

superior conj	1399 Apr 22 j 14:06	9°♄57'36	0°-44'-6	evening set	1401 Sep 05 j 10:02	25°♃52'28	
minimum elong	1399 Apr 22 j 22:28	10°♄23'22	0°43'46	inferior conj	1401 Sep 08 j 13:34	23°♃58'05	-8°-36'-6
max. Earth dist.	1399 Apr 24 j 14:55	12°♄27'52	1.73273 AU	minimum elong	1401 Sep 08 j 17:43	23°♃51'42	8°35'52
	1399 May 08 j 20:58	0°♂		min. Earth dist.	1401 Sep 09 j 08:55	23°♃28'23	0.28004 AU
asc. node	1399 May 12 j 01:29	3°♂55'09		morning rise	1401 Sep 12 j 01:08	21°♃51'12	
evening rise	1399 May 29 j 13:21	25°♂23'48		direct	1401 Sep 29 j 17:56	15°♃53'53	
	1399 Jun 02 j 07:24	0°♁		greatest brilliancy	1401 Oct 14 j 03:43	19°♃38'54	-4.6m
	1399 Jun 26 j 19:02	0°♁		asc. node	1401 Oct 26 j 20:21	27°♃40'41	
	1399 Jul 21 j 08:19	0°♂			1401 Oct 29 j 19:37	0°♁	
	1399 Aug 15 j 00:40	0°♁		morning max el	1401 Nov 19 j 09:47	19°♁02'20	46°50'28
desc. node	1399 Aug 31 j 14:40	20°♁01'01			1401 Nov 29 j 20:06	0°♂	
	1399 Sep 08 j 22:11	0°♂			1401 Dec 26 j 09:31	0°♂	
	1399 Oct 04 j 03:59	0°♂			1402 Jan 20 j 16:19	0°♁	
	1399 Oct 30 j 01:39	0°♁			1402 Feb 14 j 11:27	0°♂	
	1399 Nov 26 j 16:16	0°♂		desc. node	1402 Feb 15 j 09:46	1°♂07'49	
evening max el	1399 Nov 26 j 22:12	0°♂15'10	47°20'09		1402 Mar 11 j 02:01	0°♂	
asc. node	1399 Dec 22 j 18:03	23°♂31'04			1402 Apr 04 j 15:06	0°♂	
	1400 Jan 02 j 00:38	0°♂			1402 Apr 29 j 03:54	0°♂	
greatest brilliancy	1400 Jan 03 j 23:28	0°♂56'49	-4.7m		1402 May 23 j 16:18	0°♂	
retrograde	1400 Jan 16 j 22:08	4°♂05'29		morning set	1402 May 24 j 00:25	0°♂24'51	
	1400 Jan 31 j 04:04	30°♂		asc. node	1402 Jun 08 j 13:16	19°♂27'23	
evening set	1400 Feb 03 j 08:07	28°♂10'42			1402 Jun 17 j 03:27	0°♁	
min. Earth dist.	1400 Feb 06 j 00:27	26°♂31'23	0.27522 AU	max. Earth dist.	1402 Jun 27 j 09:17	12°♂35'26	1.73500 AU
inferior conj	1400 Feb 06 j 19:40	26°♂01'14	8°33'34				
minimum elong	1400 Feb 06 j 14:47	26°♂08'54	8°33'13	superior conj	1402 Jun 29 j 11:16	15°♂09'11	0°46'56
morning rise	1400 Feb 09 j 21:39	24°♂06'36		minimum elong	1402 Jun 29 j 03:15	14°♂44'31	0°46'37
direct	1400 Feb 27 j 11:48	18°♂08'49			1402 Jul 11 j 12:31	0°♁	
greatest brilliancy	1400 Mar 09 j 05:03	20°♂15'35	-4.6m	evening rise	1402 Aug 04 j 07:03	29°♁21'24	
	1400 Mar 25 j 23:47	0°♂			1402 Aug 04 j 19:32	0°♂	
desc. node	1400 Apr 12 j 07:24	14°♂43'12			1402 Aug 29 j 01:29	0°♁	
morning max el	1400 Apr 16 j 19:01	18°♂59'35	46°05'43		1402 Sep 22 j 07:37	0°♂	
	1400 Apr 27 j 18:49	0°♂		desc. node	1402 Sep 28 j 02:39	7°♂09'30	
	1400 May 25 j 14:06	0°♂			1402 Oct 16 j 14:59	0°♂	
	1400 Jun 20 j 21:26	0°♂			1402 Nov 10 j 00:53	0°♁	
	1400 Jul 16 j 09:40	0°♁			1402 Dec 04 j 16:27	0°♂	
asc. node	1400 Aug 03 j 10:49	21°♂39'24			1402 Dec 29 j 21:39	0°♂	
	1400 Aug 10 j 08:02	0°♁		asc. node	1403 Jan 19 j 05:51	23°♂09'34	
	1400 Sep 03 j 19:22	0°♂			1403 Jan 25 j 12:24	0°♂	
	1400 Sep 27 j 22:42	0°♁		evening max el	1403 Feb 06 j 13:01	12°♂31'48	46°32'19
greatest brilliancy	1400 Oct 08 j 12:08	13°♁12'30	-3.9m		1403 Feb 25 j 14:41	0°♂	
morning set	1400 Oct 11 j 08:29	16°♁46'40		greatest brilliancy	1403 Mar 13 j 23:08	10°♂51'34	-4.6m
	1400 Oct 21 j 21:19	0°♂		retrograde	1403 Mar 28 j 13:45	14°♂40'22	
	1400 Nov 14 j 17:52	0°♂		evening set	1403 Apr 13 j 16:53	9°♂34'24	
max. Earth dist.	1400 Nov 20 j 02:24	6°♂44'31	1.71087 AU	inferior conj	1403 Apr 18 j 21:00	6°♂24'02	4°53'43
				minimum elong	1403 Apr 19 j 06:01	6°♂09'50	4°51'31
superior conj	1400 Nov 20 j 07:32	7°♂00'39	0°06'29	min. Earth dist.	1403 Apr 18 j 21:59	6°♂22'28	0.28715 AU
minimum elong	1400 Nov 20 j 09:14	7°♂06'01	0°06'23	morning rise	1403 Apr 24 j 19:29	2°♂48'22	
behind sun begin	1400 Nov 19 j 08:50	5°♂49'13			1403 Apr 30 j 17:08	30°♂	
behind sun end	1400 Nov 21 j 09:38	8°♂22'49		direct	1403 May 10 j 06:48	28°♂10'10	
desc. node	1400 Nov 23 j 00:21	10°♂24'37		desc. node	1403 May 10 j 19:12	28°♂10'29	
	1400 Dec 08 j 14:02	0°♁			1403 May 20 j 07:31	0°♂	
evening rise	1400 Dec 31 j 21:15	29°♂17'01		greatest brilliancy	1403 May 22 j 21:22	0°♂59'35	-4.5m
	1401 Jan 01 j 10:57	0°♂		morning max el	1403 Jun 28 j 02:06	27°♂58'25	45°43'46
	1401 Jan 25 j 10:01	0°♂			1403 Jun 30 j 04:46	0°♂	
	1401 Feb 18 j 13:16	0°♂			1403 Jul 28 j 23:57	0°♁	
	1401 Mar 14 j 23:23	0°♂			1403 Aug 24 j 10:08	0°♁	
asc. node	1401 Mar 16 j 03:44	1°♂26'24		asc. node	1403 Aug 31 j 22:52	8°♁50'05	
	1401 Apr 08 j 19:31	0°♂			1403 Sep 18 j 15:52	0°♂	
	1401 May 04 j 06:26	0°♁			1403 Oct 13 j 04:35	0°♁	
	1401 May 30 j 18:05	0°♁			1403 Nov 06 j 07:32	0°♂	
	1401 Jun 28 j 11:57	0°♂			1403 Nov 30 j 05:51	0°♂	
evening max el	1401 Jun 30 j 15:45	2°♂04'36	45°33'45	desc. node	1403 Dec 21 j 12:02	26°♂43'04	
desc. node	1401 Jul 05 j 16:54	6°♂47'51			1403 Dec 24 j 02:43	0°♁	
greatest brilliancy	1401 Aug 07 j 04:31	29°♂35'16	-4.5m	morning set	1403 Dec 27 j 01:49	3°♂43'22	
	1401 Aug 08 j 07:33	0°♁			1404 Jan 16 j 23:58	0°♂	
retrograde	1401 Aug 18 j 11:23	1°♁51'40					
	1401 Aug 28 j 04:19	30°♂		superior conj	1404 Feb 06 j 15:48	25°♂52'55	-1°-23'-3

minimum elong	1404 Feb 06 j 09:57	25°≈34'38	1°23'00			1406 Aug 31 j 13:54	0°♌	
	1404 Feb 09 j 22:50	0°♋			morning max el	1406 Sep 06 j 09:57	5°♌33'28	46°07'34
max. Earth dist.	1404 Feb 10 j 15:26	0°♋51'53	1.71740 AU		asc. node	1406 Sep 28 j 10:40	28°♌33'46	
	1404 Mar 05 j 00:26	0°♌				1406 Sep 29 j 17:57	0°♍	
evening rise	1404 Mar 17 j 14:00	15°♌35'16				1406 Oct 25 j 20:52	0°♎	
	1404 Mar 29 j 05:56	0°♌				1406 Nov 19 j 18:43	0°♏	
asc. node	1404 Apr 12 j 15:42	17°♌43'33				1406 Dec 14 j 03:34	0°♐	
	1404 Apr 22 j 16:11	0°♍				1407 Jan 07 j 07:12	0°♑	
	1404 May 17 j 07:55	0°♎			desc. node	1407 Jan 17 j 23:56	13°♑19'11	
	1404 Jun 11 j 06:28	0°♏				1407 Jan 31 j 09:26	0°♒	
	1404 Jul 06 j 14:56	0°♐				1407 Feb 24 j 12:10	0°♓	
	1404 Aug 01 j 15:56	0°♑			morning set	1407 Mar 13 j 02:27	20°♓36'01	
desc. node	1404 Aug 02 j 04:45	0°♑36'10				1407 Mar 20 j 16:31	0°♌	
	1404 Aug 29 j 01:30	0°♒				1407 Apr 13 j 23:05	0°♍	
evening max el	1404 Sep 11 j 20:43	14°♒02'14	46°39'10					
	1404 Sep 29 j 11:50	0°♎			superior conj	1407 Apr 20 j 06:38	7°♌47'01	0°-46'-55
greatest brilliancy	1404 Oct 20 j 18:08	13°♎26'22	-4.6m		minimum elong	1407 Apr 20 j 15:23	8°♌13'59	0°46'35
retrograde	1404 Oct 31 j 19:01	15°♎40'59			max. Earth dist.	1407 Apr 22 j 08:44	10°♌21'18	1.73231 AU
evening set	1404 Nov 15 j 04:20	11°♎36'09				1407 May 08 j 07:52	0°♍	
inferior conj	1404 Nov 21 j 07:15	8°♎01'53	0°-31'-52		asc. node	1407 May 11 j 03:29	3°♍27'48	
minimum elong	1404 Nov 21 j 08:28	8°♎00'01	0°31'28		evening rise	1407 May 27 j 07:58	23°♍20'13	
min. Earth dist.	1404 Nov 21 j 08:29	8°♎00'00	0.26416 AU			1407 Jun 01 j 18:20	0°♎	
asc. node	1404 Nov 23 j 08:12	6°♎47'44				1407 Jun 26 j 06:08	0°♏	
morning rise	1404 Nov 27 j 12:32	4°♎24'56				1407 Jul 20 j 19:45	0°♐	
direct	1404 Dec 11 j 17:20	0°♎24'54				1407 Aug 14 j 12:41	0°♑	
greatest brilliancy	1404 Dec 23 j 19:50	3°♎09'41	-4.7m		desc. node	1407 Aug 30 j 16:46	19°♑29'38	
	1405 Jan 27 j 18:29	0°♒				1407 Sep 08 j 11:04	0°♒	
morning max el	1405 Jan 31 j 03:41	3°♒21'46	46°49'12			1407 Oct 03 j 18:14	0°♓	
	1405 Feb 25 j 03:26	0°♓				1407 Oct 29 j 18:22	0°♑	
desc. node	1405 Mar 14 j 21:44	20°≈06'50			evening max el	1407 Nov 24 j 11:45	27°♑49'22	47°20'22
	1405 Mar 23 j 11:04	0°♋				1407 Nov 26 j 15:22	0°≈	
	1405 Apr 18 j 00:20	0°♌			asc. node	1407 Dec 21 j 20:04	22°≈11'15	
	1405 May 13 j 04:45	0°♍			greatest brilliancy	1408 Jan 01 j 14:31	28°≈33'15	-4.7m
	1405 Jun 07 j 03:28	0°♎				1408 Jan 05 j 04:20	0°♋	
	1405 Jul 01 j 20:52	0°♏			retrograde	1408 Jan 14 j 12:24	1°♋41'38	
asc. node	1405 Jul 06 j 01:03	5°♏05'37				1408 Jan 23 j 12:57	30°≈	
	1405 Jul 26 j 08:32	0°♐			evening set	1408 Jan 31 j 18:59	25°≈51'42	
morning set	1405 Jul 30 j 16:21	5°♐19'50			min. Earth dist.	1408 Feb 03 j 13:46	24°≈09'01	0.27465 AU
	1405 Aug 19 j 14:48	0°♑			inferior conj	1408 Feb 04 j 09:33	23°≈38'03	8°28'08
max. Earth dist.	1405 Sep 01 j 20:41	16°♑28'34	1.72270 AU		minimum elong	1408 Feb 04 j 03:53	23°≈46'55	8°27'39
					morning rise	1408 Feb 07 j 13:00	21°≈41'31	
superior conj	1405 Sep 05 j 10:40	20°♑56'28	1°23'45		direct	1408 Feb 25 j 00:45	15°≈46'20	
minimum elong	1405 Sep 05 j 13:41	21°♑05'51	1°23'44		greatest brilliancy	1408 Mar 06 j 18:41	17°≈54'01	-4.6m
	1405 Sep 12 j 16:59	0°♒				1408 Mar 26 j 14:55	0°♋	
	1405 Oct 06 j 16:58	0°♓			desc. node	1408 Apr 11 j 09:27	13°♋49'12	
evening rise	1405 Oct 13 j 21:52	9°♓00'49			morning max el	1408 Apr 14 j 09:29	16°♋41'58	46°07'17
desc. node	1405 Oct 25 j 14:34	23°♓39'07				1408 Apr 27 j 14:10	0°♌	
	1405 Oct 30 j 16:17	0°♑				1408 May 25 j 05:00	0°♍	
	1405 Nov 23 j 15:59	0°♒				1408 Jun 20 j 10:26	0°♎	
	1405 Dec 17 j 17:12	0°≈				1408 Jul 15 j 21:39	0°♏	
	1406 Jan 10 j 22:27	0°♋			asc. node	1408 Aug 02 j 13:02	21°♏11'12	
	1406 Feb 04 j 12:25	0°♌				1408 Aug 09 j 19:28	0°♐	
asc. node	1406 Feb 15 j 17:51	13°♌27'22				1408 Sep 03 j 06:31	0°♑	
	1406 Mar 01 j 19:03	0°♍				1408 Sep 27 j 09:46	0°♒	
	1406 Mar 28 j 09:54	0°♎			morning set	1408 Oct 08 j 22:26	14°♒25'18	
evening max el	1406 Apr 18 j 08:07	21°♎33'36	45°30'41			1408 Oct 21 j 08:24	0°♓	
	1406 Apr 27 j 10:01	0°♏				1408 Nov 14 j 05:00	0°♑	
greatest brilliancy	1406 May 22 j 19:47	17°♏59'56	-4.5m					
retrograde	1406 Jun 05 j 23:47	21°♏30'32			superior conj	1408 Nov 17 j 17:54	4°♎27'09	0°10'24
desc. node	1406 Jun 07 j 07:03	21°♏28'33			minimum elong	1408 Nov 17 j 20:37	4°♎35'43	0°10'16
evening set	1406 Jun 21 j 09:36	16°♏58'58			behind sun begin	1408 Nov 17 j 00:01	3°♎30'53	
inferior conj	1406 Jun 27 j 12:16	13°♏19'11	-4°-31'-1		behind sun end	1408 Nov 18 j 17:13	5°♎40'32	
minimum elong	1406 Jun 27 j 03:34	13°♏32'48	4°28'51		max. Earth dist.	1408 Nov 17 j 11:32	4°♎07'06	1.71104 AU
min. Earth dist.	1406 Jun 27 j 11:52	13°♏19'49	0.28979 AU		desc. node	1408 Nov 22 j 02:20	9°♎55'46	
morning rise	1406 Jul 02 j 21:18	10°♏03'09				1408 Dec 08 j 01:12	0°♑	
direct	1406 Jul 19 j 03:53	5°♏01'48			evening rise	1408 Dec 29 j 07:08	26°♑42'16	
greatest brilliancy	1406 Aug 02 j 05:23	8°♏27'47	-4.5m			1408 Dec 31 j 22:10	0°≈	

	1409 Jan 24 j 21:18	0°♁			1411 Aug 23 j 23:11	0°♁	
	1409 Feb 18 j 00:42	0°♁		asc. node	1411 Aug 31 j 00:52	8°♁18'35	
	1409 Mar 14 j 11:05	0°♁			1411 Sep 18 j 03:54	0°♁	
asc. node	1409 Mar 15 j 05:50	0°♁57'07			1411 Oct 12 j 16:05	0°♁	
	1409 Apr 08 j 07:47	0°♁			1411 Nov 05 j 18:46	0°♁	
	1409 May 03 j 19:46	0°♁			1411 Nov 29 j 16:55	0°♁	
	1409 May 30 j 09:47	0°♁		desc. node	1411 Dec 20 j 14:10	26°♁15'09	
evening max el	1409 Jun 28 j 07:12	29°♁52'18	45°32'31		1411 Dec 23 j 13:43	0°♁	
	1409 Jun 28 j 10:26	0°♁		morning set	1411 Dec 24 j 11:39	1°♁08'57	
desc. node	1409 Jul 04 j 19:01	5°♁54'10			1412 Jan 16 j 10:56	0°♁	
greatest brilliancy	1409 Aug 04 j 15:31	27°♁16'29	-4.5m				
retrograde	1409 Aug 16 j 01:53	29°♁35'32		superior conj	1412 Feb 04 j 02:57	23°♁23'32	-1°-21'-59
evening set	1409 Sep 03 j 01:11	23°♁34'40		minimum elong	1412 Feb 03 j 20:12	23°♁02'25	1°21'54
inferior conj	1409 Sep 06 j 04:03	21°♁41'00	-8°-39'-24	max. Earth dist.	1412 Feb 08 j 03:28	28°♁25'20	1.71691 AU
minimum elong	1409 Sep 06 j 07:24	21°♁35'52	8°39'16		1412 Feb 09 j 09:45	0°♁	
min. Earth dist.	1409 Sep 06 j 22:12	21°♁13'08	0.28066 AU		1412 Mar 04 j 11:19	0°♁	
morning rise	1409 Sep 09 j 13:25	19°♁37'21		evening rise	1412 Mar 15 j 03:17	13°♁14'03	
direct	1409 Sep 27 j 09:44	13°♁36'10			1412 Mar 28 j 16:49	0°♁	
greatest brilliancy	1409 Oct 11 j 19:00	17°♁20'56	-4.6m	asc. node	1412 Apr 11 j 17:39	17°♁15'54	
asc. node	1409 Oct 25 j 22:21	26°♁28'51			1412 Apr 22 j 03:12	0°♁	
	1409 Oct 30 j 06:18	0°♁			1412 May 16 j 19:15	0°♁	
morning max el	1409 Nov 17 j 01:10	16°♁43'03	46°49'15		1412 Jun 10 j 18:24	0°♁	
	1409 Nov 29 j 14:59	0°♁			1412 Jul 06 j 03:55	0°♁	
	1409 Dec 26 j 00:38	0°♁			1412 Aug 01 j 06:52	0°♁	
	1410 Jan 20 j 05:45	0°♁		desc. node	1412 Aug 01 j 06:52	29°♁59'59	
	1410 Feb 13 j 23:55	0°♁			1412 Aug 28 j 20:51	0°♁	
desc. node	1410 Feb 14 j 11:56	0°♁36'32		evening max el	1412 Sep 09 j 09:26	11°♁38'31	46°36'45
	1410 Mar 10 j 13:52	0°♁			1412 Sep 30 j 01:38	0°♁	
	1410 Apr 04 j 02:30	0°♁		greatest brilliancy	1412 Oct 18 j 08:52	11°♁01'35	-4.6m
	1410 Apr 28 j 14:58	0°♁		retrograde	1412 Oct 29 j 06:33	13°♁13'14	
morning set	1410 May 21 j 18:20	28°♁19'30		evening set	1412 Nov 12 j 17:51	9°♁07'04	
	1410 May 23 j 03:09	0°♁		inferior conj	1412 Nov 18 j 19:34	5°♁34'39	0°-56'-14
asc. node	1410 Jun 07 j 15:18	19°♁00'33		minimum elong	1412 Nov 18 j 21:43	5°♁31'23	0°55'34
	1410 Jun 16 j 14:11	0°♁		min. Earth dist.	1412 Nov 18 j 22:43	5°♁29'52	0.26430 AU
max. Earth dist.	1410 Jun 25 j 07:14	10°♁42'19	1.73515 AU	asc. node	1412 Nov 22 j 10:11	3°♁24'42	
				morning rise	1412 Nov 25 j 01:21	1°♁56'40	
superior conj	1410 Jun 27 j 05:44	13°♁05'17	0°44'18		1412 Nov 29 j 04:55	30°♁	
minimum elong	1410 Jun 26 j 21:59	12°♁41'29	0°43'58	direct	1412 Dec 09 j 05:23	27°♁57'13	
	1410 Jul 10 j 23:15	0°♁			1412 Dec 19 j 14:56	0°♁	
evening rise	1410 Aug 02 j 01:12	27°♁15'40		greatest brilliancy	1412 Dec 21 j 11:12	0°♁44'53	-4.7m
	1410 Aug 04 j 06:22	0°♁			1413 Jan 27 j 18:15	0°♁	
	1410 Aug 28 j 12:30	0°♁		morning max el	1413 Jan 28 j 15:42	0°♁53'47	46°50'05
	1410 Sep 21 j 18:56	0°♁			1413 Feb 24 j 20:00	0°♁	
desc. node	1410 Sep 27 j 04:43	6°♁40'37		desc. node	1413 Mar 13 j 23:45	19°♁30'40	
	1410 Oct 16 j 02:44	0°♁			1413 Mar 23 j 00:59	0°♁	
	1410 Nov 09 j 13:13	0°♁			1413 Apr 17 j 12:52	0°♁	
	1410 Dec 04 j 05:41	0°♁			1413 May 12 j 16:28	0°♁	
	1410 Dec 29 j 12:30	0°♁			1413 Jun 06 j 14:39	0°♁	
asc. node	1411 Jan 18 j 08:00	22°♁27'52			1413 Jul 01 j 07:44	0°♁	
	1411 Jan 25 j 07:01	0°♁		asc. node	1413 Jul 05 j 03:14	4°♁39'14	
evening max el	1411 Feb 04 j 04:52	10°♁16'35	46°34'43		1413 Jul 25 j 19:15	0°♁	
	1411 Feb 26 j 02:31	0°♁		morning set	1413 Jul 28 j 09:29	3°♁11'45	
greatest brilliancy	1411 Mar 11 j 17:29	8°♁42'00	-4.6m		1413 Aug 19 j 01:28	0°♁	
retrograde	1411 Mar 26 j 06:04	12°♁28'07		max. Earth dist.	1413 Aug 30 j 12:42	14°♁15'41	1.72325 AU
evening set	1411 Apr 11 j 11:34	7°♁18'47					
inferior conj	1411 Apr 16 j 12:57	4°♁11'59	5°10'22	superior conj	1413 Sep 03 j 02:48	18°♁43'49	1°24'12
minimum elong	1411 Apr 16 j 22:13	3°♁57'22	5°08'10	minimum elong	1413 Sep 03 j 05:04	18°♁50'53	1°24'12
min. Earth dist.	1411 Apr 16 j 13:29	4°♁11'08	0.28690 AU		1413 Sep 12 j 03:42	0°♁	
morning rise	1411 Apr 22 j 09:15	0°♁39'12			1413 Oct 06 j 03:48	0°♁	
	1411 Apr 23 j 13:59	30°♁		evening rise	1413 Oct 11 j 10:44	6°♁36'53	
direct	1411 May 07 j 22:50	25°♁58'48		desc. node	1413 Oct 24 j 16:33	23°♁11'00	
desc. node	1411 May 09 j 21:09	26°♁03'08			1413 Oct 30 j 03:17	0°♁	
greatest brilliancy	1411 May 20 j 10:01	28°♁44'59	-4.5m		1413 Nov 23 j 03:09	0°♁	
	1411 May 23 j 04:01	0°♁			1413 Dec 17 j 04:35	0°♁	
morning max el	1411 Jun 25 j 17:32	25°♁47'22	45°43'42		1414 Jan 10 j 10:11	0°♁	
	1411 Jun 30 j 01:59	0°♁			1414 Feb 04 j 00:47	0°♁	
	1411 Jul 28 j 15:11	0°♁		asc. node	1414 Feb 14 j 19:53	12°♁55'16	

	1414 Mar 01 j 08:42	0°♄			1416 Oct 20 j 19:16	0°♍		
	1414 Mar 28 j 02:32	0°♁			1416 Nov 13 j 15:54	0°♁		
evening max el	1414 Apr 15 j 22:51	19°♁20'17	45°31'57	max. Earth dist.	1416 Nov 14 j 20:40	1°♁30'31	1.71120 AU	
	1414 Apr 27 j 13:21	0°♁						
greatest brilliancy	1414 May 20 j 09:19	15°♁47'59	-4.5m	superior conj	1416 Nov 15 j 04:16	1°♁54'27	0°14'18	
retrograde	1414 Jun 03 j 16:04	19°♁22'15		minimum elong	1416 Nov 15 j 07:59	2°♁06'06	0°14'08	
desc. node	1414 Jun 06 j 09:11	19°♁13'34		behind sun begin	1416 Nov 14 j 18:46	1°♁24'32		
evening set	1414 Jun 19 j 00:11	14°♁52'16		behind sun end	1416 Nov 15 j 21:12	2°♁47'41		
inferior conj	1414 Jun 25 j 04:31	11°♁10'28	-4°-13'-54	desc. node	1416 Nov 21 j 04:25	9°♁27'58		
minimum elong	1414 Jun 24 j 20:11	11°♁23'28	4°11'47		1416 Dec 07 j 12:09	0°♁		
min. Earth dist.	1414 Jun 25 j 04:08	11°♁11'03	0.28985 AU	evening rise	1416 Dec 26 j 17:02	24°♁08'10		
morning rise	1414 Jun 30 j 15:57	7°♁51'08			1416 Dec 31 j 09:10	0°♁		
direct	1414 Jul 16 j 19:39	2°♁52'47			1417 Jan 24 j 08:22	0°♁		
greatest brilliancy	1414 Jul 30 j 22:12	6°♁19'37	-4.5m		1417 Feb 17 j 11:53	0°♁		
	1414 Aug 31 j 13:48	0°♁			1417 Mar 13 j 22:32	0°♁		
morning max el	1414 Sep 04 j 01:19	3°♁20'31	46°06'12	asc. node	1417 Mar 14 j 07:48	0°♁28'12		
asc. node	1414 Sep 27 j 12:41	27°♁54'28			1417 Apr 07 j 19:48	0°♁		
	1414 Sep 29 j 10:00	0°♁			1417 May 03 j 08:57	0°♁		
	1414 Oct 25 j 10:26	0°♁			1417 May 30 j 01:33	0°♁		
	1414 Nov 19 j 07:10	0°♁		evening max el	1417 Jun 25 j 22:38	27°♁40'15	45°31'04	
	1414 Dec 13 j 15:24	0°♁			1417 Jun 28 j 09:48	0°♁		
desc. node	1415 Jan 06 j 18:37	0°♁		desc. node	1417 Jul 03 j 21:07	4°♁59'30		
	1415 Jan 17 j 02:06	12°♁50'50		greatest brilliancy	1417 Aug 02 j 03:34	24°♁58'43	-4.5m	
	1415 Jan 30 j 20:33	0°♁		retrograde	1417 Aug 13 j 15:48	27°♁19'00		
	1415 Feb 23 j 23:03	0°♁		evening set	1417 Aug 31 j 15:50	21°♁17'20		
morning set	1415 Mar 10 j 16:23	18°♁17'00		inferior conj	1417 Sep 03 j 18:25	19°♁23'47	-8°-41'-56	
	1415 Mar 20 j 03:13	0°♁		minimum elong	1417 Sep 03 j 20:55	19°♁19'56	8°41'52	
	1415 Apr 13 j 09:43	0°♁		min. Earth dist.	1417 Sep 04 j 11:38	18°♁57'17	0.28126 AU	
				morning rise	1417 Sep 07 j 01:48	17°♁22'47		
superior conj	1415 Apr 17 j 23:02	5°♁37'00	0°-49'-41	direct	1417 Sep 25 j 01:11	11°♁18'22		
minimum elong	1415 Apr 18 j 08:07	6°♁05'00	0°49'20	greatest brilliancy	1417 Oct 09 j 09:13	15°♁01'29	-4.6m	
max. Earth dist.	1415 Apr 20 j 02:26	8°♁15'24	1.73197 AU	asc. node	1417 Oct 25 j 00:25	25°♁19'06		
	1415 May 07 j 18:29	0°♁			1417 Oct 30 j 14:08	0°♁		
asc. node	1415 May 10 j 05:33	3°♁01'32		morning max el	1417 Nov 14 j 15:34	14°♁21'27	46°48'06	
evening rise	1415 May 25 j 02:16	21°♁16'33			1417 Nov 29 j 09:19	0°♁		
	1415 Jun 01 j 05:01	0°♁			1417 Dec 25 j 15:26	0°♁		
	1415 Jun 25 j 16:59	0°♁			1418 Jan 19 j 18:57	0°♁		
	1415 Jul 20 j 06:58	0°♁			1418 Feb 13 j 12:13	0°♁		
	1415 Aug 14 j 00:29	0°♁		desc. node	1418 Feb 13 j 13:51	0°♁04'58		
desc. node	1415 Aug 29 j 18:46	18°♁58'39			1418 Mar 10 j 01:33	0°♁		
	1415 Sep 07 j 23:45	0°♁			1418 Apr 03 j 13:45	0°♁		
	1415 Oct 03 j 08:19	0°♁			1418 Apr 28 j 01:53	0°♁		
	1415 Oct 29 j 11:05	0°♁		morning set	1418 May 19 j 12:29	26°♁15'18		
evening max el	1415 Nov 22 j 02:15	25°♁27'01	47°20'35		1418 May 22 j 13:52	0°♁		
	1415 Nov 26 j 15:06	0°♁		asc. node	1418 Jun 06 j 17:27	18°♁34'29		
asc. node	1415 Dec 20 j 22:16	20°♁50'14			1418 Jun 16 j 00:48	0°♁		
greatest brilliancy	1415 Dec 30 j 05:15	26°♁10'16	-4.7m	max. Earth dist.	1418 Jun 23 j 04:35	8°♁47'43	1.73534 AU	
retrograde	1416 Jan 12 j 03:15	29°♁18'40						
evening set	1416 Jan 29 j 05:38	23°♁33'54		superior conj	1418 Jun 25 j 00:21	11°♁02'15	0°41'37	
min. Earth dist.	1416 Feb 01 j 02:47	21°♁47'54	0.27403 AU	minimum elong	1418 Jun 24 j 16:55	10°♁39'26	0°41'17	
inferior conj	1416 Feb 01 j 23:24	21°♁15'45	8°21'47		1418 Jul 10 j 09:54	0°♁		
minimum elong	1416 Feb 01 j 17:01	21°♁25'43	8°21'08	evening rise	1418 Jul 30 j 19:23	25°♁10'11		
morning rise	1416 Feb 05 j 04:38	19°♁16'52			1418 Aug 03 j 17:11	0°♁		
direct	1416 Feb 22 j 14:06	13°♁24'56			1418 Aug 27 j 23:35	0°♁		
greatest brilliancy	1416 Mar 04 j 07:11	15°♁32'24	-4.6m		1418 Sep 21 j 06:21	0°♁		
	1416 Mar 27 j 01:37	0°♁		desc. node	1418 Sep 26 j 06:41	6°♁11'11		
desc. node	1416 Apr 10 j 11:28	12°♁57'30			1418 Oct 15 j 14:34	0°♁		
morning max el	1416 Apr 12 j 00:30	14°♁26'52	46°08'45		1418 Nov 09 j 01:39	0°♁		
	1416 Apr 27 j 08:32	0°♁			1418 Dec 03 j 19:02	0°♁		
	1416 May 24 j 19:23	0°♁			1418 Dec 29 j 03:32	0°♁		
	1416 Jun 19 j 23:04	0°♁		asc. node	1419 Jan 17 j 10:00	21°♁45'17		
	1416 Jul 15 j 09:23	0°♁			1419 Jan 25 j 02:07	0°♁		
asc. node	1416 Aug 01 j 15:02	20°♁42'59		evening max el	1419 Feb 01 j 19:58	7°♁59'21	46°37'09	
	1416 Aug 09 j 06:41	0°♁			1419 Feb 26 j 18:21	0°♁		
	1416 Sep 02 j 17:29	0°♁		greatest brilliancy	1419 Mar 09 j 12:18	6°♁33'01	-4.6m	
	1416 Sep 26 j 20:38	0°♁		retrograde	1419 Mar 23 j 22:07	10°♁16'09		
morning set	1416 Oct 06 j 12:17	12°♁04'24		evening set	1419 Apr 09 j 06:27	5°♁03'22		

inferior conj	1419 Apr 14 j 05:03	2°♄00'20	5°26'37	superior conj	1421 Aug 31 j 19:24	16°♁32'04	1°24'32
minimum elong	1419 Apr 14 j 14:31	1°♄45'22	5°24'25	minimum elong	1421 Aug 31 j 20:56	16°♁36'49	1°24'31
min. Earth dist.	1419 Apr 14 j 05:24	1°♄59'47	0.28662 AU		1421 Sep 11 j 14:38	0°♁	
	1419 Apr 17 j 10:08	30°♃			1421 Oct 05 j 14:55	0°♁	
morning rise	1419 Apr 19 j 22:59	28°♃30'34		evening rise	1421 Oct 09 j 00:03	4°♁13'37	
direct	1419 May 05 j 14:28	23°♃47'49		desc. node	1421 Oct 23 j 18:42	22°♁42'29	
desc. node	1419 May 08 j 23:15	24°♃00'48			1421 Oct 29 j 14:37	0°♁	
greatest brilliancy	1419 May 17 j 23:01	26°♃30'59	-4.5m		1421 Nov 22 j 14:43	0°♁	
	1419 May 24 j 21:19	0°♄			1421 Dec 16 j 16:25	0°♁	
morning max el	1419 Jun 23 j 08:23	23°♄35'00	45°43'45		1422 Jan 09 j 22:22	0°♁	
	1419 Jun 29 j 22:24	0°♁			1422 Feb 03 j 13:38	0°♃	
	1419 Jul 28 j 06:11	0°♁		asc. node	1422 Feb 13 j 21:52	12°♃21'42	
	1419 Aug 23 j 12:12	0°♁			1422 Feb 28 j 22:53	0°♄	
asc. node	1419 Aug 30 j 02:52	7°♁47'00			1422 Mar 27 j 19:54	0°♁	
	1419 Sep 17 j 16:00	0°♁		evening max el	1422 Apr 13 j 14:26	17°♁08'11	45°33'28
	1419 Oct 12 j 03:44	0°♁			1422 Apr 27 j 18:56	0°♁	
	1419 Nov 05 j 06:10	0°♁		greatest brilliancy	1422 May 17 j 22:58	13°♁35'38	-4.5m
	1419 Nov 29 j 04:11	0°♁		retrograde	1422 Jun 01 j 08:54	17°♁13'34	
desc. node	1419 Dec 19 j 16:16	25°♁46'35		desc. node	1422 Jun 05 j 11:18	16°♁53'34	
morning set	1419 Dec 21 j 21:14	28°♁33'03		evening set	1422 Jun 16 j 15:09	12°♁44'57	
	1419 Dec 23 j 00:54	0°♁		inferior conj	1422 Jun 22 j 20:54	9°♁01'15	-3°-56'-25
	1420 Jan 15 j 22:02	0°♁		minimum elong	1422 Jun 22 j 13:00	9°♁13'34	3°54'22
				min. Earth dist.	1422 Jun 22 j 20:16	9°♁02'14	0.28987 AU
superior conj	1420 Feb 01 j 13:57	20°♁53'12	-1°-20'-45	morning rise	1422 Jun 28 j 10:41	5°♁38'53	
minimum elong	1420 Feb 01 j 06:19	20°♁29'19	1°20'38	direct	1422 Jul 14 j 12:01	0°♁43'23	
max. Earth dist.	1420 Feb 05 j 13:19	25°♁51'34	1.71638 AU	greatest brilliancy	1422 Jul 28 j 14:48	4°♁10'46	-4.5m
	1420 Feb 08 j 20:47	0°♁			1422 Aug 31 j 12:55	0°♁	
	1420 Mar 03 j 22:19	0°♃		morning max el	1422 Sep 01 j 17:47	1°♁09'53	46°04'56
evening rise	1420 Mar 12 j 16:30	10°♃52'11		asc. node	1422 Sep 26 j 14:45	27°♁15'04	
	1420 Mar 28 j 03:51	0°♄			1422 Sep 29 j 02:01	0°♁	
asc. node	1420 Apr 10 j 19:46	16°♄48'17			1422 Oct 25 j 00:08	0°♁	
	1420 Apr 21 j 14:22	0°♁			1422 Nov 18 j 19:50	0°♁	
	1420 May 16 j 06:45	0°♁			1422 Dec 13 j 03:32	0°♁	
	1420 Jun 10 j 06:29	0°♁			1423 Jan 06 j 06:26	0°♁	
	1420 Jul 05 j 17:04	0°♁		desc. node	1423 Jan 16 j 04:03	12°♁20'29	
desc. node	1420 Jul 31 j 08:50	29°♁22'47			1423 Jan 30 j 08:06	0°♁	
	1420 Jul 31 j 22:07	0°♁			1423 Feb 23 j 10:22	0°♁	
	1420 Aug 28 j 17:02	0°♁		morning set	1423 Mar 08 j 05:43	15°♁54'36	
evening max el	1420 Sep 06 j 21:24	9°♁12'26	46°34'03		1423 Mar 19 j 14:22	0°♃	
	1420 Sep 30 j 20:40	0°♁			1423 Apr 12 j 20:44	0°♄	
greatest brilliancy	1420 Oct 15 j 22:50	8°♁34'36	-4.6m				
retrograde	1420 Oct 26 j 17:56	10°♁44'05		superior conj	1423 Apr 15 j 14:58	3°♄24'18	0°-52'-25
evening set	1420 Nov 10 j 07:18	6°♁35'49		minimum elong	1423 Apr 16 j 00:21	3°♄53'12	0°52'03
inferior conj	1420 Nov 16 j 07:39	3°♁05'42	-1°-20'-46	max. Earth dist.	1423 Apr 17 j 21:10	6°♄11'22	1.73157 AU
minimum elong	1420 Nov 16 j 10:44	3°♁01'01	1°19'48		1423 May 07 j 05:27	0°♁	
min. Earth dist.	1420 Nov 16 j 12:49	2°♁57'51	0.26454 AU	asc. node	1423 May 09 j 07:39	2°♁34'16	
	1420 Nov 21 j 13:30	30°♁		evening rise	1423 May 22 j 20:27	19°♁11'23	
asc. node	1420 Nov 21 j 12:22	0°♁01'34			1423 May 31 j 16:03	0°♁	
morning rise	1420 Nov 22 j 13:46	29°♁27'08			1423 Jun 25 j 04:13	0°♁	
direct	1420 Dec 06 j 17:09	25°♁27'23			1423 Jul 19 j 18:34	0°♁	
greatest brilliancy	1420 Dec 19 j 03:11	28°♁19'12	-4.7m		1423 Aug 13 j 12:39	0°♁	
	1420 Dec 22 j 14:18	0°♁		desc. node	1423 Aug 28 j 20:49	18°♁26'51	
morning max el	1421 Jan 26 j 04:28	28°♁26'16	46°51'11		1423 Sep 07 j 12:48	0°♁	
	1421 Jan 27 j 17:31	0°♁			1423 Oct 02 j 22:49	0°♁	
	1421 Feb 24 j 12:38	0°♁			1423 Oct 29 j 04:24	0°♁	
desc. node	1421 Mar 13 j 01:49	18°♁54'02		evening max el	1423 Nov 19 j 17:33	23°♁05'56	47°20'27
	1421 Mar 22 j 15:03	0°♁			1423 Nov 26 j 16:21	0°♁	
	1421 Apr 17 j 01:35	0°♃		asc. node	1423 Dec 20 j 00:11	19°♁24'43	
	1421 May 12 j 04:22	0°♄		greatest brilliancy	1423 Dec 27 j 19:55	23°♁45'46	-4.7m
	1421 Jun 06 j 02:03	0°♁		retrograde	1424 Jan 09 j 17:58	26°♁53'36	
	1421 Jun 30 j 18:49	0°♁		evening set	1424 Jan 26 j 15:51	21°♁14'29	
asc. node	1421 Jul 04 j 05:14	4°♁11'37		min. Earth dist.	1424 Jan 29 j 15:35	19°♁24'46	0.27345 AU
	1421 Jul 25 j 06:10	0°♁		inferior conj	1424 Jan 30 j 13:02	18°♁51'21	8°14'19
morning set	1421 Jul 26 j 03:08	1°♁04'35		minimum elong	1424 Jan 30 j 05:58	19°♁02'21	8°13'32
	1421 Aug 18 j 12:20	0°♁		morning rise	1424 Feb 02 j 20:23	16°♁49'35	
max. Earth dist.	1421 Aug 28 j 07:13	12°♁10'00	1.72379 AU	direct	1424 Feb 20 j 03:45	11°♁01'35	
				greatest brilliancy	1424 Mar 01 j 19:04	13°♁08'02	-4.6m

	1424 Mar 27 j 10:13	0°☿			1426 Nov 08 j 14:16	0°♁		
morning max el	1424 Apr 09 j 15:23	12°☿09'48	46°10'12		1426 Dec 03 j 08:34	0°♁		
desc. node	1424 Apr 09 j 13:35	12°☿05'24			1426 Dec 28 j 18:47	0°☿		
	1424 Apr 27 j 03:01	0°♃		asc. node	1427 Jan 16 j 12:02	21°☿02'18		
	1424 May 24 j 10:03	0°♁			1427 Jan 24 j 21:45	0°♃		
	1424 Jun 19 j 12:00	0°♂		evening max el	1427 Jan 30 j 10:11	5°♃39'42	46°39'30	
	1424 Jul 14 j 21:23	0°♁			1427 Feb 27 j 15:45	0°♁		
asc. node	1424 Jul 31 j 17:00	20°♁13'43		greatest brilliancy	1427 Mar 07 j 06:07	4°♁22'30	-4.6m	
	1424 Aug 08 j 18:10	0°♁		retrograde	1427 Mar 21 j 13:58	8°♁04'09		
	1424 Sep 02 j 04:43	0°♃		evening set	1427 Apr 07 j 01:21	2°♁47'35		
	1424 Sep 26 j 07:47	0°♂			1427 Apr 11 j 13:59	30°♃		
morning set	1424 Oct 04 j 02:41	9°♂44'25		inferior conj	1427 Apr 11 j 21:12	29°♃48'34	5°42'15	
	1424 Oct 20 j 06:23	0°♂		minimum elong	1427 Apr 12 j 06:49	29°♃33'20	5°40'06	
max. Earth dist.	1424 Nov 12 j 04:42	28°♂49'46	1.71134 AU	min. Earth dist.	1427 Apr 11 j 21:37	29°♃47'54	0.28640 AU	
				morning rise	1427 Apr 17 j 12:37	26°♃22'00		
superior conj	1424 Nov 12 j 15:23	29°♂23'22	0°18'07	direct	1427 May 03 j 05:40	21°♃36'25		
minimum elong	1424 Nov 12 j 20:01	29°♂37'55	0°17'53	desc. node	1427 May 08 j 01:21	22°♃02'40		
	1424 Nov 13 j 03:02	0°♂		greatest brilliancy	1427 May 15 j 13:10	24°♃17'52	-4.5m	
desc. node	1424 Nov 20 j 06:32	8°♂59'29			1427 May 26 j 02:04	0°♁		
	1424 Dec 06 j 23:19	0°♁		morning max el	1427 Jun 20 j 23:15	21°♁22'04	45°43'49	
evening rise	1424 Dec 24 j 03:19	21°♁34'29			1427 Jun 29 j 18:22	0°♂		
	1424 Dec 30 j 20:24	0°♁			1427 Jul 27 j 21:09	0°♁		
	1425 Jan 23 j 19:43	0°☿			1427 Aug 23 j 01:14	0°♁		
	1425 Feb 16 j 23:25	0°♃		asc. node	1427 Aug 29 j 05:03	7°♁15'48		
	1425 Mar 13 j 10:24	0°♁			1427 Sep 17 j 04:06	0°♃		
asc. node	1425 Mar 13 j 09:54	29°♃58'30			1427 Oct 11 j 15:22	0°♂		
	1425 Apr 07 j 08:16	0°♂			1427 Nov 04 j 17:33	0°♂		
	1425 May 02 j 22:39	0°♁			1427 Nov 28 j 15:26	0°♂		
	1425 May 29 j 17:59	0°♁		desc. node	1427 Dec 18 j 18:13	25°♂17'32		
evening max el	1425 Jun 23 j 13:35	25°♁26'10	45°29'48	morning set	1427 Dec 19 j 06:55	25°♂57'26		
	1425 Jun 28 j 10:40	0°♃			1427 Dec 22 j 12:04	0°♁		
desc. node	1425 Jul 02 j 23:03	4°♃02'30			1428 Jan 15 j 09:07	0°♁		
greatest brilliancy	1425 Jul 30 j 16:22	22°♃41'27	-4.5m					
retrograde	1425 Aug 11 j 05:23	25°♃02'27		superior conj	1428 Jan 30 j 01:01	18°♁23'11	-1°-19'-20	
evening set	1425 Aug 29 j 06:20	19°♃00'36		minimum elong	1428 Jan 29 j 16:35	17°♁56'46	1°19'12	
inferior conj	1425 Sep 01 j 09:00	17°♃06'41	-8°-43'-36	max. Earth dist.	1428 Feb 02 j 20:21	23°♁09'01	1.71586 AU	
minimum elong	1425 Sep 01 j 10:39	17°♃04'08	8°43'35		1428 Feb 08 j 07:47	0°☿		
min. Earth dist.	1425 Sep 02 j 01:37	16°♃41'02	0.28182 AU		1428 Mar 03 j 09:15	0°♃		
morning rise	1425 Sep 04 j 14:47	15°♃07'46		evening rise	1428 Mar 10 j 05:48	8°♃30'40		
direct	1425 Sep 22 j 16:21	9°♃00'34			1428 Mar 27 j 14:49	0°♁		
greatest brilliancy	1425 Oct 06 j 23:49	12°♃42'11	-4.6m	asc. node	1428 Apr 09 j 21:52	16°♁20'52		
asc. node	1425 Oct 24 j 02:32	24°♃10'55			1428 Apr 21 j 01:30	0°♂		
	1425 Oct 30 j 19:55	0°♂			1428 May 15 j 18:14	0°♁		
morning max el	1425 Nov 12 j 05:17	11°♂57'40	46°47'04		1428 Jun 09 j 18:37	0°♁		
	1425 Nov 29 j 03:23	0°♂			1428 Jul 05 j 06:21	0°♃		
	1425 Dec 25 j 06:12	0°♂		desc. node	1428 Jul 30 j 10:55	28°♃45'36		
	1426 Jan 19 j 08:12	0°♁			1428 Jul 31 j 13:36	0°♂		
desc. node	1426 Feb 12 j 15:57	29°♁33'36			1428 Aug 28 j 13:49	0°♂		
	1426 Feb 13 j 00:36	0°♁		evening max el	1428 Sep 04 j 09:37	6°♂47'25	46°31'36	
	1426 Mar 09 j 13:23	0°☿			1428 Oct 01 j 22:08	0°♂		
	1426 Apr 03 j 01:12	0°♃		greatest brilliancy	1428 Oct 13 j 11:50	6°♂07'12	-4.6m	
	1426 Apr 27 j 13:02	0°♁		retrograde	1428 Oct 24 j 05:50	8°♂15'50		
morning set	1426 May 17 j 06:20	24°♁09'21		evening set	1428 Nov 07 j 21:01	4°♂04'53		
	1426 May 22 j 00:49	0°♂		inferior conj	1428 Nov 13 j 19:48	0°♂37'21	-1°-44'-59	
asc. node	1426 Jun 05 j 19:26	18°♂07'10		minimum elong	1428 Nov 13 j 23:46	0°♂31'18	1°43'43	
	1426 Jun 15 j 11:40	0°♁		min. Earth dist.	1428 Nov 14 j 02:40	0°♂26'55	0.26482 AU	
max. Earth dist.	1426 Jun 21 j 00:15	6°♁47'19	1.73549 AU		1428 Nov 14 j 20:24	30°♂		
				morning rise	1428 Nov 20 j 02:04	26°♂58'46		
superior conj	1426 Jun 22 j 18:45	8°♁57'55	0°38'51	asc. node	1428 Nov 20 j 14:20	26°♂42'42		
minimum elong	1426 Jun 22 j 11:41	8°♁36'12	0°38'33	direct	1428 Dec 04 j 05:29	22°♂58'06		
	1426 Jul 09 j 20:46	0°♁		greatest brilliancy	1428 Dec 16 j 19:07	25°♂54'09	-4.7m	
evening rise	1426 Jul 28 j 13:31	23°♁04'06			1428 Dec 24 j 09:01	0°♂		
	1426 Aug 03 j 04:11	0°♃		morning max el	1429 Jan 23 j 18:23	26°♂02'09	46°52'12	
	1426 Aug 27 j 10:49	0°♂			1429 Jan 27 j 15:39	0°♁		
	1426 Sep 20 j 17:55	0°♂			1429 Feb 24 j 04:47	0°♁		
desc. node	1426 Sep 25 j 08:50	5°♂41'53		desc. node	1429 Mar 12 j 03:55	18°♁18'20		
	1426 Oct 15 j 02:35	0°♂			1429 Mar 22 j 04:46	0°☿		

	1429 Apr 16 j 14:00	0°♃		evening max el	1431 Nov 17 j 09:16	20°♁46'28	47°20'19
	1429 May 11 j 16:01	0°♄			1431 Nov 26 j 18:41	0°♁	
	1429 Jun 05 j 13:14	0°♅		asc. node	1431 Dec 19 j 02:15	17°♁57'18	
asc. node	1429 Jun 30 j 05:44	0°♆		greatest brilliancy	1431 Dec 25 j 11:28	21°♁23'08	-4.7m
morning set	1429 Jul 03 j 07:14	3°♁44'29		retrograde	1432 Jan 07 j 08:28	24°♁29'02	
	1429 Jul 23 j 20:41	28°♁57'36		evening set	1432 Jan 24 j 01:58	18°♁56'09	
	1429 Jul 24 j 16:57	0°♇		min. Earth dist.	1432 Jan 27 j 04:30	17°♁02'12	0.27282 AU
	1429 Aug 17 j 23:06	0°♈		inferior conj	1432 Jan 28 j 02:38	16°♁27'45	8°06'01
max. Earth dist.	1429 Aug 26 j 00:59	10°♈02'21	1.72432 AU	minimum elong	1432 Jan 27 j 18:56	16°♁39'44	8°05'04
				morning rise	1432 Jan 31 j 12:15	14°♁22'40	
superior conj	1429 Aug 29 j 11:52	14°♈20'14	1°24'43	direct	1432 Feb 17 j 17:21	8°♁39'16	
minimum elong	1429 Aug 29 j 12:37	14°♈22'36	1°24'43	greatest brilliancy	1432 Feb 28 j 06:36	10°♁44'05	-4.6m
	1429 Sep 11 j 01:28	0°♉			1432 Mar 27 j 15:57	0°♈	
	1429 Oct 05 j 01:52	0°♊		morning max el	1432 Apr 07 j 05:37	9°♈52'06	46°11'34
evening rise	1429 Oct 06 j 13:14	1°♊50'31		desc. node	1432 Apr 08 j 15:39	11°♈15'16	
desc. node	1429 Oct 22 j 20:44	22°♊14'09			1432 Apr 26 j 20:39	0°♃	
	1429 Oct 29 j 01:45	0°♋			1432 May 24 j 00:10	0°♄	
	1429 Nov 22 j 02:04	0°♌			1432 Jun 19 j 00:29	0°♅	
	1429 Dec 16 j 04:01	0°♍			1432 Jul 14 j 08:59	0°♆	
	1430 Jan 09 j 10:23	0°♎		asc. node	1432 Jul 30 j 19:13	19°♁46'23	
asc. node	1430 Feb 03 j 02:20	0°♏			1432 Aug 08 j 05:17	0°♇	
	1430 Feb 13 j 00:01	11°♏49'09			1432 Sep 01 j 15:37	0°♈	
	1430 Feb 28 j 12:58	0°♐			1432 Sep 25 j 18:37	0°♉	
evening max el	1430 Mar 27 j 13:21	0°♑		morning set	1432 Oct 01 j 17:02	7°♉25'15	
	1430 Apr 11 j 06:49	14°♑58'52	45°35'03		1432 Oct 19 j 17:14	0°♊	
	1430 Apr 28 j 02:20	0°♒		max. Earth dist.	1432 Nov 09 j 08:38	25°♊56'56	1.71155 AU
greatest brilliancy	1430 May 15 j 13:21	11°♒25'13	-4.5m				
retrograde	1430 May 30 j 01:50	15°♒05'39		superior conj	1432 Nov 10 j 02:19	26°♊52'31	0°21'55
desc. node	1430 Jun 04 j 13:12	14°♒29'51		minimum elong	1432 Nov 10 j 07:49	27°♊09'48	0°21'39
evening set	1430 Jun 14 j 06:19	10°♒38'27			1432 Nov 12 j 13:56	0°♋	
inferior conj	1430 Jun 20 j 13:16	6°♒52'51	-3°-38'-39	desc. node	1432 Nov 19 j 08:30	8°♋31'20	
minimum elong	1430 Jun 20 j 05:50	7°♒04'26	3°36'41		1432 Dec 06 j 10:17	0°♌	
min. Earth dist.	1430 Jun 20 j 12:12	6°♒54'32	0.28990 AU	evening rise	1432 Dec 21 j 13:03	18°♋59'46	
morning rise	1430 Jun 26 j 05:17	3°♒27'33			1432 Dec 30 j 07:25	0°♍	
	1430 Jul 03 j 18:02	30°♑			1433 Jan 23 j 06:48	0°♎	
direct	1430 Jul 12 j 04:50	28°♑34'58			1433 Feb 16 j 10:40	0°♏	
	1430 Jul 21 j 00:22	0°♒		asc. node	1433 Mar 12 j 11:59	29°♏29'44	
greatest brilliancy	1430 Jul 26 j 06:21	2°♒01'31	-4.5m		1433 Mar 12 j 21:57	0°♐	
morning max el	1430 Aug 30 j 10:28	29°♒00'34	46°03'29		1433 Apr 06 j 20:27	0°♑	
	1430 Aug 31 j 10:51	0°♓			1433 May 02 j 12:08	0°♒	
asc. node	1430 Sep 25 j 16:51	26°♓36'40			1433 May 29 j 10:21	0°♓	
	1430 Sep 28 j 17:35	0°♈		evening max el	1433 Jun 21 j 03:51	23°♓11'33	45°28'37
	1430 Oct 24 j 13:33	0°♉			1433 Jun 28 j 12:22	0°♈	
	1430 Nov 18 j 08:15	0°♊		desc. node	1433 Jul 02 j 01:14	3°♈05'55	
	1430 Dec 12 j 15:23	0°♋		greatest brilliancy	1433 Jul 28 j 05:10	20°♈25'36	-4.5m
	1431 Jan 05 j 17:54	0°♌		retrograde	1433 Aug 08 j 18:54	22°♈47'49	
desc. node	1431 Jan 15 j 06:09	11°♌51'38		evening set	1433 Aug 26 j 20:30	16°♈46'17	
	1431 Jan 29 j 19:17	0°♍		inferior conj	1433 Aug 29 j 23:45	14°♈51'26	-8°-44'-16
	1431 Feb 22 j 21:21	0°♎		minimum elong	1433 Aug 30 j 00:32	14°♈50'13	8°44'17
morning set	1431 Mar 05 j 18:56	13°♎32'45		min. Earth dist.	1433 Aug 30 j 15:56	14°♈26'25	0.28239 AU
	1431 Mar 19 j 01:12	0°♏		morning rise	1433 Sep 02 j 04:22	12°♈54'02	
	1431 Apr 12 j 07:27	0°♐		direct	1433 Sep 20 j 07:14	6°♈44'26	
				greatest brilliancy	1433 Oct 04 j 15:20	10°♈25'39	-4.6m
superior conj	1431 Apr 13 j 06:54	1°♈12'19	0°-55'-3	asc. node	1433 Oct 23 j 04:32	23°♈05'30	
minimum elong	1431 Apr 13 j 16:30	1°♈41'58	0°54'43		1433 Oct 30 j 23:20	0°♉	
max. Earth dist.	1431 Apr 15 j 17:03	4°♈11'42	1.73116 AU	morning max el	1433 Nov 09 j 18:36	9°♉33'53	46°45'50
	1431 May 06 j 16:07	0°♊			1433 Nov 28 j 20:46	0°♊	
asc. node	1431 May 08 j 09:39	2°♊07'38			1433 Dec 24 j 20:35	0°♋	
evening rise	1431 May 20 j 14:42	17°♊07'22			1434 Jan 18 j 21:10	0°♌	
	1431 May 31 j 02:45	0°♍		desc. node	1434 Feb 11 j 18:05	29°♌03'02	
	1431 Jun 24 j 15:07	0°♎			1434 Feb 12 j 12:44	0°♍	
	1431 Jul 19 j 05:52	0°♏			1434 Mar 09 j 00:57	0°♎	
	1431 Aug 13 j 00:35	0°♐			1434 Apr 02 j 12:20	0°♏	
desc. node	1431 Aug 27 j 22:56	17°♐55'58			1434 Apr 26 j 23:53	0°♐	
	1431 Sep 07 j 01:41	0°♑		morning set	1434 May 15 j 00:04	22°♐03'55	
	1431 Oct 02 j 13:15	0°♒			1434 May 21 j 11:28	0°♑	
	1431 Oct 28 j 21:50	0°♓		asc. node	1434 Jun 04 j 21:28	17°♑40'49	

	1434 Jun 14 j 22:14	0°☿		minimum elong	1436 Nov 11 j 12:55	28°♌02'36	2°07'15
max. Earth dist.	1434 Jun 18 j 19:36	4°☿46'49	1.73563 AU	min. Earth dist.	1436 Nov 11 j 16:15	27°♌57'34	0.26511 AU
				morning rise	1436 Nov 17 j 14:17	24°♌31'51	
superior conj	1434 Jun 20 j 13:15	6°☿54'48	0°36'03	asc. node	1436 Nov 19 j 16:22	23°♌28'58	
minimum elong	1434 Jun 20 j 06:35	6°☿34'18	0°35'45	direct	1436 Dec 01 j 18:36	20°♌30'02	
	1434 Jul 09 j 07:23	0°♌		greatest brilliancy	1436 Dec 14 j 10:22	23°♌29'16	-4.7m
evening rise	1434 Jul 26 j 07:58	20°♌59'54			1436 Dec 25 j 14:03	0°♌	
	1434 Aug 02 j 14:56	0°♍		morning max el	1437 Jan 21 j 08:58	23°♌40'12	46°52'59
	1434 Aug 26 j 21:46	0°♎			1437 Jan 27 j 12:47	0°♏	
	1434 Sep 20 j 05:12	0°♏			1437 Feb 23 j 20:35	0°♐	
desc. node	1434 Sep 24 j 10:52	5°♏13'09		desc. node	1437 Mar 11 j 05:55	17°♐42'38	
	1434 Oct 14 j 14:20	0°♑			1437 Mar 21 j 18:21	0°♒	
	1434 Nov 08 j 02:41	0°♒			1437 Apr 16 j 02:24	0°♓	
	1434 Dec 02 j 22:00	0°♓			1437 May 11 j 03:41	0°♈	
	1434 Dec 28 j 10:06	0°♈			1437 Jun 05 j 00:26	0°♉	
asc. node	1435 Jan 15 j 14:11	20°♈19'24			1437 Jun 29 j 16:38	0°♊	
	1435 Jan 24 j 17:54	0°♉		asc. node	1437 Jul 02 j 09:25	3°♊17'51	
evening max el	1435 Jan 28 j 00:04	3°♉19'18	46°41'56	morning set	1437 Jul 21 j 14:18	26°♊50'59	
	1435 Feb 28 j 21:22	0°♊			1437 Jul 24 j 03:43	0°♋	
greatest brilliancy	1435 Mar 04 j 23:03	2°♊10'44	-4.6m		1437 Aug 17 j 09:51	0°♌	
retrograde	1435 Mar 19 j 05:50	5°♊52'12		max. Earth dist.	1437 Aug 23 j 18:11	7°♌53'06	1.72483 AU
evening set	1435 Apr 04 j 20:09	0°♋31'29					
	1435 Apr 05 j 17:17	30°♌		superior conj	1437 Aug 27 j 04:30	12°♌09'04	1°24'46
inferior conj	1435 Apr 09 j 13:15	27°♌36'46	5°57'24	minimum elong	1437 Aug 27 j 04:32	12°♌09'08	1°24'47
minimum elong	1435 Apr 09 j 22:57	27°♌21'25	5°55'19		1437 Sep 10 j 12:18	0°♍	
min. Earth dist.	1435 Apr 09 j 13:40	27°♌36'05	0.28615 AU	evening rise	1437 Oct 04 j 02:43	29°♍28'14	
morning rise	1435 Apr 15 j 02:00	24°♌13'50			1437 Oct 04 j 12:52	0°♎	
direct	1435 Apr 30 j 20:34	19°♌24'52		desc. node	1437 Oct 21 j 22:43	21°♎45'35	
desc. node	1435 May 07 j 03:19	20°♌08'55			1437 Oct 28 j 12:57	0°♏	
greatest brilliancy	1435 May 13 j 03:54	22°♌05'46	-4.5m		1437 Nov 21 j 13:26	0°♐	
	1435 May 26 j 22:44	0°♑			1437 Dec 15 j 15:39	0°♒	
morning max el	1435 Jun 18 j 14:33	19°♑10'46	45°44'02		1438 Jan 08 j 22:25	0°♓	
	1435 Jun 29 j 13:31	0°♒			1438 Feb 02 j 15:07	0°♈	
	1435 Jul 27 j 11:42	0°♓		asc. node	1438 Feb 12 j 02:02	11°♈16'05	
	1435 Aug 22 j 13:58	0°♈			1438 Feb 28 j 03:14	0°♉	
asc. node	1435 Aug 28 j 07:01	6°♈44'44			1438 Mar 27 j 07:18	0°♊	
	1435 Sep 16 j 15:57	0°♉		evening max el	1438 Apr 08 j 23:45	12°♊50'27	45°36'32
	1435 Oct 11 j 02:45	0°♊			1438 Apr 28 j 12:47	0°♋	
	1435 Nov 04 j 04:42	0°♋		greatest brilliancy	1438 May 13 j 05:13	9°♋16'11	-4.5m
	1435 Nov 28 j 02:28	0°♌		retrograde	1438 May 27 j 18:36	12°♋57'07	
morning set	1435 Dec 16 j 16:50	23°♌23'06		desc. node	1438 Jun 03 j 15:22	12°♋00'51	
desc. node	1435 Dec 17 j 20:21	24°♌49'38		evening set	1438 Jun 11 j 21:45	8°♋31'30	
	1435 Dec 21 j 23:03	0°♍		inferior conj	1438 Jun 18 j 05:40	4°♋44'05	-3°-20'-37
	1436 Jan 14 j 20:04	0°♎		minimum elong	1438 Jun 17 j 22:45	4°♋54'53	3°18'45
				min. Earth dist.	1438 Jun 18 j 04:15	4°♋46'18	0.28989 AU
superior conj	1436 Jan 27 j 11:49	15°♎52'29	-1°-17'-45	morning rise	1438 Jun 23 j 23:47	1°♌15'51	
minimum elong	1436 Jan 27 j 02:38	15°♎23'44	1°17'35		1438 Jun 26 j 08:42	30°♌	
max. Earth dist.	1436 Jan 31 j 01:17	20°♎20'08	1.71542 AU	direct	1438 Jul 09 j 21:51	26°♌26'24	
	1436 Feb 07 j 18:41	0°♏		greatest brilliancy	1438 Jul 23 j 20:52	29°♌50'38	-4.5m
	1436 Mar 02 j 20:07	0°♐			1438 Jul 24 j 05:00	0°♍	
evening rise	1436 Mar 07 j 18:38	6°♐07'52		morning max el	1438 Aug 28 j 02:25	26°♍49'17	46°02'01
	1436 Mar 27 j 01:44	0°♑			1438 Aug 31 j 08:05	0°♎	
asc. node	1436 Apr 08 j 23:49	15°♑53'11		asc. node	1438 Sep 24 j 18:52	25°♎58'05	
	1436 Apr 20 j 12:35	0°♒			1438 Sep 28 j 09:02	0°♏	
	1436 May 15 j 05:40	0°♓			1438 Oct 24 j 02:58	0°♐	
	1436 Jun 09 j 06:42	0°♈			1438 Nov 17 j 20:44	0°♑	
	1436 Jul 04 j 19:37	0°♉			1438 Dec 12 j 03:20	0°♒	
desc. node	1436 Jul 29 j 13:02	28°♉08'28			1439 Jan 05 j 05:29	0°♓	
	1436 Jul 31 j 05:13	0°♊		desc. node	1439 Jan 14 j 08:16	11°♓22'25	
	1436 Aug 28 j 11:13	0°♋			1439 Jan 29 j 06:35	0°♈	
evening max el	1436 Sep 01 j 22:58	4°♋25'49	46°29'12		1439 Feb 22 j 08:26	0°♉	
	1436 Oct 03 j 09:18	0°♌		morning set	1439 Mar 03 j 08:22	11°♉11'09	
greatest brilliancy	1436 Oct 11 j 00:02	3°♌39'57	-4.6m		1439 Mar 18 j 12:08	0°♊	
retrograde	1436 Oct 21 j 18:20	5°♌48'42					
evening set	1436 Nov 05 j 11:06	1°♌34'54		superior conj	1439 Apr 10 j 22:53	29°♌00'04	0°-57'-36
	1436 Nov 08 j 06:35	30°♍		minimum elong	1439 Apr 11 j 08:40	29°♌30'17	0°57'16
inferior conj	1436 Nov 11 j 08:05	28°♍09'57	-2°-8'-45		1439 Apr 11 j 18:18	0°♎	



max. Earth dist.	1439 Apr 13 j 14:22	2°♄15'58	1.73076 AU	morning max el	1441 Nov 07 j 08:19	7°♁10'18	46°44'40
	1439 May 06 j 02:57	0°♁			1441 Nov 28 j 14:05	0°♁	
asc. node	1439 May 07 j 11:44	1°♁40'45			1441 Dec 24 j 11:06	0°♁	
evening rise	1439 May 18 j 08:50	15°♁02'26			1442 Jan 18 j 10:22	0°♁	
	1439 May 30 j 13:40	0°♁		desc. node	1442 Feb 10 j 20:01	28°♁30'55	
	1439 Jun 24 j 02:15	0°♁			1442 Feb 12 j 01:09	0°♁	
	1439 Jul 18 j 17:23	0°♁			1442 Mar 08 j 12:50	0°♁	
	1439 Aug 12 j 12:45	0°♁			1442 Apr 01 j 23:48	0°♁	
desc. node	1439 Aug 27 j 00:55	17°♁24'01			1442 Apr 26 j 11:02	0°♁	
	1439 Sep 06 j 14:51	0°♁		morning set	1442 May 12 j 17:54	19°♁57'42	
	1439 Oct 02 j 04:03	0°♁			1442 May 20 j 22:25	0°♁	
	1439 Oct 28 j 15:54	0°♁		asc. node	1442 Jun 03 j 23:39	17°♁14'03	
evening max el	1439 Nov 15 j 00:20	18°♁24'34	47°19'55		1442 Jun 14 j 09:07	0°♁	
	1439 Nov 26 j 22:56	0°♁		max. Earth dist.	1442 Jun 16 j 16:30	2°♁50'10	1.73578 AU
asc. node	1439 Dec 18 j 04:27	16°♁26'01					
greatest brilliancy	1439 Dec 23 j 03:55	19°♁00'35	-4.7m	superior conj	1442 Jun 18 j 07:54	4°♁51'12	0°33'13
retrograde	1440 Jan 04 j 22:27	22°♁03'15		minimum elong	1442 Jun 18 j 01:39	4°♁31'59	0°32'55
evening set	1440 Jan 21 j 11:55	16°♁37'01			1442 Jul 08 j 18:18	0°♁	
min. Earth dist.	1440 Jan 24 j 17:51	14°♁38'01	0.27218 AU	evening rise	1442 Jul 24 j 02:37	18°♁55'26	
inferior conj	1440 Jan 25 j 16:09	14°♁03'14	7°56'50		1442 Aug 02 j 02:00	0°♁	
minimum elong	1440 Jan 25 j 07:53	14°♁16'08	7°55'41		1442 Aug 26 j 09:06	0°♁	
morning rise	1440 Jan 29 j 04:13	11°♁54'27			1442 Sep 19 j 16:53	0°♁	
direct	1440 Feb 15 j 06:30	6°♁16'01		desc. node	1442 Sep 23 j 12:51	4°♁43'06	
greatest brilliancy	1440 Feb 25 j 18:53	8°♁19'54	-4.6m		1442 Oct 14 j 02:30	0°♁	
	1440 Mar 27 j 20:01	0°♁			1442 Nov 07 j 15:32	0°♁	
morning max el	1440 Apr 04 j 18:45	7°♁30'56	46°13'05		1442 Dec 02 j 11:54	0°♁	
desc. node	1440 Apr 07 j 17:38	10°♁25'15			1442 Dec 28 j 02:01	0°♁	
	1440 Apr 26 j 14:05	0°♁		asc. node	1443 Jan 14 j 16:10	19°♁34'18	
	1440 May 23 j 14:20	0°♁			1443 Jan 24 j 15:10	0°♁	
	1440 Jun 18 j 13:09	0°♁		evening max el	1443 Jan 25 j 14:05	0°♁58'04	46°44'19
	1440 Jul 13 j 20:49	0°♁		greatest brilliancy	1443 Mar 02 j 15:09	29°♁56'22	-4.6m
asc. node	1440 Jul 29 j 21:12	19°♁17'28			1443 Mar 02 j 18:10	0°♁	
	1440 Aug 07 j 16:40	0°♁		retrograde	1443 Mar 16 j 21:55	3°♁38'36	
	1440 Sep 01 j 02:47	0°♁			1443 Mar 30 j 09:55	30°♁	
	1440 Sep 25 j 05:42	0°♁		evening set	1443 Apr 02 j 14:48	28°♁13'25	
morning set	1440 Sep 29 j 07:26	5°♁05'29		inferior conj	1443 Apr 07 j 05:05	25°♁23'08	6°12'14
	1440 Oct 19 j 04:20	0°♁		minimum elong	1443 Apr 07 j 14:50	25°♁07'44	6°10'13
max. Earth dist.	1440 Nov 06 j 12:32	23°♁03'18	1.71181 AU	min. Earth dist.	1443 Apr 07 j 05:16	25°♁22'50	0.28589 AU
				morning rise	1443 Apr 12 j 15:04	22°♁04'21	
superior conj	1440 Nov 07 j 13:25	24°♁21'33	0°25'37	direct	1443 Apr 28 j 11:30	17°♁11'26	
minimum elong	1440 Nov 07 j 19:44	24°♁41'25	0°25'20	desc. node	1443 May 06 j 05:27	18°♁17'54	
	1440 Nov 12 j 01:04	0°♁		greatest brilliancy	1443 May 10 j 18:39	19°♁52'19	-4.5m
desc. node	1440 Nov 18 j 10:38	8°♁02'51			1443 May 27 j 14:42	0°♁	
	1440 Dec 05 j 21:30	0°♁		morning max el	1443 Jun 16 j 06:34	17°♁00'10	45°44'27
evening rise	1440 Dec 18 j 22:51	16°♁24'23			1443 Jun 29 j 08:29	0°♁	
	1440 Dec 29 j 18:44	0°♁			1443 Jul 27 j 02:22	0°♁	
	1441 Jan 22 j 18:13	0°♁			1443 Aug 22 j 02:54	0°♁	
	1441 Feb 15 j 22:14	0°♁		asc. node	1443 Aug 27 j 09:05	6°♁13'11	
asc. node	1441 Mar 11 j 13:59	28°♁59'44			1443 Sep 16 j 04:03	0°♁	
	1441 Mar 12 j 09:49	0°♁			1443 Oct 10 j 14:26	0°♁	
	1441 Apr 06 j 08:58	0°♁			1443 Nov 03 j 16:10	0°♁	
	1441 May 02 j 02:00	0°♁			1443 Nov 27 j 13:50	0°♁	
	1441 May 29 j 03:20	0°♁		morning set	1443 Dec 14 j 02:38	20°♁47'26	
evening max el	1441 Jun 18 j 17:28	20°♁54'35	45°27'27	desc. node	1443 Dec 16 j 22:28	24°♁20'43	
	1441 Jun 28 j 16:00	0°♁			1443 Dec 21 j 10:21	0°♁	
desc. node	1441 Jul 01 j 03:17	2°♁06'50			1444 Jan 14 j 07:17	0°♁	
greatest brilliancy	1441 Jul 25 j 17:19	18°♁08'09	-4.5m				
retrograde	1441 Aug 06 j 08:46	20°♁32'39		superior conj	1444 Jan 24 j 22:16	13°♁19'47	-1°-16'00
evening set	1441 Aug 24 j 10:19	14°♁31'43		minimum elong	1444 Jan 24 j 12:24	12°♁48'51	1°15'47
inferior conj	1441 Aug 27 j 14:35	12°♁35'28	-8°-44'-7	max. Earth dist.	1444 Jan 28 j 08:25	17°♁37'08	1.71501 AU
minimum elong	1441 Aug 27 j 14:30	12°♁35'36	8°44'08		1444 Feb 07 j 05:50	0°♁	
min. Earth dist.	1441 Aug 28 j 06:21	12°♁11'06	0.28296 AU		1444 Mar 02 j 07:17	0°♁	
morning rise	1441 Aug 30 j 18:28	10°♁39'10		evening rise	1444 Mar 05 j 07:20	3°♁43'43	
direct	1441 Sep 17 j 22:06	4°♁27'28			1444 Mar 26 j 12:57	0°♁	
greatest brilliancy	1441 Oct 02 j 08:05	8°♁10'03	-4.6m	asc. node	1444 Apr 08 j 01:57	15°♁25'06	
asc. node	1441 Oct 22 j 06:36	22°♁00'55			1444 Apr 19 j 23:59	0°♁	
	1441 Oct 31 j 01:36	0°♁			1444 May 14 j 17:25	0°♁	

	1444 Jun 08 j 19:05	0°♈			1446 Nov 17 j 09:06	0°♍	
	1444 Jul 04 j 09:14	0°♉			1446 Dec 11 j 15:13	0°♊	
desc. node	1444 Jul 28 j 15:00	27°♉29'59			1447 Jan 04 j 17:02	0°♋	
	1444 Jul 30 j 21:17	0°♌		desc. node	1447 Jan 13 j 10:13	10°♋52'40	
	1444 Aug 28 j 09:42	0°♍			1447 Jan 28 j 17:55	0°♌	
evening max el	1444 Aug 30 j 12:52	2°♍05'08	46°26'38		1447 Feb 21 j 19:35	0°♍	
	1444 Oct 05 j 15:27	0°♎		morning set	1447 Feb 28 j 21:08	8°♍47'17	
greatest brilliancy	1444 Oct 08 j 11:43	1°♎11'24	-4.6m		1447 Mar 17 j 23:07	0°♎	
retrograde	1444 Oct 19 j 06:49	3°♎20'14					
	1444 Nov 01 j 05:31	30°♎		superior conj	1447 Apr 08 j 14:19	26°♎45'59	-1°00'-7
evening set	1444 Nov 03 j 01:16	29°♎03'36		minimum elong	1447 Apr 09 j 00:12	27°♎16'30	0°59'46
inferior conj	1444 Nov 08 j 20:11	25°♎41'10	-2°-32'-26		1447 Apr 11 j 05:10	0°♏	
minimum elong	1444 Nov 09 j 01:52	25°♎32'34	2°30'41	max. Earth dist.	1447 Apr 11 j 11:01	0°♏18'02	1.73029 AU
min. Earth dist.	1444 Nov 09 j 05:24	25°♎27'13	0.26547 AU		1447 May 05 j 13:47	0°♐	
morning rise	1444 Nov 15 j 02:05	22°♎03'47		asc. node	1447 May 06 j 13:50	1°♐13'53	
asc. node	1444 Nov 18 j 18:33	20°♎17'58		evening rise	1447 May 16 j 02:30	12°♐55'59	
direct	1444 Nov 29 j 07:53	18°♎00'46			1447 May 30 j 00:35	0°♑	
greatest brilliancy	1444 Dec 12 j 00:47	21°♎01'59	-4.7m		1447 Jun 23 j 13:24	0°♒	
	1444 Dec 26 j 11:49	0°♓			1447 Jul 18 j 04:57	0°♓	
morning max el	1445 Jan 18 j 23:20	21°♓16'36	46°53'41		1447 Aug 12 j 00:56	0°♌	
	1445 Jan 27 j 09:36	0°♋		desc. node	1447 Aug 26 j 02:59	16°♌52'24	
	1445 Feb 23 j 12:26	0°♌			1447 Sep 06 j 04:00	0°♍	
desc. node	1445 Mar 10 j 08:00	17°♌06'40			1447 Oct 01 j 18:52	0°♎	
	1445 Mar 21 j 08:04	0°♍			1447 Oct 28 j 10:10	0°♏	
	1445 Apr 15 j 14:57	0°♎		evening max el	1447 Nov 12 j 14:15	16°♏00'21	47°19'22
	1445 May 10 j 15:32	0°♏			1447 Nov 27 j 04:48	0°♐	
	1445 Jun 04 j 11:49	0°♐		asc. node	1447 Dec 17 j 06:21	14°♐51'24	
	1445 Jun 29 j 03:44	0°♑		greatest brilliancy	1447 Dec 20 j 20:19	16°♐38'13	-4.7m
asc. node	1445 Jul 01 j 11:24	2°♑50'07		retrograde	1448 Jan 02 j 11:44	19°♐37'39	
morning set	1445 Jul 19 j 08:04	24°♑44'22		evening set	1448 Jan 18 j 21:42	14°♐18'03	
	1445 Jul 23 j 14:38	0°♒		min. Earth dist.	1448 Jan 22 j 07:29	12°♐13'27	0.27159 AU
	1445 Aug 16 j 20:43	0°♓		inferior conj	1448 Jan 23 j 05:37	11°♐38'55	7°46'34
max. Earth dist.	1445 Aug 21 j 10:23	5°♓40'28	1.72530 AU	minimum elong	1448 Jan 22 j 20:51	11°♐52'37	7°45'15
				morning rise	1448 Jan 26 j 20:21	9°♐26'05	
superior conj	1445 Aug 24 j 21:26	9°♓58'31	1°24'42	direct	1448 Feb 12 j 19:10	3°♐52'40	
minimum elong	1445 Aug 24 j 20:43	9°♓56'20	1°24'43	greatest brilliancy	1448 Feb 23 j 08:25	5°♐56'58	-4.6m
	1445 Sep 09 j 23:15	0°♑			1448 Mar 27 j 22:26	0°♒	
evening rise	1445 Oct 01 j 16:27	27°♑06'30		morning max el	1448 Apr 02 j 07:13	5°♒07'57	46°14'33
	1445 Oct 03 j 23:59	0°♒		desc. node	1448 Apr 06 j 19:47	9°♒36'28	
desc. node	1445 Oct 21 j 00:53	21°♒17'11			1448 Apr 26 j 07:08	0°♓	
	1445 Oct 28 j 00:16	0°♓			1448 May 23 j 04:18	0°♋	
	1445 Nov 21 j 01:00	0°♋			1448 Jun 18 j 01:37	0°♌	
	1445 Dec 15 j 03:30	0°♌			1448 Jul 13 j 08:28	0°♍	
	1446 Jan 08 j 10:43	0°♍		asc. node	1448 Jul 28 j 23:11	18°♍49'04	
	1446 Feb 02 j 04:10	0°♎			1448 Aug 07 j 03:53	0°♎	
asc. node	1446 Feb 11 j 04:02	10°♎42'09			1448 Aug 31 j 13:47	0°♏	
	1446 Feb 27 j 17:52	0°♏			1448 Sep 24 j 16:37	0°♐	
	1446 Mar 27 j 01:54	0°♐		morning set	1448 Sep 26 j 21:57	2°♐46'40	
evening max el	1446 Apr 06 j 16:07	10°♐39'59	45°38'05		1448 Oct 18 j 15:13	0°♑	
	1446 Apr 29 j 03:10	0°♑		max. Earth dist.	1448 Nov 03 j 19:01	20°♑18'31	1.71205 AU
greatest brilliancy	1446 May 10 j 21:56	7°♑07'33	-4.5m				
retrograde	1446 May 25 j 10:48	10°♑47'47		superior conj	1448 Nov 05 j 00:55	21°♑52'30	0°29'16
desc. node	1446 Jun 02 j 17:27	9°♑26'17		minimum elong	1448 Nov 05 j 08:00	22°♑14'47	0°28'56
evening set	1446 Jun 09 j 13:15	6°♑23'39			1448 Nov 11 j 11:59	0°♒	
inferior conj	1446 Jun 15 j 21:57	2°♑34'42	-3°-2'-12	desc. node	1448 Nov 17 j 12:42	7°♒35'00	
minimum elong	1446 Jun 15 j 15:36	2°♑44'38	3°00'28		1448 Dec 05 j 08:27	0°♋	
min. Earth dist.	1446 Jun 15 j 20:28	2°♑37'01	0.28984 AU	evening rise	1448 Dec 16 j 09:05	13°♋51'19	
	1446 Jun 20 j 02:43	30°♒			1448 Dec 29 j 05:45	0°♌	
morning rise	1446 Jun 21 j 18:01	29°♒03'26			1449 Jan 22 j 05:21	0°♍	
direct	1446 Jul 07 j 14:29	24°♒17'15			1449 Feb 15 j 09:32	0°♎	
greatest brilliancy	1446 Jul 21 j 10:51	27°♒38'29	-4.5m	asc. node	1449 Mar 10 j 16:05	28°♎30'45	
	1446 Jul 26 j 01:45	0°♓			1449 Mar 11 j 21:29	0°♏	
morning max el	1446 Aug 25 j 17:25	24°♓35'34	46°00'47		1449 Apr 05 j 21:20	0°♐	
	1446 Aug 31 j 04:40	0°♔			1449 May 01 j 15:49	0°♑	
asc. node	1446 Sep 23 j 20:58	25°♔20'05			1449 May 28 j 20:29	0°♒	
	1446 Sep 28 j 00:14	0°♕		evening max el	1449 Jun 16 j 07:07	18°♒38'24	45°26'32
	1446 Oct 23 j 16:14	0°♖			1449 Jun 28 j 21:15	0°♓	

desc. node	1449 Jun 30 j 05:14	1° $\Upsilon$ 06'39		1452 Jan 13 j 18:09	0° $\approx$		
greatest brilliancy	1449 Jul 23 j 04:17	15° $\Upsilon$ 50'05	-4.5m				
retrograde	1449 Aug 03 j 23:07	18° $\Upsilon$ 18'14		superior conj	1452 Jan 22 j 08:43	10° $\approx$ 48'05	-1°-14'-5
evening set	1449 Aug 21 j 23:41	12° $\Upsilon$ 18'11		minimum elong	1452 Jan 21 j 22:15	10° $\approx$ 15'15	1°13'50
inferior conj	1449 Aug 25 j 05:20	10° $\Upsilon$ 20'00	-8°-43'-10	max. Earth dist.	1452 Jan 25 j 17:28	15° $\approx$ 01'13	1.71455 AU
minimum elong	1449 Aug 25 j 04:24	10° $\Upsilon$ 21'26	8°43'10		1452 Feb 06 j 16:37	0° $\Upsilon$	
min. Earth dist.	1449 Aug 25 j 20:25	9° $\Upsilon$ 56'43	0.28352 AU		1452 Mar 01 j 18:00	0° $\Upsilon$	
morning rise	1449 Aug 28 j 08:53	8° $\Upsilon$ 24'17		evening rise	1452 Mar 02 j 20:11	1° $\Upsilon$ 21'18	
direct	1449 Sep 15 j 13:07	2° $\Upsilon$ 10'59			1452 Mar 25 j 23:43	0° $\Upsilon$	
greatest brilliancy	1449 Sep 30 j 01:27	5° $\Upsilon$ 56'05	-4.6m	asc. node	1452 Apr 07 j 04:02	14° $\Upsilon$ 58'19	
asc. node	1449 Oct 21 j 08:43	20° $\Upsilon$ 58'41			1452 Apr 19 j 10:56	0° $\Upsilon$	
	1449 Oct 31 j 02:14	0° $\Omega$			1452 May 14 j 04:44	0° $\Upsilon$	
morning max el	1449 Nov 04 j 22:56	4° $\Omega$ 49'58	46°43'39		1452 Jun 08 j 07:07	0° $\Omega$	
	1449 Nov 28 j 06:45	0° $\Upsilon$			1452 Jul 03 j 22:35	0° $\Upsilon$	
	1449 Dec 24 j 01:07	0° $\Upsilon$		desc. node	1452 Jul 27 j 17:06	26° $\Upsilon$ 52'28	
	1450 Jan 17 j 23:04	0° $\Upsilon$			1452 Jul 30 j 13:18	0° $\Omega$	
desc. node	1450 Feb 09 j 22:07	28° $\Upsilon$ 00'41		evening max el	1452 Aug 28 j 03:06	29° $\Omega$ 46'22	46°24'04
	1450 Feb 11 j 13:05	0° $\approx$			1452 Aug 28 j 08:44	0° $\Upsilon$	
	1450 Mar 08 j 00:15	0° $\Upsilon$		greatest brilliancy	1452 Oct 06 j 00:13	28° $\Upsilon$ 45'08	-4.6m
	1450 Apr 01 j 10:52	0° $\Upsilon$			1452 Oct 09 j 23:20	0° $\Upsilon$	
	1450 Apr 25 j 21:50	0° $\Upsilon$		retrograde	1452 Oct 16 j 19:06	0° $\Upsilon$ 52'54	
morning set	1450 May 10 j 11:30	17° $\Upsilon$ 51'43			1452 Oct 23 j 09:23	30° $\Upsilon$	
	1450 May 20 j 09:03	0° $\Upsilon$		evening set	1452 Oct 31 j 15:41	26° $\Upsilon$ 33'34	
asc. node	1450 Jun 03 j 01:36	16° $\Upsilon$ 47'34		inferior conj	1452 Nov 06 j 08:22	23° $\Upsilon$ 13'45	-2°-55'-41
	1450 Jun 13 j 19:41	0° $\Upsilon$		minimum elong	1452 Nov 06 j 14:49	23° $\Upsilon$ 03'57	2°53'42
max. Earth dist.	1450 Jun 14 j 14:08	0° $\Upsilon$ 56'42	1.73592 AU	min. Earth dist.	1452 Nov 06 j 18:38	22° $\Upsilon$ 58'09	0.26584 AU
				morning rise	1452 Nov 12 j 13:37	19° $\Upsilon$ 37'06	
superior conj	1450 Jun 16 j 02:12	2° $\Upsilon$ 47'31	0°30'17	asc. node	1452 Nov 17 j 20:28	17° $\Upsilon$ 13'26	
minimum elong	1450 Jun 15 j 20:24	2° $\Upsilon$ 29'42	0°30'01	direct	1452 Nov 26 j 21:11	15° $\Upsilon$ 32'56	
	1450 Jul 08 j 04:54	0° $\Omega$		greatest brilliancy	1452 Dec 09 j 14:43	18° $\Upsilon$ 35'05	-4.7m
evening rise	1450 Jul 21 j 21:02	16° $\Omega$ 51'21			1452 Dec 27 j 03:33	0° $\Upsilon$	
	1450 Aug 01 j 12:44	0° $\Upsilon$		morning max el	1453 Jan 16 j 12:59	18° $\Upsilon$ 52'03	46°54'18
	1450 Aug 25 j 20:06	0° $\Omega$			1453 Jan 27 j 05:24	0° $\Upsilon$	
	1450 Sep 19 j 04:16	0° $\Upsilon$			1453 Feb 23 j 03:41	0° $\approx$	
desc. node	1450 Sep 22 j 15:00	4° $\Upsilon$ 14'28		desc. node	1453 Mar 09 j 10:04	16° $\approx$ 31'51	
	1450 Oct 13 j 14:25	0° $\Upsilon$			1453 Mar 20 j 21:18	0° $\Upsilon$	
	1450 Nov 07 j 04:07	0° $\Upsilon$			1453 Apr 15 j 03:03	0° $\Upsilon$	
	1450 Dec 02 j 01:32	0° $\approx$			1453 May 10 j 02:56	0° $\Upsilon$	
	1450 Dec 27 j 17:41	0° $\Upsilon$			1453 Jun 03 j 22:47	0° $\Upsilon$	
asc. node	1451 Jan 13 j 18:13	18° $\Upsilon$ 50'16			1453 Jun 28 j 14:26	0° $\Upsilon$	
evening max el	1451 Jan 23 j 05:02	28° $\Upsilon$ 40'42	46°46'52	asc. node	1453 Jun 30 j 13:25	2° $\Upsilon$ 23'35	
	1451 Jan 24 j 12:34	0° $\Upsilon$		morning set	1453 Jul 17 j 01:58	22° $\Upsilon$ 39'14	
greatest brilliancy	1451 Feb 28 j 07:03	27° $\Upsilon$ 43'37	-4.6m		1453 Jul 23 j 01:14	0° $\Omega$	
	1451 Mar 05 j 21:37	0° $\Upsilon$			1453 Aug 16 j 07:20	0° $\Upsilon$	
retrograde	1451 Mar 14 j 14:38	1° $\Upsilon$ 26'55		max. Earth dist.	1453 Aug 19 j 01:03	3° $\Upsilon$ 23'58	1.72584 AU
	1451 Mar 23 j 00:07	30° $\Upsilon$					
evening set	1451 Mar 31 j 09:37	25° $\Upsilon$ 57'12		superior conj	1453 Aug 22 j 14:28	7° $\Upsilon$ 49'14	1°24'31
inferior conj	1451 Apr 04 j 21:03	23° $\Upsilon$ 11'15	6°26'23	minimum elong	1453 Aug 22 j 13:02	7° $\Upsilon$ 44'47	1°24'30
minimum elong	1451 Apr 05 j 06:48	22° $\Upsilon$ 55'53	6°24'26		1453 Sep 09 j 09:58	0° $\Omega$	
min. Earth dist.	1451 Apr 04 j 20:33	23° $\Upsilon$ 12'02	0.28565 AU	evening rise	1453 Sep 29 j 06:10	24° $\Omega$ 45'35	
morning rise	1451 Apr 10 j 04:12	19° $\Upsilon$ 56'53			1453 Oct 03 j 10:52	0° $\Upsilon$	
direct	1451 Apr 26 j 03:06	14° $\Upsilon$ 59'55		desc. node	1453 Oct 20 j 02:53	20° $\Upsilon$ 49'05	
desc. node	1451 May 05 j 07:30	16° $\Upsilon$ 32'37			1453 Oct 27 j 11:21	0° $\Upsilon$	
greatest brilliancy	1451 May 08 j 08:59	17° $\Upsilon$ 40'08	-4.5m		1453 Nov 20 j 12:19	0° $\Upsilon$	
	1451 May 28 j 01:54	0° $\Upsilon$			1453 Dec 14 j 15:08	0° $\approx$	
morning max el	1451 Jun 13 j 23:16	14° $\Upsilon$ 52'34	45°44'39		1454 Jan 07 j 22:49	0° $\Upsilon$	
	1451 Jun 29 j 02:31	0° $\Upsilon$			1454 Feb 01 j 17:05	0° $\Upsilon$	
	1451 Jul 26 j 16:30	0° $\Upsilon$		asc. node	1454 Feb 10 j 06:10	10° $\Upsilon$ 09'08	
	1451 Aug 21 j 15:24	0° $\Omega$			1454 Feb 27 j 08:23	0° $\Upsilon$	
asc. node	1451 Aug 26 j 11:12	5° $\Omega$ 43'00			1454 Mar 26 j 20:38	0° $\Upsilon$	
	1451 Sep 15 j 15:45	0° $\Upsilon$		evening max el	1454 Apr 04 j 07:52	8° $\Upsilon$ 28'54	45°39'49
	1451 Oct 10 j 01:43	0° $\Omega$			1454 Apr 29 j 21:42	0° $\Upsilon$	
	1451 Nov 03 j 03:15	0° $\Upsilon$		greatest brilliancy	1454 May 08 j 14:49	5° $\Upsilon$ 00'31	-4.5m
	1451 Nov 27 j 00:51	0° $\Upsilon$		retrograde	1454 May 23 j 02:58	8° $\Upsilon$ 40'27	
morning set	1451 Dec 11 j 12:32	18° $\Upsilon$ 13'09		desc. node	1454 Jun 01 j 19:21	6° $\Upsilon$ 49'29	
desc. node	1451 Dec 16 j 00:22	23° $\Upsilon$ 52'17		evening set	1454 Jun 07 j 05:12	4° $\Upsilon$ 17'25	
	1451 Dec 20 j 21:17	0° $\Upsilon$		inferior conj	1454 Jun 13 j 14:34	0° $\Upsilon$ 27'21	-2°-43'-42

minimum elong	1454 Jun 13 j 08:48	0°☿36°24	2°42'07			1456 Dec 04 j 19:35	0°☿		
min. Earth dist.	1454 Jun 13 j 13:17	0°☿29°22	0.28979 AU	evening rise		1456 Dec 13 j 19:01	11°☿16°44		
	1454 Jun 14 j 08:01	30°♁				1456 Dec 28 j 16:59	0°≈		
morning rise	1454 Jun 19 j 12:26	26°♁53°10				1457 Jan 21 j 16:41	0°♁		
direct	1454 Jul 05 j 06:56	22°♁10°03				1457 Feb 14 j 21:03	0°♁		
greatest brilliancy	1454 Jul 19 j 01:20	25°♁28°28	-4.5m	asc. node		1457 Mar 09 j 18:08	28°♁00°59		
	1454 Jul 27 j 07:19	0°☿				1457 Mar 11 j 09:22	0°♁		
morning max el	1454 Aug 23 j 07:56	22°☿21°37	45°59'22			1457 Apr 05 j 09:58	0°♁		
	1454 Aug 31 j 00:16	0°♁				1457 May 01 j 05:58	0°☿		
asc. node	1454 Sep 22 j 23:01	24°♁42°50				1457 May 28 j 14:11	0°♁		
	1454 Sep 27 j 15:05	0°♁		evening max el		1457 Jun 13 j 21:51	16°♁24°41	45°25'51	
	1454 Oct 23 j 05:19	0°♁				1457 Jun 29 j 04:47	0°♁		
	1454 Nov 16 j 21:20	0°♁		desc. node		1457 Jun 29 j 07:24	0°♁05°18		
	1454 Dec 11 j 02:57	0°♁		greatest brilliancy		1457 Jul 20 j 14:56	13°♁32°07	-4.5m	
	1455 Jan 04 j 04:27	0°☿		retrograde		1457 Aug 01 j 14:17	16°♁04°31		
desc. node	1455 Jan 12 j 12:20	10°☿23°54		evening set		1457 Aug 19 j 12:58	10°♁05°56		
	1455 Jan 28 j 05:06	0°≈		inferior conj		1457 Aug 22 j 20:20	8°♁05°14	-8°-41'-18	
	1455 Feb 21 j 06:35	0°♁		minimum elong		1457 Aug 22 j 18:36	8°♁07°55	8°41'17	
morning set	1455 Feb 26 j 09:41	6°♁23°01		min. Earth dist.		1457 Aug 23 j 10:19	7°♁43°40	0.28404 AU	
	1455 Mar 17 j 10:00	0°♁		morning rise		1457 Aug 26 j 00:01	6°♁09°29		
						1457 Sep 11 j 05:51	30°♁		
superior conj	1455 Apr 06 j 05:48	24°♁32°20	-1°-2'-31	direct		1457 Sep 13 j 04:46	29°♁55°25		
minimum elong	1455 Apr 06 j 15:44	25°♁03°00	1°02'12			1457 Sep 15 j 04:07	0°♁		
max. Earth dist.	1455 Apr 09 j 05:52	28°♁14°51	1.72978 AU	greatest brilliancy		1457 Sep 27 j 18:14	3°♁42°03	-4.6m	
	1455 Apr 10 j 15:56	0°♁		asc. node		1457 Oct 20 j 10:41	19°♁57°37		
	1455 May 05 j 00:30	0°♁				1457 Oct 31 j 01:47	0°♁		
asc. node	1455 May 05 j 15:49	0°♁47°03		morning max el		1457 Nov 02 j 14:31	2°♁32°07	46°42'18	
evening rise	1455 May 13 j 20:16	10°♁50°15				1457 Nov 27 j 23:17	0°♁		
	1455 May 29 j 11:21	0°☿				1457 Dec 23 j 15:16	0°♁		
	1455 Jun 23 j 00:24	0°♁				1458 Jan 17 j 12:03	0°☿		
	1455 Jul 17 j 16:22	0°♁		desc. node		1458 Feb 09 j 00:15	27°☿29°31		
	1455 Aug 11 j 13:02	0°♁				1458 Feb 11 j 01:21	0°≈		
desc. node	1455 Aug 25 j 05:05	16°♁21°01				1458 Mar 07 j 12:00	0°♁		
	1455 Sep 05 j 17:11	0°♁				1458 Mar 31 j 22:13	0°♁		
	1455 Oct 01 j 09:53	0°♁				1458 Apr 25 j 08:55	0°♁		
	1455 Oct 28 j 05:00	0°☿		morning set		1458 May 08 j 04:51	15°♁44°05		
evening max el	1455 Nov 10 j 03:17	13°☿33°33	47°18'44			1458 May 19 j 19:58	0°♁		
	1455 Nov 27 j 13:13	0°≈		asc. node		1458 Jun 02 j 03:39	16°♁20°29		
asc. node	1455 Dec 16 j 08:25	13°≈12°52		max. Earth dist.		1458 Jun 12 j 13:01	29°♁06°09	1.73601 AU	
greatest brilliancy	1455 Dec 18 j 12:23	14°≈14°40	-4.7m			1458 Jun 13 j 06:33	0°☿		
retrograde	1455 Dec 31 j 00:49	17°≈11°26							
evening set	1456 Jan 16 j 07:14	11°≈58°13		superior conj		1458 Jun 13 j 20:28	0°☿42°45	0°27'20	
min. Earth dist.	1456 Jan 19 j 21:05	9°≈47°56	0.27101 AU	minimum elong		1458 Jun 13 j 15:09	0°☿26°26	0°27'05	
inferior conj	1456 Jan 20 j 18:56	9°≈13°54	7°35'19			1458 Jul 07 j 15:49	0°♁		
minimum elong	1456 Jan 20 j 09:41	9°≈28°19	7°33'49	evening rise		1458 Jul 19 j 15:42	14°♁47°10		
morning rise	1456 Jan 24 j 12:29	6°≈56°59				1458 Jul 31 j 23:46	0°♁		
direct	1456 Feb 10 j 07:21	1°≈28°25				1458 Aug 25 j 07:21	0°♁		
greatest brilliancy	1456 Feb 20 j 22:28	3°≈34°08	-4.6m			1458 Sep 18 j 15:53	0°♁		
	1456 Mar 27 j 23:33	0°♁		desc. node		1458 Sep 21 j 17:01	3°♁44°46		
morning max el	1456 Mar 30 j 19:54	2°♁45°09	46°16'10			1458 Oct 13 j 02:33	0°♁		
desc. node	1456 Apr 05 j 21:49	8°♁48°09				1458 Nov 06 j 17:00	0°☿		
	1456 Apr 25 j 23:51	0°♁				1458 Dec 01 j 15:35	0°≈		
	1456 May 22 j 18:07	0°♁				1458 Dec 27 j 10:02	0°♁		
	1456 Jun 17 j 14:00	0°♁		asc. node		1459 Jan 12 j 20:21	18°♁04°22		
	1456 Jul 12 j 20:04	0°☿		evening max el		1459 Jan 20 j 20:50	26°♁23°52	46°49'08	
asc. node	1456 Jul 28 j 01:23	18°☿21°25				1459 Jan 24 j 11:27	0°♁		
	1456 Aug 06 j 15:03	0°♁		greatest brilliancy		1459 Feb 25 j 23:45	25°♁29°46	-4.6m	
	1456 Aug 31 j 00:45	0°♁		retrograde		1459 Mar 12 j 07:16	29°♁12°30		
	1456 Sep 24 j 03:32	0°♁		evening set		1459 Mar 29 j 04:12	23°♁38°30		
morning set	1456 Sep 24 j 12:50	0°♁29°02		inferior conj		1459 Apr 02 j 12:42	20°♁56°46	6°40'03	
	1456 Oct 18 j 02:11	0°♁		minimum elong		1459 Apr 02 j 22:23	20°♁41°32	6°38'13	
max. Earth dist.	1456 Nov 01 j 04:09	17°♁41°43	1.71239 AU	min. Earth dist.		1459 Apr 02 j 11:15	20°♁59°04	0.28536 AU	
				morning rise		1459 Apr 07 j 16:51	17°♁47°02		
superior conj	1456 Nov 02 j 12:28	19°♁23°16	0°32'51	direct		1459 Apr 23 j 18:45	12°♁46°04		
minimum elong	1456 Nov 02 j 20:14	19°♁47°42	0°32'29	desc. node		1459 May 04 j 09:29	14°♁48°55		
	1456 Nov 10 j 23:01	0°♁		greatest brilliancy		1459 May 05 j 21:58	15°♁24°21	-4.5m	
desc. node	1456 Nov 16 j 14:41	7°♁06°28				1459 May 28 j 10:52	0°♁		

morning max el	1459 Jun 11 j 15:41	12°♄42'50	45°44'57	asc. node	1462 Feb 09 j 08:11	9°♃34'53	
	1459 Jun 28 j 20:37	0°♂			1462 Feb 26 j 23:22	0°♄	
	1459 Jul 26 j 06:53	0°♁			1462 Mar 26 j 16:18	0°♂	
	1459 Aug 21 j 04:12	0°♂		evening max el	1462 Apr 01 j 22:46	6°♂14'28	45°41'22
asc. node	1459 Aug 25 j 13:11	5°♂11'22			1462 May 01 j 00:09	0°♁	
	1459 Sep 15 j 03:45	0°♂		greatest brilliancy	1462 May 06 j 06:39	2°♁50'25	-4.5m
	1459 Oct 09 j 13:17	0°♂		retrograde	1462 May 20 j 18:52	6°♁31'19	
	1459 Nov 02 j 14:38	0°♂		desc. node	1462 May 31 j 21:32	4°♁05'53	
	1459 Nov 26 j 12:07	0°♂		evening set	1462 Jun 04 j 21:04	2°♁08'53	
morning set	1459 Dec 08 j 22:58	15°♂39'46			1462 Jun 08 j 13:32	30°♂	
desc. node	1459 Dec 15 j 02:32	23°♂23'50		inferior conj	1462 Jun 11 j 07:00	28°♂18'09	-2°-24'-51
	1459 Dec 20 j 08:30	0°♂		minimum elong	1462 Jun 11 j 01:50	28°♂26'15	2°23'24
	1460 Jan 13 j 05:20	0°♂		min. Earth dist.	1462 Jun 11 j 06:12	28°♂19'24	0.28976 AU
				morning rise	1462 Jun 17 j 06:34	24°♂41'16	
superior conj	1460 Jan 19 j 19:07	8°♂15'03	-1°-12'00	direct	1462 Jul 02 j 22:47	20°♂00'48	
minimum elong	1460 Jan 19 j 08:09	7°♂40'42	1°11'43	greatest brilliancy	1462 Jul 16 j 16:46	23°♂17'57	-4.5m
max. Earth dist.	1460 Jan 23 j 04:08	12°♂29'07	1.71419 AU		1462 Jul 28 j 05:31	0°♁	
	1460 Feb 06 j 03:47	0°♂		morning max el	1462 Aug 20 j 22:18	20°♁06'09	45°58'11
evening rise	1460 Feb 29 j 08:33	28°♂55'52			1462 Aug 30 j 19:46	0°♂	
	1460 Mar 01 j 05:11	0°♂		asc. node	1462 Sep 22 j 01:03	24°♂04'50	
	1460 Mar 25 j 10:59	0°♂			1462 Sep 27 j 06:04	0°♂	
asc. node	1460 Apr 06 j 05:58	14°♂29'34			1462 Oct 22 j 18:35	0°♂	
	1460 Apr 18 j 22:23	0°♂			1462 Nov 16 j 09:45	0°♂	
	1460 May 13 j 16:34	0°♂			1462 Dec 10 j 14:53	0°♂	
	1460 Jun 07 j 19:42	0°♂			1463 Jan 03 j 16:04	0°♂	
desc. node	1460 Jul 03 j 12:32	0°♂		desc. node	1463 Jan 11 j 14:25	9°♂54'25	
	1460 Jul 26 j 19:12	26°♂13'13			1463 Jan 27 j 16:27	0°♂	
	1460 Jul 30 j 06:05	0°♂			1463 Feb 20 j 17:45	0°♂	
evening max el	1460 Aug 25 j 17:06	27°♂25'55	46°21'30	morning set	1463 Feb 23 j 22:23	3°♂58'35	
	1460 Aug 28 j 09:21	0°♂			1463 Mar 16 j 21:00	0°♂	
greatest brilliancy	1460 Oct 03 j 13:53	26°♂19'34	-4.6m				
retrograde	1460 Oct 14 j 07:02	28°♂25'11		superior conj	1463 Apr 03 j 21:26	22°♂18'37	-1°-4'-49
evening set	1460 Oct 29 j 06:27	24°♂03'07		minimum elong	1463 Apr 04 j 07:21	22°♂49'17	1°04'31
inferior conj	1460 Nov 03 j 20:45	20°♂46'14	-3°-18'-20	max. Earth dist.	1463 Apr 06 j 23:34	26°♂07'35	1.72932 AU
minimum elong	1460 Nov 04 j 03:56	20°♂35'20	3°16'12		1463 Apr 10 j 02:51	0°♂	
min. Earth dist.	1460 Nov 04 j 08:21	20°♂28'37	0.26618 AU		1463 May 04 j 11:25	0°♂	
morning rise	1460 Nov 10 j 01:03	17°♂10'28		asc. node	1463 May 04 j 17:54	0°♂19'57	
asc. node	1460 Nov 16 j 22:33	14°♂13'57		evening rise	1463 May 11 j 13:59	8°♂43'42	
direct	1460 Nov 24 j 10:11	13°♂05'00			1463 May 28 j 22:23	0°♂	
greatest brilliancy	1460 Dec 07 j 04:49	16°♂08'01	-4.7m		1463 Jun 22 j 11:41	0°♂	
	1460 Dec 27 j 15:32	0°♂			1463 Jul 17 j 04:06	0°♂	
morning max el	1461 Jan 14 j 01:44	16°♂24'29	46°54'51		1463 Aug 11 j 01:27	0°♂	
	1461 Jan 27 j 00:51	0°♂		desc. node	1463 Aug 24 j 07:03	15°♂48'23	
	1461 Feb 22 j 19:01	0°♂			1463 Sep 05 j 06:43	0°♂	
desc. node	1461 Mar 08 j 12:05	15°♂56'12			1463 Oct 01 j 01:20	0°♂	
	1461 Mar 20 j 10:48	0°♂			1463 Oct 28 j 00:34	0°♂	
	1461 Apr 14 j 15:31	0°♂		evening max el	1463 Nov 07 j 16:12	11°♂06'05	47°18'07
	1461 May 09 j 14:45	0°♂			1463 Nov 28 j 00:49	0°♂	
	1461 Jun 03 j 10:11	0°♂		asc. node	1463 Dec 15 j 10:36	11°♂30'11	
	1461 Jun 28 j 01:33	0°♂		greatest brilliancy	1463 Dec 16 j 03:44	11°♂49'37	-4.7m
asc. node	1461 Jun 29 j 15:35	1°♂56'15		retrograde	1463 Dec 28 j 14:19	14°♂44'53	
morning set	1461 Jul 14 j 19:35	20°♂32'01		evening set	1464 Jan 13 j 16:44	9°♂37'38	
	1461 Jul 22 j 12:12	0°♂		min. Earth dist.	1464 Jan 17 j 10:35	7°♂21'58	0.27041 AU
	1461 Aug 15 j 18:18	0°♂		inferior conj	1464 Jan 18 j 08:13	6°♂48'22	7°23'11
max. Earth dist.	1461 Aug 16 j 16:12	1°♂07'57	1.72636 AU	minimum elong	1464 Jan 17 j 22:34	7°♂03'22	7°21'29
				morning rise	1464 Jan 22 j 04:43	4°♂27'22	
superior conj	1461 Aug 20 j 07:26	5°♂38'43	1°24'11		1464 Feb 01 j 00:55	30°♂	
minimum elong	1461 Aug 20 j 05:18	5°♂32'05	1°24'11	direct	1464 Feb 07 j 19:31	29°♂03'32	
	1461 Sep 08 j 21:04	0°♂			1464 Feb 14 j 19:56	0°♂	
evening rise	1461 Sep 26 j 20:05	22°♂24'11		greatest brilliancy	1464 Feb 18 j 12:31	1°♂11'02	-4.6m
	1461 Oct 02 j 22:07	0°♂			1464 Mar 27 j 23:27	0°♂	
desc. node	1461 Oct 19 j 04:53	20°♂19'51		morning max el	1464 Mar 28 j 09:26	0°♂24'22	46°17'54
	1461 Oct 26 j 22:47	0°♂		desc. node	1464 Apr 04 j 23:50	8°♂00'30	
	1461 Nov 19 j 23:57	0°♂			1464 Apr 25 j 16:15	0°♂	
	1461 Dec 14 j 03:04	0°♂			1464 May 22 j 07:50	0°♂	
	1462 Jan 07 j 11:11	0°♂			1464 Jun 17 j 02:24	0°♂	
	1462 Feb 01 j 06:18	0°♂			1464 Jul 12 j 07:46	0°♂	

asc. node	1464 Jul 27 j 03:20	17°♌52'40			1467 Jan 24 j 11:03	0°♍	
	1464 Aug 06 j 02:22	0°♌		greatest brilliancy	1467 Feb 23 j 17:35	23°♍18'07	-4.6m
	1464 Aug 30 j 11:52	0°♍		retrograde	1467 Mar 09 j 23:47	26°♍58'45	
morning set	1464 Sep 22 j 03:39	28°♍10'58		evening set	1467 Mar 26 j 22:55	21°♍20'48	
	1464 Sep 23 j 14:34	0°♌		inferior conj	1467 Mar 31 j 04:27	18°♍43'13	6°53'14
	1464 Oct 17 j 13:13	0°♌		minimum elong	1467 Mar 31 j 13:59	18°♍28'11	6°51'31
max. Earth dist.	1464 Oct 29 j 15:39	15°♌12'11	1.71270 AU	min. Earth dist.	1467 Mar 31 j 02:05	18°♍46'58	0.28503 AU
				morning rise	1467 Apr 05 j 05:24	15°♍38'06	
superior conj	1464 Oct 30 j 23:57	16°♌53'42	0°36'21	direct	1467 Apr 21 j 10:31	10°♍33'21	
minimum elong	1464 Oct 31 j 08:21	17°♌20'05	0°35'58	greatest brilliancy	1467 May 03 j 10:04	13°♍08'23	-4.5m
	1464 Nov 10 j 10:06	0°♍		desc. node	1467 May 03 j 11:38	13°♍09'59	
desc. node	1464 Nov 15 j 16:48	6°♍38'13			1467 May 28 j 16:55	0°♌	
	1464 Dec 04 j 06:45	0°♌		morning max el	1467 Jun 09 j 07:39	10°♌33'02	45°45'21
evening rise	1464 Dec 11 j 04:59	8°♌42'10			1467 Jun 28 j 13:55	0°♌	
	1464 Dec 28 j 04:15	0°♌			1467 Jul 25 j 20:44	0°♌	
	1465 Jan 21 j 04:02	0°♍			1467 Aug 20 j 16:35	0°♌	
	1465 Feb 14 j 08:34	0°♍		asc. node	1467 Aug 24 j 15:14	4°♌41'04	
asc. node	1465 Mar 08 j 20:08	27°♍31'05			1467 Sep 14 j 15:25	0°♍	
	1465 Mar 10 j 21:15	0°♌			1467 Oct 09 j 00:37	0°♌	
	1465 Apr 04 j 22:36	0°♌			1467 Nov 02 j 01:48	0°♌	
	1465 Apr 30 j 20:10	0°♌			1467 Nov 25 j 23:13	0°♍	
	1465 May 28 j 08:12	0°♌		morning set	1467 Dec 06 j 09:05	13°♍05'51	
evening max el	1465 Jun 11 j 13:24	14°♌13'10	45°25'00	desc. node	1467 Dec 14 j 04:37	22°♍55'41	
desc. node	1465 Jun 28 j 09:27	29°♌02'09			1467 Dec 19 j 19:32	0°♌	
	1465 Jun 29 j 15:04	0°♍			1468 Jan 12 j 16:17	0°♌	
greatest brilliancy	1465 Jul 18 j 01:42	11°♍14'17	-4.5m				
retrograde	1465 Jul 30 j 05:19	13°♍50'23		superior conj	1468 Jan 17 j 05:07	5°♌41'32	-1°-9'-45
evening set	1465 Aug 17 j 01:49	7°♍54'02		minimum elong	1468 Jan 16 j 17:46	5°♌05'55	1°09'26
inferior conj	1465 Aug 20 j 11:15	5°♍50'09	-8°-38'-37	max. Earth dist.	1468 Jan 20 j 14:12	9°♌55'51	1.71376 AU
minimum elong	1465 Aug 20 j 08:42	5°♍54'06	8°38'33		1468 Feb 05 j 14:40	0°♍	
min. Earth dist.	1465 Aug 20 j 23:58	5°♍30'32	0.28456 AU	evening rise	1468 Feb 26 j 20:39	26°♍30'24	
morning rise	1465 Aug 23 j 15:23	3°♍53'45			1468 Feb 29 j 16:05	0°♍	
	1465 Aug 31 j 01:33	30°♌			1468 Mar 24 j 21:57	0°♌	
direct	1465 Sep 10 j 20:45	27°♌39'42		asc. node	1468 Apr 05 j 08:08	14°♌02'25	
	1465 Sep 22 j 03:28	0°♍			1468 Apr 18 j 09:32	0°♌	
greatest brilliancy	1465 Sep 25 j 10:02	1°♍26'34	-4.6m		1468 May 13 j 04:06	0°♌	
asc. node	1465 Oct 19 j 12:47	18°♍57'55			1468 Jun 07 j 07:57	0°♌	
	1465 Oct 31 j 00:25	0°♌			1468 Jul 03 j 02:11	0°♍	
morning max el	1465 Oct 31 j 06:15	0°♌14'44	46°40'59	desc. node	1468 Jul 25 j 21:10	25°♍34'36	
	1465 Nov 27 j 15:31	0°♌			1468 Jul 29 j 22:42	0°♌	
	1465 Dec 23 j 05:13	0°♍		evening max el	1468 Aug 23 j 06:08	25°♌04'30	46°18'46
	1466 Jan 17 j 00:51	0°♌			1468 Aug 28 j 10:40	0°♌	
desc. node	1466 Feb 08 j 02:10	26°♌58'11		greatest brilliancy	1468 Oct 01 j 03:49	23°♌55'29	-4.6m
	1466 Feb 10 j 13:27	0°♌		retrograde	1468 Oct 11 j 18:25	25°♌58'41	
	1466 Mar 06 j 23:35	0°♍		evening set	1468 Oct 26 j 21:18	21°♌33'23	
	1466 Mar 31 j 09:25	0°♍		inferior conj	1468 Nov 01 j 09:10	18°♌19'47	-3°-40'-30
	1466 Apr 24 j 19:49	0°♌		minimum elong	1468 Nov 01 j 16:59	18°♌07'52	3°38'13
morning set	1466 May 05 j 22:33	13°♌37'59		min. Earth dist.	1468 Nov 01 j 22:22	17°♌59'40	0.26663 AU
	1466 May 19 j 06:42	0°♌		morning rise	1468 Nov 07 j 12:13	14°♌45'06	
asc. node	1466 Jun 01 j 05:49	15°♌54'23		asc. node	1468 Nov 16 j 00:42	11°♌20'44	
max. Earth dist.	1466 Jun 10 j 13:06	27°♌19'54	1.73607 AU	direct	1468 Nov 21 j 22:43	10°♌37'40	
				greatest brilliancy	1468 Dec 04 j 20:05	13°♌42'54	-4.7m
superior conj	1466 Jun 11 j 15:00	28°♌39'27	0°24'21		1468 Dec 28 j 00:14	0°♍	
minimum elong	1466 Jun 11 j 10:12	28°♌24'44	0°24'08	morning max el	1469 Jan 11 j 14:08	13°♍56'15	46°55'25
	1466 Jun 12 j 17:12	0°♌			1469 Jan 26 j 19:36	0°♌	
	1466 Jul 07 j 02:31	0°♌			1469 Feb 22 j 09:55	0°♌	
evening rise	1466 Jul 17 j 10:37	12°♌44'20		desc. node	1469 Mar 07 j 14:10	15°♌21'40	
	1466 Jul 31 j 10:38	0°♍			1469 Mar 19 j 23:54	0°♍	
	1466 Aug 24 j 18:31	0°♌			1469 Apr 14 j 03:36	0°♍	
	1466 Sep 18 j 03:28	0°♌			1469 May 09 j 02:11	0°♌	
desc. node	1466 Sep 20 j 19:02	3°♌15'15			1469 Jun 02 j 21:10	0°♌	
	1466 Oct 12 j 14:40	0°♍			1469 Jun 27 j 12:16	0°♌	
	1466 Nov 06 j 05:51	0°♌		asc. node	1469 Jun 28 j 17:33	1°♌29'32	
	1466 Dec 01 j 05:36	0°♌		morning set	1469 Jul 12 j 13:35	18°♌27'12	
	1466 Dec 27 j 02:28	0°♍			1469 Jul 21 j 22:48	0°♌	
asc. node	1467 Jan 11 j 22:19	17°♍17'59		max. Earth dist.	1469 Aug 14 j 09:29	28°♌59'48	1.72687 AU
evening max el	1467 Jan 18 j 12:53	24°♍08'09	46°51'25		1469 Aug 15 j 04:53	0°♍	

superior conj	1469 Aug 18 j 00:58	3°♍31'17	1°23'44			1472 Jan 23 j 11:52	30°♁		
minimum elong	1469 Aug 17 j 22:10	3°♍22'34	1°23'43		direct	1472 Feb 05 j 08:12	26°♁39'09		
	1469 Sep 08 j 07:44	0°♊			greatest brilliancy	1472 Feb 16 j 02:11	28°♁48'01	-4.6m	
evening rise	1469 Sep 24 j 10:39	20°♊06'15				1472 Feb 18 j 22:31	0°♊		
	1469 Oct 02 j 08:58	0°♋			morning max el	1472 Mar 26 j 00:02	28°♊06'23	46°19'27	
desc. node	1469 Oct 18 j 07:03	19°♋52'23				1472 Mar 27 j 22:12	0°♋		
	1469 Oct 26 j 09:51	0°♌			desc. node	1472 Apr 04 j 01:58	7°♋14'13		
	1469 Nov 19 j 11:18	0°♍				1472 Apr 25 j 08:15	0°♌		
	1469 Dec 13 j 14:46	0°♎				1472 May 21 j 21:17	0°♍		
	1470 Jan 06 j 23:24	0°♏				1472 Jun 16 j 14:34	0°♎		
	1470 Jan 31 j 19:23	0°♐				1472 Jul 11 j 19:12	0°♏		
asc. node	1470 Feb 08 j 10:12	9°♐01'04			asc. node	1472 Jul 26 j 05:22	17°♏24'56		
	1470 Feb 26 j 14:17	0°♑				1472 Aug 05 j 13:24	0°♐		
	1470 Mar 26 j 12:14	0°♒				1472 Aug 29 j 22:43	0°♑		
evening max el	1470 Mar 30 j 13:17	4°♒00'02	45°43'16		morning set	1472 Sep 19 j 18:47	25°♑54'42		
	1470 May 02 j 13:00	0°♓				1472 Sep 23 j 01:22	0°♒		
greatest brilliancy	1470 May 03 j 21:35	0°♓40'18	-4.5m			1472 Oct 17 j 00:01	0°♓		
retrograde	1470 May 18 j 11:10	4°♓23'42			max. Earth dist.	1472 Oct 27 j 02:43	12°♓42'05	1.71296 AU	
desc. node	1470 May 30 j 23:35	1°♔19'51							
evening set	1470 Jun 02 j 13:10	0°♕01'17			superior conj	1472 Oct 28 j 11:59	14°♔26'35	0°39'44	
	1470 Jun 02 j 14:06	30°♌			minimum elong	1472 Oct 28 j 20:55	14°♔54'41	0°39'21	
inferior conj	1470 Jun 08 j 23:31	26°♌10'17	-2°-5'-51			1472 Nov 09 j 20:57	0°♍		
minimum elong	1470 Jun 08 j 18:59	26°♌17'22	2°04'34		desc. node	1472 Nov 14 j 18:52	6°♍10'34		
min. Earth dist.	1470 Jun 08 j 23:09	26°♌10'51	0.28972 AU			1472 Dec 03 j 17:41	0°♎		
morning rise	1470 Jun 15 j 00:42	22°♌31'02			evening rise	1472 Dec 08 j 15:25	6°♎09'50		
direct	1470 Jun 30 j 14:29	17°♌52'44				1472 Dec 27 j 15:15	0°♏		
greatest brilliancy	1470 Jul 14 j 09:05	21°♌09'55	-4.5m			1473 Jan 20 j 15:11	0°♋		
	1470 Jul 28 j 21:19	0°♍				1473 Feb 13 j 19:56	0°♌		
morning max el	1470 Aug 18 j 13:44	17°♍54'37	45°57'11		asc. node	1473 Mar 07 j 22:15	27°♌01'52		
	1470 Aug 30 j 14:14	0°♎				1473 Mar 10 j 09:02	0°♍		
asc. node	1470 Sep 21 j 03:08	23°♎28'37				1473 Apr 04 j 11:13	0°♎		
	1470 Sep 26 j 20:25	0°♏				1473 Apr 30 j 10:28	0°♏		
	1470 Oct 22 j 07:20	0°♐				1473 May 28 j 02:37	0°♐		
	1470 Nov 15 j 21:43	0°♑			evening max el	1473 Jun 09 j 05:31	12°♑03'16	45°24'22	
	1470 Dec 10 j 02:26	0°♒			desc. node	1473 Jun 27 j 11:24	27°♑57'33		
	1471 Jan 03 j 03:20	0°♓				1473 Jun 30 j 04:42	0°♒		
desc. node	1471 Jan 10 j 16:22	9°♓25'29			greatest brilliancy	1473 Jul 15 j 13:36	8°♒58'24	-4.5m	
	1471 Jan 27 j 03:33	0°♔			retrograde	1473 Jul 27 j 20:12	11°♒36'58		
	1471 Feb 20 j 04:41	0°♕			evening set	1473 Aug 14 j 14:37	5°♒43'31		
morning set	1471 Feb 21 j 10:24	1°♕32'33			inferior conj	1473 Aug 18 j 02:18	3°♒36'00	-8°-35'-20	
	1471 Mar 16 j 07:48	0°♖			minimum elong	1473 Aug 17 j 22:58	3°♒41'10	8°35'11	
					min. Earth dist.	1473 Aug 18 j 13:47	3°♒18'15	0.28502 AU	
superior conj	1471 Apr 01 j 12:30	20°♖03'48	-1°-7'-3		morning rise	1473 Aug 21 j 07:09	1°♒38'23		
minimum elong	1471 Apr 01 j 22:21	20°♖34'14	1°06'45			1473 Aug 24 j 03:18	30°♑		
max. Earth dist.	1471 Apr 04 j 14:44	23°♖53'12	1.72881 AU		direct	1473 Sep 08 j 12:58	25°♑25'07		
	1471 Apr 09 j 13:32	0°♗			greatest brilliancy	1473 Sep 23 j 00:43	29°♑10'24	-4.6m	
	1471 May 03 j 22:04	0°♘				1473 Sep 24 j 15:59	0°♒		
asc. node	1471 May 03 j 20:00	29°♗53'40			asc. node	1473 Oct 18 j 14:55	18°♒00'12		
evening rise	1471 May 09 j 07:21	6°♘36'58			morning max el	1473 Oct 28 j 21:34	27°♒57'00	46°39'35	
	1471 May 28 j 09:09	0°♙				1473 Oct 30 j 21:58	0°♓		
	1471 Jun 21 j 22:42	0°♚				1473 Nov 27 j 07:19	0°♔		
	1471 Jul 16 j 15:33	0°♛				1473 Dec 22 j 18:53	0°♕		
	1471 Aug 10 j 13:36	0°♜				1474 Jan 16 j 13:25	0°♖		
desc. node	1471 Aug 23 j 09:09	15°♜16'59			desc. node	1474 Feb 07 j 04:18	26°♖28'07		
	1471 Sep 04 j 19:57	0°♝				1474 Feb 10 j 01:20	0°♗		
	1471 Sep 30 j 16:33	0°♞				1474 Mar 06 j 11:00	0°♘		
	1471 Oct 27 j 20:12	0°♟				1474 Mar 30 j 20:30	0°♙		
evening max el	1471 Nov 05 j 06:00	8°♟42'23	47°17'24			1474 Apr 24 j 06:42	0°♚		
	1471 Nov 28 j 15:33	0°♠			morning set	1474 May 03 j 15:57	11°♚31'02		
greatest brilliancy	1471 Dec 13 j 17:49	9°♠24'09	-4.7m			1474 May 18 j 17:27	0°♛		
asc. node	1471 Dec 14 j 12:30	9°♠44'18			asc. node	1474 May 31 j 07:46	15°♛27'35		
retrograde	1471 Dec 26 j 04:10	12°♠19'17			max. Earth dist.	1474 Jun 08 j 11:29	25°♛28'25	1.73610 AU	
evening set	1472 Jan 11 j 02:14	7°♠17'36							
min. Earth dist.	1472 Jan 14 j 23:47	4°♠56'58	0.26991 AU		superior conj	1474 Jun 09 j 09:09	26°♛34'56	0°21'19	
inferior conj	1472 Jan 15 j 21:27	4°♠23'26	7°10'03		minimum elong	1474 Jun 09 j 04:54	26°♛21'55	0°21'06	
minimum elong	1472 Jan 15 j 11:29	4°♠38'52	7°08'11			1474 Jun 12 j 03:54	0°♜		
morning rise	1472 Jan 19 j 21:05	1°♠58'16				1474 Jul 06 j 13:14	0°♝		

evening rise	1474 Jul 15 j 05:11	10°♈40'23		desc. node	1477 Mar 06 j 16:14	14°♌46'39	
	1474 Jul 30 j 21:31	0°♎			1477 Mar 19 j 13:09	0°♋	
	1474 Aug 24 j 05:41	0°♊			1477 Apr 13 j 15:52	0°♍	
	1474 Sep 17 j 15:03	0°♌			1477 May 08 j 13:49	0°♉	
desc. node	1474 Sep 19 j 21:10	2°♌46'06			1477 Jun 02 j 08:24	0°♈	
	1474 Oct 12 j 02:49	0°♈			1477 Jun 26 j 23:15	0°♎	
	1474 Nov 05 j 18:46	0°♎		asc. node	1477 Jun 27 j 19:36	1°♎02'14	
	1474 Nov 30 j 19:46	0°♌		morning set	1477 Jul 10 j 07:27	16°♎21'04	
	1474 Dec 26 j 19:10	0°♋			1477 Jul 21 j 09:42	0°♈	
asc. node	1475 Jan 11 j 00:25	16°♋31'19		max. Earth dist.	1477 Aug 12 j 03:56	26°♈54'16	1.72741 AU
evening max el	1475 Jan 16 j 04:28	21°♋51'08	46°53'37		1477 Aug 14 j 15:49	0°♎	
	1475 Jan 24 j 11:45	0°♍					
greatest brilliancy	1475 Feb 21 j 11:48	21°♍06'53	-4.6m	superior conj	1477 Aug 15 j 18:16	1°♎22'03	1°23'10
retrograde	1475 Mar 07 j 15:44	24°♍44'44		minimum elong	1477 Aug 15 j 14:48	1°♎11'18	1°23'08
evening set	1475 Mar 24 j 17:34	19°♍03'02			1477 Sep 07 j 18:47	0°♊	
inferior conj	1475 Mar 28 j 20:11	16°♍29'33	7°05'47	evening rise	1477 Sep 22 j 01:01	17°♊46'40	
minimum elong	1475 Mar 29 j 05:30	16°♍14'49	7°04'11		1477 Oct 01 j 20:10	0°♌	
min. Earth dist.	1475 Mar 28 j 17:09	16°♍34'21	0.28471 AU	desc. node	1477 Oct 17 j 09:02	19°♌23'11	
morning rise	1475 Apr 02 j 17:47	13°♍29'02			1477 Oct 25 j 21:15	0°♈	
direct	1475 Apr 19 j 02:03	8°♍20'29			1477 Nov 18 j 22:58	0°♎	
greatest brilliancy	1475 Apr 30 j 22:17	10°♍52'11	-4.5m		1477 Dec 13 j 02:48	0°♌	
desc. node	1475 May 02 j 13:41	11°♍34'11			1478 Jan 06 j 11:58	0°♋	
	1475 May 28 j 21:08	0°♉			1478 Jan 31 j 08:53	0°♍	
morning max el	1475 Jun 06 j 22:45	8°♉20'37	45°45'38	asc. node	1478 Feb 07 j 12:20	8°♍26'26	
	1475 Jun 28 j 07:02	0°♈			1478 Feb 26 j 05:44	0°♉	
	1475 Jul 25 j 10:40	0°♎			1478 Mar 26 j 09:13	0°♈	
	1475 Aug 20 j 05:04	0°♈		evening max el	1478 Mar 28 j 04:14	1°♈45'39	45°45'17
asc. node	1475 Aug 23 j 17:23	4°♈10'40		greatest brilliancy	1478 May 01 j 11:55	28°♈28'30	-4.5m
	1475 Sep 14 j 03:11	0°♎			1478 May 05 j 00:22	0°♎	
	1475 Oct 08 j 12:01	0°♊		retrograde	1478 May 16 j 03:53	2°♎15'11	
	1475 Nov 01 j 13:03	0°♌			1478 May 26 j 19:51	30°♈	
	1475 Nov 25 j 10:23	0°♈		desc. node	1478 May 30 j 01:31	28°♈29'24	
morning set	1475 Dec 03 j 19:14	10°♈31'46		evening set	1478 May 31 j 05:25	27°♈52'26	
desc. node	1475 Dec 13 j 06:32	22°♈26'44		inferior conj	1478 Jun 06 j 15:59	24°♈01'23	-1°-46'-36
	1475 Dec 19 j 06:39	0°♎		minimum elong	1478 Jun 06 j 12:07	24°♈07'26	1°45'30
	1476 Jan 12 j 03:21	0°♌		min. Earth dist.	1478 Jun 06 j 15:46	24°♈01'43	0.28968 AU
				morning rise	1478 Jun 12 j 18:44	20°♈20'09	
superior conj	1476 Jan 14 j 15:13	3°♌07'54	-1°-7'-22	direct	1478 Jun 28 j 06:29	15°♈43'38	
minimum elong	1476 Jan 14 j 03:34	2°♌31'18	1°07'01	greatest brilliancy	1478 Jul 12 j 01:30	19°♈01'15	-4.5m
max. Earth dist.	1476 Jan 17 j 21:25	7°♌13'14	1.71334 AU		1478 Jul 29 j 09:32	0°♎	
	1476 Feb 05 j 01:42	0°♋		morning max el	1478 Aug 16 j 05:54	15°♎44'02	45°56'02
evening rise	1476 Feb 24 j 08:46	24°♋04'29			1478 Aug 30 j 08:41	0°♈	
	1476 Feb 29 j 03:06	0°♍		asc. node	1478 Sep 20 j 05:12	22°♈51'26	
	1476 Mar 24 j 09:02	0°♉			1478 Sep 26 j 11:03	0°♎	
asc. node	1476 Apr 04 j 10:12	13°♉34'35			1478 Oct 21 j 20:27	0°♊	
	1476 Apr 17 j 20:49	0°♈			1478 Nov 15 j 10:05	0°♌	
	1476 May 12 j 15:49	0°♎			1478 Dec 09 j 14:20	0°♈	
	1476 Jun 06 j 20:30	0°♈			1479 Jan 02 j 14:57	0°♎	
	1476 Jul 02 j 16:16	0°♎		desc. node	1479 Jan 09 j 18:31	8°♎56'05	
desc. node	1476 Jul 24 j 23:17	24°♎55'01			1479 Jan 26 j 14:58	0°♌	
	1476 Jul 29 j 16:01	0°♊		morning set	1479 Feb 18 j 22:12	29°♌04'45	
evening max el	1476 Aug 20 j 18:24	22°♊40'29	46°16'12		1479 Feb 19 j 15:56	0°♋	
	1476 Aug 28 j 13:50	0°♌			1479 Mar 15 j 18:55	0°♍	
greatest brilliancy	1476 Sep 28 j 17:33	21°♌30'34	-4.6m				
retrograde	1476 Oct 09 j 05:51	23°♌31'58		superior conj	1479 Mar 30 j 03:26	17°♍47'23	-1°-9'-10
evening set	1476 Oct 24 j 12:17	19°♌02'49		minimum elong	1479 Mar 30 j 13:09	18°♍17'25	1°08'54
inferior conj	1476 Oct 29 j 21:38	15°♌52'57	-4°-2'-9	max. Earth dist.	1479 Apr 02 j 05:55	21°♍37'41	1.72832 AU
minimum elong	1476 Oct 30 j 06:04	15°♌40'07	3°59'44		1479 Apr 09 j 00:34	0°♉	
min. Earth dist.	1476 Oct 30 j 12:32	15°♌30'17	0.26711 AU	asc. node	1479 May 02 j 21:58	29°♉25'52	
morning rise	1476 Nov 04 j 23:15	12°♌19'49			1479 May 03 j 09:05	0°♈	
asc. node	1476 Nov 15 j 02:39	8°♌33'00		evening rise	1479 May 07 j 00:42	4°♈29'02	
direct	1476 Nov 19 j 11:09	8°♌09'40			1479 May 27 j 20:15	0°♎	
greatest brilliancy	1476 Dec 02 j 12:13	11°♌18'28	-4.7m		1479 Jun 21 j 10:04	0°♈	
	1476 Dec 28 j 06:45	0°♈			1479 Jul 16 j 03:23	0°♎	
morning max el	1477 Jan 09 j 02:49	11°♈28'03	46°55'55		1479 Aug 10 j 02:10	0°♊	
	1477 Jan 26 j 14:06	0°♎		desc. node	1479 Aug 22 j 11:14	14°♊44'15	
	1477 Feb 22 j 00:52	0°♌			1479 Sep 04 j 09:45	0°♌	



	1479 Sep 30 j 08:31	0°♁			1482 Mar 05 j 22:41	0°♁		
	1479 Oct 27 j 17:05	0°♁			1482 Mar 30 j 07:49	0°♁		
evening max el	1479 Nov 02 j 20:40	6°♁19'19	47°16'33		1482 Apr 23 j 17:46	0°♁		
	1479 Nov 29 j 12:24	0°♁		morning set	1482 May 01 j 09:11	9°♁22'53		
greatest brilliancy	1479 Dec 11 j 07:35	6°♁56'17	-4.7m		1482 May 18 j 04:22	0°♁		
asc. node	1479 Dec 13 j 14:37	7°♁52'21		asc. node	1482 May 30 j 09:50	15°♁00'34		
retrograde	1479 Dec 23 j 18:06	9°♁51'10		max. Earth dist.	1482 Jun 06 j 08:52	23°♁33'19	1.73611 AU	
evening set	1480 Jan 08 j 11:32	4°♁55'09						
min. Earth dist.	1480 Jan 12 j 12:31	2°♁29'49	0.26936 AU	superior conj	1482 Jun 07 j 03:19	24°♁29'57	0°18'14	
inferior conj	1480 Jan 13 j 10:21	1°♁56'07	6°55'54	minimum elong	1482 Jun 06 j 23:39	24°♁18'42	0°18'04	
minimum elong	1480 Jan 13 j 00:09	2°♁11'52	6°53'52		1482 Jun 11 j 14:46	0°♁		
	1480 Jan 16 j 14:31	30°♁			1482 Jul 06 j 00:09	0°♁		
morning rise	1480 Jan 17 j 13:11	29°♁26'43		evening rise	1482 Jul 12 j 23:54	8°♁36'25		
direct	1480 Feb 02 j 21:05	24°♁12'41			1482 Jul 30 j 08:35	0°♁		
greatest brilliancy	1480 Feb 13 j 14:37	26°♁21'51	-4.6m		1482 Aug 23 j 17:01	0°♁		
	1480 Feb 21 j 03:03	0°♁			1482 Sep 17 j 02:47	0°♁		
morning max el	1480 Mar 23 j 14:40	25°♁47'25	46°21'00	desc. node	1482 Sep 18 j 23:10	2°♁16'06		
	1480 Mar 27 j 20:27	0°♁			1482 Oct 11 j 15:07	0°♁		
desc. node	1480 Apr 03 j 04:00	6°♁27'20			1482 Nov 05 j 07:52	0°♁		
	1480 Apr 25 j 00:20	0°♁			1482 Nov 30 j 10:13	0°♁		
	1480 May 21 j 10:57	0°♁			1482 Dec 26 j 12:26	0°♁		
	1480 Jun 16 j 03:00	0°♁		asc. node	1483 Jan 10 j 02:31	15°♁43'07		
asc. node	1480 Jul 11 j 06:56	0°♁		evening max el	1483 Jan 13 j 19:11	19°♁30'55	46°55'34	
	1480 Jul 25 j 07:33	16°♁56'43			1483 Jan 24 j 14:09	0°♁		
	1480 Aug 05 j 00:45	0°♁		greatest brilliancy	1483 Feb 19 j 06:09	18°♁54'24	-4.6m	
	1480 Aug 29 j 09:52	0°♁		retrograde	1483 Mar 05 j 07:10	22°♁29'20		
morning set	1480 Sep 17 j 10:05	23°♁38'04		evening set	1483 Mar 22 j 12:02	16°♁43'59		
	1480 Sep 22 j 12:27	0°♁		inferior conj	1483 Mar 26 j 11:46	14°♁14'43	7°17'41	
	1480 Oct 16 j 11:09	0°♁		minimum elong	1483 Mar 26 j 20:49	14°♁00'23	7°16'14	
max. Earth dist.	1480 Oct 24 j 11:17	10°♁03'06	1.71331 AU	min. Earth dist.	1483 Mar 26 j 08:23	14°♁20'05	0.28435 AU	
				morning rise	1483 Mar 31 j 05:55	11°♁18'57		
superior conj	1480 Oct 26 j 00:01	11°♁58'30	0°43'03	direct	1483 Apr 16 j 16:52	6°♁06'26		
minimum elong	1480 Oct 26 j 09:25	12°♁27'59	0°42'38	greatest brilliancy	1483 Apr 28 j 11:11	8°♁35'48	-4.5m	
	1480 Nov 09 j 08:11	0°♁		desc. node	1483 May 01 j 15:38	10°♁00'47		
desc. node	1480 Nov 13 j 20:51	5°♁41'29			1483 May 28 j 23:53	0°♁		
	1480 Dec 03 j 05:01	0°♁		morning max el	1483 Jun 04 j 13:06	6°♁05'52	45°46'07	
evening rise	1480 Dec 06 j 01:23	3°♁34'45			1483 Jun 27 j 23:52	0°♁		
	1480 Dec 27 j 02:41	0°♁			1483 Jul 25 j 00:28	0°♁		
	1481 Jan 20 j 02:42	0°♁			1483 Aug 19 j 17:31	0°♁		
	1481 Feb 13 j 07:40	0°♁		asc. node	1483 Aug 22 j 19:19	3°♁39'39		
asc. node	1481 Mar 07 j 00:17	26°♁31'19			1483 Sep 13 j 14:56	0°♁		
	1481 Mar 09 j 21:12	0°♁			1483 Oct 07 j 23:25	0°♁		
	1481 Apr 04 j 00:14	0°♁			1483 Nov 01 j 00:17	0°♁		
	1481 Apr 30 j 01:15	0°♁			1483 Nov 24 j 21:31	0°♁		
	1481 May 27 j 21:52	0°♁		morning set	1483 Dec 01 j 05:54	7°♁59'20		
evening max el	1481 Jun 06 j 21:24	9°♁51'56	45°23'45	desc. node	1483 Dec 12 j 08:43	21°♁58'45		
desc. node	1481 Jun 26 j 13:35	26°♁50'55			1483 Dec 18 j 17:43	0°♁		
	1481 Jun 30 j 23:26	0°♁			1484 Jan 11 j 14:23	0°♁		
greatest brilliancy	1481 Jul 13 j 02:44	6°♁43'23	-4.5m					
retrograde	1481 Jul 25 j 10:49	9°♁23'13		superior conj	1484 Jan 12 j 01:29	0°♁34'49	-1°-4'-49	
evening set	1481 Aug 12 j 03:17	3°♁33'21		minimum elong	1484 Jan 11 j 13:37	29°♁57'35	1°04'27	
inferior conj	1481 Aug 15 j 17:30	1°♁21'46	-8°-31'-11	max. Earth dist.	1484 Jan 15 j 02:27	4°♁23'50	1.71299 AU	
minimum elong	1481 Aug 15 j 13:25	1°♁28'06	8°30'57		1484 Feb 04 j 12:44	0°♁		
min. Earth dist.	1481 Aug 16 j 04:01	1°♁05'28	0.28543 AU	evening rise	1484 Feb 21 j 20:40	21°♁37'45		
	1481 Aug 17 j 22:30	30°♁			1484 Feb 28 j 14:09	0°♁		
morning rise	1481 Aug 18 j 23:23	29°♁22'20			1484 Mar 23 j 20:09	0°♁		
direct	1481 Sep 06 j 04:56	23°♁10'34		asc. node	1484 Apr 03 j 12:08	13°♁06'17		
greatest brilliancy	1481 Sep 20 j 14:50	26°♁53'13	-4.6m		1484 Apr 17 j 08:08	0°♁		
	1481 Sep 26 j 06:18	0°♁			1484 May 12 j 03:33	0°♁		
asc. node	1481 Oct 17 j 16:52	17°♁02'49			1484 Jun 06 j 09:03	0°♁		
morning max el	1481 Oct 26 j 11:49	25°♁36'07	46°38'05		1484 Jul 02 j 06:26	0°♁		
	1481 Oct 30 j 18:59	0°♁		desc. node	1484 Jul 24 j 01:20	24°♁15'09		
	1481 Nov 26 j 23:07	0°♁			1484 Jul 29 j 09:37	0°♁		
	1481 Dec 22 j 08:43	0°♁		evening max el	1484 Aug 18 j 06:35	20°♁16'49	46°13'42	
	1482 Jan 16 j 02:15	0°♁			1484 Aug 28 j 18:34	0°♁		
desc. node	1482 Feb 06 j 06:24	25°♁56'59		greatest brilliancy	1484 Sep 26 j 06:24	19°♁05'24	-4.6m	
	1482 Feb 09 j 13:30	0°♁		retrograde	1484 Oct 06 j 17:43	21°♁06'19		

evening set	1484 Oct 22 j 03:27	16°♌32'48		minimum elong	1487 Mar 28 j 04:01	16°♍01'58	1°10'56
inferior conj	1484 Oct 27 j 10:11	13°♌26'53	-4°-23'-10	max. Earth dist.	1487 Mar 30 j 23:31	19°♍30'48	1.72784 AU
minimum elong	1484 Oct 27 j 19:09	13°♌13'15	4°20'40		1487 Apr 08 j 11:11	0°♌	
min. Earth dist.	1484 Oct 28 j 02:31	13°♌02'03	0.26760 AU	asc. node	1487 May 02 j 00:05	28°♌59'45	
morning rise	1484 Nov 02 j 10:11	9°♌55'57			1487 May 02 j 19:42	0°♌	
asc. node	1484 Nov 14 j 04:42	5°♌52'04		evening rise	1487 May 04 j 18:09	2°♌22'38	
direct	1484 Nov 16 j 23:54	5°♌42'25			1487 May 27 j 07:01	0°♌	
greatest brilliancy	1484 Nov 30 j 04:43	8°♌55'28	-4.7m		1487 Jun 20 j 21:06	0°♌	
	1484 Dec 28 j 10:57	0°♌			1487 Jul 15 j 14:52	0°♌	
morning max el	1485 Jan 06 j 16:23	9°♌02'51	46°56'30		1487 Aug 09 j 14:25	0°♌	
	1485 Jan 26 j 07:53	0°♌		desc. node	1487 Aug 21 j 13:12	14°♌12'09	
	1485 Feb 21 j 15:24	0°♌			1487 Sep 03 j 23:15	0°♌	
desc. node	1485 Mar 05 j 18:14	14°♌12'17			1487 Sep 30 j 00:19	0°♌	
	1485 Mar 19 j 02:07	0°♌			1487 Oct 27 j 14:15	0°♌	
	1485 Apr 13 j 03:56	0°♌		evening max el	1487 Oct 31 j 11:51	3°♌58'47	47°15'30
	1485 May 08 j 01:17	0°♌			1487 Nov 30 j 16:06	0°♌	
	1485 Jun 01 j 19:27	0°♌		greatest brilliancy	1487 Dec 08 j 21:55	4°♌30'13	-4.7m
	1485 Jun 26 j 10:03	0°♌		asc. node	1487 Dec 12 j 16:45	5°♌57'01	
asc. node	1485 Jun 26 j 21:45	0°♌35'49		retrograde	1487 Dec 21 j 07:55	7°♌23'46	
morning set	1485 Jul 08 j 01:15	14°♌15'23		evening set	1488 Jan 05 j 20:55	2°♌33'36	
	1485 Jul 20 j 20:23	0°♌		min. Earth dist.	1488 Jan 10 j 01:20	0°♌03'24	0.26879 AU
max. Earth dist.	1485 Aug 10 j 00:07	24°♌54'55	1.72792 AU		1488 Jan 10 j 03:32	30°♌	
				inferior conj	1488 Jan 10 j 23:10	29°♌29'41	6°40'54
superior conj	1485 Aug 13 j 11:34	29°♌13'36	1°22'28	minimum elong	1488 Jan 10 j 12:50	29°♌45'39	6°38'44
minimum elong	1485 Aug 13 j 07:27	29°♌00'52	1°22'26	morning rise	1488 Jan 15 j 05:13	26°♌55'56	
	1485 Aug 14 j 02:31	0°♌		direct	1488 Jan 31 j 10:11	21°♌47'19	
	1485 Sep 07 j 05:36	0°♌		greatest brilliancy	1488 Feb 11 j 02:44	23°♌56'08	-4.6m
evening rise	1485 Sep 19 j 15:38	15°♌28'38			1488 Feb 22 j 13:06	0°♌	
	1485 Oct 01 j 07:10	0°♌		morning max el	1488 Mar 21 j 04:41	23°♌28'03	46°22'39
desc. node	1485 Oct 16 j 11:02	18°♌54'43			1488 Mar 27 j 17:23	0°♌	
	1485 Oct 25 j 08:28	0°♌		desc. node	1488 Apr 02 j 06:00	5°♌42'25	
	1485 Nov 18 j 10:26	0°♌			1488 Apr 24 j 15:39	0°♌	
	1485 Dec 12 j 14:35	0°♌			1488 May 21 j 00:01	0°♌	
	1486 Jan 06 j 00:16	0°♌			1488 Jun 15 j 14:55	0°♌	
	1486 Jan 30 j 22:07	0°♌			1488 Jul 10 j 18:13	0°♌	
asc. node	1486 Feb 06 j 14:19	7°♌52'14		asc. node	1488 Jul 24 j 09:29	16°♌29'04	
	1486 Feb 25 j 21:02	0°♌			1488 Aug 04 j 11:42	0°♌	
evening max el	1486 Mar 25 j 20:03	29°♌34'24	45°47'14		1488 Aug 28 j 20:38	0°♌	
	1486 Mar 26 j 06:34	0°♌		morning set	1488 Sep 15 j 01:27	21°♌22'55	
greatest brilliancy	1486 Apr 29 j 02:50	26°♌18'22	-4.5m		1488 Sep 21 j 23:10	0°♌	
	1486 May 11 j 08:18	0°♌			1488 Oct 15 j 21:53	0°♌	
retrograde	1486 May 13 j 20:57	0°♌07'26		max. Earth dist.	1488 Oct 21 j 18:19	7°♌20'41	1.71365 AU
	1486 May 16 j 08:51	30°♌					
evening set	1486 May 28 j 21:53	25°♌44'19		superior conj	1488 Oct 23 j 12:18	9°♌32'31	0°46'15
desc. node	1486 May 29 j 03:41	25°♌36'22		minimum elong	1488 Oct 23 j 22:03	10°♌03'08	0°45'50
inferior conj	1486 Jun 04 j 08:28	21°♌53'11	-1°-27'-11		1488 Nov 08 j 19:01	0°♌	
minimum elong	1486 Jun 04 j 05:17	21°♌58'10	1°26'17	desc. node	1488 Nov 12 j 22:59	5°♌14'07	
min. Earth dist.	1486 Jun 04 j 08:08	21°♌53'43	0.28964 AU		1488 Dec 02 j 15:58	0°♌	
morning rise	1486 Jun 10 j 12:40	18°♌10'17		evening rise	1488 Dec 03 j 11:26	1°♌01'09	
direct	1486 Jun 25 j 23:06	13°♌35'26			1488 Dec 26 j 13:44	0°♌	
greatest brilliancy	1486 Jul 09 j 17:36	16°♌53'08	-4.5m		1489 Jan 19 j 13:53	0°♌	
	1486 Jul 29 j 18:10	0°♌			1489 Feb 12 j 19:04	0°♌	
morning max el	1486 Aug 13 j 22:36	13°♌35'50	45°54'54	asc. node	1489 Mar 06 j 02:16	26°♌01'42	
	1486 Aug 30 j 02:18	0°♌			1489 Mar 09 j 09:02	0°♌	
asc. node	1486 Sep 19 j 07:13	22°♌15'25			1489 Apr 03 j 12:55	0°♌	
	1486 Sep 26 j 01:10	0°♌			1489 Apr 29 j 15:44	0°♌	
	1486 Oct 21 j 09:07	0°♌			1489 May 27 j 17:08	0°♌	
	1486 Nov 14 j 22:02	0°♌		evening max el	1489 Jun 04 j 12:26	7°♌39'54	45°23'08
	1486 Dec 09 j 01:53	0°♌		desc. node	1489 Jun 25 j 15:35	25°♌43'35	
	1487 Jan 02 j 02:14	0°♌			1489 Jul 01 j 23:58	0°♌	
desc. node	1487 Jan 08 j 20:34	8°♌27'29		greatest brilliancy	1489 Jul 10 j 16:12	4°♌30'06	-4.5m
	1487 Jan 26 j 02:01	0°♌		retrograde	1489 Jul 23 j 01:06	7°♌11'06	
morning set	1487 Feb 16 j 10:13	26°♌38'40		evening set	1489 Aug 09 j 15:47	1°♌25'06	
	1487 Feb 19 j 02:48	0°♌			1489 Aug 12 j 00:00	30°♌	
	1487 Mar 15 j 05:37	0°♌		inferior conj	1489 Aug 13 j 08:50	29°♌09'09	-8°-26'-12
superior conj	1487 Mar 27 j 18:30	15°♌32'30	-1°-11'-10	minimum elong	1489 Aug 13 j 04:00	29°♌16'38	8°25'53
				min. Earth dist.	1489 Aug 13 j 18:43	28°♌53'48	0.28585 AU

morning rise	1489 Aug 16 j 16:02	27°♌07'26		evening rise	1492 Feb 19 j 08:14	19°♋10'14	
direct	1489 Sep 03 j 20:32	20°♌57'24			1492 Feb 28 j 01:06	0°♍	
greatest brilliancy	1489 Sep 18 j 05:55	24°♌38'27	-4.6m		1492 Mar 23 j 07:12	0°♎	
	1489 Sep 27 j 08:32	0°♏		asc. node	1492 Apr 02 j 14:17	12°♎38'45	
asc. node	1489 Oct 16 j 18:58	16°♏07'56			1492 Apr 16 j 19:24	0°♏	
morning max el	1489 Oct 24 j 01:18	23°♏14'16	46°36'36		1492 May 11 j 15:17	0°♐	
	1489 Oct 30 j 14:58	0°♑			1492 Jun 05 j 21:38	0°♑	
	1489 Nov 26 j 14:22	0°♒			1492 Jul 01 j 20:39	0°♒	
	1489 Dec 21 j 22:07	0°♓		desc. node	1492 Jul 23 j 03:21	23°♒35'04	
	1490 Jan 15 j 14:40	0°♈			1492 Jul 29 j 03:29	0°♑	
desc. node	1490 Feb 05 j 08:20	25°♈26'33		evening max el	1492 Aug 15 j 19:12	17°♑54'55	46°11'16
	1490 Feb 09 j 01:17	0°♒			1492 Aug 29 j 01:10	0°♒	
	1490 Mar 05 j 10:02	0°♋		greatest brilliancy	1492 Sep 23 j 17:58	16°♒39'29	-4.6m
	1490 Mar 29 j 18:51	0°♌		retrograde	1492 Oct 04 j 06:06	18°♒41'08	
	1490 Apr 23 j 04:33	0°♍		evening set	1492 Oct 19 j 18:43	14°♒02'54	
morning set	1490 Apr 29 j 02:24	7°♌15'34		inferior conj	1492 Oct 24 j 22:42	11°♒00'55	-4°-43'-31
	1490 May 17 j 14:59	0°♎		minimum elong	1492 Oct 25 j 08:08	10°♒46'35	4°40'58
asc. node	1490 May 29 j 11:58	14°♎34'45		min. Earth dist.	1492 Oct 25 j 16:01	10°♒34'38	0.26818 AU
max. Earth dist.	1490 Jun 04 j 05:11	21°♎35'58	1.73608 AU	morning rise	1492 Oct 30 j 20:54	7°♒32'40	
				asc. node	1492 Nov 13 j 06:51	3°♒17'14	
superior conj	1490 Jun 04 j 21:39	22°♎26'31	0°15'10	direct	1492 Nov 14 j 13:14	3°♒15'16	
minimum elong	1490 Jun 04 j 18:34	22°♎17'06	0°15'01	greatest brilliancy	1492 Nov 27 j 20:56	6°♒32'08	-4.7m
behind sun begin	1490 Jun 04 j 11:26	21°♎55'09			1492 Dec 28 j 13:38	0°♓	
behind sun end	1490 Jun 05 j 01:43	22°♎39'03		morning max el	1493 Jan 04 j 06:53	6°♓39'40	46°56'53
	1490 Jun 11 j 01:18	0°♐			1493 Jan 26 j 01:27	0°♓	
	1490 Jul 05 j 10:44	0°♑			1493 Feb 21 j 05:54	0°♒	
evening rise	1490 Jul 10 j 18:51	6°♑34'16		desc. node	1493 Mar 04 j 20:20	13°♒38'07	
	1490 Jul 29 j 19:21	0°♒			1493 Mar 18 j 15:06	0°♋	
	1490 Aug 23 j 04:06	0°♓			1493 Apr 12 j 16:00	0°♌	
	1490 Sep 16 j 14:20	0°♔			1493 May 07 j 12:46	0°♍	
desc. node	1490 Sep 18 j 01:12	1°♔46'51			1493 Jun 01 j 06:32	0°♎	
	1490 Oct 11 j 03:14	0°♓			1493 Jun 25 j 20:55	0°♏	
	1490 Nov 04 j 20:50	0°♔		asc. node	1493 Jun 25 j 23:42	0°♐08'30	
	1490 Nov 30 j 00:34	0°♑		morning set	1493 Jul 05 j 19:12	12°♐09'57	
	1490 Dec 26 j 05:48	0°♒			1493 Jul 20 j 07:09	0°♑	
asc. node	1491 Jan 09 j 04:29	14°♒54'37		max. Earth dist.	1493 Aug 07 j 20:11	22°♑54'56	1.72836 AU
evening max el	1491 Jan 11 j 08:47	17°♒08'28	46°57'35				
	1491 Jan 24 j 17:50	0°♓		superior conj	1493 Aug 11 j 05:09	27°♑05'52	1°21'39
greatest brilliancy	1491 Feb 16 j 23:40	16°♓41'13	-4.6m	minimum elong	1493 Aug 11 j 00:27	26°♑51'19	1°21'36
retrograde	1491 Mar 02 j 22:24	20°♓14'28			1493 Aug 13 j 13:18	0°♔	
evening set	1491 Mar 20 j 06:21	14°♓25'14			1493 Sep 06 j 16:29	0°♑	
inferior conj	1491 Mar 24 j 03:18	12°♓00'15	7°28'58	evening rise	1493 Sep 17 j 06:41	13°♑11'49	
minimum elong	1491 Mar 24 j 12:00	11°♓46'29	7°27'39		1493 Sep 30 j 18:13	0°♒	
min. Earth dist.	1491 Mar 23 j 23:39	12°♓06'02	0.28400 AU	desc. node	1493 Oct 15 j 13:12	18°♒26'35	
morning rise	1491 Mar 28 j 17:55	9°♓09'28			1493 Oct 24 j 19:45	0°♓	
direct	1491 Apr 14 j 07:15	3°♓52'27			1493 Nov 17 j 22:02	0°♔	
greatest brilliancy	1491 Apr 26 j 01:10	6°♓20'57	-4.5m		1493 Dec 12 j 02:35	0°♑	
desc. node	1491 Apr 30 j 17:49	8°♓31'16			1494 Jan 05 j 12:50	0°♒	
	1491 May 29 j 00:59	0°♋			1494 Jan 30 j 11:42	0°♓	
morning max el	1491 Jun 02 j 03:36	3°♋51'55	45°46'50	asc. node	1494 Feb 05 j 16:21	7°♓17'14	
	1491 Jun 27 j 16:09	0°♎			1494 Feb 25 j 12:50	0°♋	
	1491 Jul 24 j 13:55	0°♏		evening max el	1494 Mar 23 j 12:20	27°♋23'23	45°49'20
	1491 Aug 19 j 05:40	0°♑			1494 Mar 26 j 05:05	0°♎	
asc. node	1491 Aug 21 j 21:24	3°♑09'51		greatest brilliancy	1494 Apr 26 j 18:50	24°♎08'46	-4.5m
	1491 Sep 13 j 02:27	0°♒		retrograde	1494 May 11 j 13:57	27°♎58'26	
	1491 Oct 07 j 10:39	0°♓		evening set	1494 May 26 j 14:28	23°♎35'03	
	1491 Oct 31 j 11:23	0°♔		desc. node	1494 May 28 j 05:43	22°♎39'35	
	1491 Nov 24 j 08:34	0°♓		inferior conj	1494 Jun 02 j 00:48	19°♎43'49	-1°-7'-37
morning set	1491 Nov 28 j 16:20	5°♓26'24		minimum elong	1494 Jun 01 j 22:19	19°♎47'41	1°06'54
desc. node	1491 Dec 11 j 10:46	21°♓30'34		min. Earth dist.	1494 Jun 02 j 00:11	19°♎44'47	0.28957 AU
	1491 Dec 18 j 04:43	0°♔		morning rise	1494 Jun 08 j 06:18	15°♎59'20	
				direct	1494 Jun 23 j 15:52	11°♎26'15	
superior conj	1492 Jan 09 j 11:16	28°♔00'28	-1°-2'-7	greatest brilliancy	1494 Jul 07 j 08:35	14°♎42'41	-4.5m
minimum elong	1492 Jan 08 j 23:18	27°♔22'54	1°01'44		1494 Jul 30 j 00:44	0°♏	
	1492 Jan 11 j 01:20	0°♑		morning max el	1494 Aug 11 j 15:10	11°♏26'40	45°53'53
max. Earth dist.	1492 Jan 12 j 05:53	1°♑29'38	1.71265 AU		1494 Aug 29 j 19:49	0°♑	
	1492 Feb 03 j 23:40	0°♒		asc. node	1494 Sep 18 j 09:18	21°♑39'20	

	1494 Sep 25 j 15:20	0°♍			1497 Apr 29 j 06:53	0°♁		
	1494 Oct 20 j 21:53	0°♊			1497 May 27 j 13:33	0°♈		
	1494 Nov 14 j 10:06	0°♌		evening max el	1497 Jun 02 j 02:41	5°♌24'37	45°22'39	
	1494 Dec 08 j 13:33	0°♍		desc. node	1497 Jun 24 j 17:35	24°♌32'59		
	1495 Jan 01 j 13:41	0°♎			1497 Jul 03 j 11:40	0°♍		
desc. node	1495 Jan 07 j 22:31	7°♎57'58		greatest brilliancy	1497 Jul 08 j 05:08	2°♍14'51	-4.5m	
	1495 Jan 25 j 13:19	0°♏		retrograde	1497 Jul 20 j 15:27	4°♍57'58		
morning set	1495 Feb 13 j 21:45	24°♏10'09			1497 Aug 05 j 21:28	30°♌		
	1495 Feb 18 j 13:57	0°♐		evening set	1497 Aug 07 j 04:03	29°♌15'49		
	1495 Mar 14 j 16:38	0°♑		inferior conj	1497 Aug 11 j 00:10	26°♌55'23	-8°-20'-30	
				minimum elong	1497 Aug 10 j 18:37	27°♌04'00	8°20'04	
superior conj	1495 Mar 25 j 08:58	13°♑14'38	-1°-13'-6	min. Earth dist.	1497 Aug 11 j 09:33	26°♌40'48	0.28627 AU	
minimum elong	1495 Mar 25 j 18:13	13°♑43'16	1°12'52	morning rise	1497 Aug 14 j 08:57	24°♌51'09		
max. Earth dist.	1495 Mar 28 j 17:49	17°♑24'57	1.72733 AU	direct	1497 Sep 01 j 11:46	18°♌42'56		
	1495 Apr 07 j 22:07	0°♒		greatest brilliancy	1497 Sep 15 j 22:00	22°♌23'55	-4.6m	
asc. node	1495 May 01 j 02:08	28°♒32'24			1497 Sep 28 j 04:22	0°♍		
evening rise	1495 May 02 j 11:04	0°♓13'32		asc. node	1497 Oct 15 j 21:04	15°♍13'00		
	1495 May 02 j 06:39	0°♑		morning max el	1497 Oct 21 j 14:49	20°♍51'26	46°35'13	
	1495 May 26 j 18:06	0°♒			1497 Oct 30 j 10:49	0°♊		
	1495 Jun 20 j 08:29	0°♈			1497 Nov 26 j 05:49	0°♌		
	1495 Jul 15 j 02:45	0°♍			1497 Dec 21 j 11:46	0°♎		
	1495 Aug 09 j 03:04	0°♊			1498 Jan 15 j 03:19	0°♎		
desc. node	1495 Aug 20 j 15:18	13°♊39'20		desc. node	1498 Feb 04 j 10:28	24°♎55'54		
	1495 Sep 03 j 13:12	0°♌			1498 Feb 08 j 13:18	0°♏		
	1495 Sep 29 j 16:39	0°♍			1498 Mar 04 j 21:36	0°♐		
	1495 Oct 27 j 12:24	0°♎			1498 Mar 29 j 06:07	0°♑		
evening max el	1495 Oct 29 j 02:52	1°♎37'21	47°14'25		1498 Apr 22 j 15:37	0°♒		
	1495 Dec 02 j 07:57	0°♏		morning set	1498 Apr 26 j 19:36	5°♒07'07		
greatest brilliancy	1495 Dec 06 j 12:59	2°♏04'49	-4.7m		1498 May 17 j 01:55	0°♓		
asc. node	1495 Dec 11 j 18:38	3°♏56'33		asc. node	1498 May 28 j 13:55	14°♓07'18		
retrograde	1495 Dec 18 j 21:25	4°♏55'56		max. Earth dist.	1498 Jun 02 j 00:24	19°♓34'10	1.73609 AU	
evening set	1496 Jan 03 j 06:38	0°♐11'36						
	1496 Jan 03 j 14:47	30°♏		superior conj	1498 Jun 02 j 15:53	20°♓21'44	0°12'04	
min. Earth dist.	1496 Jan 07 j 14:31	27°♏36'19	0.26826 AU	minimum elong	1498 Jun 02 j 13:26	20°♓14'11	0°11'56	
inferior conj	1496 Jan 08 j 12:08	27°♏02'57	6°25'12	behind sun begin	1498 Jun 01 j 22:28	19°♓28'15		
minimum elong	1496 Jan 08 j 01:44	27°♏19'01	6°22'54	behind sun end	1498 Jun 03 j 04:23	21°♓00'07		
morning rise	1496 Jan 12 j 21:20	24°♏24'40			1498 Jun 10 j 12:12	0°♁		
direct	1496 Jan 28 j 23:13	19°♏21'41			1498 Jul 04 j 21:41	0°♈		
greatest brilliancy	1496 Feb 08 j 15:19	21°♏30'07	-4.6m	evening rise	1498 Jul 08 j 13:42	4°♈30'46		
	1496 Feb 23 j 13:45	0°♐			1498 Jul 29 j 06:29	0°♍		
morning max el	1496 Mar 18 j 17:49	21°♐05'18	46°24'02		1498 Aug 22 j 15:34	0°♊		
	1496 Mar 27 j 14:01	0°♑			1498 Sep 16 j 02:15	0°♌		
desc. node	1496 Apr 01 j 08:09	4°♑57'26		desc. node	1498 Sep 17 j 03:19	1°♌16'46		
	1496 Apr 24 j 07:11	0°♒			1498 Oct 10 j 15:46	0°♍		
	1496 May 20 j 13:26	0°♓			1498 Nov 04 j 10:14	0°♎		
	1496 Jun 15 j 03:12	0°♑			1498 Nov 29 j 15:27	0°♏		
	1496 Jul 10 j 05:52	0°♒			1498 Dec 25 j 23:52	0°♐		
asc. node	1496 Jul 23 j 11:32	16°♒00'39		asc. node	1499 Jan 08 j 06:36	14°♐04'57		
	1496 Aug 03 j 22:59	0°♈		evening max el	1499 Jan 08 j 22:29	14°♐45'26	46°59'45	
	1496 Aug 28 j 07:45	0°♍			1499 Jan 24 j 23:41	0°♑		
morning set	1496 Sep 12 j 16:46	19°♍06'31		greatest brilliancy	1499 Feb 14 j 16:21	14°♑26'32	-4.6m	
	1496 Sep 21 j 10:14	0°♊		retrograde	1499 Feb 28 j 14:08	17°♑59'40		
	1496 Oct 15 j 09:00	0°♌		evening set	1499 Mar 18 j 00:45	12°♑06'22		
max. Earth dist.	1496 Oct 19 j 00:19	4°♌33'58	1.71399 AU	min. Earth dist.	1499 Mar 21 j 14:53	9°♑52'15	0.28365 AU	
				inferior conj	1499 Mar 21 j 19:02	9°♑45'42	7°39'31	
superior conj	1496 Oct 21 j 00:54	7°♌06'26	0°49'20	minimum elong	1499 Mar 22 j 03:21	9°♑32'33	7°38'20	
minimum elong	1496 Oct 21 j 10:57	7°♌37'59	0°48'55	morning rise	1499 Mar 26 j 06:09	7°♑00'10		
	1496 Nov 08 j 06:12	0°♍		direct	1499 Apr 11 j 21:51	1°♑38'19		
desc. node	1496 Nov 12 j 01:01	4°♍45'20		greatest brilliancy	1499 Apr 23 j 15:45	4°♑06'42	-4.5m	
evening rise	1496 Nov 30 j 21:47	28°♍27'36		desc. node	1499 Apr 29 j 19:49	7°♑04'25		
	1496 Dec 02 j 03:12	0°♎			1499 May 29 j 01:03	0°♒		
	1496 Dec 26 j 01:02	0°♏		morning max el	1499 May 30 j 18:55	1°♒39'22	45°47'26	
	1497 Jan 19 j 01:19	0°♐			1499 Jun 27 j 08:24	0°♓		
	1497 Feb 12 j 06:46	0°♑			1499 Jul 24 j 03:32	0°♒		
asc. node	1497 Mar 05 j 04:24	25°♑31'25			1499 Aug 18 j 18:04	0°♈		
	1497 Mar 08 j 21:14	0°♒		asc. node	1499 Aug 20 j 23:32	2°♈39'26		
	1497 Apr 03 j 02:04	0°♓			1499 Sep 12 j 14:15	0°♍		

	1499 Oct 06 j 22:09	0°♌	
	1499 Oct 30 j 22:44	0°♍	
	1499 Nov 23 j 19:50	0°♎	
morning set	1499 Nov 26 j 02:53	2°♏53'09	
desc. node	1499 Dec 10 j 12:43	21°♏01'20	
	1499 Dec 17 j 15:57	0°♐	
superior conj	1500 Jan 06 j 21:00	25°♑25'03	0°-59'-17
minimum elong	1500 Jan 06 j 09:01	24°♑47'25	0°58'52
max. Earth dist.	1500 Jan 09 j 09:45	28°♑35'50	1.71235 AU
	1500 Jan 10 j 12:33	0°♒	
	1500 Feb 03 j 10:50	0°♓	
evening rise	1500 Feb 16 j 19:54	16°♓42'21	
	1500 Feb 27 j 12:16	0°♈	
	1500 Mar 22 j 18:25	0°♉	
asc. node	1500 Apr 01 j 16:21	12°♊10'28	
	1500 Apr 16 j 06:50	0°♋	
	1500 May 11 j 03:11	0°♌	
	1500 Jun 05 j 10:28	0°♍	
	1500 Jul 01 j 11:15	0°♎	
desc. node	1500 Jul 22 j 05:27	22°♏54'10	
	1500 Jul 28 j 22:04	0°♐	
evening max el	1500 Aug 13 j 08:57	15°♑35'16	46°08'51