

conjunction	1601 Feb 10 04:21	21° $\approx$ 34'29	-1°04'34	retrograde	1606 Apr 21 12:25	10° $\nearrow$ 41'58	
minimum elong	1601 Feb 10 05:01	21° $\approx$ 35'47	1°04'34	desc. node	1606 Apr 22 08:16	10° $\nearrow$ 41'43	
max. Earth dist.	1601 Feb 16 17:19	26° $\approx$ 44'35	2.37053 AU	opposition	1606 May 25 14:40	3° $\nearrow$ 58'00	-1°43'11
	1601 Feb 20 20:19	0° $\bowtie$		greatest brilliancy	1606 May 26 03:28	3° $\nearrow$ 47'12	-2.3m
	1601 Mar 31 03:36	0° $\Upsilon$		min. Earth dist.	1606 Jun 03 02:25	1° $\nearrow$ 06'09	0.47782 AU
morning rise	1601 Apr 21 21:41	16° $\Upsilon$ 41'00			1606 Jun 06 13:21	30° $\mathbb{R}$ $\mathbb{M}$	
	1601 May 09 14:43	0° $\mathcal{B}$		direct	1606 Jul 02 03:25	25° $\mathbb{M}$ 41'48	
	1601 Jun 19 23:27	0° $\mathbb{I}$			1606 Jul 28 00:19	0° $\nearrow$	
asc. node	1601 Jun 30 05:27	7° $\mathbb{I}$ 10'50			1606 Sep 24 16:01	0° $\mathcal{Z}$	
	1601 Aug 02 20:58	0° $\mathcal{O}$			1606 Nov 06 23:37	0° $\approx$	
	1601 Sep 19 05:07	0° $\mathcal{O}$			1606 Dec 17 13:40	0° $\bowtie$	
	1601 Nov 12 04:06	0° $\mathbb{M}$			1607 Jan 27 00:17	0° $\Upsilon$	
retrograde	1602 Jan 22 14:57	21° $\mathbb{M}$ 44'55		asc. node	1607 Feb 20 02:27	17° $\Upsilon$ 32'36	
opposition	1602 Mar 03 04:35	12° $\mathbb{M}$ 26'32	4°08'22		1607 Mar 09 12:15	0° $\mathcal{B}$	
greatest brilliancy	1602 Mar 03 13:08	12° $\mathbb{M}$ 18'06	-1.3m		1607 Apr 21 15:49	0° $\mathbb{I}$	
min. Earth dist.	1602 Mar 05 18:32	11° $\mathbb{M}$ 25'31	0.66796 AU		1607 Jun 05 12:53	0° $\mathcal{O}$	
direct	1602 Apr 13 14:21	2° $\mathbb{M}$ 25'55		evening set	1607 Jun 08 08:30	1° $\mathcal{O}$ 50'57	
	1602 Jul 04 18:55	0° $\mathcal{L}$			1607 Jul 21 19:17	0° $\mathcal{O}$	
desc. node	1602 Jul 18 10:21	7° $\mathcal{L}$ 35'23					
	1602 Aug 23 22:17	0° $\mathbb{M}$		conjunction	1607 Jul 27 03:19	3° $\mathcal{O}$ 25'12	1°07'01
	1602 Oct 06 17:08	0° $\nearrow$		minimum elong	1607 Jul 27 02:43	3° $\mathcal{O}$ 24'15	1°07'01
	1602 Nov 16 04:13	0° $\mathcal{Z}$		max. Earth dist.	1607 Aug 02 15:57	7° $\mathcal{O}$ 35'44	2.66516 AU
	1602 Dec 24 19:53	0° $\approx$			1607 Sep 06 20:13	0° $\mathbb{M}$	
	1603 Jan 31 20:32	0° $\bowtie$		morning rise	1607 Sep 10 18:27	2° $\mathbb{M}$ 29'40	
evening set	1603 Feb 15 21:19	11° $\bowtie$ 48'59			1607 Oct 24 01:50	0° $\mathcal{L}$	
	1603 Mar 11 06:34	0° $\Upsilon$			1607 Dec 10 06:26	0° $\mathbb{M}$	
	1603 Apr 19 22:24	0° $\mathcal{B}$			1608 Jan 26 16:19	0° $\nearrow$	
				desc. node	1608 Mar 09 07:20	26° $\nearrow$ 20'58	
conjunction	1603 Apr 23 00:30	2° $\mathcal{B}$ 16'54	-0°16'08		1608 Mar 15 08:57	0° $\mathcal{Z}$	
minimum elong	1603 Apr 23 01:44	2° $\mathcal{B}$ 19'13	0°16'06		1608 May 08 17:36	0° $\approx$	
asc. node	1603 May 18 05:48	20° $\mathcal{B}$ 37'01		retrograde	1608 Jul 04 10:31	16° $\approx$ 09'13	
	1603 May 31 10:56	0° $\mathbb{I}$		opposition	1608 Aug 03 11:56	11° $\approx$ 11'45	-6°49'33
max. Earth dist.	1603 Jun 06 06:12	4° $\mathbb{I}$ 04'26	2.49142 AU	greatest brilliancy	1608 Aug 03 22:17	11° $\approx$ 04'52	-2.9m
morning rise	1603 Jun 22 09:42	15° $\mathbb{I}$ 15'31		min. Earth dist.	1608 Aug 05 03:04	10° $\approx$ 45'44	0.37560 AU
	1603 Jul 14 04:04	0° $\mathcal{O}$		direct	1608 Sep 02 19:09	6° $\approx$ 05'37	
	1603 Aug 29 05:26	0° $\mathcal{O}$			1608 Nov 10 09:15	0° $\bowtie$	
	1603 Oct 16 23:56	0° $\mathbb{M}$			1608 Dec 29 01:17	0° $\Upsilon$	
	1603 Dec 09 17:25	0° $\mathcal{L}$		asc. node	1609 Jan 07 02:07	5° $\Upsilon$ 52'46	
retrograde	1604 Mar 01 12:48	26° $\mathcal{L}$ 59'05			1609 Feb 12 18:02	0° $\mathcal{B}$	
opposition	1604 Apr 08 06:00	18° $\mathcal{L}$ 37'07	2°18'24		1609 Mar 30 12:41	0° $\mathbb{I}$	
greatest brilliancy	1604 Apr 08 19:29	18° $\mathcal{L}$ 24'20	-1.6m		1609 May 16 02:28	0° $\mathcal{O}$	
min. Earth dist.	1604 Apr 14 13:43	16° $\mathcal{L}$ 13'35	0.59985 AU		1609 Jul 02 08:21	0° $\mathcal{O}$	
direct	1604 May 19 04:00	8° $\mathcal{L}$ 48'16		evening set	1609 Jul 17 06:46	9° $\mathcal{O}$ 27'01	
desc. node	1604 Jun 04 09:08	10° $\mathcal{L}$ 24'53			1609 Aug 18 16:21	0° $\mathbb{M}$	
	1604 Jul 24 22:43	0° $\mathbb{M}$		max. Earth dist.	1609 Aug 25 01:02	4° $\mathbb{M}$ 03'08	2.67216 AU
	1604 Sep 12 01:09	0° $\nearrow$					
	1604 Oct 24 03:23	0° $\mathcal{Z}$		conjunction	1609 Sep 01 03:15	8° $\mathbb{M}$ 34'50	1°04'09
	1604 Dec 02 12:29	0° $\approx$		minimum elong	1609 Sep 01 04:01	8° $\mathbb{M}$ 36'03	1°04'09
	1605 Jan 10 01:17	0° $\bowtie$			1609 Oct 04 10:07	0° $\mathcal{L}$	
	1605 Feb 17 23:31	0° $\Upsilon$		morning rise	1609 Oct 15 12:21	7° $\mathcal{L}$ 12'49	
	1605 Mar 30 04:39	0° $\mathcal{B}$			1609 Nov 19 02:18	0° $\mathbb{M}$	
asc. node	1605 Apr 04 04:20	3° $\mathcal{B}$ 37'53			1610 Jan 02 12:47	0° $\nearrow$	
evening set	1605 Apr 20 15:36	15° $\mathcal{B}$ 28'57		desc. node	1610 Jan 25 06:57	15° $\nearrow$ 40'49	
	1605 May 11 06:03	0° $\mathbb{I}$			1610 Feb 14 19:49	0° $\mathcal{Z}$	
					1610 Mar 29 06:18	0° $\approx$	
conjunction	1605 Jun 15 06:55	23° $\mathbb{I}$ 57'40	0°41'04		1610 May 10 14:35	0° $\bowtie$	
minimum elong	1605 Jun 15 05:18	23° $\mathbb{I}$ 54'57	0°41'03		1610 Jun 24 00:49	0° $\Upsilon$	
	1605 Jun 24 07:30	0° $\mathcal{O}$			1610 Aug 23 01:05	0° $\mathcal{B}$	
max. Earth dist.	1605 Jul 08 14:58	9° $\mathcal{O}$ 28'29	2.60378 AU	retrograde	1610 Sep 13 19:29	3° $\mathcal{B}$ 15'14	
morning rise	1605 Aug 04 15:53	27° $\mathcal{O}$ 05'01			1610 Oct 05 05:27	30° $\mathbb{R}$ $\Upsilon$	
	1605 Aug 09 04:36	0° $\mathcal{O}$		min. Earth dist.	1610 Oct 11 03:00	28° $\Upsilon$ 11'38	0.43770 AU
	1605 Sep 25 13:09	0° $\mathbb{M}$		greatest brilliancy	1610 Oct 18 12:26	25° $\Upsilon$ 42'46	-2.5m
	1605 Nov 13 08:18	0° $\mathcal{L}$		opposition	1610 Oct 19 02:20	25° $\Upsilon$ 31'03	-2°09'25
	1606 Jan 03 17:22	0° $\mathbb{M}$		direct	1610 Nov 19 23:40	19° $\Upsilon$ 13'12	
	1606 Mar 05 12:44	0° $\nearrow$		asc. node	1610 Nov 25 01:09	19° $\Upsilon$ 23'23	

	1611 Jan 04 04:52	0°♄		conjunction	1616 Jan 14 14:17	23°♄57'14	-1°00'19
	1611 Mar 04 08:50	0°♂		minimum elong	1616 Jan 14 12:28	23°♄53'41	1°00'18
	1611 Apr 24 14:37	0°♂			1616 Jan 22 07:37	0°♄	
	1611 Jun 13 01:18	0°♂			1616 Feb 29 09:41	0°♄	
	1611 Jul 31 08:19	0°♄		morning rise	1616 Mar 22 22:03	17°♄41'05	
evening set	1611 Aug 23 09:56	14°♄38'21			1616 Apr 07 17:59	0°♄	
	1611 Sep 16 04:48	0°♄			1616 May 17 05:12	0°♄	
max. Earth dist.	1611 Sep 18 02:44	1°♄14'57	2.62523 AU		1616 Jun 27 14:56	0°♂	
				asc. node	1616 Jul 16 22:44	13°♂23'48	
conjunction	1611 Oct 08 07:15	14°♄33'10	0°36'25		1616 Aug 10 19:19	0°♂	
minimum elong	1611 Oct 08 08:20	14°♄34'58	0°36'24		1616 Sep 28 07:26	0°♂	
	1611 Oct 31 06:42	0°♂			1616 Nov 27 19:22	0°♄	
morning rise	1611 Nov 23 18:10	16°♂08'43		retrograde	1617 Jan 08 21:58	9°♄00'57	
desc. node	1611 Dec 13 05:54	29°♂50'07			1617 Feb 16 12:25	30°♄	
	1611 Dec 13 11:28	0°♄		opposition	1617 Feb 17 21:14	29°♄27'28	4°26'46
	1612 Jan 23 23:23	0°♄		greatest brilliancy	1617 Feb 18 00:28	29°♄24'15	-1.3m
	1612 Mar 04 03:37	0°♄		min. Earth dist.	1617 Feb 18 22:45	29°♄02'07	0.67685 AU
	1612 Apr 12 14:53	0°♄		direct	1617 Mar 31 00:11	19°♄32'42	
	1612 May 22 07:06	0°♄			1617 May 16 12:27	0°♄	
	1612 Jul 02 15:28	0°♄			1617 Jul 15 10:26	0°♄	
	1612 Aug 17 21:53	0°♂		desc. node	1617 Aug 04 02:19	11°♄48'29	
asc. node	1612 Oct 11 23:19	24°♂12'36			1617 Sep 01 10:13	0°♂	
retrograde	1612 Oct 30 05:20	26°♂24'57			1617 Oct 14 14:49	0°♄	
min. Earth dist.	1612 Dec 01 18:49	19°♂15'46	0.56662 AU		1617 Nov 23 21:38	0°♄	
opposition	1612 Dec 08 07:49	16°♂42'51	2°32'06		1618 Jan 01 11:47	0°♄	
greatest brilliancy	1612 Dec 07 16:14	16°♂58'03	-1.8m	evening set	1618 Jan 18 13:15	13°♄27'56	
direct	1613 Jan 13 16:40	8°♂27'30			1618 Feb 08 11:05	0°♄	
	1613 Mar 25 23:26	0°♂			1618 Mar 18 19:01	0°♄	
	1613 May 21 08:27	0°♂					
	1613 Jul 11 01:09	0°♄		conjunction	1618 Mar 27 13:20	6°♄45'01	-0°41'39
	1613 Aug 27 17:00	0°♄		minimum elong	1618 Mar 27 16:23	6°♄50'53	0°41'37
evening set	1613 Sep 30 12:34	22°♄21'49			1618 Apr 27 07:53	0°♄	
	1613 Oct 11 18:00	0°♂		max. Earth dist.	1618 May 17 17:03	14°♄57'37	2.43791 AU
max. Earth dist.	1613 Oct 16 17:32	3°♂25'24	2.52831 AU	morning rise	1618 Jun 01 04:26	25°♄21'39	
desc. node	1613 Oct 30 04:39	12°♂46'58		asc. node	1618 Jun 03 21:09	27°♄16'37	
					1618 Jun 07 17:30	0°♂	
conjunction	1613 Nov 18 22:56	26°♂48'28	-0°12'00		1618 Jul 21 10:09	0°♂	
minimum elong	1613 Nov 18 22:22	26°♂47'28	0°11'59		1618 Sep 05 18:20	0°♂	
behind sun begin	1613 Nov 18 07:30	26°♂20'47			1618 Oct 25 17:06	0°♄	
behind sun end	1613 Nov 19 13:15	27°♂14'10			1618 Dec 23 20:52	0°♄	
	1613 Nov 23 09:20	0°♄		retrograde	1619 Feb 14 12:33	12°♄54'24	
	1614 Jan 03 00:34	0°♄		opposition	1619 Mar 25 03:06	4°♄06'50	3°12'58
morning rise	1614 Jan 11 21:16	6°♄42'22		greatest brilliancy	1619 Mar 25 16:54	3°♄53'30	-1.5m
	1614 Feb 11 05:32	0°♄		min. Earth dist.	1619 Mar 30 00:52	2°♄13'09	0.63404 AU
	1614 Mar 21 17:55	0°♄			1619 Apr 05 00:09	30°♄	
	1614 Apr 29 10:08	0°♄		direct	1619 May 05 11:31	24°♄07'36	
	1614 Jun 08 05:31	0°♄			1619 Jun 07 05:03	0°♄	
	1614 Jul 20 09:19	0°♂		desc. node	1619 Jun 22 00:33	5°♄35'14	
asc. node	1614 Aug 29 23:15	26°♂20'12			1619 Aug 07 19:18	0°♂	
	1614 Sep 05 01:19	0°♂			1619 Sep 22 17:13	0°♄	
	1614 Nov 06 06:31	0°♂			1619 Nov 02 21:43	0°♄	
retrograde	1614 Dec 06 11:09	5°♄14'12			1619 Dec 11 21:06	0°♄	
	1615 Jan 03 11:35	30°♄			1620 Jan 19 03:04	0°♄	
min. Earth dist.	1615 Jan 12 20:07	26°♄25'43	0.65343 AU		1620 Feb 26 18:43	0°♄	
opposition	1615 Jan 15 16:03	25°♄17'44	4°19'21	evening set	1620 Mar 28 13:39	23°♄14'44	
greatest brilliancy	1615 Jan 15 04:49	25°♄28'59	-1.4m		1620 Apr 06 16:51	0°♄	
direct	1615 Feb 24 02:11	15°♄56'44		asc. node	1620 Apr 20 20:37	10°♄19'46	
	1615 Apr 20 19:04	0°♂			1620 May 18 11:29	0°♂	
	1615 Jun 19 02:31	0°♄					
	1615 Aug 08 02:33	0°♄		conjunction	1620 May 27 04:44	6°♂04'47	0°22'16
desc. node	1615 Sep 17 03:27	26°♄09'49		minimum elong	1620 May 27 03:31	6°♂02'40	0°22'14
	1615 Sep 22 19:03	0°♂		max. Earth dist.	1620 Jun 27 06:13	27°♂16'15	2.56536 AU
	1615 Nov 04 08:36	0°♄			1620 Jul 01 07:59	0°♄	
evening set	1615 Nov 16 18:42	9°♄06'11		morning rise	1620 Jul 19 17:14	12°♄10'42	
max. Earth dist.	1615 Dec 08 12:33	25°♄22'59	2.40087 AU		1620 Aug 16 04:29	0°♂	
	1615 Dec 14 14:18	0°♄			1620 Oct 02 21:28	0°♄	
					1620 Nov 21 21:39	0°♄	

	1621 Jan 16 07:40	0°♌			1626 May 03 01:37	0°♎		
retrograde	1621 Mar 30 10:23	22°♌12'05			1626 Jun 20 10:05	0°♏		
opposition	1621 May 05 05:18	14°♌43'23	0°10'44		1626 Aug 07 05:45	0°♐		
greatest brilliancy	1621 May 05 06:53	14°♌41'58	-2.0m	evening set	1626 Aug 09 01:18	1°♐08'57		
desc. node	1621 May 08 23:56	13°♌21'46		max. Earth dist.	1626 Sep 08 13:14	20°♐38'19	2.64979 AU	
min. Earth dist.	1621 May 13 07:45	11°♌49'15	0.52978 AU		1626 Sep 22 23:52	0°♑		
direct	1621 Jun 13 13:56	5°♌36'00						
	1621 Aug 22 14:40	0°♊		conjunction	1626 Sep 23 13:48	0°♑22'42	0°49'54	
	1621 Oct 07 18:12	0°♋		minimum elong	1626 Sep 23 14:57	0°♑24'34	0°49'53	
	1621 Nov 17 15:25	0°♌		morning rise	1626 Nov 07 17:49	0°♌20'08		
	1621 Dec 27 01:20	0°♍			1626 Nov 07 05:53	0°♌		
	1622 Feb 04 16:26	0°♎			1626 Dec 20 20:02	0°♊		
asc. node	1622 Mar 08 19:12	23°♎41'20		desc. node	1626 Dec 29 21:02	6°♊21'49		
	1622 Mar 17 12:37	0°♏			1627 Jan 31 21:15	0°♋		
	1622 Apr 29 03:09	0°♐			1627 Mar 13 17:05	0°♌		
evening set	1622 May 21 20:45	15°♐29'09			1627 Apr 22 21:32	0°♍		
	1622 Jun 12 14:28	0°♑			1627 Jun 02 11:54	0°♎		
					1627 Jul 15 15:50	0°♏		
conjunction	1622 Jul 11 18:23	19°♑06'03	1°00'38		1627 Sep 07 21:15	0°♐		
minimum elong	1622 Jul 11 17:14	19°♑04'10	1°00'39	retrograde	1627 Oct 14 12:43	8°♐18'53		
max. Earth dist.	1622 Jul 24 11:51	27°♑19'44	2.64757 AU	asc. node	1627 Oct 29 16:52	6°♐37'48		
	1622 Jul 28 15:27	0°♒		min. Earth dist.	1627 Nov 13 22:23	1°♐58'09	0.51801 AU	
morning rise	1622 Aug 27 18:15	19°♒14'50			1627 Nov 19 04:18	30°♑♏		
	1622 Sep 13 17:11	0°♓		opposition	1627 Nov 21 14:30	29°♑05'04	1°08'50	
	1622 Oct 31 09:16	0°♑		greatest brilliancy	1627 Nov 21 05:47	29°♑13'15	-2.1m	
	1622 Dec 18 16:25	0°♒		direct	1627 Dec 26 08:19	21°♑28'47		
	1623 Feb 06 14:20	0°♊			1628 Feb 04 18:23	0°♐		
desc. node	1623 Mar 26 23:56	26°♊24'34			1628 Apr 07 11:25	0°♑		
	1623 Apr 03 10:48	0°♋			1628 May 29 22:47	0°♒		
retrograde	1623 Jun 03 03:34	17°♋12'30			1628 Jul 18 10:30	0°♓		
opposition	1623 Jul 04 08:33	11°♋48'07	-5°20'16		1628 Sep 03 16:43	0°♑		
greatest brilliancy	1623 Jul 05 10:54	11°♋29'00	-2.7m	evening set	1628 Sep 14 18:21	7°♑14'17		
min. Earth dist.	1623 Jul 10 11:58	10°♋01'57	0.40236 AU	max. Earth dist.	1628 Oct 04 01:48	20°♑04'49	2.57162 AU	
direct	1623 Aug 06 07:56	5°♋35'06			1628 Oct 18 17:03	0°♌		
	1623 Oct 13 09:23	0°♌						
	1623 Nov 28 20:02	0°♍		conjunction	1628 Nov 01 06:58	9°♌21'26	0°08'42	
	1624 Jan 11 01:48	0°♎		minimum elong	1628 Nov 01 07:19	9°♌22'02	0°08'42	
asc. node	1624 Jan 24 17:06	9°♎30'11		behind sun begin	1628 Oct 31 13:47	8°♌51'37		
	1624 Feb 23 08:56	0°♏		behind sun end	1628 Nov 02 00:51	9°♌52'28		
	1624 Apr 07 18:35	0°♐		desc. node	1628 Nov 15 20:20	19°♌32'56		
	1624 May 23 12:17	0°♑			1628 Nov 30 12:37	0°♊		
evening set	1624 Jul 02 09:11	25°♑36'11		morning rise	1628 Dec 21 09:31	15°♊08'53		
	1624 Jul 09 06:42	0°♒			1629 Jan 10 10:36	0°♋		
max. Earth dist.	1624 Aug 16 00:08	24°♒00'06	2.67603 AU		1629 Feb 18 23:00	0°♌		
					1629 Mar 29 18:10	0°♍		
conjunction	1624 Aug 17 23:55	25°♒16'07	1°08'22		1629 May 07 16:41	0°♎		
minimum elong	1624 Aug 18 00:14	25°♒16'36	1°08'22		1629 Jun 16 20:21	0°♏		
	1624 Aug 25 10:19	0°♐			1629 Jul 29 19:04	0°♐		
morning rise	1624 Oct 01 11:53	23°♐41'43		asc. node	1629 Sep 15 15:09	29°♐03'52		
	1624 Oct 11 06:59	0°♑			1629 Sep 17 09:15	0°♑		
	1624 Nov 26 10:06	0°♒		retrograde	1629 Nov 22 15:14	21°♑15'54		
	1625 Jan 10 17:06	0°♊		min. Earth dist.	1629 Dec 28 06:23	13°♑02'12	0.62661 AU	
desc. node	1625 Feb 10 22:35	20°♊57'33		opposition	1630 Jan 01 14:16	11°♑18'39	3°52'21	
	1625 Feb 24 08:14	0°♋		greatest brilliancy	1629 Dec 31 23:03	11°♑33'50	-1.5m	
	1625 Apr 09 19:09	0°♌		direct	1630 Feb 08 23:33	2°♑18'39		
	1625 May 25 17:23	0°♍			1630 May 04 13:19	0°♒		
	1625 Jul 22 06:40	0°♎			1630 Jun 27 20:23	0°♓		
retrograde	1625 Aug 20 15:02	5°♎33'03			1630 Aug 15 15:52	0°♑		
min. Earth dist.	1625 Sep 16 03:15	1°♎04'14	0.39419 AU		1630 Sep 30 00:24	0°♒		
	1625 Sep 19 18:47	30°♏♍		desc. node	1630 Oct 03 19:00	2°♌35'21		
greatest brilliancy	1625 Sep 21 08:29	29°♏32'01	-2.8m	evening set	1630 Oct 27 20:43	19°♌25'43		
opposition	1625 Sep 22 05:06	29°♏16'44	-4°48'21		1630 Nov 11 13:48	0°♊		
direct	1625 Oct 22 08:33	23°♏54'39		max. Earth dist.	1630 Nov 11 14:31	0°♊01'18	2.45106 AU	
	1625 Nov 23 14:45	0°♎						
asc. node	1625 Dec 11 17:07	7°♎16'54		conjunction	1630 Dec 21 03:48	29°♊24'20	-0°44'50	
	1626 Jan 24 01:46	0°♏		minimum elong	1630 Dec 21 01:40	29°♊20'19	0°44'50	
	1626 Mar 15 08:28	0°♐			1630 Dec 21 22:35	0°♋		

	1631 Jan 29 19:43	0°♊		greatest brilliancy	1636 Apr 17 22:46	27°♊42'33	-1.8m
morning rise	1631 Feb 21 18:57	18°♊00'40		min. Earth dist.	1636 Apr 24 12:48	25°♊15'22	0.57727 AU
	1631 Mar 09 00:48	0°♋		desc. node	1636 May 25 15:52	18°♊16'33	
	1631 Apr 16 10:52	0°♌		direct	1636 May 28 00:16	18°♊14'22	
	1631 May 25 23:18	0°♍			1636 Jul 13 19:20	0°♌	
	1631 Jul 06 12:10	0°♎			1636 Sep 05 05:09	0°♍	
asc. node	1631 Aug 03 14:13	19°♎09'38			1636 Oct 18 06:23	0°♏	
	1631 Aug 20 05:13	0°♐			1636 Nov 27 01:03	0°♊	
	1631 Oct 09 20:25	0°♑			1637 Jan 04 19:13	0°♋	
retrograde	1631 Dec 27 12:59	26°♑18'16			1637 Feb 12 21:37	0°♌	
opposition	1632 Feb 05 17:49	16°♑32'57	4°33'31	asc. node	1637 Mar 25 10:45	0°♍07'55	
min. Earth dist.	1632 Feb 05 06:53	16°♑43'52	0.67558 AU		1637 Mar 25 06:24	0°♍	
greatest brilliancy	1632 Feb 05 15:13	16°♑35'32	-1.3m	evening set	1637 May 02 14:52	27°♍19'57	
direct	1632 Mar 17 08:39	6°♑48'11			1637 May 06 10:50	0°♎	
	1632 May 31 16:29	0°♏			1637 Jun 19 14:35	0°♐	
	1632 Jul 24 13:55	0°♑					
desc. node	1632 Aug 20 17:37	17°♑02'24		conjunction	1637 Jun 25 08:31	3°♑48'57	0°49'41
	1632 Sep 09 08:38	0°♒		minimum elong	1637 Jun 25 06:58	3°♑46'22	0°49'41
	1632 Oct 22 05:05	0°♓		max. Earth dist.	1637 Jul 14 18:13	16°♑33'54	2.62175 AU
	1632 Dec 01 10:27	0°♑			1637 Aug 04 11:57	0°♒	
evening set	1632 Dec 22 11:40	16°♑15'00		morning rise	1637 Aug 13 07:42	5°♒39'44	
	1633 Jan 09 01:09	0°♒			1637 Sep 20 16:53	0°♓	
	1633 Feb 16 00:45	0°♋			1637 Nov 07 24:00	0°♑	
					1637 Dec 27 22:51	0°♒	
conjunction	1633 Feb 26 16:11	8°♋23'29	-1°00'10		1638 Feb 20 16:22	0°♓	
minimum elong	1633 Feb 26 18:32	8°♋28'06	1°00'09	desc. node	1638 Apr 12 14:37	20°♓03'31	
	1633 Mar 26 07:54	0°♌		retrograde	1638 May 05 16:08	23°♓01'34	
max. Earth dist.	1633 Apr 11 23:43	12°♌48'30	2.38671 AU	opposition	1638 Jun 07 17:14	16°♓45'31	-2°59'47
	1633 May 04 18:56	0°♍		greatest brilliancy	1638 Jun 08 14:04	16°♓28'40	-2.4m
morning rise	1633 May 07 11:56	2°♍00'49		min. Earth dist.	1638 Jun 15 20:50	14°♓07'53	0.44896 AU
	1633 Jun 15 02:43	0°♎		direct	1638 Jul 13 20:06	9°♓08'10	
asc. node	1633 Jun 20 13:55	3°♎50'52			1638 Sep 13 17:55	0°♑	
	1633 Jul 28 20:45	0°♏			1638 Oct 30 07:44	0°♒	
	1633 Sep 13 16:36	0°♑			1638 Dec 11 02:05	0°♋	
	1633 Nov 04 15:08	0°♒			1639 Jan 21 04:48	0°♌	
retrograde	1634 Jan 30 16:32	29°♒35'36		asc. node	1639 Feb 10 10:23	14°♌34'47	
opposition	1634 Mar 10 23:41	20°♒27'05	3°51'50		1639 Mar 04 03:59	0°♍	
greatest brilliancy	1634 Mar 11 10:41	20°♒16'19	-1.4m		1639 Apr 16 15:27	0°♎	
min. Earth dist.	1634 Mar 14 10:02	19°♒06'29	0.65871 AU		1639 May 31 18:05	0°♏	
direct	1634 Apr 21 11:12	10°♒25'07		evening set	1639 Jun 17 18:06	11°♏04'16	
	1634 Jun 26 13:47	0°♑			1639 Jul 17 03:33	0°♒	
desc. node	1634 Jul 08 17:09	6°♑14'46					
	1634 Aug 18 01:14	0°♒		conjunction	1639 Aug 04 14:50	11°♒48'12	1°08'42
	1634 Oct 01 10:36	0°♓		minimum elong	1639 Aug 04 14:35	11°♒47'48	1°08'42
	1634 Nov 11 02:56	0°♑		max. Earth dist.	1639 Aug 08 00:39	13°♒58'37	2.67129 AU
	1634 Dec 19 20:46	0°♒			1639 Sep 02 04:41	0°♓	
	1635 Jan 26 22:33	0°♋		morning rise	1639 Sep 18 17:02	10°♓30'31	
evening set	1635 Mar 03 15:44	27°♋52'47			1639 Oct 19 06:29	0°♑	
	1635 Mar 06 09:46	0°♌			1639 Dec 05 00:27	0°♒	
	1635 Apr 15 02:57	0°♍		desc. node	1640 Jan 20 12:17	0°♓	
conjunction	1635 May 06 15:34	15°♍43'14	-0°01'12		1640 Feb 28 14:09	25°♓06'39	
minimum elong	1635 May 06 15:40	15°♍43'24	0°01'12		1640 Mar 07 06:32	0°♑	
behind sun begin	1635 May 05 14:21	14°♍57'45			1640 Apr 24 22:08	0°♒	
behind sun end	1635 May 07 17:00	16°♍29'00		retrograde	1640 Jun 25 21:28	0°♋	
asc. node	1635 May 08 11:52	17°♍02'58			1640 Jul 22 10:32	4°♋21'26	
	1635 May 26 16:34	0°♎			1640 Aug 19 00:35	30°♋	
max. Earth dist.	1635 Jun 15 00:11	13°♎26'32	2.51976 AU	min. Earth dist.	1640 Aug 20 09:35	29°♋38'00	0.37347 AU
morning rise	1635 Jul 03 06:46	25°♎53'03		opposition	1640 Aug 21 22:53	29°♋13'03	-6°42'12
	1635 Jul 09 09:51	0°♏		greatest brilliancy	1640 Aug 21 17:43	29°♋16'30	-2.9m
	1635 Aug 24 07:50	0°♑		direct	1640 Sep 20 11:48	24°♋18'32	
	1635 Oct 11 14:08	0°♒			1640 Oct 21 02:28	0°♋	
	1635 Dec 02 12:26	0°♑		asc. node	1640 Dec 19 18:09	0°♌	
	1636 Feb 06 08:33	0°♒			1640 Dec 28 09:27	5°♌12'57	
retrograde	1636 Mar 11 08:31	5°♒58'04			1641 Feb 05 22:32	0°♍	
	1636 Apr 11 15:56	30°♒			1641 Mar 24 19:55	0°♎	
opposition	1636 Apr 17 11:41	27°♑52'54	1°38'02		1641 May 11 00:07	0°♏	
					1641 Jun 27 13:46	0°♒	

evening set	1641 Jul 25 15:32	17°♏42'19			1646 Jun 02 22:48	0°♄	
	1641 Aug 14 01:11	0°♍			1646 Jul 14 18:41	0°♊	
max. Earth dist.	1641 Aug 30 08:49	10°♍24'00	2.66644 AU	asc. node	1646 Aug 20 06:13	24°♊14'54	
					1646 Aug 29 10:48	0°♄	
conjunction	1641 Sep 09 06:20	16°♍44'38	0°59'56		1646 Oct 23 16:32	0°♏	
minimum elong	1641 Sep 09 07:18	16°♍46'11	0°59'56	retrograde	1646 Dec 14 05:02	13°♏20'12	
	1641 Sep 29 18:55	0°♎		min. Earth dist.	1647 Jan 21 11:41	4°♏14'05	0.66420 AU
morning rise	1641 Oct 23 18:43	15°♎42'01		opposition	1647 Jan 23 11:02	3°♏26'42	4°28'19
	1641 Nov 14 07:17	0°♌		greatest brilliancy	1647 Jan 23 02:42	3°♏35'02	-1.3m
	1641 Dec 28 10:06	0°♌			1647 Feb 01 07:49	30°♌♄	
desc. node	1642 Jan 15 12:40	12°♌35'18		direct	1647 Mar 04 08:35	23°♄56'02	
	1642 Feb 09 05:10	0°♄			1647 Apr 07 18:02	0°♏	
	1642 Mar 22 23:13	0°♌			1647 Jun 12 18:56	0°♍	
	1642 May 03 07:03	0°♌			1647 Aug 02 21:44	0°♎	
	1642 Jun 14 16:16	0°♍		desc. node	1647 Sep 07 10:10	22°♎54'51	
	1642 Aug 01 20:12	0°♄			1647 Sep 17 23:01	0°♌	
retrograde	1642 Sep 25 17:24	17°♄17'57			1647 Oct 30 15:22	0°♌	
min. Earth dist.	1642 Oct 24 00:38	11°♄48'14	0.46581 AU	evening set	1647 Nov 29 03:00	21°♌50'15	
opposition	1642 Nov 01 05:30	8°♄54'18	-0°47'18		1647 Dec 09 21:10	0°♄	
greatest brilliancy	1642 Nov 01 00:01	8°♄59'08	-2.4m	max. Earth dist.	1648 Jan 02 22:58	18°♄34'27	2.37841 AU
asc. node	1642 Nov 15 08:16	4°♄30'04			1648 Jan 17 13:33	0°♌	
direct	1642 Dec 04 02:55	2°♄06'19					
	1643 Feb 23 23:16	0°♊		conjunction	1648 Jan 29 18:42	9°♌36'57	-1°04'29
	1643 Apr 18 14:38	0°♄		minimum elong	1648 Jan 29 18:03	9°♌35'40	1°04'28
	1643 Jun 07 21:59	0°♏			1648 Feb 24 14:16	0°♌	
	1643 Jul 26 13:57	0°♍			1648 Apr 02 21:19	0°♍	
evening set	1643 Aug 31 18:53	23°♍00'28		morning rise	1648 Apr 09 01:50	4°♍46'57	
	1643 Sep 11 13:47	0°♎			1648 May 12 07:24	0°♄	
max. Earth dist.	1643 Sep 24 01:21	8°♎10'45	2.60803 AU		1648 Jun 22 14:52	0°♊	
				asc. node	1648 Jul 07 04:54	10°♊11'10	
conjunction	1643 Oct 17 02:33	23°♎32'42	0°27'04		1648 Aug 05 13:13	0°♄	
minimum elong	1643 Oct 17 03:28	23°♎34'14	0°27'02		1648 Sep 22 05:06	0°♏	
	1643 Oct 26 15:10	0°♌			1648 Nov 16 23:05	0°♍	
morning rise	1643 Dec 03 14:41	26°♌23'06		retrograde	1649 Jan 16 17:10	16°♍45'46	
desc. node	1643 Dec 03 11:31	26°♌17'30		opposition	1649 Feb 25 12:04	7°♍20'17	4°17'19
	1643 Dec 08 16:48	0°♌		greatest brilliancy	1649 Feb 25 18:24	7°♍14'02	-1.3m
	1644 Jan 18 23:40	0°♄		min. Earth dist.	1649 Feb 27 10:11	6°♍34'42	0.67329 AU
	1644 Feb 27 22:03	0°♌			1649 Mar 18 11:55	30°♌♏	
	1644 Apr 07 02:50	0°♌		direct	1649 Apr 07 19:45	27°♏21'36	
	1644 May 16 11:09	0°♍			1649 Apr 29 12:55	0°♍	
	1644 Jun 26 05:23	0°♄			1649 Jul 08 19:24	0°♎	
	1644 Aug 09 17:07	0°♊		desc. node	1649 Jul 25 08:26	9°♎32'38	
asc. node	1644 Oct 02 07:43	28°♊13'54			1649 Aug 27 00:08	0°♌	
	1644 Oct 07 02:28	0°♄			1649 Oct 09 13:59	0°♌	
retrograde	1644 Nov 08 01:04	6°♄09'30			1649 Nov 19 00:08	0°♄	
	1644 Dec 08 01:44	30°♌♊			1649 Dec 27 15:39	0°♌	
min. Earth dist.	1644 Dec 11 17:49	28°♊35'54	0.59029 AU	evening set	1650 Feb 03 11:07	29°♌51'18	
opposition	1644 Dec 17 12:39	26°♊19'10	3°07'49		1650 Feb 03 15:32	0°♌	
greatest brilliancy	1644 Dec 16 19:58	26°♊35'37	-1.7m		1650 Mar 13 23:56	0°♍	
direct	1645 Jan 23 16:14	17°♊45'58					
	1645 Mar 15 10:00	0°♄		conjunction	1650 Apr 11 20:41	22°♍00'38	-0°27'26
	1645 May 15 04:11	0°♏		minimum elong	1650 Apr 11 22:52	22°♍04'44	0°27'25
	1645 Jul 05 21:43	0°♍			1650 Apr 22 13:22	0°♄	
	1645 Aug 22 22:44	0°♎		asc. node	1650 May 25 04:53	23°♄46'47	
	1645 Oct 07 02:33	0°♌		max. Earth dist.	1650 May 29 13:48	26°♄53'36	2.46772 AU
evening set	1645 Oct 09 23:56	1°♌58'58			1650 Jun 02 23:04	0°♊	
desc. node	1645 Oct 20 11:20	9°♌13'49		morning rise	1650 Jun 13 14:29	7°♊27'58	
max. Earth dist.	1645 Oct 24 21:51	12°♌19'55	2.50163 AU		1650 Jul 16 14:22	0°♄	
	1645 Nov 18 17:27	0°♌			1650 Aug 31 16:36	0°♏	
					1650 Oct 19 19:55	0°♍	
conjunction	1645 Nov 29 21:24	8°♌07'41	-0°24'20		1650 Dec 14 04:19	0°♎	
minimum elong	1645 Nov 29 20:13	8°♌05'30	0°24'18	retrograde	1651 Feb 23 11:10	21°♎17'22	
	1645 Dec 29 06:22	0°♄		opposition	1651 Apr 02 15:02	12°♎43'21	2°43'12
morning rise	1646 Jan 25 14:37	20°♄54'14		greatest brilliancy	1651 Apr 03 05:05	12°♎29'56	-1.6m
	1646 Feb 06 08:25	0°♌		min. Earth dist.	1651 Apr 08 08:20	10°♎32'12	0.61634 AU
	1646 Mar 16 17:45	0°♌		direct	1651 May 13 19:21	2°♎48'31	
	1646 Apr 24 07:02	0°♍		desc. node	1651 Jun 12 07:14	7°♎44'46	

	1651 Jul 31 04:52	0°♌		max. Earth dist.	1656 Aug 21 05:26	0°♏15'14	2.67494 AU
	1651 Sep 16 18:23	0°♏					
	1651 Oct 28 11:04	0°♐		conjunction	1656 Aug 26 02:42	3°♏21'59	1°06'21
	1651 Dec 06 16:03	0°♑		minimum elong	1656 Aug 26 03:17	3°♏22'55	1°06'22
	1652 Jan 14 01:24	0°♒			1656 Oct 06 15:10	0°♑	
	1652 Feb 21 19:50	0°♓		morning rise	1656 Oct 09 11:47	1°♑50'59	
evening set	1652 Apr 01 20:44	0°♈			1656 Nov 21 12:20	0°♌	
asc. node	1652 Apr 10 23:28	6°♈39'12			1657 Jan 05 07:50	0°♏	
	1652 Apr 11 03:48	6°♈47'04		desc. node	1657 Feb 01 04:48	18°♏19'20	
	1652 May 13 17:38	0°♉			1657 Feb 18 03:51	0°♐	
					1657 Apr 02 08:41	0°♑	
conjunction	1652 Jun 07 07:34	16°♉57'45	0°33'42		1657 May 15 20:43	0°♒	
minimum elong	1652 Jun 07 06:01	16°♉55'07	0°33'41		1657 Jul 02 01:33	0°♓	
	1652 Jun 26 15:32	0°♈		retrograde	1657 Sep 03 19:48	22°♓11'57	
max. Earth dist.	1652 Jul 03 22:41	4°♈51'34	2.58753 AU	min. Earth dist.	1657 Sep 30 13:55	17°♓27'02	0.41650 AU
morning rise	1652 Jul 28 23:38	21°♈17'40		opposition	1657 Oct 07 23:39	15°♓05'26	-3°17'35
	1652 Aug 11 10:55	0°♉		greatest brilliancy	1657 Oct 07 04:55	15°♓20'27	-2.7m
	1652 Sep 27 21:49	0°♏		direct	1657 Nov 08 01:22	9°♓13'09	
	1652 Nov 16 03:11	0°♑		asc. node	1657 Dec 02 00:46	12°♓41'50	
	1653 Jan 07 20:13	0°♌			1658 Jan 13 12:33	0°♈	
	1653 Mar 19 23:17	0°♏			1658 Mar 08 13:47	0°♉	
retrograde	1653 Apr 11 11:58	2°♏48'12			1658 Apr 27 13:17	0°♈	
desc. node	1653 Apr 29 06:25	0°♏49'07			1658 Jun 15 11:25	0°♉	
	1653 May 02 16:02	30°♌			1658 Aug 02 13:32	0°♏	
opposition	1653 May 16 09:00	25°♌43'05	-0°51'09	evening set	1658 Aug 17 06:17	9°♏18'49	
greatest brilliancy	1653 May 16 15:26	25°♌37'29	-2.2m	max. Earth dist.	1658 Sep 14 02:35	27°♏12'27	2.63725 AU
min. Earth dist.	1653 May 24 19:01	22°♌47'16	0.50149 AU		1658 Sep 18 09:41	0°♑	
direct	1653 Jun 23 19:45	17°♌00'45					
	1653 Aug 10 15:09	0°♏		conjunction	1658 Oct 01 21:59	8°♑51'00	0°42'28
	1653 Sep 30 05:44	0°♐		minimum elong	1658 Oct 01 23:08	8°♑52'53	0°42'28
	1653 Nov 11 06:41	0°♑			1658 Nov 02 14:12	0°♌	
	1653 Dec 21 06:11	0°♒		morning rise	1658 Nov 16 16:57	9°♌37'15	
	1654 Jan 30 06:13	0°♓			1658 Dec 15 24:00	0°♏	
asc. node	1654 Feb 27 02:01	20°♓24'53		desc. node	1658 Dec 20 03:56	2°♏56'33	
	1654 Mar 12 09:31	0°♈			1659 Jan 26 18:10	0°♐	
	1654 Apr 24 05:36	0°♉			1659 Mar 08 05:22	0°♑	
evening set	1654 Jun 01 00:39	25°♉28'06			1659 Apr 16 23:25	0°♒	
	1654 Jun 07 21:06	0°♈			1659 May 26 23:11	0°♓	
					1659 Jul 07 20:49	0°♈	
conjunction	1654 Jul 20 16:07	27°♈51'29	1°04'53		1659 Aug 25 01:08	0°♉	
minimum elong	1654 Jul 20 15:16	27°♈50'08	1°04'53	asc. node	1659 Oct 19 22:42	19°♉15'50	
	1654 Jul 24 00:03	0°♉		retrograde	1659 Oct 24 07:19	19°♉23'53	
max. Earth dist.	1654 Jul 29 22:59	3°♉49'20	2.65833 AU	min. Earth dist.	1659 Nov 24 21:39	12°♉35'47	0.54575 AU
morning rise	1654 Sep 04 20:13	27°♉20'27		opposition	1659 Dec 01 23:57	9°♉52'11	2°00'47
	1654 Sep 09 00:44	0°♏		greatest brilliancy	1659 Dec 01 10:18	10°♉05'19	-1.9m
	1654 Oct 26 10:24	0°♑		direct	1660 Jan 06 16:33	1°♉52'58	
	1654 Dec 13 01:18	0°♌			1660 Mar 30 19:49	0°♈	
	1655 Jan 30 09:22	0°♏			1660 May 24 07:18	0°♉	
desc. node	1655 Mar 17 05:12	27°♏09'10			1660 Jul 13 11:27	0°♏	
	1655 Mar 22 06:43	0°♐			1660 Aug 30 00:05	0°♑	
	1655 May 27 21:54	0°♑		evening set	1660 Sep 23 15:13	16°♑11'34	
retrograde	1655 Jun 21 02:33	3°♑23'40		max. Earth dist.	1660 Oct 11 01:45	27°♑56'52	2.54855 AU
	1655 Jul 15 02:45	30°♌			1660 Oct 14 01:55	0°♌	
opposition	1655 Jul 21 09:52	28°♐19'58	-6°23'08	desc. node	1660 Nov 06 02:50	15°♌58'11	
greatest brilliancy	1655 Jul 22 06:27	28°♐05'55	-2.8m				
min. Earth dist.	1655 Jul 25 08:52	27°♐15'16	0.38437 AU	conjunction	1660 Nov 11 02:32	19°♌29'09	-0°03'03
direct	1655 Aug 21 18:12	22°♐49'27		minimum elong	1660 Nov 11 02:22	19°♌28'51	0°03'04
	1655 Sep 24 18:00	0°♑		behind sun begin	1660 Nov 10 05:34	18°♌52'08	
	1655 Nov 19 10:34	0°♒		behind sun end	1660 Nov 11 23:10	20°♌05'37	
	1656 Jan 03 23:27	0°♓			1660 Nov 25 20:23	0°♏	
asc. node	1656 Jan 15 01:26	7°♓29'10		morning rise	1661 Jan 02 03:34	27°♏22'52	
	1656 Feb 17 09:25	0°♈			1661 Jan 05 15:27	0°♐	
	1656 Apr 02 10:41	0°♉			1661 Feb 14 00:16	0°♑	
	1656 May 18 14:04	0°♈			1661 Mar 24 15:39	0°♒	
	1656 Jul 04 13:59	0°♉			1661 May 02 09:51	0°♓	
evening set	1656 Jul 10 23:31	4°♉03'37			1661 Jun 11 07:19	0°♈	
	1656 Aug 20 19:52	0°♏			1661 Jul 23 15:52	0°♉	

asc. node	1661 Sep 05 22:22	28° $\Pi$ 08'08		1666 Nov 05 23:14	0° $\Xi$	
	1661 Sep 09 03:32	0° $\Xi$		1666 Dec 14 20:34	0° $\approx$	
retrograde	1661 Nov 30 16:02	29° $\Xi$ 51'27		1667 Jan 22 00:29	0° $\mathcal{H}$	
min. Earth dist.	1662 Jan 06 07:05	21° $\Xi$ 17'35	0.64267 AU	1667 Mar 01 13:17	0° $\Upsilon$	
opposition	1662 Jan 09 18:45	19° $\Xi$ 53'54	4°10'09	evening set	1667 Mar 18 14:41	13° $\Upsilon$ 00'37
greatest brilliancy	1662 Jan 09 05:30	20° $\Xi$ 07'10	-1.4m		1667 Apr 10 08:03	0° $\mathcal{B}$
direct	1662 Feb 17 18:16	10° $\Xi$ 41'30		asc. node	1667 Apr 28 19:36	13° $\mathcal{B}$ 30'10
	1662 Apr 26 05:54	0° $\Omega$				
	1662 Jun 22 03:16	0° $\mathcal{M}$		conjunction	1667 May 19 05:01	28° $\mathcal{B}$ 03'46 0°12'47
	1662 Aug 10 15:53	0° $\mathcal{B}$		minimum elong	1667 May 19 04:12	28° $\mathcal{B}$ 02'21 0°12'48
desc. node	1662 Sep 24 01:19	29° $\mathcal{B}$ 10'49		behind sun begin	1667 May 18 13:39	27° $\mathcal{B}$ 36'40
	1662 Sep 25 06:12	0° $\mathcal{M}$		behind sun end	1667 May 19 18:46	28° $\mathcal{B}$ 28'00
	1662 Nov 06 21:03	0° $\mathcal{A}$			1667 May 21 23:01	0° $\Pi$
evening set	1662 Nov 07 20:35	0° $\mathcal{A}$ 42'44		max. Earth dist.	1667 Jun 22 20:28	22° $\Pi$ 01'20 2.54577 AU
max. Earth dist.	1662 Nov 24 21:53	13° $\mathcal{A}$ 14'17	2.42264 AU		1667 Jul 04 16:35	0° $\Xi$
	1662 Dec 17 04:58	0° $\Xi$		morning rise	1667 Jul 13 10:43	5° $\Xi$ 50'11
					1667 Aug 19 12:15	0° $\Omega$
conjunction	1663 Jan 03 12:43	13° $\Xi$ 16'48	-0°54'38		1667 Oct 06 09:15	0° $\mathcal{M}$
minimum elong	1663 Jan 03 10:31	13° $\Xi$ 12'34	0°54'38		1667 Nov 26 00:54	0° $\mathcal{B}$
	1663 Jan 25 00:34	0° $\approx$			1668 Jan 23 05:38	0° $\mathcal{M}$
	1663 Mar 04 04:03	0° $\mathcal{H}$		retrograde	1668 Mar 21 22:08	15° $\mathcal{M}$ 27'07
morning rise	1663 Mar 10 13:02	5° $\mathcal{H}$ 01'00		opposition	1668 Apr 27 07:56	7° $\mathcal{M}$ 41'15 0°50'31
	1663 Apr 11 12:36	0° $\Upsilon$		greatest brilliancy	1668 Apr 27 14:30	7° $\mathcal{M}$ 35'15 -1.9m
	1663 May 20 23:22	0° $\mathcal{B}$		min. Earth dist.	1668 May 05 00:11	4° $\mathcal{M}$ 52'51 0.55177 AU
	1663 Jul 01 08:43	0° $\Pi$		desc. node	1668 May 15 21:44	1° $\mathcal{M}$ 20'52
asc. node	1663 Jul 24 22:16	16° $\Pi$ 15'27			1668 May 21 09:24	30° $\mathcal{R}$ $\mathcal{B}$
	1663 Aug 14 15:41	0° $\Xi$		direct	1668 Jun 06 06:44	28° $\mathcal{B}$ 17'40
	1663 Oct 02 18:18	0° $\Omega$			1668 Jun 22 14:46	0° $\mathcal{M}$
	1663 Dec 08 03:30	0° $\mathcal{M}$			1668 Aug 28 08:47	0° $\mathcal{A}$
retrograde	1664 Jan 04 05:00	4° $\mathcal{M}$ 05'10			1668 Oct 11 22:33	0° $\Xi$
	1664 Jan 29 06:42	30° $\mathcal{R}$ $\Omega$			1668 Nov 21 07:01	0° $\approx$
opposition	1664 Feb 13 07:22	24° $\Omega$ 26'04	4°30'55		1668 Dec 30 09:15	0° $\mathcal{H}$
greatest brilliancy	1664 Feb 13 08:04	24° $\Omega$ 25'22	-1.3m		1669 Feb 07 17:30	0° $\Upsilon$
min. Earth dist.	1664 Feb 13 17:01	24° $\Omega$ 16'28	0.67755 AU	asc. node	1669 Mar 15 18:44	26° $\Upsilon$ 42'56
direct	1664 Mar 25 05:31	14° $\Omega$ 35'09			1669 Mar 20 07:18	0° $\mathcal{B}$
	1664 May 22 18:41	0° $\mathcal{M}$			1669 May 01 15:53	0° $\Pi$
	1664 Jul 18 17:21	0° $\mathcal{B}$		evening set	1669 May 13 19:24	8° $\Pi$ 21'30
desc. node	1664 Aug 11 00:03	14° $\mathcal{B}$ 15'22			1669 Jun 14 22:28	0° $\Xi$
	1664 Sep 04 05:32	0° $\mathcal{M}$				
	1664 Oct 17 08:03	0° $\mathcal{A}$		conjunction	1669 Jul 04 21:01	13° $\Xi$ 08'27 0°56'36
	1664 Nov 26 15:06	0° $\Xi$		minimum elong	1669 Jul 04 19:40	13° $\Xi$ 06'14 0°56'36
	1665 Jan 04 05:58	0° $\approx$		max. Earth dist.	1669 Jul 20 13:21	23° $\Xi$ 20'38 2.63708 AU
evening set	1665 Jan 06 10:51	1° $\approx$ 44'02			1669 Jul 30 20:44	0° $\Omega$
	1665 Feb 11 05:17	0° $\mathcal{H}$		morning rise	1669 Aug 21 16:05	13° $\Omega$ 57'46
					1669 Sep 15 23:09	0° $\mathcal{M}$
conjunction	1665 Mar 15 02:59	25° $\mathcal{H}$ 02'43	-0°51'00		1669 Nov 02 20:47	0° $\mathcal{B}$
minimum elong	1665 Mar 15 06:10	25° $\mathcal{H}$ 08'55	0°50'59		1669 Dec 21 18:44	0° $\mathcal{M}$
	1665 Mar 21 12:09	0° $\Upsilon$			1670 Feb 11 07:06	0° $\mathcal{A}$
	1665 Apr 29 23:10	0° $\mathcal{B}$		desc. node	1670 Apr 02 21:35	25° $\mathcal{A}$ 03'45
max. Earth dist.	1665 May 05 19:08	4° $\mathcal{B}$ 19'40	2.41381 AU		1670 Apr 16 00:53	0° $\Xi$
morning rise	1665 May 21 22:13	16° $\mathcal{B}$ 08'31		retrograde	1670 May 21 02:30	6° $\Xi$ 32'55
asc. node	1665 Jun 10 20:29	0° $\Pi$ 24'37		opposition	1670 Jun 22 03:24	0° $\Xi$ 46'14 -4°20'29
	1665 Jun 10 06:34	0° $\Pi$		greatest brilliancy	1670 Jun 23 05:33	0° $\Xi$ 26'16 -2.6m
	1665 Jul 23 22:02	0° $\Xi$			1670 Jun 24 15:50	30° $\mathcal{R}$ $\mathcal{A}$
	1665 Sep 08 08:46	0° $\Omega$		min. Earth dist.	1670 Jun 29 11:44	28° $\mathcal{A}$ 32'29 0.42157 AU
	1665 Oct 28 22:18	0° $\mathcal{M}$		direct	1670 Jul 26 13:29	23° $\mathcal{A}$ 54'43
	1665 Dec 31 05:43	0° $\mathcal{B}$			1670 Aug 26 10:48	0° $\Xi$
retrograde	1666 Feb 08 01:28	7° $\mathcal{B}$ 36'55			1670 Oct 21 03:45	0° $\approx$
	1666 Mar 15 12:48	30° $\mathcal{R}$ $\mathcal{M}$			1670 Dec 03 22:03	0° $\mathcal{H}$
opposition	1666 Mar 19 00:16	28° $\mathcal{M}$ 39'35	3°30'41		1671 Jan 15 00:30	0° $\Upsilon$
greatest brilliancy	1666 Mar 19 13:04	28° $\mathcal{M}$ 27'08	-1.4m	asc. node	1671 Jan 31 16:38	11° $\Upsilon$ 49'44
min. Earth dist.	1666 Mar 23 06:48	26° $\mathcal{M}$ 59'57	0.64628 AU		1671 Feb 26 14:45	0° $\mathcal{B}$
direct	1666 Apr 29 11:12	18° $\mathcal{M}$ 38'12			1671 Apr 11 12:45	0° $\Pi$
	1666 Jun 16 02:26	0° $\mathcal{B}$			1671 May 26 22:27	0° $\Xi$
desc. node	1666 Jun 28 22:42	5° $\mathcal{B}$ 45'28		evening set	1671 Jun 26 19:36	19° $\Xi$ 57'17
	1666 Aug 11 16:59	0° $\mathcal{M}$			1671 Jul 12 12:02	0° $\Omega$
	1666 Sep 25 23:23	0° $\mathcal{A}$				

conjunction	1671 Aug 12 21:47	20°Ω00'59	1°08'59	asc. node	1676 Sep 22 14:43	29°Π40'46	
minimum elong	1671 Aug 12 21:52	20°Ω01'07	1°08'59		1676 Sep 23 06:32	0°☾	
max. Earth dist.	1671 Aug 13 06:15	20°Ω14'27	2.67499 AU	retrograde	1676 Nov 16 13:06	15°☾25'34	
	1671 Aug 28 14:17	0°♊		min. Earth dist.	1676 Dec 21 08:02	7°☾28'44	0.61152 AU
morning rise	1671 Sep 26 14:27	18°♊30'04		opposition	1676 Dec 26 07:15	5°☾30'20	3°36'14
	1671 Oct 14 13:07	0°♊		greatest brilliancy	1676 Dec 25 14:56	5°☾46'34	-1.6m
	1671 Nov 29 22:44	0°♋			1677 Jan 10 16:36	30°♋II	
	1672 Jan 14 17:46	0°♌		direct	1677 Feb 02 03:41	26°Π41'25	
desc. node	1672 Feb 18 20:32	23°♌10'35			1677 Feb 26 14:10	0°☾	
	1672 Feb 29 04:28	0°♍			1677 May 08 10:21	0°♌	
	1672 Apr 15 01:24	0°♎			1677 Jun 30 13:32	0°♊	
	1672 Jun 03 07:22	0°♏			1677 Aug 18 01:59	0°♊	
retrograde	1672 Aug 08 12:37	22°♏35'24			1677 Oct 02 09:48	0°♋	
min. Earth dist.	1672 Sep 04 14:41	18°♏08'23	0.38121 AU	desc. node	1677 Oct 10 17:07	5°♋42'26	
opposition	1672 Sep 08 22:58	16°♏55'46	-5°49'43	evening set	1677 Oct 19 22:44	12°♋07'44	
greatest brilliancy	1672 Sep 08 06:24	17°♏07'20	-2.9m	max. Earth dist.	1677 Nov 03 06:55	22°♋15'59	2.47407 AU
direct	1672 Oct 08 12:57	11°♏52'23			1677 Nov 14 01:15	0°♌	
	1672 Dec 07 08:55	0°♍					
asc. node	1672 Dec 18 16:11	5°♍53'04		conjunction	1677 Dec 11 13:50	20°♌14'59	-0°36'23
	1673 Jan 29 07:48	0°♎		minimum elong	1677 Dec 11 12:04	20°♌11'40	0°36'21
	1673 Mar 18 19:56	0°♏			1677 Dec 24 12:50	0°♍	
	1673 May 05 18:34	0°☾			1678 Feb 01 12:38	0°♎	
	1673 Jun 22 17:57	0°♌		morning rise	1678 Feb 09 10:33	6°♎10'31	
evening set	1673 Aug 02 22:20	25°♌53'25		greatest brilliancy	1678 Mar 07 20:33	26°♎53'25	1.2m
	1673 Aug 09 10:06	0°♊			1678 Mar 11 19:38	0°♏	
max. Earth dist.	1673 Sep 04 17:22	16°♊46'41	2.65833 AU		1678 Apr 19 06:29	0°♍	
					1678 May 28 19:06	0°♎	
conjunction	1673 Sep 17 10:13	24°♊57'59	0°54'31		1678 Jul 09 09:02	0°♏	
minimum elong	1673 Sep 17 11:19	24°♊59'45	0°54'31	asc. node	1678 Aug 10 13:36	21°Π47'00	
	1673 Sep 25 04:30	0°♊			1678 Aug 23 07:56	0°☾	
morning rise	1673 Nov 01 05:25	24°♊24'01			1678 Oct 14 05:35	0°♌	
	1673 Nov 09 13:57	0°♋		retrograde	1678 Dec 21 21:33	21°♌17'53	
	1673 Dec 23 10:18	0°♌		min. Earth dist.	1679 Jan 30 00:27	11°♌55'20	0.67173 AU
desc. node	1674 Jan 05 19:05	9°♌21'25		opposition	1679 Jan 31 03:16	11°♌28'32	4°32'53
	1674 Feb 03 19:34	0°♍		greatest brilliancy	1679 Jan 30 22:06	11°♌33'41	-1.3m
	1674 Mar 17 00:53	0°♎		direct	1679 Mar 12 10:46	1°♌49'27	
	1674 Apr 26 15:58	0°♏			1679 Jun 05 19:37	0°♊	
	1674 Jun 06 20:31	0°♍			1679 Jul 28 11:14	0°♊	
	1674 Jul 21 09:19	0°♎		desc. node	1679 Aug 28 15:30	19°♊47'38	
	1674 Oct 03 09:26	0°♏			1679 Sep 12 23:38	0°♋	
retrograde	1674 Oct 06 17:43	0°♏04'52			1679 Oct 25 19:45	0°♌	
	1674 Oct 10 01:31	30°♋♏			1679 Dec 05 02:19	0°♍	
min. Earth dist.	1674 Nov 05 03:28	24°♏07'23	0.49480 AU	evening set	1679 Dec 12 12:16	5°♍40'46	
asc. node	1674 Nov 05 16:13	23°♏55'57			1680 Jan 12 18:20	0°♎	
opposition	1674 Nov 13 04:17	21°♏10'34	0°23'47				
greatest brilliancy	1674 Nov 13 01:05	21°♏13'31	-2.2m	conjunction	1680 Feb 14 20:50	26°♎07'34	-1°03'59
direct	1674 Dec 17 03:15	13°♏54'43		minimum elong	1680 Feb 14 21:55	26°♎09'41	1°03'59
	1675 Feb 13 12:32	0°♏			1680 Feb 19 18:33	0°♏	
	1675 Apr 12 04:10	0°☾		max. Earth dist.	1680 Mar 04 00:27	10°♏26'34	2.37192 AU
	1675 Jun 02 14:53	0°♌			1680 Mar 29 01:09	0°♍	
	1675 Jul 21 18:13	0°♊		morning rise	1680 Apr 25 12:09	21°♍01'56	
	1675 Sep 06 22:28	0°♊			1680 May 07 10:43	0°♎	
evening set	1675 Sep 09 06:46	1°♊31'35			1680 Jun 17 16:56	0°♏	
max. Earth dist.	1675 Sep 30 07:09	15°♊22'10	2.58886 AU	asc. node	1680 Jun 27 13:26	6°♏55'35	
	1675 Oct 22 00:20	0°♋			1680 Jul 31 10:40	0°☾	
					1680 Sep 16 11:52	0°♌	
conjunction	1675 Oct 26 04:20	2°♋50'50	0°16'46		1680 Nov 08 13:31	0°♊	
minimum elong	1675 Oct 26 04:57	2°♋51'55	0°16'45	retrograde	1681 Jan 24 15:25	24°♊32'44	
desc. node	1675 Nov 23 18:19	22°♋44'09		opposition	1681 Mar 05 04:33	15°♊16'14	4°03'46
	1675 Dec 03 23:39	0°♌		greatest brilliancy	1681 Mar 05 13:39	15°♊07'17	-1.3m
morning rise	1675 Dec 13 23:43	7°♌11'10		min. Earth dist.	1681 Mar 07 23:09	14°♊10'43	0.66650 AU
	1676 Jan 14 02:16	0°♍		direct	1681 Apr 15 15:09	5°♊14'54	
	1676 Feb 22 19:24	0°♎			1681 Jul 01 08:52	0°♊	
	1676 Apr 01 18:43	0°♏		desc. node	1681 Jul 15 15:07	7°♊45'19	
	1676 May 10 20:35	0°♍			1681 Aug 21 07:53	0°♋	
	1676 Jun 20 04:30	0°♎			1681 Oct 04 09:44	0°♌	
	1676 Aug 02 13:46	0°♏			1681 Nov 14 00:08	0°♍	



	1681 Dec 22 17:15	0°≈		max. Earth dist.	1686 Aug 04 09:11	10°Ω15'05	2.66655 AU
greatest brilliancy	1682 Jan 21 15:17	23°≈35'48	1.2m		1686 Sep 04 09:22	0°ྐ	
	1682 Jan 29 18:05	0°✕		morning rise	1686 Sep 12 19:54	5°ྐ21'47	
evening set	1682 Feb 19 13:07	16°✕19'54			1686 Oct 21 14:17	0°Ω	
	1682 Mar 09 03:23	0°Υ			1686 Dec 07 16:54	0°ℓ	
	1682 Apr 17 17:52	0°♂			1687 Jan 23 21:48	0°♂	
				desc. node	1687 Mar 07 11:56	26°♂35'09	
conjunction	1682 Apr 26 07:31	6°♂19'26	-0°12'18		1687 Mar 13 02:02	0°Ω	
minimum elong	1682 Apr 26 08:27	6°♂21'09	0°12'18		1687 May 04 12:19	0°≈	
behind sun begin	1682 Apr 25 15:23	5°♂49'48		retrograde	1687 Jul 09 09:17	20°≈54'27	
behind sun end	1682 Apr 27 01:32	6°♂52'29		opposition	1687 Aug 08 12:59	15°≈56'29	-6°51'56
asc. node	1682 May 15 11:17	20°♂14'09		greatest brilliancy	1687 Aug 08 20:21	15°≈51'36	-2.9m
	1682 May 29 04:33	0°Π		min. Earth dist.	1687 Aug 09 12:41	15°≈40'44	0.37434 AU
max. Earth dist.	1682 Jun 08 09:36	7°Π09'50	2.49726 AU	direct	1687 Sep 07 15:25	10°≈54'12	
morning rise	1682 Jun 25 02:47	18°Π42'02			1687 Nov 06 15:20	0°✕	
	1682 Jul 11 19:26	0°☾			1687 Dec 26 20:50	0°Υ	
	1682 Aug 26 17:41	0°Ω		asc. node	1688 Jan 05 09:00	6°Υ06'18	
	1682 Oct 14 06:26	0°ྐ			1688 Feb 10 23:53	0°♂	
	1682 Dec 06 06:52	0°Ω			1688 Mar 27 22:29	0°Π	
retrograde	1683 Mar 04 20:43	29°Ω57'45			1688 May 13 13:52	0°☾	
opposition	1683 Apr 11 11:41	21°Ω38'55	2°07'40		1688 Jun 29 20:38	0°Ω	
greatest brilliancy	1683 Apr 12 00:35	21°Ω26'44	-1.7m	evening set	1688 Jul 19 10:35	12°Ω22'57	
min. Earth dist.	1683 Apr 17 23:12	19°Ω12'09	0.59591 AU		1688 Aug 16 05:28	0°ྐ	
direct	1683 May 22 08:42	11°Ω51'22		max. Earth dist.	1688 Aug 26 12:48	6°ྐ33'50	2.67131 AU
desc. node	1683 Jun 02 14:09	12°Ω39'11					
	1683 Jul 22 02:05	0°ℓ		conjunction	1688 Sep 03 05:32	11°ྐ28'51	1°03'02
	1683 Sep 10 09:14	0°♂		minimum elong	1688 Sep 03 06:21	11°ྐ30'09	1°03'03
	1683 Oct 22 19:33	0°Ω			1688 Oct 02 00:07	0°Ω	
	1683 Dec 01 07:51	0°≈		morning rise	1688 Oct 17 14:57	10°Ω09'44	
	1684 Jan 08 21:35	0°✕			1688 Nov 16 16:56	0°ℓ	
	1684 Feb 16 19:22	0°Υ			1688 Dec 31 03:21	0°♂	
	1684 Mar 27 23:15	0°♂		desc. node	1689 Jan 22 10:54	15°♂23'09	
asc. node	1684 Apr 01 09:58	3°♂14'38			1689 Feb 12 09:13	0°Ω	
evening set	1684 Apr 23 14:27	19°♂11'40			1689 Mar 26 17:02	0°≈	
	1684 May 08 22:59	0°Π			1689 May 07 19:27	0°✕	
					1689 Jun 20 13:45	0°Υ	
conjunction	1684 Jun 17 20:05	27°Π15'10	0°43'35		1689 Aug 13 23:00	0°♂	
minimum elong	1684 Jun 17 18:28	27°Π12'28	0°43'33	retrograde	1689 Sep 16 15:41	7°♂21'41	
	1684 Jun 21 22:42	0°☾		min. Earth dist.	1689 Oct 14 03:09	2°♂14'15	0.44271 AU
max. Earth dist.	1684 Jul 10 08:02	12°☾10'22	2.60754 AU		1689 Oct 20 17:42	30°♂Υ	
morning rise	1684 Aug 06 21:27	0°Ω05'22		opposition	1689 Oct 22 05:23	29°Υ29'36	-1°48'29
	1684 Aug 06 18:08	0°Ω		greatest brilliancy	1689 Oct 21 17:25	29°Υ39'47	-2.5m
	1684 Sep 23 00:37	0°ྐ		asc. node	1689 Nov 22 07:37	23°Υ06'33	
	1684 Nov 10 15:40	0°Ω		direct	1689 Nov 23 06:13	23°Υ06'12	
	1684 Dec 31 13:40	0°ℓ			1689 Dec 28 10:27	0°♂	
	1685 Feb 28 01:38	0°♂			1690 Feb 28 23:53	0°Π	
desc. node	1685 Apr 19 12:35	14°♂06'58			1690 Apr 21 18:37	0°☾	
retrograde	1685 Apr 24 15:34	14°♂16'30			1690 Jun 10 10:19	0°Ω	
opposition	1685 May 28 12:47	7°♂37'26	-2°01'31		1690 Jul 28 20:18	0°ྐ	
greatest brilliancy	1685 May 29 03:40	7°♂24'55	-2.3m	evening set	1690 Aug 25 13:29	17°ྐ34'51	
min. Earth dist.	1685 Jun 05 22:51	4°♂48'04	0.47240 AU		1690 Sep 13 19:02	0°Ω	
	1685 Jun 26 01:35	30°♂ℓ		max. Earth dist.	1690 Sep 19 21:11	3°Ω58'24	2.62199 AU
direct	1685 Jul 04 18:46	29°ℓ27'48					
	1685 Jul 13 14:07	0°♂		conjunction	1690 Oct 10 12:23	17°Ω36'06	0°33'53
	1685 Sep 21 06:52	0°Ω		minimum elong	1690 Oct 10 13:26	17°Ω37'51	0°33'53
	1685 Nov 04 07:30	0°≈			1690 Oct 28 22:44	0°ℓ	
	1685 Dec 15 03:14	0°✕		morning rise	1690 Nov 26 03:40	19°ℓ25'01	
	1686 Jan 24 15:49	0°Υ		desc. node	1690 Dec 10 09:27	29°ℓ25'47	
asc. node	1686 Feb 17 09:58	17°Υ17'34			1690 Dec 11 04:46	0°♂	
	1686 Mar 07 04:03	0°♂			1691 Jan 21 17:22	0°Ω	
	1686 Apr 19 07:00	0°Π			1691 Mar 02 21:38	0°≈	
	1686 Jun 03 03:12	0°☾			1691 Apr 11 08:06	0°✕	
evening set	1686 Jun 10 17:55	4°☾59'34			1691 May 20 21:58	0°Υ	
	1686 Jul 19 08:53	0°Ω			1691 Jul 01 00:34	0°♂	
					1691 Aug 15 13:00	0°Π	
conjunction	1686 Jul 29 07:51	6°Ω22'52	1°07'37	asc. node	1691 Oct 10 07:02	26°Π11'37	
minimum elong	1686 Jul 29 07:21	6°Ω22'04	1°07'37	retrograde	1691 Nov 02 12:02	29°Π38'41	

min. Earth dist.	1691 Dec 05 06:26	22° $\Pi$ 24'34	0.57124 AU		1696 Nov 21 18:28	0° $\Xi$
opposition	1691 Dec 11 15:35	19° $\Pi$ 55'04	2°42'52		1696 Dec 30 10:08	0° $\approx$
greatest brilliancy	1691 Dec 10 23:25	20° $\Pi$ 10'52	-1.8m	evening set	1697 Jan 22 01:18	17° $\approx$ 51'48
direct	1692 Jan 17 03:58	11° $\Pi$ 36'01			1697 Feb 06 09:41	0° $\mathcal{H}$
	1692 Mar 21 20:04	0° $\mathfrak{C}$			1697 Mar 16 16:45	0° $\Upsilon$
	1692 May 18 09:03	0° $\Omega$				
	1692 Jul 08 10:04	0° $\mathfrak{M}$		conjunction	1697 Mar 31 01:51	11° $\Upsilon$ 03'59 -0°38'22
	1692 Aug 25 06:29	0° $\underline{\mathfrak{A}}$		minimum elong	1697 Mar 31 04:47	11° $\Upsilon$ 09'34 0°38'19
evening set	1692 Oct 02 19:35	25° $\underline{\mathfrak{A}}$ 29'22			1697 Apr 25 03:51	0° $\mathcal{B}$
	1692 Oct 09 10:40	0° $\mathfrak{M}$		max. Earth dist.	1697 May 20 13:40	18° $\mathcal{B}$ 38'14 2.44340 AU
max. Earth dist.	1692 Oct 18 15:27	6° $\mathfrak{M}$ 19'28	2.52316 AU	asc. node	1697 Jun 01 03:50	26° $\mathcal{B}$ 56'53
desc. node	1692 Oct 27 09:07	12° $\mathfrak{M}$ 23'49		morning rise	1697 Jun 04 04:55	29° $\mathcal{B}$ 06'39
					1697 Jun 05 11:02	0° $\Pi$
conjunction	1692 Nov 21 12:34	0° $\mathcal{A}$ 15'08	-0°15'12		1697 Jul 19 00:35	0° $\mathfrak{C}$
minimum elong	1692 Nov 21 11:51	0° $\mathcal{A}$ 13'50	0°15'13		1697 Sep 03 04:23	0° $\Omega$
behind sun begin	1692 Nov 21 04:03	29° $\mathfrak{M}$ 59'48			1697 Oct 22 18:08	0° $\mathfrak{M}$
behind sun end	1692 Nov 21 19:38	0° $\mathcal{A}$ 27'52			1697 Dec 19 06:56	0° $\underline{\mathfrak{A}}$
	1692 Nov 21 04:10	0° $\mathcal{A}$		retrograde	1698 Feb 16 17:23	15° $\underline{\mathfrak{A}}$ 49'10
	1692 Dec 31 20:39	0° $\Xi$		opposition	1698 Mar 27 06:25	7° $\underline{\mathfrak{A}}$ 04'14 3°04'44
morning rise	1693 Jan 14 23:32	10° $\mathfrak{Z}$ 41'57		greatest brilliancy	1698 Mar 27 20:14	6° $\underline{\mathfrak{A}}$ 50'54 -1.5m
	1693 Feb 09 02:02	0° $\approx$		min. Earth dist.	1698 Apr 01 08:36	5° $\underline{\mathfrak{A}}$ 06'29 0.63094 AU
	1693 Mar 19 14:03	0° $\mathcal{H}$			1698 Apr 16 10:52	30° $\mathfrak{R}$ $\mathfrak{M}$
	1693 Apr 27 05:01	0° $\Upsilon$		direct	1698 May 07 14:44	27° $\mathfrak{M}$ 05'18
	1693 Jun 05 21:55	0° $\mathcal{B}$			1698 May 29 23:34	0° $\underline{\mathfrak{A}}$
	1693 Jul 17 20:55	0° $\Pi$		desc. node	1698 Jun 19 05:11	6° $\underline{\mathfrak{A}}$ 34'23
asc. node	1693 Aug 27 05:54	26° $\Pi$ 27'15			1698 Aug 04 17:31	0° $\mathfrak{M}$
	1693 Sep 02 01:08	0° $\mathfrak{C}$			1698 Sep 20 05:34	0° $\mathcal{A}$
	1693 Oct 30 21:27	0° $\Omega$			1698 Oct 31 15:30	0° $\Xi$
retrograde	1693 Dec 08 12:26	8° $\Omega$ 08'05			1698 Dec 09 17:15	0° $\approx$
	1694 Jan 13 05:08	30° $\mathfrak{R}$ $\mathfrak{C}$			1699 Jan 16 23:57	0° $\mathcal{H}$
min. Earth dist.	1694 Jan 15 01:46	29° $\mathfrak{C}$ 15'36	0.65586 AU		1699 Feb 24 15:12	0° $\Upsilon$
opposition	1694 Jan 17 16:59	28° $\mathfrak{C}$ 12'16	4°22'30	evening set	1699 Apr 01 17:42	27° $\Upsilon$ 13'02
greatest brilliancy	1694 Jan 17 06:21	28° $\mathfrak{C}$ 22'56	-1.4m		1699 Apr 05 12:08	0° $\mathcal{B}$
direct	1694 Feb 26 04:50	18° $\mathfrak{C}$ 49'09		asc. node	1699 Apr 19 03:11	9° $\mathcal{B}$ 57'42
	1694 Apr 15 21:41	0° $\Omega$			1699 May 17 05:03	0° $\Pi$
	1694 Jun 16 02:16	0° $\mathfrak{M}$				
	1694 Aug 05 13:01	0° $\underline{\mathfrak{A}}$		conjunction	1699 May 30 22:20	9° $\Pi$ 33'34 0°25'24
desc. node	1694 Sep 14 08:01	25° $\underline{\mathfrak{A}}$ 51'36		minimum elong	1699 May 30 20:59	9° $\Pi$ 31'15 0°25'24
	1694 Sep 20 11:00	0° $\mathfrak{M}$			1699 Jun 29 23:29	0° $\mathfrak{C}$
	1694 Nov 02 04:01	0° $\mathcal{A}$		max. Earth dist.	1699 Jun 29 23:06	29° $\Pi$ 59'21 2.56971 AU
evening set	1694 Nov 19 12:56	12° $\mathcal{A}$ 44'32		morning rise	1699 Jul 23 01:54	15° $\mathfrak{C}$ 17'58
	1694 Dec 12 11:45	0° $\Xi$			1699 Aug 14 17:38	0° $\Omega$
max. Earth dist.	1694 Dec 12 21:42	0° $\mathfrak{Z}$ 18'57	2.39603 AU		1699 Oct 01 07:16	0° $\mathfrak{M}$
					1699 Nov 20 00:27	0° $\underline{\mathfrak{A}}$
conjunction	1695 Jan 17 22:08	28° $\mathfrak{Z}$ 10'46	-1°01'41		1700 Jan 13 10:40	0° $\mathfrak{M}$
minimum elong	1695 Jan 17 20:32	28° $\mathfrak{Z}$ 07'37	1°01'41	retrograde	1700 Apr 03 05:36	25° $\mathfrak{M}$ 29'26
	1695 Jan 20 05:54	0° $\approx$		desc. node	1700 May 07 04:19	18° $\mathfrak{M}$ 39'46
	1695 Feb 27 07:45	0° $\mathcal{H}$		opposition	1700 May 08 19:36	18° $\mathfrak{M}$ 04'55 -0°04'42
morning rise	1695 Mar 27 19:41	22° $\mathcal{H}$ 22'44		greatest brilliancy	1701 Oct 13 12:02	19° $\mathfrak{M}$ 43'52 1.8m
	1695 Apr 06 14:52	0° $\Upsilon$		min. Earth dist.	1700 May 16 23:07	15° $\mathfrak{M}$ 10'17 0.52467 AU
	1695 May 16 00:02	0° $\mathcal{B}$		direct	1700 Jun 17 00:17	9° $\mathfrak{M}$ 01'14
	1695 Jun 26 06:44	0° $\Pi$			1700 Aug 19 20:03	0° $\mathcal{A}$
asc. node	1695 Jul 15 04:09	13° $\Pi$ 09'10			1700 Oct 06 01:15	0° $\Xi$
	1695 Aug 09 06:17	0° $\mathfrak{C}$			1700 Nov 16 05:45	0° $\approx$
	1695 Sep 26 08:05	0° $\Omega$			1700 Dec 25 18:18	0° $\mathcal{H}$
	1695 Nov 23 15:27	0° $\mathfrak{M}$			1701 Feb 03 09:59	0° $\Upsilon$
retrograde	1696 Jan 11 22:33	11° $\mathfrak{M}$ 50'15		asc. node	1701 Mar 07 01:33	23° $\Upsilon$ 21'36
opposition	1696 Feb 20 21:14	2° $\mathfrak{M}$ 18'24	4°24'13		1701 Mar 16 05:38	0° $\mathcal{B}$
greatest brilliancy	1696 Feb 21 01:10	2° $\mathfrak{M}$ 14'30	-1.3m		1701 Apr 27 19:09	0° $\Pi$
min. Earth dist.	1696 Feb 22 03:22	1° $\mathfrak{M}$ 48'30	0.67653 AU	evening set	1701 May 25 09:47	18° $\Pi$ 47'06
	1696 Feb 26 17:50	30° $\mathfrak{R}$ $\Omega$			1701 Jun 11 05:19	0° $\mathfrak{C}$
direct	1696 Apr 02 01:04	22° $\Omega$ 22'34				
	1696 May 10 21:25	0° $\mathfrak{M}$		conjunction	1701 Jul 15 01:08	22° $\mathfrak{C}$ 08'33 1°01'58
	1696 Jul 12 10:21	0° $\underline{\mathfrak{A}}$		minimum elong	1701 Jul 15 00:04	22° $\mathfrak{C}$ 06'49 1°01'57
desc. node	1696 Aug 01 06:18	11° $\underline{\mathfrak{A}}$ 45'12		max. Earth dist.	1701 Jul 27 03:43	29° $\mathfrak{C}$ 57'28 2.64989 AU
	1696 Aug 29 22:17	0° $\mathfrak{M}$			1701 Jul 27 05:17	0° $\Omega$
	1696 Oct 12 08:32	0° $\mathcal{A}$		morning rise	1701 Aug 30 20:52	22° $\Omega$ 08'49

	1701 Sep 12 05:57	0°♎		greatest brilliancy	1706 Nov 24 19:11	2°♐44'49	-2.1m
	1701 Oct 29 20:09	0°♏			1706 Dec 02 07:40	30°♏♌	
	1701 Dec 16 23:02	0°♎		direct	1706 Dec 30 04:43	24°♏53'41	
	1702 Feb 04 10:08	0°♏			1707 Jan 29 12:30	0°♐	
desc. node	1702 Mar 25 02:49	27°♏13'30			1707 Apr 06 03:18	0°♏	
	1702 Mar 30 14:10	0°♏			1707 May 29 03:52	0°♏	
retrograde	1702 Jun 08 02:05	21°♏30'34			1707 Jul 17 21:09	0°♎	
opposition	1702 Jul 09 00:58	16°♏10'51	-5°36'34		1707 Sep 03 06:55	0°♏	
greatest brilliancy	1702 Jul 10 03:15	15°♏52'06	-2.7m	evening set	1707 Sep 18 22:38	10°♏14'06	
min. Earth dist.	1702 Jul 14 21:01	14°♏31'15	0.39859 AU	max. Earth dist.	1707 Oct 07 21:57	22°♏52'57	2.56752 AU
direct	1702 Aug 10 17:37	10°♏06'26			1707 Oct 18 09:59	0°♎	
	1702 Oct 09 22:18	0°♏					
	1702 Nov 26 18:38	0°♏		conjunction	1707 Nov 05 14:45	12°♎32'43	0°05'39
	1703 Jan 09 09:52	0°♎		minimum elong	1707 Nov 05 14:59	12°♎33'08	0°05'40
asc. node	1703 Jan 23 00:41	9°♎26'41		behind sun begin	1707 Nov 04 19:28	11°♎59'11	
	1703 Feb 21 20:35	0°♏		behind sun end	1707 Nov 06 10:30	13°♎07'07	
	1703 Apr 07 07:29	0°♐		desc. node	1707 Nov 15 00:48	19°♎08'27	
	1703 May 23 01:28	0°♏			1707 Nov 30 07:37	0°♏	
evening set	1703 Jul 06 14:08	28°♏34'05		morning rise	1707 Dec 26 01:21	18°♏42'03	
	1703 Jul 08 20:04	0°♏			1708 Jan 10 06:58	0°♏	
max. Earth dist.	1703 Aug 19 11:11	26°♏28'41	2.67597 AU		1708 Feb 18 19:53	0°♏	
					1708 Mar 28 14:36	0°♏	
conjunction	1703 Aug 22 02:03	28°♏08'41	1°07'55		1708 May 06 11:28	0°♎	
minimum elong	1703 Aug 22 02:26	28°♏09'18	1°07'54		1708 Jun 15 11:36	0°♏	
	1703 Aug 25 00:01	0°♎			1708 Jul 28 02:51	0°♐	
morning rise	1703 Oct 05 13:04	26°♎34'05		asc. node	1708 Sep 13 21:32	29°♐32'02	
	1703 Oct 10 20:57	0°♏			1708 Sep 14 17:50	0°♏	
	1703 Nov 25 23:43	0°♎		retrograde	1708 Nov 25 18:32	24°♏17'33	
	1704 Jan 10 05:04	0°♏		min. Earth dist.	1708 Dec 31 14:18	15°♏59'16	0.62996 AU
desc. node	1704 Feb 10 02:30	20°♏47'46		opposition	1709 Jan 04 17:35	14°♏20'04	3°58'18
	1704 Feb 23 16:35	0°♏		greatest brilliancy	1709 Jan 04 02:37	14°♏35'02	-1.5m
	1704 Apr 07 20:24	0°♏		direct	1709 Feb 12 05:11	5°♏17'25	
	1704 May 23 01:27	0°♏			1709 May 01 21:40	0°♏	
	1704 Jul 15 03:20	0°♎			1709 Jun 26 00:46	0°♎	
retrograde	1704 Aug 24 23:15	10°♎12'35			1709 Aug 14 03:46	0°♏	
min. Earth dist.	1704 Sep 20 13:25	5°♎40'39	0.39814 AU		1709 Sep 28 16:40	0°♎	
opposition	1704 Sep 26 21:51	3°♎46'09	-4°27'25	desc. node	1709 Oct 01 23:17	2°♎14'18	
greatest brilliancy	1704 Sep 26 01:21	4°♎01'38	-2.8m	evening set	1709 Oct 31 10:08	22°♎50'38	
	1704 Oct 11 03:55	30°♏♏			1709 Nov 10 08:57	0°♏	
direct	1704 Oct 27 06:13	28°♏18'17		max. Earth dist.	1709 Nov 15 11:16	3°♏42'03	2.44554 AU
	1704 Nov 12 13:26	0°♎			1709 Dec 20 19:30	0°♏	
asc. node	1704 Dec 10 00:10	8°♎46'37					
	1705 Jan 21 10:14	0°♏		conjunction	1709 Dec 25 03:24	3°♏17'26	-0°47'28
	1705 Mar 13 10:52	0°♐		minimum elong	1709 Dec 25 01:15	3°♏13'20	0°47'26
	1705 May 01 09:56	0°♏			1710 Jan 28 17:27	0°♏	
	1705 Jun 18 21:14	0°♏		morning rise	1710 Feb 26 10:39	22°♏31'51	
	1705 Aug 05 18:54	0°♎			1710 Mar 07 22:29	0°♏	
evening set	1705 Aug 12 03:07	4°♎00'52			1710 Apr 15 07:37	0°♎	
max. Earth dist.	1705 Sep 11 04:08	23°♎13'48	2.64775 AU		1710 May 24 18:04	0°♏	
	1705 Sep 21 14:50	0°♏			1710 Jul 05 03:31	0°♐	
				asc. node	1710 Aug 01 21:44	19°♐02'28	
conjunction	1705 Sep 26 15:37	3°♏16'47	0°47'55		1710 Aug 18 14:08	0°♏	
minimum elong	1705 Sep 26 16:46	3°♏18'39	0°47'55		1710 Oct 07 11:55	0°♏	
	1705 Nov 05 22:23	0°♎		retrograde	1710 Dec 30 13:33	29°♏08'27	
morning rise	1705 Nov 10 22:06	3°♎22'21		opposition	1711 Feb 08 17:32	19°♏24'26	4°33'08
	1705 Dec 19 13:25	0°♏		min. Earth dist.	1711 Feb 08 11:10	19°♏30'48	0.67620 AU
desc. node	1705 Dec 28 02:05	5°♏59'55		greatest brilliancy	1711 Feb 08 15:40	19°♏26'19	-1.3m
	1706 Jan 30 14:40	0°♏		direct	1711 Mar 21 09:15	9°♏38'17	
	1706 Mar 12 09:34	0°♏			1711 May 29 21:02	0°♎	
	1706 Apr 21 11:49	0°♏			1711 Jul 23 19:25	0°♏	
	1706 May 31 21:28	0°♎		desc. node	1711 Aug 19 22:05	16°♏51'48	
	1706 Jul 13 13:36	0°♏			1711 Sep 08 22:39	0°♎	
	1706 Sep 03 03:05	0°♐			1711 Oct 21 23:37	0°♏	
retrograde	1706 Oct 18 01:06	11°♐52'48			1711 Dec 01 07:30	0°♏	
asc. node	1706 Oct 27 22:13	11°♐09'56		evening set	1711 Dec 27 18:32	20°♏26'28	
min. Earth dist.	1706 Nov 17 15:37	5°♐26'43	0.52369 AU		1712 Jan 08 23:16	0°♏	
opposition	1706 Nov 25 05:32	2°♐35'02	1°23'57		1712 Feb 15 22:50	0°♏	

conjunction	1712 Mar 03 08:28	12° $\text{X}$ 55'42	-0°58'22		1716 Nov 06 09:22	0° $\text{L}$	
minimum elong	1712 Mar 03 11:05	13° $\text{X}$ 00'50	0°58'21		1716 Dec 26 00:45	0° $\text{M}$	
	1712 Mar 25 05:03	0° $\text{Y}$			1717 Feb 17 16:29	0° $\text{X}$	
max. Earth dist.	1712 Apr 19 10:46	19° $\text{Y}$ 21'32	2.39133 AU	desc. node	1717 Apr 10 19:23	22° $\text{X}$ 11'05	
	1712 May 03 14:21	0° $\text{B}$		retrograde	1717 May 09 23:29	26° $\text{X}$ 48'51	
morning rise	1712 May 11 21:33	6° $\text{B}$ 09'54		opposition	1717 Jun 11 21:03	20° $\text{X}$ 38'25	-3°19'02
	1712 Jun 13 19:44	0° $\text{II}$		greatest brilliancy	1717 Jun 12 19:32	20° $\text{X}$ 20'24	-2.5m
asc. node	1712 Jun 18 20:05	3° $\text{II}$ 32'27		min. Earth dist.	1717 Jun 19 22:53	18° $\text{X}$ 04'12	0.44337 AU
	1712 Jul 27 10:22	0° $\text{E}$		direct	1717 Jul 17 15:09	13° $\text{X}$ 09'46	
	1712 Sep 12 00:31	0° $\text{L}$			1717 Sep 10 04:57	0° $\text{Z}$	
	1712 Nov 02 08:08	0° $\text{M}$			1717 Oct 28 07:10	0° $\approx$	
	1713 Jan 12 21:03	0° $\text{L}$			1717 Dec 09 10:58	0° $\text{X}$	
retrograde	1713 Feb 02 19:40	2° $\text{L}$ 27'33			1718 Jan 19 17:23	0° $\text{Y}$	
	1713 Feb 22 10:51	30° $\text{R}$ $\text{M}$		asc. node	1718 Feb 08 16:37	14° $\text{Y}$ 21'53	
opposition	1713 Mar 14 01:14	23° $\text{M}$ 21'18	3°45'50		1718 Mar 02 17:58	0° $\text{B}$	
greatest brilliancy	1713 Mar 14 12:35	23° $\text{M}$ 10'11	-1.4m		1718 Apr 15 05:44	0° $\text{II}$	
min. Earth dist.	1713 Mar 17 15:56	21° $\text{M}$ 56'31	0.65659 AU		1718 May 30 08:11	0° $\text{E}$	
direct	1713 Apr 24 12:30	13° $\text{M}$ 19'06		evening set	1718 Jun 21 01:26	14° $\text{E}$ 07'40	
	1713 Jun 23 12:13	0° $\text{L}$			1718 Jul 15 17:25	0° $\text{L}$	
desc. node	1713 Jul 06 20:57	6° $\text{L}$ 37'41					
	1713 Aug 16 07:00	0° $\text{M}$		conjunction	1718 Aug 07 17:44	14° $\text{L}$ 42'04	1°08'54
	1713 Sep 30 01:37	0° $\text{X}$		minimum elong	1718 Aug 07 17:34	14° $\text{L}$ 41'49	1°08'53
	1713 Nov 09 22:21	0° $\text{Z}$		max. Earth dist.	1718 Aug 10 15:19	16° $\text{L}$ 32'55	2.67229 AU
	1713 Dec 18 18:12	0° $\approx$			1718 Aug 31 18:25	0° $\text{M}$	
	1714 Jan 25 20:28	0° $\text{X}$		morning rise	1718 Sep 21 17:22	13° $\text{M}$ 20'24	
	1714 Mar 05 07:00	0° $\text{Y}$			1718 Oct 17 19:55	0° $\text{L}$	
evening set	1714 Mar 08 01:50	2° $\text{Y}$ 08'38			1718 Dec 03 12:44	0° $\text{M}$	
	1714 Apr 13 22:38	0° $\text{B}$			1719 Jan 18 21:26	0° $\text{X}$	
asc. node	1714 May 06 18:42	16° $\text{B}$ 41'48		desc. node	1719 Feb 26 18:34	25° $\text{X}$ 07'57	
					1719 Mar 06 08:32	0° $\text{Z}$	
conjunction	1714 May 10 15:38	19° $\text{B}$ 29'01	0°02'30		1719 Apr 23 05:20	0° $\approx$	
minimum elong	1714 May 10 15:28	19° $\text{B}$ 28'43	0°02'30		1719 Jun 18 16:04	0° $\text{X}$	
behind sun begin	1714 May 09 14:29	18° $\text{B}$ 43'52		retrograde	1719 Jul 28 09:18	9° $\text{X}$ 08'06	
behind sun end	1714 May 11 16:27	20° $\text{B}$ 13'31		min. Earth dist.	1719 Aug 25 19:50	4° $\text{X}$ 29'41	0.37401 AU
	1714 May 25 10:14	0° $\text{II}$		opposition	1719 Aug 27 22:35	3° $\text{X}$ 55'45	-6°33'53
max. Earth dist.	1714 Jun 18 00:55	16° $\text{II}$ 25'33	2.52480 AU	greatest brilliancy	1719 Aug 27 15:01	4° $\text{X}$ 00'49	-2.9m
morning rise	1714 Jul 06 19:38	29° $\text{II}$ 10'26			1719 Sep 14 04:10	30° $\text{R}$ $\approx$	
	1714 Jul 08 01:09	0° $\text{E}$		direct	1719 Sep 26 08:55	29° $\approx$ 01'19	
	1714 Aug 22 20:19	0° $\text{L}$			1719 Oct 08 16:10	0° $\text{X}$	
	1714 Oct 09 21:57	0° $\text{M}$			1719 Dec 17 23:07	0° $\text{Y}$	
	1714 Nov 30 08:18	0° $\text{L}$		asc. node	1719 Dec 27 15:21	5° $\text{Y}$ 41'43	
	1715 Jan 31 19:40	0° $\text{M}$			1720 Feb 04 23:27	0° $\text{B}$	
retrograde	1715 Mar 15 21:46	9° $\text{M}$ 04'53			1720 Mar 23 03:28	0° $\text{II}$	
opposition	1715 Apr 21 20:55	1° $\text{M}$ 03'30	1°25'35		1720 May 09 10:31	0° $\text{E}$	
greatest brilliancy	1715 Apr 22 06:56	0° $\text{M}$ 54'12	-1.8m		1720 Jun 26 01:51	0° $\text{L}$	
	1715 Apr 24 17:00	30° $\text{R}$ $\text{L}$		evening set	1720 Jul 28 18:46	20° $\text{L}$ 36'30	
min. Earth dist.	1715 Apr 29 00:55	28° $\text{L}$ 23'36	0.57242 AU		1720 Aug 12 14:40	0° $\text{M}$	
desc. node	1715 May 24 19:38	21° $\text{L}$ 49'51		max. Earth dist.	1720 Sep 01 20:01	12° $\text{M}$ 53'04	2.66525 AU
direct	1715 Jun 01 06:46	21° $\text{L}$ 27'17					
	1715 Jul 10 07:11	0° $\text{M}$		conjunction	1720 Sep 12 08:18	19° $\text{M}$ 37'43	0°58'30
	1715 Sep 04 05:56	0° $\text{X}$		minimum elong	1720 Sep 12 09:18	19° $\text{M}$ 39'19	0°58'29
	1715 Oct 17 18:53	0° $\text{Z}$			1720 Sep 28 09:40	0° $\text{L}$	
	1715 Nov 26 18:08	0° $\approx$		morning rise	1720 Oct 26 21:24	18° $\text{L}$ 39'13	
	1716 Jan 04 14:11	0° $\text{X}$			1720 Nov 12 22:56	0° $\text{M}$	
	1716 Feb 12 16:53	0° $\text{Y}$			1720 Dec 27 01:58	0° $\text{X}$	
asc. node	1716 Mar 23 18:27	29° $\text{Y}$ 48'10		desc. node	1721 Jan 13 17:15	12° $\text{X}$ 15'48	
	1716 Mar 24 00:56	0° $\text{B}$			1721 Feb 07 20:24	0° $\text{Z}$	
	1716 May 05 04:02	0° $\text{II}$			1721 Mar 21 12:46	0° $\approx$	
evening set	1716 May 06 08:25	0° $\text{II}$ 49'20			1721 May 01 17:01	0° $\text{X}$	
	1716 Jun 18 06:11	0° $\text{E}$			1721 Jun 12 17:33	0° $\text{Y}$	
					1721 Jul 29 12:19	0° $\text{B}$	
conjunction	1716 Jun 28 17:26	6° $\text{E}$ 56'46	0°51'42	retrograde	1721 Sep 29 10:20	21° $\text{B}$ 07'43	
minimum elong	1716 Jun 28 15:56	6° $\text{E}$ 54'16	0°51'41	min. Earth dist.	1721 Oct 27 20:57	15° $\text{B}$ 33'42	0.47117 AU
max. Earth dist.	1716 Jul 17 08:18	19° $\text{E}$ 09'23	2.62485 AU	opposition	1721 Nov 05 02:34	12° $\text{B}$ 38'09	-0°28'25
	1716 Aug 03 02:01	0° $\text{L}$		greatest brilliancy	1721 Nov 04 23:17	12° $\text{B}$ 41'04	-2.4m
morning rise	1716 Aug 16 10:32	8° $\text{L}$ 34'22		asc. node	1721 Nov 13 15:28	9° $\text{B}$ 45'34	
	1716 Sep 19 05:15	0° $\text{M}$		direct	1721 Dec 08 05:39	5° $\text{B}$ 44'46	

	1722 Feb 21 02:31	0°♂		conjunction	1727 Feb 03 08:31	14°♂04'36	-1°04'49
	1722 Apr 16 15:45	0°♂		minimum elong	1727 Feb 03 08:15	14°♂04'06	1°04'50
	1722 Jun 06 06:06	0°♂			1727 Feb 23 12:24	0°♂	
	1722 Jul 25 01:53	0°♂			1727 Apr 02 18:44	0°♂	
evening set	1722 Sep 03 22:35	25°♂57'02		morning rise	1727 Apr 14 20:08	9°♂18'34	
	1722 Sep 10 04:33	0°♂			1727 May 12 03:09	0°♂	
max. Earth dist.	1722 Sep 26 20:56	10°♂55'39	2.60466 AU		1727 Jun 22 07:54	0°♂	
				asc. node	1727 Jul 06 12:37	9°♂57'07	
conjunction	1722 Oct 20 08:02	26°♂36'21	0°24'19		1727 Aug 05 02:00	0°♂	
minimum elong	1722 Oct 20 08:53	26°♂37'46	0°24'19		1727 Sep 21 09:44	0°♂	
	1722 Oct 25 08:13	0°♂			1727 Nov 14 22:50	0°♂	
desc. node	1722 Dec 01 16:10	25°♂53'04		retrograde	1728 Jan 20 18:19	19°♂34'33	
morning rise	1722 Dec 07 01:02	29°♂41'34		opposition	1728 Feb 29 11:57	10°♂10'51	4°13'35
	1722 Dec 07 11:24	0°♂		greatest brilliancy	1728 Feb 29 18:54	10°♂03'59	-1.3m
	1723 Jan 17 19:04	0°♂		min. Earth dist.	1728 Mar 02 14:31	9°♂20'52	0.67220 AU
	1723 Feb 26 17:28	0°♂		direct	1728 Apr 10 19:42	0°♂11'18	
	1723 Apr 06 21:24	0°♂			1728 Jul 06 13:35	0°♂	
	1723 May 16 03:37	0°♂		desc. node	1728 Jul 23 12:43	9°♂36'52	
	1723 Jun 25 17:15	0°♂			1728 Aug 25 10:14	0°♂	
	1723 Aug 08 17:12	0°♂			1728 Oct 08 06:23	0°♂	
asc. node	1723 Oct 01 14:29	29°♂25'28			1728 Nov 17 19:44	0°♂	
	1723 Oct 02 23:45	0°♂			1728 Dec 26 12:41	0°♂	
retrograde	1723 Nov 12 06:57	9°♂18'15			1729 Feb 02 12:47	0°♂	
min. Earth dist.	1723 Dec 16 04:33	1°♂39'23	0.59454 AU	evening set	1729 Feb 08 04:08	4°♂26'55	
	1723 Dec 20 09:14	30°♂♂			1729 Mar 12 20:31	0°♂	
opposition	1723 Dec 21 18:44	29°♂26'48	3°16'44				
greatest brilliancy	1723 Dec 21 01:52	29°♂43'30	-1.7m	conjunction	1729 Apr 16 07:37	26°♂14'27	-0°23'40
direct	1724 Jan 28 01:02	20°♂50'22		minimum elong	1729 Apr 16 09:30	26°♂17'58	0°23'39
	1724 Mar 10 22:54	0°♂			1729 Apr 21 08:33	0°♂	
	1724 May 13 00:27	0°♂		asc. node	1729 May 23 10:52	23°♂25'54	
	1724 Jul 04 05:02	0°♂			1729 Jun 01 16:17	0°♂	
	1724 Aug 21 11:32	0°♂		max. Earth dist.	1729 Jun 01 23:51	0°♂13'23	2.47368 AU
	1724 Oct 05 19:06	0°♂		morning rise	1729 Jun 17 10:35	11°♂02'50	
evening set	1724 Oct 13 09:16	5°♂12'21			1729 Jul 15 05:05	0°♂	
desc. node	1724 Oct 18 14:59	8°♂49'49			1729 Aug 30 03:45	0°♂	
max. Earth dist.	1724 Oct 28 02:51	15°♂27'47	2.49664 AU		1729 Oct 18 00:11	0°♂	
	1724 Nov 17 12:43	0°♂			1729 Dec 11 09:47	0°♂	
				retrograde	1730 Feb 26 18:23	24°♂14'31	
conjunction	1724 Dec 03 13:48	11°♂41'18	-0°27'28	opposition	1730 Apr 05 19:32	15°♂43'24	2°33'31
minimum elong	1724 Dec 03 12:27	11°♂38'50	0°27'27	greatest brilliancy	1730 Apr 06 09:15	15°♂30'18	-1.6m
	1724 Dec 28 03:24	0°♂		min. Earth dist.	1730 Apr 11 16:27	13°♂28'55	0.61273 AU
morning rise	1725 Jan 29 20:16	25°♂01'29		direct	1730 May 16 22:19	5°♂49'21	
	1725 Feb 05 06:13	0°♂		desc. node	1730 Jun 10 12:07	9°♂20'48	
	1725 Mar 15 15:20	0°♂			1730 Jul 28 17:59	0°♂	
	1725 Apr 23 03:23	0°♂			1730 Sep 15 04:15	0°♂	
	1725 Jun 01 16:41	0°♂			1730 Oct 27 03:44	0°♂	
	1725 Jul 13 08:13	0°♂			1730 Dec 05 11:27	0°♂	
asc. node	1725 Aug 18 12:53	24°♂14'35			1731 Jan 12 21:30	0°♂	
	1725 Aug 27 15:10	0°♂			1731 Feb 20 15:25	0°♂	
	1725 Oct 20 08:05	0°♂			1731 Apr 01 15:00	0°♂	
retrograde	1725 Dec 17 06:29	16°♂13'01		asc. node	1731 Apr 10 09:16	6°♂24'28	
min. Earth dist.	1726 Jan 24 16:52	7°♂03'08	0.66587 AU	evening set	1731 Apr 16 01:41	10°♂31'52	
opposition	1726 Jan 26 11:40	6°♂20'14	4°30'13		1731 May 13 10:11	0°♂	
greatest brilliancy	1726 Jan 26 03:59	6°♂27'56	-1.3m				
	1726 Feb 13 03:10	30°♂♂		conjunction	1731 Jun 11 23:23	20°♂22'24	0°36'32
direct	1726 Mar 07 10:24	26°♂47'44		minimum elong	1731 Jun 11 21:47	20°♂19'40	0°36'31
	1726 Mar 31 17:23	0°♂			1731 Jun 26 06:18	0°♂	
	1726 Jun 10 13:20	0°♂		max. Earth dist.	1731 Jul 07 16:03	7°♂35'38	2.59172 AU
	1726 Aug 01 06:01	0°♂		morning rise	1731 Aug 02 06:49	24°♂22'21	
desc. node	1726 Sep 05 13:15	22°♂37'49			1731 Aug 10 23:51	0°♂	
	1726 Sep 16 13:32	0°♂			1731 Sep 27 08:15	0°♂	
	1726 Oct 29 09:38	0°♂			1731 Nov 15 08:34	0°♂	
evening set	1726 Dec 03 03:59	25°♂45'59			1732 Jan 06 10:46	0°♂	
	1726 Dec 08 17:47	0°♂			1732 Mar 11 16:13	0°♂	
max. Earth dist.	1727 Jan 13 05:35	27°♂27'26	2.37548 AU	retrograde	1732 Apr 15 11:26	6°♂15'34	
	1727 Jan 16 11:25	0°♂		desc. node	1732 Apr 27 10:21	5°♂21'09	
					1732 May 17 23:11	30°♂♂	

opposition	1732 May 20 03:39	29° $\mathbb{M}$ 14'55	-1°08'16	evening set	1737 Aug 20 09:18	12° $\mathbb{M}$ 13'32	
greatest brilliancy	1732 May 20 12:10	29° $\mathbb{M}$ 07'32	-2.2m	max. Earth dist.	1737 Sep 16 19:33	29° $\mathbb{M}$ 52'27	2.63449 AU
min. Earth dist.	1732 May 28 13:06	26° $\mathbb{M}$ 20'27	0.49615 AU		1737 Sep 17 00:12	0° $\mathbb{A}$	
direct	1732 Jun 27 08:19	20° $\mathbb{M}$ 38'00					
	1732 Aug 06 02:19	0° $\mathbb{A}$		conjunction	1737 Oct 05 02:06	11° $\mathbb{A}$ 50'37	0°40'09
	1732 Sep 28 05:08	0° $\mathbb{B}$		minimum elong	1737 Oct 05 03:13	11° $\mathbb{A}$ 52'28	0°40'08
	1732 Nov 09 17:43	0° $\approx$			1737 Nov 01 06:22	0° $\mathbb{M}$	
	1732 Dec 19 21:19	0° $\mathbb{H}$		morning rise	1737 Nov 20 00:31	12° $\mathbb{M}$ 47'49	
	1733 Jan 28 22:39	0° $\mathbb{Y}$			1737 Dec 14 17:19	0° $\mathbb{A}$	
asc. node	1733 Feb 25 09:15	20° $\mathbb{Y}$ 08'14		desc. node	1737 Dec 18 07:30	2° $\mathbb{A}$ 32'04	
	1733 Mar 11 01:46	0° $\mathbb{B}$			1738 Jan 25 12:03	0° $\mathbb{B}$	
	1733 Apr 22 20:56	0° $\mathbb{H}$			1738 Mar 06 23:06	0° $\approx$	
evening set	1733 Jun 04 12:01	28° $\mathbb{H}$ 41'48			1738 Apr 15 16:03	0° $\mathbb{H}$	
	1733 Jun 06 11:21	0° $\mathbb{B}$			1738 May 25 12:56	0° $\mathbb{Y}$	
	1733 Jul 22 13:27	0° $\mathbb{Q}$			1738 Jul 06 03:11	0° $\mathbb{B}$	
					1738 Aug 22 05:01	0° $\mathbb{H}$	
conjunction	1733 Jul 23 22:06	0° $\mathbb{Q}$ 52'27	1°05'47	asc. node	1738 Oct 18 06:18	22° $\mathbb{H}$ 07'04	
minimum elong	1733 Jul 23 21:21	0° $\mathbb{Q}$ 51'16	1°05'47	retrograde	1738 Oct 27 16:18	22° $\mathbb{H}$ 43'41	
max. Earth dist.	1733 Aug 01 16:28	6° $\mathbb{Q}$ 29'50	2.66021 AU	min. Earth dist.	1738 Nov 28 11:38	15° $\mathbb{H}$ 49'58	0.55074 AU
morning rise	1733 Sep 07 22:27	0° $\mathbb{M}$ 14'11		opposition	1738 Dec 05 10:01	13° $\mathbb{H}$ 09'26	2°13'13
	1733 Sep 07 13:31	0° $\mathbb{M}$		greatest brilliancy	1738 Dec 04 19:23	13° $\mathbb{H}$ 23'35	-1.9m
	1733 Oct 24 22:09	0° $\mathbb{A}$		direct	1739 Jan 10 06:10	5° $\mathbb{H}$ 06'05	
	1733 Dec 11 10:20	0° $\mathbb{M}$			1739 Mar 29 03:05	0° $\mathbb{B}$	
	1734 Jan 28 11:33	0° $\mathbb{A}$			1739 May 23 10:25	0° $\mathbb{Q}$	
desc. node	1734 Mar 15 09:22	27° $\mathbb{A}$ 35'27			1739 Jul 12 21:30	0° $\mathbb{M}$	
	1734 Mar 19 13:44	0° $\mathbb{B}$			1739 Aug 29 14:13	0° $\mathbb{A}$	
	1734 May 18 20:05	0° $\approx$		evening set	1739 Sep 27 21:08	19° $\mathbb{A}$ 15'13	
retrograde	1734 Jun 26 02:31	7° $\approx$ 59'43			1739 Oct 13 18:56	0° $\mathbb{M}$	
opposition	1734 Jul 26 08:37	2° $\approx$ 58'23	-6°33'13	max. Earth dist.	1739 Oct 15 00:22	0° $\mathbb{M}$ 50'13	2.54367 AU
greatest brilliancy	1734 Jul 27 03:13	2° $\approx$ 45'45	-2.9m	desc. node	1739 Nov 05 06:39	15° $\mathbb{M}$ 33'00	
min. Earth dist.	1734 Jul 29 18:05	2° $\approx$ 03'04	0.38169 AU				
	1734 Aug 06 20:17	30° $\mathbb{R}$ $\mathbb{B}$		conjunction	1739 Nov 15 14:08	22° $\mathbb{M}$ 49'24	-0°06'16
direct	1734 Aug 26 11:24	27° $\mathbb{B}$ 34'31		minimum elong	1739 Nov 15 13:51	22° $\mathbb{M}$ 48'54	0°06'15
	1734 Sep 14 13:42	0° $\approx$		behind sun begin	1739 Nov 14 18:00	22° $\mathbb{M}$ 13'42	
	1734 Nov 16 17:03	0° $\mathbb{H}$		behind sun end	1739 Nov 16 09:43	23° $\mathbb{M}$ 24'08	
	1735 Jan 02 01:18	0° $\mathbb{Y}$			1739 Nov 25 15:24	0° $\mathbb{A}$	
asc. node	1735 Jan 13 08:21	7° $\mathbb{Y}$ 33'46			1740 Jan 05 11:38	0° $\mathbb{B}$	
	1735 Feb 15 18:01	0° $\mathbb{B}$		morning rise	1740 Jan 07 02:07	1° $\mathbb{B}$ 12'11	
	1735 Apr 01 21:54	0° $\mathbb{H}$			1740 Feb 13 20:52	0° $\approx$	
	1735 May 18 02:17	0° $\mathbb{B}$			1740 Mar 23 11:52	0° $\mathbb{H}$	
	1735 Jul 04 02:43	0° $\mathbb{Q}$			1740 May 01 04:49	0° $\mathbb{Y}$	
evening set	1735 Jul 15 04:15	7° $\mathbb{Q}$ 01'07			1740 Jun 09 23:39	0° $\mathbb{B}$	
	1735 Aug 20 09:10	0° $\mathbb{M}$			1740 Jul 22 02:46	0° $\mathbb{H}$	
max. Earth dist.	1735 Aug 24 17:50	2° $\mathbb{M}$ 46'34	2.67441 AU	asc. node	1740 Sep 04 05:32	28° $\mathbb{H}$ 22'01	
					1740 Sep 06 23:47	0° $\mathbb{B}$	
conjunction	1735 Aug 30 05:18	6° $\mathbb{M}$ 15'59	1°05'31		1740 Nov 12 07:44	0° $\mathbb{Q}$	
minimum elong	1735 Aug 30 05:57	6° $\mathbb{M}$ 17'02	1°05'30	retrograde	1740 Dec 03 18:06	2° $\mathbb{Q}$ 46'33	
	1735 Oct 06 05:07	0° $\mathbb{A}$			1740 Dec 23 19:44	30° $\mathbb{R}$ $\mathbb{B}$	
morning rise	1735 Oct 13 13:48	4° $\mathbb{A}$ 45'57		min. Earth dist.	1741 Jan 09 12:53	24° $\mathbb{B}$ 08'40	0.64551 AU
	1735 Nov 21 02:38	0° $\mathbb{M}$		opposition	1741 Jan 12 20:08	22° $\mathbb{B}$ 49'15	4°14'23
	1736 Jan 04 21:37	0° $\mathbb{A}$		greatest brilliancy	1741 Jan 12 07:19	23° $\mathbb{B}$ 02'05	-1.4m
desc. node	1736 Jan 31 08:56	18° $\mathbb{A}$ 04'20		direct	1741 Feb 20 21:04	13° $\mathbb{B}$ 34'43	
	1736 Feb 17 15:48	0° $\mathbb{B}$			1741 Apr 23 01:32	0° $\mathbb{Q}$	
	1736 Mar 31 16:39	0° $\approx$			1741 Jun 20 05:45	0° $\mathbb{M}$	
	1736 May 13 19:54	0° $\mathbb{H}$			1741 Aug 09 03:31	0° $\mathbb{A}$	
	1736 Jun 28 20:28	0° $\mathbb{Y}$		desc. node	1741 Sep 22 05:58	28° $\mathbb{A}$ 50'43	
retrograde	1736 Sep 07 20:42	26° $\mathbb{Y}$ 32'28			1741 Sep 23 22:50	0° $\mathbb{M}$	
min. Earth dist.	1736 Oct 04 17:43	21° $\mathbb{Y}$ 44'32	0.42104 AU		1741 Nov 05 16:51	0° $\mathbb{A}$	
opposition	1736 Oct 12 08:37	19° $\mathbb{Y}$ 16'59	-2°55'37	evening set	1741 Nov 11 12:12	4° $\mathbb{A}$ 13'09	
greatest brilliancy	1736 Oct 11 15:10	19° $\mathbb{Y}$ 31'06	-2.6m	max. Earth dist.	1741 Nov 29 11:03	17° $\mathbb{A}$ 27'45	2.41724 AU
direct	1736 Nov 12 13:18	13° $\mathbb{Y}$ 19'05			1741 Dec 16 02:38	0° $\mathbb{B}$	
asc. node	1736 Nov 30 06:51	15° $\mathbb{Y}$ 15'56					
	1737 Jan 09 19:46	0° $\mathbb{B}$		conjunction	1742 Jan 07 16:56	17° $\mathbb{B}$ 20'41	-0°56'39
	1737 Mar 06 10:28	0° $\mathbb{H}$		minimum elong	1742 Jan 07 14:51	17° $\mathbb{B}$ 16'38	0°56'38
	1737 Apr 25 19:18	0° $\mathbb{B}$			1742 Jan 23 22:55	0° $\approx$	
	1737 Jun 13 21:26	0° $\mathbb{Q}$			1742 Mar 03 02:04	0° $\mathbb{H}$	
	1737 Aug 01 02:02	0° $\mathbb{M}$		morning rise	1742 Mar 15 09:43	9° $\mathbb{H}$ 41'50	

	1742 Apr 10 09:23	0°♄		desc. node	1747 May 15 02:15	6°♍12'20	
	1742 May 19 18:05	0°♂		direct	1747 Jun 10 13:58	1°♍35'33	
	1742 Jun 30 00:17	0°♂			1747 Aug 27 01:23	0°♂	
asc. node	1742 Jul 23 03:34	16°♂02'07			1747 Oct 11 08:31	0°♂	
	1742 Aug 13 02:02	0°♂			1747 Nov 20 22:42	0°♂	
	1742 Sep 30 16:25	0°♂			1747 Dec 30 02:59	0°♂	
	1742 Dec 02 02:09	0°♂			1748 Feb 07 11:33	0°♄	
retrograde	1743 Jan 07 06:03	6°♂53'57		asc. node	1748 Mar 14 01:23	26°♄23'16	
	1743 Feb 09 07:54	30°♂♂			1748 Mar 19 00:39	0°♂	
opposition	1743 Feb 16 07:10	27°♂16'20	4°29'15		1748 Apr 30 08:00	0°♂	
greatest brilliancy	1743 Feb 16 08:35	27°♂14'55	-1.3m	evening set	1748 May 17 10:28	11°♂45'11	
min. Earth dist.	1743 Feb 16 21:05	27°♂02'28	0.67771 AU		1748 Jun 13 13:15	0°♂	
direct	1743 Mar 29 05:36	17°♂24'19					
	1743 May 20 05:03	0°♂		conjunction	1748 Jul 08 04:53	16°♂14'11	0°58'14
	1743 Jul 17 20:04	0°♂		minimum elong	1748 Jul 08 03:35	16°♂12'05	0°58'13
desc. node	1743 Aug 10 04:33	14°♂08'44		max. Earth dist.	1748 Jul 23 02:32	25°♂55'05	2.63973 AU
	1743 Sep 03 18:37	0°♍			1748 Jul 29 10:14	0°♂	
	1743 Oct 17 02:17	0°♂		morning rise	1748 Aug 24 18:52	16°♂52'53	
	1743 Nov 26 12:15	0°♂			1748 Sep 14 11:15	0°♂	
	1744 Jan 04 04:32	0°♂			1748 Nov 01 06:32	0°♂	
evening set	1744 Jan 11 20:06	6°♂01'24			1748 Dec 19 23:02	0°♍	
	1744 Feb 11 03:59	0°♂			1749 Feb 08 20:25	0°♂	
				desc. node	1749 Apr 01 00:50	26°♂19'20	
conjunction	1744 Mar 19 17:31	29°♂28'10	-0°48'14		1749 Apr 09 18:10	0°♂	
minimum elong	1744 Mar 19 20:44	29°♂34'25	0°48'13	retrograde	1749 May 25 18:15	10°♂36'24	
	1744 Mar 20 09:56	0°♄		opposition	1749 Jun 26 13:45	4°♂55'09	-4°38'59
	1744 Apr 28 19:07	0°♂		greatest brilliancy	1749 Jun 27 16:52	4°♂34'46	-2.6m
max. Earth dist.	1744 May 10 10:54	8°♂38'32	2.41911 AU	min. Earth dist.	1749 Jul 03 18:06	2°♂46'16	0.41700 AU
morning rise	1744 May 26 02:51	20°♂03'54			1749 Jul 14 11:17	30°♂♂	
	1744 Jun 08 23:58	0°♂		direct	1749 Jul 30 16:32	28°♂12'39	
asc. node	1744 Jun 09 03:03	0°♂05'28			1749 Aug 15 23:48	0°♂	
	1744 Jul 22 12:09	0°♂			1749 Oct 18 14:29	0°♂	
	1744 Sep 06 18:00	0°♂			1749 Dec 02 02:37	0°♂	
	1744 Oct 26 20:45	0°♂			1750 Jan 13 11:04	0°♄	
	1744 Dec 26 13:59	0°♂		asc. node	1750 Jan 30 00:15	11°♄42'26	
retrograde	1745 Feb 11 05:45	10°♂29'45			1750 Feb 25 03:34	0°♂	
opposition	1745 Mar 22 02:30	1°♂34'48	3°23'26		1750 Apr 10 02:05	0°♂	
greatest brilliancy	1745 Mar 22 15:31	1°♂22'10	-1.4m		1750 May 25 11:44	0°♂	
	1745 Mar 26 04:03	30°♂♂		evening set	1750 Jun 30 01:02	22°♂57'15	
min. Earth dist.	1745 Mar 26 12:56	29°♂51'25	0.64367 AU		1750 Jul 11 01:15	0°♂	
direct	1745 May 02 12:33	21°♂33'25					
	1745 Jun 11 17:38	0°♂		conjunction	1750 Aug 16 00:11	22°♂54'34	1°08'47
desc. node	1745 Jun 27 03:12	6°♂26'16		minimum elong	1750 Aug 16 00:22	22°♂54'51	1°08'47
	1745 Aug 09 18:51	0°♍		max. Earth dist.	1750 Aug 15 20:14	22°♂48'16	2.67534 AU
	1745 Sep 24 12:49	0°♂			1750 Aug 27 03:37	0°♂	
	1745 Nov 04 17:31	0°♂		morning rise	1750 Sep 29 15:22	21°♂22'05	
	1745 Dec 13 17:05	0°♂			1750 Oct 13 02:28	0°♂	
	1746 Jan 20 21:38	0°♂			1750 Nov 28 11:18	0°♍	
	1746 Feb 28 10:01	0°♄			1751 Jan 13 04:02	0°♂	
evening set	1746 Mar 22 21:19	17°♄06'53		desc. node	1751 Feb 17 00:18	23°♂05'37	
	1746 Apr 09 03:31	0°♂			1751 Feb 27 09:47	0°♂	
asc. node	1746 Apr 27 02:44	13°♂09'14			1751 Apr 13 20:17	0°♂	
	1746 May 20 16:38	0°♂			1751 May 31 18:48	0°♂	
				retrograde	1751 Aug 14 03:05	27°♂23'38	
conjunction	1746 May 23 01:22	1°♂39'50	0°16'11	min. Earth dist.	1751 Sep 10 02:39	22°♂55'43	0.38402 AU
minimum elong	1746 May 23 00:24	1°♂38'07	0°16'10	opposition	1751 Sep 14 20:19	21°♂35'13	-5°32'27
max. Earth dist.	1746 Jun 25 17:18	24°♂52'16	2.55041 AU	greatest brilliancy	1751 Sep 14 02:42	21°♂47'45	-2.9m
	1746 Jul 03 08:00	0°♂		direct	1751 Oct 14 15:07	16°♂27'30	
morning rise	1746 Jul 16 21:14	9°♂01'59			1751 Dec 03 23:14	0°♄	
	1746 Aug 18 01:00	0°♂		asc. node	1751 Dec 17 23:36	6°♄50'58	
	1746 Oct 04 18:08	0°♂			1752 Jan 28 01:30	0°♂	
	1746 Nov 24 01:12	0°♂			1752 Mar 17 01:09	0°♂	
	1747 Jan 19 18:55	0°♍			1752 May 04 04:04	0°♂	
retrograde	1747 Mar 26 13:33	18°♍38'16			1752 Jun 21 05:35	0°♂	
opposition	1747 May 01 18:58	10°♍56'12	0°36'30	evening set	1752 Aug 06 00:04	28°♂45'07	
greatest brilliancy	1747 May 01 23:52	10°♍51'45	-1.9m		1752 Aug 07 23:23	0°♂	
min. Earth dist.	1747 May 09 12:44	8°♍06'42	0.54689 AU	max. Earth dist.	1752 Sep 07 04:48	19°♂16'19	2.65664 AU

conjunction	1752 Sep 20 11:44	27° $\mathbb{M}$ 50'50	0°52'45		1757 May 27 14:07	0° $\mathcal{B}$	
minimum elong	1752 Sep 20 12:51	27° $\mathbb{M}$ 52'38	0°52'45		1757 Jul 08 00:17	0° $\mathbb{I}$	
	1752 Sep 23 19:24	0° $\mathcal{L}$		asc. node	1757 Aug 08 20:59	21° $\mathbb{I}$ 41'47	
morning rise	1752 Nov 04 08:45	27° $\mathcal{L}$ 23'22			1757 Aug 21 15:52	0° $\mathcal{E}$	
	1752 Nov 08 06:10	0° $\mathbb{M}$			1757 Oct 11 15:09	0° $\mathcal{Q}$	
	1752 Dec 22 03:08	0° $\mathcal{A}$		retrograde	1757 Dec 24 22:54	24° $\mathcal{Q}$ 08'52	
desc. node	1753 Jan 04 00:10	9° $\mathcal{A}$ 00'43		min. Earth dist.	1758 Feb 02 04:40	14° $\mathcal{Q}$ 43'07	0.67284 AU
	1753 Feb 02 12:06	0° $\mathcal{Z}$		opposition	1758 Feb 03 03:20	14° $\mathcal{Q}$ 20'25	4°33'27
	1753 Mar 15 16:04	0° $\approx$		greatest brilliancy	1758 Feb 02 22:50	14° $\mathcal{Q}$ 24'56	-1.3m
	1753 Apr 25 04:18	0° $\mathcal{H}$		direct	1758 Mar 15 11:25	4° $\mathcal{Q}$ 39'52	
	1753 Jun 05 02:50	0° $\mathcal{Y}$			1758 Jun 03 07:25	0° $\mathbb{M}$	
	1753 Jul 18 22:47	0° $\mathcal{B}$			1758 Jul 26 18:30	0° $\mathcal{L}$	
	1753 Sep 16 12:45	0° $\mathbb{I}$		desc. node	1758 Aug 26 19:53	19° $\mathcal{L}$ 33'59	
retrograde	1753 Oct 10 08:47	3° $\mathbb{I}$ 47'11			1758 Sep 11 14:26	0° $\mathbb{M}$	
	1753 Nov 02 06:32	30° $\mathcal{R}$ $\mathcal{B}$			1758 Oct 24 14:42	0° $\mathcal{A}$	
asc. node	1753 Nov 03 21:53	29° $\mathcal{B}$ 28'33			1758 Dec 03 23:37	0° $\mathcal{Z}$	
min. Earth dist.	1753 Nov 08 23:19	27° $\mathcal{B}$ 43'53	0.50062 AU	evening set	1758 Dec 16 16:10	9° $\mathcal{Z}$ 43'43	
opposition	1753 Nov 16 22:20	24° $\mathcal{B}$ 47'41	0°40'42		1759 Jan 11 16:42	0° $\approx$	
greatest brilliancy	1753 Nov 16 16:56	24° $\mathcal{B}$ 52'40	-2.2m		1759 Feb 18 16:57	0° $\mathcal{H}$	
direct	1753 Dec 21 03:04	17° $\mathcal{B}$ 26'14					
	1754 Feb 09 12:00	0° $\mathbb{I}$		conjunction	1759 Feb 19 12:56	0° $\mathcal{H}$ 39'28	-1°03'05
	1754 Apr 10 00:49	0° $\mathcal{E}$		minimum elong	1759 Feb 19 14:26	0° $\mathcal{H}$ 42'27	1°03'05
	1754 May 31 21:40	0° $\mathcal{Q}$		max. Earth dist.	1759 Mar 21 01:59	23° $\mathcal{H}$ 52'50	2.37411 AU
	1754 Jul 20 05:41	0° $\mathbb{M}$			1759 Mar 28 22:39	0° $\mathcal{Y}$	
	1754 Sep 05 13:09	0° $\mathcal{L}$		morning rise	1759 May 01 02:40	25° $\mathcal{Y}$ 22'40	
evening set	1754 Sep 12 10:24	4° $\mathcal{L}$ 28'47			1759 May 07 06:33	0° $\mathcal{B}$	
max. Earth dist.	1754 Oct 03 04:08	18° $\mathcal{L}$ 10'09	2.58510 AU		1759 Jun 17 10:17	0° $\mathbb{I}$	
	1754 Oct 20 17:32	0° $\mathbb{M}$		asc. node	1759 Jun 26 19:35	6° $\mathbb{I}$ 37'14	
					1759 Jul 31 00:21	0° $\mathcal{E}$	
conjunction	1754 Oct 29 10:39	5° $\mathbb{M}$ 57'22	0°13'50		1759 Sep 15 18:58	0° $\mathcal{Q}$	
minimum elong	1754 Oct 29 11:11	5° $\mathbb{M}$ 58'17	0°13'50		1759 Nov 07 01:43	0° $\mathbb{M}$	
behind sun begin	1754 Oct 29 00:36	5° $\mathbb{M}$ 40'07		retrograde	1760 Jan 28 18:37	27° $\mathbb{M}$ 23'38	
behind sun end	1754 Oct 29 21:46	6° $\mathbb{M}$ 16'28		opposition	1760 Mar 08 05:36	18° $\mathbb{M}$ 09'12	3°58'43
desc. node	1754 Nov 21 22:39	22° $\mathbb{M}$ 18'46		greatest brilliancy	1760 Mar 08 15:09	17° $\mathbb{M}$ 59'48	-1.3m
	1754 Dec 02 18:47	0° $\mathcal{A}$		min. Earth dist.	1760 Mar 11 04:04	16° $\mathbb{M}$ 59'52	0.66482 AU
morning rise	1754 Dec 17 12:24	10° $\mathcal{A}$ 35'50		direct	1760 Apr 18 15:22	8° $\mathbb{M}$ 07'31	
	1755 Jan 12 22:35	0° $\mathcal{Z}$			1760 Jun 28 17:19	0° $\mathcal{L}$	
	1755 Feb 21 16:06	0° $\approx$		desc. node	1760 Jul 13 18:51	7° $\mathcal{L}$ 58'37	
	1755 Apr 01 14:49	0° $\mathcal{H}$			1760 Aug 19 15:46	0° $\mathbb{M}$	
	1755 May 10 14:49	0° $\mathcal{Y}$			1760 Oct 03 01:45	0° $\mathcal{A}$	
	1755 Jun 19 18:48	0° $\mathcal{B}$			1760 Nov 12 20:08	0° $\mathcal{Z}$	
	1755 Aug 01 19:13	0° $\mathbb{I}$			1760 Dec 21 15:07	0° $\approx$	
asc. node	1755 Sep 21 20:57	0° $\mathcal{E}$ 23'02			1761 Jan 28 16:18	0° $\mathcal{H}$	
	1755 Sep 21 02:53	0° $\mathcal{E}$		evening set	1761 Feb 24 01:56	20° $\mathcal{H}$ 43'13	
retrograde	1755 Nov 20 17:41	18° $\mathcal{E}$ 30'50			1761 Mar 08 00:48	0° $\mathcal{Y}$	
min. Earth dist.	1755 Dec 25 17:07	10° $\mathcal{E}$ 29'18	0.61530 AU		1761 Apr 16 13:40	0° $\mathcal{B}$	
opposition	1755 Dec 30 12:05	8° $\mathcal{E}$ 34'46	3°43'29				
greatest brilliancy	1755 Dec 29 19:47	8° $\mathcal{E}$ 51'02	-1.6m	conjunction	1761 Apr 30 11:26	10° $\mathcal{B}$ 15'11	-0°08'33
	1756 Jan 30 20:29	30° $\mathcal{R}$ $\mathbb{I}$		minimum elong	1761 Apr 30 12:05	10° $\mathcal{B}$ 16'21	0°08'33
direct	1756 Feb 06 10:40	29° $\mathbb{I}$ 43'04		behind sun begin	1761 Apr 29 13:38	9° $\mathcal{B}$ 35'18	
	1756 Feb 13 05:39	0° $\mathcal{E}$		behind sun end	1761 May 01 10:32	10° $\mathcal{B}$ 57'22	
	1756 May 06 00:47	0° $\mathcal{Q}$		asc. node	1761 May 13 18:01	19° $\mathcal{B}$ 53'08	
	1756 Jun 28 19:37	0° $\mathbb{M}$			1761 May 27 22:13	0° $\mathbb{I}$	
	1756 Aug 16 14:38	0° $\mathcal{L}$		max. Earth dist.	1761 Jun 11 17:11	10° $\mathbb{I}$ 22'20	2.50252 AU
	1756 Oct 01 02:27	0° $\mathbb{M}$		morning rise	1761 Jun 28 18:21	22° $\mathbb{I}$ 06'00	
desc. node	1756 Oct 08 21:05	5° $\mathbb{M}$ 19'30			1761 Jul 10 10:35	0° $\mathcal{E}$	
evening set	1756 Oct 23 09:49	15° $\mathbb{M}$ 25'56			1761 Aug 25 05:39	0° $\mathcal{Q}$	
max. Earth dist.	1756 Nov 06 21:55	25° $\mathbb{M}$ 43'24	2.46870 AU		1761 Oct 12 12:55	0° $\mathbb{M}$	
	1756 Nov 12 20:40	0° $\mathcal{A}$			1761 Dec 03 22:02	0° $\mathcal{L}$	
					1762 Feb 12 18:42	0° $\mathbb{M}$	
conjunction	1756 Dec 15 09:42	23° $\mathcal{A}$ 57'50	-0°39'17	retrograde	1762 Mar 08 08:27	3° $\mathbb{M}$ 01'44	
minimum elong	1756 Dec 15 07:48	23° $\mathcal{A}$ 54'18	0°39'16		1762 Mar 30 06:09	30° $\mathcal{R}$ $\mathcal{L}$	
	1756 Dec 23 09:59	0° $\mathcal{Z}$		opposition	1762 Apr 14 19:27	24° $\mathcal{L}$ 46'22	1°56'20
	1757 Jan 31 10:41	0° $\approx$		greatest brilliancy	1762 Apr 15 07:37	24° $\mathcal{L}$ 34'55	-1.7m
morning rise	1757 Feb 13 22:00	10° $\approx$ 31'18		min. Earth dist.	1762 Apr 21 09:39	22° $\mathcal{L}$ 17'14	0.59142 AU
	1757 Mar 10 17:41	0° $\mathcal{H}$		direct	1762 May 25 13:31	15° $\mathcal{L}$ 00'41	
	1757 Apr 18 03:34	0° $\mathcal{Y}$		desc. node	1762 May 31 17:17	15° $\mathcal{L}$ 15'26	



	1762 Jul 18 18:32	0°♌			1767 Oct 01 14:08	0°♊	
	1762 Sep 08 13:48	0°♏	morning rise		1767 Oct 21 16:50	13°♊05'39	
	1762 Oct 21 09:34	0°♐			1767 Nov 16 07:35	0°♌	
	1762 Nov 30 01:50	0°♑			1767 Dec 30 17:57	0°♏	
	1763 Jan 07 17:09	0°♒	desc. node		1768 Jan 21 15:14	15°♏06'01	
	1763 Feb 15 15:02	0°♓			1768 Feb 11 22:46	0°♐	
asc. node	1763 Mar 27 18:00	0°♈			1768 Mar 25 04:12	0°♑	
evening set	1763 Mar 31 17:56	2°♈55'15			1768 May 06 01:34	0°♒	
	1763 Apr 28 10:43	22°♈48'42			1768 Jun 18 06:40	0°♓	
	1763 May 08 16:10	0°♉			1768 Aug 08 10:44	0°♈	
	1763 Jun 21 14:08	0°♊	retrograde		1768 Sep 20 13:07	11°♈25'12	
			min. Earth dist.		1768 Oct 18 02:53	6°♈13'47	0.44784 AU
conjunction	1763 Jun 22 07:09	0°♊28'26	opposition		1768 Oct 26 07:32	3°♈25'54	-1°27'45
minimum elong	1763 Jun 22 05:32	0°♊25'43	greatest brilliancy		1768 Oct 25 21:41	3°♈34'19	-2.5m
max. Earth dist.	1763 Jul 13 22:12	14°♊47'12			1768 Nov 06 04:35	30°♏♑	
	1763 Aug 06 07:47	0°♋	asc. node		1768 Nov 20 14:25	27°♑16'25	
morning rise	1763 Aug 11 01:39	3°♋03'21	direct		1768 Nov 27 13:58	26°♑56'51	
	1763 Sep 22 12:12	0°♌			1768 Dec 20 03:41	0°♈	
	1763 Nov 09 23:27	0°♉			1769 Feb 26 11:40	0°♊	
	1763 Dec 30 11:34	0°♌			1769 Apr 19 21:27	0°♋	
	1764 Feb 25 04:48	0°♏			1769 Jun 08 18:45	0°♋	
desc. node	1764 Apr 17 16:51	17°♏11'51			1769 Jul 27 08:04	0°♌	
retrograde	1764 Apr 28 19:01	17°♏55'50	evening set		1769 Aug 28 16:29	20°♌30'24	
opposition	1764 Jun 01 12:50	11°♏22'04			1769 Sep 12 09:26	0°♉	
greatest brilliancy	1764 Jun 02 05:42	11°♏08'00	max. Earth dist.		1769 Sep 22 14:38	6°♉39'52	2.61904 AU
min. Earth dist.	1764 Jun 09 22:26	8°♏34'53					
direct	1764 Jul 08 11:02	3°♏20'07	conjunction		1769 Oct 13 16:44	20°♉37'15	0°31'20
	1764 Sep 18 14:36	0°♐	minimum elong		1769 Oct 13 17:44	20°♉38'55	0°31'19
	1764 Nov 02 11:55	0°♑			1769 Oct 27 15:13	0°♌	
	1764 Dec 13 14:19	0°♒	morning rise		1769 Nov 29 11:58	22°♌38'38	
	1765 Jan 23 05:34	0°♓	desc. node		1769 Dec 08 14:00	29°♌02'13	
asc. node	1765 Feb 15 16:14	17°♑02'54			1769 Dec 09 22:41	0°♏	
	1765 Mar 05 18:40	0°♈			1770 Jan 20 11:56	0°♐	
	1765 Apr 17 21:31	0°♉			1770 Mar 01 16:05	0°♑	
	1765 Jun 01 17:13	0°♋			1770 Apr 10 01:35	0°♒	
evening set	1765 Jun 14 02:37	8°♋07'04			1770 May 19 13:03	0°♓	
	1765 Jul 17 22:25	0°♌			1770 Jun 29 10:14	0°♈	
					1770 Aug 13 07:06	0°♉	
conjunction	1765 Aug 01 11:46	9°♌19'28	asc. node		1770 Oct 08 14:03	27°♌56'41	
minimum elong	1765 Aug 01 11:22	9°♌18'51			1770 Oct 15 14:46	0°♋	
max. Earth dist.	1765 Aug 07 00:22	12°♌51'10	retrograde		1770 Nov 05 19:07	2°♋52'51	
	1765 Sep 02 22:32	0°♌			1770 Nov 25 19:00	30°♏♌	
morning rise	1765 Sep 15 20:45	8°♌13'02	min. Earth dist.		1770 Dec 08 18:42	25°♌33'03	0.57591 AU
	1765 Oct 20 02:50	0°♉	opposition		1770 Dec 14 23:19	23°♌07'18	2°53'13
	1765 Dec 06 03:45	0°♌	greatest brilliancy		1770 Dec 14 06:37	23°♌23'42	-1.8m
	1766 Jan 22 04:18	0°♏	direct		1771 Jan 20 14:27	14°♌44'43	
desc. node	1766 Mar 05 16:17	26°♏45'30			1771 Mar 19 08:43	0°♋	
	1766 Mar 10 21:56	0°♐			1771 May 17 08:04	0°♋	
	1766 Apr 30 21:14	0°♑			1771 Jul 07 18:18	0°♌	
retrograde	1766 Jul 14 09:55	25°♑40'02			1771 Aug 24 19:41	0°♉	
opposition	1766 Aug 13 13:44	20°♑41'29	evening set		1771 Oct 07 03:09	28°♉37'55	
greatest brilliancy	1766 Aug 13 18:14	20°♑38'31			1771 Oct 09 03:23	0°♌	
min. Earth dist.	1766 Aug 13 22:52	20°♑35'28	max. Earth dist.		1771 Oct 22 19:22	9°♌23'39	2.51844 AU
direct	1766 Sep 12 09:25	15°♑42'50	desc. node		1771 Oct 26 12:42	11°♌58'50	
	1766 Nov 02 04:18	0°♒			1771 Nov 20 23:31	0°♏	
	1766 Dec 24 12:34	0°♓					
asc. node	1767 Jan 03 14:20	6°♑22'11	conjunction		1771 Nov 26 02:10	3°♏41'09	-0°18'24
	1767 Feb 09 03:47	0°♈	minimum elong		1771 Nov 26 01:17	3°♏39'35	0°18'23
	1767 Mar 27 07:03	0°♉			1771 Dec 31 17:39	0°♐	
	1767 May 13 00:32	0°♋	morning rise		1772 Jan 20 00:56	14°♐38'31	
	1767 Jun 29 08:32	0°♌			1772 Feb 08 23:44	0°♑	
evening set	1767 Jul 23 14:29	15°♌19'16			1772 Mar 18 11:28	0°♒	
	1767 Aug 15 18:28	0°♌			1772 Apr 26 01:04	0°♓	
max. Earth dist.	1767 Aug 29 23:43	9°♌03'12			1772 Jun 04 15:22	0°♈	
					1772 Jul 16 09:33	0°♉	
conjunction	1767 Sep 07 07:33	14°♌22'30	asc. node		1772 Aug 25 12:14	26°♌31'21	
minimum elong	1767 Sep 07 08:26	14°♌23'55			1772 Aug 31 02:52	0°♋	

	1772 Oct 26 13:23	0°♈			1778 Jan 15 20:46	0°♏		
retrograde	1772 Dec 11 14:08	11°♈02'25			1778 Feb 23 11:26	0°♏		
min. Earth dist.	1773 Jan 18 06:55	2°♈06'13	0.65801 AU		1778 Apr 04 07:05	0°♏		
opposition	1773 Jan 20 18:03	1°♈06'53	4°25'26	evening set	1778 Apr 05 23:03	1°♏13'41		
greatest brilliancy	1773 Jan 20 07:55	1°♈17'03	-1.4m	asc. node	1778 Apr 17 08:50	9°♏34'28		
	1773 Jan 23 12:59	30°♏			1778 May 15 22:20	0°♏		
direct	1773 Mar 01 07:12	21°♏41'53						
	1773 Apr 11 08:58	0°♏		conjunction	1778 Jun 03 16:47	13°♏03'45	0°28'32	
	1773 Jun 14 00:13	0°♏		minimum elong	1778 Jun 03 15:19	13°♏01'15	0°28'31	
	1773 Aug 03 22:37	0°♏			1778 Jun 28 14:57	0°♏		
desc. node	1773 Sep 12 11:18	25°♏32'34		max. Earth dist.	1778 Jul 02 19:49	2°♏48'50	2.57430 AU	
	1773 Sep 19 02:18	0°♏		morning rise	1778 Jul 26 10:33	18°♏25'00		
	1773 Oct 31 22:54	0°♏			1778 Aug 13 07:04	0°♏		
evening set	1773 Nov 23 10:19	16°♏29'54			1778 Sep 29 17:48	0°♏		
	1773 Dec 11 08:55	0°♏			1778 Nov 18 04:46	0°♏		
max. Earth dist.	1773 Dec 18 08:29	5°♏19'38	2.39162 AU		1779 Jan 10 18:56	0°♏		
	1774 Jan 19 04:17	0°♏		retrograde	1779 Apr 07 00:17	28°♏47'30		
				desc. node	1779 May 05 08:19	23°♏52'17		
conjunction	1774 Jan 22 07:49	2°♏28'03	-1°02'51	opposition	1779 May 12 10:09	21°♏27'01	-0°20'27	
minimum elong	1774 Jan 22 06:29	2°♏25'26	1°02'50	greatest brilliancy	1779 May 12 12:43	21°♏24'44	-2.1m	
	1774 Feb 26 06:20	0°♏		min. Earth dist.	1779 May 20 14:10	18°♏32'39	0.51952 AU	
morning rise	1774 Apr 01 15:03	26°♏58'05		direct	1779 Jun 20 09:30	12°♏27'48		
	1774 Apr 05 12:39	0°♏			1779 Aug 16 18:00	0°♏		
	1774 May 14 20:03	0°♏			1779 Oct 04 06:50	0°♏		
	1774 Jun 24 23:52	0°♏			1779 Nov 14 19:40	0°♏		
asc. node	1774 Jul 13 11:47	12°♏55'46			1779 Dec 24 11:16	0°♏		
	1774 Aug 07 18:49	0°♏		asc. node	1780 Feb 02 03:40	23°♏02'55		
	1774 Sep 24 11:13	0°♏			1780 Mar 13 22:47	0°♏		
	1774 Nov 20 01:48	0°♏			1780 Apr 25 11:07	0°♏		
retrograde	1775 Jan 14 23:58	14°♏38'13			1780 May 27 22:54	22°♏04'59		
opposition	1775 Feb 23 20:56	5°♏07'51	4°21'26	evening set	1780 Jun 08 19:59	0°♏		
greatest brilliancy	1775 Feb 24 01:30	5°♏03'19	-1.3m					
min. Earth dist.	1775 Feb 25 07:04	4°♏33'58	0.67588 AU					
	1775 Mar 09 11:30	30°♏		conjunction	1780 Jul 17 07:59	25°♏11'22	1°03'11	
direct	1775 Apr 06 00:35	25°♏11'09		minimum elong	1780 Jul 17 07:00	25°♏09'45	1°03'11	
	1775 May 06 04:09	0°♏			1780 Jul 24 18:55	0°♏		
	1775 Jul 11 08:51	0°♏		max. Earth dist.	1780 Jul 28 18:25	2°♏33'40	2.65216 AU	
desc. node	1775 Jul 31 10:39	11°♏43'50		morning rise	1780 Sep 01 23:04	25°♏02'24		
	1775 Aug 29 09:50	0°♏			1780 Sep 09 18:41	0°♏		
	1775 Oct 12 01:44	0°♏			1780 Oct 27 07:24	0°♏		
	1775 Nov 21 14:37	0°♏			1780 Dec 14 06:41	0°♏		
	1775 Dec 30 07:43	0°♏			1781 Feb 01 08:28	0°♏		
evening set	1776 Jan 27 16:55	22°♏24'09		desc. node	1781 Mar 22 07:16	27°♏56'34		
	1776 Feb 06 07:35	0°♏			1781 Mar 26 04:45	0°♏		
	1776 Mar 15 14:03	0°♏		retrograde	1781 Jun 12 00:33	25°♏52'18		
				opposition	1781 Jul 12 18:49	20°♏37'00	-5°51'50	
conjunction	1776 Apr 04 15:40	15°♏25'16	-0°34'52	greatest brilliancy	1781 Jul 13 20:33	20°♏18'47	-2.8m	
minimum elong	1776 Apr 04 18:24	15°♏30'28	0°34'51	min. Earth dist.	1781 Jul 18 04:41	19°♏05'17	0.39474 AU	
	1776 Apr 23 23:49	0°♏		direct	1781 Aug 14 04:56	14°♏41'01		
max. Earth dist.	1776 May 24 07:52	22°♏13'40	2.44939 AU		1781 Oct 04 19:57	0°♏		
asc. node	1776 May 30 10:44	26°♏36'44			1781 Nov 23 13:34	0°♏		
	1776 Jun 04 05:00	0°♏			1782 Jan 06 16:13	0°♏		
morning rise	1776 Jun 08 04:08	2°♏48'18		asc. node	1782 Jan 20 08:00	9°♏25'15		
	1776 Jul 17 15:51	0°♏			1782 Feb 19 07:15	0°♏		
	1776 Sep 01 15:42	0°♏			1782 Apr 04 19:44	0°♏		
	1776 Oct 20 21:24	0°♏			1782 May 20 14:07	0°♏		
	1776 Dec 16 02:55	0°♏			1782 Jul 06 08:54	0°♏		
retrograde	1777 Feb 19 23:12	18°♏42'21		evening set	1782 Jul 08 19:06	1°♏32'41		
opposition	1777 Mar 30 09:17	9°♏59'54	2°56'11	max. Earth dist.	1782 Aug 21 02:25	29°♏04'41	2.67587 AU	
greatest brilliancy	1777 Mar 30 23:00	9°♏46'41	-1.5m		1782 Aug 22 13:12	0°♏		
min. Earth dist.	1777 Apr 04 14:47	7°♏58'58	0.62781 AU					
direct	1777 May 10 15:42	0°♏01'23		conjunction	1782 Aug 24 04:37	1°♏02'42	1°07'19	
desc. node	1777 Jun 17 10:04	7°♏40'39		minimum elong	1782 Aug 24 05:05	1°♏03'28	1°07'19	
	1777 Aug 02 13:59	0°♏		morning rise	1782 Oct 07 14:27	29°♏27'36		
	1777 Sep 18 17:45	0°♏			1782 Oct 08 10:34	0°♏		
	1777 Oct 30 09:23	0°♏			1782 Nov 23 13:22	0°♏		
	1777 Dec 08 13:30	0°♏			1783 Jan 07 17:41	0°♏		

desc. node	1783 Feb 07 07:00	20° $\text{♁}$ 36'49		direct	1788 Feb 15 09:14	8° $\text{♁}$ 13'32	
	1783 Feb 21 02:26	0° $\text{♁}$			1788 Apr 28 02:43	0° $\text{♁}$	
	1783 Apr 06 00:25	0° $\text{♁}$			1788 Jun 23 04:35	0° $\text{♁}$	
	1783 May 20 15:29	0° $\text{♁}$			1788 Aug 11 15:31	0° $\text{♁}$	
	1783 Jul 09 23:33	0° $\text{♁}$			1788 Sep 26 09:01	0° $\text{♁}$	
retrograde	1783 Aug 29 05:01	14° $\text{♁}$ 45'53		desc. node	1788 Sep 29 03:48	1° $\text{♁}$ 53'38	
min. Earth dist.	1783 Sep 24 19:54	10° $\text{♁}$ 12'13	0.40191 AU	evening set	1788 Nov 02 23:21	26° $\text{♁}$ 15'14	
opposition	1783 Oct 01 12:00	8° $\text{♁}$ 10'05	-4°06'10		1788 Nov 08 04:18	0° $\text{♁}$	
greatest brilliancy	1783 Sep 30 15:45	8° $\text{♁}$ 25'35	-2.8m	max. Earth dist.	1788 Nov 18 11:41	7° $\text{♁}$ 29'32	2.43997 AU
direct	1783 Oct 31 22:14	2° $\text{♁}$ 37'01			1788 Dec 18 16:38	0° $\text{♁}$	
asc. node	1783 Dec 08 06:23	10° $\text{♁}$ 29'05					
	1784 Jan 18 13:04	0° $\text{♁}$		conjunction	1788 Dec 28 04:03	7° $\text{♁}$ 12'46	-0°49'57
	1784 Mar 10 11:15	0° $\text{♁}$		minimum elong	1788 Dec 28 01:51	7° $\text{♁}$ 08'35	0°49'56
	1784 Apr 28 17:05	0° $\text{♁}$			1789 Jan 26 15:15	0° $\text{♁}$	
	1784 Jun 16 07:28	0° $\text{♁}$		morning rise	1789 Mar 02 04:54	27° $\text{♁}$ 08'33	
	1784 Aug 03 07:13	0° $\text{♁}$			1789 Mar 05 20:02	0° $\text{♁}$	
evening set	1784 Aug 14 05:54	6° $\text{♁}$ 55'33			1789 Apr 13 04:01	0° $\text{♁}$	
max. Earth dist.	1784 Sep 12 17:42	25° $\text{♁}$ 48'33	2.64544 AU		1789 May 22 12:25	0° $\text{♁}$	
	1784 Sep 19 04:55	0° $\text{♁}$			1789 Jul 02 18:37	0° $\text{♁}$	
				asc. node	1789 Jul 30 03:04	18° $\text{♁}$ 51'24	
conjunction	1784 Sep 28 19:08	6° $\text{♁}$ 15'03	0°45'49		1789 Aug 15 23:28	0° $\text{♁}$	
minimum elong	1784 Sep 28 20:17	6° $\text{♁}$ 16'56	0°45'48		1789 Oct 04 06:18	0° $\text{♁}$	
	1784 Nov 03 13:59	0° $\text{♁}$			1789 Dec 14 06:21	0° $\text{♁}$	
morning rise	1784 Nov 13 04:10	6° $\text{♁}$ 29'24		retrograde	1790 Jan 01 14:38	1° $\text{♁}$ 57'54	
	1784 Dec 17 06:03	0° $\text{♁}$			1790 Jan 18 19:48	30° $\text{♁}$	
desc. node	1784 Dec 25 05:34	5° $\text{♁}$ 36'27		opposition	1790 Feb 10 17:15	22° $\text{♁}$ 14'59	4°32'22
	1785 Jan 28 07:43	0° $\text{♁}$		greatest brilliancy	1790 Feb 10 16:00	22° $\text{♁}$ 16'13	-1.3m
	1785 Mar 10 02:14	0° $\text{♁}$		min. Earth dist.	1790 Feb 10 14:38	22° $\text{♁}$ 17'35	0.67684 AU
	1785 Apr 19 03:00	0° $\text{♁}$		direct	1790 Mar 23 09:29	12° $\text{♁}$ 27'40	
	1785 May 29 08:55	0° $\text{♁}$			1790 May 25 20:42	0° $\text{♁}$	
	1785 Jul 10 15:12	0° $\text{♁}$			1790 Jul 21 00:05	0° $\text{♁}$	
	1785 Aug 29 07:20	0° $\text{♁}$		desc. node	1790 Aug 17 02:37	16° $\text{♁}$ 42'08	
retrograde	1785 Oct 20 12:08	15° $\text{♁}$ 20'35			1790 Sep 06 12:24	0° $\text{♁}$	
asc. node	1785 Oct 25 05:41	15° $\text{♁}$ 10'43			1790 Oct 19 18:09	0° $\text{♁}$	
min. Earth dist.	1785 Nov 20 07:49	8° $\text{♁}$ 48'27	0.52885 AU		1790 Nov 29 04:50	0° $\text{♁}$	
opposition	1785 Nov 27 18:02	5° $\text{♁}$ 59'10	1°38'06	evening set	1790 Dec 31 01:23	24° $\text{♁}$ 37'19	
greatest brilliancy	1785 Nov 27 06:13	6° $\text{♁}$ 10'26	-2.0m		1791 Jan 06 21:57	0° $\text{♁}$	
	1785 Dec 16 15:20	30° $\text{♁}$			1791 Feb 13 21:39	0° $\text{♁}$	
direct	1786 Jan 01 20:47	28° $\text{♁}$ 13'23					
	1786 Jan 19 01:44	0° $\text{♁}$		conjunction	1791 Mar 08 00:47	17° $\text{♁}$ 26'20	-0°56'19
	1786 Apr 02 16:49	0° $\text{♁}$		minimum elong	1791 Mar 08 03:40	17° $\text{♁}$ 32'00	0°56'17
	1786 May 26 08:07	0° $\text{♁}$			1791 Mar 24 02:56	0° $\text{♁}$	
	1786 Jul 15 07:17	0° $\text{♁}$		max. Earth dist.	1791 Apr 26 08:21	25° $\text{♁}$ 25'59	2.39607 AU
	1786 Aug 31 20:40	0° $\text{♁}$			1791 May 02 10:23	0° $\text{♁}$	
evening set	1786 Sep 21 03:56	13° $\text{♁}$ 16'24		morning rise	1791 May 16 07:18	10° $\text{♁}$ 17'31	
max. Earth dist.	1786 Oct 09 21:25	25° $\text{♁}$ 47'29	2.56293 AU		1791 Jun 12 13:10	0° $\text{♁}$	
	1786 Oct 16 02:23	0° $\text{♁}$		asc. node	1791 Jun 17 02:11	3° $\text{♁}$ 13'05	
					1791 Jul 26 00:19	0° $\text{♁}$	
conjunction	1786 Nov 08 00:40	15° $\text{♁}$ 49'00	0°02'31		1791 Sep 10 09:01	0° $\text{♁}$	
minimum elong	1786 Nov 08 00:45	15° $\text{♁}$ 49'10	0°02'31		1791 Oct 31 03:30	0° $\text{♁}$	
behind sun begin	1786 Nov 07 04:15	15° $\text{♁}$ 13'22			1792 Jan 05 04:09	0° $\text{♁}$	
behind sun end	1786 Nov 08 21:16	16° $\text{♁}$ 25'01		retrograde	1792 Feb 05 23:35	5° $\text{♁}$ 19'07	
desc. node	1786 Nov 12 04:12	18° $\text{♁}$ 43'23			1792 Mar 06 01:52	30° $\text{♁}$	
	1786 Nov 28 01:53	0° $\text{♁}$		opposition	1792 Mar 16 02:51	26° $\text{♁}$ 14'56	3°39'35
morning rise	1786 Dec 28 20:07	22° $\text{♁}$ 22'43		greatest brilliancy	1792 Mar 16 14:31	26° $\text{♁}$ 03'31	-1.4m
	1787 Jan 08 02:22	0° $\text{♁}$		min. Earth dist.	1792 Mar 19 21:02	24° $\text{♁}$ 46'42	0.65440 AU
	1787 Feb 16 15:43	0° $\text{♁}$		direct	1792 Apr 26 13:03	16° $\text{♁}$ 12'39	
	1787 Mar 27 10:09	0° $\text{♁}$			1792 Jun 19 03:30	0° $\text{♁}$	
	1787 May 05 05:45	0° $\text{♁}$		desc. node	1792 Jul 04 00:58	7° $\text{♁}$ 04'17	
	1787 Jun 14 03:01	0° $\text{♁}$			1792 Aug 13 11:49	0° $\text{♁}$	
	1787 Jul 26 12:01	0° $\text{♁}$			1792 Sep 27 16:16	0° $\text{♁}$	
asc. node	1787 Sep 12 05:22	29° $\text{♁}$ 56'28			1792 Nov 07 17:26	0° $\text{♁}$	
	1787 Sep 12 07:51	0° $\text{♁}$			1792 Dec 16 15:23	0° $\text{♁}$	
retrograde	1787 Nov 28 21:00	27° $\text{♁}$ 16'05			1793 Jan 23 18:18	0° $\text{♁}$	
min. Earth dist.	1788 Jan 03 20:27	18° $\text{♁}$ 53'56	0.63314 AU		1793 Mar 03 04:22	0° $\text{♁}$	
opposition	1788 Jan 07 19:56	17° $\text{♁}$ 18'22	4°03'39	evening set	1793 Mar 11 11:32	6° $\text{♁}$ 22'55	
greatest brilliancy	1788 Jan 07 05:11	17° $\text{♁}$ 33'08	-1.5m		1793 Apr 11 18:39	0° $\text{♁}$	

asc. node	1793 May 04 02:18	16°♄21'14			1797 Dec 01 00:36	0°♍	
					1798 Jan 16 06:04	0°♊	
conjunction	1793 May 13 15:09	23°♄12'45 0°06'05		desc. node	1798 Feb 23 21:52	25°♊07'59	
minimum elong	1793 May 13 14:44	23°♄12'00 0°06'06			1798 Mar 03 10:19	0°♄	
behind sun begin	1793 May 12 15:21	22°♄30'11			1798 Apr 19 14:46	0°♈	
behind sun end	1793 May 14 14:07	23°♄53'47			1798 Jun 11 18:44	0°♋	
	1793 May 23 04:16	0°♈		retrograde	1798 Aug 01 06:43	14°♋01'01	
max. Earth dist.	1793 Jun 20 03:58	19°♈27'49 2.52967 AU		min. Earth dist.	1798 Aug 29 09:00	9°♋25'15 0.37535 AU	
	1793 Jul 05 16:47	0°♉		opposition	1798 Aug 31 23:48	8°♋42'51 -6°22'54	
morning rise	1793 Jul 09 08:08	2°♉26'36		greatest brilliancy	1798 Aug 31 14:08	8°♋49'24 -2.9m	
	1793 Aug 20 09:04	0°♊		direct	1798 Sep 30 11:46	3°♋46'58	
	1793 Oct 07 06:14	0°♋			1798 Dec 13 21:39	0°♌	
	1793 Nov 27 06:00	0°♌		asc. node	1798 Dec 24 22:46	6°♌17'55	
	1794 Jan 26 08:14	0°♍			1799 Feb 01 23:08	0°♉	
retrograde	1794 Mar 18 10:45	12°♍11'21			1799 Mar 21 10:50	0°♈	
opposition	1794 Apr 24 06:03	4°♍13'23 1°12'49			1799 May 07 20:55	0°♉	
greatest brilliancy	1794 Apr 24 14:49	4°♍05'15 -1.8m			1799 Jun 24 13:49	0°♊	
min. Earth dist.	1794 May 01 11:53	1°♍32'02 0.56776 AU		evening set	1799 Jul 31 21:03	23°♊29'17	
	1794 May 05 19:48	30°♌♄			1799 Aug 11 03:57	0°♋	
desc. node	1794 May 21 23:52	25°♄43'46		max. Earth dist.	1799 Sep 04 06:29	15°♋21'13 2.66384 AU	
direct	1794 Jun 03 12:20	24°♄39'36					
	1794 Jul 03 15:50	0°♍		conjunction	1799 Sep 15 09:47	22°♋30'15 0°56'58	
	1794 Sep 01 05:32	0°♊		minimum elong	1799 Sep 15 10:50	22°♋31'56 0°56'58	
	1794 Oct 15 07:19	0°♄			1799 Sep 27 00:15	0°♌	
	1794 Nov 24 11:10	0°♈		morning rise	1799 Oct 29 23:54	21°♌36'33	
	1795 Jan 02 08:53	0°♋			1799 Nov 11 14:31	0°♍	
	1795 Feb 10 11:44	0°♌			1799 Dec 25 17:48	0°♊	
asc. node	1795 Mar 22 01:01	29°♌27'11		desc. node	1800 Jan 11 21:54	11°♊56'30	
	1795 Mar 22 19:00	0°♉			1800 Feb 06 11:32	0°♄	
	1795 May 03 20:51	0°♈			1800 Mar 20 01:58	0°♈	
evening set	1795 May 10 01:57	4°♈18'49			1800 Apr 30 02:32	0°♋	
	1795 Jun 16 21:32	0°♉			1800 Jun 10 18:54	0°♌	
					1800 Jul 26 10:32	0°♉	
conjunction	1795 Jul 02 03:08	10°♉06'00 0°53'39		retrograde	1800 Oct 03 05:09	25°♉01'51	
minimum elong	1795 Jul 02 01:39	10°♉03'33 0°53'37		min. Earth dist.	1800 Oct 31 20:17	19°♉21'46 0.47706 AU	
max. Earth dist.	1795 Jul 19 21:06	21°♉43'08 2.62787 AU		opposition	1800 Nov 09 00:55	16°♉25'39 -0°09'23	
	1795 Aug 01 15:54	0°♊		greatest brilliancy	1793 Oct 05 20:18	29°♊08'09 1.6m	
morning rise	1795 Aug 19 14:21	11°♊30'57		asc. node	1800 Nov 11 21:23	15°♊24'49	
	1795 Sep 17 17:23	0°♋		direct	1800 Dec 12 10:11	9°♊26'15	
	1795 Nov 04 18:33	0°♌			1801 Feb 17 22:44	0°♈	
	1795 Dec 24 03:03	0°♍			1801 Apr 14 15:18	0°♉	
	1796 Feb 14 21:02	0°♊			1801 Jun 04 13:33	0°♊	
desc. node	1796 Apr 07 22:43	24°♊02'57			1801 Jul 23 13:19	0°♋	
	1796 May 02 20:53	0°♄		evening set	1801 Sep 07 01:13	28°♋52'31	
retrograde	1796 May 13 09:16	0°♄39'35			1801 Sep 08 18:53	0°♌	
	1796 May 23 17:03	30°♌♊		max. Earth dist.	1801 Sep 29 15:35	13°♌39'40 2.60133 AU	
opposition	1796 Jun 15 02:15	24°♊34'42 -3°38'02					
greatest brilliancy	1796 Jun 16 02:24	24°♊15'37 -2.5m		conjunction	1801 Oct 23 12:53	29°♌39'34 0°21'33	
min. Earth dist.	1796 Jun 23 02:26	22°♊03'46 0.43830 AU		minimum elong	1801 Oct 23 13:39	29°♌40'52 0°21'32	
direct	1796 Jul 20 13:48	17°♊14'28			1801 Oct 24 00:57	0°♍	
	1796 Sep 05 01:51	0°♄		desc. node	1801 Nov 29 20:32	25°♍28'27	
	1796 Oct 25 05:01	0°♈			1801 Dec 06 05:56	0°♊	
	1796 Dec 06 19:45	0°♋		morning rise	1801 Dec 10 11:12	3°♊00'15	
	1797 Jan 17 06:09	0°♌			1802 Jan 16 14:40	0°♄	
asc. node	1797 Feb 05 23:24	14°♌09'42			1802 Feb 25 13:16	0°♈	
	1797 Feb 28 08:02	0°♉			1802 Apr 05 16:23	0°♋	
	1797 Apr 12 19:53	0°♈			1802 May 14 20:27	0°♌	
	1797 May 27 21:58	0°♉			1802 Jun 24 05:29	0°♉	
evening set	1797 Jun 23 08:21	17°♉10'42			1802 Aug 06 18:29	0°♈	
	1797 Jul 13 06:57	0°♊			1802 Sep 28 18:40	0°♉	
				asc. node	1802 Sep 29 20:13	0°♉28'50	
conjunction	1797 Aug 09 21:13	17°♊37'18 1°08'59		retrograde	1802 Nov 15 12:05	12°♉28'58	
minimum elong	1797 Aug 09 21:10	17°♊37'13 1°08'59		min. Earth dist.	1802 Dec 19 14:37	4°♉45'20 0.59883 AU	
max. Earth dist.	1797 Aug 12 06:26	19°♊08'24 2.67311 AU		greatest brilliancy	1802 Dec 24 07:56	2°♉53'01 -1.7m	
	1797 Aug 29 07:51	0°♋		opposition	1802 Dec 25 01:03	2°♉36'00 3°25'17	
morning rise	1797 Sep 23 18:48	16°♋12'40			1802 Dec 31 19:05	30°♌♈	
	1797 Oct 15 09:01	0°♌		direct	1803 Jan 31 09:44	23°♈56'33	

	1803 Mar 06 10:29	0°☿			1808 Apr 20 04:24	0°♄	
	1803 May 11 18:31	0°♂		asc. node	1808 May 21 17:40	23°♄05'27	
	1803 Jul 03 11:45	0°♊			1808 May 31 09:58	0°♊	
	1803 Aug 21 00:03	0°♋		max. Earth dist.	1808 Jun 05 15:00	3°♊41'02	2.47917 AU
	1803 Oct 05 11:24	0°♌		morning rise	1808 Jun 21 05:05	14°♊33'57	
evening set	1803 Oct 17 18:21	8°♌25'54			1808 Jul 13 20:10	0°☿	
desc. node	1803 Oct 17 18:52	8°♌26'47			1808 Aug 28 15:23	0°♂	
max. Earth dist.	1803 Nov 01 13:53	18°♌46'50	2.49152 AU		1808 Oct 16 05:27	0°♊	
	1803 Nov 17 07:41	0°♈			1808 Dec 08 19:19	0°♋	
				retrograde	1809 Mar 02 03:32	27°♋14'21	
conjunction	1803 Dec 08 06:24	15°♈16'17	-0°30'32	opposition	1809 Apr 09 01:10	18°♋46'08	2°23'26
minimum elong	1803 Dec 08 04:56	15°♈13'34	0°30'31	greatest brilliancy	1809 Apr 09 14:25	18°♋33'30	-1.6m
	1803 Dec 28 00:10	0°♉		min. Earth dist.	1809 Apr 15 00:34	16°♋29'21	0.60882 AU
morning rise	1804 Feb 04 03:14	29°♉12'10		direct	1809 May 20 01:25	8°♋53'27	
	1804 Feb 05 03:53	0°♊		desc. node	1809 Jun 08 15:06	11°♋10'50	
	1804 Mar 14 12:59	0°♋			1809 Jul 26 01:08	0°♌	
	1804 Apr 22 00:01	0°♌			1809 Sep 13 12:11	0°♈	
	1804 May 31 11:00	0°♄			1809 Oct 25 19:32	0°♉	
	1804 Jul 11 22:19	0°♊			1809 Dec 04 06:42	0°♊	
asc. node	1804 Aug 16 20:08	24°♊13'41			1810 Jan 11 18:03	0°♋	
	1804 Aug 25 20:40	0°☿			1810 Feb 19 11:54	0°♌	
	1804 Oct 17 07:10	0°♂			1810 Mar 31 10:26	0°♄	
retrograde	1804 Dec 20 07:35	19°♂06'10		asc. node	1810 Apr 08 17:23	6°♄04'25	
min. Earth dist.	1805 Jan 27 20:38	9°♂53'21	0.66747 AU	evening set	1810 Apr 20 00:39	14°♄15'44	
opposition	1805 Jan 29 11:59	9°♂13'53	4°31'43		1810 May 12 04:00	0°♊	
greatest brilliancy	1805 Jan 29 04:50	9°♂21'03	-1.3m				
	1805 Mar 03 05:32	30°♊☿		conjunction	1810 Jun 15 12:41	23°♊40'17	0°39'11
direct	1805 Mar 10 11:55	29°☿39'52		minimum elong	1810 Jun 15 11:02	23°♊37'31	0°39'09
	1805 Mar 18 00:38	0°♂			1810 Jun 24 22:15	0°☿	
	1805 Jun 08 05:37	0°♊		max. Earth dist.	1810 Jul 10 09:38	10°☿18'03	2.59549 AU
	1805 Jul 30 14:08	0°♋		morning rise	1810 Aug 05 12:21	27°☿22'29	
desc. node	1805 Sep 03 17:53	22°♋23'05			1810 Aug 09 13:52	0°♂	
	1805 Sep 15 04:26	0°♌			1810 Sep 25 19:51	0°♊	
	1805 Oct 28 04:22	0°♈			1810 Nov 13 15:31	0°♋	
evening set	1805 Dec 07 04:29	29°♈40'26			1811 Jan 04 04:47	0°♌	
	1805 Dec 07 14:47	0°♉			1811 Mar 06 21:10	0°♈	
	1806 Jan 15 09:26	0°♊		retrograde	1811 Apr 20 10:13	9°♈44'34	
max. Earth dist.	1806 Jan 23 02:06	6°♊02'45	2.37287 AU	desc. node	1811 Apr 26 14:28	9°♈30'10	
				opposition	1811 May 24 23:15	2°♈48'49	-1°25'48
conjunction	1806 Feb 07 22:02	18°♊31'48	-1°04'52	greatest brilliancy	1811 May 25 09:51	2°♈39'41	-2.2m
minimum elong	1806 Feb 07 22:11	18°♊32'06	1°04'51	min. Earth dist.	1811 Jun 02 09:46	29°♊55'02	0.49034 AU
	1806 Feb 22 10:25	0°♋			1811 Jun 02 03:48	30°♊♌	
	1806 Apr 01 15:56	0°♌		direct	1811 Jul 01 21:37	24°♊18'26	
morning rise	1806 Apr 19 13:41	13°♌48'47			1811 Aug 01 04:07	0°♈	
	1806 May 10 22:40	0°♄			1811 Sep 27 00:33	0°♉	
	1806 Jun 21 00:50	0°♊			1811 Nov 09 02:41	0°♊	
asc. node	1806 Jul 04 19:15	9°♊41'05			1811 Dec 19 11:11	0°♋	
	1806 Aug 03 15:00	0°☿			1812 Jan 28 14:27	0°♌	
	1806 Sep 19 15:12	0°♂		asc. node	1812 Feb 24 15:59	19°♌51'05	
	1806 Nov 12 03:46	0°♊			1812 Mar 09 18:00	0°♄	
retrograde	1807 Jan 23 20:56	22°♊24'57			1812 Apr 21 12:44	0°♊	
opposition	1807 Mar 04 12:25	13°♊02'56	4°09'27		1812 Jun 05 02:22	0°☿	
greatest brilliancy	1807 Mar 04 19:50	12°♊55'36	-1.3m		1812 Jun 07 21:41	1°☿51'08	
min. Earth dist.	1807 Mar 06 18:13	12°♊09'42	0.67102 AU	evening set	1812 Jul 21 03:43	0°♂	
direct	1807 Apr 14 19:41	3°♊02'58					
	1807 Jul 05 04:35	0°♋		conjunction	1812 Jul 27 02:18	3°♂49'01	1°06'33
desc. node	1807 Jul 22 16:58	9°♋43'40		minimum elong	1812 Jul 27 01:38	3°♂47'58	1°06'33
	1807 Aug 24 19:41	0°♌		max. Earth dist.	1812 Aug 04 04:43	9°♂00'34	2.66199 AU
	1807 Oct 07 22:59	0°♈			1812 Sep 06 03:08	0°♊	
	1807 Nov 17 16:00	0°♉		morning rise	1812 Sep 10 22:57	3°♊03'54	
	1807 Dec 26 10:39	0°♊			1812 Oct 23 10:50	0°♋	
	1808 Feb 02 11:02	0°♋			1812 Dec 09 20:41	0°♌	
evening set	1808 Feb 13 17:36	8°♋53'17			1813 Jan 26 16:02	0°♈	
	1808 Mar 11 17:58	0°♌		desc. node	1813 Mar 13 14:19	27°♈56'26	
					1813 Mar 17 02:25	0°♉	
conjunction	1808 Apr 20 15:10	0°♄20'04	-0°19'56		1813 May 12 19:03	0°♊	
minimum elong	1808 Apr 20 16:46	0°♄23'02	0°19'55	retrograde	1813 Jul 01 01:25	12°♊34'41	

opposition	1813 Jul 31 06:58	7° $\approx$ 35'43	-6°41'18	max. Earth dist.	1818 Oct 18 02:45	3° $\mathbb{M}$ 50'31	2.53916 AU
greatest brilliancy	1813 Jul 31 23:14	7° $\approx$ 24'46	-2.9m	desc. node	1818 Nov 03 10:29	15° $\mathbb{M}$ 08'12	
min. Earth dist.	1813 Aug 03 02:58	6° $\approx$ 50'00	0.37908 AU				
direct	1813 Aug 31 01:06	2° $\approx$ 18'34		conjunction	1818 Nov 19 01:14	26° $\mathbb{M}$ 09'09	-0°09'25
	1813 Nov 13 16:56	0° $\mathbb{X}$		minimum elong	1818 Nov 19 00:49	26° $\mathbb{M}$ 08'23	0°09'25
	1813 Dec 31 00:49	0° $\mathbb{Y}$		behind sun begin	1818 Nov 18 07:08	25° $\mathbb{M}$ 36'57	
asc. node	1814 Jan 11 13:51	7° $\mathbb{Y}$ 39'12		behind sun end	1818 Nov 19 18:29	26° $\mathbb{M}$ 39'52	
	1814 Feb 14 01:19	0° $\mathbb{B}$			1818 Nov 24 10:28	0° $\mathbb{Z}$	
	1814 Mar 31 08:25	0° $\mathbb{H}$			1819 Jan 04 08:12	0° $\mathbb{Z}$	
	1814 May 16 14:16	0° $\mathbb{E}$		morning rise	1819 Jan 10 23:09	4° $\mathbb{Z}$ 58'30	
	1814 Jul 02 15:35	0° $\mathbb{O}$			1819 Feb 12 18:02	0° $\approx$	
evening set	1814 Jul 18 08:12	9° $\mathbb{O}$ 56'51			1819 Mar 23 08:39	0° $\mathbb{X}$	
	1814 Aug 18 22:50	0° $\mathbb{P}$			1819 May 01 00:14	0° $\mathbb{Y}$	
max. Earth dist.	1814 Aug 27 07:02	5° $\mathbb{P}$ 18'30	2.67396 AU		1819 Jun 09 16:19	0° $\mathbb{B}$	
					1819 Jul 21 14:04	0° $\mathbb{H}$	
conjunction	1814 Sep 02 07:04	9° $\mathbb{P}$ 07'59	1°04'34	asc. node	1819 Sep 03 12:02	28° $\mathbb{H}$ 33'05	
minimum elong	1814 Sep 02 07:48	9° $\mathbb{P}$ 09'09	1°04'34		1819 Sep 05 21:45	0° $\mathbb{E}$	
	1814 Oct 04 19:33	0° $\mathbb{L}$			1819 Nov 06 03:39	0° $\mathbb{O}$	
morning rise	1814 Oct 16 14:52	7° $\mathbb{L}$ 38'50		retrograde	1819 Dec 07 19:35	5° $\mathbb{O}$ 43'31	
	1814 Nov 19 17:25	0° $\mathbb{M}$			1820 Jan 06 01:40	30° $\mathbb{R}$ $\mathbb{E}$	
	1815 Jan 03 11:59	0° $\mathbb{Z}$		min. Earth dist.	1820 Jan 13 18:13	27° $\mathbb{E}$ 02'08	0.64811 AU
desc. node	1815 Jan 29 13:12	17° $\mathbb{Z}$ 48'19		opposition	1820 Jan 16 21:54	25° $\mathbb{E}$ 46'10	4°18'17
	1815 Feb 16 04:35	0° $\mathbb{B}$		greatest brilliancy	1820 Jan 16 09:28	25° $\mathbb{E}$ 58'40	-1.4m
	1815 Mar 31 02:02	0° $\approx$		direct	1820 Feb 25 00:53	16° $\mathbb{E}$ 29'46	
	1815 May 12 21:56	0° $\mathbb{X}$			1820 Apr 19 11:41	0° $\mathbb{O}$	
	1815 Jun 27 00:25	0° $\mathbb{Y}$			1820 Jun 18 05:40	0° $\mathbb{P}$	
	1815 Sep 02 11:34	0° $\mathbb{B}$			1820 Aug 07 13:21	0° $\mathbb{L}$	
retrograde	1815 Sep 12 22:23	0° $\mathbb{B}$ 46'43		desc. node	1820 Sep 20 09:20	28° $\mathbb{L}$ 31'11	
	1815 Sep 23 06:54	30° $\mathbb{R}$ $\mathbb{Y}$			1820 Sep 22 13:56	0° $\mathbb{M}$	
min. Earth dist.	1815 Oct 09 19:35	25° $\mathbb{Y}$ 55'43	0.42566 AU		1820 Nov 04 11:24	0° $\mathbb{Z}$	
opposition	1815 Oct 17 15:12	23° $\mathbb{Y}$ 23'06	-2°34'01	evening set	1820 Nov 15 06:12	7° $\mathbb{Z}$ 50'23	
greatest brilliancy	1815 Oct 16 23:26	23° $\mathbb{Y}$ 35'58	-2.6m	max. Earth dist.	1820 Dec 04 01:39	21° $\mathbb{Z}$ 46'30	2.41232 AU
direct	1815 Nov 18 00:29	17° $\mathbb{Y}$ 19'35			1820 Dec 14 23:27	0° $\mathbb{B}$	
asc. node	1815 Nov 29 13:43	18° $\mathbb{Y}$ 10'17					
	1816 Jan 06 13:39	0° $\mathbb{B}$		conjunction	1821 Jan 11 22:23	21° $\mathbb{B}$ 28'25	-0°58'29
	1816 Mar 04 05:04	0° $\mathbb{H}$		minimum elong	1821 Jan 11 20:24	21° $\mathbb{B}$ 24'34	0°58'28
	1816 Apr 24 00:28	0° $\mathbb{E}$			1821 Jan 22 20:57	0° $\approx$	
	1816 Jun 12 07:01	0° $\mathbb{O}$			1821 Mar 02 00:16	0° $\mathbb{X}$	
	1816 Jul 30 14:25	0° $\mathbb{P}$		morning rise	1821 Mar 20 04:33	14° $\mathbb{X}$ 18'21	
evening set	1816 Aug 23 11:57	15° $\mathbb{P}$ 07'34			1821 Apr 09 06:44	0° $\mathbb{Y}$	
	1816 Sep 15 14:53	0° $\mathbb{L}$			1821 May 18 13:34	0° $\mathbb{B}$	
max. Earth dist.	1816 Sep 19 09:09	2° $\mathbb{L}$ 26'41	2.63191 AU		1821 Jun 28 16:41	0° $\mathbb{H}$	
				asc. node	1821 Jul 21 10:58	15° $\mathbb{H}$ 50'44	
conjunction	1816 Oct 08 05:43	14° $\mathbb{L}$ 49'03	0°37'47		1821 Aug 11 13:23	0° $\mathbb{E}$	
minimum elong	1816 Oct 08 06:49	14° $\mathbb{L}$ 50'51	0°37'47		1821 Sep 28 16:32	0° $\mathbb{O}$	
	1816 Oct 30 22:54	0° $\mathbb{M}$			1821 Nov 27 08:34	0° $\mathbb{P}$	
morning rise	1816 Nov 23 07:14	15° $\mathbb{M}$ 56'38		retrograde	1822 Jan 10 07:05	9° $\mathbb{P}$ 43'11	
	1816 Dec 13 11:03	0° $\mathbb{Z}$		opposition	1822 Feb 19 06:41	0° $\mathbb{P}$ 06'42	4°27'18
desc. node	1816 Dec 16 11:50	2° $\mathbb{Z}$ 08'19		greatest brilliancy	1822 Feb 19 08:42	0° $\mathbb{P}$ 04'42	-1.3m
	1817 Jan 24 06:16	0° $\mathbb{B}$			1822 Feb 19 13:25	30° $\mathbb{R}$ $\mathbb{O}$	
	1817 Mar 05 17:03	0° $\approx$		min. Earth dist.	1822 Feb 20 00:06	29° $\mathbb{O}$ 49'21	0.67753 AU
	1817 Apr 14 08:48	0° $\mathbb{X}$		direct	1822 Apr 01 05:33	20° $\mathbb{O}$ 13'49	
	1817 May 24 02:54	0° $\mathbb{Y}$			1822 May 16 02:50	0° $\mathbb{P}$	
	1817 Jul 04 10:29	0° $\mathbb{B}$			1822 Jul 15 20:38	0° $\mathbb{L}$	
	1817 Aug 19 14:22	0° $\mathbb{H}$		desc. node	1822 Aug 08 08:21	14° $\mathbb{L}$ 03'41	
asc. node	1817 Oct 16 13:48	24° $\mathbb{H}$ 38'40			1822 Sep 02 06:17	0° $\mathbb{M}$	
retrograde	1817 Oct 30 23:58	26° $\mathbb{H}$ 02'44			1822 Oct 15 19:09	0° $\mathbb{Z}$	
min. Earth dist.	1817 Dec 02 00:56	19° $\mathbb{H}$ 03'24	0.55563 AU		1822 Nov 25 08:02	0° $\mathbb{B}$	
opposition	1817 Dec 08 19:22	16° $\mathbb{H}$ 25'48	2°25'06		1823 Jan 03 01:48	0° $\approx$	
greatest brilliancy	1817 Dec 08 03:50	16° $\mathbb{H}$ 40'55	-1.9m	evening set	1823 Jan 16 10:08	10° $\approx$ 30'50	
direct	1818 Jan 13 18:14	8° $\mathbb{H}$ 18'44			1823 Feb 10 01:39	0° $\mathbb{X}$	
	1818 Mar 26 05:06	0° $\mathbb{E}$			1823 Mar 20 07:05	0° $\mathbb{Y}$	
	1818 May 21 11:51	0° $\mathbb{O}$					
	1818 Jul 11 06:34	0° $\mathbb{P}$		conjunction	1823 Mar 25 10:16	3° $\mathbb{Y}$ 58'34	-0°45'13
	1818 Aug 28 03:41	0° $\mathbb{L}$		minimum elong	1823 Mar 25 13:29	4° $\mathbb{Y}$ 04'47	0°45'11
evening set	1818 Oct 01 03:27	22° $\mathbb{L}$ 20'19			1823 Apr 28 14:56	0° $\mathbb{B}$	
	1818 Oct 12 11:38	0° $\mathbb{M}$		max. Earth dist.	1823 May 15 15:21	12° $\mathbb{B}$ 36'03	2.42501 AU

morning rise	1823 May 31 06:09	23° $\text{♄}$ 56'10	direct	1828 Aug 03 22:49	2° $\text{♄}$ 34'40	
asc. node	1823 Jun 08 10:30	29° $\text{♄}$ 47'18		1828 Oct 15 18:42	0° $\text{♄}$	
	1823 Jun 08 17:39	0° $\text{♄}$		1828 Nov 30 05:03	0° $\text{♄}$	
	1823 Jul 22 02:53	0° $\text{♄}$		1829 Jan 11 20:43	0° $\text{♄}$	
	1823 Sep 06 04:12	0° $\text{♄}$	asc. node	1829 Jan 28 07:13	11° $\text{♄}$ 35'11	
	1823 Oct 25 21:13	0° $\text{♄}$		1829 Feb 23 16:00	0° $\text{♄}$	
	1823 Dec 23 15:34	0° $\text{♄}$		1829 Apr 08 15:19	0° $\text{♄}$	
retrograde	1824 Feb 15 10:27	13° $\text{♄}$ 22'07		1829 May 24 01:00	0° $\text{♄}$	
opposition	1824 Mar 25 04:24	4° $\text{♄}$ 29'19 3°15'54	evening set	1829 Jul 03 07:16	25° $\text{♄}$ 58'15	
greatest brilliancy	1824 Mar 25 17:26	4° $\text{♄}$ 16'39 -1.4m		1829 Jul 09 14:28	0° $\text{♄}$	
min. Earth dist.	1824 Mar 29 17:48	2° $\text{♄}$ 43'00 0.64092 AU				
	1824 Apr 06 01:24	30° $\text{♄}$	conjunction	1829 Aug 19 03:34	25° $\text{♄}$ 49'29 1°08'28	
direct	1824 May 05 12:57	24° $\text{♄}$ 28'12	minimum elong	1829 Aug 19 03:49	25° $\text{♄}$ 49'54 1°08'28	
	1824 Jun 06 08:48	0° $\text{♄}$	max. Earth dist.	1829 Aug 18 13:15	25° $\text{♄}$ 26'44 2.67573 AU	
desc. node	1824 Jun 25 07:43	7° $\text{♄}$ 12'42		1829 Aug 25 17:02	0° $\text{♄}$	
	1824 Aug 07 19:05	0° $\text{♄}$	morning rise	1829 Oct 02 16:59	24° $\text{♄}$ 15'00	
	1824 Sep 23 01:45	0° $\text{♄}$		1829 Oct 11 16:08	0° $\text{♄}$	
	1824 Nov 03 11:30	0° $\text{♄}$		1829 Nov 27 00:37	0° $\text{♄}$	
	1824 Dec 12 13:12	0° $\text{♄}$		1830 Jan 11 15:39	0° $\text{♄}$	
	1825 Jan 19 18:15	0° $\text{♄}$	desc. node	1830 Feb 15 04:42	22° $\text{♄}$ 58'17	
	1825 Feb 27 06:02	0° $\text{♄}$		1830 Feb 25 17:22	0° $\text{♄}$	
evening set	1825 Mar 27 06:22	21° $\text{♄}$ 18'24		1830 Apr 11 19:06	0° $\text{♄}$	
	1825 Apr 07 22:16	0° $\text{♄}$		1830 May 28 16:57	0° $\text{♄}$	
asc. node	1825 Apr 25 08:34	12° $\text{♄}$ 47'06		1830 Jul 31 20:24	0° $\text{♄}$	
	1825 May 19 09:39	0° $\text{♄}$	retrograde	1830 Aug 18 14:37	2° $\text{♄}$ 08'26	
				1830 Sep 05 13:04	30° $\text{♄}$	
conjunction	1825 May 26 22:37	5° $\text{♄}$ 17'58 0°19'35	min. Earth dist.	1830 Sep 14 12:03	27° $\text{♄}$ 40'56 0.38667 AU	
minimum elong	1825 May 26 21:28	5° $\text{♄}$ 15'58 0°19'34	opposition	1830 Sep 19 16:21	26° $\text{♄}$ 11'27 -5°13'52	
max. Earth dist.	1825 Jun 28 18:51	27° $\text{♄}$ 51'37 2.55536 AU	greatest brilliancy	1830 Sep 18 21:40	26° $\text{♄}$ 24'56 -2.9m	
	1825 Jul 01 23:06	0° $\text{♄}$	direct	1830 Oct 19 12:49	20° $\text{♄}$ 59'40	
morning rise	1825 Jul 20 07:20	12° $\text{♄}$ 13'18		1830 Nov 28 11:11	0° $\text{♄}$	
	1825 Aug 16 13:51	0° $\text{♄}$	asc. node	1830 Dec 16 05:56	7° $\text{♄}$ 57'24	
	1825 Oct 03 03:35	0° $\text{♄}$		1831 Jan 25 15:38	0° $\text{♄}$	
	1825 Nov 22 03:03	0° $\text{♄}$		1831 Mar 16 04:58	0° $\text{♄}$	
	1826 Jan 16 16:12	0° $\text{♄}$		1831 May 03 12:51	0° $\text{♄}$	
retrograde	1826 Mar 30 05:04	21° $\text{♄}$ 51'02		1831 Jun 20 16:45	0° $\text{♄}$	
opposition	1826 May 05 06:53	14° $\text{♄}$ 12'32 0°22'05		1831 Aug 07 12:13	0° $\text{♄}$	
greatest brilliancy	1826 May 05 09:56	14° $\text{♄}$ 09'45 -1.9m	evening set	1831 Aug 10 03:08	1° $\text{♄}$ 39'31	
min. Earth dist.	1826 May 13 02:13	11° $\text{♄}$ 22'18 0.54195 AU	max. Earth dist.	1831 Sep 10 17:15	21° $\text{♄}$ 48'22 2.65470 AU	
desc. node	1826 May 13 06:09	11° $\text{♄}$ 18'49		1831 Sep 23 09:46	0° $\text{♄}$	
direct	1826 Jun 13 21:37	4° $\text{♄}$ 55'33				
	1826 Aug 24 13:52	0° $\text{♄}$	conjunction	1831 Sep 24 14:47	0° $\text{♄}$ 47'03 0°50'52	
	1826 Oct 09 17:32	0° $\text{♄}$	minimum elong	1831 Sep 24 15:55	0° $\text{♄}$ 48'53 0°50'52	
	1826 Nov 19 14:09	0° $\text{♄}$		1831 Nov 07 21:50	0° $\text{♄}$	
	1826 Dec 28 20:43	0° $\text{♄}$	morning rise	1831 Nov 08 13:27	0° $\text{♄}$ 26'12	
	1827 Feb 06 05:38	0° $\text{♄}$		1831 Dec 21 19:39	0° $\text{♄}$	
asc. node	1827 Mar 13 07:45	26° $\text{♄}$ 02'58	desc. node	1832 Jan 03 03:25	8° $\text{♄}$ 37'11	
	1827 Mar 18 18:00	0° $\text{♄}$		1832 Feb 02 04:47	0° $\text{♄}$	
	1827 Apr 30 00:04	0° $\text{♄}$		1832 Mar 14 08:04	0° $\text{♄}$	
evening set	1827 May 22 02:01	15° $\text{♄}$ 09'25		1832 Apr 23 18:14	0° $\text{♄}$	
	1827 Jun 13 03:58	0° $\text{♄}$		1832 Jun 03 11:51	0° $\text{♄}$	
				1832 Jul 16 17:51	0° $\text{♄}$	
conjunction	1827 Jul 12 13:25	19° $\text{♄}$ 20'54 0°59'46		1832 Sep 09 14:51	0° $\text{♄}$	
minimum elong	1827 Jul 12 12:12	19° $\text{♄}$ 18'55 0°59'45	retrograde	1832 Oct 13 22:24	7° $\text{♄}$ 24'19	
max. Earth dist.	1827 Jul 26 16:19	28° $\text{♄}$ 30'30 2.64241 AU	asc. node	1832 Nov 02 04:54	4° $\text{♄}$ 40'15	
	1827 Jul 28 23:46	0° $\text{♄}$	min. Earth dist.	1832 Nov 12 18:29	1° $\text{♄}$ 14'50 0.50596 AU	
morning rise	1827 Aug 28 21:57	19° $\text{♄}$ 48'17		1832 Nov 16 03:41	30° $\text{♄}$	
	1827 Sep 13 23:38	0° $\text{♄}$	opposition	1832 Nov 20 14:33	28° $\text{♄}$ 19'54 0°56'57	
	1827 Oct 31 16:59	0° $\text{♄}$	greatest brilliancy	1832 Nov 20 07:07	28° $\text{♄}$ 26'50 -2.2m	
	1827 Dec 19 04:49	0° $\text{♄}$	direct	1832 Dec 24 22:48	20° $\text{♄}$ 53'38	
	1828 Feb 07 13:18	0° $\text{♄}$		1833 Feb 04 18:52	0° $\text{♄}$	
desc. node	1828 Mar 30 05:03	27° $\text{♄}$ 25'27		1833 Apr 07 19:26	0° $\text{♄}$	
	1828 Apr 04 20:21	0° $\text{♄}$		1833 May 30 03:30	0° $\text{♄}$	
retrograde	1828 May 30 13:36	14° $\text{♄}$ 44'08		1833 Jul 18 16:30	0° $\text{♄}$	
opposition	1828 Jul 01 02:16	9° $\text{♄}$ 08'21 -4°56'59		1833 Sep 04 03:13	0° $\text{♄}$	
greatest brilliancy	1828 Jul 02 06:07	8° $\text{♄}$ 47'38 -2.7m	evening set	1833 Sep 15 14:49	7° $\text{♄}$ 28'18	
min. Earth dist.	1828 Jul 07 23:42	7° $\text{♄}$ 05'41 0.41235 AU	max. Earth dist.	1833 Oct 06 01:07	20° $\text{♄}$ 59'15 2.58094 AU	

	1833 Oct 19 10:01	0°♄			1838 Sep 14 02:10	0°♄	
					1838 Nov 04 16:38	0°♄	
conjunction	1833 Nov 01 18:53	9°♄08'41 0°10'49			1839 Jan 25 13:14	0°♄	
minimum elong	1833 Nov 01 19:19	9°♄09'25 0°10'49	retrograde		1839 Jan 31 21:32	0°♄14'30	
behind sun begin	1833 Nov 01 04:00	8°♄43'04			1839 Feb 07 01:57	30°♄	
behind sun end	1833 Nov 02 10:38	9°♄35'48	opposition		1839 Mar 12 06:34	21°♄01'48 3°53'20	
desc. node	1833 Nov 20 01:53	21°♄53'02	greatest brilliancy		1839 Mar 12 16:28	20°♄52'03 -1.3m	
	1833 Dec 01 13:02	0°♄	min. Earth dist.		1839 Mar 15 08:07	19°♄49'25 0.66314 AU	
morning rise	1833 Dec 21 04:04	14°♄08'01	direct		1839 Apr 22 15:54	11°♄00'03	
	1834 Jan 11 17:55	0°♄			1839 Jun 26 21:05	0°♄	
	1834 Feb 20 11:53	0°♄	desc. node		1839 Jul 12 22:58	8°♄15'34	
	1834 Mar 31 10:17	0°♄			1839 Aug 18 22:29	0°♄	
	1834 May 09 08:56	0°♄			1839 Oct 02 16:59	0°♄	
	1834 Jun 18 09:45	0°♄			1839 Nov 12 15:27	0°♄	
	1834 Jul 31 02:40	0°♄			1839 Dec 21 12:26	0°♄	
	1834 Sep 18 07:52	0°♄			1840 Jan 28 14:12	0°♄	
asc. node	1834 Sep 20 04:51	0°♄59'44	evening set		1840 Feb 29 13:22	25°♄03'42	
retrograde	1834 Nov 23 20:03	21°♄32'11			1840 Mar 06 22:09	0°♄	
min. Earth dist.	1834 Dec 28 23:45	13°♄26'53 0.61890 AU			1840 Apr 15 09:35	0°♄	
opposition	1835 Jan 02 15:22	11°♄35'29 3°50'01					
greatest brilliancy	1835 Jan 01 23:06	11°♄51'45 -1.6m	conjunction		1840 May 04 14:15	14°♄08'15 -0°04'51	
direct	1835 Feb 09 16:28	2°♄41'26	minimum elong		1840 May 04 14:36	14°♄08'54 0°04'51	
	1835 May 04 12:49	0°♄	behind sun begin		1840 May 03 13:36	13°♄23'22	
	1835 Jun 28 01:04	0°♄	behind sun end		1840 May 05 15:36	14°♄54'24	
	1835 Aug 16 03:00	0°♄	asc. node		1840 May 12 01:52	19°♄33'51	
	1835 Sep 30 18:59	0°♄			1840 May 26 15:59	0°♄	
desc. node	1835 Oct 08 01:28	4°♄57'39	max. Earth dist.		1840 Jun 15 03:06	13°♄38'33 2.50764 AU	
evening set	1835 Oct 27 21:06	18°♄44'52	morning rise		1840 Jul 02 09:13	25°♄28'34	
max. Earth dist.	1835 Nov 11 12:50	29°♄11'09 2.46312 AU			1840 Jul 09 01:46	0°♄	
	1835 Nov 12 15:59	0°♄			1840 Aug 23 17:38	0°♄	
					1840 Oct 10 19:49	0°♄	
conjunction	1835 Dec 20 07:10	27°♄44'36 -0°42'06			1840 Dec 01 15:42	0°♄	
minimum elong	1835 Dec 20 05:11	27°♄40'53 0°42'05			1841 Feb 05 08:45	0°♄	
	1835 Dec 23 06:57	0°♄	retrograde		1841 Mar 11 18:24	6°♄04'04	
	1836 Jan 31 08:18	0°♄			1841 Apr 12 06:06	30°♄	
morning rise	1836 Feb 19 12:50	15°♄00'16	opposition		1841 Apr 18 02:05	27°♄51'37 1°44'52	
	1836 Mar 09 15:02	0°♄	greatest brilliancy		1841 Apr 18 13:21	27°♄41'00 -1.7m	
	1836 Apr 16 23:47	0°♄	min. Earth dist.		1841 Apr 24 18:37	25°♄20'31 0.58723 AU	
	1836 May 26 08:16	0°♄	direct		1841 May 28 17:21	18°♄07'50	
	1836 Jul 06 14:59	0°♄	desc. node		1841 May 29 21:30	18°♄08'23	
asc. node	1836 Aug 07 02:45	21°♄33'54			1841 Jul 15 01:48	0°♄	
	1836 Aug 20 00:03	0°♄			1841 Sep 06 17:39	0°♄	
	1836 Oct 09 04:28	0°♄			1841 Oct 19 23:26	0°♄	
retrograde	1836 Dec 27 23:04	26°♄58'50			1841 Nov 28 19:35	0°♄	
min. Earth dist.	1837 Feb 05 07:32	17°♄30'37 0.67398 AU			1842 Jan 06 12:16	0°♄	
opposition	1837 Feb 06 02:56	17°♄11'11 4°33'31			1842 Feb 14 10:08	0°♄	
greatest brilliancy	1837 Feb 05 23:00	17°♄15'08 -1.3m			1842 Mar 26 12:16	0°♄	
direct	1837 Mar 18 12:34	7°♄29'29	asc. node		1842 Mar 30 00:42	2°♄34'28	
	1837 May 31 15:41	0°♄	evening set		1842 May 02 06:43	26°♄25'16	
	1837 Jul 25 00:53	0°♄			1842 May 07 09:05	0°♄	
desc. node	1837 Aug 25 00:42	19°♄22'03			1842 Jun 20 05:27	0°♄	
	1837 Sep 10 04:48	0°♄					
	1837 Oct 23 09:30	0°♄	conjunction		1842 Jun 25 18:41	3°♄42'24 0°48'10	
	1837 Dec 02 20:58	0°♄	minimum elong		1842 Jun 25 17:05	3°♄39'44 0°48'08	
evening set	1837 Dec 20 19:39	13°♄46'04	max. Earth dist.		1842 Jul 16 14:11	17°♄27'04 2.61434 AU	
	1838 Jan 10 15:15	0°♄			1842 Aug 04 21:22	0°♄	
	1838 Feb 17 15:29	0°♄	morning rise		1842 Aug 14 06:27	6°♄02'23	
					1842 Sep 20 23:43	0°♄	
conjunction	1838 Feb 24 04:34	5°♄10'19 -1°01'55			1842 Nov 08 07:22	0°♄	
minimum elong	1838 Feb 24 06:27	5°♄14'03 1°01'53			1842 Dec 28 10:41	0°♄	
	1838 Mar 27 20:09	0°♄			1843 Feb 21 18:29	0°♄	
max. Earth dist.	1838 Mar 31 08:56	2°♄44'36 2.37695 AU	desc. node		1843 Apr 16 20:42	19°♄53'20	
morning rise	1838 May 05 16:35	29°♄42'04	retrograde		1843 May 03 22:29	21°♄34'27	
	1838 May 06 02:10	0°♄	opposition		1843 Jun 06 12:26	15°♄05'57 -2°38'39	
	1838 Jun 16 03:13	0°♄	greatest brilliancy		1843 Jun 07 07:19	14°♄50'22 -2.4m	
asc. node	1838 Jun 25 01:32	6°♄19'10	min. Earth dist.		1843 Jun 14 22:37	12°♄20'12 0.46130 AU	
	1838 Jul 29 13:39	0°♄	direct		1843 Jul 13 05:25	7°♄11'22	



	1843 Sep 16 18:05	0° $\text{Z}$		minimum elong	1848 Oct 16 21:28	23° $\text{Z}$ 38'12	0°28'44
	1843 Nov 01 16:19	0° $\approx$			1848 Oct 26 08:18	0° $\text{M}$	
	1843 Dec 13 02:00	0° $\text{H}$		morning rise	1848 Dec 02 20:12	25° $\text{M}$ 51'14	
	1844 Jan 22 19:52	0° $\text{Y}$		desc. node	1848 Dec 06 18:25	28° $\text{M}$ 37'04	
asc. node	1844 Feb 14 22:48	16° $\text{Y}$ 48'03			1848 Dec 08 17:24	0° $\text{Z}$	
	1844 Mar 04 09:36	0° $\text{B}$			1849 Jan 19 07:29	0° $\text{Z}$	
	1844 Apr 16 12:07	0° $\text{II}$			1849 Feb 28 11:37	0° $\approx$	
	1844 May 31 07:12	0° $\text{E}$			1849 Apr 08 20:04	0° $\text{H}$	
evening set	1844 Jun 17 10:29	11° $\text{E}$ 13'01			1849 May 18 05:02	0° $\text{Y}$	
	1844 Jul 16 11:52	0° $\text{O}$			1849 Jun 27 20:55	0° $\text{B}$	
					1849 Aug 11 03:50	0° $\text{II}$	
conjunction	1844 Aug 04 15:30	12° $\text{O}$ 15'44	1°08'28	asc. node	1849 Oct 06 19:47	29° $\text{II}$ 28'32	
minimum elong	1844 Aug 04 15:11	12° $\text{O}$ 15'15	1°08'27		1849 Oct 08 06:52	0° $\text{E}$	
max. Earth dist.	1844 Aug 09 12:46	15° $\text{O}$ 22'54	2.66921 AU	retrograde	1849 Nov 09 00:24	6° $\text{E}$ 07'05	
	1844 Sep 01 11:39	0° $\text{M}$			1849 Dec 08 20:13	30° $\text{R}$ $\text{II}$	
morning rise	1844 Sep 18 21:49	11° $\text{M}$ 04'51		min. Earth dist.	1849 Dec 12 05:27	28° $\text{II}$ 42'38	0.58058 AU
	1844 Oct 18 15:20	0° $\text{Z}$		opposition	1849 Dec 18 07:03	26° $\text{II}$ 19'23	3°03'13
	1844 Dec 04 14:29	0° $\text{M}$		greatest brilliancy	1849 Dec 17 13:49	26° $\text{II}$ 36'22	-1.8m
	1845 Jan 20 10:53	0° $\text{Z}$		direct	1850 Jan 24 01:09	17° $\text{II}$ 53'28	
desc. node	1845 Mar 03 19:45	26° $\text{Z}$ 53'14			1850 Mar 15 11:16	0° $\text{E}$	
	1845 Mar 08 19:01	0° $\text{Z}$			1850 May 15 06:14	0° $\text{O}$	
	1845 Apr 27 14:30	0° $\approx$			1850 Jul 06 02:39	0° $\text{M}$	
	1845 Jul 10 20:26	0° $\text{H}$			1850 Aug 23 09:06	0° $\text{Z}$	
retrograde	1845 Jul 19 12:19	0° $\text{H}$ 28'37			1850 Oct 07 20:13	0° $\text{M}$	
	1845 Jul 28 02:03	30° $\text{R}$ $\approx$		evening set	1850 Oct 10 10:31	1° $\text{M}$ 46'03	
opposition	1845 Aug 18 15:17	25° $\approx$ 27'59	-6°49'21	desc. node	1850 Oct 24 16:49	11° $\text{M}$ 34'50	
min. Earth dist.	1845 Aug 18 11:32	25° $\approx$ 30'27	0.37302 AU	max. Earth dist.	1850 Oct 26 02:03	12° $\text{M}$ 32'35	2.51355 AU
greatest brilliancy	1845 Aug 18 17:12	25° $\approx$ 26'43	-2.9m		1850 Nov 19 18:51	0° $\text{Z}$	
direct	1845 Sep 17 08:01	20° $\approx$ 31'26					
	1845 Oct 27 15:47	0° $\text{H}$		conjunction	1850 Nov 29 15:36	7° $\text{Z}$ 07'18	-0°21'32
	1845 Dec 22 02:20	0° $\text{Y}$		minimum elong	1850 Nov 29 14:35	7° $\text{Z}$ 05'26	0°21'32
asc. node	1846 Jan 01 22:19	6° $\text{Y}$ 43'31			1850 Dec 30 14:40	0° $\text{Z}$	
	1846 Feb 07 07:56	0° $\text{B}$		morning rise	1851 Jan 24 02:53	18° $\text{Z}$ 36'30	
	1846 Mar 25 16:19	0° $\text{II}$			1851 Feb 07 21:37	0° $\approx$	
	1846 May 11 11:52	0° $\text{E}$			1851 Mar 18 09:19	0° $\text{H}$	
	1846 Jun 27 21:00	0° $\text{O}$			1851 Apr 25 21:49	0° $\text{Y}$	
evening set	1846 Jul 26 16:50	18° $\text{O}$ 12'05			1851 Jun 04 09:41	0° $\text{B}$	
	1846 Aug 14 08:00	0° $\text{M}$			1851 Jul 15 23:17	0° $\text{II}$	
max. Earth dist.	1846 Sep 01 12:04	11° $\text{M}$ 33'55	2.66938 AU	asc. node	1851 Aug 24 19:31	26° $\text{II}$ 34'21	
					1851 Aug 30 06:32	0° $\text{E}$	
conjunction	1846 Sep 10 08:51	17° $\text{M}$ 14'04	1°00'34		1851 Oct 23 20:39	0° $\text{O}$	
minimum elong	1846 Sep 10 09:46	17° $\text{M}$ 15'33	1°00'34	retrograde	1851 Dec 15 14:43	13° $\text{O}$ 56'32	
	1846 Sep 30 04:44	0° $\text{Z}$		min. Earth dist.	1852 Jan 22 10:46	4° $\text{O}$ 57'35	0.66007 AU
morning rise	1846 Oct 24 18:37	16° $\text{Z}$ 00'40		opposition	1852 Jan 24 18:56	4° $\text{O}$ 01'12	4°27'53
	1846 Nov 14 22:53	0° $\text{M}$		greatest brilliancy	1852 Jan 24 09:14	4° $\text{O}$ 10'56	-1.4m
	1846 Dec 29 09:10	0° $\text{Z}$			1852 Feb 04 06:28	30° $\text{R}$ $\text{E}$	
desc. node	1847 Jan 19 19:27	14° $\text{Z}$ 47'43		direct	1852 Mar 04 10:18	24° $\text{E}$ 34'37	
	1847 Feb 10 12:47	0° $\text{Z}$			1852 Apr 05 19:25	0° $\text{O}$	
	1847 Mar 24 15:42	0° $\approx$			1852 Jun 11 20:38	0° $\text{M}$	
	1847 May 05 08:09	0° $\text{H}$			1852 Aug 02 08:00	0° $\text{Z}$	
	1847 Jun 17 01:40	0° $\text{Y}$		desc. node	1852 Sep 10 15:45	25° $\text{Z}$ 15'30	
	1847 Aug 05 00:47	0° $\text{B}$			1852 Sep 17 17:41	0° $\text{M}$	
retrograde	1847 Sep 25 10:53	15° $\text{B}$ 28'36			1852 Oct 30 17:52	0° $\text{Z}$	
min. Earth dist.	1847 Oct 23 04:16	10° $\text{B}$ 11'25	0.45355 AU	evening set	1852 Nov 27 07:23	20° $\text{Z}$ 14'55	
opposition	1847 Oct 31 09:25	7° $\text{B}$ 21'24	-1°07'09		1852 Dec 10 06:01	0° $\text{Z}$	
greatest brilliancy	1847 Oct 31 01:48	7° $\text{B}$ 27'59	-2.5m	max. Earth dist.	1852 Dec 24 19:03	11° $\text{Z}$ 07'03	2.38711 AU
asc. node	1847 Nov 19 21:19	1° $\text{B}$ 54'32			1853 Jan 18 02:25	0° $\approx$	
direct	1847 Dec 02 22:17	0° $\text{B}$ 45'55					
	1848 Feb 24 20:39	0° $\text{II}$		conjunction	1853 Jan 26 17:59	6° $\approx$ 47'03	-1°03'44
	1848 Apr 18 00:17	0° $\text{E}$		minimum elong	1853 Jan 26 16:56	6° $\approx$ 45'01	1°03'45
	1848 Jun 07 03:41	0° $\text{O}$			1853 Feb 25 04:34	0° $\text{H}$	
	1848 Jul 25 20:22	0° $\text{M}$			1853 Apr 04 10:05	0° $\text{Y}$	
evening set	1848 Aug 31 18:27	23° $\text{M}$ 23'21		morning rise	1853 Apr 06 10:39	1° $\text{Y}$ 34'21	
	1848 Sep 11 00:20	0° $\text{Z}$			1853 May 13 15:50	0° $\text{B}$	
max. Earth dist.	1848 Sep 25 04:56	9° $\text{Z}$ 15'16	2.61607 AU		1853 Jun 23 17:01	0° $\text{II}$	
				asc. node	1853 Jul 11 18:52	12° $\text{II}$ 41'04	
conjunction	1848 Oct 16 20:32	23° $\text{Z}$ 36'38	0°28'44		1853 Aug 06 07:40	0° $\text{E}$	

	1853 Sep 22 15:21	0°♏			1858 Dec 23 02:21	0°♐		
	1853 Nov 16 20:30	0°♑			1859 Jan 31 20:08	0°♑		
retrograde	1854 Jan 18 01:15	17°♑27'35		asc. node	1859 Mar 03 15:31	22°♑45'15		
opposition	1854 Feb 26 20:42	7°♑58'36	4°18'08		1859 Mar 13 15:18	0°♐		
greatest brilliancy	1854 Feb 27 01:45	7°♑53'35	-1.3m		1859 Apr 25 02:56	0°♑		
min. Earth dist.	1854 Feb 28 09:46	7°♑21'47	0.67521 AU	evening set	1859 Jun 01 10:21	25°♑19'42		
	1854 Mar 22 12:43	30°♑♏			1859 Jun 08 10:45	0°♑		
direct	1854 Apr 09 00:53	28°♏01'24						
	1854 Apr 27 19:03	0°♑		conjunction	1859 Jul 21 13:20	28°♑11'25	1°04'14	
	1854 Jul 09 04:44	0°♐		minimum elong	1859 Jul 21 12:26	28°♑09'58	1°04'14	
desc. node	1854 Jul 29 14:45	11°♐44'27			1859 Jul 24 08:40	0°♏		
	1854 Aug 27 20:39	0°♑		max. Earth dist.	1859 Aug 01 05:22	5°♏03'40	2.65427 AU	
	1854 Oct 10 18:56	0°♐		morning rise	1859 Sep 06 00:11	27°♏54'09		
	1854 Nov 20 11:07	0°♐			1859 Sep 09 07:31	0°♑		
	1854 Dec 29 05:46	0°♑			1859 Oct 26 18:54	0°♐		
evening set	1855 Feb 01 06:44	26°♑52'01			1859 Dec 13 15:03	0°♑		
	1855 Feb 05 05:52	0°♐			1860 Jan 31 08:46	0°♐		
	1855 Mar 15 11:32	0°♑		desc. node	1860 Mar 20 12:08	28°♐33'31		
conjunction	1855 Apr 10 03:30	19°♑42'05	-0°31'18		1860 Mar 23 03:31	0°♐		
minimum elong	1855 Apr 10 06:00	19°♑46'50	0°31'15	retrograde	1860 Jun 10 05:47	0°♑		
	1855 Apr 23 19:42	0°♐			1860 Jun 16 21:19	0°♑16'36		
max. Earth dist.	1855 May 29 09:09	26°♐01'44	2.45505 AU	opposition	1860 Jun 23 11:49	30°♑♐		
asc. node	1855 May 29 17:17	26°♐16'17		greatest brilliancy	1860 Jul 17 13:18	25°♐05'36	-6°05'51	
	1855 Jun 03 22:43	0°♑		min. Earth dist.	1860 Jul 18 13:54	24°♐48'20	-2.8m	
morning rise	1855 Jun 13 02:30	6°♑28'36		direct	1860 Jul 22 11:52	23°♐42'40	0.39089 AU	
	1855 Jul 17 06:47	0°♑			1860 Aug 18 14:41	19°♐18'08		
	1855 Sep 01 02:45	0°♏			1860 Sep 29 18:00	0°♑		
	1855 Oct 20 00:54	0°♑			1860 Nov 21 03:47	0°♐		
	1855 Dec 14 03:44	0°♐		asc. node	1861 Jan 04 19:58	0°♑		
retrograde	1856 Feb 24 06:17	21°♐39'53			1861 Jan 18 13:12	9°♑24'06		
opposition	1856 Apr 02 13:30	12°♐59'58	2°47'06		1861 Feb 17 16:11	0°♐		
greatest brilliancy	1856 Apr 03 02:56	12°♐47'01	-1.5m		1861 Apr 03 06:50	0°♑		
min. Earth dist.	1856 Apr 07 21:24	10°♐56'47	0.62437 AU		1861 May 19 02:11	0°♑		
direct	1856 May 13 18:12	3°♐02'34		evening set	1861 Jul 04 21:32	0°♏		
desc. node	1856 Jun 15 12:52	8°♐58'07			1861 Jul 12 00:03	4°♏31'18		
	1856 Jul 31 05:20	0°♑		max. Earth dist.	1861 Aug 21 02:25	0°♑		
	1856 Sep 17 03:44	0°♐			1861 Aug 23 17:28	1°♑40'15	2.67586 AU	
	1856 Oct 29 02:08	0°♐		conjunction	1861 Aug 27 06:55	3°♑56'12	1°06'39	
	1856 Dec 07 09:17	0°♑		minimum elong	1861 Aug 27 07:28	3°♑57'04	1°06'38	
	1857 Jan 14 17:38	0°♐			1861 Oct 07 00:18	0°♐		
	1857 Feb 22 07:59	0°♑		morning rise	1861 Oct 10 15:33	2°♐20'38		
evening set	1857 Apr 03 02:23	0°♐			1861 Nov 22 03:11	0°♑		
asc. node	1857 Apr 10 01:17	5°♐07'10			1862 Jan 06 06:38	0°♐		
	1857 Apr 15 16:45	9°♐14'42		desc. node	1862 Feb 05 10:57	20°♐23'57		
	1857 May 14 15:50	0°♑			1862 Feb 19 13:00	0°♐		
conjunction	1857 Jun 07 08:27	16°♑28'29	0°31'28		1862 Apr 04 06:03	0°♑		
minimum elong	1857 Jun 07 06:54	16°♑25'51	0°31'28		1862 May 18 09:35	0°♐		
	1857 Jun 27 06:24	0°♑		retrograde	1862 Jul 05 20:04	0°♑		
max. Earth dist.	1857 Jul 05 18:24	5°♑41'21	2.57843 AU	min. Earth dist.	1862 Sep 02 11:49	19°♑14'36		
morning rise	1857 Jul 29 17:28	21°♑29'16		greatest brilliancy	1862 Sep 29 00:36	14°♑39'29	0.40576 AU	
	1857 Aug 11 20:23	0°♏		opposition	1862 Oct 05 05:01	12°♑45'16	-2.7m	
	1857 Sep 28 04:16	0°♑		direct	1862 Oct 06 00:30	12°♑30'13	-3°44'30	
	1857 Nov 16 09:30	0°♐		asc. node	1862 Nov 05 14:00	6°♑51'57		
	1858 Jan 08 06:10	0°♑			1862 Dec 06 13:01	12°♑26'55		
	1858 Mar 22 03:33	0°♐			1863 Jan 15 09:19	0°♐		
retrograde	1858 Apr 10 20:00	2°♐10'47			1863 Mar 09 09:51	0°♑		
	1858 Apr 29 11:03	30°♑♑			1863 Apr 27 23:24	0°♑		
desc. node	1858 May 03 11:57	28°♑58'50			1863 Jun 15 17:20	0°♏		
opposition	1858 May 16 02:51	24°♑54'49	-0°36'43	evening set	1863 Aug 02 19:30	0°♑		
greatest brilliancy	1858 May 16 07:23	24°♑50'48	-2.1m	max. Earth dist.	1863 Aug 18 08:40	9°♑50'02		
min. Earth dist.	1858 May 24 09:04	21°♑59'57	0.51382 AU		1863 Sep 16 05:21	28°♑19'48	2.64316 AU	
direct	1858 Jun 23 21:20	16°♑01'09			1863 Sep 18 19:13	0°♐		
	1858 Aug 13 02:29	0°♐		conjunction	1863 Oct 02 22:08	9°♐12'11	0°43'39	
	1858 Oct 02 08:15	0°♐		minimum elong	1863 Oct 02 23:16	9°♐14'02	0°43'38	
	1858 Nov 13 06:55	0°♑			1863 Nov 03 05:55	0°♑		

morning rise	1863 Nov 17 09:26	9° $\mathbb{M}$ 34'50	retrograde	1869 Jan 04 14:42	4° $\mathbb{M}$ 47'04	
	1863 Dec 16 23:01	0° $\mathbb{A}$		1869 Jan 31 16:52	30° $\mathbb{R}$ $\mathbb{Q}$	
desc. node	1863 Dec 24 09:32	5° $\mathbb{A}$ 13'21	opposition	1869 Feb 13 16:46	25° $\mathbb{Q}$ 05'00	4°31'16
	1864 Jan 28 01:00	0° $\mathbb{B}$	greatest brilliancy	1869 Feb 13 16:07	25° $\mathbb{Q}$ 05'38	-1.3m
	1864 Mar 08 19:07	0° $\approx$	min. Earth dist.	1869 Feb 13 17:21	25° $\mathbb{Q}$ 04'25	0.67719 AU
	1864 Apr 17 18:29	0° $\mathbb{H}$	direct	1869 Mar 26 10:31	15° $\mathbb{Q}$ 16'41	
	1864 May 27 20:59	0° $\mathbb{Y}$		1869 May 22 13:37	0° $\mathbb{M}$	
	1864 Jul 08 18:41	0° $\mathbb{B}$		1869 Jul 19 03:23	0° $\mathbb{L}$	
	1864 Aug 25 23:52	0° $\mathbb{I}$	desc. node	1869 Aug 15 06:05	16° $\mathbb{L}$ 32'29	
retrograde	1864 Oct 23 21:10	18° $\mathbb{I}$ 47'18		1869 Sep 05 01:16	0° $\mathbb{M}$	
asc. node	1864 Oct 23 13:12	18° $\mathbb{I}$ 47'16		1869 Oct 18 11:50	0° $\mathbb{A}$	
min. Earth dist.	1864 Nov 23 23:04	12° $\mathbb{I}$ 09'41	0.53398 AU	1869 Nov 28 01:15	0° $\mathbb{B}$	
opposition	1864 Dec 01 06:14	9° $\mathbb{I}$ 22'17	1°51'49	evening set	1870 Jan 04 12:00	28° $\mathbb{B}$ 57'37
greatest brilliancy	1864 Nov 30 17:02	9° $\mathbb{I}$ 34'56	-2.0m		1870 Jan 05 19:48	0° $\approx$
direct	1865 Jan 05 11:48	1° $\mathbb{I}$ 32'28			1870 Feb 12 19:54	0° $\mathbb{H}$
	1865 Mar 31 02:58	0° $\mathbb{B}$				
	1865 May 24 11:19	0° $\mathbb{Q}$	conjunction	1870 Mar 12 18:05	21° $\mathbb{H}$ 59'15	-0°54'00
	1865 Jul 13 16:58	0° $\mathbb{M}$	minimum elong	1870 Mar 12 21:09	22° $\mathbb{H}$ 05'14	0°53'58
	1865 Aug 30 10:23	0° $\mathbb{L}$		1870 Mar 23 00:38	0° $\mathbb{Y}$	
evening set	1865 Sep 24 09:02	16° $\mathbb{L}$ 18'10		1870 May 01 06:42	0° $\mathbb{B}$	
max. Earth dist.	1865 Oct 12 19:29	28° $\mathbb{L}$ 39'14	2.55877 AU	max. Earth dist.	1870 May 01 15:06	0° $\mathbb{B}$ 15'46
	1865 Oct 14 19:08	0° $\mathbb{M}$		morning rise	1870 May 20 14:22	14° $\mathbb{B}$ 18'57
desc. node	1865 Nov 10 08:19	18° $\mathbb{M}$ 18'39			1870 Jun 11 07:17	0° $\mathbb{I}$
			asc. node	1870 Jun 15 10:13	2° $\mathbb{I}$ 55'44	
conjunction	1865 Nov 11 09:46	19° $\mathbb{M}$ 03'13	-0°00'39		1870 Jul 24 15:16	0° $\mathbb{B}$
minimum elong	1865 Nov 11 09:42	19° $\mathbb{M}$ 03'08	0°00'38		1870 Sep 08 18:58	0° $\mathbb{Q}$
behind sun begin	1865 Nov 10 13:02	18° $\mathbb{M}$ 26'55			1870 Oct 29 01:47	0° $\mathbb{M}$
behind sun end	1865 Nov 12 06:22	19° $\mathbb{M}$ 39'22			1870 Dec 30 17:16	0° $\mathbb{L}$
	1865 Nov 26 20:52	0° $\mathbb{A}$	retrograde	1871 Feb 09 02:49	8° $\mathbb{L}$ 09'20	
morning rise	1866 Jan 01 13:42	26° $\mathbb{A}$ 00'08			1871 Mar 17 21:28	30° $\mathbb{R}$ $\mathbb{M}$
	1866 Jan 06 22:42	0° $\mathbb{B}$		opposition	1871 Mar 20 03:57	29° $\mathbb{M}$ 06'58
	1866 Feb 15 12:31	0° $\approx$		greatest brilliancy	1871 Mar 20 15:46	28° $\mathbb{M}$ 55'24
	1866 Mar 26 06:34	0° $\mathbb{H}$		min. Earth dist.	1871 Mar 24 01:00	27° $\mathbb{M}$ 35'58
	1866 May 04 00:45	0° $\mathbb{Y}$		direct	1871 Apr 30 13:36	19° $\mathbb{M}$ 04'51
	1866 Jun 12 19:06	0° $\mathbb{B}$			1871 Jun 16 09:08	0° $\mathbb{L}$
	1866 Jul 24 22:03	0° $\mathbb{I}$		desc. node	1871 Jul 03 05:28	7° $\mathbb{L}$ 35'08
asc. node	1866 Sep 10 11:40	0° $\mathbb{B}$ 15'23			1871 Aug 12 15:39	0° $\mathbb{M}$
	1866 Sep 10 01:03	0° $\mathbb{B}$			1871 Sep 27 06:31	0° $\mathbb{A}$
	1866 Nov 25 18:21	0° $\mathbb{Q}$			1871 Nov 07 12:08	0° $\mathbb{B}$
retrograde	1866 Dec 01 22:07	0° $\mathbb{Q}$ 15'05			1871 Dec 16 12:00	0° $\approx$
	1866 Dec 07 22:47	30° $\mathbb{R}$ $\mathbb{B}$			1872 Jan 23 15:23	0° $\mathbb{H}$
min. Earth dist.	1867 Jan 07 02:07	21° $\mathbb{B}$ 49'31	0.63624 AU		1872 Mar 02 00:53	0° $\mathbb{Y}$
opposition	1867 Jan 10 22:25	20° $\mathbb{B}$ 17'05	4°08'39	evening set	1872 Mar 15 23:25	10° $\mathbb{Y}$ 42'22
greatest brilliancy	1867 Jan 10 07:56	20° $\mathbb{B}$ 31'35	-1.5m		1872 Apr 10 13:54	0° $\mathbb{B}$
direct	1867 Feb 18 14:46	11° $\mathbb{B}$ 10'08		asc. node	1872 May 02 08:23	15° $\mathbb{B}$ 59'00
	1867 Apr 26 02:14	0° $\mathbb{Q}$				
	1867 Jun 22 06:54	0° $\mathbb{M}$		conjunction	1872 May 17 15:25	26° $\mathbb{B}$ 58'16
	1867 Aug 11 02:24	0° $\mathbb{L}$		minimum elong	1872 May 17 14:47	26° $\mathbb{B}$ 57'08
	1867 Sep 26 00:47	0° $\mathbb{M}$		behind sun begin	1872 May 16 18:51	26° $\mathbb{B}$ 21'39
desc. node	1867 Sep 28 07:13	1° $\mathbb{M}$ 32'17		behind sun end	1872 May 18 10:43	27° $\mathbb{B}$ 32'34
evening set	1867 Nov 07 14:29	29° $\mathbb{M}$ 43'59			1872 May 21 21:49	0° $\mathbb{I}$
	1867 Nov 07 23:23	0° $\mathbb{A}$		max. Earth dist.	1872 Jun 23 09:37	22° $\mathbb{I}$ 34'48
max. Earth dist.	1867 Nov 23 11:58	11° $\mathbb{A}$ 17'35	2.43486 AU		1872 Jul 04 08:16	0° $\mathbb{B}$
	1867 Dec 18 13:55	0° $\mathbb{B}$		morning rise	1872 Jul 12 20:03	5° $\mathbb{B}$ 41'48
					1872 Aug 18 22:05	0° $\mathbb{Q}$
conjunction	1868 Jan 02 05:32	11° $\mathbb{B}$ 09'42	-0°52'18		1872 Oct 05 15:19	0° $\mathbb{M}$
minimum elong	1868 Jan 02 03:22	11° $\mathbb{B}$ 05'33	0°52'16		1872 Nov 25 05:47	0° $\mathbb{L}$
	1868 Jan 26 13:40	0° $\approx$			1873 Jan 22 12:35	0° $\mathbb{M}$
	1868 Mar 04 18:33	0° $\mathbb{H}$		retrograde	1873 Mar 21 22:29	15° $\mathbb{M}$ 17'24
morning rise	1868 Mar 06 21:43	1° $\mathbb{H}$ 40'43		opposition	1873 Apr 27 14:46	7° $\mathbb{M}$ 22'35
	1868 Apr 12 01:35	0° $\mathbb{Y}$		greatest brilliancy	1873 Apr 27 22:07	7° $\mathbb{M}$ 15'46
	1868 May 21 07:59	0° $\mathbb{B}$		min. Earth dist.	1873 May 04 23:07	4° $\mathbb{M}$ 39'33
	1868 Jul 01 10:56	0° $\mathbb{I}$		desc. node	1873 May 20 04:03	29° $\mathbb{L}$ 57'46
asc. node	1868 Jul 28 10:13	18° $\mathbb{I}$ 41'08			1873 May 20 00:16	30° $\mathbb{R}$ $\mathbb{L}$
	1868 Aug 14 10:09	0° $\mathbb{B}$		direct	1873 Jun 06 18:08	27° $\mathbb{L}$ 51'40
	1868 Oct 02 03:30	0° $\mathbb{Q}$			1873 Jun 25 07:52	0° $\mathbb{M}$
	1868 Dec 06 02:58	0° $\mathbb{M}$			1873 Aug 30 02:57	0° $\mathbb{A}$

	1873 Oct 13 19:18	0° $\mathfrak{Z}$			1878 Sep 25 14:11	0° $\mathfrak{L}$		
	1873 Nov 23 04:09	0° $\approx$		morning rise	1878 Nov 02 03:21	24° $\mathfrak{L}$ 36'41		
	1874 Jan 01 03:35	0° $\mathfrak{H}$			1878 Nov 10 05:36	0° $\mathfrak{M}$		
	1874 Feb 09 06:30	0° $\mathfrak{Y}$			1878 Dec 24 09:29	0° $\mathfrak{J}$		
asc. node	1874 Mar 20 07:00	29° $\mathfrak{Y}$ 05'30		desc. node	1879 Jan 10 01:11	11° $\mathfrak{J}$ 34'43		
	1874 Mar 21 12:49	0° $\mathfrak{B}$			1879 Feb 05 03:05	0° $\mathfrak{Z}$		
	1874 May 02 13:17	0° $\mathfrak{II}$			1879 Mar 18 16:22	0° $\approx$		
evening set	1874 May 13 20:02	7° $\mathfrak{II}$ 49'25			1879 Apr 28 14:09	0° $\mathfrak{H}$		
	1874 Jun 15 12:29	0° $\mathfrak{E}$			1879 Jun 08 23:46	0° $\mathfrak{Y}$		
					1879 Jul 23 18:00	0° $\mathfrak{B}$		
conjunction	1874 Jul 05 13:20	13° $\mathfrak{E}$ 16'26 0°55'30		retrograde	1879 Oct 06 20:34	28° $\mathfrak{B}$ 48'32		
minimum elong	1874 Jul 05 11:55	13° $\mathfrak{E}$ 14'07 0°55'29		min. Earth dist.	1879 Nov 04 17:27	23° $\mathfrak{B}$ 02'21 0.48241 AU		
max. Earth dist.	1874 Jul 22 13:19	24° $\mathfrak{E}$ 22'53 2.63095 AU		asc. node	1879 Nov 10 04:32	21° $\mathfrak{B}$ 04'14		
	1874 Jul 31 05:32	0° $\mathfrak{Q}$		opposition	1879 Nov 12 20:11	20° $\mathfrak{B}$ 06'11 0°08'39		
morning rise	1874 Aug 22 18:13	14° $\mathfrak{Q}$ 27'53		greatest brilliancy	1879 Apr 27 03:05	28° $\approx$ 55'42 0.2m		
	1874 Sep 16 05:33	0° $\mathfrak{M}$		direct	1879 Dec 16 09:02	13° $\mathfrak{B}$ 01'29		
	1874 Nov 03 04:11	0° $\mathfrak{L}$			1880 Feb 14 11:39	0° $\mathfrak{II}$		
	1874 Dec 22 06:39	0° $\mathfrak{M}$			1880 Apr 11 13:21	0° $\mathfrak{E}$		
	1875 Feb 12 06:21	0° $\mathfrak{J}$			1880 Jun 01 20:14	0° $\mathfrak{Q}$		
desc. node	1875 Apr 07 02:58	25° $\mathfrak{J}$ 41'01			1880 Jul 21 00:13	0° $\mathfrak{M}$		
	1875 Apr 20 00:53	0° $\mathfrak{Z}$			1880 Sep 06 08:42	0° $\mathfrak{L}$		
retrograde	1875 May 18 22:12	4° $\mathfrak{Z}$ 32'50		evening set	1880 Sep 09 04:58	1° $\mathfrak{L}$ 50'34		
	1875 Jun 15 15:10	30° $\mathfrak{R}$ $\mathfrak{J}$		max. Earth dist.	1880 Oct 01 08:18	16° $\mathfrak{L}$ 21'25 2.59755 AU		
opposition	1875 Jun 20 08:34	28° $\mathfrak{J}$ 33'39 -3°56'56			1880 Oct 21 17:02	0° $\mathfrak{M}$		
greatest brilliancy	1875 Jun 21 10:18	28° $\mathfrak{J}$ 13'33 -2.5m						
min. Earth dist.	1875 Jun 28 05:07	26° $\mathfrak{J}$ 06'55 0.43320 AU		conjunction	1880 Oct 25 19:45	2° $\mathfrak{M}$ 47'29 0°18'40		
direct	1875 Jul 25 14:32	21° $\mathfrak{J}$ 21'45		minimum elong	1880 Oct 25 20:26	2° $\mathfrak{M}$ 48'39 0°18'39		
	1875 Aug 31 21:58	0° $\mathfrak{Z}$		desc. node	1880 Nov 26 23:43	25° $\mathfrak{M}$ 03'10		
	1875 Oct 23 23:26	0° $\approx$			1880 Dec 03 23:41	0° $\mathfrak{J}$		
	1875 Dec 06 03:12	0° $\mathfrak{H}$		morning rise	1880 Dec 13 00:15	6° $\mathfrak{J}$ 25'54		
	1876 Jan 16 18:18	0° $\mathfrak{Y}$			1881 Jan 14 09:29	0° $\mathfrak{Z}$		
asc. node	1876 Feb 05 06:40	13° $\mathfrak{Y}$ 59'14			1881 Feb 23 08:27	0° $\approx$		
	1876 Feb 27 21:45	0° $\mathfrak{B}$			1881 Apr 03 11:12	0° $\mathfrak{H}$		
	1876 Apr 11 09:45	0° $\mathfrak{II}$			1881 May 12 13:46	0° $\mathfrak{Y}$		
	1876 May 26 11:24	0° $\mathfrak{E}$			1881 Jun 21 19:08	0° $\mathfrak{B}$		
evening set	1876 Jun 26 15:12	20° $\mathfrak{E}$ 14'01			1881 Aug 03 22:58	0° $\mathfrak{II}$		
	1876 Jul 11 20:03	0° $\mathfrak{Q}$			1881 Sep 24 06:55	0° $\mathfrak{E}$		
				asc. node	1881 Sep 27 04:20	1° $\mathfrak{E}$ 23'29		
conjunction	1876 Aug 13 00:29	20° $\mathfrak{Q}$ 32'47 1°08'57		retrograde	1881 Nov 17 14:19	15° $\mathfrak{E}$ 33'42		
minimum elong	1876 Aug 13 00:32	20° $\mathfrak{Q}$ 32'51 1°08'56		min. Earth dist.	1881 Dec 21 21:44	7° $\mathfrak{E}$ 46'23 0.60279 AU		
max. Earth dist.	1876 Aug 14 20:49	21° $\mathfrak{Q}$ 43'21 2.67391 AU		greatest brilliancy	1881 Dec 26 12:01	5° $\mathfrak{E}$ 56'56 -1.6m		
	1876 Aug 27 20:54	0° $\mathfrak{M}$		opposition	1881 Dec 27 05:20	5° $\mathfrak{E}$ 39'44 3°33'06		
morning rise	1876 Sep 26 19:50	19° $\mathfrak{M}$ 04'50			1882 Jan 12 07:23	30° $\mathfrak{R}$ $\mathfrak{II}$		
	1876 Oct 13 22:01	0° $\mathfrak{L}$		direct	1882 Feb 02 17:36	26° $\mathfrak{II}$ 57'37		
	1876 Nov 29 12:50	0° $\mathfrak{M}$			1882 Feb 26 02:36	0° $\mathfrak{E}$		
	1877 Jan 14 15:49	0° $\mathfrak{J}$			1882 May 08 11:26	0° $\mathfrak{Q}$		
desc. node	1877 Feb 22 02:34	25° $\mathfrak{J}$ 07'00			1882 Jun 30 18:23	0° $\mathfrak{M}$		
	1877 Mar 01 14:20	0° $\mathfrak{Z}$			1882 Aug 18 12:42	0° $\mathfrak{L}$		
	1877 Apr 17 05:15	0° $\approx$			1882 Oct 03 03:50	0° $\mathfrak{M}$		
	1877 Jun 07 04:02	0° $\mathfrak{H}$		desc. node	1882 Oct 14 23:17	8° $\mathfrak{M}$ 04'40		
retrograde	1877 Aug 06 00:08	18° $\mathfrak{H}$ 51'52		evening set	1882 Oct 20 03:51	11° $\mathfrak{M}$ 40'08		
min. Earth dist.	1877 Sep 02 20:19	14° $\mathfrak{H}$ 19'03 0.37665 AU		max. Earth dist.	1882 Nov 03 22:08	22° $\mathfrak{M}$ 01'07 2.48600 AU		
opposition	1877 Sep 05 23:43	13° $\mathfrak{H}$ 27'25 -6°10'00			1882 Nov 15 02:39	0° $\mathfrak{J}$		
greatest brilliancy	1877 Sep 05 11:49	13° $\mathfrak{H}$ 35'35 -2.9m						
direct	1877 Oct 05 13:26	8° $\mathfrak{H}$ 29'44		conjunction	1882 Dec 11 00:31	18° $\mathfrak{J}$ 54'48 -0°33'34		
	1877 Dec 10 10:43	0° $\mathfrak{Y}$		minimum elong	1882 Dec 10 22:54	18° $\mathfrak{J}$ 51'48 0°33'33		
asc. node	1877 Dec 23 05:56	7° $\mathfrak{Y}$ 00'58			1882 Dec 25 20:41	0° $\mathfrak{Z}$		
	1878 Jan 30 20:08	0° $\mathfrak{B}$			1883 Feb 03 01:01	0° $\approx$		
	1878 Mar 19 16:49	0° $\mathfrak{II}$		morning rise	1883 Feb 07 13:19	3° $\approx$ 30'29		
	1878 May 06 06:24	0° $\mathfrak{E}$			1883 Mar 13 09:56	0° $\mathfrak{H}$		
	1878 Jun 23 01:05	0° $\mathfrak{Q}$			1883 Apr 20 19:58	0° $\mathfrak{Y}$		
evening set	1878 Aug 03 23:58	26° $\mathfrak{Q}$ 23'57			1883 May 30 04:56	0° $\mathfrak{B}$		
	1878 Aug 09 16:34	0° $\mathfrak{M}$			1883 Jul 10 12:41	0° $\mathfrak{II}$		
max. Earth dist.	1878 Sep 06 20:44	17° $\mathfrak{M}$ 56'24 2.66228 AU		asc. node	1883 Aug 15 02:45	24° $\mathfrak{II}$ 09'52		
					1883 Aug 24 03:37	0° $\mathfrak{E}$		
conjunction	1878 Sep 18 12:13	25° $\mathfrak{M}$ 25'25 0°55'20			1883 Oct 14 13:25	0° $\mathfrak{Q}$		
minimum elong	1878 Sep 18 13:17	25° $\mathfrak{M}$ 27'08 0°55'19		retrograde	1883 Dec 23 06:50	21° $\mathfrak{Q}$ 56'31		

min. Earth dist.	1884 Jan 30 23:28	12° $\Omega$ 41'12	0.66907 AU	evening set	1889 Apr 22 23:22	17° $\mathcal{B}$ 59'12	
opposition	1884 Feb 01 11:44	12° $\Omega$ 04'50	4°32'43		1889 May 09 21:30	0° $\Pi$	
greatest brilliancy	1884 Feb 01 05:08	12° $\Omega$ 11'27	-1.3m				
direct	1884 Mar 12 14:19	2° $\Omega$ 29'30		conjunction	1889 Jun 18 02:02	26° $\Pi$ 58'25	0°41'44
	1884 Jun 04 20:04	0° $\mathcal{M}$		minimum elong	1889 Jun 18 00:22	26° $\Pi$ 55'36	0°41'44
	1884 Jul 27 22:02	0° $\mathcal{A}$			1889 Jun 22 13:58	0° $\mathcal{G}$	
desc. node	1884 Aug 31 22:36	22° $\mathcal{A}$ 08'34		max. Earth dist.	1889 Jul 12 06:07	13° $\mathcal{G}$ 05'35	2.59920 AU
	1884 Sep 12 19:26	0° $\mathcal{M}$		morning rise	1889 Aug 07 18:12	0° $\Omega$ 23'29	
	1884 Oct 25 23:28	0° $\mathcal{A}$			1889 Aug 07 03:39	0° $\Omega$	
	1884 Dec 05 12:18	0° $\mathcal{B}$			1889 Sep 23 07:13	0° $\mathcal{M}$	
evening set	1884 Dec 10 04:26	3° $\mathcal{B}$ 33'18			1889 Nov 10 22:32	0° $\mathcal{A}$	
	1885 Jan 13 08:01	0° $\approx$			1890 Jan 01 00:29	0° $\mathcal{M}$	
max. Earth dist.	1885 Feb 04 19:34	17° $\approx$ 42'07	2.37083 AU		1890 Mar 01 05:34	0° $\mathcal{A}$	
				retrograde	1890 Apr 23 09:28	13° $\mathcal{A}$ 13'59	
conjunction	1885 Feb 11 11:59	22° $\approx$ 59'04	-1°04'36	desc. node	1890 Apr 23 18:31	13° $\mathcal{A}$ 13'56	
minimum elong	1885 Feb 11 12:33	23° $\approx$ 00'12	1°04'36	opposition	1890 May 27 19:06	6° $\mathcal{A}$ 23'09	-1°43'19
	1885 Feb 20 08:57	0° $\mathcal{H}$		greatest brilliancy	1890 May 28 07:48	6° $\mathcal{A}$ 12'19	-2.2m
	1885 Mar 30 13:27	0° $\mathcal{Y}$		min. Earth dist.	1890 Jun 05 07:25	3° $\mathcal{A}$ 29'31	0.48495 AU
morning rise	1885 Apr 23 07:37	18° $\mathcal{Y}$ 18'48			1890 Jun 17 10:43	30° $\mathcal{R}\mathcal{M}$	
	1885 May 08 18:19	0° $\mathcal{B}$		direct	1890 Jul 04 13:15	27° $\mathcal{M}$ 59'03	
	1885 Jun 18 17:52	0° $\Pi$			1890 Jul 22 01:20	0° $\mathcal{A}$	
asc. node	1885 Jul 02 00:57	9° $\Pi$ 23'08			1890 Sep 23 17:49	0° $\mathcal{B}$	
	1885 Aug 01 04:14	0° $\mathcal{G}$			1890 Nov 06 11:26	0° $\approx$	
	1885 Sep 16 21:40	0° $\Omega$			1890 Dec 17 01:03	0° $\mathcal{H}$	
	1885 Nov 08 13:38	0° $\mathcal{M}$			1891 Jan 26 06:04	0° $\mathcal{Y}$	
retrograde	1886 Jan 25 22:18	25° $\mathcal{M}$ 13'58		asc. node	1891 Feb 21 22:14	19° $\mathcal{Y}$ 33'38	
opposition	1886 Mar 06 12:31	15° $\mathcal{M}$ 53'24	4°04'57		1891 Mar 08 09:47	0° $\mathcal{B}$	
greatest brilliancy	1886 Mar 06 20:21	15° $\mathcal{M}$ 45'39	-1.3m		1891 Apr 20 03:56	0° $\Pi$	
min. Earth dist.	1886 Mar 08 21:28	14° $\mathcal{M}$ 57'07	0.66987 AU		1891 Jun 03 16:43	0° $\mathcal{G}$	
direct	1886 Apr 16 20:24	5° $\mathcal{M}$ 53'13		evening set	1891 Jun 11 07:20	5° $\mathcal{G}$ 01'12	
	1886 Jul 01 16:58	0° $\mathcal{A}$			1891 Jul 19 17:21	0° $\Omega$	
desc. node	1886 Jul 19 20:47	9° $\mathcal{A}$ 51'34					
	1886 Aug 22 04:37	0° $\mathcal{M}$		conjunction	1891 Jul 30 07:04	6° $\Omega$ 47'27	1°07'13
	1886 Oct 05 15:23	0° $\mathcal{A}$		minimum elong	1891 Jul 30 06:32	6° $\Omega$ 46'35	1°07'13
	1886 Nov 15 12:11	0° $\mathcal{B}$		max. Earth dist.	1891 Aug 06 15:42	11° $\Omega$ 30'18	2.66358 AU
	1886 Dec 24 08:43	0° $\approx$			1891 Sep 04 16:07	0° $\mathcal{M}$	
	1887 Jan 31 09:37	0° $\mathcal{H}$		morning rise	1891 Sep 14 00:35	5° $\mathcal{M}$ 56'31	
evening set	1887 Feb 17 06:42	13° $\mathcal{H}$ 17'53			1891 Oct 21 22:49	0° $\mathcal{A}$	
	1887 Mar 10 15:58	0° $\mathcal{Y}$			1891 Dec 08 06:19	0° $\mathcal{M}$	
	1887 Apr 19 00:51	0° $\mathcal{B}$			1892 Jan 24 20:07	0° $\mathcal{A}$	
				desc. node	1892 Mar 10 17:32	28° $\mathcal{A}$ 13'38	
conjunction	1887 Apr 24 22:11	4° $\mathcal{B}$ 23'05	-0°16'11		1892 Mar 13 16:39	0° $\mathcal{B}$	
minimum elong	1887 Apr 24 23:28	4° $\mathcal{B}$ 25'28	0°16'09		1892 May 06 22:42	0° $\approx$	
asc. node	1887 May 20 01:09	22° $\mathcal{B}$ 45'06		retrograde	1892 Jul 05 03:28	17° $\approx$ 14'00	
	1887 May 30 04:12	0° $\Pi$		opposition	1892 Aug 04 06:14	12° $\approx$ 16'16	-6°46'53
max. Earth dist.	1887 Jun 09 07:56	7° $\Pi$ 10'36	2.48450 AU	greatest brilliancy	1892 Aug 04 20:13	12° $\approx$ 06'57	-2.9m
morning rise	1887 Jun 24 23:13	18° $\Pi$ 03'23		min. Earth dist.	1892 Aug 06 14:05	11° $\approx$ 39'08	0.37736 AU
	1887 Jul 12 11:39	0° $\mathcal{G}$		direct	1892 Sep 03 17:02	7° $\approx$ 04'33	
	1887 Aug 27 03:24	0° $\Omega$			1892 Nov 09 09:15	0° $\mathcal{H}$	
	1887 Oct 14 11:33	0° $\mathcal{M}$			1892 Dec 27 23:03	0° $\mathcal{Y}$	
	1887 Dec 06 08:34	0° $\mathcal{A}$		asc. node	1893 Jan 08 21:33	7° $\mathcal{Y}$ 49'35	
	1888 Feb 27 10:55	0° $\mathcal{M}$			1893 Feb 11 08:23	0° $\mathcal{B}$	
retrograde	1888 Mar 04 11:15	0° $\mathcal{M}$ 12'56			1893 Mar 28 18:49	0° $\Pi$	
	1888 Mar 10 07:54	30° $\mathcal{R}\mathcal{A}$			1893 May 14 01:59	0° $\mathcal{G}$	
opposition	1888 Apr 11 06:16	21° $\mathcal{A}$ 47'16	2°13'02		1893 Jun 30 04:04	0° $\Omega$	
greatest brilliancy	1888 Apr 11 18:54	21° $\mathcal{A}$ 35'14	-1.6m	evening set	1893 Jul 20 11:41	12° $\Omega$ 52'13	
min. Earth dist.	1888 Apr 17 08:33	19° $\mathcal{A}$ 28'03	0.60501 AU		1893 Aug 16 12:07	0° $\mathcal{M}$	
direct	1888 May 22 04:41	11° $\mathcal{A}$ 56'07		max. Earth dist.	1893 Aug 28 21:57	7° $\mathcal{M}$ 53'38	2.67329 AU
desc. node	1888 Jun 05 19:11	13° $\mathcal{A}$ 14'13					
	1888 Jul 22 03:42	0° $\mathcal{M}$		conjunction	1893 Sep 04 09:00	12° $\mathcal{M}$ 00'50	1°03'32
	1888 Sep 10 19:34	0° $\mathcal{A}$		minimum elong	1893 Sep 04 09:48	12° $\mathcal{M}$ 02'06	1°03'31
	1888 Oct 23 11:07	0° $\mathcal{B}$			1893 Oct 02 09:37	0° $\mathcal{A}$	
	1888 Dec 02 01:37	0° $\approx$		morning rise	1893 Oct 18 16:47	10° $\mathcal{A}$ 33'49	
	1889 Jan 09 14:09	0° $\mathcal{H}$			1893 Nov 17 07:50	0° $\mathcal{M}$	
	1889 Feb 17 07:53	0° $\mathcal{Y}$			1894 Jan 01 01:49	0° $\mathcal{A}$	
	1889 Mar 29 05:26	0° $\mathcal{B}$		desc. node	1894 Jan 26 16:49	17° $\mathcal{A}$ 32'16	
asc. node	1889 Apr 06 00:21	5° $\mathcal{B}$ 42'55			1894 Feb 13 16:37	0° $\mathcal{B}$	

	1894 Mar 28 10:33	0°≈		direct	1899 Feb 27 05:54	19°☾25'07	
	1894 May 09 23:34	0°✕			1899 Apr 15 10:23	0°♈	
	1894 Jun 23 07:33	0°♑			1899 Jun 16 04:25	0°♍	
	1894 Aug 19 10:01	0°♄			1899 Aug 05 23:06	0°♊	
retrograde	1894 Sep 16 00:15	5°♄03'48		desc. node	1899 Sep 18 13:27	28°♊12'50	
min. Earth dist.	1894 Oct 13 00:05	0°♄07'38	0.43098 AU		1899 Sep 21 05:12	0°♋	
	1894 Oct 13 09:37	30°♑			1899 Nov 03 06:05	0°♌	
opposition	1894 Oct 20 22:16	27°♑31'05	-2°11'57	evening set	1899 Nov 19 00:18	11°♌27'51	
greatest brilliancy	1894 Oct 20 08:28	27°♑42'31	-2.6m	max. Earth dist.	1899 Dec 08 13:43	26°♌01'10	2.40717 AU
direct	1894 Nov 21 14:34	21°♑20'58			1899 Dec 13 20:16	0°♍	
asc. node	1894 Nov 26 21:11	21°♑31'55					
	1894 Dec 31 08:13	0°♄		conjunction	1900 Jan 16 04:49	25°♍38'40	-1°00'06
	1895 Mar 01 21:13	0°♈		minimum elong	1900 Jan 16 03:01	25°♍35'10	1°00'05
	1895 Apr 22 04:57	0°☾			1900 Jan 21 18:50	0°≈	
	1895 Jun 10 16:15	0°♈			1900 Feb 28 22:15	0°✕	
	1895 Jul 29 02:27	0°♍		morning rise	1900 Mar 25 00:40	18°✕57'36	
evening set	1895 Aug 26 13:46	18°♍00'41			1900 Apr 08 03:58	0°♑	
	1895 Sep 14 05:14	0°♊			1900 May 17 09:05	0°♄	
max. Earth dist.	1895 Sep 21 20:54	4°♊58'23	2.62923 AU		1900 Jun 27 09:20	0°♈	
				asc. node	1900 Jul 19 18:26	15°♈38'43	
conjunction	1895 Oct 11 08:38	17°♊46'52	0°35'22		1900 Aug 10 01:15	0°☾	
minimum elong	1895 Oct 11 09:41	17°♊48'37	0°35'21		1900 Sep 26 18:08	0°♈	
	1895 Oct 29 15:14	0°♋			1900 Nov 23 08:41	0°♍	
morning rise	1895 Nov 26 13:48	19°♋05'41		retrograde	1901 Jan 13 07:04	12°♍32'50	
	1895 Dec 12 04:48	0°♌		opposition	1901 Feb 22 06:11	2°♍57'27	4°24'55
desc. node	1895 Dec 14 16:10	1°♌44'33		greatest brilliancy	1901 Feb 22 08:43	2°♍54'56	-1.3m
	1896 Jan 23 00:38	0°♍		min. Earth dist.	1901 Feb 23 02:33	2°♍37'10	0.67741 AU
	1896 Mar 03 11:09	0°≈			1901 Mar 01 19:28	30°♑♈	
	1896 Apr 12 01:36	0°✕		direct	1901 Apr 04 06:52	23°♈03'48	
	1896 May 21 16:47	0°♑			1901 May 11 06:05	0°♍	
	1896 Jul 01 17:52	0°♄			1901 Jul 13 19:59	0°♊	
	1896 Aug 16 02:37	0°♈		desc. node	1901 Aug 06 12:26	13°♊59'36	
asc. node	1896 Oct 13 19:12	26°♈54'25			1901 Aug 31 18:13	0°♋	
retrograde	1896 Nov 02 06:48	29°♈24'34			1901 Oct 14 12:48	0°♌	
min. Earth dist.	1896 Dec 04 13:40	22°♈20'34	0.56076 AU		1901 Nov 24 04:44	0°♍	
opposition	1896 Dec 11 05:42	19°♈44'48	2°36'44		1902 Jan 01 23:54	0°≈	
greatest brilliancy	1896 Dec 10 13:14	20°♈00'50	-1.9m	evening set	1902 Jan 20 22:05	14°≈54'49	
direct	1897 Jan 16 08:18	11°♈34'00			1902 Feb 08 23:53	0°✕	
	1897 Mar 22 00:19	0°☾			1902 Mar 19 04:31	0°♑	
	1897 May 18 11:51	0°♈					
	1897 Jul 08 15:02	0°♍		conjunction	1902 Mar 30 00:47	8°♑23'34	-0°42'02
	1897 Aug 25 16:44	0°♊		minimum elong	1902 Mar 30 03:55	8°♑29'36	0°42'00
evening set	1897 Oct 03 09:22	25°♊25'24			1902 Apr 27 10:49	0°♄	
	1897 Oct 10 03:59	0°♋		max. Earth dist.	1902 May 20 08:15	16°♄55'38	2.43066 AU
max. Earth dist.	1897 Oct 20 03:41	6°♋49'01	2.53462 AU	morning rise	1902 Jun 04 08:27	27°♄46'14	
desc. node	1897 Oct 31 14:47	14°♋44'55		asc. node	1902 Jun 06 17:01	29°♄27'21	
					1902 Jun 07 11:19	0°♈	
conjunction	1897 Nov 21 12:11	29°♋29'30	-0°12'34		1902 Jul 20 17:43	0°☾	
minimum elong	1897 Nov 21 11:36	29°♋28'28	0°12'33		1902 Sep 04 14:47	0°♈	
behind sun begin	1897 Nov 20 21:45	29°♋03'44			1902 Oct 23 22:54	0°♍	
behind sun end	1897 Nov 22 01:28	29°♋53'13			1902 Dec 20 03:33	0°♊	
	1897 Nov 22 05:15	0°♌		retrograde	1903 Feb 18 15:34	16°♊17'11	
	1898 Jan 02 04:38	0°♍		opposition	1903 Mar 29 07:31	7°♊26'28	3°07'50
morning rise	1898 Jan 13 20:55	8°♍46'56		greatest brilliancy	1903 Mar 29 20:27	7°♊13'54	-1.5m
	1898 Feb 10 15:16	0°≈		min. Earth dist.	1903 Apr 02 23:40	5°♊37'40	0.63803 AU
	1898 Mar 21 05:46	0°✕			1903 Apr 19 20:47	30°♑♍	
	1898 Apr 28 20:10	0°♑		direct	1903 May 09 15:26	27°♍26'12	
	1898 Jun 07 09:34	0°♄			1903 May 30 17:20	0°♊	
	1898 Jul 19 02:07	0°♈		desc. node	1903 Jun 24 10:53	8°♊06'17	
asc. node	1898 Aug 31 18:37	28°♈41'58			1903 Aug 06 16:27	0°♋	
	1898 Sep 02 21:35	0°☾			1903 Sep 22 13:52	0°♌	
	1898 Oct 30 22:19	0°♈			1903 Nov 03 05:31	0°♍	
retrograde	1898 Dec 09 20:00	8°♈40'46			1903 Dec 12 09:56	0°≈	
	1899 Jan 15 19:12	30°♑☾			1904 Jan 19 15:50	0°✕	
min. Earth dist.	1899 Jan 15 22:37	29°☾56'35	0.65070 AU		1904 Feb 27 03:12	0°♑	
opposition	1899 Jan 18 23:32	28°☾43'27	4°21'49	evening set	1904 Mar 31 11:41	25°♑20'05	
greatest brilliancy	1899 Jan 18 11:28	28°☾55'34	-1.4m		1904 Apr 06 18:05	0°♄	

asc. node	1904 Apr 23 16:05	12°♄26'06			1909 Jul 21 08:36	0°♑	
	1904 May 18 03:35	0°♈		retrograde	1909 Aug 23 02:20	6°♑47'42	
				min. Earth dist.	1909 Sep 18 18:58	2°♑20'56	0.38947 AU
conjunction	1904 May 30 17:06	8°♈49'15	0°22'49	opposition	1909 Sep 24 10:09	0°♑42'38	-4°54'27
minimum elong	1904 May 30 15:48	8°♈47'00	0°22'48	greatest brilliancy	1909 Sep 23 14:49	0°♑56'43	-2.8m
	1904 Jun 30 14:56	0°♄			1909 Sep 26 21:20	30°♋	
max. Earth dist.	1904 Jul 01 20:40	0°♄50'03	2.55988 AU	direct	1909 Oct 24 07:15	25°♋26'53	
morning rise	1904 Jul 23 16:09	15°♄21'16			1909 Nov 20 20:47	0°♑	
	1904 Aug 15 03:22	0°♏		asc. node	1909 Dec 14 12:39	9°♑14'17	
	1904 Oct 01 13:52	0°♐			1910 Jan 23 01:53	0°♄	
	1904 Nov 20 06:24	0°♑			1910 Mar 14 07:17	0°♈	
	1905 Jan 13 19:26	0°♌			1910 May 01 20:49	0°♄	
retrograde	1905 Apr 02 20:46	25°♌06'31			1910 Jun 19 03:30	0°♏	
opposition	1905 May 08 20:07	17°♌32'06	0°07'09		1910 Aug 06 00:58	0°♐	
greatest brilliancy	1904 Sep 15 22:23	20°♏14'26	1.8m	evening set	1910 Aug 13 05:40	4°♐32'59	
desc. node	1905 May 11 09:33	16°♌36'19		max. Earth dist.	1910 Sep 13 05:46	24°♐20'18	2.65277 AU
min. Earth dist.	1905 May 16 18:23	14°♌40'25	0.53660 AU		1910 Sep 22 00:14	0°♑	
direct	1905 Jun 17 07:24	8°♌19'33					
	1905 Aug 21 19:33	0°♊		conjunction	1910 Sep 27 17:00	3°♑41'49	0°48'56
	1905 Oct 08 00:06	0°♊		minimum elong	1910 Sep 27 18:08	3°♑43'40	0°48'55
	1905 Nov 18 04:15	0°♋			1910 Nov 06 13:39	0°♌	
	1905 Dec 27 13:50	0°♋		morning rise	1910 Nov 11 17:22	3°♌27'44	
	1906 Feb 04 23:45	0°♑			1910 Dec 20 12:16	0°♊	
asc. node	1906 Mar 11 15:13	25°♑43'45		desc. node	1911 Jan 01 07:16	8°♊14'34	
	1906 Mar 17 11:54	0°♄			1911 Jan 31 21:30	0°♊	
	1906 Apr 28 17:00	0°♈			1911 Mar 14 00:07	0°♋	
evening set	1906 May 25 15:23	18°♈27'56			1911 Apr 23 08:28	0°♋	
	1906 Jun 11 19:39	0°♄			1911 Jun 02 21:47	0°♑	
					1911 Jul 15 16:01	0°♄	
conjunction	1906 Jul 15 19:57	22°♄22'39	1°01'07		1911 Sep 05 15:20	0°♈	
minimum elong	1906 Jul 15 18:48	22°♄20'48	1°01'08	retrograde	1911 Oct 18 08:37	10°♈57'47	
	1906 Jul 27 14:13	0°♏		asc. node	1911 Nov 01 12:43	9°♈28'14	
max. Earth dist.	1906 Jul 29 05:38	1°♏03'36	2.64483 AU	min. Earth dist.	1911 Nov 17 11:09	4°♈42'55	0.51120 AU
morning rise	1906 Aug 31 23:38	22°♏40'05		opposition	1911 Nov 25 04:59	1°♈48'53	1°12'21
	1906 Sep 12 12:53	0°♐		greatest brilliancy	1911 Nov 24 19:41	1°♈57'36	-2.1m
	1906 Oct 30 04:26	0°♑			1911 Nov 30 04:08	30°♋	
	1906 Dec 17 12:07	0°♌		direct	1911 Dec 29 16:25	24°♋18'13	
	1907 Feb 05 09:29	0°♊			1912 Jan 30 21:02	0°♈	
desc. node	1907 Mar 29 09:54	28°♊22'11			1912 Apr 05 11:31	0°♄	
	1907 Apr 01 18:32	0°♊			1912 May 28 08:16	0°♏	
retrograde	1907 Jun 05 06:42	18°♊53'55			1912 Jul 17 02:42	0°♐	
opposition	1907 Jul 06 15:28	13°♊23'24	-5°14'27		1912 Sep 02 17:03	0°♑	
greatest brilliancy	1907 Jul 07 19:32	13°♊02'42	-2.7m	evening set	1912 Sep 18 18:56	10°♑27'29	
min. Earth dist.	1907 Jul 13 04:41	11°♊27'56	0.40758 AU	max. Earth dist.	1912 Oct 08 17:59	23°♑41'28	2.57707 AU
direct	1907 Aug 09 03:28	6°♊58'50			1912 Oct 18 02:39	0°♌	
	1907 Oct 13 14:29	0°♋					
	1907 Nov 29 04:30	0°♋		conjunction	1912 Nov 05 02:17	12°♌18'27	0°07'49
	1908 Jan 11 04:39	0°♑		minimum elong	1912 Nov 05 02:36	12°♌18'58	0°07'49
asc. node	1908 Jan 27 13:04	11°♑28'32		behind sun begin	1912 Nov 04 08:32	11°♌47'46	
	1908 Feb 23 03:25	0°♄		behind sun end	1912 Nov 05 20:39	12°♌50'12	
	1908 Apr 07 04:06	0°♈		desc. node	1912 Nov 18 06:18	21°♌28'53	
	1908 May 22 14:14	0°♄			1912 Nov 30 07:40	0°♊	
evening set	1908 Jul 06 12:25	28°♄56'56		morning rise	1912 Dec 24 18:41	17°♊37'59	
	1908 Jul 08 03:54	0°♏			1913 Jan 10 13:43	0°♊	
max. Earth dist.	1908 Aug 21 01:48	27°♏57'37	2.67612 AU		1913 Feb 19 08:00	0°♋	
					1913 Mar 30 05:53	0°♋	
conjunction	1908 Aug 22 05:24	28°♏41'31	1°08'03		1913 May 08 03:00	0°♑	
minimum elong	1908 Aug 22 05:45	28°♏42'05	1°08'03		1913 Jun 17 00:38	0°♄	
	1908 Aug 24 06:44	0°♐			1913 Jul 29 10:31	0°♈	
morning rise	1908 Oct 05 17:17	27°♐05'29			1913 Sep 15 17:18	0°♄	
	1908 Oct 10 06:05	0°♑		asc. node	1913 Sep 18 11:30	1°♄30'53	
	1908 Nov 25 14:18	0°♌		retrograde	1913 Nov 26 21:11	24°♄33'53	
	1909 Jan 10 03:55	0°♊		min. Earth dist.	1914 Jan 01 05:55	16°♄25'09	0.62244 AU
desc. node	1909 Feb 13 08:57	22°♊48'51		opposition	1914 Jan 05 18:35	14°♄36'44	3°56'09
	1909 Feb 24 02:13	0°♊		greatest brilliancy	1914 Jan 05 02:26	14°♄52'52	-1.5m
	1909 Apr 09 20:34	0°♋		direct	1914 Feb 12 23:35	5°♄40'15	
	1909 May 25 22:53	0°♋			1914 May 01 20:30	0°♏	

	1914 Jun 26 04:48	0°♍		behind sun end	1919 May 10 19:54	18°♌49'54	
	1914 Aug 14 14:10	0°♊		asc. node	1919 May 11 08:06	19°♌11'58	
	1914 Sep 29 10:38	0°♎			1919 May 26 09:38	0°♊	
desc. node	1914 Oct 06 05:16	4°♎36'23		max. Earth dist.	1919 Jun 19 10:05	16°♊49'22	2.51323 AU
evening set	1914 Oct 31 09:23	22°♎06'53		morning rise	1919 Jul 06 23:28	28°♊49'26	
	1914 Nov 11 10:46	0°♈			1919 Jul 08 17:14	0°♋	
max. Earth dist.	1914 Nov 15 03:33	2°♈39'51	2.45797 AU		1919 Aug 23 06:17	0°♎	
	1914 Dec 22 03:48	0°♐			1919 Oct 10 03:53	0°♍	
					1919 Nov 30 12:10	0°♊	
conjunction	1914 Dec 24 04:19	1°♐31'33	-0°44'48		1920 Jan 31 23:18	0°♎	
minimum elong	1914 Dec 24 02:15	1°♐27'40	0°44'47	retrograde	1920 Mar 15 03:04	9°♎05'57	
	1915 Jan 30 06:12	0°♐		opposition	1920 Apr 21 08:43	0°♎56'16	1°33'01
morning rise	1915 Feb 24 01:29	19°♐24'26		greatest brilliancy	1920 Apr 21 18:58	0°♎46'39	-1.7m
	1915 Mar 09 12:56	0°♈			1920 Apr 23 20:29	30°♎	
	1915 Apr 16 20:42	0°♍		min. Earth dist.	1920 Apr 28 04:29	28°♊22'47	0.58306 AU
	1915 May 26 03:08	0°♌		desc. node	1920 May 28 01:59	21°♊20'33	
	1915 Jul 06 06:23	0°♊		direct	1920 May 31 22:25	21°♊14'39	
asc. node	1915 Aug 06 09:51	21°♊26'47			1920 Jul 10 18:14	0°♎	
	1915 Aug 19 09:10	0°♋			1920 Sep 04 20:27	0°♈	
	1915 Oct 07 20:48	0°♎			1920 Oct 18 13:22	0°♐	
retrograde	1915 Dec 31 22:29	29°♎49'24			1920 Nov 27 13:38	0°♐	
min. Earth dist.	1916 Feb 09 10:26	20°♎18'42	0.67485 AU		1921 Jan 05 07:39	0°♈	
opposition	1916 Feb 10 02:39	20°♎02'29	4°33'20		1921 Feb 13 05:21	0°♍	
greatest brilliancy	1916 Feb 09 23:18	20°♎05'50	-1.3m		1921 Mar 25 06:26	0°♌	
direct	1916 Mar 21 14:43	10°♎19'34		asc. node	1921 Mar 28 06:26	2°♌11'56	
	1916 May 28 18:42	0°♍		evening set	1921 May 06 03:24	0°♊02'54	
	1916 Jul 23 05:23	0°♊			1921 May 06 01:45	0°♊	
desc. node	1916 Aug 23 03:48	19°♊10'00			1921 Jun 18 20:34	0°♋	
	1916 Sep 08 17:43	0°♎					
	1916 Oct 22 02:57	0°♈		conjunction	1921 Jun 29 06:26	6°♋56'46	0°50'20
	1916 Dec 01 17:10	0°♐		minimum elong	1921 Jun 29 04:51	6°♋54'09	0°50'19
evening set	1916 Dec 25 02:15	17°♐56'57		max. Earth dist.	1921 Jul 19 10:16	20°♋13'41	2.61785 AU
	1917 Jan 09 12:55	0°♐			1921 Aug 03 11:01	0°♎	
	1917 Feb 16 13:33	0°♈		morning rise	1921 Aug 17 11:10	9°♎01'08	
					1921 Sep 19 11:40	0°♍	
conjunction	1917 Feb 28 21:09	9°♈43'42	-1°00'27		1921 Nov 06 16:13	0°♊	
minimum elong	1917 Feb 28 23:25	9°♈48'10	1°00'26		1921 Dec 26 11:48	0°♎	
	1917 Mar 26 17:40	0°♍			1922 Feb 18 16:15	0°♈	
max. Earth dist.	1917 Apr 10 19:47	11°♍40'31	2.38097 AU	desc. node	1922 Apr 15 00:45	22°♈16'02	
	1917 May 04 22:14	0°♌		retrograde	1922 May 08 06:09	25°♈16'20	
morning rise	1917 May 10 03:46	3°♌54'53		opposition	1922 Jun 10 14:10	18°♈53'23	-2°57'17
	1917 Jun 14 20:57	0°♊		greatest brilliancy	1922 Jun 11 11:05	18°♈36'19	-2.4m
asc. node	1917 Jun 23 09:45	6°♊03'26		min. Earth dist.	1922 Jun 18 22:37	16°♈10'21	0.45595 AU
	1917 Jul 28 04:00	0°♋		direct	1922 Jul 17 02:12	11°♈06'08	
	1917 Sep 12 10:52	0°♎			1922 Sep 13 13:02	0°♐	
	1917 Nov 02 11:00	0°♍			1922 Oct 30 18:54	0°♐	
	1918 Jan 11 08:55	0°♊			1922 Dec 11 13:10	0°♈	
retrograde	1918 Feb 03 23:01	3°♊03'54			1923 Jan 21 10:07	0°♍	
	1918 Feb 25 19:00	30°♎		asc. node	1923 Feb 13 06:05	16°♍34'17	
opposition	1918 Mar 15 06:44	23°♎52'48	3°47'41		1923 Mar 04 00:41	0°♌	
greatest brilliancy	1918 Mar 15 16:54	23°♎42'48	-1.3m		1923 Apr 16 02:54	0°♊	
min. Earth dist.	1918 Mar 18 11:27	22°♎37'25	0.66130 AU		1923 May 30 21:19	0°♋	
direct	1918 Apr 25 16:44	13°♎50'58		evening set	1923 Jun 21 18:57	14°♋19'27	
	1918 Jun 23 19:19	0°♊			1923 Jul 16 01:25	0°♎	
desc. node	1918 Jul 11 03:02	8°♊35'19					
	1918 Aug 17 04:16	0°♎		conjunction	1923 Aug 08 19:35	15°♎12'24	1°08'43
	1918 Oct 01 07:42	0°♈		minimum elong	1923 Aug 08 19:23	15°♎12'05	1°08'44
	1918 Nov 11 10:13	0°♐		max. Earth dist.	1923 Aug 13 01:00	17°♎54'11	2.67039 AU
	1918 Dec 20 09:05	0°♐			1923 Sep 01 00:57	0°♍	
	1919 Jan 27 11:20	0°♈		morning rise	1923 Sep 22 23:14	13°♍56'53	
evening set	1919 Mar 06 04:06	29°♈31'33			1923 Oct 18 04:17	0°♊	
	1919 Mar 06 18:48	0°♍			1923 Dec 04 02:11	0°♎	
	1919 Apr 15 05:00	0°♌			1924 Jan 19 19:05	0°♈	
				desc. node	1924 Mar 02 00:08	26°♈58'14	
conjunction	1919 May 09 18:11	18°♌03'21	-0°01'02		1924 Mar 06 19:02	0°♐	
minimum elong	1919 May 09 18:18	18°♌03'33	0°01'02		1924 Apr 24 15:58	0°♐	
behind sun begin	1919 May 08 16:41	17°♌17'08			1924 Jun 24 16:27	0°♈	



retrograde	1924 Jul 24 11:01	5° $\text{X}$ 18'37			1929 Oct 06 12:27	0° $\text{M}$
opposition	1924 Aug 23 17:02	0° $\text{X}$ 15'01 -6°44'21		evening set	1929 Oct 13 18:47	4° $\text{M}$ 56'47
min. Earth dist.	1924 Aug 22 23:45	0° $\text{X}$ 26'29 0.37285 AU		desc. node	1929 Oct 22 20:53	11° $\text{M}$ 11'57
greatest brilliancy	1924 Aug 23 16:14	0° $\text{X}$ 15'32 -2.9m		max. Earth dist.	1929 Oct 29 04:14	15° $\text{M}$ 34'59 2.50824 AU
	1924 Aug 24 15:38	30° $\text{R}$ $\approx$			1929 Nov 18 13:29	0° $\text{X}$
direct	1924 Sep 22 09:15	25° $\approx$ 19'50				
	1924 Oct 19 18:42	0° $\text{X}$		conjunction	1929 Dec 03 07:11	10° $\text{X}$ 39'10 -0°24'42
	1924 Dec 19 11:09	0° $\text{Y}$		minimum elong	1929 Dec 03 06:01	10° $\text{X}$ 37'02 0°24'41
asc. node	1924 Dec 31 05:36	7° $\text{Y}$ 08'51			1929 Dec 29 10:45	0° $\text{Z}$
	1925 Feb 05 10:17	0° $\text{B}$		morning rise	1930 Jan 28 08:40	22° $\text{Z}$ 44'36
	1925 Mar 24 00:42	0° $\text{II}$			1930 Feb 06 18:21	0° $\approx$
	1925 May 09 22:43	0° $\text{E}$			1930 Mar 17 05:55	0° $\text{X}$
	1925 Jun 26 09:07	0° $\text{O}$			1930 Apr 24 17:27	0° $\text{Y}$
evening set	1925 Jul 29 20:39	21° $\text{O}$ 07'30			1930 Jun 03 03:15	0° $\text{B}$
	1925 Aug 12 21:12	0° $\text{M}$			1930 Jul 14 12:54	0° $\text{II}$
max. Earth dist.	1925 Sep 04 05:04	14° $\text{M}$ 12'29 2.66824 AU		asc. node	1930 Aug 23 02:26	26° $\text{II}$ 35'12
					1930 Aug 28 11:27	0° $\text{E}$
conjunction	1925 Sep 13 11:31	20° $\text{M}$ 08'26 0°59'09			1930 Oct 20 14:43	0° $\text{O}$
minimum elong	1925 Sep 13 12:29	20° $\text{M}$ 10'00 0°59'09		retrograde	1930 Dec 18 13:45	16° $\text{O}$ 48'44
	1925 Sep 28 19:01	0° $\text{E}$		min. Earth dist.	1931 Jan 25 14:13	7° $\text{O}$ 47'01 0.66214 AU
morning rise	1925 Oct 27 21:40	18° $\text{E}$ 58'20		opposition	1931 Jan 27 19:06	6° $\text{O}$ 54'00 4°29'51
	1925 Nov 13 14:02	0° $\text{M}$		greatest brilliancy	1931 Jan 27 09:56	7° $\text{O}$ 03'11 -1.4m
	1925 Dec 28 00:35	0° $\text{X}$			1931 Feb 16 14:27	30° $\text{R}$ $\text{E}$
desc. node	1926 Jan 17 22:47	14° $\text{X}$ 27'01		direct	1931 Mar 08 13:52	27° $\text{E}$ 25'48
	1926 Feb 09 03:34	0° $\text{Z}$			1931 Mar 30 03:47	0° $\text{O}$
	1926 Mar 23 04:39	0° $\approx$			1931 Jun 10 14:58	0° $\text{M}$
	1926 May 03 17:03	0° $\text{X}$			1931 Aug 01 16:37	0° $\text{E}$
	1926 Jun 15 00:50	0° $\text{Y}$		desc. node	1931 Sep 09 20:08	24° $\text{E}$ 59'10
	1926 Aug 01 09:14	0° $\text{B}$			1931 Sep 17 08:43	0° $\text{M}$
retrograde	1926 Sep 29 05:43	19° $\text{B}$ 27'26			1931 Oct 30 12:46	0° $\text{X}$
min. Earth dist.	1926 Oct 27 05:06	14° $\text{B}$ 04'09 0.45882 AU		evening set	1931 Dec 02 04:25	24° $\text{X}$ 00'17
opposition	1926 Nov 04 09:30	11° $\text{B}$ 12'37 -0°47'03			1931 Dec 10 03:10	0° $\text{Z}$
greatest brilliancy	1926 Nov 04 04:06	11° $\text{B}$ 17'21 -2.4m		max. Earth dist.	1932 Jan 01 23:24	17° $\text{Z}$ 30'10 2.38278 AU
asc. node	1926 Nov 18 04:10	6° $\text{B}$ 56'11			1932 Jan 18 00:34	0° $\approx$
direct	1926 Dec 07 02:25	4° $\text{B}$ 31'24				
	1927 Feb 22 00:43	0° $\text{II}$		conjunction	1932 Feb 01 05:31	11° $\approx$ 09'12 -1°04'23
	1927 Apr 17 01:29	0° $\text{E}$		minimum elong	1932 Feb 01 04:50	11° $\approx$ 07'51 1°04'22
	1927 Jun 06 11:36	0° $\text{O}$			1932 Feb 25 02:36	0° $\text{X}$
	1927 Jul 25 07:47	0° $\text{M}$			1932 Apr 03 07:02	0° $\text{Y}$
evening set	1927 Sep 04 21:56	26° $\text{M}$ 20'03		morning rise	1932 Apr 11 07:47	6° $\text{Y}$ 14'10
	1927 Sep 10 14:19	0° $\text{E}$			1932 May 12 10:53	0° $\text{B}$
max. Earth dist.	1927 Sep 28 19:20	11° $\text{E}$ 52'23 2.61267 AU			1932 Jun 22 09:19	0° $\text{II}$
				asc. node	1932 Jul 10 00:30	12° $\text{II}$ 25'08
conjunction	1927 Oct 21 02:09	26° $\text{E}$ 40'58 0°26'01			1932 Aug 04 19:52	0° $\text{E}$
minimum elong	1927 Oct 21 03:02	26° $\text{E}$ 42'26 0°25'59			1932 Sep 20 19:43	0° $\text{O}$
	1927 Oct 26 00:20	0° $\text{M}$			1932 Nov 13 21:25	0° $\text{M}$
desc. node	1927 Dec 05 21:27	28° $\text{M}$ 11'30		retrograde	1933 Jan 21 01:28	20° $\text{M}$ 17'01
morning rise	1927 Dec 07 06:55	29° $\text{M}$ 10'27		opposition	1933 Mar 01 20:28	10° $\text{M}$ 49'21 4°14'31
	1927 Dec 08 11:01	0° $\text{X}$		greatest brilliancy	1933 Mar 02 02:01	10° $\text{M}$ 43'51 -1.3m
	1928 Jan 19 02:02	0° $\text{Z}$		min. Earth dist.	1933 Mar 03 13:00	10° $\text{M}$ 09'11 0.67460 AU
	1928 Feb 28 06:30	0° $\approx$		direct	1933 Apr 12 02:17	0° $\text{M}$ 51'39
	1928 Apr 07 14:27	0° $\text{X}$			1933 Jul 06 22:02	0° $\text{E}$
	1928 May 16 21:35	0° $\text{Y}$		desc. node	1933 Jul 27 18:30	11° $\text{E}$ 46'48
	1928 Jun 26 09:04	0° $\text{B}$			1933 Aug 26 06:34	0° $\text{M}$
	1928 Aug 09 04:09	0° $\text{II}$			1933 Oct 09 11:35	0° $\text{X}$
	1928 Oct 03 03:46	0° $\text{E}$			1933 Nov 19 07:18	0° $\text{Z}$
asc. node	1928 Oct 05 03:26	0° $\text{E}$ 48'25			1933 Dec 28 03:43	0° $\approx$
retrograde	1928 Nov 12 04:13	9° $\text{E}$ 17'23			1934 Feb 04 04:13	0° $\text{X}$
min. Earth dist.	1928 Dec 15 14:28	1° $\text{E}$ 49'11 0.58497 AU		evening set	1934 Feb 05 19:28	1° $\text{X}$ 17'32
	1928 Dec 20 05:23	30° $\text{R}$ $\text{II}$			1934 Mar 14 09:08	0° $\text{Y}$
opposition	1928 Dec 21 13:35	29° $\text{II}$ 28'15 3°12'28				
greatest brilliancy	1928 Dec 20 19:55	29° $\text{II}$ 45'40 -1.7m		conjunction	1934 Apr 14 13:54	23° $\text{Y}$ 55'34 -0°27'40
direct	1929 Jan 27 12:02	20° $\text{II}$ 59'18		minimum elong	1934 Apr 14 16:09	23° $\text{Y}$ 59'48 0°27'38
	1929 Mar 10 23:18	0° $\text{E}$			1934 Apr 22 15:40	0° $\text{B}$
	1929 May 13 02:32	0° $\text{O}$		asc. node	1934 May 28 00:25	25° $\text{B}$ 56'50
	1929 Jul 04 10:03	0° $\text{M}$		max. Earth dist.	1934 Jun 02 11:06	29° $\text{B}$ 50'39 2.46054 AU
	1929 Aug 21 21:51	0° $\text{E}$			1934 Jun 02 16:21	0° $\text{II}$

morning rise	1934 Jun 17 00:15	10° $\Pi$ 07'43		direct	1939 Aug 23 23:58	23° $\mathfrak{Z}$ 55'06	
	1934 Jul 15 21:33	0° $\mathfrak{G}$			1939 Sep 24 01:13	0° $\approx$	
	1934 Aug 30 13:43	0° $\Omega$			1939 Nov 19 15:56	0° $\mathfrak{H}$	
	1934 Oct 18 04:59	0° $\mathfrak{M}$			1940 Jan 04 00:05	0° $\Upsilon$	
	1934 Dec 11 09:32	0° $\underline{\mathfrak{L}}$		asc. node	1940 Jan 17 21:03	9° $\Upsilon$ 26'27	
retrograde	1935 Feb 27 12:11	24° $\underline{\mathfrak{L}}$ 37'00			1940 Feb 17 01:54	0° $\mathfrak{B}$	
opposition	1935 Apr 06 17:34	15° $\underline{\mathfrak{L}}$ 59'21	2°37'48		1940 Apr 01 18:41	0° $\Pi$	
greatest brilliancy	1935 Apr 07 06:39	15° $\underline{\mathfrak{L}}$ 46'46	-1.5m		1940 May 17 14:45	0° $\mathfrak{G}$	
min. Earth dist.	1935 Apr 12 04:59	13° $\underline{\mathfrak{L}}$ 53'13	0.62102 AU		1940 Jul 03 10:32	0° $\Omega$	
direct	1935 May 17 21:37	6° $\underline{\mathfrak{L}}$ 03'08		evening set	1940 Jul 15 03:50	7° $\Omega$ 27'11	
desc. node	1935 Jun 14 17:00	10° $\underline{\mathfrak{L}}$ 26'24			1940 Aug 19 15:58	0° $\mathfrak{M}$	
	1935 Jul 29 17:32	0° $\mathfrak{M}$		max. Earth dist.	1940 Aug 26 06:42	4° $\mathfrak{M}$ 12'23	2.67559 AU
	1935 Sep 16 12:59	0° $\mathfrak{J}$					
	1935 Oct 28 18:22	0° $\mathfrak{Z}$		conjunction	1940 Aug 30 08:30	6° $\mathfrak{M}$ 48'03	1°05'51
	1935 Dec 07 04:33	0° $\approx$		minimum elong	1940 Aug 30 09:07	6° $\mathfrak{M}$ 49'03	1°05'52
	1936 Jan 14 13:59	0° $\mathfrak{H}$			1940 Oct 05 14:21	0° $\underline{\mathfrak{L}}$	
	1936 Feb 22 04:09	0° $\Upsilon$		morning rise	1940 Oct 13 16:47	5° $\underline{\mathfrak{L}}$ 13'29	
	1936 Apr 01 21:30	0° $\mathfrak{B}$			1940 Nov 20 17:16	0° $\mathfrak{M}$	
asc. node	1936 Apr 13 23:57	8° $\mathfrak{B}$ 53'48			1941 Jan 04 19:42	0° $\mathfrak{J}$	
evening set	1936 Apr 14 02:51	8° $\mathfrak{B}$ 59'06		desc. node	1941 Feb 03 14:26	20° $\mathfrak{J}$ 10'12	
	1936 May 13 09:17	0° $\Pi$			1941 Feb 17 23:32	0° $\mathfrak{Z}$	
					1941 Apr 02 11:45	0° $\approx$	
conjunction	1936 Jun 11 00:01	19° $\Pi$ 52'47	0°34'21		1941 May 16 05:05	0° $\mathfrak{H}$	
minimum elong	1936 Jun 10 22:25	19° $\Pi$ 50'02	0°34'20		1941 Jul 02 05:17	0° $\Upsilon$	
	1936 Jun 25 21:53	0° $\mathfrak{G}$		retrograde	1941 Sep 06 18:34	23° $\Upsilon$ 43'12	
max. Earth dist.	1936 Jul 08 17:15	8° $\mathfrak{G}$ 34'12	2.58252 AU	min. Earth dist.	1941 Oct 03 07:26	19° $\Upsilon$ 04'11	0.41046 AU
morning rise	1936 Aug 02 00:50	24° $\mathfrak{G}$ 34'11		opposition	1941 Oct 10 12:47	16° $\Upsilon$ 49'03	-3°22'14
	1936 Aug 10 09:43	0° $\Omega$		greatest brilliancy	1941 Oct 09 18:30	17° $\Upsilon$ 03'23	-2.7m
	1936 Sep 26 14:51	0° $\mathfrak{M}$		direct	1941 Nov 10 08:33	11° $\Upsilon$ 04'28	
	1936 Nov 14 14:52	0° $\underline{\mathfrak{L}}$		asc. node	1941 Dec 04 21:07	14° $\Upsilon$ 42'34	
	1937 Jan 05 20:39	0° $\mathfrak{M}$			1942 Jan 11 22:20	0° $\mathfrak{B}$	
	1937 Mar 13 03:16	0° $\mathfrak{J}$			1942 Mar 07 08:04	0° $\Pi$	
retrograde	1937 Apr 14 14:42	5° $\mathfrak{J}$ 32'01			1942 Apr 26 06:18	0° $\mathfrak{G}$	
desc. node	1937 May 01 16:12	3° $\mathfrak{J}$ 43'01			1942 Jun 14 03:55	0° $\Omega$	
	1937 May 14 22:52	30° $\mathfrak{K}$ $\mathfrak{M}$			1942 Aug 01 08:27	0° $\mathfrak{M}$	
opposition	1937 May 19 18:37	28° $\mathfrak{M}$ 20'36	-0°53'02	evening set	1942 Aug 21 10:07	12° $\mathfrak{M}$ 41'09	
greatest brilliancy	1937 May 20 01:09	28° $\mathfrak{M}$ 14'51	-2.1m		1942 Sep 17 10:10	0° $\underline{\mathfrak{L}}$	
min. Earth dist.	1937 May 28 03:32	25° $\mathfrak{M}$ 24'43	0.50854 AU	max. Earth dist.	1942 Sep 18 17:45	0° $\underline{\mathfrak{L}}$ 51'07	2.64078 AU
direct	1937 Jun 27 10:09	19° $\mathfrak{M}$ 31'54					
	1937 Aug 08 22:14	0° $\mathfrak{J}$		conjunction	1942 Oct 06 00:06	12° $\underline{\mathfrak{L}}$ 06'36	0°41'26
	1937 Sep 30 09:08	0° $\mathfrak{Z}$		minimum elong	1942 Oct 06 01:14	12° $\underline{\mathfrak{L}}$ 08'27	0°41'26
	1937 Nov 11 18:31	0° $\approx$			1942 Nov 01 22:36	0° $\mathfrak{M}$	
	1937 Dec 21 17:46	0° $\mathfrak{H}$		morning rise	1942 Nov 20 14:32	12° $\mathfrak{M}$ 38'54	
	1938 Jan 30 12:44	0° $\Upsilon$			1942 Dec 15 16:51	0° $\mathfrak{J}$	
asc. node	1938 Mar 01 22:01	22° $\Upsilon$ 26'51		desc. node	1942 Dec 22 13:54	4° $\mathfrak{J}$ 49'27	
	1938 Mar 12 07:48	0° $\mathfrak{B}$			1943 Jan 26 19:10	0° $\mathfrak{Z}$	
	1938 Apr 23 18:39	0° $\Pi$			1943 Mar 08 12:42	0° $\approx$	
evening set	1938 Jun 04 21:53	28° $\Pi$ 34'14			1943 Apr 17 10:25	0° $\mathfrak{H}$	
	1938 Jun 07 01:28	0° $\mathfrak{G}$			1943 May 27 09:25	0° $\Upsilon$	
	1938 Jul 22 22:26	0° $\Omega$			1943 Jul 07 23:05	0° $\mathfrak{B}$	
					1943 Aug 23 23:58	0° $\Pi$	
conjunction	1938 Jul 24 19:08	1° $\Omega$ 12'05	1°05'12	asc. node	1943 Oct 22 18:55	22° $\Pi$ 01'16	
minimum elong	1938 Jul 24 18:19	1° $\Omega$ 10'46	1°05'12	retrograde	1943 Oct 28 05:16	22° $\Pi$ 13'56	
max. Earth dist.	1938 Aug 03 18:10	7° $\Omega$ 36'32	2.65618 AU	min. Earth dist.	1943 Nov 28 13:14	15° $\Pi$ 31'36	0.53945 AU
	1938 Sep 07 20:22	0° $\mathfrak{M}$		opposition	1943 Dec 05 18:31	12° $\Pi$ 45'25	2°05'03
morning rise	1938 Sep 09 02:10	0° $\mathfrak{M}$ 47'18		greatest brilliancy	1943 Dec 05 04:02	12° $\Pi$ 59'19	-2.0m
	1938 Oct 25 06:20	0° $\underline{\mathfrak{L}}$		direct	1944 Jan 10 04:37	4° $\Pi$ 51'25	
	1938 Dec 11 23:25	0° $\mathfrak{M}$			1944 Mar 28 09:54	0° $\mathfrak{G}$	
	1939 Jan 29 09:49	0° $\mathfrak{J}$			1944 May 22 14:16	0° $\Omega$	
desc. node	1939 Mar 19 15:17	29° $\mathfrak{J}$ 03'42			1944 Jul 12 02:54	0° $\mathfrak{M}$	
	1939 Mar 21 07:25	0° $\mathfrak{Z}$			1944 Aug 29 00:23	0° $\underline{\mathfrak{L}}$	
	1939 May 25 00:19	0° $\approx$		evening set	1944 Sep 27 13:39	19° $\underline{\mathfrak{L}}$ 18'35	
retrograde	1939 Jun 22 18:34	4° $\approx$ 42'22			1944 Oct 13 12:09	0° $\mathfrak{M}$	
	1939 Jul 21 19:31	30° $\mathfrak{K}$ $\mathfrak{Z}$		max. Earth dist.	1944 Oct 15 14:26	1° $\mathfrak{M}$ 25'14	2.55454 AU
opposition	1939 Jul 23 08:03	29° $\mathfrak{Z}$ 34'48	-6°17'56	desc. node	1944 Nov 08 12:51	17° $\mathfrak{M}$ 54'13	
greatest brilliancy	1939 Jul 24 07:20	29° $\mathfrak{Z}$ 18'41	-2.8m				
min. Earth dist.	1939 Jul 27 20:46	28° $\mathfrak{Z}$ 19'52	0.38789 AU	conjunction	1944 Nov 14 18:27	22° $\mathfrak{M}$ 16'29	-0°03'46

minimum elong	1944 Nov 14 18:18	22° $\mathbb{M}$ 16'14	0°03'47		1949 Sep 07 04:51	0° $\mathcal{Q}$	
behind sun begin	1944 Nov 13 21:50	21° $\mathbb{M}$ 40'14			1949 Oct 27 00:58	0° $\mathbb{M}$	
behind sun end	1944 Nov 15 14:47	22° $\mathbb{M}$ 52'15			1949 Dec 26 05:23	0° $\mathcal{A}$	
	1944 Nov 25 16:11	0° $\mathcal{A}$		retrograde	1950 Feb 12 05:48	11° $\mathcal{A}$ 02'25	
morning rise	1945 Jan 05 07:38	29° $\mathcal{A}$ 37'53		opposition	1950 Mar 23 05:44	2° $\mathcal{A}$ 01'59	3°25'54
	1945 Jan 05 19:31	0° $\mathcal{B}$		greatest brilliancy	1950 Mar 23 17:38	1° $\mathcal{A}$ 50'22	-1.4m
	1945 Feb 14 09:57	0° $\approx$		min. Earth dist.	1950 Mar 27 06:10	0° $\mathcal{A}$ 27'56	0.64972 AU
	1945 Mar 25 03:43	0° $\mathcal{H}$			1950 Mar 28 11:05	30° $\mathcal{R}$ $\mathbb{M}$	
	1945 May 02 20:29	0° $\mathcal{Y}$		direct	1950 May 03 15:51	22° $\mathbb{M}$ 00'21	
	1945 Jun 11 11:52	0° $\mathcal{B}$			1950 Jun 11 20:26	0° $\mathcal{A}$	
	1945 Jul 23 08:59	0° $\mathbb{I}$		desc. node	1950 Jul 01 08:48	8° $\mathcal{A}$ 11'52	
	1945 Sep 07 20:56	0° $\mathcal{B}$			1950 Aug 10 16:47	0° $\mathbb{M}$	
asc. node	1945 Sep 08 17:59	0° $\mathcal{B}$ 31'10			1950 Sep 25 19:48	0° $\mathcal{A}$	
	1945 Nov 11 21:04	0° $\mathcal{Q}$			1950 Nov 06 06:40	0° $\mathcal{B}$	
retrograde	1945 Dec 04 22:49	3° $\mathcal{Q}$ 13'47			1950 Dec 15 08:59	0° $\approx$	
	1945 Dec 26 15:05	30° $\mathcal{R}$ $\mathcal{B}$			1951 Jan 22 13:05	0° $\mathcal{H}$	
min. Earth dist.	1946 Jan 10 07:34	24° $\mathcal{B}$ 45'02	0.63934 AU		1951 Mar 01 22:03	0° $\mathcal{Y}$	
greatest brilliancy	1946 Jan 13 10:41	23° $\mathcal{B}$ 29'55	-1.5m	evening set	1951 Mar 21 08:09	14° $\mathcal{Y}$ 53'58	
opposition	1946 Jan 14 00:52	23° $\mathcal{B}$ 15'44	4°13'13		1951 Apr 10 09:37	0° $\mathcal{B}$	
direct	1946 Feb 21 21:12	14° $\mathcal{B}$ 06'27		asc. node	1951 May 01 15:27	15° $\mathcal{B}$ 37'52	
	1946 Apr 22 19:31	0° $\mathcal{Q}$			1951 May 21 15:32	0° $\mathbb{I}$	
	1946 Jun 20 08:31	0° $\mathbb{M}$					
	1946 Aug 09 13:17	0° $\mathcal{A}$		conjunction	1951 May 22 13:22	0° $\mathbb{I}$ 38'42	0°13'12
	1946 Sep 24 16:35	0° $\mathbb{M}$		minimum elong	1951 May 22 12:31	0° $\mathbb{I}$ 37'12	0°13'12
desc. node	1946 Sep 26 11:24	1° $\mathbb{M}$ 12'17		behind sun begin	1951 May 21 22:41	0° $\mathbb{I}$ 12'41	
	1946 Nov 06 18:22	0° $\mathcal{A}$		behind sun end	1951 May 23 02:21	1° $\mathbb{I}$ 01'42	
evening set	1946 Nov 11 05:16	3° $\mathcal{A}$ 12'29		max. Earth dist.	1951 Jun 27 11:35	25° $\mathbb{I}$ 35'24	2.53983 AU
max. Earth dist.	1946 Nov 27 09:08	15° $\mathcal{A}$ 00'42	2.42952 AU		1951 Jul 03 23:42	0° $\mathcal{B}$	
	1946 Dec 17 10:56	0° $\mathcal{B}$		morning rise	1951 Jul 17 07:03	8° $\mathcal{B}$ 55'26	
					1951 Aug 18 10:55	0° $\mathcal{Q}$	
conjunction	1947 Jan 06 07:15	15° $\mathcal{B}$ 08'01	-0°54'27		1951 Oct 05 00:20	0° $\mathbb{M}$	
minimum elong	1947 Jan 06 05:07	15° $\mathcal{B}$ 03'54	0°54'27		1951 Nov 24 06:11	0° $\mathcal{A}$	
	1947 Jan 25 11:44	0° $\approx$			1952 Jan 20 01:33	0° $\mathbb{M}$	
	1947 Mar 04 16:46	0° $\mathcal{H}$		retrograde	1952 Mar 25 11:07	18° $\mathbb{M}$ 28'31	
morning rise	1947 Mar 12 15:25	6° $\mathcal{H}$ 15'15		opposition	1952 May 01 01:31	10° $\mathbb{M}$ 37'24	0°46'08
	1947 Apr 11 23:02	0° $\mathcal{Y}$		greatest brilliancy	1952 May 01 07:22	10° $\mathbb{M}$ 32'01	-1.9m
	1947 May 21 03:39	0° $\mathcal{B}$		min. Earth dist.	1952 May 08 13:26	7° $\mathbb{M}$ 52'06	0.55825 AU
	1947 Jul 01 03:34	0° $\mathbb{I}$		desc. node	1952 May 18 07:21	4° $\mathbb{M}$ 38'28	
asc. node	1947 Jul 27 18:11	18° $\mathbb{I}$ 31'22		direct	1952 Jun 10 02:45	1° $\mathbb{M}$ 09'55	
	1947 Aug 13 21:26	0° $\mathcal{B}$			1952 Aug 27 18:53	0° $\mathcal{A}$	
	1947 Oct 01 02:30	0° $\mathcal{Q}$			1952 Oct 12 04:45	0° $\mathcal{B}$	
	1947 Dec 01 11:44	0° $\mathbb{M}$			1952 Nov 21 19:39	0° $\approx$	
retrograde	1948 Jan 08 13:49	7° $\mathbb{M}$ 36'36			1952 Dec 30 21:35	0° $\mathcal{H}$	
	1948 Feb 12 10:28	30° $\mathcal{R}$ $\mathcal{Q}$			1953 Feb 08 01:07	0° $\mathcal{Y}$	
opposition	1948 Feb 17 16:16	27° $\mathcal{Q}$ 55'33	4°29'44	asc. node	1953 Mar 18 15:01	28° $\mathcal{Y}$ 47'02	
greatest brilliancy	1948 Feb 17 16:10	27° $\mathcal{Q}$ 55'38	-1.3m		1953 Mar 20 06:54	0° $\mathcal{B}$	
min. Earth dist.	1948 Feb 17 20:08	27° $\mathcal{Q}$ 51'41	0.67758 AU		1953 May 01 06:08	0° $\mathbb{I}$	
direct	1948 Mar 29 12:33	18° $\mathcal{Q}$ 06'13		evening set	1953 May 17 11:16	11° $\mathbb{I}$ 13'59	
	1948 May 18 20:53	0° $\mathbb{M}$			1953 Jun 14 03:49	0° $\mathcal{B}$	
	1948 Jul 17 05:25	0° $\mathcal{A}$					
desc. node	1948 Aug 13 10:05	16° $\mathcal{A}$ 24'39		conjunction	1953 Jul 08 21:00	16° $\mathcal{B}$ 22'03	0°57'10
	1948 Sep 03 13:58	0° $\mathbb{M}$		minimum elong	1953 Jul 08 19:38	16° $\mathcal{B}$ 19'50	0°57'10
	1948 Oct 17 05:43	0° $\mathcal{A}$		max. Earth dist.	1953 Jul 25 06:45	27° $\mathcal{B}$ 04'04	2.63373 AU
	1948 Nov 26 21:59	0° $\mathcal{B}$			1953 Jul 29 19:25	0° $\mathcal{Q}$	
	1949 Jan 04 17:50	0° $\approx$		morning rise	1953 Aug 25 20:40	17° $\mathcal{Q}$ 22'10	
evening set	1949 Jan 08 21:04	3° $\approx$ 14'48			1953 Sep 14 17:59	0° $\mathbb{M}$	
	1949 Feb 11 18:05	0° $\mathcal{H}$			1953 Nov 01 14:19	0° $\mathcal{A}$	
					1953 Dec 20 11:22	0° $\mathbb{M}$	
conjunction	1949 Mar 17 10:14	26° $\mathcal{H}$ 29'56	-0°51'26		1954 Feb 09 19:17	0° $\mathcal{A}$	
minimum elong	1949 Mar 17 13:28	26° $\mathcal{H}$ 36'13	0°51'24	desc. node	1954 Apr 05 07:24	27° $\mathcal{A}$ 07'40	
	1949 Mar 21 22:02	0° $\mathcal{Y}$			1954 Apr 12 16:28	0° $\mathcal{B}$	
	1949 Apr 30 02:33	0° $\mathcal{B}$		retrograde	1954 May 23 12:47	8° $\mathcal{B}$ 31'55	
max. Earth dist.	1949 May 07 01:22	5° $\mathcal{B}$ 11'57	2.40685 AU	opposition	1954 Jun 24 17:21	2° $\mathcal{B}$ 38'28	-4°15'48
morning rise	1949 May 24 21:02	18° $\mathcal{B}$ 20'00		greatest brilliancy	1954 Jun 25 20:20	2° $\mathcal{B}$ 17'33	-2.6m
	1949 Jun 10 00:57	0° $\mathbb{I}$		min. Earth dist.	1954 Jul 02 07:55	0° $\mathcal{B}$ 17'30	0.42780 AU
asc. node	1949 Jun 13 16:51	2° $\mathbb{I}$ 36'36			1954 Jul 03 07:23	30° $\mathcal{R}$ $\mathcal{A}$	
	1949 Jul 23 05:54	0° $\mathcal{B}$		direct	1954 Jul 29 15:20	25° $\mathcal{A}$ 35'22	

	1954 Aug 24 13:22	0°♄		conjunction	1959 Oct 30 01:46	5°♍53'14	0°15'47
	1954 Oct 21 12:03	0°♊		minimum elong	1959 Oct 30 02:21	5°♍54'14	0°15'46
	1954 Dec 04 07:41	0°♋		behind sun begin	1959 Oct 29 22:04	5°♍46'55	
	1955 Jan 15 04:33	0°♌		behind sun end	1959 Oct 30 06:38	6°♍01'32	
asc. node	1955 Feb 03 13:04	13°♌49'56		desc. node	1959 Nov 26 04:00	24°♍38'40	
	1955 Feb 26 10:22	0°♌			1959 Dec 03 18:09	0°♌	
	1955 Apr 10 23:09	0°♍		morning rise	1959 Dec 17 12:21	9°♌49'00	
	1955 May 26 00:50	0°♎			1960 Jan 14 04:59	0°♄	
evening set	1955 Jun 30 21:28	23°♎15'46			1960 Feb 23 04:11	0°♊	
	1955 Jul 11 09:22	0°♏			1960 Apr 02 06:24	0°♋	
					1960 May 11 07:19	0°♌	
conjunction	1955 Aug 17 02:46	23°♏26'16	1°08'48		1960 Jun 20 09:05	0°♌	
minimum elong	1955 Aug 17 02:53	23°♏26'27	1°08'48		1960 Aug 02 04:32	0°♍	
max. Earth dist.	1955 Aug 18 07:05	24°♏11'20	2.67465 AU		1960 Sep 21 04:06	0°♎	
	1955 Aug 27 10:13	0°♎		asc. node	1960 Sep 25 11:02	2°♎10'17	
morning rise	1955 Sep 30 20:17	21°♎55'40		retrograde	1960 Nov 20 17:04	18°♎39'14	
	1955 Oct 13 11:19	0°♏		min. Earth dist.	1960 Dec 25 05:40	10°♎48'15	0.60681 AU
	1955 Nov 29 01:33	0°♐		opposition	1960 Dec 30 10:21	8°♎44'34	3°40'29
	1956 Jan 14 02:28	0°♑		greatest brilliancy	1960 Dec 29 17:01	9°♎01'46	-1.6m
desc. node	1956 Feb 21 06:41	25°♑02'34			1961 Feb 05 00:25	30°♏♍	
	1956 Feb 28 20:05	0°♄		direct	1961 Feb 06 02:51	29°♍59'33	
	1956 Apr 14 23:40	0°♊			1961 Feb 07 05:23	0°♎	
	1956 Jun 03 07:51	0°♋			1961 May 06 01:13	0°♏	
retrograde	1956 Aug 10 16:18	23°♋39'23			1961 Jun 28 23:47	0°♎	
min. Earth dist.	1956 Sep 07 04:48	19°♋10'18	0.37809 AU		1961 Aug 17 00:41	0°♏	
opposition	1956 Sep 10 21:58	18°♋08'42	-5°55'20		1961 Oct 01 20:02	0°♐	
greatest brilliancy	1956 Sep 10 08:02	18°♋18'21	-2.9m	desc. node	1961 Oct 13 02:57	7°♐41'35	
direct	1956 Oct 10 10:06	13°♋09'05		evening set	1961 Oct 23 14:15	14°♐56'08	
	1956 Dec 06 11:24	0°♌		max. Earth dist.	1961 Nov 07 04:13	25°♐11'38	2.48096 AU
asc. node	1956 Dec 21 12:01	7°♌49'58			1961 Nov 13 21:50	0°♑	
	1957 Jan 28 14:19	0°♌					
	1957 Mar 17 21:34	0°♍		conjunction	1961 Dec 14 18:29	22°♑32'35	-0°36'30
	1957 May 04 15:22	0°♎		minimum elong	1961 Dec 14 16:45	22°♑29'22	0°36'29
	1957 Jun 21 12:18	0°♏			1961 Dec 24 17:50	0°♄	
evening set	1957 Aug 07 03:16	29°♏18'37			1962 Feb 01 23:06	0°♊	
	1957 Aug 08 05:27	0°♎		morning rise	1962 Feb 11 21:55	7°♊44'35	
max. Earth dist.	1957 Sep 09 11:53	20°♎32'19	2.66074 AU		1962 Mar 12 07:58	0°♋	
					1962 Apr 19 16:58	0°♌	
conjunction	1957 Sep 21 14:29	28°♎19'46	0°53'36	greatest brilliancy	1962 Apr 24 14:27	3°♌47'27	1.2m
minimum elong	1957 Sep 21 15:34	28°♎21'32	0°53'36		1962 May 28 23:47	0°♌	
	1957 Sep 24 04:31	0°♏			1962 Jul 09 03:50	0°♍	
morning rise	1957 Nov 05 06:39	27°♏36'03		asc. node	1962 Aug 13 09:19	24°♍04'25	
	1957 Nov 08 21:04	0°♐			1962 Aug 22 11:37	0°♎	
	1957 Dec 23 01:29	0°♑			1962 Oct 11 23:54	0°♏	
desc. node	1958 Jan 08 04:54	11°♑13'09		retrograde	1962 Dec 26 06:11	24°♏47'55	
	1958 Feb 03 18:57	0°♄		min. Earth dist.	1963 Feb 03 03:18	15°♏29'42	0.67044 AU
	1958 Mar 17 07:11	0°♊		opposition	1963 Feb 04 11:57	14°♏57'01	4°33'24
	1958 Apr 27 02:31	0°♋		greatest brilliancy	1963 Feb 04 05:59	15°♏03'00	-1.3m
	1958 Jun 07 06:21	0°♌		direct	1963 Mar 16 17:21	5°♏20'08	
	1958 Jul 21 07:03	0°♌			1963 Jun 03 06:30	0°♎	
	1958 Sep 21 05:26	0°♍			1963 Jul 27 04:14	0°♏	
retrograde	1958 Oct 10 09:46	2°♍32'08		desc. node	1963 Aug 31 01:15	21°♏53'01	
	1958 Oct 29 00:01	30°♏♌			1963 Sep 12 09:11	0°♐	
asc. node	1958 Nov 08 12:04	26°♌41'33			1963 Oct 25 17:31	0°♑	
min. Earth dist.	1958 Nov 08 13:10	26°♌40'34	0.48770 AU		1963 Dec 05 09:03	0°♄	
opposition	1958 Nov 16 14:32	23°♌44'11	0°26'09	evening set	1963 Dec 15 07:33	7°♄34'03	
greatest brilliancy	1958 Nov 16 10:57	23°♌47'27	-2.3m		1964 Jan 13 06:13	0°♊	
direct	1958 Dec 20 06:45	16°♌34'40					
	1959 Feb 10 13:57	0°♍		conjunction	1964 Feb 17 02:57	27°♊28'38	-1°04'05
	1959 Apr 10 09:46	0°♎		minimum elong	1964 Feb 17 03:57	27°♊30'35	1°04'05
	1959 Jun 01 02:26	0°♏		max. Earth dist.	1964 Feb 19 14:41	29°♊26'40	2.37046 AU
	1959 Jul 20 11:03	0°♎			1964 Feb 20 07:33	0°♋	
	1959 Sep 05 22:46	0°♏			1964 Mar 29 11:24	0°♌	
evening set	1959 Sep 13 08:38	4°♏47'55		morning rise	1964 Apr 27 22:42	22°♌41'35	
max. Earth dist.	1959 Oct 04 22:08	18°♏57'39	2.59396 AU		1964 May 07 14:41	0°♌	
	1959 Oct 21 09:40	0°♐			1964 Jun 17 11:43	0°♍	
				asc. node	1964 Jun 30 09:11	9°♍08'02	

	1964 Jul 30 18:22	0°☿			1969 Nov 04 18:50	0°♊		
	1964 Sep 15 05:22	0°♈			1969 Dec 15 14:22	0°♋		
	1964 Nov 06 03:20	0°♉			1970 Jan 24 21:29	0°♌		
retrograde	1965 Jan 28 22:38	28°♏02'47		asc. node	1970 Feb 20 05:35	19°♍18'27		
opposition	1965 Mar 09 12:29	18°♏43'46	4°00'10		1970 Mar 07 01:28	0°♎		
greatest brilliancy	1965 Mar 09 20:43	18°♏35'37	-1.3m		1970 Apr 18 18:59	0°♏		
min. Earth dist.	1965 Mar 12 01:08	17°♏43'57	0.66848 AU		1970 Jun 02 06:50	0°☿		
direct	1965 Apr 19 21:56	8°♏43'12		evening set	1970 Jun 14 17:37	8°☿12'19		
	1965 Jun 29 01:12	0°♐			1970 Jul 18 06:43	0°♈		
desc. node	1965 Jul 18 00:27	10°♑02'17						
	1965 Aug 20 12:16	0°♒		conjunction	1970 Aug 02 12:01	9°♈46'31	1°07'46	
	1965 Oct 04 06:46	0°♊		minimum elong	1970 Aug 02 11:33	9°♈45'47	1°07'46	
	1965 Nov 14 07:19	0°♋		max. Earth dist.	1970 Aug 09 04:50	14°♈03'48	2.66511 AU	
	1965 Dec 23 05:36	0°♌			1970 Sep 03 04:57	0°♍		
	1966 Jan 30 07:01	0°♍		morning rise	1970 Sep 17 02:08	8°♍49'14		
evening set	1966 Feb 21 22:39	17°♍49'58			1970 Oct 20 10:57	0°♎		
	1966 Mar 09 12:55	0°♏			1970 Dec 06 16:34	0°♏		
	1966 Apr 17 20:35	0°♐			1971 Jan 23 01:34	0°♊		
conjunction	1966 Apr 29 05:29	8°♐27'14	-0°12'20	desc. node	1971 Mar 09 21:39	28°♊28'05		
minimum elong	1966 Apr 29 06:27	8°♐29'01	0°12'20		1971 Mar 12 10:11	0°♋		
behind sun begin	1966 Apr 28 13:15	7°♐57'15		retrograde	1971 May 03 20:57	0°♌		
behind sun end	1966 Apr 29 23:40	9°♐00'45		opposition	1971 Jul 11 06:30	21°♌57'26		
asc. node	1966 May 18 07:56	22°♐24'08		greatest brilliancy	1971 Aug 10 06:53	17°♌00'18	-6°50'16	
	1966 May 28 22:07	0°♑		min. Earth dist.	1971 Aug 10 18:34	16°♌52'33	-2.9m	
max. Earth dist.	1966 Jun 12 16:23	10°♑25'26	2.49033 AU	direct	1971 Aug 12 02:26	16°♌31'26	0.37570 AU	
morning rise	1966 Jun 28 16:13	21°♑30'38			1971 Sep 09 13:51	11°♌53'25		
	1966 Jul 11 03:15	0°☿			1971 Nov 06 12:31	0°♍		
	1966 Aug 25 15:52	0°♈		asc. node	1971 Dec 26 18:04	0°♎		
	1966 Oct 12 18:37	0°♉			1972 Jan 08 05:14	8°♎03'45		
	1966 Dec 04 00:55	0°♊			1972 Feb 10 14:04	0°♋		
	1967 Feb 12 12:20	0°♋			1972 Mar 27 04:30	0°♌		
retrograde	1967 Mar 08 17:44	3°♋11'42			1972 May 12 13:14	0°☿		
	1967 Mar 31 06:10	30°♌♐		evening set	1972 Jun 28 16:09	0°♈		
opposition	1967 Apr 15 11:30	24°♐48'38	2°02'20		1972 Jul 23 15:28	15°♐48'27		
greatest brilliancy	1967 Apr 15 23:28	24°♐37'17	-1.6m	max. Earth dist.	1972 Aug 15 00:59	0°♏		
min. Earth dist.	1967 Apr 21 17:33	22°♐26'26	0.60121 AU		1972 Aug 31 13:28	10°♏30'21	2.67262 AU	
direct	1967 May 26 09:29	14°♐59'05		conjunction	1972 Sep 07 10:57	14°♏54'24	1°02'22	
desc. node	1967 Jun 04 23:54	15°♐33'37		minimum elong	1972 Sep 07 11:47	14°♏55'44	1°02'22	
	1967 Jul 19 22:56	0°♑			1972 Sep 30 23:23	0°♐		
	1967 Sep 10 01:44	0°♊		morning rise	1972 Oct 21 18:44	13°♐29'24		
	1967 Oct 23 02:14	0°♋			1972 Nov 15 22:17	0°♌		
	1967 Dec 01 20:12	0°♌			1972 Dec 30 16:12	0°♍		
	1968 Jan 09 09:49	0°♍		desc. node	1973 Jan 24 20:40	17°♍15'00		
	1968 Feb 17 03:18	0°♎			1973 Feb 12 05:50	0°♏		
	1968 Mar 27 23:43	0°♏			1973 Mar 26 20:59	0°♐		
asc. node	1968 Apr 04 05:55	5°♐20'10			1973 May 08 04:09	0°♋		
evening set	1968 Apr 26 23:05	21°♐45'15			1973 Jun 20 20:53	0°♌		
	1968 May 08 14:14	0°♑			1973 Aug 12 14:56	0°♎		
				retrograde	1973 Sep 19 23:19	9°♎16'18		
conjunction	1968 Jun 21 15:47	0°☿18'03	0°44'14	min. Earth dist.	1973 Oct 17 04:05	4°♎14'30	0.43603 AU	
minimum elong	1968 Jun 21 14:08	0°☿15'16	0°44'13	opposition	1973 Oct 25 03:27	1°♎34'33	-1°50'19	
	1968 Jun 21 05:03	0°☿		greatest brilliancy	1973 Oct 24 15:34	1°♎44'32	-2.6m	
max. Earth dist.	1968 Jul 15 03:27	15°☿55'16	2.60321 AU		1973 Oct 29 22:56	30°♏♐		
	1968 Aug 05 17:07	0°♈		asc. node	1973 Nov 25 03:55	25°♐18'33		
morning rise	1968 Aug 11 00:10	3°♈25'12		direct	1973 Nov 26 00:06	25°♐18'16		
	1968 Sep 21 18:39	0°♉			1973 Dec 24 08:09	0°♋		
	1968 Nov 09 06:09	0°♊			1974 Feb 27 10:11	0°♌		
	1968 Dec 29 22:07	0°♋			1974 Apr 20 08:18	0°☿		
	1969 Feb 25 06:21	0°♌			1974 Jun 09 00:54	0°♈		
desc. node	1969 Apr 21 22:26	16°♌34'35			1974 Jul 27 14:04	0°♉		
retrograde	1969 Apr 27 11:24	16°♌45'36		evening set	1974 Aug 29 16:43	20°♏56'07		
opposition	1969 May 31 15:51	9°♌59'58	-2°01'07		1974 Sep 12 19:08	0°♐		
greatest brilliancy	1969 Jun 01 06:43	9°♌47'24	-2.3m	max. Earth dist.	1974 Sep 24 11:56	7°♐36'05	2.62622 AU	
min. Earth dist.	1969 Jun 09 04:09	7°♌07'28	0.47955 AU					
direct	1969 Jul 08 06:07	1°♌41'55		conjunction	1974 Oct 14 12:56	20°♐47'58	0°32'50	
	1969 Sep 21 06:35	0°♏		minimum elong	1974 Oct 14 13:57	20°♐49'38	0°32'50	

	1974 Oct 28 07:05	0°♌			1979 Aug 08 13:28	0°♏	
morning rise	1974 Nov 29 22:20	22°♌19'16			1979 Sep 24 21:21	0°♏	
	1974 Dec 10 22:05	0°♏			1979 Nov 19 21:36	0°♏	
desc. node	1974 Dec 12 19:19	1°♏19'31		retrograde	1980 Jan 16 06:18	15°♏20'48	
	1975 Jan 21 18:49	0°♏		opposition	1980 Feb 25 05:43	5°♏46'43	4°22'05
	1975 Mar 03 05:32	0°♏		greatest brilliancy	1980 Feb 25 08:50	5°♏43'37	-1.3m
	1975 Apr 11 19:15	0°♏		min. Earth dist.	1980 Feb 26 06:00	5°♏22'36	0.67731 AU
	1975 May 21 08:14	0°♏			1980 Mar 11 20:46	30°♏♏	
	1975 Jul 01 03:53	0°♏		direct	1980 Apr 06 08:27	25°♏52'14	
	1975 Aug 14 20:47	0°♏			1980 May 04 02:26	0°♏	
asc. node	1975 Oct 13 02:43	28°♏50'45			1980 Jul 10 17:59	0°♏	
	1975 Oct 17 08:44	0°♏		desc. node	1980 Aug 03 16:21	13°♏56'23	
retrograde	1975 Nov 06 12:01	2°♏39'53			1980 Aug 29 05:50	0°♌	
	1975 Nov 25 18:30	30°♏♏			1980 Oct 12 06:27	0°♏	
min. Earth dist.	1975 Dec 09 00:03	25°♏32'02	0.56548 AU		1980 Nov 22 01:42	0°♏	
opposition	1975 Dec 15 13:58	22°♏58'12	2°47'32		1980 Dec 30 22:30	0°♏	
greatest brilliancy	1975 Dec 14 20:48	23°♏14'56	-1.8m	evening set	1981 Jan 24 09:12	19°♏16'00	
direct	1976 Jan 20 21:27	14°♏43'52			1981 Feb 06 22:48	0°♏	
	1976 Mar 18 13:15	0°♏			1981 Mar 17 02:40	0°♏	
	1976 May 16 11:10	0°♏					
	1976 Jul 06 23:27	0°♏		conjunction	1981 Apr 02 14:13	12°♏44'49	-0°38'44
	1976 Aug 24 05:55	0°♏		minimum elong	1981 Apr 02 17:14	12°♏50'36	0°38'42
evening set	1976 Oct 06 16:26	28°♏32'15			1981 Apr 25 07:17	0°♏	
	1976 Oct 08 20:23	0°♌		max. Earth dist.	1981 May 23 23:20	21°♏10'18	2.43616 AU
max. Earth dist.	1976 Oct 23 00:37	9°♌40'42	2.52957 AU	asc. node	1981 Jun 03 23:46	29°♏06'55	
desc. node	1976 Oct 29 18:37	14°♌20'57			1981 Jun 05 05:26	0°♏	
	1976 Nov 20 23:53	0°♏		morning rise	1981 Jun 07 10:19	1°♏34'22	
					1981 Jul 18 08:54	0°♏	
conjunction	1976 Nov 25 01:20	2°♏54'24	-0°15'45		1981 Sep 02 01:52	0°♏	
minimum elong	1976 Nov 25 00:36	2°♏53'07	0°15'45		1981 Oct 21 01:56	0°♏	
behind sun begin	1976 Nov 24 19:16	2°♏43'32			1981 Dec 16 00:14	0°♏	
behind sun end	1976 Nov 25 05:57	3°♏02'41		retrograde	1982 Feb 20 19:13	19°♏10'48	
	1977 Jan 01 00:42	0°♏		opposition	1982 Mar 31 10:13	10°♏22'19	2°59'31
morning rise	1977 Jan 17 22:07	12°♏43'24		greatest brilliancy	1982 Mar 31 23:03	10°♏09'53	-1.5m
	1977 Feb 09 11:57	0°♏		min. Earth dist.	1982 Apr 05 06:30	8°♏29'56	0.63512 AU
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	1977 Apr 27 15:46	0°♏		desc. node	1982 Jun 21 14:53	9°♏07'22	
	1977 Jun 06 03:00	0°♏			1982 Aug 03 11:45	0°♌	
	1977 Jul 17 15:13	0°♏			1982 Sep 20 01:20	0°♏	
asc. node	1977 Aug 30 02:20	28°♏48'35			1982 Oct 31 23:05	0°♏	
	1977 Sep 01 00:20	0°♏			1982 Dec 10 06:17	0°♏	
	1977 Oct 26 18:56	0°♏			1983 Jan 17 13:10	0°♏	
retrograde	1977 Dec 12 19:12	11°♏33'40			1983 Feb 25 00:19	0°♏	
min. Earth dist.	1978 Jan 19 03:01	2°♏46'10	0.65319 AU	evening set	1983 Apr 04 16:29	29°♏19'54	
opposition	1978 Jan 22 00:11	1°♏36'56	4°24'44		1983 Apr 05 14:03	0°♏	
greatest brilliancy	1978 Jan 21 12:38	1°♏48'29	-1.4m	asc. node	1983 Apr 21 23:34	12°♏04'37	
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direct	1978 Mar 02 09:56	22°♏16'34					
	1978 Apr 10 18:50	0°♏		conjunction	1983 Jun 03 11:21	12°♏19'26	0°25'58
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desc. node	1978 Sep 16 17:56	27°♏54'28		max. Earth dist.	1983 Jul 04 18:44	3°♏41'56	2.56424 AU
	1978 Sep 19 20:57	0°♌		morning rise	1983 Jul 27 01:04	18°♏29'10	
	1978 Nov 02 01:20	0°♏			1983 Aug 13 16:54	0°♏	
evening set	1978 Nov 22 17:54	15°♏03'44			1983 Sep 30 00:12	0°♏	
	1978 Dec 12 17:39	0°♏			1983 Nov 18 10:26	0°♏	
max. Earth dist.	1978 Dec 13 14:19	0°♏39'04	2.40191 AU		1984 Jan 11 03:20	0°♌	
				retrograde	1984 Apr 05 12:22	28°♌20'50	
conjunction	1979 Jan 20 12:18	29°♏50'34	-1°01'30	desc. node	1984 May 08 14:02	21°♌50'02	
minimum elong	1979 Jan 20 10:41	29°♏47'26	1°01'30	opposition	1984 May 11 08:52	20°♌50'37	-0°07'50
	1979 Jan 20 17:07	0°♏		greatest brilliancy	1983 Sep 20 03:52	23°♏51'07	1.8m
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morning rise	1979 Mar 29 22:28	23°♏40'04		direct	1984 Jun 19 18:17	11°♌41'56	
	1979 Apr 07 01:08	0°♏			1984 Aug 17 19:50	0°♏	
	1979 May 16 04:25	0°♏			1984 Oct 05 06:02	0°♏	
	1979 Jun 26 01:55	0°♏			1984 Nov 15 18:09	0°♏	
asc. node	1979 Jul 18 00:28	15°♏23'57			1984 Dec 25 06:38	0°♏	

	1985 Feb 02 17:19	0°♂					1989 Dec 18 04:57	0°♂
asc. node	1985 Mar 08 22:07	25°♂24'43		desc. node			1989 Dec 29 11:30	7°♂52'37
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conjunction	1985 Jul 18 02:41	25°♂25'41 1°02'24					1990 Aug 31 11:39	0°♂
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morning rise	1985 Sep 03 02:09	25°♂34'18		opposition			1990 Nov 27 20:33	5°♂20'31 1°27'35
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desc. node	1986 Mar 26 12:56	29°♂10'37					1991 Apr 03 00:49	0°♂
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retrograde	1986 Jun 08 23:25	23°♂06'44					1991 Jul 15 12:36	0°♂
opposition	1986 Jul 10 05:28	17°♂40'50 -5°30'33					1991 Sep 01 06:38	0°♂
greatest brilliancy	1986 Jul 11 09:18	17°♂20'32 -2.7m		evening set			1991 Sep 21 22:44	13°♂26'24
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max. Earth dist.	1987 Aug 23 12:36	0°♂26'37 2.67622 AU					1992 Mar 28 02:04	0°♂
							1992 May 05 21:36	0°♂
conjunction	1987 Aug 25 07:32	1°♂34'56 1°07'32					1992 Jun 14 15:56	0°♂
minimum elong	1987 Aug 25 07:58	1°♂35'37 1°07'32					1992 Jul 26 18:59	0°♂
morning rise	1987 Oct 08 18:43	29°♂58'49					1992 Sep 12 06:05	0°♂
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desc. node	1988 Feb 11 11:58	22°♂38'40		opposition			1993 Jan 07 22:42	17°♂39'53 4°01'55
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	1988 Apr 06 21:44	0°♂		direct			1993 Feb 15 07:43	8°♂40'31
	1988 May 22 07:42	0°♂					1993 Apr 27 23:40	0°♂
	1988 Jul 13 20:00	0°♂					1993 Jun 23 07:42	0°♂
retrograde	1988 Aug 26 14:40	11°♂27'50					1993 Aug 12 01:10	0°♂
min. Earth dist.	1988 Sep 22 03:13	6°♂59'37 0.39314 AU		desc. node			1993 Oct 03 09:00	4°♂15'13
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opposition	1988 Sep 28 03:31	5°♂13'38 -4°33'35					1993 Nov 09 05:29	0°♂
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	1989 Aug 03 13:35	0°♂					1994 Mar 07 11:01	0°♂
evening set	1989 Aug 15 07:48	7°♂25'47					1994 Apr 14 18:02	0°♂
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				asc. node			1994 Aug 03 17:36	21°♂19'13
conjunction	1989 Sep 29 19:00	6°♂36'28 0°46'55					1994 Aug 16 19:15	0°♂
minimum elong	1989 Sep 29 20:08	6°♂38'19 0°46'55					1994 Oct 04 15:48	0°♂
	1989 Nov 04 05:29	0°♂					1994 Dec 12 11:32	0°♂
morning rise	1989 Nov 13 21:44	6°♂30'15		retrograde			1995 Jan 02 21:27	2°♂40'08


























































































































	1995 Jan 22 23:48	30° $\mathbb{R}$ 8 $\mathbb{Q}$			1999 Nov 26 06:56	0° $\approx$	
opposition	1995 Feb 12 02:31	22° $\mathbb{Q}$ 54'16	4°32'40		2000 Jan 04 03:01	0° $\mathbb{H}$	
greatest brilliancy	1995 Feb 11 23:50	22° $\mathbb{Q}$ 56'57	-1.3m		2000 Feb 12 01:04	0° $\mathbb{Y}$	
min. Earth dist.	1995 Feb 11 14:15	23° $\mathbb{Q}$ 06'32	0.67569 AU		2000 Mar 23 01:25	0° $\mathbb{B}$	
direct	1995 Mar 24 17:18	13° $\mathbb{Q}$ 09'55		asc. node	2000 Mar 25 14:32	1° $\mathbb{B}$ 52'10	
	1995 May 25 16:09	0° $\mathbb{M}$			2000 May 03 19:18	0° $\mathbb{I}$	
	1995 Jul 21 09:21	0° $\underline{\mathbb{A}}$		evening set	2000 May 08 21:10	3° $\mathbb{I}$ 33'22	
desc. node	1995 Aug 21 07:30	18° $\underline{\mathbb{A}}$ 58'52			2000 Jun 16 12:30	0° $\mathbb{G}$	
	1995 Sep 07 07:00	0° $\mathbb{M}$					
	1995 Oct 20 21:02	0° $\mathbb{J}$		conjunction	2000 Jul 01 15:50	10° $\mathbb{G}$ 05'47	0°52'20
	1995 Nov 30 13:57	0° $\mathbb{Z}$		minimum elong	2000 Jul 01 14:18	10° $\mathbb{G}$ 03'15	0°52'19
evening set	1995 Dec 29 08:46	22° $\mathbb{Z}$ 07'04		max. Earth dist.	2000 Jul 21 05:13	22° $\mathbb{G}$ 57'12	2.62108 AU
	1996 Jan 08 11:02	0° $\approx$			2000 Aug 01 01:21	0° $\mathbb{Q}$	
	1996 Feb 15 11:50	0° $\mathbb{H}$		morning rise	2000 Aug 19 14:47	11° $\mathbb{Q}$ 57'02	
					2000 Sep 17 00:19	0° $\mathbb{M}$	
conjunction	1996 Mar 04 14:02	14° $\mathbb{H}$ 17'06	-0°58'42		2000 Nov 04 02:00	0° $\underline{\mathbb{A}}$	
minimum elong	1996 Mar 04 16:36	14° $\mathbb{H}$ 22'11	0°58'41		2000 Dec 23 14:37	0° $\mathbb{M}$	
	1996 Mar 24 15:12	0° $\mathbb{Y}$			2001 Feb 14 20:06	0° $\mathbb{J}$	
max. Earth dist.	1996 Apr 17 18:31	18° $\mathbb{Y}$ 38'04	2.38534 AU	desc. node	2001 Apr 12 04:42	24° $\mathbb{J}$ 22'07	
	1996 May 02 18:16	0° $\mathbb{B}$		retrograde	2001 May 11 16:08	29° $\mathbb{J}$ 02'57	
morning rise	1996 May 13 14:54	8° $\mathbb{B}$ 07'11		opposition	2001 Jun 13 17:46	22° $\mathbb{J}$ 45'46	-3°16'18
	1996 Jun 12 14:42	0° $\mathbb{I}$		greatest brilliancy	2001 Jun 14 16:34	22° $\mathbb{J}$ 27'18	-2.4m
asc. node	1996 Jun 20 16:39	5° $\mathbb{I}$ 45'14		min. Earth dist.	2001 Jun 21 22:51	20° $\mathbb{J}$ 06'36	0.45017 AU
	1996 Jul 25 18:32	0° $\mathbb{G}$		direct	2001 Jul 19 22:45	15° $\mathbb{J}$ 06'29	
	1996 Sep 09 20:02	0° $\mathbb{Q}$			2001 Sep 08 17:51	0° $\mathbb{Z}$	
	1996 Oct 30 07:13	0° $\mathbb{M}$			2001 Oct 27 17:19	0° $\approx$	
	1997 Jan 03 08:10	0° $\underline{\mathbb{A}}$			2001 Dec 08 21:52	0° $\mathbb{H}$	
retrograde	1997 Feb 06 00:37	5° $\underline{\mathbb{A}}$ 55'22			2002 Jan 18 22:53	0° $\mathbb{Y}$	
	1997 Mar 08 19:50	30° $\mathbb{R}$ 8 $\mathbb{M}$		asc. node	2002 Feb 10 13:06	16° $\mathbb{Y}$ 21'58	
opposition	1997 Mar 17 07:55	26° $\mathbb{M}$ 46'09	3°41'30		2002 Mar 01 15:05	0° $\mathbb{B}$	
greatest brilliancy	1997 Mar 17 18:22	26° $\mathbb{M}$ 35'54	-1.4m		2002 Apr 13 17:36	0° $\mathbb{I}$	
min. Earth dist.	1997 Mar 20 16:45	25° $\mathbb{M}$ 26'58	0.65939 AU		2002 May 28 11:43	0° $\mathbb{G}$	
direct	1997 Apr 27 19:09	16° $\mathbb{M}$ 44'18		evening set	2002 Jun 24 02:29	17° $\mathbb{G}$ 23'24	
	1997 Jun 19 08:30	0° $\underline{\mathbb{A}}$			2002 Jul 13 15:23	0° $\mathbb{Q}$	
desc. node	1997 Jul 08 06:33	8° $\underline{\mathbb{A}}$ 59'01					
	1997 Aug 14 08:42	0° $\mathbb{M}$		conjunction	2002 Aug 10 22:17	18° $\mathbb{Q}$ 06'09	1°08'51
	1997 Sep 28 22:22	0° $\mathbb{J}$		minimum elong	2002 Aug 10 22:10	18° $\mathbb{Q}$ 05'59	1°08'51
	1997 Nov 09 05:33	0° $\mathbb{Z}$		max. Earth dist.	2002 Aug 14 11:48	20° $\mathbb{Q}$ 22'29	2.67143 AU
	1997 Dec 18 06:37	0° $\approx$			2002 Aug 29 14:38	0° $\mathbb{M}$	
	1998 Jan 25 09:26	0° $\mathbb{H}$		morning rise	2002 Sep 24 23:27	16° $\mathbb{M}$ 46'31	
	1998 Mar 04 16:18	0° $\mathbb{Y}$			2002 Oct 15 17:38	0° $\underline{\mathbb{A}}$	
evening set	1998 Mar 09 15:25	3° $\mathbb{Y}$ 50'29			2002 Dec 01 14:26	0° $\mathbb{M}$	
	1998 Apr 13 01:04	0° $\mathbb{B}$			2003 Jan 17 04:22	0° $\mathbb{J}$	
asc. node	1998 May 08 14:53	18° $\mathbb{B}$ 50'07		desc. node	2003 Feb 28 04:21	26° $\mathbb{J}$ 59'46	
					2003 Mar 04 21:17	0° $\mathbb{Z}$	
conjunction	1998 May 12 19:45	21° $\mathbb{B}$ 52'33	0°02'44		2003 Apr 21 23:48	0° $\approx$	
minimum elong	1998 May 12 19:35	21° $\mathbb{B}$ 52'15	0°02'44		2003 Jun 17 02:25	0° $\mathbb{H}$	
behind sun begin	1998 May 11 18:19	21° $\mathbb{B}$ 06'40		retrograde	2003 Jul 29 07:37	10° $\mathbb{H}$ 08'02	
behind sun end	1998 May 13 20:50	22° $\mathbb{B}$ 37'47		min. Earth dist.	2003 Aug 27 09:46	5° $\mathbb{H}$ 22'46	0.37272 AU
	1998 May 24 03:42	0° $\mathbb{I}$		opposition	2003 Aug 28 17:59	5° $\mathbb{H}$ 01'14	-6°37'04
max. Earth dist.	1998 Jun 21 12:40	19° $\mathbb{I}$ 51'54	2.51843 AU	greatest brilliancy	2003 Aug 28 14:16	5° $\mathbb{H}$ 03'43	-2.9m
	1998 Jul 06 09:00	0° $\mathbb{G}$		direct	2003 Sep 27 07:52	0° $\mathbb{H}$ 07'07	
morning rise	1998 Jul 09 13:12	2° $\mathbb{G}$ 08'40			2003 Dec 16 13:24	0° $\mathbb{Y}$	
	1998 Aug 20 19:16	0° $\mathbb{Q}$		asc. node	2003 Dec 29 11:21	7° $\mathbb{Y}$ 38'17	
	1998 Oct 07 12:28	0° $\mathbb{M}$			2004 Feb 03 10:04	0° $\mathbb{B}$	
	1998 Nov 27 10:10	0° $\underline{\mathbb{A}}$			2004 Mar 21 07:39	0° $\mathbb{I}$	
	1999 Jan 26 11:59	0° $\mathbb{M}$			2004 May 07 08:46	0° $\mathbb{G}$	
retrograde	1999 Mar 18 13:41	12° $\mathbb{M}$ 12'11			2004 Jun 23 20:50	0° $\mathbb{Q}$	
opposition	1999 Apr 24 17:38	4° $\mathbb{M}$ 05'57	1°20'35	evening set	2004 Jul 31 23:42	24° $\mathbb{Q}$ 01'47	
greatest brilliancy	1999 Apr 25 02:46	3° $\mathbb{M}$ 57'24	-1.7m		2004 Aug 10 10:14	0° $\mathbb{M}$	
min. Earth dist.	1999 May 01 17:22	1° $\mathbb{M}$ 29'32	0.57847 AU	max. Earth dist.	2004 Sep 05 19:18	16° $\mathbb{M}$ 46'42	2.66717 AU
	1999 May 05 21:32	30° $\mathbb{R}$ 8 $\underline{\mathbb{A}}$					
desc. node	1999 May 26 05:10	24° $\underline{\mathbb{A}}$ 59'35		conjunction	2004 Sep 15 12:55	23° $\mathbb{M}$ 00'55	0°57'41
direct	1999 Jun 04 06:10	24° $\underline{\mathbb{A}}$ 26'52		minimum elong	2004 Sep 15 13:55	23° $\mathbb{M}$ 02'32	0°57'40
	1999 Jul 05 03:59	0° $\mathbb{M}$			2004 Sep 26 09:15	0° $\underline{\mathbb{A}}$	
	1999 Sep 02 19:29	0° $\mathbb{J}$		morning rise	2004 Oct 29 23:42	21° $\underline{\mathbb{A}}$ 54'33	
	1999 Oct 17 01:35	0° $\mathbb{Z}$			2004 Nov 11 05:11	0° $\mathbb{M}$	



	2004 Dec 25 16:04	0°♊	direct	2010 Mar 10 17:09	0°♏17'41	
desc. node	2005 Jan 15 02:53	14°♊07'27		2010 Jun 07 06:11	0°♎	
	2005 Feb 06 18:32	0°♊		2010 Jul 29 23:46	0°♎	
	2005 Mar 20 18:02	0°♊	desc. node	2010 Sep 06 23:10	24°♎42'43	
	2005 May 01 02:58	0°♊		2010 Sep 14 22:38	0°♎	
	2005 Jun 12 02:30	0°♊		2010 Oct 28 06:48	0°♊	
	2005 Jul 28 05:12	0°♊	evening set	2010 Dec 05 03:05	27°♊50'17	
retrograde	2005 Oct 01 22:04	23°♊22'20		2010 Dec 07 23:49	0°♊	
min. Earth dist.	2005 Oct 30 03:20	17°♊54'05 0.46405 AU	max. Earth dist.	2011 Jan 07 22:20	23°♊44'59 2.37934 AU	
opposition	2005 Nov 07 07:57	15°♊00'37 -0°27'37		2011 Jan 15 22:41	0°♊	
greatest brilliancy	2005 Nov 07 04:45	15°♊03'27 -2.4m				
asc. node	2005 Nov 15 11:20	12°♊17'17	conjunction	2011 Feb 04 16:40	15°♊30'44 -1°04'45	
direct	2005 Dec 10 04:04	8°♊14'08	minimum elong	2011 Feb 04 16:20	15°♊30'05 1°04'46	
	2006 Feb 17 22:44	0°♊		2011 Feb 23 01:06	0°♊	
	2006 Apr 14 00:59	0°♊		2011 Apr 02 04:51	0°♊	
	2006 Jun 03 18:43	0°♏	morning rise	2011 Apr 16 01:09	10°♊44'29	
	2006 Jul 22 18:53	0°♎		2011 May 11 07:04	0°♊	
evening set	2006 Sep 07 00:56	29°♎15'53		2011 Jun 21 02:50	0°♊	
	2006 Sep 08 04:18	0°♎	asc. node	2011 Jul 08 08:48	12°♊11'36	
max. Earth dist.	2006 Sep 30 09:18	14°♎28'30 2.60940 AU		2011 Aug 03 09:22	0°♎	
				2011 Sep 19 01:51	0°♏	
conjunction	2006 Oct 23 06:46	29°♎43'23 0°23'17		2011 Nov 11 04:15	0°♎	
minimum elong	2006 Oct 23 07:34	29°♎44'44 0°23'17	retrograde	2012 Jan 24 00:54	23°♎05'34	
	2006 Oct 23 16:38	0°♎	opposition	2012 Mar 03 20:10	13°♎39'25 4°10'34	
desc. node	2006 Dec 03 01:46	27°♎47'40	greatest brilliancy	2012 Mar 04 02:17	13°♎33'22 -1.3m	
	2006 Dec 06 04:58	0°♊	min. Earth dist.	2012 Mar 05 16:55	12°♎55'10 0.67368 AU	
morning rise	2006 Dec 09 16:40	2°♊27'47	direct	2012 Apr 14 03:53	3°♎40'56	
	2007 Jan 16 20:54	0°♊		2012 Jul 03 12:32	0°♎	
	2007 Feb 26 01:32	0°♊	desc. node	2012 Jul 24 22:03	11°♎51'12	
	2007 Apr 06 08:49	0°♊		2012 Aug 23 15:24	0°♎	
	2007 May 15 14:06	0°♊		2012 Oct 07 03:21	0°♊	
	2007 Jun 24 21:27	0°♊		2012 Nov 17 02:36	0°♊	
	2007 Aug 07 06:01	0°♊		2012 Dec 26 00:49	0°♊	
	2007 Sep 28 23:55	0°♎		2013 Feb 02 01:54	0°♊	
asc. node	2007 Oct 03 10:46	1°♎58'39	evening set	2013 Feb 09 11:08	5°♊50'03	
retrograde	2007 Nov 15 08:24	12°♎27'03		2013 Mar 12 06:26	0°♊	
min. Earth dist.	2007 Dec 18 23:41	4°♎54'52 0.58934 AU				
opposition	2007 Dec 24 19:47	2°♎36'56 3°21'16	conjunction	2013 Apr 18 00:20	28°♊08'20 -0°23'56	
greatest brilliancy	2007 Dec 24 01:53	2°♎54'34 -1.7m	minimum elong	2013 Apr 18 02:17	28°♊12'00 0°23'54	
	2007 Dec 31 16:00	30°♎		2013 Apr 20 11:48	0°♊	
direct	2008 Jan 30 22:33	24°♊04'40	asc. node	2013 May 25 07:51	25°♊36'47	
	2008 Mar 04 10:01	0°♎		2013 May 31 10:39	0°♊	
	2008 May 09 20:20	0°♏	max. Earth dist.	2013 Jun 04 22:42	3°♊12'31 2.46650 AU	
	2008 Jul 01 16:21	0°♎	morning rise	2013 Jun 19 20:20	13°♊42'03	
	2008 Aug 19 10:03	0°♎		2013 Jul 13 13:22	0°♎	
	2008 Oct 04 04:34	0°♎		2013 Aug 28 02:05	0°♏	
evening set	2008 Oct 16 03:19	8°♎08'05		2013 Oct 15 11:05	0°♎	
desc. node	2008 Oct 20 00:45	10°♎48'46		2013 Dec 07 20:41	0°♎	
max. Earth dist.	2008 Oct 31 03:43	18°♎32'36 2.50336 AU	retrograde	2014 Mar 01 16:24	27°♎31'58	
	2008 Nov 16 08:27	0°♊	opposition	2014 Apr 08 21:04	18°♎56'50 2°28'09	
			greatest brilliancy	2014 Apr 09 09:48	18°♎44'38 -1.6m	
conjunction	2008 Dec 05 22:04	14°♊09'18 -0°27'46	min. Earth dist.	2014 Apr 14 12:48	16°♎47'01 0.61757 AU	
minimum elong	2008 Dec 05 20:45	14°♊06'54 0°27'45	direct	2014 May 20 01:31	9°♎01'31	
	2008 Dec 27 07:30	0°♊	desc. node	2014 Jun 11 21:44	12°♎04'56	
morning rise	2009 Jan 31 12:21	26°♊47'41		2014 Jul 26 02:25	0°♎	
	2009 Feb 04 15:55	0°♊		2014 Sep 13 21:57	0°♊	
	2009 Mar 15 03:20	0°♊		2014 Oct 26 10:43	0°♊	
	2009 Apr 22 13:44	0°♊		2014 Dec 04 23:57	0°♊	
	2009 May 31 21:18	0°♊		2015 Jan 12 10:20	0°♊	
	2009 Jul 12 02:56	0°♊		2015 Feb 20 00:11	0°♊	
asc. node	2009 Aug 20 09:14	26°♊34'37		2015 Mar 31 16:26	0°♊	
	2009 Aug 25 17:15	0°♎	asc. node	2015 Apr 12 05:41	8°♊30'26	
	2009 Oct 16 15:32	0°♏	evening set	2015 Apr 18 05:53	12°♊53'23	
retrograde	2009 Dec 20 13:26	19°♏41'43		2015 May 12 02:40	0°♊	
min. Earth dist.	2010 Jan 27 18:56	10°♏36'36 0.66398 AU				
opposition	2010 Jan 29 19:43	9°♏47'48 4°31'29	conjunction	2015 Jun 14 15:56	23°♊17'12 0°37'09	
greatest brilliancy	2010 Jan 29 11:13	9°♏56'19 -1.3m	minimum elong	2015 Jun 14 14:17	23°♊14'23 0°37'08	

	2015 Jun 24 13:33	0°☿		retrograde	2020 Sep 09 22:22	28°♊08'30	
max. Earth dist.	2015 Jul 11 12:19	11°☿20'19	2.58688 AU	min. Earth dist.	2020 Oct 06 14:13	23°♊25'07	0.41491 AU
morning rise	2015 Aug 05 07:47	27°☿37'39		opposition	2020 Oct 13 23:26	21°♊04'41	-2°59'45
	2015 Aug 08 23:32	0°♊		greatest brilliancy	2020 Oct 13 06:28	21°♊18'13	-2.7m
	2015 Sep 25 02:18	0°♊		direct	2020 Nov 14 00:36	15°♊14'00	
	2015 Nov 12 21:41	0°♊		asc. node	2020 Dec 02 03:33	17°♊17'42	
	2016 Jan 03 14:32	0°♊			2021 Jan 06 22:27	0°♋	
	2016 Mar 06 02:29	0°♋			2021 Mar 04 03:30	0°♋	
retrograde	2016 Apr 17 12:14	8°♋54'02			2021 Apr 23 11:49	0°☿	
desc. node	2016 Apr 28 20:16	8°♋06'00			2021 Jun 11 13:34	0°♊	
opposition	2016 May 22 11:17	1°♋47'23	-1°09'34		2021 Jul 29 20:33	0°♊	
greatest brilliancy	2016 May 22 19:54	1°♋39'52	-2.1m	evening set	2021 Aug 23 13:31	15°♊36'34	
	2016 May 27 13:51	30°♋			2021 Sep 15 00:14	0°♊	
min. Earth dist.	2016 May 30 21:29	28°♋51'16	0.50322 AU	max. Earth dist.	2021 Sep 20 11:34	3°♊32'33	2.63814 AU
direct	2016 Jun 29 23:38	23°♋03'28					
	2016 Aug 02 17:49	0°♋		conjunction	2021 Oct 08 04:01	15°♊05'50	0°39'06
	2016 Sep 27 08:07	0°♋		minimum elong	2021 Oct 08 05:06	15°♊07'38	0°39'05
	2016 Nov 09 05:51	0°♋			2021 Oct 30 14:21	0°♋	
	2016 Dec 19 09:23	0°♋		morning rise	2021 Nov 22 21:33	15°♋48'06	
	2017 Jan 28 05:39	0°♊			2021 Dec 13 09:53	0°♋	
asc. node	2017 Feb 27 05:16	22°♊09'15		desc. node	2021 Dec 19 17:03	4°♋24'46	
	2017 Mar 10 00:34	0°♋			2022 Jan 24 12:53	0°♋	
	2017 Apr 21 10:32	0°♋			2022 Mar 06 06:23	0°♋	
	2017 Jun 04 16:16	0°☿			2022 Apr 15 03:06	0°♋	
evening set	2017 Jun 07 09:44	1°☿48'43			2022 May 24 23:17	0°♊	
	2017 Jul 20 12:20	0°♊			2022 Jul 05 06:04	0°♋	
					2022 Aug 20 07:56	0°♋	
conjunction	2017 Jul 27 00:57	4°♊12'29	1°06'04	asc. node	2022 Oct 20 02:15	24°♋51'05	
minimum elong	2017 Jul 27 00:15	4°♊11'21	1°06'04	retrograde	2022 Oct 30 13:26	25°♋36'50	
max. Earth dist.	2017 Aug 05 10:39	10°♊14'57	2.65816 AU	min. Earth dist.	2022 Dec 01 02:12	18°♋50'27	0.54447 AU
	2017 Sep 05 09:35	0°♊		opposition	2022 Dec 08 05:42	16°♋05'47	2°17'42
morning rise	2017 Sep 11 04:07	3°♊39'56		greatest brilliancy	2022 Dec 07 14:08	16°♋20'44	-1.9m
	2017 Oct 22 18:29	0°♊		direct	2023 Jan 12 20:56	8°♋07'45	
	2017 Dec 09 08:59	0°♋			2023 Mar 25 11:45	0°☿	
	2018 Jan 26 12:56	0°♋			2023 May 20 15:31	0°♊	
desc. node	2018 Mar 16 19:03	29°♋28'59			2023 Jul 10 11:40	0°♊	
	2018 Mar 17 16:40	0°♋			2023 Aug 27 13:20	0°♊	
	2018 May 16 04:55	0°♋		evening set	2023 Sep 30 19:54	22°♋23'27	
retrograde	2018 Jun 26 21:04	9°♋13'05			2023 Oct 12 04:04	0°♋	
opposition	2018 Jul 27 05:13	4°♋08'47	-6°28'21	max. Earth dist.	2023 Oct 18 09:13	4°♋12'54	2.54978 AU
greatest brilliancy	2018 Jul 28 03:05	3°♋53'51	-2.8m	desc. node	2023 Nov 06 16:02	17°♋29'38	
min. Earth dist.	2018 Jul 31 07:45	3°♋01'38	0.38497 AU				
	2018 Aug 13 02:14	30°♋		conjunction	2023 Nov 18 05:43	25°♋36'44	-0°06'57
direct	2018 Aug 27 14:05	28°♋36'36		minimum elong	2023 Nov 18 05:23	25°♋36'10	0°06'57
	2018 Sep 11 00:56	0°♋		behind sun begin	2023 Nov 17 10:07	25°♋02'09	
	2018 Nov 15 22:21	0°♋		behind sun end	2023 Nov 19 00:40	26°♋10'13	
	2019 Jan 01 02:20	0°♊			2023 Nov 24 10:15	0°♋	
asc. node	2019 Jan 15 04:48	9°♊30'59			2024 Jan 04 14:58	0°♋	
	2019 Feb 14 10:51	0°♋		morning rise	2024 Jan 09 05:05	3°♋25'21	
	2019 Mar 31 06:12	0°♋			2024 Feb 13 06:05	0°♋	
	2019 May 16 03:09	0°☿			2024 Mar 22 23:47	0°♋	
	2019 Jul 01 23:19	0°♊			2024 Apr 30 15:33	0°♊	
evening set	2019 Jul 18 08:26	10°♊24'26			2024 Jun 09 04:35	0°♋	
	2019 Aug 18 05:18	0°♊			2024 Jul 20 20:43	0°♋	
max. Earth dist.	2019 Aug 28 19:21	6°♊43'52	2.67533 AU		2024 Sep 04 19:46	0°☿	
				asc. node	2024 Sep 06 02:03	0°☿45'40	
conjunction	2019 Sep 02 10:42	9°♊41'11	1°04'57		2024 Nov 04 04:10	0°♊	
minimum elong	2019 Sep 02 11:24	9°♊42'17	1°04'57	retrograde	2024 Dec 06 23:33	6°♊10'16	
	2019 Oct 04 04:22	0°♊			2025 Jan 06 10:44	30°♋	
morning rise	2019 Oct 16 18:35	8°♊07'25		min. Earth dist.	2025 Jan 12 13:32	27°☿37'40	0.64228 AU
	2019 Nov 19 07:40	0°♋		opposition	2025 Jan 16 02:39	26°☿12'37	4°17'15
	2020 Jan 03 09:37	0°♋		greatest brilliancy	2025 Jan 15 12:58	26°☿26'18	-1.4m
desc. node	2020 Feb 01 18:23	19°♋55'03		direct	2025 Feb 24 02:00	17°☿00'55	
	2020 Feb 16 11:33	0°♋			2025 Apr 18 04:21	0°♊	
	2020 Mar 30 19:43	0°♋			2025 Jun 17 08:36	0°♊	
	2020 May 13 04:17	0°♋			2025 Aug 06 23:23	0°♊	
	2020 Jun 28 01:45	0°♊			2025 Sep 22 07:55	0°♋	

desc. node	2025 Sep 23 15:20	0°♍52'50		max. Earth dist.	2030 Jun 29 09:13	28°♊28'17	2.54452 AU
	2025 Nov 04 13:01	0°♊			2030 Jul 01 15:20	0°♊	
evening set	2025 Nov 13 20:53	6°♊43'28		morning rise	2030 Jul 19 18:14	12°♊08'57	
max. Earth dist.	2025 Nov 30 10:09	18°♊52'01	2.42388 AU		2030 Aug 15 23:56	0°♊	
	2025 Dec 15 07:34	0°♊			2030 Oct 02 09:42	0°♊	
					2030 Nov 21 07:55	0°♊	
conjunction	2026 Jan 09 11:41	19°♊12'56	-0°56'29		2031 Jan 15 22:48	0°♊	
minimum elong	2026 Jan 09 09:38	19°♊08'59	0°56'28	retrograde	2031 Mar 29 00:35	21°♊38'10	
	2026 Jan 23 09:17	0°♊		opposition	2031 May 04 12:04	13°♊50'54	0°32'19
	2026 Mar 02 14:16	0°♊		greatest brilliancy	2031 May 04 16:18	13°♊47'02	-1.9m
morning rise	2026 Mar 16 13:05	10°♊59'17		min. Earth dist.	2031 May 12 03:44	11°♊02'57	0.55337 AU
	2026 Apr 09 19:36	0°♊		desc. node	2031 May 16 11:41	9°♊32'23	
	2026 May 18 22:25	0°♊		direct	2031 Jun 13 11:57	4°♊26'17	
	2026 Jun 28 19:29	0°♊			2031 Aug 25 08:08	0°♊	
asc. node	2026 Jul 25 00:14	18°♊18'59			2031 Oct 10 13:47	0°♊	
	2026 Aug 11 08:31	0°♊			2031 Nov 20 10:57	0°♊	
	2026 Sep 28 02:49	0°♊			2031 Dec 29 15:16	0°♊	
	2026 Nov 25 23:37	0°♊			2032 Feb 06 19:19	0°♊	
retrograde	2027 Jan 10 12:59	10°♊25'44		asc. node	2032 Mar 15 21:59	28°♊27'17	
opposition	2027 Feb 19 15:51	0°♊46'06	4°27'48		2032 Mar 18 00:35	0°♊	
greatest brilliancy	2027 Feb 19 16:28	0°♊45'29	-1.3m		2032 Apr 28 22:45	0°♊	
min. Earth dist.	2027 Feb 20 00:08	0°♊37'52	0.67792 AU	evening set	2032 May 20 02:45	14°♊38'45	
	2027 Feb 21 14:13	30°♊			2032 Jun 11 19:06	0°♊	
direct	2027 Apr 01 14:08	20°♊55'36					
	2027 May 14 14:47	0°♊		conjunction	2032 Jul 11 05:16	19°♊28'27	0°58'45
	2027 Jul 15 05:40	0°♊		minimum elong	2032 Jul 11 03:59	19°♊26'22	0°58'45
desc. node	2027 Aug 11 14:00	16°♊18'32		max. Earth dist.	2032 Jul 27 00:50	29°♊46'10	2.63652 AU
	2027 Sep 02 01:52	0°♊			2032 Jul 27 09:23	0°♊	
	2027 Oct 15 23:14	0°♊		morning rise	2032 Aug 28 00:06	20°♊17'58	
	2027 Nov 25 18:38	0°♊			2032 Sep 12 06:32	0°♊	
	2028 Jan 03 16:02	0°♊			2032 Oct 30 00:38	0°♊	
evening set	2028 Jan 13 06:42	7°♊33'00			2032 Dec 17 16:47	0°♊	
	2028 Feb 10 16:32	0°♊			2033 Feb 06 11:12	0°♊	
	2028 Mar 19 19:36	0°♊		desc. node	2033 Apr 02 10:28	28°♊20'48	
					2033 Apr 06 06:51	0°♊	
conjunction	2028 Mar 21 02:36	1°♊00'23	-0°48'39	retrograde	2033 May 26 23:47	12°♊30'17	
minimum elong	2028 Mar 21 05:51	1°♊06'44	0°48'37	opposition	2033 Jun 28 01:30	6°♊41'55	-4°33'54
	2028 Apr 27 22:21	0°♊		greatest brilliancy	2033 Jun 29 05:20	6°♊20'33	-2.6m
max. Earth dist.	2028 May 11 20:53	10°♊24'20	2.41207 AU	min. Earth dist.	2033 Jul 05 11:13	4°♊26'22	0.42303 AU
morning rise	2028 May 28 03:27	22°♊20'31			2033 Jul 27 04:34	30°♊	
	2028 Jun 07 18:20	0°♊		direct	2033 Aug 01 14:25	29°♊47'30	
asc. node	2028 Jun 10 23:06	2°♊17'09			2033 Aug 07 00:48	0°♊	
	2028 Jul 20 20:10	0°♊			2033 Oct 17 21:52	0°♊	
	2028 Sep 04 14:36	0°♊			2033 Dec 01 12:10	0°♊	
	2028 Oct 24 01:10	0°♊			2034 Jan 12 15:15	0°♊	
	2028 Dec 21 08:46	0°♊		asc. node	2034 Jan 31 20:17	13°♊41'20	
retrograde	2029 Feb 14 08:16	13°♊55'21			2034 Feb 23 23:24	0°♊	
opposition	2029 Mar 25 07:49	4°♊57'09	3°18'31		2034 Apr 08 12:49	0°♊	
greatest brilliancy	2029 Mar 25 19:52	4°♊45'26	-1.4m		2034 May 23 14:26	0°♊	
min. Earth dist.	2029 Mar 29 12:50	3°♊18'57	0.64723 AU	evening set	2034 Jul 03 03:43	26°♊16'55	
	2029 Apr 07 13:09	30°♊			2034 Jul 08 22:51	0°♊	
direct	2029 May 05 19:00	24°♊55'45					
	2029 Jun 05 04:49	0°♊		conjunction	2034 Aug 19 05:22	26°♊19'56	1°08'33
desc. node	2029 Jun 28 12:38	8°♊54'42		minimum elong	2034 Aug 19 05:36	26°♊20'17	1°08'33
	2029 Aug 07 16:03	0°♊		max. Earth dist.	2034 Aug 19 17:48	26°♊39'42	2.67511 AU
	2029 Sep 23 08:14	0°♊			2034 Aug 24 23:42	0°♊	
	2029 Nov 04 00:32	0°♊		morning rise	2034 Oct 02 21:25	24°♊47'35	
	2029 Dec 13 05:25	0°♊			2034 Oct 11 00:44	0°♊	
	2030 Jan 20 10:27	0°♊			2034 Nov 26 14:16	0°♊	
	2030 Feb 27 19:07	0°♊			2035 Jan 11 13:01	0°♊	
evening set	2030 Mar 24 16:01	19°♊03'11		desc. node	2035 Feb 18 09:34	24°♊55'55	
	2030 Apr 08 05:27	0°♊			2035 Feb 26 01:58	0°♊	
asc. node	2030 Apr 28 23:02	15°♊17'15			2035 Apr 12 19:36	0°♊	
	2030 May 19 09:28	0°♊			2035 May 30 22:08	0°♊	
				retrograde	2035 Aug 15 10:01	28°♊26'02	
conjunction	2030 May 25 10:50	4°♊17'32	0°16'38	min. Earth dist.	2035 Sep 11 14:15	23°♊58'38	0.38041 AU
minimum elong	2030 May 25 09:48	4°♊15'43	0°16'36	opposition	2035 Sep 15 19:39	22°♊48'07	-5°38'37

greatest brilliancy	2035 Sep 15 04:16	22°  58'50	-2.9m	max. Earth dist.	2040 Nov 09 09:22	28°  20'55	2.47575 AU
direct	2035 Oct 15 08:32	17°  45'25			2040 Nov 11 16:52	0° 	
	2035 Dec 01 19:38	0° 					
asc. node	2035 Dec 19 19:51	8°  46'59		conjunction	2040 Dec 17 12:49	26°  11'43	-0°39'21
	2036 Jan 26 07:15	0° 		minimum elong	2040 Dec 17 10:59	26°  08'17	0°39'20
	2036 Mar 15 02:37	0° 			2040 Dec 22 14:50	0° 	
	2036 May 02 00:50	0° 			2041 Jan 30 21:08	0° 	
	2036 Jun 18 23:57	0° 		morning rise	2041 Feb 15 07:18	12°  00'35	
	2036 Aug 05 18:43	0° 			2041 Mar 10 06:09	0° 	
evening set	2036 Aug 09 05:07	2°  10'09		greatest brilliancy	2041 Mar 25 16:59	12°  07'28	1.2m
max. Earth dist.	2036 Sep 11 02:46	23°  07'03	2.65909 AU		2041 Apr 17 14:18	0° 	
	2036 Sep 21 19:17	0° 			2041 May 26 19:05	0° 	
					2041 Jul 06 19:31	0° 	
conjunction	2036 Sep 23 15:45	1°  11'52	0°51'49	asc. node	2041 Aug 10 17:15	23°  15'55	
minimum elong	2036 Sep 23 16:52	1°  13'39	0°51'48		2041 Aug 19 20:28	0° 	
	2036 Nov 06 13:03	0° 			2041 Oct 08 13:54	0° 	
morning rise	2036 Nov 07 09:48	0°  34'36		retrograde	2041 Dec 28 05:39	27°  03'16	
	2036 Dec 20 18:01	0° 		min. Earth dist.	2042 Feb 05 07:51	18°  01'40	0.67174 AU
desc. node	2037 Jan 05 09:20	10°  52'02		opposition	2042 Feb 06 12:05	17°  04'26	4°33'43
	2037 Feb 01 11:08	0° 		greatest brilliancy	2042 Feb 06 06:48	17°  05'42	-1.3m
	2037 Mar 14 22:03	0° 		direct	2042 Mar 18 19:51	8°  10'50	
	2037 Apr 24 14:44	0° 			2042 May 30 13:08	0° 	
	2037 Jun 04 13:03	0° 			2042 Jul 24 09:51	0° 	
	2037 Jul 17 22:43	0° 		desc. node	2042 Aug 28 05:22	21°  04'13	
	2037 Sep 11 20:29	0° 			2042 Sep 09 22:54	0° 	
retrograde	2037 Oct 12 23:09	6°  15'48			2042 Oct 23 11:37	0° 	
asc. node	2037 Nov 05 18:39	2°  13'00			2042 Dec 03 05:43	0° 	
min. Earth dist.	2037 Nov 11 07:54	0°  19'34	0.49357 AU	evening set	2042 Dec 18 09:52	11°  03'59	
	2037 Nov 12 05:39	30°  08'08			2043 Jan 11 04:09	0° 	
opposition	2037 Nov 19 09:10	27°  02'23	0°43'17		2043 Feb 18 05:43	0° 	
greatest brilliancy	2037 Nov 19 03:18	27°  02'45	-2.2m				
direct	2037 Dec 23 06:31	20°  07'36		conjunction	2043 Feb 20 17:47	1°  05'41	-1°03'15
	2038 Feb 05 00:33	0° 		minimum elong	2043 Feb 20 19:11	2°  01'28	1°03'16
	2038 Apr 07 04:57	0° 		max. Earth dist.	2043 Mar 09 06:20	15°  01'06	2.37120 AU
	2038 May 29 08:38	0° 			2043 Mar 28 08:56	0° 	
	2038 Jul 17 22:08	0° 		morning rise	2043 May 02 13:30	27°  04'04	
	2038 Sep 03 13:05	0° 			2043 May 06 10:41	0° 	
evening set	2038 Sep 15 11:23	7°  04'31			2043 Jun 16 05:23	0° 	
max. Earth dist.	2038 Oct 06 13:51	21°  03'29	2.59037 AU	asc. node	2043 Jun 28 16:40	8°  15'42	
	2038 Oct 19 02:36	0° 			2043 Jul 29 08:31	0° 	
					2043 Sep 13 13:26	0° 	
conjunction	2038 Nov 01 07:01	8°  57'18	0°12'54		2043 Nov 03 19:22	0° 	
minimum elong	2038 Nov 01 07:30	8°  58'07	0°12'53		2044 Jan 19 17:59	0° 	
behind sun begin	2038 Oct 31 19:14	8°  37'10		retrograde	2044 Jan 31 23:11	0°  05'30'01	
behind sun end	2038 Nov 01 19:45	9°  19'06			2044 Feb 12 17:26	30°  08'00	
desc. node	2038 Nov 23 08:22	24°  13'38		opposition	2044 Mar 11 12:51	21°  13'51	3°54'54
	2038 Dec 01 13:06	0° 		greatest brilliancy	2044 Mar 11 21:33	21°  17'17	-1.3m
morning rise	2038 Dec 20 00:18	13°  01'12		min. Earth dist.	2044 Mar 14 06:01	20°  14'44	0.66709 AU
	2039 Jan 12 01:12	0° 		direct	2044 Apr 21 23:36	11°  14'47	
	2039 Feb 21 00:46	0° 			2044 Jun 25 03:35	0° 	
	2039 Apr 01 02:23	0° 		desc. node	2044 Jul 15 04:23	10°  01'10	
	2039 May 10 01:29	0° 			2044 Aug 17 18:43	0° 	
	2039 Jun 18 23:31	0° 			2044 Oct 01 22:01	0° 	
	2039 Jul 31 10:58	0° 			2044 Nov 12 02:48	0° 	
	2039 Sep 18 07:29	0° 			2044 Dec 21 03:03	0° 	
asc. node	2039 Sep 23 17:00	2°  05'01			2045 Jan 28 04:58	0° 	
retrograde	2039 Nov 23 20:48	21°  04'51		greatest brilliancy	2045 Feb 03 21:33	5°  16'54	1.2m
min. Earth dist.	2039 Dec 28 14:41	13°  04'49	0.61091 AU	evening set	2045 Feb 25 11:23	22°  14'28	
opposition	2040 Jan 02 15:28	11°  04'57	3°47'34		2045 Mar 07 10:14	0° 	
greatest brilliancy	2040 Jan 01 22:13	12°  07'05	-1.6m		2045 Apr 15 16:27	0° 	
direct	2040 Feb 09 11:48	3°  01'43					
	2040 May 02 12:07	0° 		conjunction	2045 May 02 10:43	12°  02'39	-0°08'33
	2040 Jun 26 04:42	0° 		minimum elong	2045 May 02 11:22	12°  02'52	0°08'32
	2040 Aug 14 12:36	0°		behind sun begin	2045 May 01 12:37	11°  04'01	
	2040 Sep 29 12:10	0°		behind sun end	2045 May 03 10:08	13°  09'40	
desc. node	2040 Oct 10 06:47	7°  19'06		asc. node	2045 May 15 14:40	22°  02'57	
evening set	2040 Oct 26 00:35	18°  12'20			2045 May 26 16:01	0°	

max. Earth dist.	2045 Jun 14 21:06	13° $\Pi$ 33'41	2.49582 AU	direct	2050 Sep 13 11:02	16° $\approx$ 42'38	
morning rise	2045 Jul 01 08:52	24° $\Pi$ 57'11			2050 Oct 31 20:50	0° $\text{H}$	
	2045 Jul 08 18:44	0° $\text{E}$			2050 Dec 23 09:08	0° $\text{Y}$	
	2045 Aug 23 04:18	0° $\Omega$		asc. node	2051 Jan 05 10:55	8° $\text{Y}$ 19'22	
	2045 Oct 10 01:55	0° $\text{M}$			2051 Feb 07 17:58	0° $\text{B}$	
	2045 Nov 30 18:55	0° $\text{L}$			2051 Mar 25 13:21	0° $\Pi$	
	2046 Feb 04 05:56	0° $\text{M}$			2051 May 11 00:16	0° $\text{E}$	
retrograde	2046 Mar 11 02:11	6° $\text{M}$ 13'56			2051 Jun 27 04:24	0° $\Omega$	
	2046 Apr 12 01:51	30° $\text{R}$ $\text{L}$		evening set	2051 Jul 26 18:57	18° $\Omega$ 43'26	
opposition	2046 Apr 17 18:07	27° $\text{L}$ 54'06	1°51'04		2051 Aug 13 14:15	0° $\text{M}$	
greatest brilliancy	2046 Apr 18 05:21	27° $\text{L}$ 43'29	-1.7m	max. Earth dist.	2051 Sep 03 00:44	12° $\text{M}$ 59'36	2.67195 AU
min. Earth dist.	2046 Apr 24 04:27	25° $\text{L}$ 28'25	0.59705 AU				
direct	2046 May 28 15:31	18° $\text{L}$ 06'16		conjunction	2051 Sep 10 12:24	17° $\text{M}$ 46'26	1°01'08
desc. node	2046 Jun 02 02:58	18° $\text{L}$ 13'59		minimum elong	2051 Sep 10 13:19	17° $\text{M}$ 47'53	1°01'07
	2046 Jul 15 05:13	0° $\text{M}$			2051 Sep 29 13:37	0° $\text{L}$	
	2046 Sep 07 05:03	0° $\text{X}$		morning rise	2051 Oct 24 20:24	16° $\text{L}$ 23'56	
	2046 Oct 20 16:08	0° $\text{Z}$			2051 Nov 14 13:14	0° $\text{M}$	
	2046 Nov 29 14:25	0° $\approx$			2051 Dec 29 07:11	0° $\text{X}$	
	2047 Jan 07 05:46	0° $\text{H}$		desc. node	2052 Jan 23 00:39	16° $\text{X}$ 56'40	
	2047 Feb 14 23:22	0° $\text{Y}$			2052 Feb 10 19:55	0° $\text{Z}$	
	2047 Mar 26 18:50	0° $\text{B}$			2052 Mar 24 08:44	0° $\approx$	
asc. node	2047 Apr 02 14:09	5° $\text{B}$ 00'41			2052 May 05 11:00	0° $\text{H}$	
evening set	2047 Apr 30 19:36	25° $\text{B}$ 23'37			2052 Jun 17 15:13	0° $\text{Y}$	
	2047 May 07 07:45	0° $\Pi$			2052 Aug 06 16:32	0° $\text{B}$	
	2047 Jun 19 20:43	0° $\text{E}$		retrograde	2052 Sep 22 19:12	13° $\text{B}$ 22'56	
				min. Earth dist.	2052 Oct 20 05:06	8° $\text{B}$ 16'49	0.44090 AU
conjunction	2047 Jun 25 02:57	3° $\text{E}$ 32'06	0°46'33	opposition	2052 Oct 28 06:34	5° $\text{B}$ 33'09	-1°29'04
minimum elong	2047 Jun 25 01:17	3° $\text{E}$ 29'20	0°46'32	greatest brilliancy	2052 Oct 27 20:41	5° $\text{B}$ 41'31	-2.5m
max. Earth dist.	2047 Jul 17 20:35	18° $\text{E}$ 37'13	2.60675 AU		2052 Nov 18 09:07	30° $\text{R}$ $\text{Y}$	
	2047 Aug 04 06:59	0° $\Omega$		asc. node	2052 Nov 22 10:38	29° $\text{Y}$ 30'24	
morning rise	2047 Aug 14 04:36	6° $\Omega$ 23'47		direct	2052 Nov 29 06:20	29° $\text{Y}$ 11'20	
	2047 Sep 20 06:29	0° $\text{M}$			2052 Dec 10 12:55	0° $\text{B}$	
	2047 Nov 07 14:26	0° $\text{L}$			2053 Feb 23 19:45	0° $\Pi$	
	2047 Dec 27 21:26	0° $\text{M}$			2053 Apr 17 10:45	0° $\text{E}$	
	2048 Feb 21 17:50	0° $\text{X}$			2053 Jun 06 09:21	0° $\Omega$	
desc. node	2048 Apr 19 02:05	19° $\text{X}$ 35'17			2053 Jul 25 01:53	0° $\text{M}$	
retrograde	2048 Apr 30 16:53	20° $\text{X}$ 22'25		evening set	2053 Aug 31 19:56	23° $\text{M}$ 51'11	
opposition	2048 Jun 03 14:51	13° $\text{X}$ 42'18	-2°19'18		2053 Sep 10 09:29	0° $\text{L}$	
greatest brilliancy	2048 Jun 04 07:50	13° $\text{X}$ 28'01	-2.3m	max. Earth dist.	2053 Sep 26 04:23	10° $\text{L}$ 15'12	2.62323 AU
min. Earth dist.	2048 Jun 12 01:35	10° $\text{X}$ 52'06	0.47367 AU				
direct	2048 Jul 10 22:38	5° $\text{X}$ 31'03		conjunction	2053 Oct 16 16:59	23° $\text{L}$ 47'53	0°30'16
	2048 Sep 17 11:50	0° $\text{Z}$		minimum elong	2053 Oct 16 17:56	23° $\text{L}$ 49'29	0°30'15
	2048 Nov 01 23:07	0° $\approx$			2053 Oct 25 23:27	0° $\text{M}$	
	2048 Dec 13 01:52	0° $\text{H}$		morning rise	2053 Dec 02 06:19	25° $\text{M}$ 31'26	
	2049 Jan 22 11:54	0° $\text{Y}$			2053 Dec 08 15:52	0° $\text{X}$	
asc. node	2049 Feb 17 13:16	19° $\text{Y}$ 04'50		desc. node	2053 Dec 09 23:21	0° $\text{X}$ 55'17	
	2049 Mar 04 16:50	0° $\text{B}$			2054 Jan 19 13:22	0° $\text{Z}$	
	2049 Apr 16 10:14	0° $\Pi$			2054 Mar 01 00:08	0° $\approx$	
	2049 May 30 21:27	0° $\text{E}$			2054 Apr 09 13:07	0° $\text{H}$	
evening set	2049 Jun 17 02:05	11° $\text{E}$ 19'10			2054 May 19 00:03	0° $\text{Y}$	
	2049 Jul 15 20:40	0° $\Omega$			2054 Jun 28 14:49	0° $\text{B}$	
					2054 Aug 11 18:06	0° $\Pi$	
conjunction	2049 Aug 04 15:16	12° $\Omega$ 41'49	1°08'11		2054 Oct 08 19:54	0° $\text{E}$	
minimum elong	2049 Aug 04 14:55	12° $\Omega$ 41'15	1°08'11	asc. node	2054 Oct 10 10:39	0° $\text{E}$ 33'10	
max. Earth dist.	2049 Aug 10 18:56	16° $\Omega$ 37'49	2.66653 AU	retrograde	2054 Nov 08 18:43	5° $\text{E}$ 54'21	
	2049 Aug 31 18:23	0° $\text{M}$			2054 Dec 08 00:46	30° $\text{R}$ $\Pi$	
morning rise	2049 Sep 19 02:31	11° $\text{M}$ 39'16		min. Earth dist.	2054 Dec 11 11:37	28° $\Pi$ 41'57	0.57014 AU
	2049 Oct 17 23:47	0° $\text{L}$		opposition	2054 Dec 17 22:15	26° $\Pi$ 11'11	2°57'52
	2049 Dec 04 03:49	0° $\text{M}$		greatest brilliancy	2054 Dec 17 04:35	26° $\Pi$ 28'26	-1.8m
	2050 Jan 20 08:41	0° $\text{X}$		direct	2055 Jan 23 10:02	17° $\Pi$ 53'08	
desc. node	2050 Mar 07 01:49	28° $\text{X}$ 37'58			2055 Mar 14 15:22	0° $\text{E}$	
	2050 Mar 09 07:08	0° $\text{Z}$			2055 May 14 08:42	0° $\Omega$	
	2050 Apr 29 08:45	0° $\approx$			2055 Jul 05 07:05	0° $\text{M}$	
retrograde	2050 Jul 15 06:02	26° $\approx$ 42'24			2055 Aug 22 18:44	0° $\text{L}$	
opposition	2050 Aug 14 07:52	21° $\approx$ 45'16	-6°51'31		2055 Oct 07 12:50	0° $\text{M}$	
greatest brilliancy	2050 Aug 14 16:44	21° $\approx$ 39'22	-2.9m	evening set	2055 Oct 09 23:33	1° $\text{M}$ 39'11	
min. Earth dist.	2050 Aug 15 12:48	21° $\approx$ 26'02	0.37405 AU	max. Earth dist.	2055 Oct 25 21:00	12° $\text{M}$ 31'15	2.52486 AU

desc. node	2055 Oct 27 22:11	13°♍56'17			2060 Jul 16 00:24	0°♎	
	2055 Nov 19 18:56	0°♊			2060 Aug 30 13:29	0°♏	
					2060 Oct 18 06:10	0°♐	
conjunction	2055 Nov 28 13:52	6°♊17'46 -0°18'53			2060 Dec 12 03:08	0°♑	
minimum elong	2055 Nov 28 13:00	6°♊16'12 0°18'52	retrograde		2061 Feb 22 22:45	22°♑04'13	
	2055 Dec 30 21:26	0°♎	opposition		2061 Apr 02 12:53	13°♑18'16 2°50'54	
morning rise	2056 Jan 21 21:55	16°♎36'25	greatest brilliancy		2061 Apr 03 01:40	13°♑05'56 -1.5m	
	2056 Feb 08 09:24	0°♌	min. Earth dist.		2061 Apr 07 13:48	11°♑21'44 0.63199 AU	
	2056 Mar 17 23:35	0°♋	direct		2061 May 13 21:41	3°♑19'08	
	2056 Apr 25 11:54	0°♐	desc. node		2061 Jun 18 19:17	10°♑17'16	
	2056 Jun 03 20:48	0°♉			2061 Jul 31 04:00	0°♌	
	2056 Jul 15 04:41	0°♈			2061 Sep 17 11:42	0°♊	
asc. node	2056 Aug 27 09:07	28°♈52'16			2061 Oct 29 15:44	0°♎	
	2056 Aug 29 04:10	0°♎			2061 Dec 08 01:37	0°♌	
	2056 Oct 22 04:26	0°♏			2062 Jan 15 09:20	0°♋	
retrograde	2056 Dec 14 20:18	14°♏28'15			2062 Feb 22 20:10	0°♐	
min. Earth dist.	2057 Jan 21 08:57	5°♏36'48 0.65552 AU			2062 Apr 03 08:49	0°♉	
opposition	2057 Jan 24 01:32	4°♏32'10 4°27'23	evening set		2062 Apr 07 23:05	3°♉24'41	
greatest brilliancy	2057 Jan 23 14:37	4°♏43'06 -1.4m	asc. node		2062 Apr 19 05:29	11°♉42'12	
	2057 Feb 05 01:07	30°♋♎			2062 May 14 14:55	0°♈	
direct	2057 Mar 04 13:33	25°♎09'36					
	2057 Apr 03 21:32	0°♏	conjunction		2062 Jun 06 06:05	15°♈51'29 0°29'06	
	2057 Jun 10 21:53	0°♐	minimum elong		2062 Jun 06 04:35	15°♈48'53 0°29'04	
	2057 Aug 01 17:28	0°♑			2062 Jun 26 22:18	0°♎	
desc. node	2057 Sep 13 20:44	27°♑35'35	max. Earth dist.		2062 Jul 06 12:22	6°♑27'14 2.56900 AU	
	2057 Sep 17 11:27	0°♌	morning rise		2062 Jul 29 09:38	21°♑37'01	
	2057 Oct 30 19:42	0°♊			2062 Aug 11 06:15	0°♏	
evening set	2057 Nov 25 13:39	18°♊45'16			2062 Sep 27 10:43	0°♐	
	2057 Dec 10 14:33	0°♎			2062 Nov 15 15:19	0°♑	
max. Earth dist.	2057 Dec 18 09:02	5°♎53'06 2.39736 AU			2063 Jan 07 14:57	0°♌	
	2058 Jan 18 15:26	0°♌			2063 Mar 23 09:41	0°♊	
			retrograde		2063 Apr 09 06:16	1°♊36'41	
conjunction	2058 Jan 23 20:23	4°♌04'10 -1°02'41			2063 Apr 25 06:58	30°♋♌	
minimum elong	2058 Jan 23 19:04	4°♌01'34 1°02'40	desc. node		2063 May 06 17:57	26°♌58'14	
	2058 Feb 25 19:03	0°♋	opposition		2063 May 14 22:22	24°♌10'46 -0°23'12	
morning rise	2058 Apr 02 17:53	28°♋16'15	greatest brilliancy		2063 May 15 01:14	24°♌08'12 -2.0m	
	2058 Apr 04 23:05	0°♐	min. Earth dist.		2063 May 23 01:50	21°♌16'04 0.52638 AU	
	2058 May 14 00:37	0°♉	direct		2063 Jun 23 04:42	15°♌05'43	
	2058 Jun 23 19:19	0°♈			2063 Aug 14 11:00	0°♊	
asc. node	2058 Jul 15 08:02	15°♈10'19			2063 Oct 03 10:20	0°♎	
	2058 Aug 06 02:30	0°♎			2063 Nov 14 07:25	0°♌	
	2058 Sep 22 01:49	0°♏			2063 Dec 23 23:03	0°♋	
	2058 Nov 15 18:23	0°♐			2064 Feb 01 10:32	0°♐	
retrograde	2059 Jan 18 05:59	18°♐09'37	asc. node		2064 Mar 06 04:39	25°♐05'49	
opposition	2059 Feb 27 05:31	8°♐37'09 4°19'02			2064 Mar 12 21:51	0°♉	
greatest brilliancy	2059 Feb 27 09:19	8°♐33'23 -1.3m			2064 Apr 24 00:52	0°♈	
min. Earth dist.	2059 Feb 28 10:26	8°♐08'28 0.67681 AU	evening set		2064 May 30 18:46	25°♈07'58	
	2059 Mar 26 01:41	30°♋♏			2064 Jun 07 01:08	0°♎	
direct	2059 Apr 09 09:48	28°♏41'36					
	2059 Apr 24 10:41	0°♐	conjunction		2064 Jul 20 10:03	28°♎30'14 1°03'34	
	2059 Jul 08 12:48	0°♑	minimum elong		2064 Jul 20 09:05	28°♎28'40 1°03'34	
desc. node	2059 Aug 01 19:30	13°♑55'22			2064 Jul 22 17:31	0°♏	
	2059 Aug 27 15:39	0°♌	max. Earth dist.		2064 Aug 01 16:04	6°♏24'49 2.64965 AU	
	2059 Oct 10 22:31	0°♊	morning rise		2064 Sep 05 04:52	28°♏29'09	
	2059 Nov 20 21:11	0°♎			2064 Sep 07 14:05	0°♐	
	2059 Dec 29 19:44	0°♌			2064 Oct 25 02:24	0°♑	
evening set	2060 Jan 29 00:29	23°♌47'53			2064 Dec 12 02:45	0°♌	
	2060 Feb 05 20:37	0°♋			2065 Jan 30 05:31	0°♊	
	2060 Mar 15 00:06	0°♐	desc. node		2065 Mar 23 16:30	29°♊52'34	
					2065 Mar 23 22:07	0°♎	
conjunction	2060 Apr 06 03:55	17°♐07'02 -0°35'16	retrograde		2065 Jun 12 20:02	27°♎23'12	
minimum elong	2060 Apr 06 06:43	17°♐12'24 0°35'14	opposition		2065 Jul 13 21:03	22°♎02'13 -5°45'45	
	2060 Apr 23 03:28	0°♉	greatest brilliancy		2065 Jul 15 00:41	21°♎42'25 -2.7m	
max. Earth dist.	2060 May 26 20:48	24°♉52'36 2.44210 AU	min. Earth dist.		2065 Jul 19 19:45	20°♎20'26 0.39959 AU	
asc. node	2060 Jun 01 07:35	28°♉48'10	direct		2065 Aug 15 14:43	15°♎55'30	
	2060 Jun 02 23:38	0°♈			2065 Oct 03 19:24	0°♌	
morning rise	2060 Jun 10 09:49	5°♈17'37			2065 Nov 22 21:23	0°♋	

	2066 Jan 05 18:44	0°♈			2070 Nov 26 20:30	0°♏	
asc. node	2066 Jan 22 04:19	11°♈23'40		morning rise	2070 Dec 31 03:15	24°♏46'01	
	2066 Feb 18 01:27	0°♉			2071 Jan 07 05:21	0°♐	
	2066 Apr 03 04:51	0°♊			2071 Feb 16 00:54	0°♑	
	2066 May 18 15:36	0°♋			2071 Mar 26 22:16	0°♒	
	2066 Jul 04 05:27	0°♌			2071 May 04 16:45	0°♓	
evening set	2066 Jul 11 23:00	4°♌55'54			2071 Jun 13 08:28	0°♈	
	2066 Aug 20 08:49	0°♍			2071 Jul 25 05:45	0°♊	
max. Earth dist.	2066 Aug 25 00:16	2°♍57'13	2.67633 AU		2071 Sep 10 00:27	0°♋	
				asc. node	2071 Sep 14 01:55	2°♋21'11	
conjunction	2066 Aug 27 09:58	4°♍28'59	1°06'54		2071 Nov 22 13:09	0°♌	
minimum elong	2066 Aug 27 10:29	4°♍29'49	1°06'54	retrograde	2071 Dec 02 01:27	0°♌35'23	
	2066 Oct 06 08:53	0°♎			2071 Dec 11 07:32	30°♎	
morning rise	2066 Oct 10 19:55	2°♎51'55		min. Earth dist.	2072 Jan 06 20:17	22°♎18'31	0.62938 AU
	2066 Nov 21 16:49	0°♏		greatest brilliancy	2072 Jan 10 09:31	20°♎53'30	-1.5m
	2067 Jan 06 03:55	0°♐		opposition	2072 Jan 11 01:05	20°♎37'58	4°07'06
desc. node	2067 Feb 08 16:10	22°♐27'49		direct	2072 Feb 18 12:42	11°♎35'57	
	2067 Feb 19 20:00	0°♑			2072 Apr 23 23:09	0°♏	
	2067 Apr 05 01:38	0°♒			2072 Jun 20 10:30	0°♍	
	2067 May 19 21:52	0°♓			2072 Aug 09 12:32	0°♎	
	2067 Jul 08 21:55	0°♈			2072 Sep 24 18:19	0°♏	
retrograde	2067 Aug 31 00:19	16°♈06'06		desc. node	2072 Sep 30 12:56	3°♏53'46	
min. Earth dist.	2067 Sep 26 12:51	11°♈35'14	0.39669 AU	evening set	2072 Nov 05 11:18	28°♏53'26	
opposition	2067 Oct 02 19:55	9°♈42'25	-4°12'02		2072 Nov 07 00:35	0°♐	
greatest brilliancy	2067 Oct 02 00:55	9°♈56'42	-2.8m	max. Earth dist.	2072 Nov 20 06:05	9°♐32'39	2.44687 AU
direct	2067 Nov 02 02:56	4°♈16'10			2072 Dec 17 21:29	0°♑	
asc. node	2067 Dec 10 03:13	12°♈26'55					
	2068 Jan 16 08:05	0°♉		conjunction	2072 Dec 30 02:55	9°♑14'57	-0°49'52
	2068 Mar 08 08:33	0°♊		minimum elong	2072 Dec 30 00:47	9°♑10'54	0°49'50
	2068 Apr 26 11:33	0°♋			2073 Jan 26 01:50	0°♒	
	2068 Jun 14 00:17	0°♌		morning rise	2073 Mar 03 10:05	28°♒28'18	
	2068 Aug 01 01:44	0°♍			2073 Mar 05 08:42	0°♓	
evening set	2068 Aug 17 10:39	10°♍20'15			2073 Apr 12 14:51	0°♈	
max. Earth dist.	2068 Sep 16 14:45	29°♍37'42	2.64857 AU		2073 May 21 17:43	0°♉	
	2068 Sep 17 04:34	0°♎			2073 Jul 01 14:41	0°♊	
				asc. node	2073 Aug 01 00:23	21°♊08'56	
conjunction	2068 Oct 01 21:51	9°♎33'13	0°44'48		2073 Aug 14 06:14	0°♋	
minimum elong	2068 Oct 01 22:59	9°♎35'04	0°44'47		2073 Oct 01 13:57	0°♌	
	2068 Nov 01 21:01	0°♏			2073 Dec 04 06:57	0°♍	
morning rise	2068 Nov 16 02:56	9°♏34'55		retrograde	2074 Jan 04 21:02	5°♍28'06	
	2068 Dec 15 21:38	0°♐			2074 Feb 02 23:01	30°♍	
desc. node	2068 Dec 26 15:01	7°♐29'09		opposition	2074 Feb 14 01:59	25°♍43'37	4°31'37
	2069 Jan 27 07:22	0°♑		greatest brilliancy	2074 Feb 14 00:02	25°♍45'34	-1.3m
	2069 Mar 09 08:47	0°♒		min. Earth dist.	2074 Feb 13 18:18	25°♍51'16	0.67645 AU
	2069 Apr 18 13:36	0°♓		direct	2074 Mar 26 18:11	15°♍57'51	
	2069 May 28 19:06	0°♈			2074 May 21 07:30	0°♎	
	2069 Jul 09 17:32	0°♉			2074 Jul 18 12:46	0°♏	
	2069 Aug 27 00:53	0°♊		desc. node	2074 Aug 18 12:03	18°♏49'23	
retrograde	2069 Oct 23 06:16	18°♊04'05			2074 Sep 04 20:19	0°♐	
asc. node	2069 Oct 27 01:58	17°♊57'43			2074 Oct 18 15:24	0°♑	
min. Earth dist.	2069 Nov 22 19:10	11°♊39'58	0.52220 AU		2074 Nov 28 11:13	0°♒	
opposition	2069 Nov 30 10:20	8°♊47'18	1°42'02	evening set	2075 Jan 01 14:38	26°♒15'14	
greatest brilliancy	2069 Nov 29 21:45	8°♊59'10	-2.1m		2075 Jan 06 09:41	0°♓	
direct	2070 Jan 04 08:14	1°♊07'19			2075 Feb 13 10:38	0°♈	
	2070 Mar 30 11:24	0°♋					
	2070 May 23 15:44	0°♌		conjunction	2075 Mar 09 06:51	18°♋49'21	-0°56'40
	2070 Jul 12 22:16	0°♍		minimum elong	2075 Mar 09 09:43	18°♋54'59	0°56'39
	2070 Aug 29 20:01	0°♎			2075 Mar 23 13:08	0°♐	
evening set	2070 Sep 24 03:49	16°♎27'43		max. Earth dist.	2075 Apr 24 22:48	24°♐58'02	2.38970 AU
max. Earth dist.	2070 Oct 13 04:41	29°♎08'35	2.56876 AU		2075 May 01 14:29	0°♑	
	2070 Oct 14 11:13	0°♏		morning rise	2075 May 18 01:41	12°♑18'06	
					2075 Jun 11 08:28	0°♒	
conjunction	2070 Nov 10 18:24	18°♒42'05	0°01'42	asc. node	2075 Jun 18 22:44	5°♒25'25	
minimum elong	2070 Nov 10 18:30	18°♒42'14	0°01'41		2075 Jul 24 09:06	0°♓	
behind sun begin	2070 Nov 09 22:05	18°♒06'45			2075 Sep 08 05:39	0°♈	
behind sun end	2070 Nov 11 14:55	19°♒17'46			2075 Oct 28 05:31	0°♉	
desc. node	2070 Nov 13 13:34	20°♒39'06			2075 Dec 29 03:48	0°♊	

retrograde	2076 Feb 09 02:09	8°♌45'22			2080 Oct 24 14:23	0°♏		
	2076 Mar 18 10:42	30°♏			2080 Dec 06 06:22	0°♏		
opposition	2076 Mar 19 08:56	29°♏38'18	3°35'03		2081 Jan 16 11:27	0°♏		
greatest brilliancy	2076 Mar 19 19:43	29°♏27'45	-1.4m	asc. node	2081 Feb 07 20:13	16°♏10'25		
min. Earth dist.	2076 Mar 22 22:24	28°♏14'45	0.65743 AU		2081 Feb 27 05:02	0°♏		
direct	2076 Apr 29 20:56	19°♏36'13			2081 Apr 11 07:39	0°♏		
	2076 Jun 14 11:04	0°♏			2081 May 26 01:23	0°♏		
desc. node	2076 Jul 05 10:29	9°♏26'58		evening set	2081 Jun 26 09:36	20°♏27'30		
	2076 Aug 11 11:51	0°♏			2081 Jul 11 04:40	0°♏		
	2076 Sep 26 12:27	0°♏						
	2076 Nov 07 00:30	0°♏		conjunction	2081 Aug 13 01:26	21°♏01'35	1°08'53	
	2076 Dec 16 03:56	0°♏		minimum elong	2081 Aug 13 01:26	21°♏01'34	1°08'53	
	2077 Jan 23 07:33	0°♏		max. Earth dist.	2081 Aug 16 01:28	22°♏56'20	2.67228 AU	
	2077 Mar 02 14:01	0°♏			2081 Aug 27 03:40	0°♏		
evening set	2077 Mar 13 01:30	8°♏05'55		morning rise	2081 Sep 27 00:37	19°♏38'55		
	2077 Apr 10 21:30	0°♏			2081 Oct 13 06:17	0°♏		
asc. node	2077 May 05 22:41	18°♏29'20			2081 Nov 29 01:55	0°♏		
					2082 Jan 14 12:57	0°♏		
conjunction	2077 May 15 20:35	25°♏39'22	0°06'22	desc. node	2082 Feb 25 07:07	26°♏59'18		
minimum elong	2077 May 15 20:09	25°♏38'36	0°06'22		2082 Mar 01 23:28	0°♏		
behind sun begin	2077 May 14 20:40	24°♏56'23			2082 Apr 18 10:34	0°♏		
behind sun end	2077 May 16 19:38	26°♏20'45			2082 Jun 10 13:46	0°♏		
	2077 May 21 22:07	0°♏		retrograde	2082 Aug 02 04:16	14°♏56'19		
max. Earth dist.	2077 Jun 23 12:12	22°♏48'38	2.52339 AU	min. Earth dist.	2082 Aug 30 18:55	10°♏16'24	0.37356 AU	
	2077 Jul 04 01:00	0°♏		opposition	2082 Sep 01 17:40	9°♏45'07	-6°27'09	
morning rise	2077 Jul 12 02:46	5°♏27'08		greatest brilliancy	2082 Sep 01 11:22	9°♏49'20	-2.9m	
	2077 Aug 18 08:24	0°♏		direct	2082 Oct 01 04:13	4°♏50'45		
	2077 Oct 04 21:27	0°♏			2082 Dec 12 10:11	0°♏		
	2077 Nov 24 09:47	0°♏		asc. node	2082 Dec 26 19:17	8°♏14'08		
	2078 Jan 21 16:29	0°♏			2083 Jan 31 09:08	0°♏		
retrograde	2078 Mar 21 00:44	15°♏16'21			2083 Mar 19 14:35	0°♏		
opposition	2078 Apr 27 01:39	7°♏13'44	1°08'02		2083 May 05 18:46	0°♏		
greatest brilliancy	2078 Apr 27 09:39	7°♏06'18	-1.8m		2083 Jun 22 08:23	0°♏		
min. Earth dist.	2078 May 04 05:03	4°♏34'24	0.57392 AU	evening set	2083 Aug 04 01:57	26°♏54'55		
	2078 May 18 14:44	30°♏			2083 Aug 08 23:03	0°♏		
desc. node	2078 May 23 09:15	28°♏57'14		max. Earth dist.	2083 Sep 08 07:17	19°♏17'37	2.66587 AU	
direct	2078 Jun 06 12:50	27°♏36'45						
	2078 Jun 26 04:06	0°♏		conjunction	2083 Sep 18 14:21	25°♏53'46	0°56'06	
	2078 Aug 30 16:42	0°♏		minimum elong	2083 Sep 18 15:24	25°♏55'27	0°56'06	
	2078 Oct 14 13:13	0°♏			2083 Sep 24 23:20	0°♏		
	2078 Nov 23 23:43	0°♏		morning rise	2083 Nov 02 02:30	24°♏52'33		
	2079 Jan 01 21:44	0°♏			2083 Nov 09 20:11	0°♏		
	2079 Feb 09 20:07	0°♏			2083 Dec 24 07:19	0°♏		
	2079 Mar 21 19:49	0°♏		desc. node	2084 Jan 13 06:51	13°♏48'11		
asc. node	2079 Mar 23 21:58	1°♏32'10			2084 Feb 05 09:03	0°♏		
	2079 May 02 12:24	0°♏			2084 Mar 18 06:47	0°♏		
evening set	2079 May 12 14:50	7°♏03'54			2084 Apr 28 12:17	0°♏		
	2079 Jun 15 04:02	0°♏			2084 Jun 09 04:24	0°♏		
					2084 Jul 24 07:19	0°♏		
conjunction	2079 Jul 05 01:19	13°♏15'23	0°54'14	retrograde	2084 Oct 04 14:33	27°♏16'20		
minimum elong	2079 Jul 04 23:50	13°♏12'56	0°54'12	min. Earth dist.	2084 Nov 02 00:28	21°♏43'29	0.46985 AU	
max. Earth dist.	2079 Jul 23 21:13	25°♏36'35	2.62418 AU	opposition	2084 Nov 10 06:08	18°♏48'00	-0°08'27	
	2079 Jul 30 15:15	0°♏		greatest brilliancy	2091 Sep 01 20:49	6°♏58'37	1.2m	
morning rise	2079 Aug 22 18:34	14°♏54'02		asc. node	2084 Nov 12 18:37	17°♏54'52		
	2079 Sep 15 12:29	0°♏		direct	2084 Dec 13 07:36	11°♏55'50		
	2079 Nov 02 11:24	0°♏			2085 Feb 13 13:49	0°♏		
	2079 Dec 21 17:48	0°♏			2085 Apr 10 23:39	0°♏		
	2080 Feb 12 04:14	0°♏			2085 Jun 01 01:48	0°♏		
desc. node	2080 Apr 09 08:10	26°♏10'49			2085 Jul 20 06:01	0°♏		
	2080 Apr 22 13:44	0°♏			2085 Sep 05 18:20	0°♏		
retrograde	2080 May 14 22:22	2°♏48'47		evening set	2085 Sep 09 03:28	2°♏10'44		
	2080 Jun 05 07:25	30°♏		max. Earth dist.	2085 Oct 02 02:54	17°♏10'26	2.60603 AU	
opposition	2080 Jun 16 20:28	26°♏36'46	-3°34'38		2085 Oct 21 09:01	0°♏		
greatest brilliancy	2080 Jun 17 20:49	26°♏17'10	-2.5m					
min. Earth dist.	2080 Jun 24 22:47	24°♏01'24	0.44498 AU	conjunction	2085 Oct 25 11:05	2°♏45'17	0°20'32	
direct	2080 Jul 22 17:05	19°♏05'24		minimum elong	2085 Oct 25 11:48	2°♏46'30	0°20'31	
	2080 Sep 03 07:13	0°♏		desc. node	2085 Nov 30 05:55	27°♏23'12		



	2085 Dec 03 23:10	0°♊		min. Earth dist.	2091 Mar 08 21:37	15°♏41'41	0.67272 AU
morning rise	2085 Dec 12 02:22	5°♊45'06		direct	2091 Apr 17 04:40	6°♏31'06	
	2086 Jan 14 16:09	0°♋			2091 Jun 30 23:37	0°♏	
	2086 Feb 23 21:00	0°♌		desc. node	2091 Jul 23 02:00	11°♏58'11	
	2086 Apr 04 03:32	0°♍			2091 Aug 21 23:56	0°♏	
	2086 May 13 06:49	0°♎			2091 Oct 05 19:36	0°♊	
	2086 Jun 22 10:01	0°♏			2091 Nov 15 22:40	0°♋	
	2086 Aug 04 08:53	0°♐			2091 Dec 24 22:41	0°♌	
	2086 Sep 24 09:15	0°♑			2092 Feb 01 00:09	0°♍	
asc. node	2086 Sep 30 16:56	3°♑00'25		evening set	2092 Feb 14 01:19	10°♍18'25	
retrograde	2086 Nov 17 14:10	15°♑38'08			2092 Mar 10 04:01	0°♎	
min. Earth dist.	2086 Dec 21 10:48	8°♑00'49	0.59386 AU		2092 Apr 18 07:57	0°♏	
greatest brilliancy	2086 Dec 26 08:38	6°♑04'36	-1.7m				
opposition	2086 Dec 27 02:38	5°♑46'48	3°29'40	conjunction	2092 Apr 21 09:37	2°♏18'10	-0°20'07
	2087 Jan 12 17:12	30°♒♐		minimum elong	2092 Apr 21 11:16	2°♏21'15	0°20'07
direct	2087 Feb 02 08:59	27°♐11'00		asc. node	2092 May 22 14:24	25°♏15'16	
	2087 Feb 24 16:36	0°♑			2092 May 29 04:47	0°♐	
	2087 May 07 12:08	0°♒		max. Earth dist.	2092 Jun 07 09:14	6°♐32'32	2.47220 AU
	2087 Jun 29 22:17	0°♓		morning rise	2092 Jun 22 16:14	17°♐16'03	
	2087 Aug 17 22:07	0°♑			2092 Jul 11 05:01	0°♑	
	2087 Oct 02 20:32	0°♒			2092 Aug 25 14:25	0°♒	
desc. node	2087 Oct 18 04:18	10°♒25'29			2092 Oct 12 17:32	0°♓	
evening set	2087 Oct 19 11:41	11°♒19'29			2092 Dec 04 10:20	0°♑	
max. Earth dist.	2087 Nov 03 06:00	21°♒35'30	2.49834 AU		2093 Feb 22 16:15	0°♒	
	2087 Nov 15 03:14	0°♊		retrograde	2093 Mar 03 23:51	0°♒30'38	
					2093 Mar 13 01:07	30°♒♐	
conjunction	2087 Dec 09 13:24	17°♊40'48	-0°30'47	opposition	2093 Apr 11 02:21	21°♑58'34	2°18'00
minimum elong	2087 Dec 09 11:57	17°♊38'09	0°30'45	greatest brilliancy	2093 Apr 11 14:41	21°♑46'47	-1.6m
	2087 Dec 26 04:14	0°♋		min. Earth dist.	2093 Apr 16 22:16	19°♑45'06	0.61383 AU
	2088 Feb 03 13:42	0°♌		direct	2093 May 22 06:01	12°♑04'19	
morning rise	2088 Feb 04 17:20	0°♌53'25		desc. node	2093 Jun 09 00:33	13°♑58'55	
	2088 Mar 13 01:13	0°♍			2093 Jul 22 03:48	0°♒	
	2088 Apr 20 10:41	0°♎			2093 Sep 11 04:55	0°♊	
	2088 May 29 16:07	0°♏			2093 Oct 24 02:20	0°♋	
	2088 Jul 09 17:49	0°♐			2093 Dec 02 19:18	0°♌	
asc. node	2088 Aug 17 16:34	26°♐32'55			2094 Jan 10 07:05	0°♍	
	2088 Aug 23 00:23	0°♑			2094 Feb 17 20:50	0°♎	
	2088 Oct 12 22:02	0°♒			2094 Mar 29 12:00	0°♏	
retrograde	2088 Dec 22 14:10	22°♒34'46		asc. node	2094 Apr 09 13:35	8°♏09'51	
min. Earth dist.	2089 Jan 30 00:20	13°♒25'44	0.66577 AU	evening set	2094 Apr 21 05:46	16°♏40'17	
opposition	2089 Jan 31 20:23	12°♒41'38	4°32'43		2094 May 09 20:32	0°♐	
greatest brilliancy	2089 Jan 31 12:34	12°♒49'28	-1.3m				
direct	2089 Mar 12 19:37	3°♒09'31		conjunction	2094 Jun 17 05:46	26°♐37'11	0°39'49
	2089 Jun 03 19:04	0°♓		minimum elong	2094 Jun 17 04:06	26°♐34'20	0°39'47
	2089 Jul 27 06:47	0°♑			2094 Jun 22 05:31	0°♑	
desc. node	2089 Sep 04 02:56	24°♑27'15		max. Earth dist.	2094 Jul 13 04:33	14°♑01'18	2.59082 AU
	2089 Sep 12 12:49	0°♒			2094 Aug 06 13:32	0°♒	
	2089 Oct 26 01:04	0°♊		morning rise	2094 Aug 07 13:50	0°♒39'25	
	2089 Dec 05 20:33	0°♋			2094 Sep 22 13:56	0°♓	
evening set	2089 Dec 08 02:27	1°♋41'48			2094 Nov 10 04:58	0°♑	
	2090 Jan 13 20:44	0°♌			2094 Dec 31 10:13	0°♒	
max. Earth dist.	2090 Jan 15 22:11	1°♌36'36	2.37599 AU		2095 Mar 01 06:16	0°♊	
				retrograde	2095 Apr 21 13:05	12°♊22'11	
conjunction	2090 Feb 08 05:29	19°♌55'56	-1°04'51	desc. node	2095 Apr 26 23:23	12°♊11'11	
minimum elong	2090 Feb 08 05:33	19°♌56'05	1°04'50	opposition	2095 May 26 06:27	5°♊20'31	-1°26'47
	2090 Feb 20 23:27	0°♍		greatest brilliancy	2095 May 26 17:11	5°♊11'13	-2.2m
	2090 Mar 31 02:38	0°♎		min. Earth dist.	2095 Jun 03 16:06	2°♊25'37	0.49748 AU
morning rise	2090 Apr 19 20:02	15°♎17'11			2095 Jun 11 10:04	30°♒♐	
	2090 May 09 03:23	0°♏		direct	2095 Jul 03 12:49	26°♐42'11	
	2090 Jun 18 20:42	0°♐			2095 Jul 26 03:48	0°♊	
asc. node	2090 Jul 05 16:07	11°♐55'26			2095 Sep 25 01:42	0°♋	
	2090 Jul 31 23:25	0°♑			2095 Nov 07 14:26	0°♌	
	2090 Sep 16 08:57	0°♒			2095 Dec 17 23:19	0°♍	
	2090 Nov 07 15:05	0°♓			2096 Jan 26 21:39	0°♎	
retrograde	2091 Jan 26 01:36	25°♓54'48		asc. node	2096 Feb 25 12:56	21°♎53'13	
opposition	2091 Mar 06 20:15	16°♓30'27	4°06'11		2096 Mar 07 17:00	0°♏	
greatest brilliancy	2091 Mar 07 02:55	16°♓23'51	-1.3m		2096 Apr 19 02:28	0°♐	

	2096 Jun 02 07:18	0°☿		2101 Apr 13 19:46	0°♄
evening set	2096 Jun 09 19:55	4°☿59'37		2101 May 23 13:31	0°♅
	2096 Jul 18 02:29	0°♁		2101 Jul 03 14:16	0°♄
				2101 Aug 17 21:03	0°♁
conjunction	2096 Jul 29 05:28	7°♁10'11 1°06'47	asc. node	2101 Oct 18 10:26	27°♁20'31
minimum elong	2096 Jul 29 04:50	7°♁09'11 1°06'46	retrograde	2101 Nov 02 22:10	28°♁57'33
max. Earth dist.	2096 Aug 07 03:01	12°♁52'43 2.66003 AU	min. Earth dist.	2101 Dec 04 15:45	22°♁05'58 0.54941 AU
	2096 Sep 02 23:02	0°♁	opposition	2101 Dec 11 15:43	19°♁24'13 2°29'40
morning rise	2096 Sep 13 05:07	6°♁30'49	greatest brilliancy	2101 Dec 10 23:17	19°♁40'04 -1.9m
	2096 Oct 20 06:59	0°♁			
	2096 Dec 06 19:14	0°♁			
	2097 Jan 23 17:32	0°♄			
desc. node	2097 Mar 13 23:18	29°♄50'02			
	2097 Mar 14 06:07	0°♄			
	2097 May 09 13:55	0°♁			
retrograde	2097 Jun 30 22:47	13°♁48'03			
opposition	2097 Jul 31 03:39	8°♁46'49 -6°37'16			
greatest brilliancy	2097 Jul 31 23:49	8°♁33'08 -2.9m			
min. Earth dist.	2097 Aug 03 18:12	7°♁48'08 0.38187 AU			
direct	2097 Aug 31 07:00	3°♁21'53			
	2097 Nov 11 20:00	0°♄			
	2097 Dec 29 01:00	0°♅			
asc. node	2098 Jan 12 10:37	9°♅37'09			
	2098 Feb 11 17:44	0°♄			
	2098 Mar 28 16:29	0°♁			
	2098 May 13 14:54	0°☿			
	2098 Jun 29 11:49	0°♁			
evening set	2098 Jul 20 12:28	13°♁20'54			
	2098 Aug 15 18:28	0°♁			
max. Earth dist.	2098 Aug 30 05:12	9°♁11'07 2.67501 AU			
conjunction	2098 Sep 04 12:04	12°♁33'10 1°03'58			
minimum elong	2098 Sep 04 12:49	12°♁34'22 1°03'58			
	2098 Oct 01 18:13	0°♁			
morning rise	2098 Oct 18 19:22	11°♁00'13			
	2098 Nov 16 21:57	0°♁			
	2098 Dec 31 23:37	0°♄			
desc. node	2099 Jan 29 22:31	19°♄39'36			
	2099 Feb 14 00:02	0°♄			
	2099 Mar 29 04:51	0°♁			
	2099 May 11 06:06	0°♄			
	2099 Jun 25 06:26	0°♅			
	2099 Aug 26 01:42	0°♄			
retrograde	2099 Sep 13 23:03	2°♄29'23			
	2099 Oct 02 18:01	30°♄♅			
min. Earth dist.	2099 Oct 10 18:43	27°♅42'30 0.41921 AU			
opposition	2099 Oct 18 08:08	25°♅16'33 -2°37'29			
greatest brilliancy	2099 Oct 17 16:31	25°♅29'09 -2.7m			
direct	2099 Nov 18 11:45	19°♅20'25			
asc. node	2099 Nov 30 10:01	20°♅15'13			
	2100 Jan 02 03:48	0°♄			
	2100 Mar 01 19:46	0°♁			
	2100 Apr 21 15:51	0°☿			
	2100 Jun 09 22:21	0°♁			
	2100 Jul 28 08:12	0°♁			
evening set	2100 Aug 26 16:03	18°♁30'52			
	2100 Sep 13 14:09	0°♁			
max. Earth dist.	2100 Sep 23 03:59	6°♁11'52 2.63561 AU			
conjunction	2100 Oct 11 06:57	18°♁03'39 0°36'43			
minimum elong	2100 Oct 11 08:01	18°♁05'24 0°36'43			
	2100 Oct 29 06:06	0°♁			
morning rise	2100 Nov 26 03:33	18°♁55'57			
	2100 Dec 12 02:54	0°♄			
desc. node	2100 Dec 17 21:08	4°♄01'50			
	2101 Jan 23 06:31	0°♄			
	2101 Mar 04 23:58	0°♁			