27°♊34'39 | | desc. node | 10960 Jul 29 17:50 | 5°♊34'21 | |
| | 10958 Mar 05 10:05 | 0°♊ | | | 10960 Aug 28 14:52 | 0°♊ | |
| | 10958 Mar 29 13:59 | 0°♊ | | morning max el | 10960 Aug 30 08:44 | 1°♊42'52 | 46°32'43 |
| | 10958 Apr 22 17:01 | 0°♊ | | | 10960 Sep 26 04:50 | 0°♎ | |
| | 10958 May 16 21:15 | 0°♊ | | | 10960 Oct 22 16:53 | 0°♊ | |
| asc. node | 10958 Jun 04 13:47 | 23°♊02'14 | | | 10960 Nov 17 07:37 | 0°♎ | |
| | 10958 Jun 10 06:10 | 0°♊ | | asc. node | 10960 Nov 19 15:21 | 2°♎45'19 | |
| | 10958 Jul 05 00:43 | 0°♎ | | | 10960 Dec 12 09:33 | 0°♊ | |
| | 10958 Jul 30 13:32 | 0°♊ | | | 10961 Jan 06 02:48 | 0°♊ | |
| | 10958 Aug 26 18:03 | 0°♎ | | | 10961 Jan 30 14:12 | 0°♊ | |
| evening max el | 10958 Sep 05 03:22 | 9°♎33'23 | 46°12'37 | | 10961 Feb 23 21:35 | 0°♊ | |
| desc. node | 10958 Sep 24 12:37 | 26°♎56'13 | | morning set | 10961 Feb 25 16:53 | 2°♊14'01 | |
| | 10958 Sep 28 14:03 | 0°♊ | | desc. node | 10961 Mar 11 07:35 | 19°♊07'05 | |
| greatest brilliancy | 10958 Oct 14 00:43 | 8°♊41'34 | -4.8m | | 10961 Mar 20 01:40 | 0°♊ | |
| retrograde | 10958 Oct 24 16:39 | 10°♊45'14 | | max. Earth dist. | 10961 Apr 02 17:15 | 17°♊00'48 | 1.71900 AU |
| evening set | 10958 Nov 11 19:26 | 4°♊33'40 | | | | | |
| inferior conj | 10958 Nov 15 04:37 | 2°♊27'23 | -8°38'55 | superior conj | 10961 Apr 06 02:39 | 21°♊14'54 | -0°57'35 |
| minimum elong | 10958 Nov 15 02:03 | 2°♊31'26 | 8°38'19 | minimum elong | 10961 Apr 05 15:24 | 20°♊39'46 | 0°57'20 |
| min. Earth dist. | 10958 Nov 14 20:26 | 2°♊40'16 | 0.29002 AU | | 10961 Apr 13 02:44 | 0°♊ | |
| morning rise | 10958 Nov 18 08:48 | 0°♊29'06 | | | 10961 May 07 01:32 | 0°♊ | |
| | 10958 Nov 19 04:10 | 30°♎♊ | | evening rise | 10961 May 15 21:54 | 11°♊05'50 | |
| direct | 10958 Dec 06 15:48 | 24°♎14'46 | | | 10961 May 30 23:39 | 0°♊ | |
| greatest brilliancy | 10958 Dec 16 17:41 | 26°♎05'49 | -4.7m | | 10961 Jun 23 23:15 | 0°♊ | |
| | 10958 Dec 25 02:44 | 0°♊ | | asc. node | 10961 Jul 02 01:43 | 10°♊05'58 | |
| asc. node | 10959 Jan 15 13:02 | 16°♊06'40 | | | 10961 Jul 18 02:36 | 0°♎ | |
| morning max el | 10959 Jan 24 16:34 | 24°♊40'00 | 45°47'41 | | 10961 Aug 11 12:14 | 0°♊ | |
| | 10959 Jan 30 01:45 | 0°♊ | | | 10961 Sep 05 08:09 | 0°♎ | |
| | 10959 Feb 26 22:59 | 0°♊ | | | 10961 Sep 30 22:05 | 0°♊ | |
| | 10959 Mar 24 20:47 | 0°♊ | | desc. node | 10961 Oct 21 22:43 | 23°♊32'02 | |
| | 10959 Apr 18 21:00 | 0°♊ | | | 10961 Oct 27 23:07 | 0°♊ | |
| desc. node | 10959 May 07 08:18 | 22°♊34'18 | | evening max el | 10961 Nov 15 01:05 | 18°♊21'21 | 45°48'33 |
| | 10959 May 13 09:04 | 0°♊ | | | 10961 Nov 27 21:31 | 0°♊ | |
| | 10959 Jun 06 13:45 | 0°♊ | | greatest brilliancy | 10961 Dec 24 05:59 | 16°♊37'54 | -4.7m |
| | 10959 Jun 30 14:31 | 0°♊ | | retrograde | 10962 Jan 02 21:10 | 18°♊19'38 | |
| | 10959 Jul 24 14:15 | 0°♊ | | evening set | 10962 Jan 18 19:48 | 13°♊27'22 | |
| morning set | 10959 Jul 28 09:15 | 4°♊44'22 | | inferior conj | 10962 Jan 24 04:08 | 10°♊13'32 | -4°26'13 |
| | 10959 Aug 17 14:49 | 0°♎ | | minimum elong | 10962 Jan 24 12:55 | 9°♊59'47 | 4°23'24 |
| asc. node | 10959 Aug 28 01:35 | 13°♎01'24 | | min. Earth dist. | 10962 Jan 24 20:32 | 9°♊47'53 | 0.28444 AU |
| | | | | morning rise | 10962 Jan 30 05:26 | 6°♊34'20 | |
| superior conj | 10959 Sep 05 09:11 | 23°♎22'26 | 0°20'04 | asc. node | 10962 Feb 11 23:48 | 2°♊08'01 | |
| minimum elong | 10959 Sep 05 04:36 | 23°♎08'10 | 0°19'43 | direct | 10962 Feb 14 10:46 | 2°♊00'43 | |
| max. Earth dist. | 10959 Sep 08 01:39 | 26°♎42'53 | 1.72307 AU | greatest brilliancy | 10962 Feb 25 13:13 | 4°♊16'26 | -4.8m |
| | 10959 Sep 10 17:04 | 0°♊ | | | 10962 Apr 01 09:22 | 0°♊ | |
| | 10959 Oct 04 21:21 | 0°♎ | | morning max el | 10962 Apr 05 09:23 | 3°♊55'22 | 46°28'12 |
| evening rise | 10959 Oct 13 00:27 | 10°♎03'28 | | | 10962 Apr 29 21:39 | 0°♊ | |
| | 10959 Oct 29 04:22 | 0°♊ | | | 10962 May 25 22:25 | 0°♊ | |
| | 10959 Nov 22 15:24 | 0°♊ | | desc. node | 10962 Jun 03 21:02 | 10°♊37'21 | |
| | 10959 Dec 17 07:50 | 0°♊ | | | 10962 Jun 19 23:01 | 0°♊ | |
| desc. node | 10959 Dec 17 19:02 | 0°♊33'52 | | | 10962 Jul 14 12:06 | 0°♊ | |
| | 10960 Jan 11 06:38 | 0°♊ | | | 10962 Aug 07 20:12 | 0°♊ | |
| | 10960 Feb 05 13:10 | 0°♊ | | | 10962 Sep 01 02:46 | 0°♎ | |
| | 10960 Mar 02 08:15 | 0°♊ | | asc. node | 10962 Sep 24 15:00 | 29°♎03'54 | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 10962 Sep 25 09:09 | 0°♄ | | minimum elong | 10965 Apr 05 08:16 | 21°♏14'29 | 5°55'17 |
| morning set | 10962 Oct 07 22:00 | 15°♄29'40 | | min. Earth dist. | 10965 Apr 05 18:09 | 20°♏59'10 | 0.27447 AU |
| | 10962 Oct 19 15:36 | 0°♌ | | morning rise | 10965 Apr 10 09:57 | 18°♏10'02 | |
| | 10962 Nov 12 22:17 | 0°♊ | | direct | 10965 Apr 26 16:55 | 13°♏00'36 | |
| | | | | greatest brilliancy | 10965 May 06 16:43 | 14°♏54'02 | -4.9m |
| superior conj | 10962 Nov 14 02:31 | 1°♊27'12 | 1°25'10 | | 10965 May 30 05:55 | 0°♄ | |
| minimum elong | 10962 Nov 13 23:36 | 1°♊18'13 | 1°25'40 | morning max el | 10965 Jun 16 05:21 | 15°♄53'14 | 46°58'47 |
| max. Earth dist. | 10962 Nov 15 01:43 | 2°♊38'50 | 1.73139 AU | | 10965 Jun 29 17:05 | 0°♈ | |
| | 10962 Dec 07 05:48 | 0°♈ | | desc. node | 10965 Jul 01 08:53 | 1°♈47'55 | |
| evening rise | 10962 Dec 20 22:20 | 16°♈51'30 | | | 10965 Jul 26 08:52 | 0°♄ | |
| | 10962 Dec 31 14:53 | 0°♌ | | | 10965 Aug 20 20:11 | 0°♌ | |
| desc. node | 10963 Jan 14 07:18 | 16°♌48'08 | | | 10965 Sep 14 19:59 | 0°♍ | |
| | 10963 Jan 25 01:39 | 0°♋ | | | 10965 Oct 09 14:14 | 0°♄ | |
| | 10963 Feb 18 13:42 | 0°♏ | | asc. node | 10965 Oct 22 04:20 | 15°♄19'31 | |
| | 10963 Mar 15 03:06 | 0°♄ | | | 10965 Nov 03 04:44 | 0°♌ | |
| | 10963 Apr 08 19:56 | 0°♈ | | | 10965 Nov 27 16:03 | 0°♊ | |
| | 10963 May 03 21:51 | 0°♄ | | morning set | 10965 Dec 15 22:09 | 22°♊27'44 | |
| asc. node | 10963 May 07 04:38 | 3°♄52'09 | | | 10965 Dec 22 00:59 | 0°♈ | |
| | 10963 May 29 21:07 | 0°♌ | | | 10966 Jan 15 08:32 | 0°♌ | |
| evening max el | 10963 Jun 23 10:43 | 26°♌18'54 | 46°48'19 | max. Earth dist. | 10966 Jan 20 14:52 | 6°♌30'01 | 1.73008 AU |
| | 10963 Jun 27 03:58 | 0°♍ | | | | | |
| greatest brilliancy | 10963 Aug 01 22:53 | 26°♍44'12 | -4.9m | superior conj | 10966 Jan 21 19:21 | 7°♌57'57 | 0°46'00 |
| retrograde | 10963 Aug 12 19:55 | 28°♍56'43 | | minimum elong | 10966 Jan 22 04:17 | 8°♌25'32 | 0°46'08 |
| desc. node | 10963 Aug 27 04:19 | 24°♍52'05 | | | 10966 Feb 08 15:11 | 0°♋ | |
| evening set | 10963 Aug 27 12:40 | 24°♍40'55 | | desc. node | 10966 Feb 10 20:08 | 2°♋43'45 | |
| inferior conj | 10963 Sep 02 20:50 | 20°♍56'30 | -1°41'26 | evening rise | 10966 Mar 01 01:41 | 25°♋17'52 | |
| minimum elong | 10963 Sep 02 16:58 | 21°♍02'26 | 1°40'22 | | 10966 Mar 04 20:44 | 0°♏ | |
| min. Earth dist. | 10963 Sep 02 06:21 | 21°♍18'45 | 0.27599 AU | | 10966 Mar 29 00:49 | 0°♄ | |
| morning rise | 10963 Sep 08 21:56 | 17°♍22'54 | | | 10966 Apr 22 04:07 | 0°♈ | |
| direct | 10963 Sep 23 18:57 | 13°♍04'52 | | | 10966 May 16 08:42 | 0°♄ | |
| greatest brilliancy | 10963 Oct 03 11:24 | 14°♍47'45 | -4.8m | asc. node | 10966 Jun 03 15:48 | 22°♄32'08 | |
| | 10963 Oct 28 01:03 | 0°♄ | | | 10966 Jun 09 18:08 | 0°♌ | |
| morning max el | 10963 Nov 11 19:02 | 13°♄14'14 | 45°50'10 | | 10966 Jul 04 13:33 | 0°♍ | |
| | 10963 Nov 28 09:40 | 0°♌ | | | 10966 Jul 30 04:03 | 0°♄ | |
| asc. node | 10963 Dec 18 03:45 | 21°♌28'21 | | | 10966 Aug 26 12:54 | 0°♌ | |
| | 10963 Dec 25 17:15 | 0°♊ | | evening max el | 10966 Sep 02 18:25 | 7°♌19'06 | 46°13'52 |
| | 10964 Jan 20 13:28 | 0°♈ | | desc. node | 10966 Sep 23 14:28 | 25°♌50'56 | |
| | 10964 Feb 14 15:17 | 0°♌ | | | 10966 Sep 29 09:17 | 0°♊ | |
| | 10964 Mar 10 06:17 | 0°♋ | | greatest brilliancy | 10966 Oct 11 16:31 | 6°♊31'28 | -4.8m |
| | 10964 Apr 03 14:08 | 0°♏ | | retrograde | 10966 Oct 22 08:11 | 8°♊35'16 | |
| desc. node | 10964 Apr 07 20:57 | 5°♏18'41 | | evening set | 10966 Nov 09 09:33 | 2°♊27'02 | |
| | 10964 Apr 27 16:48 | 0°♄ | | inferior conj | 10966 Nov 12 20:44 | 0°♊17'41 | -8°36'10 |
| morning set | 10964 May 10 20:59 | 16°♄28'41 | | minimum elong | 10966 Nov 12 17:22 | 0°♊22'58 | 8°35'29 |
| | 10964 May 21 15:47 | 0°♈ | | min. Earth dist. | 10966 Nov 12 11:40 | 0°♊31'57 | 0.28982 AU |
| | 10964 Jun 14 12:59 | 0°♄ | | | 10966 Nov 13 07:58 | 30°♋♌ | |
| | | | | morning rise | 10966 Nov 16 01:18 | 28°♌18'38 | |
| superior conj | 10964 Jun 20 04:09 | 7°♄04'37 | -1°18'07 | direct | 10966 Dec 04 07:31 | 22°♌05'37 | |
| minimum elong | 10964 Jun 20 13:50 | 7°♄35'02 | 1°18'31 | greatest brilliancy | 10966 Dec 14 08:42 | 23°♌55'32 | -4.7m |
| max. Earth dist. | 10964 Jun 21 02:38 | 8°♄15'13 | 1.71346 AU | | 10966 Dec 26 08:18 | 0°♊ | |
| | 10964 Jul 08 10:25 | 0°♌ | | asc. node | 10967 Jan 14 15:01 | 15°♊12'56 | |
| asc. node | 10964 Jul 29 14:22 | 26°♌29'22 | | morning max el | 10967 Jan 22 06:44 | 22°♊24'59 | 45°46'47 |
| evening rise | 10964 Jul 30 09:35 | 27°♌29'21 | | | 10967 Jan 29 21:17 | 0°♈ | |
| | 10964 Aug 01 09:51 | 0°♍ | | | 10967 Feb 26 13:40 | 0°♌ | |
| | 10964 Aug 25 12:31 | 0°♄ | | | 10967 Mar 24 09:37 | 0°♋ | |
| | 10964 Sep 18 19:44 | 0°♌ | | | 10967 Apr 18 08:57 | 0°♏ | |
| | 10964 Oct 13 09:40 | 0°♊ | | desc. node | 10967 May 06 10:16 | 22°♏04'54 | |
| | 10964 Nov 07 09:51 | 0°♈ | | | 10967 May 12 20:31 | 0°♄ | |
| desc. node | 10964 Nov 18 09:30 | 12°♈57'29 | | | 10967 Jun 06 00:53 | 0°♈ | |
| | 10964 Dec 03 01:32 | 0°♌ | | | 10967 Jun 30 01:27 | 0°♄ | |
| | 10964 Dec 29 18:32 | 0°♋ | | | 10967 Jul 24 01:01 | 0°♌ | |
| evening max el | 10965 Jan 25 15:25 | 27°♋54'38 | 46°05'10 | morning set | 10967 Jul 25 22:27 | 2°♌22'02 | |
| | 10965 Jan 27 19:30 | 0°♏ | | | 10967 Aug 17 01:28 | 0°♍ | |
| greatest brilliancy | 10965 Mar 06 02:11 | 27°♏00'40 | -4.8m | asc. node | 10967 Aug 27 03:24 | 12°♍34'05 | |
| asc. node | 10965 Mar 11 10:06 | 28°♏25'28 | | | | | |
| retrograde | 10965 Mar 16 00:32 | 28°♏49'56 | | superior conj | 10967 Sep 02 23:53 | 21°♍06'02 | 0°16'35 |
| evening set | 10965 Mar 31 06:27 | 24°♏16'07 | | minimum elong | 10967 Sep 02 20:03 | 20°♍54'07 | 0°16'15 |
| inferior conj | 10965 Apr 05 19:03 | 20°♏57'46 | 5°58'05 | max. Earth dist. | 10967 Sep 05 16:10 | 24°♍25'57 | 1.72262 AU |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 10967 Sep 10 03:37 | 0°♌ | | | 10970 Feb 15 08:50 | 0°♏ | |
| evening rise | 10967 Oct 04 07:52 | 0°♍ | | greatest brilliancy | 10970 Feb 23 05:20 | 2°♏03'38 | -4.8m |
| | 10967 Oct 10 17:07 | 7°♍54'02 | | | 10970 Apr 01 08:24 | 0°♏ | |
| | 10967 Oct 28 14:58 | 0°♎ | | morning max el | 10970 Apr 03 01:45 | 1°♏42'12 | 46°26'29 |
| | 10967 Nov 22 02:15 | 0°♎ | | | 10970 Apr 29 13:48 | 0°♏ | |
| desc. node | 10967 Dec 16 21:03 | 0°♏05'51 | | | 10970 May 25 12:11 | 0°♏ | |
| | 10967 Dec 16 19:07 | 0°♏ | | desc. node | 10970 Jun 02 23:04 | 10°♏03'39 | |
| | 10968 Jan 10 18:35 | 0°♏ | | | 10970 Jun 19 11:39 | 0°♏ | |
| | 10968 Feb 05 02:10 | 0°♏ | | | 10970 Jul 14 00:04 | 0°♏ | |
| | 10968 Mar 01 23:09 | 0°♏ | | | 10970 Aug 07 07:42 | 0°♏ | |
| asc. node | 10968 Mar 29 03:25 | 0°♏ | | | 10970 Aug 31 13:56 | 0°♏ | |
| evening max el | 10968 Apr 07 20:13 | 9°♏59'16 | | asc. node | 10970 Sep 23 16:51 | 28°♏35'50 | |
| | 10968 Apr 08 05:10 | 10°♏21'39 | 46°42'23 | | 10970 Sep 24 20:05 | 0°♏ | |
| | 10968 Apr 29 23:35 | 0°♏ | | morning set | 10970 Oct 05 13:47 | 13°♏16'32 | |
| greatest brilliancy | 10968 May 18 21:30 | 11°♏06'38 | -4.9m | | 10970 Oct 19 02:23 | 0°♏ | |
| retrograde | 10968 May 28 10:57 | 12°♏50'34 | | | | | |
| evening set | 10968 Jun 15 01:04 | 6°♏56'48 | | superior conj | 10970 Nov 11 19:43 | 29°♏19'03 | 1°24'37 |
| inferior conj | 10968 Jun 18 03:32 | 5°♏03'37 | 8°25'09 | minimum elong | 10970 Nov 11 16:06 | 29°♏07'53 | 1°25'05 |
| minimum elong | 10968 Jun 18 12:07 | 4°♏50'25 | 8°23'24 | | 10970 Nov 12 08:59 | 0°♏ | |
| min. Earth dist. | 10968 Jun 18 11:31 | 4°♏51'21 | 0.27127 AU | max. Earth dist. | 10970 Nov 12 22:05 | 0°♏40'29 | 1.73122 AU |
| morning rise | 10968 Jun 21 23:07 | 2°♏44'55 | | | 10970 Dec 06 16:31 | 0°♏ | |
| | 10968 Jun 27 03:43 | 30°♏ | | evening rise | 10970 Dec 18 15:10 | 14°♏42'32 | |
| direct | 10968 Jul 08 19:41 | 27°♏14'58 | | | 10970 Dec 31 01:43 | 0°♏ | |
| greatest brilliancy | 10968 Jul 18 18:47 | 29°♏06'11 | -4.9m | desc. node | 10971 Jan 13 09:10 | 16°♏20'17 | |
| | 10968 Jul 21 01:48 | 0°♏ | | | 10971 Jan 24 12:43 | 0°♏ | |
| desc. node | 10968 Jul 28 19:49 | 4°♏04'43 | | | 10971 Feb 18 01:08 | 0°♏ | |
| morning max el | 10968 Aug 27 22:11 | 29°♏20'28 | 46°34'30 | | 10971 Mar 14 15:05 | 0°♏ | |
| | 10968 Aug 28 14:08 | 0°♏ | | | 10971 Apr 08 08:44 | 0°♏ | |
| | 10968 Sep 25 21:03 | 0°♏ | | | 10971 May 03 11:58 | 0°♏ | |
| | 10968 Oct 22 06:25 | 0°♏ | | asc. node | 10971 May 06 06:39 | 3°♏15'54 | |
| | 10968 Nov 16 19:47 | 0°♏ | | | 10971 May 29 13:56 | 0°♏ | |
| asc. node | 10968 Nov 18 17:26 | 2°♏15'34 | | evening max el | 10971 Jun 21 02:10 | 24°♏00'37 | 46°49'03 |
| | 10968 Dec 11 20:57 | 0°♏ | | | 10971 Jun 27 04:37 | 0°♏ | |
| | 10969 Jan 05 13:49 | 0°♏ | | greatest brilliancy | 10971 Jul 30 13:41 | 24°♏24'01 | -4.9m |
| | 10969 Jan 30 01:02 | 0°♏ | | retrograde | 10971 Aug 10 10:52 | 26°♏36'15 | |
| morning set | 10969 Feb 23 07:38 | 29°♏57'47 | | evening set | 10971 Aug 25 02:46 | 22°♏21'04 | |
| | 10969 Feb 23 08:21 | 0°♏ | | desc. node | 10971 Aug 26 06:13 | 21°♏43'06 | |
| desc. node | 10969 Mar 10 09:25 | 18°♏39'22 | | inferior conj | 10971 Aug 31 10:45 | 18°♏36'45 | -1°18'57 |
| | 10969 Mar 19 12:26 | 0°♏ | | minimum elong | 10971 Aug 31 07:44 | 18°♏41'24 | 1°18'10 |
| max. Earth dist. | 10969 Mar 31 07:27 | 14°♏41'38 | 1.71944 AU | min. Earth dist. | 10971 Aug 30 20:48 | 18°♏58'12 | 0.27551 AU |
| | | | | morning rise | 10971 Sep 06 13:26 | 15°♏01'22 | |
| superior conj | 10969 Apr 03 15:15 | 18°♏50'39 | -0°54'40 | direct | 10971 Sep 21 09:08 | 10°♏45'52 | |
| minimum elong | 10969 Apr 03 04:14 | 18°♏16'17 | 0°54'22 | greatest brilliancy | 10971 Oct 01 00:43 | 12°♏28'30 | -4.8m |
| | 10969 Apr 12 13:33 | 0°♏ | | | 10971 Oct 28 08:28 | 0°♏ | |
| | 10969 May 06 12:25 | 0°♏ | | morning max el | 10971 Nov 09 09:59 | 10°♏59'46 | 45°51'08 |
| evening rise | 10969 May 13 09:19 | 8°♏36'58 | | | 10971 Nov 28 03:29 | 0°♏ | |
| | 10969 May 30 10:39 | 0°♏ | | asc. node | 10971 Dec 17 05:37 | 20°♏51'52 | |
| | 10969 Jun 23 10:24 | 0°♏ | | | 10971 Dec 25 07:26 | 0°♏ | |
| asc. node | 10969 Jul 01 03:39 | 9°♏37'04 | | | 10972 Jan 20 02:03 | 0°♏ | |
| | 10969 Jul 17 13:59 | 0°♏ | | | 10972 Feb 14 03:04 | 0°♏ | |
| | 10969 Aug 11 00:01 | 0°♏ | | | 10972 Mar 09 17:38 | 0°♏ | |
| | 10969 Sep 04 20:41 | 0°♏ | | | 10972 Apr 03 01:18 | 0°♏ | |
| | 10969 Sep 30 12:03 | 0°♏ | | desc. node | 10972 Apr 06 22:57 | 4°♏50'22 | |
| desc. node | 10969 Oct 21 00:46 | 22°♏53'33 | | | 10972 Apr 27 03:52 | 0°♏ | |
| | 10969 Oct 27 16:30 | 0°♏ | | morning set | 10972 May 08 08:08 | 13°♏58'47 | |
| evening max el | 10969 Nov 12 16:16 | 16°♏09'25 | 45°48'55 | | 10972 May 21 02:50 | 0°♏ | |
| | 10969 Nov 28 04:22 | 0°♏ | | | 10972 Jun 14 00:00 | 0°♏ | |
| greatest brilliancy | 10969 Dec 21 20:12 | 14°♏25'16 | -4.7m | | | | |
| retrograde | 10969 Dec 31 12:53 | 16°♏08'08 | | superior conj | 10972 Jun 17 15:36 | 4°♏35'08 | -1°19'49 |
| evening set | 10970 Jan 16 13:54 | 11°♏11'27 | | minimum elong | 10972 Jun 18 00:37 | 5°♏03'28 | 1°20'15 |
| inferior conj | 10970 Jan 21 19:46 | 8°♏01'02 | -4°43'56 | max. Earth dist. | 10972 Jun 18 11:32 | 5°♏37'44 | 1.71335 AU |
| minimum elong | 10970 Jan 22 04:55 | 7°♏46'43 | 4°41'04 | | 10972 Jul 07 21:26 | 0°♏ | |
| min. Earth dist. | 10970 Jan 22 11:55 | 7°♏35'47 | 0.28493 AU | evening rise | 10972 Jul 27 22:00 | 25°♏03'46 | |
| morning rise | 10970 Jan 27 19:26 | 4°♏24'24 | | asc. node | 10972 Jul 28 16:09 | 26°♏00'27 | |
| | 10970 Feb 08 22:41 | 30°♏ | | | 10972 Jul 31 20:54 | 0°♏ | |
| asc. node | 10970 Feb 11 01:41 | 29°♏49'00 | | | 10972 Aug 24 23:39 | 0°♏ | |
| direct | 10970 Feb 12 03:08 | 29°♏47'39 | | | 10972 Sep 18 07:03 | 0°♏ | |

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|---------------------|--------------------|----------------------|--|---------------------|--------------------|----------------------|--|
| | 10972 Oct 12 21:22 | 0°♊ | | desc. node | 10975 May 05 12:15 | 21°♊34'57 | |
| | 10972 Nov 06 22:15 | 0°♋ | | | 10975 May 12 08:07 | 0°♌ | |
| desc. node | 10972 Nov 17 11:32 | 12°♋25'42 | | | 10975 Jun 05 12:10 | 0°♍ | |
| | 10972 Dec 02 15:15 | 0°♌ | | | 10975 Jun 29 12:33 | 0°♎ | |
| | 10972 Dec 29 11:01 | 0°♍ | | morning set | 10975 Jul 23 11:41 | 29°♎59'01 | |
| evening max el | 10973 Jan 23 06:01 | 25°♍37'49 46°04'01 | | | 10975 Jul 23 12:00 | 0°♏ | |
| | 10973 Jan 27 20:01 | 0°♎ | | | 10975 Aug 16 12:21 | 0°♐ | |
| greatest brilliancy | 10973 Mar 03 16:15 | 24°♎40'40 -4.8m | | asc. node | 10975 Aug 26 05:21 | 12°♐06'19 | |
| asc. node | 10973 Mar 10 12:05 | 26°♎18'07 | | | | | |
| retrograde | 10973 Mar 13 13:42 | 26°♎29'04 | | superior conj | 10975 Aug 31 14:21 | 18°♐47'58 0°13'03 | |
| evening set | 10973 Mar 28 17:32 | 21°♏59'24 | | minimum elong | 10975 Aug 31 11:20 | 18°♐38'32 0°12'43 | |
| inferior conj | 10973 Apr 03 09:00 | 18°♏36'54 5°40'04 | | behind sun begin | 10975 Aug 30 20:18 | 17°♐51'46 | |
| minimum elong | 10973 Apr 02 22:26 | 18°♏53'17 5°37'15 | | behind sun end | 10975 Sep 01 02:21 | 19°♐25'18 | |
| min. Earth dist. | 10973 Apr 03 08:38 | 18°♏37'28 0.27463 AU | | max. Earth dist. | 10975 Sep 03 04:38 | 22°♐01'43 1.72226 AU | |
| morning rise | 10973 Apr 08 03:10 | 15°♏44'06 | | | 10975 Sep 09 14:27 | 0°♑ | |
| direct | 10973 Apr 24 06:58 | 10°♏39'27 | | | 10975 Oct 03 18:42 | 0°♒ | |
| greatest brilliancy | 10973 May 04 07:54 | 12°♏33'25 -4.9m | | evening rise | 10975 Oct 08 09:27 | 5°♒42'35 | |
| | 10973 May 30 13:41 | 0°♑ | | | 10975 Oct 28 01:53 | 0°♓ | |
| morning max el | 10973 Jun 13 18:08 | 13°♑27'45 46°58'24 | | | 10975 Nov 21 13:24 | 0°♋ | |
| | 10973 Jun 29 11:33 | 0°♌ | | desc. node | 10975 Dec 15 22:55 | 29°♋36'38 | |
| desc. node | 10973 Jun 30 10:50 | 1°♌03'32 | | | 10975 Dec 16 06:39 | 0°♌ | |
| | 10973 Jul 25 23:45 | 0°♍ | | | 10976 Jan 10 06:47 | 0°♍ | |
| | 10973 Aug 20 09:26 | 0°♎ | | | 10976 Feb 04 15:27 | 0°♎ | |
| | 10973 Sep 14 08:17 | 0°♏ | | | 10976 Mar 01 14:26 | 0°♏ | |
| | 10973 Oct 09 01:54 | 0°♑ | | | 10976 Mar 28 23:20 | 0°♐ | |
| asc. node | 10973 Oct 21 06:22 | 14°♑50'56 | | evening max el | 10976 Apr 05 17:57 | 7°♐56'45 46°41'30 | |
| | 10973 Nov 02 15:58 | 0°♒ | | asc. node | 10976 Apr 06 22:20 | 9°♐07'17 | |
| | 10973 Nov 27 03:01 | 0°♓ | | | 10976 Apr 30 17:52 | 0°♑ | |
| morning set | 10973 Dec 13 15:19 | 20°♓19'20 | | greatest brilliancy | 10976 May 16 10:39 | 8°♑41'53 -4.9m | |
| | 10973 Dec 21 11:49 | 0°♋ | | retrograde | 10976 May 26 00:12 | 10°♑26'13 | |
| | 10974 Jan 14 19:20 | 0°♌ | | evening set | 10976 Jun 12 17:15 | 4°♑27'19 | |
| max. Earth dist. | 10974 Jan 18 06:40 | 4°♌17'15 1.73030 AU | | inferior conj | 10976 Jun 15 16:35 | 2°♑39'00 8°34'35 | |
| | | | | minimum elong | 10976 Jun 16 00:31 | 2°♑26'50 8°33'00 | |
| superior conj | 10974 Jan 19 11:38 | 5°♌46'39 0°48'50 | | min. Earth dist. | 10976 Jun 16 00:23 | 2°♑27'01 0.27137 AU | |
| minimum elong | 10974 Jan 19 20:52 | 6°♌15'08 0°48'59 | | morning rise | 10976 Jun 19 07:44 | 0°♑27'02 | |
| | 10974 Feb 08 02:04 | 0°♍ | | | 10976 Jun 20 02:18 | 30°♒♌ | |
| desc. node | 10974 Feb 09 22:01 | 2°♍15'54 | | direct | 10976 Jul 06 08:37 | 24°♒49'53 | |
| evening rise | 10974 Feb 26 16:41 | 23°♍01'43 | | greatest brilliancy | 10976 Jul 16 07:44 | 26°♒41'32 -4.9m | |
| | 10974 Mar 04 07:43 | 0°♎ | | | 10976 Jul 23 12:29 | 0°♓ | |
| | 10974 Mar 28 11:58 | 0°♏ | | desc. node | 10976 Jul 27 21:44 | 2°♓38'39 | |
| | 10974 Apr 21 15:30 | 0°♐ | | morning max el | 10976 Aug 25 12:36 | 27°♓00'34 46°36'00 | |
| | 10974 May 15 20:27 | 0°♑ | | | 10976 Aug 28 12:23 | 0°♏ | |
| asc. node | 10974 Jun 02 17:45 | 22°♑00'45 | | | 10976 Sep 25 13:02 | 0°♐ | |
| | 10974 Jun 09 06:29 | 0°♑ | | | 10976 Oct 21 19:58 | 0°♑ | |
| | 10974 Jul 04 02:53 | 0°♒ | | | 10976 Nov 16 08:03 | 0°♒ | |
| | 10974 Jul 29 19:18 | 0°♓ | | asc. node | 10976 Nov 17 19:16 | 1°♓44'42 | |
| | 10974 Aug 26 08:58 | 0°♋ | | | 10976 Dec 11 08:31 | 0°♓ | |
| evening max el | 10974 Aug 31 08:39 | 5°♓01'00 46°15'08 | | | 10977 Jan 05 00:57 | 0°♋ | |
| desc. node | 10974 Sep 22 16:35 | 24°♓42'42 | | | 10977 Jan 29 11:57 | 0°♌ | |
| | 10974 Sep 30 12:59 | 0°♊ | | morning set | 10977 Feb 20 22:29 | 27°♌41'45 | |
| greatest brilliancy | 10974 Oct 09 08:13 | 4°♊19'19 -4.8m | | | 10977 Feb 22 19:09 | 0°♍ | |
| retrograde | 10974 Oct 19 23:46 | 6°♊23'37 | | desc. node | 10977 Mar 09 11:21 | 18°♍11'53 | |
| evening set | 10974 Nov 06 23:15 | 0°♊19'01 | | | 10977 Mar 18 23:13 | 0°♎ | |
| | 10974 Nov 07 11:46 | 30°♒♌ | | max. Earth dist. | 10977 Mar 28 22:26 | 12°♎24'59 1.71985 AU | |
| min. Earth dist. | 10974 Nov 10 02:56 | 28°♌21'43 0.28957 AU | | | | | |
| inferior conj | 10974 Nov 10 12:43 | 28°♌06'20 -8°32'37 | | superior conj | 10977 Apr 01 03:56 | 16°♎26'40 -0°51'40 | |
| minimum elong | 10974 Nov 10 08:36 | 28°♌12'48 8°31'52 | | minimum elong | 10977 Mar 31 17:13 | 15°♎53'16 0°51'20 | |
| morning rise | 10974 Nov 13 18:03 | 26°♌06'06 | | | 10977 Apr 12 00:22 | 0°♏ | |
| direct | 10974 Dec 01 22:41 | 19°♌54'45 | | | 10977 May 05 23:19 | 0°♐ | |
| greatest brilliancy | 10974 Dec 12 00:01 | 21°♌44'20 -4.7m | | evening rise | 10977 May 10 20:59 | 6°♐08'52 | |
| | 10974 Dec 27 06:14 | 0°♊ | | | 10977 May 29 21:39 | 0°♑ | |
| asc. node | 10975 Jan 13 16:58 | 14°♊19'13 | | | 10977 Jun 22 21:32 | 0°♒ | |
| morning max el | 10975 Jan 19 20:57 | 20°♊09'07 45°46'05 | | asc. node | 10977 Jun 30 05:30 | 9°♒07'58 | |
| | 10975 Jan 29 16:36 | 0°♋ | | | 10977 Jul 17 01:19 | 0°♒ | |
| | 10975 Feb 26 04:27 | 0°♌ | | | 10977 Aug 10 11:47 | 0°♓ | |
| | 10975 Mar 23 22:38 | 0°♍ | | | 10977 Sep 04 09:13 | 0°♋ | |
| | 10975 Apr 17 21:05 | 0°♎ | | | 10977 Sep 30 02:09 | 0°♌ | |

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|---------------------|--------------------|----------------------|------------|---------------------|--------------------|----------------------|------------|
| desc. node | 10977 Oct 20 02:46 | 22° ♁ 14'24 | | | 10980 Apr 26 14:39 | 0° ♁ | |
| | 10977 Oct 27 10:21 | 0° ♁ | | morning set | 10980 May 05 19:06 | 11° ♁ 29'16 | |
| evening max el | 10977 Nov 10 08:07 | 13° ♁ 58'48 | 45°49'08 | | 10980 May 20 13:33 | 0° ♁ | |
| | 10977 Nov 28 14:04 | 0° ♁ | | | 10980 Jun 13 10:41 | 0° ♁ | |
| greatest brilliancy | 10977 Dec 19 10:27 | 12° ♁ 12'16 | -4.7m | | | | |
| retrograde | 10977 Dec 29 04:31 | 13° ♁ 55'53 | | superior conj | 10980 Jun 15 03:00 | 2° ♁ 06'38 | -1°21'22 |
| evening set | 10978 Jan 14 08:00 | 8° ♁ 55'03 | | minimum elong | 10980 Jun 15 11:17 | 2° ♁ 32'38 | 1°21'50 |
| inferior conj | 10978 Jan 19 11:14 | 5° ♁ 48'03 | -5°01'18 | max. Earth dist. | 10980 Jun 15 18:03 | 2° ♁ 53'55 | 1.71325 AU |
| minimum elong | 10978 Jan 19 20:43 | 5° ♁ 33'13 | 4°58'23 | | 10980 Jul 07 08:08 | 0° ♁ | |
| min. Earth dist. | 10978 Jan 20 02:56 | 5° ♁ 23'31 | 0.28537 AU | evening rise | 10980 Jul 25 10:20 | 22° ♁ 38'52 | |
| morning rise | 10978 Jan 25 09:03 | 2° ♁ 14'11 | | asc. node | 10980 Jul 27 18:09 | 25° ♁ 33'10 | |
| | 10978 Jan 29 20:22 | 30° ♁ | | | 10980 Jul 31 07:38 | 0° ♁ | |
| direct | 10978 Feb 09 19:34 | 27° ♁ 34'26 | | | 10980 Aug 24 10:28 | 0° ♁ | |
| asc. node | 10978 Feb 10 03:41 | 27° ♁ 34'35 | | | 10980 Sep 17 18:03 | 0° ♁ | |
| greatest brilliancy | 10978 Feb 20 20:36 | 29° ♁ 49'45 | -4.8m | | 10980 Oct 12 08:43 | 0° ♁ | |
| | 10978 Feb 21 06:59 | 0° ♁ | | | 10980 Nov 06 10:18 | 0° ♁ | |
| morning max el | 10978 Mar 31 17:46 | 29° ♁ 28'30 | 46°24'48 | desc. node | 10980 Nov 16 13:25 | 11° ♁ 54'39 | |
| | 10978 Apr 01 06:25 | 0° ♁ | | | 10980 Dec 02 04:42 | 0° ♁ | |
| | 10978 Apr 29 05:32 | 0° ♁ | | | 10980 Dec 29 03:26 | 0° ♁ | |
| | 10978 May 25 01:41 | 0° ♁ | | evening max el | 10981 Jan 20 19:36 | 23° ♁ 19'28 | 46°02'42 |
| desc. node | 10978 Jun 02 00:52 | 9° ♁ 29'58 | | | 10981 Jan 27 21:31 | 0° ♁ | |
| | 10978 Jun 19 00:03 | 0° ♁ | | greatest brilliancy | 10981 Mar 01 06:23 | 22° ♁ 21'07 | -4.8m |
| | 10978 Jul 13 11:48 | 0° ♁ | | asc. node | 10981 Mar 09 14:11 | 24° ♁ 05'57 | |
| | 10978 Aug 06 18:59 | 0° ♁ | | retrograde | 10981 Mar 11 02:34 | 24° ♁ 08'39 | |
| | 10978 Aug 31 00:52 | 0° ♁ | | evening set | 10981 Mar 26 04:35 | 19° ♁ 42'33 | |
| asc. node | 10978 Sep 22 18:50 | 28° ♁ 08'50 | | inferior conj | 10981 Mar 31 22:47 | 16° ♁ 16'25 | 5°21'14 |
| | 10978 Sep 24 06:47 | 0° ♁ | | minimum elong | 10981 Mar 31 12:31 | 16° ♁ 32'21 | 5°18'27 |
| morning set | 10978 Oct 03 05:49 | 11° ♁ 04'50 | | min. Earth dist. | 10981 Mar 31 23:14 | 16° ♁ 15'43 | 0.27481 AU |
| | 10978 Oct 18 12:57 | 0° ♁ | | morning rise | 10981 Apr 05 20:10 | 13° ♁ 18'43 | |
| | | | | direct | 10981 Apr 21 20:25 | 8° ♁ 18'26 | |
| superior conj | 10978 Nov 09 13:00 | 27° ♁ 11'38 | 1°23'57 | greatest brilliancy | 10981 May 01 23:28 | 10° ♁ 13'47 | -4.9m |
| minimum elong | 10978 Nov 09 08:41 | 26° ♁ 58'20 | 1°24'23 | | 10981 May 30 18:52 | 0° ♁ | |
| max. Earth dist. | 10978 Nov 10 19:00 | 28° ♁ 44'19 | 1.73109 AU | morning max el | 10981 Jun 11 06:39 | 11° ♁ 02'28 | 46°58'10 |
| | 10978 Nov 11 19:30 | 0° ♁ | | | 10981 Jun 29 05:11 | 0° ♁ | |
| | 10978 Dec 06 03:05 | 0° ♁ | | desc. node | 10981 Jun 29 12:49 | 0° ♁ 20'58 | |
| evening rise | 10978 Dec 16 07:52 | 12° ♁ 33'36 | | | 10981 Jul 25 14:03 | 0° ♁ | |
| | 10978 Dec 30 12:25 | 0° ♁ | | | 10981 Aug 19 22:10 | 0° ♁ | |
| desc. node | 10979 Jan 12 11:03 | 15° ♁ 52'50 | | | 10981 Sep 13 20:06 | 0° ♁ | |
| | 10979 Jan 23 23:39 | 0° ♁ | | | 10981 Oct 08 13:09 | 0° ♁ | |
| | 10979 Feb 17 12:26 | 0° ♁ | | asc. node | 10981 Oct 20 08:11 | 14° ♁ 22'56 | |
| | 10979 Mar 14 02:55 | 0° ♁ | | | 10981 Nov 02 02:48 | 0° ♁ | |
| | 10979 Apr 07 21:23 | 0° ♁ | | | 10981 Nov 26 13:34 | 0° ♁ | |
| | 10979 May 03 02:00 | 0° ♁ | | morning set | 10981 Dec 11 08:38 | 18° ♁ 12'38 | |
| asc. node | 10979 May 05 08:34 | 2° ♁ 39'51 | | | 10981 Dec 20 22:14 | 0° ♁ | |
| | 10979 May 29 06:48 | 0° ♁ | | | 10982 Jan 14 05:45 | 0° ♁ | |
| evening max el | 10979 Jun 18 17:31 | 21° ♁ 42'47 | 46°49'40 | max. Earth dist. | 10982 Jan 16 00:33 | 2° ♁ 12'08 | 1.73055 AU |
| | 10979 Jun 27 06:14 | 0° ♁ | | | | | |
| greatest brilliancy | 10979 Jul 28 05:07 | 22° ♁ 05'26 | -4.9m | superior conj | 10982 Jan 17 04:04 | 3° ♁ 37'05 | 0°51'34 |
| retrograde | 10979 Aug 08 01:30 | 24° ♁ 16'30 | | minimum elong | 10982 Jan 17 13:31 | 4° ♁ 06'15 | 0°51'44 |
| evening set | 10979 Aug 22 17:08 | 20° ♁ 01'57 | | | 10982 Feb 07 12:33 | 0° ♁ | |
| desc. node | 10979 Aug 25 08:19 | 18° ♁ 32'12 | | desc. node | 10982 Feb 09 00:01 | 1° ♁ 49'37 | |
| min. Earth dist. | 10979 Aug 28 11:30 | 16° ♁ 38'16 | 0.27502 AU | evening rise | 10982 Feb 24 07:42 | 20° ♁ 46'50 | |
| inferior conj | 10979 Aug 29 00:42 | 16° ♁ 17'58 | -0°56'15 | | 10982 Mar 03 18:22 | 0° ♁ | |
| minimum elong | 10979 Aug 28 22:32 | 16° ♁ 21'18 | 0°55'46 | | 10982 Mar 27 22:50 | 0° ♁ | |
| morning rise | 10979 Sep 04 04:43 | 12° ♁ 40'49 | | | 10982 Apr 21 02:37 | 0° ♁ | |
| direct | 10979 Sep 18 23:15 | 8° ♁ 27'58 | | | 10982 May 15 07:58 | 0° ♁ | |
| greatest brilliancy | 10979 Sep 28 14:06 | 10° ♁ 10'10 | -4.8m | asc. node | 10982 Jun 01 19:37 | 21° ♁ 30'01 | |
| | 10979 Oct 28 13:10 | 0° ♁ | | | 10982 Jun 08 18:34 | 0° ♁ | |
| morning max el | 10979 Nov 06 23:57 | 8° ♁ 43'51 | 45°52'07 | | 10982 Jul 03 15:58 | 0° ♁ | |
| | 10979 Nov 27 20:30 | 0° ♁ | | | 10982 Jul 29 10:20 | 0° ♁ | |
| asc. node | 10979 Dec 16 07:33 | 20° ♁ 16'49 | | | 10982 Aug 26 05:13 | 0° ♁ | |
| | 10979 Dec 24 21:08 | 0° ♁ | | evening max el | 10982 Aug 28 22:39 | 2° ♁ 43'31 | 46°16'30 |
| | 10980 Jan 19 14:18 | 0° ♁ | | desc. node | 10982 Sep 21 18:35 | 23° ♁ 33'32 | |
| | 10980 Feb 13 14:35 | 0° ♁ | | | 10982 Oct 02 03:59 | 0° ♁ | |
| | 10980 Mar 09 04:46 | 0° ♁ | | greatest brilliancy | 10982 Oct 06 23:22 | 2° ♁ 07'32 | -4.8m |
| | 10980 Apr 02 12:12 | 0° ♁ | | retrograde | 10982 Oct 17 15:39 | 4° ♁ 13'07 | |
| desc. node | 10980 Apr 06 00:53 | 4° ♁ 22'39 | | | 10982 Nov 01 09:21 | 30° ♁ | |

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|---------------------|--------------------|--------------------------------|------------|---------------------|--------------------|---------------------------------|------------|
| evening set | 10982 Nov 04 12:34 | 28° \mathbb{M} 12'16 | | max. Earth dist. | 10985 Mar 26 13:17 | 10° Υ 08'43 | 1.72025 AU |
| min. Earth dist. | 10982 Nov 07 17:58 | 26° \mathbb{M} 12'42 | 0.28930 AU | | | | |
| inferior conj | 10982 Nov 08 04:37 | 25° \mathbb{M} 55'58 | -8°28'12 | superior conj | 10985 Mar 29 17:00 | 14° Υ 04'45 | -0°48'35 |
| minimum elong | 10982 Nov 07 23:47 | 26° \mathbb{M} 03'34 | 8°27'23 | minimum elong | 10985 Mar 29 06:42 | 13° Υ 32'37 | 0°48'15 |
| morning rise | 10982 Nov 11 11:04 | 23° \mathbb{M} 54'14 | | | 10985 Apr 11 10:58 | 0° \mathcal{B} | |
| direct | 10982 Nov 29 13:46 | 17° \mathbb{M} 44'44 | | | 10985 May 05 10:02 | 0° \mathbb{I} | |
| greatest brilliancy | 10982 Dec 09 15:20 | 19° \mathbb{M} 34'20 | -4.7m | evening rise | 10985 May 08 08:52 | 3° \mathbb{I} 42'02 | |
| | 10982 Dec 27 21:48 | 0° \mathcal{A} | | | 10985 May 29 08:30 | 0° \mathcal{E} | |
| asc. node | 10983 Jan 12 18:58 | 13° \mathcal{A} 27'58 | | | 10985 Jun 22 08:34 | 0° \mathcal{Q} | |
| morning max el | 10983 Jan 17 11:48 | 17° \mathcal{A} 56'08 | 45°45'32 | asc. node | 10985 Jun 29 07:29 | 8° \mathcal{Q} 39'35 | |
| | 10983 Jan 29 10:54 | 0° \mathcal{Z} | | | 10985 Jul 16 12:38 | 0° \mathbb{N} | |
| | 10983 Feb 25 18:38 | 0° \approx | | | 10985 Aug 09 23:32 | 0° \mathcal{L} | |
| | 10983 Mar 23 11:12 | 0° \mathcal{H} | | | 10985 Sep 03 21:46 | 0° \mathbb{M} | |
| | 10983 Apr 17 08:51 | 0° Υ | | | 10985 Sep 29 16:19 | 0° \mathcal{A} | |
| desc. node | 10983 May 04 14:03 | 21° Υ 05'24 | | desc. node | 10985 Oct 19 04:40 | 21° \mathcal{A} 34'58 | |
| | 10983 May 11 19:27 | 0° \mathcal{B} | | | 10985 Oct 27 04:29 | 0° \mathcal{Z} | |
| | 10983 Jun 04 23:13 | 0° \mathbb{I} | | evening max el | 10985 Nov 08 00:04 | 11° \mathcal{Z} 48'52 | 45°49'28 |
| | 10983 Jun 28 23:24 | 0° \mathcal{E} | | | 10985 Nov 29 02:52 | 0° \approx | |
| morning set | 10983 Jul 21 00:27 | 27° \mathcal{E} 35'18 | | greatest brilliancy | 10985 Dec 17 01:22 | 10° \approx 00'51 | -4.7m |
| | 10983 Jul 22 22:42 | 0° \mathcal{Q} | | retrograde | 10985 Dec 26 20:00 | 11° \approx 44'25 | |
| | 10983 Aug 15 22:56 | 0° \mathbb{N} | | evening set | 10986 Jan 12 02:20 | 6° \approx 39'37 | |
| asc. node | 10983 Aug 25 07:16 | 11° \mathbb{N} 39'24 | | inferior conj | 10986 Jan 17 02:52 | 3° \approx 36'01 | -5°18'04 |
| | | | | minimum elong | 10986 Jan 17 12:36 | 3° \approx 20'45 | 5°15'09 |
| superior conj | 10983 Aug 29 04:31 | 16° \mathbb{N} 29'51 | 0°09'28 | min. Earth dist. | 10986 Jan 17 18:10 | 3° \approx 12'03 | 0.28577 AU |
| minimum elong | 10983 Aug 29 02:18 | 16° \mathbb{N} 22'59 | 0°09'09 | morning rise | 10986 Jan 22 22:35 | 0° \approx 04'56 | |
| behind sun begin | 10983 Aug 28 06:04 | 15° \mathbb{N} 19'57 | | | 10986 Jan 23 02:06 | 30° \mathcal{R} \mathcal{Z} | |
| behind sun end | 10983 Aug 29 22:33 | 17° \mathbb{N} 26'00 | | direct | 10986 Feb 07 12:01 | 25° \mathcal{Z} 22'16 | |
| max. Earth dist. | 10983 Aug 31 17:40 | 19° \mathbb{N} 40'14 | 1.72187 AU | asc. node | 10986 Feb 09 05:46 | 25° \mathcal{Z} 25'52 | |
| | 10983 Sep 09 00:57 | 0° \mathcal{L} | | greatest brilliancy | 10986 Feb 18 11:46 | 27° \mathcal{Z} 36'22 | -4.8m |
| | 10983 Oct 03 05:12 | 0° \mathbb{M} | | | 10986 Feb 23 16:46 | 0° \approx | |
| evening rise | 10983 Oct 06 01:47 | 3° \mathbb{M} 32'08 | | morning max el | 10986 Mar 29 09:11 | 27° \approx 13'51 | 46°23'11 |
| | 10983 Oct 27 12:30 | 0° \mathcal{A} | | | 10986 Apr 01 03:24 | 0° \mathcal{H} | |
| | 10983 Nov 21 00:15 | 0° \mathcal{Z} | | | 10986 Apr 28 20:51 | 0° Υ | |
| desc. node | 10983 Dec 15 00:51 | 29° \mathcal{Z} 08'35 | | | 10986 May 24 14:56 | 0° \mathcal{B} | |
| | 10983 Dec 15 17:54 | 0° \approx | | desc. node | 10986 Jun 01 02:53 | 8° \mathcal{B} 57'30 | |
| | 10984 Jan 09 18:41 | 0° \mathcal{H} | | | 10986 Jun 18 12:17 | 0° \mathbb{I} | |
| | 10984 Feb 04 04:28 | 0° Υ | | | 10986 Jul 12 23:27 | 0° \mathcal{E} | |
| | 10984 Mar 01 05:34 | 0° \mathcal{B} | | | 10986 Aug 06 06:13 | 0° \mathcal{Q} | |
| | 10984 Mar 28 19:34 | 0° \mathbb{I} | | | 10986 Aug 30 11:49 | 0° \mathbb{N} | |
| evening max el | 10984 Apr 03 07:23 | 5° \mathbb{I} 34'21 | 46°40'22 | asc. node | 10986 Sep 21 20:39 | 27° \mathbb{N} 41'11 | |
| asc. node | 10984 Apr 06 00:10 | 8° \mathbb{I} 14'22 | | | 10986 Sep 23 17:32 | 0° \mathcal{L} | |
| | 10984 May 01 18:30 | 0° \mathcal{E} | | morning set | 10986 Sep 30 21:30 | 8° \mathcal{L} 51'54 | |
| greatest brilliancy | 10984 May 13 22:59 | 6° \mathcal{E} 16'17 | -4.9m | | 10986 Oct 17 23:33 | 0° \mathbb{M} | |
| retrograde | 10984 May 23 13:32 | 8° \mathcal{E} 01'23 | | | | | |
| evening set | 10984 Jun 10 08:56 | 1° \mathcal{E} 57'38 | | superior conj | 10986 Nov 07 06:02 | 25° \mathbb{M} 03'28 | 1°23'08 |
| inferior conj | 10984 Jun 13 05:19 | 0° \mathcal{E} 13'46 | 8°43'02 | minimum elong | 10986 Nov 07 01:04 | 24° \mathbb{M} 48'09 | 1°23'34 |
| minimum elong | 10984 Jun 13 12:31 | 0° \mathcal{E} 02'43 | 8°41'39 | max. Earth dist. | 10986 Nov 08 14:51 | 26° \mathbb{M} 44'52 | 1.73087 AU |
| min. Earth dist. | 10984 Jun 13 12:37 | 0° \mathcal{E} 02'34 | 0.27150 AU | | 10986 Nov 11 06:02 | 0° \mathcal{A} | |
| | 10984 Jun 13 14:17 | 30° \mathcal{R} \mathbb{I} | | | 10986 Dec 05 13:38 | 0° \mathcal{Z} | |
| morning rise | 10984 Jun 16 16:05 | 28° \mathbb{I} 08'26 | | evening rise | 10986 Dec 14 00:29 | 10° \mathcal{Z} 24'22 | |
| direct | 10984 Jul 03 21:51 | 22° \mathbb{I} 24'20 | | | 10986 Dec 29 23:06 | 0° \approx | |
| greatest brilliancy | 10984 Jul 13 19:55 | 24° \mathbb{I} 15'40 | -4.9m | desc. node | 10987 Jan 11 13:03 | 15° \approx 25'44 | |
| | 10984 Jul 25 02:04 | 0° \mathcal{E} | | | 10987 Jan 23 10:37 | 0° \mathcal{H} | |
| desc. node | 10984 Jul 26 23:49 | 1° \mathcal{E} 15'38 | | | 10987 Feb 16 23:48 | 0° Υ | |
| morning max el | 10984 Aug 23 03:15 | 24° \mathcal{E} 41'27 | 46°37'36 | | 10987 Mar 13 14:49 | 0° \mathcal{B} | |
| | 10984 Aug 28 09:41 | 0° \mathcal{Q} | | | 10987 Apr 07 10:05 | 0° \mathbb{I} | |
| | 10984 Sep 25 04:34 | 0° \mathbb{N} | | | 10987 May 02 16:07 | 0° \mathcal{E} | |
| | 10984 Oct 21 09:08 | 0° \mathcal{L} | | asc. node | 10987 May 04 10:32 | 2° \mathcal{E} 03'54 | |
| | 10984 Nov 15 20:00 | 0° \mathbb{M} | | | 10987 May 28 23:58 | 0° \mathcal{Q} | |
| asc. node | 10984 Nov 16 21:09 | 1° \mathbb{M} 14'51 | | evening max el | 10987 Jun 16 07:52 | 19° \mathcal{Q} 22'22 | 46°50'03 |
| | 10984 Dec 10 19:47 | 0° \mathcal{A} | | | 10987 Jun 27 09:18 | 0° \mathbb{N} | |
| | 10985 Jan 04 11:50 | 0° \mathcal{Z} | | greatest brilliancy | 10987 Jul 25 20:58 | 19° \mathbb{N} 46'58 | -4.9m |
| | 10985 Jan 28 22:37 | 0° \approx | | retrograde | 10987 Aug 05 15:33 | 21° \mathbb{N} 56'10 | |
| morning set | 10985 Feb 18 13:48 | 25° \approx 28'01 | | evening set | 10987 Aug 20 07:36 | 17° \mathbb{N} 41'57 | |
| | 10985 Feb 22 05:43 | 0° \mathcal{H} | | desc. node | 10987 Aug 24 10:17 | 15° \mathbb{N} 18'52 | |
| desc. node | 10985 Mar 08 13:16 | 17° \mathcal{H} 45'04 | | min. Earth dist. | 10987 Aug 26 02:32 | 14° \mathbb{N} 17'12 | 0.27459 AU |
| | 10985 Mar 18 09:46 | 0° Υ | | inferior conj | 10987 Aug 26 14:35 | 13° \mathbb{N} 58'37 | -0°33'24 |

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|---------------------|--------------------|-----------------------|------------|---------------------|--|--------------------|----------------------------|------------|
| minimum elong | 10987 Aug 26 13:17 | 14° \cap 00'37 | 0°33'12 | | | 10990 Mar 27 09:59 | 0° B | |
| morning rise | 10987 Sep 01 19:43 | 10° \cap 19'44 | | | | 10990 Apr 20 14:04 | 0° II | |
| direct | 10987 Sep 16 12:46 | 6° \cap 09'18 | | | | 10990 May 14 19:50 | 0° G | |
| greatest brilliancy | 10987 Sep 26 04:03 | 7° \cap 51'33 | -4.8m | asc. node | | 10990 May 31 21:38 | 20° G 58'43 | |
| | 10987 Oct 28 16:23 | 0° L | | | | 10990 Jun 08 07:03 | 0° Ω | |
| morning max el | 10987 Nov 04 13:12 | 6° L 25'22 | 45°53'12 | | | 10990 Jul 03 05:28 | 0° \cap | |
| | 10987 Nov 27 13:23 | 0° M | | | | 10990 Jul 29 01:54 | 0° L | |
| asc. node | 10987 Dec 15 09:36 | 19° M 41'53 | | | | 10990 Aug 26 02:28 | 0° M | |
| | 10987 Dec 24 10:51 | 0° N | | evening max el | | 10990 Aug 26 13:26 | 0° M 27'12 | 46°17'58 |
| | 10988 Jan 19 02:35 | 0° O | | desc. node | | 10990 Sep 20 20:28 | 22° M 21'30 | |
| | 10988 Feb 13 02:09 | 0° \approx | | greatest brilliancy | | 10990 Oct 04 13:58 | 29° M 54'26 | -4.8m |
| | 10988 Mar 08 15:57 | 0° H | | | | 10990 Oct 04 19:57 | 0° N | |
| | 10988 Apr 01 23:12 | 0° Y | | retrograde | | 10990 Oct 15 08:05 | 2° N 01'59 | |
| desc. node | 10988 Apr 05 02:38 | 3° Y 54'00 | | | | 10990 Oct 25 09:54 | 30° R M | |
| | 10988 Apr 26 01:34 | 0° B | | evening set | | 10990 Nov 02 01:45 | 26° M 04'59 | |
| morning set | 10988 May 03 06:16 | 9° B 00'00 | | inferior conj | | 10990 Nov 05 20:35 | 23° M 44'46 | -8°23'07 |
| | 10988 May 20 00:23 | 0° II | | minimum elong | | 10990 Nov 05 15:01 | 23° M 53'29 | 8°22'11 |
| | | | | min. Earth dist. | | 10990 Nov 05 08:42 | 24° M 03'23 | 0.28903 AU |
| superior conj | 10988 Jun 12 14:47 | 29° II 38'58 | -1°22'44 | morning rise | | 10990 Nov 09 04:25 | 21° M 41'14 | |
| minimum elong | 10988 Jun 12 22:16 | 0° G 02'31 | 1°23'14 | direct | | 10990 Nov 27 05:19 | 15° M 33'56 | |
| | 10988 Jun 12 21:28 | 0° G | | greatest brilliancy | | 10990 Dec 07 06:15 | 17° M 23'11 | -4.7m |
| max. Earth dist. | 10988 Jun 12 22:24 | 0° G 02'55 | 1.71315 AU | | | 10990 Dec 28 09:47 | 0° N | |
| | 10988 Jul 06 18:55 | 0° Ω | | asc. node | | 10991 Jan 11 20:57 | 12° N 36'38 | |
| evening rise | 10988 Jul 22 22:53 | 20° Ω 14'13 | | morning max el | | 10991 Jan 15 03:43 | 15° N 44'45 | 45°44'55 |
| asc. node | 10988 Jul 26 20:03 | 25° Ω 05'19 | | | | 10991 Jan 29 05:10 | 0° O | |
| | 10988 Jul 30 18:28 | 0° \cap | | | | 10991 Feb 25 09:03 | 0° \approx | |
| | 10988 Aug 23 21:26 | 0° L | | | | 10991 Mar 23 00:02 | 0° H | |
| | 10988 Sep 17 05:14 | 0° M | | | | 10991 Apr 16 20:53 | 0° Y | |
| | 10988 Oct 11 20:19 | 0° N | | desc. node | | 10991 May 03 16:03 | 20° Y 35'30 | |
| | 10988 Nov 05 22:40 | 0° O | | | | 10991 May 11 07:02 | 0° B | |
| desc. node | 10988 Nov 15 15:23 | 11° O 22'57 | | | | 10991 Jun 04 10:32 | 0° II | |
| | 10988 Dec 01 18:31 | 0° \approx | | | | 10991 Jun 28 10:34 | 0° G | |
| | 10988 Dec 28 20:27 | 0° H | | morning set | | 10991 Jul 18 13:14 | 25° G 10'29 | |
| evening max el | 10989 Jan 18 08:48 | 20° H 59'47 | 46°01'38 | | | 10991 Jul 22 09:45 | 0° Ω | |
| | 10989 Jan 28 00:45 | 0° Y | | | | 10991 Aug 15 09:53 | 0° \cap | |
| greatest brilliancy | 10989 Feb 26 20:22 | 20° Y 01'11 | -4.8m | asc. node | | 10991 Aug 24 09:05 | 11° \cap 11'05 | |
| retrograde | 10989 Mar 08 15:50 | 21° Y 48'27 | | | | | | |
| asc. node | 10989 Mar 08 16:04 | 21° Y 48'27 | | superior conj | | 10991 Aug 26 18:39 | 14° \cap 10'26 | 0°05'52 |
| evening set | 10989 Mar 23 15:58 | 17° Y 25'06 | | minimum elong | | 10991 Aug 26 17:18 | 14° \cap 06'13 | 0°05'34 |
| inferior conj | 10989 Mar 29 12:43 | 13° Y 55'49 | 5°01'59 | behind sun begin | | 10991 Aug 25 18:12 | 12° \cap 54'16 | |
| minimum elong | 10989 Mar 29 02:47 | 14° Y 11'13 | 4°59'14 | behind sun end | | 10991 Aug 27 16:23 | 15° \cap 18'11 | |
| min. Earth dist. | 10989 Mar 29 13:55 | 13° Y 53'58 | 0.27503 AU | max. Earth dist. | | 10991 Aug 29 07:41 | 17° \cap 20'32 | 1.72147 AU |
| morning rise | 10989 Apr 03 13:14 | 10° Y 53'37 | | | | 10991 Sep 08 11:49 | 0° L | |
| direct | 10989 Apr 19 10:00 | 5° Y 57'04 | | | | 10991 Oct 02 16:03 | 0° M | |
| greatest brilliancy | 10989 Apr 29 15:17 | 7° Y 54'12 | -4.9m | evening rise | | 10991 Oct 03 18:13 | 1° M 20'58 | |
| | 10989 May 30 22:27 | 0° B | | | | 10991 Oct 26 23:27 | 0° N | |
| morning max el | 10989 Jun 08 20:18 | 8° B 39'28 | 46°57'59 | | | 10991 Nov 20 11:26 | 0° O | |
| desc. node | 10989 Jun 28 14:48 | 29° B 38'15 | | desc. node | | 10991 Dec 14 02:52 | 28° O 39'40 | |
| | 10989 Jun 28 22:40 | 0° II | | | | 10991 Dec 15 05:32 | 0° \approx | |
| | 10989 Jul 25 04:24 | 0° G | | | | 10992 Jan 09 07:02 | 0° H | |
| | 10989 Aug 19 11:01 | 0° Ω | | | | 10992 Feb 03 18:01 | 0° Y | |
| | 10989 Sep 13 08:06 | 0° \cap | | | | 10992 Feb 29 21:23 | 0° B | |
| | 10989 Oct 08 00:34 | 0° L | | | | 10992 Mar 28 16:59 | 0° II | |
| asc. node | 10989 Oct 19 10:02 | 13° L 54'19 | | evening max el | | 10992 Mar 31 21:43 | 3° II 13'08 | 46°39'18 |
| | 10989 Nov 01 13:51 | 0° M | | asc. node | | 10992 Apr 05 02:12 | 7° II 19'46 | |
| | 10989 Nov 26 00:24 | 0° N | | | | 10992 May 03 05:57 | 0° G | |
| morning set | 10989 Dec 09 01:50 | 16° N 04'33 | | greatest brilliancy | | 10992 May 11 11:14 | 3° G 49'50 | -4.9m |
| | 10989 Dec 20 08:57 | 0° O | | retrograde | | 10992 May 21 02:57 | 5° G 35'29 | |
| | 10990 Jan 13 16:28 | 0° \approx | | | | 10992 Jun 07 02:32 | 30° R II | |
| max. Earth dist. | 10990 Jan 13 19:46 | 0° \approx 10'12 | 1.73076 AU | evening set | | 10992 Jun 08 00:24 | 29° II 27'34 | |
| | | | | inferior conj | | 10992 Jun 10 18:05 | 27° II 47'34 | 8°50'30 |
| superior conj | 10990 Jan 14 20:24 | 1° \approx 26'13 | 0°54'14 | minimum elong | | 10992 Jun 11 00:29 | 27° II 37'44 | 8°49'18 |
| minimum elong | 10990 Jan 15 06:01 | 1° \approx 55'56 | 0°54'25 | min. Earth dist. | | 10992 Jun 11 00:37 | 27° II 37'32 | 0.27162 AU |
| | 10990 Feb 06 23:21 | 0° H | | morning rise | | 10992 Jun 14 00:34 | 25° II 48'35 | |
| desc. node | 10990 Feb 08 01:50 | 1° H 21'51 | | direct | | 10992 Jul 01 11:19 | 19° II 58'04 | |
| evening rise | 10990 Feb 21 22:43 | 18° H 31'09 | | greatest brilliancy | | 10992 Jul 11 07:41 | 21° II 48'15 | -4.9m |
| | 10990 Mar 03 05:18 | 0° Y | | desc. node | | 10992 Jul 26 01:46 | 29° II 54'10 | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|--|
| | 10992 Jul 26 05:04 | 0°☿ | | | 10995 Feb 16 11:20 | 0°♃ | | |
| morning max el | 10992 Aug 20 17:45 | 22°☿20'46 | 46°39'01 | | 10995 Mar 13 02:56 | 0°♄ | | |
| | 10992 Aug 28 06:40 | 0°♂ | | | 10995 Apr 06 23:06 | 0°♂ | | |
| | 10992 Sep 24 20:15 | 0°♂ | | | 10995 May 02 06:40 | 0°☿ | | |
| | 10992 Oct 20 22:35 | 0°♂ | | asc. node | 10995 May 03 12:33 | 1°☿26'59 | | |
| | 10992 Nov 15 08:15 | 0°♂ | | | 10995 May 28 17:50 | 0°♂ | | |
| asc. node | 10992 Nov 15 23:11 | 0°♂44'32 | | evening max el | 10995 Jun 13 21:14 | 16°♂58'34 | 46°50'30 | |
| | 10992 Dec 10 07:20 | 0°♄ | | | 10995 Jun 27 14:35 | 0°♂ | | |
| | 10993 Jan 03 23:00 | 0°♄ | | greatest brilliancy | 10995 Jul 23 13:02 | 17°♂27'37 | -4.9m | |
| | 10993 Jan 28 09:35 | 0°♂ | | retrograde | 10995 Aug 03 05:12 | 19°♂34'50 | | |
| morning set | 10993 Feb 16 05:06 | 23°♂13'10 | | evening set | 10995 Aug 17 22:05 | 15°♂20'25 | | |
| | 10993 Feb 21 16:38 | 0°♄ | | min. Earth dist. | 10995 Aug 23 17:41 | 11°♂54'47 | 0.27417 AU | |
| desc. node | 10993 Mar 07 15:06 | 17°♄16'51 | | desc. node | 10995 Aug 23 12:12 | 12°♂03'14 | | |
| | 10993 Mar 17 20:41 | 0°♃ | | inferior conj | 10995 Aug 24 04:21 | 11°♂38'21 | -0°10'20 | |
| max. Earth dist. | 10993 Mar 24 01:19 | 7°♃42'34 | 1.72066 AU | minimum elong | 10995 Aug 24 03:56 | 11°♂38'59 | 0°10'26 | |
| | | | | transit middle | 10995 Aug 24 03:56 | 11°♂38'59 | 0°10'26 | |
| superior conj | 10993 Mar 27 05:58 | 11°♃41'23 | -0°45'25 | transit begin | 10995 Aug 24 00:47 | 11°♂43'51 | | |
| minimum elong | 10993 Mar 26 20:08 | 11°♃10'46 | 0°45'04 | transit end | 10995 Aug 24 07:05 | 11°♂34'07 | | |
| | 10993 Apr 10 21:57 | 0°♄ | | morning rise | 10995 Aug 30 10:24 | 7°♂57'56 | | |
| | 10993 May 04 21:05 | 0°♂ | | direct | 10995 Sep 14 01:36 | 3°♂49'28 | | |
| evening rise | 10993 May 05 20:32 | 1°♂13'29 | | greatest brilliancy | 10995 Sep 23 18:20 | 5°♂32'31 | -4.8m | |
| | 10993 May 28 19:40 | 0°☿ | | | 10995 Oct 28 18:15 | 0°♂ | | |
| | 10993 Jun 21 19:54 | 0°♂ | | morning max el | 10995 Nov 02 02:14 | 4°♂05'48 | 45°54'22 | |
| asc. node | 10993 Jun 28 09:25 | 8°♂10'03 | | | 10995 Nov 27 06:02 | 0°♂ | | |
| | 10993 Jul 16 00:15 | 0°♂ | | asc. node | 10995 Dec 14 11:28 | 19°♂06'21 | | |
| | 10993 Aug 09 11:39 | 0°♂ | | | 10995 Dec 24 00:32 | 0°♄ | | |
| | 10993 Sep 03 10:45 | 0°♂ | | | 10996 Jan 18 14:53 | 0°♄ | | |
| | 10993 Sep 29 07:00 | 0°♄ | | | 10996 Feb 12 13:43 | 0°♂ | | |
| desc. node | 10993 Oct 18 06:44 | 20°♄54'38 | | | 10996 Mar 08 03:09 | 0°♄ | | |
| | 10993 Oct 26 23:28 | 0°♄ | | | 10996 Apr 01 10:13 | 0°♃ | | |
| evening max el | 10993 Nov 05 15:36 | 9°♄36'59 | 45°49'50 | desc. node | 10996 Apr 04 04:39 | 3°♃26'08 | | |
| | 10993 Nov 29 20:34 | 0°♂ | | | 10996 Apr 25 12:28 | 0°♄ | | |
| greatest brilliancy | 10993 Dec 14 16:49 | 7°♂49'23 | -4.7m | morning set | 10996 Apr 30 17:26 | 6°♄30'36 | | |
| retrograde | 10993 Dec 24 11:01 | 9°♂32'24 | | | 10996 May 19 11:15 | 0°♂ | | |
| evening set | 10994 Jan 09 20:44 | 4°♂23'41 | | | | | | |
| inferior conj | 10994 Jan 14 18:34 | 1°♂23'39 | -5°34'12 | superior conj | 10996 Jun 10 02:16 | 27°♂10'08 | -1°23'57 | |
| minimum elong | 10994 Jan 15 04:30 | 1°♂08'04 | 5°31'19 | minimum elong | 10996 Jun 10 08:54 | 27°♂31'00 | 1°24'29 | |
| min. Earth dist. | 10994 Jan 15 09:40 | 0°♂59'57 | 0.28616 AU | max. Earth dist. | 10996 Jun 10 01:36 | 27°♂08'01 | 1.71315 AU | |
| | 10994 Jan 17 00:07 | 30°♄ | | | 10996 Jun 12 08:20 | 0°☿ | | |
| morning rise | 10994 Jan 20 11:58 | 27°♄55'24 | | | 10996 Jul 06 05:48 | 0°♂ | | |
| direct | 10994 Feb 05 04:05 | 23°♄09'44 | | evening rise | 10996 Jul 20 10:52 | 17°♂47'35 | | |
| asc. node | 10994 Feb 08 07:37 | 23°♄21'19 | | asc. node | 10996 Jul 25 21:51 | 24°♂36'51 | | |
| greatest brilliancy | 10994 Feb 16 03:12 | 25°♄22'43 | -4.8m | | 10996 Jul 30 05:23 | 0°♂ | | |
| | 10994 Feb 25 05:48 | 0°♂ | | | 10996 Aug 23 08:27 | 0°♂ | | |
| morning max el | 10994 Mar 26 23:44 | 24°♂56'13 | 46°21'25 | | 10996 Sep 16 16:27 | 0°♂ | | |
| | 10994 Apr 01 00:01 | 0°♄ | | | 10996 Oct 11 07:58 | 0°♄ | | |
| | 10994 Apr 28 12:18 | 0°♃ | | | 10996 Nov 05 11:07 | 0°♄ | | |
| | 10994 May 24 04:25 | 0°♄ | | desc. node | 10996 Nov 14 17:24 | 10°♄51'12 | | |
| desc. node | 10994 May 31 04:51 | 8°♄24'05 | | | 10996 Dec 01 08:31 | 0°♂ | | |
| | 10994 Jun 18 00:46 | 0°♂ | | | 10996 Dec 28 13:49 | 0°♄ | | |
| | 10994 Jul 12 11:19 | 0°☿ | | evening max el | 10997 Jan 15 22:35 | 18°♄41'54 | 46°00'45 | |
| | 10994 Aug 05 17:40 | 0°♂ | | | 10997 Jan 28 05:40 | 0°♃ | | |
| | 10994 Aug 29 22:58 | 0°♂ | | greatest brilliancy | 10997 Feb 24 09:55 | 17°♃41'20 | -4.8m | |
| asc. node | 10994 Sep 20 22:32 | 27°♂13'02 | | retrograde | 10997 Mar 06 05:40 | 19°♃29'04 | | |
| | 10994 Sep 23 04:29 | 0°♂ | | asc. node | 10997 Mar 07 18:04 | 19°♃26'17 | | |
| morning set | 10994 Sep 28 12:58 | 6°♂37'33 | | evening set | 10997 Mar 21 03:40 | 15°♃07'58 | | |
| | 10994 Oct 17 10:22 | 0°♂ | | inferior conj | 10997 Mar 27 02:41 | 11°♃35'54 | 4°42'20 | |
| | | | | minimum elong | 10997 Mar 26 17:11 | 11°♃50'37 | 4°39'38 | |
| superior conj | 10994 Nov 04 23:00 | 22°♂54'23 | 1°22'14 | min. Earth dist. | 10997 Mar 27 04:23 | 11°♃33'15 | 0.27525 AU | |
| minimum elong | 10994 Nov 04 17:25 | 22°♂37'07 | 1°22'36 | morning rise | 10997 Apr 01 06:17 | 8°♃29'31 | | |
| max. Earth dist. | 10994 Nov 06 08:22 | 24°♂37'28 | 1.73065 AU | direct | 10997 Apr 17 00:04 | 3°♃36'29 | | |
| | 10994 Nov 10 16:48 | 0°♄ | | greatest brilliancy | 10997 Apr 27 06:46 | 5°♃35'09 | -4.9m | |
| | 10994 Dec 05 00:25 | 0°♄ | | | 10997 May 31 00:14 | 0°♄ | | |
| evening rise | 10994 Dec 11 17:06 | 8°♄14'34 | | morning max el | 10997 Jun 06 10:52 | 6°♄19'27 | 46°57'33 | |
| | 10994 Dec 29 10:00 | 0°♂ | | desc. node | 10997 Jun 27 16:43 | 28°♄56'19 | | |
| desc. node | 10995 Jan 10 14:54 | 14°♂57'40 | | | 10997 Jun 28 15:37 | 0°♂ | | |
| | 10995 Jan 22 21:45 | 0°♄ | | | 10997 Jul 24 18:31 | 0°☿ | | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 10997 Aug 18 23:45 | 0°♌ | | | 11000 Mar 29 14:49 | 0°♊ | |
| | 10997 Sep 12 20:00 | 0°♍ | | evening max el | 11000 Mar 30 12:15 | 0°♊53'32 | 46°38'09 |
| | 10997 Oct 07 11:54 | 0°♋ | | asc. node | 11000 Apr 05 04:18 | 6°♊25'13 | |
| asc. node | 10997 Oct 18 12:05 | 13°♋26'35 | | | 11000 May 06 11:00 | 0°♋ | |
| | 10997 Nov 01 00:46 | 0°♌ | | greatest brilliancy | 11000 May 10 00:06 | 1°♋25'29 | -4.9m |
| | 10997 Nov 25 11:04 | 0°♍ | | retrograde | 11000 May 19 16:11 | 3°♋10'52 | |
| morning set | 10997 Dec 06 18:49 | 13°♍56'18 | | | 11000 Jun 01 05:13 | 30°♋♊ | |
| | 10997 Dec 19 19:31 | 0°♎ | | evening set | 11000 Jun 06 15:45 | 26°♊59'36 | |
| max. Earth dist. | 10998 Jan 11 16:04 | 28°♎12'02 | 1.73096 AU | inferior conj | 11000 Jun 09 06:57 | 25°♊23'06 | 8°57'07 |
| | | | | minimum elong | 11000 Jun 09 12:31 | 25°♊14'32 | 8°56'03 |
| superior conj | 10998 Jan 12 12:38 | 29°♎15'33 | 0°56'49 | min. Earth dist. | 11000 Jun 09 12:55 | 25°♊13'54 | 0.27167 AU |
| minimum elong | 10998 Jan 12 22:24 | 29°♎45'40 | 0°57'02 | morning rise | 11000 Jun 12 09:18 | 23°♊30'02 | |
| | 10998 Jan 13 03:03 | 0°♏ | | direct | 11000 Jun 30 00:38 | 17°♊33'41 | |
| | 10998 Feb 06 10:00 | 0°♐ | | greatest brilliancy | 11000 Jul 09 19:40 | 19°♊22'41 | -4.9m |
| desc. node | 10998 Feb 07 03:42 | 0°♐54'42 | | desc. node | 11000 Jul 26 03:42 | 28°♊36'57 | |
| evening rise | 10998 Feb 19 13:49 | 16°♐16'18 | | | 11000 Jul 27 23:59 | 0°♋ | |
| | 10998 Mar 02 16:04 | 0°♑ | | morning max el | 11000 Aug 19 07:26 | 19°♋59'38 | 46°40'25 |
| | 10998 Mar 26 20:55 | 0°♒ | | | 11000 Aug 29 02:18 | 0°♌ | |
| | 10998 Apr 20 01:16 | 0°♊ | | | 11000 Sep 25 11:08 | 0°♍ | |
| | 10998 May 14 07:26 | 0°♋ | | | 11000 Oct 21 11:26 | 0°♋ | |
| asc. node | 10998 May 30 23:34 | 20°♋27'55 | | | 11000 Nov 15 20:01 | 0°♌ | |
| | 10998 Jun 07 19:18 | 0°♌ | | asc. node | 11000 Nov 16 01:01 | 0°♌14'55 | |
| | 10998 Jul 02 18:49 | 0°♍ | | | 11000 Dec 10 18:29 | 0°♍ | |
| | 10998 Jul 28 17:29 | 0°♋ | | | 11001 Jan 04 09:46 | 0°♎ | |
| evening max el | 10998 Aug 24 05:08 | 28°♋13'34 | 46°19'22 | | 11001 Jan 28 20:10 | 0°♏ | |
| | 10998 Aug 26 00:23 | 0°♌ | | morning set | 11001 Feb 14 20:20 | 20°♏59'26 | |
| desc. node | 10998 Sep 19 22:35 | 21°♌08'00 | | | 11001 Feb 22 03:07 | 0°♐ | |
| greatest brilliancy | 10998 Oct 02 04:20 | 27°♌41'09 | -4.8m | desc. node | 11001 Mar 07 17:02 | 16°♐50'12 | |
| retrograde | 10998 Oct 13 00:42 | 29°♌50'36 | | | 11001 Mar 18 07:11 | 0°♑ | |
| evening set | 10998 Oct 30 14:34 | 23°♌57'54 | | max. Earth dist. | 11001 Mar 22 11:58 | 5°♑13'33 | 1.72109 AU |
| min. Earth dist. | 10998 Nov 02 23:03 | 21°♌54'11 | 0.28871 AU | | | | |
| inferior conj | 10998 Nov 03 12:19 | 21°♌33'27 | -8°17'15 | superior conj | 11001 Mar 25 18:59 | 9°♑19'35 | -0°42'11 |
| minimum elong | 10998 Nov 03 06:06 | 21°♌43'10 | 8°16'12 | minimum elong | 11001 Mar 25 09:42 | 8°♑50'38 | 0°41'48 |
| morning rise | 10998 Nov 06 21:49 | 19°♌27'41 | | | 11001 Apr 11 08:32 | 0°♒ | |
| direct | 10998 Nov 24 21:03 | 13°♌23'15 | | evening rise | 11001 May 04 08:18 | 28°♒46'27 | |
| greatest brilliancy | 10998 Dec 04 20:20 | 15°♌11'28 | -4.7m | | 11001 May 05 07:47 | 0°♊ | |
| | 10998 Dec 28 18:19 | 0°♍ | | | 11001 May 29 06:28 | 0°♋ | |
| asc. node | 10999 Jan 10 22:54 | 11°♍46'53 | | | 11001 Jun 22 06:50 | 0°♌ | |
| morning max el | 10999 Jan 12 19:49 | 13°♍34'43 | 45°44'17 | asc. node | 11001 Jun 28 11:15 | 7°♌41'34 | |
| | 10999 Jan 28 22:43 | 0°♎ | | | 11001 Jul 16 11:27 | 0°♍ | |
| | 10999 Feb 24 23:01 | 0°♏ | | | 11001 Aug 09 23:17 | 0°♋ | |
| | 10999 Mar 22 12:31 | 0°♐ | | | 11001 Sep 03 23:15 | 0°♌ | |
| | 10999 Apr 16 08:34 | 0°♑ | | | 11001 Sep 29 21:18 | 0°♍ | |
| desc. node | 10999 May 02 17:58 | 20°♑06'27 | | desc. node | 11001 Oct 18 08:42 | 20°♍15'02 | |
| | 10999 May 10 18:15 | 0°♒ | | | 11001 Oct 27 18:26 | 0°♎ | |
| | 10999 Jun 03 21:29 | 0°♊ | | evening max el | 11001 Nov 04 06:26 | 7°♎24'40 | 45°50'04 |
| | 10999 Jun 27 21:20 | 0°♋ | | | 11001 Dec 01 19:47 | 0°♏ | |
| morning set | 10999 Jul 16 02:16 | 22°♋47'47 | | greatest brilliancy | 11001 Dec 13 08:40 | 5°♏39'36 | -4.7m |
| | 10999 Jul 21 20:23 | 0°♌ | | retrograde | 11001 Dec 23 01:48 | 7°♏21'58 | |
| | 10999 Aug 14 20:25 | 0°♍ | | evening set | 11002 Jan 08 15:16 | 2°♏09'03 | |
| asc. node | 10999 Aug 23 11:02 | 10°♍44'18 | | | 11002 Jan 12 04:21 | 30°♋♎ | |
| | | | | inferior conj | 11002 Jan 13 10:24 | 29°♎12'50 | -5°49'48 |
| superior conj | 10999 Aug 24 08:43 | 11°♍51'53 | 0°02'14 | minimum elong | 11002 Jan 13 20:27 | 28°♎57'02 | 5°46'57 |
| minimum elong | 10999 Aug 24 08:14 | 11°♍50'25 | 0°01'57 | min. Earth dist. | 11002 Jan 14 01:36 | 28°♎48'57 | 0.28657 AU |
| behind sun begin | 10999 Aug 23 07:57 | 10°♍34'42 | | morning rise | 11002 Jan 19 01:20 | 25°♎47'38 | |
| behind sun end | 10999 Aug 25 08:32 | 13°♍06'09 | | direct | 11002 Feb 03 19:50 | 20°♎58'33 | |
| max. Earth dist. | 10999 Aug 26 23:34 | 15°♍07'46 | 1.72113 AU | asc. node | 11002 Feb 08 09:39 | 21°♎22'42 | |
| | 10999 Sep 07 22:18 | 0°♋ | | greatest brilliancy | 11002 Feb 14 19:17 | 23°♎11'11 | -4.8m |
| evening rise | 10999 Oct 01 10:26 | 29°♋10'04 | | | 11002 Feb 27 07:04 | 0°♏ | |
| | 10999 Oct 02 02:34 | 0°♌ | | morning max el | 11002 Mar 25 13:57 | 22°♏38'53 | 46°19'43 |
| | 10999 Oct 26 10:05 | 0°♍ | | | 11002 Apr 01 19:32 | 0°♐ | |
| | 10999 Nov 19 22:19 | 0°♎ | | | 11002 Apr 29 03:07 | 0°♑ | |
| desc. node | 10999 Dec 13 04:42 | 28°♎11'08 | | | 11002 May 24 17:24 | 0°♒ | |
| | 10999 Dec 14 16:51 | 0°♏ | | desc. node | 11002 May 31 06:40 | 7°♒51'28 | |
| | 11000 Jan 08 19:05 | 0°♐ | | | 11002 Jun 18 12:48 | 0°♊ | |
| | 11000 Feb 03 07:21 | 0°♑ | | | 11002 Jul 12 22:46 | 0°♋ | |
| | 11000 Mar 01 13:06 | 0°♒ | | | 11002 Aug 06 04:43 | 0°♌ | |

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|---------------------|--------------------|----------------------|---------------------|--------------------|----------------------|------------|
| | 11002 Aug 30 09:43 | 0°♍ | greatest brilliancy | 11005 Feb 22 22:56 | 15°♑21'17 | -4.8m |
| asc. node | 11002 Sep 21 00:30 | 26°♍46'28 | retrograde | 11005 Mar 04 19:50 | 17°♑09'47 | |
| | 11002 Sep 23 15:00 | 0°♌ | asc. node | 11005 Mar 07 20:09 | 16°♑58'47 | |
| morning set | 11002 Sep 27 04:47 | 4°♌25'33 | evening set | 11005 Mar 19 15:38 | 12°♑50'46 | |
| | 11002 Oct 17 20:45 | 0°♍ | inferior conj | 11005 Mar 25 16:38 | 9°♑15'58 | 4°22'01 |
| | | | minimum elong | 11005 Mar 25 07:37 | 9°♑29'54 | 4°19'27 |
| superior conj | 11002 Nov 03 16:20 | 20°♍47'45 1°21'11 | min. Earth dist. | 11005 Mar 25 18:37 | 9°♑12'52 | 0.27551 AU |
| minimum elong | 11002 Nov 03 10:08 | 20°♍28'36 1°21'32 | morning rise | 11005 Mar 30 23:14 | 6°♑05'36 | |
| max. Earth dist. | 11002 Nov 05 01:32 | 22°♍30'19 1.73046 AU | direct | 11005 Apr 15 14:40 | 1°♑15'59 | |
| | 11002 Nov 11 03:08 | 0°♌ | greatest brilliancy | 11005 Apr 25 21:51 | 3°♑15'35 | -4.9m |
| | 11002 Dec 05 10:48 | 0°♌ | | 11005 Jun 01 00:46 | 0°♌ | |
| evening rise | 11002 Dec 10 10:02 | 6°♌06'53 | morning max el | 11005 Jun 05 02:10 | 4°♌01'16 | 46°57'03 |
| | 11002 Dec 29 20:34 | 0°♌ | desc. node | 11005 Jun 27 18:43 | 28°♌15'00 | |
| desc. node | 11003 Jan 10 16:48 | 14°♌30'44 | | 11005 Jun 29 08:16 | 0°♌ | |
| | 11003 Jan 23 08:37 | 0°♌ | | 11005 Jul 25 08:29 | 0°♌ | |
| | 11003 Feb 16 22:36 | 0°♑ | | 11005 Aug 19 12:24 | 0°♌ | |
| | 11003 Mar 13 14:48 | 0°♌ | | 11005 Sep 13 07:50 | 0°♍ | |
| | 11003 Apr 07 11:53 | 0°♌ | | 11005 Oct 07 23:12 | 0°♌ | |
| | 11003 May 02 21:05 | 0°♌ | asc. node | 11005 Oct 18 13:52 | 12°♌58'04 | |
| asc. node | 11003 May 03 14:28 | 0°♌50'25 | | 11005 Nov 01 11:41 | 0°♌ | |
| | 11003 May 29 11:49 | 0°♌ | | 11005 Nov 25 21:44 | 0°♌ | |
| evening max el | 11003 Jun 12 10:12 | 14°♌34'36 46°50'55 | morning set | 11005 Dec 05 12:13 | 11°♌49'23 | |
| | 11003 Jun 28 21:40 | 0°♍ | | 11005 Dec 20 06:04 | 0°♌ | |
| greatest brilliancy | 11003 Jul 22 04:54 | 15°♍08'44 -4.9m | max. Earth dist. | 11006 Jan 10 13:45 | 26°♌18'15 1.73113 AU | |
| retrograde | 11003 Aug 01 18:58 | 17°♍14'34 | | | | |
| evening set | 11003 Aug 16 12:46 | 12°♍59'16 | superior conj | 11006 Jan 11 05:22 | 27°♌06'26 0°59'18 | |
| inferior conj | 11003 Aug 22 18:08 | 9°♍18'58 0°12'55 | minimum elong | 11006 Jan 11 15:10 | 27°♌36'41 0°59'31 | |
| minimum elong | 11003 Aug 22 18:37 | 9°♍18'13 0°12'29 | | 11006 Jan 13 13:36 | 0°♌ | |
| transit middle | 11003 Aug 22 18:37 | 9°♍18'13 0°12'29 | | 11006 Feb 06 20:39 | 0°♌ | |
| transit begin | 11003 Aug 22 15:57 | 9°♍22'19 | desc. node | 11006 Feb 07 05:43 | 0°♌27'59 | |
| transit end | 11003 Aug 22 21:18 | 9°♍14'06 | evening rise | 11006 Feb 18 05:17 | 14°♌02'33 | |
| min. Earth dist. | 11003 Aug 22 08:56 | 9°♍33'08 0.27376 AU | | 11006 Mar 03 02:53 | 0°♑ | |
| desc. node | 11003 Aug 23 14:19 | 8°♍47'56 | | 11006 Mar 27 07:58 | 0°♌ | |
| morning rise | 11003 Aug 29 00:58 | 5°♍37'28 | | 11006 Apr 20 12:39 | 0°♌ | |
| direct | 11003 Sep 12 14:18 | 1°♍30'17 | | 11006 May 14 19:16 | 0°♌ | |
| greatest brilliancy | 11003 Sep 22 08:51 | 3°♍14'42 -4.8m | asc. node | 11006 May 31 01:27 | 19°♌56'21 | |
| | 11003 Oct 29 18:20 | 0°♌ | | 11006 Jun 08 07:48 | 0°♌ | |
| morning max el | 11003 Oct 31 16:04 | 1°♌49'11 45°55'46 | | 11006 Jul 03 08:27 | 0°♍ | |
| | 11003 Nov 27 21:57 | 0°♍ | | 11006 Jul 29 09:31 | 0°♌ | |
| asc. node | 11003 Dec 14 13:24 | 18°♍32'26 | evening max el | 11006 Aug 22 21:30 | 26°♌00'55 46°20'45 | |
| | 11003 Dec 24 13:43 | 0°♌ | | 11006 Aug 26 23:26 | 0°♍ | |
| | 11004 Jan 19 02:49 | 0°♌ | desc. node | 11006 Sep 20 00:33 | 19°♍51'24 | |
| | 11004 Feb 13 01:02 | 0°♌ | greatest brilliancy | 11006 Sep 30 19:03 | 25°♍27'40 -4.8m | |
| | 11004 Mar 08 14:09 | 0°♌ | retrograde | 11006 Oct 11 17:10 | 27°♍38'21 | |
| | 11004 Apr 01 21:03 | 0°♑ | evening set | 11006 Oct 29 03:16 | 21°♍50'30 | |
| desc. node | 11004 Apr 04 06:33 | 2°♑58'28 | min. Earth dist. | 11006 Nov 01 13:27 | 19°♍44'15 0.28832 AU | |
| | 11004 Apr 25 23:13 | 0°♌ | inferior conj | 11006 Nov 02 04:01 | 19°♍21'27 -8°10'36 | |
| morning set | 11004 Apr 29 04:34 | 4°♌01'45 | minimum elong | 11006 Nov 01 21:12 | 19°♍32'07 8°09'27 | |
| | 11004 May 19 21:57 | 0°♌ | morning rise | 11006 Nov 05 15:22 | 17°♍13'02 | |
| | | | direct | 11006 Nov 23 12:59 | 11°♍12'06 | |
| superior conj | 11004 Jun 08 13:39 | 24°♌41'30 -1°25'00 | greatest brilliancy | 11006 Dec 03 10:02 | 12°♍58'41 -4.7m | |
| minimum elong | 11004 Jun 08 19:22 | 24°♌59'27 1°25'33 | | 11006 Dec 30 00:34 | 0°♌ | |
| max. Earth dist. | 11004 Jun 08 07:59 | 24°♌23'43 1.71317 AU | asc. node | 11007 Jan 11 00:54 | 10°♌57'46 | |
| | 11004 Jun 12 19:02 | 0°♌ | morning max el | 11007 Jan 11 11:35 | 11°♌23'34 45°43'49 | |
| | 11004 Jul 06 16:32 | 0°♌ | | 11007 Jan 29 15:58 | 0°♌ | |
| evening rise | 11004 Jul 18 22:50 | 15°♌21'21 | | 11007 Feb 25 12:57 | 0°♌ | |
| asc. node | 11004 Jul 25 23:51 | 24°♌09'25 | | 11007 Mar 23 01:02 | 0°♌ | |
| | 11004 Jul 30 16:11 | 0°♍ | | 11007 Apr 16 20:24 | 0°♑ | |
| | 11004 Aug 23 19:21 | 0°♌ | desc. node | 11007 May 02 19:47 | 19°♑36'24 | |
| | 11004 Sep 17 03:33 | 0°♍ | | 11007 May 11 05:42 | 0°♌ | |
| | 11004 Oct 11 19:28 | 0°♌ | | 11007 Jun 04 08:43 | 0°♌ | |
| | 11004 Nov 05 23:26 | 0°♌ | | 11007 Jun 28 08:25 | 0°♌ | |
| desc. node | 11004 Nov 14 19:18 | 10°♌19'39 | morning set | 11007 Jul 14 14:51 | 20°♌22'32 | |
| | 11004 Dec 01 22:25 | 0°♌ | | 11007 Jul 22 07:21 | 0°♌ | |
| | 11004 Dec 29 07:22 | 0°♌ | | 11007 Aug 15 07:17 | 0°♍ | |
| evening max el | 11005 Jan 14 13:18 | 16°♌26'57 45°59'42 | | | | |
| | 11005 Jan 29 12:34 | 0°♑ | superior conj | 11007 Aug 22 22:20 | 9°♍30'56 -0°01'30 | |

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|---------------------|--------------------|---------------------------------|------------|---------------------|--------------------|---------------------------------|------------|
| minimum elong | 11007 Aug 22 22:46 | 9° \mathbb{M} 32'18 | 0°01'45 | minimum elong | 11010 Jan 11 12:17 | 26° \mathcal{Z} 44'27 | 6°02'04 |
| behind sun begin | 11007 Aug 21 22:24 | 8° \mathbb{M} 16'17 | | min. Earth dist. | 11010 Jan 11 17:31 | 26° \mathcal{Z} 36'12 | 0.28696 AU |
| behind sun end | 11007 Aug 23 23:09 | 10° \mathbb{M} 48'17 | | morning rise | 11010 Jan 16 14:28 | 23° \mathcal{Z} 38'39 | |
| asc. node | 11007 Aug 23 12:56 | 10° \mathbb{M} 16'28 | | direct | 11010 Feb 01 11:16 | 18° \mathcal{Z} 45'32 | |
| max. Earth dist. | 11007 Aug 25 16:13 | 12° \mathbb{M} 56'16 | 1.72074 AU | asc. node | 11010 Feb 07 11:43 | 19° \mathcal{Z} 26'49 | |
| | 11007 Sep 08 09:07 | 0° \mathcal{L} | | greatest brilliancy | 11010 Feb 12 11:47 | 20° \mathcal{Z} 58'42 | -4.8m |
| evening rise | 11007 Sep 30 02:24 | 26° \mathcal{L} 57'21 | | | 11010 Feb 28 02:16 | 0° \approx | |
| | 11007 Oct 02 13:25 | 0° \mathbb{M} | | morning max el | 11010 Mar 23 04:26 | 20° \approx 21'01 | 46°18'19 |
| | 11007 Oct 26 21:04 | 0° \mathcal{Z} | | | 11010 Apr 01 14:57 | 0° \mathcal{H} | |
| | 11007 Nov 20 09:33 | 0° \mathcal{Z} | | | 11010 Apr 28 18:07 | 0° \mathcal{Y} | |
| desc. node | 11007 Dec 13 06:41 | 27° \mathcal{Z} 42'10 | | | 11010 May 24 06:38 | 0° \mathcal{B} | |
| | 11007 Dec 15 04:31 | 0° \approx | | desc. node | 11010 May 30 08:42 | 7° \mathcal{B} 18'42 | |
| | 11008 Jan 09 07:29 | 0° \mathcal{H} | | | 11010 Jun 18 01:07 | 0° \mathbb{I} | |
| | 11008 Feb 03 21:01 | 0° \mathcal{Y} | | | 11010 Jul 12 10:32 | 0° \mathcal{G} | |
| | 11008 Mar 01 05:20 | 0° \mathcal{B} | | | 11010 Aug 05 16:08 | 0° \mathcal{Q} | |
| evening max el | 11008 Mar 28 02:07 | 28° \mathcal{B} 31'35 | 46°36'47 | | 11010 Aug 29 20:53 | 0° \mathbb{M} | |
| | 11008 Mar 29 13:50 | 0° \mathbb{I} | | asc. node | 11010 Sep 20 02:19 | 26° \mathbb{M} 18'01 | |
| asc. node | 11008 Apr 04 06:09 | 5° \mathbb{I} 28'16 | | | 11010 Sep 23 02:00 | 0° \mathcal{L} | |
| greatest brilliancy | 11008 May 07 13:23 | 29° \mathbb{I} 00'43 | -4.9m | morning set | 11010 Sep 24 20:05 | 2° \mathcal{L} 10'20 | |
| | 11008 May 10 22:28 | 0° \mathcal{G} | | | 11010 Oct 17 07:37 | 0° \mathbb{M} | |
| retrograde | 11008 May 17 04:41 | 0° \mathcal{G} 45'14 | | | | | |
| | 11008 May 23 06:35 | 30° \mathcal{R} \mathbb{I} | | superior conj | 11010 Nov 01 09:10 | 18° \mathbb{M} 38'05 | 1°20'00 |
| evening set | 11008 Jun 04 06:42 | 24° \mathbb{I} 31'19 | | minimum elong | 11010 Nov 01 02:24 | 18° \mathbb{M} 17'08 | 1°20'19 |
| inferior conj | 11008 Jun 06 19:53 | 22° \mathbb{I} 57'39 | 9°02'33 | max. Earth dist. | 11010 Nov 02 17:38 | 20° \mathbb{M} 18'24 | 1.73025 AU |
| minimum elong | 11008 Jun 07 00:33 | 22° \mathbb{I} 50'27 | 9°01'37 | | 11010 Nov 10 13:56 | 0° \mathcal{Z} | |
| min. Earth dist. | 11008 Jun 07 01:38 | 22° \mathbb{I} 48'46 | 0.27179 AU | | 11010 Dec 04 21:39 | 0° \mathcal{Z} | |
| morning rise | 11008 Jun 09 18:26 | 21° \mathbb{I} 09'58 | | evening rise | 11010 Dec 08 02:39 | 3° \mathcal{Z} 56'55 | |
| direct | 11008 Jun 27 13:41 | 15° \mathbb{I} 08'05 | | | 11010 Dec 29 07:35 | 0° \approx | |
| greatest brilliancy | 11008 Jul 07 08:31 | 16° \mathbb{I} 56'36 | -4.9m | desc. node | 11011 Jan 09 18:49 | 14° \approx 02'47 | |
| desc. node | 11008 Jul 25 05:47 | 27° \mathbb{I} 20'56 | | | 11011 Jan 22 19:56 | 0° \mathcal{H} | |
| | 11008 Jul 28 14:47 | 0° \mathcal{G} | | | 11011 Feb 16 10:20 | 0° \mathcal{Y} | |
| morning max el | 11008 Aug 16 20:13 | 17° \mathcal{G} 34'32 | 46°41'44 | | 11011 Mar 13 03:07 | 0° \mathcal{B} | |
| | 11008 Aug 28 21:56 | 0° \mathcal{Q} | | | 11011 Apr 07 01:06 | 0° \mathbb{I} | |
| | 11008 Sep 25 02:19 | 0° \mathbb{M} | | | 11011 May 02 11:59 | 0° \mathcal{G} | |
| | 11008 Oct 21 00:39 | 0° \mathcal{L} | | asc. node | 11011 May 02 16:28 | 0° \mathcal{G} 12'59 | |
| asc. node | 11008 Nov 15 02:55 | 29° \mathcal{L} 44'19 | | | 11011 May 29 06:32 | 0° \mathcal{Q} | |
| | 11008 Nov 15 08:10 | 0° \mathbb{M} | | evening max el | 11011 Jun 09 23:22 | 12° \mathcal{Q} 10'33 | 46°51'23 |
| | 11008 Dec 10 06:00 | 0° \mathcal{Z} | | | 11011 Jun 29 07:45 | 0° \mathbb{M} | |
| | 11009 Jan 03 20:56 | 0° \mathcal{Z} | | greatest brilliancy | 11011 Jul 19 20:01 | 12° \mathbb{M} 48'12 | -4.9m |
| | 11009 Jan 28 07:07 | 0° \approx | | retrograde | 11011 Jul 30 09:06 | 14° \mathbb{M} 53'36 | |
| morning set | 11009 Feb 12 11:57 | 18° \approx 45'43 | | evening set | 11011 Aug 14 03:38 | 10° \mathbb{M} 36'47 | |
| | 11009 Feb 21 13:59 | 0° \mathcal{H} | | inferior conj | 11011 Aug 20 07:55 | 6° \mathbb{M} 58'27 | 0°36'08 |
| desc. node | 11009 Mar 06 18:57 | 16° \mathcal{H} 22'26 | | minimum elong | 11011 Aug 20 09:18 | 6° \mathbb{M} 56'19 | 0°35'23 |
| | 11009 Mar 17 18:03 | 0° \mathcal{Y} | | min. Earth dist. | 11011 Aug 19 23:53 | 7° \mathbb{M} 10'47 | 0.27345 AU |
| max. Earth dist. | 11009 Mar 20 00:08 | 2° \mathcal{Y} 48'17 | 1.72150 AU | desc. node | 11011 Aug 22 16:15 | 5° \mathbb{M} 32'30 | |
| | | | | morning rise | 11011 Aug 26 15:22 | 3° \mathbb{M} 16'21 | |
| superior conj | 11009 Mar 23 08:34 | 6° \mathcal{Y} 58'34 | -0°38'54 | | 11011 Sep 03 16:25 | 30° \mathcal{R} \mathcal{Q} | |
| minimum elong | 11009 Mar 22 23:51 | 6° \mathcal{Y} 31'26 | 0°38'32 | direct | 11011 Sep 10 03:22 | 29° \mathcal{Q} 09'48 | |
| | 11009 Apr 10 19:27 | 0° \mathcal{B} | | | 11011 Sep 16 19:46 | 0° \mathbb{M} | |
| evening rise | 11009 May 01 20:34 | 26° \mathcal{B} 20'05 | | greatest brilliancy | 11011 Sep 19 23:16 | 0° \mathbb{M} 55'35 | -4.8m |
| | 11009 May 04 18:48 | 0° \mathbb{I} | | morning max el | 11011 Oct 29 06:51 | 29° \mathbb{M} 33'29 | 45°57'00 |
| | 11009 May 28 17:37 | 0° \mathcal{G} | | | 11011 Oct 29 17:52 | 0° \mathcal{L} | |
| | 11009 Jun 21 18:13 | 0° \mathcal{Q} | | | 11011 Nov 27 14:06 | 0° \mathbb{M} | |
| asc. node | 11009 Jun 27 13:16 | 7° \mathcal{Q} 12'18 | | asc. node | 11011 Dec 13 15:27 | 17° \mathbb{M} 57'35 | |
| | 11009 Jul 15 23:09 | 0° \mathbb{M} | | | 11011 Dec 24 03:15 | 0° \mathcal{Z} | |
| | 11009 Aug 09 11:31 | 0° \mathcal{L} | | | 11012 Jan 18 15:07 | 0° \mathcal{Z} | |
| | 11009 Sep 03 12:26 | 0° \mathbb{M} | | | 11012 Feb 12 12:42 | 0° \approx | |
| | 11009 Sep 29 12:24 | 0° \mathcal{Z} | | | 11012 Mar 08 01:28 | 0° \mathcal{H} | |
| desc. node | 11009 Oct 17 10:38 | 19° \mathcal{Z} 33'09 | | | 11012 Apr 01 08:11 | 0° \mathcal{Y} | |
| | 11009 Oct 27 14:40 | 0° \mathcal{Z} | | desc. node | 11012 Apr 03 08:20 | 2° \mathcal{Y} 29'27 | |
| evening max el | 11009 Nov 01 20:20 | 5° \mathcal{Z} 08'23 | 45°50'30 | | 11012 Apr 25 10:15 | 0° \mathcal{B} | |
| | 11009 Dec 03 05:42 | 0° \approx | | morning set | 11012 Apr 26 15:51 | 1° \mathcal{B} 32'30 | |
| greatest brilliancy | 11009 Dec 11 00:13 | 3° \approx 27'48 | -4.7m | | 11012 May 19 08:55 | 0° \mathbb{I} | |
| retrograde | 11009 Dec 20 16:38 | 5° \approx 10'03 | | max. Earth dist. | 11012 Jun 05 16:56 | 21° \mathbb{I} 46'37 | 1.71316 AU |
| evening set | 11010 Jan 06 09:42 | 29° \mathcal{Z} 52'30 | | | | | |
| | 11010 Jan 06 04:32 | 30° \mathcal{R} \mathcal{Z} | | superior conj | 11012 Jun 06 01:13 | 22° \mathbb{I} 12'40 | -1°25'52 |
| inferior conj | 11010 Jan 11 02:09 | 27° \mathcal{Z} 00'22 | -6°04'51 | minimum elong | 11012 Jun 06 05:58 | 22° \mathbb{I} 27'36 | 1°26'27 |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 11012 Jun 12 05:57 | 0°☿ | | | 11014 Dec 30 04:41 | 0°♊ | |
| | 11012 Jul 06 03:27 | 0°♋ | | morning max el | 11015 Jan 09 02:39 | 9°♊10'49 | 45°43'10 |
| evening rise | 11012 Jul 16 11:05 | 12°♋55'24 | | asc. node | 11015 Jan 10 02:53 | 10°♊09'35 | |
| asc. node | 11012 Jul 25 01:45 | 23°♋41'10 | | | 11015 Jan 29 08:53 | 0°♋ | |
| | 11012 Jul 30 03:10 | 0°♌ | | | 11015 Feb 25 02:46 | 0°♌ | |
| | 11012 Aug 23 06:26 | 0°♍ | | | 11015 Mar 22 13:30 | 0°♌ | |
| | 11012 Sep 16 14:54 | 0°♎ | | | 11015 Apr 16 08:10 | 0°♍ | |
| | 11012 Oct 11 07:18 | 0°♏ | | desc. node | 11015 May 01 21:48 | 19°♍07'10 | |
| | 11012 Nov 05 12:09 | 0°♐ | | | 11015 May 10 17:04 | 0°♎ | |
| desc. node | 11012 Nov 13 21:17 | 9°♐47'14 | | | 11015 Jun 03 19:51 | 0°♎ | |
| | 11012 Dec 01 12:52 | 0°♑ | | | 11015 Jun 27 19:24 | 0°♏ | |
| | 11012 Dec 29 01:45 | 0°♒ | | morning set | 11015 Jul 12 03:19 | 17°♏57'14 | |
| evening max el | 11013 Jan 12 04:37 | 14°♒12'39 | 45°58'46 | | 11015 Jul 21 18:12 | 0°♋ | |
| | 11013 Jan 29 22:37 | 0°♓ | | | 11015 Aug 14 18:01 | 0°♌ | |
| greatest brilliancy | 11013 Feb 20 11:56 | 13°♓00'36 | -4.8m | | | | |
| retrograde | 11013 Mar 02 10:00 | 14°♓49'36 | | superior conj | 11015 Aug 20 12:05 | 7°♌10'42 | -0°05'10 |
| asc. node | 11013 Mar 06 22:01 | 14°♓24'59 | | minimum elong | 11015 Aug 20 13:24 | 7°♌14'50 | 0°05'25 |
| evening set | 11013 Mar 17 03:52 | 10°♓32'42 | | behind sun begin | 11015 Aug 19 14:04 | 6°♌02'01 | |
| inferior conj | 11013 Mar 23 06:32 | 6°♓55'17 | 4°01'21 | behind sun end | 11015 Aug 21 12:45 | 8°♌27'38 | |
| minimum elong | 11013 Mar 22 22:04 | 7°♓08'22 | 3°58'54 | asc. node | 11015 Aug 22 14:45 | 9°♌48'42 | |
| min. Earth dist. | 11013 Mar 23 08:42 | 6°♓51'56 | 0.27574 AU | max. Earth dist. | 11015 Aug 23 07:46 | 10°♌41'46 | 1.72029 AU |
| morning rise | 11013 Mar 28 15:59 | 3°♓41'01 | | | 11015 Sep 07 19:47 | 0°♍ | |
| | 11013 Apr 05 23:32 | 30°♒♌ | | evening rise | 11015 Sep 27 18:31 | 24°♍45'35 | |
| direct | 11013 Apr 13 05:32 | 28°♒55'00 | | | 11015 Oct 02 00:05 | 0°♎ | |
| | 11013 Apr 20 17:16 | 0°♓ | | | 11015 Oct 26 07:50 | 0°♏ | |
| greatest brilliancy | 11013 Apr 23 12:28 | 0°♓54'48 | -4.9m | | 11015 Nov 19 20:34 | 0°♐ | |
| | 11013 Jun 01 00:23 | 0°♑ | | desc. node | 11015 Dec 12 08:42 | 27°♐13'48 | |
| morning max el | 11013 Jun 02 17:20 | 1°♑42'20 | 46°56'31 | | 11015 Dec 14 16:00 | 0°♑ | |
| desc. node | 11013 Jun 26 20:43 | 27°♑33'41 | | | 11016 Jan 08 19:47 | 0°♒ | |
| | 11013 Jun 29 00:46 | 0°♒ | | | 11016 Feb 03 10:44 | 0°♓ | |
| | 11013 Jul 24 22:25 | 0°♏ | | | 11016 Feb 29 21:46 | 0°♑ | |
| | 11013 Aug 19 01:02 | 0°♋ | | evening max el | 11016 Mar 25 15:00 | 26°♑07'27 | 46°35'28 |
| | 11013 Sep 12 19:40 | 0°♌ | | | 11016 Mar 29 13:49 | 0°♒ | |
| | 11013 Oct 07 10:30 | 0°♍ | | asc. node | 11016 Apr 03 08:12 | 4°♒30'43 | |
| asc. node | 11013 Oct 17 15:46 | 12°♍29'46 | | greatest brilliancy | 11016 May 05 02:55 | 26°♒36'31 | -4.9m |
| | 11013 Oct 31 22:39 | 0°♎ | | retrograde | 11016 May 14 16:51 | 28°♒20'08 | |
| | 11013 Nov 25 08:31 | 0°♏ | | evening set | 11016 Jun 01 21:06 | 22°♒04'11 | |
| morning set | 11013 Dec 03 05:28 | 9°♏41'40 | | inferior conj | 11016 Jun 04 08:47 | 20°♒32'44 | 9°06'55 |
| | 11013 Dec 19 16:47 | 0°♐ | | minimum elong | 11016 Jun 04 12:31 | 20°♒26'59 | 9°06'08 |
| | | | | min. Earth dist. | 11016 Jun 04 14:31 | 20°♒23'54 | 0.27189 AU |
| superior conj | 11014 Jan 08 21:53 | 24°♐56'14 | 1°01'41 | morning rise | 11016 Jun 07 03:55 | 18°♒50'00 | |
| minimum elong | 11014 Jan 09 07:40 | 25°♐26'25 | 1°01'56 | direct | 11016 Jun 25 02:13 | 12°♒42'50 | |
| max. Earth dist. | 11014 Jan 08 09:17 | 24°♐17'24 | 1.73128 AU | greatest brilliancy | 11016 Jul 04 21:48 | 14°♒31'37 | -4.9m |
| | 11014 Jan 13 00:19 | 0°♑ | | desc. node | 11016 Jul 24 07:44 | 26°♒07'32 | |
| desc. node | 11014 Feb 06 07:32 | 0°♒00'17 | | | 11016 Jul 29 01:32 | 0°♏ | |
| | 11014 Feb 06 07:26 | 0°♒ | | morning max el | 11016 Aug 14 08:37 | 15°♏08'58 | 46°43'09 |
| evening rise | 11014 Feb 15 20:24 | 11°♒47'22 | | | 11016 Aug 28 16:44 | 0°♋ | |
| | 11014 Mar 02 13:49 | 0°♓ | | | 11016 Sep 24 17:01 | 0°♌ | |
| | 11014 Mar 26 19:08 | 0°♑ | | | 11016 Oct 20 13:28 | 0°♍ | |
| | 11014 Apr 20 00:08 | 0°♒ | | asc. node | 11016 Nov 14 04:57 | 29°♍15'07 | |
| | 11014 May 14 07:12 | 0°♏ | | | 11016 Nov 14 19:56 | 0°♎ | |
| asc. node | 11014 May 30 03:29 | 19°♏24'59 | | | 11016 Dec 09 17:09 | 0°♏ | |
| | 11014 Jun 07 20:24 | 0°♋ | | | 11017 Jan 03 07:43 | 0°♐ | |
| | 11014 Jul 02 22:14 | 0°♌ | | | 11017 Jan 27 17:44 | 0°♑ | |
| | 11014 Jul 29 01:47 | 0°♍ | | morning set | 11017 Feb 10 03:39 | 16°♑33'09 | |
| evening max el | 11014 Aug 20 13:49 | 23°♍48'23 | 46°22'10 | | 11017 Feb 21 00:34 | 0°♒ | |
| | 11014 Aug 26 23:24 | 0°♎ | | desc. node | 11017 Mar 05 20:47 | 15°♒55'12 | |
| desc. node | 11014 Sep 19 02:28 | 18°♎32'51 | | | 11017 Mar 17 04:41 | 0°♓ | |
| greatest brilliancy | 11014 Sep 28 10:21 | 23°♎15'28 | -4.8m | max. Earth dist. | 11017 Mar 17 13:36 | 0°♓27'46 | 1.72198 AU |
| retrograde | 11014 Oct 09 09:19 | 25°♎26'41 | | | | | |
| evening set | 11014 Oct 26 16:00 | 19°♎44'05 | | superior conj | 11017 Mar 20 21:57 | 4°♓37'47 | -0°35'33 |
| min. Earth dist. | 11014 Oct 30 04:10 | 17°♎34'49 | 0.28794 AU | minimum elong | 11017 Mar 20 13:53 | 4°♓12'39 | 0°35'10 |
| inferior conj | 11014 Oct 30 19:52 | 17°♎10'14 | -8°03'15 | | 11017 Apr 10 06:09 | 0°♑ | |
| minimum elong | 11014 Oct 30 12:28 | 17°♎21'50 | 8°01'59 | evening rise | 11017 Apr 29 08:34 | 23°♑53'40 | |
| morning rise | 11014 Nov 03 09:12 | 14°♎58'48 | | | 11017 May 04 05:35 | 0°♒ | |
| direct | 11014 Nov 21 05:02 | 9°♎01'48 | | | 11017 May 28 04:32 | 0°♏ | |
| greatest brilliancy | 11014 Nov 30 23:59 | 10°♎46'37 | -4.7m | | 11017 Jun 21 05:20 | 0°♋ | |

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| asc. node | 11017 Jun 26 15:09 | 6°♌43'29 | | asc. node | 11019 Dec 12 17:17 | 17°♍23'36 | |
| | 11017 Jul 15 10:35 | 0°♍ | | | 11019 Dec 23 16:14 | 0°♌ | |
| | 11017 Aug 08 23:30 | 0°♎ | | | 11020 Jan 18 02:55 | 0°♍ | |
| | 11017 Sep 03 01:21 | 0°♏ | | | 11020 Feb 11 23:53 | 0°♎ | |
| | 11017 Sep 29 03:18 | 0°♐ | | | 11020 Mar 07 12:19 | 0°♏ | |
| desc. node | 11017 Oct 16 12:43 | 18°♐52'24 | | | 11020 Mar 31 18:53 | 0°♐ | |
| | 11017 Oct 27 11:02 | 0°♑ | | desc. node | 11020 Apr 02 10:21 | 2°♐02'32 | |
| evening max el | 11017 Oct 30 10:26 | 2°♑53'59 | 45°51'09 | morning set | 11020 Apr 24 03:28 | 29°♐05'38 | |
| | 11017 Dec 05 07:25 | 0°♒ | | | 11020 Apr 24 20:52 | 0°♑ | |
| greatest brilliancy | 11017 Dec 08 15:18 | 1°♒17'27 | -4.7m | | 11020 May 18 19:31 | 0°♒ | |
| retrograde | 11017 Dec 18 08:10 | 3°♒00'31 | | max. Earth dist. | 11020 Jun 03 02:28 | 19°♒12'19 | 1.71323 AU |
| | 11017 Dec 30 17:34 | 30°♒ | | | | | |
| evening set | 11018 Jan 04 04:21 | 27°♒38'05 | | superior conj | 11020 Jun 03 12:39 | 19°♒44'17 | -1°26'34 |
| inferior conj | 11018 Jan 08 18:08 | 24°♒50'04 | -6°19'04 | minimum elong | 11020 Jun 03 16:24 | 19°♒56'05 | 1°27'10 |
| minimum elong | 11018 Jan 09 04:16 | 24°♒34'09 | 6°16'22 | | 11020 Jun 11 16:36 | 0°♓ | |
| min. Earth dist. | 11018 Jan 09 09:19 | 24°♒26'14 | 0.28736 AU | | 11020 Jul 05 14:08 | 0°♑ | |
| morning rise | 11018 Jan 14 03:48 | 21°♒32'15 | | evening rise | 11020 Jul 13 22:49 | 10°♑28'28 | |
| direct | 11018 Jan 30 03:03 | 16°♒34'42 | | asc. node | 11020 Jul 24 03:34 | 23°♑13'22 | |
| asc. node | 11018 Feb 06 13:34 | 17°♒37'05 | | | 11020 Jul 29 13:54 | 0°♒ | |
| greatest brilliancy | 11018 Feb 10 04:25 | 18°♒48'32 | -4.8m | | 11020 Aug 22 17:17 | 0°♓ | |
| | 11018 Feb 28 15:42 | 0°♓ | | | 11020 Sep 16 01:59 | 0°♏ | |
| morning max el | 11018 Mar 20 19:48 | 18°♓06'47 | 46°16'41 | | 11020 Oct 10 18:52 | 0°♐ | |
| | 11018 Apr 01 09:22 | 0°♑ | | | 11020 Nov 05 00:37 | 0°♑ | |
| | 11018 Apr 28 08:36 | 0°♒ | | desc. node | 11020 Nov 12 23:17 | 9°♒15'42 | |
| | 11018 May 23 19:29 | 0°♓ | | | 11020 Dec 01 03:06 | 0°♓ | |
| desc. node | 11018 May 29 10:39 | 6°♓46'33 | | | 11020 Dec 28 20:09 | 0°♑ | |
| | 11018 Jun 17 13:06 | 0°♒ | | evening max el | 11021 Jan 09 20:24 | 12°♑00'52 | 45°57'55 |
| | 11018 Jul 11 21:59 | 0°♓ | | | 11021 Jan 30 11:16 | 0°♒ | |
| | 11018 Aug 05 03:12 | 0°♑ | | greatest brilliancy | 11021 Feb 18 01:45 | 10°♒42'56 | -4.8m |
| | 11018 Aug 29 07:42 | 0°♒ | | retrograde | 11021 Feb 28 00:10 | 12°♒31'41 | |
| asc. node | 11018 Sep 19 04:12 | 25°♒50'54 | | asc. node | 11021 Mar 06 00:04 | 11°♒48'05 | |
| morning set | 11018 Sep 22 11:18 | 29°♒55'57 | | evening set | 11021 Mar 14 16:43 | 8°♒16'53 | |
| | 11018 Sep 22 12:37 | 0°♓ | | inferior conj | 11021 Mar 20 20:46 | 4°♒37'07 | 3°40'34 |
| | 11018 Oct 16 18:06 | 0°♏ | | minimum elong | 11021 Mar 20 12:55 | 4°♒49'17 | 3°38'16 |
| | | | | min. Earth dist. | 11021 Mar 20 23:13 | 4°♒33'19 | 0.27596 AU |
| superior conj | 11018 Oct 30 02:06 | 16°♏29'47 | 1°18'43 | morning rise | 11021 Mar 26 08:52 | 1°♒19'00 | |
| minimum elong | 11018 Oct 29 18:48 | 16°♏07'11 | 1°18'59 | | 11021 Mar 28 20:28 | 30°♒ | |
| max. Earth dist. | 11018 Oct 31 10:36 | 18°♏10'13 | 1.73004 AU | direct | 11021 Apr 10 20:42 | 26°♒36'43 | |
| | 11018 Nov 10 00:21 | 0°♐ | | greatest brilliancy | 11021 Apr 21 03:18 | 28°♒36'18 | -4.9m |
| | 11018 Dec 04 08:06 | 0°♑ | | | 11021 Apr 24 11:02 | 0°♒ | |
| evening rise | 11018 Dec 05 19:37 | 1°♑49'16 | | morning max el | 11021 May 31 07:38 | 29°♒22'41 | 46°55'39 |
| | 11018 Dec 28 18:11 | 0°♒ | | | 11021 May 31 22:27 | 0°♓ | |
| desc. node | 11019 Jan 08 20:39 | 13°♒35'42 | | desc. node | 11021 Jun 25 22:37 | 26°♓53'40 | |
| | 11019 Jan 22 06:48 | 0°♑ | | | 11021 Jun 28 16:35 | 0°♒ | |
| | 11019 Feb 15 21:37 | 0°♒ | | | 11021 Jul 24 11:58 | 0°♓ | |
| | 11019 Mar 12 15:03 | 0°♓ | | | 11021 Aug 18 13:24 | 0°♑ | |
| | 11019 Apr 06 14:03 | 0°♒ | | | 11021 Sep 12 07:18 | 0°♒ | |
| asc. node | 11019 May 01 18:29 | 29°♒36'06 | | | 11021 Oct 06 21:36 | 0°♓ | |
| | 11019 May 02 02:46 | 0°♓ | | asc. node | 11021 Oct 16 17:46 | 12°♓02'21 | |
| | 11019 May 29 01:32 | 0°♑ | | | 11021 Oct 31 09:24 | 0°♏ | |
| evening max el | 11019 Jun 07 13:21 | 9°♑49'11 | 46°51'45 | | 11021 Nov 24 19:02 | 0°♐ | |
| | 11019 Jun 29 21:08 | 0°♒ | | morning set | 11021 Nov 30 22:32 | 7°♐34'07 | |
| greatest brilliancy | 11019 Jul 17 10:28 | 10°♒27'04 | -4.9m | | 11021 Dec 19 03:13 | 0°♑ | |
| retrograde | 11019 Jul 27 23:30 | 12°♒32'28 | | max. Earth dist. | 11022 Jan 06 03:24 | 22°♒13'00 | 1.73139 AU |
| evening set | 11019 Aug 11 18:28 | 8°♒13'58 | | | | | |
| inferior conj | 11019 Aug 17 21:23 | 4°♒37'46 | 0°59'28 | superior conj | 11022 Jan 06 14:29 | 22°♒47'12 | 1°03'58 |
| minimum elong | 11019 Aug 17 23:41 | 4°♒34'15 | 0°58'25 | minimum elong | 11022 Jan 07 00:12 | 23°♒17'11 | 1°04'16 |
| min. Earth dist. | 11019 Aug 17 14:15 | 4°♒48'42 | 0.27312 AU | | 11022 Jan 12 10:46 | 0°♓ | |
| desc. node | 11019 Aug 21 18:11 | 2°♒18'04 | | desc. node | 11022 Feb 05 09:25 | 29°♒33'35 | |
| morning rise | 11019 Aug 24 05:19 | 0°♒55'32 | | | 11022 Feb 05 17:58 | 0°♑ | |
| | 11019 Aug 26 01:02 | 30°♒ | | evening rise | 11022 Feb 13 11:42 | 9°♑33'38 | |
| direct | 11019 Sep 07 16:42 | 26°♑49'20 | | | 11022 Mar 02 00:30 | 0°♒ | |
| greatest brilliancy | 11019 Sep 17 12:51 | 28°♑35'57 | -4.8m | | 11022 Mar 26 06:02 | 0°♓ | |
| | 11019 Sep 21 01:40 | 0°♒ | | | 11022 Apr 19 11:21 | 0°♒ | |
| morning max el | 11019 Oct 26 21:59 | 27°♒19'35 | 45°58'20 | | 11022 May 13 18:52 | 0°♓ | |
| | 11019 Oct 29 15:59 | 0°♓ | | asc. node | 11022 May 29 05:24 | 18°♓54'04 | |
| | 11019 Nov 27 05:32 | 0°♏ | | | 11022 Jun 07 08:47 | 0°♑ | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 11022 Jul 02 11:54 | 0°♍ | | | 11025 Jan 27 04:29 | 0°♋ | |
| | 11022 Jul 28 18:12 | 0°♊ | | morning set | 11025 Feb 07 19:13 | 14°♋19'48 | |
| evening max el | 11022 Aug 18 05:12 | 21°♊33'22 | 46°23'19 | | 11025 Feb 20 11:15 | 0°♋ | |
| | 11022 Aug 27 00:37 | 0°♋ | | desc. node | 11025 Mar 04 22:44 | 15°♋28'01 | |
| desc. node | 11022 Sep 18 04:35 | 17°♋11'38 | | max. Earth dist. | 11025 Mar 15 05:53 | 28°♋15'45 | 1.72243 AU |
| greatest brilliancy | 11022 Sep 26 02:09 | 21°♋03'10 | -4.8m | | 11025 Mar 16 15:24 | 0°♋ | |
| retrograde | 11022 Oct 07 00:48 | 23°♋14'09 | | | | | |
| evening set | 11022 Oct 24 04:23 | 17°♋37'08 | | superior conj | 11025 Mar 18 11:17 | 2°♋16'31 | -0°32'08 |
| inferior conj | 11022 Oct 28 11:28 | 14°♋58'23 | -7°55'11 | minimum elong | 11025 Mar 18 03:54 | 1°♋53'31 | 0°31'45 |
| minimum elong | 11022 Oct 28 03:31 | 15°♋10'51 | 7°53'46 | | 11025 Apr 09 16:58 | 0°♋ | |
| min. Earth dist. | 11022 Oct 27 19:05 | 15°♋24'04 | 0.28750 AU | evening rise | 11025 Apr 26 20:49 | 21°♋27'42 | |
| morning rise | 11022 Nov 01 02:55 | 12°♋43'38 | | | 11025 May 03 16:30 | 0°♋ | |
| direct | 11022 Nov 18 20:24 | 6°♋50'53 | | | 11025 May 27 15:35 | 0°♋ | |
| greatest brilliancy | 11022 Nov 28 14:14 | 8°♋34'27 | -4.7m | | 11025 Jun 20 16:34 | 0°♋ | |
| | 11022 Dec 30 07:03 | 0°♋ | | asc. node | 11025 Jun 25 17:01 | 6°♋14'11 | |
| morning max el | 11023 Jan 06 16:30 | 6°♋55'22 | 45°42'44 | | 11025 Jul 14 22:09 | 0°♋ | |
| asc. node | 11023 Jan 09 04:49 | 9°♋22'20 | | | 11025 Aug 08 11:35 | 0°♋ | |
| | 11023 Jan 29 01:17 | 0°♋ | | | 11025 Sep 02 14:27 | 0°♋ | |
| | 11023 Feb 24 16:16 | 0°♋ | | | 11025 Sep 28 18:33 | 0°♋ | |
| | 11023 Mar 22 01:43 | 0°♋ | | desc. node | 11025 Oct 15 14:40 | 18°♋10'08 | |
| | 11023 Apr 15 19:42 | 0°♋ | | | 11025 Oct 27 08:26 | 0°♋ | |
| desc. node | 11023 Apr 30 23:41 | 18°♋38'06 | | evening max el | 11025 Oct 28 01:00 | 0°♋40'05 | 45°51'39 |
| | 11023 May 10 04:14 | 0°♋ | | greatest brilliancy | 11025 Dec 06 05:43 | 29°♋05'11 | -4.7m |
| | 11023 Jun 03 06:47 | 0°♋ | | | 11025 Dec 09 08:43 | 0°♋ | |
| | 11023 Jun 27 06:10 | 0°♋ | | retrograde | 11025 Dec 16 00:02 | 0°♋49'31 | |
| morning set | 11023 Jul 09 16:04 | 15°♋33'20 | | | 11025 Dec 22 10:24 | 30°♋ | |
| | 11023 Jul 21 04:51 | 0°♋ | | evening set | 11026 Jan 01 22:51 | 25°♋22'09 | |
| | 11023 Aug 14 04:37 | 0°♋ | | inferior conj | 11026 Jan 06 09:54 | 22°♋38'13 | -6°32'52 |
| | | | | minimum elong | 11026 Jan 06 20:00 | 22°♋22'23 | 6°30'15 |
| superior conj | 11023 Aug 18 01:53 | 4°♋51'01 | -0°08'49 | min. Earth dist. | 11026 Jan 07 00:33 | 22°♋15'15 | 0.28776 AU |
| minimum elong | 11023 Aug 18 04:06 | 4°♋57'56 | 0°09'02 | morning rise | 11026 Jan 11 16:50 | 19°♋24'38 | |
| behind sun begin | 11023 Aug 17 07:29 | 3°♋53'35 | | direct | 11026 Jan 27 19:03 | 14°♋22'23 | |
| behind sun end | 11023 Aug 19 00:44 | 6°♋02'17 | | asc. node | 11026 Feb 05 15:38 | 15°♋50'05 | |
| max. Earth dist. | 11023 Aug 20 21:49 | 8°♋22'52 | 1.71992 AU | greatest brilliancy | 11026 Feb 07 20:25 | 16°♋36'28 | -4.8m |
| asc. node | 11023 Aug 21 16:43 | 9°♋21'46 | | | 11026 Mar 01 02:08 | 0°♋ | |
| | 11023 Sep 07 06:23 | 0°♋ | | morning max el | 11026 Mar 18 11:49 | 15°♋53'24 | 46°15'08 |
| evening rise | 11023 Sep 25 10:22 | 22°♋33'02 | | | 11026 Apr 01 03:38 | 0°♋ | |
| | 11023 Oct 01 10:44 | 0°♋ | | | 11026 Apr 27 23:10 | 0°♋ | |
| | 11023 Oct 25 18:38 | 0°♋ | | | 11026 May 23 08:28 | 0°♋ | |
| | 11023 Nov 19 07:38 | 0°♋ | | desc. node | 11026 May 28 12:28 | 6°♋13'33 | |
| desc. node | 11023 Dec 11 10:31 | 26°♋44'46 | | | 11026 Jun 17 01:15 | 0°♋ | |
| | 11023 Dec 14 03:33 | 0°♋ | | | 11026 Jul 11 09:37 | 0°♋ | |
| | 11024 Jan 08 08:09 | 0°♋ | | | 11026 Aug 04 14:29 | 0°♋ | |
| | 11024 Feb 03 00:33 | 0°♋ | | | 11026 Aug 28 18:43 | 0°♋ | |
| | 11024 Feb 29 14:31 | 0°♋ | | asc. node | 11026 Sep 18 06:10 | 25°♋23'24 | |
| evening max el | 11024 Mar 23 03:11 | 23°♋41'49 | 46°34'14 | morning set | 11026 Sep 20 02:45 | 27°♋41'33 | |
| | 11024 Mar 29 14:58 | 0°♋ | | | 11026 Sep 21 23:26 | 0°♋ | |
| asc. node | 11024 Apr 02 10:16 | 3°♋32'00 | | | 11026 Oct 16 04:48 | 0°♋ | |
| greatest brilliancy | 11024 May 02 16:28 | 24°♋12'39 | -4.9m | | | | |
| retrograde | 11024 May 12 05:21 | 25°♋55'49 | | superior conj | 11026 Oct 27 19:04 | 14°♋20'50 | 1°17'19 |
| evening set | 11024 May 30 11:06 | 19°♋38'18 | | minimum elong | 11026 Oct 27 11:16 | 13°♋56'41 | 1°17'33 |
| inferior conj | 11024 Jun 01 21:50 | 18°♋08'23 | 9°10'18 | max. Earth dist. | 11026 Oct 29 05:51 | 16°♋08'23 | 1.72985 AU |
| minimum elong | 11024 Jun 02 00:35 | 18°♋04'09 | 9°09'36 | | 11026 Nov 09 11:01 | 0°♋ | |
| min. Earth dist. | 11024 Jun 02 03:30 | 17°♋59'38 | 0.27199 AU | evening rise | 11026 Dec 03 12:35 | 29°♋40'40 | |
| morning rise | 11024 Jun 04 14:02 | 16°♋30'03 | | | 11026 Dec 03 18:52 | 0°♋ | |
| direct | 11024 Jun 22 14:38 | 10°♋17'59 | | | 11026 Dec 28 05:08 | 0°♋ | |
| greatest brilliancy | 11024 Jul 02 11:21 | 12°♋07'30 | -4.9m | desc. node | 11027 Jan 07 22:34 | 13°♋07'44 | |
| desc. node | 11024 Jul 23 09:40 | 24°♋56'35 | | | 11027 Jan 21 18:04 | 0°♋ | |
| | 11024 Jul 29 09:15 | 0°♋ | | | 11027 Feb 15 09:20 | 0°♋ | |
| morning max el | 11024 Aug 11 21:28 | 12°♋44'43 | 46°44'34 | | 11027 Mar 12 03:24 | 0°♋ | |
| | 11024 Aug 28 10:57 | 0°♋ | | | 11027 Apr 06 03:27 | 0°♋ | |
| | 11024 Sep 24 07:30 | 0°♋ | | asc. node | 11027 Apr 30 20:22 | 28°♋57'32 | |
| | 11024 Oct 20 02:16 | 0°♋ | | | 11027 May 01 18:07 | 0°♋ | |
| asc. node | 11024 Nov 13 06:46 | 28°♋44'59 | | | 11027 May 28 21:29 | 0°♋ | |
| | 11024 Nov 14 07:47 | 0°♋ | | evening max el | 11027 Jun 05 04:03 | 7°♋28'38 | 46°52'04 |
| | 11024 Dec 09 04:26 | 0°♋ | | | 11027 Jun 30 15:42 | 0°♋ | |
| | 11025 Jan 02 18:40 | 0°♋ | | greatest brilliancy | 11027 Jul 15 00:45 | 8°♋04'42 | -4.9m |

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|---------------------|--------------------|---------------------------------|------------|---------------------|--------------------|-------------------------|------------|
| retrograde | 11027 Jul 25 13:58 | 10° \mathbb{M} 09'58 | | superior conj | 11030 Jan 04 07:22 | 20° \mathcal{Z} 38'00 | 1°06'09 |
| evening set | 11027 Aug 09 09:29 | 5° \mathbb{M} 49'49 | | minimum elong | 11030 Jan 04 16:58 | 21° \mathcal{Z} 07'36 | 1°06'27 |
| inferior conj | 11027 Aug 15 10:47 | 2° \mathbb{M} 15'44 | 1°22'56 | max. Earth dist. | 11030 Jan 03 20:50 | 20° \mathcal{Z} 05'30 | 1.73151 AU |
| minimum elong | 11027 Aug 15 13:58 | 2° \mathbb{M} 10'52 | 1°21'34 | | 11030 Jan 11 21:33 | 0° \approx | |
| min. Earth dist. | 11027 Aug 15 04:18 | 2° \mathbb{M} 25'40 | 0.27278 AU | desc. node | 11030 Feb 04 11:24 | 29° \approx 06'08 | |
| | 11027 Aug 19 05:02 | 30° \mathcal{R} \mathcal{Q} | | | 11030 Feb 05 04:52 | 0° \mathcal{H} | |
| desc. node | 11027 Aug 20 20:18 | 29° \mathcal{Q} 04'17 | | evening rise | 11030 Feb 11 03:10 | 7° \mathcal{H} 19'19 | |
| morning rise | 11027 Aug 21 18:58 | 28° \mathcal{Q} 33'37 | | | 11030 Mar 01 11:34 | 0° \mathcal{Y} | |
| direct | 11027 Sep 05 06:24 | 24° \mathcal{Q} 27'47 | | | 11030 Mar 25 17:23 | 0° \mathcal{B} | |
| greatest brilliancy | 11027 Sep 15 01:48 | 26° \mathcal{Q} 14'23 | -4.8m | | 11030 Apr 18 23:03 | 0° \mathbb{I} | |
| | 11027 Sep 23 06:37 | 0° \mathbb{M} | | | 11030 May 13 07:02 | 0° \mathcal{G} | |
| morning max el | 11027 Oct 24 12:58 | 25° \mathbb{M} 04'24 | 45°59'42 | asc. node | 11030 May 28 07:17 | 18° \mathcal{G} 21'32 | |
| | 11027 Oct 29 13:34 | 0° \mathcal{L} | | | 11030 Jun 06 21:41 | 0° \mathcal{Q} | |
| | 11027 Nov 26 21:02 | 0° \mathbb{M} | | | 11030 Jul 02 02:08 | 0° \mathbb{M} | |
| asc. node | 11027 Dec 11 19:16 | 16° \mathbb{M} 49'16 | | | 11030 Jul 28 11:22 | 0° \mathcal{L} | |
| | 11027 Dec 23 05:26 | 0° \mathcal{A} | | evening max el | 11030 Aug 15 19:36 | 19° \mathcal{L} 14'46 | 46°24'39 |
| | 11028 Jan 17 15:03 | 0° \mathcal{Z} | | | 11030 Aug 27 03:42 | 0° \mathbb{M} | |
| | 11028 Feb 11 11:27 | 0° \approx | | desc. node | 11030 Sep 17 06:31 | 15° \mathbb{M} 46'31 | |
| | 11028 Mar 06 23:37 | 0° \mathcal{H} | | greatest brilliancy | 11030 Sep 23 18:10 | 18° \mathbb{M} 50'06 | -4.8m |
| | 11028 Mar 31 06:00 | 0° \mathcal{Y} | | retrograde | 11030 Oct 04 16:09 | 21° \mathbb{M} 00'55 | |
| desc. node | 11028 Apr 01 12:14 | 1° \mathcal{Y} 33'51 | | evening set | 11030 Oct 21 16:45 | 15° \mathbb{M} 29'19 | |
| morning set | 11028 Apr 21 14:52 | 26° \mathcal{Y} 36'55 | | min. Earth dist. | 11030 Oct 25 10:20 | 13° \mathbb{M} 12'06 | 0.28706 AU |
| | 11028 Apr 24 07:54 | 0° \mathcal{B} | | inferior conj | 11030 Oct 26 03:07 | 12° \mathbb{M} 45'47 | -7°46'19 |
| | 11028 May 18 06:30 | 0° \mathbb{I} | | minimum elong | 11030 Oct 25 18:41 | 12° \mathbb{M} 59'01 | 7°44'46 |
| | | | | morning rise | 11030 Oct 29 20:52 | 10° \mathbb{M} 27'30 | |
| superior conj | 11028 May 31 23:55 | 17° \mathbb{I} 14'20 | -1°27'07 | direct | 11030 Nov 16 11:20 | 4° \mathbb{M} 39'02 | |
| minimum elong | 11028 Jun 01 02:36 | 17° \mathbb{I} 22'49 | 1°27'42 | greatest brilliancy | 11030 Nov 26 05:07 | 6° \mathbb{M} 22'06 | -4.7m |
| max. Earth dist. | 11028 May 31 11:23 | 16° \mathbb{I} 34'58 | 1.71326 AU | | 11030 Dec 30 08:20 | 0° \mathcal{A} | |
| | 11028 Jun 11 03:35 | 0° \mathcal{G} | | morning max el | 11031 Jan 04 06:10 | 4° \mathcal{A} 38'34 | 45°42'29 |
| | 11028 Jul 05 01:11 | 0° \mathcal{Q} | | asc. node | 11031 Jan 08 06:50 | 8° \mathcal{A} 35'09 | |
| evening rise | 11028 Jul 11 10:24 | 7° \mathcal{Q} 59'58 | | | 11031 Jan 28 17:40 | 0° \mathcal{Z} | |
| asc. node | 11028 Jul 23 05:34 | 22° \mathcal{Q} 45'02 | | | 11031 Feb 24 05:55 | 0° \approx | |
| | 11028 Jul 29 01:01 | 0° \mathbb{M} | | | 11031 Mar 21 14:09 | 0° \mathcal{H} | |
| | 11028 Aug 22 04:31 | 0° \mathcal{L} | | | 11031 Apr 15 07:31 | 0° \mathcal{Y} | |
| | 11028 Sep 15 13:28 | 0° \mathbb{M} | | desc. node | 11031 Apr 30 01:31 | 18° \mathcal{Y} 07'56 | |
| | 11028 Oct 10 06:50 | 0° \mathcal{A} | | | 11031 May 09 15:43 | 0° \mathcal{B} | |
| | 11028 Nov 04 13:32 | 0° \mathcal{Z} | | | 11031 Jun 02 18:05 | 0° \mathbb{I} | |
| desc. node | 11028 Nov 12 01:10 | 8° \mathcal{Z} 42'35 | | | 11031 Jun 26 17:18 | 0° \mathcal{G} | |
| | 11028 Nov 30 17:54 | 0° \approx | | morning set | 11031 Jul 07 04:15 | 13° \mathcal{G} 06'26 | |
| | 11028 Dec 28 15:33 | 0° \mathcal{H} | | | 11031 Jul 20 15:51 | 0° \mathcal{Q} | |
| evening max el | 11029 Jan 07 11:25 | 9° \mathcal{H} 45'59 | 45°56'50 | | 11031 Aug 13 15:31 | 0° \mathbb{M} | |
| | 11029 Jan 31 05:12 | 0° \mathcal{Y} | | | | | |
| greatest brilliancy | 11029 Feb 15 15:57 | 8° \mathcal{Y} 23'56 | -4.8m | superior conj | 11031 Aug 15 15:18 | 2° \mathbb{M} 29'09 | -0°12'30 |
| retrograde | 11029 Feb 25 13:36 | 10° \mathcal{Y} 11'43 | | minimum elong | 11031 Aug 15 18:25 | 2° \mathbb{M} 38'51 | 0°12'41 |
| asc. node | 11029 Mar 05 02:07 | 9° \mathcal{Y} 03'25 | | behind sun begin | 11031 Aug 15 02:57 | 1° \mathbb{M} 50'35 | |
| evening set | 11029 Mar 12 05:34 | 5° \mathcal{Y} 58'46 | | behind sun end | 11031 Aug 16 09:53 | 3° \mathbb{M} 27'07 | |
| inferior conj | 11029 Mar 18 10:49 | 2° \mathcal{Y} 16'59 | 3°19'15 | max. Earth dist. | 11031 Aug 18 09:19 | 5° \mathbb{M} 55'04 | 1.71949 AU |
| minimum elong | 11029 Mar 18 03:38 | 2° \mathcal{Y} 28'09 | 3°17'08 | asc. node | 11031 Aug 20 18:36 | 8° \mathbb{M} 53'42 | |
| min. Earth dist. | 11029 Mar 18 13:58 | 2° \mathcal{Y} 12'05 | 0.27622 AU | | 11031 Sep 06 17:15 | 0° \mathcal{L} | |
| | 11029 Mar 22 04:20 | 30° \mathcal{R} \mathcal{H} | | evening rise | 11031 Sep 23 02:03 | 20° \mathcal{L} 19'12 | |
| morning rise | 11029 Mar 24 01:24 | 28° \mathcal{H} 55'00 | | | 11031 Sep 30 21:38 | 0° \mathbb{M} | |
| direct | 11029 Apr 08 11:09 | 24° \mathcal{H} 16'18 | | | 11031 Oct 25 05:40 | 0° \mathcal{A} | |
| greatest brilliancy | 11029 Apr 18 18:29 | 26° \mathcal{H} 16'08 | -4.9m | | 11031 Nov 18 18:56 | 0° \mathcal{Z} | |
| | 11029 Apr 26 12:53 | 0° \mathcal{Y} | | desc. node | 11031 Dec 10 12:30 | 26° \mathcal{Z} 15'30 | |
| morning max el | 11029 May 28 20:55 | 26° \mathcal{Y} 58'42 | 46°54'55 | | 11031 Dec 13 15:21 | 0° \approx | |
| | 11029 May 31 20:20 | 0° \mathcal{B} | | | 11032 Jan 07 20:48 | 0° \mathcal{H} | |
| desc. node | 11029 Jun 25 00:37 | 26° \mathcal{B} 12'51 | | | 11032 Feb 02 14:42 | 0° \mathcal{Y} | |
| | 11029 Jun 28 08:39 | 0° \mathbb{I} | | | 11032 Feb 29 07:46 | 0° \mathcal{B} | |
| | 11029 Jul 24 01:48 | 0° \mathcal{G} | | evening max el | 11032 Mar 20 15:27 | 21° \mathcal{B} 16'09 | 46°32'55 |
| | 11029 Aug 18 02:04 | 0° \mathcal{Q} | | | 11032 Mar 29 17:45 | 0° \mathbb{I} | |
| | 11029 Sep 11 19:14 | 0° \mathbb{M} | | asc. node | 11032 Apr 01 12:07 | 2° \mathbb{I} 30'50 | |
| | 11029 Oct 06 09:03 | 0° \mathcal{L} | | greatest brilliancy | 11032 Apr 30 05:11 | 21° \mathbb{I} 47'05 | -4.9m |
| asc. node | 11029 Oct 15 19:33 | 11° \mathcal{L} 33'12 | | retrograde | 11032 May 09 18:06 | 23° \mathbb{I} 30'38 | |
| | 11029 Oct 30 20:30 | 0° \mathbb{M} | | evening set | 11032 May 28 00:20 | 17° \mathbb{I} 12'06 | |
| | 11029 Nov 24 05:56 | 0° \mathcal{A} | | inferior conj | 11032 May 30 10:43 | 15° \mathbb{I} 42'51 | 9°12'34 |
| morning set | 11029 Nov 28 15:44 | 5° \mathcal{A} 25'50 | | minimum elong | 11032 May 30 12:29 | 15° \mathbb{I} 40'07 | 9°11'55 |
| | 11029 Dec 18 14:01 | 0° \mathcal{Z} | | min. Earth dist. | 11032 May 30 16:07 | 15° \mathbb{I} 34'32 | 0.27216 AU |

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|---------------------|--------------------|----------------------|------------|---------------------|--------------------|---------------------------|------------|
| morning rise | 11032 Jun 02 00:36 | 14° Π 08'08 | | desc. node | 11035 Jan 07 00:33 | 12° \approx 40'35 | |
| direct | 11032 Jun 20 03:17 | 7° Π 51'47 | | | 11035 Jan 21 05:09 | 0° H | |
| greatest brilliancy | 11032 Jun 30 00:35 | 9° Π 42'00 | -4.9m | | 11035 Feb 14 20:52 | 0° Y | |
| desc. node | 11032 Jul 22 11:45 | 23° Π 46'50 | | | 11035 Mar 11 15:36 | 0° B | |
| | 11032 Jul 29 15:08 | 0° E | | | 11035 Apr 05 16:43 | 0° Π | |
| morning max el | 11032 Aug 09 11:12 | 10° E 21'41 | 46°45'59 | asc. node | 11035 Apr 29 22:24 | 28° Π 19'55 | |
| | 11032 Aug 28 05:03 | 0° Ω | | | 11035 May 01 09:23 | 0° E | |
| | 11032 Sep 23 22:04 | 0° M | | | 11035 May 28 17:39 | 0° Ω | |
| asc. node | 11032 Oct 19 15:08 | 0° E | | evening max el | 11035 Jun 02 19:04 | 5° Ω 10'01 | 46°52'19 |
| | 11032 Nov 12 08:41 | 28° E 14'59 | | | 11035 Jul 01 16:05 | 0° M | |
| | 11032 Nov 13 19:41 | 0° M | | greatest brilliancy | 11035 Jul 12 15:32 | 5° M 44'21 | -4.9m |
| | 11032 Dec 08 15:45 | 0° A | | retrograde | 11035 Jul 23 04:22 | 7° M 48'43 | |
| | 11033 Jan 02 05:38 | 0° B | | evening set | 11035 Aug 07 00:52 | 3° M 26'59 | |
| | 11033 Jan 26 15:18 | 0° \approx | | | 11035 Aug 12 21:07 | 30° R Ω | |
| morning set | 11033 Feb 05 11:10 | 12° \approx 07'31 | | inferior conj | 11035 Aug 13 00:20 | 29° Ω 55'04 | 1°46'10 |
| | 11033 Feb 19 22:00 | 0° H | | minimum elong | 11035 Aug 13 04:23 | 29° Ω 48'52 | 1°44'30 |
| desc. node | 11033 Mar 04 00:36 | 15° H 00'31 | | min. Earth dist. | 11035 Aug 12 18:33 | 0° M 03'55 | 0.27249 AU |
| max. Earth dist. | 11033 Mar 12 23:43 | 26° H 08'32 | 1.72283 AU | morning rise | 11035 Aug 19 08:28 | 26° Ω 13'08 | |
| | | | | desc. node | 11035 Aug 19 22:13 | 25° Ω 55'12 | |
| superior conj | 11033 Mar 16 01:01 | 29° H 56'26 | -0°28'41 | direct | 11035 Sep 02 20:18 | 22° Ω 07'42 | |
| minimum elong | 11033 Mar 15 18:21 | 29° H 35'41 | 0°28'18 | greatest brilliancy | 11035 Sep 12 14:50 | 23° Ω 53'51 | -4.8m |
| | 11033 Mar 16 02:10 | 0° Y | | | 11035 Sep 24 16:46 | 0° M | |
| | 11033 Apr 09 03:47 | 0° B | | morning max el | 11035 Oct 22 03:27 | 22° M 48'40 | 46°00'55 |
| evening rise | 11033 Apr 24 09:29 | 19° B 03'11 | | | 11035 Oct 29 10:05 | 0° E | |
| | 11033 May 03 03:25 | 0° Π | | | 11035 Nov 26 12:02 | 0° M | |
| | 11033 May 27 02:39 | 0° E | | asc. node | 11035 Dec 10 21:16 | 16° M 15'59 | |
| asc. node | 11033 Jun 20 03:53 | 0° Ω | | | 11035 Dec 22 18:16 | 0° A | |
| | 11033 Jun 24 19:02 | 5° Ω 45'12 | | | 11036 Jan 17 02:48 | 0° B | |
| | 11033 Jul 14 09:49 | 0° M | | | 11036 Feb 10 22:39 | 0° \approx | |
| | 11033 Aug 07 23:50 | 0° E | | | 11036 Mar 06 10:31 | 0° H | |
| | 11033 Sep 02 03:44 | 0° M | | | 11036 Mar 30 16:45 | 0° Y | |
| desc. node | 11033 Sep 28 10:05 | 0° A | | desc. node | 11036 Mar 31 14:00 | 1° Y 05'58 | |
| evening max el | 11033 Oct 14 16:36 | 17° A 27'15 | | morning set | 11036 Apr 19 02:29 | 24° Y 09'57 | |
| | 11033 Oct 25 16:27 | 28° A 28'23 | 45°52'25 | | 11036 Apr 23 18:34 | 0° B | |
| | 11033 Oct 27 06:39 | 0° B | | | 11036 May 17 17:09 | 0° Π | |
| greatest brilliancy | 11033 Dec 03 19:59 | 26° B 53'22 | -4.7m | max. Earth dist. | 11036 May 28 17:21 | 13° Π 49'29 | 1.71329 AU |
| retrograde | 11033 Dec 13 16:12 | 28° B 39'02 | | | | | |
| evening set | 11033 Dec 30 17:30 | 23° B 06'52 | | superior conj | 11036 May 29 11:30 | 14° Π 46'32 | -1°27'28 |
| inferior conj | 11034 Jan 04 01:47 | 20° B 26'54 | -6°46'04 | minimum elong | 11036 May 29 13:07 | 14° Π 51'37 | 1°28'04 |
| minimum elong | 11034 Jan 04 11:47 | 20° B 11'13 | 6°43'32 | | 11036 Jun 10 14:14 | 0° E | |
| min. Earth dist. | 11034 Jan 04 15:33 | 20° B 05'19 | 0.28813 AU | | 11036 Jul 04 11:50 | 0° Ω | |
| morning rise | 11034 Jan 09 05:49 | 17° B 17'42 | | evening rise | 11036 Jul 08 22:11 | 5° Ω 33'12 | |
| direct | 11034 Jan 25 11:35 | 12° B 10'50 | | asc. node | 11036 Jul 22 07:27 | 22° Ω 17'39 | |
| asc. node | 11034 Feb 04 17:39 | 14° B 07'22 | | | 11036 Jul 28 11:42 | 0° M | |
| greatest brilliancy | 11034 Feb 05 11:48 | 14° B 24'16 | -4.8m | | 11036 Aug 21 15:20 | 0° E | |
| | 11034 Mar 01 09:33 | 0° \approx | | | 11036 Sep 15 00:35 | 0° M | |
| morning max el | 11034 Mar 16 04:20 | 13° \approx 41'51 | 46°13'37 | | 11036 Oct 09 18:29 | 0° A | |
| | 11034 Mar 31 21:19 | 0° H | | | 11036 Nov 04 02:10 | 0° B | |
| | 11034 Apr 27 13:23 | 0° Y | | desc. node | 11036 Nov 11 03:11 | 8° B 10'44 | |
| | 11034 May 22 21:11 | 0° B | | | 11036 Nov 30 08:30 | 0° \approx | |
| desc. node | 11034 May 27 14:29 | 5° B 41'46 | | | 11036 Dec 28 11:04 | 0° H | |
| | 11034 Jun 16 13:09 | 0° Π | | evening max el | 11037 Jan 05 01:44 | 7° H 30'39 | 45°55'55 |
| | 11034 Jul 10 21:02 | 0° E | | | 11037 Feb 01 04:35 | 0° Y | |
| | 11034 Aug 04 01:36 | 0° Ω | | greatest brilliancy | 11037 Feb 13 06:48 | 6° Y 07'24 | -4.8m |
| | 11034 Aug 28 05:37 | 0° M | | retrograde | 11037 Feb 23 02:58 | 7° Y 53'55 | |
| asc. node | 11034 Sep 17 07:58 | 24° M 55'41 | | asc. node | 11037 Mar 04 03:59 | 6° Y 15'44 | |
| morning set | 11034 Sep 17 17:55 | 25° M 26'32 | | evening set | 11037 Mar 09 18:50 | 3° Y 42'13 | |
| | 11034 Sep 21 10:09 | 0° E | | inferior conj | 11037 Mar 16 01:08 | 29° H 59'03 | 2°57'44 |
| | 11034 Oct 15 15:23 | 0° M | | minimum elong | 11037 Mar 15 18:38 | 0° Y 09'09 | 2°55'50 |
| | | | | min. Earth dist. | 11037 Mar 16 05:17 | 29° H 52'35 | 0.27649 AU |
| superior conj | 11034 Oct 25 11:41 | 12° M 11'06 | 1°15'47 | | 11037 Mar 16 00:31 | 30° R H | |
| minimum elong | 11034 Oct 25 03:25 | 11° M 45'33 | 1°15'58 | morning rise | 11037 Mar 21 18:01 | 26° H 33'23 | |
| max. Earth dist. | 11034 Oct 27 01:32 | 14° M 08'10 | 1.72961 AU | direct | 11037 Apr 06 01:18 | 21° H 57'49 | |
| | 11034 Nov 08 21:33 | 0° A | | greatest brilliancy | 11037 Apr 16 10:27 | 23° H 58'41 | -4.9m |
| evening rise | 11034 Dec 01 05:20 | 27° A 31'57 | | | 11037 Apr 27 21:08 | 0° Y | |
| | 11034 Dec 03 05:27 | 0° B | | morning max el | 11037 May 26 10:00 | 24° Y 35'36 | 46°54'09 |
| | 11034 Dec 27 15:54 | 0° \approx | | | 11037 May 31 16:55 | 0° B | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| desc. node | 11037 Jun 24 02:35 | 25°♄33'39 | | | 11040 Feb 29 01:07 | 0°♄ | |
| | 11037 Jun 28 00:00 | 0°♄ | | evening max el | 11040 Mar 18 04:52 | 18°♄54'19 | 46°31'42 |
| | 11037 Jul 23 15:04 | 0°♄ | | | 11040 Mar 29 21:52 | 0°♄ | |
| | 11037 Aug 17 14:12 | 0°♄ | | asc. node | 11040 Mar 31 14:12 | 1°♄29'27 | |
| | 11037 Sep 11 06:39 | 0°♄ | | greatest brilliancy | 11040 Apr 27 17:25 | 19°♄22'03 | -4.9m |
| | 11037 Oct 05 19:58 | 0°♄ | | retrograde | 11040 May 07 07:27 | 21°♄06'34 | |
| asc. node | 11037 Oct 14 21:28 | 11°♄05'58 | | evening set | 11040 May 25 13:00 | 14°♄47'54 | |
| | 11037 Oct 30 07:06 | 0°♄ | | inferior conj | 11040 May 27 23:40 | 13°♄18'20 | 9°13'43 |
| | 11037 Nov 23 16:23 | 0°♄ | | minimum elong | 11040 May 28 00:27 | 13°♄17'07 | 9°13'08 |
| morning set | 11037 Nov 26 08:56 | 3°♄18'52 | | min. Earth dist. | 11040 May 28 04:21 | 13°♄11'06 | 0.27230 AU |
| | 11037 Dec 18 00:24 | 0°♄ | | morning rise | 11040 May 30 11:52 | 11°♄46'17 | |
| max. Earth dist. | 11038 Jan 01 13:30 | 17°♄56'51 | 1.73165 AU | direct | 11040 Jun 17 16:30 | 5°♄26'50 | |
| | | | | greatest brilliancy | 11040 Jun 27 13:15 | 7°♄17'01 | -4.9m |
| superior conj | 11038 Jan 02 00:18 | 18°♄30'11 | 1°08'14 | desc. node | 11040 Jul 21 13:42 | 22°♄39'45 | |
| minimum elong | 11038 Jan 02 09:43 | 18°♄59'13 | 1°08'33 | | 11040 Jul 29 18:41 | 0°♄ | |
| | 11038 Jan 11 07:57 | 0°♄ | | morning max el | 11040 Aug 07 01:53 | 8°♄01'59 | 46°47'12 |
| desc. node | 11038 Feb 03 13:13 | 28°♄39'26 | | | 11040 Aug 27 22:25 | 0°♄ | |
| | 11038 Feb 04 15:20 | 0°♄ | | | 11040 Sep 23 12:11 | 0°♄ | |
| evening rise | 11038 Feb 08 18:39 | 5°♄06'27 | | | 11040 Oct 19 03:39 | 0°♄ | |
| | 11038 Feb 28 22:13 | 0°♄ | | asc. node | 11040 Nov 11 10:42 | 27°♄46'04 | |
| | 11038 Mar 25 04:18 | 0°♄ | | | 11040 Nov 13 07:17 | 0°♄ | |
| | 11038 Apr 18 10:20 | 0°♄ | | | 11040 Dec 08 02:47 | 0°♄ | |
| | 11038 May 12 18:49 | 0°♄ | | | 11041 Jan 01 16:21 | 0°♄ | |
| asc. node | 11038 May 27 09:20 | 17°♄50'37 | | | 11041 Jan 26 01:51 | 0°♄ | |
| | 11038 Jun 06 10:15 | 0°♄ | | morning set | 11041 Feb 03 03:20 | 9°♄56'43 | |
| | 11038 Jul 01 16:05 | 0°♄ | | | 11041 Feb 19 08:33 | 0°♄ | |
| | 11038 Jul 28 04:25 | 0°♄ | | desc. node | 11041 Mar 03 02:28 | 14°♄33'34 | |
| evening max el | 11038 Aug 13 09:37 | 16°♄56'35 | 46°26'04 | max. Earth dist. | 11041 Mar 10 16:31 | 23°♄58'38 | 1.72326 AU |
| | 11038 Aug 27 07:51 | 0°♄ | | | | | |
| desc. node | 11038 Sep 16 08:28 | 14°♄20'10 | | superior conj | 11041 Mar 13 14:44 | 27°♄36'52 | -0°25'11 |
| greatest brilliancy | 11038 Sep 21 09:57 | 16°♄38'12 | -4.8m | minimum elong | 11041 Mar 13 08:50 | 27°♄18'32 | 0°24'49 |
| retrograde | 11038 Oct 02 07:48 | 18°♄49'31 | | | 11041 Mar 15 12:46 | 0°♄ | |
| evening set | 11038 Oct 19 05:08 | 13°♄23'04 | | | 11041 Apr 08 14:28 | 0°♄ | |
| min. Earth dist. | 11038 Oct 23 01:40 | 11°♄01'49 | 0.28662 AU | evening rise | 11041 Apr 21 21:58 | 16°♄38'29 | |
| inferior conj | 11038 Oct 23 18:52 | 10°♄34'54 | -7°36'41 | | 11041 May 02 14:13 | 0°♄ | |
| minimum elong | 11038 Oct 23 09:58 | 10°♄48'49 | 7°35'01 | | 11041 May 26 13:36 | 0°♄ | |
| morning rise | 11038 Oct 27 15:03 | 8°♄13'03 | | | 11041 Jun 19 15:04 | 0°♄ | |
| direct | 11038 Nov 14 02:01 | 2°♄28'43 | | asc. node | 11041 Jun 23 20:55 | 5°♄16'10 | |
| greatest brilliancy | 11038 Nov 23 20:21 | 4°♄11'50 | -4.7m | | 11041 Jul 13 21:23 | 0°♄ | |
| | 11038 Dec 30 07:48 | 0°♄ | | | 11041 Aug 07 12:00 | 0°♄ | |
| morning max el | 11039 Jan 01 20:36 | 2°♄24'59 | 45°42'13 | | 11041 Sep 01 17:01 | 0°♄ | |
| asc. node | 11039 Jan 07 08:47 | 7°♄49'55 | | | 11041 Sep 28 01:48 | 0°♄ | |
| | 11039 Jan 28 09:19 | 0°♄ | | desc. node | 11041 Oct 13 18:42 | 16°♄44'24 | |
| | 11039 Feb 23 19:04 | 0°♄ | | evening max el | 11041 Oct 23 08:40 | 26°♄18'43 | 45°53'10 |
| | 11039 Mar 21 02:09 | 0°♄ | | | 11041 Oct 27 05:44 | 0°♄ | |
| | 11039 Apr 14 18:55 | 0°♄ | | greatest brilliancy | 11041 Dec 01 10:33 | 24°♄42'19 | -4.7m |
| desc. node | 11039 Apr 29 03:33 | 17°♄39'42 | | retrograde | 11041 Dec 11 08:16 | 26°♄28'47 | |
| | 11039 May 09 02:48 | 0°♄ | | evening set | 11041 Dec 28 12:10 | 20°♄52'16 | |
| | 11039 Jun 02 04:57 | 0°♄ | | inferior conj | 11042 Jan 01 17:40 | 18°♄16'04 | -6°58'32 |
| | 11039 Jun 26 04:02 | 0°♄ | | minimum elong | 11042 Jan 02 03:30 | 18°♄00'39 | 6°56'08 |
| morning set | 11039 Jul 04 16:15 | 10°♄40'04 | | min. Earth dist. | 11042 Jan 02 06:26 | 17°♄56'03 | 0.28844 AU |
| | 11039 Jul 20 02:29 | 0°♄ | | morning rise | 11042 Jan 06 18:42 | 15°♄11'16 | |
| | | | | direct | 11042 Jan 23 04:16 | 10°♄00'03 | |
| superior conj | 11039 Aug 13 04:36 | 0°♄07'53 | -0°16'10 | greatest brilliancy | 11042 Feb 03 02:32 | 12°♄11'52 | -4.8m |
| minimum elong | 11039 Aug 13 08:37 | 0°♄20'23 | 0°16'20 | asc. node | 11042 Feb 03 19:32 | 12°♄28'34 | |
| | 11039 Aug 13 02:05 | 0°♄ | | | 11042 Mar 01 14:33 | 0°♄ | |
| max. Earth dist. | 11039 Aug 15 19:02 | 3°♄22'42 | 1.71910 AU | morning max el | 11042 Mar 13 20:22 | 11°♄29'31 | 46°11'56 |
| asc. node | 11039 Aug 19 20:26 | 8°♄26'30 | | | 11042 Mar 31 14:32 | 0°♄ | |
| | 11039 Sep 06 03:47 | 0°♄ | | | 11042 Apr 27 03:27 | 0°♄ | |
| evening rise | 11039 Sep 20 17:46 | 18°♄06'30 | | | 11042 May 22 09:52 | 0°♄ | |
| | 11039 Sep 30 08:12 | 0°♄ | | desc. node | 11042 May 26 16:27 | 5°♄09'49 | |
| | 11039 Oct 24 16:20 | 0°♄ | | | 11042 Jun 16 01:05 | 0°♄ | |
| | 11039 Nov 18 05:53 | 0°♄ | | | 11042 Jul 10 08:30 | 0°♄ | |
| desc. node | 11039 Dec 09 14:31 | 25°♄47'22 | | | 11042 Aug 03 12:44 | 0°♄ | |
| | 11039 Dec 13 02:49 | 0°♄ | | | 11042 Aug 27 16:31 | 0°♄ | |
| | 11040 Jan 07 09:11 | 0°♄ | | morning set | 11042 Sep 15 08:57 | 23°♄11'01 | |
| | 11040 Feb 02 04:43 | 0°♄ | | asc. node | 11042 Sep 16 09:53 | 24°♄28'22 | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|--|
| | 11042 Sep 20 20:53 | 0°♌ | | | 11045 Mar 09 20:08 | 30°♏♏ | | |
| | 11042 Oct 15 02:00 | 0°♌ | | inferior conj | 11045 Mar 13 15:28 | 27°♏40'32 | 2°36'02 | |
| | | | | minimum elong | 11045 Mar 13 09:42 | 27°♏49'31 | 2°34'21 | |
| superior conj | 11042 Oct 23 04:15 | 10°♌01'01 | 1°14'07 | min. Earth dist. | 11045 Mar 13 20:45 | 27°♏32'20 | 0.27675 AU | |
| minimum elong | 11042 Oct 22 19:36 | 9°♌34'15 | 1°14'16 | morning rise | 11045 Mar 19 10:32 | 24°♏11'34 | | |
| max. Earth dist. | 11042 Oct 24 21:12 | 12°♌07'42 | 1.72935 AU | direct | 11045 Apr 03 15:19 | 19°♏38'35 | | |
| | 11042 Nov 08 08:09 | 0°♏ | | greatest brilliancy | 11045 Apr 14 02:46 | 21°♏41'11 | -4.9m | |
| evening rise | 11042 Nov 28 22:09 | 25°♏23'07 | | | 11045 Apr 28 20:31 | 0°♏ | | |
| | 11042 Dec 02 16:07 | 0°♏ | | morning max el | 11045 May 23 23:23 | 22°♏12'37 | 46°53'23 | |
| | 11042 Dec 27 02:46 | 0°♏ | | | 11045 May 31 13:05 | 0°♏ | | |
| desc. node | 11043 Jan 06 02:24 | 12°♏12'47 | | desc. node | 11045 Jun 23 04:31 | 24°♏54'00 | | |
| | 11043 Jan 20 16:17 | 0°♏ | | | 11045 Jun 27 15:25 | 0°♏ | | |
| | 11043 Feb 14 08:28 | 0°♏ | | | 11045 Jul 23 04:33 | 0°♏ | | |
| | 11043 Mar 11 03:54 | 0°♏ | | | 11045 Aug 17 02:39 | 0°♏ | | |
| | 11043 Apr 05 06:11 | 0°♏ | | | 11045 Sep 10 18:26 | 0°♏ | | |
| asc. node | 11043 Apr 29 00:24 | 27°♏41'19 | | | 11045 Oct 05 07:18 | 0°♏ | | |
| | 11043 May 01 01:04 | 0°♏ | | asc. node | 11045 Oct 13 23:28 | 10°♏37'45 | | |
| | 11043 May 28 14:51 | 0°♏ | | | 11045 Oct 29 18:08 | 0°♏ | | |
| evening max el | 11043 May 31 09:38 | 2°♏49'20 | 46°52'20 | | 11045 Nov 23 03:13 | 0°♏ | | |
| | 11043 Jul 03 03:20 | 0°♏ | | morning set | 11045 Nov 24 01:48 | 1°♏09'36 | | |
| greatest brilliancy | 11043 Jul 10 06:50 | 3°♏23'17 | -4.9m | | 11045 Dec 17 11:09 | 0°♏ | | |
| retrograde | 11043 Jul 20 18:07 | 5°♏25'47 | | | | | | |
| evening set | 11043 Aug 04 16:14 | 1°♏02'25 | | superior conj | 11045 Dec 30 17:04 | 16°♏20'41 | 1°10'13 | |
| | 11043 Aug 06 12:20 | 30°♏♏ | | minimum elong | 11045 Dec 31 02:16 | 16°♏49'01 | 1°10'35 | |
| inferior conj | 11043 Aug 10 13:40 | 27°♏33'00 | 2°09'20 | max. Earth dist. | 11045 Dec 30 07:30 | 15°♏51'11 | 1.73179 AU | |
| minimum elong | 11043 Aug 10 18:35 | 27°♏25'29 | 2°07'24 | | 11046 Jan 10 18:44 | 0°♏ | | |
| min. Earth dist. | 11043 Aug 10 08:58 | 27°♏40'14 | 0.27219 AU | desc. node | 11046 Feb 02 15:07 | 28°♏11'42 | | |
| morning rise | 11043 Aug 16 21:29 | 23°♏51'18 | | | 11046 Feb 04 02:14 | 0°♏ | | |
| desc. node | 11043 Aug 19 00:11 | 22°♏47'46 | | evening rise | 11046 Feb 06 10:09 | 2°♏52'30 | | |
| direct | 11043 Aug 31 09:33 | 19°♏46'12 | | | 11046 Feb 28 09:18 | 0°♏ | | |
| greatest brilliancy | 11043 Sep 10 04:00 | 21°♏32'06 | -4.8m | | 11046 Mar 24 15:37 | 0°♏ | | |
| | 11043 Sep 25 17:37 | 0°♏ | | | 11046 Apr 17 21:58 | 0°♏ | | |
| morning max el | 11043 Oct 19 16:49 | 20°♏29'21 | 46°02'12 | | 11046 May 12 06:56 | 0°♏ | | |
| | 11043 Oct 29 06:11 | 0°♏ | | asc. node | 11046 May 26 11:13 | 17°♏18'17 | | |
| | 11043 Nov 26 03:02 | 0°♏ | | | 11046 Jun 05 23:10 | 0°♏ | | |
| asc. node | 11043 Dec 09 23:08 | 15°♏41'54 | | | 11046 Jul 01 06:31 | 0°♏ | | |
| | 11043 Dec 22 07:13 | 0°♏ | | | 11046 Jul 27 22:17 | 0°♏ | | |
| | 11044 Jan 16 14:45 | 0°♏ | | evening max el | 11046 Aug 10 23:55 | 14°♏37'45 | 46°27'22 | |
| | 11044 Feb 10 10:03 | 0°♏ | | | 11046 Aug 27 14:48 | 0°♏ | | |
| | 11044 Mar 05 21:36 | 0°♏ | | desc. node | 11046 Sep 15 10:35 | 12°♏49'11 | | |
| | 11044 Mar 30 03:40 | 0°♏ | | greatest brilliancy | 11046 Sep 19 01:05 | 14°♏23'32 | -4.8m | |
| desc. node | 11044 Mar 30 16:03 | 0°♏38'26 | | retrograde | 11046 Sep 29 23:37 | 16°♏36'00 | | |
| morning set | 11044 Apr 16 14:20 | 21°♏43'15 | | evening set | 11046 Oct 16 17:14 | 11°♏14'28 | | |
| | 11044 Apr 23 05:25 | 0°♏ | | min. Earth dist. | 11046 Oct 20 16:38 | 8°♏49'27 | 0.28619 AU | |
| | 11044 May 17 04:01 | 0°♏ | | inferior conj | 11046 Oct 21 10:22 | 8°♏21'46 | -7°26'16 | |
| max. Earth dist. | 11044 May 25 21:37 | 10°♏58'00 | 1.71341 AU | minimum elong | 11046 Oct 21 01:04 | 8°♏36'17 | 7°24'26 | |
| | | | | morning rise | 11046 Oct 25 09:10 | 5°♏56'18 | | |
| superior conj | 11044 May 26 23:07 | 12°♏18'06 | -1°27'39 | direct | 11046 Nov 11 16:39 | 0°♏16'04 | | |
| minimum elong | 11044 May 26 23:39 | 12°♏19'49 | 1°28'15 | greatest brilliancy | 11046 Nov 21 11:18 | 1°♏59'25 | -4.7m | |
| | 11044 Jun 10 01:08 | 0°♏ | | | 11046 Dec 30 06:50 | 0°♏ | | |
| | 11044 Jul 03 22:47 | 0°♏ | | morning max el | 11046 Dec 30 11:43 | 0°♏11'43 | 45°42'04 | |
| evening rise | 11044 Jul 06 09:31 | 3°♏04'02 | | asc. node | 11047 Jan 06 10:45 | 7°♏03'55 | | |
| asc. node | 11044 Jul 21 09:16 | 21°♏49'01 | | | 11047 Jan 28 01:11 | 0°♏ | | |
| | 11044 Jul 27 22:43 | 0°♏ | | | 11047 Feb 23 08:31 | 0°♏ | | |
| | 11044 Aug 21 02:31 | 0°♏ | | | 11047 Mar 20 14:30 | 0°♏ | | |
| | 11044 Sep 14 12:03 | 0°♏ | | | 11047 Apr 14 06:42 | 0°♏ | | |
| | 11044 Oct 09 06:31 | 0°♏ | | desc. node | 11047 Apr 28 05:24 | 17°♏09'43 | | |
| | 11044 Nov 03 15:14 | 0°♏ | | | 11047 May 08 14:14 | 0°♏ | | |
| desc. node | 11044 Nov 10 05:11 | 7°♏37'35 | | | 11047 Jun 01 16:10 | 0°♏ | | |
| | 11044 Nov 29 23:41 | 0°♏ | | | 11047 Jun 25 15:05 | 0°♏ | | |
| | 11044 Dec 28 07:39 | 0°♏ | | morning set | 11047 Jul 02 04:37 | 8°♏13'50 | | |
| evening max el | 11045 Jan 02 15:29 | 5°♏12'59 | 45°55'05 | | 11047 Jul 19 13:25 | 0°♏ | | |
| | 11045 Feb 02 14:00 | 0°♏ | | | | | | |
| greatest brilliancy | 11045 Feb 10 21:38 | 3°♏49'56 | -4.8m | superior conj | 11047 Aug 10 18:06 | 27°♏46'11 | -0°19'47 | |
| retrograde | 11045 Feb 20 16:24 | 5°♏35'39 | | minimum elong | 11047 Aug 10 22:59 | 28°♏01'25 | 0°19'56 | |
| asc. node | 11045 Mar 03 06:04 | 3°♏22'12 | | | 11047 Aug 12 12:57 | 0°♏ | | |
| evening set | 11045 Mar 07 08:19 | 1°♏24'32 | | max. Earth dist. | 11047 Aug 13 06:56 | 0°♏56'07 | 1.71876 AU | |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|----------------------|
| asc. node | 11047 Aug 18 22:24 | 7°♍58'48 | | 11050 Mar 31 07:36 | 0°♋ | |
| | 11047 Sep 05 14:39 | 0°♊ | | 11050 Apr 26 17:33 | 0°♍ | |
| evening rise | 11047 Sep 18 09:33 | 15°♊52'57 | | 11050 May 21 22:37 | 0°♌ | |
| | 11047 Sep 29 19:07 | 0°♍ | | desc. node | 11050 May 25 18:16 | 4°♌37'08 |
| | 11047 Oct 24 03:24 | 0°♌ | | | 11050 Jun 15 13:07 | 0°♍ |
| | 11047 Nov 17 17:16 | 0°♎ | | | 11050 Jul 09 20:05 | 0°♏ |
| desc. node | 11047 Dec 08 16:20 | 25°♎17'19 | | | 11050 Aug 03 00:00 | 0°♐ |
| | 11047 Dec 12 14:45 | 0°♏ | | | 11050 Aug 27 03:32 | 0°♑ |
| | 11048 Jan 06 22:05 | 0°♋ | | morning set | 11050 Sep 13 00:14 | 20°♑55'59 |
| | 11048 Feb 01 19:18 | 0°♍ | | asc. node | 11050 Sep 15 11:49 | 24°♑00'46 |
| | 11048 Feb 28 19:19 | 0°♌ | | | 11050 Sep 20 07:41 | 0°♊ |
| evening max el | 11048 Mar 15 19:13 | 16°♌33'46 | 46°30'26 | | 11050 Oct 14 12:40 | 0°♍ |
| | 11048 Mar 30 04:33 | 0°♍ | | | | |
| asc. node | 11048 Mar 30 16:14 | 0°♍25'13 | | superior conj | 11050 Oct 20 21:07 | 7°♍51'45 1°12'23 |
| greatest brilliancy | 11048 Apr 25 05:28 | 16°♍55'49 | -4.9m | minimum elong | 11050 Oct 20 12:07 | 7°♍23'55 1°12'28 |
| retrograde | 11048 May 04 21:02 | 18°♍41'18 | | max. Earth dist. | 11050 Oct 22 16:51 | 10°♍07'04 1.72906 AU |
| evening set | 11048 May 23 01:06 | 12°♍23'36 | | | 11050 Nov 07 18:47 | 0°♌ |
| inferior conj | 11048 May 25 12:36 | 10°♍52'44 | 9°13'58 | evening rise | 11050 Nov 26 15:15 | 23°♌14'59 |
| minimum elong | 11048 May 25 12:23 | 10°♍53'03 | 9°13'23 | | 11050 Dec 02 02:51 | 0°♎ |
| min. Earth dist. | 11048 May 25 16:25 | 10°♍46'52 | 0.27239 AU | | 11050 Dec 26 13:42 | 0°♏ |
| morning rise | 11048 May 27 23:40 | 9°♍22'29 | | desc. node | 11051 Jan 05 04:21 | 11°♏45'03 |
| direct | 11048 Jun 15 06:06 | 3°♍01'06 | | | 11051 Jan 20 03:33 | 0°♋ |
| greatest brilliancy | 11048 Jun 25 01:28 | 4°♍50'34 | -4.9m | | 11051 Feb 13 20:12 | 0°♍ |
| desc. node | 11048 Jul 20 15:38 | 21°♍33'38 | | | 11051 Mar 10 16:22 | 0°♌ |
| | 11048 Jul 29 20:57 | 0°♏ | | | 11051 Apr 04 19:53 | 0°♍ |
| morning max el | 11048 Aug 04 16:39 | 5°♏41'51 | 46°48'29 | asc. node | 11051 Apr 28 02:18 | 27°♍01'49 |
| | 11048 Aug 27 15:37 | 0°♐ | | | 11051 Apr 30 17:06 | 0°♏ |
| | 11048 Sep 23 02:23 | 0°♑ | | | 11051 May 28 12:56 | 0°♐ |
| | 11048 Oct 18 16:21 | 0°♊ | | evening max el | 11051 May 28 23:11 | 0°♐25'46 46°52'15 |
| asc. node | 11048 Nov 10 12:30 | 27°♊15'44 | | | 11051 Jul 05 09:41 | 0°♑ |
| | 11048 Nov 12 19:08 | 0°♍ | | greatest brilliancy | 11051 Jul 07 22:29 | 1°♑02'10 -4.9m |
| | 11048 Dec 07 14:07 | 0°♌ | | retrograde | 11051 Jul 18 07:19 | 3°♑02'27 |
| | 11049 Jan 01 03:22 | 0°♎ | | | 11051 Jul 30 15:07 | 30°♑♐ |
| | 11049 Jan 25 12:44 | 0°♏ | | evening set | 11051 Aug 02 07:40 | 28°♐37'05 |
| morning set | 11049 Jan 31 19:29 | 7°♏44'56 | | inferior conj | 11051 Aug 08 02:59 | 25°♐10'39 2°32'23 |
| | 11049 Feb 18 19:24 | 0°♋ | | minimum elong | 11051 Aug 08 08:41 | 25°♐01'52 2°30'12 |
| desc. node | 11049 Mar 02 04:25 | 14°♋06'00 | | min. Earth dist. | 11051 Aug 07 23:41 | 25°♐15'42 0.27191 AU |
| max. Earth dist. | 11049 Mar 08 07:50 | 21°♋43'24 | 1.72367 AU | morning rise | 11051 Aug 14 10:10 | 21°♐29'20 |
| | | | | desc. node | 11051 Aug 18 02:18 | 19°♐43'51 |
| superior conj | 11049 Mar 11 04:26 | 25°♋16'31 | -0°21'40 | direct | 11051 Aug 28 22:13 | 17°♐24'07 |
| minimum elong | 11049 Mar 10 23:21 | 25°♋00'42 | 0°21'18 | greatest brilliancy | 11051 Sep 07 17:44 | 19°♐10'32 -4.8m |
| | 11049 Mar 14 23:39 | 0°♍ | | | 11051 Sep 26 11:59 | 0°♑ |
| | 11049 Apr 08 01:26 | 0°♌ | | morning max el | 11051 Oct 17 05:48 | 18°♑08'56 46°03'48 |
| evening rise | 11049 Apr 19 10:29 | 14°♌13'02 | | | 11051 Oct 29 01:36 | 0°♊ |
| | 11049 May 02 01:18 | 0°♍ | | | 11051 Nov 25 17:45 | 0°♍ |
| | 11049 May 26 00:52 | 0°♏ | | asc. node | 11051 Dec 09 01:05 | 15°♍08'34 |
| | 11049 Jun 19 02:34 | 0°♐ | | | 11051 Dec 21 19:58 | 0°♌ |
| asc. node | 11049 Jun 22 22:48 | 4°♐46'14 | | | 11052 Jan 16 02:33 | 0°♎ |
| | 11049 Jul 13 09:12 | 0°♑ | | | 11052 Feb 09 21:21 | 0°♏ |
| | 11049 Aug 07 00:25 | 0°♊ | | | 11052 Mar 05 08:38 | 0°♋ |
| | 11049 Sep 01 06:34 | 0°♍ | | desc. node | 11052 Mar 29 17:55 | 0°♍10'22 |
| | 11049 Sep 27 17:54 | 0°♌ | | | 11052 Mar 29 14:34 | 0°♍ |
| desc. node | 11049 Oct 12 20:38 | 16°♌00'08 | | morning set | 11052 Apr 14 02:03 | 19°♍16'09 |
| evening max el | 11049 Oct 21 00:49 | 24°♌08'24 | 45°53'45 | | 11052 Apr 22 16:16 | 0°♌ |
| | 11049 Oct 27 06:06 | 0°♎ | | | 11052 May 16 14:50 | 0°♍ |
| greatest brilliancy | 11049 Nov 29 01:44 | 22°♎31'33 | -4.7m | max. Earth dist. | 11052 May 23 01:52 | 8°♍06'42 1.71355 AU |
| retrograde | 11049 Dec 08 23:58 | 24°♎18'06 | | | | |
| evening set | 11049 Dec 26 06:55 | 18°♎37'30 | | superior conj | 11052 May 24 10:34 | 9°♍49'22 -1°27'40 |
| inferior conj | 11049 Dec 30 09:42 | 16°♎05'02 | -7°10'20 | minimum elong | 11052 May 24 10:02 | 9°♍47'42 1°28'14 |
| minimum elong | 11049 Dec 30 19:18 | 15°♎49'57 | 7°08'05 | | 11052 Jun 09 11:59 | 0°♏ |
| min. Earth dist. | 11049 Dec 30 21:39 | 15°♎46'16 | 0.28875 AU | | 11052 Jul 03 09:40 | 0°♐ |
| morning rise | 11050 Jan 04 07:34 | 13°♎04'33 | | evening rise | 11052 Jul 03 20:45 | 0°♐34'44 |
| direct | 11050 Jan 20 20:52 | 7°♎49'04 | | asc. node | 11052 Jul 20 11:17 | 21°♐21'09 |
| greatest brilliancy | 11050 Jan 31 17:31 | 9°♎59'10 | -4.8m | | 11052 Aug 27 09:41 | 0°♑ |
| asc. node | 11050 Feb 02 21:35 | 10°♎52'50 | | | 11052 Aug 20 13:39 | 0°♊ |
| | 11050 Mar 01 18:00 | 0°♏ | | | 11052 Sep 13 23:29 | 0°♍ |
| morning max el | 11050 Mar 11 11:42 | 9°♏14'50 | 46°10'14 | | 11052 Oct 08 18:29 | 0°♌ |

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|---------------------|--------------------|---|--|---------------------|--------------------|----------------------------------|--|
| | 11052 Nov 03 04:13 | 0° Z | | | 11055 Apr 13 18:03 | 0° Y | |
| desc. node | 11052 Nov 09 07:05 | 7° Z 04'34 | | desc. node | 11055 Apr 27 07:15 | 16° Y 40'57 | |
| | 11052 Nov 29 14:50 | 0° \approx | | | 11055 May 08 01:18 | 0° B | |
| | 11052 Dec 28 04:38 | 0° H | | | 11055 Jun 01 03:03 | 0° II | |
| evening max el | 11052 Dec 31 05:13 | 2° H 56'18 45°54'20 | | | 11055 Jun 25 01:51 | 0° E | |
| | 11053 Feb 04 15:26 | 0° Y | | morning set | 11055 Jun 29 16:35 | 5° E 47'06 | |
| greatest brilliancy | 11053 Feb 08 11:52 | 1° Y 32'51 -4.8m | | | 11055 Jul 19 00:06 | 0° Ω | |
| retrograde | 11053 Feb 18 06:17 | 3° Y 18'37 | | | | | |
| asc. node | 11053 Mar 02 08:04 | 0° Y 25'16 | | superior conj | 11055 Aug 08 07:01 | 25° Ω 23'23 -0°23'26 | |
| | 11053 Mar 03 05:14 | 30° R H | | minimum elong | 11055 Aug 08 12:45 | 25° Ω 41'17 0°23'33 | |
| evening set | 11053 Mar 04 22:07 | 29° H 07'26 | | max. Earth dist. | 11055 Aug 10 20:01 | 28° Ω 33'55 1.71841 AU | |
| inferior conj | 11053 Mar 11 05:56 | 25° H 22'53 2°14'10 | | | 11055 Aug 11 23:34 | 0° M | |
| minimum elong | 11053 Mar 11 00:55 | 25° H 30'40 2°12'43 | | asc. node | 11055 Aug 18 00:17 | 7° M 31'36 | |
| min. Earth dist. | 11053 Mar 11 12:06 | 25° H 13'17 0.27710 AU | | | 11055 Sep 05 01:15 | 0° $\underline{\text{A}}$ | |
| morning rise | 11053 Mar 17 03:06 | 21° H 51'04 | | evening rise | 11055 Sep 16 00:55 | 13° $\underline{\text{A}}$ 38'53 | |
| direct | 11053 Apr 01 05:45 | 17° H 20'04 | | | 11055 Sep 29 05:45 | 0° M | |
| greatest brilliancy | 11053 Apr 11 19:17 | 19° H 24'37 -4.9m | | | 11055 Oct 23 14:11 | 0° A | |
| | 11053 Apr 29 13:34 | 0° Y | | | 11055 Nov 17 04:22 | 0° Z | |
| morning max el | 11053 May 21 13:54 | 19° Y 52'53 46°52'31 | | desc. node | 11055 Dec 07 18:20 | 24° Z 48'43 | |
| | 11053 May 31 08:33 | 0° B | | | 11055 Dec 12 02:25 | 0° \approx | |
| desc. node | 11053 Jun 22 06:30 | 24° B 15'11 | | | 11056 Jan 06 10:41 | 0° H | |
| | 11053 Jun 27 06:30 | 0° II | | | 11056 Feb 01 09:37 | 0° Y | |
| | 11053 Jul 22 17:47 | 0° E | | | 11056 Feb 28 13:25 | 0° B | |
| | 11053 Aug 16 14:51 | 0° Ω | | evening max el | 11056 Mar 13 10:00 | 14° B 15'56 46°29'09 | |
| | 11053 Sep 10 05:59 | 0° M | | asc. node | 11056 Mar 29 18:06 | 29° B 20'33 | |
| | 11053 Oct 04 18:24 | 0° $\underline{\text{A}}$ | | | 11056 Mar 30 12:58 | 0° II | |
| asc. node | 11053 Oct 13 01:14 | 10° $\underline{\text{A}}$ 09'28 | | greatest brilliancy | 11056 Apr 22 17:34 | 14° II 31'25 -4.9m | |
| | 11053 Oct 29 04:56 | 0° M | | retrograde | 11056 May 02 10:20 | 16° II 17'25 | |
| morning set | 11053 Nov 21 18:50 | 29° M 01'29 | | evening set | 11056 May 20 12:39 | 10° II 01'52 | |
| | 11053 Nov 22 13:50 | 0° A | | inferior conj | 11056 May 23 01:36 | 8° II 28'38 9°13'11 | |
| | 11053 Dec 16 21:40 | 0° Z | | minimum elong | 11056 May 23 00:25 | 8° II 30'28 9°12'35 | |
| | | | | min. Earth dist. | 11056 May 23 04:33 | 8° II 24'06 0.27252 AU | |
| superior conj | 11053 Dec 28 10:09 | 14° Z 12'58 1°12'04 | | morning rise | 11056 May 25 12:11 | 6° II 59'02 | |
| minimum elong | 11053 Dec 28 19:05 | 14° Z 40'29 1°12'28 | | direct | 11056 Jun 12 19:54 | 0° II 36'56 | |
| max. Earth dist. | 11053 Dec 28 03:40 | 13° Z 52'56 1.73187 AU | | greatest brilliancy | 11056 Jun 22 13:51 | 2° II 25'21 -4.9m | |
| | 11054 Jan 10 05:13 | 0° \approx | | desc. node | 11056 Jul 19 17:43 | 20° II 30'21 | |
| desc. node | 11054 Feb 01 17:07 | 27° \approx 45'13 | | | 11056 Jul 29 21:34 | 0° E | |
| | 11054 Feb 03 12:49 | 0° H | | morning max el | 11056 Aug 02 06:45 | 3° E 20'41 46°49'27 | |
| evening rise | 11054 Feb 04 02:03 | 0° H 40'48 | | | 11056 Aug 27 08:16 | 0° Ω | |
| | 11054 Feb 27 20:05 | 0° Y | | | 11056 Sep 22 16:12 | 0° M | |
| | 11054 Mar 24 02:42 | 0° B | | | 11056 Oct 18 04:43 | 0° $\underline{\text{A}}$ | |
| | 11054 Apr 17 09:25 | 0° II | | asc. node | 11056 Nov 09 14:27 | 26° $\underline{\text{A}}$ 46'52 | |
| | 11054 May 11 18:56 | 0° E | | | 11056 Nov 12 06:38 | 0° M | |
| asc. node | 11054 May 25 13:09 | 16° E 46'20 | | | 11056 Dec 07 01:05 | 0° A | |
| | 11054 Jun 05 12:01 | 0° Ω | | | 11056 Dec 31 14:03 | 0° Z | |
| | 11054 Jun 30 20:57 | 0° M | | | 11057 Jan 24 23:17 | 0° \approx | |
| | 11054 Jul 27 16:23 | 0° $\underline{\text{A}}$ | | morning set | 11057 Jan 29 11:40 | 5° \approx 34'17 | |
| evening max el | 11054 Aug 08 14:58 | 12° $\underline{\text{A}}$ 21'22 46°28'46 | | | 11057 Feb 18 05:54 | 0° H | |
| | 11054 Aug 28 00:05 | 0° M | | desc. node | 11057 Mar 01 06:16 | 13° H 39'15 | |
| desc. node | 11054 Sep 14 12:30 | 11° M 15'18 | | max. Earth dist. | 11057 Mar 05 21:25 | 19° H 24'01 1.72402 AU | |
| greatest brilliancy | 11054 Sep 16 15:34 | 12° M 08'35 -4.8m | | | | | |
| retrograde | 11054 Sep 27 15:44 | 14° M 22'46 | | superior conj | 11057 Mar 08 18:29 | 22° H 58'27 -0°18'08 | |
| evening set | 11054 Oct 14 05:14 | 9° M 06'03 | | minimum elong | 11057 Mar 08 14:13 | 22° H 45'12 0°17'46 | |
| min. Earth dist. | 11054 Oct 18 07:13 | 6° M 37'38 0.28572 AU | | | 11057 Mar 14 10:09 | 0° Y | |
| inferior conj | 11054 Oct 19 01:43 | 6° M 08'49 -7°15'07 | | | 11057 Apr 07 12:00 | 0° B | |
| minimum elong | 11054 Oct 18 16:05 | 6° M 23'50 7°13'09 | | evening rise | 11057 Apr 16 23:24 | 11° B 50'10 | |
| morning rise | 11054 Oct 23 03:14 | 3° M 39'45 | | | 11057 May 01 11:58 | 0° II | |
| | 11054 Oct 30 10:46 | 30° R $\underline{\text{A}}$ | | | 11057 May 25 11:43 | 0° E | |
| direct | 11054 Nov 09 07:38 | 28° $\underline{\text{A}}$ 03'44 | | | 11057 Jun 18 13:42 | 0° Ω | |
| greatest brilliancy | 11054 Nov 19 01:38 | 29° $\underline{\text{A}}$ 46'57 -4.7m | | asc. node | 11057 Jun 22 00:49 | 4° Ω 17'52 | |
| | 11054 Nov 19 16:41 | 0° M | | | 11057 Jul 12 20:45 | 0° M | |
| morning max el | 11054 Dec 28 03:35 | 28° M 01'17 45°42'05 | | | 11057 Aug 06 12:36 | 0° $\underline{\text{A}}$ | |
| | 11054 Dec 30 04:33 | 0° A | | | 11057 Aug 31 19:59 | 0° M | |
| asc. node | 11055 Jan 05 12:45 | 6° A 19'42 | | | 11057 Sep 27 10:05 | 0° A | |
| | 11055 Jan 27 16:23 | 0° Z | | desc. node | 11057 Oct 11 22:35 | 15° A 15'53 | |
| | 11055 Feb 22 21:26 | 0° \approx | | evening max el | 11057 Oct 18 16:00 | 21° A 56'08 45°54'27 | |
| | 11055 Mar 20 02:23 | 0° H | | | 11057 Oct 27 07:31 | 0° Z | |

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|---------------------|--------------------|----------------------|------------|---------------------|--------------------|----------------------|------------|
| greatest brilliancy | 11057 Nov 26 17:15 | 20° Z 21'33 | -4.7m | max. Earth dist. | 11060 May 20 07:36 | 5° II 20'26 | 1.71369 AU |
| retrograde | 11057 Dec 06 15:01 | 22° Z 07'50 | | | | | |
| evening set | 11057 Dec 24 01:30 | 16° Z 23'11 | | superior conj | 11060 May 21 22:07 | 7° II 21'23 | -1°27'30 |
| inferior conj | 11057 Dec 28 01:37 | 13° Z 54'30 | -7°21'38 | minimum elong | 11060 May 21 20:30 | 7° II 16'17 | 1°28'03 |
| minimum elong | 11057 Dec 28 10:54 | 13° Z 39'52 | 7°19'30 | | 11060 Jun 08 22:41 | 0° Z | |
| min. Earth dist. | 11057 Dec 28 13:00 | 13° Z 36'34 | 0.28902 AU | evening rise | 11060 Jul 01 08:14 | 28° Z 06'51 | |
| morning rise | 11058 Jan 01 20:11 | 10° Z 58'26 | | | 11060 Jul 02 20:22 | 0° Z | |
| direct | 11058 Jan 18 12:55 | 5° Z 38'30 | | asc. node | 11060 Jul 19 13:09 | 20° Z 53'25 | |
| greatest brilliancy | 11058 Jan 29 08:51 | 7° Z 47'26 | -4.8m | | 11060 Jul 26 20:27 | 0° Z | |
| asc. node | 11058 Feb 01 23:37 | 9° Z 20'52 | | | 11060 Aug 20 00:34 | 0° Z | |
| | 11058 Mar 01 19:35 | 0° Z | | | 11060 Sep 13 10:45 | 0° Z | |
| morning max el | 11058 Mar 09 02:08 | 6° Z 58'42 | 46°08'45 | | 11060 Oct 08 06:21 | 0° Z | |
| | 11058 Mar 30 24:00 | 0° Z | | | 11060 Nov 02 17:14 | 0° Z | |
| | 11058 Apr 26 07:08 | 0° Z | | desc. node | 11060 Nov 08 09:05 | 6° Z 31'46 | |
| | 11058 May 21 10:55 | 0° Z | | | 11060 Nov 29 06:12 | 0° Z | |
| desc. node | 11058 May 24 20:17 | 4° Z 06'23 | | | 11060 Dec 28 02:29 | 0° Z | |
| | 11058 Jun 15 00:41 | 0° Z | | evening max el | 11060 Dec 28 19:27 | 0° Z 40'51 | 45°53'40 |
| | 11058 Jul 09 07:15 | 0° Z | | greatest brilliancy | 11061 Feb 06 01:33 | 29° Z 14'57 | -4.8m |
| | 11058 Aug 02 10:54 | 0° Z | | | 11061 Feb 08 12:02 | 0° Z | |
| | 11058 Aug 26 14:14 | 0° Z | | retrograde | 11061 Feb 15 20:37 | 1° Z 01'16 | |
| morning set | 11058 Sep 10 15:11 | 18° Z 40'38 | | | 11061 Feb 22 23:21 | 30° Z | |
| asc. node | 11058 Sep 14 13:38 | 23° Z 33'35 | | asc. node | 11061 Mar 01 09:57 | 27° Z 23'50 | |
| | 11058 Sep 19 18:14 | 0° Z | | evening set | 11061 Mar 02 12:02 | 26° Z 49'43 | |
| | 11058 Oct 13 23:07 | 0° Z | | inferior conj | 11061 Mar 08 20:13 | 23° Z 04'45 | 1°51'57 |
| | | | | minimum elong | 11061 Mar 08 16:00 | 23° Z 11'17 | 1°50'47 |
| superior conj | 11058 Oct 18 13:33 | 5° Z 41'44 | 1°10'29 | min. Earth dist. | 11061 Mar 09 03:00 | 22° Z 54'14 | 0.27744 AU |
| minimum elong | 11058 Oct 18 04:15 | 5° Z 12'58 | 1°10'32 | morning rise | 11061 Mar 14 19:22 | 19° Z 30'28 | |
| max. Earth dist. | 11058 Oct 20 09:44 | 7° Z 58'26 | 1.72878 AU | direct | 11061 Mar 29 20:30 | 15° Z 01'12 | |
| | 11058 Nov 07 05:14 | 0° Z | | greatest brilliancy | 11061 Apr 09 11:09 | 17° Z 07'12 | -4.8m |
| evening rise | 11058 Nov 24 07:52 | 21° Z 06'02 | | | 11061 Apr 30 02:18 | 0° Z | |
| | 11058 Dec 01 13:23 | 0° Z | | morning max el | 11061 May 19 05:06 | 17° Z 34'59 | 46°51'37 |
| | 11058 Dec 26 00:26 | 0° Z | | | 11061 May 31 03:27 | 0° Z | |
| desc. node | 11059 Jan 04 06:18 | 11° Z 17'53 | | desc. node | 11061 Jun 21 08:28 | 23° Z 36'46 | |
| | 11059 Jan 19 14:37 | 0° Z | | | 11061 Jun 26 21:21 | 0° Z | |
| | 11059 Feb 13 07:46 | 0° Z | | | 11061 Jul 22 06:52 | 0° Z | |
| | 11059 Mar 10 04:42 | 0° Z | | | 11061 Aug 16 02:56 | 0° Z | |
| | 11059 Apr 04 09:27 | 0° Z | | | 11061 Sep 09 17:25 | 0° Z | |
| asc. node | 11059 Apr 27 04:21 | 26° Z 23'16 | | | 11061 Oct 04 05:25 | 0° Z | |
| | 11059 Apr 30 09:06 | 0° Z | | asc. node | 11061 Oct 12 03:11 | 9° Z 41'59 | |
| evening max el | 11059 May 26 11:55 | 28° Z 01'18 | 46°52'19 | | 11061 Oct 28 15:41 | 0° Z | |
| | 11059 May 28 11:29 | 0° Z | | morning set | 11061 Nov 19 11:54 | 26° Z 53'29 | |
| greatest brilliancy | 11059 Jul 05 14:06 | 28° Z 42'24 | -4.9m | | 11061 Nov 22 00:25 | 0° Z | |
| | 11059 Jul 09 21:56 | 0° Z | | | 11061 Dec 16 08:12 | 0° Z | |
| retrograde | 11059 Jul 15 20:28 | 0° Z 40'56 | | | | | |
| | 11059 Jul 21 15:39 | 30° Z | | superior conj | 11061 Dec 26 03:05 | 12° Z 04'30 | 1°13'51 |
| evening set | 11059 Jul 30 23:23 | 26° Z 12'52 | | minimum elong | 11061 Dec 26 11:40 | 12° Z 30'58 | 1°14'15 |
| inferior conj | 11059 Aug 05 16:28 | 22° Z 49'50 | 2°55'05 | max. Earth dist. | 11061 Dec 26 00:12 | 11° Z 55'36 | 1.73200 AU |
| minimum elong | 11059 Aug 05 22:57 | 22° Z 39'52 | 2°52'38 | | 11062 Jan 09 15:49 | 0° Z | |
| min. Earth dist. | 11059 Aug 05 14:38 | 22° Z 52'39 | 0.27170 AU | desc. node | 11062 Jan 31 18:54 | 27° Z 17'41 | |
| morning rise | 11059 Aug 11 22:49 | 19° Z 09'20 | | evening rise | 11062 Feb 01 17:38 | 28° Z 27'47 | |
| desc. node | 11059 Aug 17 04:11 | 16° Z 46'34 | | | 11062 Feb 02 23:33 | 0° Z | |
| direct | 11059 Aug 26 10:51 | 15° Z 03'16 | | | 11062 Feb 27 07:01 | 0° Z | |
| greatest brilliancy | 11059 Sep 05 08:05 | 16° Z 50'55 | -4.8m | | 11062 Mar 23 13:55 | 0° Z | |
| | 11059 Sep 27 01:12 | 0° Z | | | 11062 Apr 16 21:02 | 0° Z | |
| morning max el | 11059 Oct 14 19:10 | 15° Z 49'56 | 46°05'12 | | 11062 May 11 07:05 | 0° Z | |
| | 11059 Oct 28 20:16 | 0° Z | | asc. node | 11062 May 24 15:10 | 16° Z 14'12 | |
| | 11059 Nov 25 08:08 | 0° Z | | | 11062 Jun 05 01:05 | 0° Z | |
| asc. node | 11059 Dec 08 03:06 | 14° Z 35'57 | | | 11062 Jun 30 11:41 | 0° Z | |
| | 11059 Dec 21 08:33 | 0° Z | | | 11062 Jul 27 11:03 | 0° Z | |
| | 11060 Jan 15 14:12 | 0° Z | | evening max el | 11062 Aug 06 06:58 | 10° Z 07'15 | 46°30'17 |
| | 11060 Feb 09 08:30 | 0° Z | | | 11062 Aug 28 12:37 | 0° Z | |
| | 11060 Mar 04 19:31 | 0° Z | | desc. node | 11062 Sep 13 14:27 | 9° Z 38'24 | |
| desc. node | 11060 Mar 28 19:41 | 29° Z 42'31 | | greatest brilliancy | 11062 Sep 14 06:11 | 9° Z 54'02 | -4.8m |
| | 11060 Mar 29 01:19 | 0° Z | | retrograde | 11062 Sep 25 08:12 | 12° Z 09'43 | |
| morning set | 11060 Apr 11 13:44 | 16° Z 49'27 | | evening set | 11062 Oct 11 17:31 | 6° Z 57'57 | |
| | 11060 Apr 22 02:58 | 0° Z | | min. Earth dist. | 11062 Oct 15 21:43 | 4° Z 26'25 | 0.28522 AU |
| | 11060 May 16 01:32 | 0° Z | | inferior conj | 11062 Oct 16 17:11 | 3° Z 56'08 | -7°03'15 |

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|---------------------|--------------------|---|------------|---------------------|--------------------|-----------------------------|------------|
| minimum elong | 11062 Oct 16 07:18 | 4° \mathbb{M} 11'31 | 7°01'10 | behind sun begin | 11065 Mar 05 17:51 | 19° \mathbb{X} 53'45 | |
| morning rise | 11062 Oct 20 21:28 | 1° \mathbb{M} 23'19 | | behind sun end | 11065 Mar 06 16:43 | 21° \mathbb{X} 04'46 | |
| | 11062 Oct 23 08:52 | 30° \mathbb{R} $\underline{\mathbb{A}}$ | | | 11065 Mar 13 21:03 | 0° \mathbb{Y} | |
| direct | 11062 Nov 06 23:09 | 25° $\underline{\mathbb{A}}$ 51'55 | | | 11065 Apr 06 23:00 | 0° \mathbb{B} | |
| greatest brilliancy | 11062 Nov 16 15:31 | 27° $\underline{\mathbb{A}}$ 34'11 | -4.7m | evening rise | 11065 Apr 14 12:10 | 9° \mathbb{B} 25'31 | |
| | 11062 Nov 22 10:57 | 0° \mathbb{M} | | | 11065 Apr 30 23:07 | 0° \mathbb{I} | |
| morning max el | 11062 Dec 25 19:29 | 25° \mathbb{M} 50'51 | 45°41'50 | | 11065 May 24 23:03 | 0° \mathbb{G} | |
| | 11062 Dec 30 01:31 | 0° \mathbb{X} | | | 11065 Jun 18 01:17 | 0° \mathbb{Q} | |
| asc. node | 11063 Jan 04 14:42 | 5° \mathbb{X} 35'44 | | asc. node | 11065 Jun 21 02:41 | 3° \mathbb{Q} 47'35 | |
| | 11063 Jan 27 07:32 | 0° \mathbb{B} | | | 11065 Jul 12 08:43 | 0° \mathbb{M} | |
| | 11063 Feb 22 10:32 | 0° \approx | | | 11065 Aug 06 01:15 | 0° $\underline{\mathbb{A}}$ | |
| | 11063 Mar 19 14:30 | 0° \mathbb{X} | | | 11065 Aug 31 09:56 | 0° \mathbb{M} | |
| | 11063 Apr 13 05:39 | 0° \mathbb{Y} | | | 11065 Sep 27 03:00 | 0° \mathbb{X} | |
| desc. node | 11063 Apr 26 09:16 | 16° \mathbb{Y} 11'59 | | desc. node | 11065 Oct 11 00:40 | 14° \mathbb{X} 30'19 | |
| | 11063 May 07 12:36 | 0° \mathbb{B} | | evening max el | 11065 Oct 16 06:33 | 19° \mathbb{X} 41'17 | 45°55'16 |
| | 11063 May 31 14:09 | 0° \mathbb{I} | | | 11065 Oct 27 10:50 | 0° \mathbb{B} | |
| | 11063 Jun 24 12:49 | 0° \mathbb{G} | | greatest brilliancy | 11065 Nov 24 09:07 | 18° \mathbb{B} 11'29 | -4.7m |
| morning set | 11063 Jun 27 04:24 | 3° \mathbb{G} 19'21 | | retrograde | 11065 Dec 04 06:20 | 19° \mathbb{B} 57'45 | |
| | 11063 Jul 18 10:59 | 0° \mathbb{Q} | | evening set | 11065 Dec 21 20:16 | 14° \mathbb{B} 08'57 | |
| | | | | inferior conj | 11065 Dec 25 17:49 | 11° \mathbb{B} 44'05 | -7°32'02 |
| superior conj | 11063 Aug 05 19:54 | 22° \mathbb{Q} 59'41 | -0°27'02 | minimum elong | 11065 Dec 26 02:46 | 11° \mathbb{B} 29'59 | 7°30'03 |
| minimum elong | 11063 Aug 06 02:27 | 23° \mathbb{Q} 20'08 | 0°27'09 | min. Earth dist. | 11065 Dec 26 04:46 | 11° \mathbb{B} 26'51 | 0.28926 AU |
| max. Earth dist. | 11063 Aug 08 10:35 | 26° \mathbb{Q} 15'36 | 1.71803 AU | morning rise | 11065 Dec 30 09:08 | 8° \mathbb{B} 52'35 | |
| | 11063 Aug 11 10:25 | 0° \mathbb{M} | | direct | 11066 Jan 16 04:50 | 3° \mathbb{B} 27'59 | |
| asc. node | 11063 Aug 17 02:06 | 7° \mathbb{M} 03'30 | | greatest brilliancy | 11066 Jan 27 00:51 | 5° \mathbb{B} 36'24 | -4.8m |
| | 11063 Sep 04 12:04 | 0° $\underline{\mathbb{A}}$ | | asc. node | 11066 Feb 01 01:28 | 7° \mathbb{B} 51'36 | |
| evening rise | 11063 Sep 13 16:20 | 11° $\underline{\mathbb{A}}$ 24'15 | | | 11066 Mar 01 20:06 | 0° \approx | |
| | 11063 Sep 28 16:36 | 0° \mathbb{M} | | morning max el | 11066 Mar 06 16:26 | 4° \approx 41'33 | 46°07'10 |
| | 11063 Oct 23 01:10 | 0° \mathbb{X} | | | 11066 Mar 30 16:25 | 0° \mathbb{X} | |
| | 11063 Nov 16 15:40 | 0° \mathbb{B} | | | 11066 Apr 25 21:00 | 0° \mathbb{Y} | |
| desc. node | 11063 Dec 06 20:19 | 24° \mathbb{B} 19'22 | | | 11066 May 20 23:36 | 0° \mathbb{B} | |
| | 11063 Dec 11 14:19 | 0° \approx | | desc. node | 11066 May 23 22:11 | 3° \mathbb{B} 33'55 | |
| | 11064 Jan 05 23:38 | 0° \mathbb{X} | | | 11066 Jun 14 12:45 | 0° \mathbb{I} | |
| | 11064 Feb 01 00:29 | 0° \mathbb{Y} | | | 11066 Jul 08 18:54 | 0° \mathbb{G} | |
| | 11064 Feb 28 08:31 | 0° \mathbb{B} | | | 11066 Aug 01 22:15 | 0° \mathbb{Q} | |
| evening max el | 11064 Mar 11 00:22 | 11° \mathbb{B} 55'39 | 46°27'38 | | 11066 Aug 26 01:20 | 0° \mathbb{M} | |
| asc. node | 11064 Mar 28 20:11 | 28° \mathbb{B} 13'07 | | morning set | 11066 Sep 08 05:54 | 16° \mathbb{M} 23'11 | |
| | 11064 Mar 31 01:13 | 0° \mathbb{I} | | asc. node | 11066 Sep 13 15:34 | 23° \mathbb{M} 05'36 | |
| greatest brilliancy | 11064 Apr 20 06:12 | 12° \mathbb{I} 06'07 | -4.9m | | 11066 Sep 19 05:10 | 0° $\underline{\mathbb{A}}$ | |
| retrograde | 11064 Apr 29 23:03 | 13° \mathbb{I} 51'51 | | | 11066 Oct 13 09:57 | 0° \mathbb{M} | |
| evening set | 11064 May 17 23:32 | 7° \mathbb{I} 39'42 | | | | | |
| inferior conj | 11064 May 20 14:33 | 6° \mathbb{I} 03'09 | 9°11'18 | superior conj | 11066 Oct 16 05:59 | 3° \mathbb{M} 30'33 | 1°08'30 |
| minimum elong | 11064 May 20 12:23 | 6° \mathbb{I} 06'30 | 9°10'41 | minimum elong | 11066 Oct 15 20:27 | 3° \mathbb{M} 01'02 | 1°08'31 |
| min. Earth dist. | 11064 May 20 16:56 | 5° \mathbb{I} 59'28 | 0.27261 AU | max. Earth dist. | 11066 Oct 18 01:20 | 5° \mathbb{M} 44'44 | 1.72848 AU |
| morning rise | 11064 May 23 01:14 | 4° \mathbb{I} 33'10 | | | 11066 Nov 06 16:04 | 0° \mathbb{X} | |
| | 11064 May 31 23:00 | 30° \mathbb{R} \mathbb{B} | | evening rise | 11066 Nov 22 00:45 | 18° \mathbb{X} 56'49 | |
| direct | 11064 Jun 10 09:14 | 28° \mathbb{B} 11'26 | | | 11066 Dec 01 00:18 | 0° \mathbb{B} | |
| greatest brilliancy | 11064 Jun 20 02:33 | 29° \mathbb{B} 59'05 | -4.9m | | 11066 Dec 25 11:31 | 0° \approx | |
| | 11064 Jun 20 03:34 | 0° \mathbb{I} | | desc. node | 11067 Jan 03 08:08 | 10° \approx 49'23 | |
| desc. node | 11064 Jul 18 19:38 | 19° \mathbb{I} 27'14 | | | 11067 Jan 19 02:00 | 0° \mathbb{X} | |
| | 11064 Jul 29 21:28 | 0° \mathbb{G} | | | 11067 Feb 12 19:40 | 0° \mathbb{Y} | |
| morning max el | 11064 Jul 30 19:41 | 0° \mathbb{G} 55'26 | 46°50'28 | | 11067 Mar 09 17:24 | 0° \mathbb{B} | |
| | 11064 Aug 27 00:57 | 0° \mathbb{Q} | | | 11067 Apr 03 23:32 | 0° \mathbb{I} | |
| | 11064 Sep 22 06:12 | 0° \mathbb{M} | | asc. node | 11067 Apr 26 06:19 | 25° \mathbb{I} 42'49 | |
| | 11064 Oct 17 17:20 | 0° $\underline{\mathbb{A}}$ | | | 11067 Apr 30 01:52 | 0° \mathbb{G} | |
| asc. node | 11064 Nov 08 16:25 | 26° $\underline{\mathbb{A}}$ 17'13 | | evening max el | 11067 May 24 00:23 | 25° \mathbb{G} 34'32 | 46°52'08 |
| | 11064 Nov 11 18:24 | 0° \mathbb{M} | | | 11067 May 28 11:45 | 0° \mathbb{Q} | |
| | 11064 Dec 06 12:19 | 0° \mathbb{X} | | greatest brilliancy | 11067 Jul 03 05:03 | 26° \mathbb{Q} 19'27 | -4.9m |
| | 11064 Dec 31 00:59 | 0° \mathbb{B} | | retrograde | 11067 Jul 13 09:38 | 28° \mathbb{Q} 16'58 | |
| | 11065 Jan 24 10:06 | 0° \approx | | evening set | 11067 Jul 28 14:57 | 23° \mathbb{Q} 45'38 | |
| morning set | 11065 Jan 27 04:10 | 3° \approx 23'47 | | inferior conj | 11067 Aug 03 05:38 | 20° \mathbb{Q} 26'22 | 3°17'37 |
| | 11065 Feb 17 16:43 | 0° \mathbb{X} | | minimum elong | 11067 Aug 03 12:52 | 20° \mathbb{Q} 15'16 | 3°14'58 |
| desc. node | 11065 Feb 28 08:08 | 13° \mathbb{X} 11'25 | | min. Earth dist. | 11067 Aug 03 05:08 | 20° \mathbb{Q} 27'08 | 0.27151 AU |
| max. Earth dist. | 11065 Mar 03 10:39 | 17° \mathbb{X} 02'31 | 1.72448 AU | morning rise | 11067 Aug 09 10:59 | 16° \mathbb{Q} 47'18 | |
| | | | | desc. node | 11067 Aug 16 06:10 | 13° \mathbb{Q} 51'35 | |
| superior conj | 11065 Mar 06 08:43 | 20° \mathbb{X} 39'53 | -0°14'34 | direct | 11067 Aug 23 23:16 | 12° \mathbb{Q} 39'41 | |
| minimum elong | 11065 Mar 06 05:17 | 20° \mathbb{X} 29'15 | 0°14'15 | greatest brilliancy | 11067 Sep 02 22:03 | 14° \mathbb{Q} 28'47 | -4.8m |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 11067 Sep 27 11:45 | 0°♎ | | asc. node | 11070 May 23 17:04 | 15°♎41'47 | |
| morning max el | 11067 Oct 12 09:02 | 13°♎30'42 | 46°06'50 | | 11070 Jun 04 14:10 | 0°♎ | |
| | 11067 Oct 28 14:52 | 0°♎ | | | 11070 Jun 30 02:35 | 0°♎ | |
| | 11067 Nov 24 22:42 | 0°♎ | | | 11070 Jul 27 06:17 | 0°♎ | |
| asc. node | 11067 Dec 07 04:56 | 14°♎02'04 | | evening max el | 11070 Aug 03 23:08 | 7°♎53'08 | 46°31'25 |
| | 11067 Dec 20 21:22 | 0°♎ | | | 11070 Aug 29 05:52 | 0°♎ | |
| | 11068 Jan 15 02:06 | 0°♎ | | greatest brilliancy | 11070 Sep 11 21:12 | 7°♎38'59 | -4.8m |
| | 11068 Feb 08 19:53 | 0°♎ | | desc. node | 11070 Sep 12 16:34 | 7°♎57'13 | |
| | 11068 Mar 04 06:37 | 0°♎ | | retrograde | 11070 Sep 23 00:12 | 9°♎55'10 | |
| desc. node | 11068 Mar 27 21:44 | 29°♎14'50 | | evening set | 11070 Oct 09 05:36 | 4°♎48'42 | |
| | 11068 Mar 28 12:17 | 0°♎ | | min. Earth dist. | 11070 Oct 13 12:12 | 2°♎13'40 | 0.28470 AU |
| morning set | 11068 Apr 09 02:04 | 14°♎24'10 | | inferior conj | 11070 Oct 14 08:24 | 1°♎42'14 | -6°50'35 |
| | 11068 Apr 21 13:53 | 0°♎ | | minimum elong | 11070 Oct 13 22:18 | 1°♎57'56 | 6°48'24 |
| | 11068 May 15 12:29 | 0°♎ | | | 11070 Oct 17 02:46 | 30°♎ | |
| max. Earth dist. | 11068 May 17 17:00 | 2°♎44'50 | 1.71392 AU | morning rise | 11070 Oct 18 15:29 | 29°♎05'28 | |
| | | | | direct | 11070 Nov 04 14:36 | 23°♎39'03 | |
| superior conj | 11068 May 19 09:50 | 4°♎53'04 | -1°27'09 | greatest brilliancy | 11070 Nov 14 05:08 | 25°♎20'03 | -4.7m |
| minimum elong | 11068 May 19 07:09 | 4°♎44'38 | 1°27'42 | | 11070 Nov 24 03:50 | 0°♎ | |
| | 11068 Jun 08 09:40 | 0°♎ | | morning max el | 11070 Dec 23 10:27 | 23°♎37'48 | 45°41'45 |
| evening rise | 11068 Jun 28 19:31 | 25°♎37'12 | | | 11070 Dec 29 21:53 | 0°♎ | |
| | 11068 Jul 02 07:25 | 0°♎ | | asc. node | 11071 Jan 03 16:40 | 4°♎52'12 | |
| asc. node | 11068 Jul 18 15:00 | 20°♎24'28 | | | 11071 Jan 26 22:29 | 0°♎ | |
| | 11068 Jul 26 07:36 | 0°♎ | | | 11071 Feb 21 23:28 | 0°♎ | |
| | 11068 Aug 19 11:54 | 0°♎ | | | 11071 Mar 19 02:29 | 0°♎ | |
| | 11068 Sep 12 22:24 | 0°♎ | | | 11071 Apr 12 17:08 | 0°♎ | |
| | 11068 Oct 07 18:36 | 0°♎ | | desc. node | 11071 Apr 25 11:06 | 15°♎42'49 | |
| | 11068 Nov 02 06:39 | 0°♎ | | | 11071 May 06 23:46 | 0°♎ | |
| desc. node | 11068 Nov 07 11:04 | 5°♎57'53 | | | 11071 May 31 01:06 | 0°♎ | |
| | 11068 Nov 28 22:06 | 0°♎ | | | 11071 Jun 23 23:38 | 0°♎ | |
| evening max el | 11068 Dec 26 10:43 | 28°♎27'30 | 45°53'08 | morning set | 11071 Jun 24 16:36 | 0°♎53'11 | |
| | 11068 Dec 28 01:29 | 0°♎ | | | 11071 Jul 17 21:43 | 0°♎ | |
| greatest brilliancy | 11069 Feb 03 15:16 | 26°♎57'18 | -4.8m | | | | |
| retrograde | 11069 Feb 13 11:26 | 28°♎44'11 | | superior conj | 11071 Aug 03 09:01 | 20°♎37'13 | -0°30'34 |
| evening set | 11069 Feb 28 02:29 | 24°♎32'20 | | minimum elong | 11071 Aug 03 16:20 | 21°♎00'04 | 0°30'41 |
| asc. node | 11069 Feb 28 12:02 | 24°♎19'21 | | max. Earth dist. | 11071 Aug 06 02:01 | 24°♎00'25 | 1.71768 AU |
| inferior conj | 11069 Mar 06 10:45 | 20°♎47'00 | 1°29'46 | | 11071 Aug 10 21:06 | 0°♎ | |
| minimum elong | 11069 Mar 06 07:20 | 20°♎52'17 | 1°28'52 | asc. node | 11071 Aug 16 04:05 | 6°♎36'26 | |
| min. Earth dist. | 11069 Mar 06 17:49 | 20°♎36'02 | 0.27775 AU | | 11071 Sep 03 22:45 | 0°♎ | |
| morning rise | 11069 Mar 12 11:42 | 17°♎10'32 | | evening rise | 11071 Sep 11 07:41 | 9°♎09'44 | |
| direct | 11069 Mar 27 11:52 | 12°♎43'04 | | | 11071 Sep 28 03:21 | 0°♎ | |
| greatest brilliancy | 11069 Apr 07 02:30 | 14°♎49'33 | -4.8m | | 11071 Oct 22 12:05 | 0°♎ | |
| | 11069 Apr 30 11:41 | 0°♎ | | | 11071 Nov 16 02:56 | 0°♎ | |
| morning max el | 11069 May 16 20:39 | 15°♎18'05 | 46°50'35 | desc. node | 11071 Dec 05 22:09 | 23°♎49'44 | |
| | 11069 May 30 21:54 | 0°♎ | | | 11071 Dec 11 02:12 | 0°♎ | |
| desc. node | 11069 Jun 20 10:23 | 22°♎58'21 | | | 11072 Jan 05 12:34 | 0°♎ | |
| | 11069 Jun 26 12:06 | 0°♎ | | | 11072 Jan 31 15:22 | 0°♎ | |
| | 11069 Jul 21 20:00 | 0°♎ | | | 11072 Feb 28 03:54 | 0°♎ | |
| | 11069 Aug 15 15:10 | 0°♎ | | evening max el | 11072 Mar 08 13:47 | 9°♎33'47 | 46°26'13 |
| | 11069 Sep 09 05:05 | 0°♎ | | asc. node | 11072 Mar 27 22:12 | 27°♎04'33 | |
| | 11069 Oct 03 16:40 | 0°♎ | | | 11072 Mar 31 17:07 | 0°♎ | |
| asc. node | 11069 Oct 11 05:09 | 9°♎13'54 | | greatest brilliancy | 11072 Apr 17 19:33 | 9°♎42'38 | -4.9m |
| | 11069 Oct 28 02:38 | 0°♎ | | retrograde | 11072 Apr 27 11:32 | 11°♎27'39 | |
| morning set | 11069 Nov 17 04:44 | 24°♎44'16 | | evening set | 11072 May 15 10:02 | 5°♎19'46 | |
| | 11069 Nov 21 11:11 | 0°♎ | | inferior conj | 11072 May 18 03:40 | 3°♎39'07 | 9°08'26 |
| | 11069 Dec 15 18:52 | 0°♎ | | minimum elong | 11072 May 18 00:32 | 3°♎43'59 | 9°07'46 |
| | | | | min. Earth dist. | 11072 May 18 05:51 | 3°♎35'45 | 0.27268 AU |
| superior conj | 11069 Dec 23 19:59 | 9°♎55'38 | 1°15'29 | morning rise | 11072 May 20 15:02 | 2°♎07'56 | |
| minimum elong | 11069 Dec 24 04:11 | 10°♎20'53 | 1°15'56 | | 11072 May 24 07:38 | 30°♎ | |
| max. Earth dist. | 11069 Dec 23 21:10 | 9°♎59'18 | 1.73205 AU | direct | 11072 Jun 07 22:10 | 25°♎47'12 | |
| | 11070 Jan 09 02:30 | 0°♎ | | greatest brilliancy | 11072 Jun 17 16:01 | 27°♎34'53 | -4.9m |
| evening rise | 11070 Jan 30 09:24 | 26°♎15'03 | | | 11072 Jun 23 05:06 | 0°♎ | |
| desc. node | 11070 Jan 30 20:50 | 26°♎50'19 | | desc. node | 11072 Jul 17 21:36 | 18°♎26'54 | |
| | 11070 Feb 02 10:22 | 0°♎ | | morning max el | 11072 Jul 28 07:56 | 28°♎29'25 | 46°51'34 |
| | 11070 Feb 26 18:03 | 0°♎ | | | 11072 Jul 29 19:55 | 0°♎ | |
| | 11070 Mar 23 01:11 | 0°♎ | | | 11072 Aug 26 16:55 | 0°♎ | |
| | 11070 Apr 16 08:39 | 0°♎ | | | 11072 Sep 21 19:41 | 0°♎ | |
| | 11070 May 10 19:15 | 0°♎ | | | 11072 Oct 17 05:31 | 0°♎ | |

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|---------------------|--------------------|-------------------------|------------|---------------------|--------------------|-------------------------|------------|
| asc. node | 11072 Nov 07 18:14 | 25° Ω 48'00 | | evening max el | 11075 May 21 13:20 | 23° Θ 10'26 | 46°52'07 |
| | 11072 Nov 11 05:50 | 0° \mathbb{L} | | | 11075 May 28 12:41 | 0° Ω | |
| | 11072 Dec 05 23:18 | 0° \mathcal{A} | | greatest brilliancy | 11075 Jun 30 19:22 | 23° Ω 57'10 | -4.9m |
| | 11072 Dec 30 11:43 | 0° \mathcal{Z} | | retrograde | 11075 Jul 10 23:25 | 25° Ω 54'25 | |
| | 11073 Jan 23 20:42 | 0° \approx | | evening set | 11075 Jul 26 06:43 | 21° Ω 19'23 | |
| morning set | 11073 Jan 24 20:28 | 1° \approx 13'18 | | inferior conj | 11075 Jul 31 18:47 | 18° Ω 04'00 | 3°39'50 |
| | 11073 Feb 17 03:17 | 0° \mathcal{H} | | minimum elong | 11075 Aug 01 02:44 | 17° Ω 51'50 | 3°37'00 |
| desc. node | 11073 Feb 27 10:06 | 12° \mathcal{H} 44'45 | | min. Earth dist. | 11075 Jul 31 19:14 | 18° Ω 03'20 | 0.27135 AU |
| max. Earth dist. | 11073 Mar 01 01:28 | 14° \mathcal{H} 46'50 | 1.72490 AU | morning rise | 11075 Aug 06 22:56 | 14° Ω 26'54 | |
| | | | | desc. node | 11075 Aug 15 08:18 | 11° Ω 03'17 | |
| superior conj | 11073 Mar 03 22:51 | 18° \mathcal{H} 22'01 | -0°11'00 | direct | 11075 Aug 21 12:07 | 10° Ω 17'11 | |
| minimum elong | 11073 Mar 03 20:16 | 18° \mathcal{H} 14'03 | 0°10'41 | greatest brilliancy | 11075 Aug 31 11:31 | 12° Ω 07'16 | -4.8m |
| behind sun begin | 11073 Mar 03 01:53 | 17° \mathcal{H} 16'59 | | | 11075 Sep 27 18:55 | 0° \mathbb{P} | |
| behind sun end | 11073 Mar 04 14:40 | 19° \mathcal{H} 11'07 | | morning max el | 11075 Oct 09 23:51 | 11° \mathbb{P} 15'01 | 46°08'30 |
| | 11073 Mar 13 07:39 | 0° \mathcal{Y} | | | 11075 Oct 28 08:32 | 0° Ω | |
| | 11073 Apr 06 09:41 | 0° \mathcal{B} | | | 11075 Nov 24 12:39 | 0° \mathbb{L} | |
| evening rise | 11073 Apr 12 01:02 | 7° \mathcal{B} 02'23 | | asc. node | 11075 Dec 06 06:55 | 13° \mathbb{L} 30'08 | |
| | 11073 Apr 30 09:56 | 0° \mathbb{I} | | | 11075 Dec 20 09:39 | 0° \mathcal{A} | |
| | 11073 May 24 10:04 | 0° Θ | | | 11076 Jan 14 13:33 | 0° \mathcal{Z} | |
| | 11073 Jun 17 12:33 | 0° Ω | | | 11076 Feb 08 06:53 | 0° \approx | |
| asc. node | 11073 Jun 20 04:35 | 3° Ω 18'25 | | | 11076 Mar 03 17:24 | 0° \mathcal{H} | |
| | 11073 Jul 11 20:22 | 0° \mathbb{P} | | desc. node | 11076 Mar 26 23:35 | 28° \mathcal{H} 47'23 | |
| | 11073 Aug 05 13:34 | 0° Ω | | | 11076 Mar 27 22:58 | 0° \mathcal{Y} | |
| | 11073 Aug 30 23:35 | 0° \mathbb{L} | | morning set | 11076 Apr 06 14:14 | 11° \mathcal{Y} 59'15 | |
| | 11073 Sep 26 19:48 | 0° \mathcal{A} | | | 11076 Apr 21 00:32 | 0° \mathcal{B} | |
| desc. node | 11073 Oct 10 02:36 | 13° \mathcal{A} 44'55 | | | 11076 May 14 23:07 | 0° \mathbb{I} | |
| evening max el | 11073 Oct 13 20:20 | 17° \mathcal{A} 25'37 | 45°55'59 | max. Earth dist. | 11076 May 15 03:30 | 0° \mathbb{I} 13'45 | 1.71410 AU |
| | 11073 Oct 27 15:29 | 0° \mathcal{Z} | | | | | |
| greatest brilliancy | 11073 Nov 22 00:25 | 16° \mathcal{Z} 01'25 | -4.7m | superior conj | 11076 May 16 21:14 | 2° \mathbb{I} 24'45 | -1°26'38 |
| retrograde | 11073 Dec 01 21:47 | 17° \mathcal{Z} 48'16 | | minimum elong | 11076 May 16 17:31 | 2° \mathbb{I} 13'06 | 1°27'09 |
| evening set | 11073 Dec 19 14:43 | 11° \mathcal{Z} 55'11 | | | 11076 Jun 07 20:19 | 0° Θ | |
| inferior conj | 11073 Dec 23 09:52 | 9° \mathcal{Z} 34'04 | -7°41'45 | evening rise | 11076 Jun 26 06:38 | 23° Θ 08'08 | |
| minimum elong | 11073 Dec 23 18:24 | 9° \mathcal{Z} 20'38 | 7°39'55 | | 11076 Jul 01 18:06 | 0° Ω | |
| min. Earth dist. | 11073 Dec 23 20:20 | 9° \mathcal{Z} 17'36 | 0.28955 AU | asc. node | 11076 Jul 17 17:00 | 19° Ω 57'04 | |
| morning rise | 11073 Dec 27 21:55 | 6° \mathcal{Z} 47'22 | | | 11076 Jul 25 18:25 | 0° \mathbb{P} | |
| direct | 11074 Jan 13 20:26 | 1° \mathcal{Z} 17'40 | | | 11076 Aug 18 22:55 | 0° Ω | |
| greatest brilliancy | 11074 Jan 24 17:05 | 3° \mathcal{Z} 26'15 | -4.8m | | 11076 Sep 12 09:45 | 0° \mathbb{L} | |
| asc. node | 11074 Jan 31 03:34 | 6° \mathcal{Z} 26'06 | | | 11076 Oct 07 06:34 | 0° \mathcal{A} | |
| | 11074 Mar 01 19:13 | 0° \approx | | | 11076 Nov 01 19:47 | 0° \mathcal{Z} | |
| morning max el | 11074 Mar 04 07:12 | 2° \approx 26'23 | 46°05'46 | desc. node | 11076 Nov 06 13:00 | 5° \mathcal{Z} 24'48 | |
| | 11074 Mar 30 08:14 | 0° \mathcal{H} | | | 11076 Nov 28 13:51 | 0° \approx | |
| | 11074 Apr 25 10:23 | 0° \mathcal{Y} | | evening max el | 11076 Dec 24 02:23 | 26° \approx 16'21 | 45°52'30 |
| | 11074 May 20 11:50 | 0° \mathcal{B} | | | 11076 Dec 28 01:04 | 0° \mathcal{H} | |
| desc. node | 11074 May 23 00:05 | 3° \mathcal{B} 02'47 | | greatest brilliancy | 11077 Feb 01 05:06 | 24° \mathcal{H} 40'52 | -4.8m |
| | 11074 Jun 14 00:21 | 0° \mathbb{I} | | retrograde | 11077 Feb 11 01:58 | 26° \mathcal{H} 27'44 | |
| | 11074 Jul 08 06:06 | 0° Θ | | evening set | 11077 Feb 25 17:05 | 22° \mathcal{H} 15'37 | |
| | 11074 Aug 01 09:11 | 0° Ω | | asc. node | 11077 Feb 27 14:02 | 21° \mathcal{H} 12'36 | |
| | 11074 Aug 25 12:01 | 0° \mathbb{P} | | inferior conj | 11077 Mar 04 01:12 | 18° \mathcal{H} 29'58 | 1°07'30 |
| morning set | 11074 Sep 05 20:43 | 14° \mathbb{P} 07'14 | | minimum elong | 11077 Mar 03 22:37 | 18° \mathcal{H} 33'58 | 1°06'52 |
| asc. node | 11074 Sep 12 17:29 | 22° \mathbb{P} 38'49 | | min. Earth dist. | 11077 Mar 04 08:35 | 18° \mathcal{H} 18'30 | 0.27811 AU |
| | 11074 Sep 18 15:40 | 0° Ω | | morning rise | 11077 Mar 10 03:44 | 14° \mathcal{H} 51'18 | |
| | 11074 Oct 12 20:21 | 0° \mathbb{L} | | direct | 11077 Mar 25 03:21 | 10° \mathcal{H} 25'42 | |
| | | | | greatest brilliancy | 11077 Apr 04 17:32 | 12° \mathcal{H} 32'00 | -4.8m |
| superior conj | 11074 Oct 13 22:33 | 1° \mathbb{L} 21'07 | 1°06'24 | | 11077 Apr 30 18:18 | 0° \mathcal{Y} | |
| minimum elong | 11074 Oct 13 12:50 | 0° \mathbb{L} 51'01 | 1°06'22 | morning max el | 11077 May 14 11:48 | 13° \mathcal{Y} 00'41 | 46°49'25 |
| max. Earth dist. | 11074 Oct 15 17:27 | 3° \mathbb{L} 33'55 | 1.72819 AU | | 11077 May 30 15:45 | 0° \mathcal{B} | |
| | 11074 Nov 06 02:27 | 0° \mathcal{A} | | desc. node | 11077 Jun 19 12:24 | 22° \mathcal{B} 21'06 | |
| evening rise | 11074 Nov 19 17:52 | 16° \mathcal{A} 49'37 | | | 11077 Jun 26 02:30 | 0° \mathbb{I} | |
| | 11074 Nov 30 10:48 | 0° \mathcal{Z} | | | 11077 Jul 21 08:48 | 0° Θ | |
| | 11074 Dec 24 22:14 | 0° \approx | | | 11077 Aug 15 03:04 | 0° Ω | |
| desc. node | 11075 Jan 02 10:08 | 10° \approx 22'22 | | | 11077 Sep 08 16:25 | 0° \mathbb{P} | |
| | 11075 Jan 18 13:05 | 0° \mathcal{H} | | | 11077 Oct 03 03:37 | 0° Ω | |
| | 11075 Feb 12 07:17 | 0° \mathcal{Y} | | asc. node | 11077 Oct 10 06:55 | 8° Ω 46'01 | |
| | 11075 Mar 09 05:52 | 0° \mathcal{B} | | | 11077 Oct 27 13:19 | 0° \mathbb{L} | |
| | 11075 Apr 03 13:23 | 0° \mathbb{I} | | morning set | 11077 Nov 14 21:42 | 22° \mathbb{L} 36'13 | |
| asc. node | 11075 Apr 25 08:14 | 25° \mathbb{I} 03'02 | | | 11077 Nov 20 21:41 | 0° \mathcal{A} | |
| | 11075 Apr 29 18:31 | 0° Θ | | | 11077 Dec 15 05:18 | 0° \mathcal{Z} | |

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|---------------------|--------------------|------------|------------|---------------------|--|--------------------|------------|------------|
| superior conj | 11077 Dec 21 13:10 | 7°348'23 | 1°17'01 | | | 11080 May 17 17:46 | 30°R8 | |
| minimum elong | 11077 Dec 21 20:56 | 8°312'20 | 1°17'30 | morning rise | | 11080 May 18 05:29 | 29°842'09 | |
| max. Earth dist. | 11077 Dec 21 17:21 | 8°301'17 | 1.73206 AU | direct | | 11080 Jun 05 10:51 | 23°822'52 | |
| | 11078 Jan 08 12:58 | 0°≈ | | greatest brilliancy | | 11080 Jun 15 06:02 | 25°811'15 | -4.9m |
| evening rise | 11078 Jan 28 01:20 | 24°≈03'39 | | | | 11080 Jun 25 00:47 | 0°II | |
| desc. node | 11078 Jan 29 22:49 | 26°≈23'49 | | desc. node | | 11080 Jul 16 23:40 | 17°II27'48 | |
| | 11078 Feb 01 20:57 | 0°X | | morning max el | | 11080 Jul 25 20:30 | 26°II03'32 | 46°52'33 |
| | 11078 Feb 26 04:51 | 0°Y | | | | 11080 Jul 29 17:42 | 0°☾ | |
| | 11078 Mar 22 12:18 | 0°8 | | | | 11080 Aug 26 08:52 | 0°Ω | |
| | 11078 Apr 15 20:10 | 0°II | | | | 11080 Sep 21 09:17 | 0°♍ | |
| | 11078 May 10 07:23 | 0°☾ | | | | 11080 Oct 16 17:50 | 0°♊ | |
| asc. node | 11078 May 22 19:00 | 15°☾09'30 | | asc. node | | 11080 Nov 06 20:12 | 25°♊18'56 | |
| | 11078 Jun 04 03:18 | 0°Ω | | | | 11080 Nov 10 17:22 | 0°♋ | |
| | 11078 Jun 29 17:36 | 0°♍ | | | | 11080 Dec 05 10:22 | 0°♌ | |
| | 11078 Jul 27 01:58 | 0°♊ | | | | 11080 Dec 29 22:32 | 0°♍ | |
| evening max el | 11078 Aug 01 14:47 | 5°♊37'53 | 46°32'41 | morning set | | 11081 Jan 22 12:56 | 29°303'01 | |
| | 11078 Aug 30 05:00 | 0°♋ | | | | 11081 Jan 23 07:25 | 0°≈ | |
| greatest brilliancy | 11078 Sep 09 12:54 | 5°♋25'06 | -4.8m | | | 11081 Feb 16 13:59 | 0°X | |
| desc. node | 11078 Sep 11 18:28 | 6°♋12'34 | | desc. node | | 11081 Feb 26 11:57 | 12°X17'17 | |
| retrograde | 11078 Sep 20 15:45 | 7°♋40'55 | | max. Earth dist. | | 11081 Feb 26 18:18 | 12°X37'00 | 1.72529 AU |
| evening set | 11078 Oct 06 17:50 | 2°♋39'44 | | | | | | |
| min. Earth dist. | 11078 Oct 11 03:01 | 0°♋00'51 | 0.28415 AU | superior conj | | 11081 Mar 01 13:19 | 16°X04'48 | -0°07'27 |
| | 11078 Oct 11 03:34 | 30°R♊ | | minimum elong | | 11081 Mar 01 11:36 | 15°X59'28 | 0°07'08 |
| inferior conj | 11078 Oct 11 23:37 | 29°♊28'47 | -6°37'22 | behind sun begin | | 11081 Feb 28 13:37 | 14°X51'16 | |
| minimum elong | 11078 Oct 11 13:23 | 29°♊44'42 | 6°35'03 | behind sun end | | 11081 Mar 02 09:35 | 17°X07'41 | |
| morning rise | 11078 Oct 16 09:29 | 26°♊47'55 | | | | 11081 Mar 12 18:22 | 0°Y | |
| direct | 11078 Nov 02 05:50 | 21°♊26'39 | | | | 11081 Apr 05 20:29 | 0°8 | |
| greatest brilliancy | 11078 Nov 11 19:00 | 23°♊06'27 | -4.7m | evening rise | | 11081 Apr 09 14:24 | 4°840'29 | |
| | 11078 Nov 25 07:48 | 0°♋ | | | | 11081 Apr 29 20:53 | 0°II | |
| morning max el | 11078 Dec 21 00:37 | 21°♋23'14 | 45°41'47 | | | 11081 May 23 21:14 | 0°☾ | |
| | 11078 Dec 29 17:25 | 0°♌ | | | | 11081 Jun 17 00:01 | 0°Ω | |
| asc. node | 11079 Jan 02 18:40 | 4°♌09'51 | | asc. node | | 11081 Jun 19 06:37 | 2°Ω49'08 | |
| | 11079 Jan 26 13:04 | 0°3 | | | | 11081 Jul 11 08:16 | 0°♍ | |
| | 11079 Feb 21 12:10 | 0°≈ | | | | 11081 Aug 05 02:14 | 0°♊ | |
| | 11079 Mar 18 14:17 | 0°X | | | | 11081 Aug 30 13:42 | 0°♋ | |
| | 11079 Apr 12 04:28 | 0°Y | | | | 11081 Sep 26 13:20 | 0°♌ | |
| desc. node | 11079 Apr 24 12:58 | 15°Y14'03 | | desc. node | | 11081 Oct 09 04:34 | 12°♌57'57 | |
| | 11079 May 06 10:51 | 0°8 | | evening max el | | 11081 Oct 11 10:35 | 15°♌10'15 | 45°56'59 |
| | 11079 May 30 12:02 | 0°II | | | | 11081 Oct 27 22:45 | 0°3 | |
| morning set | 11079 Jun 22 04:14 | 28°II25'11 | | greatest brilliancy | | 11081 Nov 19 15:15 | 13°350'09 | -4.7m |
| | 11079 Jun 23 10:28 | 0°☾ | | retrograde | | 11081 Nov 29 13:48 | 15°338'20 | |
| | 11079 Jul 17 08:29 | 0°Ω | | evening set | | 11081 Dec 17 09:09 | 9°340'54 | |
| | | | | inferior conj | | 11081 Dec 21 01:58 | 7°323'29 | -7°50'51 |
| superior conj | 11079 Jul 31 21:38 | 18°Ω13'00 | -0°34'06 | minimum elong | | 11081 Dec 21 10:03 | 7°310'47 | 7°49'09 |
| minimum elong | 11079 Aug 01 05:40 | 18°Ω38'09 | 0°34'11 | min. Earth dist. | | 11081 Dec 21 11:38 | 7°308'18 | 0.28980 AU |
| max. Earth dist. | 11079 Aug 03 14:10 | 21°Ω34'47 | 1.71728 AU | morning rise | | 11081 Dec 25 10:48 | 4°341'45 | |
| | 11079 Aug 10 07:49 | 0°♍ | | | | 11082 Jan 04 20:52 | 30°R♌ | |
| asc. node | 11079 Aug 15 05:56 | 6°♍08'47 | | direct | | 11082 Jan 11 12:16 | 29°♌06'48 | |
| | 11079 Sep 03 09:27 | 0°♊ | | | | 11082 Jan 18 09:15 | 0°3 | |
| evening rise | 11079 Sep 08 22:34 | 6°♊53'39 | | greatest brilliancy | | 11082 Jan 22 09:04 | 1°315'28 | -4.8m |
| | 11079 Sep 27 14:06 | 0°♋ | | asc. node | | 11082 Jan 30 05:33 | 5°302'46 | |
| | 11079 Oct 21 23:01 | 0°♌ | | | | 11082 Mar 01 17:37 | 0°≈ | |
| | 11079 Nov 15 14:14 | 0°3 | | morning max el | | 11082 Mar 01 22:59 | 0°≈13'13 | 46°04'24 |
| desc. node | 11079 Dec 05 00:11 | 23°320'38 | | | | 11082 Mar 30 00:00 | 0°X | |
| | 11079 Dec 10 14:08 | 0°≈ | | | | 11082 Apr 24 23:51 | 0°Y | |
| | 11080 Jan 05 01:35 | 0°X | | | | 11082 May 20 00:13 | 0°8 | |
| | 11080 Jan 31 06:25 | 0°Y | | desc. node | | 11082 May 22 02:05 | 2°831'29 | |
| | 11080 Feb 27 23:49 | 0°8 | | | | 11082 Jun 13 12:07 | 0°II | |
| evening max el | 11080 Mar 06 02:29 | 7°810'26 | 46°24'50 | | | 11082 Jul 07 17:30 | 0°☾ | |
| asc. node | 11080 Mar 27 00:05 | 25°853'59 | | | | 11082 Jul 31 20:19 | 0°Ω | |
| | 11080 Apr 01 14:26 | 0°II | | | | 11082 Aug 24 22:58 | 0°♍ | |
| greatest brilliancy | 11080 Apr 15 08:56 | 7°II19'24 | -4.9m | morning set | | 11082 Sep 03 11:26 | 11°♍49'59 | |
| retrograde | 11080 Apr 24 23:59 | 9°II03'56 | | asc. node | | 11082 Sep 11 19:17 | 22°♍10'45 | |
| evening set | 11080 May 12 20:04 | 3°II00'43 | | | | 11082 Sep 18 02:29 | 0°♊ | |
| inferior conj | 11080 May 15 16:53 | 1°II15'20 | 9°04'33 | | | | | |
| minimum elong | 11080 May 15 12:47 | 1°II21'39 | 9°03'46 | superior conj | | 11082 Oct 11 14:49 | 29°♊09'34 | 1°04'12 |
| min. Earth dist. | 11080 May 15 18:58 | 1°II12'05 | 0.27281 AU | minimum elong | | 11082 Oct 11 04:57 | 28°♊39'01 | 1°04'07 |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 11082 Oct 12 07:06 | 0°♌ | | morning max el | 11085 May 12 02:06 | 10°♑40'22 | 46°48'06 |
| max. Earth dist. | 11082 Oct 13 09:35 | 1°♌22'00 | 1.72792 AU | | 11085 May 30 09:29 | 0°♋ | |
| | 11082 Nov 05 13:12 | 0°♌ | | desc. node | 11085 Jun 18 14:20 | 21°♋43'05 | |
| evening rise | 11082 Nov 17 10:45 | 14°♌40'37 | | | 11085 Jun 25 17:01 | 0°♌ | |
| | 11082 Nov 29 21:38 | 0°♌ | | | 11085 Jul 20 21:50 | 0°♌ | |
| | 11082 Dec 24 09:16 | 0°♌ | | | 11085 Aug 14 15:14 | 0°♌ | |
| desc. node | 11083 Jan 01 12:04 | 9°♌54'15 | | | 11085 Sep 08 04:01 | 0°♌ | |
| | 11083 Jan 18 00:29 | 0°♌ | | | 11085 Oct 02 14:49 | 0°♌ | |
| | 11083 Feb 11 19:16 | 0°♌ | | asc. node | 11085 Oct 09 08:53 | 8°♌17'59 | |
| | 11083 Mar 08 18:43 | 0°♌ | | | 11085 Oct 27 00:15 | 0°♌ | |
| asc. node | 11083 Apr 03 03:43 | 0°♌ | | morning set | 11085 Nov 12 14:44 | 20°♌27'32 | |
| | 11083 Apr 24 10:17 | 24°♌22'19 | | | 11085 Nov 20 08:27 | 0°♌ | |
| | 11083 Apr 29 11:51 | 0°♌ | | | 11085 Dec 14 16:02 | 0°♌ | |
| evening max el | 11083 May 19 03:26 | 20°♌48'30 | 46°52'06 | | | | |
| | 11083 May 28 15:18 | 0°♌ | | superior conj | 11085 Dec 19 06:23 | 5°♌40'20 | 1°18'27 |
| greatest brilliancy | 11083 Jun 28 09:24 | 21°♌34'08 | -4.9m | minimum elong | 11085 Dec 19 13:40 | 6°♌02'47 | 1°18'56 |
| retrograde | 11083 Jul 08 13:38 | 23°♌31'21 | | max. Earth dist. | 11085 Dec 19 11:38 | 5°♌56'30 | 1.73210 AU |
| evening set | 11083 Jul 23 22:43 | 18°♌52'36 | | | 11086 Jan 07 23:45 | 0°♌ | |
| inferior conj | 11083 Jul 29 08:02 | 15°♌41'05 | 4°01'37 | evening rise | 11086 Jan 25 17:08 | 21°♌50'49 | |
| minimum elong | 11083 Jul 29 16:37 | 15°♌27'57 | 3°58'37 | desc. node | 11086 Jan 29 00:37 | 25°♌55'45 | |
| min. Earth dist. | 11083 Jul 29 09:02 | 15°♌39'32 | 0.27122 AU | | 11086 Feb 01 07:53 | 0°♌ | |
| morning rise | 11083 Aug 04 10:44 | 12°♌06'18 | | | 11086 Feb 25 15:59 | 0°♌ | |
| desc. node | 11083 Aug 14 10:08 | 8°♌20'35 | | | 11086 Mar 21 23:43 | 0°♌ | |
| direct | 11083 Aug 19 01:37 | 7°♌54'19 | | | 11086 Apr 15 08:01 | 0°♌ | |
| greatest brilliancy | 11083 Aug 29 00:25 | 9°♌44'31 | -4.8m | | 11086 May 09 19:52 | 0°♌ | |
| | 11083 Sep 28 00:14 | 0°♌ | | asc. node | 11086 May 21 21:01 | 14°♌36'31 | |
| morning max el | 11083 Oct 07 15:03 | 8°♌59'20 | 46°09'58 | | 11086 Jun 03 16:51 | 0°♌ | |
| | 11083 Oct 28 02:11 | 0°♌ | | | 11086 Jun 29 09:11 | 0°♌ | |
| | 11083 Nov 24 02:51 | 0°♌ | | | 11086 Jul 26 22:41 | 0°♌ | |
| asc. node | 11083 Dec 05 08:54 | 12°♌57'11 | | evening max el | 11086 Jul 30 05:40 | 3°♌19'40 | 46°33'53 |
| | 11083 Dec 19 22:17 | 0°♌ | | | 11086 Aug 31 14:03 | 0°♌ | |
| | 11084 Jan 14 01:20 | 0°♌ | | greatest brilliancy | 11086 Sep 07 05:10 | 3°♌10'53 | -4.8m |
| | 11084 Feb 07 18:12 | 0°♌ | | desc. node | 11086 Sep 10 20:28 | 4°♌23'14 | |
| | 11084 Mar 03 04:28 | 0°♌ | | retrograde | 11086 Sep 18 06:59 | 5°♌25'51 | |
| desc. node | 11084 Mar 26 01:23 | 28°♌18'53 | | evening set | 11086 Oct 04 06:10 | 0°♌29'49 | |
| | 11084 Mar 27 09:56 | 0°♌ | | | 11086 Oct 05 02:47 | 30°♌ | |
| morning set | 11084 Apr 04 02:31 | 9°♌33'59 | | min. Earth dist. | 11086 Oct 08 18:17 | 27°♌46'44 | 0.28358 AU |
| | 11084 Apr 20 11:30 | 0°♌ | | inferior conj | 11086 Oct 09 14:50 | 27°♌14'42 | -6°23'25 |
| max. Earth dist. | 11084 May 12 12:51 | 27°♌38'00 | 1.71430 AU | minimum elong | 11086 Oct 09 04:34 | 27°♌30'44 | 6°21'02 |
| | | | | morning rise | 11086 Oct 14 03:28 | 24°♌29'40 | |
| superior conj | 11084 May 14 08:47 | 29°♌55'52 | -1°25'57 | direct | 11086 Oct 30 20:25 | 19°♌13'34 | |
| minimum elong | 11084 May 14 04:04 | 29°♌41'05 | 1°26'25 | greatest brilliancy | 11086 Nov 09 09:23 | 20°♌52'44 | -4.7m |
| | 11084 May 14 10:06 | 0°♌ | | | 11086 Nov 26 04:22 | 0°♌ | |
| | 11084 Jun 07 07:18 | 0°♌ | | morning max el | 11086 Dec 18 14:12 | 19°♌06'32 | 45°41'52 |
| evening rise | 11084 Jun 23 17:52 | 20°♌38'21 | | | 11086 Dec 29 12:36 | 0°♌ | |
| | 11084 Jul 01 05:08 | 0°♌ | | asc. node | 11087 Jan 01 20:37 | 3°♌27'19 | |
| asc. node | 11084 Jul 16 18:51 | 19°♌28'16 | | | 11087 Jan 26 03:43 | 0°♌ | |
| | 11084 Jul 25 05:32 | 0°♌ | | | 11087 Feb 21 01:04 | 0°♌ | |
| | 11084 Aug 18 10:14 | 0°♌ | | | 11087 Mar 18 02:20 | 0°♌ | |
| | 11084 Sep 11 21:25 | 0°♌ | | | 11087 Apr 11 16:02 | 0°♌ | |
| | 11084 Oct 06 18:54 | 0°♌ | | desc. node | 11087 Apr 23 15:01 | 14°♌45'09 | |
| desc. node | 11084 Nov 01 09:24 | 0°♌ | | | 11087 May 05 22:08 | 0°♌ | |
| | 11084 Nov 05 15:00 | 4°♌50'40 | | | 11087 May 29 23:08 | 0°♌ | |
| | 11084 Nov 28 06:19 | 0°♌ | | morning set | 11087 Jun 19 15:46 | 25°♌56'17 | |
| evening max el | 11084 Dec 21 18:10 | 24°♌04'17 | 45°51'54 | | 11087 Jun 22 21:28 | 0°♌ | |
| | 11084 Dec 28 02:22 | 0°♌ | | | 11087 Jul 16 19:26 | 0°♌ | |
| greatest brilliancy | 11085 Jan 29 19:46 | 22°♌24'38 | -4.8m | | | | |
| retrograde | 11085 Feb 08 16:13 | 24°♌10'39 | | superior conj | 11087 Jul 29 10:16 | 15°♌48'16 | -0°37'34 |
| evening set | 11085 Feb 23 08:05 | 19°♌58'14 | | minimum elong | 11087 Jul 29 18:59 | 16°♌15'32 | 0°37'39 |
| asc. node | 11085 Feb 26 15:55 | 18°♌03'24 | | max. Earth dist. | 11087 Jul 31 23:34 | 19°♌00'01 | 1.71694 AU |
| inferior conj | 11085 Mar 01 15:50 | 16°♌12'36 | 0°45'17 | | 11087 Aug 09 18:44 | 0°♌ | |
| minimum elong | 11085 Mar 01 14:06 | 16°♌15'18 | 0°44'56 | asc. node | 11087 Aug 14 07:47 | 5°♌40'30 | |
| min. Earth dist. | 11085 Mar 01 23:49 | 16°♌00'12 | 0.27844 AU | | 11087 Sep 02 20:21 | 0°♌ | |
| morning rise | 11085 Mar 07 19:44 | 12°♌31'46 | | evening rise | 11087 Sep 06 13:26 | 4°♌36'50 | |
| direct | 11085 Mar 22 18:41 | 8°♌08'05 | | | 11087 Sep 27 01:03 | 0°♌ | |
| greatest brilliancy | 11085 Apr 02 08:55 | 10°♌14'13 | -4.8m | | 11087 Oct 21 10:08 | 0°♌ | |
| | 11085 Apr 30 23:09 | 0°♌ | | | 11087 Nov 15 01:42 | 0°♌ | |

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|---------------------|--------------------|----------------------|------------|---------------------|--------------------|---------------------------------|
| desc. node | 11087 Dec 04 02:09 | 22° ♁ 50'53 | | 11090 Mar 29 15:23 | 0° ♁ | |
| | 11087 Dec 10 02:16 | 0° ♁ | | 11090 Apr 24 13:07 | 0° ♁ | |
| | 11088 Jan 04 14:52 | 0° ♁ | | 11090 May 19 12:29 | 0° ♁ | |
| | 11088 Jan 30 21:54 | 0° ♁ | | desc. node | 11090 May 21 03:58 | 2° ♁ 00'05 |
| | 11088 Feb 27 20:41 | 0° ♁ | | 11090 Jun 12 23:49 | 0° ♁ | |
| evening max el | 11088 Mar 03 15:06 | 4° ♁ 46'20 | 46°23'27 | 11090 Jul 07 04:50 | 0° ♁ | |
| asc. node | 11088 Mar 26 02:11 | 24° ♁ 41'01 | | 11090 Jul 31 07:22 | 0° ♁ | |
| | 11088 Apr 02 20:24 | 0° ♁ | | 11090 Aug 24 09:47 | 0° ♁ | |
| greatest brilliancy | 11088 Apr 12 21:57 | 4° ♁ 54'57 | -4.9m | morning set | 11090 Sep 01 01:52 | 9° ♁ 32'12 |
| retrograde | 11088 Apr 22 12:45 | 6° ♁ 39'38 | | asc. node | 11090 Sep 10 21:14 | 21° ♁ 43'30 |
| evening set | 11088 May 10 05:35 | 0° ♁ 41'26 | | 11090 Sep 17 13:09 | 0° ♁ | |
| | 11088 May 11 09:02 | 30° ♁ | | | | |
| inferior conj | 11088 May 13 06:02 | 28° ♁ 50'49 | 8°59'34 | superior conj | 11090 Oct 09 06:48 | 26° ♁ 57'31 1°01'51 |
| minimum elong | 11088 May 13 01:02 | 28° ♁ 58'31 | 8°58'41 | minimum elong | 11090 Oct 08 20:51 | 26° ♁ 26'42 1°01'45 |
| min. Earth dist. | 11088 May 13 07:57 | 28° ♁ 47'50 | 0.27294 AU | max. Earth dist. | 11090 Oct 11 03:37 | 29° ♁ 16'20 1.72765 AU |
| morning rise | 11088 May 15 20:26 | 27° ♁ 14'58 | | | 11090 Oct 11 17:42 | 0° ♁ |
| direct | 11088 Jun 02 23:30 | 20° ♁ 57'44 | | | 11090 Nov 04 23:49 | 0° ♁ |
| greatest brilliancy | 11088 Jun 12 19:56 | 22° ♁ 47'07 | -4.9m | evening rise | 11090 Nov 15 03:34 | 12° ♁ 31'49 |
| | 11088 Jun 26 06:57 | 0° ♁ | | | 11090 Nov 29 08:20 | 0° ♁ |
| desc. node | 11088 Jul 16 01:35 | 16° ♁ 29'23 | | desc. node | 11090 Dec 23 20:11 | 0° ♁ |
| morning max el | 11088 Jul 23 09:55 | 23° ♁ 39'27 | 46°53'28 | | 11090 Dec 31 13:53 | 9° ♁ 26'14 |
| | 11088 Jul 29 14:49 | 0° ♁ | | | 11091 Jan 17 11:45 | 0° ♁ |
| | 11088 Aug 26 00:38 | 0° ♁ | | | 11091 Feb 11 07:05 | 0° ♁ |
| | 11088 Sep 20 22:50 | 0° ♁ | | | 11091 Mar 08 07:26 | 0° ♁ |
| | 11088 Oct 16 06:11 | 0° ♁ | | | 11091 Apr 02 17:58 | 0° ♁ |
| asc. node | 11088 Nov 05 22:10 | 24° ♁ 49'34 | | asc. node | 11091 Apr 23 12:16 | 23° ♁ 41'32 |
| | 11088 Nov 10 04:58 | 0° ♁ | | | 11091 Apr 29 05:21 | 0° ♁ |
| | 11088 Dec 04 21:30 | 0° ♁ | | evening max el | 11091 May 16 18:07 | 18° ♁ 28'24 46°51'47 |
| | 11088 Dec 29 09:24 | 0° ♁ | | | 11091 May 28 19:30 | 0° ♁ |
| morning set | 11089 Jan 20 05:35 | 26° ♁ 53'12 | | greatest brilliancy | 11091 Jun 25 23:18 | 19° ♁ 10'41 -4.9m |
| | 11089 Jan 22 18:09 | 0° ♁ | | retrograde | 11091 Jul 06 03:28 | 21° ♁ 07'21 |
| | 11089 Feb 16 00:42 | 0° ♁ | | evening set | 11091 Jul 21 14:39 | 16° ♁ 25'00 |
| max. Earth dist. | 11089 Feb 24 12:58 | 10° ♁ 32'43 | 1.72571 AU | inferior conj | 11091 Jul 26 20:57 | 13° ♁ 17'24 4°23'12 |
| desc. node | 11089 Feb 25 13:50 | 11° ♁ 49'49 | | minimum elong | 11091 Jul 27 06:08 | 13° ♁ 03'22 4°20'03 |
| | | | | min. Earth dist. | 11091 Jul 26 22:30 | 13° ♁ 15'03 0.27108 AU |
| superior conj | 11089 Feb 27 03:47 | 13° ♁ 47'30 | -0°03'52 | morning rise | 11091 Aug 01 21:55 | 9° ♁ 45'11 |
| minimum elong | 11089 Feb 27 02:55 | 13° ♁ 44'47 | 0°03'35 | desc. node | 11091 Aug 13 12:10 | 5° ♁ 42'45 |
| behind sun begin | 11089 Feb 26 03:10 | 12° ♁ 31'09 | | direct | 11091 Aug 16 15:01 | 5° ♁ 30'57 |
| behind sun end | 11089 Feb 28 02:40 | 14° ♁ 58'27 | | greatest brilliancy | 11091 Aug 26 12:43 | 7° ♁ 20'39 -4.8m |
| | 11089 Mar 12 05:09 | 0° ♁ | | | 11091 Sep 28 03:35 | 0° ♁ |
| | 11089 Apr 05 07:22 | 0° ♁ | | morning max el | 11091 Oct 05 05:35 | 6° ♁ 42'18 46°11'28 |
| evening rise | 11089 Apr 07 03:40 | 2° ♁ 18'07 | | | 11091 Oct 27 19:13 | 0° ♁ |
| | 11089 Apr 29 07:56 | 0° ♁ | | | 11091 Nov 23 16:39 | 0° ♁ |
| | 11089 May 23 08:28 | 0° ♁ | | asc. node | 11091 Dec 04 10:45 | 12° ♁ 24'46 |
| | 11089 Jun 16 11:32 | 0° ♁ | | | 11091 Dec 19 10:35 | 0° ♁ |
| asc. node | 11089 Jun 18 08:27 | 2° ♁ 19'04 | | | 11092 Jan 13 12:49 | 0° ♁ |
| | 11089 Jul 10 20:13 | 0° ♁ | | | 11092 Feb 07 05:14 | 0° ♁ |
| | 11089 Aug 04 14:58 | 0° ♁ | | | 11092 Mar 02 15:16 | 0° ♁ |
| | 11089 Aug 30 03:59 | 0° ♁ | | desc. node | 11092 Mar 25 03:24 | 27° ♁ 51'58 |
| | 11089 Sep 26 07:18 | 0° ♁ | | | 11092 Mar 26 20:37 | 0° ♁ |
| desc. node | 11089 Oct 08 06:39 | 12° ♁ 10'31 | | morning set | 11092 Apr 01 15:12 | 7° ♁ 10'57 |
| evening max el | 11089 Oct 09 01:47 | 12° ♁ 57'10 | 45°58'00 | | 11092 Apr 19 22:08 | 0° ♁ |
| | 11089 Oct 28 08:45 | 0° ♁ | | max. Earth dist. | 11092 May 09 21:06 | 24° ♁ 59'57 1.71452 AU |
| greatest brilliancy | 11089 Nov 17 05:32 | 11° ♁ 38'21 | -4.7m | | | |
| retrograde | 11089 Nov 27 06:09 | 13° ♁ 28'17 | | superior conj | 11092 May 11 20:35 | 27° ♁ 28'54 -1°25'06 |
| evening set | 11089 Dec 15 03:24 | 7° ♁ 26'46 | | minimum elong | 11092 May 11 14:55 | 27° ♁ 11'07 1°25'32 |
| inferior conj | 11089 Dec 18 17:59 | 5° ♁ 12'50 | -7°59'15 | | 11092 May 13 20:44 | 0° ♁ |
| minimum elong | 11089 Dec 19 01:34 | 5° ♁ 00'55 | 7°57'42 | | 11092 Jun 06 17:58 | 0° ♁ |
| min. Earth dist. | 11089 Dec 19 02:29 | 4° ♁ 59'28 | 0.29000 AU | evening rise | 11092 Jun 21 04:59 | 18° ♁ 09'02 |
| morning rise | 11089 Dec 22 23:38 | 2° ♁ 36'05 | | | 11092 Jun 30 15:53 | 0° ♁ |
| | 11089 Dec 27 18:51 | 30° ♁ | | asc. node | 11092 Jul 15 20:43 | 19° ♁ 00'15 |
| direct | 11090 Jan 09 04:26 | 26° ♁ 56'05 | | | 11092 Jul 24 16:25 | 0° ♁ |
| greatest brilliancy | 11090 Jan 20 00:16 | 29° ♁ 04'09 | -4.8m | | 11092 Aug 17 21:19 | 0° ♁ |
| | 11090 Jan 22 06:59 | 0° ♁ | | | 11092 Sep 11 08:52 | 0° ♁ |
| asc. node | 11090 Jan 29 07:26 | 3° ♁ 42'17 | | | 11092 Oct 06 07:00 | 0° ♁ |
| morning max el | 11090 Feb 27 15:24 | 28° ♁ 02'12 | 46°03'01 | | 11092 Oct 31 22:52 | 0° ♁ |
| | 11090 Mar 01 14:58 | 0° ♁ | | desc. node | 11092 Nov 04 16:58 | 4° ♁ 17'05 |

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|---------------------|--------------------|-----------|------------|---------------------|--------------------|-----------|------------|
| | 11092 Nov 27 22:48 | 0°≈ | | morning set | 11095 Jun 17 03:30 | 23°Ⅱ29'05 | |
| evening max el | 11092 Dec 19 09:11 | 21°≈51'16 | 45°51'17 | | 11095 Jun 22 08:05 | 0°☾ | |
| | 11092 Dec 28 04:43 | 0°✕ | | | 11095 Jul 16 05:58 | 0°♁ | |
| greatest brilliancy | 11093 Jan 27 10:55 | 20°✕09'52 | -4.8m | | | | |
| retrograde | 11093 Feb 06 05:59 | 21°✕54'36 | | superior conj | 11095 Jul 26 23:13 | 13°♁25'45 | -0°40'56 |
| evening set | 11093 Feb 20 23:13 | 17°✕41'32 | | minimum elong | 11095 Jul 27 08:33 | 13°♁54'58 | 0°41'01 |
| asc. node | 11093 Feb 25 18:02 | 14°✕53'06 | | max. Earth dist. | 11095 Jul 29 08:26 | 16°♁24'50 | 1.71658 AU |
| inferior conj | 11093 Feb 27 06:29 | 13°✕56'25 | 0°22'56 | | 11095 Aug 09 05:13 | 0°♐ | |
| minimum elong | 11093 Feb 27 05:36 | 13°✕57'48 | 0°22'54 | asc. node | 11095 Aug 13 09:46 | 5°♐13'57 | |
| min. Earth dist. | 11093 Feb 27 15:24 | 13°✕42'31 | 0.27876 AU | | 11095 Sep 02 06:50 | 0°♑ | |
| morning rise | 11093 Mar 05 11:30 | 10°✕13'32 | | evening rise | 11095 Sep 04 04:32 | 2°♑22'00 | |
| direct | 11093 Mar 20 09:29 | 5°✕51'29 | | | 11095 Sep 26 11:36 | 0°♒ | |
| greatest brilliancy | 11093 Mar 31 00:48 | 7°✕58'05 | -4.8m | | 11095 Oct 20 20:54 | 0°♓ | |
| | 11093 May 01 01:44 | 0°♑ | | | 11095 Nov 14 12:53 | 0°♑ | |
| morning max el | 11093 May 09 15:36 | 8°♑19'15 | 46°46'59 | desc. node | 11095 Dec 03 03:58 | 22°♑21'35 | |
| | 11093 May 30 02:21 | 0°♒ | | | 11095 Dec 09 14:07 | 0°≈ | |
| desc. node | 11093 Jun 17 16:14 | 21°♒06'37 | | | 11096 Jan 04 03:55 | 0°✕ | |
| | 11093 Jun 25 06:56 | 0°Ⅱ | | | 11096 Jan 30 13:17 | 0°♑ | |
| | 11093 Jul 20 10:21 | 0°☾ | | | 11096 Feb 27 17:56 | 0°♒ | |
| | 11093 Aug 14 02:59 | 0°♁ | | evening max el | 11096 Mar 01 04:17 | 2°♒24'48 | 46°22'06 |
| | 11093 Sep 07 15:16 | 0°♐ | | asc. node | 11096 Mar 25 04:10 | 23°♒26'29 | |
| | 11093 Oct 02 01:42 | 0°♑ | | | 11096 Apr 04 15:23 | 0°Ⅱ | |
| asc. node | 11093 Oct 08 10:49 | 7°♑50'45 | | greatest brilliancy | 11096 Apr 10 10:19 | 2°Ⅱ30'39 | -4.9m |
| | 11093 Oct 26 10:51 | 0°♒ | | retrograde | 11096 Apr 20 01:53 | 4°Ⅱ16'13 | |
| morning set | 11093 Nov 10 07:25 | 18°♒18'41 | | | 11096 May 04 18:48 | 30°♒♒ | |
| | 11093 Nov 19 18:54 | 0°♓ | | evening set | 11096 May 07 14:40 | 28°♒23'17 | |
| | 11093 Dec 14 02:24 | 0°♑ | | inferior conj | 11096 May 10 19:05 | 26°♒26'56 | 8°53'31 |
| | | | | minimum elong | 11096 May 10 13:14 | 26°♒35'57 | 8°52'31 |
| superior conj | 11093 Dec 16 23:26 | 3°♑32'53 | 1°19'45 | min. Earth dist. | 11096 May 10 20:37 | 26°♒24'34 | 0.27307 AU |
| minimum elong | 11093 Dec 17 06:11 | 3°♑53'41 | 1°20'16 | morning rise | 11096 May 13 11:44 | 24°♒47'53 | |
| max. Earth dist. | 11093 Dec 17 04:56 | 3°♑49'49 | 1.73212 AU | direct | 11096 May 31 12:43 | 18°♒33'15 | |
| | 11094 Jan 07 10:11 | 0°≈ | | greatest brilliancy | 11096 Jun 10 09:28 | 20°♒23'21 | -4.9m |
| evening rise | 11094 Jan 23 08:54 | 19°≈39'00 | | | 11096 Jun 27 04:25 | 0°Ⅱ | |
| desc. node | 11094 Jan 28 02:32 | 25°≈29'05 | | desc. node | 11096 Jul 15 03:32 | 15°Ⅱ33'16 | |
| | 11094 Jan 31 18:28 | 0°✕ | | morning max el | 11096 Jul 21 00:16 | 21°Ⅱ18'46 | 46°54'33 |
| | 11094 Feb 25 02:48 | 0°♑ | | | 11096 Jul 29 10:51 | 0°☾ | |
| | 11094 Mar 21 10:50 | 0°♒ | | | 11096 Aug 25 15:46 | 0°♁ | |
| | 11094 Apr 14 19:31 | 0°Ⅱ | | | 11096 Sep 20 11:53 | 0°♐ | |
| | 11094 May 09 07:59 | 0°☾ | | | 11096 Oct 15 18:04 | 0°♑ | |
| asc. node | 11094 May 20 22:55 | 14°☾04'25 | | asc. node | 11096 Nov 04 23:57 | 24°♑20'48 | |
| | 11094 Jun 03 06:02 | 0°♁ | | | 11096 Nov 09 16:10 | 0°♒ | |
| | 11094 Jun 29 00:28 | 0°♐ | | | 11096 Dec 04 08:19 | 0°♓ | |
| | 11094 Jul 26 19:34 | 0°♑ | | | 11096 Dec 28 20:00 | 0°♑ | |
| evening max el | 11094 Jul 27 19:45 | 1°♑00'42 | 46°34'58 | morning set | 11097 Jan 17 22:17 | 24°♑44'15 | |
| | 11094 Sep 02 14:55 | 0°♒ | | | 11097 Jan 22 04:39 | 0°≈ | |
| greatest brilliancy | 11094 Sep 04 21:17 | 0°♒57'17 | -4.8m | | 11097 Feb 15 11:11 | 0°✕ | |
| desc. node | 11094 Sep 09 22:33 | 2°♒30'45 | | max. Earth dist. | 11097 Feb 22 07:56 | 8°✕30'10 | 1.72609 AU |
| retrograde | 11094 Sep 15 22:00 | 3°♒11'44 | | | | | |
| | 11094 Sep 28 14:55 | 30°♒♑ | | superior conj | 11097 Feb 24 18:13 | 11°✕30'50 | -0°00'15 |
| evening set | 11094 Oct 01 18:28 | 28°♑20'20 | | minimum elong | 11097 Feb 24 18:12 | 11°✕30'47 | 0°00'00 |
| min. Earth dist. | 11094 Oct 06 09:46 | 25°♑33'01 | 0.28305 AU | behind sun begin | 11097 Feb 24 06:27 | 10°✕54'19 | |
| inferior conj | 11094 Oct 07 06:01 | 25°♑01'27 | -6°08'41 | behind sun end | 11097 Feb 25 05:58 | 12°✕07'16 | |
| minimum elong | 11094 Oct 06 19:43 | 25°♑17'30 | 6°06'13 | desc. node | 11097 Feb 24 15:48 | 11°✕23'19 | |
| morning rise | 11094 Oct 11 21:27 | 22°♑12'18 | | | 11097 Mar 11 15:41 | 0°♑ | |
| direct | 11094 Oct 28 10:32 | 17°♑01'00 | | evening rise | 11097 Apr 04 16:59 | 29°♑56'40 | |
| greatest brilliancy | 11094 Nov 07 00:26 | 18°♑40'27 | -4.8m | | 11097 Apr 04 18:03 | 0°♒ | |
| | 11094 Nov 26 19:10 | 0°♒ | | | 11097 Apr 28 18:48 | 0°Ⅱ | |
| morning max el | 11094 Dec 16 03:55 | 16°♒51'03 | 45°42'04 | | 11097 May 22 19:34 | 0°☾ | |
| | 11094 Dec 29 06:53 | 0°♓ | | | 11097 Jun 15 22:54 | 0°♁ | |
| asc. node | 11094 Dec 31 22:34 | 2°♓46'19 | | asc. node | 11097 Jun 17 10:22 | 1°♁49'42 | |
| | 11095 Jan 25 17:50 | 0°♑ | | | 11097 Jul 10 08:02 | 0°♐ | |
| | 11095 Feb 20 13:30 | 0°≈ | | | 11097 Aug 04 03:33 | 0°♑ | |
| | 11095 Mar 17 13:58 | 0°✕ | | | 11097 Aug 29 18:08 | 0°♒ | |
| | 11095 Apr 11 03:13 | 0°♑ | | | 11097 Sep 26 01:22 | 0°♓ | |
| desc. node | 11095 Apr 22 16:47 | 14°♑16'28 | | evening max el | 11097 Oct 06 17:52 | 10°♓47'12 | 45°59'01 |
| | 11095 May 05 09:03 | 0°♒ | | desc. node | 11097 Oct 07 08:33 | 11°♓22'51 | |
| | 11095 May 29 09:53 | 0°Ⅱ | | | 11097 Oct 28 21:41 | 0°♑ | |

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|---------------------|--------------------|----------------------|------------|---------------------|--------------------|----------------------|------------|
| greatest brilliancy | 11097 Nov 14 19:51 | 9° ♁ 27'45 | -4.7m | superior conj | 11100 May 10 08:16 | 25° ♁ 00'55 | -1°24'04 |
| retrograde | 11097 Nov 24 22:41 | 11° ♁ 19'18 | | minimum elong | 11100 May 10 01:43 | 24° ♁ 40'21 | 1°24'29 |
| evening set | 11097 Dec 12 21:41 | 5° ♁ 14'06 | | | 11100 May 14 07:37 | 0° ♁ | |
| inferior conj | 11097 Dec 16 10:10 | 3° ♁ 03'14 | -8°06'50 | | 11100 Jun 07 04:53 | 0° ♁ | |
| minimum elong | 11097 Dec 16 17:13 | 2° ♁ 52'09 | 8°05'26 | evening rise | 11100 Jun 19 15:50 | 15° ♁ 38'09 | |
| min. Earth dist. | 11097 Dec 16 17:17 | 2° ♁ 52'03 | 0.29020 AU | | 11100 Jul 01 02:52 | 0° ♁ | |
| morning rise | 11097 Dec 20 12:42 | 0° ♁ 31'16 | | asc. node | 11100 Jul 15 22:43 | 18° ♁ 31'56 | |
| | 11097 Dec 21 10:00 | 30° ♁ | | | 11100 Jul 25 03:32 | 0° ♁ | |
| direct | 11098 Jan 06 21:15 | 24° ♁ 46'35 | | | 11100 Aug 18 08:41 | 0° ♁ | |
| greatest brilliancy | 11098 Jan 17 15:10 | 26° ♁ 53'16 | -4.8m | | 11100 Sep 11 20:36 | 0° ♁ | |
| | 11098 Jan 24 07:44 | 0° ♁ | | | 11100 Oct 06 19:27 | 0° ♁ | |
| asc. node | 11098 Jan 28 09:31 | 2° ♁ 25'13 | | | 11100 Nov 01 12:41 | 0° ♁ | |
| morning max el | 11098 Feb 25 08:02 | 25° ♁ 52'09 | 46°01'31 | desc. node | 11100 Nov 04 18:53 | 3° ♁ 42'31 | |
| | 11098 Mar 01 11:26 | 0° ♁ | | | 11100 Nov 28 15:48 | 0° ♁ | |
| | 11098 Mar 29 06:28 | 0° ♁ | | evening max el | 11100 Dec 17 23:24 | 19° ♁ 36'00 | 45°50'48 |
| | 11098 Apr 24 02:13 | 0° ♁ | | | 11100 Dec 29 08:51 | 0° ♁ | |
| | 11098 May 19 00:36 | 0° ♁ | | greatest brilliancy | 11101 Jan 26 02:13 | 17° ♁ 55'16 | -4.8m |
| desc. node | 11098 May 20 05:51 | 1° ♁ 29'02 | | retrograde | 11101 Feb 04 19:44 | 19° ♁ 39'02 | |
| | 11098 Jun 12 11:25 | 0° ♁ | | evening set | 11101 Feb 19 14:44 | 15° ♁ 24'37 | |
| | 11098 Jul 06 16:05 | 0° ♁ | | inferior conj | 11101 Feb 25 21:23 | 11° ♁ 40'27 | 0°00'53 |
| | 11098 Jul 30 18:21 | 0° ♁ | | minimum elong | 11101 Feb 25 21:21 | 11° ♁ 40'32 | 0°01'08 |
| | 11098 Aug 23 20:35 | 0° ♁ | | transit middle | 11101 Feb 25 21:21 | 11° ♁ 40'32 | 0°01'08 |
| morning set | 11098 Aug 29 16:28 | 7° ♁ 14'58 | | transit begin | 11101 Feb 25 17:18 | 11° ♁ 46'50 | |
| asc. node | 11098 Sep 09 23:08 | 21° ♁ 16'13 | | transit end | 11101 Feb 26 01:23 | 11° ♁ 34'13 | |
| | 11098 Sep 16 23:47 | 0° ♁ | | asc. node | 11101 Feb 25 19:59 | 11° ♁ 42'40 | |
| | | | | min. Earth dist. | 11101 Feb 26 07:21 | 11° ♁ 24'54 | 0.27915 AU |
| superior conj | 11098 Oct 06 23:00 | 24° ♁ 46'16 | 0°59'26 | morning rise | 11101 Mar 04 03:20 | 7° ♁ 55'49 | |
| minimum elong | 11098 Oct 06 13:03 | 24° ♁ 15'27 | 0°59'18 | direct | 11101 Mar 19 00:15 | 3° ♁ 34'47 | |
| max. Earth dist. | 11098 Oct 08 23:31 | 27° ♁ 16'37 | 1.72731 AU | greatest brilliancy | 11101 Mar 29 17:30 | 5° ♁ 42'40 | -4.8m |
| | 11098 Oct 11 04:15 | 0° ♁ | | | 11101 May 02 03:16 | 0° ♁ | |
| | 11098 Nov 04 10:21 | 0° ♁ | | morning max el | 11101 May 08 05:14 | 5° ♁ 57'25 | 46°45'40 |
| evening rise | 11098 Nov 12 20:44 | 10° ♁ 24'17 | | | 11101 May 30 19:19 | 0° ♁ | |
| | 11098 Nov 28 18:58 | 0° ♁ | | desc. node | 11101 Jun 17 18:15 | 20° ♁ 29'28 | |
| | 11098 Dec 23 07:04 | 0° ♁ | | | 11101 Jun 25 21:07 | 0° ♁ | |
| desc. node | 11098 Dec 30 15:54 | 8° ♁ 58'52 | | | 11101 Jul 20 23:13 | 0° ♁ | |
| | 11099 Jan 16 23:02 | 0° ♁ | | | 11101 Aug 14 15:04 | 0° ♁ | |
| | 11099 Feb 10 19:00 | 0° ♁ | | | 11101 Sep 08 02:50 | 0° ♁ | |
| | 11099 Mar 07 20:19 | 0° ♁ | | | 11101 Oct 02 12:54 | 0° ♁ | |
| | 11099 Apr 02 08:29 | 0° ♁ | | asc. node | 11101 Oct 08 12:36 | 7° ♁ 21'56 | |
| asc. node | 11099 Apr 22 14:10 | 22° ♁ 59'51 | | | 11101 Oct 26 21:48 | 0° ♁ | |
| | 11099 Apr 28 23:22 | 0° ♁ | | morning set | 11101 Nov 09 00:03 | 16° ♁ 08'34 | |
| evening max el | 11099 May 14 08:39 | 16° ♁ 07'37 | 46°51'23 | | 11101 Nov 20 05:41 | 0° ♁ | |
| | 11099 May 29 01:48 | 0° ♁ | | | 11101 Dec 14 13:08 | 0° ♁ | |
| greatest brilliancy | 11099 Jun 23 13:40 | 16° ♁ 47'35 | -4.9m | | | | |
| retrograde | 11099 Jul 03 16:56 | 18° ♁ 42'54 | | superior conj | 11101 Dec 15 16:46 | 1° ♁ 25'12 | 1°20'55 |
| evening set | 11099 Jul 19 06:44 | 13° ♁ 57'02 | | minimum elong | 11101 Dec 15 22:58 | 1° ♁ 44'20 | 1°21'28 |
| inferior conj | 11099 Jul 24 09:55 | 10° ♁ 53'28 | 4°44'14 | max. Earth dist. | 11101 Dec 15 22:03 | 1° ♁ 41'31 | 1.73210 AU |
| minimum elong | 11099 Jul 24 19:37 | 10° ♁ 38'37 | 4°41'00 | | 11102 Jan 07 20:57 | 0° ♁ | |
| min. Earth dist. | 11099 Jul 24 12:12 | 10° ♁ 50'00 | 0.27095 AU | | | | |
| morning rise | 11099 Jul 30 08:48 | 7° ♁ 23'51 | | | | | |
| desc. node | 11099 Aug 12 14:16 | 3° ♁ 10'18 | | | | | |
| direct | 11099 Aug 14 04:15 | 3° ♁ 07'17 | | | | | |
| greatest brilliancy | 11099 Aug 24 01:20 | 4° ♁ 56'29 | -4.8m | | | | |
| | 11099 Sep 28 05:34 | 0° ♁ | | | | | |
| morning max el | 11099 Oct 02 19:26 | 4° ♁ 23'03 | 46°13'06 | | | | |
| | 11099 Oct 27 12:01 | 0° ♁ | | | | | |
| | 11099 Nov 23 06:23 | 0° ♁ | | | | | |
| asc. node | 11099 Dec 03 12:44 | 11° ♁ 52'42 | | | | | |
| | 11099 Dec 18 22:51 | 0° ♁ | | | | | |
| | 11100 Jan 13 00:20 | 0° ♁ | | | | | |
| | 11100 Feb 06 16:21 | 0° ♁ | | | | | |
| | 11100 Mar 03 02:12 | 0° ♁ | | | | | |
| desc. node | 11100 Mar 25 05:14 | 27° ♁ 23'52 | | | | | |
| | 11100 Mar 27 07:30 | 0° ♁ | | | | | |
| morning set | 11100 Mar 31 03:53 | 4° ♁ 47'14 | | | | | |
| | 11100 Apr 20 09:00 | 0° ♁ | | | | | |
| max. Earth dist. | 11100 May 08 02:02 | 22° ♁ 10'51 | 1.71476 AU | | | | |