























































































































conjunction	6600 Jan 11 04:29	21°  43'50 -0°08'34		6605 Sep 21 20:02	15° 
minimum elong	6600 Jan 11 04:29	21°  43'50 0°08'30	direct	6605 Oct 20 16:34	14°  39'21
behind sun begin	6600 Jan 10 22:40	21°  42'57		6605 Nov 18 01:00	15° 
behind sun end	6600 Jan 11 10:18	21°  44'43	evening set	6606 Jan 22 21:55	17°  58'59
max. Earth dist.	6600 Jan 10 19:21	21°  42'25 19.59499 AU			
morning rise	6600 Jan 27 04:48	22°  43'18	conjunction	6606 Feb 07 19:31	18°  57'01 -0°30'05
retrograde	6600 Apr 28 11:19	26°  01'51	minimum elong	6606 Feb 07 19:31	18°  57'01 0°30'03
opposition	6600 Jul 11 22:36	24°  00'43 -0°11'38	max. Earth dist.	6606 Feb 07 20:26	18°  57'09 19.95773 AU
min. Earth dist.	6600 Jul 12 05:17	24°  00'00 17.62044 AU	morning rise	6606 Feb 23 14:59	19°  54'43
direct	6600 Sep 26 22:07	21°  05'10	retrograde	6606 May 26 00:51	23°  09'16
evening set	6600 Dec 30 23:02	25°  02'59	opposition	6606 Aug 09 09:03	21°  09'16 -0°35'04
			min. Earth dist.	6606 Aug 09 07:11	21°  09'27 17.99211 AU
conjunction	6601 Jan 16 01:27	26°  02'36 -0°12'29	direct	6606 Oct 25 12:06	19°  06'47
minimum elong	6601 Jan 16 01:26	26°  02'36 0°12'26	evening set	6607 Jan 27 14:05	22°  25'19
behind sun begin	6601 Jan 15 21:05	26°  01'56			
behind sun end	6601 Jan 16 05:48	26°  02'15	conjunction	6607 Feb 12 10:59	23°  23'01 -0°33'04
max. Earth dist.	6601 Jan 15 18:55	26°  01'36 19.64693 AU	minimum elong	6607 Feb 12 10:59	23°  23'01 0°33'02
morning rise	6601 Feb 01 00:40	27°  01'46	max. Earth dist.	6607 Feb 12 13:59	23°  23'28 20.02700 AU
	6601 Mar 27 00:17	0° 	morning rise	6607 Feb 28 05:45	24°  20'25
retrograde	6601 May 03 06:26	0°  37'39	retrograde	6607 May 30 17:44	27°  34'18
	6601 Jun 10 17:05	30°  00'00	opposition	6607 Aug 14 04:41	25°  34'32 -0°38'16
opposition	6601 Jul 16 21:42	28°  03'39 -0°15'57	min. Earth dist.	6607 Aug 14 01:03	25°  34'54 18.06169 AU
min. Earth dist.	6601 Jul 17 03:25	28°  03'03 17.67408 AU	direct	6607 Oct 30 09:57	23°  32'29
direct	6601 Oct 01 22:41	26°  02'22	evening set	6608 Feb 01 05:31	26°  49'52
evening set	6602 Jan 04 20:03	29°  05'13			
	6602 Jan 05 21:04	0° 	conjunction	6608 Feb 17 01:34	27°  47'16 -0°35'51
conjunction	6602 Jan 20 21:16	0°  55'30 -0°16'18	minimum elong	6608 Feb 17 01:33	27°  47'16 0°35'49
minimum elong	6602 Jan 20 21:16	0°  55'30 0°16'15	max. Earth dist.	6608 Feb 17 05:19	27°  47'50 20.09674 AU
max. Earth dist.	6602 Jan 20 15:19	0°  54'35 19.70245 AU	morning rise	6608 Mar 03 19:49	28°  44'23
morning rise	6602 Feb 05 19:47	1°  54'23			
retrograde	6602 May 08 01:41	5°  11'36	retrograde	6608 Jun 03 08:28	1°  57'38
opposition	6602 Jul 21 20:14	3°  10'45 -0°20'08		6608 Aug 17 05:02	30°  00'00
min. Earth dist.	6602 Jul 22 00:09	3°  10'21 17.73154 AU	opposition	6608 Aug 18 00:00	29°  58'03 -0°41'14
direct	6602 Oct 06 21:31	1°  06'44	min. Earth dist.	6608 Aug 17 19:49	29°  58'29 18.13157 AU
evening set	6603 Jan 09 15:47	4°  29'34	direct	6608 Nov 03 04:07	27°  56'23
			evening set	6609 Jan 14 05:50	0° 
conjunction	6603 Jan 25 16:14	5°  28'34 -0°19'59		6609 Feb 04 19:53	1°  12'39
minimum elong	6603 Jan 25 16:14	5°  28'34 0°19'56	conjunction	6609 Feb 20 15:16	2°  09'43 -0°38'25
max. Earth dist.	6603 Jan 25 13:00	5°  28'04 19.76169 AU	minimum elong	6609 Feb 20 15:16	2°  09'43 0°38'24
morning rise	6603 Feb 10 13:47	6°  27'09	max. Earth dist.	6609 Feb 20 20:40	2°  10'32 20.16642 AU
retrograde	6603 May 12 20:35	9°  43'40	morning rise	6609 Mar 08 08:58	3°  06'33
opposition	6603 Jul 26 18:15	7°  43'01 -0°24'09	retrograde	6609 Jun 07 23:43	6°  19'10
min. Earth dist.	6603 Jul 26 20:39	7°  42'46 17.79244 AU	opposition	6609 Aug 22 18:39	4°  19'46 -0°43'56
direct	6603 Oct 11 21:05	5°  39'21	min. Earth dist.	6609 Aug 22 12:34	4°  20'23 18.20085 AU
evening set	6604 Jan 14 10:52	9°  01'08	direct	6609 Nov 08 00:41	2°  18'31
			evening set	6610 Feb 09 09:34	5°  33'35
conjunction	6604 Jan 30 10:13	9°  59'48 -0°23'31			
minimum elong	6604 Jan 30 10:13	9°  59'48 0°23'30	conjunction	6610 Feb 25 04:13	6°  30'22 -0°40'44
max. Earth dist.	6604 Jan 30 07:43	9°  59'25 19.82431 AU	minimum elong	6610 Feb 25 04:13	6°  30'22 0°40'42
morning rise	6604 Feb 15 07:06	10°  58'06	max. Earth dist.	6610 Feb 25 10:25	6°  31'18 20.23515 AU
retrograde	6604 May 16 14:18	14°  13'57	morning rise	6610 Mar 12 21:30	7°  26'55
opposition	6604 Jul 30 15:38	12°  13'30 -0°28'00	retrograde	6610 Jun 12 13:07	10°  38'55
min. Earth dist.	6604 Jul 30 16:33	12°  13'24 17.85668 AU	opposition	6610 Aug 27 12:41	8°  39'39 -0°46'22
direct	6604 Oct 15 17:45	10°  10'12	min. Earth dist.	6610 Aug 27 06:22	8°  40'18 18.26908 AU
evening set	6605 Jan 18 04:52	13°  30'56	direct	6610 Nov 12 17:16	6°  38'46
			evening set	6611 Feb 13 22:13	9°  52'41
conjunction	6605 Feb 03 03:27	14°  29'17 -0°26'53			
minimum elong	6605 Feb 03 03:26	14°  29'17 0°26'51	conjunction	6611 Mar 01 16:22	10°  49'09 -0°42'49
max. Earth dist.	6605 Feb 03 03:28	14°  29'17 19.88995 AU	minimum elong	6611 Mar 01 16:22	10°  49'09 0°42'49
	6605 Feb 11 11:32	15° 	max. Earth dist.	6611 Mar 01 23:43	10°  50'16 20.30255 AU
morning rise	6605 Feb 18 23:29	15°  27'16	morning rise	6611 Mar 17 09:17	11°  45'28
retrograde	6605 May 21 08:44	18°  42'28	retrograde	6611 Jun 17 03:01	14°  56'49
opposition	6605 Aug 04 12:36	16°  42'15 -0°31'39	opposition	6611 Sep 01 05:56	12°  57'41 -0°48'31
min. Earth dist.	6605 Aug 04 11:46	16°  42'20 17.92342 AU	min. Earth dist.	6611 Aug 31 21:46	12°  58'31 18.33547 AU

direct	6611 Nov 17 11:48	10° $\mathbf{\text{X}}$ 57'08	minimum elong	6618 Mar 30 07:40	10° $\mathbf{\text{Y}}$ 09'51 0°50'07
evening set	6612 Feb 18 10:07	14° $\mathbf{\text{X}}$ 09'53	max. Earth dist.	6618 Mar 30 22:36	10° $\mathbf{\text{Y}}$ 12'02 20.72074 AU
			morning rise	6618 Apr 14 23:53	11° $\mathbf{\text{Y}}$ 04'43
conjunction	6612 Mar 05 03:42	15° $\mathbf{\text{X}}$ 06'05 -0°44'39	retrograde	6618 Jul 16 06:42	14° $\mathbf{\text{Y}}$ 12'24
minimum elong	6612 Mar 05 03:42	15° $\mathbf{\text{X}}$ 06'05 0°44'38	opposition	6618 Oct 01 12:01	12° $\mathbf{\text{Y}}$ 13'46 -0°55'28
max. Earth dist.	6612 Mar 05 11:53	15° $\mathbf{\text{X}}$ 07'18 20.36786 AU	min. Earth dist.	6618 Sep 30 21:41	12° $\mathbf{\text{Y}}$ 15'13 18.74745 AU
morning rise	6612 Mar 20 20:18	16° $\mathbf{\text{X}}$ 02'08	direct	6618 Dec 17 09:39	10° $\mathbf{\text{Y}}$ 15'20
retrograde	6612 Jun 20 14:57	19° $\mathbf{\text{X}}$ 12'52	evening set	6619 Mar 18 22:27	13° $\mathbf{\text{Y}}$ 20'45
opposition	6612 Sep 04 22:39	17° $\mathbf{\text{X}}$ 13'50 -0°50'23			
min. Earth dist.	6612 Sep 04 14:29	17° $\mathbf{\text{X}}$ 14'40 18.39984 AU	conjunction	6619 Apr 03 14:17	14° $\mathbf{\text{Y}}$ 15'22 -0°50'06
direct	6612 Nov 21 02:59	15° $\mathbf{\text{X}}$ 13'35	minimum elong	6619 Apr 03 14:17	14° $\mathbf{\text{Y}}$ 15'22 0°50'06
evening set	6613 Feb 21 21:04	18° $\mathbf{\text{X}}$ 25'11	max. Earth dist.	6619 Apr 04 05:44	14° $\mathbf{\text{Y}}$ 17'38 20.77310 AU
			morning rise	6619 Apr 19 06:44	15° $\mathbf{\text{Y}}$ 10'06
conjunction	6613 Mar 09 14:13	19° $\mathbf{\text{X}}$ 21'06 -0°46'13	retrograde	6619 Jul 20 17:22	18° $\mathbf{\text{Y}}$ 17'25
minimum elong	6613 Mar 09 14:13	19° $\mathbf{\text{X}}$ 21'06 0°46'13	min. Earth dist.	6619 Oct 05 07:55	16° $\mathbf{\text{Y}}$ 20'31 18.79843 AU
max. Earth dist.	6613 Mar 09 23:25	19° $\mathbf{\text{X}}$ 22'28 20.43122 AU	opposition	6619 Oct 06 00:03	16° $\mathbf{\text{Y}}$ 18'54 -0°55'18
morning rise	6613 Mar 25 06:37	20° $\mathbf{\text{X}}$ 16'55	direct	6619 Dec 21 20:38	14° $\mathbf{\text{Y}}$ 20'47
retrograde	6613 Jun 25 03:37	23° $\mathbf{\text{X}}$ 27'03	evening set	6620 Mar 22 04:36	17° $\mathbf{\text{Y}}$ 25'21
opposition	6613 Sep 09 14:33	21° $\mathbf{\text{X}}$ 28'04 -0°51'58			
min. Earth dist.	6613 Sep 09 04:23	21° $\mathbf{\text{X}}$ 29'06 18.46212 AU	conjunction	6620 Apr 06 20:25	18° $\mathbf{\text{Y}}$ 19'50 -0°49'50
direct	6613 Nov 25 19:40	19° $\mathbf{\text{X}}$ 28'07	minimum elong	6620 Apr 06 20:25	18° $\mathbf{\text{Y}}$ 19'50 0°49'52
evening set	6614 Feb 26 07:02	22° $\mathbf{\text{X}}$ 38'33	max. Earth dist.	6620 Apr 07 13:04	18° $\mathbf{\text{Y}}$ 22'16 20.82252 AU
			morning rise	6620 Apr 22 13:02	19° $\mathbf{\text{Y}}$ 14'26
conjunction	6614 Mar 13 23:49	23° $\mathbf{\text{X}}$ 34'13 -0°47'31	retrograde	6620 Jul 24 01:39	22° $\mathbf{\text{Y}}$ 21'27
minimum elong	6614 Mar 13 23:48	23° $\mathbf{\text{X}}$ 34'13 0°47'32	opposition	6620 Oct 09 11:49	20° $\mathbf{\text{Y}}$ 23'02 -0°54'52
max. Earth dist.	6614 Mar 14 10:11	23° $\mathbf{\text{X}}$ 35'45 20.49245 AU	min. Earth dist.	6620 Oct 08 20:03	20° $\mathbf{\text{Y}}$ 24'36 18.84634 AU
morning rise	6614 Mar 29 16:04	24° $\mathbf{\text{X}}$ 29'49	direct	6620 Dec 25 05:35	18° $\mathbf{\text{Y}}$ 25'14
retrograde	6614 Jun 29 14:09	27° $\mathbf{\text{X}}$ 39'22	evening set	6621 Mar 26 10:25	21° $\mathbf{\text{Y}}$ 29'01
opposition	6614 Sep 14 05:53	25° $\mathbf{\text{X}}$ 40'26 -0°53'16			
min. Earth dist.	6614 Sep 13 19:43	25° $\mathbf{\text{X}}$ 41'28 18.52252 AU	conjunction	6621 Apr 11 02:17	22° $\mathbf{\text{Y}}$ 23'20 -0°49'20
direct	6614 Nov 30 09:01	23° $\mathbf{\text{X}}$ 40'46	minimum elong	6621 Apr 11 02:17	22° $\mathbf{\text{Y}}$ 23'20 0°49'22
evening set	6615 Mar 02 16:18	26° $\mathbf{\text{X}}$ 50'05	max. Earth dist.	6621 Apr 11 19:09	22° $\mathbf{\text{Y}}$ 25'48 20.86879 AU
			morning rise	6621 Apr 26 19:14	23° $\mathbf{\text{Y}}$ 17'50
conjunction	6615 Mar 18 08:46	27° $\mathbf{\text{X}}$ 45'30 -0°48'34	retrograde	6621 Jul 28 11:55	26° $\mathbf{\text{Y}}$ 24'35
minimum elong	6615 Mar 18 08:46	27° $\mathbf{\text{X}}$ 45'30 0°48'34	opposition	6621 Oct 13 22:56	24° $\mathbf{\text{Y}}$ 26'15 -0°54'10
max. Earth dist.	6615 Mar 18 20:06	27° $\mathbf{\text{X}}$ 47'11 20.55199 AU	min. Earth dist.	6621 Oct 13 05:41	24° $\mathbf{\text{Y}}$ 27'58 18.89074 AU
morning rise	6615 Apr 03 00:55	28° $\mathbf{\text{X}}$ 40'53	direct	6621 Dec 29 14:59	22° $\mathbf{\text{Y}}$ 28'44
	6615 Apr 27 07:03	0° $\mathbf{\text{Y}}$	evening set	6622 Mar 30 15:50	25° $\mathbf{\text{Y}}$ 31'46
retrograde	6615 Jul 04 01:41	1° $\mathbf{\text{Y}}$ 49'54			
	6615 Sep 15 03:11	30° $\mathbf{\text{R}}$ $\mathbf{\text{X}}$	conjunction	6622 Apr 15 07:53	26° $\mathbf{\text{Y}}$ 26'00 -0°48'35
opposition	6615 Sep 18 20:10	29° $\mathbf{\text{X}}$ 51'01 -0°54'15	minimum elong	6622 Apr 15 07:53	26° $\mathbf{\text{Y}}$ 26'00 0°48'37
min. Earth dist.	6615 Sep 18 07:54	29° $\mathbf{\text{X}}$ 52'15 18.58123 AU	max. Earth dist.	6622 Apr 16 01:38	26° $\mathbf{\text{Y}}$ 28'34 20.91107 AU
direct	6615 Dec 04 23:47	27° $\mathbf{\text{X}}$ 51'37	morning rise	6622 May 01 01:08	27° $\mathbf{\text{Y}}$ 20'24
	6616 Feb 16 23:13	0° $\mathbf{\text{Y}}$		6622 Jun 29 18:41	0° $\mathbf{\text{B}}$
evening set	6616 Mar 06 00:51	0° $\mathbf{\text{Y}}$ 59'54	retrograde	6622 Aug 01 19:48	0° $\mathbf{\text{B}}$ 26'54
				6622 Sep 04 18:23	30° $\mathbf{\text{R}}$ $\mathbf{\text{Y}}$
conjunction	6616 Mar 21 17:01	1° $\mathbf{\text{Y}}$ 55'05 -0°49'20	opposition	6622 Oct 18 09:45	28° $\mathbf{\text{Y}}$ 28'38 -0°53'12
minimum elong	6616 Mar 21 17:01	1° $\mathbf{\text{Y}}$ 55'05 0°49'21	min. Earth dist.	6622 Oct 17 17:13	28° $\mathbf{\text{Y}}$ 30'17 18.93091 AU
max. Earth dist.	6616 Mar 22 05:43	1° $\mathbf{\text{Y}}$ 56'58 20.60984 AU	direct	6623 Jan 02 23:34	26° $\mathbf{\text{Y}}$ 31'23
morning rise	6616 Apr 06 09:06	2° $\mathbf{\text{Y}}$ 50'17	evening set	6623 Apr 03 21:04	29° $\mathbf{\text{Y}}$ 33'44
retrograde	6616 Jul 07 11:02	5° $\mathbf{\text{Y}}$ 58'48		6623 Apr 11 12:55	0° $\mathbf{\text{B}}$
opposition	6616 Sep 22 10:11	3° $\mathbf{\text{Y}}$ 59'59 -0°54'57			
min. Earth dist.	6616 Sep 21 21:49	4° $\mathbf{\text{Y}}$ 01'14 18.63842 AU	conjunction	6623 Apr 19 13:16	0° $\mathbf{\text{B}}$ 27'51 -0°47'36
direct	6616 Dec 08 11:08	2° $\mathbf{\text{Y}}$ 00'54	minimum elong	6623 Apr 19 13:16	0° $\mathbf{\text{B}}$ 27'51 0°47'38
evening set	6617 Mar 10 08:35	5° $\mathbf{\text{Y}}$ 08'10	max. Earth dist.	6623 Apr 20 06:43	0° $\mathbf{\text{B}}$ 30'22 20.94896 AU
			morning rise	6623 May 05 06:57	1° $\mathbf{\text{B}}$ 22'11
conjunction	6617 Mar 26 00:33	6° $\mathbf{\text{Y}}$ 03'08 -0°49'51	retrograde	6623 Aug 06 05:53	4° $\mathbf{\text{B}}$ 28'28
minimum elong	6617 Mar 26 00:33	6° $\mathbf{\text{Y}}$ 03'08 0°49'51	opposition	6623 Oct 22 19:55	2° $\mathbf{\text{B}}$ 30'14 -0°51'58
max. Earth dist.	6617 Mar 26 14:08	6° $\mathbf{\text{Y}}$ 05'08 20.66625 AU	min. Earth dist.	6623 Oct 22 02:18	2° $\mathbf{\text{B}}$ 32'00 18.96635 AU
morning rise	6617 Apr 10 16:42	6° $\mathbf{\text{Y}}$ 58'09	direct	6624 Jan 07 07:58	0° $\mathbf{\text{B}}$ 33'11
retrograde	6617 Jul 11 22:10	10° $\mathbf{\text{Y}}$ 06'14	evening set	6624 Apr 07 02:02	3° $\mathbf{\text{B}}$ 34'54
opposition	6617 Sep 26 23:23	8° $\mathbf{\text{Y}}$ 07'31 -0°55'21			
min. Earth dist.	6617 Sep 26 08:54	8° $\mathbf{\text{Y}}$ 08'58 18.69394 AU	conjunction	6624 Apr 22 18:30	4° $\mathbf{\text{B}}$ 28'56 -0°46'23
direct	6617 Dec 12 23:56	6° $\mathbf{\text{Y}}$ 08'45	minimum elong	6624 Apr 22 18:31	4° $\mathbf{\text{B}}$ 28'56 0°46'25
evening set	6618 Mar 14 15:47	9° $\mathbf{\text{Y}}$ 15'03	max. Earth dist.	6624 Apr 23 12:30	4° $\mathbf{\text{B}}$ 31'32 20.98176 AU
			morning rise	6624 May 08 12:34	5° $\mathbf{\text{B}}$ 23'13
conjunction	6618 Mar 30 07:40	10° $\mathbf{\text{Y}}$ 09'51 -0°50'06	retrograde	6624 Aug 09 12:52	8° $\mathbf{\text{B}}$ 29'18

opposition	6624 Oct 26 06:00	6°831'04 -0°50'30	direct	6631 Feb 04 08:54	28°825'19
min. Earth dist.	6624 Oct 25 13:13	6°832'45 18.99656 AU		6631 Apr 08 06:06	0°II
direct	6625 Jan 10 16:09	4°834'12	evening set	6631 May 05 06:55	1°II24'03
evening set	6625 Apr 11 06:38	7°835'18			
			conjunction	6631 May 21 02:43	2°II18'00 -0°32'08
conjunction	6625 Apr 26 23:25	8°829'16 -0°44'57	minimum elong	6631 May 21 02:43	2°II18'00 0°32'10
minimum elong	6625 Apr 26 23:25	8°829'16 0°45'00	max. Earth dist.	6631 May 21 20:25	2°II20'32 21.07701 AU
max. Earth dist.	6625 Apr 27 16:54	8°831'47 21.00940 AU	morning rise	6631 Jun 06 01:19	3°II12'22
morning rise	6625 May 12 18:04	9°823'30	retrograde	6631 Sep 07 19:12	6°II18'03
retrograde	6625 Aug 13 22:52	12°829'26	opposition	6631 Nov 24 16:42	4°II19'11 -0°33'58
opposition	6625 Oct 30 15:29	10°831'09 -0°48'47	min. Earth dist.	6631 Nov 23 23:24	4°II20'54 19.07659 AU
min. Earth dist.	6625 Oct 29 21:50	10°832'54 19.02147 AU	direct	6632 Feb 08 14:59	2°II22'36
direct	6626 Jan 15 00:18	8°834'22	evening set	6632 May 08 10:59	5°II21'13
evening set	6626 Apr 15 11:04	11°834'54			
			conjunction	6632 May 24 07:29	6°II15'15 -0°29'24
conjunction	6626 May 01 04:18	12°828'50 -0°43'18	minimum elong	6632 May 24 07:29	6°II15'15 0°29'27
minimum elong	6626 May 01 04:18	12°828'50 0°43'20	max. Earth dist.	6632 May 25 01:40	6°II17'51 21.07469 AU
max. Earth dist.	6626 May 01 22:15	12°831'25 21.03160 AU	morning rise	6632 Jun 09 06:47	7°II09'42
morning rise	6626 May 16 23:27	13°823'04	retrograde	6632 Sep 11 02:21	10°II15'31
	6626 Jun 17 09:55	15°8	min. Earth dist.	6632 Nov 27 07:48	8°II18'15 19.07238 AU
retrograde	6626 Aug 18 04:53	16°828'49	opposition	6632 Nov 28 00:15	8°II16'36 -0°30'52
	6626 Oct 22 12:31	15°88	direct	6633 Feb 11 19:52	6°II20'03
min. Earth dist.	6626 Nov 03 07:49	14°832'06 19.04112 AU	evening set	6633 May 12 15:13	9°II18'37
opposition	6626 Nov 04 00:28	14°830'27 -0°46'50			
direct	6627 Jan 19 07:16	12°833'45	conjunction	6633 May 28 12:23	10°II12'44 -0°26'31
	6627 Apr 09 09:07	15°8	minimum elong	6633 May 28 12:23	10°II12'44 0°26'34
evening set	6627 Apr 19 15:18	15°833'46	max. Earth dist.	6633 May 29 05:43	10°II15'13 21.06867 AU
			morning rise	6633 Jun 13 12:36	11°II07'17
conjunction	6627 May 05 08:54	16°827'40 -0°41'26	retrograde	6633 Sep 15 11:15	14°II13'19
minimum elong	6627 May 05 08:55	16°827'40 0°41'29	opposition	6633 Dec 02 07:39	12°II14'20 -0°27'37
max. Earth dist.	6627 May 06 02:20	16°830'10 21.04891 AU	min. Earth dist.	6633 Dec 01 14:57	12°II16'01 19.06429 AU
morning rise	6627 May 21 04:44	17°821'53	direct	6634 Feb 16 01:13	10°II17'48
retrograde	6627 Aug 22 13:59	20°827'31	evening set	6634 May 16 19:51	13°II16'25
opposition	6627 Nov 08 09:04	18°829'02 -0°44'39			
min. Earth dist.	6627 Nov 07 15:37	18°830'46 19.05610 AU	conjunction	6634 Jun 01 17:48	14°II10'39 -0°23'31
direct	6628 Jan 23 15:05	16°832'22	minimum elong	6634 Jun 01 17:48	14°II10'39 0°23'35
evening set	6628 Apr 22 19:10	19°831'57	max. Earth dist.	6634 Jun 02 11:16	14°II13'08 21.05841 AU
			morning rise	6634 Jun 17 18:44	15°II05'18
conjunction	6628 May 08 13:17	20°825'50 -0°39'23	retrograde	6634 Sep 19 18:54	18°II11'35
minimum elong	6628 May 08 13:17	20°825'50 0°39'25	opposition	6634 Dec 06 14:57	16°II12'33 -0°24'14
max. Earth dist.	6628 May 09 07:26	20°828'26 21.06164 AU	min. Earth dist.	6634 Dec 05 23:25	16°II14'07 19.05182 AU
morning rise	6628 May 24 09:40	21°820'03	direct	6635 Feb 20 06:21	14°II16'02
retrograde	6628 Aug 25 19:53	24°825'38	evening set	6635 May 21 00:52	17°II14'47
opposition	6628 Nov 11 17:30	22°827'02 -0°42'16			
min. Earth dist.	6628 Nov 11 00:46	22°828'42 19.06682 AU	conjunction	6635 Jun 05 23:31	18°II09'07 -0°20'24
direct	6629 Jan 26 20:50	20°830'24	minimum elong	6635 Jun 05 23:31	18°II09'07 0°20'27
evening set	6629 Apr 26 23:07	23°829'36	max. Earth dist.	6635 Jun 06 15:44	18°II11'26 21.04382 AU
			morning rise	6635 Jun 22 01:22	19°II03'55
conjunction	6629 May 12 17:44	24°823'29 -0°37'08	retrograde	6635 Sep 24 04:30	22°II10'30
minimum elong	6629 May 12 17:44	24°823'29 0°37'11	opposition	6635 Dec 10 22:25	20°II11'24 -0°20'44
max. Earth dist.	6629 May 13 11:27	24°826'02 21.07051 AU	min. Earth dist.	6635 Dec 10 07:01	20°II12'57 19.03484 AU
morning rise	6629 May 28 14:52	25°817'45	direct	6636 Feb 24 11:41	18°II14'51
retrograde	6629 Aug 30 04:22	28°823'17	evening set	6636 May 24 06:11	21°II13'48
min. Earth dist.	6629 Nov 15 07:55	26°826'20 19.07381 AU			
opposition	6629 Nov 16 01:23	26°824'35 -0°39'41	conjunction	6636 Jun 09 05:39	22°II08'16 -0°17'11
direct	6630 Jan 31 03:53	24°827'58	minimum elong	6636 Jun 09 05:39	22°II08'16 0°17'14
evening set	6630 May 01 02:59	27°826'54	max. Earth dist.	6636 Jun 09 21:46	22°II10'34 21.02429 AU
			morning rise	6636 Jun 25 08:15	23°II03'13
conjunction	6630 May 16 22:13	28°820'49 -0°34'43	retrograde	6636 Sep 27 12:36	26°II10'08
minimum elong	6630 May 16 22:14	28°820'49 0°34'46	opposition	6636 Dec 14 06:03	24°II10'58 -0°17'07
max. Earth dist.	6630 May 17 16:33	28°823'27 21.07556 AU	min. Earth dist.	6636 Dec 13 16:02	24°II12'23 19.01271 AU
morning rise	6630 Jun 01 20:01	29°815'07	direct	6637 Feb 27 17:13	22°II14'22
	6630 Jun 15 15:02	0°II	evening set	6637 May 28 12:09	25°II13'33
retrograde	6630 Sep 03 10:47	2°II20'42			
opposition	6630 Nov 20 09:11	0°II21'54 -0°36'55	conjunction	6637 Jun 13 12:23	26°II08'11 -0°13'52
min. Earth dist.	6630 Nov 19 16:29	0°II23'35 19.07701 AU	minimum elong	6637 Jun 13 12:23	26°II08'11 0°13'56
	6630 Nov 29 13:34	30°88	behind sun begin	6637 Jun 13 09:00	26°II07'42

behind sun end	6637 Jun 13 15:47	26° $\Pi$ 08'39		retrograde	6642 Oct 22 23:11	20° $\mathfrak{D}$ 25'03	
max. Earth dist.	6637 Jun 14 02:49	26° $\Pi$ 10'14	20.99962 AU	opposition	6643 Jan 08 05:34	18° $\mathfrak{D}$ 24'48	0°06'00
morning rise	6637 Jun 29 15:57	27° $\Pi$ 03'17		min. Earth dist.	6643 Jan 07 21:25	18° $\mathfrak{D}$ 25'38	18.77776 AU
	6637 Sep 11 02:30	0° $\mathfrak{D}$		direct	6643 Mar 24 07:08	16° $\mathfrak{D}$ 26'54	
retrograde	6637 Oct 01 23:03	0° $\mathfrak{D}$ 10'34		evening set	6643 Jun 22 09:50	19° $\mathfrak{D}$ 28'48	
	6637 Oct 22 21:52	30° $\mathfrak{R}$ $\Pi$					
opposition	6637 Dec 18 13:35	28° $\Pi$ 11'17	-0°13'24	conjunction	6643 Jul 08 15:14	20° $\mathfrak{D}$ 24'38	0°07'13
min. Earth dist.	6637 Dec 18 00:09	28° $\Pi$ 12'38	18.98532 AU	minimum elong	6643 Jul 08 15:14	20° $\mathfrak{D}$ 24'38	0°07'11
direct	6638 Mar 03 23:07	26° $\Pi$ 14'33		behind sun begin	6643 Jul 08 09:06	20° $\mathfrak{D}$ 23'47	
evening set	6638 Jun 01 18:33	29° $\Pi$ 14'03		behind sun end	6643 Jul 08 21:22	20° $\mathfrak{D}$ 25'30	
	6638 Jun 15 05:59	0° $\mathfrak{D}$		max. Earth dist.	6643 Jul 08 23:21	20° $\mathfrak{D}$ 25'48	20.75250 AU
				morning rise	6643 Jul 24 23:58	21° $\mathfrak{D}$ 20'56	
conjunction	6638 Jun 17 19:41	0° $\mathfrak{D}$ 08'51	-0°10'29	retrograde	6643 Oct 27 11:09	24° $\mathfrak{D}$ 30'54	
minimum elong	6638 Jun 17 19:42	0° $\mathfrak{D}$ 08'51	0°10'32	opposition	6644 Jan 12 14:13	22° $\mathfrak{D}$ 30'26	0°09'55
behind sun begin	6638 Jun 17 14:32	0° $\mathfrak{D}$ 08'08		min. Earth dist.	6644 Jan 12 06:47	22° $\mathfrak{D}$ 31'12	18.72646 AU
behind sun end	6638 Jun 18 00:52	0° $\mathfrak{D}$ 09'34		direct	6644 Mar 27 14:08	20° $\mathfrak{D}$ 32'15	
max. Earth dist.	6638 Jun 18 09:39	0° $\mathfrak{D}$ 10'51	20.96943 AU	evening set	6644 Jun 25 19:26	23° $\mathfrak{D}$ 34'51	
morning rise	6638 Jul 04 00:02	1° $\mathfrak{D}$ 04'07					
retrograde	6638 Oct 06 06:59	4° $\mathfrak{D}$ 11'47		conjunction	6644 Jul 12 01:50	24° $\mathfrak{D}$ 30'56	0°10'44
opposition	6638 Dec 22 21:23	2° $\mathfrak{D}$ 12'21	-0°09'36	minimum elong	6644 Jul 12 01:50	24° $\mathfrak{D}$ 30'56	0°10'41
min. Earth dist.	6638 Dec 22 09:25	2° $\mathfrak{D}$ 13'34	18.95238 AU	behind sun begin	6644 Jul 11 20:42	24° $\mathfrak{D}$ 30'13	
direct	6639 Mar 08 04:57	0° $\mathfrak{D}$ 15'27		behind sun end	6644 Jul 12 06:57	24° $\mathfrak{D}$ 31'39	
evening set	6639 Jun 06 01:18	3° $\mathfrak{D}$ 15'18		max. Earth dist.	6644 Jul 12 09:52	24° $\mathfrak{D}$ 32'05	20.70000 AU
				morning rise	6644 Jul 28 11:15	25° $\mathfrak{D}$ 27'28	
conjunction	6639 Jun 22 03:14	4° $\mathfrak{D}$ 10'17	-0°07'02	retrograde	6644 Oct 30 22:30	28° $\mathfrak{D}$ 38'00	
minimum elong	6639 Jun 22 03:14	4° $\mathfrak{D}$ 10'17	0°07'06	opposition	6645 Jan 15 23:12	26° $\mathfrak{D}$ 37'21	0°13'48
behind sun begin	6639 Jun 21 21:06	4° $\mathfrak{D}$ 09'25		min. Earth dist.	6645 Jan 15 16:44	26° $\mathfrak{D}$ 38'01	18.67288 AU
behind sun end	6639 Jun 22 09:21	4° $\mathfrak{D}$ 11'08		direct	6645 Mar 31 21:28	24° $\mathfrak{D}$ 38'55	
max. Earth dist.	6639 Jun 22 15:24	4° $\mathfrak{D}$ 12'01	20.93407 AU	evening set	6645 Jun 30 06:02	27° $\mathfrak{D}$ 42'15	
morning rise	6639 Jul 08 08:32	5° $\mathfrak{D}$ 05'44					
retrograde	6639 Oct 10 17:52	8° $\mathfrak{D}$ 13'48		conjunction	6645 Jul 16 13:12	28° $\mathfrak{D}$ 38'36	0°14'12
opposition	6639 Dec 27 05:14	6° $\mathfrak{D}$ 14'10	-0°05'45	minimum elong	6645 Jul 16 13:12	28° $\mathfrak{D}$ 38'35	0°14'10
min. Earth dist.	6639 Dec 26 17:57	6° $\mathfrak{D}$ 15'19	18.91457 AU	behind sun begin	6645 Jul 16 10:03	28° $\mathfrak{D}$ 38'09	
direct	6640 Mar 11 11:29	4° $\mathfrak{D}$ 17'03		behind sun end	6645 Jul 16 16:21	28° $\mathfrak{D}$ 39'02	
evening set	6640 Jun 09 08:34	7° $\mathfrak{D}$ 17'19		max. Earth dist.	6645 Jul 16 19:12	28° $\mathfrak{D}$ 39'27	20.64555 AU
				morning rise	6645 Aug 01 23:34	29° $\mathfrak{D}$ 35'23	
conjunction	6640 Jun 25 11:26	8° $\mathfrak{D}$ 12'30	-0°03'32		6645 Aug 09 07:52	0° $\mathfrak{Q}$	
minimum elong	6640 Jun 25 11:26	8° $\mathfrak{D}$ 12'30	0°03'36	retrograde	6645 Nov 04 11:53	2° $\mathfrak{Q}$ 46'30	
behind sun begin	6640 Jun 25 04:50	8° $\mathfrak{D}$ 11'35		opposition	6646 Jan 20 08:26	0° $\mathfrak{Q}$ 45'42	0°17'38
behind sun end	6640 Jun 25 18:02	8° $\mathfrak{D}$ 13'25		min. Earth dist.	6646 Jan 20 02:57	0° $\mathfrak{Q}$ 46'16	18.61754 AU
max. Earth dist.	6640 Jun 25 23:20	8° $\mathfrak{D}$ 14'12	20.89399 AU		6646 Feb 08 04:43	30° $\mathfrak{R}$ $\mathfrak{D}$	
morning rise	6640 Jul 11 17:30	9° $\mathfrak{D}$ 08'09		direct	6646 Apr 05 05:22	28° $\mathfrak{D}$ 46'58	
retrograde	6640 Oct 14 02:16	12° $\mathfrak{D}$ 16'37			6646 May 29 05:34	0° $\mathfrak{Q}$	
opposition	6640 Dec 30 13:12	10° $\mathfrak{D}$ 16'48	-0°01'51	evening set	6646 Jul 04 17:22	1° $\mathfrak{Q}$ 51'09	
min. Earth dist.	6640 Dec 30 03:13	10° $\mathfrak{D}$ 17'49	18.87239 AU				
direct	6641 Mar 15 17:42	8° $\mathfrak{D}$ 19'26		conjunction	6646 Jul 21 01:32	2° $\mathfrak{Q}$ 47'46	0°17'38
evening set	6641 Jun 13 16:22	11° $\mathfrak{D}$ 20'10		minimum elong	6646 Jul 21 01:32	2° $\mathfrak{Q}$ 47'46	0°17'34
asc. node	6641 Jun 22 09:03	11° $\mathfrak{D}$ 49'47		max. Earth dist.	6646 Jul 21 07:22	2° $\mathfrak{Q}$ 48'36	20.58926 AU
				morning rise	6646 Aug 06 12:30	3° $\mathfrak{Q}$ 44'48	
conjunction	6641 Jun 29 20:03	12° $\mathfrak{D}$ 15'33	0°00'04	retrograde	6646 Nov 09 00:50	6° $\mathfrak{Q}$ 56'33	
minimum elong	6641 Jun 29 20:04	12° $\mathfrak{D}$ 15'33	0°00'01	opposition	6647 Jan 24 18:16	4° $\mathfrak{Q}$ 55'37	0°21'24
behind sun begin	6641 Jun 29 16:03	12° $\mathfrak{D}$ 15'01		min. Earth dist.	6647 Jan 24 13:43	4° $\mathfrak{Q}$ 56'05	18.56036 AU
behind sun end	6641 Jun 30 00:05	12° $\mathfrak{D}$ 16'05		direct	6647 Apr 09 13:20	2° $\mathfrak{Q}$ 56'39	
max. Earth dist.	6641 Jun 30 06:12	12° $\mathfrak{D}$ 17'00	20.85004 AU	evening set	6647 Jul 09 05:33	6° $\mathfrak{Q}$ 01'43	
morning rise	6641 Jul 16 03:09	13° $\mathfrak{D}$ 11'25					
retrograde	6641 Oct 18 13:28	16° $\mathfrak{D}$ 20'21		conjunction	6647 Jul 25 14:24	6° $\mathfrak{Q}$ 58'35	0°20'59
opposition	6642 Jan 03 21:20	14° $\mathfrak{D}$ 20'18	0°02'04	minimum elong	6647 Jul 25 14:24	6° $\mathfrak{Q}$ 58'35	0°20'57
min. Earth dist.	6642 Jan 03 12:03	14° $\mathfrak{D}$ 21'15	18.82667 AU	max. Earth dist.	6647 Jul 25 18:05	6° $\mathfrak{Q}$ 59'07	20.53136 AU
direct	6642 Mar 20 00:23	12° $\mathfrak{D}$ 22'40		morning rise	6647 Aug 11 02:16	7° $\mathfrak{Q}$ 55'54	
evening set	6642 Jun 18 00:46	15° $\mathfrak{D}$ 23'57		retrograde	6647 Nov 13 15:41	11° $\mathfrak{Q}$ 08'20	
				opposition	6648 Jan 29 04:39	9° $\mathfrak{Q}$ 07'15	0°25'04
conjunction	6642 Jul 04 05:25	16° $\mathfrak{D}$ 19'34	0°03'42	min. Earth dist.	6648 Jan 29 01:20	9° $\mathfrak{Q}$ 07'35	18.50163 AU
minimum elong	6642 Jul 04 05:24	16° $\mathfrak{D}$ 19'34	0°03'39	direct	6648 Apr 12 22:35	7° $\mathfrak{Q}$ 08'01	
behind sun begin	6642 Jul 03 22:47	16° $\mathfrak{D}$ 18'38		evening set	6648 Jul 12 18:44	10° $\mathfrak{Q}$ 14'03	
behind sun end	6642 Jul 04 12:00	16° $\mathfrak{D}$ 20'29					
max. Earth dist.	6642 Jul 04 15:21	16° $\mathfrak{D}$ 20'59	20.80261 AU	conjunction	6648 Jul 29 04:34	11° $\mathfrak{Q}$ 11'13	0°24'15
morning rise	6642 Jul 20 13:10	17° $\mathfrak{D}$ 15'38		minimum elong	6648 Jul 29 04:33	11° $\mathfrak{Q}$ 11'13	0°24'12

max. Earth dist.	6648 Jul 29 07:59	11°Ω11'43	20.47168 AU	morning rise	6654 Sep 11 04:18	8°♊05'22	
morning rise	6648 Aug 14 16:57	12°Ω08'48		retrograde	6654 Dec 14 12:41	11°♊22'37	
	6648 Oct 18 17:02	15°Ω		opposition	6655 Feb 27 20:58	9°♊20'20	0°46'39
retrograde	6648 Nov 17 06:18	15°Ω21'55		min. Earth dist.	6655 Feb 28 02:49	9°♊19'42	18.03893 AU
	6648 Dec 17 02:33	15°♊Ω		direct	6655 May 13 11:58	7°♊18'39	
opposition	6649 Feb 01 15:26	13°Ω20'43	0°28'39	evening set	6655 Aug 13 18:20	10°♊32'21	
min. Earth dist.	6649 Feb 01 13:14	13°Ω20'56	18.44096 AU				
direct	6649 Apr 17 07:57	11°Ω21'13		conjunction	6655 Aug 30 08:54	11°♊31'37	0°43'01
evening set	6649 Jul 17 09:05	14°Ω28'16		minimum elong	6655 Aug 30 08:54	11°♊31'37	0°43'00
	6649 Jul 26 12:15	15°Ω		max. Earth dist.	6655 Aug 30 00:10	11°♊30'19	20.00455 AU
				morning rise	6655 Sep 16 00:57	12°♊31'07	
conjunction	6649 Aug 02 19:34	15°Ω25'43	0°27'25	retrograde	6655 Dec 19 05:53	15°♊49'02	
minimum elong	6649 Aug 02 19:34	15°Ω25'43	0°27'22	opposition	6656 Mar 03 12:02	13°♊46'32	0°48'52
max. Earth dist.	6649 Aug 02 20:20	15°Ω25'50	20.41005 AU	min. Earth dist.	6656 Mar 03 19:47	13°♊45'42	17.97038 AU
morning rise	6649 Aug 19 08:47	16°Ω23'35		direct	6656 May 17 02:22	11°♊44'26	
retrograde	6649 Nov 21 22:15	19°Ω37'25		evening set	6656 Aug 17 14:59	14°♊59'19	
opposition	6650 Feb 06 02:56	17°Ω36'04	0°32'06				
min. Earth dist.	6650 Feb 06 02:27	17°Ω36'07	18.37829 AU	conjunction	6656 Sep 03 06:14	15°♊58'53	0°44'52
direct	6650 Apr 21 18:28	15°Ω36'16		minimum elong	6656 Sep 03 06:14	15°♊58'53	0°44'51
evening set	6650 Jul 22 00:16	18°Ω44'22		max. Earth dist.	6656 Sep 02 21:16	15°♊57'32	19.93660 AU
				morning rise	6656 Sep 19 22:26	16°♊58'38	
conjunction	6650 Aug 07 11:39	19°Ω42'08	0°30'27	retrograde	6656 Dec 23 02:04	20°♊17'11	
minimum elong	6650 Aug 07 11:39	19°Ω42'08	0°30'25	opposition	6657 Mar 08 03:27	18°♊14'31	0°50'47
max. Earth dist.	6650 Aug 07 11:51	19°Ω42'10	20.34612 AU	min. Earth dist.	6657 Mar 08 11:25	18°♊13'39	17.90323 AU
morning rise	6650 Aug 24 01:15	20°Ω40'15		direct	6657 May 21 20:04	16°♊12'01	
retrograde	6650 Nov 26 14:24	23°Ω54'48		evening set	6657 Aug 22 12:41	19°♊28'06	
opposition	6651 Feb 10 14:58	21°Ω53'18	0°35'24				
min. Earth dist.	6651 Feb 10 15:33	21°Ω53'14	18.31322 AU	conjunction	6657 Sep 08 04:14	20°♊27'57	0°46'27
direct	6651 Apr 26 06:04	19°Ω53'11		minimum elong	6657 Sep 08 04:14	20°♊27'57	0°46'27
evening set	6651 Jul 26 16:33	23°Ω02'22		max. Earth dist.	6657 Sep 07 17:08	20°♊26'17	19.87036 AU
				morning rise	6657 Sep 24 20:43	21°♊27'57	
conjunction	6651 Aug 12 04:31	24°Ω00'25	0°33'20	retrograde	6657 Dec 27 20:11	24°♊47'08	
minimum elong	6651 Aug 12 04:30	24°Ω00'25	0°33'18	opposition	6658 Mar 12 19:48	22°♊44'18	0°52'25
max. Earth dist.	6651 Aug 12 01:50	24°Ω00'01	20.28007 AU	min. Earth dist.	6658 Mar 13 05:35	22°♊43'15	17.83823 AU
morning rise	6651 Aug 28 18:51	24°Ω58'50		direct	6658 May 26 12:02	20°♊41'26	
retrograde	6651 Dec 01 06:52	28°Ω14'04		evening set	6658 Aug 27 10:58	23°♊58'43	
opposition	6652 Feb 15 03:41	26°Ω12'23	0°38'31				
min. Earth dist.	6652 Feb 15 06:10	26°Ω12'07	18.24626 AU	conjunction	6658 Sep 13 03:01	24°♊58'50	0°47'46
direct	6652 Apr 29 17:37	24°Ω11'53		minimum elong	6658 Sep 13 03:01	24°♊58'50	0°47'45
evening set	6652 Jul 30 09:32	27°Ω22'10		max. Earth dist.	6658 Sep 12 15:40	24°♊57'07	19.80659 AU
				morning rise	6658 Sep 29 19:31	25°♊59'04	
conjunction	6652 Aug 15 22:25	28°Ω20'32	0°36'03	retrograde	6659 Jan 01 17:42	29°♊18'53	
minimum elong	6652 Aug 15 22:25	28°Ω20'32	0°36'03	opposition	6659 Mar 17 12:42	27°♊15'56	0°53'44
max. Earth dist.	6652 Aug 15 19:12	28°Ω20'04	20.21221 AU	min. Earth dist.	6659 Mar 17 22:17	27°♊14'54	17.77586 AU
morning rise	6652 Sep 01 13:08	29°Ω19'13		direct	6659 May 31 07:26	25°♊12'44	
	6652 Sep 13 14:09	0°♊		evening set	6659 Sep 01 10:20	28°♊31'12	
retrograde	6652 Dec 05 00:46	2°♊35'08					
opposition	6653 Feb 18 16:53	0°♊33'15	0°41'27	conjunction	6659 Sep 18 02:36	29°♊31'35	0°48'47
min. Earth dist.	6653 Feb 18 20:15	0°♊32'54	18.17764 AU	minimum elong	6659 Sep 18 02:36	29°♊31'35	0°48'47
	6653 Mar 03 22:22	30°♊Ω		max. Earth dist.	6659 Sep 17 13:38	29°♊29'37	19.74570 AU
direct	6653 May 04 07:28	28°Ω32'23			6659 Sep 25 21:38	0°♊	
	6653 Jul 02 10:46	0°♊		morning rise	6659 Oct 04 19:13	0°♊32'03	
evening set	6653 Aug 04 03:44	1°♊43'47		retrograde	6660 Jan 06 13:28	3°♊52'28	
				opposition	6660 Mar 21 06:21	1°♊49'26	0°54'43
conjunction	6653 Aug 20 17:06	2°♊42'27	0°38'36	min. Earth dist.	6660 Mar 21 17:43	1°♊48'12	17.71668 AU
minimum elong	6653 Aug 20 17:06	2°♊42'27	0°38'34		6660 May 12 00:04	30°♊	
max. Earth dist.	6653 Aug 20 11:05	2°♊41'33	20.14312 AU	direct	6660 Jun 04 00:52	29°♊45'55	
morning rise	6653 Sep 06 08:25	3°♊41'25			6660 Jun 26 21:33	0°♊	
retrograde	6653 Dec 09 17:26	6°♊58'00		evening set	6660 Sep 05 10:28	3°♊05'35	
opposition	6654 Feb 23 06:37	4°♊55'55	0°44'10				
min. Earth dist.	6654 Feb 23 12:00	4°♊55'20	18.10832 AU	conjunction	6660 Sep 22 03:06	4°♊06'14	0°49'30
direct	6654 May 08 20:12	2°♊54'37		minimum elong	6660 Sep 22 03:06	4°♊06'14	0°49'31
evening set	6654 Aug 08 22:35	6°♊07'10		max. Earth dist.	6660 Sep 21 13:36	4°♊04'11	19.68819 AU
				morning rise	6660 Oct 08 19:43	5°♊06'55	
conjunction	6654 Aug 25 12:45	7°♊06'09	0°40'55	retrograde	6661 Jan 10 12:40	8°♊27'54	
minimum elong	6654 Aug 25 12:45	7°♊06'09	0°40'54	opposition	6661 Mar 26 00:39	6°♊24'50	0°55'22
max. Earth dist.	6654 Aug 25 06:25	7°♊05'12	20.07366 AU	min. Earth dist.	6661 Mar 26 11:50	6°♊23'37	17.66075 AU

direct	6661 Jun 08 21:31	4° <u>♂</u> 21'03		conjunction	6667 Oct 27 00:45	6° <u>♂</u> 54'57	0°45'31
evening set	6661 Sep 10 11:39	7° <u>♂</u> 41'54		minimum elong	6667 Oct 27 00:45	6° <u>♂</u> 54'57	0°45'33
				morning rise	6667 Nov 12 15:01	7° <u>♂</u> 56'37	
conjunction	6661 Sep 27 04:23	8° <u>♂</u> 42'47	0°49'54	retrograde	6668 Feb 13 10:07	11° <u>♂</u> 20'07	
minimum elong	6661 Sep 27 04:23	8° <u>♂</u> 42'47	0°49'55	opposition	6668 Apr 27 04:02	9° <u>♂</u> 16'52	0°49'45
max. Earth dist.	6661 Sep 26 13:40	8° <u>♂</u> 40'32	19.63381 AU	min. Earth dist.	6668 Apr 27 20:58	9° <u>♂</u> 15'01	17.36019 AU
morning rise	6661 Oct 13 20:51	9° <u>♂</u> 43'40		direct	6668 Jul 11 11:16	7° <u>♂</u> 11'16	
retrograde	6662 Jan 15 10:17	13° <u>♂</u> 05'12		evening set	6668 Oct 14 13:30	10° <u>♂</u> 38'40	
opposition	6662 Mar 30 19:46	11° <u>♂</u> 02'07	0°55'40	max. Earth dist.	6668 Oct 30 08:38	11° <u>♂</u> 37'26	19.34584 AU
min. Earth dist.	6662 Mar 31 08:49	11° <u>♂</u> 00'42	17.60807 AU				
direct	6662 Jun 13 16:23	8° <u>♂</u> 58'04		conjunction	6668 Oct 31 05:17	11° <u>♂</u> 40'39	0°43'38
evening set	6662 Sep 15 13:34	12° <u>♂</u> 20'05		minimum elong	6668 Oct 31 05:17	11° <u>♂</u> 40'39	0°43'40
				morning rise	6668 Nov 16 19:08	12° <u>♂</u> 42'22	
conjunction	6662 Oct 02 06:24	13° <u>♂</u> 21'11	0°50'00		6668 Dec 29 20:19	15° <u>♂</u>	
minimum elong	6662 Oct 02 06:24	13° <u>♂</u> 21'11	0°50'02	retrograde	6669 Feb 17 10:48	16° <u>♂</u> 05'58	
max. Earth dist.	6662 Oct 01 14:42	13° <u>♂</u> 18'46	19.58274 AU		6669 Apr 09 11:35	15° <u>♂</u>	
morning rise	6662 Oct 18 22:44	14° <u>♂</u> 22'15		opposition	6669 May 02 03:12	14° <u>♂</u> 02'41	0°47'30
retrograde	6663 Jan 20 11:00	17° <u>♂</u> 44'17		min. Earth dist.	6669 May 02 20:02	14° <u>♂</u> 00'51	17.33337 AU
opposition	6663 Apr 04 15:31	15° <u>♂</u> 41'11	0°55'36	direct	6669 Jul 16 14:15	11° <u>♂</u> 56'52	
min. Earth dist.	6663 Apr 05 04:29	15° <u>♂</u> 39'47	17.55855 AU		6669 Oct 12 21:24	15° <u>♂</u>	
direct	6663 Jun 18 14:37	13° <u>♂</u> 36'53		evening set	6669 Oct 19 18:25	15° <u>♂</u> 24'52	
evening set	6663 Sep 20 16:10	16° <u>♂</u> 59'59					
				conjunction	6669 Nov 05 09:54	16° <u>♂</u> 26'55	0°41'27
conjunction	6663 Oct 07 09:05	18° <u>♂</u> 01'18	0°49'46	minimum elong	6669 Nov 05 09:54	16° <u>♂</u> 26'55	0°41'30
minimum elong	6663 Oct 07 09:05	18° <u>♂</u> 01'18	0°49'47	max. Earth dist.	6669 Nov 04 14:25	16° <u>♂</u> 23'52	19.32162 AU
max. Earth dist.	6663 Oct 06 16:34	17° <u>♂</u> 58'45	19.53460 AU	morning rise	6669 Nov 21 22:54	17° <u>♂</u> 28'38	
morning rise	6663 Oct 24 01:06	19° <u>♂</u> 02'32		retrograde	6670 Feb 22 10:30	20° <u>♂</u> 52'16	
retrograde	6664 Jan 25 09:41	22° <u>♂</u> 25'00		opposition	6670 May 07 02:47	18° <u>♂</u> 48'59	0°44'54
opposition	6664 Apr 08 12:10	20° <u>♂</u> 21'53	0°55'10	min. Earth dist.	6670 May 07 19:43	18° <u>♂</u> 47'08	17.31194 AU
min. Earth dist.	6664 Apr 09 02:55	20° <u>♂</u> 20'17	17.51195 AU	direct	6670 Jul 21 16:10	16° <u>♂</u> 42'59	
direct	6664 Jun 22 10:59	18° <u>♂</u> 17'19		evening set	6670 Oct 24 23:34	20° <u>♂</u> 11'30	
evening set	6664 Sep 24 19:38	21° <u>♂</u> 41'26					
				conjunction	6670 Nov 10 14:20	21° <u>♂</u> 13'33	0°38'58
conjunction	6664 Oct 11 12:25	22° <u>♂</u> 42'56	0°49'12	minimum elong	6670 Nov 10 14:20	21° <u>♂</u> 13'33	0°39'01
minimum elong	6664 Oct 11 12:25	22° <u>♂</u> 42'56	0°49'13	max. Earth dist.	6670 Nov 09 17:57	21° <u>♂</u> 10'21	19.30322 AU
max. Earth dist.	6664 Oct 10 18:25	22° <u>♂</u> 40'09	19.48954 AU	morning rise	6670 Nov 27 02:47	22° <u>♂</u> 15'16	
morning rise	6664 Oct 28 04:14	23° <u>♂</u> 44'19		retrograde	6671 Feb 27 10:42	25° <u>♂</u> 38'54	
retrograde	6665 Jan 29 10:48	27° <u>♂</u> 07'09		opposition	6671 May 12 02:38	23° <u>♂</u> 35'37	0°41'59
opposition	6665 Apr 13 09:12	25° <u>♂</u> 04'00	0°54'22	min. Earth dist.	6671 May 12 19:24	23° <u>♂</u> 33'47	17.29672 AU
min. Earth dist.	6665 Apr 13 23:55	25° <u>♂</u> 02'23	17.46845 AU	direct	6671 Jul 26 19:18	21° <u>♂</u> 29'28	
direct	6665 Jun 27 11:06	22° <u>♂</u> 59'10		evening set	6671 Oct 30 04:28	24° <u>♂</u> 58'23	
evening set	6665 Sep 29 23:34	26° <u>♂</u> 24'14					
				conjunction	6671 Nov 15 18:50	26° <u>♂</u> 00'27	0°36'13
conjunction	6665 Oct 16 16:19	27° <u>♂</u> 25'54	0°48'18	minimum elong	6671 Nov 15 18:50	26° <u>♂</u> 00'27	0°36'16
minimum elong	6665 Oct 16 16:19	27° <u>♂</u> 25'54	0°48'19	max. Earth dist.	6671 Nov 14 23:56	25° <u>♂</u> 57'29	19.29117 AU
max. Earth dist.	6665 Oct 15 22:04	27° <u>♂</u> 23'04	19.44758 AU	morning rise	6671 Dec 02 06:24	27° <u>♂</u> 02'08	
morning rise	6665 Nov 02 07:35	28° <u>♂</u> 27'24			6672 Feb 02 03:16	0° <u>♂</u>	
	6665 Nov 29 14:49	0° <u>♂</u>		retrograde	6672 Mar 03 11:15	0° <u>♂</u> 25'40	
retrograde	6666 Feb 03 09:59	1° <u>♂</u> 50'30			6672 Apr 03 07:07	30° <u>♂</u>	
	6666 Apr 13 11:15	30° <u>♂</u>		opposition	6672 May 16 02:51	28° <u>♂</u> 22'29	0°38'47
opposition	6666 Apr 18 07:05	29° <u>♂</u> 47'20	0°53'12	min. Earth dist.	6672 May 16 18:59	28° <u>♂</u> 20'43	17.28786 AU
min. Earth dist.	6666 Apr 18 23:13	29° <u>♂</u> 45'34	17.42827 AU	direct	6672 Jul 30 22:31	26° <u>♂</u> 16'15	
direct	6666 Jul 02 09:21	27° <u>♂</u> 42'14		evening set	6672 Nov 03 09:33	29° <u>♂</u> 45'29	
	6666 Sep 15 13:36	0° <u>♂</u>			6672 Nov 07 07:43	0° <u>♂</u>	
evening set	6666 Oct 05 03:50	1° <u>♂</u> 08'10					
				conjunction	6672 Nov 19 23:05	0° <u>♂</u> 47'30	0°33'13
conjunction	6666 Oct 21 20:15	2° <u>♂</u> 09'58	0°47'04	minimum elong	6672 Nov 19 23:06	0° <u>♂</u> 47'30	0°33'16
minimum elong	6666 Oct 21 20:15	2° <u>♂</u> 09'58	0°47'05	max. Earth dist.	6672 Nov 19 03:47	0° <u>♂</u> 44'29	19.28570 AU
max. Earth dist.	6666 Oct 21 00:30	2° <u>♂</u> 06'54	19.40936 AU	morning rise	6672 Dec 06 09:54	1° <u>♂</u> 49'08	
morning rise	6666 Nov 07 11:12	3° <u>♂</u> 11'34		retrograde	6673 Mar 08 11:07	5° <u>♂</u> 12'34	
retrograde	6667 Feb 08 10:49	6° <u>♂</u> 34'55		opposition	6673 May 21 03:19	3° <u>♂</u> 09'29	0°35'18
opposition	6667 Apr 23 05:20	4° <u>♂</u> 31'41	0°51'39	min. Earth dist.	6673 May 21 19:20	3° <u>♂</u> 07'44	17.28583 AU
min. Earth dist.	6667 Apr 23 21:21	4° <u>♂</u> 29'56	17.39207 AU	direct	6673 Aug 05 01:15	1° <u>♂</u> 03'13	
direct	6667 Jul 07 11:11	2° <u>♂</u> 26'20		evening set	6673 Nov 08 14:17	4° <u>♂</u> 32'42	
evening set	6667 Oct 10 08:27	5° <u>♂</u> 53'02		max. Earth dist.	6673 Nov 24 09:27	5° <u>♂</u> 31'52	19.28710 AU
max. Earth dist.	6667 Oct 26 05:32	6° <u>♂</u> 51'57	19.37523 AU				
				conjunction	6673 Nov 25 03:14	5° <u>♂</u> 34'40	0°29'59

minimum elong	6673 Nov 25 03:14	5° $\nearrow$ 34'40	0°30'02	behind sun begin	6679 Dec 24 13:13	4° $\searrow$ 10'51	
morning rise	6673 Dec 11 13:06	6° $\nearrow$ 36'13		behind sun end	6679 Dec 25 01:27	4° $\searrow$ 12'44	
retrograde	6674 Mar 13 12:50	9° $\nearrow$ 59'28		max. Earth dist.	6679 Dec 24 05:39	4° $\searrow$ 09'39	19.41385 AU
opposition	6674 May 26 04:01	7° $\nearrow$ 56'33	0°31'35	morning rise	6680 Jan 09 23:33	5° $\searrow$ 12'20	
min. Earth dist.	6674 May 26 18:51	7° $\nearrow$ 54'56	17.29044 AU	retrograde	6680 Apr 10 12:13	8° $\searrow$ 33'26	
direct	6674 Aug 10 04:57	5° $\nearrow$ 50'21		opposition	6680 Jun 23 10:08	6° $\searrow$ 31'38	0°05'47
evening set	6674 Nov 13 18:46	9° $\nearrow$ 19'57		min. Earth dist.	6680 Jun 23 20:57	6° $\searrow$ 30'29	17.43170 AU
				direct	6680 Sep 08 00:31	4° $\searrow$ 26'15	
conjunction	6674 Nov 30 06:51	10° $\nearrow$ 21'50	0°26'33	evening set	6680 Dec 12 13:28	7° $\searrow$ 54'16	
minimum elong	6674 Nov 30 06:51	10° $\nearrow$ 21'50	0°26'36				
max. Earth dist.	6674 Nov 29 13:19	10° $\nearrow$ 19'04	19.29497 AU	conjunction	6680 Dec 28 19:58	8° $\searrow$ 55'03	0°03'10
morning rise	6674 Dec 16 15:53	11° $\nearrow$ 23'17		minimum elong	6680 Dec 28 19:58	8° $\searrow$ 55'03	0°03'14
retrograde	6675 Mar 18 12:29	14° $\nearrow$ 46'19		behind sun begin	6680 Dec 28 13:20	8° $\searrow$ 54'03	
opposition	6675 May 31 04:57	12° $\nearrow$ 43'36	0°27'39	behind sun end	6680 Dec 29 02:36	8° $\searrow$ 56'04	
min. Earth dist.	6675 May 31 19:56	12° $\nearrow$ 41'58	17.30142 AU	max. Earth dist.	6680 Dec 28 08:05	8° $\searrow$ 53'12	19.45043 AU
direct	6675 Aug 15 06:51	10° $\nearrow$ 37'29		morning rise	6681 Jan 13 23:01	9° $\searrow$ 55'21	
evening set	6675 Nov 18 23:04	14° $\nearrow$ 07'08		retrograde	6681 Apr 15 08:42	13° $\searrow$ 15'54	
				opposition	6681 Jun 28 10:54	11° $\searrow$ 14'15	0°01'13
conjunction	6675 Dec 05 10:22	15° $\nearrow$ 08'53	0°22'56	min. Earth dist.	6681 Jun 28 21:47	11° $\searrow$ 13'05	17.47017 AU
minimum elong	6675 Dec 05 10:22	15° $\nearrow$ 08'53	0°22'59	direct	6681 Sep 13 03:07	9° $\searrow$ 09'01	
max. Earth dist.	6675 Dec 04 17:55	15° $\nearrow$ 06'18	19.30894 AU	desc. node	6681 Oct 04 15:33	9° $\searrow$ 21'11	
morning rise	6675 Dec 21 18:28	16° $\nearrow$ 10'12		evening set	6681 Dec 17 14:18	12° $\searrow$ 36'23	
retrograde	6676 Mar 22 14:37	19° $\nearrow$ 32'58					
opposition	6676 Jun 04 05:50	17° $\nearrow$ 30'27	0°23'31	conjunction	6682 Jan 02 19:38	13° $\searrow$ 36'54	-0°01'02
min. Earth dist.	6676 Jun 04 19:28	17° $\nearrow$ 28'58	17.31803 AU	minimum elong	6682 Jan 02 19:39	13° $\searrow$ 36'54	0°00'59
direct	6676 Aug 19 10:46	15° $\nearrow$ 24'28		behind sun begin	6682 Jan 02 13:00	13° $\searrow$ 35'53	
evening set	6676 Nov 23 03:08	18° $\nearrow$ 54'01		behind sun end	6682 Jan 03 02:18	13° $\searrow$ 37'55	
				max. Earth dist.	6682 Jan 02 07:57	13° $\searrow$ 35'05	19.49091 AU
conjunction	6676 Dec 09 13:30	19° $\nearrow$ 55'39	0°19'10	morning rise	6682 Jan 18 21:54	14° $\searrow$ 36'57	
minimum elong	6676 Dec 09 13:30	19° $\nearrow$ 55'39	0°19'13	retrograde	6682 Apr 20 06:43	17° $\searrow$ 56'53	
max. Earth dist.	6676 Dec 08 21:42	19° $\nearrow$ 53'10	19.32818 AU	opposition	6682 Jul 03 11:09	15° $\searrow$ 55'22	-0°03'21
morning rise	6676 Dec 25 20:35	20° $\nearrow$ 56'48		min. Earth dist.	6682 Jul 03 20:05	15° $\searrow$ 54'24	17.51251 AU
retrograde	6677 Mar 27 13:41	24° $\nearrow$ 19'14		direct	6682 Sep 18 06:55	13° $\searrow$ 50'18	
opposition	6677 Jun 09 07:06	22° $\nearrow$ 16'56	0°19'14	evening set	6682 Dec 22 13:58	17° $\searrow$ 16'54	
min. Earth dist.	6677 Jun 09 21:04	22° $\nearrow$ 15'25	17.33984 AU				
direct	6677 Aug 24 12:45	20° $\nearrow$ 11'04		conjunction	6683 Jan 07 18:30	18° $\searrow$ 17'08	-0°05'08
evening set	6677 Nov 28 06:33	23° $\nearrow$ 40'25		minimum elong	6683 Jan 07 18:30	18° $\searrow$ 17'08	0°05'05
				behind sun begin	6683 Jan 07 12:02	18° $\searrow$ 16'09	
conjunction	6677 Dec 14 15:56	24° $\nearrow$ 41'52	0°15'17	behind sun end	6683 Jan 08 00:58	18° $\searrow$ 18'07	
minimum elong	6677 Dec 14 15:56	24° $\nearrow$ 41'52	0°15'20	max. Earth dist.	6683 Jan 07 09:08	18° $\searrow$ 15'42	19.53513 AU
behind sun begin	6677 Dec 14 14:01	24° $\nearrow$ 41'34		morning rise	6683 Jan 23 19:40	19° $\searrow$ 16'55	
behind sun end	6677 Dec 14 17:51	24° $\nearrow$ 42'10		retrograde	6683 Apr 25 02:29	22° $\searrow$ 36'13	
max. Earth dist.	6677 Dec 14 00:48	24° $\nearrow$ 39'29	19.35242 AU	opposition	6683 Jul 08 11:10	20° $\searrow$ 34'49	-0°07'51
morning rise	6677 Dec 30 22:06	25° $\nearrow$ 42'50		min. Earth dist.	6683 Jul 08 19:44	20° $\searrow$ 33'54	17.55858 AU
retrograde	6678 Apr 01 14:46	29° $\nearrow$ 04'54		direct	6683 Sep 23 08:31	18° $\searrow$ 29'56	
opposition	6678 Jun 14 08:13	27° $\nearrow$ 02'46	0°14'50	evening set	6683 Dec 27 12:59	21° $\searrow$ 55'42	
min. Earth dist.	6678 Jun 14 20:30	27° $\nearrow$ 01'26	17.36626 AU				
direct	6678 Aug 29 17:18	24° $\nearrow$ 57'04		conjunction	6684 Jan 12 16:19	22° $\searrow$ 55'38	-0°09'08
evening set	6678 Dec 03 09:31	28° $\nearrow$ 26'05		minimum elong	6684 Jan 12 16:19	22° $\searrow$ 55'38	0°09'06
				behind sun begin	6684 Jan 12 10:40	22° $\searrow$ 54'46	
conjunction	6678 Dec 19 18:00	29° $\nearrow$ 27'20	0°11'18	behind sun end	6684 Jan 12 21:58	22° $\searrow$ 56'30	
minimum elong	6678 Dec 19 18:00	29° $\nearrow$ 27'20	0°11'21	max. Earth dist.	6684 Jan 12 07:15	22° $\searrow$ 54'14	19.58321 AU
behind sun begin	6678 Dec 19 13:08	29° $\nearrow$ 26'35		morning rise	6684 Jan 28 16:42	23° $\searrow$ 55'08	
behind sun end	6678 Dec 19 22:53	29° $\nearrow$ 28'05		retrograde	6684 Apr 28 23:09	27° $\searrow$ 13'46	
max. Earth dist.	6678 Dec 19 04:05	29° $\nearrow$ 25'09	19.38102 AU	opposition	6684 Jul 12 10:33	25° $\searrow$ 12'29	-0°12'17
	6678 Dec 28 10:01	0° $\searrow$		min. Earth dist.	6684 Jul 12 17:06	25° $\searrow$ 11'47	17.60867 AU
morning rise	6679 Jan 04 23:04	0° $\searrow$ 28'06		direct	6684 Sep 27 10:22	23° $\searrow$ 07'48	
retrograde	6679 Apr 06 12:31	3° $\searrow$ 49'42		evening set	6684 Dec 31 10:52	26° $\searrow$ 32'40	
opposition	6679 Jun 19 09:17	1° $\searrow$ 47'45	0°10'20				
min. Earth dist.	6679 Jun 19 21:55	1° $\searrow$ 46'23	17.39701 AU	conjunction	6685 Jan 16 13:21	27° $\searrow$ 32'18	-0°13'03
	6679 Aug 08 13:26	30° $\nearrow$		minimum elong	6685 Jan 16 13:20	27° $\searrow$ 32'18	0°13'00
direct	6679 Sep 03 19:31	29° $\nearrow$ 42'11		behind sun begin	6685 Jan 16 09:18	27° $\searrow$ 31'41	
	6679 Sep 29 20:50	0° $\searrow$		behind sun end	6685 Jan 16 17:23	27° $\searrow$ 32'55	
evening set	6679 Dec 08 11:55	3° $\searrow$ 10'47		max. Earth dist.	6685 Jan 16 07:01	27° $\searrow$ 31'20	19.63531 AU
				morning rise	6685 Feb 01 12:38	28° $\searrow$ 31'30	
conjunction	6679 Dec 24 19:19	4° $\searrow$ 11'48	0°07'15		6685 Feb 27 12:40	0° $\approx$	
minimum elong	6679 Dec 24 19:20	4° $\searrow$ 11'48	0°07'19	retrograde	6685 May 03 18:08	1° $\approx$ 49'27	

	6685 Jul 12 19:16	30° $\approx$ 30'30"	direct	6691 Oct 30 21:26	24° $\approx$ 44'39"	
opposition	6685 Jul 17 09:44	29° $\approx$ 48'19" -0°16'36"	evening set	6692 Feb 01 18:07	28° $\approx$ 02'11"	
min. Earth dist.	6685 Jul 17 15:17	29° $\approx$ 47'44" 17.66279 AU				
direct	6685 Oct 02 10:26	27° $\approx$ 43'54"	conjunction	6692 Feb 17 14:12	28° $\approx$ 59'36" -0°36'23"	
	6685 Dec 16 18:39	0° $\approx$	minimum elong	6692 Feb 17 14:11	28° $\approx$ 59'36" 0°36'22"	
evening set	6686 Jan 05 07:49	1° $\approx$ 07'47"	max. Earth dist.	6692 Feb 17 17:38	29° $\approx$ 00'07" 20.08806 AU	
			morning rise	6692 Mar 04 08:31	29° $\approx$ 56'45"	
conjunction	6686 Jan 21 09:07	2° $\approx$ 07'07" -0°16'52"		6692 Mar 05 06:23	0° $\approx$	
minimum elong	6686 Jan 21 09:06	2° $\approx$ 07'07" 0°16'49"	retrograde	6692 Jun 03 21:20	3° $\approx$ 10'07"	
max. Earth dist.	6686 Jan 21 03:25	2° $\approx$ 06'15" 19.69155 AU	opposition	6692 Aug 18 12:31	1° $\approx$ 10'30" -0°41'48"	
morning rise	6686 Feb 06 07:42	3° $\approx$ 06'02"	min. Earth dist.	6692 Aug 18 08:24	1° $\approx$ 10'56" 18.12260 AU	
retrograde	6686 May 08 13:55	6° $\approx$ 23'19"		6692 Sep 17 22:03	30° $\approx$	
opposition	6686 Jul 22 08:17	4° $\approx$ 22'21" -0°20'47"	direct	6692 Nov 03 16:24	29° $\approx$ 08'49"	
min. Earth dist.	6686 Jul 22 11:48	4° $\approx$ 21'58" 17.72110 AU		6692 Dec 18 21:07	0° $\approx$	
direct	6686 Oct 07 10:15	2° $\approx$ 18'13"	evening set	6693 Feb 05 08:40	2° $\approx$ 25'11"	
evening set	6687 Jan 10 03:46	5° $\approx$ 41'08"				
			conjunction	6693 Feb 21 04:08	3° $\approx$ 22'18" -0°38'55"	
conjunction	6687 Jan 26 04:17	6° $\approx$ 40'09" -0°20'33"	minimum elong	6693 Feb 21 04:07	3° $\approx$ 22'18" 0°38'54"	
minimum elong	6687 Jan 26 04:16	6° $\approx$ 40'09" 0°20'31"	max. Earth dist.	6693 Feb 21 09:18	3° $\approx$ 23'05" 20.15708 AU	
max. Earth dist.	6687 Jan 26 01:19	6° $\approx$ 39'41" 19.75175 AU	morning rise	6693 Mar 08 21:51	4° $\approx$ 19'10"	
morning rise	6687 Feb 11 01:53	7° $\approx$ 38'46"	retrograde	6693 Jun 08 13:18	7° $\approx$ 31'54"	
retrograde	6687 May 13 08:04	10° $\approx$ 55'21"	opposition	6693 Aug 23 07:16	5° $\approx$ 32'28" -0°44'29"	
opposition	6687 Jul 27 06:12	8° $\approx$ 54'37" -0°24'48"	min. Earth dist.	6693 Aug 23 01:26	5° $\approx$ 33'04" 18.19114 AU	
min. Earth dist.	6687 Jul 27 08:29	8° $\approx$ 54'22" 17.78298 AU	direct	6693 Nov 08 12:13	3° $\approx$ 31'10"	
direct	6687 Oct 12 08:47	6° $\approx$ 50'51"	evening set	6694 Feb 09 22:19	6° $\approx$ 46'23"	
evening set	6688 Jan 14 22:58	10° $\approx$ 12'45"				
			conjunction	6694 Feb 25 17:03	7° $\approx$ 43'11" -0°41'13"	
conjunction	6688 Jan 30 22:24	11° $\approx$ 11'26" -0°24'05"	minimum elong	6694 Feb 25 17:03	7° $\approx$ 43'11" 0°41'13"	
minimum elong	6688 Jan 30 22:24	11° $\approx$ 11'26" 0°24'02"	max. Earth dist.	6694 Feb 25 22:53	7° $\approx$ 44'04" 20.22503 AU	
max. Earth dist.	6688 Jan 30 20:01	11° $\approx$ 11'04" 19.81531 AU	morning rise	6694 Mar 13 10:26	8° $\approx$ 39'48"	
morning rise	6688 Feb 15 19:22	12° $\approx$ 09'45"	retrograde	6694 Jun 13 02:21	11° $\approx$ 51'54"	
	6688 Apr 16 04:55	15° $\approx$	opposition	6694 Aug 28 01:24	9° $\approx$ 52'36" -0°46'53"	
retrograde	6688 May 17 02:43	15° $\approx$ 25'42"	min. Earth dist.	6694 Aug 27 19:15	9° $\approx$ 53'13" 18.25854 AU	
	6688 Jun 17 18:22	15° $\approx$	direct	6694 Nov 13 05:39	7° $\approx$ 51'39"	
opposition	6688 Jul 31 03:46	13° $\approx$ 25'11" -0°28'38"	evening set	6695 Feb 14 11:06	11° $\approx$ 05'42"	
min. Earth dist.	6688 Jul 31 04:27	13° $\approx$ 25'07" 17.84802 AU				
direct	6688 Oct 16 06:53	11° $\approx$ 21'49"	conjunction	6695 Mar 02 05:20	12° $\approx$ 02'13" -0°43'17"	
evening set	6689 Jan 18 17:00	14° $\approx$ 42'39"	minimum elong	6695 Mar 02 05:20	12° $\approx$ 02'13" 0°43'15"	
	6689 Jan 23 11:51	15° $\approx$	max. Earth dist.	6695 Mar 02 12:31	12° $\approx$ 03'17" 20.29164 AU	
			morning rise	6695 Mar 17 22:17	12° $\approx$ 58'33"	
conjunction	6689 Feb 03 15:39	15° $\approx$ 41'02" -0°27'27"	retrograde	6695 Jun 17 16:47	16° $\approx$ 10'00"	
minimum elong	6689 Feb 03 15:39	15° $\approx$ 41'02" 0°27'25"	opposition	6695 Sep 01 18:35	14° $\approx$ 10'49" -0°49'01"	
max. Earth dist.	6689 Feb 03 15:49	15° $\approx$ 41'03" 19.88156 AU	min. Earth dist.	6695 Sep 01 10:41	14° $\approx$ 11'38" 18.32426 AU	
morning rise	6689 Feb 19 11:45	16° $\approx$ 39'03"	direct	6695 Nov 18 00:21	12° $\approx$ 10'12"	
retrograde	6689 May 21 20:11	19° $\approx$ 54'20"	evening set	6696 Feb 18 23:03	15° $\approx$ 23'05"	
opposition	6689 Aug 05 00:50	17° $\approx$ 54'04" -0°32'16"				
min. Earth dist.	6689 Aug 05 00:01	17° $\approx$ 54'09" 17.91520 AU	conjunction	6696 Mar 05 16:41	16° $\approx$ 19'19" -0°45'04"	
direct	6689 Oct 21 04:25	15° $\approx$ 51'08"	minimum elong	6696 Mar 05 16:41	16° $\approx$ 19'19" 0°45'04"	
evening set	6690 Jan 23 10:19	19° $\approx$ 10'53"	max. Earth dist.	6696 Mar 06 00:42	16° $\approx$ 20'31" 20.35655 AU	
			morning rise	6696 Mar 21 09:23	17° $\approx$ 15'24"	
conjunction	6690 Feb 08 07:58	20° $\approx$ 08'56" -0°30'38"	retrograde	6696 Jun 21 03:56	20° $\approx$ 26'14"	
minimum elong	6690 Feb 08 07:58	20° $\approx$ 08'56" 0°30'35"	opposition	6696 Sep 05 11:22	18° $\approx$ 27'08" -0°50'51"	
max. Earth dist.	6690 Feb 08 08:45	20° $\approx$ 09'03" 19.94959 AU	min. Earth dist.	6696 Sep 05 03:16	18° $\approx$ 27'57" 18.38851 AU	
morning rise	6690 Feb 24 03:30	21° $\approx$ 06'40"	direct	6696 Nov 21 15:43	16° $\approx$ 26'49"	
retrograde	6690 May 26 13:22	24° $\approx$ 21'18"	evening set	6697 Feb 22 09:50	19° $\approx$ 38'31"	
opposition	6690 Aug 09 21:16	22° $\approx$ 21'16" -0°35'41"				
min. Earth dist.	6690 Aug 09 19:22	22° $\approx$ 21'28" 17.98399 AU	conjunction	6697 Mar 10 03:05	20° $\approx$ 34'28" -0°46'37"	
direct	6690 Oct 26 00:41	20° $\approx$ 18'44"	minimum elong	6697 Mar 10 03:04	20° $\approx$ 34'28" 0°46'36"	
evening set	6691 Jan 28 02:35	23° $\approx$ 37'24"	max. Earth dist.	6697 Mar 10 12:31	20° $\approx$ 35'53" 20.42009 AU	
			morning rise	6697 Mar 25 19:31	21° $\approx$ 30'19"	
conjunction	6691 Feb 12 23:34	24° $\approx$ 35'08" -0°33'37"	retrograde	6697 Jun 25 16:51	24° $\approx$ 40'33"	
minimum elong	6691 Feb 12 23:34	24° $\approx$ 35'08" 0°33'35"	opposition	6697 Sep 10 03:16	22° $\approx$ 41'30" -0°52'23"	
max. Earth dist.	6691 Feb 13 02:26	24° $\approx$ 35'34" 20.01876 AU	min. Earth dist.	6697 Sep 09 17:03	22° $\approx$ 42'32" 18.45134 AU	
morning rise	6691 Feb 28 18:24	25° $\approx$ 32'34"	direct	6697 Nov 26 08:33	20° $\approx$ 41'28"	
retrograde	6691 May 31 06:07	28° $\approx$ 46'34"	evening set	6698 Feb 26 19:57	23° $\approx$ 52'01"	
opposition	6691 Aug 14 17:09	26° $\approx$ 46'45" -0°38'52"				
min. Earth dist.	6691 Aug 14 13:41	26° $\approx$ 47'07" 18.05329 AU	conjunction	6698 Mar 14 12:45	24° $\approx$ 47'43" -0°47'53"	



minimum elong	6698 Mar 14 12:45	24° $\mathbb{H}$ 47'43	0°47'53	min. Earth dist.	6704 Oct 10 08:55	21° $\mathbb{Y}$ 39'13	18.84712 AU
max. Earth dist.	6698 Mar 14 23:20	24° $\mathbb{H}$ 49'17	20.48224 AU	opposition	6704 Oct 11 00:46	21° $\mathbb{Y}$ 37'38	-0°55'00
morning rise	6698 Mar 30 05:02	25° $\mathbb{H}$ 43'20		direct	6704 Dec 26 18:30	19° $\mathbb{Y}$ 39'51	
retrograde	6698 Jun 30 02:40	28° $\mathbb{H}$ 52'59		evening set	6705 Mar 27 23:43	22° $\mathbb{Y}$ 43'38	
opposition	6698 Sep 14 18:25	26° $\mathbb{H}$ 54'00	-0°53'38				
min. Earth dist.	6698 Sep 14 08:02	26° $\mathbb{H}$ 55'03	18.51308 AU	conjunction	6705 Apr 12 15:37	23° $\mathbb{Y}$ 37'58	-0°49'26
direct	6698 Nov 30 21:52	24° $\mathbb{H}$ 54'15		minimum elong	6705 Apr 12 15:37	23° $\mathbb{Y}$ 37'58	0°49'27
evening set	6699 Mar 03 05:13	28° $\mathbb{H}$ 03'43		max. Earth dist.	6705 Apr 13 08:31	23° $\mathbb{Y}$ 40'26	20.86984 AU
				morning rise	6705 Apr 28 08:33	24° $\mathbb{Y}$ 32'28	
conjunction	6699 Mar 18 21:43	28° $\mathbb{H}$ 59'09	-0°48'53	retrograde	6705 Jul 30 01:22	27° $\mathbb{Y}$ 39'11	
minimum elong	6699 Mar 18 21:43	28° $\mathbb{H}$ 59'09	0°48'53	opposition	6705 Oct 15 11:58	25° $\mathbb{Y}$ 40'52	-0°54'15
max. Earth dist.	6699 Mar 19 09:32	29° $\mathbb{H}$ 00'54	20.54342 AU	min. Earth dist.	6705 Oct 14 18:44	25° $\mathbb{Y}$ 42'35	18.89193 AU
morning rise	6699 Apr 03 13:54	29° $\mathbb{H}$ 54'34		direct	6705 Dec 31 05:03	23° $\mathbb{Y}$ 43'21	
	6699 Apr 05 03:32	0° $\mathbb{Y}$		evening set	6706 Apr 01 05:22	26° $\mathbb{Y}$ 46'23	
retrograde	6699 Jul 04 14:32	3° $\mathbb{Y}$ 03'40					
opposition	6699 Sep 19 08:52	1° $\mathbb{Y}$ 04'45	-0°54'35	conjunction	6706 Apr 16 21:24	27° $\mathbb{Y}$ 40'36	-0°48'39
min. Earth dist.	6699 Sep 18 20:14	1° $\mathbb{Y}$ 06'02	18.57366 AU	minimum elong	6706 Apr 16 21:24	27° $\mathbb{Y}$ 40'36	0°48'40
	6699 Oct 17 13:42	30° $\mathbb{R}$ $\mathbb{H}$		max. Earth dist.	6706 Apr 17 14:50	27° $\mathbb{Y}$ 43'08	20.91225 AU
direct	6699 Dec 05 12:11	29° $\mathbb{H}$ 05'20		morning rise	6706 May 02 14:38	28° $\mathbb{Y}$ 35'00	
	6700 Jan 21 10:12	0° $\mathbb{Y}$			6706 May 29 11:12	0° $\mathbb{B}$	
evening set	6700 Mar 07 13:43	2° $\mathbb{Y}$ 13'43		retrograde	6706 Aug 03 08:55	1° $\mathbb{B}$ 41'27	
					6706 Oct 12 21:27	30° $\mathbb{R}$ $\mathbb{Y}$	
conjunction	6700 Mar 23 05:54	3° $\mathbb{Y}$ 08'56	-0°49'37	opposition	6706 Oct 19 22:40	29° $\mathbb{Y}$ 43'11	-0°53'14
minimum elong	6700 Mar 23 05:54	3° $\mathbb{Y}$ 08'56	0°49'37	min. Earth dist.	6706 Oct 19 06:22	29° $\mathbb{Y}$ 44'49	18.93198 AU
max. Earth dist.	6700 Mar 23 18:59	3° $\mathbb{Y}$ 10'52	20.60330 AU	direct	6707 Jan 04 12:37	27° $\mathbb{Y}$ 45'54	
morning rise	6700 Apr 07 22:01	4° $\mathbb{Y}$ 04'09			6707 Mar 21 17:43	0° $\mathbb{B}$	
retrograde	6700 Jul 08 23:49	7° $\mathbb{Y}$ 12'45		evening set	6707 Apr 05 10:39	0° $\mathbb{B}$ 48'15	
opposition	6700 Sep 23 22:53	5° $\mathbb{Y}$ 13'56	-0°55'14				
min. Earth dist.	6700 Sep 23 10:05	5° $\mathbb{Y}$ 15'14	18.63295 AU	conjunction	6707 Apr 21 02:52	1° $\mathbb{B}$ 42'21	-0°47'37
direct	6700 Dec 09 23:52	3° $\mathbb{Y}$ 14'51		minimum elong	6707 Apr 21 02:52	1° $\mathbb{B}$ 42'21	0°47'39
evening set	6701 Mar 11 21:34	6° $\mathbb{Y}$ 22'13		max. Earth dist.	6707 Apr 21 20:06	1° $\mathbb{B}$ 44'51	20.94980 AU
				morning rise	6707 May 06 20:31	2° $\mathbb{B}$ 36'41	
conjunction	6701 Mar 27 13:36	7° $\mathbb{Y}$ 17'13	-0°50'06	retrograde	6707 Aug 07 18:32	5° $\mathbb{B}$ 42'54	
minimum elong	6701 Mar 27 13:36	7° $\mathbb{Y}$ 17'13	0°50'07	opposition	6707 Oct 24 08:58	3° $\mathbb{B}$ 44'39	-0°51'58
max. Earth dist.	6701 Mar 28 03:40	7° $\mathbb{Y}$ 19'17	20.66184 AU	min. Earth dist.	6707 Oct 23 15:35	3° $\mathbb{B}$ 46'23	18.96686 AU
morning rise	6701 Apr 12 05:46	8° $\mathbb{Y}$ 12'15		direct	6708 Jan 08 22:21	1° $\mathbb{B}$ 47'33	
retrograde	6701 Jul 13 11:03	11° $\mathbb{Y}$ 20'24		evening set	6708 Apr 08 15:31	4° $\mathbb{B}$ 49'14	
opposition	6701 Sep 28 12:04	9° $\mathbb{Y}$ 21'42	-0°55'36				
min. Earth dist.	6701 Sep 27 21:12	9° $\mathbb{Y}$ 23'11	18.69055 AU	conjunction	6708 Apr 24 08:00	5° $\mathbb{B}$ 43'16	-0°46'22
direct	6701 Dec 14 12:21	7° $\mathbb{Y}$ 22'56		minimum elong	6708 Apr 24 08:00	5° $\mathbb{B}$ 43'16	0°46'25
evening set	6702 Mar 16 04:48	10° $\mathbb{Y}$ 29'20		max. Earth dist.	6708 Apr 25 01:39	5° $\mathbb{B}$ 45'49	20.98193 AU
				morning rise	6708 May 10 02:05	6° $\mathbb{B}$ 37'32	
conjunction	6702 Mar 31 20:43	11° $\mathbb{Y}$ 24'08	-0°50'18	retrograde	6708 Aug 11 01:51	9° $\mathbb{B}$ 43'33	
minimum elong	6702 Mar 31 20:43	11° $\mathbb{Y}$ 24'08	0°50'19	opposition	6708 Oct 27 19:02	7° $\mathbb{B}$ 45'16	-0°50'27
max. Earth dist.	6702 Apr 01 11:53	11° $\mathbb{Y}$ 26'22	20.71830 AU	min. Earth dist.	6708 Oct 27 02:36	7° $\mathbb{B}$ 46'54	18.99636 AU
morning rise	6702 Apr 16 12:59	12° $\mathbb{Y}$ 19'01		direct	6709 Jan 12 05:24	5° $\mathbb{B}$ 48'19	
retrograde	6702 Jul 17 19:56	15° $\mathbb{Y}$ 26'45		evening set	6709 Apr 12 20:08	8° $\mathbb{B}$ 49'23	
min. Earth dist.	6702 Oct 02 10:13	13° $\mathbb{Y}$ 29'37	18.74584 AU				
opposition	6702 Oct 03 00:52	13° $\mathbb{Y}$ 28'09	-0°55'41	conjunction	6709 Apr 28 12:58	9° $\mathbb{B}$ 43'21	-0°44'53
direct	6702 Dec 18 22:22	11° $\mathbb{Y}$ 29'44		minimum elong	6709 Apr 28 12:58	9° $\mathbb{B}$ 43'21	0°44'55
evening set	6703 Mar 20 11:33	14° $\mathbb{Y}$ 35'12		max. Earth dist.	6709 Apr 29 06:19	9° $\mathbb{B}$ 45'51	21.00891 AU
				morning rise	6709 May 14 07:36	10° $\mathbb{B}$ 37'35	
conjunction	6703 Apr 05 03:24	15° $\mathbb{Y}$ 29'50	-0°50'16	retrograde	6709 Aug 15 10:37	13° $\mathbb{B}$ 43'24	
minimum elong	6703 Apr 05 03:24	15° $\mathbb{Y}$ 29'50	0°50'17	min. Earth dist.	6709 Oct 31 10:57	11° $\mathbb{B}$ 46'48	19.02078 AU
max. Earth dist.	6703 Apr 05 19:10	15° $\mathbb{Y}$ 32'09	20.77223 AU	opposition	6709 Nov 01 04:20	11° $\mathbb{B}$ 45'04	-0°48'41
morning rise	6703 Apr 20 19:50	16° $\mathbb{Y}$ 24'34		direct	6710 Jan 16 13:52	9° $\mathbb{B}$ 48'13	
retrograde	6703 Jul 22 06:43	19° $\mathbb{Y}$ 31'55		evening set	6710 Apr 17 00:27	12° $\mathbb{B}$ 48'43	
opposition	6703 Oct 07 12:55	17° $\mathbb{Y}$ 33'25	-0°55'28				
min. Earth dist.	6703 Oct 06 20:32	17° $\mathbb{Y}$ 35'04	18.79821 AU	conjunction	6710 May 02 17:41	13° $\mathbb{B}$ 42'39	-0°43'12
direct	6703 Dec 23 09:48	15° $\mathbb{Y}$ 35'19		minimum elong	6710 May 02 17:41	13° $\mathbb{B}$ 42'39	0°43'15
evening set	6704 Mar 23 17:54	18° $\mathbb{Y}$ 39'56		max. Earth dist.	6710 May 03 11:31	13° $\mathbb{B}$ 45'12	21.03084 AU
				morning rise	6710 May 18 12:52	14° $\mathbb{B}$ 36'51	
conjunction	6704 Apr 08 09:44	19° $\mathbb{Y}$ 34'25	-0°49'58		6710 May 25 11:48	15° $\mathbb{B}$	
minimum elong	6704 Apr 08 09:44	19° $\mathbb{Y}$ 34'25	0°49'59	retrograde	6710 Aug 19 17:32	17° $\mathbb{B}$ 42'32	
max. Earth dist.	6704 Apr 09 02:23	19° $\mathbb{Y}$ 36'51	20.82287 AU	opposition	6710 Nov 05 13:25	15° $\mathbb{B}$ 44'07	-0°46'41
morning rise	6704 Apr 24 02:21	20° $\mathbb{Y}$ 29'01		min. Earth dist.	6710 Nov 04 20:56	15° $\mathbb{B}$ 45'46	19.04042 AU
retrograde	6704 Jul 25 14:56	23° $\mathbb{Y}$ 36'02			6710 Nov 24 11:10	15° $\mathbb{R}$ $\mathbb{B}$	

direct	6711 Jan 20 20:30	13° <b>♄</b> 47'21	conjunction	6717 May 30 01:50	11° <b>♅</b> 27'32 -0°26'10
	6711 Mar 16 12:40	15° <b>♄</b>	minimum elong	6717 May 30 01:50	11° <b>♅</b> 27'32 0°26'15
evening set	6711 Apr 21 04:31	16° <b>♄</b> 47'22	max. Earth dist.	6717 May 30 19:10	11° <b>♅</b> 30'01 21.07271 AU
			morning rise	6717 Jun 15 02:00	12° <b>♅</b> 22'05
conjunction	6711 May 06 22:08	17° <b>♄</b> 41'15 -0°41'18	retrograde	6717 Sep 17 01:45	15° <b>♅</b> 28'11
minimum elong	6711 May 06 22:08	17° <b>♄</b> 41'15 0°41'20	opposition	6717 Dec 03 20:40	13° <b>♅</b> 29'20 -0°27'13
max. Earth dist.	6711 May 07 15:45	17° <b>♄</b> 43'47 21.04839 AU	min. Earth dist.	6717 Dec 03 04:04	13° <b>♅</b> 31'00 19.06827 AU
morning rise	6711 May 22 17:56	18° <b>♄</b> 35'27	direct	6718 Feb 17 14:21	11° <b>♅</b> 32'55
retrograde	6711 Aug 24 02:04	21° <b>♄</b> 41'03	evening set	6718 May 18 09:25	14° <b>♅</b> 31'37
opposition	6711 Nov 09 21:58	19° <b>♄</b> 42'33 -0°44'29			
min. Earth dist.	6711 Nov 09 04:26	19° <b>♄</b> 44'18 19.05592 AU	conjunction	6718 Jun 03 07:20	15° <b>♅</b> 25'51 -0°23'08
direct	6712 Jan 25 03:29	17° <b>♄</b> 45'51	minimum elong	6718 Jun 03 07:20	15° <b>♅</b> 25'51 0°23'12
evening set	6712 Apr 24 08:29	20° <b>♄</b> 45'26	max. Earth dist.	6718 Jun 04 00:34	15° <b>♅</b> 28'19 21.06223 AU
			morning rise	6718 Jun 19 08:14	16° <b>♅</b> 20'31
conjunction	6712 May 10 02:35	21° <b>♄</b> 39'19 -0°39'12	retrograde	6718 Sep 21 08:35	19° <b>♅</b> 26'51
minimum elong	6712 May 10 02:35	21° <b>♄</b> 39'19 0°39'15	opposition	6718 Dec 08 04:13	17° <b>♅</b> 27'57 -0°23'48
max. Earth dist.	6712 May 10 20:46	21° <b>♄</b> 41'56 21.06186 AU	min. Earth dist.	6718 Dec 07 13:02	17° <b>♅</b> 29'28 19.05533 AU
morning rise	6712 May 25 22:58	22° <b>♄</b> 33'32	direct	6719 Feb 21 18:55	15° <b>♅</b> 31'31
retrograde	6712 Aug 27 08:31	25° <b>♄</b> 39'05	evening set	6719 May 22 14:27	18° <b>♅</b> 30'20
opposition	6712 Nov 13 06:21	23° <b>♄</b> 40'31 -0°42'03			
min. Earth dist.	6712 Nov 12 13:33	23° <b>♄</b> 42'11 19.06756 AU	conjunction	6719 Jun 07 13:03	19° <b>♅</b> 24'40 -0°19'59
direct	6713 Jan 28 09:49	21° <b>♄</b> 43'53	minimum elong	6719 Jun 07 13:03	19° <b>♅</b> 24'40 0°20'03
evening set	6713 Apr 28 12:19	24° <b>♄</b> 43'07	max. Earth dist.	6719 Jun 08 05:07	19° <b>♅</b> 26'58 21.04684 AU
			morning rise	6719 Jun 23 14:50	20° <b>♅</b> 19'28
conjunction	6713 May 14 06:56	25° <b>♄</b> 37'01 -0°36'55	retrograde	6719 Sep 25 18:28	23° <b>♅</b> 26'05
minimum elong	6713 May 14 06:56	25° <b>♄</b> 37'01 0°36'58	opposition	6719 Dec 12 11:46	21° <b>♅</b> 27'05 -0°20'15
max. Earth dist.	6713 May 15 00:50	25° <b>♄</b> 39'35 21.07174 AU	min. Earth dist.	6719 Dec 11 20:43	21° <b>♅</b> 28'36 19.03726 AU
morning rise	6713 May 30 04:04	26° <b>♄</b> 31'16	direct	6720 Feb 26 01:25	19° <b>♅</b> 30'35
retrograde	6713 Aug 31 17:44	29° <b>♄</b> 36'50	evening set	6720 May 25 19:59	22° <b>♅</b> 29'34
opposition	6713 Nov 17 14:19	27° <b>♄</b> 38'11 -0°39'26			
min. Earth dist.	6713 Nov 16 20:35	27° <b>♄</b> 39'57 19.07554 AU	conjunction	6720 Jun 10 19:24	23° <b>♅</b> 24'03 -0°16'44
direct	6714 Feb 01 15:48	25° <b>♄</b> 41'36	minimum elong	6720 Jun 10 19:24	23° <b>♅</b> 24'03 0°16'48
evening set	6714 May 02 16:15	28° <b>♄</b> 40'36	max. Earth dist.	6720 Jun 11 11:03	23° <b>♅</b> 26'17 21.02597 AU
			morning rise	6720 Jun 26 21:58	24° <b>♅</b> 18'59
conjunction	6714 May 18 11:27	29° <b>♄</b> 34'31 -0°34'28	retrograde	6720 Sep 29 02:09	27° <b>♅</b> 25'55
minimum elong	6714 May 18 11:27	29° <b>♄</b> 34'31 0°34'30	opposition	6720 Dec 15 19:26	25° <b>♅</b> 26'47 -0°16'36
max. Earth dist.	6714 May 19 05:44	29° <b>♄</b> 37'08 21.07777 AU	min. Earth dist.	6720 Dec 15 05:57	25° <b>♅</b> 28'08 19.01361 AU
	6714 May 25 21:23	0° <b>♅</b>	direct	6721 Mar 01 06:32	23° <b>♅</b> 30'10
morning rise	6714 Jun 03 09:14	0° <b>♅</b> 28'50	evening set	6721 May 30 01:54	26° <b>♅</b> 29'22
retrograde	6714 Sep 04 23:50	3° <b>♅</b> 34'26			
opposition	6714 Nov 21 22:02	1° <b>♅</b> 35'44 -0°36'37	conjunction	6721 Jun 15 02:08	27° <b>♅</b> 23'59 -0°13'24
min. Earth dist.	6714 Nov 21 05:13	1° <b>♅</b> 37'25 19.07969 AU	minimum elong	6721 Jun 15 02:08	27° <b>♅</b> 23'59 0°13'27
	6715 Jan 07 17:01	30° <b>♄</b>	behind sun begin	6721 Jun 14 22:24	27° <b>♅</b> 23'28
direct	6715 Feb 05 21:25	29° <b>♄</b> 39'14	behind sun end	6721 Jun 15 05:52	27° <b>♅</b> 24'31
	6715 Mar 06 12:56	0° <b>♅</b>	max. Earth dist.	6721 Jun 15 16:09	27° <b>♅</b> 25'59 20.99967 AU
evening set	6715 May 06 20:14	2° <b>♅</b> 38'02	morning rise	6721 Jul 01 05:39	28° <b>♅</b> 19'05
				6721 Aug 03 07:23	0° <b>♅</b>
conjunction	6715 May 22 16:02	3° <b>♅</b> 32'00 -0°31'51	retrograde	6721 Oct 03 11:56	1° <b>♅</b> 26'20
minimum elong	6715 May 22 16:02	3° <b>♅</b> 32'00 0°31'54		6721 Dec 06 08:17	30° <b>♄</b> <b>♅</b>
max. Earth dist.	6715 May 23 09:49	3° <b>♅</b> 34'33 21.08015 AU	opposition	6721 Dec 20 03:03	29° <b>♅</b> 27'02 -0°12'51
morning rise	6715 Jun 07 14:36	4° <b>♅</b> 26'23	min. Earth dist.	6721 Dec 19 13:59	29° <b>♅</b> 28'21 18.98450 AU
retrograde	6715 Sep 09 09:33	7° <b>♅</b> 32'06	direct	6722 Mar 05 13:01	27° <b>♅</b> 30'15
opposition	6715 Nov 26 05:40	5° <b>♅</b> 33'21 -0°33'39		6722 May 25 07:39	0° <b>♅</b>
min. Earth dist.	6715 Nov 25 12:10	5° <b>♅</b> 35'06 19.08007 AU	evening set	6722 Jun 03 08:12	0° <b>♅</b> 29'43
direct	6716 Feb 10 03:22	3° <b>♅</b> 36'53			
evening set	6716 May 10 00:15	6° <b>♅</b> 35'35	conjunction	6722 Jun 19 09:18	1° <b>♅</b> 24'30 -0°09'59
			minimum elong	6722 Jun 19 09:17	1° <b>♅</b> 24'30 0°10'02
conjunction	6716 May 25 20:44	7° <b>♅</b> 29'38 -0°29'05	behind sun begin	6722 Jun 19 03:57	1° <b>♅</b> 23'46
minimum elong	6716 May 25 20:44	7° <b>♅</b> 29'38 0°29'08	behind sun end	6722 Jun 19 14:38	1° <b>♅</b> 25'15
max. Earth dist.	6716 May 26 14:51	7° <b>♅</b> 32'13 21.07848 AU	max. Earth dist.	6722 Jun 19 22:47	1° <b>♅</b> 26'26 20.96787 AU
morning rise	6716 Jun 10 20:02	8° <b>♅</b> 24'05	morning rise	6722 Jul 05 13:35	2° <b>♅</b> 19'46
retrograde	6716 Sep 12 15:56	11° <b>♅</b> 29'58	retrograde	6722 Oct 07 20:17	5° <b>♅</b> 27'21
opposition	6716 Nov 29 13:20	9° <b>♅</b> 31'11 -0°30'30	opposition	6722 Dec 24 10:43	3° <b>♅</b> 27'52 -0°09'02
min. Earth dist.	6716 Nov 28 20:54	9° <b>♅</b> 32'49 19.07632 AU	min. Earth dist.	6722 Dec 23 23:10	3° <b>♅</b> 29'02 18.95017 AU
direct	6717 Feb 13 08:07	7° <b>♅</b> 34'45	direct	6723 Mar 09 18:42	1° <b>♅</b> 30'53
evening set	6717 May 14 04:40	10° <b>♅</b> 33'25	evening set	6723 Jun 07 14:56	4° <b>♅</b> 30'40

conjunction	6723 Jun 23 16:50	5°☾25'38 -0°06'30	retrograde	6728 Nov 01 11:38	29°☾51'46	
minimum elong	6723 Jun 23 16:50	5°☾25'38 0°06'33	opposition	6729 Jan 17 12:17	27°☾51'07	0°14'27
behind sun begin	6723 Jun 23 10:36	5°☾24'46	min. Earth dist.	6729 Jan 17 05:46	27°☾51'47	18.67162 AU
behind sun end	6723 Jun 23 23:04	5°☾26'30	direct	6729 Apr 02 10:56	25°☾52'40	
max. Earth dist.	6723 Jun 24 04:47	5°☾27'20 20.93141 AU	evening set	6729 Jul 01 19:20	28°☾56'02	
morning rise	6723 Jul 09 22:05	6°☾21'05				
retrograde	6723 Oct 12 06:14	9°☾29'03	conjunction	6729 Jul 18 02:28	29°☾52'22	0°14'48
opposition	6723 Dec 28 18:28	7°☾29'20 -0°05'09	minimum elong	6729 Jul 18 02:28	29°☾52'22	0°14'44
min. Earth dist.	6723 Dec 28 07:18	7°☾30'28 18.91157 AU	behind sun begin	6729 Jul 17 23:51	29°☾52'00	
direct	6724 Mar 13 01:12	5°☾32'06	behind sun end	6729 Jul 18 05:04	29°☾52'44	
evening set	6724 Jun 10 22:00	8°☾32'18	max. Earth dist.	6729 Jul 18 08:40	29°☾53'15	20.64462 AU
				6729 Jul 20 07:02	0°♈	
conjunction	6724 Jun 27 00:51	9°☾27'28 -0°02'59	morning rise	6729 Aug 03 12:46	0°♈49'09	
minimum elong	6724 Jun 27 00:50	9°☾27'28 0°03'03	retrograde	6729 Nov 06 01:05	4°♈00'18	
behind sun begin	6724 Jun 26 18:12	9°☾26'32	opposition	6730 Jan 21 21:41	1°♈59'31	0°18'17
behind sun end	6724 Jun 27 07:27	9°☾28'23	min. Earth dist.	6730 Jan 21 16:01	2°♈00'06	18.61685 AU
max. Earth dist.	6724 Jun 27 12:31	9°☾29'08 20.89078 AU	direct	6730 Apr 06 18:44	0°♈00'49	
morning rise	6724 Jul 13 06:52	10°☾23'06	evening set	6730 Jul 06 06:38	3°♈05'03	
retrograde	6724 Oct 15 15:24	13°☾31'29				
opposition	6725 Jan 01 02:24	11°☾31'33 -0°01'14	conjunction	6730 Jul 22 14:42	4°♈01'40	0°18'13
min. Earth dist.	6724 Dec 31 16:32	11°☾32'34 18.86910 AU	minimum elong	6730 Jul 22 14:42	4°♈01'40	0°18'11
direct	6725 Mar 17 07:15	9°☾34'05	max. Earth dist.	6730 Jul 22 20:40	4°♈02'31	20.58875 AU
asc. node	6725 Apr 26 14:55	10°☾15'27	morning rise	6730 Aug 08 01:36	4°♈58'42	
evening set	6725 Jun 15 05:49	12°☾34'46	retrograde	6730 Nov 10 14:00	8°♈10'31	
			opposition	6731 Jan 26 07:33	6°♈09'37	0°22'03
conjunction	6725 Jul 01 09:28	13°☾30'08 0°00'39	min. Earth dist.	6731 Jan 26 03:05	6°♈10'05	18.55993 AU
minimum elong	6725 Jul 01 09:28	13°☾30'08 0°00'37	direct	6731 Apr 11 03:08	4°♈10'42	
behind sun begin	6725 Jul 01 02:50	13°☾29'12	evening set	6731 Jul 10 18:59	7°♈15'51	
behind sun end	6725 Jul 01 16:06	13°☾31'03				
max. Earth dist.	6725 Jul 01 19:33	13°☾31'34 20.84677 AU	conjunction	6731 Jul 27 03:47	8°♈12'44	0°21'35
morning rise	6725 Jul 17 16:28	14°☾25'58	minimum elong	6731 Jul 27 03:47	8°♈12'44	0°21'31
retrograde	6725 Oct 20 02:19	17°☾34'49	max. Earth dist.	6731 Jul 27 07:31	8°♈13'16	20.53090 AU
opposition	6726 Jan 05 10:19	15°☾34'41 0°02'42	morning rise	6731 Aug 12 15:33	9°♈10'03	
min. Earth dist.	6726 Jan 05 00:56	15°☾35'38 18.82354 AU	retrograde	6731 Nov 15 04:43	12°♈22'34	
direct	6726 Mar 21 14:00	13°☾36'57	opposition	6732 Jan 30 17:56	10°♈21'32	0°25'44
evening set	6726 Jun 19 14:10	16°☾38'11	min. Earth dist.	6732 Jan 30 14:43	10°♈21'53	18.50099 AU
			direct	6732 Apr 14 11:41	8°♈22'22	
conjunction	6726 Jul 05 18:43	17°☾33'47 0°04'16	evening set	6732 Jul 14 08:12	11°♈28'29	
minimum elong	6726 Jul 05 18:44	17°☾33'47 0°04'13				
behind sun begin	6726 Jul 05 12:10	17°☾32'52	conjunction	6732 Jul 30 17:58	12°♈25'40	0°24'50
behind sun end	6726 Jul 06 01:18	17°☾34'42	minimum elong	6732 Jul 30 17:58	12°♈25'40	0°24'48
max. Earth dist.	6726 Jul 06 04:36	17°☾35'11 20.79970 AU	max. Earth dist.	6732 Jul 30 21:11	12°♈26'08	20.47068 AU
morning rise	6726 Jul 22 02:27	18°☾29'51	morning rise	6732 Aug 16 06:18	13°♈23'15	
retrograde	6726 Oct 24 12:15	21°☾39'12		6732 Sep 15 22:01	15°♈	
opposition	6727 Jan 09 18:40	19°☾38'52 0°06'39	retrograde	6732 Nov 18 19:41	16°♈36'29	
min. Earth dist.	6727 Jan 09 10:27	19°☾39'43 18.77514 AU		6733 Jan 24 07:18	15°♈♊	
direct	6727 Mar 25 20:28	17°☾40'54	opposition	6733 Feb 03 04:54	14°♈35'20	0°29'18
evening set	6727 Jun 23 23:03	20°☾42'46	min. Earth dist.	6733 Feb 03 03:03	14°♈35'31	18.43947 AU
			direct	6733 Apr 18 21:41	12°♈35'53	
conjunction	6727 Jul 10 04:25	21°☾38'35 0°07'48		6733 Jul 06 01:45	15°♈	
minimum elong	6727 Jul 10 04:25	21°☾38'35 0°07'45	evening set	6733 Jul 18 22:38	15°♈43'01	
behind sun begin	6727 Jul 09 22:24	21°☾37'45				
behind sun end	6727 Jul 10 10:25	21°☾39'26	conjunction	6733 Aug 04 09:03	16°♈40'29	0°28'00
max. Earth dist.	6727 Jul 10 12:42	21°☾39'46 20.75019 AU	minimum elong	6733 Aug 04 09:03	16°♈40'29	0°27'58
morning rise	6727 Jul 26 13:05	22°☾34'53	max. Earth dist.	6733 Aug 04 09:30	16°♈40'33	20.40790 AU
retrograde	6727 Oct 29 00:30	25°☾44'48	morning rise	6733 Aug 20 22:10	17°♈38'21	
opposition	6728 Jan 14 03:21	23°☾44'17 0°10'34	retrograde	6733 Nov 23 11:33	20°♈52'17	
min. Earth dist.	6728 Jan 13 19:39	23°☾45'05 18.72449 AU	opposition	6734 Feb 07 16:21	18°♈50'58	0°32'44
direct	6728 Mar 29 03:45	21°☾46'04	min. Earth dist.	6734 Feb 07 16:08	18°♈50'59	18.37545 AU
evening set	6728 Jun 27 08:45	24°☾48'39	direct	6734 Apr 23 07:51	16°♈51'11	
			evening set	6734 Jul 23 13:50	19°♈59'22	
conjunction	6728 Jul 13 15:06	25°☾44'44 0°11'19				
minimum elong	6728 Jul 13 15:06	25°☾44'44 0°11'16	conjunction	6734 Aug 09 01:10	20°♈57'08	0°31'01
behind sun begin	6728 Jul 13 10:12	25°☾44'03	minimum elong	6734 Aug 09 01:10	20°♈57'08	0°30'59
behind sun end	6728 Jul 13 19:59	25°☾45'25	max. Earth dist.	6734 Aug 09 00:57	20°♈57'06	20.34256 AU
max. Earth dist.	6728 Jul 13 23:12	25°☾45'53 20.69838 AU	morning rise	6734 Aug 25 14:43	21°♈55'16	
morning rise	6728 Jul 30 00:28	26°☾41'16	retrograde	6734 Nov 28 03:49	25°♈09'53	

opposition	6735 Feb 12 04:28	23°08'23	0°36'01	conjunction	6741 Sep 09 17:04	21°04'27	0°46'50
min. Earth dist.	6735 Feb 12 05:24	23°08'17	18.30893 AU	minimum elong	6741 Sep 09 17:04	21°04'27	0°46'49
direct	6735 Apr 27 19:15	21°08'16		max. Earth dist.	6741 Sep 09 06:17	21°04'49	19.86617 AU
evening set	6735 Jul 28 05:55	24°01'29		morning rise	6741 Sep 26 09:29	22°04'27	
				retrograde	6741 Dec 29 09:26	26°01'39	
conjunction	6735 Aug 13 17:51	25°01'53	0°33'54	opposition	6742 Mar 14 09:02	23°05'45	0°52'49
minimum elong	6735 Aug 13 17:51	25°01'53	0°33'52	min. Earth dist.	6742 Mar 14 18:19	23°05'45	17.83476 AU
max. Earth dist.	6735 Aug 13 14:53	25°01'50	20.27514 AU	direct	6742 May 28 01:36	21°05'51	
morning rise	6735 Aug 30 08:10	26°01'58		evening set	6742 Aug 28 23:59	25°01'30	
retrograde	6735 Dec 02 20:38	29°02'17					
opposition	6736 Feb 16 17:11	27°02'33	0°39'08	conjunction	6742 Sep 14 15:59	26°01'14	0°48'06
min. Earth dist.	6736 Feb 16 19:50	27°02'16	18.24071 AU	minimum elong	6742 Sep 14 15:59	26°01'14	0°48'06
direct	6736 May 01 07:31	25°02'01		max. Earth dist.	6742 Sep 14 05:07	26°01'13	19.80388 AU
evening set	6736 Jul 31 22:55	28°03'20		morning rise	6742 Oct 01 08:26	27°01'32	
					6742 Nov 28 16:37	0°01'18	
conjunction	6736 Aug 17 11:44	29°03'52	0°36'36	retrograde	6743 Jan 03 06:44	0°03'18	
minimum elong	6736 Aug 17 11:44	29°03'52	0°36'33		6743 Feb 08 07:10	30°01'00	
max. Earth dist.	6736 Aug 17 08:20	29°03'51	20.20621 AU	opposition	6743 Mar 19 01:58	28°03'18	0°54'05
	6736 Aug 24 07:33	0°01'00		min. Earth dist.	6743 Mar 19 11:09	28°03'19	17.77391 AU
morning rise	6736 Sep 03 02:24	0°01'34		direct	6743 Jun 01 20:07	26°02'06	
retrograde	6736 Dec 06 13:34	3°05'21		evening set	6743 Sep 02 23:21	29°04'53	
opposition	6737 Feb 20 06:12	1°04'25	0°42'02		6743 Sep 07 00:12	0°01'18	
min. Earth dist.	6737 Feb 20 09:46	1°04'02	18.17129 AU				
	6737 Apr 14 01:24	30°03'00		conjunction	6743 Sep 19 15:34	0°04'57	0°49'05
direct	6737 May 05 20:17	29°04'29		minimum elong	6743 Sep 19 15:34	0°04'57	0°49'05
	6737 May 27 13:07	0°01'00		max. Earth dist.	6743 Sep 19 02:59	0°04'40	19.74451 AU
evening set	6737 Aug 05 16:59	2°05'54		morning rise	6743 Oct 06 08:11	1°04'42	
				retrograde	6744 Jan 08 03:09	5°06'51	
conjunction	6737 Aug 22 06:18	3°05'34	0°39'06	opposition	6744 Mar 22 19:47	3°03'49	0°55'02
minimum elong	6737 Aug 22 06:18	3°05'34	0°39'05	min. Earth dist.	6744 Mar 23 06:47	3°02'38	17.71611 AU
max. Earth dist.	6737 Aug 22 00:13	3°05'40	20.13658 AU	direct	6744 Jun 05 13:50	1°00'19	
morning rise	6737 Sep 07 21:35	4°05'32		evening set	6744 Sep 06 23:40	4°02'00	
retrograde	6737 Dec 11 07:09	8°01'10					
opposition	6738 Feb 24 19:59	6°01'59	0°44'44	conjunction	6744 Sep 23 16:15	5°02'39	0°49'46
min. Earth dist.	6738 Feb 25 01:16	6°01'25	18.10169 AU	minimum elong	6744 Sep 23 16:15	5°02'39	0°49'46
direct	6738 May 10 10:18	4°09'37		max. Earth dist.	6744 Sep 23 03:13	5°01'83	19.68818 AU
evening set	6738 Aug 10 11:36	7°02'10		morning rise	6744 Oct 10 08:48	6°02'12	
				retrograde	6745 Jan 12 02:14	9°04'22	
conjunction	6738 Aug 27 01:41	8°02'10	0°41'24	opposition	6745 Mar 27 14:03	7°03'17	0°55'38
minimum elong	6738 Aug 27 01:41	8°02'10	0°41'23	min. Earth dist.	6745 Mar 28 01:05	7°03'05	17.66117 AU
max. Earth dist.	6738 Aug 26 19:29	8°02'13	20.06704 AU	direct	6745 Jun 10 10:27	5°03'32	
morning rise	6738 Sep 12 17:11	9°02'23		evening set	6745 Sep 12 00:59	8°05'24	
retrograde	6738 Dec 16 00:51	12°03'40					
opposition	6739 Mar 01 10:16	10°03'51	0°47'10	conjunction	6745 Sep 28 17:40	9°05'17	0°50'08
min. Earth dist.	6739 Mar 01 16:00	10°03'49	18.03247 AU	minimum elong	6745 Sep 28 17:40	9°05'17	0°50'09
direct	6739 May 15 01:03	8°03'30		max. Earth dist.	6745 Sep 28 03:06	9°05'04	19.63455 AU
evening set	6739 Aug 15 07:23	11°04'12		morning rise	6745 Oct 15 10:06	10°05'10	
				retrograde	6746 Jan 16 23:50	14°01'44	
conjunction	6739 Aug 31 21:52	12°04'28	0°43'28	opposition	6746 Apr 01 09:22	12°01'41	0°55'54
minimum elong	6739 Aug 31 21:52	12°04'27	0°43'27	min. Earth dist.	6746 Apr 01 22:21	12°01'16	17.60899 AU
max. Earth dist.	6739 Aug 31 13:18	12°04'51	19.99835 AU	direct	6746 Jun 15 05:44	10°01'24	
morning rise	6739 Sep 17 13:52	13°04'58		evening set	6746 Sep 17 02:51	13°03'40	
retrograde	6739 Dec 20 19:00	17°03'54					
opposition	6740 Mar 05 01:11	15°01'18	0°49'20	conjunction	6746 Oct 03 19:39	14°03'54	0°50'11
min. Earth dist.	6740 Mar 05 08:37	15°00'30	17.96458 AU	minimum elong	6746 Oct 03 19:39	14°03'54	0°50'12
direct	6740 May 18 16:20	12°05'07		max. Earth dist.	6746 Oct 03 04:12	14°03'24	19.58367 AU
evening set	6740 Aug 19 03:58	16°01'59		morning rise	6746 Oct 20 11:58	15°03'65	
				retrograde	6747 Jan 22 00:11	18°05'54	
conjunction	6740 Sep 04 19:09	17°01'33	0°45'17	opposition	6747 Apr 06 05:14	16°05'54	0°55'47
minimum elong	6740 Sep 04 19:09	17°01'33	0°45'17	min. Earth dist.	6747 Apr 06 18:11	16°05'24	17.55940 AU
max. Earth dist.	6740 Sep 04 10:28	17°01'15	19.93123 AU	direct	6747 Jun 20 04:10	14°05'13	
morning rise	6740 Sep 21 11:17	18°01'18		evening set	6747 Sep 22 05:39	18°01'43	
retrograde	6740 Dec 24 14:23	21°03'15					
opposition	6741 Mar 09 16:44	19°02'06	0°51'14	conjunction	6747 Oct 08 22:30	19°01'56	0°49'54
min. Earth dist.	6741 Mar 10 00:19	19°01'17	17.89844 AU	minimum elong	6747 Oct 08 22:30	19°01'56	0°49'56
direct	6741 May 23 09:07	17°02'33		max. Earth dist.	6747 Oct 08 05:56	19°01'23	19.53529 AU
evening set	6741 Aug 24 01:37	20°04'27		morning rise	6747 Oct 25 14:30	20°01'10	

retrograde	6748 Jan 26 23:03	23°♄39'39		opposition	6754 May 08 16:15	20°♄03'41	0°44'44
opposition	6748 Apr 10 01:49	21°♄36'32	0°55'18	min. Earth dist.	6754 May 09 08:57	20°♄01'51	17.31276 AU
min. Earth dist.	6748 Apr 10 16:40	21°♄34'55	17.51245 AU	direct	6754 Jul 23 05:26	17°♄57'43	
direct	6748 Jun 24 01:17	19°♄31'59		evening set	6754 Oct 26 12:26	21°♄26'12	
evening set	6748 Sep 26 09:04	22°♄56'06		max. Earth dist.	6754 Nov 11 07:15	22°♄25'08	19.30451 AU
max. Earth dist.	6748 Oct 12 07:57	23°♄54'49	19.48984 AU				
				conjunction	6754 Nov 12 03:14	22°♄28'16	0°38'47
conjunction	6748 Oct 13 01:51	23°♄57'35	0°49'18	minimum elong	6754 Nov 12 03:14	22°♄28'16	0°38'50
minimum elong	6748 Oct 13 01:51	23°♄57'35	0°49'19	morning rise	6754 Nov 28 15:43	23°♄30'00	
morning rise	6748 Oct 29 17:38	24°♄58'58		retrograde	6755 Feb 28 23:53	26°♄53'40	
retrograde	6749 Jan 30 23:56	28°♄21'48		opposition	6755 May 13 16:09	24°♄50'25	0°41'46
opposition	6749 Apr 14 22:57	26°♄18'39	0°54'27	min. Earth dist.	6755 May 14 08:27	24°♄48'38	17.29854 AU
min. Earth dist.	6749 Apr 15 13:41	26°♄17'03	17.46852 AU	direct	6755 Jul 28 08:19	22°♄44'19	
direct	6749 Jun 29 00:51	24°♄13'49		evening set	6755 Oct 31 17:24	26°♄13'15	
evening set	6749 Oct 01 12:52	27°♄38'52					
max. Earth dist.	6749 Oct 17 11:23	28°♄37'43	19.44747 AU	conjunction	6755 Nov 17 07:48	27°♄15'18	0°36'00
				minimum elong	6755 Nov 17 07:48	27°♄15'18	0°36'03
conjunction	6749 Oct 18 05:35	28°♄40'32	0°48'21	max. Earth dist.	6755 Nov 16 13:21	27°♄12'24	19.29355 AU
minimum elong	6749 Oct 18 05:35	28°♄40'32	0°48'23	morning rise	6755 Dec 03 19:22	28°♄16'59	
morning rise	6749 Nov 03 20:50	29°♄42'02			6756 Jan 03 04:07	0°♂	
	6749 Nov 08 20:34	0°♄		retrograde	6756 Mar 05 00:33	1°♂40'34	
retrograde	6750 Feb 04 23:36	3°♄05'10			6756 May 09 01:15	30°♄♄	
opposition	6750 Apr 19 20:46	1°♄01'59	0°53'14	opposition	6756 May 17 16:16	29°♄37'26	0°38'31
min. Earth dist.	6750 Apr 20 12:58	1°♄00'12	17.42801 AU	min. Earth dist.	6756 May 18 08:08	29°♄35'42	17.29081 AU
	6750 May 14 13:22	30°♄♄		direct	6756 Aug 01 11:43	27°♄31'18	
direct	6750 Jul 03 23:36	28°♄56'53			6756 Oct 18 20:16	0°♂	
	6750 Aug 22 07:35	0°♄		evening set	6756 Nov 04 22:32	1°♂00'33	
evening set	6750 Oct 06 17:11	2°♄22'48					
				conjunction	6756 Nov 21 12:06	2°♂02'34	0°32'57
conjunction	6750 Oct 23 09:35	3°♄24'35	0°47'04	minimum elong	6756 Nov 21 12:06	2°♂02'34	0°33'00
minimum elong	6750 Oct 23 09:35	3°♄24'35	0°47'07	max. Earth dist.	6756 Nov 20 17:08	1°♂59'35	19.28924 AU
max. Earth dist.	6750 Oct 22 14:02	3°♄21'32	19.40902 AU	morning rise	6756 Dec 07 22:58	3°♂04'12	
morning rise	6750 Nov 09 00:32	4°♄26'11		retrograde	6757 Mar 10 00:52	6°♂27'41	
retrograde	6751 Feb 10 00:17	7°♄49'33		opposition	6757 May 22 16:50	4°♂24'41	0°35'00
opposition	6751 Apr 24 18:52	5°♄46'19	0°51'38	min. Earth dist.	6757 May 23 08:29	4°♂22'58	17.28981 AU
min. Earth dist.	6751 Apr 25 10:51	5°♄44'34	17.39169 AU	direct	6757 Aug 06 14:21	2°♂18'32	
direct	6751 Jul 09 00:10	3°♄40'57		evening set	6757 Nov 10 03:14	5°♂48'01	
evening set	6751 Oct 11 21:40	7°♄07'39					
				conjunction	6757 Nov 26 16:12	6°♂49'59	0°29'41
conjunction	6751 Oct 28 13:58	8°♄09'34	0°45'28	minimum elong	6757 Nov 26 16:12	6°♂49'59	0°29'45
minimum elong	6751 Oct 28 13:58	8°♄09'34	0°45'30	max. Earth dist.	6757 Nov 25 22:49	6°♂47'15	19.29145 AU
max. Earth dist.	6751 Oct 27 18:54	8°♄06'35	19.37487 AU	morning rise	6757 Dec 13 02:06	7°♂51'32	
morning rise	6751 Nov 14 04:16	9°♄11'14		retrograde	6758 Mar 15 02:17	11°♂14'51	
retrograde	6752 Feb 15 00:17	12°♄34'45		opposition	6758 May 27 17:37	9°♂12'01	0°31'14
opposition	6752 Apr 28 17:38	10°♄31'30	0°49'41	min. Earth dist.	6758 May 28 08:20	9°♂10'25	17.29496 AU
min. Earth dist.	6752 Apr 29 10:32	10°♄29'38	17.35990 AU	direct	6758 Aug 11 17:52	7°♂05'55	
direct	6752 Jul 13 00:57	8°♄25'54		evening set	6758 Nov 15 08:01	10°♂35'32	
evening set	6752 Oct 16 02:37	11°♄53'17					
				conjunction	6758 Dec 01 20:05	11°♂37'25	0°26'13
conjunction	6752 Nov 01 18:22	12°♄55'17	0°43'32	minimum elong	6758 Dec 01 20:05	11°♂37'25	0°26'17
minimum elong	6752 Nov 01 18:23	12°♄55'17	0°43'36	max. Earth dist.	6758 Dec 01 02:35	11°♂34'40	19.29957 AU
max. Earth dist.	6752 Oct 31 22:02	12°♄52'06	19.34568 AU	morning rise	6758 Dec 18 05:10	12°♂38'52	
morning rise	6752 Nov 18 08:14	13°♄57'00		retrograde	6759 Mar 20 02:41	16°♂01'56	
	6752 Dec 06 05:53	15°♄		opposition	6759 Jun 01 18:32	13°♂59'17	0°27'15
retrograde	6753 Feb 19 00:01	17°♄20'37		min. Earth dist.	6759 Jun 02 09:27	13°♂57'40	17.30594 AU
opposition	6753 May 03 16:40	15°♄17'20	0°47'22	direct	6759 Aug 16 20:11	11°♂53'15	
min. Earth dist.	6753 May 04 09:14	15°♄15'31	17.33345 AU	evening set	6759 Nov 20 12:28	15°♂22'54	
	6753 May 10 07:16	15°♄♄					
direct	6753 Jul 18 02:50	13°♄11'31		conjunction	6759 Dec 06 23:48	16°♂24'39	0°22'34
	6753 Sep 21 23:24	15°♄		minimum elong	6759 Dec 06 23:48	16°♂24'39	0°22'37
evening set	6753 Oct 21 07:29	16°♄39'31		max. Earth dist.	6759 Dec 06 07:22	16°♂22'04	19.31322 AU
				morning rise	6759 Dec 23 07:55	17°♂25'58	
conjunction	6753 Nov 06 22:57	17°♄41'34	0°41'19	retrograde	6760 Mar 24 04:04	20°♂48'45	
minimum elong	6753 Nov 06 22:57	17°♄41'34	0°41'21	opposition	6760 Jun 05 19:39	18°♂46'18	0°23'05
max. Earth dist.	6753 Nov 06 03:49	17°♄38'34	19.32201 AU	min. Earth dist.	6760 Jun 06 09:21	18°♂44'48	17.32199 AU
morning rise	6753 Nov 23 11:59	18°♄43'17		direct	6760 Aug 21 00:25	16°♂40'21	
retrograde	6754 Feb 24 00:14	22°♄06'57		evening set	6760 Nov 24 16:36	20°♂09'53	

max. Earth dist.	6760 Dec 10 10:55	21° $\mathring{A}$ 08'59	19.33167 AU	max. Earth dist.	6766 Jan 03 21:28	14° $\mathring{S}$ 50'12	19.48940 AU
conjunction	6760 Dec 11 02:58	21° $\mathring{A}$ 11'30	0°18'46	morning rise	6766 Jan 20 11:32	15° $\mathring{S}$ 52'04	
minimum elong	6760 Dec 11 02:58	21° $\mathring{A}$ 11'30	0°18'50	retrograde	6766 Apr 21 20:57	19° $\mathring{S}$ 11'58	
morning rise	6760 Dec 27 10:04	22° $\mathring{A}$ 12'39		opposition	6766 Jul 05 00:57	17° $\mathring{S}$ 10'23	-0°03'58
retrograde	6761 Mar 29 03:24	25° $\mathring{A}$ 35'05		min. Earth dist.	6766 Jul 05 09:50	17° $\mathring{S}$ 09'26	17.51083 AU
opposition	6761 Jun 10 20:58	23° $\mathring{A}$ 32'48	0°18'46	direct	6766 Sep 19 20:33	15° $\mathring{S}$ 05'15	
min. Earth dist.	6761 Jun 11 10:59	23° $\mathring{A}$ 31'17	17.34285 AU	evening set	6766 Dec 24 03:31	18° $\mathring{S}$ 31'49	
direct	6761 Aug 26 02:44	21° $\mathring{A}$ 26'58		conjunction	6767 Jan 09 08:05	19° $\mathring{S}$ 32'03	-0°05'42
evening set	6761 Nov 29 20:12	24° $\mathring{A}$ 56'16		minimum elong	6767 Jan 09 08:05	19° $\mathring{S}$ 32'03	0°05'39
				behind sun begin	6767 Jan 09 01:41	19° $\mathring{S}$ 31'05	
conjunction	6761 Dec 16 05:38	25° $\mathring{A}$ 57'42	0°14'50	behind sun end	6767 Jan 09 14:28	19° $\mathring{S}$ 33'02	
minimum elong	6761 Dec 16 05:38	25° $\mathring{A}$ 57'42	0°14'53	max. Earth dist.	6767 Jan 08 22:42	19° $\mathring{S}$ 30'37	19.53343 AU
behind sun begin	6761 Dec 16 03:08	25° $\mathring{A}$ 57'19		morning rise	6767 Jan 25 09:18	20° $\mathring{S}$ 31'50	
behind sun end	6761 Dec 16 08:08	25° $\mathring{A}$ 58'05		retrograde	6767 Apr 26 16:08	23° $\mathring{S}$ 51'06	
max. Earth dist.	6761 Dec 15 14:19	25° $\mathring{A}$ 55'18	19.35486 AU	opposition	6767 Jul 10 00:47	21° $\mathring{S}$ 49'39	-0°08'29
morning rise	6762 Jan 01 11:49	26° $\mathring{A}$ 58'40		min. Earth dist.	6767 Jul 10 09:20	21° $\mathring{S}$ 48'44	17.55702 AU
	6762 Mar 06 21:45	0° $\mathring{S}$		direct	6767 Sep 24 21:50	19° $\mathring{S}$ 44'43	
retrograde	6762 Apr 03 04:12	0° $\mathring{S}$ 20'42		evening set	6767 Dec 29 02:31	23° $\mathring{S}$ 10'28	
	6762 Apr 30 19:30	30° $\mathring{R}$ $\mathring{A}$		conjunction	6768 Jan 14 05:54	24° $\mathring{S}$ 10'25	-0°09'43
opposition	6762 Jun 15 22:04	28° $\mathring{A}$ 18'34	0°14'19	minimum elong	6768 Jan 14 05:54	24° $\mathring{S}$ 10'25	0°09'39
min. Earth dist.	6762 Jun 16 10:30	28° $\mathring{A}$ 17'13	17.36814 AU	behind sun begin	6768 Jan 14 00:24	24° $\mathring{S}$ 09'35	
direct	6762 Aug 31 07:27	26° $\mathring{A}$ 12'51		behind sun end	6768 Jan 14 11:23	24° $\mathring{S}$ 11'15	
evening set	6762 Dec 04 23:09	29° $\mathring{A}$ 41'49		max. Earth dist.	6768 Jan 13 21:00	24° $\mathring{S}$ 09'03	19.58192 AU
	6762 Dec 09 20:54	0° $\mathring{S}$		morning rise	6768 Jan 30 06:20	25° $\mathring{S}$ 09'55	
conjunction	6762 Dec 21 07:41	0° $\mathring{S}$ 43'03	0°10'49	retrograde	6768 Apr 30 13:11	28° $\mathring{S}$ 28'32	
minimum elong	6762 Dec 21 07:41	0° $\mathring{S}$ 43'03	0°10'53	opposition	6768 Jul 14 00:14	26° $\mathring{S}$ 27'14	-0°12'55
behind sun begin	6762 Dec 21 02:37	0° $\mathring{S}$ 42'17		min. Earth dist.	6768 Jul 14 06:32	26° $\mathring{S}$ 26'34	17.60777 AU
behind sun end	6762 Dec 21 12:45	0° $\mathring{S}$ 43'50		direct	6768 Sep 29 00:02	24° $\mathring{S}$ 22'33	
max. Earth dist.	6762 Dec 20 17:23	0° $\mathring{S}$ 40'49	19.38228 AU	evening set	6769 Jan 02 00:17	27° $\mathring{S}$ 47'25	
morning rise	6763 Jan 06 12:49	1° $\mathring{S}$ 43'49		conjunction	6769 Jan 18 02:48	28° $\mathring{S}$ 47'04	-0°13'38
retrograde	6763 Apr 08 02:15	5° $\mathring{S}$ 05'23		minimum elong	6769 Jan 18 02:47	28° $\mathring{S}$ 47'04	0°13'35
opposition	6763 Jun 20 23:14	3° $\mathring{S}$ 03'25	0°09'48	behind sun begin	6769 Jan 17 23:06	28° $\mathring{S}$ 46'31	
min. Earth dist.	6763 Jun 21 11:59	3° $\mathring{S}$ 02'02	17.39765 AU	behind sun end	6769 Jan 18 06:28	28° $\mathring{S}$ 47'38	
direct	6763 Sep 05 09:43	0° $\mathring{S}$ 57'49		max. Earth dist.	6769 Jan 17 20:42	28° $\mathring{S}$ 46'08	19.63486 AU
evening set	6763 Dec 10 01:34	4° $\mathring{S}$ 26'20		morning rise	6769 Feb 03 02:08	29° $\mathring{S}$ 46'17	
conjunction	6763 Dec 26 09:02	5° $\mathring{S}$ 27'22	0°06'45		6769 Feb 06 21:08	0° $\mathring{\approx}$	
minimum elong	6763 Dec 26 09:02	5° $\mathring{S}$ 27'22	0°06'48	retrograde	6769 May 05 07:45	3° $\mathring{\approx}$ 04'15	
behind sun begin	6763 Dec 26 02:49	5° $\mathring{S}$ 26'24		opposition	6769 Jul 18 23:22	1° $\mathring{\approx}$ 03'09	-0°17'15
behind sun end	6763 Dec 26 15:15	5° $\mathring{S}$ 28'19		min. Earth dist.	6769 Jul 19 04:46	1° $\mathring{\approx}$ 02'34	17.66287 AU
max. Earth dist.	6763 Dec 25 19:08	5° $\mathring{S}$ 25'11	19.41391 AU		6769 Aug 14 00:58	30° $\mathring{R}$ $\mathring{S}$	
morning rise	6764 Jan 11 13:17	6° $\mathring{S}$ 27'54		direct	6769 Oct 04 00:09	28° $\mathring{S}$ 58'46	
retrograde	6764 Apr 12 01:52	9° $\mathring{S}$ 48'57			6769 Nov 22 03:44	0° $\mathring{\approx}$	
opposition	6764 Jun 24 23:59	7° $\mathring{S}$ 47'07	0°05'13	evening set	6770 Jan 06 21:21	2° $\mathring{\approx}$ 22'42	
min. Earth dist.	6764 Jun 25 10:55	7° $\mathring{S}$ 45'56	17.43122 AU	conjunction	6770 Jan 22 22:42	3° $\mathring{\approx}$ 22'02	-0°17'27
direct	6764 Sep 09 14:24	5° $\mathring{S}$ 41'40		minimum elong	6770 Jan 22 22:42	3° $\mathring{\approx}$ 22'02	0°17'24
evening set	6764 Dec 14 03:09	9° $\mathring{S}$ 09'38		max. Earth dist.	6770 Jan 22 17:11	3° $\mathring{\approx}$ 21'12	19.69217 AU
conjunction	6764 Dec 30 09:42	10° $\mathring{S}$ 10'25	0°02'38	morning rise	6770 Feb 07 21:21	4° $\mathring{\approx}$ 20'58	
minimum elong	6764 Dec 30 09:42	10° $\mathring{S}$ 10'25	0°02'42	retrograde	6770 May 10 03:30	7° $\mathring{\approx}$ 38'18	
behind sun begin	6764 Dec 30 03:02	10° $\mathring{S}$ 09'24		opposition	6770 Jul 23 21:47	5° $\mathring{\approx}$ 37'24	-0°21'25
behind sun end	6764 Dec 30 16:21	10° $\mathring{S}$ 11'26		min. Earth dist.	6770 Jul 24 01:06	5° $\mathring{\approx}$ 37'03	17.72218 AU
max. Earth dist.	6764 Dec 29 21:31	10° $\mathring{S}$ 08'31	19.44954 AU	direct	6770 Oct 08 23:18	3° $\mathring{\approx}$ 33'21	
morning rise	6765 Jan 15 12:49	11° $\mathring{S}$ 10'42		evening set	6771 Jan 11 17:17	6° $\mathring{\approx}$ 56'20	
retrograde	6765 Apr 16 22:40	14° $\mathring{S}$ 31'12		conjunction	6771 Jan 27 17:52	7° $\mathring{\approx}$ 55'22	-0°21'08
opposition	6765 Jun 30 00:45	12° $\mathring{S}$ 29'30	0°00'37	minimum elong	6771 Jan 27 17:52	7° $\mathring{\approx}$ 55'22	0°21'05
min. Earth dist.	6765 Jun 30 11:42	12° $\mathring{S}$ 28'19	17.46892 AU	max. Earth dist.	6771 Jan 27 15:03	7° $\mathring{\approx}$ 54'56	19.75325 AU
desc. node	6765 Aug 18 10:12	10° $\mathring{S}$ 43'13		morning rise	6771 Feb 12 15:33	8° $\mathring{\approx}$ 53'59	
direct	6765 Sep 14 16:22	10° $\mathring{S}$ 24'12		retrograde	6771 May 14 22:01	12° $\mathring{\approx}$ 10'39	
evening set	6765 Dec 19 03:46	13° $\mathring{S}$ 51'30		opposition	6771 Jul 28 19:52	10° $\mathring{\approx}$ 10'00	-0°25'26
conjunction	6766 Jan 04 09:13	14° $\mathring{S}$ 52'01	-0°01'36	min. Earth dist.	6771 Jul 28 22:09	10° $\mathring{\approx}$ 09'46	17.78474 AU
minimum elong	6766 Jan 04 09:12	14° $\mathring{S}$ 52'01	0°01'32	direct	6771 Oct 13 22:19	8° $\mathring{\approx}$ 06'20	
behind sun begin	6766 Jan 04 02:33	14° $\mathring{S}$ 51'00		evening set	6772 Jan 16 12:29	11° $\mathring{\approx}$ 28'18	
behind sun end	6766 Jan 04 15:52	14° $\mathring{S}$ 53'02					

conjunction	6772 Feb 01 11:57	12° $\approx$ 27'01 -0°24'40	minimum elong	6778 Feb 27 06:59	8° $\approx$ 59'30 0°41'40
minimum elong	6772 Feb 01 11:57	12° $\approx$ 27'01 0°24'38	max. Earth dist.	6778 Feb 27 12:24	9° $\approx$ 00'19 20.22189 AU
max. Earth dist.	6772 Feb 01 09:38	12° $\approx$ 26'39 19.81724 AU	morning rise	6778 Mar 15 00:24	9° $\approx$ 56'06
morning rise	6772 Feb 17 08:59	13° $\approx$ 25'21	retrograde	6778 Jun 14 16:02	13° $\approx$ 08'08
	6772 Mar 16 16:14	15° $\approx$	opposition	6778 Aug 29 14:55	11° $\approx$ 08'44 -0°47'25
retrograde	6772 May 18 16:34	16° $\approx$ 41'22	min. Earth dist.	6778 Aug 29 09:00	11° $\approx$ 09'20 18.25483 AU
	6772 Jul 25 02:31	15° $\approx$	direct	6778 Nov 14 19:41	9° $\approx$ 07'39
opposition	6772 Aug 01 17:26	14° $\approx$ 40'57 -0°29'16	evening set	6779 Feb 16 00:52	12° $\approx$ 21'39
min. Earth dist.	6772 Aug 01 18:04	14° $\approx$ 40'53 17.84999 AU			
direct	6772 Oct 17 19:19	12° $\approx$ 37'40	conjunction	6779 Mar 03 19:11	13° $\approx$ 18'09 -0°43'44
	6773 Jan 03 08:43	15° $\approx$	minimum elong	6779 Mar 03 19:10	13° $\approx$ 18'09 0°43'43
evening set	6773 Jan 20 06:39	15° $\approx$ 58'36	max. Earth dist.	6779 Mar 04 02:11	13° $\approx$ 19'12 20.28750 AU
			morning rise	6779 Mar 19 12:10	14° $\approx$ 14'29
conjunction	6773 Feb 05 05:22	16° $\approx$ 56'59 -0°28'02	retrograde	6779 Jun 19 05:13	17° $\approx$ 25'51
minimum elong	6773 Feb 05 05:22	16° $\approx$ 56'59 0°27'59	opposition	6779 Sep 03 08:07	15° $\approx$ 26'32 -0°49'30
max. Earth dist.	6773 Feb 05 05:34	16° $\approx$ 57'01 19.88348 AU	min. Earth dist.	6779 Sep 03 00:24	15° $\approx$ 27'20 18.31979 AU
morning rise	6773 Feb 21 01:30	17° $\approx$ 55'01	direct	6779 Nov 19 14:17	13° $\approx$ 25'46
retrograde	6773 May 23 10:33	21° $\approx$ 10'22	evening set	6780 Feb 20 12:36	16° $\approx$ 38'33
opposition	6773 Aug 06 14:32	19° $\approx$ 10'11 -0°32'54			
min. Earth dist.	6773 Aug 06 13:57	19° $\approx$ 10'15 17.91698 AU	conjunction	6780 Mar 07 06:16	17° $\approx$ 34'47 -0°45'30
direct	6773 Oct 22 17:47	17° $\approx$ 07'19	minimum elong	6780 Mar 07 06:16	17° $\approx$ 34'47 0°45'29
evening set	6774 Jan 24 23:58	20° $\approx$ 27'08	max. Earth dist.	6780 Mar 07 14:07	17° $\approx$ 35'57 20.35191 AU
			morning rise	6780 Mar 22 23:00	18° $\approx$ 30'52
conjunction	6774 Feb 09 21:40	21° $\approx$ 25'12 -0°31'12	retrograde	6780 Jun 22 17:19	21° $\approx$ 41'36
minimum elong	6774 Feb 09 21:40	21° $\approx$ 25'12 0°31'10	opposition	6780 Sep 07 00:46	19° $\approx$ 42'21 -0°51'18
max. Earth dist.	6774 Feb 09 22:19	21° $\approx$ 25'18 19.95107 AU	min. Earth dist.	6780 Sep 06 16:35	19° $\approx$ 43'11 18.38390 AU
morning rise	6774 Feb 25 17:17	22° $\approx$ 22'57	direct	6780 Nov 23 05:37	17° $\approx$ 41'52
retrograde	6774 May 28 03:35	25° $\approx$ 37'39	evening set	6781 Feb 23 23:23	20° $\approx$ 53'29
opposition	6774 Aug 11 11:05	23° $\approx$ 37'40 -0°36'18			
min. Earth dist.	6774 Aug 11 09:19	23° $\approx$ 37'51 17.98509 AU	conjunction	6781 Mar 11 16:40	21° $\approx$ 49'26 -0°47'00
direct	6774 Oct 27 13:41	21° $\approx$ 35'11	minimum elong	6781 Mar 11 16:40	21° $\approx$ 49'26 0°47'00
evening set	6775 Jan 29 16:22	24° $\approx$ 53'53	max. Earth dist.	6781 Mar 12 02:13	21° $\approx$ 50'52 20.41563 AU
			morning rise	6781 Mar 27 09:07	22° $\approx$ 45'17
conjunction	6775 Feb 14 13:23	25° $\approx$ 51'37 -0°34'10	retrograde	6781 Jun 27 05:34	25° $\approx$ 55'25
minimum elong	6775 Feb 14 13:23	25° $\approx$ 51'37 0°34'08	opposition	6781 Sep 11 16:29	23° $\approx$ 56'14 -0°52'48
max. Earth dist.	6775 Feb 14 16:08	25° $\approx$ 52'02 20.01936 AU	min. Earth dist.	6781 Sep 11 06:09	23° $\approx$ 57'17 18.44727 AU
morning rise	6775 Mar 02 08:13	26° $\approx$ 49'04	direct	6781 Nov 27 22:00	21° $\approx$ 56'04
	6775 May 22 00:26	0° $\approx$	evening set	6782 Feb 28 09:23	25° $\approx$ 06'34
retrograde	6775 Jun 01 20:05	0° $\approx$ 03'05			
	6775 Jun 12 15:56	30° $\approx$	conjunction	6782 Mar 16 02:12	26° $\approx$ 02'15 -0°48'13
opposition	6775 Aug 16 06:54	28° $\approx$ 03'18 -0°39'28	minimum elong	6782 Mar 16 02:12	26° $\approx$ 02'15 0°48'14
min. Earth dist.	6775 Aug 16 03:50	28° $\approx$ 03'37 18.05336 AU	max. Earth dist.	6782 Mar 16 12:48	26° $\approx$ 03'50 20.47860 AU
direct	6775 Nov 01 11:24	26° $\approx$ 01'13	morning rise	6782 Mar 31 18:32	26° $\approx$ 57'52
evening set	6776 Feb 03 08:02	29° $\approx$ 18'45		6782 Jun 14 16:30	0° $\approx$
	6776 Feb 14 17:52	0° $\approx$	retrograde	6782 Jul 01 16:18	0° $\approx$ 07'27
				6782 Jul 18 21:58	30° $\approx$
conjunction	6776 Feb 19 04:08	0° $\approx$ 16'11 -0°36'55	opposition	6782 Sep 16 07:41	28° $\approx$ 08'22 -0°54'00
minimum elong	6776 Feb 19 04:08	0° $\approx$ 16'11 0°36'53	min. Earth dist.	6782 Sep 15 20:59	28° $\approx$ 09'27 18.50998 AU
max. Earth dist.	6776 Feb 19 07:15	0° $\approx$ 16'39 20.08754 AU	direct	6782 Dec 02 11:14	26° $\approx$ 08'32
morning rise	6776 Mar 05 22:29	1° $\approx$ 13'20	evening set	6783 Mar 04 18:35	29° $\approx$ 17'57
retrograde	6776 Jun 05 11:32	4° $\approx$ 26'42		6783 Mar 16 16:56	0° $\approx$
opposition	6776 Aug 20 02:21	2° $\approx$ 27'04 -0°42'23			
min. Earth dist.	6776 Aug 19 22:28	2° $\approx$ 27'28 18.12146 AU	conjunction	6783 Mar 20 11:08	0° $\approx$ 13'24 -0°49'11
direct	6776 Nov 05 06:09	0° $\approx$ 25'20	minimum elong	6783 Mar 20 11:08	0° $\approx$ 13'24 0°49'11
evening set	6777 Feb 06 22:28	3° $\approx$ 41'43	max. Earth dist.	6783 Mar 20 23:10	0° $\approx$ 15'11 20.54086 AU
			morning rise	6783 Apr 05 03:17	1° $\approx$ 08'48
conjunction	6777 Feb 22 17:59	4° $\approx$ 38'49 -0°39'26	retrograde	6783 Jul 06 03:56	4° $\approx$ 17'51
minimum elong	6777 Feb 22 17:59	4° $\approx$ 38'49 0°39'25	opposition	6783 Sep 20 22:01	2° $\approx$ 18'53 -0°54'54
max. Earth dist.	6777 Feb 22 22:56	4° $\approx$ 39'34 20.15525 AU	min. Earth dist.	6783 Sep 20 09:11	2° $\approx$ 20'11 18.57167 AU
morning rise	6777 Mar 10 11:45	5° $\approx$ 35'42	direct	6783 Dec 07 01:50	0° $\approx$ 19'26
retrograde	6777 Jun 10 02:17	8° $\approx$ 48'24	evening set	6784 Mar 08 03:10	3° $\approx$ 27'49
opposition	6777 Aug 24 21:02	6° $\approx$ 48'54 -0°45'02			
min. Earth dist.	6777 Aug 24 15:34	6° $\approx$ 49'28 18.18864 AU	conjunction	6784 Mar 23 19:23	4° $\approx$ 23'02 -0°49'53
direct	6777 Nov 10 02:43	4° $\approx$ 47'31	minimum elong	6784 Mar 23 19:23	4° $\approx$ 23'02 0°49'54
evening set	6778 Feb 11 12:13	8° $\approx$ 02'41	max. Earth dist.	6784 Mar 24 08:30	4° $\approx$ 24'58 20.60190 AU
			morning rise	6784 Apr 08 11:33	5° $\approx$ 18'15
conjunction	6778 Feb 27 06:59	8° $\approx$ 59'30 -0°41'43	retrograde	6784 Jul 09 13:36	8° $\approx$ 26'50

opposition	6784 Sep 24 12:02	6° $\Upsilon$ 28'01 -0°55'30	conjunction	6791 Apr 21 16:37	2° $\text{♄}$ 57'52 -0°47'37
min. Earth dist.	6784 Sep 23 23:05	6° $\Upsilon$ 29'19 18.63207 AU	minimum elong	6791 Apr 21 16:37	2° $\text{♄}$ 57'52 0°47'40
direct	6784 Dec 10 13:06	4° $\Upsilon$ 28'55	max. Earth dist.	6791 Apr 22 09:43	3° $\text{♄}$ 00'21 20.94936 AU
evening set	6785 Mar 12 10:57	7° $\Upsilon$ 36'18	morning rise	6791 May 07 10:17	3° $\text{♄}$ 52'12
			retrograde	6791 Aug 08 08:09	6° $\text{♄}$ 58'26
conjunction	6785 Mar 28 03:02	8° $\Upsilon$ 31'19 -0°50'19	opposition	6791 Oct 24 22:22	5° $\text{♄}$ 00'12 -0°51'57
minimum elong	6785 Mar 28 03:02	8° $\Upsilon$ 31'19 0°50'20	min. Earth dist.	6791 Oct 24 05:05	5° $\text{♄}$ 01'56 18.96622 AU
max. Earth dist.	6785 Mar 28 17:19	8° $\Upsilon$ 33'25 20.66144 AU	direct	6792 Jan 09 11:23	3° $\text{♄}$ 03'06
morning rise	6785 Apr 12 19:13	9° $\Upsilon$ 26'21	evening set	6792 Apr 09 05:16	6° $\text{♄}$ 04'48
retrograde	6785 Jul 14 00:53	12° $\Upsilon$ 34'30			
min. Earth dist.	6785 Sep 28 10:22	10° $\Upsilon$ 37'19 18.69049 AU	conjunction	6792 Apr 24 21:46	6° $\text{♄}$ 58'50 -0°46'19
opposition	6785 Sep 29 01:15	10° $\Upsilon$ 35'49 -0°55'50	minimum elong	6792 Apr 24 21:46	6° $\text{♄}$ 58'50 0°46'22
direct	6785 Dec 15 01:56	8° $\Upsilon$ 37'06	max. Earth dist.	6792 Apr 25 15:12	7° $\text{♄}$ 01'21 20.98124 AU
evening set	6786 Mar 16 18:20	11° $\Upsilon$ 43'33	morning rise	6792 May 10 15:53	7° $\text{♄}$ 53'06
			retrograde	6792 Aug 11 14:48	10° $\text{♄}$ 59'05
conjunction	6786 Apr 01 10:15	12° $\Upsilon$ 38'22 -0°50'30	opposition	6792 Oct 28 08:20	9° $\text{♄}$ 00'48 -0°50'23
minimum elong	6786 Apr 01 10:15	12° $\Upsilon$ 38'22 0°50'31	min. Earth dist.	6792 Oct 27 15:55	9° $\text{♄}$ 02'26 18.99574 AU
max. Earth dist.	6786 Apr 02 01:23	12° $\Upsilon$ 40'35 20.71857 AU	direct	6793 Jan 12 19:01	7° $\text{♄}$ 03'50
morning rise	6786 Apr 17 02:33	13° $\Upsilon$ 33'15	evening set	6793 Apr 13 09:41	10° $\text{♄}$ 04'52
retrograde	6786 Jul 18 09:28	16° $\Upsilon$ 41'00			
opposition	6786 Oct 03 13:56	14° $\Upsilon$ 42'28 -0°55'52	conjunction	6793 Apr 29 02:34	10° $\text{♄}$ 58'50 -0°44'48
min. Earth dist.	6786 Oct 02 23:23	14° $\Upsilon$ 43'55 18.74635 AU	minimum elong	6793 Apr 29 02:34	10° $\text{♄}$ 58'50 0°44'52
direct	6786 Dec 19 11:49	12° $\Upsilon$ 44'05	max. Earth dist.	6793 Apr 29 20:02	11° $\text{♄}$ 01'21 21.00854 AU
evening set	6787 Mar 21 01:11	15° $\Upsilon$ 49'39	morning rise	6793 May 14 21:13	11° $\text{♄}$ 53'04
			retrograde	6793 Aug 16 00:23	14° $\text{♄}$ 58'50
conjunction	6787 Apr 05 17:04	16° $\Upsilon$ 44'17 -0°50'25	opposition	6793 Nov 01 17:36	13° $\text{♄}$ 00'28 -0°48'34
minimum elong	6787 Apr 05 17:04	16° $\Upsilon$ 44'17 0°50'26	min. Earth dist.	6793 Nov 01 00:01	13° $\text{♄}$ 02'13 19.02078 AU
max. Earth dist.	6787 Apr 06 08:54	16° $\Upsilon$ 46'37 20.77294 AU	direct	6794 Jan 17 03:27	11° $\text{♄}$ 03'35
morning rise	6787 Apr 21 09:30	17° $\Upsilon$ 39'02	evening set	6794 Apr 17 13:58	14° $\text{♄}$ 04'03
retrograde	6787 Jul 22 20:17	20° $\Upsilon$ 46'25			
min. Earth dist.	6787 Oct 07 09:55	18° $\Upsilon$ 49'38 18.79900 AU	conjunction	6794 May 03 07:11	14° $\text{♄}$ 57'58 -0°43'04
opposition	6787 Oct 08 02:08	18° $\Upsilon$ 48'00 -0°55'37	minimum elong	6794 May 03 07:11	14° $\text{♄}$ 57'58 0°43'06
direct	6787 Dec 23 22:56	16° $\Upsilon$ 49'58			
evening set	6788 Mar 24 07:30	19° $\Upsilon$ 54'40	max. Earth dist.	6794 May 04 01:05	15° $\text{♄}$ 00'32 21.03138 AU
			morning rise	6794 May 19 02:21	15° $\text{♄}$ 52'10
conjunction	6788 Apr 08 23:20	20° $\Upsilon$ 49'10 -0°50'05	retrograde	6794 Aug 20 06:13	18° $\text{♄}$ 57'46
minimum elong	6788 Apr 08 23:20	20° $\Upsilon$ 49'10 0°50'07	min. Earth dist.	6794 Nov 05 09:45	17° $\text{♄}$ 01'00 19.04168 AU
max. Earth dist.	6788 Apr 09 15:52	20° $\Upsilon$ 51'34 20.82367 AU	opposition	6794 Nov 06 02:30	16° $\text{♄}$ 59'20 -0°46'32
morning rise	6788 Apr 24 15:59	21° $\Upsilon$ 43'47	direct	6795 Jan 21 09:38	15° $\text{♄}$ 02'32
retrograde	6788 Jul 26 04:29	24° $\Upsilon$ 50'51	evening set	6795 Apr 21 18:01	18° $\text{♄}$ 02'30
opposition	6788 Oct 11 14:03	22° $\Upsilon$ 52'32 -0°55'06			
min. Earth dist.	6788 Oct 10 22:25	22° $\Upsilon$ 54'06 18.84786 AU	conjunction	6795 May 07 11:38	18° $\text{♄}$ 56'22 -0°41'08
direct	6788 Dec 27 08:03	20° $\Upsilon$ 54'48	minimum elong	6795 May 07 11:38	18° $\text{♄}$ 56'22 0°41'11
evening set	6789 Mar 28 13:30	23° $\Upsilon$ 58'41	max. Earth dist.	6795 May 08 05:35	18° $\text{♄}$ 58'57 21.05045 AU
			morning rise	6795 May 23 07:23	19° $\text{♄}$ 50'33
conjunction	6789 Apr 13 05:26	24° $\Upsilon$ 53'02 -0°49'30	retrograde	6795 Aug 24 15:15	22° $\text{♄}$ 56'03
minimum elong	6789 Apr 13 05:26	24° $\Upsilon$ 53'02 0°49'32	opposition	6795 Nov 10 11:01	20° $\text{♄}$ 57'33 -0°44'17
max. Earth dist.	6789 Apr 13 22:15	24° $\Upsilon$ 55'29 20.87041 AU	min. Earth dist.	6795 Nov 09 17:05	20° $\text{♄}$ 59'20 19.05887 AU
morning rise	6789 Apr 28 22:22	25° $\Upsilon$ 47'33	direct	6796 Jan 25 17:33	19° $\text{♄}$ 00'49
retrograde	6789 Jul 30 14:41	28° $\Upsilon$ 54'18	evening set	6796 Apr 24 21:49	22° $\text{♄}$ 00'21
min. Earth dist.	6789 Oct 15 08:13	26° $\Upsilon$ 57'45 18.89231 AU			
opposition	6789 Oct 16 01:11	26° $\Upsilon$ 56'04 -0°54'19	conjunction	6796 May 10 15:54	22° $\text{♄}$ 54'13 -0°39'00
direct	6789 Dec 31 17:49	24° $\Upsilon$ 58'35	minimum elong	6796 May 10 15:54	22° $\text{♄}$ 54'13 0°39'03
evening set	6790 Apr 01 19:10	28° $\Upsilon$ 01'43	max. Earth dist.	6796 May 11 10:20	22° $\text{♄}$ 56'52 21.06573 AU
			morning rise	6796 May 26 12:17	23° $\text{♄}$ 48'25
conjunction	6790 Apr 17 11:13	28° $\Upsilon$ 55'56 -0°48'41	retrograde	6796 Aug 27 21:32	26° $\text{♄}$ 53'53
minimum elong	6790 Apr 17 11:13	28° $\Upsilon$ 55'56 0°48'43	opposition	6796 Nov 13 19:23	24° $\text{♄}$ 55'18 -0°41'49
max. Earth dist.	6790 Apr 18 04:20	28° $\Upsilon$ 58'25 20.91236 AU	min. Earth dist.	6796 Nov 13 02:18	24° $\text{♄}$ 57'00 19.07233 AU
morning rise	6790 May 03 04:30	29° $\Upsilon$ 50'21	direct	6797 Jan 28 22:31	22° $\text{♄}$ 58'40
	6790 May 06 00:51	0° $\text{♄}$	evening set	6797 Apr 29 01:41	25° $\text{♄}$ 57'51
retrograde	6790 Aug 03 22:21	2° $\text{♄}$ 56'50			
opposition	6790 Oct 20 12:05	0° $\text{♄}$ 58'37 -0°53'15	conjunction	6797 May 14 20:19	26° $\text{♄}$ 51'43 -0°36'41
min. Earth dist.	6790 Oct 19 20:00	1° $\text{♄}$ 00'14 18.93182 AU	minimum elong	6797 May 14 20:19	26° $\text{♄}$ 51'43 0°36'44
	6790 Nov 15 03:21	30° $\text{♄}$	max. Earth dist.	6797 May 15 14:36	26° $\text{♄}$ 54'20 21.07741 AU
direct	6791 Jan 05 02:17	29° $\Upsilon$ 01'22	morning rise	6797 May 30 17:24	27° $\text{♄}$ 45'57
	6791 Feb 22 23:24	0° $\text{♄}$		6797 Jul 16 16:43	0° $\text{♄}$
evening set	6791 Apr 06 00:22	2° $\text{♄}$ 03'45	retrograde	6797 Sep 01 06:03	0° $\text{♄}$ 51'24



	6797 Oct 19 06:29	30° $\mathbb{R}$ $\mathbb{B}$		conjunction	6804 Jun 11 08:54	24° $\mathbb{II}$ 38'07 -0°16'19
min. Earth dist.	6797 Nov 17 09:11	28° $\mathbb{B}$ 54'35 19.08206 AU		minimum elong	6804 Jun 11 08:54	24° $\mathbb{II}$ 38'07 0°16'22
opposition	6797 Nov 18 03:10	28° $\mathbb{B}$ 52'47 -0°39'09		max. Earth dist.	6804 Jun 12 00:00	24° $\mathbb{II}$ 40'16 21.03421 AU
direct	6798 Feb 02 05:42	26° $\mathbb{B}$ 56'13		morning rise	6804 Jun 27 11:26	25° $\mathbb{II}$ 33'02
evening set	6798 May 03 05:36	29° $\mathbb{B}$ 55'09		retrograde	6804 Sep 29 15:27	28° $\mathbb{II}$ 39'51
	6798 May 04 16:13	0° $\mathbb{II}$		opposition	6804 Dec 16 08:33	26° $\mathbb{II}$ 40'46 -0°16'07
				min. Earth dist.	6804 Dec 15 19:20	26° $\mathbb{II}$ 42'06 19.02128 AU
conjunction	6798 May 19 00:47	0° $\mathbb{II}$ 49'03 -0°34'12		direct	6805 Mar 01 19:34	24° $\mathbb{II}$ 44'12
minimum elong	6798 May 19 00:47	0° $\mathbb{II}$ 49'03 0°34'16		evening set	6805 May 30 15:22	27° $\mathbb{II}$ 43'19
max. Earth dist.	6798 May 19 19:18	0° $\mathbb{II}$ 51'42 21.08511 AU				
morning rise	6798 Jun 03 22:34	1° $\mathbb{II}$ 43'20		conjunction	6805 Jun 15 15:34	28° $\mathbb{II}$ 37'55 -0°12'57
retrograde	6798 Sep 05 12:57	4° $\mathbb{II}$ 48'50		minimum elong	6805 Jun 15 15:34	28° $\mathbb{II}$ 37'55 0°13'01
opposition	6798 Nov 22 11:02	2° $\mathbb{II}$ 50'11 -0°36'19		behind sun begin	6805 Jun 15 11:34	28° $\mathbb{II}$ 37'22
min. Earth dist.	6798 Nov 21 18:07	2° $\mathbb{II}$ 51'53 19.08775 AU		behind sun end	6805 Jun 15 19:35	28° $\mathbb{II}$ 38'29
direct	6799 Feb 06 10:16	0° $\mathbb{II}$ 53'43		max. Earth dist.	6805 Jun 16 05:19	28° $\mathbb{II}$ 39'53 21.00691 AU
evening set	6799 May 07 09:28	3° $\mathbb{II}$ 52'27		morning rise	6805 Jul 01 19:01	29° $\mathbb{II}$ 32'59
					6805 Jul 09 23:37	0° $\mathbb{B}$
conjunction	6799 May 23 05:16	4° $\mathbb{II}$ 46'24 -0°31'34		retrograde	6805 Oct 04 01:49	2° $\mathbb{B}$ 40'08
minimum elong	6799 May 23 05:16	4° $\mathbb{II}$ 46'24 0°31'37		opposition	6805 Dec 20 15:56	0° $\mathbb{B}$ 40'52 -0°12'21
max. Earth dist.	6799 May 23 23:25	4° $\mathbb{II}$ 48'59 21.08885 AU		min. Earth dist.	6805 Dec 20 03:00	0° $\mathbb{B}$ 42'10 18.99136 AU
morning rise	6799 Jun 08 03:48	5° $\mathbb{II}$ 40'44			6806 Jan 06 21:18	30° $\mathbb{R}$ $\mathbb{II}$
retrograde	6799 Sep 09 21:42	8° $\mathbb{II}$ 46'22		direct	6806 Mar 06 02:08	28° $\mathbb{II}$ 44'06
opposition	6799 Nov 26 18:43	6° $\mathbb{II}$ 47'41 -0°33'19			6806 Apr 30 15:52	0° $\mathbb{B}$
min. Earth dist.	6799 Nov 26 01:06	6° $\mathbb{II}$ 49'27 19.08930 AU		evening set	6806 Jun 03 21:34	1° $\mathbb{B}$ 43'31
direct	6800 Feb 10 16:32	4° $\mathbb{II}$ 51'16				
evening set	6800 May 10 13:41	7° $\mathbb{II}$ 49'54		conjunction	6806 Jun 19 22:36	2° $\mathbb{B}$ 38'17 -0°09'31
				minimum elong	6806 Jun 19 22:36	2° $\mathbb{B}$ 38'17 0°09'34
conjunction	6800 May 26 10:07	8° $\mathbb{II}$ 43'55 -0°28'46		behind sun begin	6806 Jun 19 17:07	2° $\mathbb{B}$ 37'31
minimum elong	6800 May 26 10:07	8° $\mathbb{II}$ 43'55 0°28'50		behind sun end	6806 Jun 20 04:06	2° $\mathbb{B}$ 39'03
max. Earth dist.	6800 May 27 04:17	8° $\mathbb{II}$ 46'31 21.08814 AU		max. Earth dist.	6806 Jun 20 11:52	2° $\mathbb{B}$ 40'10 20.97455 AU
morning rise	6800 Jun 11 09:23	9° $\mathbb{II}$ 38'21		morning rise	6806 Jul 06 02:52	3° $\mathbb{B}$ 33'31
retrograde	6800 Sep 13 05:01	12° $\mathbb{II}$ 44'08		retrograde	6806 Oct 08 09:08	6° $\mathbb{B}$ 41'00
min. Earth dist.	6800 Nov 29 10:02	10° $\mathbb{II}$ 47'03 19.08630 AU		opposition	6806 Dec 24 23:36	4° $\mathbb{B}$ 41'33 -0°08'30
opposition	6800 Nov 30 02:20	10° $\mathbb{II}$ 45'25 -0°30'08		min. Earth dist.	6806 Dec 24 12:11	4° $\mathbb{B}$ 42'42 18.95675 AU
direct	6801 Feb 13 21:17	8° $\mathbb{II}$ 49'04		direct	6807 Mar 10 07:26	2° $\mathbb{B}$ 44'35
evening set	6801 May 14 18:06	11° $\mathbb{II}$ 47'40		evening set	6807 Jun 08 04:01	5° $\mathbb{B}$ 44'19
conjunction	6801 May 30 15:15	12° $\mathbb{II}$ 41'46 -0°25'50		conjunction	6807 Jun 24 05:54	6° $\mathbb{B}$ 39'16 -0°06'01
minimum elong	6801 May 30 15:15	12° $\mathbb{II}$ 41'46 0°25'53		minimum elong	6807 Jun 24 05:53	6° $\mathbb{B}$ 39'15 0°06'06
max. Earth dist.	6801 May 31 08:36	12° $\mathbb{II}$ 44'15 21.08283 AU		behind sun begin	6807 Jun 23 23:35	6° $\mathbb{B}$ 38'23
morning rise	6801 Jun 15 15:22	13° $\mathbb{II}$ 36'17		behind sun end	6807 Jun 24 12:12	6° $\mathbb{B}$ 40'08
retrograde	6801 Sep 17 14:25	16° $\mathbb{II}$ 42'18		max. Earth dist.	6807 Jun 24 17:59	6° $\mathbb{B}$ 40'59 20.93803 AU
opposition	6801 Dec 04 09:48	14° $\mathbb{II}$ 43'32 -0°26'49		morning rise	6807 Jul 10 11:05	7° $\mathbb{B}$ 34'41
min. Earth dist.	6801 Dec 03 17:17	14° $\mathbb{II}$ 45'11 19.07839 AU		retrograde	6807 Oct 12 20:00	10° $\mathbb{B}$ 42'34
direct	6802 Feb 18 02:54	12° $\mathbb{II}$ 47'11		opposition	6807 Dec 29 07:18	8° $\mathbb{B}$ 42'53 -0°04'36
evening set	6802 May 18 22:56	15° $\mathbb{II}$ 45'51		min. Earth dist.	6807 Dec 28 20:04	8° $\mathbb{B}$ 44'02 18.91832 AU
				direct	6808 Mar 13 14:28	6° $\mathbb{B}$ 45'42
conjunction	6802 Jun 03 20:46	16° $\mathbb{II}$ 40'03 -0°22'46		evening set	6808 Jun 11 11:07	9° $\mathbb{B}$ 45'50
minimum elong	6802 Jun 03 20:46	16° $\mathbb{II}$ 40'03 0°22'50				
max. Earth dist.	6802 Jun 04 13:41	16° $\mathbb{II}$ 42'27 21.07216 AU		conjunction	6808 Jun 27 13:52	10° $\mathbb{B}$ 40'59 -0°02'29
morning rise	6802 Jun 19 21:36	17° $\mathbb{II}$ 34'41		minimum elong	6808 Jun 27 13:52	10° $\mathbb{B}$ 40'59 0°02'32
retrograde	6802 Sep 21 21:51	20° $\mathbb{II}$ 40'56		behind sun begin	6808 Jun 27 07:14	10° $\mathbb{B}$ 40'04
opposition	6802 Dec 08 17:20	18° $\mathbb{II}$ 42'07 -0°23'22		behind sun end	6808 Jun 27 20:31	10° $\mathbb{B}$ 41'55
min. Earth dist.	6802 Dec 08 02:24	18° $\mathbb{II}$ 43'37 19.06499 AU		max. Earth dist.	6808 Jun 28 01:37	10° $\mathbb{B}$ 42'40 20.89777 AU
direct	6803 Feb 22 08:12	16° $\mathbb{II}$ 45'45		morning rise	6808 Jul 13 19:52	11° $\mathbb{B}$ 36'36
evening set	6803 May 23 04:05	19° $\mathbb{II}$ 44'30		retrograde	6808 Oct 16 03:59	14° $\mathbb{B}$ 44'54
				opposition	6809 Jan 01 15:04	12° $\mathbb{B}$ 45'02 -0°00'41
conjunction	6803 Jun 08 02:39	20° $\mathbb{II}$ 38'49 -0°19'36		min. Earth dist.	6809 Jan 01 05:15	12° $\mathbb{B}$ 46'02 18.87643 AU
minimum elong	6803 Jun 08 02:39	20° $\mathbb{II}$ 38'49 0°19'39		asc. node	6809 Mar 05 20:17	10° $\mathbb{B}$ 51'17
max. Earth dist.	6803 Jun 08 18:22	20° $\mathbb{II}$ 41'04 21.05609 AU		direct	6809 Mar 17 20:01	10° $\mathbb{B}$ 47'36
morning rise	6803 Jun 24 04:21	21° $\mathbb{II}$ 33'35		evening set	6809 Jun 15 18:46	13° $\mathbb{B}$ 48'14
retrograde	6803 Sep 26 07:55	24° $\mathbb{II}$ 40'07				
min. Earth dist.	6803 Dec 12 09:59	22° $\mathbb{II}$ 42'41 19.04602 AU		conjunction	6809 Jul 01 22:21	14° $\mathbb{B}$ 43'35 0°01'11
opposition	6803 Dec 13 00:53	22° $\mathbb{II}$ 41'11 -0°19'48		minimum elong	6809 Jul 01 22:22	14° $\mathbb{B}$ 43'35 0°01'07
direct	6804 Feb 26 14:05	20° $\mathbb{II}$ 44'44		behind sun begin	6809 Jul 01 15:43	14° $\mathbb{B}$ 42'39
evening set	6804 May 26 09:30	23° $\mathbb{II}$ 43'39		behind sun end	6809 Jul 02 05:01	14° $\mathbb{B}$ 44'31
				max. Earth dist.	6809 Jul 02 08:44	14° $\mathbb{B}$ 45'04 20.85446 AU

morning rise	6809 Jul 18 05:18	15°☾39'24		conjunction	6815 Jul 27 16:19	9°♈26'03	0°22'06
retrograde	6809 Oct 20 15:16	18°☾48'11		minimum elong	6815 Jul 27 16:19	9°♈26'03	0°22'04
opposition	6810 Jan 05 23:02	16°☾48'07	0°03'16	max. Earth dist.	6815 Jul 27 19:50	9°♈26'34	20.54105 AU
min. Earth dist.	6810 Jan 05 13:29	16°☾49'05	18.83166 AU	morning rise	6815 Aug 13 04:01	10°♈23'20	
direct	6810 Mar 22 03:03	14°☾50'27		retrograde	6815 Nov 15 17:27	13°♈35'45	
evening set	6810 Jun 20 02:55	17°☾51'39		opposition	6816 Jan 31 06:31	11°♈34'46	0°26'19
				min. Earth dist.	6816 Jan 31 03:27	11°♈35'05	18.51059 AU
conjunction	6810 Jul 06 07:25	18°☾47'13	0°04'47	direct	6816 Apr 15 00:57	9°♈35'37	
minimum elong	6810 Jul 06 07:24	18°☾47'13	0°04'44	evening set	6816 Jul 14 20:54	12°♈41'38	
behind sun begin	6810 Jul 06 00:53	18°☾46'18					
behind sun end	6810 Jul 06 13:55	18°☾48'08		conjunction	6816 Jul 31 06:34	13°♈38'46	0°25'22
max. Earth dist.	6810 Jul 06 17:27	18°☾48'39	20.80822 AU	minimum elong	6816 Jul 31 06:34	13°♈38'46	0°25'19
morning rise	6810 Jul 22 15:03	19°☾43'15		max. Earth dist.	6816 Jul 31 09:17	13°♈39'10	20.47956 AU
retrograde	6810 Oct 25 00:48	22°☾52'33		morning rise	6816 Aug 16 18:48	14°♈36'19	
opposition	6811 Jan 10 07:21	20°☾52'18	0°07'13		6816 Aug 23 18:58	15°♈	
min. Earth dist.	6811 Jan 09 23:03	20°☾53'09	18.78413 AU	retrograde	6816 Nov 19 07:43	17°♈49'24	
direct	6811 Mar 26 09:13	18°☾54'24		opposition	6817 Feb 03 17:22	15°♈48'15	0°29'53
evening set	6811 Jun 24 11:49	21°☾56'13		min. Earth dist.	6817 Feb 03 15:53	15°♈48'24	18.44759 AU
					6817 Feb 23 12:09	15°♈	
conjunction	6811 Jul 10 17:08	22°☾52'01	0°08'19	direct	6817 Apr 19 10:26	13°♈48'48	
minimum elong	6811 Jul 10 17:08	22°☾52'01	0°08'16		6817 Jun 11 13:59	15°♈	
behind sun begin	6811 Jul 10 11:15	22°☾51'12		evening set	6817 Jul 19 11:12	16°♈55'47	
behind sun end	6811 Jul 10 23:01	22°☾52'51					
max. Earth dist.	6811 Jul 11 01:40	22°☾53'14	20.75962 AU	conjunction	6817 Aug 04 21:32	17°♈53'12	0°28'31
morning rise	6811 Jul 27 01:43	23°☾48'17		minimum elong	6817 Aug 04 21:32	17°♈53'12	0°28'28
retrograde	6811 Oct 29 12:52	26°☾58'09		max. Earth dist.	6817 Aug 04 21:36	17°♈53'13	20.41521 AU
opposition	6812 Jan 14 15:54	24°☾57'44	0°11'09	morning rise	6817 Aug 21 10:34	18°♈51'02	
min. Earth dist.	6812 Jan 14 08:01	24°☾58'32	18.73435 AU	retrograde	6817 Nov 23 23:26	22°♈04'48	
direct	6812 Mar 29 16:34	22°☾59'36		opposition	6818 Feb 08 04:50	20°♈03'26	0°33'19
evening set	6812 Jun 27 21:25	26°☾02'08		min. Earth dist.	6818 Feb 08 04:47	20°♈03'27	18.38190 AU
				direct	6818 Apr 23 21:15	18°♈03'37	
conjunction	6812 Jul 14 03:42	26°☾58'11	0°11'51	evening set	6818 Jul 24 02:04	21°♈11'37	
minimum elong	6812 Jul 14 03:42	26°☾58'11	0°11'47				
behind sun begin	6812 Jul 13 23:03	26°☾57'31		conjunction	6818 Aug 09 13:19	22°♈09'20	0°31'32
behind sun end	6812 Jul 14 08:21	26°☾58'50		minimum elong	6818 Aug 09 13:19	22°♈09'20	0°31'30
max. Earth dist.	6812 Jul 14 11:51	26°☾59'20	20.70860 AU	max. Earth dist.	6818 Aug 09 12:47	22°♈09'16	20.34824 AU
morning rise	6812 Jul 30 13:01	27°☾54'41		morning rise	6818 Aug 26 02:47	23°♈07'26	
	6812 Sep 10 19:13	0°♈		retrograde	6818 Nov 28 15:02	26°♈21'53	
retrograde	6812 Nov 02 00:10	1°♈05'08		opposition	6819 Feb 12 16:48	24°♈20'18	0°36'35
	6812 Dec 25 17:55	30°♈		min. Earth dist.	6819 Feb 12 18:02	24°♈20'11	18.31389 AU
opposition	6813 Jan 18 00:55	29°☾04'34	0°15'02	direct	6819 Apr 28 08:42	22°♈20'06	
min. Earth dist.	6813 Jan 17 18:22	29°☾05'14	18.68212 AU	evening set	6819 Jul 28 18:06	25°♈29'09	
direct	6813 Apr 02 23:23	27°☾06'12					
	6813 Jun 29 12:23	0°♈		conjunction	6819 Aug 14 05:57	26°♈27'10	0°34'23
evening set	6813 Jul 02 07:58	0°♈09'31		minimum elong	6819 Aug 14 05:57	26°♈27'10	0°34'20
				max. Earth dist.	6819 Aug 14 02:50	26°♈26'42	20.27951 AU
conjunction	6813 Jul 18 15:02	1°♈05'49	0°15'20	morning rise	6819 Aug 30 20:11	27°♈25'32	
minimum elong	6813 Jul 18 15:02	1°♈05'49	0°15'17		6819 Oct 24 01:13	0°♈	
behind sun begin	6813 Jul 18 13:07	1°♈05'33		retrograde	6819 Dec 03 07:21	0°♈40'40	
behind sun end	6813 Jul 18 16:57	1°♈06'05			6820 Jan 13 03:12	30°♈	
max. Earth dist.	6813 Jul 18 21:18	1°♈06'43	20.65531 AU	opposition	6820 Feb 17 05:13	28°♈38'51	0°39'40
morning rise	6813 Aug 04 01:14	2°♈02'34		min. Earth dist.	6820 Feb 17 07:57	28°♈38'34	18.24458 AU
retrograde	6813 Nov 06 13:38	5°♈13'39		direct	6820 May 01 20:18	26°♈38'14	
opposition	6814 Jan 22 10:11	3°♈12'57	0°18'52	evening set	6820 Aug 01 10:52	29°♈48'22	
min. Earth dist.	6814 Jan 22 04:26	3°♈13'33	18.62761 AU		6820 Aug 04 19:00	0°♈	
direct	6814 Apr 07 07:35	1°♈14'21					
evening set	6814 Jul 06 19:21	4°♈18'30		conjunction	6820 Aug 17 23:37	0°♈46'42	0°37'04
				minimum elong	6820 Aug 17 23:37	0°♈46'42	0°37'03
conjunction	6814 Jul 23 03:19	5°♈15'05	0°18'45	max. Earth dist.	6820 Aug 17 20:07	0°♈46'11	20.20968 AU
minimum elong	6814 Jul 23 03:19	5°♈15'05	0°18'42	morning rise	6820 Sep 03 14:12	1°♈45'21	
max. Earth dist.	6814 Jul 23 09:05	5°♈15'55	20.59948 AU	retrograde	6820 Dec 07 00:44	5°♈01'09	
morning rise	6814 Aug 08 14:08	6°♈12'05		opposition	6821 Feb 20 18:12	2°♈59'07	0°42'33
retrograde	6814 Nov 11 02:26	9°♈23'49		min. Earth dist.	6821 Feb 20 21:54	2°♈58'44	18.17447 AU
opposition	6815 Jan 26 20:06	7°♈23'00	0°22'39	direct	6821 May 06 09:37	0°♈58'06	
min. Earth dist.	6815 Jan 26 15:50	7°♈23'26	18.57046 AU	evening set	6821 Aug 06 04:41	4°♈09'21	
direct	6815 Apr 11 15:22	5°♈24'09					
evening set	6815 Jul 11 07:36	8°♈29'12		conjunction	6821 Aug 22 17:54	5°♈07'59	0°39'33

minimum elong	6821 Aug 22 17:54	5° <u>07</u> '59	0°39'31	opposition	6828 Mar 23 07:09	4° <u>13</u> '31	0°55'18
max. Earth dist.	6821 Aug 22 11:54	5° <u>07</u> '06	20.13953 AU	min. Earth dist.	6828 Mar 23 18:15	4° <u>12</u> '19	17.71964 AU
morning rise	6821 Sep 08 09:05	6° <u>06</u> '55		direct	6828 Jun 06 00:57	2° <u>10</u> '07	
retrograde	6821 Dec 11 17:33	9° <u>23</u> '24		evening set	6828 Sep 07 10:48	5° <u>29</u> '49	
opposition	6822 Feb 25 07:45	7° <u>21</u> '09	0°45'12				
min. Earth dist.	6822 Feb 25 12:57	7° <u>20</u> '36	18.10454 AU	conjunction	6828 Sep 24 03:20	6° <u>30</u> '28	0°49'59
direct	6822 May 10 22:12	5° <u>19</u> '43		minimum elong	6828 Sep 24 03:20	6° <u>30</u> '28	0°50'00
evening set	6822 Aug 10 23:13	8° <u>32</u> '08		max. Earth dist.	6828 Sep 23 14:12	6° <u>28</u> '28	19.69125 AU
				morning rise	6828 Oct 10 19:50	7° <u>31</u> '09	
conjunction	6822 Aug 27 13:13	9° <u>31</u> '04	0°41'49	retrograde	6829 Jan 12 13:36	10° <u>52</u> '14	
minimum elong	6822 Aug 27 13:13	9° <u>31</u> '04	0°41'48	opposition	6829 Mar 28 01:34	8° <u>49</u> '15	0°55'52
max. Earth dist.	6822 Aug 27 07:08	9° <u>30</u> '10	20.06985 AU	min. Earth dist.	6829 Mar 28 12:48	8° <u>48</u> '02	17.66365 AU
morning rise	6822 Sep 13 04:38	10° <u>30</u> '16		direct	6829 Jun 10 21:39	6° <u>45</u> '35	
retrograde	6822 Dec 16 12:37	13° <u>47</u> '26		evening set	6829 Sep 12 12:02	10° <u>06</u> '28	
opposition	6823 Mar 01 21:54	11° <u>45</u> '00	0°47'36				
min. Earth dist.	6823 Mar 02 03:39	11° <u>44</u> '23	18.03536 AU	conjunction	6829 Sep 29 04:38	11° <u>07</u> '20	0°50'19
direct	6823 May 15 13:12	9° <u>43</u> '11		minimum elong	6829 Sep 29 04:38	11° <u>07</u> '20	0°50'20
evening set	6823 Aug 15 18:47	12° <u>56</u> '46		max. Earth dist.	6829 Sep 28 13:41	11° <u>05</u> '03	19.63626 AU
				morning rise	6829 Oct 15 21:03	12° <u>08</u> '14	
conjunction	6823 Sep 01 09:12	13° <u>56</u> '00	0°43'51	retrograde	6830 Jan 17 11:04	15° <u>29</u> '51	
minimum elong	6823 Sep 01 09:12	13° <u>56</u> '00	0°43'50	opposition	6830 Apr 01 20:55	13° <u>26</u> '49	0°56'05
max. Earth dist.	6823 Sep 01 00:47	13° <u>54</u> '45	20.00133 AU	min. Earth dist.	6830 Apr 02 10:05	13° <u>25</u> '23	17.60990 AU
morning rise	6823 Sep 18 01:09	14° <u>55</u> '29		direct	6830 Jun 15 17:15	11° <u>22</u> '51	
retrograde	6823 Dec 21 06:11	18° <u>13</u> '21		evening set	6830 Sep 17 13:59	14° <u>44</u> '51	
opposition	6824 Mar 05 12:49	16° <u>10</u> '43	0°49'45				
min. Earth dist.	6824 Mar 05 20:05	16° <u>09</u> '56	17.96770 AU	conjunction	6830 Oct 04 06:46	15° <u>45</u> '57	0°50'20
direct	6824 May 19 03:29	14° <u>08</u> '32		minimum elong	6830 Oct 04 06:46	15° <u>45</u> '57	0°50'22
evening set	6824 Aug 19 15:16	17° <u>23</u> '19		max. Earth dist.	6830 Oct 03 15:01	15° <u>43</u> '32	19.58369 AU
				morning rise	6830 Oct 20 23:02	16° <u>47</u> '02	
conjunction	6824 Sep 05 06:22	18° <u>22</u> '52	0°45'38	retrograde	6831 Jan 22 11:37	20° <u>09</u> '08	
minimum elong	6824 Sep 05 06:22	18° <u>22</u> '52	0°45'37	opposition	6831 Apr 06 16:42	18° <u>06</u> '02	0°55'56
max. Earth dist.	6824 Sep 04 21:55	18° <u>21</u> '35	19.93451 AU	min. Earth dist.	6831 Apr 07 05:50	18° <u>04</u> '36	17.55855 AU
morning rise	6824 Sep 21 22:25	19° <u>22</u> '36		direct	6831 Jun 20 15:45	16° <u>01</u> '45	
retrograde	6824 Dec 25 02:19	22° <u>41</u> '07		evening set	6831 Sep 22 16:43	19° <u>24</u> '49	
opposition	6825 Mar 10 04:12	20° <u>38</u> '22	0°51'36				
min. Earth dist.	6825 Mar 10 11:44	20° <u>37</u> '34	17.90192 AU	conjunction	6831 Oct 09 09:32	20° <u>26</u> '08	0°50'01
direct	6825 May 23 20:17	18° <u>35</u> '51		minimum elong	6831 Oct 09 09:32	20° <u>26</u> '08	0°50'02
evening set	6825 Aug 24 12:49	21° <u>51</u> '52		max. Earth dist.	6831 Oct 08 16:30	20° <u>23</u> '31	19.53359 AU
				morning rise	6831 Oct 26 01:33	21° <u>27</u> '23	
conjunction	6825 Sep 10 04:13	22° <u>51</u> '42	0°47'09	retrograde	6832 Jan 27 09:55	24° <u>49</u> '52	
minimum elong	6825 Sep 10 04:13	22° <u>51</u> '42	0°47'09	opposition	6832 Apr 10 13:21	22° <u>46</u> '43	0°55'24
max. Earth dist.	6825 Sep 09 17:34	22° <u>50</u> '05	19.86990 AU	min. Earth dist.	6832 Apr 11 04:21	22° <u>45</u> '05	17.50995 AU
morning rise	6825 Sep 26 20:36	23° <u>51</u> '41		direct	6832 Jun 24 12:28	20° <u>42</u> '07	
retrograde	6825 Dec 29 20:56	27° <u>10</u> '54		evening set	6832 Sep 26 20:01	24° <u>06</u> '11	
opposition	6826 Mar 14 20:32	25° <u>08</u> '02	0°53'09				
min. Earth dist.	6826 Mar 15 05:37	25° <u>07</u> '03	17.83864 AU	conjunction	6832 Oct 13 12:47	25° <u>07</u> '41	0°49'22
direct	6826 May 28 12:19	23° <u>05</u> '12		minimum elong	6832 Oct 13 12:47	25° <u>07</u> '41	0°49'24
evening set	6826 Aug 29 10:58	26° <u>22</u> '27		max. Earth dist.	6832 Oct 12 18:44	25° <u>04</u> '53	19.48661 AU
				morning rise	6832 Oct 30 04:33	26° <u>09</u> '04	
conjunction	6826 Sep 15 02:56	27° <u>22</u> '34	0°48'23	retrograde	6833 Jan 31 11:14	29° <u>31</u> '55	
minimum elong	6826 Sep 15 02:56	27° <u>22</u> '34	0°48'22	opposition	6833 Apr 15 10:20	27° <u>28</u> '41	0°54'31
max. Earth dist.	6826 Sep 14 16:19	27° <u>20</u> '57	19.80788 AU	min. Earth dist.	6833 Apr 16 01:05	27° <u>27</u> '04	17.46468 AU
morning rise	6826 Oct 01 19:21	28° <u>22</u> '47		direct	6833 Jun 29 12:44	25° <u>23</u> '47	
	6826 Oct 31 09:35	0° <u>42</u> '40		evening set	6833 Oct 01 23:48	28° <u>48</u> '46	
retrograde	6827 Jan 03 18:27	1° <u>42</u> '40					
	6827 Mar 11 17:34	30° <u>39</u> '45		conjunction	6833 Oct 18 16:30	29° <u>50</u> '26	0°48'23
opposition	6827 Mar 19 13:28	29° <u>39</u> '45	0°54'23	minimum elong	6833 Oct 18 16:30	29° <u>50</u> '26	0°48'25
min. Earth dist.	6827 Mar 19 22:38	29° <u>38</u> '45	17.77786 AU	max. Earth dist.	6833 Oct 17 22:03	29° <u>47</u> '34	19.44319 AU
direct	6827 Jun 02 07:08	27° <u>36</u> '38			6833 Oct 21 06:09	0° <u>51</u> '56	
	6827 Aug 18 09:23	0° <u>55</u> '07		morning rise	6833 Nov 04 07:46	0° <u>51</u> '56	
evening set	6827 Sep 03 10:28	0° <u>55</u> '07		retrograde	6834 Feb 05 09:56	4° <u>15</u> '03	
				opposition	6834 Apr 20 08:07	2° <u>11</u> '14	0°53'14
conjunction	6827 Sep 20 02:37	1° <u>55</u> '30	0°49'20	min. Earth dist.	6834 Apr 21 00:18	2° <u>09</u> '59	17.42338 AU
minimum elong	6827 Sep 20 02:37	1° <u>55</u> '30	0°49'20	direct	6834 Jul 04 10:47	0° <u>06</u> '34	
max. Earth dist.	6827 Sep 19 13:57	1° <u>53</u> '34	19.74834 AU	evening set	6834 Oct 07 03:53	3° <u>32</u> '25	
morning rise	6827 Oct 06 19:12	2° <u>55</u> '58					
retrograde	6828 Jan 08 14:26	6° <u>16</u> '28		conjunction	6834 Oct 23 20:19	4° <u>34</u> '12	0°47'03

minimum elong	6834 Oct 23 20:19	4° $\mathbb{M}$ 34'12	0°47'05	max. Earth dist.	6840 Nov 21 04:13	3° $\mathbb{A}$ 08'23	19.28863 AU
max. Earth dist.	6834 Oct 23 00:52	4° $\mathbb{M}$ 31'10	19.40418 AU	morning rise	6840 Dec 08 09:53	4° $\mathbb{A}$ 12'59	
morning rise	6834 Nov 09 11:19	5° $\mathbb{M}$ 35'48		retrograde	6841 Mar 10 12:38	7° $\mathbb{A}$ 36'34	
retrograde	6835 Feb 10 11:13	8° $\mathbb{M}$ 59'09		opposition	6841 May 23 04:16	5° $\mathbb{A}$ 33'37	0°34'43
opposition	6835 Apr 25 06:13	6° $\mathbb{M}$ 55'48	0°51'36	min. Earth dist.	6841 May 23 19:45	5° $\mathbb{A}$ 31'55	17.28931 AU
min. Earth dist.	6835 Apr 25 21:58	6° $\mathbb{M}$ 54'04	17.38670 AU	direct	6841 Aug 07 01:12	3° $\mathbb{A}$ 27'32	
direct	6835 Jul 09 12:26	4° $\mathbb{M}$ 50'20		evening set	6841 Nov 10 14:21	6° $\mathbb{A}$ 57'06	
evening set	6835 Oct 12 08:24	8° $\mathbb{M}$ 16'57		max. Earth dist.	6841 Nov 26 10:05	7° $\mathbb{A}$ 56'23	19.29090 AU
max. Earth dist.	6835 Oct 28 05:40	9° $\mathbb{M}$ 15'53	19.36991 AU				
conjunction	6835 Oct 29 00:41	9° $\mathbb{M}$ 18'51	0°45'25	conjunction	6841 Nov 27 03:21	7° $\mathbb{A}$ 59'05	0°29'25
minimum elong	6835 Oct 29 00:41	9° $\mathbb{M}$ 18'51	0°45'28	minimum elong	6841 Nov 27 03:21	7° $\mathbb{A}$ 59'05	0°29'29
morning rise	6835 Nov 14 15:00	10° $\mathbb{M}$ 20'32		morning rise	6841 Dec 13 13:17	9° $\mathbb{A}$ 00'40	
retrograde	6836 Feb 15 10:10	13° $\mathbb{M}$ 44'01		retrograde	6842 Mar 15 13:59	12° $\mathbb{A}$ 24'06	
opposition	6836 Apr 29 04:50	11° $\mathbb{M}$ 40'38	0°49'36	opposition	6842 May 28 05:07	10° $\mathbb{A}$ 21'20	0°30'55
min. Earth dist.	6836 Apr 29 21:35	11° $\mathbb{M}$ 38'48	17.35510 AU	min. Earth dist.	6842 May 28 20:02	10° $\mathbb{A}$ 19'42	17.29422 AU
direct	6836 Jul 13 12:05	9° $\mathbb{M}$ 34'56		direct	6842 Aug 12 04:52	8° $\mathbb{A}$ 15'19	
evening set	6836 Oct 16 13:16	13° $\mathbb{M}$ 02'15		evening set	6842 Nov 15 19:15	11° $\mathbb{A}$ 45'02	
max. Earth dist.	6836 Nov 01 09:02	14° $\mathbb{M}$ 01'07	19.34116 AU	conjunction	6842 Dec 02 07:22	12° $\mathbb{A}$ 46'56	0°25'55
conjunction	6836 Nov 02 05:03	14° $\mathbb{M}$ 04'14	0°43'27	minimum elong	6842 Dec 02 07:22	12° $\mathbb{A}$ 46'56	0°25'59
minimum elong	6836 Nov 02 05:03	14° $\mathbb{M}$ 04'14	0°43'29	max. Earth dist.	6842 Dec 01 13:41	12° $\mathbb{A}$ 44'09	19.29843 AU
morning rise	6836 Nov 17 03:57	15° $\mathbb{M}$		morning rise	6842 Dec 18 16:30	13° $\mathbb{A}$ 48'25	
retrograde	6836 Nov 18 18:56	15° $\mathbb{M}$ 05'58		retrograde	6843 Mar 20 14:16	17° $\mathbb{A}$ 11'38	
opposition	6837 Feb 19 11:25	18° $\mathbb{M}$ 29'34		opposition	6843 Jun 02 06:16	15° $\mathbb{A}$ 09'03	0°26'54
min. Earth dist.	6837 May 04 03:56	16° $\mathbb{M}$ 26'10	0°47'15	min. Earth dist.	6843 Jun 02 21:20	15° $\mathbb{A}$ 07'25	17.30429 AU
direct	6837 May 04 20:05	16° $\mathbb{M}$ 24'24	17.32933 AU	direct	6843 Aug 17 07:44	13° $\mathbb{A}$ 03'06	
evening set	6837 Jun 09 06:10	15° $\mathbb{R}$ $\mathbb{M}$		evening set	6843 Nov 20 23:52	16° $\mathbb{A}$ 32'51	
direct	6837 Jul 18 14:49	14° $\mathbb{M}$ 20'17		conjunction	6843 Dec 07 11:13	17° $\mathbb{A}$ 34'38	0°22'14
evening set	6837 Aug 26 09:29	15° $\mathbb{M}$		minimum elong	6843 Dec 07 11:13	17° $\mathbb{A}$ 34'38	0°22'18
conjunction	6837 Nov 07 09:29	18° $\mathbb{M}$ 50'15	0°41'11	max. Earth dist.	6843 Dec 06 18:40	17° $\mathbb{A}$ 32'02	19.31091 AU
minimum elong	6837 Nov 07 09:29	18° $\mathbb{M}$ 50'15	0°41'14	morning rise	6843 Dec 23 19:22	18° $\mathbb{A}$ 35'59	
max. Earth dist.	6837 Nov 06 14:45	18° $\mathbb{M}$ 47'19	19.31837 AU	retrograde	6844 Mar 24 16:08	21° $\mathbb{A}$ 58'55	
morning rise	6837 Nov 23 22:32	19° $\mathbb{M}$ 51'59		opposition	6844 Jun 06 07:27	19° $\mathbb{A}$ 56'31	0°22'42
retrograde	6838 Feb 24 10:49	23° $\mathbb{M}$ 15'39		min. Earth dist.	6844 Jun 06 21:30	19° $\mathbb{A}$ 54'59	17.31898 AU
opposition	6838 May 09 03:34	21° $\mathbb{M}$ 12'18	0°44'34	direct	6844 Aug 21 11:48	17° $\mathbb{A}$ 50'39	
min. Earth dist.	6838 May 09 19:57	21° $\mathbb{M}$ 10'30	17.30968 AU	evening set	6844 Nov 25 04:11	21° $\mathbb{A}$ 20'18	
direct	6838 Jul 23 15:59	19° $\mathbb{M}$ 06'17		conjunction	6844 Dec 11 14:34	22° $\mathbb{A}$ 21'57	0°18'24
evening set	6838 Oct 26 23:08	22° $\mathbb{M}$ 34'45		minimum elong	6844 Dec 11 14:35	22° $\mathbb{A}$ 21'57	0°18'27
conjunction	6838 Nov 12 13:56	23° $\mathbb{M}$ 36'48	0°38'37	max. Earth dist.	6844 Dec 10 22:09	22° $\mathbb{A}$ 19'22	19.32791 AU
minimum elong	6838 Nov 12 13:56	23° $\mathbb{M}$ 36'48	0°38'40	morning rise	6844 Dec 27 21:45	23° $\mathbb{A}$ 23'08	
max. Earth dist.	6838 Nov 11 18:21	23° $\mathbb{M}$ 33'44	19.30205 AU	retrograde	6845 Mar 29 15:43	26° $\mathbb{A}$ 45'44	
morning rise	6838 Nov 29 02:28	24° $\mathbb{M}$ 38'33		opposition	6845 Jun 11 08:53	24° $\mathbb{A}$ 43'29	0°18'21
retrograde	6839 Mar 01 11:44	28° $\mathbb{M}$ 02'14		min. Earth dist.	6845 Jun 11 23:09	24° $\mathbb{A}$ 41'56	17.33831 AU
opposition	6839 May 14 03:21	25° $\mathbb{M}$ 58'58	0°41'34	direct	6845 Aug 26 14:22	22° $\mathbb{A}$ 37'41	
min. Earth dist.	6839 May 14 19:13	25° $\mathbb{M}$ 57'13	17.29665 AU	evening set	6845 Nov 30 07:44	26° $\mathbb{A}$ 07'08	
direct	6839 Jul 28 19:07	23° $\mathbb{M}$ 52'52		conjunction	6845 Dec 16 17:15	27° $\mathbb{A}$ 08'36	0°14'27
evening set	6839 Nov 01 04:12	27° $\mathbb{M}$ 21'48		minimum elong	6845 Dec 16 17:15	27° $\mathbb{A}$ 08'36	0°14'31
conjunction	6839 Nov 17 18:37	28° $\mathbb{M}$ 23'52	0°35'48	behind sun begin	6845 Dec 16 14:22	27° $\mathbb{A}$ 08'10	
minimum elong	6839 Nov 17 18:38	28° $\mathbb{M}$ 23'52	0°35'51	behind sun end	6845 Dec 16 20:08	27° $\mathbb{A}$ 09'03	
max. Earth dist.	6839 Nov 17 00:32	28° $\mathbb{M}$ 21'02	19.29223 AU	max. Earth dist.	6845 Dec 16 01:45	27° $\mathbb{A}$ 06'10	19.34951 AU
morning rise	6839 Dec 04 06:14	29° $\mathbb{M}$ 25'34		morning rise	6846 Jan 01 23:30	28° $\mathbb{A}$ 09'37	
retrograde	6839 Dec 13 18:57	0° $\mathbb{A}$		retrograde	6846 Feb 03 19:34	0° $\mathbb{B}$	
opposition	6840 Mar 05 12:05	2° $\mathbb{A}$ 49'13		retrograde	6846 Apr 03 16:42	1° $\mathbb{B}$ 31'48	
opposition	6840 May 18 03:40	0° $\mathbb{A}$ 46'06	0°38'16	opposition	6846 Jun 04 15:02	30° $\mathbb{R}$ $\mathbb{A}$	
min. Earth dist.	6840 May 18 19:21	0° $\mathbb{A}$ 44'23	17.28990 AU	min. Earth dist.	6846 Jun 16 10:06	29° $\mathbb{A}$ 29'42	0°13'52
direct	6840 Jun 05 02:45	30° $\mathbb{R}$ $\mathbb{M}$		direct	6846 Jun 16 22:52	29° $\mathbb{A}$ 28'19	17.36196 AU
evening set	6840 Aug 01 21:53	28° $\mathbb{M}$ 40'00		evening set	6846 Aug 31 18:35	27° $\mathbb{A}$ 24'01	
conjunction	6840 Sep 26 20:15	0° $\mathbb{A}$		conjunction	6846 Nov 20 13:26	0° $\mathbb{B}$	
minimum elong	6840 Nov 05 09:23	2° $\mathbb{A}$ 09'18		minimum elong	6846 Dec 05 10:54	0° $\mathbb{B}$ 53'06	
conjunction	6840 Nov 21 22:58	3° $\mathbb{A}$ 11'20	0°32'43	behind sun begin	6846 Dec 21 19:29	1° $\mathbb{B}$ 54'24	0°10'24
minimum elong	6840 Nov 21 22:58	3° $\mathbb{A}$ 11'20	0°32'48	behind sun end	6846 Dec 21 19:30	1° $\mathbb{B}$ 54'24	0°10'28
					6846 Dec 21 14:16	1° $\mathbb{B}$ 53'35	
					6846 Dec 22 00:43	1° $\mathbb{B}$ 55'12	

max. Earth dist.	6846 Dec 21 04:49	1°35'20"06	19.37535 AU	evening set	6853 Jan 02 12:35	29°30'00"17	
morning rise	6847 Jan 07 00:43	2°35'55"12					
retrograde	6847 Apr 08 14:54	6°31'16"55		conjunction	6853 Jan 18 15:10	29°35'59"58	-0°14'08
opposition	6847 Jun 21 11:12	4°31'14"56	0°09'19	minimum elong	6853 Jan 18 15:10	29°35'59"58	0°14'04
min. Earth dist.	6847 Jun 22 00:14	4°31'13"32	17.39002 AU	behind sun begin	6853 Jan 18 11:50	29°35'59"28	
direct	6847 Sep 05 21:09	2°30'09"20		behind sun end	6853 Jan 18 18:30	0°30'00"28	
evening set	6847 Dec 10 13:24	5°33'38"00		max. Earth dist.	6853 Jan 18 09:18	29°35'59"04	19.62720 AU
					6853 Jan 18 15:23	0°30'00"00	
conjunction	6847 Dec 26 20:57	6°33'39"04	0°06'19	morning rise	6853 Feb 03 14:35	0°30'59"13	
minimum elong	6847 Dec 26 20:58	6°33'39"04	0°06'23	retrograde	6853 May 05 20:44	4°30'17"19	
behind sun begin	6847 Dec 26 14:40	6°33'38"06		opposition	6853 Jul 19 11:55	2°30'16"12	-0°17'48
behind sun end	6847 Dec 27 03:15	6°33'40"02		min. Earth dist.	6853 Jul 19 17:04	2°30'15"39	17.65567 AU
max. Earth dist.	6847 Dec 26 06:58	6°33'36"52	19.40569 AU	direct	6853 Oct 04 11:50	0°30'11"49	
morning rise	6848 Jan 12 01:17	7°33'39"39		evening set	6854 Jan 07 09:44	3°30'35"53	
retrograde	6848 Apr 12 14:25	11°33'00"50					
opposition	6848 Jun 25 12:05	8°33'58"58	0°04'43	conjunction	6854 Jan 23 11:11	4°30'35"16	-0°17'57
min. Earth dist.	6848 Jun 25 23:13	8°33'57"46	17.42247 AU	minimum elong	6854 Jan 23 11:11	4°30'35"16	0°17'54
direct	6848 Sep 10 01:53	6°33'53"30		max. Earth dist.	6854 Jan 23 05:51	4°30'34"27	19.68536 AU
evening set	6848 Dec 14 14:54	10°33'21"35		morning rise	6854 Feb 08 09:57	5°30'34"14	
				retrograde	6854 May 10 16:57	8°30'51"42	
conjunction	6848 Dec 30 21:31	11°33'22"24	0°02'10	opposition	6854 Jul 24 10:33	6°30'50"48	-0°21'59
minimum elong	6848 Dec 30 21:32	11°33'22"24	0°02'15	min. Earth dist.	6854 Jul 24 13:37	6°30'50"28	17.71561 AU
behind sun begin	6848 Dec 30 14:52	11°33'21"23		direct	6854 Oct 09 12:02	4°30'46"46	
behind sun end	6848 Dec 31 04:12	11°33'23"25		evening set	6855 Jan 12 05:58	8°30'09"53	
max. Earth dist.	6848 Dec 30 09:18	11°33'20"30	19.44038 AU				
morning rise	6849 Jan 16 00:46	12°33'22"44		conjunction	6855 Jan 28 06:37	9°30'08"57	-0°21'38
retrograde	6849 Apr 17 11:03	15°33'43"22		minimum elong	6855 Jan 28 06:37	9°30'08"56	0°21'36
opposition	6849 Jun 30 12:54	13°33'41"37	0°00'06	max. Earth dist.	6855 Jan 28 03:54	9°30'08"32	19.74685 AU
min. Earth dist.	6849 Jun 30 23:57	13°33'40"25	17.45950 AU	morning rise	6855 Feb 13 04:21	10°30'07"36	
desc. node	6849 Jul 08 02:47	13°33'22"10		retrograde	6855 May 15 11:11	13°30'24"25	
direct	6849 Sep 15 04:29	11°33'36"16		opposition	6855 Jul 29 08:47	11°30'23"46	-0°26'01
evening set	6849 Dec 19 15:41	15°33'03"41		min. Earth dist.	6855 Jul 29 11:05	11°30'23"31	17.77843 AU
				direct	6855 Oct 14 10:35	9°30'20"07	
conjunction	6850 Jan 04 21:11	16°33'04"14	-0°02'05	evening set	6856 Jan 17 01:30	12°30'42"13	
minimum elong	6850 Jan 04 21:12	16°33'04"14	0°02'01				
behind sun begin	6850 Jan 04 14:32	16°33'03"13		conjunction	6856 Feb 02 01:01	13°30'40"57	-0°25'11
behind sun end	6850 Jan 05 03:52	16°33'05"15		minimum elong	6856 Feb 02 01:01	13°30'40"57	0°25'07
max. Earth dist.	6850 Jan 04 09:39	16°33'02"27	19.47986 AU	max. Earth dist.	6856 Feb 01 22:39	13°30'40"36	19.81093 AU
morning rise	6850 Jan 20 23:36	17°33'04"19		morning rise	6856 Feb 17 22:07	14°30'39"20	
retrograde	6850 Apr 22 08:58	20°33'24"21			6856 Feb 23 16:50	15°30'00"00	
opposition	6850 Jul 05 13:02	18°33'22"42	-0°04'30	retrograde	6856 May 19 06:14	17°30'55"29	
min. Earth dist.	6850 Jul 05 21:51	18°33'21"45	17.50134 AU	opposition	6856 Aug 02 06:36	15°30'55"04	-0°29'50
direct	6850 Sep 20 08:19	16°33'17"31		min. Earth dist.	6856 Aug 02 07:11	15°30'55"00	17.84358 AU
evening set	6850 Dec 24 15:30	19°33'44"11			6856 Aug 24 23:47	15°30'00"00	
				direct	6856 Oct 18 09:12	13°30'51"47	
conjunction	6851 Jan 09 20:07	20°33'44"28	-0°06'11		6856 Dec 09 13:50	15°30'00"00	
minimum elong	6851 Jan 09 20:08	20°33'44"28	0°06'07	evening set	6857 Jan 20 19:47	17°30'12"50	
behind sun begin	6851 Jan 09 13:49	20°33'43"30					
behind sun end	6851 Jan 10 02:27	20°33'45"26		conjunction	6857 Feb 05 18:33	18°30'11"15	-0°28'32
max. Earth dist.	6851 Jan 09 10:56	20°33'43"03	19.52410 AU	minimum elong	6857 Feb 05 18:33	18°30'11"15	0°28'30
morning rise	6851 Jan 25 21:26	21°33'44"17		max. Earth dist.	6857 Feb 05 18:41	18°30'11"17	19.87684 AU
retrograde	6851 Apr 27 04:44	25°33'03"40		morning rise	6857 Feb 21 14:45	19°30'09"20	
opposition	6851 Jul 10 13:08	23°33'02"10	-0°09'02	retrograde	6857 May 23 23:43	22°30'24"49	
min. Earth dist.	6851 Jul 10 21:29	23°33'01"16	17.54803 AU	opposition	6857 Aug 07 03:55	20°30'24"38	-0°33'28
direct	6851 Sep 25 09:57	20°33'57"12		min. Earth dist.	6857 Aug 07 03:32	20°30'24"40	17.91007 AU
evening set	6851 Dec 29 14:34	24°33'23"03		direct	6857 Oct 23 06:43	18°30'21"45	
				evening set	6858 Jan 25 13:27	21°30'41"42	
conjunction	6852 Jan 14 18:00	25°33'23"02	-0°10'12				
minimum elong	6852 Jan 14 18:00	25°33'23"02	0°10'09	conjunction	6858 Feb 10 11:12	22°30'39"48	-0°31'42
behind sun begin	6852 Jan 14 12:41	25°33'22"14		minimum elong	6858 Feb 10 11:11	22°30'39"47	0°31'40
behind sun end	6852 Jan 14 23:19	25°33'23"51		max. Earth dist.	6858 Feb 10 11:31	22°30'39"51	19.94379 AU
max. Earth dist.	6852 Jan 14 09:26	25°33'21"43	19.57330 AU	morning rise	6858 Feb 26 06:51	23°30'37"34	
morning rise	6852 Jan 30 18:30	26°33'22"34		retrograde	6858 May 28 17:04	26°30'52"24	
retrograde	6852 May 01 01:36	29°33'41"20		opposition	6858 Aug 12 00:28	24°30'52"24	-0°36'52
opposition	6852 Jul 14 12:40	27°33'39"59	-0°13'29	min. Earth dist.	6858 Aug 11 22:51	24°30'52"34	17.97740 AU
min. Earth dist.	6852 Jul 14 18:34	27°33'39"22	17.59961 AU	direct	6858 Oct 28 03:30	22°30'49"53	
direct	6852 Sep 29 12:04	25°33'35"17		evening set	6859 Jan 30 06:03	26°30'08"43	

conjunction	6859 Feb 15 03:08	27°06'30 -0°34'40	retrograde	6865 Jun 27 19:57	27°11'31
minimum elong	6859 Feb 15 03:08	27°06'30 0°34'38	opposition	6865 Sep 12 06:13	25°12'18 -0°53'09
max. Earth dist.	6859 Feb 15 05:34	27°06'53 20.01119 AU	min. Earth dist.	6865 Sep 11 19:42	25°13'22 18.43889 AU
morning rise	6859 Mar 02 22:00	28°03'59	direct	6865 Nov 28 11:48	23°12'07
	6859 Apr 08 03:26	0°	evening set	6866 Feb 28 23:19	26°22'45
retrograde	6859 Jun 02 09:43	1°18'07			
	6859 Jul 30 17:14	30°	conjunction	6866 Mar 16 16:10	27°18'28 -0°48'32
opposition	6859 Aug 16 20:34	29°18'19 -0°40'01	minimum elong	6866 Mar 16 16:10	27°18'28 0°48'31
min. Earth dist.	6859 Aug 16 17:47	29°18'36 18.04471 AU	max. Earth dist.	6866 Mar 17 02:58	27°20'04 20.47097 AU
direct	6859 Nov 02 00:22	27°16'11	morning rise	6866 Apr 01 08:32	28°14'07
	6860 Jan 25 05:11	0°		6866 May 04 21:02	0°
evening set	6860 Feb 03 21:45	0°33'51	retrograde	6866 Jul 02 06:17	1°23'48
				6866 Sep 02 03:54	30°
conjunction	6860 Feb 19 17:54	1°31'19 -0°37'24	opposition	6866 Sep 16 21:18	29°24'42 -0°54'18
minimum elong	6860 Feb 19 17:54	1°31'19 0°37'22	min. Earth dist.	6866 Sep 16 10:21	29°25'49 18.50310 AU
max. Earth dist.	6860 Feb 19 20:37	1°31'43 20.07835 AU	direct	6866 Dec 03 00:48	27°24'53
morning rise	6860 Mar 06 12:19	2°28'31		6867 Feb 23 05:49	0°
retrograde	6860 Jun 06 01:09	5°41'59	evening set	6867 Mar 05 08:34	0°34'26
opposition	6860 Aug 20 16:04	3°42'19 -0°42'55			
min. Earth dist.	6860 Aug 20 12:19	3°42'42 18.11177 AU	conjunction	6867 Mar 21 01:11	1°29'54 -0°49'27
direct	6860 Nov 05 19:34	1°40'32	minimum elong	6867 Mar 21 01:11	1°29'54 0°49'27
evening set	6861 Feb 07 12:22	4°57'01	max. Earth dist.	6867 Mar 21 13:33	1°31'44 20.53473 AU
			morning rise	6867 Apr 05 17:23	2°25'21
conjunction	6861 Feb 23 07:58	5°54'11 -0°39'54	retrograde	6867 Jul 06 17:57	5°34'29
minimum elong	6861 Feb 23 07:57	5°54'11 0°39'52	opposition	6867 Sep 21 11:46	3°35'33 -0°55'10
max. Earth dist.	6861 Feb 23 12:40	5°54'53 20.14511 AU	min. Earth dist.	6867 Sep 20 22:46	3°36'52 18.56619 AU
morning rise	6861 Mar 11 01:46	6°51'05	direct	6867 Dec 07 15:21	1°36'06
retrograde	6861 Jun 10 16:48	10°03'53	evening set	6868 Mar 08 17:06	4°44'35
opposition	6861 Aug 25 10:41	8°04'20 -0°45'33			
min. Earth dist.	6861 Aug 25 05:32	8°04'52 18.17813 AU	conjunction	6868 Mar 24 09:22	5°39'50 -0°50'07
direct	6861 Nov 10 15:32	6°02'52	minimum elong	6868 Mar 24 09:22	5°39'50 0°50'07
evening set	6862 Feb 12 02:05	9°18'10	max. Earth dist.	6868 Mar 24 22:37	5°41'48 20.59704 AU
			morning rise	6868 Apr 09 01:35	6°35'05
conjunction	6862 Feb 27 20:55	10°15'00 -0°42'09	retrograde	6868 Jul 10 03:49	9°43'45
minimum elong	6862 Feb 27 20:55	10°15'00 0°42'09	opposition	6868 Sep 25 01:51	7°44'56 -0°55'44
max. Earth dist.	6862 Feb 28 02:07	10°15'47 20.21113 AU	min. Earth dist.	6868 Sep 24 12:42	7°46'16 18.62771 AU
morning rise	6862 Mar 15 14:26	11°11'39	direct	6868 Dec 11 02:50	5°45'51
retrograde	6862 Jun 15 05:50	14°23'47	evening set	6869 Mar 13 01:03	8°53'20
opposition	6862 Aug 30 04:41	12°24'18 -0°47'53			
min. Earth dist.	6862 Aug 29 22:50	12°24'54 18.24393 AU	conjunction	6869 Mar 28 17:12	9°48'23 -0°50'30
direct	6862 Nov 15 09:01	10°23'09	minimum elong	6869 Mar 28 17:12	9°48'23 0°50'32
evening set	6863 Feb 16 14:41	13°37'15	max. Earth dist.	6869 Mar 29 07:39	9°50'30 20.65751 AU
			morning rise	6869 Apr 13 09:25	10°43'26
conjunction	6863 Mar 04 09:02	14°33'48 -0°44'09	retrograde	6869 Jul 14 14:45	13°51'39
minimum elong	6863 Mar 04 09:02	14°33'48 0°44'08	opposition	6869 Sep 29 15:01	11°52'59 -0°56'01
max. Earth dist.	6863 Mar 04 16:12	14°34'52 20.27661 AU	min. Earth dist.	6869 Sep 29 00:07	11°54'29 18.68691 AU
morning rise	6863 Mar 20 02:03	15°30'10	direct	6869 Dec 15 15:40	9°54'15
retrograde	6863 Jun 19 19:59	18°41'37	evening set	6870 Mar 17 08:32	13°00'47
opposition	6863 Sep 03 21:51	16°42'14 -0°49'57			
min. Earth dist.	6863 Sep 03 14:11	16°43'01 18.30912 AU	conjunction	6870 Apr 02 00:29	13°55'37 -0°50'39
direct	6863 Nov 20 03:49	14°41'24	minimum elong	6870 Apr 02 00:29	13°55'37 0°50'39
evening set	6864 Feb 21 02:31	17°54'18	max. Earth dist.	6870 Apr 02 15:31	13°57'49 20.71524 AU
			morning rise	6870 Apr 17 16:50	14°50'31
conjunction	6864 Mar 07 20:13	18°50'34 -0°45'52	retrograde	6870 Jul 18 24:00	17°58'19
minimum elong	6864 Mar 07 20:13	18°50'34 0°45'53	opposition	6870 Oct 04 03:56	15°59'46 -0°56'01
max. Earth dist.	6864 Mar 08 04:14	18°51'46 20.34163 AU	min. Earth dist.	6870 Oct 03 13:21	16°01'13 18.74318 AU
morning rise	6864 Mar 23 13:00	19°46'41	direct	6870 Dec 20 01:34	14°01'22
retrograde	6864 Jun 23 07:17	22°57'31	evening set	6871 Mar 21 15:23	17°06'58
opposition	6864 Sep 07 14:29	20°58'12 -0°51'42			
min. Earth dist.	6864 Sep 07 06:04	20°59'03 18.37419 AU	conjunction	6871 Apr 06 07:18	18°01'38 -0°50'31
direct	6864 Nov 23 18:58	18°57'40	minimum elong	6871 Apr 06 07:18	18°01'38 0°50'34
evening set	6865 Feb 24 13:12	22°09'25	max. Earth dist.	6871 Apr 06 23:08	18°03'57 20.76977 AU
			morning rise	6871 Apr 21 23:44	18°56'23
conjunction	6865 Mar 12 06:32	23°05'24 -0°47'20	retrograde	6871 Jul 23 10:29	22°03'47
minimum elong	6865 Mar 12 06:32	23°05'24 0°47'20	opposition	6871 Oct 08 16:12	20°05'21 -0°55'43
max. Earth dist.	6865 Mar 12 16:29	23°06'53 20.40655 AU	min. Earth dist.	6871 Oct 08 00:03	20°06'58 18.79580 AU
morning rise	6865 Mar 27 23:01	24°01'17	direct	6871 Dec 24 13:32	18°07'16

evening set	6872 Mar 24 21:55	21° $\Upsilon$ 12'00	conjunction	6878 May 03 21:14	16° $\mathcal{B}$ 13'23 -0°42'54
			minimum elong	6878 May 03 21:14	16° $\mathcal{B}$ 13'23 0°42'57
conjunction	6872 Apr 09 13:46	22° $\Upsilon$ 06'29 -0°50'09	max. Earth dist.	6878 May 04 15:22	16° $\mathcal{B}$ 16'00 21.02879 AU
minimum elong	6872 Apr 09 13:46	22° $\Upsilon$ 06'29 0°50'11	morning rise	6878 May 19 16:24	17° $\mathcal{B}$ 07'35
max. Earth dist.	6872 Apr 10 06:00	22° $\Upsilon$ 08'51 20.82032 AU	retrograde	6878 Aug 20 19:28	20° $\mathcal{B}$ 13'08
morning rise	6872 Apr 25 06:27	23° $\Upsilon$ 01'07	opposition	6878 Nov 06 16:09	18° $\mathcal{B}$ 14'39 -0°46'19
retrograde	6872 Jul 26 18:55	26° $\Upsilon$ 08'10	min. Earth dist.	6878 Nov 05 23:10	18° $\mathcal{B}$ 16'20 19.03997 AU
opposition	6872 Oct 12 04:07	24° $\Upsilon$ 09'48 -0°55'09	direct	6879 Jan 21 23:53	16° $\mathcal{B}$ 17'48
min. Earth dist.	6872 Oct 11 12:38	24° $\Upsilon$ 11'21 18.84431 AU	evening set	6879 Apr 22 07:53	19° $\mathcal{B}$ 17'45
direct	6872 Dec 27 22:10	22° $\Upsilon$ 11'59			
evening set	6873 Mar 29 03:53	25° $\Upsilon$ 15'52	conjunction	6879 May 08 01:31	20° $\mathcal{B}$ 11'38 -0°40'55
			minimum elong	6879 May 08 01:31	20° $\mathcal{B}$ 11'38 0°40'58
conjunction	6873 Apr 13 19:53	26° $\Upsilon$ 10'13 -0°49'32	max. Earth dist.	6879 May 08 19:55	20° $\mathcal{B}$ 14'16 21.04963 AU
minimum elong	6873 Apr 13 19:53	26° $\Upsilon$ 10'13 0°49'34	morning rise	6879 May 23 21:15	21° $\mathcal{B}$ 05'49
max. Earth dist.	6873 Apr 14 12:29	26° $\Upsilon$ 12'38 20.86656 AU	retrograde	6879 Aug 25 04:12	24° $\mathcal{B}$ 11'17
morning rise	6873 Apr 29 12:49	27° $\Upsilon$ 04'44	min. Earth dist.	6879 Nov 10 06:20	22° $\mathcal{B}$ 14'36 19.05900 AU
	6873 Jul 09 17:46	0° $\mathcal{B}$	opposition	6879 Nov 11 00:38	22° $\mathcal{B}$ 12'47 -0°44'01
retrograde	6873 Jul 31 04:53	0° $\mathcal{B}$ 11'27	direct	6880 Jan 26 06:38	20° $\mathcal{B}$ 16'03
	6873 Aug 21 23:47	30° $\mathcal{R}\Upsilon$	evening set	6880 Apr 25 11:46	23° $\mathcal{B}$ 15'37
opposition	6873 Oct 16 15:20	28° $\Upsilon$ 13'07 -0°54'19			
min. Earth dist.	6873 Oct 15 22:32	28° $\Upsilon$ 14'48 18.88811 AU	conjunction	6880 May 11 05:51	24° $\mathcal{B}$ 09'28 -0°38'45
direct	6874 Jan 01 09:09	26° $\Upsilon$ 15'33	minimum elong	6880 May 11 05:51	24° $\mathcal{B}$ 09'28 0°38'49
evening set	6874 Apr 02 09:34	29° $\Upsilon$ 18'38	max. Earth dist.	6880 May 12 00:31	24° $\mathcal{B}$ 12'09 21.06680 AU
	6874 Apr 14 09:05	0° $\mathcal{B}$	morning rise	6880 May 27 02:14	25° $\mathcal{B}$ 03'40
			retrograde	6880 Aug 28 10:39	28° $\mathcal{B}$ 09'07
conjunction	6874 Apr 18 01:38	0° $\mathcal{B}$ 12'52 -0°48'40	opposition	6880 Nov 14 08:52	26° $\mathcal{B}$ 10'35 -0°41'31
minimum elong	6874 Apr 18 01:38	0° $\mathcal{B}$ 12'52 0°48'42	min. Earth dist.	6880 Nov 13 15:29	26° $\mathcal{B}$ 12'19 19.07437 AU
max. Earth dist.	6874 Apr 18 18:24	0° $\mathcal{B}$ 15'18 20.90784 AU	direct	6881 Jan 29 12:17	24° $\mathcal{B}$ 13'59
morning rise	6874 May 03 18:55	1° $\mathcal{B}$ 07'17	evening set	6881 Apr 29 15:35	27° $\mathcal{B}$ 13'13
retrograde	6874 Aug 04 12:16	4° $\mathcal{B}$ 13'41			
min. Earth dist.	6874 Oct 20 10:12	2° $\mathcal{B}$ 16'57 18.92701 AU	conjunction	6881 May 15 10:14	28° $\mathcal{B}$ 07'05 -0°36'25
opposition	6874 Oct 21 02:06	2° $\mathcal{B}$ 15'22 -0°53'13	minimum elong	6881 May 15 10:14	28° $\mathcal{B}$ 07'05 0°36'29
direct	6875 Jan 05 16:55	0° $\mathcal{B}$ 17'58	max. Earth dist.	6881 May 16 04:51	28° $\mathcal{B}$ 09'46 21.08035 AU
evening set	6875 Apr 06 14:43	3° $\mathcal{B}$ 20'19	morning rise	6881 May 31 07:18	29° $\mathcal{B}$ 01'19
				6881 Jun 18 13:07	0° $\mathcal{B}$
conjunction	6875 Apr 22 07:02	4° $\mathcal{B}$ 14'26 -0°47'34	retrograde	6881 Sep 01 20:16	2° $\mathcal{B}$ 06'47
minimum elong	6875 Apr 22 07:02	4° $\mathcal{B}$ 14'26 0°47'36	opposition	6881 Nov 18 16:45	0° $\mathcal{B}$ 08'15 -0°38'50
max. Earth dist.	6875 Apr 23 00:05	4° $\mathcal{B}$ 16'54 20.94445 AU	min. Earth dist.	6881 Nov 17 22:24	0° $\mathcal{B}$ 10'05 19.08584 AU
morning rise	6875 May 08 00:42	5° $\mathcal{B}$ 08'45		6881 Nov 22 03:28	30° $\mathcal{R}\mathcal{B}$
retrograde	6875 Aug 08 21:25	8° $\mathcal{B}$ 14'53	direct	6882 Feb 02 18:21	28° $\mathcal{B}$ 11'45
opposition	6875 Oct 25 12:19	6° $\mathcal{B}$ 16'32 -0°51'51		6882 Apr 11 10:51	0° $\mathcal{B}$
min. Earth dist.	6875 Oct 24 19:07	6° $\mathcal{B}$ 18'15 18.96126 AU	evening set	6882 May 03 19:28	1° $\mathcal{B}$ 10'44
direct	6876 Jan 10 02:43	4° $\mathcal{B}$ 19'18			
evening set	6876 Apr 09 19:24	7° $\mathcal{B}$ 20'56	conjunction	6882 May 19 14:37	2° $\mathcal{B}$ 04'38 -0°33'54
			minimum elong	6882 May 19 14:37	2° $\mathcal{B}$ 04'38 0°33'57
conjunction	6876 Apr 25 11:56	8° $\mathcal{B}$ 14'57 -0°46'13	max. Earth dist.	6882 May 20 09:17	2° $\mathcal{B}$ 07'18 21.08968 AU
minimum elong	6876 Apr 25 11:56	8° $\mathcal{B}$ 14'57 0°46'17	morning rise	6882 Jun 04 12:22	2° $\mathcal{B}$ 58'55
max. Earth dist.	6876 Apr 26 05:23	8° $\mathcal{B}$ 17'28 20.97646 AU	retrograde	6882 Sep 06 02:26	6° $\mathcal{B}$ 04'26
morning rise	6876 May 11 06:05	9° $\mathcal{B}$ 09'13	min. Earth dist.	6882 Nov 22 07:25	4° $\mathcal{B}$ 07'37 19.09303 AU
retrograde	6876 Aug 12 04:18	12° $\mathcal{B}$ 15'07	opposition	6882 Nov 23 00:36	4° $\mathcal{B}$ 05'54 -0°35'58
opposition	6876 Oct 28 22:10	10° $\mathcal{B}$ 16'42 -0°50'15	direct	6883 Feb 06 23:24	2° $\mathcal{B}$ 09'31
min. Earth dist.	6876 Oct 28 05:46	10° $\mathcal{B}$ 18'21 18.99126 AU	evening set	6883 May 07 23:28	5° $\mathcal{B}$ 08'19
direct	6877 Jan 13 09:39	8° $\mathcal{B}$ 19'36			
evening set	6877 Apr 13 23:49	11° $\mathcal{B}$ 20'36	conjunction	6883 May 23 19:16	6° $\mathcal{B}$ 02'15 -0°31'13
			minimum elong	6883 May 23 19:16	6° $\mathcal{B}$ 02'15 0°31'18
conjunction	6877 Apr 29 16:42	12° $\mathcal{B}$ 14'33 -0°44'40	max. Earth dist.	6883 May 24 13:37	6° $\mathcal{B}$ 04'53 21.09477 AU
minimum elong	6877 Apr 29 16:42	12° $\mathcal{B}$ 14'33 0°44'42	morning rise	6883 Jun 08 17:45	6° $\mathcal{B}$ 56'36
max. Earth dist.	6877 Apr 30 10:28	12° $\mathcal{B}$ 17'07 21.00454 AU	retrograde	6883 Sep 10 12:32	10° $\mathcal{B}$ 02'14
morning rise	6877 May 15 11:20	13° $\mathcal{B}$ 08'47	opposition	6883 Nov 27 08:16	8° $\mathcal{B}$ 03'41 -0°32'55
	6877 Jun 21 08:22	15° $\mathcal{B}$	min. Earth dist.	6883 Nov 26 14:28	8° $\mathcal{B}$ 05'27 19.09573 AU
retrograde	6877 Aug 16 12:46	16° $\mathcal{B}$ 14'28	direct	6884 Feb 11 05:44	6° $\mathcal{B}$ 07'22
	6877 Oct 14 11:08	15° $\mathcal{R}\mathcal{B}$	evening set	6884 May 11 03:40	9° $\mathcal{B}$ 06'03
opposition	6877 Nov 02 07:12	14° $\mathcal{B}$ 16'01 -0°48'24			
min. Earth dist.	6877 Nov 01 13:29	14° $\mathcal{B}$ 17'47 19.01743 AU	conjunction	6884 May 27 00:05	10° $\mathcal{B}$ 00'04 -0°28'24
direct	6878 Jan 17 17:46	12° $\mathcal{B}$ 19'02	minimum elong	6884 May 27 00:05	10° $\mathcal{B}$ 00'04 0°28'27
	6878 Apr 12 07:41	15° $\mathcal{B}$	max. Earth dist.	6884 May 27 18:12	10° $\mathcal{B}$ 02'39 21.09494 AU
evening set	6878 Apr 18 04:02	15° $\mathcal{B}$ 19'29	morning rise	6884 Jun 11 23:20	10° $\mathcal{B}$ 54'29

retrograde	6884 Sep 13 19:05	14°II00'17		max. Earth dist.	6890 Jun 21 01:19	3°☿55'40	20.97993 AU
opposition	6884 Nov 30 15:57	12°II01'41	-0°29'43	morning rise	6890 Jul 06 16:17	4°☿48'59	
min. Earth dist.	6884 Nov 29 23:42	12°II03'19	19.09331 AU	retrograde	6890 Oct 08 22:14	7°☿56'19	
direct	6885 Feb 14 10:01	10°II05'26		opposition	6890 Dec 25 12:56	5°☿56'49	-0°07'57
evening set	6885 May 15 08:13	13°II04'04		min. Earth dist.	6890 Dec 25 01:31	5°☿57'58	18.96239 AU
				direct	6891 Mar 10 21:26	3°☿59'48	
conjunction	6885 May 31 05:20	13°II58'09	-0°25'26	evening set	6891 Jun 08 17:33	6°☿59'24	
minimum elong	6885 May 31 05:20	13°II58'09	0°25'30				
max. Earth dist.	6885 May 31 22:39	14°II00'37	21.08989 AU	conjunction	6891 Jun 24 19:22	7°☿54'19	-0°05'31
morning rise	6885 Jun 16 05:22	14°II52'40		minimum elong	6891 Jun 24 19:22	7°☿54'19	0°05'35
retrograde	6885 Sep 18 04:49	17°II58'39		behind sun begin	6891 Jun 24 12:59	7°☿53'25	
opposition	6885 Dec 04 23:20	15°II59'59	-0°26'22	behind sun end	6891 Jun 25 01:45	7°☿55'12	
min. Earth dist.	6885 Dec 04 06:57	16°II01'38	19.08538 AU	max. Earth dist.	6891 Jun 25 07:37	7°☿56'04	20.94398 AU
direct	6886 Feb 18 17:01	14°II03'43		morning rise	6891 Jul 11 00:29	8°☿49'42	
evening set	6886 May 19 13:05	17°II02'23		retrograde	6891 Oct 13 08:15	11°☿57'26	
				opposition	6891 Dec 29 20:28	9°☿57'43	-0°04'03
conjunction	6886 Jun 04 10:53	17°II56'34	-0°22'21	min. Earth dist.	6891 Dec 29 09:01	9°☿58'53	18.92470 AU
minimum elong	6886 Jun 04 10:53	17°II56'34	0°22'24	direct	6892 Mar 14 03:46	8°☿00'30	
max. Earth dist.	6886 Jun 05 03:30	17°II58'56	21.07896 AU	evening set	6892 Jun 12 00:30	11°☿00'31	
morning rise	6886 Jun 20 11:42	18°II51'11					
retrograde	6886 Sep 22 11:52	21°II57'23		conjunction	6892 Jun 28 03:13	11°☿55'37	-0°01'58
opposition	6886 Dec 09 07:00	19°II58'37	-0°22'54	minimum elong	6892 Jun 28 03:12	11°☿55'37	0°02'02
min. Earth dist.	6886 Dec 08 16:20	20°II00'06	19.07149 AU	behind sun begin	6892 Jun 27 20:33	11°☿54'42	
direct	6887 Feb 22 21:23	18°II02'18		behind sun end	6892 Jun 28 09:51	11°☿56'33	
evening set	6887 May 23 18:02	21°II01'00		max. Earth dist.	6892 Jun 28 14:56	11°☿57'18	20.90454 AU
				morning rise	6892 Jul 14 09:09	12°☿51'12	
conjunction	6887 Jun 08 16:37	21°II55'18	-0°19'09	retrograde	6892 Oct 16 17:12	15°☿59'22	
minimum elong	6887 Jun 08 16:37	21°II55'18	0°19'13	opposition	6893 Jan 02 04:17	13°☿59'29	-0°00'06
max. Earth dist.	6887 Jun 09 08:12	21°II57'32	21.06225 AU	min. Earth dist.	6893 Jan 01 18:17	14°☿00'30	18.88366 AU
morning rise	6887 Jun 24 18:17	22°II50'03		asc. node	6893 Jan 12 05:12	13°☿35'06	
retrograde	6887 Sep 26 21:22	25°II56'29		direct	6893 Mar 18 09:23	12°☿02'03	
opposition	6887 Dec 13 14:31	23°II57'35	-0°19'18	evening set	6893 Jun 16 08:05	15°☿02'34	
min. Earth dist.	6887 Dec 12 23:51	23°II59'03	19.05180 AU				
direct	6888 Feb 27 04:33	22°II01'07		conjunction	6893 Jul 02 11:37	15°☿57'53	0°01'43
evening set	6888 May 26 23:26	24°II59'57		minimum elong	6893 Jul 02 11:37	15°☿57'53	0°01'40
				behind sun begin	6893 Jul 02 04:58	15°☿56'57	
conjunction	6888 Jun 11 22:48	25°II54'23	-0°15'51	behind sun end	6893 Jul 02 18:16	15°☿58'49	
minimum elong	6888 Jun 11 22:49	25°II54'23	0°15'55	max. Earth dist.	6893 Jul 02 22:09	15°☿59'23	20.86211 AU
behind sun begin	6888 Jun 11 21:56	25°II54'16		morning rise	6893 Jul 18 18:26	16°☿53'40	
behind sun end	6888 Jun 11 23:41	25°II54'31		retrograde	6893 Oct 21 04:23	20°☿02'19	
max. Earth dist.	6888 Jun 12 13:40	25°II56'30	21.03972 AU	opposition	6894 Jan 06 12:08	18°☿02'16	0°03'51
morning rise	6888 Jun 28 01:20	26°II49'16		min. Earth dist.	6894 Jan 06 02:15	18°☿03'17	18.83977 AU
retrograde	6888 Sep 30 04:48	29°II55'58		direct	6894 Mar 22 16:08	16°☿04'38	
opposition	6888 Dec 16 21:57	27°II56'52	-0°15'36	evening set	6894 Jun 20 16:16	19°☿05'44	
min. Earth dist.	6888 Dec 16 09:03	27°II58'10	19.02659 AU				
direct	6889 Mar 02 09:28	26°II00'16		conjunction	6894 Jul 06 20:39	20°☿01'16	0°05'18
evening set	6889 May 31 05:07	28°II59'16		minimum elong	6894 Jul 06 20:40	20°☿01'16	0°05'14
				behind sun begin	6894 Jul 06 14:13	20°☿00'22	
conjunction	6889 Jun 16 05:19	29°II53'51	-0°12'28	behind sun end	6894 Jul 07 03:07	20°☿02'10	
minimum elong	6889 Jun 16 05:19	29°II53'51	0°12'32	max. Earth dist.	6894 Jul 07 06:44	20°☿02'42	20.81678 AU
behind sun begin	6889 Jun 16 01:02	29°II53'15		morning rise	6894 Jul 23 04:16	20°☿57'16	
behind sun end	6889 Jun 16 09:35	29°II54'27		retrograde	6894 Oct 25 14:07	24°☿06'28	
max. Earth dist.	6889 Jun 16 19:06	29°II55'49	21.01215 AU	opposition	6895 Jan 10 20:29	22°☿06'16	0°07'48
	6889 Jun 18 00:15	0°☿		min. Earth dist.	6895 Jan 10 12:02	22°☿07'08	18.79310 AU
morning rise	6889 Jul 02 08:43	0°☿48'53		direct	6895 Mar 26 22:04	20°☿08'26	
retrograde	6889 Oct 04 14:13	3°☿55'52		evening set	6895 Jun 25 01:02	23°☿10'11	
opposition	6889 Dec 21 05:21	1°☿56'35	-0°11'48				
min. Earth dist.	6889 Dec 20 16:27	1°☿57'53	18.99662 AU	conjunction	6895 Jul 11 06:19	24°☿05'57	0°08'51
	6890 Mar 03 15:33	30°☿II		minimum elong	6895 Jul 11 06:19	24°☿05'57	0°08'47
direct	6890 Mar 06 16:03	29°II59'46		behind sun begin	6895 Jul 11 00:34	24°☿05'09	
	6890 Mar 09 16:06	0°☿		behind sun end	6895 Jul 11 12:04	24°☿06'46	
evening set	6890 Jun 04 11:05	2°☿59'02		max. Earth dist.	6895 Jul 11 15:03	24°☿07'12	20.76893 AU
				morning rise	6895 Jul 27 14:50	25°☿02'11	
conjunction	6890 Jun 20 12:04	3°☿53'46	-0°09'01	retrograde	6895 Oct 30 02:53	28°☿11'59	
minimum elong	6890 Jun 20 12:04	3°☿53'46	0°09'06	opposition	6896 Jan 15 05:06	26°☿11'38	0°11'44
behind sun begin	6890 Jun 20 06:25	3°☿52'59		min. Earth dist.	6896 Jan 14 21:02	26°☿12'28	18.74387 AU
behind sun end	6890 Jun 20 17:42	3°☿54'34		direct	6896 Mar 30 05:38	24°☿13'36	



evening set	6896 Jun 28 10:47	27° $\mathring{O}$ 16'05		direct	6902 Apr 25 11:00	19° $\mathring{O}$ 18'16	
				evening set	6902 Jul 25 15:25	22° $\mathring{O}$ 26'15	
conjunction	6896 Jul 14 16:58	28° $\mathring{O}$ 12'07	0°12'23				
minimum elong	6896 Jul 14 16:58	28° $\mathring{O}$ 12'07	0°12'19	conjunction	6902 Aug 11 02:35	23° $\mathring{O}$ 23'57	0°32'03
behind sun begin	6896 Jul 14 12:35	28° $\mathring{O}$ 11'30		minimum elong	6902 Aug 11 02:35	23° $\mathring{O}$ 23'57	0°32'00
behind sun end	6896 Jul 14 21:21	28° $\mathring{O}$ 12'44		max. Earth dist.	6902 Aug 11 01:42	23° $\mathring{O}$ 23'50	20.35096 AU
max. Earth dist.	6896 Jul 15 01:05	28° $\mathring{O}$ 13'16	20.71828 AU	morning rise	6902 Aug 27 16:00	24° $\mathring{O}$ 22'02	
morning rise	6896 Jul 31 02:13	29° $\mathring{O}$ 08'35		retrograde	6902 Nov 30 03:34	27° $\mathring{O}$ 36'27	
	6896 Aug 15 19:20	0° $\mathring{O}$		opposition	6903 Feb 14 05:57	25° $\mathring{O}$ 34'53	0°37'08
retrograde	6896 Nov 02 13:35	2° $\mathring{O}$ 18'59		min. Earth dist.	6903 Feb 14 07:27	25° $\mathring{O}$ 34'44	18.31614 AU
opposition	6897 Jan 18 14:00	0° $\mathring{O}$ 18'33	0°15'38	direct	6903 Apr 29 21:43	23° $\mathring{O}$ 34'41	
min. Earth dist.	6897 Jan 18 07:38	0° $\mathring{O}$ 19'12	18.69180 AU	evening set	6903 Jul 30 07:14	26° $\mathring{O}$ 43'42	
	6897 Jan 26 02:27	30° $\mathring{R}$ $\mathring{O}$					
direct	6897 Apr 03 12:24	28° $\mathring{O}$ 20'18		conjunction	6903 Aug 15 19:02	27° $\mathring{O}$ 41'42	0°34'53
	6897 Jun 06 11:19	0° $\mathring{O}$		minimum elong	6903 Aug 15 19:02	27° $\mathring{O}$ 41'42	0°34'52
evening set	6897 Jul 02 21:22	1° $\mathring{O}$ 23'35		max. Earth dist.	6903 Aug 15 15:46	27° $\mathring{O}$ 41'13	20.28141 AU
				morning rise	6903 Sep 01 09:12	28° $\mathring{O}$ 40'04	
conjunction	6897 Jul 19 04:22	2° $\mathring{O}$ 19'52	0°15'52		6903 Sep 25 22:29	0° $\mathring{O}$	
minimum elong	6897 Jul 19 04:22	2° $\mathring{O}$ 19'52	0°15'48	retrograde	6903 Dec 04 20:41	1° $\mathring{O}$ 55'10	
behind sun begin	6897 Jul 19 03:33	2° $\mathring{O}$ 19'45			6904 Feb 16 03:21	30° $\mathring{R}$ $\mathring{O}$	
behind sun end	6897 Jul 19 05:10	2° $\mathring{O}$ 19'59		opposition	6904 Feb 18 18:20	29° $\mathring{O}$ 53'21	0°40'12
max. Earth dist.	6897 Jul 19 10:40	2° $\mathring{O}$ 20'46	20.66489 AU	min. Earth dist.	6904 Feb 18 21:05	29° $\mathring{O}$ 53'03	18.24620 AU
morning rise	6897 Aug 04 14:29	3° $\mathring{O}$ 16'36		direct	6904 May 03 10:05	27° $\mathring{O}$ 52'43	
retrograde	6897 Nov 07 03:28	6° $\mathring{O}$ 27'40			6904 Jul 15 01:33	0° $\mathring{O}$	
opposition	6898 Jan 22 23:25	4° $\mathring{O}$ 27'05	0°19'28	evening set	6904 Aug 02 23:56	1° $\mathring{O}$ 02'49	
min. Earth dist.	6898 Jan 22 17:50	4° $\mathring{O}$ 27'40	18.63689 AU				
direct	6898 Apr 07 20:48	2° $\mathring{O}$ 28'36		conjunction	6904 Aug 19 12:35	2° $\mathring{O}$ 01'08	0°37'32
evening set	6898 Jul 07 08:43	5° $\mathring{O}$ 32'46		minimum elong	6904 Aug 19 12:35	2° $\mathring{O}$ 01'08	0°37'30
				max. Earth dist.	6904 Aug 19 08:57	2° $\mathring{O}$ 00'35	20.21112 AU
conjunction	6898 Jul 23 16:36	6° $\mathring{O}$ 29'19	0°19'18	morning rise	6904 Sep 05 03:05	2° $\mathring{O}$ 59'46	
minimum elong	6898 Jul 23 16:36	6° $\mathring{O}$ 29'19	0°19'15	retrograde	6904 Dec 08 12:57	6° $\mathring{O}$ 15'31	
max. Earth dist.	6898 Jul 23 22:07	6° $\mathring{O}$ 30'07	20.60828 AU	opposition	6905 Feb 22 07:09	4° $\mathring{O}$ 13'29	0°43'04
morning rise	6898 Aug 09 03:20	7° $\mathring{O}$ 26'19		min. Earth dist.	6905 Feb 22 10:55	4° $\mathring{O}$ 13'05	18.17586 AU
retrograde	6898 Nov 11 15:50	10° $\mathring{O}$ 38'03		direct	6905 May 07 22:00	2° $\mathring{O}$ 12'27	
opposition	6899 Jan 27 09:26	8° $\mathring{O}$ 37'20	0°23'14	evening set	6905 Aug 07 17:38	5° $\mathring{O}$ 23'39	
min. Earth dist.	6899 Jan 27 05:36	8° $\mathring{O}$ 37'44	18.57864 AU				
direct	6899 Apr 12 05:02	6° $\mathring{O}$ 38'36		conjunction	6905 Aug 24 06:46	6° $\mathring{O}$ 22'16	0°40'00
evening set	6899 Jul 11 21:09	9° $\mathring{O}$ 43'39		minimum elong	6905 Aug 24 06:46	6° $\mathring{O}$ 22'16	0°39'59
				max. Earth dist.	6905 Aug 24 00:48	6° $\mathring{O}$ 21'22	20.14097 AU
conjunction	6899 Jul 28 05:48	10° $\mathring{O}$ 40'29	0°22'39	morning rise	6905 Sep 09 21:54	7° $\mathring{O}$ 21'10	
minimum elong	6899 Jul 28 05:48	10° $\mathring{O}$ 40'29	0°22'35	retrograde	6905 Dec 13 07:01	10° $\mathring{O}$ 37'37	
max. Earth dist.	6899 Jul 28 09:01	10° $\mathring{O}$ 40'57	20.54846 AU	opposition	6906 Feb 26 20:42	8° $\mathring{O}$ 35'21	0°45'41
morning rise	6899 Aug 13 17:23	11° $\mathring{O}$ 37'45		min. Earth dist.	6906 Feb 27 01:41	8° $\mathring{O}$ 34'49	18.10610 AU
retrograde	6899 Nov 16 06:39	14° $\mathring{O}$ 50'10		direct	6906 May 12 11:55	6° $\mathring{O}$ 33'54	
opposition	6900 Jan 31 19:48	12° $\mathring{O}$ 49'16	0°26'55	evening set	6906 Aug 12 11:55	9° $\mathring{O}$ 46'15	
min. Earth dist.	6900 Jan 31 17:05	12° $\mathring{O}$ 49'33	18.51717 AU				
direct	6900 Apr 16 14:31	10° $\mathring{O}$ 50'13		conjunction	6906 Aug 29 01:52	10° $\mathring{O}$ 45'10	0°42'14
evening set	6900 Jul 16 10:24	13° $\mathring{O}$ 56'13		minimum elong	6906 Aug 29 01:51	10° $\mathring{O}$ 45'10	0°42'12
				max. Earth dist.	6906 Aug 28 19:54	10° $\mathring{O}$ 44'17	20.07157 AU
conjunction	6900 Aug 01 20:00	14° $\mathring{O}$ 53'21	0°25'54	morning rise	6906 Sep 14 17:13	11° $\mathring{O}$ 44'21	
minimum elong	6900 Aug 01 19:59	14° $\mathring{O}$ 53'21	0°25'52	retrograde	6906 Dec 18 00:27	15° $\mathring{O}$ 01'29	
max. Earth dist.	6900 Aug 01 22:13	14° $\mathring{O}$ 53'40	20.48526 AU	opposition	6907 Mar 03 10:53	12° $\mathring{O}$ 59'01	0°48'03
	6900 Aug 03 17:31	15° $\mathring{O}$		min. Earth dist.	6907 Mar 03 16:29	12° $\mathring{O}$ 58'25	18.03729 AU
morning rise	6900 Aug 18 08:10	15° $\mathring{O}$ 50'52		direct	6907 May 17 01:48	10° $\mathring{O}$ 57'12	
retrograde	6900 Nov 20 20:34	19° $\mathring{O}$ 03'57		evening set	6907 Aug 17 07:30	14° $\mathring{O}$ 10'43	
opposition	6901 Feb 05 06:45	17° $\mathring{O}$ 02'52	0°30'28				
min. Earth dist.	6901 Feb 05 05:43	17° $\mathring{O}$ 02'58	18.45241 AU	conjunction	6907 Sep 02 21:52	15° $\mathring{O}$ 09'56	0°44'14
direct	6901 Apr 21 00:11	15° $\mathring{O}$ 03'27		minimum elong	6907 Sep 02 21:52	15° $\mathring{O}$ 09'56	0°44'13
evening set	6901 Jul 21 00:32	18° $\mathring{O}$ 10'25		max. Earth dist.	6907 Sep 02 13:35	15° $\mathring{O}$ 08'42	20.00352 AU
				morning rise	6907 Sep 19 13:45	16° $\mathring{O}$ 09'23	
conjunction	6901 Aug 06 10:48	19° $\mathring{O}$ 07'50	0°29'03	retrograde	6907 Dec 22 19:12	19° $\mathring{O}$ 27'13	
minimum elong	6901 Aug 06 10:48	19° $\mathring{O}$ 07'50	0°29'00	opposition	6908 Mar 07 01:39	17° $\mathring{O}$ 24'34	0°50'09
max. Earth dist.	6901 Aug 06 10:33	19° $\mathring{O}$ 07'48	20.41923 AU	min. Earth dist.	6908 Mar 07 08:37	17° $\mathring{O}$ 23'49	17.97018 AU
morning rise	6901 Aug 22 23:44	20° $\mathring{O}$ 05'38		direct	6908 May 20 16:54	15° $\mathring{O}$ 22'23	
retrograde	6901 Nov 25 12:25	23° $\mathring{O}$ 19'23		evening set	6908 Aug 21 03:55	18° $\mathring{O}$ 37'07	
opposition	6902 Feb 09 18:05	21° $\mathring{O}$ 18'04	0°33'53				
min. Earth dist.	6902 Feb 09 18:15	21° $\mathring{O}$ 18'03	18.38519 AU	conjunction	6908 Sep 06 18:58	19° $\mathring{O}$ 36'38	0°45'59

minimum elong	6908 Sep 06 18:58	19° <u>♏</u> 36'38	0°45'58	opposition	6915 Apr 08 05:45	19° <u>♏</u> 19'00	0°56'03
max. Earth dist.	6908 Sep 06 10:42	19° <u>♏</u> 35'24	19.93726 AU	min. Earth dist.	6915 Apr 08 19:09	19° <u>♏</u> 17'32	17.55545 AU
morning rise	6908 Sep 23 10:58	20° <u>♏</u> 36'21		direct	6915 Jun 22 04:55	17° <u>♏</u> 14'40	
retrograde	6908 Dec 26 14:27	23° <u>♏</u> 54'51		evening set	6915 Sep 24 05:20	20° <u>♏</u> 37'41	
opposition	6909 Mar 11 17:10	21° <u>♏</u> 52'06	0°51'58				
min. Earth dist.	6909 Mar 12 00:32	21° <u>♏</u> 51'18	17.90489 AU	conjunction	6915 Oct 10 22:07	21° <u>♏</u> 38'59	0°50'06
direct	6909 May 25 09:03	19° <u>♏</u> 49'36		minimum elong	6915 Oct 10 22:07	21° <u>♏</u> 38'59	0°50'08
evening set	6909 Aug 26 01:20	23° <u>♏</u> 05'32		max. Earth dist.	6915 Oct 10 04:46	21° <u>♏</u> 36'19	19.52978 AU
				morning rise	6915 Oct 27 14:07	22° <u>♏</u> 40'13	
conjunction	6909 Sep 11 16:39	24° <u>♏</u> 05'21	0°47'28	retrograde	6916 Jan 28 22:16	26° <u>♏</u> 02'43	
minimum elong	6909 Sep 11 16:39	24° <u>♏</u> 05'21	0°47'27	opposition	6916 Apr 12 02:13	23° <u>♏</u> 59'29	0°55'28
max. Earth dist.	6909 Sep 11 06:11	24° <u>♏</u> 03'46	19.87303 AU	min. Earth dist.	6916 Apr 12 17:27	23° <u>♏</u> 57'49	17.50547 AU
morning rise	6909 Sep 28 09:00	25° <u>♏</u> 05'19		direct	6916 Jun 26 02:05	21° <u>♏</u> 54'49	
retrograde	6909 Dec 31 09:58	28° <u>♏</u> 24'31		evening set	6916 Sep 28 08:33	25° <u>♏</u> 18'51	
opposition	6910 Mar 16 09:29	26° <u>♏</u> 21'40	0°53'29	max. Earth dist.	6916 Oct 14 07:16	26° <u>♏</u> 17'33	19.48162 AU
min. Earth dist.	6910 Mar 16 18:25	26° <u>♏</u> 20'42	17.84180 AU				
direct	6910 May 30 01:22	24° <u>♏</u> 18'51		conjunction	6916 Oct 15 01:19	26° <u>♏</u> 20'21	0°49'24
evening set	6910 Aug 30 23:41	27° <u>♏</u> 36'03		minimum elong	6916 Oct 15 01:19	26° <u>♏</u> 20'21	0°49'25
				morning rise	6916 Oct 31 17:04	27° <u>♏</u> 21'44	
conjunction	6910 Sep 16 15:34	28° <u>♏</u> 36'09	0°48'40		6916 Dec 23 04:54	0° <u>♏</u>	
minimum elong	6910 Sep 16 15:34	28° <u>♏</u> 36'09	0°48'41	retrograde	6917 Feb 01 22:56	0° <u>♏</u> 44'36	
max. Earth dist.	6910 Sep 16 05:03	28° <u>♏</u> 34'33	19.81094 AU		6917 Mar 15 10:02	30° <u>♏</u>	
morning rise	6910 Oct 03 07:55	29° <u>♏</u> 36'22		opposition	6917 Apr 16 23:12	28° <u>♏</u> 41'17	0°54'32
	6910 Oct 10 01:54	0° <u>♏</u>		min. Earth dist.	6917 Apr 17 14:04	28° <u>♏</u> 39'39	17.45922 AU
retrograde	6911 Jan 05 07:14	2° <u>♏</u> 56'13		direct	6917 Jul 01 01:52	26° <u>♏</u> 36'19	
opposition	6911 Mar 21 02:22	0° <u>♏</u> 53'19	0°54'41	evening set	6917 Oct 03 12:06	0° <u>♏</u> 01'17	
min. Earth dist.	6911 Mar 21 11:42	0° <u>♏</u> 52'18	17.78069 AU		6917 Oct 03 03:37	0° <u>♏</u>	
	6911 Apr 11 08:14	30° <u>♏</u>		max. Earth dist.	6917 Oct 19 10:20	1° <u>♏</u> 00'05	19.43740 AU
direct	6911 Jun 03 19:43	28° <u>♏</u> 50'13					
	6911 Jul 25 21:41	0° <u>♏</u>		conjunction	6917 Oct 20 04:46	1° <u>♏</u> 02'57	0°48'22
evening set	6911 Sep 04 23:12	2° <u>♏</u> 08'39		minimum elong	6917 Oct 20 04:46	1° <u>♏</u> 02'57	0°48'24
				morning rise	6917 Nov 05 20:04	2° <u>♏</u> 04'28	
conjunction	6911 Sep 21 15:17	3° <u>♏</u> 09'01	0°49'35	retrograde	6918 Feb 06 22:27	5° <u>♏</u> 27'38	
minimum elong	6911 Sep 21 15:17	3° <u>♏</u> 09'01	0°49'36	opposition	6918 Apr 21 20:55	3° <u>♏</u> 24'15	0°53'12
max. Earth dist.	6911 Sep 21 02:27	3° <u>♏</u> 07'04	19.75073 AU	min. Earth dist.	6918 Apr 22 13:10	3° <u>♏</u> 22'28	17.41735 AU
morning rise	6911 Oct 08 07:50	4° <u>♏</u> 09'28		direct	6918 Jul 06 00:17	1° <u>♏</u> 18'59	
retrograde	6912 Jan 10 03:50	7° <u>♏</u> 29'58		evening set	6918 Oct 08 16:12	4° <u>♏</u> 44'50	
opposition	6912 Mar 24 20:12	5° <u>♏</u> 27'00	0°55'33				
min. Earth dist.	6912 Mar 25 07:29	5° <u>♏</u> 25'47	17.72147 AU	conjunction	6918 Oct 25 08:38	5° <u>♏</u> 46'38	0°47'00
direct	6912 Jun 07 13:38	3° <u>♏</u> 23'36		minimum elong	6918 Oct 25 08:38	5° <u>♏</u> 46'38	0°47'03
evening set	6912 Sep 08 23:32	6° <u>♏</u> 43'15		max. Earth dist.	6918 Oct 24 13:27	5° <u>♏</u> 43'39	19.39803 AU
				morning rise	6918 Nov 10 23:38	6° <u>♏</u> 48'16	
conjunction	6912 Sep 25 16:00	7° <u>♏</u> 43'53	0°50'12	retrograde	6919 Feb 11 23:21	10° <u>♏</u> 11'39	
minimum elong	6912 Sep 25 16:00	7° <u>♏</u> 43'53	0°50'13	opposition	6919 Apr 26 18:51	8° <u>♏</u> 08'14	0°51'31
max. Earth dist.	6912 Sep 25 02:44	7° <u>♏</u> 41'51	19.69232 AU	min. Earth dist.	6919 Apr 27 10:31	8° <u>♏</u> 06'31	17.38057 AU
morning rise	6912 Oct 12 08:25	8° <u>♏</u> 44'33		direct	6919 Jul 11 00:58	6° <u>♏</u> 02'42	
retrograde	6913 Jan 14 02:35	12° <u>♏</u> 05'37		evening set	6919 Oct 13 20:39	9° <u>♏</u> 29'21	
opposition	6913 Mar 29 14:38	10° <u>♏</u> 02'36	0°56'05				
min. Earth dist.	6913 Mar 30 02:08	10° <u>♏</u> 01'21	17.66394 AU	conjunction	6919 Oct 30 12:55	10° <u>♏</u> 31'17	0°45'18
direct	6913 Jun 12 10:31	7° <u>♏</u> 58'55		minimum elong	6919 Oct 30 12:55	10° <u>♏</u> 31'17	0°45'21
evening set	6913 Sep 14 00:50	11° <u>♏</u> 19'44		max. Earth dist.	6919 Oct 29 18:08	10° <u>♏</u> 28'21	19.36389 AU
				morning rise	6919 Nov 16 03:16	11° <u>♏</u> 32'59	
conjunction	6913 Sep 30 17:22	12° <u>♏</u> 20'36	0°50'30	retrograde	6920 Feb 16 23:20	14° <u>♏</u> 56'33	
minimum elong	6913 Sep 30 17:22	12° <u>♏</u> 20'36	0°50'31	opposition	6920 Apr 30 17:34	12° <u>♏</u> 53'07	0°49'27
max. Earth dist.	6913 Sep 30 02:02	12° <u>♏</u> 18'15	19.63571 AU	min. Earth dist.	6920 May 01 10:08	12° <u>♏</u> 51'18	17.34934 AU
morning rise	6913 Oct 17 09:45	13° <u>♏</u> 21'29		direct	6920 Jul 15 00:47	10° <u>♏</u> 47'23	
retrograde	6914 Jan 18 23:55	16° <u>♏</u> 43'05		evening set	6920 Oct 18 01:23	14° <u>♏</u> 14'45	
opposition	6914 Apr 03 09:57	14° <u>♏</u> 40'00	0°56'15		6920 Oct 30 06:04	15° <u>♏</u>	
min. Earth dist.	6914 Apr 03 23:23	14° <u>♏</u> 38'32	17.60849 AU				
direct	6914 Jun 17 06:04	12° <u>♏</u> 35'58		conjunction	6920 Nov 03 17:09	15° <u>♏</u> 16'45	0°43'18
evening set	6914 Sep 19 02:36	15° <u>♏</u> 57'55		minimum elong	6920 Nov 03 17:09	15° <u>♏</u> 16'45	0°43'21
				max. Earth dist.	6920 Nov 02 21:34	15° <u>♏</u> 13'42	19.33573 AU
conjunction	6914 Oct 05 19:22	16° <u>♏</u> 59'01	0°50'28	morning rise	6920 Nov 20 07:02	16° <u>♏</u> 18'30	
minimum elong	6914 Oct 05 19:22	16° <u>♏</u> 59'01	0°50'29	retrograde	6921 Feb 20 23:45	19° <u>♏</u> 42'13	
max. Earth dist.	6914 Oct 05 03:28	16° <u>♏</u> 56'34	19.58144 AU	opposition	6921 May 05 16:37	17° <u>♏</u> 38'48	0°47'03
morning rise	6914 Oct 22 11:37	18° <u>♏</u> 00'05		min. Earth dist.	6921 May 06 08:21	17° <u>♏</u> 37'04	17.32435 AU
retrograde	6915 Jan 23 23:52	21° <u>♏</u> 22'10		direct	6921 Jul 20 02:37	15° <u>♏</u> 32'54	

evening set	6921 Oct 23 06:15	19° $\overline{\text{M}}$ 00'54		minimum elong	6927 Dec 09 00:06	18° $\overline{\text{X}}$ 49'02	0°21'53
				morning rise	6927 Dec 25 08:17	19° $\overline{\text{X}}$ 50'24	
conjunction	6921 Nov 08 21:44	20° $\overline{\text{M}}$ 02'58	0°40'59	retrograde	6928 Mar 26 04:57	23° $\overline{\text{X}}$ 13'21	
minimum elong	6921 Nov 08 21:44	20° $\overline{\text{M}}$ 02'58	0°41'02	opposition	6928 Jun 07 20:41	21° $\overline{\text{X}}$ 10'54	0°22'13
max. Earth dist.	6921 Nov 08 03:19	20° $\overline{\text{M}}$ 00'05	19.31391 AU	min. Earth dist.	6928 Jun 08 10:43	21° $\overline{\text{X}}$ 09'22	17.31614 AU
morning rise	6921 Nov 25 10:48	21° $\overline{\text{M}}$ 04'44		direct	6928 Aug 23 01:02	19° $\overline{\text{X}}$ 04'59	
retrograde	6922 Feb 26 00:06	24° $\overline{\text{M}}$ 28'31		evening set	6928 Nov 26 16:54	22° $\overline{\text{X}}$ 34'36	
opposition	6922 May 10 16:12	22° $\overline{\text{M}}$ 25'11	0°44'20	max. Earth dist.	6928 Dec 12 10:46	23° $\overline{\text{X}}$ 33'39	19.32485 AU
min. Earth dist.	6922 May 11 08:18	22° $\overline{\text{M}}$ 23'25	17.30577 AU				
direct	6922 Jul 25 04:09	20° $\overline{\text{M}}$ 19'12		conjunction	6928 Dec 13 03:20	23° $\overline{\text{X}}$ 36'15	0°17'57
evening set	6922 Oct 28 11:22	23° $\overline{\text{M}}$ 47'45		minimum elong	6928 Dec 13 03:20	23° $\overline{\text{X}}$ 36'15	0°18'02
max. Earth dist.	6922 Nov 13 06:59	24° $\overline{\text{M}}$ 46'50	19.29869 AU	morning rise	6928 Dec 29 10:35	24° $\overline{\text{X}}$ 37'27	
				retrograde	6929 Mar 31 04:24	28° $\overline{\text{X}}$ 00'03	
conjunction	6922 Nov 14 02:14	24° $\overline{\text{M}}$ 49'51	0°38'24	opposition	6929 Jun 12 22:05	25° $\overline{\text{X}}$ 57'43	0°17'50
minimum elong	6922 Nov 14 02:14	24° $\overline{\text{M}}$ 49'51	0°38'27	min. Earth dist.	6929 Jun 13 12:13	25° $\overline{\text{X}}$ 56'11	17.33505 AU
morning rise	6922 Nov 30 14:49	25° $\overline{\text{M}}$ 51'37		direct	6929 Aug 28 03:38	23° $\overline{\text{X}}$ 51'52	
retrograde	6923 Mar 03 00:24	29° $\overline{\text{M}}$ 15'27		evening set	6929 Dec 01 20:34	27° $\overline{\text{X}}$ 21'15	
opposition	6923 May 15 16:08	27° $\overline{\text{M}}$ 12'13	0°41'17				
min. Earth dist.	6923 May 16 07:36	27° $\overline{\text{M}}$ 10'31	17.29372 AU	conjunction	6929 Dec 18 06:09	28° $\overline{\text{X}}$ 22'44	0°13'59
direct	6923 Jul 30 07:15	25° $\overline{\text{M}}$ 06'10		minimum elong	6929 Dec 18 06:09	28° $\overline{\text{X}}$ 22'44	0°14'02
evening set	6923 Nov 02 16:34	28° $\overline{\text{M}}$ 35'13		behind sun begin	6929 Dec 18 02:51	28° $\overline{\text{X}}$ 22'13	
				behind sun end	6929 Dec 18 09:27	28° $\overline{\text{X}}$ 23'14	
conjunction	6923 Nov 19 07:00	29° $\overline{\text{M}}$ 37'18	0°35'32	max. Earth dist.	6929 Dec 17 14:42	28° $\overline{\text{X}}$ 20'18	19.34609 AU
minimum elong	6923 Nov 19 07:00	29° $\overline{\text{M}}$ 37'18	0°35'36	morning rise	6930 Jan 03 12:27	29° $\overline{\text{X}}$ 23'44	
max. Earth dist.	6923 Nov 18 13:12	29° $\overline{\text{M}}$ 34'31	19.28969 AU		6930 Jan 13 13:08	0° $\overline{\text{Z}}$	
	6923 Nov 25 07:25	0° $\overline{\text{X}}$		retrograde	6930 Apr 05 05:16	2° $\overline{\text{Z}}$ 45'54	
morning rise	6923 Dec 05 18:38	0° $\overline{\text{X}}$ 39'02		opposition	6930 Jun 17 23:10	0° $\overline{\text{Z}}$ 43'42	0°13'20
retrograde	6924 Mar 07 01:06	4° $\overline{\text{X}}$ 02'49		min. Earth dist.	6930 Jun 18 11:55	0° $\overline{\text{Z}}$ 42'19	17.35844 AU
opposition	6924 May 19 16:28	1° $\overline{\text{X}}$ 59'45	0°37'57		6930 Jul 05 03:41	30° $\overline{\text{R}}$ $\overline{\text{X}}$	
min. Earth dist.	6924 May 20 08:02	1° $\overline{\text{X}}$ 58'03	17.28764 AU	direct	6930 Sep 02 08:28	28° $\overline{\text{X}}$ 37'55	
	6924 Jul 19 01:30	30° $\overline{\text{R}}$ $\overline{\text{M}}$			6930 Oct 29 06:47	0° $\overline{\text{Z}}$	
direct	6924 Aug 03 10:16	29° $\overline{\text{M}}$ 53'43		evening set	6930 Dec 06 23:43	2° $\overline{\text{Z}}$ 06'57	
	6924 Aug 18 16:44	0° $\overline{\text{X}}$					
evening set	6924 Nov 06 21:56	3° $\overline{\text{X}}$ 23'07		conjunction	6930 Dec 23 08:21	3° $\overline{\text{Z}}$ 08'14	0°09'55
				minimum elong	6930 Dec 23 08:21	3° $\overline{\text{Z}}$ 08'14	0°10'00
conjunction	6924 Nov 23 11:32	4° $\overline{\text{X}}$ 25'11	0°32'25	behind sun begin	6930 Dec 23 02:57	3° $\overline{\text{Z}}$ 07'25	
minimum elong	6924 Nov 23 11:32	4° $\overline{\text{X}}$ 25'11	0°32'29	behind sun end	6930 Dec 23 13:45	3° $\overline{\text{Z}}$ 09'04	
max. Earth dist.	6924 Nov 22 16:55	4° $\overline{\text{X}}$ 22'15	19.28657 AU	max. Earth dist.	6930 Dec 22 17:36	3° $\overline{\text{Z}}$ 05'56	19.37179 AU
morning rise	6924 Dec 09 22:30	5° $\overline{\text{X}}$ 26'51		morning rise	6931 Jan 08 13:40	4° $\overline{\text{Z}}$ 09'03	
retrograde	6925 Mar 12 01:48	8° $\overline{\text{X}}$ 50'33		retrograde	6931 Apr 10 03:15	7° $\overline{\text{Z}}$ 30'43	
opposition	6925 May 24 17:13	6° $\overline{\text{X}}$ 47'38	0°34'21	opposition	6931 Jun 23 00:20	5° $\overline{\text{Z}}$ 28'39	0°08'45
min. Earth dist.	6925 May 25 08:28	6° $\overline{\text{X}}$ 45'58	17.28735 AU	min. Earth dist.	6931 Jun 23 13:14	5° $\overline{\text{Z}}$ 27'15	17.38646 AU
direct	6925 Aug 08 13:43	4° $\overline{\text{X}}$ 41'36		direct	6931 Sep 07 10:33	3° $\overline{\text{Z}}$ 22'57	
evening set	6925 Nov 12 02:53	8° $\overline{\text{X}}$ 11'15		evening set	6931 Dec 12 02:05	6° $\overline{\text{Z}}$ 51'32	
conjunction	6925 Nov 28 15:56	9° $\overline{\text{X}}$ 13'15	0°29'05	conjunction	6931 Dec 28 09:42	7° $\overline{\text{Z}}$ 52'36	0°05'48
minimum elong	6925 Nov 28 15:57	9° $\overline{\text{X}}$ 13'15	0°29'09	minimum elong	6931 Dec 28 09:42	7° $\overline{\text{Z}}$ 52'36	0°05'52
max. Earth dist.	6925 Nov 27 22:48	9° $\overline{\text{X}}$ 10'33	19.28891 AU	behind sun begin	6931 Dec 28 03:19	7° $\overline{\text{Z}}$ 51'37	
morning rise	6925 Dec 15 01:56	10° $\overline{\text{X}}$ 14'51		behind sun end	6931 Dec 28 16:05	7° $\overline{\text{Z}}$ 53'34	
retrograde	6926 Mar 17 03:06	13° $\overline{\text{X}}$ 38'22		max. Earth dist.	6931 Dec 27 19:55	7° $\overline{\text{Z}}$ 50'26	19.40221 AU
opposition	6926 May 29 18:14	11° $\overline{\text{X}}$ 35'37	0°30'31	morning rise	6932 Jan 13 14:04	8° $\overline{\text{Z}}$ 53'11	
min. Earth dist.	6926 May 30 09:08	11° $\overline{\text{X}}$ 34'00	17.29213 AU	retrograde	6932 Apr 14 03:14	12° $\overline{\text{Z}}$ 14'20	
direct	6926 Aug 13 17:32	9° $\overline{\text{X}}$ 29'38		opposition	6932 Jun 27 01:09	10° $\overline{\text{Z}}$ 12'22	0°04'08
evening set	6926 Nov 17 08:00	12° $\overline{\text{X}}$ 59'22		min. Earth dist.	6932 Jun 27 12:07	10° $\overline{\text{Z}}$ 11'11	17.41916 AU
				direct	6932 Sep 11 15:19	8° $\overline{\text{Z}}$ 06'47	
conjunction	6926 Dec 03 20:08	14° $\overline{\text{X}}$ 01'17	0°25'32	evening set	6932 Dec 16 03:39	11° $\overline{\text{Z}}$ 34'49	
minimum elong	6926 Dec 03 20:08	14° $\overline{\text{X}}$ 01'17	0°25'36				
max. Earth dist.	6926 Dec 03 02:19	13° $\overline{\text{X}}$ 58'29	19.29619 AU	conjunction	6933 Jan 01 10:18	12° $\overline{\text{Z}}$ 35'38	0°01'38
morning rise	6926 Dec 20 05:20	15° $\overline{\text{X}}$ 02'47		minimum elong	6933 Jan 01 10:18	12° $\overline{\text{Z}}$ 35'38	0°01'42
retrograde	6927 Mar 22 03:35	18° $\overline{\text{X}}$ 26'03		behind sun begin	6933 Jan 01 03:37	12° $\overline{\text{Z}}$ 34'37	
opposition	6927 Jun 03 19:20	16° $\overline{\text{X}}$ 23'27	0°26'28	behind sun end	6933 Jan 01 16:59	12° $\overline{\text{Z}}$ 36'39	
min. Earth dist.	6927 Jun 04 10:17	16° $\overline{\text{X}}$ 21'49	17.30187 AU	max. Earth dist.	6932 Dec 31 22:10	12° $\overline{\text{Z}}$ 33'45	19.43738 AU
direct	6927 Aug 18 20:38	14° $\overline{\text{X}}$ 17'29		morning rise	6933 Jan 17 13:36	13° $\overline{\text{Z}}$ 35'59	
evening set	6927 Nov 22 12:41	17° $\overline{\text{X}}$ 47'14		retrograde	6933 Apr 18 23:53	16° $\overline{\text{Z}}$ 56'35	
max. Earth dist.	6927 Dec 08 07:32	18° $\overline{\text{X}}$ 46'26	19.30828 AU	desc. node	6933 May 23 12:32	16° $\overline{\text{Z}}$ 55'12	
				opposition	6933 Jul 02 01:52	14° $\overline{\text{Z}}$ 54'45	-0°00'30
conjunction	6927 Dec 09 00:06	18° $\overline{\text{X}}$ 49'02	0°21'49	min. Earth dist.	6933 Jul 02 12:40	14° $\overline{\text{Z}}$ 53'35	17.45692 AU

direct	6933 Sep 16 16:44	12° $\text{♁}$ 49'19	morning rise	6939 Feb 14 17:40	11° $\text{♁}$ 22'08
evening set	6933 Dec 21 04:19	16° $\text{♁}$ 16'42	retrograde	6939 May 17 00:53	14° $\text{♁}$ 39'04
			opposition	6939 Jul 30 22:07	12° $\text{♁}$ 38'32 -0°26'36
conjunction	6934 Jan 06 09:54	17° $\text{♁}$ 17'16 -0°02'37	min. Earth dist.	6939 Jul 31 00:40	12° $\text{♁}$ 38'16 17.78013 AU
minimum elong	6934 Jan 06 09:54	17° $\text{♁}$ 17'16 0°02'33	direct	6939 Oct 15 23:38	10° $\text{♁}$ 35'00
behind sun begin	6934 Jan 06 03:15	17° $\text{♁}$ 16'15	evening set	6940 Jan 18 14:46	13° $\text{♁}$ 57'14
behind sun end	6934 Jan 06 16:33	17° $\text{♁}$ 18'17			
max. Earth dist.	6934 Jan 05 22:39	17° $\text{♁}$ 15'31 19.47776 AU	conjunction	6940 Feb 03 14:19	14° $\text{♁}$ 55'59 -0°25'42
morning rise	6934 Jan 22 12:22	18° $\text{♁}$ 17'22	minimum elong	6940 Feb 03 14:19	14° $\text{♁}$ 55'59 0°25'40
retrograde	6934 Apr 23 22:39	21° $\text{♁}$ 37'23	max. Earth dist.	6940 Feb 03 11:51	14° $\text{♁}$ 55'37 19.81233 AU
opposition	6934 Jul 07 02:06	19° $\text{♁}$ 35'41 -0°05'05		6940 Feb 04 16:19	15° $\text{♁}$
min. Earth dist.	6934 Jul 07 10:33	19° $\text{♁}$ 34'47 17.49980 AU	morning rise	6940 Feb 19 11:27	15° $\text{♁}$ 54'23
direct	6934 Sep 21 21:02	17° $\text{♁}$ 30'29	retrograde	6940 May 20 20:04	19° $\text{♁}$ 10'40
evening set	6934 Dec 26 04:13	20° $\text{♁}$ 57'10	opposition	6940 Aug 03 20:01	17° $\text{♁}$ 10'21 -0°30'26
			min. Earth dist.	6940 Aug 03 20:46	17° $\text{♁}$ 10'16 17.84463 AU
conjunction	6935 Jan 11 08:53	21° $\text{♁}$ 57'27 -0°06'43	direct	6940 Oct 19 21:40	15° $\text{♁}$ 07'10
minimum elong	6935 Jan 11 08:52	21° $\text{♁}$ 57'27 0°06'40	evening set	6941 Jan 22 09:19	18° $\text{♁}$ 28'20
behind sun begin	6935 Jan 11 02:39	21° $\text{♁}$ 56'30			
behind sun end	6935 Jan 11 15:06	21° $\text{♁}$ 58'24	conjunction	6941 Feb 07 08:08	19° $\text{♁}$ 26'47 -0°29'04
max. Earth dist.	6935 Jan 10 23:52	21° $\text{♁}$ 56'04 19.52317 AU	minimum elong	6941 Feb 07 08:08	19° $\text{♁}$ 26'46 0°29'00
morning rise	6935 Jan 27 10:13	22° $\text{♁}$ 57'17	max. Earth dist.	6941 Feb 07 08:04	19° $\text{♁}$ 26'46 19.87742 AU
retrograde	6935 Apr 28 17:54	26° $\text{♁}$ 16'42	morning rise	6941 Feb 23 04:21	20° $\text{♁}$ 24'52
opposition	6935 Jul 12 02:07	24° $\text{♁}$ 15'13 -0°09'38	retrograde	6941 May 25 13:31	23° $\text{♁}$ 40'27
min. Earth dist.	6935 Jul 12 10:10	24° $\text{♁}$ 14'21 17.54774 AU	opposition	6941 Aug 08 17:19	21° $\text{♁}$ 40'20 -0°34'03
direct	6935 Sep 26 21:43	22° $\text{♁}$ 10'16	min. Earth dist.	6941 Aug 08 17:19	21° $\text{♁}$ 40'20 17.91017 AU
evening set	6935 Dec 31 03:22	25° $\text{♁}$ 36'11	direct	6941 Oct 24 19:51	19° $\text{♁}$ 37'32
			evening set	6942 Jan 27 03:04	22° $\text{♁}$ 57'35
conjunction	6936 Jan 16 06:53	26° $\text{♁}$ 36'11 -0°10'44			
minimum elong	6936 Jan 16 06:52	26° $\text{♁}$ 36'11 0°10'40	conjunction	6942 Feb 12 00:52	23° $\text{♁}$ 55'42 -0°32'13
behind sun begin	6936 Jan 16 01:44	26° $\text{♁}$ 35'24	minimum elong	6942 Feb 12 00:52	23° $\text{♁}$ 55'42 0°32'11
behind sun end	6936 Jan 16 12:00	26° $\text{♁}$ 36'58	max. Earth dist.	6942 Feb 12 00:52	23° $\text{♁}$ 55'42 19.94329 AU
max. Earth dist.	6936 Jan 15 22:35	26° $\text{♁}$ 34'55 19.57367 AU	morning rise	6942 Feb 27 20:34	24° $\text{♁}$ 53'29
morning rise	6936 Feb 01 07:25	27° $\text{♁}$ 35'44	retrograde	6942 May 30 07:17	28° $\text{♁}$ 08'24
	6936 Mar 18 14:15	0° $\text{♁}$	opposition	6942 Aug 13 14:03	26° $\text{♁}$ 08'26 -0°37'26
retrograde	6936 May 02 15:42	0° $\text{♁}$ 54'34	min. Earth dist.	6942 Aug 13 12:39	26° $\text{♁}$ 08'35 17.97629 AU
	6936 Jun 18 09:12	30° $\text{♁}$ 3	direct	6942 Oct 29 16:29	24° $\text{♁}$ 05'58
opposition	6936 Jul 16 01:43	28° $\text{♁}$ 53'18 -0°14'04	evening set	6943 Jan 31 19:43	27° $\text{♁}$ 24'52
min. Earth dist.	6936 Jul 16 07:20	28° $\text{♁}$ 52'42 17.60050 AU			
direct	6936 Oct 01 00:34	26° $\text{♁}$ 48'40	conjunction	6943 Feb 16 16:51	28° $\text{♁}$ 22'40 -0°35'10
	6936 Dec 31 06:09	0° $\text{♁}$	minimum elong	6943 Feb 16 16:50	28° $\text{♁}$ 22'40 0°35'08
evening set	6937 Jan 04 01:21	0° $\text{♁}$ 13'45	max. Earth dist.	6943 Feb 16 19:03	28° $\text{♁}$ 23'00 20.00941 AU
			morning rise	6943 Mar 04 11:45	29° $\text{♁}$ 20'10
conjunction	6937 Jan 20 04:00	1° $\text{♁}$ 13'28 -0°14'40		6943 Mar 15 21:27	0° $\text{♁}$
minimum elong	6937 Jan 20 04:00	1° $\text{♁}$ 13'28 0°14'37	retrograde	6943 Jun 03 23:19	2° $\text{♁}$ 34'21
behind sun begin	6937 Jan 20 01:07	1° $\text{♁}$ 13'01	opposition	6943 Aug 18 10:09	0° $\text{♁}$ 34'33 -0°40'34
behind sun end	6937 Jan 20 06:53	1° $\text{♁}$ 13'54	min. Earth dist.	6943 Aug 18 07:43	0° $\text{♁}$ 34'48 18.04233 AU
max. Earth dist.	6937 Jan 19 22:21	1° $\text{♁}$ 12'36 19.62857 AU		6943 Sep 01 12:27	30° $\text{♁}$
morning rise	6937 Feb 05 03:30	2° $\text{♁}$ 12'43	direct	6943 Nov 03 13:57	28° $\text{♁}$ 32'25
retrograde	6937 May 07 10:13	5° $\text{♁}$ 30'57		6944 Jan 02 08:07	0° $\text{♁}$
opposition	6937 Jul 21 01:02	3° $\text{♁}$ 29'55 -0°18'24	evening set	6944 Feb 05 11:31	1° $\text{♁}$ 50'07
min. Earth dist.	6937 Jul 21 06:11	3° $\text{♁}$ 29'22 17.65732 AU			
direct	6937 Oct 06 00:27	1° $\text{♁}$ 25'40	conjunction	6944 Feb 21 07:43	2° $\text{♁}$ 47'36 -0°37'53
evening set	6938 Jan 08 22:46	4° $\text{♁}$ 49'51	minimum elong	6944 Feb 21 07:43	2° $\text{♁}$ 47'36 0°37'51
			max. Earth dist.	6944 Feb 21 10:08	2° $\text{♁}$ 47'58 20.07542 AU
conjunction	6938 Jan 25 00:16	5° $\text{♁}$ 49'14 -0°18'29	morning rise	6944 Mar 08 02:12	3° $\text{♁}$ 44'48
minimum elong	6938 Jan 25 00:16	5° $\text{♁}$ 49'14 0°18'26	retrograde	6944 Jun 07 15:18	6° $\text{♁}$ 58'18
max. Earth dist.	6938 Jan 24 19:03	5° $\text{♁}$ 48'26 19.68722 AU	opposition	6944 Aug 22 05:36	4° $\text{♁}$ 58'35 -0°43'27
morning rise	6938 Feb 09 23:04	6° $\text{♁}$ 48'13	min. Earth dist.	6944 Aug 22 02:01	4° $\text{♁}$ 58'57 18.10834 AU
retrograde	6938 May 12 06:37	10° $\text{♁}$ 05'48	direct	6944 Nov 07 09:21	2° $\text{♁}$ 56'45
opposition	6938 Jul 25 23:39	8° $\text{♁}$ 05'02 -0°22'35	evening set	6945 Feb 09 01:59	6° $\text{♁}$ 13'15
min. Earth dist.	6938 Jul 26 02:45	8° $\text{♁}$ 04'42 17.71752 AU			
direct	6938 Oct 11 00:41	6° $\text{♁}$ 01'07	conjunction	6945 Feb 24 21:40	7° $\text{♁}$ 10'24 -0°40'22
evening set	6939 Jan 13 19:11	9° $\text{♁}$ 24'22	minimum elong	6945 Feb 24 21:40	7° $\text{♁}$ 10'24 0°40'20
			max. Earth dist.	6945 Feb 25 02:17	7° $\text{♁}$ 11'06 20.14130 AU
conjunction	6939 Jan 29 19:53	10° $\text{♁}$ 23'27 -0°22'11	morning rise	6945 Mar 12 15:33	8° $\text{♁}$ 07'20
minimum elong	6939 Jan 29 19:53	10° $\text{♁}$ 23'27 0°22'07	retrograde	6945 Jun 12 05:32	11° $\text{♁}$ 20'07
max. Earth dist.	6939 Jan 29 17:09	10° $\text{♁}$ 23'02 19.74871 AU	opposition	6945 Aug 27 00:17	9° $\text{♁}$ 20'29 -0°46'03

min. Earth dist.	6945 Aug 26 19:19	9° $\mathbf{\text{H}}$ 21'00	18.17403 AU	conjunction	6952 Mar 25 23:25	6° $\mathbf{\text{Y}}$ 55'32	-0°50'20
direct	6945 Nov 12 05:34	7° $\mathbf{\text{H}}$ 18'57		minimum elong	6952 Mar 25 23:25	6° $\mathbf{\text{Y}}$ 55'32	0°50'21
evening set	6946 Feb 13 15:43	10° $\mathbf{\text{H}}$ 34'14		max. Earth dist.	6952 Mar 26 12:35	6° $\mathbf{\text{Y}}$ 57'29	20.59687 AU
				morning rise	6952 Apr 10 15:41	7° $\mathbf{\text{Y}}$ 50'48	
conjunction	6946 Mar 01 10:37	11° $\mathbf{\text{H}}$ 31'05	-0°42'35	retrograde	6952 Jul 11 18:24	10° $\mathbf{\text{Y}}$ 59'30	
minimum elong	6946 Mar 01 10:37	11° $\mathbf{\text{H}}$ 31'05	0°42'33	opposition	6952 Sep 26 15:38	9° $\mathbf{\text{Y}}$ 00'44	-0°55'58
max. Earth dist.	6946 Mar 01 15:41	11° $\mathbf{\text{H}}$ 31'50	20.20692 AU	min. Earth dist.	6952 Sep 26 02:36	9° $\mathbf{\text{Y}}$ 02'03	18.62758 AU
morning rise	6946 Mar 17 04:11	12° $\mathbf{\text{H}}$ 27'43		direct	6952 Dec 12 16:27	7° $\mathbf{\text{Y}}$ 01'41	
retrograde	6946 Jun 16 19:38	15° $\mathbf{\text{H}}$ 39'49		evening set	6953 Mar 14 15:08	10° $\mathbf{\text{Y}}$ 09'14	
opposition	6946 Aug 31 18:09	13° $\mathbf{\text{H}}$ 40'15	-0°48'21				
min. Earth dist.	6946 Aug 31 12:12	13° $\mathbf{\text{H}}$ 40'52	18.23977 AU	conjunction	6953 Mar 30 07:19	11° $\mathbf{\text{Y}}$ 04'17	-0°50'42
direct	6946 Nov 16 23:00	11° $\mathbf{\text{H}}$ 39'00		minimum elong	6953 Mar 30 07:19	11° $\mathbf{\text{Y}}$ 04'17	0°50'42
evening set	6947 Feb 18 04:21	14° $\mathbf{\text{H}}$ 53'05		max. Earth dist.	6953 Mar 30 21:46	11° $\mathbf{\text{Y}}$ 06'25	20.65729 AU
				morning rise	6953 Apr 14 23:33	11° $\mathbf{\text{Y}}$ 59'21	
conjunction	6947 Mar 05 22:46	15° $\mathbf{\text{H}}$ 49'38	-0°44'33	retrograde	6953 Jul 16 05:44	15° $\mathbf{\text{Y}}$ 07'37	
minimum elong	6947 Mar 05 22:46	15° $\mathbf{\text{H}}$ 49'38	0°44'32	opposition	6953 Oct 01 04:59	13° $\mathbf{\text{Y}}$ 09'00	-0°56'12
max. Earth dist.	6947 Mar 06 06:04	15° $\mathbf{\text{H}}$ 50'44	20.27266 AU	min. Earth dist.	6953 Sep 30 14:20	13° $\mathbf{\text{Y}}$ 10'28	18.68650 AU
morning rise	6947 Mar 21 15:49	16° $\mathbf{\text{H}}$ 46'01		direct	6953 Dec 17 05:39	11° $\mathbf{\text{Y}}$ 10'19	
retrograde	6947 Jun 21 08:30	19° $\mathbf{\text{H}}$ 57'26		evening set	6954 Mar 18 22:45	14° $\mathbf{\text{Y}}$ 16'54	
opposition	6947 Sep 05 11:25	17° $\mathbf{\text{H}}$ 57'58	-0°50'22				
min. Earth dist.	6947 Sep 05 03:36	17° $\mathbf{\text{H}}$ 58'46	18.30554 AU	conjunction	6954 Apr 03 14:41	15° $\mathbf{\text{Y}}$ 11'46	-0°50'47
direct	6947 Nov 21 17:15	15° $\mathbf{\text{H}}$ 57'03		minimum elong	6954 Apr 03 14:41	15° $\mathbf{\text{Y}}$ 11'46	0°50'49
evening set	6948 Feb 22 16:06	19° $\mathbf{\text{H}}$ 09'56		max. Earth dist.	6954 Apr 04 05:29	15° $\mathbf{\text{Y}}$ 13'56	20.71452 AU
				morning rise	6954 Apr 19 07:02	16° $\mathbf{\text{Y}}$ 06'40	
conjunction	6948 Mar 09 09:50	20° $\mathbf{\text{H}}$ 06'12	-0°46'14	retrograde	6954 Jul 20 14:24	19° $\mathbf{\text{Y}}$ 14'32	
minimum elong	6948 Mar 09 09:50	20° $\mathbf{\text{H}}$ 06'12	0°46'13	opposition	6954 Oct 05 17:54	17° $\mathbf{\text{Y}}$ 16'01	-0°56'09
max. Earth dist.	6948 Mar 09 17:54	20° $\mathbf{\text{H}}$ 07'24	20.33849 AU	min. Earth dist.	6954 Oct 05 03:37	17° $\mathbf{\text{Y}}$ 17'27	18.74210 AU
morning rise	6948 Mar 25 02:40	21° $\mathbf{\text{H}}$ 02'19		direct	6954 Dec 21 15:57	15° $\mathbf{\text{Y}}$ 17'40	
retrograde	6948 Jun 24 21:07	24° $\mathbf{\text{H}}$ 13'08		evening set	6955 Mar 23 05:46	18° $\mathbf{\text{Y}}$ 23'21	
opposition	6948 Sep 09 04:04	22° $\mathbf{\text{H}}$ 13'46	-0°52'05				
min. Earth dist.	6948 Sep 08 19:19	22° $\mathbf{\text{H}}$ 14'39	18.37155 AU	conjunction	6955 Apr 07 21:43	19° $\mathbf{\text{Y}}$ 18'02	-0°50'38
direct	6948 Nov 25 08:39	20° $\mathbf{\text{H}}$ 13'11		minimum elong	6955 Apr 07 21:43	19° $\mathbf{\text{Y}}$ 18'02	0°50'39
evening set	6949 Feb 26 02:56	23° $\mathbf{\text{H}}$ 24'56		max. Earth dist.	6955 Apr 08 13:21	19° $\mathbf{\text{Y}}$ 20'19	20.76825 AU
				morning rise	6955 Apr 23 14:08	20° $\mathbf{\text{Y}}$ 12'47	
conjunction	6949 Mar 13 20:20	24° $\mathbf{\text{H}}$ 20'55	-0°47'40	retrograde	6955 Jul 25 01:00	23° $\mathbf{\text{Y}}$ 20'15	
minimum elong	6949 Mar 13 20:20	24° $\mathbf{\text{H}}$ 20'55	0°47'40	opposition	6955 Oct 10 06:15	21° $\mathbf{\text{Y}}$ 21'51	-0°55'49
max. Earth dist.	6949 Mar 14 06:26	24° $\mathbf{\text{H}}$ 22'26	20.40443 AU	min. Earth dist.	6955 Oct 09 14:28	21° $\mathbf{\text{Y}}$ 23'25	18.79376 AU
morning rise	6949 Mar 29 12:51	25° $\mathbf{\text{H}}$ 16'48		direct	6955 Dec 26 03:31	19° $\mathbf{\text{Y}}$ 23'47	
retrograde	6949 Jun 29 09:24	28° $\mathbf{\text{H}}$ 27'01		evening set	6956 Mar 26 12:16	22° $\mathbf{\text{Y}}$ 28'35	
opposition	6949 Sep 13 19:43	26° $\mathbf{\text{H}}$ 27'47	-0°53'30				
min. Earth dist.	6949 Sep 13 09:04	26° $\mathbf{\text{H}}$ 28'53	18.43726 AU	conjunction	6956 Apr 11 04:08	23° $\mathbf{\text{Y}}$ 23'06	-0°50'13
direct	6949 Nov 30 00:42	24° $\mathbf{\text{H}}$ 27'35		minimum elong	6956 Apr 11 04:08	23° $\mathbf{\text{Y}}$ 23'06	0°50'15
evening set	6950 Mar 02 13:07	27° $\mathbf{\text{H}}$ 38'14		max. Earth dist.	6956 Apr 11 19:56	23° $\mathbf{\text{Y}}$ 25'24	20.81769 AU
				morning rise	6956 Apr 26 20:50	24° $\mathbf{\text{Y}}$ 17'44	
conjunction	6950 Mar 18 06:01	28° $\mathbf{\text{H}}$ 33'58	-0°48'49	retrograde	6956 Jul 28 09:01	27° $\mathbf{\text{Y}}$ 24'50	
minimum elong	6950 Mar 18 06:01	28° $\mathbf{\text{H}}$ 33'58	0°48'49	opposition	6956 Oct 13 18:10	25° $\mathbf{\text{Y}}$ 26'29	-0°55'12
max. Earth dist.	6950 Mar 18 16:49	28° $\mathbf{\text{H}}$ 35'34	20.46982 AU	min. Earth dist.	6956 Oct 13 03:01	25° $\mathbf{\text{Y}}$ 27'59	18.84106 AU
morning rise	6950 Apr 02 22:27	29° $\mathbf{\text{H}}$ 29'37		direct	6956 Dec 29 12:54	23° $\mathbf{\text{Y}}$ 28'40	
	6950 Apr 11 19:10	0° $\mathbf{\text{Y}}$		evening set	6957 Mar 30 18:17	26° $\mathbf{\text{Y}}$ 32'37	
retrograde	6950 Jul 03 20:36	2° $\mathbf{\text{Y}}$ 39'18					
opposition	6950 Sep 18 10:59	0° $\mathbf{\text{Y}}$ 40'13	-0°54'37	conjunction	6957 Apr 15 10:19	27° $\mathbf{\text{Y}}$ 26'59	-0°49'33
min. Earth dist.	6950 Sep 17 23:52	0° $\mathbf{\text{Y}}$ 41'21	18.50230 AU	minimum elong	6957 Apr 15 10:19	27° $\mathbf{\text{Y}}$ 26'59	0°49'34
	6950 Oct 05 07:15	30° $\mathbf{\text{R}}$ $\mathbf{\text{H}}$		max. Earth dist.	6957 Apr 16 02:37	27° $\mathbf{\text{Y}}$ 29'21	20.86272 AU
direct	6950 Dec 04 14:11	28° $\mathbf{\text{H}}$ 40'24		morning rise	6957 May 01 03:16	28° $\mathbf{\text{Y}}$ 21'30	
	6951 Jan 30 17:12	0° $\mathbf{\text{Y}}$			6957 Jun 01 18:07	0° $\mathbf{\text{B}}$	
evening set	6951 Mar 06 22:22	1° $\mathbf{\text{Y}}$ 49'59		retrograde	6957 Aug 01 18:37	1° $\mathbf{\text{B}}$ 28'14	
					6957 Oct 05 12:40	30° $\mathbf{\text{R}}$ $\mathbf{\text{Y}}$	
conjunction	6951 Mar 22 15:02	2° $\mathbf{\text{Y}}$ 45'28	-0°49'43	opposition	6957 Oct 18 05:11	29° $\mathbf{\text{Y}}$ 29'54	-0°54'19
minimum elong	6951 Mar 22 15:01	2° $\mathbf{\text{Y}}$ 45'28	0°49'43	min. Earth dist.	6957 Oct 17 12:45	29° $\mathbf{\text{Y}}$ 31'33	18.88372 AU
max. Earth dist.	6951 Mar 23 03:33	2° $\mathbf{\text{Y}}$ 47'19	20.53423 AU	direct	6958 Jan 02 23:05	27° $\mathbf{\text{Y}}$ 32'17	
morning rise	6951 Apr 07 07:15	3° $\mathbf{\text{Y}}$ 40'55			6958 Mar 24 08:12	0° $\mathbf{\text{B}}$	
retrograde	6951 Jul 08 08:32	6° $\mathbf{\text{Y}}$ 50'05		evening set	6958 Apr 03 23:53	0° $\mathbf{\text{B}}$ 35'26	
opposition	6951 Sep 23 01:33	4° $\mathbf{\text{Y}}$ 51'10	-0°55'26				
min. Earth dist.	6951 Sep 22 12:35	4° $\mathbf{\text{Y}}$ 52'29	18.56588 AU	conjunction	6958 Apr 19 15:59	1° $\mathbf{\text{B}}$ 29'40	-0°48'38
direct	6951 Dec 09 04:51	2° $\mathbf{\text{Y}}$ 51'44		minimum elong	6958 Apr 19 15:59	1° $\mathbf{\text{B}}$ 29'40	0°48'40
evening set	6952 Mar 10 07:08	6° $\mathbf{\text{Y}}$ 00'17		max. Earth dist.	6958 Apr 20 08:24	1° $\mathbf{\text{B}}$ 32'03	20.90309 AU
				morning rise	6958 May 05 09:19	2° $\mathbf{\text{B}}$ 24'05	

retrograde	6958 Aug 06 01:54	5°♄30'30	evening set	6965 May 01 05:30	28°♄29'29
opposition	6958 Oct 22 15:58	3°♄32'08 -0°53'09			
min. Earth dist.	6958 Oct 22 00:13	3°♄33'42 18.92200 AU	conjunction	6965 May 17 00:10	29°♄23'21 -0°36'06
direct	6959 Jan 07 07:18	1°♄34'41	minimum elong	6965 May 17 00:10	29°♄23'21 0°36'09
evening set	6959 Apr 08 04:47	4°♄37'03	max. Earth dist.	6965 May 17 19:04	29°♄26'03 21.08196 AU
				6965 May 27 16:30	0°♄
conjunction	6959 Apr 23 21:08	5°♄31'11 -0°47'29	morning rise	6965 Jun 01 21:12	0°♄17'34
minimum elong	6959 Apr 23 21:08	5°♄31'11 0°47'32	retrograde	6965 Sep 03 09:08	3°♄22'58
max. Earth dist.	6959 Apr 24 14:12	5°♄33'39 20.93936 AU	min. Earth dist.	6965 Nov 19 11:52	1°♄26'17 19.08794 AU
morning rise	6959 May 09 14:48	6°♄25'31	opposition	6965 Nov 20 06:16	1°♄24'27 -0°38'28
retrograde	6959 Aug 10 11:00	9°♄31'38		6965 Dec 29 16:32	30°♄
min. Earth dist.	6959 Oct 26 08:51	7°♄34'57 18.95628 AU	direct	6966 Feb 04 08:49	29°♄27'58
opposition	6959 Oct 27 02:04	7°♄33'14 -0°51'45		6966 Mar 12 02:11	0°♄
direct	6960 Jan 11 16:38	5°♄35'55	evening set	6966 May 05 09:29	2°♄26'55
evening set	6960 Apr 11 09:31	8°♄37'35			
			conjunction	6966 May 21 04:38	3°♄20'49 -0°33'33
conjunction	6960 Apr 27 02:02	9°♄31'37 -0°46'06	minimum elong	6966 May 21 04:38	3°♄20'49 0°33'37
minimum elong	6960 Apr 27 02:02	9°♄31'37 0°46'08	max. Earth dist.	6966 May 21 23:21	3°♄23'30 21.09225 AU
max. Earth dist.	6960 Apr 27 19:27	9°♄34'07 20.97174 AU	morning rise	6966 Jun 06 02:23	4°♄15'05
morning rise	6960 May 12 20:12	10°♄25'53	retrograde	6966 Sep 07 16:24	7°♄20'33
retrograde	6960 Aug 13 17:35	13°♄31'46	opposition	6966 Nov 24 14:16	5°♄22'02 -0°35'34
opposition	6960 Oct 30 11:42	11°♄33'18 -0°50'05	min. Earth dist.	6966 Nov 23 21:08	5°♄23'44 19.09595 AU
min. Earth dist.	6960 Oct 29 19:10	11°♄34'57 18.98701 AU	direct	6967 Feb 08 13:18	3°♄25'39
direct	6961 Jan 14 23:22	9°♄36'08	evening set	6967 May 09 13:26	6°♄24'25
evening set	6961 Apr 15 13:48	12°♄37'09			
			conjunction	6967 May 25 09:15	7°♄18'21 -0°30'51
conjunction	6961 May 01 06:43	13°♄31'07 -0°44'30	minimum elong	6967 May 25 09:15	7°♄18'21 0°30'54
minimum elong	6961 May 01 06:43	13°♄31'07 0°44'34	max. Earth dist.	6967 May 26 03:45	7°♄21'00 21.09792 AU
max. Earth dist.	6961 May 02 00:40	13°♄33'42 21.00080 AU	morning rise	6967 Jun 10 07:42	8°♄12'41
morning rise	6961 May 17 01:20	14°♄25'20	retrograde	6967 Sep 12 01:15	11°♄18'15
	6961 May 27 13:00	15°♄	opposition	6967 Nov 28 21:58	9°♄19'43 -0°32'29
retrograde	6961 Aug 18 02:41	17°♄31'00	min. Earth dist.	6967 Nov 28 04:17	9°♄21'29 19.09900 AU
opposition	6961 Nov 03 20:47	15°♄32'31 -0°48'11	direct	6968 Feb 12 19:41	7°♄23'24
min. Earth dist.	6961 Nov 03 02:48	15°♄34'19 19.01434 AU	evening set	6968 May 12 17:50	10°♄22'03
	6961 Nov 17 15:11	15°♄			
direct	6962 Jan 19 07:45	13°♄35'29	conjunction	6968 May 28 14:13	11°♄16'03 -0°28'00
	6962 Mar 19 13:10	15°♄	minimum elong	6968 May 28 14:13	11°♄16'03 0°28'04
evening set	6962 Apr 19 17:54	16°♄35'57	max. Earth dist.	6968 May 29 08:07	11°♄18'36 21.09822 AU
			morning rise	6968 Jun 13 13:27	12°♄10'28
conjunction	6962 May 05 11:06	17°♄29'51 -0°42'41	retrograde	6968 Sep 15 08:32	15°♄16'11
minimum elong	6962 May 05 11:06	17°♄29'51 0°42'44	opposition	6968 Dec 02 05:35	13°♄17'36 -0°29'15
max. Earth dist.	6962 May 06 05:21	17°♄32'29 21.02636 AU	min. Earth dist.	6968 Dec 01 13:34	13°♄19'12 19.09654 AU
morning rise	6962 May 21 06:16	18°♄24'03	direct	6969 Feb 16 00:30	11°♄21'19
retrograde	6962 Aug 22 08:55	21°♄29'35	evening set	6969 May 16 22:22	14°♄19'55
opposition	6962 Nov 08 05:41	19°♄31'04 -0°46'04			
min. Earth dist.	6962 Nov 07 12:26	19°♄32'47 19.03826 AU	conjunction	6969 Jun 01 19:30	15°♄13'59 -0°25'00
direct	6963 Jan 23 13:13	17°♄34'11	minimum elong	6969 Jun 01 19:30	15°♄13'59 0°25'04
evening set	6963 Apr 23 21:49	20°♄34'09	max. Earth dist.	6969 Jun 02 12:39	15°♄16'26 21.09296 AU
			morning rise	6969 Jun 17 19:29	16°♄08'29
conjunction	6963 May 09 15:29	21°♄28'01 -0°40'40	retrograde	6969 Sep 19 18:00	19°♄14'23
minimum elong	6963 May 09 15:29	21°♄28'01 0°40'44	opposition	6969 Dec 06 13:06	17°♄15'43 -0°25'53
max. Earth dist.	6963 May 10 10:10	21°♄30'43 21.04866 AU	min. Earth dist.	6969 Dec 05 20:49	17°♄17'21 19.08827 AU
morning rise	6963 May 25 11:13	22°♄22'13	direct	6970 Feb 20 06:26	15°♄19'24
retrograde	6963 Aug 26 17:52	25°♄27'39	evening set	6970 May 21 03:05	18°♄18'00
opposition	6963 Nov 12 14:08	23°♄29'07 -0°43'44			
min. Earth dist.	6963 Nov 11 19:36	23°♄30'58 19.05874 AU	conjunction	6970 Jun 06 00:51	19°♄12'10 -0°21'53
direct	6964 Jan 27 21:01	21°♄32'23	minimum elong	6970 Jun 06 00:51	19°♄12'10 0°21'58
evening set	6964 Apr 27 01:38	24°♄31'56	max. Earth dist.	6970 Jun 06 17:12	19°♄14'30 21.08170 AU
			morning rise	6970 Jun 22 01:39	20°♄06'47
conjunction	6964 May 12 19:44	25°♄25'48 -0°38'29	retrograde	6970 Sep 24 00:58	23°♄12'53
minimum elong	6964 May 12 19:44	25°♄25'48 0°38'32	opposition	6970 Dec 10 20:44	21°♄14'06 -0°22'22
max. Earth dist.	6964 May 13 14:33	25°♄28'30 21.06724 AU	min. Earth dist.	6970 Dec 10 06:08	21°♄15'34 19.07413 AU
morning rise	6964 May 28 16:09	26°♄20'00	direct	6971 Feb 24 11:46	19°♄17'43
retrograde	6964 Aug 30 00:36	29°♄25'24	evening set	6971 May 25 08:01	22°♄16'21
opposition	6964 Nov 15 22:28	27°♄26'52 -0°41'12			
min. Earth dist.	6964 Nov 15 04:56	27°♄28'37 19.07540 AU	conjunction	6971 Jun 10 06:36	23°♄10'38 -0°18'40
direct	6965 Jan 31 01:39	25°♄30'16	minimum elong	6971 Jun 10 06:36	23°♄10'38 0°18'44






























































































































max. Earth dist.	6971 Jun 10 22:12	23° $\Pi$ 12'52	21.06496 AU	opposition	6977 Jan 03 17:09	15° $\mathfrak{D}$ 13'46	0°00'29
morning rise	6971 Jun 26 08:14	24° $\Pi$ 05'21		min. Earth dist.	6977 Jan 03 06:52	15° $\mathfrak{D}$ 14'49	18.89529 AU
retrograde	6971 Sep 28 10:59	27° $\Pi$ 11'41		direct	6977 Mar 19 22:00	13° $\mathfrak{D}$ 16'26	
opposition	6971 Dec 15 04:03	25° $\Pi$ 12'44	-0°18'45	evening set	6977 Jun 17 21:17	16° $\mathfrak{D}$ 16'54	
min. Earth dist.	6971 Dec 14 13:16	25° $\Pi$ 14'14	19.05470 AU				
direct	6972 Feb 28 17:55	23° $\Pi$ 16'14		conjunction	6977 Jul 04 00:47	17° $\mathfrak{D}$ 12'11	0°02'16
evening set	6972 May 28 13:14	26° $\Pi$ 15'00		minimum elong	6977 Jul 04 00:46	17° $\mathfrak{D}$ 12'11	0°02'11
				behind sun begin	6977 Jul 03 18:07	17° $\mathfrak{D}$ 11'15	
conjunction	6972 Jun 13 12:35	27° $\Pi$ 09'24	-0°15'21	behind sun end	6977 Jul 04 07:25	17° $\mathfrak{D}$ 13'07	
minimum elong	6972 Jun 13 12:35	27° $\Pi$ 09'24	0°15'25	max. Earth dist.	6977 Jul 04 11:51	17° $\mathfrak{D}$ 13'46	20.87481 AU
behind sun begin	6972 Jun 13 10:41	27° $\Pi$ 09'08		morning rise	6977 Jul 20 07:31	18° $\mathfrak{D}$ 07'56	
behind sun end	6972 Jun 13 14:29	27° $\Pi$ 09'40		retrograde	6977 Oct 22 17:36	21° $\mathfrak{D}$ 16'30	
max. Earth dist.	6972 Jun 14 03:28	27° $\Pi$ 11'31	21.04300 AU	opposition	6978 Jan 08 01:02	19° $\mathfrak{D}$ 16'35	0°04'27
morning rise	6972 Jun 29 15:05	28° $\Pi$ 04'16		min. Earth dist.	6978 Jan 07 14:47	19° $\mathfrak{D}$ 17'37	18.85347 AU
	6972 Aug 07 15:00	0° $\mathfrak{D}$		direct	6978 Mar 24 05:13	17° $\mathfrak{D}$ 19'04	
retrograde	6972 Oct 01 17:53	1° $\mathfrak{D}$ 10'51		evening set	6978 Jun 22 05:16	20° $\mathfrak{D}$ 20'06	
	6972 Nov 27 21:38	30° $\mathfrak{R}$ $\Pi$					
opposition	6972 Dec 18 11:28	29° $\Pi$ 11'44	-0°15'02	conjunction	6978 Jul 08 09:37	21° $\mathfrak{D}$ 15'36	0°05'51
min. Earth dist.	6972 Dec 17 22:20	29° $\Pi$ 13'04	19.03039 AU	minimum elong	6978 Jul 08 09:36	21° $\mathfrak{D}$ 15'36	0°05'47
direct	6973 Mar 03 22:48	27° $\Pi$ 15'06		behind sun begin	6978 Jul 08 03:14	21° $\mathfrak{D}$ 14'42	
	6973 May 28 13:19	0° $\mathfrak{D}$		behind sun end	6978 Jul 08 15:59	21° $\mathfrak{D}$ 16'29	
evening set	6973 Jun 01 18:45	0° $\mathfrak{D}$ 14'02		max. Earth dist.	6978 Jul 08 20:01	21° $\mathfrak{D}$ 17'05	20.83140 AU
				morning rise	6978 Jul 24 17:09	22° $\mathfrak{D}$ 11'34	
conjunction	6973 Jun 17 18:53	1° $\mathfrak{D}$ 08'35	-0°11'57	retrograde	6978 Oct 27 03:19	25° $\mathfrak{D}$ 20'40	
minimum elong	6973 Jun 17 18:53	1° $\mathfrak{D}$ 08'35	0°12'01	opposition	6979 Jan 12 09:23	23° $\mathfrak{D}$ 20'37	0°08'24
behind sun begin	6973 Jun 17 14:21	1° $\mathfrak{D}$ 07'57		min. Earth dist.	6979 Jan 12 00:46	23° $\mathfrak{D}$ 21'30	18.80852 AU
behind sun end	6973 Jun 17 23:26	1° $\mathfrak{D}$ 09'12		direct	6979 Mar 28 11:00	21° $\mathfrak{D}$ 22'56	
max. Earth dist.	6973 Jun 18 09:04	1° $\mathfrak{D}$ 10'36	21.01660 AU	evening set	6979 Jun 26 14:08	24° $\mathfrak{D}$ 24'36	
morning rise	6973 Jul 03 22:13	2° $\mathfrak{D}$ 03'35					
retrograde	6973 Oct 06 04:08	5° $\mathfrak{D}$ 10'28		conjunction	6979 Jul 12 19:21	25° $\mathfrak{D}$ 20'20	0°09'23
opposition	6973 Dec 22 18:38	3° $\mathfrak{D}$ 11'11	-0°11'14	minimum elong	6979 Jul 12 19:21	25° $\mathfrak{D}$ 20'20	0°09'19
min. Earth dist.	6973 Dec 22 05:19	3° $\mathfrak{D}$ 12'31	19.00191 AU	behind sun begin	6979 Jul 12 13:46	25° $\mathfrak{D}$ 19'33	
direct	6974 Mar 08 05:33	1° $\mathfrak{D}$ 14'22		behind sun end	6979 Jul 13 00:56	25° $\mathfrak{D}$ 21'07	
evening set	6974 Jun 06 00:40	4° $\mathfrak{D}$ 13'35		max. Earth dist.	6979 Jul 13 04:26	25° $\mathfrak{D}$ 21'38	20.78504 AU
				morning rise	6979 Jul 29 03:47	26° $\mathfrak{D}$ 16'32	
conjunction	6974 Jun 22 01:35	5° $\mathfrak{D}$ 08'17	-0°08'29	retrograde	6979 Oct 31 15:27	29° $\mathfrak{D}$ 26'13	
minimum elong	6974 Jun 22 01:35	5° $\mathfrak{D}$ 08'17	0°08'33	opposition	6980 Jan 16 17:51	27° $\mathfrak{D}$ 26'03	0°12'19
behind sun begin	6974 Jun 21 19:47	5° $\mathfrak{D}$ 07'29		min. Earth dist.	6980 Jan 16 09:38	27° $\mathfrak{D}$ 26'53	18.76052 AU
behind sun end	6974 Jun 22 07:22	5° $\mathfrak{D}$ 09'06		direct	6980 Mar 31 18:33	25° $\mathfrak{D}$ 28'09	
max. Earth dist.	6974 Jun 22 15:10	5° $\mathfrak{D}$ 10'13	20.98616 AU	evening set	6980 Jun 29 23:52	28° $\mathfrak{D}$ 30'33	
morning rise	6974 Jul 08 05:44	6° $\mathfrak{D}$ 03'28					
retrograde	6974 Oct 10 11:20	9° $\mathfrak{D}$ 10'42		conjunction	6980 Jul 16 05:58	29° $\mathfrak{D}$ 26'32	0°12'55
opposition	6974 Dec 27 02:07	7° $\mathfrak{D}$ 11'14	-0°07'22	minimum elong	6980 Jul 16 05:58	29° $\mathfrak{D}$ 26'32	0°12'50
min. Earth dist.	6974 Dec 26 14:19	7° $\mathfrak{D}$ 12'26	18.96969 AU	behind sun begin	6980 Jul 16 01:52	29° $\mathfrak{D}$ 25'57	
direct	6975 Mar 12 09:57	5° $\mathfrak{D}$ 14'16		behind sun end	6980 Jul 16 10:03	29° $\mathfrak{D}$ 27'06	
evening set	6975 Jun 10 06:54	8° $\mathfrak{D}$ 13'48		max. Earth dist.	6980 Jul 16 14:03	29° $\mathfrak{D}$ 27'41	20.73528 AU
					6980 Jul 25 21:53	0° $\mathfrak{Q}$	
conjunction	6975 Jun 26 08:42	9° $\mathfrak{D}$ 08'41	-0°04'59	morning rise	6980 Aug 01 15:08	0° $\mathfrak{Q}$ 22'58	
minimum elong	6975 Jun 26 08:41	9° $\mathfrak{D}$ 08'41	0°05'04	retrograde	6980 Nov 04 02:45	3° $\mathfrak{Q}$ 33'15	
behind sun begin	6975 Jun 26 02:14	9° $\mathfrak{D}$ 07'47		opposition	6981 Jan 20 02:53	1° $\mathfrak{Q}$ 32'57	0°16'13
behind sun end	6975 Jun 26 15:08	9° $\mathfrak{D}$ 09'35		min. Earth dist.	6981 Jan 19 20:35	1° $\mathfrak{Q}$ 33'36	18.70900 AU
max. Earth dist.	6975 Jun 26 21:31	9° $\mathfrak{D}$ 10'31	20.95232 AU		6981 Mar 04 08:55	30° $\mathfrak{R}$ $\mathfrak{D}$	
morning rise	6975 Jul 12 13:44	10° $\mathfrak{D}$ 04'02		direct	6981 Apr 05 01:15	29° $\mathfrak{D}$ 34'50	
retrograde	6975 Oct 14 22:09	13° $\mathfrak{D}$ 11'41			6981 May 06 04:23	0° $\mathfrak{Q}$	
opposition	6975 Dec 31 09:33	11° $\mathfrak{D}$ 12'03	-0°03'27	evening set	6981 Jul 04 10:24	2° $\mathfrak{Q}$ 38'01	
min. Earth dist.	6975 Dec 30 21:39	11° $\mathfrak{D}$ 13'15	18.93413 AU				
direct	6976 Mar 15 17:11	9° $\mathfrak{D}$ 14'53		conjunction	6981 Jul 20 17:17	3° $\mathfrak{Q}$ 34'15	0°16'24
evening set	6976 Jun 13 13:49	12° $\mathfrak{D}$ 14'51		minimum elong	6981 Jul 20 17:17	3° $\mathfrak{Q}$ 34'15	0°16'21
				max. Earth dist.	6981 Jul 20 23:33	3° $\mathfrak{Q}$ 35'09	20.68202 AU
conjunction	6976 Jun 29 16:26	13° $\mathfrak{D}$ 09'56	-0°01'25	morning rise	6981 Aug 06 03:16	4° $\mathfrak{Q}$ 30'55	
minimum elong	6976 Jun 29 16:26	13° $\mathfrak{D}$ 09'56	0°01'28	retrograde	6981 Nov 08 16:08	7° $\mathfrak{Q}$ 41'51	
behind sun begin	6976 Jun 29 09:47	13° $\mathfrak{D}$ 09'00		opposition	6982 Jan 24 12:16	5° $\mathfrak{Q}$ 41'23	0°20'03
behind sun end	6976 Jun 29 23:05	13° $\mathfrak{D}$ 10'51		min. Earth dist.	6982 Jan 24 06:41	5° $\mathfrak{Q}$ 41'58	18.65385 AU
max. Earth dist.	6976 Jun 30 04:34	13° $\mathfrak{D}$ 11'39	20.91506 AU	direct	6982 Apr 09 09:56	3° $\mathfrak{Q}$ 43'01	
morning rise	6976 Jul 15 22:18	14° $\mathfrak{D}$ 05'28		evening set	6982 Jul 08 21:49	6° $\mathfrak{Q}$ 47'01	
retrograde	6976 Oct 18 06:12	17° $\mathfrak{D}$ 13'33					
asc. node	6976 Nov 18 22:53	16° $\mathfrak{D}$ 49'48		conjunction	6982 Jul 25 05:35	7° $\mathfrak{Q}$ 43'31	0°19'49

minimum elong	6982 Jul 25 05:35	7°Ω43'31	0°19'45	max. Earth dist.	6988 Aug 19 20:55	3°♊11'20	20.22531 AU
max. Earth dist.	6982 Jul 25 10:42	7°Ω44'15	20.62489 AU	morning rise	6988 Sep 05 14:46	4°♊10'24	
morning rise	6982 Aug 10 16:14	8°Ω40'27		retrograde	6988 Dec 09 00:05	7°♊25'56	
retrograde	6982 Nov 13 04:33	11°Ω52'00		opposition	6989 Feb 22 19:06	5°♊23'55	0°43'31
opposition	6983 Jan 28 22:13	9°Ω51'23	0°23'49	min. Earth dist.	6989 Feb 22 22:47	5°♊23'31	18.19033 AU
min. Earth dist.	6983 Jan 28 18:35	9°Ω51'45	18.59485 AU	direct	6989 May 08 11:09	3°♊22'55	
direct	6983 Apr 13 17:50	7°Ω52'42		evening set	6989 Aug 08 05:08	6°♊33'53	
evening set	6983 Jul 13 10:02	10°Ω57'34					
conjunction	6983 Jul 29 18:38	11°Ω54'20	0°23'10	conjunction	6989 Aug 24 18:11	7°♊32'26	0°40'23
minimum elong	6983 Jul 29 18:38	11°Ω54'20	0°23'08	minimum elong	6989 Aug 24 18:11	7°♊32'26	0°40'21
max. Earth dist.	6983 Jul 29 21:34	11°Ω54'46	20.56417 AU	max. Earth dist.	6989 Aug 24 12:35	7°♊31'36	20.15571 AU
morning rise	6983 Aug 15 06:09	12°Ω51'32		morning rise	6989 Sep 10 09:13	8°♊31'17	
	6983 Sep 27 10:00	15°Ω		retrograde	6989 Dec 13 17:24	11°♊47'33	
retrograde	6983 Nov 17 19:15	16°Ω03'44		opposition	6990 Feb 27 08:32	9°♊45'19	0°46'06
	6984 Jan 09 11:58	15°♌Ω		min. Earth dist.	6990 Feb 27 13:13	9°♊44'49	18.12117 AU
opposition	6984 Feb 02 08:32	14°Ω02'52	0°27'29	direct	6990 May 12 23:46	7°♊43'56	
min. Earth dist.	6984 Feb 02 05:52	14°Ω03'09	18.53235 AU	evening set	6990 Aug 12 23:24	10°♊56'05	
direct	6984 Apr 17 03:47	12°Ω03'50		conjunction	6990 Aug 29 13:14	11°♊54'57	0°42'36
	6984 Jul 14 03:22	15°Ω		minimum elong	6990 Aug 29 13:13	11°♊54'57	0°42'35
evening set	6984 Jul 16 23:09	15°Ω09'37		max. Earth dist.	6990 Aug 29 07:31	11°♊54'06	20.08695 AU
conjunction	6984 Aug 02 08:38	16°Ω06'40	0°26'25	morning rise	6990 Sep 15 04:30	12°♊54'04	
minimum elong	6984 Aug 02 08:38	16°Ω06'40	0°26'22	retrograde	6990 Dec 18 12:04	16°♊11'02	
max. Earth dist.	6984 Aug 02 10:31	16°Ω06'57	20.49999 AU	opposition	6991 Mar 03 22:29	14°♊08'40	0°48'26
morning rise	6984 Aug 18 20:43	17°Ω04'08		min. Earth dist.	6991 Mar 04 04:00	14°♊08'04	18.05304 AU
retrograde	6984 Nov 21 08:39	20°Ω16'57		direct	6991 May 17 13:46	12°♊06'57	
opposition	6985 Feb 05 19:13	18°Ω15'53	0°31'02	evening set	6991 Aug 17 18:48	15°♊20'18	
min. Earth dist.	6985 Feb 05 18:23	18°Ω15'58	18.46674 AU	conjunction	6991 Sep 03 09:04	16°♊19'27	0°44'34
direct	6985 Apr 21 13:12	16°Ω16'28		minimum elong	6991 Sep 03 09:04	16°♊19'27	0°44'33
evening set	6985 Jul 21 13:04	19°Ω23'12		max. Earth dist.	6991 Sep 03 01:01	16°♊18'15	20.01956 AU
conjunction	6985 Aug 06 23:16	20°Ω20'32	0°29'32	morning rise	6991 Sep 20 00:53	17°♊18'51	
minimum elong	6985 Aug 06 23:16	20°Ω20'32	0°29'30	retrograde	6991 Dec 23 06:24	20°♊36'33	
max. Earth dist.	6985 Aug 06 23:00	20°Ω20'30	20.43332 AU	opposition	6992 Mar 07 13:15	18°♊34'02	0°50'31
morning rise	6985 Aug 23 12:08	21°Ω18'16		min. Earth dist.	6992 Mar 07 20:00	18°♊33'19	17.98643 AU
retrograde	6985 Nov 26 00:06	24°Ω31'45		direct	6992 May 21 04:04	16°♊32'00	
opposition	6986 Feb 10 06:26	22°Ω30'25	0°34'25	evening set	6992 Aug 21 15:05	19°♊46'35	
min. Earth dist.	6986 Feb 10 06:33	22°Ω30'25	18.39909 AU	conjunction	6992 Sep 07 06:01	20°♊46'03	0°46'17
direct	6986 Apr 26 00:05	20°Ω30'37		minimum elong	6992 Sep 07 06:01	20°♊46'03	0°46'17
evening set	6986 Jul 26 03:37	23°Ω38'19		max. Earth dist.	6992 Sep 06 21:56	20°♊44'50	19.95363 AU
conjunction	6986 Aug 11 14:42	24°Ω35'58	0°32'31	morning rise	6992 Sep 23 21:55	21°♊45'43	
minimum elong	6986 Aug 11 14:42	24°Ω35'58	0°32'29	retrograde	6992 Dec 27 02:26	25°♊04'07	
max. Earth dist.	6986 Aug 11 13:51	24°Ω35'51	20.36477 AU	opposition	6993 Mar 12 04:36	23°♊01'32	0°52'18
morning rise	6986 Aug 28 04:04	25°Ω33'58		min. Earth dist.	6993 Mar 12 12:02	23°♊00'44	17.92126 AU
retrograde	6986 Nov 30 15:02	28°Ω48'08		direct	6993 May 25 19:48	20°♊59'12	
opposition	6987 Feb 14 18:12	26°Ω46'34	0°37'39	evening set	6993 Aug 26 12:32	24°♊15'02	
min. Earth dist.	6987 Feb 14 19:45	26°Ω46'24	18.32992 AU	conjunction	6993 Sep 12 03:45	25°♊14'48	0°47'45
direct	6987 Apr 30 11:01	24°Ω46'21		minimum elong	6993 Sep 12 03:44	25°♊14'48	0°47'45
evening set	6987 Jul 30 19:18	27°Ω55'06		max. Earth dist.	6993 Sep 11 17:15	25°♊13'13	19.88928 AU
conjunction	6987 Aug 16 07:02	28°Ω53'02	0°35'20	morning rise	6993 Sep 28 20:01	26°♊14'44	
minimum elong	6987 Aug 16 07:02	28°Ω53'02	0°35'17	retrograde	6993 Dec 31 21:46	29°♊33'51	
max. Earth dist.	6987 Aug 16 03:59	28°Ω52'36	20.29526 AU	opposition	6994 Mar 16 20:49	27°♊31'10	0°53'47
morning rise	6987 Sep 01 21:07	29°Ω51'20		min. Earth dist.	6994 Mar 17 05:51	27°♊30'11	17.85774 AU
	6987 Sep 04 09:35	0°♊		direct	6994 May 30 12:14	25°♊28'32	
retrograde	6987 Dec 05 07:20	3°♊06'11		evening set	6994 Aug 31 10:46	28°♊45'37	
opposition	6988 Feb 19 06:18	1°♊04'21	0°40'41	conjunction	6994 Sep 17 02:34	29°♊45'40	0°48'55
min. Earth dist.	6988 Feb 19 08:53	1°♊04'05	18.26020 AU	minimum elong	6994 Sep 17 02:34	29°♊45'40	0°48'55
	6988 Mar 17 00:05	30°♌Ω		max. Earth dist.	6994 Sep 16 15:53	29°♊44'03	19.82635 AU
direct	6988 May 03 22:41	29°Ω03'44			6994 Sep 21 01:09	0°♌	
	6988 Jun 19 17:52	0°♊		morning rise	6994 Oct 03 18:51	0°♌45'51	
evening set	6988 Aug 03 11:47	2°♊13'35		retrograde	6995 Jan 05 18:53	4°♌05'38	
conjunction	6988 Aug 20 00:20	3°♊11'50	0°37'58	opposition	6995 Mar 21 13:46	2°♌02'53	0°54'57
minimum elong	6988 Aug 20 00:20	3°♊11'50	0°37'56	min. Earth dist.	6995 Mar 21 23:24	2°♌01'50	17.79541 AU
					6995 Jun 02 17:53	30°♌♊	



direct	6995 Jun 04 06:23	29° <u>17</u> 59'56	conjunction	7001 Oct 21 14:39	2° <u>11</u> 10'23	0°48'20
	6995 Jun 05 18:55	0° <u>0</u>	minimum elong	7001 Oct 21 14:39	2° <u>11</u> 10'23	0°48'23
evening set	6995 Sep 05 10:18	3° <u>0</u> 18'15	max. Earth dist.	7001 Oct 20 20:00	2° <u>11</u> 07'30	19.44115 AU
			morning rise	7001 Nov 07 05:57	3° <u>11</u> 11'52	
conjunction	6995 Sep 22 02:17	4° <u>0</u> 18'34 0°49'48	retrograde	7002 Feb 08 07:25	6° <u>11</u> 34'53	
minimum elong	6995 Sep 22 02:17	4° <u>0</u> 18'34 0°49'49	opposition	7002 Apr 23 07:10	4° <u>11</u> 31'25	0°53'09
max. Earth dist.	6995 Sep 21 12:59	4° <u>0</u> 16'33 19.76460 AU	min. Earth dist.	7002 Apr 23 23:27	4° <u>11</u> 29'37	17.42075 AU
morning rise	6995 Oct 08 18:46	5° <u>0</u> 18'59	direct	7002 Jul 07 10:45	2° <u>11</u> 26'04	
retrograde	6996 Jan 10 15:00	8° <u>0</u> 39'24	evening set	7002 Oct 10 01:53	5° <u>11</u> 51'43	
opposition	6996 Mar 25 07:27	6° <u>0</u> 36'33 0°55'46				
min. Earth dist.	6996 Mar 25 18:58	6° <u>0</u> 35'18 17.73440 AU	conjunction	7002 Oct 26 18:20	6° <u>11</u> 53'29	0°46'56
direct	6996 Jun 08 00:58	4° <u>0</u> 33'16	minimum elong	7002 Oct 26 18:20	6° <u>11</u> 53'29	0°46'59
evening set	6996 Sep 09 10:31	7° <u>0</u> 52'47	max. Earth dist.	7002 Oct 25 23:12	6° <u>11</u> 50'30	19.40111 AU
			morning rise	7002 Nov 12 09:20	7° <u>11</u> 55'04	
conjunction	6996 Sep 26 02:55	8° <u>0</u> 53'22 0°50'23	retrograde	7003 Feb 13 09:00	11° <u>11</u> 18'20	
minimum elong	6996 Sep 26 02:55	8° <u>0</u> 53'22 0°50'23	opposition	7003 Apr 28 05:05	9° <u>11</u> 14'49	0°51'25
max. Earth dist.	6996 Sep 25 13:13	8° <u>0</u> 51'17 19.70424 AU	min. Earth dist.	7003 Apr 28 20:36	9° <u>11</u> 13'06	17.38342 AU
morning rise	6996 Oct 12 19:17	9° <u>0</u> 54'00	direct	7003 Jul 12 11:55	7° <u>11</u> 09'13	
retrograde	6997 Jan 14 13:22	13° <u>0</u> 14'59	evening set	7003 Oct 15 06:13	10° <u>11</u> 35'41	
opposition	6997 Mar 30 01:51	11° <u>0</u> 12'02 0°56'16				
min. Earth dist.	6997 Mar 30 13:39	11° <u>0</u> 10'45 17.67481 AU	conjunction	7003 Oct 31 22:26	11° <u>11</u> 37'34	0°45'12
direct	6997 Jun 12 21:30	9° <u>0</u> 08'24	minimum elong	7003 Oct 31 22:26	11° <u>11</u> 37'34	0°45'16
evening set	6997 Sep 14 11:29	12° <u>0</u> 29'04	max. Earth dist.	7003 Oct 31 03:35	11° <u>11</u> 34'38	19.36656 AU
			morning rise	7003 Nov 17 12:47	12° <u>11</u> 39'15	
conjunction	6997 Oct 01 03:57	13° <u>0</u> 29'53 0°50'38		7003 Dec 31 22:58	15° <u>11</u>	
minimum elong	6997 Oct 01 03:57	13° <u>0</u> 29'53 0°50'39	retrograde	7004 Feb 18 07:57	16° <u>11</u> 02'42	
max. Earth dist.	6997 Sep 30 12:07	13° <u>0</u> 27'28 19.64556 AU		7004 Apr 08 00:12	15° <u>11</u> 00	
morning rise	6997 Oct 17 20:20	14° <u>0</u> 30'44	opposition	7004 May 02 03:39	13° <u>11</u> 59'12	0°49'19
retrograde	6998 Jan 19 10:25	17° <u>0</u> 52'14	min. Earth dist.	7004 May 02 20:07	13° <u>11</u> 57'23	17.35193 AU
opposition	6998 Apr 03 21:01	15° <u>0</u> 49'09 0°56'23	direct	7004 Jul 16 11:08	11° <u>11</u> 53'24	
min. Earth dist.	6998 Apr 04 10:40	15° <u>0</u> 47'40 17.61731 AU		7004 Oct 13 17:56	15° <u>11</u>	
direct	6998 Jun 17 17:40	13° <u>0</u> 45'10	evening set	7004 Oct 19 10:52	15° <u>11</u> 20'38	
evening set	6998 Sep 19 13:11	17° <u>0</u> 06'56	max. Earth dist.	7004 Nov 04 07:12	16° <u>11</u> 19'34	19.33827 AU
conjunction	6998 Oct 06 05:55	18° <u>0</u> 07'59 0°50'34	conjunction	7004 Nov 05 02:39	16° <u>11</u> 22'36	0°43'10
minimum elong	6998 Oct 06 05:55	18° <u>0</u> 07'59 0°50'36	minimum elong	7004 Nov 05 02:39	16° <u>11</u> 22'36	0°43'12
max. Earth dist.	6998 Oct 05 13:42	18° <u>0</u> 05'30 19.58932 AU	morning rise	7004 Nov 21 16:34	17° <u>11</u> 24'20	
morning rise	6998 Oct 22 22:07	19° <u>0</u> 09'01	retrograde	7005 Feb 22 09:47	20° <u>11</u> 47'58	
retrograde	6999 Jan 24 10:11	22° <u>0</u> 30'58	opposition	7005 May 07 02:39	18° <u>11</u> 44'30	0°46'53
opposition	6999 Apr 08 16:32	20° <u>0</u> 27'47 0°56'08	min. Earth dist.	7005 May 07 18:11	18° <u>11</u> 42'48	17.32679 AU
min. Earth dist.	6999 Apr 09 06:11	20° <u>0</u> 26'18 17.56243 AU	direct	7005 Jul 21 13:11	16° <u>11</u> 38'36	
direct	6999 Jun 22 15:59	18° <u>0</u> 23'26	evening set	7005 Oct 24 15:32	20° <u>11</u> 06'29	
evening set	6999 Sep 24 15:41	21° <u>0</u> 46'16				
			conjunction	7005 Nov 10 07:04	21° <u>11</u> 08'32	0°40'49
conjunction	6999 Oct 11 08:25	22° <u>0</u> 47'32 0°50'10	minimum elong	7005 Nov 10 07:04	21° <u>11</u> 08'32	0°40'53
minimum elong	6999 Oct 11 08:25	22° <u>0</u> 47'32 0°50'11	max. Earth dist.	7005 Nov 09 12:40	21° <u>11</u> 05'39	19.31623 AU
max. Earth dist.	6999 Oct 10 14:41	22° <u>0</u> 44'48 19.53597 AU	morning rise	7005 Nov 26 20:13	22° <u>11</u> 10'18	
morning rise	6999 Oct 28 00:26	23° <u>0</u> 48'44	retrograde	7006 Feb 27 09:25	25° <u>11</u> 34'03	
retrograde	7000 Jan 29 08:04	27° <u>0</u> 11'05	opposition	7006 May 12 02:14	23° <u>11</u> 30'42	0°44'07
opposition	7000 Apr 13 12:55	25° <u>0</u> 07'48 0°55'31	min. Earth dist.	7006 May 12 18:26	23° <u>11</u> 28'55	17.30781 AU
min. Earth dist.	7000 Apr 14 04:17	25° <u>0</u> 06'07 17.51093 AU	direct	7006 Jul 26 13:43	21° <u>11</u> 24'43	
direct	7000 Jun 27 12:56	23° <u>0</u> 03'05	evening set	7006 Oct 29 20:45	24° <u>11</u> 53'13	
evening set	7000 Sep 29 18:34	26° <u>0</u> 26'55				
			conjunction	7006 Nov 15 11:38	25° <u>11</u> 55'18	0°38'11
conjunction	7000 Oct 16 11:17	27° <u>0</u> 28'22 0°49'25	minimum elong	7006 Nov 15 11:38	25° <u>11</u> 55'18	0°38'15
minimum elong	7000 Oct 16 11:17	27° <u>0</u> 28'22 0°49'28	max. Earth dist.	7006 Nov 14 16:23	25° <u>11</u> 52'17	19.30037 AU
max. Earth dist.	7000 Oct 15 17:13	27° <u>0</u> 25'34 19.48641 AU	morning rise	7006 Dec 02 00:16	26° <u>11</u> 57'04	
morning rise	7000 Nov 02 03:00	28° <u>0</u> 29'43		7007 Feb 05 01:41	0° <u>11</u> 00	
	7000 Nov 28 18:31	0° <u>11</u> 00	retrograde	7007 Mar 04 11:08	0° <u>11</u> 20'54	
retrograde	7001 Feb 03 09:07	1° <u>11</u> 52'26		7007 Apr 01 03:34	30° <u>11</u> 00	
	7001 Apr 14 05:24	30° <u>11</u> 00	opposition	7007 May 17 02:03	28° <u>11</u> 17'40	0°41'02
opposition	7001 Apr 18 09:42	29° <u>0</u> 49'02 0°54'31	min. Earth dist.	7007 May 17 17:39	28° <u>11</u> 15'58	17.29485 AU
min. Earth dist.	7001 Apr 19 00:36	29° <u>0</u> 47'24 17.46345 AU	direct	7007 Jul 31 16:44	26° <u>11</u> 11'40	
direct	7001 Jul 02 12:54	27° <u>0</u> 44'00	evening set	7007 Nov 04 02:00	29° <u>11</u> 40'40	
	7001 Sep 15 01:45	0° <u>11</u> 00		7007 Nov 09 07:18	0° <u>11</u> 00	
evening set	7001 Oct 04 22:02	1° <u>11</u> 08'46				
			conjunction	7007 Nov 20 16:28	0° <u>11</u> 42'47	0°35'18

minimum elong	7007 Nov 20 16:28	0° $\mathring{A}$ 42'47	0°35'21	opposition	7014 Jun 19 09:21	1° $\mathring{B}$ 50'26	0°12'52
max. Earth dist.	7007 Nov 19 22:29	0° $\mathring{A}$ 39'57	19.29016 AU	min. Earth dist.	7014 Jun 19 22:21	1° $\mathring{B}$ 49'02	17.34644 AU
morning rise	7007 Dec 07 04:09	1° $\mathring{A}$ 44'31			7014 Aug 10 08:54	30° $\mathring{R}$ $\mathring{A}$	
retrograde	7008 Mar 08 11:21	5° $\mathring{A}$ 08'20		direct	7014 Sep 03 17:54	29° $\mathring{A}$ 44'35	
opposition	7008 May 21 02:32	3° $\mathring{A}$ 05'17	0°37'40		7014 Sep 27 20:54	0° $\mathring{B}$	
min. Earth dist.	7008 May 21 18:29	3° $\mathring{A}$ 03'32	17.28731 AU	evening set	7014 Dec 08 09:30	3° $\mathring{B}$ 13'45	
direct	7008 Aug 04 19:16	0° $\mathring{A}$ 59'16					
evening set	7008 Nov 08 07:17	4° $\mathring{A}$ 28'40		conjunction	7014 Dec 24 18:11	4° $\mathring{B}$ 15'05	0°09'29
				minimum elong	7014 Dec 24 18:12	4° $\mathring{B}$ 15'05	0°09'33
conjunction	7008 Nov 24 20:54	5° $\mathring{A}$ 30'44	0°32'09	behind sun begin	7014 Dec 24 12:39	4° $\mathring{B}$ 14'14	
minimum elong	7008 Nov 24 20:54	5° $\mathring{A}$ 30'44	0°32'14	behind sun end	7014 Dec 24 23:45	4° $\mathring{B}$ 15'56	
max. Earth dist.	7008 Nov 24 02:02	5° $\mathring{A}$ 27'46	19.28530 AU	max. Earth dist.	7014 Dec 24 03:19	4° $\mathring{B}$ 12'45	19.35937 AU
morning rise	7008 Dec 11 07:56	6° $\mathring{A}$ 32'26		morning rise	7015 Jan 09 23:36	5° $\mathring{B}$ 15'57	
retrograde	7009 Mar 13 12:20	9° $\mathring{A}$ 56'12		retrograde	7015 Apr 11 14:01	8° $\mathring{B}$ 37'47	
opposition	7009 May 26 03:19	7° $\mathring{A}$ 53'17	0°34'02	opposition	7015 Jun 24 10:27	6° $\mathring{B}$ 35'37	0°08'16
min. Earth dist.	7009 May 26 18:50	7° $\mathring{A}$ 51'35	17.28506 AU	min. Earth dist.	7015 Jun 24 23:21	6° $\mathring{B}$ 34'13	17.37381 AU
direct	7009 Aug 09 23:09	5° $\mathring{A}$ 47'16		direct	7015 Sep 08 20:41	4° $\mathring{B}$ 29'50	
evening set	7009 Nov 13 12:27	9° $\mathring{A}$ 16'56		evening set	7015 Dec 13 11:55	7° $\mathring{B}$ 58'34	
max. Earth dist.	7009 Nov 29 08:04	10° $\mathring{A}$ 16'13	19.28550 AU				
				conjunction	7015 Dec 29 19:37	8° $\mathring{B}$ 59'40	0°05'22
conjunction	7009 Nov 30 01:32	10° $\mathring{A}$ 18'57	0°28'47	minimum elong	7015 Dec 29 19:38	8° $\mathring{B}$ 59'40	0°05'26
minimum elong	7009 Nov 30 01:32	10° $\mathring{A}$ 18'57	0°28'50	behind sun begin	7015 Dec 29 13:11	8° $\mathring{B}$ 58'41	
morning rise	7009 Dec 16 11:35	11° $\mathring{A}$ 20'34		behind sun end	7015 Dec 30 02:05	9° $\mathring{B}$ 00'40	
retrograde	7010 Mar 18 13:02	14° $\mathring{A}$ 44'11		max. Earth dist.	7015 Dec 29 06:07	8° $\mathring{B}$ 57'33	19.38951 AU
opposition	7010 May 31 04:16	12° $\mathring{A}$ 41'25	0°30'10	morning rise	7016 Jan 15 00:05	10° $\mathring{B}$ 00'19	
min. Earth dist.	7010 May 31 19:41	12° $\mathring{A}$ 39'44	17.28762 AU	retrograde	7016 Apr 15 13:22	13° $\mathring{B}$ 21'37	
direct	7010 Aug 15 03:05	10° $\mathring{A}$ 35'25		opposition	7016 Jun 28 11:23	11° $\mathring{B}$ 19'34	0°03'38
evening set	7010 Nov 18 17:38	14° $\mathring{A}$ 05'14		min. Earth dist.	7016 Jun 28 22:11	11° $\mathring{B}$ 18'24	17.40661 AU
max. Earth dist.	7010 Dec 04 11:33	15° $\mathring{A}$ 04'18	19.29052 AU	direct	7016 Sep 13 00:42	9° $\mathring{B}$ 13'55	
				evening set	7016 Dec 17 13:25	12° $\mathring{B}$ 42'05	
conjunction	7010 Dec 05 05:49	15° $\mathring{A}$ 07'11	0°25'12				
minimum elong	7010 Dec 05 05:49	15° $\mathring{A}$ 07'11	0°25'17	conjunction	7017 Jan 02 20:09	13° $\mathring{B}$ 42'57	0°01'11
morning rise	7010 Dec 21 15:06	16° $\mathring{A}$ 08'42		minimum elong	7017 Jan 02 20:09	13° $\mathring{B}$ 42'57	0°01'15
retrograde	7011 Mar 23 13:32	19° $\mathring{A}$ 32'06		behind sun begin	7017 Jan 02 13:29	13° $\mathring{B}$ 41'56	
opposition	7011 Jun 05 05:31	17° $\mathring{A}$ 29'28	0°26'05	behind sun end	7017 Jan 03 02:50	13° $\mathring{B}$ 43'59	
min. Earth dist.	7011 Jun 05 20:46	17° $\mathring{A}$ 27'48	17.29507 AU	max. Earth dist.	7017 Jan 02 08:16	13° $\mathring{B}$ 41'06	19.42512 AU
direct	7011 Aug 20 06:53	15° $\mathring{A}$ 23'28		morning rise	7017 Jan 18 23:34	14° $\mathring{B}$ 43'21	
evening set	7011 Nov 23 22:18	18° $\mathring{A}$ 53'19		desc. node	7017 Apr 14 07:11	18° $\mathring{B}$ 03'04	
				retrograde	7017 Apr 20 10:37	18° $\mathring{B}$ 04'07	
conjunction	7011 Dec 10 09:47	19° $\mathring{A}$ 55'09	0°21'28	opposition	7017 Jul 03 12:11	16° $\mathring{B}$ 02'12	-0°01'00
minimum elong	7011 Dec 10 09:47	19° $\mathring{A}$ 55'09	0°21'32	min. Earth dist.	7017 Jul 03 22:38	16° $\mathring{B}$ 01'05	17.44512 AU
max. Earth dist.	7011 Dec 09 16:58	19° $\mathring{A}$ 52'30	19.30036 AU	direct	7017 Sep 18 03:01	13° $\mathring{B}$ 56'44	
morning rise	7011 Dec 26 18:00	20° $\mathring{A}$ 56'32		evening set	7017 Dec 22 14:20	17° $\mathring{B}$ 24'16	
retrograde	7012 Mar 27 14:41	24° $\mathring{A}$ 19'38					
opposition	7012 Jun 09 06:50	22° $\mathring{A}$ 17'08	0°21'49	conjunction	7018 Jan 07 20:00	18° $\mathring{B}$ 24'53	-0°03'05
min. Earth dist.	7012 Jun 09 21:18	22° $\mathring{A}$ 15'34	17.30719 AU	minimum elong	7018 Jan 07 20:00	18° $\mathring{B}$ 24'53	0°03'01
direct	7012 Aug 24 11:04	20° $\mathring{A}$ 11'11		behind sun begin	7018 Jan 07 13:22	18° $\mathring{B}$ 23'52	
evening set	7012 Nov 28 02:41	23° $\mathring{A}$ 40'55		behind sun end	7018 Jan 08 02:39	18° $\mathring{B}$ 25'54	
				max. Earth dist.	7018 Jan 07 09:13	18° $\mathring{B}$ 23'12	19.46651 AU
conjunction	7012 Dec 14 13:10	24° $\mathring{A}$ 42'37	0°17'34	morning rise	7018 Jan 23 22:32	19° $\mathring{B}$ 25'01	
minimum elong	7012 Dec 14 13:10	24° $\mathring{A}$ 42'37	0°17'39	retrograde	7018 Apr 25 08:48	22° $\mathring{B}$ 45'12	
max. Earth dist.	7012 Dec 13 20:14	24° $\mathring{A}$ 39'57	19.31498 AU	opposition	7018 Jul 08 12:23	20° $\mathring{B}$ 43'28	-0°05'37
morning rise	7012 Dec 30 20:32	25° $\mathring{A}$ 43'51		min. Earth dist.	7018 Jul 08 20:29	20° $\mathring{B}$ 42'36	17.48916 AU
retrograde	7013 Apr 01 14:35	29° $\mathring{A}$ 06'36		direct	7018 Sep 23 06:33	18° $\mathring{B}$ 38'14	
opposition	7013 Jun 14 08:09	27° $\mathring{A}$ 04'13	0°17'24	evening set	7018 Dec 27 14:26	22° $\mathring{B}$ 05'05	
min. Earth dist.	7013 Jun 14 22:33	27° $\mathring{A}$ 02'39	17.32437 AU				
direct	7013 Aug 29 14:05	24° $\mathring{A}$ 58'17		conjunction	7019 Jan 12 19:10	23° $\mathring{B}$ 05'25	-0°07'11
evening set	7013 Dec 03 06:18	28° $\mathring{A}$ 27'48		minimum elong	7019 Jan 12 19:10	23° $\mathring{B}$ 05'25	0°07'06
				behind sun begin	7019 Jan 12 13:02	23° $\mathring{B}$ 04'29	
conjunction	7013 Dec 19 16:00	29° $\mathring{A}$ 29'20	0°13'34	behind sun end	7019 Jan 13 01:19	23° $\mathring{B}$ 06'21	
minimum elong	7013 Dec 19 16:00	29° $\mathring{A}$ 29'20	0°13'39	max. Earth dist.	7019 Jan 12 10:27	23° $\mathring{B}$ 04'05	19.51320 AU
behind sun begin	7013 Dec 19 12:24	29° $\mathring{A}$ 28'47		morning rise	7019 Jan 28 20:37	24° $\mathring{B}$ 05'17	
behind sun end	7013 Dec 19 19:36	29° $\mathring{A}$ 29'53		retrograde	7019 Apr 30 05:02	27° $\mathring{B}$ 24'53	
max. Earth dist.	7013 Dec 19 00:28	29° $\mathring{A}$ 26'53	19.33470 AU	opposition	7019 Jul 13 12:37	25° $\mathring{B}$ 23'22	-0°10'09
	7013 Dec 27 18:47	0° $\mathring{B}$		min. Earth dist.	7019 Jul 13 20:23	25° $\mathring{B}$ 22'33	17.53835 AU
morning rise	7014 Jan 04 22:24	0° $\mathring{B}$ 30'24		direct	7019 Sep 28 08:07	23° $\mathring{B}$ 18'26	
retrograde	7014 Apr 06 15:14	3° $\mathring{B}$ 52'42		evening set	7020 Jan 01 13:39	26° $\mathring{B}$ 44'30	

conjunction	7020 Jan 17 17:15	27°  44'33	-0°11'12	direct	7025 Oct 26 07:16	20°  47'30	
minimum elong	7020 Jan 17 17:15	27°  44'33	0°11'09	evening set	7026 Jan 28 14:40	24°  07'40	
behind sun begin	7020 Jan 17 12:18	27°  43'47					
behind sun end	7020 Jan 17 22:12	27°  45'18		conjunction	7026 Feb 13 12:32	25°  05'49	-0°32'41
max. Earth dist.	7020 Jan 17 09:21	27°  43'20	19.56481 AU	minimum elong	7026 Feb 13 12:32	25°  05'49	0°32'38
morning rise	7020 Feb 02 17:54	28°  44'08		max. Earth dist.	7026 Feb 13 12:08	25°  05'46	19.93237 AU
	7020 Feb 24 15:12	0° 		morning rise	7026 Mar 01 08:19	26°  03'40	
retrograde	7020 May 04 02:21	2°  03'08		retrograde	7026 May 31 18:38	29°  18'41	
opposition	7020 Jul 17 12:21	0°  01'51	-0°14'36	opposition	7026 Aug 15 01:35	27°  18'40	-0°37'57
min. Earth dist.	7020 Jul 17 17:44	0°  01'17	17.59203 AU	min. Earth dist.	7026 Aug 15 00:22	27°  18'48	17.96480 AU
	7020 Jul 18 05:46	30°  R 		direct	7026 Oct 31 04:36	25°  16'07	
direct	7020 Oct 02 10:30	27°  57'14		evening set	7027 Feb 02 07:28	28°  35'10	
	7020 Dec 12 11:31	0° 					
evening set	7021 Jan 05 12:00	1°  22'28		conjunction	7027 Feb 18 04:42	29°  33'00	-0°35'37
				minimum elong	7027 Feb 18 04:42	29°  33'00	0°35'35
conjunction	7021 Jan 21 14:43	2°  22'13	-0°15'09	max. Earth dist.	7027 Feb 18 06:36	29°  33'18	19.99746 AU
minimum elong	7021 Jan 21 14:43	2°  22'13	0°15'04		7027 Feb 25 13:20	0° 	
behind sun begin	7021 Jan 21 12:19	2°  21'51		morning rise	7027 Mar 05 23:41	0°  H30'32	
behind sun end	7021 Jan 21 17:07	2°  22'35		retrograde	7027 Jun 05 11:00	3°  H44'51	
max. Earth dist.	7021 Jan 21 09:09	2°  21'22	19.62040 AU	opposition	7027 Aug 19 21:53	1°  H44'59	-0°41'04
morning rise	7021 Feb 06 14:18	3°  21'32		min. Earth dist.	7027 Aug 19 19:45	1°  H45'12	18.02994 AU
retrograde	7021 May 08 21:44	6°  39'53			7027 Oct 09 17:14	30°  R 	
opposition	7021 Jul 22 11:44	4°  38'51	-0°18'56	direct	7027 Nov 05 01:27	29°  42'45	
min. Earth dist.	7021 Jul 22 16:52	4°  38'19	17.64935 AU		7027 Nov 30 23:58	0°  H	
direct	7021 Oct 07 10:30	2°  34'35		evening set	7028 Feb 06 23:14	3°  H00'36	
evening set	7022 Jan 10 09:37	5°  58'55					
				conjunction	7028 Feb 22 19:32	3°  H58'07	-0°38'19
conjunction	7022 Jan 26 11:13	6°  58'21	-0°18'58	minimum elong	7028 Feb 22 19:32	3°  H58'07	0°38'17
minimum elong	7022 Jan 26 11:13	6°  58'21	0°18'55	max. Earth dist.	7028 Feb 22 21:45	3°  H58'27	20.06275 AU
max. Earth dist.	7022 Jan 26 05:59	6°  57'33	19.67928 AU	morning rise	7028 Mar 09 14:07	4°  H55'23	
morning rise	7022 Feb 11 10:06	7°  57'23		retrograde	7028 Jun 09 02:42	8°  H09'00	
retrograde	7022 May 13 18:17	11°  15'06		opposition	7028 Aug 23 17:25	6°  H09'13	-0°43'55
opposition	7022 Jul 27 10:39	9°  14'18	-0°23'07	min. Earth dist.	7028 Aug 23 13:52	6°  H09'35	18.09547 AU
min. Earth dist.	7022 Jul 27 13:43	9°  13'58	17.70952 AU	direct	7028 Nov 08 20:41	4°  H07'18	
direct	7022 Oct 12 11:26	7°  10'22		evening set	7029 Feb 10 13:54	7°  H23'57	
evening set	7023 Jan 15 06:13	10°  33'45					
				conjunction	7029 Feb 26 09:40	8°  H21'10	-0°40'46
conjunction	7023 Jan 31 06:58	11°  32'52	-0°22'40	minimum elong	7029 Feb 26 09:40	8°  H21'10	0°40'44
minimum elong	7023 Jan 31 06:58	11°  32'52	0°22'37	max. Earth dist.	7029 Feb 26 14:20	8°  H21'52	20.12842 AU
max. Earth dist.	7023 Jan 31 04:05	11°  32'26	19.74049 AU	morning rise	7029 Mar 14 03:36	9°  H18'08	
morning rise	7023 Feb 16 04:49	12°  31'36		retrograde	7029 Jun 13 17:58	12°  H31'03	
	7023 Apr 05 20:30	15° 		opposition	7029 Aug 28 12:03	10°  H31'23	-0°46'29
retrograde	7023 May 18 12:31	15°  48'39		min. Earth dist.	7029 Aug 28 07:11	10°  H31'53	18.16133 AU
	7023 Jul 01 20:15	15°  R 		direct	7029 Nov 13 16:35	8°  H29'46	
opposition	7023 Aug 01 09:16	13°  48'05	-0°27'09	evening set	7030 Feb 15 03:46	11°  H45'14	
min. Earth dist.	7023 Aug 01 11:58	13°  47'48	17.77167 AU				
direct	7023 Oct 17 10:20	11°  44'32		conjunction	7030 Mar 02 22:42	12°  H42'08	-0°42'58
	7024 Jan 18 04:10	15° 		minimum elong	7030 Mar 02 22:42	12°  H42'08	0°42'57
evening set	7024 Jan 20 02:04	15°  06'53		max. Earth dist.	7030 Mar 03 03:54	12°  H42'55	20.19454 AU
				morning rise	7030 Mar 18 16:20	13°  H38'50	
conjunction	7024 Feb 05 01:42	16°  05'41	-0°26'11	retrograde	7030 Jun 18 07:40	16°  H51'05	
minimum elong	7024 Feb 05 01:42	16°  05'41	0°26'08	opposition	7030 Sep 02 06:08	14°  H51'30	-0°48'46
max. Earth dist.	7024 Feb 04 22:57	16°  05'16	19.80349 AU	min. Earth dist.	7030 Sep 01 23:57	14°  H52'08	18.22788 AU
morning rise	7024 Feb 20 22:55	17°  04'06		direct	7030 Nov 18 09:51	12°  H50'14	
retrograde	7024 May 22 07:51	20°  20'30		evening set	7031 Feb 19 16:27	16°  H04'31	
opposition	7024 Aug 05 07:19	18°  20'08	-0°30'58				
min. Earth dist.	7024 Aug 05 08:09	18°  20'03	17.83538 AU	conjunction	7031 Mar 07 10:55	17°  H01'07	-0°44'54
direct	7024 Oct 21 09:33	16°  16'55		minimum elong	7031 Mar 07 10:55	17°  H01'07	0°44'53
evening set	7025 Jan 23 20:42	19°  38'13		max. Earth dist.	7031 Mar 07 18:33	17°  H02'16	20.26131 AU
				morning rise	7031 Mar 23 04:00	17°  H57'33	
conjunction	7025 Feb 08 19:37	20°  36'41	-0°29'32	retrograde	7031 Jun 22 21:54	21°  H09'10	
minimum elong	7025 Feb 08 19:37	20°  36'41	0°29'30	opposition	7031 Sep 06 23:31	19°  H09'43	-0°50'45
max. Earth dist.	7025 Feb 08 19:12	20°  36'38	19.86764 AU	min. Earth dist.	7031 Sep 06 15:34	19°  H10'32	18.29483 AU
morning rise	7025 Feb 24 15:56	21°  34'49		direct	7031 Nov 23 04:33	17°  H08'49	
retrograde	7025 May 27 01:07	24°  50'32		evening set	7032 Feb 24 04:27	20°  H21'56	
opposition	7025 Aug 10 04:51	22°  50'22	-0°34'34				
min. Earth dist.	7025 Aug 10 05:08	22°  50'20	17.89983 AU	conjunction	7032 Mar 10 22:15	21°  H18'15	-0°46'34

minimum elong	7032 Mar 10 22:14	21° $\text{H}$ 18'15	0°46'34	opposition	7038 Oct 07 07:12	18° $\text{Y}$ 31'51	-0°56'16
max. Earth dist.	7032 Mar 11 06:31	21° $\text{H}$ 19'29	20.32843 AU	min. Earth dist.	7038 Oct 06 17:06	18° $\text{Y}$ 33'15	18.73392 AU
morning rise	7032 Mar 26 15:08	22° $\text{H}$ 14'25		direct	7038 Dec 23 04:56	16° $\text{Y}$ 33'27	
retrograde	7032 Jun 26 10:09	25° $\text{H}$ 25'27		evening set	7039 Mar 24 19:28	19° $\text{Y}$ 39'15	
opposition	7032 Sep 10 16:11	23° $\text{H}$ 26'07	-0°52'26				
min. Earth dist.	7032 Sep 10 07:14	23° $\text{H}$ 27'02	18.36214 AU	conjunction	7039 Apr 09 11:28	20° $\text{Y}$ 33'57	-0°50'43
direct	7032 Nov 26 19:40	21° $\text{H}$ 25'36		minimum elong	7039 Apr 09 11:28	20° $\text{Y}$ 33'57	0°50'45
evening set	7033 Feb 27 15:24	24° $\text{H}$ 37'35		max. Earth dist.	7039 Apr 10 02:49	20° $\text{Y}$ 36'12	20.75960 AU
				morning rise	7039 Apr 25 03:55	21° $\text{Y}$ 28'44	
conjunction	7033 Mar 15 08:54	25° $\text{H}$ 33'38	-0°47'58	retrograde	7039 Jul 26 14:34	24° $\text{Y}$ 36'17	
minimum elong	7033 Mar 15 08:54	25° $\text{H}$ 33'38	0°47'57	opposition	7039 Oct 11 19:40	22° $\text{Y}$ 37'49	-0°55'54
max. Earth dist.	7033 Mar 15 19:17	25° $\text{H}$ 35'11	20.39560 AU	min. Earth dist.	7039 Oct 11 04:10	22° $\text{Y}$ 39'22	18.78463 AU
morning rise	7033 Mar 31 01:27	26° $\text{H}$ 29'34		direct	7039 Dec 27 17:25	20° $\text{Y}$ 39'40	
retrograde	7033 Jun 30 22:56	29° $\text{H}$ 40'00		evening set	7040 Mar 28 02:09	23° $\text{Y}$ 44'33	
opposition	7033 Sep 15 08:08	27° $\text{H}$ 40'51	-0°53'49				
min. Earth dist.	7033 Sep 14 21:27	27° $\text{H}$ 41'56	18.42892 AU	conjunction	7040 Apr 12 18:04	24° $\text{Y}$ 39'05	-0°50'16
direct	7033 Dec 01 12:46	25° $\text{H}$ 40'43		minimum elong	7040 Apr 12 18:04	24° $\text{Y}$ 39'05	0°50'17
evening set	7034 Mar 04 01:47	28° $\text{H}$ 51'36		max. Earth dist.	7040 Apr 13 09:26	24° $\text{Y}$ 41'19	20.80812 AU
				morning rise	7040 Apr 28 10:49	25° $\text{Y}$ 33'44	
conjunction	7034 Mar 19 18:44	29° $\text{H}$ 47'23	-0°49'05	retrograde	7040 Jul 29 22:56	28° $\text{Y}$ 40'52	
minimum elong	7034 Mar 19 18:44	29° $\text{H}$ 47'23	0°49'06	opposition	7040 Oct 15 07:30	26° $\text{Y}$ 42'24	-0°55'14
max. Earth dist.	7034 Mar 20 05:38	29° $\text{H}$ 49'01	20.46191 AU	min. Earth dist.	7040 Oct 14 16:36	26° $\text{Y}$ 43'54	18.83111 AU
	7034 Mar 23 07:19	0° $\text{Y}$		direct	7040 Dec 31 02:20	24° $\text{Y}$ 44'28	
morning rise	7034 Apr 04 11:12	0° $\text{Y}$ 43'06		evening set	7041 Apr 01 08:08	27° $\text{Y}$ 48'28	
retrograde	7034 Jul 05 10:19	3° $\text{Y}$ 53'00					
opposition	7034 Sep 19 23:33	1° $\text{Y}$ 53'59	-0°54'54	conjunction	7041 Apr 17 00:14	28° $\text{Y}$ 42'51	-0°49'33
min. Earth dist.	7034 Sep 19 12:19	1° $\text{Y}$ 55'08	18.49473 AU	minimum elong	7041 Apr 17 00:15	28° $\text{Y}$ 42'51	0°49'35
	7034 Nov 20 21:44	30° $\text{R}$ $\text{H}$		max. Earth dist.	7041 Apr 17 16:25	28° $\text{Y}$ 45'13	20.85252 AU
direct	7034 Dec 06 02:06	29° $\text{H}$ 54'15		morning rise	7041 May 02 17:13	29° $\text{Y}$ 37'23	
	7034 Dec 21 02:43	0° $\text{Y}$			7041 May 09 10:19	0° $\text{B}$	
evening set	7035 Mar 08 11:21	3° $\text{Y}$ 04'03		retrograde	7041 Aug 03 08:14	2° $\text{B}$ 44'08	
				opposition	7041 Oct 19 18:40	0° $\text{B}$ 45'39	-0°54'17
conjunction	7035 Mar 24 04:04	3° $\text{Y}$ 59'36	-0°49'57	min. Earth dist.	7041 Oct 19 02:25	0° $\text{B}$ 47'17	18.87337 AU
minimum elong	7035 Mar 24 04:04	3° $\text{Y}$ 59'36	0°49'58		7041 Nov 08 07:21	30° $\text{R}$ $\text{Y}$	
max. Earth dist.	7035 Mar 24 16:42	4° $\text{Y}$ 01'28	20.52694 AU	direct	7042 Jan 04 13:35	28° $\text{Y}$ 47'54	
morning rise	7035 Apr 08 20:19	4° $\text{Y}$ 55'05			7042 Feb 27 22:32	0° $\text{B}$	
retrograde	7035 Jul 09 21:49	8° $\text{Y}$ 04'27		evening set	7042 Apr 05 13:38	1° $\text{B}$ 51'03	
opposition	7035 Sep 24 14:21	6° $\text{Y}$ 05'37	-0°55'41				
min. Earth dist.	7035 Sep 24 01:26	6° $\text{Y}$ 06'55	18.55877 AU	conjunction	7042 Apr 21 05:46	2° $\text{B}$ 45'19	-0°48'35
direct	7035 Dec 10 17:15	4° $\text{Y}$ 06'15		minimum elong	7042 Apr 21 05:46	2° $\text{B}$ 45'19	0°48'38
evening set	7036 Mar 11 20:15	7° $\text{Y}$ 15'00		max. Earth dist.	7042 Apr 21 22:09	2° $\text{B}$ 47'41	20.89278 AU
				morning rise	7042 May 06 23:07	3° $\text{B}$ 39'45	
conjunction	7036 Mar 27 12:35	8° $\text{Y}$ 10'18	-0°50'32	retrograde	7042 Aug 07 15:28	6° $\text{B}$ 46'09	
minimum elong	7036 Mar 27 12:35	8° $\text{Y}$ 10'18	0°50'33	opposition	7042 Oct 24 05:27	4° $\text{B}$ 47'39	-0°53'05
max. Earth dist.	7036 Mar 28 01:36	8° $\text{Y}$ 12'14	20.58982 AU	min. Earth dist.	7042 Oct 23 13:42	4° $\text{B}$ 49'13	18.91190 AU
morning rise	7036 Apr 12 04:54	9° $\text{Y}$ 05'36		direct	7043 Jan 08 21:27	2° $\text{B}$ 50'03	
retrograde	7036 Jul 13 08:26	12° $\text{Y}$ 14'29		evening set	7043 Apr 09 18:39	5° $\text{B}$ 52'27	
opposition	7036 Sep 28 04:39	10° $\text{Y}$ 15'46	-0°56'10				
min. Earth dist.	7036 Sep 27 15:39	10° $\text{Y}$ 17'05	18.62048 AU	conjunction	7043 Apr 25 11:02	6° $\text{B}$ 46'35	-0°47'23
direct	7036 Dec 14 05:07	8° $\text{Y}$ 16'45		minimum elong	7043 Apr 25 11:02	6° $\text{B}$ 46'35	0°47'26
evening set	7037 Mar 16 04:34	11° $\text{Y}$ 24'30		max. Earth dist.	7043 Apr 26 04:21	6° $\text{B}$ 49'06	20.92964 AU
				morning rise	7043 May 11 04:43	7° $\text{B}$ 40'56	
conjunction	7037 Mar 31 20:49	12° $\text{Y}$ 19'35	-0°50'52	retrograde	7043 Aug 12 00:17	10° $\text{B}$ 47'03	
minimum elong	7037 Mar 31 20:48	12° $\text{Y}$ 19'35	0°50'53	opposition	7043 Oct 28 15:32	8° $\text{B}$ 48'31	-0°51'37
max. Earth dist.	7037 Apr 01 11:05	12° $\text{Y}$ 21'41	20.65003 AU	min. Earth dist.	7043 Oct 27 22:14	8° $\text{B}$ 50'14	18.94710 AU
morning rise	7037 Apr 16 13:02	13° $\text{Y}$ 14'42		direct	7044 Jan 13 06:58	6° $\text{B}$ 51'05	
retrograde	7037 Jul 17 18:58	16° $\text{Y}$ 23'06		evening set	7044 Apr 12 23:18	9° $\text{B}$ 52'46	
opposition	7037 Oct 02 18:02	14° $\text{Y}$ 24'30	-0°56'22				
min. Earth dist.	7037 Oct 02 03:38	14° $\text{Y}$ 25'57	18.67901 AU	conjunction	7044 Apr 28 15:52	10° $\text{B}$ 46'50	-0°45'58
direct	7037 Dec 18 18:34	12° $\text{Y}$ 25'49		minimum elong	7044 Apr 28 15:52	10° $\text{B}$ 46'50	0°46'01
evening set	7038 Mar 20 12:25	15° $\text{Y}$ 32'34		max. Earth dist.	7044 Apr 29 09:26	10° $\text{B}$ 49'22	20.96317 AU
				morning rise	7044 May 14 10:03	11° $\text{B}$ 41'07	
conjunction	7038 Apr 05 04:23	16° $\text{Y}$ 27'27	-0°50'55	retrograde	7044 Aug 15 07:06	14° $\text{B}$ 47'00	
minimum elong	7038 Apr 05 04:23	16° $\text{Y}$ 27'27	0°50'56	min. Earth dist.	7044 Oct 31 08:31	12° $\text{B}$ 50'07	18.97913 AU
max. Earth dist.	7038 Apr 05 18:45	16° $\text{Y}$ 29'34	20.70672 AU	opposition	7044 Nov 01 01:16	12° $\text{B}$ 48'27	-0°49'55
morning rise	7038 Apr 20 20:46	17° $\text{Y}$ 22'24		direct	7045 Jan 16 13:42	10° $\text{B}$ 51'11	
retrograde	7038 Jul 22 04:33	20° $\text{Y}$ 30'22		evening set	7045 Apr 17 03:38	13° $\text{B}$ 52'16	



















































































conjunction	7045 May 02 20:35	14° <b>8</b> 46'15 -0°44'19	minimum elong	7051 May 26 23:30	8° <b>II</b> 34'56 0°30'31
minimum elong	7045 May 02 20:35	14° <b>8</b> 46'15 0°44'21	max. Earth dist.	7051 May 27 17:52	8° <b>II</b> 37'34 21.09553 AU
max. Earth dist.	7045 May 03 14:52	14° <b>8</b> 48'53 20.99362 AU	morning rise	7051 Jun 11 21:55	9° <b>II</b> 29'17
	7045 May 06 19:50	15° <b>8</b>	retrograde	7051 Sep 13 16:04	12° <b>II</b> 34'56
morning rise	7045 May 18 15:11	15° <b>8</b> 40'29	opposition	7051 Nov 30 11:46	10° <b>II</b> 36'26 -0°32'01
retrograde	7045 Aug 19 15:36	18° <b>8</b> 46'10	min. Earth dist.	7051 Nov 29 18:17	10° <b>II</b> 38'11 19.09635 AU
opposition	7045 Nov 05 10:17	16° <b>8</b> 47'38 -0°47'58	direct	7052 Feb 14 09:28	8° <b>II</b> 40'08
min. Earth dist.	7045 Nov 04 16:06	16° <b>8</b> 49'27 19.00789 AU	evening set	7052 May 14 08:06	11° <b>II</b> 38'53
	7046 Jan 01 08:11	15° <b>8</b> 8			
direct	7046 Jan 20 21:31	14° <b>8</b> 50'34	conjunction	7052 May 30 04:29	12° <b>II</b> 32'53 -0°27'33
	7046 Feb 09 04:17	15° <b>8</b>	minimum elong	7052 May 30 04:29	12° <b>II</b> 32'53 0°27'37
evening set	7046 Apr 21 07:50	17° <b>8</b> 51'06	max. Earth dist.	7052 May 30 21:59	12° <b>II</b> 35'23 21.09519 AU
			morning rise	7052 Jun 15 03:42	13° <b>II</b> 27'18
conjunction	7046 May 07 01:02	18° <b>8</b> 45'01 -0°42'28	retrograde	7052 Sep 16 22:40	16° <b>II</b> 33'04
minimum elong	7046 May 07 01:02	18° <b>8</b> 45'01 0°42'31	opposition	7052 Dec 03 19:31	14° <b>II</b> 34'30 -0°28'45
max. Earth dist.	7046 May 07 19:25	18° <b>8</b> 47'40 21.02069 AU	min. Earth dist.	7052 Dec 03 03:43	14° <b>II</b> 36'05 19.09308 AU
morning rise	7046 May 22 20:14	19° <b>8</b> 39'14	direct	7053 Feb 17 13:39	12° <b>II</b> 38'11
retrograde	7046 Aug 23 22:25	22° <b>8</b> 44'49	evening set	7053 May 18 12:34	15° <b>II</b> 36'50
opposition	7046 Nov 09 19:17	20° <b>8</b> 46'17 -0°45'48			
min. Earth dist.	7046 Nov 09 01:47	20° <b>8</b> 48'02 19.03329 AU	conjunction	7053 Jun 03 09:41	16° <b>II</b> 30'55 -0°24'32
direct	7047 Jan 25 03:21	18° <b>8</b> 49'24	minimum elong	7053 Jun 03 09:41	16° <b>II</b> 30'55 0°24'36
evening set	7047 Apr 25 11:39	21° <b>8</b> 49'27	max. Earth dist.	7053 Jun 04 02:39	16° <b>II</b> 33'21 21.08906 AU
			morning rise	7053 Jun 19 09:37	17° <b>II</b> 25'25
conjunction	7047 May 11 05:21	22° <b>8</b> 43'21 -0°40'25	retrograde	7053 Sep 21 07:51	20° <b>II</b> 31'19
minimum elong	7047 May 11 05:21	22° <b>8</b> 43'21 0°40'28	min. Earth dist.	7053 Dec 07 10:49	18° <b>II</b> 34'14 19.08397 AU
max. Earth dist.	7047 May 12 00:19	22° <b>8</b> 46'04 21.04435 AU	opposition	7053 Dec 08 02:55	18° <b>II</b> 32'38 -0°25'20
morning rise	7047 May 27 01:06	23° <b>8</b> 37'33	direct	7054 Feb 21 21:09	16° <b>II</b> 36'16
retrograde	7047 Aug 28 07:19	26° <b>8</b> 43'03	evening set	7054 May 22 17:16	19° <b>II</b> 34'52
min. Earth dist.	7047 Nov 13 09:05	24° <b>8</b> 46'25 19.05498 AU			
opposition	7047 Nov 14 03:47	24° <b>8</b> 44'34 -0°43'25	conjunction	7054 Jun 07 15:01	20° <b>II</b> 29'03 -0°21'23
direct	7048 Jan 29 10:11	22° <b>8</b> 47'50	minimum elong	7054 Jun 07 15:01	20° <b>II</b> 29'03 0°21'27
evening set	7048 Apr 28 15:38	25° <b>8</b> 47'29	max. Earth dist.	7054 Jun 08 07:08	20° <b>II</b> 31'21 21.07719 AU
			morning rise	7054 Jun 23 15:49	21° <b>II</b> 23'39
conjunction	7048 May 14 09:44	26° <b>8</b> 41'22 -0°38'10	retrograde	7054 Sep 25 14:55	24° <b>II</b> 29'43
minimum elong	7048 May 14 09:44	26° <b>8</b> 41'22 0°38'14	opposition	7054 Dec 12 10:25	22° <b>II</b> 30'52 -0°21'48
max. Earth dist.	7048 May 15 04:33	26° <b>8</b> 44'04 21.06401 AU	min. Earth dist.	7054 Dec 11 20:00	22° <b>II</b> 32'18 19.06949 AU
morning rise	7048 May 30 06:10	27° <b>8</b> 35'35	direct	7055 Feb 26 01:21	20° <b>II</b> 34'23
	7048 Jul 21 06:01	0° <b>II</b>	evening set	7055 May 26 21:57	23° <b>II</b> 33'01
retrograde	7048 Aug 31 13:59	0° <b>II</b> 41'04			
	7048 Oct 13 04:51	30° <b>8</b> 8	conjunction	7055 Jun 11 20:32	24° <b>II</b> 27'17 -0°18'08
opposition	7048 Nov 17 12:02	28° <b>8</b> 42'35 -0°40'50	minimum elong	7055 Jun 11 20:32	24° <b>II</b> 27'17 0°18'13
min. Earth dist.	7048 Nov 16 18:27	28° <b>8</b> 44'21 19.07259 AU	max. Earth dist.	7055 Jun 12 12:14	24° <b>II</b> 29'32 21.06035 AU
direct	7049 Feb 01 15:23	26° <b>8</b> 46'01	morning rise	7055 Jun 27 22:09	25° <b>II</b> 22'01
evening set	7049 May 02 19:33	29° <b>8</b> 45'21	retrograde	7055 Sep 29 23:46	28° <b>II</b> 28'17
	7049 May 07 03:39	0° <b>II</b>	opposition	7055 Dec 16 17:37	26° <b>II</b> 29'15 -0°18'09
			min. Earth dist.	7055 Dec 16 02:51	26° <b>II</b> 30'44 19.05025 AU
conjunction	7049 May 18 14:15	0° <b>II</b> 39'15 -0°35'45	direct	7056 Mar 01 08:29	24° <b>II</b> 32'39
minimum elong	7049 May 18 14:15	0° <b>II</b> 39'15 0°35'50	evening set	7056 May 30 03:09	27° <b>II</b> 31'22
max. Earth dist.	7049 May 19 09:13	0° <b>II</b> 41'58 21.07949 AU			
morning rise	7049 Jun 03 11:16	1° <b>II</b> 33'29	conjunction	7056 Jun 15 02:26	28° <b>II</b> 25'46 -0°14'48
retrograde	7049 Sep 04 23:37	4° <b>II</b> 38'58	minimum elong	7056 Jun 15 02:26	28° <b>II</b> 25'46 0°14'52
opposition	7049 Nov 21 20:02	2° <b>II</b> 40'31 -0°38'04	behind sun begin	7056 Jun 14 23:51	28° <b>II</b> 25'24
min. Earth dist.	7049 Nov 21 01:36	2° <b>II</b> 42'22 19.08567 AU	behind sun end	7056 Jun 15 05:01	28° <b>II</b> 26'07
direct	7050 Feb 05 21:54	0° <b>II</b> 44'05	max. Earth dist.	7056 Jun 15 17:20	28° <b>II</b> 27'53 21.03887 AU
evening set	7050 May 06 23:33	3° <b>II</b> 43'10	morning rise	7056 Jul 01 04:54	29° <b>II</b> 20'37
				7056 Jul 13 06:31	0° <b>8</b>
conjunction	7050 May 22 18:40	4° <b>II</b> 37'04 -0°33'10	retrograde	7056 Oct 03 07:10	2° <b>8</b> 27'07
minimum elong	7050 May 22 18:40	4° <b>II</b> 37'04 0°33'15	min. Earth dist.	7056 Dec 19 11:40	0° <b>8</b> 29'14 19.02674 AU
max. Earth dist.	7050 May 23 13:15	4° <b>II</b> 39'43 21.09006 AU	opposition	7056 Dec 20 00:48	0° <b>8</b> 27'55 -0°14'25
morning rise	7050 Jun 07 16:25	5° <b>II</b> 31'21		7056 Dec 31 16:23	30° <b>8</b> II
retrograde	7050 Sep 09 06:05	8° <b>II</b> 36'55	direct	7057 Mar 05 12:59	28° <b>II</b> 31'10
min. Earth dist.	7050 Nov 25 11:04	6° <b>II</b> 40'09 19.09373 AU		7057 May 05 03:14	0° <b>8</b>
opposition	7050 Nov 26 04:06	6° <b>II</b> 38'27 -0°35'07	evening set	7057 Jun 03 08:33	1° <b>8</b> 30'04
direct	7051 Feb 10 02:37	4° <b>II</b> 42'07			
evening set	7051 May 11 03:43	7° <b>II</b> 40'59	conjunction	7057 Jun 19 08:41	2° <b>8</b> 24'36 -0°11'23
			minimum elong	7057 Jun 19 08:40	2° <b>8</b> 24'36 0°11'27
conjunction	7051 May 26 23:30	8° <b>II</b> 34'56 -0°30'26	behind sun begin	7057 Jun 19 03:53	2° <b>8</b> 23'56

behind sun end	7057 Jun 19 13:28	2°☾25'16		direct	7063 Mar 29 23:51	22°☾37'51	
max. Earth dist.	7057 Jun 19 23:07	2°☾26'40	21.01352 AU	evening set	7063 Jun 28 03:49	25°☾39'30	
morning rise	7057 Jul 05 11:57	3°☾19'36					
retrograde	7057 Oct 07 16:26	6°☾26'24		conjunction	7063 Jul 14 09:00	26°☾35'13	0°10'00
opposition	7057 Dec 24 08:01	4°☾27'02	-0°10'36	minimum elong	7063 Jul 14 09:00	26°☾35'13	0°09'56
min. Earth dist.	7057 Dec 23 18:28	4°☾28'24	18.99951 AU	behind sun begin	7063 Jul 14 03:36	26°☾34'27	
direct	7058 Mar 09 19:16	2°☾30'08		behind sun end	7063 Jul 14 14:23	26°☾35'58	
evening set	7058 Jun 07 14:16	5°☾29'17		max. Earth dist.	7063 Jul 14 18:19	26°☾36'32	20.79071 AU
				morning rise	7063 Jul 30 17:21	27°☾31'23	
conjunction	7058 Jun 23 15:09	6°☾23'59	-0°07'55		7063 Sep 22 00:34	0°♈	
minimum elong	7058 Jun 23 15:09	6°☾23'59	0°08'00	retrograde	7063 Nov 02 06:02	0°♏41'02	
behind sun begin	7058 Jun 23 09:13	6°☾23'09			7063 Dec 14 04:07	30°♐☾	
behind sun end	7058 Jun 23 21:04	6°☾24'48		opposition	7064 Jan 18 07:23	28°☾40'55	0°13'00
max. Earth dist.	7058 Jun 24 04:55	6°☾25'56	20.98449 AU	min. Earth dist.	7064 Jan 17 23:04	28°☾41'46	18.76648 AU
morning rise	7058 Jul 09 19:17	7°☾19'09		direct	7064 Apr 02 07:56	26°☾43'05	
retrograde	7058 Oct 12 00:26	10°☾26'18		evening set	7064 Jul 01 13:39	29°☾45'28	
opposition	7058 Dec 28 15:30	8°☾26'46	-0°06'43		7064 Jul 05 20:01	0°♈	
min. Earth dist.	7058 Dec 28 03:27	8°☾27'59	18.96881 AU				
direct	7059 Mar 14 00:15	6°☾29'43		conjunction	7064 Jul 17 19:38	0°♏41'26	0°13'31
evening set	7059 Jun 11 20:33	9°☾29'12		minimum elong	7064 Jul 17 19:38	0°♏41'26	0°13'28
				behind sun begin	7064 Jul 17 15:57	0°♏40'55	
conjunction	7059 Jun 27 22:18	10°☾24'05	-0°04'24	behind sun end	7064 Jul 17 23:20	0°♏41'57	
minimum elong	7059 Jun 27 22:19	10°☾24'05	0°04'28	max. Earth dist.	7064 Jul 18 03:40	0°♏42'35	20.74134 AU
behind sun begin	7059 Jun 27 15:49	10°☾23'10		morning rise	7064 Aug 03 04:44	1°♏37'51	
behind sun end	7059 Jun 28 04:50	10°☾24'59		retrograde	7064 Nov 05 16:23	4°♏48'06	
max. Earth dist.	7059 Jun 28 11:29	10°☾25'57	20.95225 AU	opposition	7065 Jan 21 16:22	2°♏47'52	0°16'54
morning rise	7059 Jul 14 03:18	11°☾19'25		min. Earth dist.	7065 Jan 21 10:13	2°♏48'30	18.71508 AU
retrograde	7059 Oct 16 10:44	14°☾26'58		direct	7065 Apr 06 14:27	0°♏49'48	
opposition	7060 Jan 01 22:50	12°☾27'18	-0°02'48	evening set	7065 Jul 06 00:13	3°♏52'58	
min. Earth dist.	7060 Jan 01 10:33	12°☾28'33	18.93491 AU				
direct	7060 Mar 17 06:21	10°☾30'06		conjunction	7065 Jul 22 07:04	4°♏49'11	0°17'00
evening set	7060 Jun 15 03:26	13°☾30'01		minimum elong	7065 Jul 22 07:03	4°♏49'11	0°16'56
				max. Earth dist.	7065 Jul 22 13:18	4°♏50'04	20.68799 AU
conjunction	7060 Jul 01 06:02	14°☾25'04	-0°00'48	morning rise	7065 Aug 07 16:57	5°♏45'50	
minimum elong	7060 Jul 01 06:01	14°☾25'04	0°00'54	retrograde	7065 Nov 10 06:19	8°♏56'43	
behind sun begin	7060 Jun 30 23:23	14°☾24'09		opposition	7066 Jan 26 01:49	6°♏56'18	0°20'44
behind sun end	7060 Jul 01 12:39	14°☾26'00		min. Earth dist.	7066 Jan 25 20:19	6°♏56'53	18.65963 AU
max. Earth dist.	7060 Jul 01 18:20	14°☾26'50	20.91669 AU	direct	7066 Apr 10 23:40	4°♏57'59	
morning rise	7060 Jul 17 11:52	15°☾20'36		evening set	7066 Jul 10 11:28	8°♏01'56	
asc. node	7060 Sep 19 11:35	18°☾06'13					
retrograde	7060 Oct 19 19:35	18°☾28'36		conjunction	7066 Jul 26 19:11	8°♏58'25	0°20'26
opposition	7061 Jan 05 06:36	16°☾28'49	0°01'09	minimum elong	7066 Jul 26 19:11	8°♏58'25	0°20'23
min. Earth dist.	7061 Jan 04 19:58	16°☾29'54	18.89775 AU	max. Earth dist.	7066 Jul 27 00:08	8°♏59'08	20.63045 AU
direct	7061 Mar 21 11:31	14°☾31'29		morning rise	7066 Aug 12 05:48	9°♏55'20	
evening set	7061 Jun 19 10:48	17°☾31'53		retrograde	7066 Nov 14 17:54	13°♏06'50	
				opposition	7067 Jan 30 11:47	11°♏06'14	0°24'29
conjunction	7061 Jul 05 14:14	18°☾27'09	0°02'52	min. Earth dist.	7067 Jan 30 08:22	11°♏06'35	18.60015 AU
minimum elong	7061 Jul 05 14:14	18°☾27'09	0°02'48	direct	7067 Apr 15 07:44	9°♏07'36	
behind sun begin	7061 Jul 05 07:36	18°☾26'13		evening set	7067 Jul 14 23:38	12°♏12'24	
behind sun end	7061 Jul 05 20:52	18°☾28'05					
max. Earth dist.	7061 Jul 06 01:45	18°☾28'47	20.87805 AU	conjunction	7067 Jul 31 08:11	13°♏09'09	0°23'46
morning rise	7061 Jul 21 20:55	19°☾22'53		minimum elong	7067 Jul 31 08:11	13°♏09'09	0°23'42
retrograde	7061 Oct 24 07:14	22°☾31'24		max. Earth dist.	7067 Jul 31 11:09	13°♏09'35	20.56932 AU
opposition	7062 Jan 09 14:29	20°☾31'29	0°05'07	morning rise	7067 Aug 16 19:37	14°♏06'20	
min. Earth dist.	7062 Jan 09 03:50	20°☾32'34	18.85744 AU		7067 Sep 02 03:01	15°♏	
direct	7062 Mar 25 18:24	18°☾34'00		retrograde	7067 Nov 19 08:20	17°♏18'27	
evening set	7062 Jun 23 18:58	21°☾35'00		opposition	7068 Feb 03 21:51	15°♏17'38	0°28'08
				min. Earth dist.	7068 Feb 03 19:15	15°♏17'54	18.53738 AU
conjunction	7062 Jul 09 23:13	22°☾30'29	0°06'27		7068 Feb 10 23:55	15°♐♏	
minimum elong	7062 Jul 09 23:14	22°☾30'29	0°06'22	direct	7068 Apr 18 17:47	13°♏18'37	
behind sun begin	7062 Jul 09 16:57	22°☾29'36			7068 Jun 22 01:46	15°♏	
behind sun end	7062 Jul 10 05:31	22°☾31'22		evening set	7068 Jul 18 12:35	16°♏24'20	
max. Earth dist.	7062 Jul 10 09:49	22°☾31'59	20.83606 AU				
morning rise	7062 Jul 26 06:43	23°☾26'26		conjunction	7068 Aug 03 22:00	17°♏21'22	0°27'00
retrograde	7062 Oct 28 16:55	26°☾35'29		minimum elong	7068 Aug 03 22:00	17°♏21'22	0°26'57
opposition	7063 Jan 13 22:49	24°☾35'29	0°09'04	max. Earth dist.	7068 Aug 03 23:52	17°♏21'39	20.50505 AU
min. Earth dist.	7063 Jan 13 14:03	24°☾36'23	18.81376 AU	morning rise	7068 Aug 20 10:02	18°♏18'49	

retrograde	7068 Nov 22 21:19	21° $\Omega$ 31'34		evening set	7075 Aug 19 07:40	16° $\Upsilon$ 34'33	
opposition	7069 Feb 07 08:35	19° $\Omega$ 30'31	0°31'40				
min. Earth dist.	7069 Feb 07 07:47	19° $\Omega$ 30'36	18.47189 AU	conjunction	7075 Sep 04 21:51	17° $\Upsilon$ 33'40	0°44'59
direct	7069 Apr 23 02:54	17° $\Omega$ 31'08		minimum elong	7075 Sep 04 21:51	17° $\Upsilon$ 33'40	0°44'58
evening set	7069 Jul 23 02:12	20° $\Omega$ 37'47		max. Earth dist.	7075 Sep 04 14:00	17° $\Upsilon$ 32'30	20.03022 AU
				morning rise	7075 Sep 21 13:35	18° $\Upsilon$ 33'02	
conjunction	7069 Aug 08 12:20	21° $\Omega$ 35'06	0°30'06	retrograde	7075 Dec 24 19:43	21° $\Upsilon$ 50'40	
minimum elong	7069 Aug 08 12:20	21° $\Omega$ 35'06	0°30'03	opposition	7076 Mar 09 02:09	19° $\Upsilon$ 48'16	0°50'57
max. Earth dist.	7069 Aug 08 12:18	21° $\Omega$ 35'06	20.43864 AU	min. Earth dist.	7076 Mar 09 08:43	19° $\Upsilon$ 47'34	17.99726 AU
morning rise	7069 Aug 25 01:07	22° $\Omega$ 32'49		direct	7076 May 22 17:12	17° $\Upsilon$ 46'20	
retrograde	7069 Nov 27 12:55	25° $\Omega$ 46'15		evening set	7076 Aug 23 04:01	21° $\Upsilon$ 00'51	
opposition	7070 Feb 11 19:39	23° $\Omega$ 44'57	0°35'02				
min. Earth dist.	7070 Feb 11 19:33	23° $\Omega$ 44'57	18.40467 AU	conjunction	7076 Sep 08 18:52	22° $\Upsilon$ 00'17	0°46'40
direct	7070 Apr 27 13:56	21° $\Omega$ 45'10		minimum elong	7076 Sep 08 18:52	22° $\Upsilon$ 00'17	0°46'40
evening set	7070 Jul 27 16:45	24° $\Omega$ 52'49		max. Earth dist.	7076 Sep 08 10:50	21° $\Upsilon$ 59'05	19.96453 AU
				morning rise	7076 Sep 25 10:42	22° $\Upsilon$ 59'55	
conjunction	7070 Aug 13 03:43	25° $\Omega$ 50'26	0°33'04	retrograde	7076 Dec 28 14:59	26° $\Upsilon$ 18'15	
minimum elong	7070 Aug 13 03:43	25° $\Omega$ 50'26	0°33'01	opposition	7077 Mar 13 17:40	24° $\Upsilon$ 15'46	0°52'42
max. Earth dist.	7070 Aug 13 02:59	25° $\Omega$ 50'19	20.37066 AU	min. Earth dist.	7077 Mar 14 01:12	24° $\Upsilon$ 14'57	17.93202 AU
morning rise	7070 Aug 29 17:00	26° $\Omega$ 48'25		direct	7077 May 27 08:57	22° $\Upsilon$ 13'32	
	7070 Nov 22 06:22	0° $\Upsilon$		evening set	7077 Aug 28 01:24	25° $\Upsilon$ 29'16	
retrograde	7070 Dec 02 03:16	0° $\Upsilon$ 02'31					
	7070 Dec 12 03:07	30° $\Upsilon$ 02		conjunction	7077 Sep 13 16:32	26° $\Upsilon$ 28'59	0°48'06
opposition	7071 Feb 16 07:13	28° $\Omega$ 00'58	0°38'14	minimum elong	7077 Sep 13 16:32	26° $\Upsilon$ 28'59	0°48'05
min. Earth dist.	7071 Feb 16 08:39	28° $\Omega$ 00'49	18.33625 AU	max. Earth dist.	7077 Sep 13 05:59	26° $\Upsilon$ 27'24	19.89973 AU
direct	7071 May 01 23:56	26° $\Omega$ 00'49		morning rise	7077 Sep 30 08:45	27° $\Upsilon$ 28'53	
evening set	7071 Aug 01 08:17	29° $\Omega$ 09'30			7077 Nov 20 07:27	0° $\Omega$	
	7071 Aug 15 17:44	0° $\Upsilon$		retrograde	7078 Jan 02 10:53	0° $\Omega$ 47'56	
					7078 Feb 15 06:59	30° $\Upsilon$ 06	
conjunction	7071 Aug 17 19:56	0° $\Upsilon$ 07'24	0°35'51	opposition	7078 Mar 18 09:59	28° $\Upsilon$ 45'20	0°54'09
minimum elong	7071 Aug 17 19:55	0° $\Upsilon$ 07'24	0°35'49	min. Earth dist.	7078 Mar 18 19:05	28° $\Upsilon$ 44'21	17.86770 AU
max. Earth dist.	7071 Aug 17 17:07	0° $\Upsilon$ 07'00	20.30200 AU	direct	7078 Jun 01 01:20	26° $\Upsilon$ 42'46	
morning rise	7071 Sep 03 09:55	1° $\Upsilon$ 05'40		evening set	7078 Sep 01 23:47	29° $\Upsilon$ 59'44	
retrograde	7071 Dec 06 20:31	4° $\Upsilon$ 20'28			7078 Sep 02 01:34	0° $\Omega$	
opposition	7072 Feb 20 19:19	2° $\Upsilon$ 18'41	0°41'15				
min. Earth dist.	7072 Feb 20 21:32	2° $\Upsilon$ 18'27	18.26745 AU	conjunction	7078 Sep 18 15:31	0° $\Omega$ 59'45	0°49'14
direct	7072 May 05 12:10	0° $\Upsilon$ 18'08		minimum elong	7078 Sep 18 15:31	0° $\Omega$ 59'45	0°49'15
evening set	7072 Aug 05 00:37	3° $\Upsilon$ 27'55		max. Earth dist.	7078 Sep 18 04:36	0° $\Omega$ 58'06	19.83567 AU
				morning rise	7078 Oct 05 07:43	1° $\Omega$ 59'53	
conjunction	7072 Aug 21 13:03	4° $\Upsilon$ 26'07	0°38'27	retrograde	7079 Jan 07 07:54	5° $\Omega$ 19'35	
minimum elong	7072 Aug 21 13:02	4° $\Upsilon$ 26'07	0°38'25	opposition	7079 Mar 23 02:52	3° $\Omega$ 16'52	0°55'16
max. Earth dist.	7072 Aug 21 09:48	4° $\Upsilon$ 25'39	20.23303 AU	min. Earth dist.	7079 Mar 23 12:49	3° $\Omega$ 15'47	17.80403 AU
morning rise	7072 Sep 07 03:22	5° $\Upsilon$ 24'40		direct	7079 Jun 05 19:43	1° $\Omega$ 13'58	
retrograde	7072 Dec 10 12:23	8° $\Upsilon$ 40'09		evening set	7079 Sep 06 23:16	4° $\Omega$ 32'09	
opposition	7073 Feb 24 08:02	6° $\Upsilon$ 38'11	0°44'02				
min. Earth dist.	7073 Feb 24 11:28	6° $\Upsilon$ 37'49	18.19862 AU	conjunction	7079 Sep 23 15:11	5° $\Omega$ 32'26	0°50'05
direct	7073 May 09 23:26	4° $\Upsilon$ 37'15		minimum elong	7079 Sep 23 15:11	5° $\Omega$ 32'26	0°50'05
evening set	7073 Aug 09 18:00	7° $\Upsilon$ 48'10		max. Earth dist.	7079 Sep 23 01:35	5° $\Omega$ 30'22	19.77247 AU
				morning rise	7079 Oct 10 07:37	6° $\Omega$ 32'49	
conjunction	7073 Aug 26 06:58	8° $\Upsilon$ 46'40	0°40'51	retrograde	7080 Jan 12 04:14	9° $\Omega$ 53'07	
minimum elong	7073 Aug 26 06:58	8° $\Upsilon$ 46'40	0°40'50	opposition	7080 Mar 26 20:37	7° $\Omega$ 50'16	0°56'03
max. Earth dist.	7073 Aug 26 01:37	8° $\Upsilon$ 45'53	20.16456 AU	min. Earth dist.	7080 Mar 27 08:20	7° $\Omega$ 49'00	17.74149 AU
morning rise	7073 Sep 11 21:54	9° $\Upsilon$ 45'29		direct	7080 Jun 09 13:49	5° $\Omega$ 47'00	
retrograde	7073 Dec 15 06:51	13° $\Upsilon$ 01'42		evening set	7080 Sep 10 23:17	9° $\Omega$ 06'22	
opposition	7074 Feb 28 21:24	10° $\Upsilon$ 59'32	0°46'36				
min. Earth dist.	7074 Mar 01 01:41	10° $\Upsilon$ 59'05	18.13058 AU	conjunction	7080 Sep 27 15:37	10° $\Omega$ 06'55	0°50'37
direct	7074 May 14 13:02	8° $\Upsilon$ 58'15		minimum elong	7080 Sep 27 15:37	10° $\Omega$ 06'55	0°50'38
evening set	7074 Aug 14 12:11	12° $\Upsilon$ 10'20		max. Earth dist.	7080 Sep 27 01:48	10° $\Omega$ 04'49	19.71059 AU
				morning rise	7080 Oct 14 07:55	11° $\Omega$ 07'31	
conjunction	7074 Aug 31 01:56	13° $\Upsilon$ 09'09	0°43'02	retrograde	7081 Jan 16 02:25	14° $\Omega$ 28'23	
minimum elong	7074 Aug 31 01:56	13° $\Upsilon$ 09'09	0°43'00	opposition	7081 Mar 31 14:56	12° $\Omega$ 25'25	0°56'30
max. Earth dist.	7074 Aug 30 20:25	13° $\Upsilon$ 08'20	20.09687 AU	min. Earth dist.	7081 Apr 01 03:01	12° $\Omega$ 24'06	17.68046 AU
morning rise	7074 Sep 16 17:09	14° $\Upsilon$ 08'15		direct	7081 Jun 14 10:38	10° $\Omega$ 21'47	
retrograde	7074 Dec 20 00:24	17° $\Upsilon$ 25'10		evening set	7081 Sep 16 00:16	13° $\Omega$ 42'18	
opposition	7075 Mar 05 11:29	15° $\Upsilon$ 22'53	0°48'54				
min. Earth dist.	7075 Mar 05 16:48	15° $\Upsilon$ 22'18	18.06335 AU	conjunction	7081 Oct 02 16:41	14° $\Omega$ 43'05	0°50'49
direct	7075 May 19 02:16	13° $\Upsilon$ 21'16		minimum elong	7081 Oct 02 16:41	14° $\Omega$ 43'05	0°50'51

max. Earth dist.	7081 Oct 02 00:40	14° <u>♁</u> 40'38	19.65064 AU	opposition	7088 May 02 16:12	15° <u>♂</u> 11'21	0°49'11
morning rise	7081 Oct 19 09:02	15° <u>♁</u> 43'54		min. Earth dist.	7088 May 03 08:25	15° <u>♂</u> 09'34	17.35694 AU
retrograde	7082 Jan 20 23:12	19° <u>♁</u> 05'18			7088 May 06 23:37	15° <u>♂</u> ♂	
opposition	7082 Apr 05 09:55	17° <u>♁</u> 02'11	0°56'34	direct	7088 Jul 16 23:12	13° <u>♂</u> 05'40	
min. Earth dist.	7082 Apr 05 23:45	17° <u>♁</u> 00'41	17.62187 AU		7088 Sep 22 17:13	15° <u>♂</u>	
direct	7082 Jun 19 06:15	14° <u>♁</u> 58'11		evening set	7088 Oct 19 22:40	16° <u>♂</u> 32'52	
evening set	7082 Sep 21 01:48	18° <u>♁</u> 19'49					
conjunction	7082 Oct 07 18:31	19° <u>♁</u> 20'50	0°50'42	conjunction	7088 Nov 05 14:28	17° <u>♂</u> 34'50	0°43'00
minimum elong	7082 Oct 07 18:31	19° <u>♁</u> 20'50	0°50'44	minimum elong	7088 Nov 05 14:28	17° <u>♂</u> 34'50	0°43'04
max. Earth dist.	7082 Oct 07 02:21	19° <u>♁</u> 18'21	19.59345 AU	max. Earth dist.	7088 Nov 04 19:24	17° <u>♂</u> 31'52	19.34355 AU
morning rise	7082 Oct 24 10:41	20° <u>♁</u> 21'50		morning rise	7088 Nov 22 04:24	18° <u>♂</u> 36'34	
retrograde	7083 Jan 25 22:34	23° <u>♁</u> 43'42		retrograde	7089 Feb 22 22:14	22° <u>♂</u> 00'15	
opposition	7083 Apr 10 05:27	21° <u>♁</u> 40'29	0°56'16	opposition	7089 May 07 15:09	19° <u>♂</u> 56'53	0°46'41
min. Earth dist.	7083 Apr 10 19:13	21° <u>♁</u> 38'58	17.56620 AU	min. Earth dist.	7089 May 08 06:29	19° <u>♂</u> 55'12	17.33216 AU
direct	7083 Jun 24 05:03	19° <u>♁</u> 36'07		direct	7089 Jul 22 01:00	17° <u>♂</u> 51'06	
evening set	7083 Sep 26 04:10	22° <u>♁</u> 58'49		evening set	7089 Oct 25 03:32	21° <u>♂</u> 18'59	
conjunction	7083 Oct 12 20:49	24° <u>♁</u> 00'03	0°50'15	conjunction	7089 Nov 10 19:02	22° <u>♂</u> 21'02	0°40'37
minimum elong	7083 Oct 12 20:49	24° <u>♁</u> 00'03	0°50'18	minimum elong	7089 Nov 10 19:02	22° <u>♂</u> 21'02	0°40'41
max. Earth dist.	7083 Oct 12 03:05	23° <u>♁</u> 57'19	19.53949 AU	max. Earth dist.	7089 Nov 10 00:42	22° <u>♂</u> 18'10	19.32162 AU
morning rise	7083 Oct 29 12:49	25° <u>♁</u> 01'14		morning rise	7089 Nov 27 08:12	23° <u>♂</u> 22'48	
retrograde	7084 Jan 30 20:17	28° <u>♁</u> 23'31		retrograde	7090 Feb 27 22:33	26° <u>♂</u> 46'36	
opposition	7084 Apr 14 01:39	26° <u>♁</u> 20'11	0°55'36	opposition	7090 May 12 14:38	24° <u>♂</u> 43'21	0°43'52
min. Earth dist.	7084 Apr 14 17:00	26° <u>♁</u> 18'30	17.51431 AU	min. Earth dist.	7090 May 13 06:53	24° <u>♂</u> 41'34	17.31305 AU
direct	7084 Jun 28 02:03	24° <u>♁</u> 15'28		direct	7090 Jul 27 01:31	22° <u>♂</u> 37'29	
evening set	7084 Sep 30 06:54	27° <u>♁</u> 39'12		evening set	7090 Oct 30 08:50	26° <u>♂</u> 05'59	
conjunction	7084 Oct 16 23:37	28° <u>♁</u> 40'38	0°49'28	conjunction	7090 Nov 15 23:43	27° <u>♂</u> 08'04	0°37'57
minimum elong	7084 Oct 16 23:37	28° <u>♁</u> 40'38	0°49'30	minimum elong	7090 Nov 15 23:43	27° <u>♂</u> 08'04	0°38'01
max. Earth dist.	7084 Oct 16 05:47	28° <u>♁</u> 37'52	19.48974 AU	max. Earth dist.	7090 Nov 15 04:25	27° <u>♂</u> 05'03	19.30528 AU
morning rise	7084 Nov 02 15:19	29° <u>♁</u> 41'57		morning rise	7090 Dec 02 12:21	28° <u>♂</u> 09'50	
	7084 Nov 07 15:57	0° <u>♂</u>			7091 Jan 04 07:57	0° <u>♂</u>	
retrograde	7085 Feb 03 20:37	3° <u>♂</u> 04'37		retrograde	7091 Mar 04 23:31	1° <u>♂</u> 33'42	
opposition	7085 Apr 18 22:22	1° <u>♂</u> 01'12	0°54'32		7091 May 06 07:12	30° <u>♂</u> ♂	
min. Earth dist.	7085 Apr 19 13:09	0° <u>♂</u> 59'35	17.46685 AU	opposition	7091 May 17 14:35	29° <u>♂</u> 30'33	0°40'45
	7085 May 13 06:42	30° <u>♂</u> ♂		min. Earth dist.	7091 May 18 06:12	29° <u>♂</u> 28'50	17.29930 AU
direct	7085 Jul 03 01:45	28° <u>♁</u> 56'11		direct	7091 Aug 01 04:57	27° <u>♂</u> 24'37	
	7085 Aug 21 14:15	0° <u>♂</u>			7091 Oct 20 12:39	0° <u>♂</u>	
evening set	7085 Oct 05 10:07	2° <u>♂</u> 20'51		evening set	7091 Nov 04 14:04	0° <u>♂</u> 53'37	
max. Earth dist.	7085 Oct 21 08:14	3° <u>♂</u> 19'36	19.44469 AU	max. Earth dist.	7091 Nov 20 10:18	1° <u>♂</u> 52'51	19.29397 AU
conjunction	7085 Oct 22 02:43	3° <u>♂</u> 22'27	0°48'20	conjunction	7091 Nov 21 04:31	1° <u>♂</u> 55'43	0°35'00
minimum elong	7085 Oct 22 02:43	3° <u>♂</u> 22'27	0°48'23	minimum elong	7091 Nov 21 04:31	1° <u>♂</u> 55'43	0°35'05
morning rise	7085 Nov 07 18:04	4° <u>♂</u> 23'56		morning rise	7091 Dec 07 16:12	2° <u>♂</u> 57'27	
retrograde	7086 Feb 08 19:49	7° <u>♂</u> 46'55		retrograde	7092 Mar 08 23:53	6° <u>♂</u> 21'18	
opposition	7086 Apr 23 19:50	5° <u>♂</u> 43'27	0°53'07	opposition	7092 May 21 15:05	4° <u>♂</u> 18'16	0°37'20
min. Earth dist.	7086 Apr 24 11:54	5° <u>♂</u> 41'41	17.42449 AU	min. Earth dist.	7092 May 22 07:15	4° <u>♂</u> 16'30	17.29045 AU
direct	7086 Jul 07 23:47	3° <u>♂</u> 38'09		direct	7092 Aug 05 07:27	2° <u>♂</u> 12'18	
evening set	7086 Oct 10 13:56	7° <u>♂</u> 03'44		evening set	7092 Nov 08 19:29	5° <u>♂</u> 41'39	
max. Earth dist.	7086 Oct 26 11:37	8° <u>♂</u> 02'34	19.40511 AU				
conjunction	7086 Oct 27 06:22	8° <u>♂</u> 05'29	0°46'53	conjunction	7092 Nov 25 09:07	6° <u>♂</u> 43'43	0°31'49
minimum elong	7086 Oct 27 06:22	8° <u>♂</u> 05'29	0°46'55	minimum elong	7092 Nov 25 09:07	6° <u>♂</u> 43'43	0°31'53
morning rise	7086 Nov 12 21:20	9° <u>♂</u> 07'04		max. Earth dist.	7092 Nov 24 13:53	6° <u>♂</u> 40'42	19.28765 AU
retrograde	7087 Feb 13 20:54	12° <u>♂</u> 30'19		morning rise	7092 Dec 11 20:10	7° <u>♂</u> 45'24	
opposition	7087 Apr 28 17:35	10° <u>♂</u> 26'51	0°51'20	retrograde	7093 Mar 14 00:40	11° <u>♂</u> 09'10	
min. Earth dist.	7087 Apr 29 08:49	10° <u>♂</u> 25'10	17.38775 AU	opposition	7093 May 26 15:45	9° <u>♂</u> 06'14	0°33'39
direct	7087 Jul 13 00:22	8° <u>♂</u> 21'19		min. Earth dist.	7093 May 27 07:25	9° <u>♂</u> 04'31	17.28659 AU
evening set	7087 Oct 15 18:11	11° <u>♂</u> 47'45		direct	7093 Aug 10 11:48	7° <u>♂</u> 00'13	
conjunction	7087 Nov 01 10:24	12° <u>♂</u> 49'38	0°45'06	evening set	7093 Nov 14 00:33	10° <u>♂</u> 29'49	
minimum elong	7087 Nov 01 10:24	12° <u>♂</u> 49'38	0°45'08	conjunction	7093 Nov 30 13:42	11° <u>♂</u> 31'50	0°28'24
max. Earth dist.	7087 Oct 31 15:46	12° <u>♂</u> 46'44	19.37125 AU	minimum elong	7093 Nov 30 13:42	11° <u>♂</u> 31'50	0°28'29
morning rise	7087 Nov 18 00:46	13° <u>♂</u> 51'18		max. Earth dist.	7093 Nov 29 19:49	11° <u>♂</u> 29'01	19.28615 AU
	7087 Dec 07 16:55	15° <u>♂</u>		morning rise	7093 Dec 16 23:46	12° <u>♂</u> 33'27	
retrograde	7088 Feb 18 20:52	17° <u>♂</u> 14'47		retrograde	7094 Mar 19 01:16	15° <u>♂</u> 57'02	
				opposition	7094 May 31 16:46	13° <u>♂</u> 54'13	0°29'44
				min. Earth dist.	7094 Jun 01 08:29	13° <u>♂</u> 52'30	17.28738 AU



direct	7094 Aug 15 15:30	11°  48'09	opposition	7100 Jun 29 23:17	12°  29'56 0°03'02
evening set	7094 Nov 19 05:42	15°  17'53	min. Earth dist.	7100 Jun 30 09:55	12°  28'47 17.40178 AU
			direct	7100 Sep 14 13:10	10°  24'12
conjunction	7094 Dec 05 17:54	16°  19'49 0°24'48	evening set	7100 Dec 19 01:01	13°  52'20
minimum elong	7094 Dec 05 17:54	16°  19'49 0°24'52			
max. Earth dist.	7094 Dec 04 23:11	16°  16'52 19.28940 AU	conjunction	7101 Jan 04 07:48	14°  53'14 0°00'37
morning rise	7094 Dec 22 03:13	17°  21'20	minimum elong	7101 Jan 04 07:47	14°  53'14 0°00'42
retrograde	7095 Mar 24 01:39	20°  44'40	behind sun begin	7101 Jan 04 01:08	14°  52'12
opposition	7095 Jun 05 17:50	18°  41'57 0°25'36	behind sun end	7101 Jan 04 14:27	14°  54'15
min. Earth dist.	7095 Jun 06 09:14	18°  40'16 17.29312 AU	max. Earth dist.	7101 Jan 03 19:57	14°  51'23 19.42063 AU
direct	7095 Aug 20 19:25	16°  35'52	morning rise	7101 Jan 20 11:17	15°  53'38
evening set	7095 Nov 24 10:18	20°  05'37	desc. node	7101 Feb 25 16:18	17°  53'09
			retrograde	7101 Apr 21 22:04	19°  14'25
conjunction	7095 Dec 10 21:50	21°  07'26 0°21'01	opposition	7101 Jul 04 23:55	17°  12'27 -0°01'37
minimum elong	7095 Dec 10 21:50	21°  07'26 0°21'06	min. Earth dist.	7101 Jul 05 10:10	17°  11'21 17.44103 AU
max. Earth dist.	7095 Dec 10 04:43	21°  04'45 19.29766 AU	direct	7101 Sep 19 13:59	15°  06'56
morning rise	7095 Dec 27 06:07	22°  08'49	evening set	7101 Dec 24 01:53	18°  34'31
retrograde	7096 Mar 28 02:28	25°  31'51			
opposition	7096 Jun 09 19:06	23°  29'14 0°21'18	conjunction	7102 Jan 09 07:41	19°  35'09 -0°03'39
min. Earth dist.	7096 Jun 10 09:47	23°  27'38 17.30381 AU	minimum elong	7102 Jan 09 07:40	19°  35'09 0°03'34
direct	7096 Aug 24 23:35	21°  23'09	behind sun begin	7102 Jan 09 01:04	19°  34'08
evening set	7096 Nov 28 14:25	24°  52'46	behind sun end	7102 Jan 09 14:17	19°  36'09
max. Earth dist.	7096 Dec 14 07:44	25°  51'45 19.31101 AU	max. Earth dist.	7102 Jan 08 21:05	19°  33'30 19.46280 AU
conjunction	7096 Dec 15 00:59	25°  54'27 0°17'06			
minimum elong	7096 Dec 15 00:59	25°  54'27 0°17'11			
morning rise	7096 Dec 31 08:27	26°  55'42			
	7097 Mar 07 12:17	0°  00'00			
retrograde	7097 Apr 02 01:57	0°  18'22			
	7097 Apr 28 01:59	30°  00'00			
opposition	7097 Jun 14 20:19	28°  15'50 0°16'51			
min. Earth dist.	7097 Jun 15 10:43	28°  14'16 17.31985 AU			
direct	7097 Aug 30 02:31	26°  09'45			
evening set	7097 Dec 03 18:01	29°  39'10			
	7097 Dec 09 08:40	0°  00'00			
conjunction	7097 Dec 20 03:48	0°  40'41 0°13'04			
minimum elong	7097 Dec 20 03:47	0°  40'41 0°13'08			
behind sun begin	7097 Dec 19 23:51	0°  40'05			
behind sun end	7097 Dec 20 07:44	0°  41'18			
max. Earth dist.	7097 Dec 19 12:12	0°  38'15 19.32980 AU			
morning rise	7098 Jan 05 10:15	1°  41'45			
retrograde	7098 Apr 07 02:34	5°  03'59			
opposition	7098 Jun 19 21:18	3°  01'34 0°12'18			
min. Earth dist.	7098 Jun 20 10:23	3°  00'08 17.34128 AU			
direct	7098 Sep 04 07:02	0°  55'33			
evening set	7098 Dec 08 21:09	4°  24'38			
conjunction	7098 Dec 25 05:54	5°  25'58 0°08'58			
minimum elong	7098 Dec 25 05:53	5°  25'58 0°09'03			
behind sun begin	7098 Dec 25 00:12	5°  25'05			
behind sun end	7098 Dec 25 11:35	5°  26'50			
max. Earth dist.	7098 Dec 24 14:57	5°  23'37 19.35410 AU			
morning rise	7099 Jan 10 11:23	6°  26'50			
retrograde	7099 Apr 12 00:45	9°  48'36			
opposition	7099 Jun 24 22:26	7°  46'18 0°07'41			
min. Earth dist.	7099 Jun 25 11:09	7°  44'55 17.36857 AU			
direct	7099 Sep 09 08:50	5°  40'23			
evening set	7099 Dec 13 23:22	9°  09'02			
conjunction	7099 Dec 30 07:09	10°  31'09 0°04'50			
minimum elong	7099 Dec 30 07:09	10°  31'09 0°04'54			
behind sun begin	7099 Dec 30 00:38	10°  30'10			
behind sun end	7099 Dec 30 13:39	10°  31'09			
max. Earth dist.	7099 Dec 29 17:54	10°  30'05 19.38440 AU			
morning rise	7100 Jan 15 11:39	11°  31'48			
retrograde	7100 Apr 17 01:07	14°  32'05			