

conjunction	1601 Feb 10 04:21	21°≈34'29	-1°-4'-33	desc. node	1606 Apr 22 08:15	10°≈41'43	
minimum elong	1601 Feb 10 05:01	21°≈35'47	1°04'34	opposition	1606 May 25 14:39	3°≈58'01	-1°-43'-10
max. Earth dist.	1601 Feb 16 17:19	26°≈44'36	2.37053 AU	greatest brilliancy	1606 May 26 10:15	3°≈41'28	-2.2m
	1601 Feb 20 20:18	0°≈		min. Earth dist.	1606 Jun 03 02:24	1°≈06'09	0.47782 AU
	1601 Mar 31 03:35	0°≈			1606 Jun 06 13:21	30°≈	
morning rise	1601 Apr 21 21:41	16°≈41'00		direct	1606 Jul 02 03:24	25°≈41'48	
	1601 May 09 14:43	0°≈			1606 Jul 28 00:18	0°≈	
	1601 Jun 19 23:26	0°≈			1606 Sep 24 16:01	0°≈	
asc. node	1601 Jun 30 05:27	7°≈10'51			1606 Nov 06 23:36	0°≈	
	1601 Aug 02 20:58	0°≈			1606 Dec 17 13:40	0°≈	
	1601 Sep 19 05:06	0°≈			1607 Jan 27 00:16	0°≈	
	1601 Nov 12 04:06	0°≈		asc. node	1607 Feb 20 02:27	17°≈32'36	
retrograde	1602 Jan 22 14:57	21°≈44'55			1607 Mar 09 12:14	0°≈	
opposition	1602 Mar 03 04:34	12°≈26'32	4°08'22		1607 Apr 21 15:49	0°≈	
greatest brilliancy	1602 Mar 03 15:39	12°≈15'37	-1.3m		1607 Jun 05 12:53	0°≈	
min. Earth dist.	1602 Mar 05 18:32	11°≈25'31	0.66796 AU	evening set	1607 Jun 08 08:30	1°≈50'57	
direct	1602 Apr 13 14:20	2°≈25'55			1607 Jul 21 19:16	0°≈	
	1602 Jul 04 18:55	0°≈					
desc. node	1602 Jul 18 10:21	7°≈35'23		conjunction	1607 Jul 27 03:18	3°≈25'12	1°07'01
	1602 Aug 23 22:16	0°≈		minimum elong	1607 Jul 27 02:43	3°≈24'16	1°07'01
	1602 Oct 06 17:08	0°≈		max. Earth dist.	1607 Aug 02 15:57	7°≈35'44	2.66516 AU
	1602 Nov 16 04:13	0°≈			1607 Sep 06 20:12	0°≈	
	1602 Dec 24 19:53	0°≈		morning rise	1607 Sep 10 18:27	2°≈29'40	
greatest brilliancy	1602 Dec 28 03:55	2°≈37'25	1.2m		1607 Oct 24 01:49	0°≈	
	1603 Jan 31 20:32	0°≈			1607 Dec 10 06:25	0°≈	
evening set	1603 Feb 15 21:19	11°≈48'59			1608 Jan 26 16:18	0°≈	
	1603 Mar 11 06:34	0°≈		desc. node	1608 Mar 09 07:20	26°≈20'59	
	1603 Apr 19 22:23	0°≈			1608 Mar 15 08:56	0°≈	
					1608 May 08 17:36	0°≈	
conjunction	1603 Apr 23 00:29	2°≈16'55	0°-16'-7	retrograde	1608 Jul 04 10:31	16°≈09'13	
minimum elong	1603 Apr 23 01:44	2°≈19'13	0°16'06	opposition	1608 Aug 03 11:55	11°≈11'45	-6°-49'-31
asc. node	1603 May 18 05:48	20°≈37'02		greatest brilliancy	1608 Aug 04 01:06	11°≈03'00	-2.9m
	1603 May 31 10:55	0°≈		min. Earth dist.	1608 Aug 05 03:04	10°≈45'45	0.37560 AU
max. Earth dist.	1603 Jun 06 06:12	4°≈04'26	2.49142 AU	direct	1608 Sep 02 19:08	6°≈05'37	
morning rise	1603 Jun 22 09:42	15°≈15'31			1608 Nov 10 09:14	0°≈	
	1603 Jul 14 04:04	0°≈			1608 Dec 29 01:16	0°≈	
	1603 Aug 29 05:25	0°≈		asc. node	1609 Jan 07 02:06	5°≈52'46	
	1603 Oct 16 23:56	0°≈			1609 Feb 12 18:01	0°≈	
	1603 Dec 09 17:25	0°≈			1609 Mar 30 12:40	0°≈	
retrograde	1604 Mar 01 12:48	26°≈59'05			1609 May 16 02:27	0°≈	
opposition	1604 Apr 08 05:59	18°≈37'07	2°18'24		1609 Jul 02 08:21	0°≈	
greatest brilliancy	1604 Apr 09 00:31	18°≈19'33	-1.6m	evening set	1609 Jul 17 06:45	9°≈27'01	
min. Earth dist.	1604 Apr 14 13:42	16°≈13'35	0.59985 AU		1609 Aug 18 16:20	0°≈	
direct	1604 May 19 04:00	8°≈48'16		max. Earth dist.	1609 Aug 25 01:01	4°≈03'08	2.67216 AU
desc. node	1604 Jun 04 09:07	10°≈24'53					
	1604 Jul 24 22:42	0°≈		conjunction	1609 Sep 01 03:15	8°≈34'50	1°04'09
	1604 Sep 12 01:08	0°≈		minimum elong	1609 Sep 01 04:00	8°≈36'03	1°04'09
	1604 Oct 24 03:22	0°≈			1609 Oct 04 10:06	0°≈	
	1604 Dec 02 12:28	0°≈		morning rise	1609 Oct 15 12:20	7°≈12'49	
	1605 Jan 10 01:17	0°≈			1609 Nov 19 02:17	0°≈	
	1605 Feb 17 23:31	0°≈			1610 Jan 02 12:47	0°≈	
	1605 Mar 30 04:39	0°≈		desc. node	1610 Jan 25 06:58	15°≈40'50	
asc. node	1605 Apr 04 04:20	3°≈37'53			1610 Feb 14 19:48	0°≈	
evening set	1605 Apr 20 15:35	15°≈28'57			1610 Mar 29 06:17	0°≈	
	1605 May 11 06:03	0°≈			1610 May 10 14:34	0°≈	
					1610 Jun 24 00:48	0°≈	
conjunction	1605 Jun 15 06:54	23°≈57'40	0°41'04		1610 Aug 23 01:04	0°≈	
minimum elong	1605 Jun 15 05:17	23°≈54'57	0°41'03	retrograde	1610 Sep 13 19:29	3°≈15'14	
	1605 Jun 24 07:29	0°≈			1610 Oct 05 05:27	30°≈	
max. Earth dist.	1605 Jul 08 14:57	9°≈28'29	2.60378 AU	min. Earth dist.	1610 Oct 11 03:00	28°≈11'39	0.43770 AU
morning rise	1605 Aug 04 15:53	27°≈05'01		greatest brilliancy	1610 Oct 18 05:16	25°≈48'48	-2.5m
	1605 Aug 09 04:35	0°≈		opposition	1610 Oct 19 02:19	25°≈31'03	-2°-9'-24
	1605 Sep 25 13:08	0°≈		direct	1610 Nov 19 23:39	19°≈13'12	
	1605 Nov 13 08:17	0°≈		asc. node	1610 Nov 25 01:09	19°≈23'23	
	1606 Jan 03 17:21	0°≈			1611 Jan 04 04:51	0°≈	
	1606 Mar 05 12:43	0°≈			1611 Mar 04 08:49	0°≈	
retrograde	1606 Apr 21 12:25	10°≈41'58			1611 Apr 24 14:36	0°≈	

	1611 Jun 13 01:17	0°♈			1616 Feb 29 09:40	0°♁	
	1611 Jul 31 08:18	0°♉		morning rise	1616 Mar 22 22:02	17°♁41'05	
evening set	1611 Aug 23 09:55	14°♉38'21			1616 Apr 07 17:58	0°♂	
	1611 Sep 16 04:47	0°♊			1616 May 17 05:12	0°♂	
max. Earth dist.	1611 Sep 18 02:43	1°♊14'57	2.62523 AU		1616 Jun 27 14:55	0°♈	
				asc. node	1616 Jul 16 22:45	13°♈23'50	
conjunction	1611 Oct 08 07:15	14°♊33'10	0°36'25		1616 Aug 10 19:18	0°♉	
minimum elong	1611 Oct 08 08:20	14°♊34'58	0°36'24		1616 Sep 28 07:25	0°♈	
	1611 Oct 31 06:41	0°♋			1616 Nov 27 19:21	0°♉	
morning rise	1611 Nov 23 18:09	16°♋08'43		retrograde	1617 Jan 08 21:57	9°♉00'58	
desc. node	1611 Dec 13 05:54	29°♋50'09			1617 Feb 16 12:25	30°♈	
	1611 Dec 13 11:27	0°♌		opposition	1617 Feb 17 21:13	29°♈27'28	4°26'46
	1612 Jan 23 23:23	0°♍		greatest brilliancy	1617 Feb 18 01:17	29°♈23'25	-1.2m
	1612 Mar 04 03:36	0°♎		min. Earth dist.	1617 Feb 18 22:44	29°♈02'07	0.67685 AU
	1612 Apr 12 14:52	0°♏		direct	1617 Mar 31 00:11	19°♈32'42	
	1612 May 22 07:05	0°♐			1617 May 16 12:26	0°♉	
	1612 Jul 02 15:27	0°♑			1617 Jul 15 10:26	0°♊	
	1612 Aug 17 21:52	0°♒		desc. node	1617 Aug 04 02:18	11°♊48'28	
asc. node	1612 Oct 11 23:19	24°♒12'37			1617 Sep 01 10:12	0°♋	
retrograde	1612 Oct 30 05:20	26°♒24'57			1617 Oct 14 14:48	0°♌	
min. Earth dist.	1612 Dec 01 18:48	19°♒15'46	0.56662 AU		1617 Nov 23 21:37	0°♍	
greatest brilliancy	1612 Dec 07 10:04	17°♒04'03	-1.8m		1618 Jan 01 11:47	0°♎	
opposition	1612 Dec 08 07:48	16°♒42'51	2°32'06	evening set	1618 Jan 18 13:14	13°♎27'56	
direct	1613 Jan 13 16:39	8°♒27'30			1618 Feb 08 11:04	0°♏	
	1613 Mar 25 23:25	0°♓			1618 Mar 18 19:00	0°♐	
	1613 May 21 08:26	0°♈					
	1613 Jul 11 01:08	0°♉		conjunction	1618 Mar 27 13:19	6°♐45'01	0°-41'-38
	1613 Aug 27 16:59	0°♊		minimum elong	1618 Mar 27 16:22	6°♐50'53	0°41'37
evening set	1613 Sep 30 12:33	22°♊21'49			1618 Apr 27 07:52	0°♑	
	1613 Oct 11 18:00	0°♋		max. Earth dist.	1618 May 17 17:02	14°♑57'38	2.43791 AU
max. Earth dist.	1613 Oct 16 17:32	3°♋25'24	2.52831 AU	morning rise	1618 Jun 01 04:25	25°♑21'39	
desc. node	1613 Oct 30 04:39	12°♋46'59		asc. node	1618 Jun 03 21:09	27°♑16'38	
					1618 Jun 07 17:30	0°♒	
conjunction	1613 Nov 18 22:55	26°♋48'29	0°-11'-59		1618 Jul 21 10:08	0°♓	
minimum elong	1613 Nov 18 22:22	26°♋47'28	0°11'59		1618 Sep 05 18:19	0°♈	
behind sun begin	1613 Nov 18 07:29	26°♋20'47			1618 Oct 25 17:05	0°♉	
behind sun end	1613 Nov 19 13:14	27°♋14'11			1618 Dec 23 20:51	0°♊	
	1613 Nov 23 09:19	0°♌		retrograde	1619 Feb 14 12:33	12°♊54'24	
	1614 Jan 03 00:33	0°♍		opposition	1619 Mar 25 03:05	4°♊06'50	3°12'58
morning rise	1614 Jan 11 21:16	6°♍42'22		greatest brilliancy	1619 Mar 25 21:29	3°♊49'03	-1.4m
	1614 Feb 11 05:32	0°♎		min. Earth dist.	1619 Mar 30 00:51	2°♊13'09	0.63404 AU
	1614 Mar 21 17:54	0°♏			1619 Apr 05 00:08	30°♉	
	1614 Apr 29 10:07	0°♐		direct	1619 May 05 11:30	24°♉07'36	
	1614 Jun 08 05:30	0°♑			1619 Jun 07 05:02	0°♊	
	1614 Jul 20 09:18	0°♒		desc. node	1619 Jun 22 00:32	5°♊35'14	
asc. node	1614 Aug 29 23:15	26°♒20'14			1619 Aug 07 19:17	0°♋	
	1614 Sep 05 01:18	0°♓			1619 Sep 22 17:12	0°♌	
	1614 Nov 06 06:30	0°♈			1619 Nov 02 21:42	0°♍	
retrograde	1614 Dec 06 11:08	5°♈14'12			1619 Dec 11 21:05	0°♎	
	1615 Jan 03 11:34	30°♓			1620 Jan 19 03:03	0°♏	
min. Earth dist.	1615 Jan 12 20:07	26°♓25'44	0.65343 AU		1620 Feb 26 18:42	0°♐	
greatest brilliancy	1615 Jan 15 01:09	25°♓32'39	-1.3m	evening set	1620 Mar 28 13:38	23°♐14'44	
opposition	1615 Jan 15 16:02	25°♓17'44	4°19'21		1620 Apr 06 16:50	0°♑	
direct	1615 Feb 24 02:10	15°♓56'44		asc. node	1620 Apr 20 20:36	10°♑19'47	
	1615 Apr 20 19:04	0°♈			1620 May 18 11:28	0°♒	
	1615 Jun 19 02:30	0°♉					
	1615 Aug 08 02:32	0°♊		conjunction	1620 May 27 04:44	6°♒04'48	0°22'16
desc. node	1615 Sep 17 03:26	26°♊09'49		minimum elong	1620 May 27 03:30	6°♒02'40	0°22'14
	1615 Sep 22 19:02	0°♋		max. Earth dist.	1620 Jun 27 06:12	27°♒16'16	2.56536 AU
	1615 Nov 04 08:35	0°♌			1620 Jul 01 07:58	0°♓	
evening set	1615 Nov 16 18:41	9°♌06'12		morning rise	1620 Jul 19 17:13	12°♓10'42	
max. Earth dist.	1615 Dec 08 12:32	25°♌22'59	2.40087 AU		1620 Aug 16 04:28	0°♈	
	1615 Dec 14 14:17	0°♍			1620 Oct 02 21:27	0°♉	
					1620 Nov 21 21:38	0°♊	
conjunction	1616 Jan 14 14:16	23°♍57'14	-1°00'-18		1621 Jan 16 07:39	0°♋	
minimum elong	1616 Jan 14 12:27	23°♍53'41	1°00'18	retrograde	1621 Mar 30 10:23	22°♋12'05	
	1616 Jan 22 07:36	0°♎		opposition	1621 May 05 05:17	14°♋43'23	0°10'44

greatest brilliancy	1621 May 05 07:35	14°♌41'20	-1.9m	evening set	1626 Aug 09 01:17	1°♍08'57	
desc. node	1621 May 08 23:56	13°♌21'47		max. Earth dist.	1626 Sep 08 13:14	20°♍38'19	2.64979 AU
min. Earth dist.	1621 May 13 07:44	11°♌49'15	0.52978 AU		1626 Sep 22 23:51	0°♌	
direct	1621 Jun 13 13:56	5°♌36'00					
	1621 Aug 22 14:39	0°♌		conjunction	1626 Sep 23 13:47	0°♌22'42	0°49'54
	1621 Oct 07 18:11	0°♌		minimum elong	1626 Sep 23 14:56	0°♌24'34	0°49'53
	1621 Nov 17 15:24	0°♌			1626 Nov 07 05:53	0°♌	
	1621 Dec 27 01:19	0°♌		morning rise	1626 Nov 07 17:48	0°♌20'08	
	1622 Feb 04 16:25	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°♌21'51	
	1622 Mar 17 12:36	0°♌			1627 Jan 31 21:14	0°♌	
	1622 Apr 29 03:08	0°♌			1627 Mar 13 17:04	0°♌	
evening set	1622 May 21 20:44	15°♌29'09			1627 Apr 22 21:32	0°♌	
	1622 Jun 12 14:27	0°♌			1627 Jun 02 11:53	0°♌	
					1627 Jul 15 15:50	0°♌	
conjunction	1622 Jul 11 18:22	19°♌06'03	1°00'38		1627 Sep 07 21:14	0°♌	
minimum elong	1622 Jul 11 17:13	19°♌04'11	1°00'39	retrograde	1627 Oct 14 12:43	8°♌18'53	
max. Earth dist.	1622 Jul 24 11:50	27°♌19'45	2.64757 AU	asc. node	1627 Oct 29 16:52	6°♌37'48	
	1622 Jul 28 15:26	0°♌		min. Earth dist.	1627 Nov 13 22:23	1°♌58'09	0.51801 AU
morning rise	1622 Aug 27 18:14	19°♌14'50			1627 Nov 19 04:18	30°♌	
	1622 Sep 13 17:10	0°♌		greatest brilliancy	1627 Nov 21 01:40	29°♌17'08	-2.0m
	1622 Oct 31 09:15	0°♌		opposition	1627 Nov 21 14:29	29°♌05'04	1°08'50
	1622 Dec 18 16:24	0°♌		direct	1627 Dec 26 08:18	21°♌28'47	
	1623 Feb 06 14:19	0°♌			1628 Feb 04 18:22	0°♌	
desc. node	1623 Mar 26 23:56	26°♌24'35			1628 Apr 07 11:24	0°♌	
	1623 Apr 03 10:47	0°♌			1628 May 29 22:46	0°♌	
retrograde	1623 Jun 03 03:33	17°♌12'30			1628 Jul 18 10:29	0°♌	
opposition	1623 Jul 04 08:32	11°♌48'07	-5°-20'-15		1628 Sep 03 16:43	0°♌	
greatest brilliancy	1623 Jul 05 20:14	11°♌22'14	-2.7m	evening set	1628 Sep 14 18:21	7°♌14'17	
min. Earth dist.	1623 Jul 10 11:57	10°♌01'57	0.40236 AU	max. Earth dist.	1628 Oct 04 01:48	20°♌04'49	2.57162 AU
direct	1623 Aug 06 07:55	5°♌35'06			1628 Oct 18 17:03	0°♌	
	1623 Oct 13 09:22	0°♌					
	1623 Nov 28 20:01	0°♌		conjunction	1628 Nov 01 06:57	9°♌21'25	0°08'42
	1624 Jan 11 01:47	0°♌		minimum elong	1628 Nov 01 07:18	9°♌22'02	0°08'42
asc. node	1624 Jan 24 17:05	9°♌30'10		behind sun begin	1628 Oct 31 13:46	8°♌51'37	
	1624 Feb 23 08:55	0°♌		behind sun end	1628 Nov 02 00:50	9°♌52'28	
	1624 Apr 07 18:34	0°♌		desc. node	1628 Nov 15 20:20	19°♌32'57	
	1624 May 23 12:16	0°♌			1628 Nov 30 12:37	0°♌	
evening set	1624 Jul 02 09:11	25°♌36'12		morning rise	1628 Dec 21 09:31	15°♌08'53	
	1624 Jul 09 06:42	0°♌			1629 Jan 10 10:35	0°♌	
max. Earth dist.	1624 Aug 16 00:07	24°♌00'06	2.67603 AU		1629 Feb 18 23:00	0°♌	
					1629 Mar 29 18:09	0°♌	
conjunction	1624 Aug 17 23:54	25°♌16'07	1°08'22		1629 May 07 16:41	0°♌	
minimum elong	1624 Aug 18 00:13	25°♌16'36	1°08'22		1629 Jun 16 20:21	0°♌	
	1624 Aug 25 10:18	0°♌			1629 Jul 29 19:03	0°♌	
morning rise	1624 Oct 01 11:52	23°♌41'43		asc. node	1629 Sep 15 15:10	29°♌03'53	
	1624 Oct 11 06:58	0°♌			1629 Sep 17 09:15	0°♌	
	1624 Nov 26 10:06	0°♌		retrograde	1629 Nov 22 15:13	21°♌15'54	
	1625 Jan 10 17:05	0°♌		min. Earth dist.	1629 Dec 28 06:23	13°♌02'12	0.62661 AU
desc. node	1625 Feb 10 22:35	20°♌57'35		greatest brilliancy	1629 Dec 31 17:54	11°♌38'59	-1.5m
	1625 Feb 24 08:13	0°♌		opposition	1630 Jan 01 14:16	11°♌18'40	3°52'21
	1625 Apr 09 19:09	0°♌		direct	1630 Feb 08 23:33	2°♌18'39	
	1625 May 25 17:23	0°♌			1630 May 04 13:18	0°♌	
	1625 Jul 22 06:39	0°♌			1630 Jun 27 20:22	0°♌	
retrograde	1625 Aug 20 15:01	5°♌33'03			1630 Aug 15 15:51	0°♌	
min. Earth dist.	1625 Sep 16 03:14	1°♌04'14	0.39419 AU		1630 Sep 30 00:23	0°♌	
	1625 Sep 19 18:46	30°♌		desc. node	1630 Oct 03 18:59	2°♌35'21	
greatest brilliancy	1625 Sep 21 00:25	29°♌38'00	-2.7m	evening set	1630 Oct 27 20:42	19°♌25'43	
opposition	1625 Sep 22 05:05	29°♌16'44	-4°-48'-20	max. Earth dist.	1630 Nov 11 14:30	0°♌01'18	2.45106 AU
direct	1625 Oct 22 08:33	23°♌54'39			1630 Nov 11 13:48	0°♌	
	1625 Nov 23 14:44	0°♌					
asc. node	1625 Dec 11 17:06	7°♌16'54		conjunction	1630 Dec 21 03:47	29°♌24'21	0°-44'-49
	1626 Jan 24 01:45	0°♌		minimum elong	1630 Dec 21 01:40	29°♌20'19	0°44'50
	1626 Mar 15 08:28	0°♌			1630 Dec 21 22:34	0°♌	
	1626 May 03 01:36	0°♌			1631 Jan 29 19:43	0°♌	
	1626 Jun 20 10:05	0°♌		morning rise	1631 Feb 21 18:57	18°♌00'40	
	1626 Aug 07 05:44	0°♌		greatest brilliancy	1631 Feb 23 08:23	19°♌14'15	1.2m

	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 12:09	0°♂			1636 Sep 05 05:09	0°♁	
asc. node	1631 Aug 03 14:13	19°♂09'40			1636 Oct 18 06:23	0°♄	
	1631 Aug 20 05:13	0°♄			1636 Nov 27 01:02	0°♁	
	1631 Oct 09 20:24	0°♂			1637 Jan 04 19:13	0°♁	
retrograde	1631 Dec 27 12:59	26°♂18'16			1637 Feb 12 21:36	0°♂	
min. Earth dist.	1632 Feb 05 06:53	16°♂43'52	0.67558 AU		1637 Mar 25 06:23	0°♄	
opposition	1632 Feb 05 17:49	16°♂32'57	4°33'31	asc. node	1637 Mar 25 10:45	0°♄07'55	
greatest brilliancy	1632 Feb 05 14:17	16°♂36'29	-1.2m	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 16:28	0°♃			1637 Jun 19 14:35	0°♄	
	1632 Jul 24 13:54	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 00:44	0°♁			1637 Nov 08 00:00	0°♁	
					1637 Dec 27 22:50	0°♃	
conjunction	1633 Feb 26 16:11	8°♁23'29	-1°00'-9		1638 Feb 20 16:22	0°♁	
minimum elong	1633 Feb 26 18:31	8°♁28'06	1°00'09	desc. node	1638 Apr 12 14:37	20°♁03'31	
	1633 Mar 26 07:53	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'-46
	1633 May 04 18:55	0°♄		greatest brilliancy	1638 Jun 08 23:42	16°♁20'51	-2.4m
morning rise	1633 May 07 11:55	2°♄00'50		min. Earth dist.	1638 Jun 15 20:49	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°♂50'54			1638 Sep 13 17:55	0°♄	
	1633 Jul 28 20:45	0°♄			1638 Oct 30 07:44	0°♁	
	1633 Sep 13 16:35	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°♂34'46	
opposition	1634 Mar 10 23:41	20°♃27'05	3°51'50		1639 Mar 04 03:59	0°♄	
greatest brilliancy	1634 Mar 11 14:03	20°♃13'00	-1.3m		1639 Apr 16 15:26	0°♂	
min. Earth dist.	1634 Mar 14 10:01	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 13:46	0°♁			1639 Jul 17 03:32	0°♂	
desc. node	1634 Jul 08 17:08	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°♂47'49	1°08'42
	1634 Nov 11 02:56	0°♄		max. Earth dist.	1639 Aug 08 00:39	13°♂58'38	2.67129 AU
	1634 Dec 19 20:45	0°♁			1639 Sep 02 04:41	0°♃	
	1635 Jan 26 22:32	0°♁		morning rise	1639 Sep 18 17:01	10°♃30'31	
evening set	1635 Mar 03 15:44	27°♁52'48			1639 Oct 19 06:28	0°♁	
	1635 Mar 06 09:45	0°♂			1639 Dec 05 00:26	0°♃	
	1635 Apr 15 02:57	0°♄		desc. node	1640 Jan 20 12:16	0°♁	
					1640 Feb 28 14:09	25°♁06'41	
conjunction	1635 May 06 15:35	15°♄43'16	0°-1'-11		1640 Mar 07 06:32	0°♄	
minimum elong	1635 May 06 15:40	15°♄43'24	0°01'12		1640 Apr 24 22:07	0°♁	
behind sun begin	1635 May 05 14:21	14°♄57'45			1640 Jun 25 21:28	0°♁	
behind sun end	1635 May 07 16:59	16°♄29'00		retrograde	1640 Jul 22 10:32	4°♁21'26	
asc. node	1635 May 08 11:54	17°♄03'03			1640 Aug 19 00:35	30°♁	
	1635 May 26 16:34	0°♂		min. Earth dist.	1640 Aug 20 09:35	29°♁38'00	0.37347 AU
max. Earth dist.	1635 Jun 15 00:11	13°♂26'32	2.51976 AU	opposition	1640 Aug 21 22:53	29°♁13'03	-6°-42'-11
morning rise	1635 Jul 03 06:45	25°♂53'03		greatest brilliancy	1640 Aug 21 15:43	29°♁17'51	-2.9m
	1635 Jul 09 09:50	0°♄		direct	1640 Sep 20 11:48	24°♁18'32	
	1635 Aug 24 07:50	0°♂			1640 Oct 21 02:28	0°♁	
	1635 Oct 11 14:08	0°♃			1640 Dec 19 18:09	0°♂	
	1635 Dec 02 12:26	0°♁		asc. node	1640 Dec 28 09:27	5°♂12'57	
	1636 Feb 06 08:33	0°♃			1641 Feb 05 22:32	0°♄	
retrograde	1636 Mar 11 08:31	5°♃58'05			1641 Mar 24 19:54	0°♂	
	1636 Apr 11 15:56	30°♁			1641 May 11 00:07	0°♄	
opposition	1636 Apr 17 11:40	27°♁52'54	1°38'02		1641 Jun 27 13:46	0°♂	
greatest brilliancy	1636 Apr 18 03:17	27°♁38'21	-1.7m	evening set	1641 Jul 25 15:32	17°♂42'20	
min. Earth dist.	1636 Apr 24 12:47	25°♁15'22	0.57727 AU		1641 Aug 14 01:11	0°♃	

max. Earth dist.	1641 Aug 30 08:49	10° $\mathring{\text{M}}$ 24'00	2.66644 AU	asc. node	1646 Aug 20 06:14	24° $\mathring{\text{II}}$ 14'55	
					1646 Aug 29 10:48	0° $\mathring{\text{S}}$	
conjunction	1641 Sep 09 06:20	16° $\mathring{\text{M}}$ 44'38	0°59'56		1646 Oct 23 16:32	0° $\mathring{\text{Q}}$	
minimum elong	1641 Sep 09 07:18	16° $\mathring{\text{M}}$ 46'11	0°59'56	retrograde	1646 Dec 14 05:02	13° $\mathring{\text{Q}}$ 20'12	
	1641 Sep 29 18:55	0° $\mathring{\text{S}}$		min. Earth dist.	1647 Jan 21 11:40	4° $\mathring{\text{Q}}$ 14'05	0.66420 AU
morning rise	1641 Oct 23 18:43	15° $\mathring{\text{S}}$ 42'01		greatest brilliancy	1647 Jan 23 00:00	3° $\mathring{\text{Q}}$ 37'44	-1.3m
	1641 Nov 14 07:17	0° $\mathring{\text{M}}$		opposition	1647 Jan 23 11:01	3° $\mathring{\text{Q}}$ 26'42	4°28'19
	1641 Dec 28 10:06	0° $\mathring{\text{S}}$			1647 Feb 01 07:49	30° $\mathring{\text{S}}$	
desc. node	1642 Jan 15 12:41	12° $\mathring{\text{S}}$ 35'19		direct	1647 Mar 04 08:35	23° $\mathring{\text{S}}$ 56'02	
	1642 Feb 09 05:09	0° $\mathring{\text{S}}$			1647 Apr 07 18:01	0° $\mathring{\text{Q}}$	
	1642 Mar 22 23:13	0° $\mathring{\text{S}}$			1647 Jun 12 18:55	0° $\mathring{\text{M}}$	
	1642 May 03 07:03	0° $\mathring{\text{K}}$			1647 Aug 02 21:43	0° $\mathring{\text{S}}$	
	1642 Jun 14 16:16	0° $\mathring{\text{Y}}$		desc. node	1647 Sep 07 10:10	22° $\mathring{\text{S}}$ 54'51	
	1642 Aug 01 20:11	0° $\mathring{\text{S}}$			1647 Sep 17 23:01	0° $\mathring{\text{M}}$	
retrograde	1642 Sep 25 17:23	17° $\mathring{\text{S}}$ 17'57			1647 Oct 30 15:22	0° $\mathring{\text{S}}$	
min. Earth dist.	1642 Oct 24 00:38	11° $\mathring{\text{S}}$ 48'14	0.46581 AU	evening set	1647 Nov 29 03:00	21° $\mathring{\text{S}}$ 50'16	
greatest brilliancy	1642 Oct 31 20:40	9° $\mathring{\text{S}}$ 02'07	-2.3m		1647 Dec 09 21:10	0° $\mathring{\text{S}}$	
opposition	1642 Nov 01 05:30	8° $\mathring{\text{S}}$ 54'18	0°-47'-17	max. Earth dist.	1648 Jan 02 22:58	18° $\mathring{\text{S}}$ 34'27	2.37841 AU
asc. node	1642 Nov 15 08:16	4° $\mathring{\text{S}}$ 30'04			1648 Jan 17 13:33	0° $\mathring{\text{S}}$	
direct	1642 Dec 04 02:55	2° $\mathring{\text{S}}$ 06'20					
	1643 Feb 23 23:15	0° $\mathring{\text{II}}$		conjunction	1648 Jan 29 18:42	9° $\mathring{\text{S}}$ 36'57	-1°-4'-28
	1643 Apr 18 14:38	0° $\mathring{\text{S}}$		minimum elong	1648 Jan 29 18:03	9° $\mathring{\text{S}}$ 35'40	1°04'28
	1643 Jun 07 21:59	0° $\mathring{\text{Q}}$			1648 Feb 24 14:16	0° $\mathring{\text{K}}$	
	1643 Jul 26 13:57	0° $\mathring{\text{M}}$			1648 Apr 02 21:18	0° $\mathring{\text{Y}}$	
evening set	1643 Aug 31 18:53	23° $\mathring{\text{M}}$ 00'28		morning rise	1648 Apr 09 01:50	4° $\mathring{\text{Y}}$ 46'57	
	1643 Sep 11 13:46	0° $\mathring{\text{S}}$			1648 May 12 07:24	0° $\mathring{\text{S}}$	
max. Earth dist.	1643 Sep 24 01:21	8° $\mathring{\text{S}}$ 10'45	2.60803 AU		1648 Jun 22 14:52	0° $\mathring{\text{II}}$	
				asc. node	1648 Jul 07 04:55	10° $\mathring{\text{II}}$ 11'11	
conjunction	1643 Oct 17 02:33	23° $\mathring{\text{S}}$ 32'42	0°27'04		1648 Aug 05 13:13	0° $\mathring{\text{S}}$	
minimum elong	1643 Oct 17 03:28	23° $\mathring{\text{S}}$ 34'14	0°27'02		1648 Sep 22 05:05	0° $\mathring{\text{Q}}$	
	1643 Oct 26 15:09	0° $\mathring{\text{M}}$			1648 Nov 16 23:05	0° $\mathring{\text{M}}$	
morning rise	1643 Dec 03 14:41	26° $\mathring{\text{M}}$ 23'06		retrograde	1649 Jan 16 17:10	16° $\mathring{\text{M}}$ 45'46	
desc. node	1643 Dec 03 11:32	26° $\mathring{\text{M}}$ 17'31		opposition	1649 Feb 25 12:04	7° $\mathring{\text{M}}$ 20'17	4°17'19
	1643 Dec 08 16:48	0° $\mathring{\text{S}}$		greatest brilliancy	1649 Feb 25 20:11	7° $\mathring{\text{M}}$ 12'16	-1.2m
	1644 Jan 18 23:39	0° $\mathring{\text{S}}$		min. Earth dist.	1649 Feb 27 10:11	6° $\mathring{\text{M}}$ 34'42	0.67329 AU
	1644 Feb 27 22:03	0° $\mathring{\text{S}}$			1649 Mar 18 11:55	30° $\mathring{\text{Q}}$	
	1644 Apr 07 02:50	0° $\mathring{\text{K}}$		direct	1649 Apr 07 19:45	27° $\mathring{\text{Q}}$ 21'36	
	1644 May 16 11:09	0° $\mathring{\text{Y}}$			1649 Apr 29 12:55	0° $\mathring{\text{M}}$	
	1644 Jun 26 05:23	0° $\mathring{\text{S}}$			1649 Jul 08 19:24	0° $\mathring{\text{S}}$	
	1644 Aug 09 17:07	0° $\mathring{\text{II}}$		desc. node	1649 Jul 25 08:26	9° $\mathring{\text{S}}$ 32'38	
asc. node	1644 Oct 02 07:43	28° $\mathring{\text{II}}$ 13'54			1649 Aug 27 00:08	0° $\mathring{\text{M}}$	
	1644 Oct 07 02:28	0° $\mathring{\text{S}}$			1649 Oct 09 13:59	0° $\mathring{\text{S}}$	
retrograde	1644 Nov 08 01:04	6° $\mathring{\text{S}}$ 09'30			1649 Nov 19 00:08	0° $\mathring{\text{S}}$	
	1644 Dec 08 01:44	30° $\mathring{\text{II}}$			1649 Dec 27 15:39	0° $\mathring{\text{S}}$	
min. Earth dist.	1644 Dec 11 17:49	28° $\mathring{\text{II}}$ 35'54	0.59029 AU	evening set	1650 Feb 03 11:07	29° $\mathring{\text{S}}$ 51'18	
greatest brilliancy	1644 Dec 16 13:51	26° $\mathring{\text{II}}$ 41'40	-1.6m		1650 Feb 03 15:32	0° $\mathring{\text{K}}$	
opposition	1644 Dec 17 12:39	26° $\mathring{\text{II}}$ 19'10	3°07'49	greatest brilliancy	1650 Feb 14 18:26	8° $\mathring{\text{K}}$ 45'38	1.2m
direct	1645 Jan 23 16:14	17° $\mathring{\text{II}}$ 45'58			1650 Mar 13 23:56	0° $\mathring{\text{Y}}$	
	1645 Mar 15 10:00	0° $\mathring{\text{S}}$					
	1645 May 15 04:11	0° $\mathring{\text{Q}}$		conjunction	1650 Apr 11 20:41	22° $\mathring{\text{Y}}$ 00'38	0°-27'-25
	1645 Jul 05 21:43	0° $\mathring{\text{M}}$		minimum elong	1650 Apr 11 22:52	22° $\mathring{\text{Y}}$ 04'44	0°27'25
	1645 Aug 22 22:44	0° $\mathring{\text{S}}$			1650 Apr 22 13:22	0° $\mathring{\text{S}}$	
	1645 Oct 07 02:32	0° $\mathring{\text{M}}$		asc. node	1650 May 25 04:53	23° $\mathring{\text{S}}$ 46'49	
evening set	1645 Oct 09 23:56	1° $\mathring{\text{M}}$ 58'58		max. Earth dist.	1650 May 29 13:48	26° $\mathring{\text{S}}$ 53'36	2.46772 AU
desc. node	1645 Oct 20 11:20	9° $\mathring{\text{M}}$ 13'50			1650 Jun 02 23:04	0° $\mathring{\text{II}}$	
max. Earth dist.	1645 Oct 24 21:51	12° $\mathring{\text{M}}$ 19'55	2.50163 AU	morning rise	1650 Jun 13 14:29	7° $\mathring{\text{II}}$ 27'59	
	1645 Nov 18 17:27	0° $\mathring{\text{S}}$			1650 Jul 16 14:22	0° $\mathring{\text{S}}$	
					1650 Aug 31 16:36	0° $\mathring{\text{Q}}$	
conjunction	1645 Nov 29 21:24	8° $\mathring{\text{S}}$ 07'41	0°-24'-19		1650 Oct 19 19:55	0° $\mathring{\text{M}}$	
minimum elong	1645 Nov 29 20:13	8° $\mathring{\text{S}}$ 05'30	0°24'18		1650 Dec 14 04:19	0° $\mathring{\text{S}}$	
	1645 Dec 29 06:21	0° $\mathring{\text{S}}$		retrograde	1651 Feb 23 11:10	21° $\mathring{\text{S}}$ 17'22	
morning rise	1646 Jan 25 14:36	20° $\mathring{\text{S}}$ 54'14		opposition	1651 Apr 02 15:02	12° $\mathring{\text{S}}$ 43'22	2°43'12
	1646 Feb 06 08:25	0° $\mathring{\text{S}}$		greatest brilliancy	1651 Apr 03 10:03	12° $\mathring{\text{S}}$ 25'11	-1.5m
	1646 Mar 16 17:45	0° $\mathring{\text{K}}$		min. Earth dist.	1651 Apr 08 08:20	10° $\mathring{\text{S}}$ 32'12	0.61634 AU
	1646 Apr 24 07:02	0° $\mathring{\text{Y}}$		direct	1651 May 13 19:21	2° $\mathring{\text{S}}$ 48'31	
	1646 Jun 02 22:48	0° $\mathring{\text{S}}$		desc. node	1651 Jun 12 07:14	7° $\mathring{\text{S}}$ 44'46	
	1646 Jul 14 18:41	0° $\mathring{\text{II}}$			1651 Jul 31 04:51	0° $\mathring{\text{M}}$	

	1651 Sep 16 18:23	0°♊		conjunction	1656 Aug 26 02:42	3°♎21'59	1°06'21
	1651 Oct 28 11:04	0°♋		minimum elong	1656 Aug 26 03:17	3°♎22'55	1°06'22
	1651 Dec 06 16:03	0°♌			1656 Oct 06 15:10	0°♎	
	1652 Jan 14 01:24	0°♍		morning rise	1656 Oct 09 11:47	1°♎50'59	
	1652 Feb 21 19:50	0°♎			1656 Nov 21 12:20	0°♏	
	1652 Apr 01 20:44	0°♏			1657 Jan 05 07:50	0°♐	
evening set	1652 Apr 10 23:28	6°♏39'12		desc. node	1657 Feb 01 04:49	18°♐19'21	
asc. node	1652 Apr 11 03:48	6°♏47'04			1657 Feb 18 03:51	0°♑	
	1652 May 13 17:38	0°♐			1657 Apr 02 08:41	0°♑	
					1657 May 15 20:43	0°♒	
conjunction	1652 Jun 07 07:34	16°♐57'45	0°33'42		1657 Jul 02 01:33	0°♓	
minimum elong	1652 Jun 07 06:01	16°♐55'07	0°33'41	retrograde	1657 Sep 03 19:48	22°♓11'57	
	1652 Jun 26 15:32	0°♑		min. Earth dist.	1657 Sep 30 13:55	17°♓27'02	0.41650 AU
max. Earth dist.	1652 Jul 03 22:41	4°♑51'34	2.58753 AU	greatest brilliancy	1657 Oct 06 20:26	15°♓27'16	-2.6m
morning rise	1652 Jul 28 23:38	21°♑17'40		opposition	1657 Oct 07 23:39	15°♓05'26	-3°-17'-34
	1652 Aug 11 10:55	0°♒		direct	1657 Nov 08 01:22	9°♓13'09	
	1652 Sep 27 21:49	0°♓		asc. node	1657 Dec 02 00:46	12°♓41'50	
	1652 Nov 16 03:11	0°♔			1658 Jan 13 12:33	0°♕	
	1653 Jan 07 20:13	0°♕			1658 Mar 08 13:47	0°♖	
	1653 Mar 19 23:17	0°♆			1658 Apr 27 13:17	0°♗	
retrograde	1653 Apr 11 11:58	2°♆48'12			1658 Jun 15 11:25	0°♘	
desc. node	1653 Apr 29 06:25	0°♆49'07			1658 Aug 02 13:32	0°♙	
	1653 May 02 16:02	30°♕		evening set	1658 Aug 17 06:17	9°♙18'49	
opposition	1653 May 16 09:00	25°♕43'06	0°-51'-8	max. Earth dist.	1658 Sep 14 02:35	27°♙12'27	2.63725 AU
greatest brilliancy	1653 May 16 19:06	25°♕34'18	-2.1m		1658 Sep 18 09:41	0°♚	
min. Earth dist.	1653 May 24 19:01	22°♕47'17	0.50149 AU				
direct	1653 Jun 23 19:45	17°♕00'45		conjunction	1658 Oct 01 21:59	8°♚51'00	0°42'28
	1653 Aug 10 15:09	0°♛		minimum elong	1658 Oct 01 23:08	8°♚52'53	0°42'28
	1653 Sep 30 05:44	0°♜			1658 Nov 02 14:12	0°♛	
	1653 Nov 11 06:41	0°♝		morning rise	1658 Nov 16 16:57	9°♛37'16	
	1653 Dec 21 06:11	0°♞			1658 Dec 16 00:00	0°♛	
	1654 Jan 30 06:13	0°♟		desc. node	1658 Dec 20 03:57	2°♛56'35	
asc. node	1654 Feb 27 02:01	20°♟24'53			1659 Jan 26 18:10	0°♞	
	1654 Mar 12 09:31	0°♠			1659 Mar 08 05:22	0°♟	
	1654 Apr 24 05:36	0°♡			1659 Apr 16 23:25	0°♞	
evening set	1654 Jun 01 00:39	25°♡28'06			1659 May 26 23:11	0°♟	
	1654 Jun 07 21:06	0°♢			1659 Jul 07 20:49	0°♠	
					1659 Aug 25 01:08	0°♡	
conjunction	1654 Jul 20 16:07	27°♢51'29	1°04'53	asc. node	1659 Oct 19 22:42	19°♡15'51	
minimum elong	1654 Jul 20 15:16	27°♢50'08	1°04'53	retrograde	1659 Oct 24 07:19	19°♡23'53	
	1654 Jul 24 00:03	0°♣		min. Earth dist.	1659 Nov 24 21:39	12°♡35'47	0.54575 AU
max. Earth dist.	1654 Jul 29 22:59	3°♣49'20	2.65833 AU	greatest brilliancy	1659 Dec 01 04:34	10°♡10'51	-1.9m
morning rise	1654 Sep 04 20:13	27°♣20'28		opposition	1659 Dec 01 23:57	9°♡52'11	2°00'47
	1654 Sep 09 00:44	0°♤		direct	1660 Jan 06 16:33	1°♡52'59	
	1654 Oct 26 10:24	0°♥			1660 Mar 30 19:49	0°♢	
	1654 Dec 13 01:18	0°♦			1660 May 24 07:18	0°♣	
	1655 Jan 30 09:22	0°♧			1660 Jul 13 11:27	0°♤	
desc. node	1655 Mar 17 05:12	27°♧09'11			1660 Aug 30 00:05	0°♥	
	1655 Mar 22 06:43	0°♨		evening set	1660 Sep 23 15:13	16°♥11'34	
	1655 May 27 21:54	0°♩		max. Earth dist.	1660 Oct 11 01:45	27°♥56'52	2.54855 AU
retrograde	1655 Jun 21 02:33	3°♩23'40			1660 Oct 14 01:55	0°♦	
	1655 Jul 15 02:45	30°♩		desc. node	1660 Nov 06 02:51	15°♦58'12	
opposition	1655 Jul 21 09:52	28°♩19'58	-6°-23'-7				
greatest brilliancy	1655 Jul 22 12:49	28°♩01'35	-2.8m	conjunction	1660 Nov 11 02:30	19°♦29'07	0°-3'-2
min. Earth dist.	1655 Jul 25 08:52	27°♩15'16	0.38437 AU	minimum elong	1660 Nov 11 02:22	19°♦28'52	0°03'04
direct	1655 Aug 21 18:12	22°♩49'27		behind sun begin	1660 Nov 10 05:34	18°♦52'08	
	1655 Sep 24 18:00	0°♪		behind sun end	1660 Nov 11 23:10	20°♦05'38	
	1655 Nov 19 10:34	0°♫			1660 Nov 25 20:23	0°♧	
	1656 Jan 03 23:27	0°♬		morning rise	1661 Jan 02 03:34	27°♧22'52	
asc. node	1656 Jan 15 01:26	7°♬29'09			1661 Jan 05 15:26	0°♨	
	1656 Feb 17 09:25	0°♭			1661 Feb 14 00:16	0°♩	
	1656 Apr 02 10:41	0°♣			1661 Mar 24 15:39	0°♫	
	1656 May 18 14:04	0°♤			1661 May 02 09:51	0°♬	
	1656 Jul 04 13:59	0°♥			1661 Jun 11 07:19	0°♭	
evening set	1656 Jul 10 23:31	4°♥03'37			1661 Jul 23 15:52	0°♣	
	1656 Aug 20 19:52	0°♦		asc. node	1661 Sep 05 22:22	28°♣08'09	
max. Earth dist.	1656 Aug 21 05:26	0°♧15'15	2.67494 AU		1661 Sep 09 03:32	0°♤	

retrograde	1661 Nov 30 16:02	29°♄51'27			1667 Jan 22 00:29	0°♃	
min. Earth dist.	1662 Jan 06 07:05	21°♄17'36	0.64267 AU		1667 Mar 01 13:17	0°♃	
greatest brilliancy	1662 Jan 09 01:08	20°♄11'32	-1.4m	evening set	1667 Mar 18 14:42	13°♃00'38	
opposition	1662 Jan 09 18:45	19°♄53'54	4°10'09		1667 Apr 10 08:03	0°♃	
direct	1662 Feb 17 18:16	10°♄41'30		asc. node	1667 Apr 28 19:36	13°♃30'11	
	1662 Apr 26 05:54	0°♄					
	1662 Jun 22 03:16	0°♄		conjunction	1667 May 19 05:00	28°♃03'45	0°12'47
	1662 Aug 10 15:53	0°♄		minimum elong	1667 May 19 04:13	28°♃02'21	0°12'48
desc. node	1662 Sep 24 01:19	29°♄10'49		behind sun begin	1667 May 18 13:39	27°♃36'40	
	1662 Sep 25 06:12	0°♄		behind sun end	1667 May 19 18:46	28°♃28'00	
	1662 Nov 06 21:03	0°♄			1667 May 21 23:01	0°♄	
evening set	1662 Nov 07 20:35	0°♄42'44		max. Earth dist.	1667 Jun 22 20:28	22°♄01'20	2.54577 AU
max. Earth dist.	1662 Nov 24 21:53	13°♄14'17	2.42264 AU		1667 Jul 04 16:35	0°♄	
	1662 Dec 17 04:58	0°♄		morning rise	1667 Jul 13 10:43	5°♄50'11	
					1667 Aug 19 12:15	0°♄	
conjunction	1663 Jan 03 12:43	13°♄16'48	0°-54'-37		1667 Oct 06 09:15	0°♄	
minimum elong	1663 Jan 03 10:31	13°♄12'35	0°54'38		1667 Nov 26 00:54	0°♄	
	1663 Jan 25 00:34	0°♄			1668 Jan 23 05:38	0°♄	
	1663 Mar 04 04:03	0°♄		retrograde	1668 Mar 21 22:08	15°♄27'07	
morning rise	1663 Mar 10 13:02	5°♄01'00		opposition	1668 Apr 27 07:57	7°♄41'15	0°50'31
	1663 Apr 11 12:36	0°♄		greatest brilliancy	1668 Apr 27 17:27	7°♄32'33	-1.8m
	1663 May 20 23:22	0°♄		min. Earth dist.	1668 May 05 00:11	4°♄52'51	0.55177 AU
	1663 Jul 01 08:43	0°♄		desc. node	1668 May 15 21:44	1°♄20'52	
asc. node	1663 Jul 24 22:17	16°♄15'28			1668 May 21 09:25	30°♄	
	1663 Aug 14 15:41	0°♄		direct	1668 Jun 06 06:45	28°♄17'40	
	1663 Oct 02 18:18	0°♄			1668 Jun 22 14:45	0°♄	
	1663 Dec 08 03:30	0°♄			1668 Aug 28 08:47	0°♄	
retrograde	1664 Jan 04 05:00	4°♄05'10			1668 Oct 11 22:33	0°♄	
	1664 Jan 29 06:42	30°♄			1668 Nov 21 07:01	0°♄	
opposition	1664 Feb 13 07:22	24°♄26'04	4°30'55		1668 Dec 30 09:15	0°♄	
greatest brilliancy	1664 Feb 13 08:08	24°♄25'19	-1.2m		1669 Feb 07 17:30	0°♄	
min. Earth dist.	1664 Feb 13 17:01	24°♄16'28	0.67755 AU	asc. node	1669 Mar 15 18:44	26°♄42'56	
direct	1664 Mar 25 05:31	14°♄35'09			1669 Mar 20 07:18	0°♄	
	1664 May 22 18:41	0°♄			1669 May 01 15:53	0°♄	
	1664 Jul 18 17:21	0°♄		evening set	1669 May 13 19:24	8°♄21'31	
desc. node	1664 Aug 11 00:03	14°♄15'22			1669 Jun 14 22:28	0°♄	
	1664 Sep 04 05:32	0°♄					
	1664 Oct 17 08:03	0°♄		conjunction	1669 Jul 04 21:01	13°♄08'27	0°56'36
	1664 Nov 26 15:06	0°♄		minimum elong	1669 Jul 04 19:40	13°♄06'14	0°56'36
	1665 Jan 04 05:58	0°♄		max. Earth dist.	1669 Jul 20 13:21	23°♄20'38	2.63708 AU
evening set	1665 Jan 06 10:51	1°♄44'03			1669 Jul 30 20:44	0°♄	
	1665 Feb 11 05:17	0°♄		morning rise	1669 Aug 21 16:05	13°♄57'46	
					1669 Sep 15 23:09	0°♄	
conjunction	1665 Mar 15 02:59	25°♄02'43	0°-50'-59		1669 Nov 02 20:47	0°♄	
minimum elong	1665 Mar 15 06:10	25°♄08'55	0°50'59		1669 Dec 21 18:44	0°♄	
	1665 Mar 21 12:09	0°♄			1670 Feb 11 07:06	0°♄	
	1665 Apr 29 23:10	0°♄		desc. node	1670 Apr 02 21:36	25°♄03'46	
max. Earth dist.	1665 May 05 19:08	4°♄19'40	2.41381 AU		1670 Apr 16 00:53	0°♄	
morning rise	1665 May 21 22:13	16°♄08'32		retrograde	1670 May 21 02:30	6°♄32'55	
	1665 Jun 10 06:34	0°♄		opposition	1670 Jun 22 03:24	0°♄46'14	-4°-20'-28
asc. node	1665 Jun 10 20:30	0°♄24'38		greatest brilliancy	1670 Jun 23 15:57	0°♄18'18	-2.5m
	1665 Jul 23 22:02	0°♄			1670 Jun 24 15:50	30°♄	
	1665 Sep 08 08:46	0°♄		min. Earth dist.	1670 Jun 29 11:44	28°♄32'29	0.42157 AU
	1665 Oct 28 22:18	0°♄		direct	1670 Jul 26 13:29	23°♄54'43	
	1665 Dec 31 05:43	0°♄			1670 Aug 26 10:48	0°♄	
retrograde	1666 Feb 08 01:28	7°♄36'55			1670 Oct 21 03:45	0°♄	
	1666 Mar 15 12:48	30°♄			1670 Dec 03 22:03	0°♄	
opposition	1666 Mar 19 00:16	28°♄39'35	3°30'41		1671 Jan 15 00:30	0°♄	
greatest brilliancy	1666 Mar 19 17:11	28°♄23'08	-1.3m	asc. node	1671 Jan 31 16:38	11°♄49'44	
min. Earth dist.	1666 Mar 23 06:48	26°♄59'57	0.64628 AU		1671 Feb 26 14:45	0°♄	
direct	1666 Apr 29 11:12	18°♄38'12			1671 Apr 11 12:45	0°♄	
	1666 Jun 16 02:26	0°♄			1671 May 26 22:27	0°♄	
desc. node	1666 Jun 28 22:41	5°♄45'27		evening set	1671 Jun 26 19:36	19°♄57'17	
	1666 Aug 11 16:59	0°♄			1671 Jul 12 12:02	0°♄	
	1666 Sep 25 23:23	0°♄					
	1666 Nov 05 23:14	0°♄		conjunction	1671 Aug 12 21:47	20°♄00'59	1°08'59
	1666 Dec 14 20:34	0°♄		minimum elong	1671 Aug 12 21:52	20°♄01'07	1°08'59

max. Earth dist.	1671 Aug 13 06:15	20°♏14'28	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°♎30'05		greatest brilliancy	1676 Dec 25 09:14	5°♍52'14	-1.5m
	1671 Oct 14 13:07	0°♎		opposition	1676 Dec 26 07:15	5°♍30'20	3°36'14
	1671 Nov 29 22:44	0°♎			1677 Jan 10 16:36	30°♈	
	1672 Jan 14 17:47	0°♎		direct	1677 Feb 02 03:41	26°♈41'25	
desc. node	1672 Feb 18 20:33	23°♎10'36			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 17:08	5°♎42'26	
greatest brilliancy	1672 Sep 08 00:25	17°♎11'31	-2.8m	evening set	1677 Oct 19 22:44	12°♎07'45	
opposition	1672 Sep 08 22:58	16°♎55'46	-5°-49'-42	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 01:16	0°♎	
	1672 Dec 07 08:55	0°♎					
asc. node	1672 Dec 18 16:11	5°♎53'04		conjunction	1677 Dec 11 13:50	20°♎15'00	0°-36'-22
	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°♏53'26			1678 Mar 11 19:39	0°♎	
	1673 Aug 09 10:06	0°♎		greatest brilliancy	1678 Apr 16 12:10	27°♎51'46	1.2m
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°♎58'00	0°54'31		1678 Jul 09 09:02	0°♈	
minimum elong	1673 Sep 17 11:19	24°♎59'46	0°54'31	asc. node	1678 Aug 10 13:37	21°♈47'02	
	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 21:34	21°♏17'53	
	1673 Dec 23 10:18	0°♎		min. Earth dist.	1679 Jan 30 00:28	11°♏55'21	0.67173 AU
desc. node	1674 Jan 05 19:06	9°♎21'27		greatest brilliancy	1679 Jan 30 20:23	11°♏35'25	-1.2m
	1674 Feb 03 19:34	0°♎		opposition	1679 Jan 31 03:16	11°♏28'32	4°32'53
	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 09:25	0°♈			1679 Sep 12 23:39	0°♎	
retrograde	1674 Oct 06 17:43	0°♈04'52			1679 Oct 25 19:45	0°♎	
	1674 Oct 10 01:33	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 12 23:21	21°♎15'07	-2.2m	conjunction	1680 Feb 14 20:50	26°♎07'34	-1°-3'-58
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 18:34	0°♎	
	1675 Apr 12 04:11	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 07:10	15°♎22'10	2.58886 AU	asc. node	1680 Jun 27 13:27	6°♈55'36	
	1675 Oct 22 00:20	0°♎			1680 Jul 31 10:41	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 04:58	2°♎51'55	0°16'45	retrograde	1681 Jan 24 15:25	24°♎32'44	
desc. node	1675 Nov 23 18:20	22°♎44'10		opposition	1681 Mar 05 04:34	15°♎16'14	4°03'46
	1675 Dec 03 23:39	0°♎		greatest brilliancy	1681 Mar 05 16:22	15°♎04'37	-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°♎	
asc. node	1676 Sep 22 14:44	29°♈40'47		greatest brilliancy	1681 Nov 28 02:53	10°♈49'15	1.2m
	1676 Sep 23 06:32	0°♍			1681 Dec 22 17:15	0°♎	

	1682 Jan 29 18:05	0°♁		morning rise	1686 Sep 12 19:55	5°♁21'47	
evening set	1682 Feb 19 13:07	16°♁19'54			1686 Oct 21 14:17	0°♁	
	1682 Mar 09 03:23	0°♂			1686 Dec 07 16:55	0°♁	
	1682 Apr 17 17:52	0°♂			1687 Jan 23 21:48	0°♁	
				desc. node	1687 Mar 07 11:57	26°♁35'10	
conjunction	1682 Apr 26 07:31	6°♂19'26	0°-12'-17		1687 Mar 13 02:02	0°♁	
minimum elong	1682 Apr 26 08:28	6°♂21'10	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'-55
asc. node	1682 May 15 11:18	20°♂14'10		greatest brilliancy	1687 Aug 08 22:12	15°♁50'22	-2.9m
	1682 May 29 04:33	0°♁		min. Earth dist.	1687 Aug 09 12:41	15°♁40'44	0.37434 AU
max. Earth dist.	1682 Jun 08 09:36	7°♁09'51	2.49726 AU	direct	1687 Sep 07 15:25	10°♁54'12	
morning rise	1682 Jun 25 02:47	18°♁42'03			1687 Nov 06 15:20	0°♁	
	1682 Jul 11 19:26	0°♁			1687 Dec 26 20:51	0°♂	
	1682 Aug 26 17:41	0°♁		asc. node	1688 Jan 05 09:00	6°♂06'18	
	1682 Oct 14 06:27	0°♁			1688 Feb 10 23:53	0°♂	
	1682 Dec 06 06:52	0°♁			1688 Mar 27 22:29	0°♁	
retrograde	1683 Mar 04 20:43	29°♁57'45			1688 May 13 13:52	0°♁	
opposition	1683 Apr 11 11:41	21°♁38'55	2°07'40		1688 Jun 29 20:38	0°♁	
greatest brilliancy	1683 Apr 12 05:31	21°♁22'05	-1.6m	evening set	1688 Jul 19 10:35	12°♁22'58	
min. Earth dist.	1683 Apr 17 23:12	19°♁12'09	0.59591 AU		1688 Aug 16 05:28	0°♁	
direct	1683 May 22 08:42	11°♁51'22		max. Earth dist.	1688 Aug 26 12:48	6°♁33'50	2.67131 AU
desc. node	1683 Jun 02 14:09	12°♁39'11					
	1683 Jul 22 02:05	0°♁		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°♁			1688 Oct 02 00:07	0°♁	
	1683 Dec 01 07:51	0°♁		morning rise	1688 Oct 17 14:58	10°♁09'44	
	1684 Jan 08 21:35	0°♁			1688 Nov 16 16:56	0°♁	
	1684 Feb 16 19:23	0°♂			1688 Dec 31 03:21	0°♁	
	1684 Mar 27 23:15	0°♂		desc. node	1689 Jan 22 10:55	15°♁23'11	
asc. node	1684 Apr 01 09:58	3°♂14'38			1689 Feb 12 09:14	0°♁	
evening set	1684 Apr 23 14:27	19°♂11'40			1689 Mar 26 17:02	0°♁	
	1684 May 08 22:59	0°♁			1689 May 07 19:27	0°♁	
					1689 Jun 20 13:45	0°♂	
conjunction	1684 Jun 17 20:05	27°♁15'11	0°43'35		1689 Aug 13 23:00	0°♂	
minimum elong	1684 Jun 17 18:28	27°♁12'28	0°43'33	retrograde	1689 Sep 16 15:41	7°♂21'41	
	1684 Jun 21 22:42	0°♁		min. Earth dist.	1689 Oct 14 03:10	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°♂	
morning rise	1684 Aug 06 21:28	0°♁05'22		greatest brilliancy	1689 Oct 21 10:59	29°♂45'15	-2.5m
	1684 Aug 06 18:08	0°♁		opposition	1689 Oct 22 05:23	29°♂29'37	-1°-48'-28
	1684 Sep 23 00:37	0°♁		asc. node	1689 Nov 22 07:37	23°♂06'33	
	1684 Nov 10 15:40	0°♁		direct	1689 Nov 23 06:13	23°♂06'12	
	1684 Dec 31 13:40	0°♁			1689 Dec 28 10:27	0°♂	
	1685 Feb 28 01:38	0°♁			1690 Feb 28 23:53	0°♁	
desc. node	1685 Apr 19 12:36	14°♁06'58			1690 Apr 21 18:37	0°♁	
retrograde	1685 Apr 24 15:35	14°♁16'30			1690 Jun 10 10:19	0°♁	
opposition	1685 May 28 12:47	7°♁37'26	-2°-1'-30		1690 Jul 28 20:18	0°♁	
greatest brilliancy	1685 May 29 11:18	7°♁18'30	-2.2m	evening set	1690 Aug 25 13:29	17°♁34'51	
min. Earth dist.	1685 Jun 05 22:51	4°♁48'05	0.47240 AU		1690 Sep 13 19:02	0°♁	
	1685 Jun 26 01:36	30°♁		max. Earth dist.	1690 Sep 19 21:11	3°♁58'24	2.62199 AU
direct	1685 Jul 04 18:47	29°♁27'48					
	1685 Jul 13 14:07	0°♁		conjunction	1690 Oct 10 12:23	17°♁36'06	0°33'53
	1685 Sep 21 06:52	0°♁		minimum elong	1690 Oct 10 13:26	17°♁37'51	0°33'53
	1685 Nov 04 07:30	0°♁			1690 Oct 28 22:44	0°♁	
	1685 Dec 15 03:14	0°♁		morning rise	1690 Nov 26 03:41	19°♁25'01	
	1686 Jan 24 15:49	0°♂		desc. node	1690 Dec 10 09:28	29°♁25'49	
asc. node	1686 Feb 17 09:58	17°♂17'34			1690 Dec 11 04:46	0°♁	
	1686 Mar 07 04:03	0°♂			1691 Jan 21 17:22	0°♁	
	1686 Apr 19 07:00	0°♁			1691 Mar 02 21:38	0°♁	
	1686 Jun 03 03:12	0°♁			1691 Apr 11 08:06	0°♁	
evening set	1686 Jun 10 17:56	4°♁59'34			1691 May 20 21:58	0°♂	
	1686 Jul 19 08:53	0°♁			1691 Jul 01 00:34	0°♂	
					1691 Aug 15 13:00	0°♁	
conjunction	1686 Jul 29 07:52	6°♁22'52	1°07'37	asc. node	1691 Oct 10 07:03	26°♁11'37	
minimum elong	1686 Jul 29 07:21	6°♁22'04	1°07'37	retrograde	1691 Nov 02 12:02	29°♁38'42	
max. Earth dist.	1686 Aug 04 09:11	10°♁15'05	2.66655 AU	min. Earth dist.	1691 Dec 05 06:26	22°♁24'34	0.57124 AU
	1686 Sep 04 09:22	0°♁		greatest brilliancy	1691 Dec 10 17:11	20°♁16'59	-1.7m

opposition	1691 Dec 11 15:35	19°II55'04	2°42'52	evening set	1697 Jan 22 01:18	17°≈51'48	
direct	1692 Jan 17 03:59	11°II36'01			1697 Feb 06 09:41	0°✠	
	1692 Mar 21 20:04	0°☉			1697 Mar 16 16:45	0°♃	
	1692 May 18 09:03	0°♁					
	1692 Jul 08 10:04	0°♃		conjunction	1697 Mar 31 01:51	11°♃03'59	0°-38'-21
	1692 Aug 25 06:29	0°♁		minimum elong	1697 Mar 31 04:47	11°♃09'35	0°38'19
evening set	1692 Oct 02 19:35	25°♁29'22			1697 Apr 25 03:51	0°♃	
	1692 Oct 09 10:40	0°♃		max. Earth dist.	1697 May 20 13:40	18°♃38'14	2.44340 AU
max. Earth dist.	1692 Oct 18 15:27	6°♃19'28	2.52316 AU	asc. node	1697 Jun 01 03:51	26°♃56'55	
desc. node	1692 Oct 27 09:08	12°♃23'50		morning rise	1697 Jun 04 04:55	29°♃06'39	
	1692 Nov 21 04:10	0°♃			1697 Jun 05 11:03	0°II	
					1697 Jul 19 00:35	0°☉	
conjunction	1692 Nov 21 12:34	0°♃15'07	0°-15'-11		1697 Sep 03 04:23	0°♁	
minimum elong	1692 Nov 21 11:51	0°♃13'50	0°15'13		1697 Oct 22 18:08	0°♃	
behind sun begin	1692 Nov 21 04:03	29°♃59'48			1697 Dec 19 06:56	0°♁	
behind sun end	1692 Nov 21 19:38	0°♃27'52		retrograde	1698 Feb 16 17:23	15°♁49'10	
	1692 Dec 31 20:39	0°☉		opposition	1698 Mar 27 06:25	7°♁04'14	3°04'44
morning rise	1693 Jan 14 23:32	10°☉41'57		greatest brilliancy	1698 Mar 28 00:55	6°♁46'24	-1.4m
	1693 Feb 09 02:02	0°≈		min. Earth dist.	1698 Apr 01 08:36	5°♁06'29	0.63094 AU
	1693 Mar 19 14:03	0°✠			1698 Apr 16 10:52	30°♃	
	1693 Apr 27 05:01	0°♃		direct	1698 May 07 14:44	27°♃05'18	
	1693 Jun 05 21:55	0°♃			1698 May 29 23:34	0°♁	
	1693 Jul 17 20:55	0°II		desc. node	1698 Jun 19 05:11	6°♁34'23	
asc. node	1693 Aug 27 05:55	26°II27'16			1698 Aug 04 17:31	0°♃	
	1693 Sep 02 01:08	0°☉			1698 Sep 20 05:34	0°♃	
	1693 Oct 30 21:27	0°♁			1698 Oct 31 15:30	0°☉	
retrograde	1693 Dec 08 12:26	8°♁08'05			1698 Dec 09 17:15	0°≈	
	1694 Jan 13 05:08	30°☉			1699 Jan 16 23:57	0°✠	
min. Earth dist.	1694 Jan 15 01:46	29°☉15'36	0.65586 AU		1699 Feb 24 15:12	0°♃	
greatest brilliancy	1694 Jan 17 02:53	28°☉26'24	-1.3m	evening set	1699 Apr 01 17:42	27°♃13'02	
opposition	1694 Jan 17 17:00	28°☉12'16	4°22'30		1699 Apr 05 12:08	0°♃	
direct	1694 Feb 26 04:50	18°☉49'09		asc. node	1699 Apr 19 03:12	9°♃57'43	
	1694 Apr 15 21:41	0°♁			1699 May 17 05:03	0°II	
	1694 Jun 16 02:16	0°♃					
	1694 Aug 05 13:01	0°♁		conjunction	1699 May 30 22:20	9°II33'34	0°25'24
desc. node	1694 Sep 14 08:01	25°♁51'36		minimum elong	1699 May 30 21:00	9°II31'15	0°25'24
	1694 Sep 20 11:01	0°♃			1699 Jun 29 23:29	0°☉	
	1694 Nov 02 04:01	0°♃		max. Earth dist.	1699 Jun 29 23:06	29°II59'22	2.56971 AU
evening set	1694 Nov 19 12:56	12°♃44'33		morning rise	1699 Jul 23 01:54	15°☉17'58	
	1694 Dec 12 11:45	0°☉			1699 Aug 14 17:38	0°♁	
max. Earth dist.	1694 Dec 12 21:42	0°☉18'58	2.39603 AU		1699 Oct 01 07:16	0°♃	
					1699 Nov 20 00:27	0°♁	
					1700 Jan 13 10:40	0°♃	
conjunction	1695 Jan 17 22:09	28°☉10'46	-1°-1'-40				
minimum elong	1695 Jan 17 20:32	28°☉07'37	1°01'41	retrograde	1700 Apr 03 05:36	25°♃29'26	
	1695 Jan 20 05:54	0°≈		desc. node	1700 May 07 04:19	18°♃39'46	
	1695 Feb 27 07:46	0°✠		opposition	1700 May 08 19:36	18°♃04'56	0°-4'-41
morning rise	1695 Mar 27 19:41	22°✠22'44		greatest brilliancy	1700 May 01 13:13	20°♃34'25	-2.0m
	1695 Apr 06 14:52	0°♃		min. Earth dist.	1700 May 16 23:07	15°♃10'17	0.52467 AU
	1695 May 16 00:03	0°♃		direct	1700 Jun 17 00:17	9°♃01'14	
	1695 Jun 26 06:44	0°II			1700 Aug 19 20:03	0°♃	
asc. node	1695 Jul 15 04:10	13°II09'11					
	1695 Aug 09 06:17	0°☉					
	1695 Sep 26 08:05	0°♁					
	1695 Nov 23 15:27	0°♃					
retrograde	1696 Jan 11 22:33	11°♃50'16					
opposition	1696 Feb 20 21:14	2°♃18'25	4°24'13				
greatest brilliancy	1696 Feb 21 02:12	2°♃13'28	-1.2m				
min. Earth dist.	1696 Feb 22 03:22	1°♃48'30	0.67653 AU				
	1696 Feb 26 17:50	30°♁					
direct	1696 Apr 02 01:04	22°♁22'34					
	1696 May 10 21:25	0°♃					
	1696 Jul 12 10:21	0°♁					
desc. node	1696 Aug 01 06:17	11°♁45'12					
	1696 Aug 29 22:18	0°♃					
	1696 Oct 12 08:33	0°♃					
	1696 Nov 21 18:28	0°☉					
	1696 Dec 30 10:08	0°≈					