

superior conj	1599 Jan 08 20:19	18°♁13'57	-1°-57'-55	morning set	1599 Dec 02 17:43	0°♁55'46	
minimum elong	1599 Jan 08 15:40	17°♁54'44	1°57'44	desc. node	1599 Dec 03 20:26	2°♁39'31	
	1599 Jan 15 20:14	0°♁		max. Earth dist.	1599 Dec 16 10:09	22°♁19'55	1.44691 AU
evening rise	1599 Jan 21 11:30	9°♁44'56					
	1599 Feb 02 12:28	0°♁		superior conj	1599 Dec 19 13:23	27°♁18'04	-1°-32'-55
asc. node	1599 Feb 04 09:07	2°♁40'07		minimum elong	1599 Dec 19 04:45	26°♁43'48	1°32'07
evening max el	1599 Feb 07 23:03	6°♁56'46	18°09'19		1599 Dec 21 06:00	0°♁	
retrograde	1599 Feb 14 10:35	10°♁21'04		evening rise	1600 Jan 03 01:26	20°♁52'02	
evening set	1599 Feb 17 05:12	9°♁42'28			1600 Jan 08 13:32	0°♁	
inferior conj	1599 Feb 23 12:50	4°♁29'44	3°44'02	evening max el	1600 Jan 22 11:23	20°♁18'21	18°27'06
minimum elong	1599 Feb 23 13:18	4°♁28'33	3°44'01	asc. node	1600 Jan 22 06:09	20°♁04'53	
min. Earth dist.	1599 Feb 26 08:14	1°♁34'11	0.62513 AU	retrograde	1600 Jan 29 00:01	23°♁52'49	
	1599 Feb 27 23:36	30°♁		evening set	1600 Jan 31 23:48	23°♁03'27	
morning rise	1599 Mar 01 19:11	28°♁30'01		inferior conj	1600 Feb 06 22:20	17°♁31'18	3°40'41
direct	1599 Mar 08 17:57	25°♁54'33		minimum elong	1600 Feb 06 21:07	17°♁34'51	3°40'36
desc. node	1599 Mar 14 22:33	27°♁40'54		min. Earth dist.	1600 Feb 09 02:26	15°♁00'08	0.64329 AU
	1599 Mar 18 10:42	0°♁		morning rise	1600 Feb 12 17:01	11°♁23'31	
morning max el	1599 Mar 22 17:59	3°♁49'20	27°48'48	direct	1600 Feb 19 13:13	8°♁34'22	
	1599 Apr 11 06:21	0°♁		desc. node	1600 Feb 29 19:36	13°♁22'24	
morning set	1599 Apr 25 12:31	26°♁03'27		morning max el	1600 Mar 04 02:56	16°♁25'19	27°26'04
	1599 Apr 27 10:43	0°♁			1600 Mar 15 08:51	0°♁	
max. Earth dist.	1599 May 01 03:12	7°♁46'50	1.32659 AU		1600 Apr 03 00:36	0°♁	
				morning set	1600 Apr 08 06:17	9°♁56'30	
superior conj	1599 May 03 02:12	12°♁00'21	0°-2'-45	max. Earth dist.	1600 Apr 13 04:02	19°♁51'10	1.33480 AU
minimum elong	1599 May 03 02:19	12°♁01'03	0°02'44				
behind sun begin	1599 May 02 21:12	11°♁33'18		superior conj	1600 Apr 16 07:38	26°♁28'07	0°-30'-13
behind sun end	1599 May 03 07:27	12°♁28'50		minimum elong	1600 Apr 16 09:08	26°♁36'06	0°29'55
asc. node	1599 May 03 08:26	12°♁34'14			1600 Apr 17 23:24	0°♁	
evening rise	1599 May 10 02:24	27°♁09'31		asc. node	1600 Apr 19 05:28	2°♁41'00	
	1599 May 11 10:51	0°♁		evening rise	1600 Apr 23 13:45	11°♁56'12	
	1599 May 29 00:26	0°♁			1600 May 02 21:10	0°♁	
evening max el	1599 Jun 03 09:06	6°♁00'04	23°58'42	evening max el	1600 May 15 00:39	16°♁31'15	22°22'48
desc. node	1599 Jun 10 21:48	11°♁26'53		retrograde	1600 May 28 00:08	22°♁56'29	
retrograde	1599 Jun 17 03:51	12°♁55'32		desc. node	1600 May 27 18:49	22°♁56'22	
evening set	1599 Jun 21 13:16	12°♁12'57		evening set	1600 May 31 00:16	22°♁36'33	
min. Earth dist.	1599 Jun 27 19:54	9°♁11'18	0.56327 AU	min. Earth dist.	1600 Jun 08 07:31	19°♁01'18	0.55196 AU
inferior conj	1599 Jun 30 06:03	7°♁42'00	-4°-32'-55	inferior conj	1600 Jun 09 07:28	18°♁27'29	-3°-22'-52
minimum elong	1599 Jun 30 00:38	7°♁50'22	4°32'08	minimum elong	1600 Jun 08 23:41	18°♁38'29	3°20'44
morning rise	1599 Jul 08 15:31	3°♁42'53		morning rise	1600 Jun 18 01:20	14°♁35'38	
direct	1599 Jul 11 08:19	3°♁24'00		direct	1600 Jun 21 00:33	14°♁15'40	
morning max el	1599 Jul 21 05:51	7°♁59'26	19°50'48	morning max el	1600 Jul 02 13:19	19°♁37'48	21°11'14
asc. node	1599 Jul 30 07:41	19°♁57'16			1600 Jul 10 22:27	0°♁	
	1599 Aug 04 20:07	0°♁		asc. node	1600 Jul 16 04:43	8°♁55'43	
morning set	1599 Aug 08 01:27	6°♁24'04		morning set	1600 Jul 22 09:20	21°♁08'29	
					1600 Jul 26 15:11	0°♁	
superior conj	1599 Aug 15 22:53	22°♁22'38	1°46'02				
minimum elong	1599 Aug 15 22:59	22°♁23'09	1°46'02	superior conj	1600 Jul 29 19:57	6°♁40'01	1°42'42
	1599 Aug 19 20:22	0°♁		minimum elong	1600 Jul 29 18:39	6°♁33'17	1°42'38
max. Earth dist.	1599 Aug 21 15:53	3°♁26'51	1.37150 AU	max. Earth dist.	1600 Aug 03 02:06	15°♁18'39	1.35397 AU
evening rise	1599 Aug 25 12:34	10°♁33'36		evening rise	1600 Aug 07 08:57	23°♁37'31	
	1599 Sep 06 01:44	0°♁			1600 Aug 10 19:45	0°♁	
desc. node	1599 Sep 06 21:09	1°♁15'54		desc. node	1600 Aug 23 18:10	21°♁25'06	
	1599 Sep 28 08:41	0°♁			1600 Aug 29 16:55	0°♁	
evening max el	1599 Sep 30 06:57	1°♁57'43	25°33'49	evening max el	1600 Sep 11 19:01	15°♁35'15	26°34'13
retrograde	1599 Oct 12 11:08	8°♁56'43		retrograde	1600 Sep 24 16:28	22°♁48'32	
evening set	1599 Oct 18 10:02	6°♁27'59		evening set	1600 Oct 01 05:07	20°♁08'36	
min. Earth dist.	1599 Oct 22 19:55	1°♁36'56	0.67002 AU	min. Earth dist.	1600 Oct 05 07:28	15°♁54'34	0.66096 AU
inferior conj	1599 Oct 24 00:14	0°♁06'06	0°-46'-59	inferior conj	1600 Oct 06 23:31	13°♁54'23	-1°-44'-50
minimum elong	1599 Oct 24 01:27	0°♁02'14	0°46'28	minimum elong	1600 Oct 07 02:17	13°♁46'04	1°43'43
	1599 Oct 24 02:08	30°♁		asc. node	1600 Oct 12 03:54	8°♁39'36	
asc. node	1599 Oct 26 06:52	27°♁17'27		morning rise	1600 Oct 13 00:42	8°♁07'38	
morning rise	1599 Oct 29 17:35	24°♁08'05		direct	1600 Oct 15 22:15	7°♁20'25	
direct	1599 Nov 02 00:26	23°♁05'47		morning max el	1600 Oct 22 14:10	11°♁00'05	18°32'50
morning max el	1599 Nov 09 02:58	27°♁05'43	19°18'44		1600 Nov 05 02:39	0°♁	
	1599 Nov 11 17:35	0°♁		morning set	1600 Nov 11 18:22	10°♁37'59	
greatest brilliancy	1599 Nov 18 20:33	9°♁42'33	-0.7m	desc. node	1600 Nov 19 17:27	23°♁18'26	
	1599 Dec 02 03:22	0°♁			1600 Nov 23 23:14	0°♁	

superior conj	1600 Nov 27 15:08	5°♁45'34	0°-51'-4		1601 Oct 28 22:57	0°♁	
minimum elong	1600 Nov 27 08:39	5°♁20'06	0°50'15				
max. Earth dist.	1600 Nov 28 04:36	6°♁38'28	1.45127 AU	superior conj	1601 Nov 06 22:42	14°♁36'08	0°-2'-18
	1600 Dec 13 00:25	0°♁		minimum elong	1601 Nov 06 22:25	14°♁35'00	0°02'17
evening rise	1600 Dec 13 16:00	1°♁01'49		behind sun begin	1601 Nov 06 11:52	13°♁52'46	
	1601 Jan 01 16:10	0°♁		behind sun end	1601 Nov 07 08:59	15°♁17'10	
evening max el	1601 Jan 04 21:20	3°♁45'03	19°02'35	desc. node	1601 Nov 06 14:30	14°♁03'20	
asc. node	1601 Jan 08 03:10	6°♁28'34		max. Earth dist.	1601 Nov 10 23:22	21°♁00'02	1.44818 AU
retrograde	1601 Jan 11 19:00	7°♁40'25			1601 Nov 16 17:03	0°♁	
evening set	1601 Jan 15 00:57	6°♁39'13		evening rise	1601 Nov 23 09:41	10°♁23'10	
inferior conj	1601 Jan 20 17:11	0°♁50'04	3°22'25		1601 Dec 06 05:52	0°♁	
minimum elong	1601 Jan 20 14:56	0°♁57'10	3°22'02	greatest brilliancy	1601 Dec 11 21:53	8°♁14'09	-0.6m
	1601 Jan 21 09:01	30°♁		evening max el	1601 Dec 19 03:05	17°♁14'20	19°54'11
min. Earth dist.	1601 Jan 22 05:58	28°♁54'13	0.65775 AU	asc. node	1601 Dec 26 00:11	21°♁36'38	
morning rise	1601 Jan 26 03:59	24°♁37'27		retrograde	1601 Dec 26 16:32	21°♁39'13	
direct	1601 Feb 01 15:03	21°♁48'36		evening set	1601 Dec 30 06:13	20°♁24'43	
morning max el	1601 Feb 14 12:48	29°♁25'01	26°32'51	inferior conj	1602 Jan 04 18:27	14°♁21'28	2°53'02
	1601 Feb 15 02:32	0°♁		minimum elong	1602 Jan 04 15:47	14°♁30'18	2°52'21
desc. node	1601 Feb 15 16:38	0°♁36'44		min. Earth dist.	1602 Jan 05 17:16	13°♁05'26	0.66822 AU
	1601 Mar 09 05:38	0°♁		morning rise	1602 Jan 10 00:44	8°♁06'28	
morning set	1601 Mar 22 12:29	23°♁10'43		direct	1602 Jan 15 22:48	5°♁29'08	
	1601 Mar 26 01:27	0°♁		morning max el	1602 Jan 27 21:45	12°♁36'46	25°17'59
max. Earth dist.	1601 Mar 26 17:56	1°♁21'21	1.34753 AU	desc. node	1602 Feb 02 13:40	18°♁57'23	
					1602 Feb 10 22:35	0°♁	
superior conj	1601 Mar 31 06:52	10°♁32'09	0°-57'-52		1602 Mar 01 23:18	0°♁	
minimum elong	1601 Mar 31 09:46	10°♁47'02	0°57'22	morning set	1602 Mar 05 02:25	5°♁32'54	
asc. node	1601 Apr 06 02:29	22°♁39'58		max. Earth dist.	1602 Mar 08 20:11	12°♁25'27	1.36470 AU
evening rise	1601 Apr 07 22:41	26°♁29'51					
	1601 Apr 09 15:40	0°♁		superior conj	1602 Mar 14 21:10	24°♁05'11	-1°-24'00
evening max el	1601 Apr 27 00:20	27°♁22'35	20°55'00	minimum elong	1602 Mar 15 01:07	24°♁24'47	1°23'26
	1601 Apr 30 03:07	0°♁			1602 Mar 17 20:03	0°♁	
retrograde	1601 May 08 13:30	2°♁59'44		evening rise	1602 Mar 23 03:07	10°♁44'17	
evening set	1601 May 10 18:05	2°♁48'21		asc. node	1602 Mar 23 23:31	12°♁26'58	
desc. node	1601 May 14 15:50	1°♁37'28			1602 Apr 02 13:17	0°♁	
	1601 May 17 23:30	30°♁		evening max el	1602 Apr 09 11:43	8°♁51'54	19°43'30
inferior conj	1601 May 20 01:15	28°♁50'25	-1°-33'-30	retrograde	1602 Apr 19 07:15	13°♁35'49	
minimum elong	1601 May 19 20:51	28°♁56'41	1°31'57	evening set	1602 Apr 21 08:14	13°♁24'27	
min. Earth dist.	1601 May 20 20:01	28°♁23'46	0.54949 AU	inferior conj	1602 Apr 30 02:02	9°♁22'07	0°25'02
morning rise	1601 May 28 22:57	24°♁46'21		minimum elong	1602 Apr 30 03:07	9°♁20'25	0°24'39
direct	1601 Jun 01 10:01	24°♁20'32		desc. node	1602 May 01 12:50	8°♁27'40	
	1601 Jun 13 19:19	0°♁		min. Earth dist.	1602 May 02 10:11	7°♁54'44	0.55668 AU
morning max el	1601 Jun 14 10:34	0°♁34'53	22°47'22	morning rise	1602 May 08 18:34	4°♁48'43	
asc. node	1601 Jul 03 01:45	28°♁20'46		direct	1602 May 13 02:50	4°♁06'40	
	1601 Jul 03 21:40	0°♁		morning max el	1602 May 27 01:47	11°♁05'46	24°29'10
morning set	1601 Jul 06 20:03	6°♁01'37			1602 Jun 10 08:32	0°♁	
				asc. node	1602 Jun 19 22:48	18°♁05'17	
superior conj	1601 Jul 14 00:05	21°♁18'28	1°33'07	morning set	1602 Jun 21 07:54	20°♁58'16	
minimum elong	1601 Jul 13 21:57	21°♁07'05	1°32'54		1602 Jun 25 12:46	0°♁	
max. Earth dist.	1601 Jul 16 21:07	27°♁22'11	1.34007 AU				
	1601 Jul 18 03:36	0°♁		superior conj	1602 Jun 28 08:46	6°♁09'55	1°18'27
evening rise	1601 Jul 21 19:38	7°♁23'11		minimum elong	1602 Jun 28 06:20	5°♁56'45	1°18'07
	1601 Aug 03 09:11	0°♁		max. Earth dist.	1602 Jun 30 00:53	9°♁46'57	1.33019 AU
desc. node	1601 Aug 10 15:11	11°♁08'50		evening rise	1602 Jul 05 16:39	21°♁39'28	
evening max el	1601 Aug 25 06:54	29°♁01'43	27°13'45		1602 Jul 09 22:10	0°♁	
	1601 Aug 26 07:55	0°♁			1602 Jul 28 07:20	0°♁	
retrograde	1601 Sep 07 16:25	6°♁20'35		desc. node	1602 Jul 28 12:12	0°♁16'23	
evening set	1601 Sep 14 15:49	3°♁37'11		evening max el	1602 Aug 07 17:13	12°♁05'44	27°25'43
	1601 Sep 18 11:15	30°♁		retrograde	1602 Aug 21 10:16	19°♁23'43	
min. Earth dist.	1601 Sep 18 11:21	29°♁59'46	0.64827 AU	evening set	1602 Aug 28 14:57	16°♁48'10	
inferior conj	1601 Sep 20 15:58	27°♁34'50	-2°-42'-22	min. Earth dist.	1602 Sep 01 05:47	13°♁43'04	0.63212 AU
minimum elong	1601 Sep 20 20:12	27°♁23'09	2°40'53	inferior conj	1602 Sep 03 22:58	11°♁01'30	-3°-36'-29
morning rise	1601 Sep 27 02:26	22°♁02'27		minimum elong	1602 Sep 04 04:08	10°♁48'40	3°35'03
asc. node	1601 Sep 29 00:56	21°♁28'56		morning rise	1602 Sep 10 19:44	5°♁46'40	
direct	1601 Sep 29 17:06	21°♁26'31		direct	1602 Sep 13 06:13	5°♁18'29	
morning max el	1601 Oct 06 05:16	24°♁55'13	18°03'40	asc. node	1602 Sep 15 22:00	5°♁52'41	
	1601 Oct 10 09:59	0°♁		morning max el	1602 Sep 19 21:21	8°♁44'21	17°52'02
morning set	1601 Oct 24 00:05	21°♁45'49			1602 Oct 03 22:40	0°♁	

morning set	1602 Oct 06 06:26	4°♁04'29		morning max el	1603 Sep 03 11:28	22°♁20'47	17°59'00
					1603 Sep 09 10:07	0°♁	
superior conj	1602 Oct 18 05:01	24°♁34'50	0°41'38	morning set	1603 Sep 19 07:15	17°♁16'28	
minimum elong	1602 Oct 18 08:57	24°♁51'12	0°41'06		1603 Sep 26 06:44	0°♁	
	1602 Oct 21 11:52	0°♁					
desc. node	1602 Oct 24 11:32	4°♁50'28		superior conj	1603 Sep 29 14:34	5°♁53'54	1°14'18
max. Earth dist.	1602 Oct 24 15:39	5°♁07'03	1.43821 AU	minimum elong	1603 Sep 29 19:06	6°♁13'47	1°13'48
evening rise	1602 Nov 02 17:39	19°♁24'52		max. Earth dist.	1603 Oct 07 03:40	18°♁45'25	1.42261 AU
	1602 Nov 09 16:12	0°♁		desc. node	1603 Oct 11 08:34	25°♁36'57	
greatest brilliancy	1602 Nov 26 17:37	24°♁24'03	-0.5m	evening rise	1603 Oct 13 09:17	28°♁51'30	
	1602 Dec 01 10:30	0°♁			1603 Oct 14 02:36	0°♁	
evening max el	1602 Dec 02 03:25	0°♁44'21	20°59'27		1603 Nov 03 08:29	0°♁	
retrograde	1602 Dec 10 14:15	5°♁44'51		greatest brilliancy	1603 Nov 10 05:12	8°♁57'20	-0.3m
asc. node	1602 Dec 12 21:14	5°♁15'30		evening max el	1603 Nov 14 22:18	14°♁15'46	22°14'29
evening set	1602 Dec 14 13:35	4°♁15'17		retrograde	1603 Nov 24 10:20	19°♁54'46	
	1602 Dec 18 12:32	30°♁		evening set	1603 Nov 28 21:20	18°♁08'29	
inferior conj	1602 Dec 19 23:40	28°♁01'09	2°15'01	asc. node	1603 Nov 29 18:18	17°♁22'11	
minimum elong	1602 Dec 19 21:09	28°♁09'46	2°14'11	inferior conj	1603 Dec 04 06:49	11°♁46'56	1°30'11
min. Earth dist.	1602 Dec 20 10:03	27°♁25'29	0.67483 AU	minimum elong	1603 Dec 04 04:55	11°♁53'33	1°29'26
morning rise	1602 Dec 25 04:19	21°♁45'54		min. Earth dist.	1603 Dec 04 05:56	11°♁49'59	0.67782 AU
direct	1602 Dec 30 11:33	19°♁27'35		morning rise	1603 Dec 09 12:20	5°♁33'30	
morning max el	1603 Jan 10 06:08	25°♁53'03	23°51'39	direct	1603 Dec 14 04:25	3°♁37'46	
	1603 Jan 14 00:32	0°♁		morning max el	1603 Dec 23 16:58	9°♁15'05	22°23'43
desc. node	1603 Jan 20 10:44	8°♁04'35		greatest brilliancy	1603 Dec 28 06:53	14°♁22'33	-0.3m
	1603 Feb 04 12:07	0°♁		desc. node	1604 Jan 07 07:48	27°♁45'10	
morning set	1603 Feb 14 18:00	16°♁45'45			1604 Jan 08 21:29	0°♁	
max. Earth dist.	1603 Feb 18 15:22	23°♁32'34	1.38522 AU	morning set	1604 Jan 26 05:30	26°♁35'41	
	1603 Feb 22 05:17	0°♁			1604 Jan 28 07:21	0°♁	
				max. Earth dist.	1604 Jan 31 12:03	5°♁20'36	1.40669 AU
superior conj	1603 Feb 25 22:53	6°♁57'17	-1°-46'-10				
minimum elong	1603 Feb 26 03:00	7°♁16'46	1°45'46	superior conj	1604 Feb 08 07:21	18°♁56'50	-2°00'-54
evening rise	1603 Mar 07 00:26	24°♁32'05		minimum elong	1604 Feb 08 09:52	19°♁08'12	2°00'49
	1603 Mar 09 20:04	0°♁			1604 Feb 14 08:08	0°♁	
asc. node	1603 Mar 10 20:33	1°♁56'29		evening rise	1604 Feb 18 11:29	7°♁45'44	
evening max el	1603 Mar 23 09:55	20°♁59'47	18°51'29	asc. node	1604 Feb 25 17:36	21°♁02'31	
retrograde	1603 Mar 31 16:33	25°♁00'52			1604 Mar 02 12:12	0°♁	
evening set	1603 Apr 02 21:50	24°♁44'40		evening max el	1604 Mar 05 16:04	3°♁39'02	18°19'34
inferior conj	1603 Apr 10 20:44	20°♁25'59	2°02'06	retrograde	1604 Mar 12 21:06	7°♁13'56	
minimum elong	1603 Apr 11 00:40	20°♁18'52	2°00'56	evening set	1604 Mar 15 07:52	6°♁50'08	
min. Earth dist.	1603 Apr 14 02:33	18°♁06'26	0.57190 AU	inferior conj	1604 Mar 22 12:46	2°♁10'21	3°05'19
desc. node	1603 Apr 18 09:52	15°♁33'51		minimum elong	1604 Mar 22 16:18	2°♁02'53	3°04'37
morning rise	1603 Apr 18 23:11	15°♁18'59			1604 Mar 25 02:20	30°♁	
direct	1603 Apr 24 09:12	14°♁08'08		min. Earth dist.	1604 Mar 25 23:07	29°♁17'39	0.59194 AU
morning max el	1603 May 08 16:51	21°♁36'16	26°02'09	morning rise	1604 Mar 29 20:57	26°♁35'42	
	1603 May 16 00:53	0°♁		desc. node	1604 Apr 04 06:56	24°♁50'52	
	1603 Jun 02 22:51	0°♁		direct	1604 Apr 05 04:30	24°♁48'43	
morning set	1603 Jun 05 19:17	5°♁53'11			1604 Apr 16 17:18	0°♁	
asc. node	1603 Jun 06 19:52	8°♁03'22		morning max el	1604 Apr 19 12:48	2°♁33'16	27°11'10
					1604 May 09 09:45	0°♁	
superior conj	1603 Jun 12 19:55	21°♁07'29	0°59'39	morning set	1604 May 20 04:29	20°♁40'02	
minimum elong	1603 Jun 12 17:42	20°♁55'19	0°59'15	asc. node	1604 May 23 16:54	28°♁09'22	
max. Earth dist.	1603 Jun 13 10:51	22°♁29'27	1.32425 AU		1604 May 24 13:16	0°♁	
	1603 Jun 16 21:42	0°♁		max. Earth dist.	1604 May 26 23:21	5°♁18'14	1.32212 AU
evening rise	1603 Jun 19 20:51	6°♁16'29					
	1603 Jul 02 11:48	0°♁		superior conj	1604 May 27 07:42	6°♁04'12	0°37'26
desc. node	1603 Jul 15 09:11	18°♁33'00		minimum elong	1604 May 27 06:08	5°♁55'32	0°37'07
evening max el	1603 Jul 20 23:31	24°♁34'51	27°05'28	evening rise	1604 Jun 03 05:37	21°♁05'00	
	1603 Jul 28 05:20	0°♁			1604 Jun 07 14:18	0°♁	
retrograde	1603 Aug 03 20:58	1°♁49'19			1604 Jun 26 05:08	0°♁	
	1603 Aug 10 05:33	30°♁		desc. node	1604 Jul 01 06:13	5°♁36'39	
evening set	1603 Aug 10 22:27	29°♁34'50		evening max el	1604 Jul 01 23:10	6°♁17'47	26°12'18
min. Earth dist.	1603 Aug 14 13:49	26°♁52'18	0.61309 AU	retrograde	1604 Jul 15 23:04	13°♁28'59	
inferior conj	1603 Aug 17 17:22	24°♁07'05	-4°-22'-8	evening set	1604 Jul 22 09:29	11°♁47'35	
minimum elong	1603 Aug 17 22:13	23°♁56'26	4°21'14	min. Earth dist.	1604 Jul 26 11:54	9°♁11'47	0.59253 AU
morning rise	1603 Aug 25 00:54	19°♁13'00		inferior conj	1604 Jul 29 19:27	6°♁40'42	-4°-51'-10
direct	1603 Aug 27 10:06	18°♁49'39		minimum elong	1604 Jul 29 21:50	6°♁36'08	4°51'00
asc. node	1603 Sep 02 19:05	21°♁42'35		morning rise	1604 Aug 06 13:36	2°♁09'50	

direct	1604 Aug 09 00:13	1°♏49'16		minimum elong	1605 Jul 10 23:39	18°♍37'10	4°51'14
morning max el	1604 Aug 16 20:28	5°♏35'18	18°25'50	morning rise	1605 Jul 19 06:13	14°♍24'34	
asc. node	1604 Aug 19 16:09	8°♏42'51		direct	1605 Jul 21 20:13	14°♍05'30	
	1604 Sep 01 07:22	0°♎		morning max el	1605 Jul 30 21:15	18°♍18'47	19°13'39
morning set	1604 Sep 01 21:10	1°♎06'05		asc. node	1605 Aug 06 13:12	26°♍38'39	
					1605 Aug 08 15:08	0°♏	
superior conj	1604 Sep 10 23:33	18°♎22'15	1°34'48	morning set	1605 Aug 16 20:15	15°♏22'44	
minimum elong	1604 Sep 11 02:38	18°♎36'32	1°34'34		1605 Aug 24 04:59	0°♎	
	1604 Sep 17 10:55	0°♎					
max. Earth dist.	1604 Sep 18 10:30	1°♎42'21	1.40329 AU	superior conj	1605 Aug 25 02:19	1°♎43'55	1°44'32
evening rise	1604 Sep 22 21:28	9°♎15'08		minimum elong	1605 Aug 25 03:27	1°♎49'26	1°44'30
desc. node	1604 Sep 27 05:34	16°♎18'47		max. Earth dist.	1605 Aug 31 13:58	13°♎56'40	1.38280 AU
	1604 Oct 06 03:03	0°♎		evening rise	1605 Sep 04 09:56	20°♎46'55	
evening max el	1604 Oct 27 12:44	27°♎49'13	23°34'18		1605 Sep 09 20:18	0°♎	
	1604 Oct 29 20:38	0°♎		desc. node	1605 Sep 14 02:35	6°♎52'02	
retrograde	1604 Nov 07 03:30	4°♎05'25			1605 Sep 30 03:59	0°♎	
evening set	1604 Nov 12 03:48	2°♎01'39		evening max el	1605 Oct 10 00:49	11°♎25'55	24°52'28
	1604 Nov 14 04:35	30°♎		retrograde	1605 Oct 21 16:44	18°♎12'53	
asc. node	1604 Nov 15 15:22	28°♎13'32		evening set	1605 Oct 27 07:18	15°♎52'25	
min. Earth dist.	1604 Nov 17 02:34	26°♎15'50	0.67736 AU	min. Earth dist.	1605 Oct 31 21:36	10°♎40'49	0.67362 AU
inferior conj	1604 Nov 17 14:05	25°♎36'28	0°39'56	inferior conj	1605 Nov 01 19:41	9°♎27'50	0°-14'-25
minimum elong	1604 Nov 17 13:09	25°♎39'39	0°39'32	minimum elong	1605 Nov 01 20:03	9°♎26'39	0°14'16
morning rise	1604 Nov 22 22:39	19°♎27'06		transit begin	1605 Nov 01 18:44	9°♎31'00	
direct	1604 Nov 27 00:24	17°♎54'08		transit end	1605 Nov 01 21:22	9°♎22'18	
morning max el	1604 Dec 05 09:49	22°♎46'40	21°02'10	asc. node	1605 Nov 02 12:25	8°♎32'51	
greatest brilliancy	1604 Dec 10 21:28	29°♎07'20	-0.5m	morning rise	1605 Nov 07 09:18	3°♎24'52	
	1604 Dec 11 13:52	0°♎		direct	1605 Nov 10 22:22	2°♎12'28	
desc. node	1604 Dec 24 04:50	17°♎49'38		morning max el	1605 Nov 18 10:22	6°♎28'57	19°52'17
	1605 Jan 01 05:43	0°♎		greatest brilliancy	1605 Nov 25 23:02	15°♎44'30	-0.6m
morning set	1605 Jan 04 13:32	5°♎10'00			1605 Dec 05 16:58	0°♎	
max. Earth dist.	1605 Jan 12 15:31	18°♎04'32	1.42612 AU	desc. node	1605 Dec 11 01:52	8°♎11'00	
				morning set	1605 Dec 14 09:30	13°♎17'31	
superior conj	1605 Jan 19 17:12	29°♎51'05	-2°-3'-41		1605 Dec 25 01:52	0°♎	
minimum elong	1605 Jan 19 15:41	29°♎44'38	2°03'41	max. Earth dist.	1605 Dec 26 02:01	1°♎36'03	1.44103 AU
	1605 Jan 19 19:17	0°♎					
evening rise	1605 Jan 31 08:26	20°♎16'49		superior conj	1605 Dec 31 00:34	9°♎32'17	-1°-49'-41
	1605 Feb 05 19:17	0°♎		minimum elong	1605 Dec 30 17:45	9°♎04'36	1°49'13
asc. node	1605 Feb 11 14:39	9°♎37'26			1606 Jan 12 07:38	0°♎	
evening max el	1605 Feb 17 02:55	16°♎40'58	18°07'30	evening rise	1606 Jan 13 10:50	1°♎55'53	
retrograde	1605 Feb 23 18:02	20°♎05'27		asc. node	1606 Jan 29 11:41	27°♎30'53	
evening set	1605 Feb 26 09:45	19°♎32'39			1606 Jan 31 16:47	0°♎	
inferior conj	1605 Mar 05 00:05	14°♎31'33	3°37'10	evening max el	1606 Jan 31 15:26	29°♎56'38	18°14'41
minimum elong	1605 Mar 05 01:43	14°♎27'35	3°37'01	retrograde	1606 Feb 07 02:37	3°♎24'12	
min. Earth dist.	1605 Mar 08 02:52	11°♎30'15	0.61327 AU	evening set	1606 Feb 09 23:12	2°♎41'19	
morning rise	1605 Mar 11 14:53	8°♎38'28			1606 Feb 13 13:28	30°♎	
direct	1605 Mar 18 10:49	6°♎17'48		inferior conj	1606 Feb 16 02:36	27°♎20'11	3°44'44
desc. node	1605 Mar 22 03:59	6°♎56'00		minimum elong	1606 Feb 16 02:16	27°♎21'05	3°44'44
morning max el	1605 Apr 01 15:17	14°♎11'24	27°45'55	min. Earth dist.	1606 Feb 18 15:43	24°♎32'52	0.63316 AU
	1605 Apr 14 08:56	0°♎		morning rise	1606 Feb 22 03:27	21°♎16'15	
	1605 May 01 19:34	0°♎		direct	1606 Mar 01 02:00	18°♎32'58	
morning set	1605 May 04 09:37	5°♎12'38		desc. node	1606 Mar 09 01:01	21°♎28'07	
max. Earth dist.	1605 May 10 10:25	17°♎59'59	1.32381 AU	morning max el	1606 Mar 14 22:34	26°♎28'15	27°43'21
asc. node	1605 May 10 13:56	18°♎19'08			1606 Mar 18 05:51	0°♎	
					1606 Apr 07 22:46	0°♎	
superior conj	1605 May 11 18:28	20°♎54'40	0°12'33	morning set	1606 Apr 18 08:20	19°♎22'23	
minimum elong	1605 May 11 17:53	20°♎51'31	0°12'25		1606 Apr 23 12:09	0°♎	
behind sun begin	1605 May 11 14:42	20°♎34'05		max. Earth dist.	1606 Apr 23 15:55	0°♎19'55	1.32951 AU
behind sun end	1605 May 11 21:05	21°♎08'56					
	1605 May 15 22:16	0°♎		superior conj	1606 Apr 26 02:23	5°♎32'06	0°-14'-16
evening rise	1605 May 18 16:53	5°♎57'59		minimum elong	1606 Apr 26 03:05	5°♎35'50	0°14'09
	1605 May 31 09:40	0°♎		behind sun begin	1606 Apr 26 00:38	5°♎22'45	
evening max el	1605 Jun 13 15:47	17°♎15'38	24°52'08	behind sun end	1606 Apr 26 05:31	5°♎48'56	
desc. node	1605 Jun 18 03:13	20°♎57'56		asc. node	1606 Apr 27 10:58	8°♎27'48	
retrograde	1605 Jun 27 14:56	24°♎20'47		evening rise	1606 May 03 04:41	20°♎48'07	
evening set	1605 Jul 02 20:52	23°♎18'04			1606 May 07 16:26	0°♎	
min. Earth dist.	1605 Jul 08 03:08	20°♎30'12	0.57288 AU	evening max el	1606 May 26 05:37	27°♎47'30	23°17'40
inferior conj	1605 Jul 11 02:03	18°♎33'10	-4°-51'-23		1606 May 28 17:24	0°♎	

desc. node	1606 Jun 05 00:13	4°♁00'57		evening max el	1607 May 08 00:04	8°♁24'27	21°43'54
retrograde	1606 Jun 08 18:34	4°♁33'13		retrograde	1607 May 20 10:35	14°♁30'18	
evening set	1606 Jun 12 12:36	4°♁02'21		evening set	1607 May 23 00:07	14°♁15'32	
min. Earth dist.	1606 Jun 19 15:30	0°♁47'40	0.55751 AU	desc. node	1607 May 22 21:15	14°♁16'52	
	1606 Jun 20 23:55	30°♁		inferior conj	1607 Jun 01 09:22	10°♁13'29	-2°-39'-55
inferior conj	1606 Jun 21 12:48	29°♁40'57	-4°-9'-5	minimum elong	1607 Jun 01 02:23	10°♁23'15	2°37'42
minimum elong	1606 Jun 21 05:45	29°♁51'22	4°07'40	min. Earth dist.	1607 Jun 01 03:33	10°♁21'38	0.54974 AU
morning rise	1606 Jun 30 02:07	25°♁46'47		morning rise	1607 Jun 10 05:37	6°♁18'35	
direct	1606 Jul 02 21:00	25°♁27'56		direct	1607 Jun 13 09:02	5°♁56'51	
	1606 Jul 13 01:32	0°♁		morning max el	1607 Jun 25 14:05	11°♁41'47	21°50'35
morning max el	1606 Jul 13 11:22	0°♁22'21	20°22'39		1607 Jul 08 21:20	0°♁	
asc. node	1606 Jul 24 10:13	15°♁17'03		asc. node	1607 Jul 11 07:14	4°♁27'39	
morning set	1606 Aug 01 01:34	29°♁58'34		morning set	1607 Jul 16 10:53	14°♁47'07	
	1606 Aug 01 01:51	0°♁			1607 Jul 23 16:05	0°♁	
superior conj	1606 Aug 08 17:51	15°♁44'14	1°45'28	superior conj	1607 Jul 23 18:16	0°♁11'23	1°39'18
minimum elong	1606 Aug 08 17:18	15°♁41'23	1°45'27	minimum elong	1607 Jul 23 16:32	0°♁02'19	1°39'11
max. Earth dist.	1606 Aug 13 19:50	25°♁47'49	1.36364 AU	max. Earth dist.	1607 Jul 27 09:40	7°♁42'52	1.34762 AU
	1606 Aug 16 00:48	0°♁		evening rise	1607 Jul 31 23:03	16°♁44'15	
evening rise	1606 Aug 17 20:02	3°♁20'54			1607 Aug 08 04:44	0°♁	
desc. node	1606 Aug 31 23:34	27°♁11'47		desc. node	1607 Aug 18 20:35	17°♁11'06	
	1606 Sep 02 19:49	0°♁			1607 Aug 28 05:34	0°♁	
evening max el	1606 Sep 22 12:42	25°♁05'16	26°01'39	evening max el	1607 Sep 05 01:01	8°♁40'10	26°54'07
	1606 Sep 28 13:39	0°♁		retrograde	1607 Sep 18 04:20	15°♁56'23	
retrograde	1606 Oct 05 01:16	2°♁12'18		evening set	1607 Sep 24 21:54	13°♁14'13	
	1606 Oct 10 19:19	30°♁		min. Earth dist.	1607 Sep 28 21:22	9°♁15'40	0.65599 AU
evening set	1606 Oct 11 06:04	29°♁38'10		inferior conj	1607 Sep 30 18:33	7°♁04'33	-2°-9'-26
min. Earth dist.	1606 Oct 15 12:40	25°♁02'33	0.66653 AU	minimum elong	1607 Sep 30 21:58	6°♁54'35	2°08'07
inferior conj	1606 Oct 16 21:52	23°♁18'44	-1°-11'-26	morning rise	1607 Oct 06 23:30	1°♁23'11	
minimum elong	1606 Oct 16 23:44	23°♁12'53	1°10'39	asc. node	1607 Oct 07 06:28	1°♁14'52	
asc. node	1606 Oct 20 09:26	19°♁18'02		direct	1607 Oct 09 17:50	0°♁41'07	
morning rise	1606 Oct 22 18:20	17°♁24'58		morning max el	1607 Oct 16 07:18	4°♁15'10	18°18'17
direct	1606 Oct 25 20:52	16°♁29'39			1607 Nov 02 18:45	0°♁	
morning max el	1606 Nov 01 18:11	20°♁20'11	18°57'10	morning set	1607 Nov 04 08:01	2°♁31'49	
	1606 Nov 09 08:37	0°♁		desc. node	1607 Nov 14 19:54	19°♁26'21	
morning set	1606 Nov 23 18:48	22°♁12'10					
desc. node	1606 Nov 27 22:53	28°♁44'45		superior conj	1607 Nov 19 10:35	26°♁44'41	0°-30'-26
	1606 Nov 28 18:05	0°♁		minimum elong	1607 Nov 19 06:38	26°♁29'05	0°29'56
max. Earth dist.	1606 Dec 08 18:10	15°♁41'50	1.44962 AU	max. Earth dist.	1607 Nov 21 13:15	0°♁04'11	1.45091 AU
					1607 Nov 21 12:12	0°♁	
superior conj	1606 Dec 10 09:07	18°♁15'09	-1°-16'-48	evening rise	1607 Dec 05 19:47	22°♁24'38	
minimum elong	1606 Dec 10 00:33	17°♁41'26	1°15'52		1607 Dec 10 16:17	0°♁	
	1606 Dec 17 18:51	0°♁		greatest brilliancy	1607 Dec 20 13:05	15°♁08'33	-0.7m
evening rise	1606 Dec 25 14:55	12°♁37'57		evening max el	1607 Dec 29 11:30	26°♁49'00	19°22'45
	1607 Jan 05 08:51	0°♁			1608 Jan 02 09:47	0°♁	
evening max el	1607 Jan 15 03:04	13°♁20'50	18°40'11	asc. node	1608 Jan 03 05:44	0°♁24'26	
asc. node	1607 Jan 16 08:43	14°♁31'16		retrograde	1608 Jan 05 14:57	0°♁55'32	
retrograde	1607 Jan 21 18:40	17°♁02'52			1608 Jan 08 16:54	30°♁	
evening set	1607 Jan 24 20:53	16°♁08'43		evening set	1608 Jan 09 00:03	29°♁48'45	
inferior conj	1607 Jan 30 16:28	10°♁29'21	3°34'30	inferior conj	1608 Jan 14 14:21	23°♁53'22	3°11'08
minimum elong	1607 Jan 30 14:43	10°♁34'36	3°34'17	minimum elong	1608 Jan 14 11:51	24°♁01'26	3°10'36
min. Earth dist.	1607 Feb 01 14:03	8°♁11'58	0.64994 AU	min. Earth dist.	1608 Jan 15 21:00	22°♁14'17	0.66276 AU
morning rise	1607 Feb 05 07:20	4°♁19'12		morning rise	1608 Jan 19 22:52	17°♁39'46	
direct	1607 Feb 12 00:27	1°♁28'12		direct	1608 Jan 26 04:54	14°♁54'36	
desc. node	1607 Feb 23 22:04	7°♁52'21		morning max el	1608 Feb 07 17:25	22°♁19'48	26°03'02
morning max el	1607 Feb 25 08:01	9°♁14'51	27°06'36	desc. node	1608 Feb 10 19:07	25°♁37'13	
	1607 Mar 13 14:28	0°♁			1608 Feb 14 11:26	0°♁	
	1607 Mar 31 08:04	0°♁			1608 Mar 05 20:58	0°♁	
morning set	1607 Apr 01 21:38	2°♁59'52		morning set	1608 Mar 14 21:34	15°♁53'22	
max. Earth dist.	1607 Apr 06 12:04	12°♁07'52	1.33962 AU	max. Earth dist.	1608 Mar 18 20:45	23°♁24'11	1.35432 AU
					1608 Mar 22 05:11	0°♁	
superior conj	1607 Apr 10 05:28	19°♁50'20	0°-42'-1				
minimum elong	1607 Apr 10 07:34	20°♁01'23	0°41'36	superior conj	1608 Mar 24 01:19	3°♁42'19	-1°-9'-16
asc. node	1607 Apr 14 07:59	28°♁31'28		minimum elong	1608 Mar 24 04:44	3°♁59'36	1°08'42
	1607 Apr 15 00:41	0°♁		asc. node	1608 Mar 31 05:02	18°♁26'01	
evening rise	1607 Apr 17 15:12	5°♁29'23		evening rise	1608 Mar 31 22:31	19°♁55'43	
	1607 May 01 01:55	0°♁			1608 Apr 06 00:10	0°♁	

evening max el	1608 Apr 19 04:42	19°♄31'17	20°22'22			1609 Mar 31 15:03	0°♄		
retrograde	1608 Apr 29 23:56	24°♄45'00			evening max el	1609 Apr 01 20:50	1°♄16'38	19°18'54	
evening set	1608 May 02 01:42	24°♄34'16			retrograde	1609 Apr 10 23:39	5°♄41'02		
desc. node	1608 May 08 18:17	21°♄59'15			evening set	1609 Apr 13 01:58	5°♄28'03		
inferior conj	1608 May 11 04:23	20°♄36'22	0°-42'-15		inferior conj	1609 Apr 21 11:51	1°♄19'20	1°10'05	
minimum elong	1608 May 11 02:24	20°♄39'16	0°41'32		minimum elong	1609 Apr 21 14:36	1°♄14'46	1°09'08	
min. Earth dist.	1608 May 12 16:27	19°♄43'42	0.55141 AU			1609 Apr 23 11:40	30°♄		
morning rise	1608 May 20 01:11	16°♄21'47			min. Earth dist.	1609 Apr 24 07:12	29°♄28'19	0.56226 AU	
direct	1608 May 23 20:29	15°♄50'29			desc. node	1609 Apr 25 15:20	28°♄38'31		
morning max el	1608 Jun 06 07:58	22°♄24'48	23°30'46		morning rise	1609 Apr 29 23:16	26°♄31'30		
	1608 Jun 12 23:58	0°♄			direct	1609 May 04 18:10	25°♄38'58		
asc. node	1608 Jun 27 04:17	24°♄02'14				1609 May 15 14:52	0°♄		
morning set	1608 Jun 29 22:21	29°♄43'09			morning max el	1609 May 18 22:29	2°♄51'58	25°10'55	
	1608 Jun 30 01:33	0°♄				1609 Jun 07 01:11	0°♄		
					morning set	1609 Jun 14 10:14	14°♄39'51		
superior conj	1608 Jul 07 00:39	14°♄56'41	1°27'27		asc. node	1609 Jun 14 01:21	13°♄53'07		
minimum elong	1608 Jul 06 22:19	14°♄44'11	1°27'11						
max. Earth dist.	1608 Jul 09 09:00	19°♄57'25	1.33543 AU		superior conj	1609 Jun 21 10:37	29°♄51'23	1°10'57	
	1608 Jul 14 05:40	0°♄			minimum elong	1609 Jun 21 08:14	29°♄38'19	1°10'34	
evening rise	1608 Jul 14 14:38	0°♄44'53				1609 Jun 21 12:12	0°♄		
	1608 Jul 31 04:21	0°♄			max. Earth dist.	1609 Jun 22 15:54	2°♄30'59	1.32716 AU	
desc. node	1608 Aug 04 17:36	6°♄41'18			evening rise	1609 Jun 28 15:02	15°♄10'43		
evening max el	1608 Aug 17 12:42	21°♄59'32	27°22'28			1609 Jul 06 06:14	0°♄		
retrograde	1608 Aug 31 01:31	29°♄17'35			desc. node	1609 Jul 22 14:37	25°♄29'26		
evening set	1608 Sep 07 04:08	26°♄36'09				1609 Jul 26 07:22	0°♄		
min. Earth dist.	1608 Sep 10 21:23	23°♄13'16	0.64192 AU		evening max el	1609 Jul 30 21:28	4°♄49'35	27°21'03	
inferior conj	1608 Sep 13 07:23	20°♄40'17	-3°-5'-57		retrograde	1609 Aug 13 16:24	12°♄06'15		
minimum elong	1608 Sep 13 12:06	20°♄27'47	3°04'25		evening set	1609 Aug 20 21:11	9°♄37'37		
morning rise	1608 Sep 19 22:07	15°♄14'52			min. Earth dist.	1609 Aug 24 11:12	6°♄44'04	0.62440 AU	
direct	1608 Sep 22 10:49	14°♄42'28			inferior conj	1609 Aug 27 09:25	3°♄58'52	-3°-57'-16	
asc. node	1608 Sep 23 03:31	14°♄44'58			minimum elong	1609 Aug 27 14:40	3°♄46'30	3°55'59	
morning max el	1608 Sep 28 23:10	18°♄08'35	17°56'28			1609 Sep 01 04:51	30°♄		
	1608 Oct 07 14:28	0°♄			morning rise	1609 Sep 03 10:48	28°♄52'47		
morning set	1608 Oct 16 00:59	14°♄12'18			direct	1609 Sep 05 20:25	28°♄26'58		
	1608 Oct 25 10:22	0°♄			asc. node	1609 Sep 10 00:35	29°♄47'02		
						1609 Sep 10 08:28	0°♄		
superior conj	1608 Oct 29 02:25	6°♄00'11	0°17'29		morning max el	1609 Sep 12 14:52	1°♄53'40	17°52'40	
minimum elong	1608 Oct 29 04:23	6°♄08'11	0°17'13		morning set	1609 Sep 28 15:56	26°♄55'43		
desc. node	1608 Oct 31 16:56	10°♄12'24				1609 Sep 30 09:07	0°♄		
max. Earth dist.	1608 Nov 03 07:49	14°♄23'27	1.44483 AU						
	1608 Nov 13 07:20	0°♄			superior conj	1609 Oct 09 20:32	16°♄34'06	0°57'00	
evening rise	1608 Nov 14 07:29	1°♄33'04			minimum elong	1609 Oct 10 01:06	16°♄53'29	0°56'25	
	1608 Dec 03 09:05	0°♄			max. Earth dist.	1609 Oct 16 22:38	28°♄20'43	1.43218 AU	
greatest brilliancy	1608 Dec 05 07:27	2°♄39'00	-0.5m			1609 Oct 17 23:09	0°♄		
evening max el	1608 Dec 11 15:02	10°♄18'25	20°20'28		desc. node	1609 Oct 18 13:58	0°♄59'43		
retrograde	1608 Dec 19 12:49	14°♄57'39			evening rise	1609 Oct 24 16:38	10°♄40'04		
asc. node	1608 Dec 20 02:47	14°♄55'45				1609 Nov 06 11:33	0°♄		
evening set	1608 Dec 23 06:28	13°♄36'42			greatest brilliancy	1609 Nov 19 13:39	18°♄06'07	-0.4m	
inferior conj	1608 Dec 28 17:33	7°♄28'15	2°37'49		evening max el	1609 Nov 24 12:53	23°♄48'37	21°30'23	
minimum elong	1608 Dec 28 14:54	7°♄37'14	2°37'02		retrograde	1609 Dec 03 10:11	29°♄05'52		
min. Earth dist.	1608 Dec 29 10:49	6°♄29'50	0.67153 AU		asc. node	1609 Dec 06 23:50	27°♄55'21		
morning rise	1609 Jan 02 22:51	1°♄13'04			evening set	1609 Dec 07 14:14	27°♄29'15		
	1609 Jan 04 12:46	30°♄			inferior conj	1609 Dec 12 23:51	21°♄11'13	1°56'44	
direct	1609 Jan 08 14:40	28°♄43'28			minimum elong	1609 Dec 12 21:33	21°♄19'11	1°55'54	
	1609 Jan 13 02:39	0°♄			min. Earth dist.	1609 Dec 13 05:16	20°♄52'30	0.67648 AU	
morning max el	1609 Jan 20 02:00	5°♄33'54	24°42'04		morning rise	1609 Dec 18 04:35	14°♄56'23		
desc. node	1609 Jan 27 16:11	14°♄19'17			direct	1609 Dec 23 05:12	12°♄47'41		
	1609 Feb 07 23:30	0°♄			morning max el	1610 Jan 02 11:12	18°♄53'21	23°13'55	
morning set	1609 Feb 25 02:45	27°♄47'35			greatest brilliancy	1610 Jan 07 13:43	24°♄36'49	-0.3m	
	1609 Feb 26 08:35	0°♄				1610 Jan 11 19:20	0°♄		
max. Earth dist.	1609 Feb 28 19:35	4°♄26'45	1.37314 AU		desc. node	1610 Jan 14 13:13	3°♄42'12		
						1610 Feb 01 03:18	0°♄		
superior conj	1609 Mar 07 10:45	16°♄58'48	-1°-34'-4		morning set	1610 Feb 06 07:00	8°♄26'56		
minimum elong	1609 Mar 07 14:56	17°♄19'08	1°33'34		max. Earth dist.	1610 Feb 10 14:33	15°♄48'17	1.39435 AU	
	1609 Mar 14 00:20	0°♄							
evening rise	1609 Mar 16 00:17	3°♄59'43			superior conj	1610 Feb 18 05:45	29°♄30'03	-1°-53'-34	
asc. node	1609 Mar 18 02:06	8°♄06'12			minimum elong	1610 Feb 18 09:28	29°♄47'16	1°53'19	

	1610 Feb 18 12:13	0°♁		superior conj	1611 Jan 31 05:10	11°≈02'57	-2°-3'-51
evening rise	1610 Feb 27 17:43	17°♁34'23		minimum elong	1611 Jan 31 06:17	11°≈07'51	2°03'51
asc. node	1610 Mar 04 23:10	27°♁26'53			1611 Feb 10 16:37	0°♁	
	1610 Mar 06 09:11	0°♂		evening rise	1611 Feb 10 23:13	0°♁30'25	
evening max el	1610 Mar 15 22:46	13°♂38'50	18°35'27	asc. node	1611 Feb 19 20:12	16°♁20'37	
retrograde	1610 Mar 23 17:17	17°♂27'02		evening max el	1611 Feb 27 07:19	26°♁28'48	18°12'06
evening set	1610 Mar 26 00:44	17°♂08'00		retrograde	1611 Mar 06 05:04	29°♁57'11	
inferior conj	1610 Apr 02 15:40	12°♂40'43	2°33'06	evening set	1611 Mar 08 18:00	29°♁29'44	
minimum elong	1610 Apr 02 19:44	12°♂32'51	2°32'03	inferior conj	1611 Mar 15 16:17	24°♁41'08	3°22'12
min. Earth dist.	1610 Apr 06 01:19	10°♂03'59	0.57999 AU	minimum elong	1611 Mar 15 19:05	24°♁34'50	3°21'47
morning rise	1610 Apr 10 10:27	7°♂20'24		min. Earth dist.	1611 Mar 19 00:43	21°♁41'27	0.60107 AU
desc. node	1610 Apr 12 12:23	6°♂30'19		morning rise	1611 Mar 22 16:46	18°♁57'37	
direct	1610 Apr 16 06:22	5°♂54'30		direct	1611 Mar 29 07:02	16°♁54'58	
morning max el	1610 Apr 30 15:25	13°♂31'44	26°35'14	desc. node	1611 Mar 30 09:25	16°♁58'16	
	1610 May 13 16:25	0°♂		morning max el	1611 Apr 12 13:58	24°♁44'37	27°30'25
morning set	1610 May 29 20:53	29°♂31'50			1611 Apr 17 09:24	0°♂	
	1610 May 30 02:15	0°♁			1611 May 06 23:02	0°♂	
asc. node	1610 May 31 22:25	3°♁55'00		morning set	1611 May 14 04:34	14°♂13'06	
				asc. node	1611 May 18 19:28	24°♂03'10	
superior conj	1610 Jun 05 22:15	14°♁49'08	0°50'37	max. Earth dist.	1611 May 20 15:20	28°♂02'37	1.32230 AU
minimum elong	1610 Jun 05 20:15	14°♁38'10	0°50'14				
max. Earth dist.	1610 Jun 06 03:12	15°♁16'20	1.32282 AU	superior conj	1611 May 21 09:48	29°♂43'55	0°27'11
evening rise	1610 Jun 12 21:25	29°♁53'01		minimum elong	1611 May 21 08:36	29°♂37'23	0°26'55
	1610 Jun 12 22:45	0°♁			1611 May 21 12:43	0°♁	
	1610 Jun 29 10:53	0°♂		evening rise	1611 May 28 07:28	14°♁44'11	
desc. node	1610 Jul 09 11:39	13°♂17'59			1611 Jun 04 23:18	0°♁	
evening max el	1610 Jul 13 00:56	16°♂58'47	26°46'39	evening max el	1611 Jun 24 21:34	28°♁22'15	25°41'04
retrograde	1610 Jul 26 23:58	24°♂12'50		desc. node	1611 Jun 26 08:40	29°♁42'31	
evening set	1610 Aug 02 20:35	22°♂10'57			1611 Jun 26 16:45	0°♂	
min. Earth dist.	1610 Aug 06 14:48	19°♂33'33	0.60437 AU	retrograde	1611 Jul 08 22:12	5°♂31'43	
inferior conj	1610 Aug 09 21:16	16°♂51'36	-4°-37'-10	evening set	1611 Jul 14 21:43	4°♂07'06	
minimum elong	1610 Aug 10 01:23	16°♂43'03	4°36'35	min. Earth dist.	1611 Jul 19 09:51	1°♂28'02	0.58379 AU
morning rise	1610 Aug 17 09:25	12°♂07'30			1611 Jul 21 11:23	30°♁	
direct	1610 Aug 19 18:46	11°♂45'42		inferior conj	1611 Jul 22 15:25	29°♁09'14	-4°-55'-41
morning max el	1610 Aug 27 03:14	15°♂22'02	18°07'56	minimum elong	1611 Jul 22 15:59	29°♁08'12	4°55'42
asc. node	1610 Aug 27 21:38	16°♂08'32		morning rise	1611 Jul 30 13:51	24°♁47'58	
	1610 Sep 06 06:53	0°♂		direct	1611 Aug 02 01:36	24°♁28'13	
morning set	1610 Sep 11 22:52	10°♂24'59		morning max el	1611 Aug 10 09:05	28°♁24'47	18°43'33
					1611 Aug 11 22:07	0°♂	
superior conj	1610 Sep 21 16:43	28°♂24'40	1°24'25	asc. node	1611 Aug 14 18:41	3°♂34'21	
minimum elong	1610 Sep 21 20:47	28°♂42'54	1°24'01	morning set	1611 Aug 26 17:08	24°♂27'48	
	1610 Sep 22 14:04	0°♁			1611 Aug 29 13:11	0°♂	
max. Earth dist.	1610 Sep 29 07:49	11°♁40'19	1.41467 AU				
evening rise	1610 Oct 04 15:55	20°♁28'07		superior conj	1611 Sep 04 09:57	11°♂17'54	1°40'07
desc. node	1610 Oct 05 10:58	21°♁44'43		minimum elong	1611 Sep 04 12:13	11°♂28'37	1°39'59
	1610 Oct 10 16:50	0°♂		max. Earth dist.	1611 Sep 11 12:40	24°♂18'13	1.39457 AU
	1610 Oct 31 19:34	0°♂			1611 Sep 14 19:21	0°♁	
greatest brilliancy	1610 Nov 02 04:11	1°♂40'30	-0.3m	evening rise	1611 Sep 15 14:35	1°♁21'49	
evening max el	1610 Nov 07 05:33	7°♂20'31	22°48'13	desc. node	1611 Sep 22 07:59	12°♁24'04	
retrograde	1610 Nov 17 05:15	13°♂16'24			1611 Oct 04 00:39	0°♂	
evening set	1610 Nov 21 21:36	11°♂22'54		evening max el	1611 Oct 20 18:55	20°♂56'35	24°08'10
asc. node	1610 Nov 23 20:53	9°♂26'34		retrograde	1611 Oct 31 20:48	27°♂26'35	
min. Earth dist.	1610 Nov 27 01:52	5°♂17'51	0.67801 AU	evening set	1611 Nov 06 03:00	25°♂15'49	
inferior conj	1610 Nov 27 07:16	4°♂59'11	1°09'26	asc. node	1611 Nov 10 17:54	19°♂58'30	
minimum elong	1610 Nov 27 05:44	5°♂04'29	1°08'49	min. Earth dist.	1611 Nov 10 22:10	19°♂44'11	0.67623 AU
	1610 Dec 01 06:13	30°♂		inferior conj	1611 Nov 11 14:04	18°♂50'30	0°17'20
morning rise	1610 Dec 02 13:48	28°♂46'54		minimum elong	1611 Nov 11 13:39	18°♂51'55	0°17'09
direct	1610 Dec 06 23:36	27°♂00'57		morning rise	1611 Nov 17 00:32	12°♂43'20	
	1610 Dec 13 11:49	0°♂		direct	1611 Nov 20 20:45	11°♂19'16	
morning max el	1610 Dec 16 00:10	2°♂18'56	21°47'45	morning max el	1611 Nov 28 20:05	15°♂55'02	20°30'40
greatest brilliancy	1610 Dec 20 19:53	7°♂46'07	-0.4m	greatest brilliancy	1611 Dec 05 01:20	23°♂16'48	-0.5m
desc. node	1611 Jan 01 10:14	23°♂33'48			1611 Dec 09 22:39	0°♂	
	1611 Jan 05 19:06	0°♂		desc. node	1611 Dec 19 07:15	13°♂46'28	
morning set	1611 Jan 17 05:56	17°♂41'27		morning set	1611 Dec 27 05:54	25°♂55'28	
max. Earth dist.	1611 Jan 23 13:03	27°♂56'53	1.41536 AU		1611 Dec 29 20:40	0°♂	
	1611 Jan 24 18:32	0°≈		max. Earth dist.	1612 Jan 05 19:36	11°♂02'50	1.43326 AU

superior conj	1612 Jan 12 03:59	21°☿26'43	-2°00'-3	morning set	1612 Dec 05 04:51	4°♁16'15	
minimum elong	1612 Jan 12 00:10	21°☿10'48	1°59'54	desc. node	1612 Dec 05 04:17	4°♁14'06	
	1612 Jan 17 05:41	0°♁		max. Earth dist.	1612 Dec 18 09:30	24°♁54'01	1.44561 AU
evening rise	1612 Jan 24 12:44	12°♁40'02			1612 Dec 21 14:32	0°☿	
	1612 Feb 03 15:14	0°♁					
asc. node	1612 Feb 06 17:13	4°♁39'08		superior conj	1612 Dec 22 00:37	0°☿40'16	-1°-37'-56
evening max el	1612 Feb 10 19:16	9°♁37'41	18°08'15	minimum elong	1612 Dec 21 16:17	0°☿06'59	1°37'13
retrograde	1612 Feb 17 07:22	13°♁01'34		evening rise	1613 Jan 05 06:05	23°☿56'17	
evening set	1612 Feb 20 01:16	12°♁24'25			1613 Jan 08 21:05	0°♁	
inferior conj	1612 Feb 26 10:31	7°♁14'36	3°42'53	asc. node	1613 Jan 23 14:14	22°♁12'07	
minimum elong	1612 Feb 26 11:16	7°♁12'39	3°42'52	evening max el	1613 Jan 24 07:43	22°♁58'14	18°23'16
min. Earth dist.	1612 Feb 29 07:56	4°♁16'59	0.62212 AU	retrograde	1613 Jan 30 19:44	26°♁30'38	
morning rise	1612 Mar 03 18:57	1°♁16'29		evening set	1613 Feb 02 18:39	25°♁42'59	
	1612 Mar 05 19:52	30°♁		inferior conj	1613 Feb 08 18:21	20°♁13'31	3°42'16
direct	1612 Mar 10 17:17	28°♁44'32		minimum elong	1613 Feb 08 17:20	20°♁16'25	3°42'11
	1612 Mar 15 22:07	0°♁		min. Earth dist.	1613 Feb 11 00:45	17°♁37'48	0.64077 AU
desc. node	1612 Mar 16 06:27	0°♁09'55		morning rise	1613 Feb 14 14:30	14°♁06'33	
morning max el	1612 Mar 24 18:31	6°♁39'00	27°49'18	direct	1613 Feb 21 11:29	11°♁18'35	
	1612 Apr 11 11:59	0°♁		desc. node	1613 Mar 03 03:29	15°♁34'47	
morning set	1612 Apr 27 07:14	28°♁36'38		morning max el	1613 Mar 07 03:13	19°♁10'59	27°31'36
	1612 Apr 27 23:34	0°♁			1613 Mar 16 08:05	0°♁	
max. Earth dist.	1612 May 03 00:31	10°♁36'41	1.32572 AU		1613 Apr 04 10:37	0°♁	
				morning set	1613 Apr 11 02:22	12°♁34'27	
superior conj	1612 May 04 19:33	14°♁29'32	0°01'21	max. Earth dist.	1613 Apr 16 02:45	22°♁45'49	1.33330 AU
minimum elong	1612 May 04 19:28	14°♁29'09	0°01'20				
behind sun begin	1612 May 04 14:20	14°♁01'14		superior conj	1613 Apr 19 01:40	28°♁59'59	0°-26'00
behind sun end	1612 May 05 00:37	14°♁57'06		minimum elong	1613 Apr 19 02:58	29°♁06'51	0°25'44
asc. node	1612 May 04 16:29	14°♁12'56			1613 Apr 19 12:55	0°♁	
evening rise	1612 May 11 19:10	29°♁36'54		asc. node	1613 Apr 21 13:32	4°♁20'30	
	1612 May 11 23:32	0°♁		evening rise	1613 Apr 26 06:42	14°♁24'45	
	1612 May 28 19:08	0°♁			1613 May 04 04:04	0°♁	
evening max el	1612 Jun 05 12:25	9°♁06'24	24°12'55	evening max el	1613 May 18 03:09	19°♁36'12	22°36'49
desc. node	1612 Jun 12 05:41	14°♁09'52		desc. node	1613 May 30 02:41	26°♁04'32	
retrograde	1612 Jun 19 08:32	16°♁04'43		retrograde	1613 May 31 06:38	26°♁07'37	
evening set	1612 Jun 23 23:31	15°♁17'13		evening set	1613 Jun 03 11:06	25°♁45'18	
min. Earth dist.	1612 Jun 29 23:19	12°♁19'39	0.56560 AU	min. Earth dist.	1613 Jun 11 10:58	22°♁15'48	0.55314 AU
inferior conj	1612 Jul 02 13:22	10°♁42'45	-4°-39'-19	inferior conj	1613 Jun 12 16:53	21°♁33'10	-3°-36'-32
minimum elong	1612 Jul 02 08:42	10°♁50'06	4°38'45	minimum elong	1613 Jun 12 09:06	21°♁44'17	3°34'31
morning rise	1612 Jul 10 21:28	6°♁41'30		morning rise	1613 Jun 21 09:40	17°♁41'24	
direct	1612 Jul 13 13:35	6°♁22'34		direct	1613 Jun 24 07:37	17°♁21'53	
morning max el	1612 Jul 23 05:26	10°♁51'39	19°40'29	morning max el	1613 Jul 05 14:37	22°♁36'25	20°58'05
asc. node	1612 Jul 31 15:42	21°♁49'40			1613 Jul 11 22:23	0°♁	
	1612 Aug 05 06:20	0°♁		asc. node	1613 Jul 18 12:46	10°♁42'58	
morning set	1612 Aug 09 19:12	8°♁53'44		morning set	1613 Jul 25 02:28	23°♁35'47	
					1613 Jul 28 04:26	0°♁	
superior conj	1612 Aug 17 18:41	24°♁57'27	1°45'54	superior conj	1613 Aug 01 14:24	9°♁10'30	1°43'37
minimum elong	1612 Aug 17 19:02	24°♁59'15	1°45'53	minimum elong	1613 Aug 01 13:17	9°♁04'43	1°43'35
	1612 Aug 20 08:32	0°♁		max. Earth dist.	1613 Aug 06 01:42	18°♁11'41	1.35636 AU
max. Earth dist.	1612 Aug 23 16:53	6°♁21'41	1.37438 AU	evening rise	1613 Aug 10 06:35	26°♁17'21	
evening rise	1612 Aug 27 12:45	13°♁21'17			1613 Aug 12 06:38	0°♁	
	1612 Sep 06 09:16	0°♁		desc. node	1613 Aug 26 02:01	23°♁04'32	
desc. node	1612 Sep 08 05:01	2°♁52'33			1613 Aug 30 19:18	0°♁	
	1612 Sep 27 23:25	0°♁		evening max el	1613 Sep 14 18:48	18°♁13'14	26°26'23
evening max el	1612 Oct 02 06:53	4°♁35'31	25°23'24	retrograde	1613 Sep 27 14:09	25°♁25'27	
retrograde	1612 Oct 14 07:56	11°♁31'32		evening set	1613 Oct 04 00:51	22°♁46'41	
evening set	1612 Oct 20 04:44	9°♁04'47		min. Earth dist.	1613 Oct 08 04:14	18°♁27'08	0.66249 AU
min. Earth dist.	1612 Oct 24 15:44	4°♁08'26	0.67109 AU	inferior conj	1613 Oct 09 18:31	16°♁30'56	-1°-36'-1
inferior conj	1612 Oct 25 18:26	2°♁42'07	0°-38'-18	minimum elong	1613 Oct 09 21:03	16°♁23'14	1°35'00
minimum elong	1612 Oct 25 19:25	2°♁38'57	0°37'54	asc. node	1613 Oct 14 11:57	11°♁32'54	
asc. node	1612 Oct 27 14:55	0°♁22'04		morning rise	1613 Oct 15 18:26	10°♁42'23	
	1612 Oct 27 22:21	30°♁		direct	1613 Oct 18 17:10	9°♁53'14	
morning rise	1612 Oct 31 10:46	26°♁42'50		morning max el	1613 Oct 25 10:20	13°♁35'28	18°38'39
direct	1612 Nov 03 19:10	25°♁38'01			1613 Nov 06 08:53	0°♁	
morning max el	1612 Nov 10 23:54	29°♁41'45	19°26'57	morning set	1613 Nov 15 01:14	13°♁45'26	
	1612 Nov 11 07:03	0°♁		desc. node	1613 Nov 22 01:19	24°♁51'46	
greatest brilliancy	1612 Nov 19 22:47	11°♁06'45	-0.7m		1613 Nov 25 07:31	0°♁	
	1612 Dec 02 10:36	0°♁					

superior conj	1613 Dec 01 03:30	9°♄10'01	0°-58'-9			1614 Oct 30 07:49	0°♁		
minimum elong	1613 Nov 30 20:17	8°♄41'40	0°57'17	desc. node		1614 Nov 08 22:21	15°♁35'59		
max. Earth dist.	1613 Dec 01 03:24	9°♄09'37	1.45104 AU						
	1613 Dec 14 08:17	0°♄		superior conj		1614 Nov 10 08:53	17°♁53'40	0°-9'-37	
evening rise	1613 Dec 17 00:10	4°♄14'28		minimum elong		1614 Nov 10 07:40	17°♁48'51	0°09'28	
	1614 Jan 02 13:45	0°♄		behind sun begin		1614 Nov 09 22:49	17°♁13'36		
evening max el	1614 Jan 07 18:11	6°♄24'29	18°56'13	behind sun end		1614 Nov 10 16:31	18°♁24'04		
asc. node	1614 Jan 10 11:16	8°♄46'03		max. Earth dist.		1614 Nov 13 22:12	23°♁31'33	1.44910 AU	
retrograde	1614 Jan 14 14:06	10°♄16'15				1614 Nov 18 01:10	0°♄		
evening set	1614 Jan 17 19:00	9°♄16'59		evening rise		1614 Nov 26 20:28	13°♄41'38		
inferior conj	1614 Jan 23 12:02	3°♄30'17	3°26'00			1614 Dec 07 10:54	0°♄		
minimum elong	1614 Jan 23 09:53	3°♄36'57	3°25'38	greatest brilliancy		1614 Dec 14 10:43	10°♄20'00	-0.6m	
min. Earth dist.	1614 Jan 25 03:04	1°♄28'34	0.65584 AU	evening max el		1614 Dec 22 00:42	19°♄53'49	19°45'36	
	1614 Jan 26 08:42	30°♄		asc. node		1614 Dec 28 08:18	24°♄06'36		
morning rise	1614 Jan 28 23:46	27°♄18'08		retrograde		1614 Dec 29 11:25	24°♄13'41		
direct	1614 Feb 04 12:30	24°♄28'17		evening set		1615 Jan 01 23:49	23°♄01'19		
	1614 Feb 15 07:24	0°♄		inferior conj		1615 Jan 07 12:32	17°♄00'06	2°58'06	
morning max el	1614 Feb 17 13:08	2°♄08'07	26°42'21	minimum elong		1615 Jan 07 09:54	17°♄08'47	2°57'26	
desc. node	1614 Feb 18 00:32	2°♄37'03		min. Earth dist.		1615 Jan 08 13:22	15°♄37'57	0.66695 AU	
	1614 Mar 10 12:14	0°♄		morning rise		1615 Jan 12 19:18	10°♄45'22		
morning set	1614 Mar 25 10:35	25°♄55'20		direct		1615 Jan 18 19:33	8°♄05'37		
	1614 Mar 27 13:28	0°♄		morning max el		1615 Jan 30 22:11	15°♄18'21	25°30'03	
max. Earth dist.	1614 Mar 29 18:20	4°♄20'30	1.34534 AU	desc. node		1615 Feb 04 21:35	20°♄49'02		
						1615 Feb 12 00:34	0°♄		
superior conj	1614 Apr 03 02:00	13°♄07'58	0°-53'-45			1615 Mar 03 08:53	0°♄		
minimum elong	1614 Apr 03 04:42	13°♄21'54	0°53'14	morning set		1615 Mar 08 03:18	8°♄26'12		
asc. node	1614 Apr 08 10:34	24°♄20'56		max. Earth dist.		1615 Mar 11 21:59	15°♄26'13	1.36191 AU	
evening rise	1614 Apr 10 16:07	29°♄00'32							
	1614 Apr 11 03:37	0°♄		superior conj		1615 Mar 17 17:53	26°♄46'18	-1°-20'-14	
	1614 Apr 29 15:56	0°♄		minimum elong		1615 Mar 17 21:43	27°♄05'26	1°19'40	
evening max el	1614 Apr 30 01:19	0°♄23'04	21°07'10			1615 Mar 19 08:30	0°♄		
retrograde	1614 May 11 20:30	6°♄08'02		evening rise		1615 Mar 25 21:23	13°♄18'15		
evening set	1614 May 14 02:43	5°♄56'09		asc. node		1615 Mar 26 07:38	14°♄10'04		
desc. node	1614 May 16 23:44	5°♄09'23				1615 Apr 03 16:53	0°♄		
inferior conj	1614 May 23 10:55	1°♄57'41	-1°-51'-34	evening max el		1615 Apr 12 11:01	11°♄46'39	19°52'57	
minimum elong	1614 May 23 05:43	2°♄05'01	1°49'45	retrograde		1615 Apr 22 12:34	16°♄37'49		
min. Earth dist.	1614 May 23 23:24	1°♄40'04	0.54924 AU	evening set		1615 Apr 24 13:26	16°♄26'47		
	1614 May 27 01:03	30°♄		inferior conj		1615 May 03 09:47	12°♄26'10	0°07'57	
morning rise	1614 Jun 01 08:29	27°♄56'31		minimum elong		1615 May 03 10:09	12°♄25'37	0°07'48	
direct	1614 Jun 04 17:14	27°♄32'02		transit begin		1615 May 03 06:41	12°♄30'55		
	1614 Jun 12 19:34	0°♄		transit end		1615 May 03 13:36	12°♄20'19		
morning max el	1614 Jun 17 13:14	3°♄39'10	22°32'23	desc. node		1615 May 03 20:47	12°♄09'18		
	1614 Jul 05 08:53	0°♄		min. Earth dist.		1615 May 05 13:18	11°♄07'32	0.55504 AU	
asc. node	1614 Jul 05 09:50	0°♄04'37		morning rise		1615 May 12 03:44	7°♄57'54		
morning set	1614 Jul 09 12:53	8°♄28'00		direct		1615 May 16 08:30	7°♄18'58		
				morning max el		1615 May 30 04:53	14°♄12'13	24°14'13	
superior conj	1614 Jul 16 17:41	23°♄46'33	1°34'54			1615 Jun 11 13:01	0°♄		
minimum elong	1614 Jul 16 15:38	23°♄35'41	1°34'44	asc. node		1615 Jun 22 06:53	19°♄46'50		
	1614 Jul 19 16:52	0°♄		morning set		1615 Jun 24 00:41	23°♄24'41		
max. Earth dist.	1614 Jul 19 19:16	0°♄12'25	1.34187 AU			1615 Jun 27 02:37	0°♄		
evening rise	1614 Jul 24 15:25	9°♄57'53							
	1614 Aug 04 16:55	0°♄		superior conj		1615 Jul 01 01:50	8°♄36'42	1°20'58	
desc. node	1614 Aug 12 23:02	12°♄52'51		minimum elong		1615 Jun 30 23:25	8°♄23'37	1°20'38	
	1614 Aug 26 13:35	0°♄		max. Earth dist.		1615 Jul 02 21:59	12°♄34'43	1.33141 AU	
evening max el	1614 Aug 28 06:51	1°♄42'33	27°09'33	evening rise		1615 Jul 08 11:09	24°♄10'37		
retrograde	1614 Sep 10 15:04	9°♄01'13				1615 Jul 11 09:37	0°♄		
evening set	1614 Sep 17 13:02	6°♄17'50				1615 Jul 29 07:23	0°♄		
min. Earth dist.	1614 Sep 21 09:31	2°♄34'58	0.65035 AU	desc. node		1615 Jul 30 20:04	2°♄07'01		
inferior conj	1614 Sep 23 12:12	0°♄13'20	-2°-33'-48	evening max el		1615 Aug 10 17:41	14°♄51'25	27°25'58	
minimum elong	1614 Sep 23 16:14	0°♄02'02	2°32'21	retrograde		1615 Aug 24 09:47	22°♄09'25		
	1614 Sep 23 16:58	30°♄		evening set		1615 Aug 31 14:08	19°♄32'04		
morning rise	1614 Sep 29 21:11	24°♄38'30		min. Earth dist.		1615 Sep 04 05:32	16°♄22'31	0.63475 AU	
asc. node	1614 Oct 01 09:01	24°♄08'17		inferior conj		1615 Sep 06 20:50	13°♄42'55	-3°-28'-44	
direct	1614 Oct 02 12:41	24°♄01'08		minimum elong		1615 Sep 07 01:55	13°♄30'03	3°27'14	
morning max el	1614 Oct 09 01:03	27°♄31'07	18°06'54	morning rise		1615 Sep 13 16:01	8°♄25'06		
	1614 Oct 11 06:11	0°♄		direct		1615 Sep 16 02:58	7°♄55'55		
morning set	1614 Oct 27 02:48	24°♄41'21		asc. node		1615 Sep 18 06:06	8°♄18'17		

morning max el	1615 Sep 22 17:10	11°♄21'39	17°52'34	direct	1616 Aug 29 08:31	21°♁30'57	
	1615 Oct 05 07:20	0°♁		asc. node	1616 Sep 04 03:09	23°♁56'03	
morning set	1615 Oct 09 05:54	6°♁50'55		morning max el	1616 Sep 05 07:45	25°♁00'32	17°56'42
					1616 Sep 09 11:03	0°♄	
superior conj	1615 Oct 21 11:11	27°♁40'29	0°35'37	morning set	1616 Sep 21 04:19	19°♄56'00	
minimum elong	1615 Oct 21 14:44	27°♁55'08	0°35'08		1616 Sep 26 17:21	0°♁	
	1615 Oct 22 21:04	0°♄					
desc. node	1615 Oct 26 19:22	6°♄22'56		superior conj	1616 Oct 01 16:47	8°♁47'59	1°10'09
max. Earth dist.	1615 Oct 27 15:10	7°♄42'24	1.44014 AU	minimum elong	1616 Oct 01 21:25	9°♁08'04	1°09'37
evening rise	1615 Nov 06 04:51	22°♄43'49		max. Earth dist.	1616 Oct 09 04:07	21°♁26'42	1.42527 AU
	1615 Nov 10 22:54	0°♄		desc. node	1616 Oct 12 16:23	27°♁09'39	
greatest brilliancy	1615 Nov 29 11:23	26°♄46'30	-0.5m		1616 Oct 14 10:59	0°♄	
	1615 Dec 02 01:07	0°♁		evening rise	1616 Oct 15 18:17	2°♄03'58	
evening max el	1615 Dec 05 01:56	3°♁23'53	20°49'00		1616 Nov 03 11:05	0°♄	
retrograde	1615 Dec 13 09:10	8°♁18'33		greatest brilliancy	1616 Nov 12 04:07	11°♄34'04	-0.3m
asc. node	1615 Dec 15 05:22	7°♁59'33		evening max el	1616 Nov 16 21:31	16°♄54'42	22°02'51
evening set	1615 Dec 17 07:00	6°♁51'14		retrograde	1616 Nov 26 05:36	22°♄27'57	
inferior conj	1615 Dec 22 17:18	0°♁38'34	2°21'14	evening set	1616 Nov 30 14:47	20°♄44'07	
minimum elong	1615 Dec 22 14:44	0°♁47'20	2°20'25	asc. node	1616 Dec 01 02:25	20°♄19'34	
	1615 Dec 23 04:34	30°♄		inferior conj	1616 Dec 06 00:15	14°♄23'20	1°37'19
min. Earth dist.	1615 Dec 23 05:26	29°♄57'01	0.67411 AU	minimum elong	1616 Dec 05 22:14	14°♄30'21	1°36'34
morning rise	1615 Dec 27 22:02	24°♄23'21		min. Earth dist.	1616 Dec 06 00:57	14°♄20'56	0.67759 AU
direct	1616 Jan 02 07:34	22°♄01'54		morning rise	1616 Dec 11 05:30	8°♄09'35	
morning max el	1616 Jan 13 06:27	28°♄33'51	24°04'50	direct	1616 Dec 15 23:46	6°♄10'32	
	1616 Jan 14 15:32	0°♁		morning max el	1616 Dec 25 16:45	11°♄55'01	22°36'34
desc. node	1616 Jan 22 18:37	9°♁50'03		greatest brilliancy	1616 Dec 30 06:42	17°♄01'58	-0.3m
	1616 Feb 05 18:57	0°♁		desc. node	1617 Jan 08 15:38	29°♄26'02	
morning set	1616 Feb 17 22:39	19°♁50'36			1617 Jan 09 01:15	0°♁	
max. Earth dist.	1616 Feb 21 17:54	26°♁31'27	1.38202 AU	morning set	1617 Jan 28 14:31	29°♁53'12	
	1616 Feb 23 16:08	0°♄			1617 Jan 28 16:11	0°♁	
				max. Earth dist.	1617 Feb 02 14:07	8°♁12'36	1.40350 AU
superior conj	1616 Feb 28 21:47	9°♄45'39	-1°-43'-11				
minimum elong	1616 Feb 29 01:58	10°♄05'36	1°42'47	superior conj	1617 Feb 10 09:05	21°♁53'37	-1°-59'-19
evening rise	1616 Mar 08 19:59	27°♄10'59		minimum elong	1617 Feb 10 12:01	22°♁06'51	1°59'13
	1616 Mar 10 06:30	0°♄			1617 Feb 14 18:55	0°♄	
asc. node	1616 Mar 12 04:41	3°♄43'01		evening rise	1617 Feb 20 08:47	10°♄30'22	
evening max el	1616 Mar 25 07:48	23°♄49'34	18°57'57	asc. node	1617 Feb 27 01:44	22°♄53'11	
retrograde	1616 Apr 02 19:13	27°♄56'08			1617 Mar 03 09:54	0°♄	
evening set	1616 Apr 04 23:45	27°♄40'50		evening max el	1617 Mar 08 12:54	6°♄24'32	18°23'03
inferior conj	1616 Apr 13 01:28	23°♄24'51	1°49'28	retrograde	1617 Mar 15 21:05	10°♄02'30	
minimum elong	1616 Apr 13 05:13	23°♄18'14	1°48'19	evening set	1617 Mar 18 06:59	9°♄40'02	
min. Earth dist.	1616 Apr 16 05:08	21°♄12'16	0.56922 AU	inferior conj	1617 Mar 25 14:22	5°♄03'25	2°57'51
desc. node	1616 Apr 19 17:49	19°♄04'55		minimum elong	1617 Mar 25 18:06	4°♄55'41	2°57'04
morning rise	1616 Apr 21 06:27	18°♄22'48		min. Earth dist.	1617 Mar 29 00:54	2°♄14'08	0.58874 AU
direct	1616 Apr 26 12:39	17°♄17'05			1617 Apr 01 05:39	30°♄	
morning max el	1616 May 10 19:37	24°♄41'25	25°49'32	morning rise	1617 Apr 02 01:18	29°♄32'07	
	1616 May 15 16:49	0°♄		desc. node	1617 Apr 06 14:51	27°♄57'47	
	1616 Jun 03 10:22	0°♄		direct	1617 Apr 08 06:01	27°♄50'44	
morning set	1616 Jun 07 12:17	8°♄20'43			1617 Apr 15 12:28	0°♄	
asc. node	1616 Jun 08 03:57	9°♄43'34		morning max el	1617 Apr 22 14:46	5°♄33'39	27°02'57
					1617 May 10 16:33	0°♄	
superior conj	1616 Jun 14 12:45	23°♄34'05	1°02'46	morning set	1617 May 22 21:54	23°♄09'16	
minimum elong	1616 Jun 14 10:29	23°♄21'36	1°02'21		1617 May 26 03:03	0°♄	
max. Earth dist.	1616 Jun 15 07:22	25°♄16'07	1.32491 AU	asc. node	1617 May 26 00:59	29°♄48'48	
	1616 Jun 17 11:29	0°♄		max. Earth dist.	1617 May 29 19:42	8°♄04'44	1.32219 AU
evening rise	1616 Jun 21 14:28	8°♄45'30					
	1616 Jul 02 18:51	0°♄		superior conj	1617 May 30 00:32	8°♄31'19	0°41'01
desc. node	1616 Jul 16 17:06	20°♄32'49		minimum elong	1617 May 29 22:50	8°♄21'58	0°40'40
evening max el	1616 Jul 23 00:46	27°♄26'39	27°10'32	evening rise	1617 Jun 05 22:40	23°♄32'38	
	1616 Jul 25 23:01	0°♄			1617 Jun 09 01:51	0°♄	
retrograde	1616 Aug 05 21:29	4°♄41'21			1617 Jun 26 23:04	0°♄	
evening set	1616 Aug 13 00:14	2°♄22'48		desc. node	1617 Jul 03 14:07	7°♄49'08	
	1616 Aug 16 04:35	30°♄		evening max el	1617 Jul 05 01:19	9°♄16'11	26°22'04
min. Earth dist.	1616 Aug 16 14:59	29°♄37'54	0.61614 AU	retrograde	1617 Jul 19 00:59	16°♄28'12	
inferior conj	1616 Aug 19 17:18	26°♄52'14	-4°-16'-6	evening set	1617 Jul 25 14:34	14°♄41'05	
minimum elong	1616 Aug 19 22:19	26°♄41'00	4°15'04	min. Earth dist.	1617 Jul 29 14:18	12°♄05'34	0.59563 AU
morning rise	1616 Aug 26 23:15	21°♄54'55		inferior conj	1617 Aug 01 21:58	9°♄30'59	-4°-48'-19

minimum elong	1617 Aug 02 00:53	9°♁25'16	4°48'05	minimum elong	1618 Jul 14 05:59	21°♁32'43	4°53'47
morning rise	1617 Aug 09 14:36	4°♁56'47		morning rise	1618 Jul 22 10:18	17°♁18'22	
direct	1617 Aug 12 00:50	4°♁35'58		direct	1618 Jul 24 23:37	16°♁59'13	
morning max el	1617 Aug 19 17:42	8°♁18'59	18°20'33	morning max el	1618 Aug 02 19:53	21°♁07'49	19°05'11
asc. node	1617 Aug 22 00:11	10°♁46'34		asc. node	1618 Aug 08 21:13	28°♁34'54	
	1617 Sep 02 18:01	0°♁			1618 Aug 09 19:23	0°♁	
morning set	1617 Sep 04 16:32	3°♁40'46		morning set	1618 Aug 19 14:26	17°♁53'58	
					1618 Aug 25 17:09	0°♁	
superior conj	1617 Sep 13 22:39	21°♁07'23	1°32'25	superior conj	1618 Aug 27 23:05	4°♁22'07	1°43'39
minimum elong	1617 Sep 14 02:01	21°♁22'50	1°32'08	minimum elong	1618 Aug 28 00:30	4°♁29'00	1°43'36
	1617 Sep 18 21:19	0°♁			1618 Aug 29 00:30	4°♁29'00	1°43'36
max. Earth dist.	1617 Sep 21 11:30	4°♁29'50	1.40630 AU	max. Earth dist.	1618 Sep 03 14:57	16°♁49'02	1.38580 AU
evening rise	1617 Sep 26 02:56	12°♁18'05		evening rise	1618 Sep 07 11:51	23°♁40'06	
desc. node	1617 Sep 29 13:25	17°♁52'45			1618 Sep 11 05:14	0°♁	
	1617 Oct 07 09:05	0°♁		desc. node	1618 Sep 16 10:26	8°♁27'56	
	1617 Oct 30 01:27	0°♁			1618 Oct 01 04:08	0°♁	
evening max el	1617 Oct 30 12:23	0°♁27'43	23°22'19	evening max el	1618 Oct 13 00:42	14°♁04'21	24°41'13
retrograde	1617 Nov 09 23:18	6°♁39'04		retrograde	1618 Oct 24 13:13	20°♁47'29	
evening set	1617 Nov 14 21:30	4°♁37'52		evening set	1618 Oct 30 01:33	18°♁29'32	
asc. node	1617 Nov 17 23:25	1°♁20'35		min. Earth dist.	1618 Nov 03 17:04	13°♁12'36	0.67438 AU
	1617 Nov 19 00:08	30°♁		inferior conj	1618 Nov 04 13:33	12°♁04'31	0°-5'-55
min. Earth dist.	1617 Nov 19 21:37	28°♁47'02	0.67763 AU	minimum elong	1618 Nov 04 13:42	12°♁04'02	0°05'53
inferior conj	1617 Nov 20 07:35	28°♁12'51	0°47'50	transit begin	1618 Nov 04 11:08	12°♁12'34	
minimum elong	1617 Nov 20 06:29	28°♁16'37	0°47'23	transit end	1618 Nov 04 16:16	11°♁55'30	
morning rise	1617 Nov 25 15:34	22°♁02'39		asc. node	1618 Nov 04 20:26	11°♁41'38	
direct	1617 Nov 29 19:19	20°♁26'28		morning rise	1618 Nov 10 02:17	6°♁00'19	
morning max el	1617 Dec 08 08:34	25°♁25'27	21°13'38	direct	1618 Nov 13 17:07	4°♁45'00	
	1617 Dec 12 10:27	0°♁		morning max el	1618 Nov 21 07:54	9°♁06'19	20°01'46
greatest brilliancy	1617 Dec 13 15:19	1°♁29'28	-0.4m	greatest brilliancy	1618 Nov 28 11:31	17°♁48'28	-0.6m
desc. node	1617 Dec 26 12:39	19°♁27'26			1618 Dec 06 22:27	0°♁	
	1618 Jan 02 12:46	0°♁		desc. node	1618 Dec 13 09:40	9°♁46'49	
morning set	1618 Jan 08 02:03	8°♁36'54		morning set	1618 Dec 17 22:11	16°♁43'39	
max. Earth dist.	1618 Jan 15 16:08	20°♁47'14	1.42345 AU		1618 Dec 26 10:03	0°♁	
	1618 Jan 21 04:48	0°♁		max. Earth dist.	1618 Dec 29 01:28	4°♁11'59	1.43922 AU
superior conj	1618 Jan 22 22:33	2°♁58'01	-2°-4'-16	superior conj	1619 Jan 03 09:55	12°♁50'15	-1°-53'-2
minimum elong	1618 Jan 22 21:48	2°♁54'46	2°04'16	minimum elong	1619 Jan 03 03:49	12°♁25'21	1°52'40
evening rise	1618 Feb 03 08:03	23°♁08'07			1619 Jan 13 16:31	0°♁	
	1618 Feb 07 03:29	0°♁		evening rise	1619 Jan 16 13:27	4°♁55'15	
asc. node	1618 Feb 13 22:46	11°♁33'20		asc. node	1619 Jan 31 19:47	29°♁33'41	
evening max el	1618 Feb 19 23:12	19°♁23'20	18°08'05		1619 Feb 01 04:05	0°♁	
retrograde	1618 Feb 26 15:47	22°♁48'30		evening max el	1619 Feb 03 11:39	2°♁37'29	18°12'26
evening set	1618 Mar 01 06:43	22°♁17'11		retrograde	1619 Feb 09 22:47	6°♁03'38	
inferior conj	1618 Mar 07 23:00	17°♁19'21	3°34'02	evening set	1619 Feb 12 18:40	5°♁22'17	
minimum elong	1618 Mar 08 00:57	17°♁14'42	3°33'50	inferior conj	1619 Feb 18 23:29	0°♁04'08	3°44'50
min. Earth dist.	1618 Mar 11 03:31	14°♁17'36	0.61010 AU	minimum elong	1619 Feb 18 23:26	0°♁04'18	3°44'50
morning rise	1618 Mar 14 16:12	11°♁28'22			1619 Feb 19 01:01	30°♁	
direct	1618 Mar 21 10:56	9°♁12'00		min. Earth dist.	1619 Feb 21 14:54	27°♁13'28	0.63041 AU
desc. node	1618 Mar 24 11:51	9°♁37'32		morning rise	1619 Feb 25 02:11	24°♁01'34	
morning max el	1618 Apr 04 16:17	17°♁05'07	27°43'07	direct	1619 Mar 04 01:01	21°♁20'37	
	1618 Apr 15 09:09	0°♁		desc. node	1619 Mar 11 08:52	23°♁49'28	
	1618 May 03 07:02	0°♁		morning max el	1619 Mar 17 22:53	29°♁16'07	27°46'00
morning set	1618 May 07 03:44	7°♁44'10			1619 Mar 18 16:12	0°♁	
asc. node	1618 May 12 22:01	19°♁58'14			1619 Apr 09 06:40	0°♁	
max. Earth dist.	1618 May 13 07:05	20°♁47'33	1.32327 AU	morning set	1619 Apr 21 03:33	21°♁57'46	
					1619 Apr 25 01:24	0°♁	
superior conj	1618 May 14 11:31	23°♁22'53	0°16'28	max. Earth dist.	1619 Apr 26 13:34	3°♁11'07	1.32833 AU
minimum elong	1618 May 14 10:46	23°♁18'47	0°16'18				
	1618 May 17 12:02	0°♁		superior conj	1619 Apr 28 19:59	8°♁02'45	0°-10'-8
evening rise	1618 May 21 09:38	8°♁25'02		minimum elong	1619 Apr 28 20:28	8°♁05'24	0°10'02
	1618 Jun 01 14:44	0°♁		behind sun begin	1619 Apr 28 16:22	7°♁43'17	
evening max el	1618 Jun 16 18:48	20°♁19'54	25°05'22	behind sun end	1619 Apr 29 00:34	8°♁27'31	
desc. node	1618 Jun 20 11:09	23°♁28'04		asc. node	1619 Apr 29 19:05	10°♁07'35	
retrograde	1618 Jun 30 18:41	27°♁26'45		evening rise	1619 May 05 21:27	23°♁16'06	
evening set	1618 Jul 06 05:29	26°♁18'28			1619 May 09 03:28	0°♁	
min. Earth dist.	1618 Jul 11 06:25	23°♁33'20	0.57559 AU		1619 May 28 10:45	0°♁	
inferior conj	1618 Jul 14 07:35	21°♁30'01	-4°-53'-49	evening max el	1619 May 29 08:48	0°♁54'47	23°32'12

desc. node	1619 Jun 07 08:09	6°♁54'48		evening max el	1620 May 10 02:05	11°♁28'55	21°57'21
retrograde	1619 Jun 12 00:13	7°♁44'21		retrograde	1620 May 22 17:24	17°♁41'49	
evening set	1619 Jun 15 23:30	7°♁09'44		desc. node	1620 May 24 05:10	17°♁36'49	
min. Earth dist.	1619 Jun 22 19:07	3°♁59'52	0.55936 AU	evening set	1620 May 25 10:21	17°♁25'31	
inferior conj	1619 Jun 24 21:14	2°♁45'03	-4°-18'-44	min. Earth dist.	1620 Jun 03 06:57	13°♁38'35	0.55030 AU
minimum elong	1619 Jun 24 14:41	2°♁54'53	4°17'31	inferior conj	1620 Jun 03 19:13	13°♁21'25	-2°-56'-2
	1619 Jun 29 22:33	30°♁		minimum elong	1620 Jun 03 11:49	13°♁31'47	2°53'47
morning rise	1619 Jul 03 09:11	28°♁49'21		morning rise	1620 Jun 12 14:43	9°♁28'02	
direct	1619 Jul 06 03:17	28°♁30'31		direct	1620 Jun 15 16:35	9°♁07'00	
	1619 Jul 11 22:21	0°♁		morning max el	1620 Jun 27 16:00	14°♁43'52	21°36'32
morning max el	1619 Jul 16 11:42	3°♁18'11	20°11'03		1620 Jul 09 03:56	0°♁	
asc. node	1619 Jul 26 18:16	17°♁08'08		asc. node	1620 Jul 12 15:21	6°♁14'42	
	1619 Aug 02 13:46	0°♁		morning set	1620 Jul 18 03:55	17°♁15'18	
morning set	1619 Aug 03 19:02	2°♁27'56			1620 Jul 24 05:26	0°♁	
superior conj	1619 Aug 11 13:01	18°♁17'52	1°45'48	superior conj	1620 Jul 25 12:20	2°♁41'47	1°40'39
minimum elong	1619 Aug 11 12:41	18°♁16'11	1°45'48	minimum elong	1620 Jul 25 10:45	2°♁33'31	1°40'32
max. Earth dist.	1619 Aug 16 20:16	28°♁43'11	1.36636 AU	max. Earth dist.	1620 Jul 29 08:54	10°♁37'06	1.34978 AU
	1619 Aug 17 12:24	0°♁		evening rise	1620 Aug 02 19:53	19°♁23'01	
evening rise	1619 Aug 20 19:04	6°♁06'08			1620 Aug 08 14:19	0°♁	
desc. node	1619 Sep 03 07:29	28°♁50'33		desc. node	1620 Aug 20 04:31	18°♁53'38	
	1619 Sep 04 01:32	0°♁			1620 Aug 28 03:04	0°♁	
evening max el	1619 Sep 25 12:40	27°♁44'19	25°52'12	evening max el	1620 Sep 07 00:59	11°♁20'34	26°47'35
	1619 Sep 28 00:03	0°♁		retrograde	1620 Sep 20 02:18	18°♁35'40	
retrograde	1619 Oct 07 22:27	4°♁48'41		evening set	1620 Sep 26 18:13	15°♁54'10	
evening set	1619 Oct 14 01:10	2°♁16'27		min. Earth dist.	1620 Sep 30 18:42	11°♁50'12	0.65784 AU
	1619 Oct 16 08:27	30°♁		inferior conj	1620 Oct 02 14:03	9°♁42'52	-2°00'-39
min. Earth dist.	1619 Oct 18 08:57	27°♁35'19	0.66784 AU	minimum elong	1620 Oct 02 17:15	9°♁33'28	1°59'25
inferior conj	1619 Oct 19 16:23	25°♁56'03	-1°-2'-37	morning rise	1620 Oct 08 17:39	3°♁59'32	
minimum elong	1619 Oct 19 18:01	25°♁50'54	1°01'57	asc. node	1620 Oct 08 14:31	4°♁03'40	
asc. node	1619 Oct 22 17:27	22°♁19'46		direct	1620 Oct 11 13:07	3°♁15'42	
morning rise	1619 Oct 25 11:43	20°♁00'38		morning max el	1620 Oct 18 03:14	6°♁51'25	18°23'00
direct	1619 Oct 28 15:43	19°♁02'56			1620 Nov 03 02:19	0°♁	
morning max el	1619 Nov 04 14:42	22°♁56'33	19°04'20	morning set	1620 Nov 06 13:03	5°♁34'48	
	1619 Nov 10 09:32	0°♁		desc. node	1620 Nov 16 03:48	21°♁00'11	
morning set	1619 Nov 27 04:12	25°♁28'01					
	1619 Nov 30 01:47	0°♁		superior conj	1620 Nov 21 22:21	0°♁07'45	0°-37'-52
desc. node	1619 Nov 30 06:44	0°♁19'19		minimum elong	1620 Nov 21 17:26	29°♁48'26	0°37'14
max. Earth dist.	1619 Dec 11 17:10	18°♁14'51	1.44887 AU		1620 Nov 21 20:22	0°♁	
				max. Earth dist.	1620 Nov 23 12:15	2°♁36'49	1.45120 AU
superior conj	1619 Dec 13 21:13	21°♁40'07	-1°-22'-52	evening rise	1620 Dec 08 05:17	25°♁41'12	
minimum elong	1619 Dec 13 12:29	21°♁05'37	1°21'58		1620 Dec 10 23:09	0°♁	
	1619 Dec 19 03:04	0°♁		greatest brilliancy	1620 Dec 21 18:13	16°♁45'15	-0.7m
evening rise	1619 Dec 28 21:03	15°♁46'18		evening max el	1620 Dec 31 08:40	29°♁29'21	19°15'21
	1620 Jan 06 14:10	0°♁			1620 Dec 31 20:53	0°♁	
evening max el	1620 Jan 17 23:37	16°♁01'07	18°35'14	asc. node	1621 Jan 04 13:49	2°♁47'57	
asc. node	1620 Jan 18 16:48	16°♁43'08		retrograde	1621 Jan 07 09:55	3°♁31'45	
retrograde	1620 Jan 24 13:58	19°♁40'09		evening set	1621 Jan 10 17:55	2°♁26'54	
evening set	1620 Jan 27 15:21	18°♁47'41			1621 Jan 13 12:37	30°♁	
inferior conj	1620 Feb 02 11:54	13°♁10'48	3°36'57	inferior conj	1621 Jan 16 08:50	26°♁33'36	3°15'22
minimum elong	1620 Feb 02 10:20	13°♁15'29	3°36'46	minimum elong	1621 Jan 16 06:25	26°♁41'22	3°14'52
min. Earth dist.	1620 Feb 04 11:46	10°♁48'25	0.64774 AU	min. Earth dist.	1621 Jan 17 17:34	24°♁48'39	0.66110 AU
morning rise	1620 Feb 08 04:03	7°♁01'29		morning rise	1621 Jan 21 18:06	20°♁20'21	
direct	1620 Feb 14 22:23	4°♁10'50		direct	1621 Jan 28 01:57	17°♁33'45	
desc. node	1620 Feb 26 05:55	9°♁59'10		morning max el	1621 Feb 09 17:48	25°♁02'58	26°13'52
morning max el	1620 Feb 28 08:09	11°♁59'05	27°13'58	desc. node	1621 Feb 12 02:59	27°♁34'07	
	1620 Mar 13 17:37	0°♁			1621 Feb 14 06:05	0°♁	
	1620 Mar 31 19:04	0°♁			1621 Mar 07 04:53	0°♁	
morning set	1620 Apr 03 18:29	5°♁40'43		morning set	1621 Mar 17 20:46	18°♁42'07	
max. Earth dist.	1620 Apr 08 11:22	15°♁04'29	1.33782 AU	max. Earth dist.	1621 Mar 21 22:04	26°♁26'23	1.35189 AU
					1621 Mar 23 17:27	0°♁	
superior conj	1620 Apr 11 23:57	22°♁24'24	0°-37'-49				
minimum elong	1620 Apr 12 01:51	22°♁34'22	0°37'26	superior conj	1621 Mar 26 21:06	6°♁21'04	-1°-5'-14
	1620 Apr 15 13:48	0°♁		minimum elong	1621 Mar 27 00:20	6°♁37'33	1°04'41
asc. node	1620 Apr 15 16:08	0°♁12'25		asc. node	1621 Apr 02 13:11	20°♁08'49	
evening rise	1620 Apr 19 08:19	7°♁59'19		evening rise	1621 Apr 03 16:19	22°♁28'44	
	1620 May 01 02:19	0°♁			1621 Apr 07 09:57	0°♁	

evening max el	1621 Apr 22 04:55	22°♄29'46	20°33'20	evening rise	1622 Mar 18 19:04	6°♃36'34	
retrograde	1621 May 03 06:27	27°♄51'46		asc. node	1622 Mar 20 10:13	9°♃51'29	
evening set	1621 May 05 08:56	27°♄40'55			1622 Apr 01 04:03	0°♄	
desc. node	1621 May 11 02:11	25°♄38'19		evening max el	1622 Apr 04 19:25	4°♄09'30	19°27'01
inferior conj	1621 May 14 13:26	23°♄43'16	-1°00'-29	retrograde	1622 Apr 14 03:59	8°♄40'32	
minimum elong	1621 May 14 10:34	23°♄47'25	0°59'28	evening set	1622 Apr 16 05:39	8°♄28'14	
min. Earth dist.	1621 May 15 19:36	22°♄59'44	0.55055 AU	inferior conj	1622 Apr 24 18:23	4°♄21'54	0°54'35
morning rise	1621 May 23 10:45	19°♄32'47		minimum elong	1622 Apr 24 20:37	4°♄18'16	0°53'49
direct	1621 May 27 03:00	19°♄03'39		min. Earth dist.	1622 Apr 27 10:09	2°♄38'55	0.56017 AU
morning max el	1621 Jun 09 10:57	25°♄31'04	23°15'36	desc. node	1622 Apr 27 23:14	2°♄18'35	
	1621 Jun 13 15:45	0°♄			1622 May 02 09:21	30°♃	
asc. node	1621 Jun 29 12:27	25°♄46'00		morning rise	1622 May 03 07:45	29°♃39'04	
	1621 Jul 01 14:13	0°♄		direct	1622 May 07 22:51	28°♃50'28	
morning set	1621 Jul 02 15:10	2°♄10'11			1622 May 13 11:19	0°♄	
				morning max el	1622 May 22 01:38	5°♄59'02	24°56'38
superior conj	1621 Jul 09 18:00	17°♄24'35	1°29'35		1622 Jun 08 09:36	0°♄	
minimum elong	1621 Jul 09 15:44	17°♄12'26	1°29'20	asc. node	1622 Jun 16 09:31	15°♄34'42	
max. Earth dist.	1621 Jul 12 06:45	22°♄47'26	1.33694 AU	morning set	1622 Jun 17 03:04	17°♄06'52	
	1621 Jul 15 18:21	0°♄			1622 Jun 23 02:13	0°♄	
evening rise	1621 Jul 17 09:48	3°♄18'14					
	1621 Aug 01 09:36	0°♄		superior conj	1622 Jun 24 03:33	2°♄18'13	1°13'44
desc. node	1621 Aug 07 01:31	8°♄28'42		minimum elong	1622 Jun 24 01:08	2°♄05'04	1°13'21
evening max el	1621 Aug 20 12:46	24°♄42'28	27°20'02	max. Earth dist.	1622 Jun 25 12:33	5°♄17'38	1.32810 AU
	1621 Aug 27 08:44	0°♄		evening rise	1622 Jul 01 09:04	17°♄40'45	
retrograde	1621 Sep 03 00:25	2°♄00'50			1622 Jul 07 16:16	0°♄	
	1621 Sep 09 02:52	30°♄		desc. node	1622 Jul 24 22:33	27°♄24'10	
evening set	1621 Sep 10 02:05	29°♄18'24			1622 Jul 26 23:31	0°♄	
min. Earth dist.	1621 Sep 13 20:04	25°♄50'39	0.64422 AU	evening max el	1622 Aug 02 22:04	7°♄37'34	27°23'26
inferior conj	1621 Sep 16 04:13	23°♄20'15	-2°-57'-41	retrograde	1622 Aug 16 16:27	14°♄55'01	
minimum elong	1621 Sep 16 08:48	23°♄07'59	2°56'08	evening set	1622 Aug 23 21:24	12°♄23'36	
morning rise	1621 Sep 22 17:28	17°♄52'24		min. Earth dist.	1622 Aug 27 11:32	9°♄26'18	0.62712 AU
direct	1621 Sep 25 06:48	17°♄18'50		inferior conj	1622 Aug 30 08:05	6°♄41'59	-3°-50'-9
asc. node	1621 Sep 25 11:37	17°♄19'02		minimum elong	1622 Aug 30 13:20	6°♄29'22	3°48'47
morning max el	1621 Oct 01 18:55	20°♄45'36	17°58'36	morning rise	1622 Sep 06 07:51	1°♄32'52	
	1621 Oct 08 19:02	0°♄		direct	1622 Sep 08 17:41	1°♄06'20	
morning set	1621 Oct 19 02:11	17°♄04'05		asc. node	1622 Sep 12 08:41	2°♄07'53	
	1621 Oct 26 19:21	0°♄		morning max el	1622 Sep 15 10:51	4°♄32'36	17°52'04
				morning set	1622 Oct 01 14:16	29°♄39'30	
superior conj	1621 Nov 01 10:57	9°♄13'31	0°10'37		1622 Oct 01 18:53	0°♄	
minimum elong	1621 Nov 01 12:11	9°♄18'30	0°10'26				
behind sun begin	1621 Nov 01 04:13	8°♄46'18		superior conj	1622 Oct 13 00:58	19°♄35'32	0°51'46
behind sun end	1621 Nov 01 20:10	9°♄50'39		minimum elong	1622 Oct 13 05:23	19°♄54'07	0°51'11
desc. node	1621 Nov 03 00:49	11°♄45'45			1622 Oct 19 07:55	0°♄	
max. Earth dist.	1621 Nov 06 07:02	16°♄57'31	1.44613 AU	max. Earth dist.	1622 Oct 19 22:19	0°♄58'23	1.43439 AU
	1621 Nov 14 14:52	0°♄		desc. node	1622 Oct 20 21:50	2°♄33'15	
evening rise	1621 Nov 17 18:45	4°♄53'10		evening rise	1622 Oct 28 03:09	13°♄57'40	
	1621 Dec 04 10:54	0°♄			1622 Nov 07 16:49	0°♄	
greatest brilliancy	1621 Dec 07 22:23	4°♄53'10	-0.6m	greatest brilliancy	1622 Nov 22 09:13	20°♄34'37	-0.4m
evening max el	1621 Dec 14 12:58	12°♄58'30	20°11'01	evening max el	1622 Nov 27 11:39	26°♄28'33	21°19'21
retrograde	1621 Dec 22 07:46	17°♄32'42			1622 Dec 01 13:55	0°♄	
asc. node	1621 Dec 22 10:52	17°♄32'36		retrograde	1622 Dec 06 05:17	1°♄40'02	
evening set	1621 Dec 25 23:59	16°♄14'01		asc. node	1622 Dec 09 07:54	0°♄46'16	
inferior conj	1621 Dec 31 11:25	10°♄07'16	2°43'24	evening set	1622 Dec 10 07:37	0°♄05'56	
minimum elong	1621 Dec 31 08:45	10°♄16'13	2°42'40		1622 Dec 10 10:39	30°♄	
min. Earth dist.	1622 Jan 01 06:34	9°♄02'44	0.67043 AU	inferior conj	1622 Dec 15 17:22	23°♄49'09	2°03'24
morning rise	1622 Jan 05 16:59	3°♄52'03		minimum elong	1622 Dec 15 14:59	23°♄57'23	2°02'34
direct	1622 Jan 11 10:59	1°♄19'41		min. Earth dist.	1622 Dec 16 00:31	23°♄24'30	0.67600 AU
morning max el	1622 Jan 23 02:34	8°♄16'32	24°54'50	morning rise	1622 Dec 20 22:01	17°♄34'03	
desc. node	1622 Jan 30 00:01	16°♄08'46		direct	1622 Dec 26 00:56	15°♄21'54	
	1622 Feb 09 03:53	0°♄		morning max el	1623 Jan 05 11:23	21°♄34'43	23°27'02
	1622 Feb 27 18:39	0°♄		greatest brilliancy	1623 Jan 11 06:56	28°♄09'52	-0.2m
morning set	1622 Feb 28 05:08	0°♄46'32			1623 Jan 12 18:05	0°♄	
max. Earth dist.	1622 Mar 03 22:01	7°♄29'05	1.37014 AU	desc. node	1623 Jan 16 21:03	5°♄26'10	
					1623 Feb 02 11:01	0°♄	
superior conj	1622 Mar 10 08:18	19°♄43'30	-1°-30'-34	morning set	1623 Feb 09 13:25	11°♄37'37	
minimum elong	1622 Mar 10 12:25	20°♄03'41	1°30'03	max. Earth dist.	1623 Feb 13 16:41	18°♄43'55	1.39115 AU
	1622 Mar 15 12:12	0°♄			1623 Feb 19 23:06	0°♄	

superior conj	1623 Feb 21 05:41	2°♄21'57	-1°-51'-7	superior conj	1624 Feb 03 08:22	14°♁04'26	-2°-3'-6
minimum elong	1623 Feb 21 09:35	2°♄40'09	1°50'49	minimum elong	1624 Feb 03 10:03	14°♁11'51	2°03'04
evening rise	1623 Mar 02 13:53	20°♄15'40		evening rise	1624 Feb 12 02:43	0°♄	
asc. node	1623 Mar 07 07:14	29°♄15'11		asc. node	1624 Feb 13 21:22	3°♄17'54	
	1623 Mar 07 16:57	0°♄		evening max el	1624 Feb 22 04:15	18°♄13'26	
evening max el	1623 Mar 18 20:06	16°♄26'48	18°40'38	evening max el	1624 Mar 01 03:53	29°♄13'27	18°14'21
retrograde	1623 Mar 26 18:36	20°♄19'07		retrograde	1624 Mar 02 00:01	0°♄	
evening set	1623 Mar 29 01:16	20°♄01'09		retrograde	1624 Mar 08 03:53	2°♄43'43	
inferior conj	1623 Apr 05 18:58	15°♄37'00	2°22'43	evening set	1624 Mar 10 16:07	2°♄17'32	
minimum elong	1623 Apr 05 23:03	15°♄29'17	2°21'37		1624 Mar 14 17:25	30°♄	
min. Earth dist.	1623 Apr 09 03:40	13°♄05'46	0.57709 AU	inferior conj	1624 Mar 17 16:38	27°♄32'04	3°16'46
morning rise	1623 Apr 13 16:28	10°♄21'07		minimum elong	1624 Mar 17 19:43	27°♄25'17	3°16'15
desc. node	1623 Apr 14 20:15	9°♄52'00		min. Earth dist.	1624 Mar 21 01:59	24°♄34'19	0.59783 AU
direct	1623 Apr 19 09:04	9°♄00'31		morning rise	1624 Mar 24 19:47	21°♄51'32	
morning max el	1623 May 03 17:46	16°♄34'56	26°24'13	direct	1624 Mar 31 07:57	19°♄54'17	
	1623 May 14 17:15	0°♄		desc. node	1624 Mar 31 17:15	19°♄54'41	
	1623 May 31 15:02	0°♄		morning max el	1624 Apr 14 15:22	27°♄42'12	27°24'27
morning set	1623 Jun 01 13:58	1°♄59'45			1624 Apr 16 20:36	0°♄	
asc. node	1623 Jun 03 06:32	5°♄35'08			1624 May 07 08:13	0°♄	
				morning set	1624 May 15 22:13	16°♄43'26	
superior conj	1623 Jun 08 15:01	17°♄15'55	0°53'55	asc. node	1624 May 20 03:33	25°♄42'48	
minimum elong	1623 Jun 08 12:56	17°♄04'28	0°53'32		1624 May 22 02:40	0°♄	
max. Earth dist.	1623 Jun 08 23:22	18°♄01'47	1.32323 AU	max. Earth dist.	1624 May 22 11:46	0°♄49'52	1.32218 AU
	1623 Jun 14 11:52	0°♄					
evening rise	1623 Jun 15 14:43	2°♄21'15		superior conj	1624 May 23 02:41	2°♄11'52	0°30'55
	1623 Jun 30 14:24	0°♄		minimum elong	1624 May 23 01:21	2°♄04'31	0°30'38
desc. node	1623 Jul 11 19:34	15°♄23'04		evening rise	1624 May 30 00:22	17°♄12'04	
evening max el	1623 Jul 16 02:33	19°♄53'40	26°53'57		1624 Jun 05 08:51	0°♄	
retrograde	1623 Jul 30 01:10	27°♄07'58			1624 Jun 25 14:18	0°♄	
evening set	1623 Aug 05 23:41	25°♄01'29		evening max el	1624 Jun 27 00:17	1°♄24'13	25°52'29
min. Earth dist.	1623 Aug 09 16:40	22°♄22'36	0.60741 AU	desc. node	1624 Jun 27 16:34	2°♄02'18	
inferior conj	1623 Aug 12 22:14	19°♄39'08	-4°-32'-17	retrograde	1624 Jul 11 00:41	8°♄34'06	
minimum elong	1623 Aug 13 02:40	19°♄29'45	4°31'35	evening set	1624 Jul 17 04:19	7°♄03'34	
morning rise	1623 Aug 20 08:47	14°♄51'28		min. Earth dist.	1624 Jul 21 12:44	4°♄25'59	0.58686 AU
direct	1623 Aug 22 17:58	14°♄29'12		inferior conj	1624 Jul 24 19:12	2°♄02'35	-4°-54'-48
morning max el	1623 Aug 29 23:51	18°♄03'39	18°04'24	minimum elong	1624 Jul 24 20:29	2°♄00'15	4°54'47
asc. node	1623 Aug 30 05:44	18°♄18'05			1624 Jul 27 17:03	30°♄	
	1623 Sep 07 14:04	0°♄		morning rise	1624 Aug 01 16:09	27°♄37'53	
morning set	1623 Sep 14 19:09	13°♄02'48		direct	1624 Aug 04 03:30	27°♄17'51	
	1623 Sep 24 00:40	0°♄			1624 Aug 10 22:33	0°♄	
				morning max el	1624 Aug 12 06:49	1°♄10'29	18°36'54
superior conj	1623 Sep 24 17:31	1°♄15'07	1°21'02	asc. node	1624 Aug 16 02:46	5°♄34'57	
minimum elong	1623 Sep 24 21:47	1°♄34'05	1°20'36	morning set	1624 Aug 28 11:58	27°♄01'03	
max. Earth dist.	1623 Oct 02 08:24	14°♄24'17	1.41751 AU		1624 Aug 30 00:50	0°♄	
evening rise	1623 Oct 07 23:32	23°♄37'34					
desc. node	1623 Oct 07 18:52	23°♄18'51		superior conj	1624 Sep 06 07:57	13°♄59'41	1°38'24
	1623 Oct 12 00:17	0°♄		minimum elong	1624 Sep 06 10:31	14°♄11'42	1°38'15
	1623 Nov 01 17:47	0°♄		max. Earth dist.	1624 Sep 13 13:56	27°♄08'46	1.39766 AU
greatest brilliancy	1623 Nov 05 08:37	4°♄33'54	-0.3m		1624 Sep 15 05:20	0°♄	
evening max el	1623 Nov 10 05:05	10°♄00'14	22°36'20	evening rise	1624 Sep 17 18:30	4°♄20'28	
retrograde	1623 Nov 20 00:42	15°♄50'11		desc. node	1624 Sep 23 15:54	13°♄59'03	
evening set	1623 Nov 24 15:08	13°♄59'17			1624 Oct 04 04:59	0°♄	
asc. node	1623 Nov 26 04:56	12°♄29'32		evening max el	1624 Oct 22 18:48	23°♄35'17	23°56'23
min. Earth dist.	1623 Nov 29 20:54	7°♄49'29	0.67804 AU		1624 Nov 02 09:09	0°♄	
inferior conj	1623 Nov 30 00:43	7°♄36'16	1°16'59	retrograde	1624 Nov 02 16:46	0°♄00'26	
minimum elong	1623 Nov 29 23:02	7°♄42'05	1°16'18		1624 Nov 03 00:20	30°♄	
morning rise	1623 Dec 05 06:50	1°♄23'30		evening set	1624 Nov 07 20:55	27°♄52'05	
	1623 Dec 07 13:34	30°♄		asc. node	1624 Nov 12 01:58	23°♄07'08	
direct	1623 Dec 09 18:50	29°♄34'04		min. Earth dist.	1624 Nov 12 17:19	22°♄15'31	0.67672 AU
	1623 Dec 12 03:01	0°♄		inferior conj	1624 Nov 13 07:41	21°♄26'48	0°25'31
morning max el	1623 Dec 18 23:28	4°♄58'38	22°00'06	minimum elong	1624 Nov 13 07:05	21°♄28'52	0°25'15
greatest brilliancy	1623 Dec 23 16:27	10°♄16'41	-0.4m	morning rise	1624 Nov 18 17:27	15°♄18'52	
desc. node	1624 Jan 03 18:04	25°♄13'54		direct	1624 Nov 22 15:36	13°♄51'41	
	1624 Jan 07 00:32	0°♄		morning max el	1624 Nov 30 18:17	18°♄32'58	20°41'26
morning set	1624 Jan 20 16:41	21°♄04'06		greatest brilliancy	1624 Dec 06 16:48	25°♄31'07	-0.5m
	1624 Jan 26 03:40	0°♄			1624 Dec 10 00:47	0°♄	
max. Earth dist.	1624 Jan 26 14:22	0°♄44'43	1.41237 AU	desc. node	1624 Dec 20 15:07	15°♄23'42	

morning set	1624 Dec 29 19:04	29°♄23'52		greatest brilliancy	1625 Nov 22 05:56	12°♄50'07	-0.6m
	1624 Dec 30 04:21	0°♄			1625 Dec 03 17:24	0°♄	
max. Earth dist.	1625 Jan 07 20:01	13°♄43'41	1.43088 AU	desc. node	1625 Dec 07 12:10	5°♄49'24	
				morning set	1625 Dec 08 16:31	7°♄38'55	
superior conj	1625 Jan 14 11:08	24°♄38'55	-2°-1'-44	max. Earth dist.	1625 Dec 21 08:56	27°♄29'00	1.44415 AU
minimum elong	1625 Jan 14 08:08	24°♄26'23	2°01'39		1625 Dec 22 22:56	0°♄	
	1625 Jan 17 15:02	0°♄					
evening rise	1625 Jan 26 13:35	15°♄35'06		superior conj	1625 Dec 25 11:27	4°♄01'58	-1°-42'-31
	1625 Feb 03 20:02	0°♄		minimum elong	1625 Dec 25 03:33	3°♄30'14	1°41'54
asc. node	1625 Feb 08 01:17	6°♄37'49		evening rise	1626 Jan 08 10:15	26°♄59'48	
evening max el	1625 Feb 12 15:30	12°♄19'49	18°07'37		1626 Jan 10 05:03	0°♄	
retrograde	1625 Feb 19 04:27	15°♄43'38		asc. node	1626 Jan 25 22:19	24°♄18'24	
evening set	1625 Feb 21 21:35	15°♄08'00		evening max el	1626 Jan 27 04:03	25°♄38'47	18°19'51
inferior conj	1625 Feb 28 08:32	10°♄01'07	3°41'18	retrograde	1626 Feb 02 15:37	29°♄09'20	
minimum elong	1625 Feb 28 09:35	9°♄58'26	3°41'13	evening set	1626 Feb 05 13:42	28°♄23'22	
min. Earth dist.	1625 Mar 03 07:53	7°♄01'51	0.61904 AU	inferior conj	1626 Feb 11 14:38	22°♄56'43	3°43'26
morning rise	1625 Mar 06 19:07	4°♄04'39		minimum elong	1626 Feb 11 13:51	22°♄58'56	3°43'24
direct	1625 Mar 13 16:48	1°♄36'29		min. Earth dist.	1626 Feb 13 23:23	20°♄16'38	0.63819 AU
desc. node	1625 Mar 18 14:17	2°♄42'57		morning rise	1626 Feb 17 12:21	16°♄50'38	
morning max el	1625 Mar 27 19:14	9°♄30'39	27°48'58	direct	1626 Feb 24 09:58	14°♄04'03	
	1625 Apr 12 16:17	0°♄		desc. node	1626 Mar 05 11:20	17°♄49'41	
	1625 Apr 29 11:59	0°♄		morning max el	1626 Mar 10 03:35	21°♄57'45	27°36'23
morning set	1625 Apr 30 01:47	1°♄10'05			1626 Mar 17 04:57	0°♄	
max. Earth dist.	1625 May 05 21:43	13°♄26'54	1.32497 AU		1626 Apr 05 20:07	0°♄	
asc. node	1625 May 07 00:35	15°♄52'28		morning set	1626 Apr 13 22:16	15°♄12'01	
				max. Earth dist.	1626 Apr 19 01:13	25°♄39'46	1.33187 AU
					1626 Apr 21 02:26	0°♄	
superior conj	1625 May 07 12:49	16°♄59'02	0°05'24				
minimum elong	1625 May 07 12:34	16°♄57'38	0°05'21	superior conj	1626 Apr 21 19:37	1°♄31'42	0°-21'-48
behind sun begin	1625 May 07 07:42	16°♄31'11		minimum elong	1626 Apr 21 20:42	1°♄37'27	0°21'35
behind sun end	1625 May 07 17:25	17°♄24'07		asc. node	1626 Apr 23 21:38	6°♄00'12	
	1625 May 13 12:31	0°♄		evening rise	1626 Apr 28 23:37	16°♄53'15	
evening rise	1625 May 14 11:57	2°♄04'49			1626 May 05 12:28	0°♄	
	1625 May 29 17:42	0°♄		evening max el	1626 May 21 05:51	22°♄41'56	22°51'02
evening max el	1625 Jun 08 15:38	12°♄12'31	24°26'51	desc. node	1626 Jun 01 10:36	29°♄08'56	
desc. node	1625 Jun 14 13:35	16°♄49'34		retrograde	1626 Jun 03 13:04	29°♄19'00	
retrograde	1625 Jun 22 12:55	19°♄13'27		evening set	1626 Jun 06 22:03	28°♄54'00	
evening set	1625 Jun 27 09:21	18°♄20'45		min. Earth dist.	1626 Jun 14 14:29	25°♄29'58	0.55448 AU
min. Earth dist.	1625 Jul 03 02:39	15°♄26'54	0.56808 AU	inferior conj	1626 Jun 16 02:07	24°♄38'41	-3°-49'-9
inferior conj	1625 Jul 05 20:12	13°♄42'40	-4°-44'-38	minimum elong	1626 Jun 15 18:27	24°♄49'43	3°47'19
minimum elong	1625 Jul 05 16:18	13°♄48'54	4°44'15	morning rise	1626 Jun 24 17:44	20°♄46'30	
morning rise	1625 Jul 14 02:57	9°♄39'03		direct	1626 Jun 27 14:30	20°♄27'19	
direct	1625 Jul 16 18:21	9°♄20'04		morning max el	1626 Jul 08 15:44	25°♄34'37	20°45'20
morning max el	1625 Jul 26 04:46	13°♄43'12	19°30'39		1626 Jul 12 17:18	0°♄	
asc. node	1625 Aug 02 23:49	23°♄43'27		asc. node	1626 Jul 20 20:53	12°♄31'34	
	1625 Aug 06 15:25	0°♄		morning set	1626 Jul 27 19:41	26°♄03'44	
morning set	1625 Aug 12 13:02	11°♄23'48			1626 Jul 29 17:26	0°♄	
				superior conj	1626 Aug 04 09:03	11°♄41'59	1°44'26
superior conj	1625 Aug 20 14:42	27°♄33'10	1°45'34	minimum elong	1626 Aug 04 08:07	11°♄37'13	1°44'23
minimum elong	1625 Aug 20 15:20	27°♄36'16	1°45'33	max. Earth dist.	1626 Aug 09 01:29	21°♄05'25	1.35883 AU
	1625 Aug 21 20:44	0°♄		evening rise	1626 Aug 13 04:33	28°♄58'43	
max. Earth dist.	1625 Aug 26 17:48	9°♄15'38	1.37730 AU		1626 Aug 13 17:45	0°♄	
evening rise	1625 Aug 30 13:20	16°♄10'14		desc. node	1626 Aug 28 09:58	24°♄44'12	
	1625 Sep 07 17:16	0°♄			1626 Aug 31 22:47	0°♄	
desc. node	1625 Sep 10 12:57	4°♄29'22		evening max el	1626 Sep 17 18:38	20°♄51'39	26°18'07
	1625 Sep 28 17:53	0°♄		retrograde	1626 Sep 30 11:49	28°♄02'28	
evening max el	1625 Oct 05 06:46	7°♄13'28	25°12'49	evening set	1626 Oct 06 20:27	25°♄25'08	
retrograde	1625 Oct 17 04:41	14°♄06'34		min. Earth dist.	1626 Oct 11 00:56	20°♄59'59	0.66396 AU
evening set	1625 Oct 22 23:20	11°♄41'54		inferior conj	1626 Oct 12 13:26	19°♄07'57	-1°-27'-15
min. Earth dist.	1625 Oct 27 11:27	6°♄40'16	0.67203 AU	minimum elong	1626 Oct 12 15:44	19°♄00'54	1°26'18
inferior conj	1625 Oct 28 12:33	5°♄18'29	0°-29'-42	asc. node	1626 Oct 16 20:05	14°♄28'40	
minimum elong	1625 Oct 28 13:18	5°♄16'01	0°29'23	morning rise	1626 Oct 18 12:07	13°♄17'33	
asc. node	1625 Oct 29 23:00	3°♄28'06		direct	1626 Oct 21 12:06	12°♄26'22	
	1625 Nov 02 05:17	30°♄		morning max el	1626 Oct 28 06:37	16°♄11'24	18°44'47
morning rise	1625 Nov 03 03:54	29°♄17'56			1626 Nov 07 14:06	0°♄	
direct	1625 Nov 06 13:54	28°♄10'35		morning set	1626 Nov 18 08:46	16°♄55'07	
	1625 Nov 11 05:51	0°♄					
morning max el	1625 Nov 13 21:02	2°♄18'29	19°35'33				

desc. node	1626 Nov 24 09:13	26°♁25'38		morning set	1627 Oct 30 06:04	27°♁38'27	
	1626 Nov 26 15:41	0°♁			1627 Oct 31 16:27	0°♁	
max. Earth dist.	1626 Dec 04 02:11	11°♁41'02	1.45068 AU	desc. node	1627 Nov 11 06:17	17°♁08'58	
superior conj	1626 Dec 04 15:56	12°♁35'03	-1°-5'-2	superior conj	1627 Nov 13 19:29	21°♁12'24	0°-17'00
minimum elong	1626 Dec 04 08:06	12°♁04'17	1°04'07	minimum elong	1627 Nov 13 17:19	21°♁03'46	0°16'43
	1626 Dec 15 16:19	0°♁		max. Earth dist.	1627 Nov 16 20:58	26°♁02'40	1.44991 AU
evening rise	1626 Dec 20 07:50	7°♁26'07			1627 Nov 19 09:23	0°♁	
	1627 Jan 03 14:33	0°♁		evening rise	1627 Nov 30 06:56	16°♁59'20	
evening max el	1627 Jan 10 14:59	9°♁04'21	18°50'15		1627 Dec 08 16:42	0°♁	
asc. node	1627 Jan 12 19:22	11°♁02'06		greatest brilliancy	1627 Dec 16 22:29	12°♁21'43	-0.7m
retrograde	1627 Jan 17 09:18	12°♁52'34		evening max el	1627 Dec 24 22:13	22°♁33'11	19°37'19
evening set	1627 Jan 20 13:12	11°♁55'10		asc. node	1627 Dec 30 16:25	26°♁34'26	
inferior conj	1627 Jan 26 07:04	6°♁11'00	3°29'13	retrograde	1628 Jan 01 06:15	26°♁48'10	
minimum elong	1627 Jan 26 05:03	6°♁17'12	3°28'56	evening set	1628 Jan 04 17:28	25°♁37'47	
min. Earth dist.	1627 Jan 28 00:24	4°♁03'35	0.65387 AU	inferior conj	1628 Jan 10 06:42	19°♁38'38	3°02'54
morning rise	1627 Jan 31 19:50	29°♁59'26		minimum elong	1628 Jan 10 04:06	19°♁47'08	3°02'17
	1627 Jan 31 19:34	30°♁		min. Earth dist.	1628 Jan 11 09:34	18°♁10'27	0.66559 AU
direct	1627 Feb 07 10:12	27°♁08'50		morning rise	1628 Jan 15 14:01	13°♁24'16	
	1627 Feb 14 22:06	0°♁		direct	1628 Jan 21 16:22	10°♁42'22	
morning max el	1627 Feb 20 13:27	4°♁51'34	26°51'19	morning max el	1628 Feb 02 22:32	17°♁59'43	25°41'52
desc. node	1627 Feb 20 08:23	4°♁38'54		desc. node	1628 Feb 07 05:27	22°♁41'29	
	1627 Mar 11 18:05	0°♁			1628 Feb 13 01:09	0°♁	
morning set	1627 Mar 28 08:23	28°♁39'05		morning set	1628 Mar 03 18:08	0°♁	
	1627 Mar 29 01:15	0°♁		max. Earth dist.	1628 Mar 10 03:45	11°♁18'10	
max. Earth dist.	1627 Apr 01 18:22	7°♁18'38	1.34322 AU	max. Earth dist.	1628 Mar 13 23:40	18°♁27'23	1.35917 AU
superior conj	1627 Apr 05 21:01	15°♁43'31	0°-49'-34	superior conj	1628 Mar 19 14:22	29°♁26'52	-1°-16'-23
minimum elong	1627 Apr 05 23:30	15°♁56'26	0°49'06	minimum elong	1628 Mar 19 18:03	29°♁45'25	1°15'49
asc. node	1627 Apr 10 18:42	26°♁01'52			1628 Mar 19 20:57	0°♁	
	1627 Apr 12 16:02	0°♁		evening rise	1628 Mar 27 15:33	15°♁51'57	
evening rise	1627 Apr 13 09:30	1°♁31'06		asc. node	1628 Mar 27 15:44	15°♁52'57	
	1627 Apr 29 23:16	0°♁			1628 Apr 03 22:56	0°♁	
evening max el	1627 May 03 02:40	3°♁25'04	21°19'46	evening max el	1628 Apr 14 10:36	14°♁42'37	20°02'50
retrograde	1627 May 15 03:34	9°♁17'37		retrograde	1628 Apr 24 18:14	19°♁41'25	
evening set	1627 May 17 11:53	9°♁04'59		evening set	1628 Apr 26 19:13	19°♁30'35	
desc. node	1627 May 19 07:36	8°♁38'47		desc. node	1628 May 05 04:38	15°♁51'18	
inferior conj	1627 May 26 20:47	5°♁05'39	-2°-9'-16	inferior conj	1628 May 05 17:58	15°♁31'17	0°-9'-40
minimum elong	1627 May 26 14:51	5°♁13'59	2°07'17	minimum elong	1628 May 05 17:32	15°♁31'57	0°09'31
min. Earth dist.	1627 May 27 02:54	4°♁57'03	0.54916 AU	transit begin	1628 May 05 14:20	15°♁36'47	
morning rise	1627 Jun 04 18:00	1°♁07'03		transit end	1628 May 05 20:44	15°♁27'08	
direct	1627 Jun 08 00:42	0°♁43'41		min. Earth dist.	1628 May 07 16:25	14°♁21'37	0.55358 AU
morning max el	1627 Jun 20 15:46	6°♁43'19	22°17'34	morning rise	1628 May 14 13:06	11°♁08'04	
	1627 Jul 06 19:08	0°♁		direct	1628 May 18 14:30	10°♁32'00	
asc. node	1627 Jul 07 17:58	1°♁49'42		morning max el	1628 Jun 01 07:59	17°♁18'54	23°59'08
morning set	1627 Jul 12 05:48	10°♁55'09			1628 Jun 11 15:10	0°♁	
superior conj	1627 Jul 19 11:26	26°♁15'32	1°36'37	asc. node	1628 Jun 23 15:00	21°♁29'07	
minimum elong	1627 Jul 19 09:29	26°♁05'16	1°36'26	morning set	1628 Jun 25 17:31	25°♁51'27	
	1627 Jul 21 06:12	0°♁			1628 Jun 27 16:15	0°♁	
max. Earth dist.	1627 Jul 22 17:45	3°♁04'10	1.34379 AU	superior conj	1628 Jul 02 19:00	11°♁03'53	1°23'24
evening rise	1627 Jul 27 11:30	12°♁34'01		minimum elong	1628 Jul 02 16:36	10°♁50'57	1°23'05
	1627 Aug 06 01:15	0°♁		max. Earth dist.	1628 Jul 04 19:18	15°♁23'31	1.33272 AU
desc. node	1627 Aug 15 06:59	14°♁36'49		evening rise	1628 Jul 10 05:50	26°♁42'32	
	1627 Aug 27 01:56	0°♁			1628 Jul 11 21:28	0°♁	
evening max el	1627 Aug 31 06:50	4°♁23'26	27°04'39		1628 Jul 29 09:17	0°♁	
retrograde	1627 Sep 13 13:31	11°♁41'28		desc. node	1628 Aug 01 03:59	3°♁56'46	
evening set	1627 Sep 20 09:59	8°♁58'22		evening max el	1628 Aug 12 18:04	17°♁36'24	27°25'24
min. Earth dist.	1627 Sep 24 07:31	5°♁09'58	0.65242 AU	retrograde	1628 Aug 26 09:05	24°♁54'15	
inferior conj	1627 Sep 26 08:14	2°♁51'52	-2°-25'-10	evening set	1628 Sep 02 12:57	22°♁15'18	
minimum elong	1627 Sep 26 12:04	2°♁41'01	2°23'45	min. Earth dist.	1628 Sep 06 04:57	19°♁01'11	0.63735 AU
	1627 Sep 29 00:01	30°♁		inferior conj	1628 Sep 08 18:23	16°♁23'45	-3°-20'-45
morning rise	1627 Oct 02 15:48	27°♁14'37		minimum elong	1628 Sep 08 23:22	16°♁10'57	3°19'14
asc. node	1627 Oct 03 17:09	26°♁50'06		morning rise	1628 Sep 15 12:00	11°♁03'06	
direct	1627 Oct 05 08:13	26°♁35'43		direct	1628 Sep 17 23:32	10°♁32'50	
morning max el	1627 Oct 11 20:50	0°♁06'59	18°10'28	asc. node	1628 Sep 19 14:12	10°♁45'50	
	1627 Oct 11 18:02	0°♁		morning max el	1628 Sep 24 12:54	13°♁58'31	17°53'30

	1628 Oct 05 15:16	0°♁		morning rise	1629 Aug 29 21:12	24°♁35'41	
morning set	1628 Oct 11 05:46	9°♁38'19		direct	1629 Sep 01 06:33	24°♁11'06	
	1628 Oct 23 06:20	0°♁		asc. node	1629 Sep 06 11:15	26°♁10'53	
				morning max el	1629 Sep 08 03:54	27°♁39'23	17°54'53
superior conj	1628 Oct 23 17:56	0°♁47'42	0°29'23		1629 Sep 10 06:52	0°♁	
minimum elong	1628 Oct 23 21:00	1°♁00'16	0°28'56	morning set	1629 Sep 24 01:39	22°♁36'00	
desc. node	1628 Oct 28 03:18	7°♁55'38			1629 Sep 28 03:53	0°♁	
max. Earth dist.	1628 Oct 29 14:38	10°♁17'10	1.44195 AU				
evening rise	1628 Nov 08 16:07	26°♁02'50		superior conj	1629 Oct 04 19:32	11°♁43'28	1°05'43
	1628 Nov 11 05:57	0°♁		minimum elong	1629 Oct 05 00:12	12°♁03'31	1°05'09
greatest brilliancy	1628 Dec 01 04:19	29°♁06'13	-0.5m	max. Earth dist.	1629 Oct 12 04:24	24°♁06'48	1.42779 AU
	1628 Dec 01 20:49	0°♁		desc. node	1629 Oct 15 00:19	28°♁42'32	
evening max el	1628 Dec 07 00:16	6°♁03'07	20°38'49		1629 Oct 15 19:37	0°♁	
retrograde	1628 Dec 15 04:03	10°♁52'10		evening rise	1629 Oct 19 03:42	5°♁17'27	
asc. node	1628 Dec 16 13:26	10°♁41'19			1629 Nov 04 14:42	0°♁	
evening set	1628 Dec 19 00:25	9°♁27'04		greatest brilliancy	1629 Nov 15 01:47	14°♁07'12	-0.4m
inferior conj	1628 Dec 24 10:57	3°♁15'51	2°27'19	evening max el	1629 Nov 19 20:34	19°♁33'24	21°51'21
minimum elong	1628 Dec 24 08:21	3°♁24'43	2°26'30	retrograde	1629 Nov 29 00:48	25°♁01'04	
min. Earth dist.	1628 Dec 25 00:50	2°♁28'27	0.67328 AU	evening set	1629 Dec 03 08:11	23°♁19'43	
	1628 Dec 26 21:51	30°♁		asc. node	1629 Dec 03 10:28	23°♁15'07	
morning rise	1628 Dec 29 15:49	27°♁00'41		inferior conj	1629 Dec 08 17:41	16°♁59'45	1°44'24
direct	1629 Jan 04 03:36	24°♁36'17		minimum elong	1629 Dec 08 15:33	17°♁07'09	1°43'36
	1629 Jan 14 00:14	0°♁		min. Earth dist.	1629 Dec 08 19:58	16°♁51'48	0.67729 AU
morning max el	1629 Jan 15 06:51	1°♁14'45	24°17'59	morning rise	1629 Dec 13 22:42	10°♁45'38	
desc. node	1629 Jan 24 02:30	11°♁36'05		direct	1629 Dec 18 19:09	8°♁43'16	
	1629 Feb 06 01:18	0°♁		morning max el	1629 Dec 28 16:41	14°♁35'06	22°49'33
morning set	1629 Feb 20 02:40	22°♁53'28		greatest brilliancy	1630 Jan 02 08:24	19°♁46'50	-0.3m
max. Earth dist.	1629 Feb 23 20:36	29°♁31'40	1.37887 AU		1630 Jan 10 04:09	0°♁	
	1629 Feb 24 02:52	0°♁		desc. node	1630 Jan 10 23:31	1°♁07'24	
					1630 Jan 30 00:50	0°♁	
superior conj	1629 Mar 02 20:17	12°♁32'37	-1°-40'-4	morning set	1630 Jan 31 22:52	3°♁08'32	
minimum elong	1629 Mar 03 00:30	12°♁52'52	1°39'37	max. Earth dist.	1630 Feb 05 16:12	11°♁05'08	1.40032 AU
evening rise	1629 Mar 11 15:18	29°♁49'01					
	1629 Mar 11 17:32	0°♁		superior conj	1630 Feb 13 10:18	24°♁48'25	-1°-57'-31
asc. node	1629 Mar 14 12:46	5°♁28'40		minimum elong	1630 Feb 13 13:34	25°♁03'17	1°57'20
evening max el	1629 Mar 28 05:49	26°♁39'39	19°04'50		1630 Feb 16 05:54	0°♁	
	1629 Apr 01 23:05	0°♁		evening rise	1630 Feb 23 05:45	13°♁13'30	
retrograde	1629 Apr 05 22:21	0°♁52'09		asc. node	1630 Mar 01 09:47	24°♁42'27	
evening set	1629 Apr 08 02:05	0°♁37'42			1630 Mar 04 12:08	0°♁	
	1629 Apr 10 02:28	30°♁		evening max el	1630 Mar 11 09:49	9°♁09'55	18°27'00
inferior conj	1629 Apr 16 06:41	26°♁24'18	1°36'03	retrograde	1630 Mar 18 21:26	12°♁51'15	
minimum elong	1629 Apr 16 10:09	26°♁18'19	1°34'57	evening set	1630 Mar 21 06:27	12°♁30'03	
min. Earth dist.	1629 Apr 19 07:45	24°♁19'04	0.56668 AU	inferior conj	1630 Mar 28 16:24	7°♁56'41	2°49'41
desc. node	1629 Apr 22 01:38	22°♁38'29		minimum elong	1630 Mar 28 20:18	7°♁48'48	2°48'47
morning rise	1629 Apr 24 14:03	21°♁27'13		min. Earth dist.	1630 Apr 01 02:52	5°♁11'20	0.58561 AU
direct	1629 Apr 29 16:20	20°♁26'23		morning rise	1630 Apr 05 06:05	2°♁28'58	
morning max el	1629 May 13 22:32	27°♁46'47	25°36'24	desc. node	1630 Apr 08 22:40	1°♁07'55	
	1629 May 16 02:49	0°♁		direct	1630 Apr 11 07:49	0°♁53'05	
	1629 Jun 04 21:17	0°♁		morning max el	1630 Apr 25 16:53	8°♁34'16	26°53'55
morning set	1629 Jun 10 05:12	10°♁47'33			1630 May 11 22:16	0°♁	
asc. node	1629 Jun 10 12:03	11°♁23'43		morning set	1630 May 25 15:12	25°♁37'22	
					1630 May 27 16:46	0°♁	
superior conj	1629 Jun 17 05:35	26°♁00'04	1°05'46	asc. node	1630 May 28 09:05	1°♁27'46	
minimum elong	1629 Jun 17 03:15	25°♁47'19	1°05'22				
max. Earth dist.	1629 Jun 18 03:55	28°♁02'14	1.32563 AU	superior conj	1630 Jun 01 17:20	10°♁57'33	0°44'31
	1629 Jun 19 01:31	0°♁		minimum elong	1630 Jun 01 15:31	10°♁47'34	0°44'09
evening rise	1629 Jun 24 08:09	11°♁14'04		max. Earth dist.	1630 Jun 01 15:57	10°♁49'54	1.32233 AU
	1629 Jul 04 03:00	0°♁		evening rise	1630 Jun 08 15:45	25°♁59'32	
desc. node	1629 Jul 19 00:58	22°♁30'25			1630 Jun 10 14:06	0°♁	
	1629 Jul 25 18:48	0°♁			1630 Jun 27 20:46	0°♁	
evening max el	1629 Jul 26 01:46	0°♁16'39	27°14'54	desc. node	1630 Jul 05 21:58	9°♁58'42	
retrograde	1629 Aug 08 21:46	7°♁31'52		evening max el	1630 Jul 08 03:19	12°♁12'57	26°31'18
evening set	1629 Aug 16 01:32	5°♁09'29		retrograde	1630 Jul 22 02:48	19°♁25'53	
min. Earth dist.	1629 Aug 19 15:51	2°♁21'55	0.61908 AU	evening set	1630 Jul 28 19:10	17°♁33'19	
	1629 Aug 22 06:25	30°♁		min. Earth dist.	1630 Aug 01 16:36	14°♁57'34	0.59867 AU
inferior conj	1629 Aug 22 16:50	29°♁36'07	-4°-9'-42	inferior conj	1630 Aug 05 00:05	12°♁19'56	-4°-44'-56
minimum elong	1629 Aug 22 21:59	29°♁24'24	4°08'35	minimum elong	1630 Aug 05 03:30	12°♁13'08	4°44'34

morning rise	1630 Aug 12 15:11	7°♁42'23		min. Earth dist.	1631 Jul 14 09:44	26°♁34'51	0.57838 AU
direct	1630 Aug 15 01:03	7°♁21'15		inferior conj	1631 Jul 17 12:45	24°♁25'42	-4°-55'-25
morning max el	1630 Aug 22 14:47	11°♁01'42	18°15'44	minimum elong	1631 Jul 17 11:58	24°♁27'04	4°55'24
asc. node	1630 Aug 24 08:18	12°♁51'30		morning rise	1631 Jul 25 13:59	20°♁10'45	
	1630 Sep 04 04:09	0°♁		direct	1631 Jul 28 02:39	19°♁51'27	
morning set	1630 Sep 07 12:08	6°♁15'46		morning max el	1631 Aug 05 18:21	23°♁55'41	18°57'10
					1631 Aug 10 20:27	0°♁	
superior conj	1630 Sep 16 22:11	23°♁53'29	1°29'47	asc. node	1631 Aug 11 05:21	0°♁32'08	
minimum elong	1630 Sep 17 01:49	24°♁10'01	1°29'28	morning set	1631 Aug 22 08:51	20°♁25'22	
	1630 Sep 20 07:55	0°♁			1631 Aug 27 05:25	0°♁	
max. Earth dist.	1630 Sep 24 12:22	7°♁15'48	1.40925 AU	superior conj	1631 Aug 30 20:13	7°♁00'52	1°42'35
evening rise	1630 Sep 29 09:00	15°♁22'23		minimum elong	1631 Aug 30 21:56	7°♁09'07	1°42'30
desc. node	1630 Oct 01 21:20	19°♁26'31		max. Earth dist.	1631 Sep 06 16:06	19°♁40'43	1.38885 AU
	1630 Oct 08 15:45	0°♁		evening rise	1631 Sep 10 14:21	26°♁34'29	
greatest brilliancy	1630 Oct 27 07:12	26°♁04'32	-0.2m		1631 Sep 12 14:39	0°♁	
	1630 Oct 30 14:32	0°♁		desc. node	1631 Sep 18 18:22	10°♁03'07	
evening max el	1630 Nov 02 12:01	3°♁06'08	23°10'19		1631 Oct 02 05:56	0°♁	
retrograde	1630 Nov 12 19:04	9°♁12'21		evening max el	1631 Oct 16 00:41	16°♁42'35	24°29'47
evening set	1630 Nov 17 15:11	7°♁13'50		retrograde	1631 Oct 27 09:38	23°♁21'24	
asc. node	1630 Nov 20 07:29	4°♁26'35		evening set	1631 Nov 01 19:46	21°♁06'00	
min. Earth dist.	1630 Nov 22 16:42	1°♁17'57	0.67785 AU	min. Earth dist.	1631 Nov 06 12:33	15°♁43'49	0.67510 AU
inferior conj	1630 Nov 23 01:05	0°♁49'04	0°55'42	inferior conj	1631 Nov 07 07:24	14°♁40'45	0°02'28
minimum elong	1630 Nov 22 23:49	0°♁53'26	0°55'10	minimum elong	1631 Nov 07 07:21	14°♁40'58	0°02'26
	1630 Nov 23 15:23	30°♁		transit begin	1631 Nov 07 04:38	14°♁50'02	
morning rise	1630 Nov 28 08:31	24°♁38'04		transit end	1631 Nov 07 10:03	14°♁31'53	
direct	1630 Dec 02 14:19	22°♁58'31		asc. node	1631 Nov 07 04:33	14°♁50'20	
morning max el	1630 Dec 11 07:29	28°♁04'05	21°25'19	morning rise	1631 Nov 12 19:18	8°♁35'23	
	1630 Dec 13 03:09	0°♁		direct	1631 Nov 16 11:59	7°♁17'03	
greatest brilliancy	1630 Dec 16 09:56	3°♁53'35	-0.4m	morning max el	1631 Nov 24 05:38	11°♁43'17	20°11'34
desc. node	1630 Dec 28 20:35	21°♁05'39		greatest brilliancy	1631 Dec 01 00:50	19°♁54'50	-0.6m
	1631 Jan 03 19:37	0°♁			1631 Dec 08 03:24	0°♁	
morning set	1631 Jan 11 14:11	12°♁02'20		desc. node	1631 Dec 15 17:39	11°♁22'55	
max. Earth dist.	1631 Jan 18 16:51	23°♁30'14	1.42072 AU	morning set	1631 Dec 21 11:11	20°♁10'17	
	1631 Jan 22 14:22	0°♁			1631 Dec 27 18:20	0°♁	
superior conj	1631 Jan 26 03:20	6°♁02'48	-2°-4'-27	max. Earth dist.	1632 Jan 01 01:11	6°♁48'33	1.43727 AU
minimum elong	1631 Jan 26 03:18	6°♁02'38	2°04'28	superior conj	1632 Jan 06 18:48	16°♁06'28	-1°-55'-56
evening rise	1631 Feb 06 07:17	25°♁57'38		minimum elong	1632 Jan 06 13:29	15°♁44'35	1°55'40
	1631 Feb 08 12:35	0°♁			1632 Jan 15 01:46	0°♁	
asc. node	1631 Feb 16 06:48	13°♁27'24		evening rise	1632 Jan 19 15:39	7°♁53'01	
evening max el	1631 Feb 22 19:32	22°♁05'27	18°09'06		1632 Feb 02 00:17	0°♁	
retrograde	1631 Mar 01 13:45	25°♁31'29		asc. node	1632 Feb 03 03:50	1°♁34'43	
evening set	1631 Mar 04 03:58	25°♁01'34		evening max el	1632 Feb 06 07:56	5°♁18'18	18°10'36
inferior conj	1631 Mar 10 22:17	20°♁07'02	3°30'19	retrograde	1632 Feb 12 19:11	8°♁43'17	
minimum elong	1631 Mar 11 00:32	20°♁01'44	3°30'03	evening set	1632 Feb 15 14:23	8°♁03'25	
min. Earth dist.	1631 Mar 14 04:23	17°♁05'22	0.60695 AU	inferior conj	1632 Feb 21 20:41	2°♁48'14	3°44'29
morning rise	1631 Mar 17 17:58	14°♁18'25		minimum elong	1632 Feb 21 20:54	2°♁47'39	3°44'30
direct	1631 Mar 24 11:18	12°♁06'36		min. Earth dist.	1632 Feb 24 14:18	29°♁54'42	0.62756 AU
desc. node	1631 Mar 26 19:43	12°♁21'50			1632 Feb 24 12:14	30°♁	
morning max el	1631 Apr 07 17:22	19°♁58'55	27°39'28	morning rise	1632 Feb 28 01:19	26°♁47'09	
	1631 Apr 16 07:13	0°♁		direct	1632 Mar 06 00:13	24°♁09'01	
	1631 May 04 18:11	0°♁		desc. node	1632 Mar 12 16:47	26°♁13'16	
morning set	1631 May 09 21:44	10°♁14'38			1632 Mar 17 18:37	0°♁	
asc. node	1631 May 15 06:07	21°♁36'42		morning max el	1632 Mar 19 23:17	2°♁04'22	27°47'56
max. Earth dist.	1631 May 16 03:39	23°♁34'00	1.32282 AU		1632 Apr 09 13:53	0°♁	
superior conj	1631 May 17 04:34	25°♁50'21	0°20'21	morning set	1632 Apr 22 22:40	24°♁32'11	
minimum elong	1631 May 17 03:39	25°♁45'21	0°20'09		1632 Apr 25 14:38	0°♁	
	1631 May 19 02:05	0°♁		max. Earth dist.	1632 Apr 28 11:09	6°♁01'36	1.32730 AU
evening rise	1631 May 24 02:26	10°♁51'35		superior conj	1632 Apr 30 13:34	10°♁32'47	0°-5'-59
	1631 Jun 02 21:34	0°♁		minimum elong	1632 Apr 30 13:51	10°♁34'20	0°05'56
evening max el	1631 Jun 19 21:51	23°♁23'25	25°18'18	behind sun begin	1632 Apr 30 08:59	10°♁08'02	
desc. node	1631 Jun 22 18:59	25°♁54'42		behind sun end	1632 Apr 30 18:43	11°♁00'39	
	1631 Jun 30 06:21	0°♁		asc. node	1632 May 01 03:10	11°♁46'28	
retrograde	1631 Jul 03 22:16	0°♁31'30		evening rise	1632 May 07 14:18	25°♁43'42	
	1631 Jul 07 14:01	30°♁			1632 May 09 15:20	0°♁	
evening set	1631 Jul 09 13:41	29°♁17'32					

	1632 May 27 18:20	0°♄			1633 May 02 05:55	0°♄	
evening max el	1632 May 31 12:06	4°♄01'28	23°46'35	evening max el	1633 May 13 04:19	14°♄33'08	22°10'57
desc. node	1632 Jun 08 16:00	9°♄44'11		retrograde	1633 May 26 00:09	20°♄52'51	
retrograde	1632 Jun 14 05:27	10°♄54'21		desc. node	1633 May 26 13:03	20°♄52'11	
evening set	1632 Jun 18 10:13	10°♄15'34		evening set	1633 May 28 20:52	20°♄34'42	
min. Earth dist.	1632 Jun 24 22:43	7°♄10'17	0.56142 AU	min. Earth dist.	1633 Jun 06 10:20	16°♄54'17	0.55111 AU
inferior conj	1632 Jun 27 05:19	5°♄47'34	-4°-27'-11	inferior conj	1633 Jun 07 04:58	16°♄28'05	-3°-11'-17
minimum elong	1632 Jun 26 23:22	5°♄56'39	4°26'13	minimum elong	1633 Jun 06 21:18	16°♄38'53	3°09'05
morning rise	1632 Jul 05 15:56	1°♄50'06		morning rise	1633 Jun 15 23:37	12°♄35'47	
direct	1632 Jul 08 09:19	1°♄31'15		direct	1633 Jun 19 00:04	12°♄15'22	
morning max el	1632 Jul 18 11:49	6°♄12'12	19°59'52	morning max el	1633 Jun 30 17:45	17°♄44'12	21°22'46
asc. node	1632 Jul 28 02:26	18°♄59'28			1633 Jul 10 08:45	0°♄	
	1632 Aug 03 01:19	0°♄		asc. node	1633 Jul 14 23:29	8°♄01'22	
morning set	1632 Aug 05 12:38	4°♄56'52		morning set	1633 Jul 20 21:00	19°♄42'32	
					1633 Jul 25 18:56	0°♄	
superior conj	1632 Aug 13 08:25	20°♄51'14	1°45'59	superior conj	1633 Jul 28 06:33	5°♄11'32	1°41'50
minimum elong	1632 Aug 13 08:20	20°♄50'46	1°45'59	minimum elong	1633 Jul 28 05:07	5°♄04'06	1°41'45
	1632 Aug 18 00:26	0°♄		max. Earth dist.	1633 Aug 01 08:16	13°♄30'18	1.35201 AU
max. Earth dist.	1632 Aug 18 20:57	1°♄37'47	1.36916 AU	evening rise	1633 Aug 05 16:59	22°♄01'22	
evening rise	1632 Aug 22 18:32	8°♄51'34			1633 Aug 10 00:37	0°♄	
	1632 Sep 04 08:14	0°♄		desc. node	1633 Aug 22 12:24	20°♄34'20	
desc. node	1632 Sep 04 15:23	0°♄27'48			1633 Aug 29 02:57	0°♄	
	1632 Sep 27 03:37	0°♄		evening max el	1633 Sep 10 00:54	13°♄59'31	26°40'37
evening max el	1632 Sep 27 12:42	0°♄22'17	25°42'25	retrograde	1633 Sep 23 00:10	21°♄13'38	
retrograde	1632 Oct 09 19:30	7°♄23'46		evening set	1633 Sep 29 14:21	18°♄32'56	
evening set	1632 Oct 15 20:10	4°♄53'26		min. Earth dist.	1633 Oct 03 15:50	14°♄23'35	0.65956 AU
min. Earth dist.	1632 Oct 20 05:06	0°♄06'55	0.66907 AU	inferior conj	1633 Oct 05 09:25	12°♄20'02	-1°-51'-53
	1632 Oct 20 07:17	30°♄		minimum elong	1633 Oct 05 12:23	12°♄11'13	1°50'42
inferior conj	1632 Oct 21 10:50	28°♄32'12	0°-53'-56	asc. node	1633 Oct 10 22:42	6°♄53'36	
minimum elong	1632 Oct 21 12:14	28°♄27'45	0°53'20	morning rise	1633 Oct 11 11:42	6°♄34'52	
asc. node	1632 Oct 24 01:37	25°♄21'48		direct	1633 Oct 14 08:17	5°♄49'15	
morning rise	1632 Oct 27 05:05	22°♄35'20		morning max el	1633 Oct 20 23:16	9°♄26'55	18°28'06
direct	1632 Oct 30 10:36	21°♄35'10			1633 Nov 04 09:37	0°♄	
morning max el	1632 Nov 06 11:23	25°♄32'01	19°11'53	morning set	1633 Nov 09 18:41	8°♄38'44	
	1632 Nov 10 07:56	0°♄		desc. node	1633 Nov 18 11:42	22°♄33'27	
greatest brilliancy	1632 Nov 17 15:09	10°♄19'23	-0.7m		1633 Nov 23 04:45	0°♄	
morning set	1632 Nov 29 14:16	28°♄44'57		superior conj	1633 Nov 25 10:21	3°♄30'51	0°-45'-12
	1632 Nov 30 09:32	0°♄		minimum elong	1633 Nov 25 04:33	3°♄08'00	0°44'28
desc. node	1632 Dec 01 14:41	1°♄53'34		max. Earth dist.	1633 Nov 26 11:17	5°♄08'45	1.45131 AU
max. Earth dist.	1632 Dec 13 16:22	20°♄47'46	1.44788 AU	evening rise	1633 Dec 11 14:19	28°♄55'51	
					1633 Dec 12 06:34	0°♄	
superior conj	1632 Dec 16 09:06	25°♄03'44	-1°-28'-36	greatest brilliancy	1633 Dec 23 16:30	17°♄54'05	-0.7m
minimum elong	1632 Dec 16 00:21	24°♄29'04	1°27'44		1634 Jan 01 07:31	0°♄	
	1632 Dec 19 11:34	0°♄		evening max el	1634 Jan 03 05:44	2°♄08'46	19°08'19
evening rise	1632 Dec 31 02:42	18°♄52'49		asc. node	1634 Jan 06 21:57	5°♄08'45	
	1633 Jan 06 20:38	0°♄		retrograde	1634 Jan 10 04:58	6°♄07'17	
evening max el	1633 Jan 19 20:08	18°♄41'04	18°30'41	evening set	1634 Jan 13 11:51	5°♄04'22	
asc. node	1633 Jan 20 00:53	18°♄53'01			1634 Jan 18 12:40	30°♄	
retrograde	1633 Jan 26 09:28	22°♄17'30		inferior conj	1634 Jan 19 03:26	29°♄13'15	3°19'21
evening set	1633 Jan 29 10:00	21°♄26'40		minimum elong	1634 Jan 19 01:07	29°♄20'39	3°18'54
inferior conj	1633 Feb 04 07:35	15°♄52'19	3°39'05	min. Earth dist.	1634 Jan 20 14:20	27°♄22'24	0.65935 AU
minimum elong	1633 Feb 04 06:12	15°♄56'23	3°38'58	morning rise	1634 Jan 24 13:30	23°♄00'17	
min. Earth dist.	1633 Feb 06 09:43	13°♄25'07	0.64538 AU	direct	1634 Jan 30 23:06	20°♄12'27	
morning rise	1633 Feb 10 01:03	9°♄43'49		morning max el	1634 Feb 12 18:12	27°♄45'39	26°24'16
direct	1633 Feb 16 20:28	6°♄53'51		desc. node	1634 Feb 14 10:53	29°♄31'41	
desc. node	1633 Feb 27 13:51	12°♄07'46			1634 Feb 14 21:19	0°♄	
morning max el	1633 Mar 02 08:22	14°♄43'34	27°20'47		1634 Mar 08 12:27	0°♄	
	1633 Mar 14 19:36	0°♄		morning set	1634 Mar 20 19:32	21°♄28'45	
morning set	1633 Apr 06 15:07	8°♄20'21		max. Earth dist.	1634 Mar 24 23:04	29°♄27'07	1.34953 AU
max. Earth dist.	1633 Apr 11 10:36	18°♄00'37	1.33615 AU		1634 Mar 25 05:44	0°♄	
				superior conj	1634 Mar 29 16:37	8°♄58'07	-1°-1'-10
superior conj	1633 Apr 14 18:20	24°♄57'28	0°-33'-34	minimum elong	1634 Mar 29 19:39	9°♄13'45	1°00'38
minimum elong	1633 Apr 14 20:00	25°♄06'20	0°33'15	asc. node	1634 Apr 04 21:14	21°♄50'04	
	1633 Apr 17 03:12	0°♄		evening rise	1634 Apr 06 09:57	25°♄00'19	
asc. node	1633 Apr 18 00:12	1°♄52'10					
evening rise	1633 Apr 22 01:26	10°♄28'35					

	1634 Apr 08 20:48	0°♄		superior conj	1635 Mar 13 05:29	22°♄26'13	-1°-27'00
evening max el	1634 Apr 25 05:22	25°♄28'22	20°44'45	minimum elong	1635 Mar 13 09:32	22°♄46'09	1°26'26
	1634 May 01 18:11	0°♂			1635 Mar 17 00:25	0°♃	
retrograde	1634 May 06 13:14	0°♂58'35		evening rise	1635 Mar 21 13:37	9°♃11'43	
evening set	1634 May 08 16:40	0°♂47'32		asc. node	1635 Mar 22 18:17	11°♃35'17	
	1634 May 11 14:34	30°♄			1635 Apr 02 00:56	0°♄	
desc. node	1634 May 13 10:04	29°♄14'44		evening max el	1635 Apr 07 18:12	7°♄02'36	19°35'41
inferior conj	1634 May 17 22:44	26°♄49'50	-1°-18'-47	retrograde	1635 Apr 17 08:39	11°♄40'31	
minimum elong	1634 May 17 19:00	26°♄55'10	1°17'27	evening set	1635 Apr 19 09:50	11°♄28'47	
min. Earth dist.	1634 May 18 22:48	26°♄15'24	0.54989 AU	inferior conj	1635 Apr 28 01:20	7°♄24'44	0°38'28
morning rise	1634 May 26 20:19	22°♄43'00		minimum elong	1635 Apr 28 02:58	7°♄22'08	0°37'54
direct	1634 May 30 09:43	22°♄15'45		min. Earth dist.	1635 Apr 30 13:11	5°♄50'01	0.55818 AU
morning max el	1634 Jun 12 13:50	28°♄36'11	23°00'28	desc. node	1635 Apr 30 07:04	5°♄59'31	
	1634 Jun 13 23:59	0°♂		morning rise	1635 May 06 16:27	2°♄46'59	
asc. node	1634 Jul 01 20:31	27°♂29'04		direct	1635 May 11 03:50	2°♄02'01	
	1634 Jul 03 02:30	0°♄		morning max el	1635 May 25 04:45	9°♄05'46	24°42'04
morning set	1634 Jul 05 07:58	4°♄36'27			1635 Jun 09 16:46	0°♂	
				asc. node	1635 Jun 18 17:33	17°♂15'46	
superior conj	1634 Jul 12 11:24	19°♄52'02	1°31'35	morning set	1635 Jun 19 19:51	19°♂33'33	
minimum elong	1634 Jul 12 09:12	19°♄40'18	1°31'22		1635 Jun 24 16:13	0°♄	
max. Earth dist.	1634 Jul 15 04:36	25°♄36'59	1.33855 AU				
	1634 Jul 17 07:22	0°♂		superior conj	1635 Jun 26 20:31	4°♄44'59	1°16'24
evening rise	1634 Jul 20 05:10	5°♂51'29		minimum elong	1635 Jun 26 18:05	4°♄31'48	1°16'03
	1634 Aug 02 16:01	0°♃		max. Earth dist.	1635 Jun 28 09:18	8°♄04'30	1.32914 AU
desc. node	1634 Aug 09 09:24	10°♃14'26		evening rise	1635 Jul 04 03:15	20°♄11'08	
evening max el	1634 Aug 23 12:43	27°♃24'04	27°16'57		1635 Jul 09 02:56	0°♂	
	1634 Aug 26 11:15	0°♄		desc. node	1635 Jul 27 06:24	29°♂17'09	
retrograde	1634 Sep 05 23:15	4°♄42'50			1635 Jul 27 19:23	0°♃	
evening set	1634 Sep 12 23:46	1°♄59'45		evening max el	1635 Aug 05 22:35	10°♃24'30	27°25'00
	1634 Sep 15 06:08	30°♃		retrograde	1635 Aug 19 16:20	17°♃42'24	
min. Earth dist.	1634 Sep 16 18:33	28°♃26'53	0.64643 AU	evening set	1635 Aug 26 21:12	15°♃08'38	
inferior conj	1634 Sep 19 00:50	25°♃59'18	-2°-49'-15	min. Earth dist.	1635 Aug 30 11:38	12°♃07'14	0.62984 AU
minimum elong	1634 Sep 19 05:13	25°♃47'20	2°47'44	inferior conj	1635 Sep 02 06:24	9°♃24'14	-3°-42'-42
morning rise	1634 Sep 25 12:35	20°♃29'01		minimum elong	1635 Sep 02 11:38	9°♃11'26	3°41'18
direct	1634 Sep 28 02:35	19°♃54'14		morning rise	1635 Sep 09 04:34	4°♃12'01	
asc. node	1634 Sep 27 19:45	19°♃54'40		direct	1635 Sep 11 14:42	3°♃44'39	
morning max el	1634 Oct 04 14:40	23°♃21'57	18°01'08	asc. node	1635 Sep 14 16:46	4°♃30'04	
	1634 Oct 09 21:30	0°♄		morning max el	1635 Sep 18 06:44	7°♃10'39	17°51'51
morning set	1634 Oct 22 03:53	19°♄56'46			1635 Oct 03 04:23	0°♄	
	1634 Oct 28 04:23	0°♂		morning set	1635 Oct 04 12:59	2°♄23'52	
superior conj	1634 Nov 04 20:06	12°♂28'08	0°03'33	superior conj	1635 Oct 16 06:01	22°♄38'08	0°46'13
minimum elong	1634 Nov 04 20:31	12°♂29'50	0°03'29	minimum elong	1635 Oct 16 10:11	22°♄55'36	0°45'41
behind sun begin	1634 Nov 04 10:13	11°♂48'27			1635 Oct 20 16:56	0°♂	
behind sun end	1634 Nov 05 06:49	13°♂11'08		max. Earth dist.	1635 Oct 22 21:50	3°♂34'28	1.43655 AU
desc. node	1634 Nov 05 08:43	13°♂18'41		desc. node	1635 Oct 23 05:44	4°♂06'19	
max. Earth dist.	1634 Nov 09 06:04	19°♂30'06	1.44733 AU	evening rise	1635 Oct 31 13:58	17°♂15'34	
	1634 Nov 15 22:45	0°♃			1635 Nov 08 22:48	0°♃	
evening rise	1634 Nov 21 05:54	8°♃12'29		greatest brilliancy	1635 Nov 25 04:06	23°♃00'29	-0.4m
	1634 Dec 05 14:16	0°♄		evening max el	1635 Nov 30 10:20	29°♃07'56	21°08'31
greatest brilliancy	1634 Dec 10 12:39	7°♄04'18	-0.6m		1635 Dec 01 07:18	0°♄	
evening max el	1634 Dec 17 10:46	15°♄37'43	20°01'49	retrograde	1635 Dec 09 00:17	4°♄13'28	
retrograde	1634 Dec 25 02:39	20°♄06'56		asc. node	1635 Dec 11 16:01	3°♄34'07	
asc. node	1634 Dec 24 19:00	20°♄06'21		evening set	1635 Dec 13 00:59	2°♄41'50	
evening set	1634 Dec 28 17:29	18°♄50'30			1635 Dec 15 17:57	30°♃	
inferior conj	1635 Jan 03 05:19	12°♄45'34	2°48'49	inferior conj	1635 Dec 18 10:54	26°♄26'27	2°09'55
minimum elong	1635 Jan 03 02:40	12°♄54'28	2°48'05	minimum elong	1635 Dec 18 08:27	26°♄34'55	2°09'05
min. Earth dist.	1635 Jan 04 02:26	11°♄34'51	0.66930 AU	min. Earth dist.	1635 Dec 18 19:47	25°♄55'50	0.67545 AU
morning rise	1635 Jan 08 11:15	6°♄30'25		morning rise	1635 Dec 23 15:31	20°♄11'12	
direct	1635 Jan 14 07:26	3°♄55'18		direct	1635 Dec 28 20:46	17°♄55'41	
morning max el	1635 Jan 26 03:03	10°♄58'10	25°07'20	morning max el	1636 Jan 08 11:35	24°♄15'20	23°40'11
desc. node	1635 Feb 01 07:55	17°♄58'34			1636 Jan 13 14:46	0°♄	
	1635 Feb 10 07:39	0°♂		desc. node	1636 Jan 19 04:58	7°♄10'31	
	1635 Mar 01 04:37	0°♃			1636 Feb 03 18:33	0°♂	
morning set	1635 Mar 03 06:56	3°♃42'48		morning set	1636 Feb 12 19:11	14°♂45'47	
max. Earth dist.	1635 Mar 07 00:06	10°♃29'51	1.36718 AU	max. Earth dist.	1636 Feb 16 18:55	21°♂40'05	1.38794 AU
					1636 Feb 21 10:02	0°♃	

superior conj	1636 Feb 24 05:14	5°♄12'11	-1°-48'-29	superior conj	1637 Feb 05 11:07	17°♁04'34	-2°-2'-1
minimum elong	1636 Feb 24 09:16	5°♄31'12	1°48'08	minimum elong	1637 Feb 05 13:18	17°♁14'17	2°01'59
evening rise	1636 Mar 04 09:48	22°♄55'39		evening rise	1637 Feb 12 13:08	0°♄	
	1636 Mar 08 02:02	0°♄		asc. node	1637 Feb 15 19:17	6°♄04'37	
asc. node	1636 Mar 08 15:19	1°♄02'27		asc. node	1637 Feb 23 12:21	20°♄05'27	
evening max el	1636 Mar 20 17:36	19°♄15'12	18°46'19		1637 Mar 02 04:52	0°♄	
retrograde	1636 Mar 28 20:22	23°♄12'05		evening max el	1637 Mar 04 00:35	1°♄58'26	18°16'59
evening set	1636 Mar 31 02:17	22°♄55'05		retrograde	1637 Mar 11 03:09	5°♄31'00	
inferior conj	1636 Apr 07 22:46	18°♄33'59	2°11'35	evening set	1637 Mar 13 14:37	5°♄06'07	
minimum elong	1636 Apr 08 02:47	18°♄26'33	2°10'26	inferior conj	1637 Mar 20 17:28	0°♄23'42	3°10'35
min. Earth dist.	1636 Apr 11 06:06	16°♄08'49	0.57421 AU	minimum elong	1637 Mar 20 20:48	0°♄16'30	3°09'59
morning rise	1636 Apr 15 22:57	13°♄22'49			1637 Mar 21 04:25	30°♄	
desc. node	1636 Apr 16 04:07	13°♄17'12		min. Earth dist.	1637 Mar 24 03:27	27°♄28'29	0.59465 AU
direct	1636 Apr 21 12:04	12°♄07'31		morning rise	1637 Mar 27 23:20	24°♄46'16	
morning max el	1636 May 05 20:16	19°♄38'44	26°12'38	direct	1637 Apr 03 09:07	22°♄54'34	
	1636 May 14 15:27	0°♄		desc. node	1637 Apr 03 01:09	22°♄54'51	
	1636 Jun 01 03:24	0°♄			1637 Apr 17 00:08	0°♄	
morning set	1636 Jun 03 07:00	4°♄27'33		morning max el	1637 Apr 17 16:59	0°♄40'38	27°17'38
asc. node	1636 Jun 04 14:34	7°♄14'58			1637 May 08 16:39	0°♄	
				morning set	1637 May 18 15:47	19°♄13'03	
superior conj	1636 Jun 10 07:48	19°♄42'40	0°57'10	asc. node	1637 May 22 11:38	27°♄21'56	
minimum elong	1636 Jun 10 05:38	19°♄30'48	0°56'46		1637 May 23 16:40	0°♄	
max. Earth dist.	1636 Jun 10 19:40	20°♄47'52	1.32372 AU	max. Earth dist.	1637 May 25 08:10	3°♄36'30	1.32213 AU
	1636 Jun 15 01:16	0°♄					
evening rise	1636 Jun 17 08:07	4°♄49'50		superior conj	1637 May 25 19:34	4°♄39'10	0°34'35
	1636 Jun 30 19:29	0°♄		minimum elong	1637 May 25 18:05	4°♄31'03	0°34'17
desc. node	1636 Jul 13 03:25	17°♄26'03		evening rise	1637 Jun 01 17:20	19°♄39'33	
evening max el	1636 Jul 18 04:04	22°♄47'40	27°00'29		1637 Jun 06 19:19	0°♄	
	1636 Jul 31 05:07	0°♄			1637 Jun 25 22:49	0°♄	
retrograde	1636 Aug 01 02:06	0°♄02'00		evening max el	1637 Jun 30 02:50	4°♄24'43	26°03'23
	1636 Aug 01 22:57	30°♄		desc. node	1637 Jun 30 00:25	4°♄18'58	
evening set	1636 Aug 08 02:18	27°♄51'06		retrograde	1637 Jul 14 02:54	11°♄35'11	
min. Earth dist.	1636 Aug 11 18:20	25°♄10'22	0.61049 AU	evening set	1637 Jul 20 10:23	9°♄58'45	
inferior conj	1636 Aug 14 22:51	22°♄25'51	-4°-26'-56	min. Earth dist.	1637 Jul 24 15:27	7°♄22'17	0.58992 AU
minimum elong	1636 Aug 15 03:32	22°♄15'43	4°26'08	inferior conj	1637 Jul 27 22:34	4°♄54'38	-4°-53'-14
morning rise	1636 Aug 22 07:47	17°♄34'39		minimum elong	1637 Jul 28 00:29	4°♄51'03	4°53'08
direct	1636 Aug 24 16:55	17°♄11'50		morning rise	1637 Aug 04 18:01	0°♄26'37	
morning max el	1636 Aug 31 20:20	20°♄44'29	18°01'17	direct	1637 Aug 07 04:59	0°♄06'17	
asc. node	1636 Aug 31 13:48	20°♄28'54		morning max el	1637 Aug 15 04:22	3°♄55'13	18°30'45
	1636 Sep 07 19:32	0°♄		asc. node	1637 Aug 18 10:51	7°♄36'29	
morning set	1636 Sep 16 15:43	15°♄41'09		morning set	1637 Aug 31 06:59	29°♄34'43	
	1636 Sep 24 11:21	0°♄			1637 Aug 31 12:13	0°♄	
superior conj	1636 Sep 26 18:48	4°♄06'42	1°17'24	superior conj	1637 Sep 09 06:19	16°♄42'29	1°36'30
minimum elong	1636 Sep 26 23:14	4°♄26'14	1°16'55	minimum elong	1637 Sep 09 09:11	16°♄55'47	1°36'17
max. Earth dist.	1636 Oct 04 08:58	17°♄07'16	1.42031 AU		1637 Sep 16 15:32	0°♄	
desc. node	1636 Oct 09 02:46	24°♄52'29		max. Earth dist.	1637 Sep 16 15:11	29°♄58'27	1.40069 AU
evening rise	1636 Oct 10 07:40	26°♄48'08		evening rise	1637 Sep 20 22:56	7°♄20'30	
	1636 Oct 12 08:09	0°♄		desc. node	1637 Sep 25 23:47	15°♄33'39	
	1636 Nov 01 18:02	0°♄			1637 Oct 05 10:02	0°♄	
greatest brilliancy	1636 Nov 07 10:37	7°♄19'58	-0.3m	evening max el	1637 Oct 25 18:39	26°♄14'11	23°44'33
evening max el	1636 Nov 12 04:33	12°♄39'51	22°24'33		1637 Oct 30 02:14	0°♄	
retrograde	1636 Nov 21 20:05	18°♄23'53		retrograde	1637 Nov 05 12:45	2°♄34'36	
evening set	1636 Nov 26 08:39	16°♄35'29		evening set	1637 Nov 10 14:49	0°♄28'42	
asc. node	1636 Nov 27 13:03	15°♄30'38			1637 Nov 11 03:47	30°♄	
inferior conj	1636 Dec 01 18:10	10°♄13'15	1°24'24	asc. node	1637 Nov 14 10:06	26°♄15'38	
minimum elong	1636 Dec 01 16:22	10°♄19'31	1°23'41	min. Earth dist.	1637 Nov 15 12:29	24°♄47'11	0.67710 AU
min. Earth dist.	1636 Dec 01 15:56	10°♄21'01	0.67797 AU	inferior conj	1637 Nov 16 01:19	24°♄03'27	0°33'35
morning rise	1636 Dec 06 23:57	4°♄00'09		minimum elong	1637 Nov 16 00:32	24°♄06'08	0°33'15
direct	1636 Dec 11 14:09	2°♄07'16		morning rise	1637 Nov 21 10:25	17°♄54'45	
morning max el	1636 Dec 20 23:00	7°♄38'38	22°12'43	direct	1637 Nov 25 10:30	16°♄24'29	
greatest brilliancy	1636 Dec 25 13:55	12°♄49'45	-0.3m	morning max el	1637 Dec 03 16:44	21°♄11'38	20°52'29
desc. node	1637 Jan 05 02:01	26°♄54'47		greatest brilliancy	1637 Dec 09 09:07	27°♄48'33	-0.5m
	1637 Jan 07 05:23	0°♄			1637 Dec 11 01:15	0°♄	
morning set	1637 Jan 23 02:56	24°♄25'24		desc. node	1637 Dec 22 23:04	17°♄01'49	
	1637 Jan 26 12:41	0°♄			1637 Dec 31 11:45	0°♄	
max. Earth dist.	1637 Jan 28 16:07	3°♄34'42	1.40934 AU	morning set	1638 Jan 02 08:11	2°♄52'37	

max. Earth dist.	1638 Jan 10 20:39	16°☿26'00	1.42839 AU	max. Earth dist.	1638 Dec 24 08:22	0°☿04'35	1.44255 AU
					1638 Dec 24 07:13	0°☿	
superior conj	1638 Jan 17 17:44	27°☿49'49	-2°-3'00	superior conj	1638 Dec 28 21:52	7°☿22'52	-1°-46'-41
minimum elong	1638 Jan 17 15:34	27°☿40'39	2°02'59	minimum elong	1638 Dec 28 14:30	6°☿53'10	1°46'09
	1638 Jan 19 00:26	0°☿		evening rise	1639 Jan 11 13:55	0°☿02'17	
evening rise	1638 Jan 29 14:06	18°☿29'26			1639 Jan 11 13:23	0°☿	
	1638 Feb 05 02:26	0°☿		asc. node	1639 Jan 28 06:27	26°☿23'49	
asc. node	1638 Feb 10 09:25	8°☿35'48		evening max el	1639 Jan 30 00:23	28°☿19'46	18°16'49
evening max el	1638 Feb 15 11:48	15°☿02'17	18°07'19		1639 Jan 31 21:30	0°☿	
retrograde	1638 Feb 22 01:49	18°☿26'21		retrograde	1639 Feb 05 11:39	1°☿48'35	
evening set	1638 Feb 24 18:11	17°☿52'15		evening set	1639 Feb 08 08:55	1°☿04'18	
inferior conj	1638 Mar 03 06:55	12°☿48'25	3°39'06		1639 Feb 10 01:24	30°☿	
minimum elong	1638 Mar 03 08:17	12°☿45'00	3°39'00	inferior conj	1639 Feb 14 11:08	25°☿40'37	3°44'14
min. Earth dist.	1638 Mar 06 08:09	9°☿47'51	0.61597 AU	minimum elong	1639 Feb 14 10:36	25°☿42'06	3°44'13
morning rise	1638 Mar 09 19:45	6°☿53'40		min. Earth dist.	1639 Feb 16 22:16	22°☿56'26	0.63555 AU
direct	1638 Mar 16 16:33	4°☿29'29		morning rise	1639 Feb 20 10:31	19°☿35'32	
desc. node	1638 Mar 20 22:13	5°☿19'14		direct	1639 Feb 27 08:41	16°☿50'37	
morning max el	1638 Mar 30 20:07	12°☿23'20	27°47'41	desc. node	1639 Mar 07 19:18	20°☿07'19	
	1638 Apr 13 19:18	0°☿		morning max el	1639 Mar 13 04:00	24°☿45'23	27°40'26
	1638 May 01 00:07	0°☿			1639 Mar 17 22:41	0°☿	
morning set	1638 May 02 20:14	3°☿42'49			1639 Apr 07 05:00	0°☿	
max. Earth dist.	1638 May 08 18:46	16°☿16'03	1.32431 AU	morning set	1639 Apr 16 17:57	17°☿49'14	
asc. node	1638 May 09 08:41	17°☿31'37		max. Earth dist.	1639 Apr 21 23:23	28°☿32'55	1.33054 AU
					1639 Apr 22 15:51	0°☿	
superior conj	1638 May 10 06:03	19°☿27'57	0°09'24	superior conj	1639 Apr 24 13:29	4°☿03'26	0°-17'-36
minimum elong	1638 May 10 05:37	19°☿25'35	0°09'18	minimum elong	1639 Apr 24 14:21	4°☿08'04	0°17'26
behind sun begin	1638 May 10 01:27	19°☿02'51		asc. node	1639 Apr 26 05:44	7°☿40'03	
behind sun end	1638 May 10 09:47	19°☿48'19		evening rise	1639 May 01 16:32	19°☿21'54	
	1638 May 15 01:56	0°☿			1639 May 06 22:01	0°☿	
evening rise	1638 May 17 04:45	4°☿32'21		evening max el	1639 May 24 08:45	25°☿48'34	23°05'21
	1638 May 30 19:18	0°☿			1639 May 29 15:47	0°☿	
evening max el	1638 Jun 11 18:48	15°☿17'56	24°40'34	desc. node	1639 Jun 03 18:29	2°☿09'38	
desc. node	1638 Jun 16 21:26	19°☿25'32		retrograde	1639 Jun 06 19:17	2°☿30'36	
retrograde	1638 Jun 25 17:11	22°☿21'19		evening set	1639 Jun 10 09:01	2°☿02'36	
evening set	1638 Jun 30 18:50	21°☿23'17			1639 Jun 15 10:55	30°☿	
min. Earth dist.	1638 Jul 06 05:58	18°☿32'50	0.57060 AU	min. Earth dist.	1639 Jun 17 18:06	28°☿43'45	0.55600 AU
inferior conj	1638 Jul 09 02:36	16°☿41'32	-4°-48'-56	inferior conj	1639 Jun 19 11:05	27°☿44'04	-4°00'-44
minimum elong	1638 Jul 08 23:31	16°☿46'34	4°48'41	minimum elong	1639 Jun 19 03:42	27°☿54'51	3°59'07
morning rise	1638 Jul 17 07:58	12°☿35'24		morning rise	1639 Jun 28 01:27	23°☿51'01	
direct	1638 Jul 19 22:37	12°☿16'22		direct	1639 Jun 30 21:08	23°☿32'03	
morning max el	1638 Jul 29 03:54	16°☿34'04	19°21'20	morning max el	1639 Jul 11 16:36	28°☿32'22	20°32'58
asc. node	1638 Aug 05 07:55	25°☿38'14			1639 Jul 13 04:06	0°☿	
	1638 Aug 07 23:05	0°☿		asc. node	1639 Jul 23 04:59	14°☿21'17	
morning set	1638 Aug 15 07:02	13°☿54'34		morning set	1639 Jul 30 13:00	28°☿32'33	
					1639 Jul 31 06:03	0°☿	
superior conj	1638 Aug 23 11:00	0°☿10'04	1°45'04	superior conj	1639 Aug 07 03:53	14°☿14'38	1°45'03
minimum elong	1638 Aug 23 11:54	0°☿14'31	1°45'02	minimum elong	1639 Aug 07 03:09	14°☿10'55	1°45'02
	1638 Aug 23 08:56	0°☿		max. Earth dist.	1639 Aug 12 01:29	24°☿00'01	1.36137 AU
max. Earth dist.	1638 Aug 29 18:50	12°☿09'37	1.38021 AU		1639 Aug 15 05:00	0°☿	
evening rise	1638 Sep 02 14:23	19°☿00'54		evening rise	1639 Aug 16 02:54	1°☿41'52	
	1638 Sep 09 01:38	0°☿		desc. node	1639 Aug 30 17:48	26°☿23'27	
desc. node	1638 Sep 12 20:48	6°☿05'48			1639 Sep 02 03:10	0°☿	
	1638 Sep 29 14:56	0°☿		evening max el	1639 Sep 20 18:30	23°☿30'33	26°09'26
evening max el	1638 Oct 08 06:40	9°☿51'51	25°01'58		1639 Sep 29 22:49	0°☿	
retrograde	1638 Oct 20 01:24	16°☿41'50		retrograde	1639 Oct 03 09:17	0°☿39'33	
evening set	1638 Oct 25 17:51	14°☿19'22			1639 Oct 06 14:24	30°☿	
min. Earth dist.	1638 Oct 30 07:07	9°☿12'24	0.67291 AU	evening set	1639 Oct 09 15:52	28°☿03'53	
inferior conj	1638 Oct 31 06:37	7°☿55'15	0°-21'-9	min. Earth dist.	1639 Oct 13 21:29	23°☿33'04	0.66538 AU
minimum elong	1638 Oct 31 07:09	7°☿53'30	0°20'56	inferior conj	1639 Oct 15 08:12	21°☿45'23	-1°-18'-27
asc. node	1638 Nov 01 07:09	6°☿35'28		minimum elong	1639 Oct 15 10:16	21°☿39'00	1°17'36
morning rise	1638 Nov 05 21:00	1°☿53'25		asc. node	1639 Oct 19 04:12	17°☿26'50	
direct	1638 Nov 09 08:38	0°☿43'24		morning rise	1639 Oct 21 05:41	15°☿53'08	
morning max el	1638 Nov 16 18:20	4°☿55'49	19°44'26	direct	1639 Oct 24 06:59	14°☿59'48	
greatest brilliancy	1638 Nov 24 15:37	14°☿43'33	-0.6m	morning max el	1639 Oct 31 02:58	18°☿47'43	18°51'15
	1638 Dec 04 23:45	0°☿					
desc. node	1638 Dec 09 20:07	7°☿25'23					
morning set	1638 Dec 12 04:38	11°☿03'17					

	1639 Nov 08 17:57	0°♄			1640 Oct 10 05:07	0°♄		
morning set	1639 Nov 21 16:56	20°♄07'10			1640 Oct 13 16:35	2°♄42'52	18°14'25	
desc. node	1639 Nov 26 17:07	28°♄00'03			1640 Nov 01 00:41	0°♄		
	1639 Nov 27 23:39	0°♄			1640 Nov 01 09:50	0°♄37'28		
max. Earth dist.	1639 Dec 07 00:52	14°♄12'39	1.45018 AU		1640 Nov 12 14:06	18°♄42'07		
superior conj	1639 Dec 08 04:17	16°♄00'30	-1°-11'-39		1640 Nov 16 06:25	24°♄32'35	0°-24'-24	
minimum elong	1639 Dec 07 19:59	15°♄27'51	1°10'44		1640 Nov 16 03:16	24°♄20'06	0°23'59	
	1639 Dec 17 00:22	0°♄			1640 Nov 18 19:44	28°♄34'18	1.45052 AU	
evening rise	1639 Dec 23 14:56	10°♄36'49			1640 Nov 19 17:32	0°♄		
	1640 Jan 04 17:25	0°♄			1640 Dec 02 16:58	20°♄16'32		
evening max el	1640 Jan 13 11:41	11°♄44'49	18°44'41		1640 Dec 08 22:54	0°♄		
asc. node	1640 Jan 15 03:29	13°♄17'06			1640 Dec 18 08:37	14°♄17'47	-0.7m	
retrograde	1640 Jan 20 04:30	15°♄29'38			1640 Dec 26 19:34	25°♄13'06	19°29'25	
evening set	1640 Jan 23 07:28	14°♄34'00			1641 Jan 01 00:31	29°♄00'58		
inferior conj	1640 Jan 29 02:14	8°♄52'26	3°32'14		1641 Jan 03 01:03	29°♄23'26		
minimum elong	1640 Jan 29 00:22	8°♄58'07	3°31'59		1641 Jan 06 11:09	28°♄14'59		
min. Earth dist.	1640 Jan 30 21:52	6°♄39'31	0.65178 AU		1641 Jan 12 00:55	22°♄17'54	3°07'33	
morning rise	1640 Feb 03 16:06	2°♄41'36			1641 Jan 11 22:23	22°♄26'10	3°06'58	
	1640 Feb 08 17:30	30°♄			1641 Jan 13 05:49	20°♄43'48	0.66407 AU	
direct	1640 Feb 10 08:00	29°♄50'37			1641 Jan 17 08:51	16°♄03'57		
	1640 Feb 11 23:42	0°♄			1641 Jan 23 13:12	13°♄20'11		
desc. node	1640 Feb 22 16:20	6°♄43'15			1641 Feb 04 22:50	20°♄41'53	25°53'27	
morning max el	1640 Feb 23 13:39	7°♄35'44	26°59'50		1641 Feb 08 13:21	24°♄35'58		
	1640 Mar 11 22:50	0°♄			1641 Feb 12 23:47	0°♄		
	1640 Mar 29 12:36	0°♄			1641 Mar 05 02:46	0°♄		
morning set	1640 Mar 30 05:52	1°♄22'42			1641 Mar 13 03:42	14°♄09'29		
max. Earth dist.	1640 Apr 03 18:11	10°♄17'16	1.34121 AU		1641 Mar 17 01:18	21°♄29'57	1.35651 AU	
					1641 Mar 21 09:13	0°♄		
superior conj	1640 Apr 07 15:52	18°♄19'26	0°-45'-21		1641 Mar 22 10:33	2°♄07'23	-1°-12'-28	
minimum elong	1640 Apr 07 18:08	18°♄31'19	0°44'55		1641 Mar 22 14:05	2°♄25'16	1°11'53	
asc. node	1640 Apr 12 02:47	27°♄43'18			1641 Mar 29 23:49	17°♄36'19		
	1640 Apr 13 04:39	0°♄			1641 Mar 30 09:32	18°♄26'01		
evening rise	1640 Apr 15 02:49	4°♄02'17			1641 Apr 05 06:36	0°♄		
	1640 Apr 29 15:28	0°♄			1641 Apr 17 10:25	17°♄40'17	20°13'09	
evening max el	1640 May 05 04:17	6°♄28'44	21°32'38		1641 Apr 28 00:14	22°♄47'01		
retrograde	1640 May 17 10:30	12°♄28'35			1641 Apr 30 01:33	22°♄36'17		
evening set	1640 May 19 21:27	12°♄14'55			1641 May 07 12:33	19°♄33'23		
desc. node	1640 May 20 15:31	12°♄05'29			1641 May 09 02:32	18°♄37'53	0°-27'-37	
inferior conj	1640 May 29 06:42	8°♄14'20	-2°-26'-34		1641 May 09 01:15	18°♄39'47	0°27'10	
minimum elong	1640 May 29 00:09	8°♄23'32	2°24'25		1641 May 10 19:30	17°♄37'22	0.55236 AU	
min. Earth dist.	1640 May 29 06:24	8°♄14'45	0.54938 AU		1641 May 17 22:39	14°♄19'28		
morning rise	1640 Jun 07 03:26	4°♄17'54			1641 May 21 20:47	13°♄46'03		
direct	1640 Jun 10 08:18	3°♄55'29			1641 Jun 04 11:05	20°♄26'11	23°43'51	
morning max el	1640 Jun 22 18:05	9°♄47'14	22°02'54		1641 Jun 12 14:10	0°♄		
	1640 Jul 07 04:08	0°♄			1641 Jun 25 23:03	23°♄11'59		
asc. node	1640 Jul 09 02:01	3°♄35'31			1641 Jun 28 10:18	28°♄18'36		
morning set	1640 Jul 13 22:43	13°♄22'45			1641 Jun 29 05:29	0°♄		
superior conj	1640 Jul 21 05:15	28°♄45'07	1°38'09		1641 Jul 05 12:11	13°♄31'32	1°25'42	
minimum elong	1640 Jul 21 03:25	28°♄35'30	1°38'01		1641 Jul 05 09:49	13°♄18'50	1°25'25	
	1640 Jul 21 19:31	0°♄			1641 Jul 07 16:46	18°♄13'10	1.33416 AU	
max. Earth dist.	1640 Jul 24 16:24	5°♄56'42	1.34583 AU		1641 Jul 13 00:40	29°♄15'12		
evening rise	1640 Jul 29 07:48	15°♄11'10			1641 Jul 13 09:37	0°♄		
	1640 Aug 06 10:03	0°♄			1641 Jul 30 12:36	0°♄		
desc. node	1640 Aug 16 14:48	16°♄19'55			1641 Aug 03 11:50	5°♄45'34		
	1640 Aug 26 18:41	0°♄			1641 Aug 15 18:19	20°♄20'47	27°24'07	
evening max el	1640 Sep 02 06:48	7°♄04'12	26°59'10		1641 Aug 29 08:08	27°♄38'38		
retrograde	1640 Sep 15 11:44	14°♄21'15			1641 Sep 05 11:24	24°♄58'16		
evening set	1640 Sep 22 06:39	11°♄38'38			1641 Sep 09 04:04	21°♄39'30	0.63984 AU	
min. Earth dist.	1640 Sep 26 05:13	7°♄44'43	0.65441 AU		1641 Sep 11 15:39	19°♄04'25	-3°-12'-39	
inferior conj	1640 Sep 28 04:02	5°♄30'19	-2°-16'-27		1641 Sep 11 20:30	18°♄51'45	3°11'07	
minimum elong	1640 Sep 28 07:39	5°♄19'57	2°15'06		1641 Sep 18 07:43	13°♄41'09		
	1640 Oct 04 03:02	30°♄			1641 Sep 20 19:50	13°♄09'46		
morning rise	1640 Oct 04 10:11	29°♄50'47			1641 Sep 21 22:16	13°♄15'55		
asc. node	1640 Oct 05 01:14	29°♄34'20			1641 Sep 27 08:35	16°♄35'35	17°54'55	
direct	1640 Oct 07 03:36	29°♄10'13						

	1641 Oct 06 22:08	0°♁		morning rise	1642 Sep 01 18:50	27°♁16'40	
morning set	1641 Oct 14 06:03	12°♁27'33		direct	1642 Sep 04 04:18	26°♁51'28	
	1641 Oct 24 15:25	0°♁		asc. node	1642 Sep 08 19:19	28°♁28'15	
					1642 Sep 10 16:12	0°♁	
superior conj	1641 Oct 27 01:18	3°♁57'25	0°22'52	morning max el	1642 Sep 11 00:00	0°♁18'46	17°53'32
minimum elong	1641 Oct 27 03:47	4°♁07'34	0°22'32	morning set	1642 Sep 26 23:22	25°♁17'48	
desc. node	1641 Oct 30 11:08	9°♁28'36			1642 Sep 29 14:07	0°♁	
max. Earth dist.	1641 Nov 01 14:06	12°♁52'26	1.44357 AU				
evening rise	1641 Nov 12 03:25	29°♁22'46		superior conj	1642 Oct 07 22:56	14°♁41'38	1°00'59
	1641 Nov 12 13:06	0°♁		minimum elong	1642 Oct 08 03:33	15°♁01'24	1°00'24
	1641 Dec 02 19:29	0°♁		max. Earth dist.	1642 Oct 15 04:29	26°♁46'26	1.43020 AU
greatest brilliancy	1641 Dec 03 20:29	1°♁24'11	-0.5m		1642 Oct 17 04:15	0°♁	
evening max el	1641 Dec 09 22:25	8°♁42'52	20°28'50	desc. node	1642 Oct 17 08:10	0°♁15'47	
retrograde	1641 Dec 17 22:54	13°♁26'32		evening rise	1642 Oct 22 13:36	8°♁33'03	
asc. node	1641 Dec 18 21:33	13°♁21'32			1642 Nov 05 18:56	0°♁	
evening set	1641 Dec 21 17:49	12°♁03'39		greatest brilliancy	1642 Nov 17 22:34	16°♁38'40	-0.4m
inferior conj	1641 Dec 27 04:37	5°♁53'52	2°33'12	evening max el	1642 Nov 22 19:31	22°♁12'56	21°39'57
minimum elong	1641 Dec 27 01:59	6°♁02'48	2°32'25	retrograde	1642 Dec 01 20:00	27°♁35'01	
min. Earth dist.	1641 Dec 27 20:18	5°♁00'36	0.67238 AU	evening set	1642 Dec 06 01:35	25°♁56'11	
	1642 Jan 01 00:28	30°♁		asc. node	1642 Dec 05 18:35	26°♁09'30	
morning rise	1642 Jan 01 09:41	29°♁38'43		inferior conj	1642 Dec 11 11:08	19°♁37'11	1°51'18
direct	1642 Jan 06 23:40	27°♁11'28		minimum elong	1642 Dec 11 08:54	19°♁44'55	1°50'30
	1642 Jan 13 20:21	0°♁		min. Earth dist.	1642 Dec 11 15:06	19°♁23'29	0.67693 AU
morning max el	1642 Jan 18 07:17	3°♁56'26	24°31'01	morning rise	1642 Dec 16 15:59	13°♁22'39	
desc. node	1642 Jan 26 10:22	13°♁23'34		direct	1642 Dec 21 14:39	11°♁16'53	
	1642 Feb 07 06:53	0°♁		morning max el	1642 Dec 31 16:45	17°♁16'07	23°02'34
morning set	1642 Feb 23 06:00	25°♁54'51		greatest brilliancy	1643 Jan 05 12:41	22°♁40'05	-0.3m
	1642 Feb 25 13:19	0°♁			1643 Jan 11 05:39	0°♁	
max. Earth dist.	1642 Feb 26 23:10	2°♁32'48	1.37576 AU	desc. node	1643 Jan 13 07:24	2°♁50'01	
					1643 Jan 31 09:06	0°♁	
superior conj	1642 Mar 05 18:21	15°♁18'45	-1°-36'-49	morning set	1643 Feb 04 06:32	6°♁22'30	
minimum elong	1642 Mar 05 22:34	15°♁39'07	1°36'19	max. Earth dist.	1643 Feb 08 18:16	13°♁58'47	1.39712 AU
	1642 Mar 13 04:53	0°♁					
evening rise	1642 Mar 14 10:23	2°♁26'42		superior conj	1643 Feb 16 11:03	27°♁42'19	-1°-55'-27
asc. node	1642 Mar 16 20:52	7°♁14'33		minimum elong	1643 Feb 16 14:35	27°♁58'35	1°55'14
evening max el	1642 Mar 31 03:58	29°♁30'53	19°12'13		1643 Feb 17 16:51	0°♁	
	1642 Mar 31 16:22	0°♁		evening rise	1643 Feb 26 02:25	15°♁56'09	
retrograde	1642 Apr 09 01:58	3°♁49'41		asc. node	1643 Mar 03 17:54	26°♁31'51	
evening set	1642 Apr 11 04:53	3°♁36'04			1643 Mar 05 17:03	0°♁	
	1642 Apr 18 15:34	30°♁		evening max el	1643 Mar 14 06:51	11°♁56'18	18°31'24
inferior conj	1642 Apr 19 12:21	29°♁25'10	1°21'55	retrograde	1643 Mar 21 22:07	15°♁41'16	
minimum elong	1642 Apr 19 15:27	29°♁19'56	1°20'53	evening set	1643 Mar 24 06:15	15°♁21'17	
min. Earth dist.	1642 Apr 22 10:27	27°♁27'33	0.56425 AU	inferior conj	1643 Mar 31 18:52	10°♁51'13	2°40'43
desc. node	1642 Apr 24 09:34	26°♁14'50		minimum elong	1643 Mar 31 22:52	10°♁43'18	2°39'45
morning rise	1642 Apr 27 21:57	24°♁33'04		min. Earth dist.	1643 Apr 04 05:02	8°♁10'15	0.58249 AU
direct	1642 May 02 20:16	23°♁36'50		morning rise	1643 Apr 08 11:17	5°♁27'22	
	1642 May 16 02:43	0°♁		desc. node	1643 Apr 11 06:36	4°♁22'19	
morning max el	1642 May 17 01:32	0°♁53'14	25°22'52	direct	1643 Apr 14 09:54	3°♁56'54	
	1642 Jun 06 07:15	0°♁		morning max el	1643 Apr 28 19:06	11°♁36'13	26°44'17
morning set	1642 Jun 12 22:06	13°♁15'00			1643 May 13 02:21	0°♁	
asc. node	1642 Jun 12 20:06	13°♁04'30		morning set	1643 May 28 08:30	28°♁06'18	
					1643 May 29 06:04	0°♁	
superior conj	1642 Jun 19 22:27	28°♁26'54	1°08'43	asc. node	1643 May 30 17:11	3°♁07'39	
minimum elong	1642 Jun 19 20:05	28°♁13'57	1°08'18				
	1642 Jun 20 15:29	0°♁		superior conj	1643 Jun 04 10:10	13°♁24'50	0°47'58
max. Earth dist.	1642 Jun 21 00:30	0°♁49'09	1.32643 AU	minimum elong	1643 Jun 04 08:15	13°♁14'17	0°47'35
evening rise	1642 Jun 27 01:59	13°♁43'39		max. Earth dist.	1643 Jun 04 12:13	13°♁36'05	1.32250 AU
	1642 Jul 05 11:52	0°♁		evening rise	1643 Jun 11 08:57	28°♁27'43	
desc. node	1642 Jul 21 08:52	24°♁27'26			1643 Jun 12 02:38	0°♁	
	1642 Jul 26 01:29	0°♁			1643 Jun 28 20:54	0°♁	
evening max el	1642 Jul 29 02:36	3°♁06'16	27°18'31	desc. node	1643 Jul 08 05:53	12°♁07'33	
retrograde	1642 Aug 11 21:59	10°♁22'16		evening max el	1643 Jul 11 05:14	15°♁10'04	26°39'54
evening set	1642 Aug 19 02:26	7°♁56'23		retrograde	1643 Jul 25 04:31	22°♁23'39	
min. Earth dist.	1642 Aug 22 16:32	5°♁05'44	0.62196 AU	evening set	1643 Jul 31 23:18	20°♁25'54	
inferior conj	1642 Aug 25 16:03	2°♁20'08	-4°-3'-2	min. Earth dist.	1643 Aug 04 18:50	17°♁49'29	0.60176 AU
minimum elong	1642 Aug 25 21:17	2°♁08'01	4°01'49	inferior conj	1643 Aug 08 01:53	15°♁09'17	-4°-40'-57
	1642 Aug 28 07:15	30°♁		minimum elong	1643 Aug 08 05:43	15°♁01'29	4°40'28

morning rise	1643 Aug 15 15:25	10°♁28'12		min. Earth dist.	1644 Jul 16 13:01	29°♁35'57	0.58129 AU
direct	1643 Aug 18 00:57	10°♁06'45		inferior conj	1644 Jul 19 17:32	27°♁21'24	-4°-56'-2
morning max el	1643 Aug 25 11:47	13°♁44'54	18°11'19	minimum elong	1644 Jul 19 17:31	27°♁21'26	4°56'04
asc. node	1643 Aug 26 16:22	14°♁58'39		morning rise	1644 Jul 27 17:17	23°♁03'03	
	1643 Sep 05 13:19	0°♁		direct	1644 Jul 30 05:24	22°♁43'33	
morning set	1643 Sep 10 08:00	8°♁52'15		morning max el	1644 Aug 07 16:37	26°♁43'32	18°49'34
					1644 Aug 10 16:11	0°♁	
superior conj	1643 Sep 19 22:11	26°♁41'33	1°26'53	asc. node	1644 Aug 12 13:26	2°♁31'00	
minimum elong	1643 Sep 20 02:04	26°♁59'04	1°26'31	morning set	1644 Aug 24 03:26	22°♁58'01	
	1643 Sep 21 18:30	0°♁			1644 Aug 27 17:27	0°♁	
max. Earth dist.	1643 Sep 27 13:06	10°♁01'12	1.41222 AU				
evening rise	1643 Oct 02 15:39	18°♁28'57		superior conj	1644 Sep 01 17:40	9°♁41'09	1°41'16
desc. node	1643 Oct 04 05:13	21°♁00'30		minimum elong	1644 Sep 01 19:41	9°♁50'47	1°41'10
	1643 Oct 09 22:43	0°♁		max. Earth dist.	1644 Sep 08 17:20	22°♁32'35	1.39198 AU
greatest brilliancy	1643 Oct 31 02:41	29°♁43'16	-0.2m	evening rise	1644 Sep 12 17:23	29°♁30'53	
	1643 Oct 31 08:12	0°♁			1644 Sep 13 00:13	0°♁	
evening max el	1643 Nov 05 11:39	5°♁45'17	22°58'21	desc. node	1644 Sep 20 02:14	11°♁38'24	
retrograde	1643 Nov 15 14:47	11°♁46'01			1644 Oct 02 08:49	0°♁	
evening set	1643 Nov 20 08:50	9°♁50'13		evening max el	1644 Oct 18 00:41	19°♁21'19	24°18'12
asc. node	1643 Nov 22 15:37	7°♁31'53		retrograde	1644 Oct 29 05:53	25°♁55'30	
min. Earth dist.	1643 Nov 25 11:49	3°♁49'22	0.67801 AU	evening set	1644 Nov 03 13:53	23°♁42'37	
inferior conj	1643 Nov 25 18:36	3°♁25'55	1°03'24	min. Earth dist.	1644 Nov 08 07:58	18°♁15'18	0.67575 AU
minimum elong	1643 Nov 25 17:11	3°♁30'49	1°02'50	asc. node	1644 Nov 08 12:39	17°♁59'33	
	1643 Nov 28 08:49	30°♁		inferior conj	1644 Nov 09 01:13	17°♁17'18	0°10'48
morning rise	1643 Dec 01 01:32	27°♁14'11		minimum elong	1644 Nov 09 00:57	17°♁18'11	0°10'41
direct	1643 Dec 05 09:28	25°♁31'11		transit begin	1644 Nov 08 22:53	17°♁25'07	
	1643 Dec 13 12:56	0°♁		transit end	1644 Nov 09 03:00	17°♁11'15	
morning max el	1643 Dec 14 06:35	0°♁43'23	21°37'13	morning rise	1644 Nov 14 12:18	11°♁10'54	
greatest brilliancy	1643 Dec 19 05:13	6°♁20'11	-0.4m	direct	1644 Nov 18 06:52	9°♁49'29	
desc. node	1643 Dec 31 04:28	22°♁44'41		morning max el	1644 Nov 26 03:31	14°♁20'45	20°21'41
	1644 Jan 05 01:58	0°♁		greatest brilliancy	1644 Dec 02 14:53	22°♁04'17	-0.5m
morning set	1644 Jan 15 01:55	15°♁27'17			1644 Dec 08 07:24	0°♁	
max. Earth dist.	1644 Jan 21 17:44	26°♁14'56	1.41788 AU	desc. node	1644 Dec 17 01:31	12°♁59'27	
	1644 Jan 23 23:44	0°♁		morning set	1644 Dec 24 00:20	23°♁38'04	
					1644 Dec 28 02:21	0°♁	
superior conj	1644 Jan 29 07:36	9°♁06'47	-2°-4'-17	max. Earth dist.	1645 Jan 03 01:10	9°♁26'58	1.43516 AU
minimum elong	1644 Jan 29 08:13	9°♁09'30	2°04'18				
evening rise	1644 Feb 09 06:09	28°♁46'45		superior conj	1645 Jan 09 03:07	19°♁21'44	-1°-58'-25
	1644 Feb 09 22:08	0°♁		minimum elong	1645 Jan 08 22:36	19°♁03'05	1°58'13
asc. node	1644 Feb 18 14:57	15°♁21'38			1645 Jan 15 10:59	0°♁	
evening max el	1644 Feb 25 15:59	24°♁48'50	18°10'32	evening rise	1645 Jan 21 17:24	10°♁50'15	
retrograde	1644 Mar 03 11:59	28°♁15'59			1645 Feb 02 00:58	0°♁	
evening set	1644 Mar 06 01:31	27°♁47'25		asc. node	1645 Feb 04 11:59	3°♁35'29	
inferior conj	1644 Mar 12 21:56	22°♁56'08	3°25'59	evening max el	1645 Feb 08 04:13	8°♁00'00	18°09'08
minimum elong	1644 Mar 13 00:30	22°♁50'15	3°25'39	retrograde	1645 Feb 14 15:48	11°♁24'11	
min. Earth dist.	1644 Mar 16 05:24	19°♁55'13	0.60374 AU	evening set	1645 Feb 17 10:19	10°♁45'47	
morning rise	1644 Mar 19 20:10	17°♁10'09		inferior conj	1645 Feb 23 18:10	5°♁33'29	3°43'43
direct	1644 Mar 26 11:58	15°♁03'09		minimum elong	1645 Feb 23 18:41	5°♁32'08	3°43'41
desc. node	1644 Mar 28 03:39	15°♁10'40		min. Earth dist.	1645 Feb 26 13:52	2°♁37'33	0.62467 AU
morning max el	1644 Apr 09 18:34	22°♁54'18	27°35'03		1645 Mar 01 11:15	30°♁	
	1644 Apr 16 02:02	0°♁		morning rise	1645 Mar 02 00:49	29°♁33'57	
	1644 May 05 04:36	0°♁		direct	1645 Mar 08 23:31	26°♁59'00	
morning set	1644 May 11 15:39	12°♁45'33		desc. node	1645 Mar 15 00:42	28°♁40'37	
asc. node	1644 May 16 14:14	23°♁16'03			1645 Mar 17 04:57	0°♁	
max. Earth dist.	1644 May 18 00:09	26°♁21'06	1.32244 AU	morning max el	1645 Mar 22 23:45	4°♁53'52	27°49'02
					1645 Apr 10 20:04	0°♁	
superior conj	1644 May 18 21:35	28°♁18'34	0°24'12	morning set	1645 Apr 25 17:31	27°♁06'06	
minimum elong	1644 May 18 20:31	28°♁12'41	0°23'58		1645 Apr 27 03:34	0°♁	
	1644 May 19 16:03	0°♁		max. Earth dist.	1645 May 01 08:33	8°♁51'50	1.32641 AU
evening rise	1644 May 25 19:18	13°♁19'07					
	1644 Jun 03 05:32	0°♁		superior conj	1645 May 03 07:00	13°♁02'31	0°-1'-53
evening max el	1644 Jun 22 00:53	26°♁27'20	25°30'51	minimum elong	1645 May 03 07:05	13°♁02'59	0°01'52
desc. node	1644 Jun 24 02:56	28°♁19'37		behind sun begin	1645 May 03 01:56	12°♁35'03	
	1644 Jun 26 06:50	0°♁		behind sun end	1645 May 03 12:14	13°♁30'55	
retrograde	1644 Jul 06 01:31	3°♁36'15		asc. node	1645 May 03 11:17	13°♁25'45	
evening set	1644 Jul 11 21:26	2°♁16'30		evening rise	1645 May 10 07:05	28°♁11'20	
	1644 Jul 15 22:37	30°♁			1645 May 11 03:43	0°♁	

	1645 May 28 09:39	0°☿			1646 May 03 11:43	0°♁	
evening max el	1645 Jun 03 15:22	7°☿07'51	24°00'50	evening max el	1646 May 16 06:39	17°♁37'34	22°24'44
desc. node	1645 Jun 10 23:56	12°☿29'55		desc. node	1646 May 28 20:56	24°♁03'24	
retrograde	1645 Jun 17 10:17	14°☿03'44		retrograde	1646 May 29 06:44	24°♁03'46	
evening set	1645 Jun 21 20:37	13°☿20'23		evening set	1646 Jun 01 07:29	23°♁43'31	
min. Earth dist.	1645 Jun 28 02:10	10°☿19'24	0.56362 AU	min. Earth dist.	1646 Jun 09 13:40	20°♁09'09	0.55209 AU
inferior conj	1645 Jun 30 12:55	8°☿48'58	-4°-34'-29	inferior conj	1646 Jun 10 14:28	19°♁34'03	-3°-25'-43
minimum elong	1645 Jun 30 07:38	8°☿57'09	4°33'45	minimum elong	1646 Jun 10 06:40	19°♁45'06	3°23'35
morning rise	1645 Jul 08 22:11	4°☿49'33		morning rise	1646 Jun 19 08:07	15°♁42'19	
direct	1645 Jul 11 14:54	4°☿30'38		direct	1646 Jun 22 07:14	15°♁22'24	
morning max el	1645 Jul 21 11:35	9°☿05'06	19°49'14	morning max el	1646 Jul 03 19:12	20°♁43'29	21°09'26
asc. node	1645 Jul 30 10:30	20°☿51'26			1646 Jul 11 10:49	0°☿	
	1645 Aug 04 12:03	0°♁		asc. node	1646 Jul 17 07:33	9°☿48'27	
morning set	1645 Aug 08 06:18	7°♁26'17		morning set	1646 Jul 23 14:06	22°☿10'01	
					1646 Jul 27 08:14	0°♁	
superior conj	1645 Aug 16 04:01	23°♁25'26	1°45'59	superior conj	1646 Jul 31 00:53	7°♁41'56	1°42'52
minimum elong	1645 Aug 16 04:10	23°♁26'13	1°45'59	minimum elong	1646 Jul 30 23:37	7°♁35'24	1°42'50
	1645 Aug 19 12:32	0°♁		max. Earth dist.	1646 Aug 04 07:48	16°♁23'59	1.35427 AU
max. Earth dist.	1645 Aug 21 21:47	4°♁32'40	1.37197 AU	evening rise	1646 Aug 08 14:20	24°♁40'47	
evening rise	1645 Aug 25 18:20	11°♁38'17			1646 Aug 11 11:13	0°♁	
	1645 Sep 05 15:23	0°♁		desc. node	1646 Aug 24 20:15	22°♁14'48	
desc. node	1645 Sep 06 23:15	2°♁05'03			1646 Aug 30 04:21	0°♁	
	1645 Sep 27 15:01	0°♁		evening max el	1646 Sep 13 00:44	16°♁38'25	26°33'10
evening max el	1645 Sep 30 12:41	3°♁00'35	25°32'19	retrograde	1646 Sep 25 21:55	23°♁51'35	
retrograde	1645 Oct 12 16:25	9°♁59'08		evening set	1646 Oct 02 10:16	21°♁11'49	
evening set	1645 Oct 18 15:00	7°♁30'43		min. Earth dist.	1646 Oct 06 12:45	16°♁57'02	0.66118 AU
min. Earth dist.	1645 Oct 23 01:03	2°♁38'55	0.67021 AU	inferior conj	1646 Oct 08 04:34	14°♁57'22	-1°-43'-3
inferior conj	1645 Oct 24 05:09	1°♁08'41	0°-45'-12	minimum elong	1646 Oct 08 07:18	14°♁49'09	1°41'58
minimum elong	1645 Oct 24 06:19	1°♁04'56	0°44'43	asc. node	1646 Oct 13 06:44	9°♁46'00	
	1645 Oct 25 02:43	30°♁		morning rise	1646 Oct 14 05:35	9°♁10'22	
asc. node	1645 Oct 26 09:42	28°♁25'52		direct	1646 Oct 17 03:17	8°♁22'54	
morning rise	1645 Oct 29 22:21	25°♁10'30		morning max el	1646 Oct 23 19:22	12°♁02'52	18°33'36
direct	1645 Nov 02 05:25	24°♁07'51			1646 Nov 05 16:14	0°♁	
morning max el	1645 Nov 09 08:13	28°♁08'12	19°19'47	morning set	1646 Nov 13 01:01	11°♁44'57	
	1645 Nov 11 01:38	0°♁		desc. node	1646 Nov 20 19:32	24°♁06'51	
greatest brilliancy	1645 Nov 18 22:38	10°♁32'47	-0.7m		1646 Nov 24 13:02	0°♁	
	1645 Dec 01 16:54	0°♁		superior conj	1646 Nov 28 22:36	6°♁55'03	0°-52'-25
morning set	1645 Dec 03 00:55	2°♁04'14		minimum elong	1646 Nov 28 15:58	6°♁29'00	0°51'37
desc. node	1645 Dec 03 22:31	3°♁28'08		max. Earth dist.	1646 Nov 29 10:12	7°♁40'32	1.45128 AU
max. Earth dist.	1645 Dec 16 15:43	23°♁21'57	1.44674 AU		1646 Dec 13 14:14	0°♁	
				evening rise	1646 Dec 14 22:54	2°♁09'36	
superior conj	1645 Dec 19 20:40	28°♁26'59	-1°-33'-55		1647 Jan 02 02:13	0°♁	
minimum elong	1645 Dec 19 12:04	27°♁52'48	1°33'08	evening max el	1647 Jan 06 02:38	4°♁48'01	19°01'37
	1645 Dec 20 20:00	0°♁		asc. node	1647 Jan 09 06:02	7°♁27'32	
evening rise	1646 Jan 03 07:49	21°♁58'30		retrograde	1647 Jan 13 00:01	8°♁42'49	
	1646 Jan 08 03:44	0°♁		evening set	1647 Jan 16 05:49	7°♁41'52	
asc. node	1646 Jan 22 09:01	21°♁01'46		inferior conj	1647 Jan 21 22:09	1°♁53'04	3°23'05
evening max el	1646 Jan 22 16:35	21°♁21'17	18°26'30	minimum elong	1647 Jan 21 19:56	2°♁00'04	3°22'42
retrograde	1646 Jan 29 05:05	24°♁55'24			1647 Jan 23 10:05	30°♁	
evening set	1646 Feb 01 04:45	24°♁06'15		min. Earth dist.	1647 Jan 23 11:15	29°♁56'20	0.65754 AU
inferior conj	1646 Feb 07 03:26	18°♁34'29	3°40'55	morning rise	1647 Jan 27 09:05	25°♁40'28	
minimum elong	1646 Feb 07 02:15	18°♁37'54	3°40'49	direct	1647 Feb 02 20:24	22°♁51'28	
min. Earth dist.	1646 Feb 09 07:52	16°♁02'36	0.64296 AU		1647 Feb 15 07:09	0°♁	
morning rise	1646 Feb 12 22:19	12°♁26'46		morning max el	1647 Feb 15 18:34	0°♁28'26	26°34'10
direct	1646 Feb 19 18:37	9°♁37'47		desc. node	1647 Feb 16 18:46	1°♁30'35	
desc. node	1646 Mar 01 21:43	14°♁18'38			1647 Mar 09 19:27	0°♁	
morning max el	1646 Mar 05 08:38	17°♁28'58	27°26'53	morning set	1647 Mar 23 17:55	24°♁14'07	
	1646 Mar 15 19:57	0°♁			1647 Mar 26 17:52	0°♁	
	1646 Apr 03 16:07	0°♁		max. Earth dist.	1647 Mar 27 23:40	2°♁26'37	1.34724 AU
morning set	1646 Apr 09 11:26	10°♁59'04					
max. Earth dist.	1646 Apr 14 09:32	20°♁56'00	1.33459 AU	superior conj	1647 Apr 01 11:54	11°♁34'20	0°-57'-4
				minimum elong	1647 Apr 01 14:45	11°♁49'03	0°56'33
superior conj	1646 Apr 17 12:30	27°♁29'53	0°-29'-22	asc. node	1647 Apr 07 05:21	23°♁31'17	
minimum elong	1646 Apr 17 13:57	27°♁37'38	0°29'04	evening rise	1647 Apr 09 03:28	27°♁31'17	
	1646 Apr 18 16:41	0°♁			1647 Apr 10 08:23	0°♁	
asc. node	1646 Apr 20 08:19	3°♁32'08					
evening rise	1646 Apr 24 18:26	12°♁57'27					

evening max el	1647 Apr 28 06:06	28°♄28'00	20°56'38	minimum elong	1648 Mar 15 06:22	25°♃27'46	1°22'44
	1647 Apr 29 22:59	0°♄			1648 Mar 17 12:46	0°♃	
retrograde	1647 May 09 20:10	4°♄06'17		evening rise	1648 Mar 23 08:02	11°♃46'22	
evening set	1647 May 12 00:54	3°♄54'53		asc. node	1648 Mar 24 02:24	13°♃18'52	
desc. node	1647 May 15 17:58	2°♄48'52			1648 Apr 02 02:27	0°♃	
inferior conj	1647 May 21 08:15	29°♄56'54	-1°-36'-59	evening max el	1648 Apr 09 17:19	9°♄56'58	19°44'51
minimum elong	1647 May 21 03:41	0°♄03'22	1°35'23	retrograde	1648 Apr 19 13:44	14°♄42'01	
	1647 May 21 06:03	30°♄		evening set	1648 Apr 21 14:39	14°♄30'43	
min. Earth dist.	1647 May 22 02:08	29°♄31'31	0.54941 AU	inferior conj	1648 Apr 30 08:50	10°♄28'40	0°21'44
morning rise	1647 May 30 05:51	25°♄53'18		minimum elong	1648 Apr 30 09:47	10°♄27'11	0°21'23
direct	1647 Jun 02 16:39	25°♄27'38		desc. node	1648 May 01 15:00	9°♄41'36	
	1647 Jun 13 18:12	0°♄		min. Earth dist.	1648 May 02 16:21	9°♄02'33	0.55638 AU
morning max el	1647 Jun 15 16:36	1°♄41'01	22°45'24	morning rise	1648 May 09 01:32	5°♄56'04	
asc. node	1647 Jul 04 04:35	29°♄12'42		direct	1648 May 13 09:19	5°♄14'27	
	1647 Jul 04 14:07	0°♄		morning max el	1648 May 27 07:56	12°♄12'45	24°27'09
morning set	1647 Jul 08 00:46	7°♄02'54			1648 Jun 09 22:23	0°♄	
				asc. node	1648 Jun 20 01:38	18°♄57'06	
superior conj	1647 Jul 15 04:54	22°♄19'57	1°33'30	morning set	1648 Jun 21 12:39	21°♄59'56	
minimum elong	1647 Jul 15 02:46	22°♄08'40	1°33'17		1648 Jun 25 06:09	0°♄	
max. Earth dist.	1647 Jul 18 02:35	28°♄26'57	1.34025 AU				
	1647 Jul 18 20:32	0°♄		superior conj	1648 Jun 28 13:32	7°♄11'38	1°19'01
evening rise	1647 Jul 23 00:43	8°♄25'36		minimum elong	1648 Jun 28 11:07	6°♄58'29	1°18'39
	1647 Aug 03 23:15	0°♄		max. Earth dist.	1648 Jun 30 06:14	10°♄51'42	1.33032 AU
desc. node	1647 Aug 11 17:17	11°♄59'29		evening rise	1648 Jul 05 21:36	22°♄41'47	
	1647 Aug 26 10:25	0°♄			1648 Jul 09 14:10	0°♄	
evening max el	1647 Aug 26 12:37	0°♄05'17	27°13'15		1648 Jul 27 18:09	0°♄	
retrograde	1647 Sep 08 21:59	7°♄24'12		desc. node	1648 Jul 28 14:19	1°♄08'36	
evening set	1647 Sep 15 21:11	4°♄40'50		evening max el	1648 Aug 07 23:04	13°♄10'18	27°25'48
min. Earth dist.	1647 Sep 19 16:51	1°♄02'38	0.64857 AU	retrograde	1648 Aug 21 15:59	20°♄28'15	
	1647 Sep 20 15:43	30°♄		evening set	1648 Aug 28 20:37	17°♄52'27	
inferior conj	1647 Sep 21 21:12	28°♄38'07	-2°-40'-44	min. Earth dist.	1648 Sep 01 11:32	14°♄46'42	0.63252 AU
minimum elong	1647 Sep 22 01:24	28°♄26'30	2°39'15	inferior conj	1648 Sep 04 04:27	12°♄05'25	-3°-35'-7
morning rise	1647 Sep 28 07:28	23°♄05'24		minimum elong	1648 Sep 04 09:37	11°♄52'33	3°33'38
asc. node	1647 Sep 30 03:47	22°♄32'26		morning rise	1648 Sep 11 01:01	6°♄50'07	
direct	1647 Sep 30 22:15	22°♄29'17		direct	1648 Sep 13 11:32	6°♄21'49	
morning max el	1647 Oct 07 10:25	25°♄58'08	18°04'04	asc. node	1648 Sep 16 00:50	6°♄53'29	
	1647 Oct 10 20:36	0°♄		morning max el	1648 Sep 20 02:32	9°♄47'40	17°52'02
morning set	1647 Oct 25 06:08	22°♄51'04			1648 Oct 03 13:31	0°♄	
	1647 Oct 29 13:20	0°♄		morning set	1648 Oct 06 12:04	5°♄08'42	
desc. node	1647 Nov 07 16:33	14°♄51'24					
				superior conj	1648 Oct 18 11:37	25°♄41'45	0°40'27
superior conj	1647 Nov 08 05:50	15°♄44'28	0°-3'-43	minimum elong	1648 Oct 18 15:28	25°♄57'47	0°39'56
minimum elong	1647 Nov 08 05:23	15°♄42'38	0°03'39		1648 Oct 21 02:11	0°♄	
behind sun begin	1647 Nov 07 18:56	15°♄00'55		desc. node	1648 Oct 24 13:36	5°♄38'37	
behind sun end	1647 Nov 08 15:49	16°♄24'18		max. Earth dist.	1648 Oct 24 21:19	6°♄09'37	1.43856 AU
max. Earth dist.	1647 Nov 12 04:54	22°♄01'50	1.44838 AU	evening rise	1648 Nov 03 00:57	20°♄33'32	
	1647 Nov 17 06:46	0°♄			1648 Nov 09 05:21	0°♄	
evening rise	1647 Nov 24 16:53	11°♄31'25		greatest brilliancy	1648 Nov 26 22:28	25°♄24'32	-0.5m
	1647 Dec 06 18:43	0°♄			1648 Nov 30 17:10	0°♄	
greatest brilliancy	1647 Dec 13 02:07	9°♄12'31	-0.6m	evening max el	1648 Dec 02 08:56	1°♄47'12	20°57'56
evening max el	1647 Dec 20 08:27	18°♄16'58	19°52'57	retrograde	1648 Dec 10 19:14	6°♄46'49	
asc. node	1647 Dec 27 03:04	22°♄37'51		asc. node	1648 Dec 13 00:06	6°♄19'42	
retrograde	1647 Dec 27 21:32	22°♄41'08		evening set	1648 Dec 14 18:23	5°♄17'33	
evening set	1647 Dec 31 11:02	21°♄26'54			1648 Dec 19 12:00	30°♄	
inferior conj	1648 Jan 05 23:19	15°♄23'57	2°54'00	inferior conj	1648 Dec 20 04:29	29°♄03'37	2°16'16
minimum elong	1648 Jan 05 20:41	15°♄32'44	2°53'20	minimum elong	1648 Dec 20 01:58	29°♄12'15	2°15'26
min. Earth dist.	1648 Jan 06 22:26	14°♄07'00	0.66809 AU	min. Earth dist.	1648 Dec 20 15:07	28°♄27'06	0.67478 AU
morning rise	1648 Jan 11 05:40	9°♄08'58		morning rise	1648 Dec 25 09:09	22°♄48'21	
direct	1648 Jan 17 04:03	6°♄31'15		direct	1648 Dec 30 16:43	20°♄29'34	
morning max el	1648 Jan 29 03:31	13°♄39'40	25°19'38	morning max el	1649 Jan 10 11:53	26°♄55'54	23°53'25
desc. node	1648 Feb 03 15:47	19°♄49'12			1649 Jan 13 08:25	0°♄	
	1648 Feb 11 10:24	0°♄		desc. node	1649 Jan 20 12:50	8°♄55'09	
	1648 Mar 01 14:21	0°♄			1649 Feb 04 01:43	0°♄	
morning set	1648 Mar 05 08:16	6°♄37'37		morning set	1649 Feb 15 00:23	17°♄52'04	
max. Earth dist.	1648 Mar 09 02:05	13°♄30'54	1.36427 AU	max. Earth dist.	1649 Feb 18 21:24	24°♄37'50	1.38475 AU
					1649 Feb 21 20:57	0°♄	
superior conj	1648 Mar 15 02:26	25°♄08'13	-1°-23'-17				

superior conj	1649 Feb 26 04:27	8°♄01'20	-1°-45'-38	superior conj	1650 Feb 08 13:21	20°♁02'25	-2°00'-40
minimum elong	1649 Feb 26 08:36	8°♄20'57	1°45'15	minimum elong	1650 Feb 08 15:58	20°♁14'11	2°00'35
evening rise	1649 Mar 07 05:32	25°♄34'54		evening rise	1650 Feb 13 23:53	0°♄	
	1649 Mar 09 12:04	0°♄		evening rise	1650 Feb 18 16:53	8°♄49'41	
asc. node	1649 Mar 10 23:27	2°♄49'06		asc. node	1650 Feb 25 20:30	21°♄56'05	
evening max el	1649 Mar 23 15:21	22°♄04'10	18°52'24		1650 Mar 02 22:40	0°♄	
retrograde	1649 Mar 31 22:38	26°♄06'03		evening max el	1650 Mar 06 21:20	4°♄42'52	18°20'00
evening set	1649 Apr 03 03:47	25°♄50'00		retrograde	1650 Mar 14 02:48	8°♄18'10	
inferior conj	1649 Apr 11 03:06	21°♄31'44	1°59'34	evening set	1650 Mar 16 13:25	7°♄54'36	
minimum elong	1649 Apr 11 07:00	21°♄24'42	1°58'25	inferior conj	1650 Mar 23 18:41	3°♄15'14	3°03'44
min. Earth dist.	1649 Apr 14 08:37	19°♄13'12	0.57148 AU	minimum elong	1650 Mar 23 22:15	3°♄07'42	3°03'01
desc. node	1649 Apr 18 12:03	16°♄45'34		min. Earth dist.	1650 Mar 27 05:04	0°♄23'01	0.59148 AU
morning rise	1649 Apr 19 05:54	16°♄25'27			1650 Mar 27 16:46	30°♄	
direct	1649 Apr 24 15:23	15°♄15'22		morning rise	1650 Mar 31 03:17	27°♄41'02	
morning max el	1649 May 08 22:56	22°♄42'58	26°00'26	desc. node	1650 Apr 05 09:05	25°♄57'51	
	1649 May 15 10:20	0°♄		direct	1650 Apr 06 10:24	25°♄54'53	
	1649 Jun 02 15:23	0°♄			1650 Apr 16 14:01	0°♄	
morning set	1649 Jun 06 00:02	6°♄54'42		morning max el	1650 Apr 20 18:47	3°♄39'12	27°10'05
asc. node	1649 Jun 06 22:42	8°♄54'45			1650 May 10 00:18	0°♄	
				morning set	1650 May 21 09:17	21°♄41'41	
superior conj	1649 Jun 13 00:38	22°♄08'50	1°00'20	asc. node	1650 May 24 19:46	29°♄00'41	
minimum elong	1649 Jun 12 22:25	21°♄56'36	0°59'55		1650 May 25 06:43	0°♄	
max. Earth dist.	1649 Jun 13 16:06	23°♄33'42	1.32434 AU	max. Earth dist.	1650 May 28 04:33	6°♄22'14	1.32212 AU
	1649 Jun 16 15:02	0°♄					
evening rise	1649 Jun 20 01:40	7°♄18'08		superior conj	1650 May 28 12:25	7°♄05'34	0°38'12
	1649 Jul 02 02:01	0°♄		minimum elong	1650 May 28 10:49	6°♄56'45	0°37'52
desc. node	1649 Jul 15 11:21	19°♄26'42		evening rise	1650 Jun 04 10:21	22°♄06'21	
evening max el	1649 Jul 21 05:27	25°♄39'47	27°06'12		1650 Jun 08 06:40	0°♄	
	1649 Jul 26 15:01	0°♄			1650 Jun 26 14:03	0°♄	
retrograde	1649 Aug 04 02:46	2°♄54'10		desc. node	1650 Jul 02 08:23	6°♄32'47	
evening set	1649 Aug 11 04:27	0°♄39'05		evening max el	1650 Jul 03 05:11	7°♄23'30	26°13'43
	1649 Aug 12 04:04	30°♄		retrograde	1650 Jul 17 05:01	14°♄34'46	
min. Earth dist.	1649 Aug 14 19:44	27°♄56'12	0.61354 AU	evening set	1650 Jul 23 15:58	12°♄52'30	
inferior conj	1649 Aug 17 23:05	25°♄11'00	-4°-21'-12	min. Earth dist.	1650 Jul 27 17:58	10°♄16'46	0.59297 AU
minimum elong	1649 Aug 18 03:59	25°♄00'12	4°20'16	inferior conj	1650 Jul 31 01:31	7°♄45'13	-4°-50'-55
morning rise	1649 Aug 25 06:25	20°♄16'26		minimum elong	1650 Jul 31 04:01	7°♄40'26	4°50'45
direct	1649 Aug 27 15:36	19°♄53'01		morning rise	1650 Aug 07 19:28	3°♄13'54	
asc. node	1649 Sep 02 21:53	22°♄40'27		direct	1650 Aug 10 06:02	2°♄53'19	
morning max el	1649 Sep 03 16:41	23°♄23'57	17°58'39	morning max el	1650 Aug 18 01:47	6°♄38'57	18°25'03
	1649 Sep 08 22:41	0°♄		asc. node	1650 Aug 20 18:58	9°♄38'45	
morning set	1649 Sep 19 12:32	18°♄19'32			1650 Sep 01 23:20	0°♄	
	1649 Sep 25 22:08	0°♄		morning set	1650 Sep 03 02:11	2°♄08'25	
superior conj	1649 Sep 29 20:34	6°♄59'02	1°13'29	superior conj	1650 Sep 12 05:05	19°♄26'01	1°34'18
minimum elong	1649 Sep 30 01:08	7°♄18'56	1°12'57	minimum elong	1650 Sep 12 08:14	19°♄40'32	1°34'04
max. Earth dist.	1649 Oct 07 09:29	19°♄48'54	1.42300 AU		1650 Sep 18 02:01	0°♄	
desc. node	1649 Oct 11 10:39	26°♄25'14		max. Earth dist.	1650 Sep 19 16:21	2°♄46'38	1.40370 AU
evening rise	1649 Oct 13 16:17	29°♄59'17		evening rise	1650 Sep 24 03:55	10°♄21'30	
	1649 Oct 13 16:27	0°♄		desc. node	1650 Sep 28 07:40	17°♄07'23	
	1649 Nov 02 19:57	0°♄			1650 Oct 06 15:52	0°♄	
greatest brilliancy	1649 Nov 10 10:50	10°♄00'18	-0.3m	evening max el	1650 Oct 28 18:23	28°♄52'17	23°32'36
evening max el	1649 Nov 15 03:54	15°♄18'51	22°12'50		1650 Oct 29 22:20	0°♄	
retrograde	1649 Nov 24 15:24	20°♄57'04		retrograde	1650 Nov 08 08:38	5°♄07'53	
evening set	1649 Nov 29 02:08	19°♄11'06		evening set	1650 Nov 13 08:37	3°♄04'30	
asc. node	1649 Nov 29 21:08	18°♄29'32			1650 Nov 16 06:26	30°♄	
inferior conj	1649 Dec 04 11:38	12°♄49'39	1°31'40	asc. node	1650 Nov 16 18:10	29°♄22'51	
minimum elong	1649 Dec 04 09:41	12°♄56'21	1°30'56	min. Earth dist.	1650 Nov 18 07:34	27°♄18'00	0.67742 AU
min. Earth dist.	1649 Dec 04 10:57	12°♄51'59	0.67781 AU	inferior conj	1650 Nov 18 18:53	26°♄39'18	0°41'35
morning rise	1649 Dec 09 17:05	6°♄36'13		minimum elong	1650 Nov 18 17:55	26°♄42'36	0°41'11
direct	1649 Dec 14 09:30	4°♄39'58		morning rise	1650 Nov 24 03:21	20°♄29'49	
morning max el	1649 Dec 23 22:40	10°♄18'17	22°25'30	direct	1650 Nov 28 05:24	18°♄56'24	
greatest brilliancy	1649 Dec 28 12:29	15°♄25'20	-0.3m	morning max el	1650 Dec 06 15:21	23°♄49'47	21°03'45
desc. node	1650 Jan 07 09:53	28°♄35'08			1650 Dec 11 23:45	0°♄	
	1650 Jan 08 09:42	0°♄		greatest brilliancy	1650 Dec 12 02:15	0°♄07'56	-0.5m
morning set	1650 Jan 26 12:33	27°♄44'19		desc. node	1650 Dec 25 06:54	18°♄38'59	
	1650 Jan 27 21:42	0°♄			1651 Jan 01 19:06	0°♄	
max. Earth dist.	1650 Jan 31 18:05	6°♄25'27	1.40626 AU	morning set	1651 Jan 05 21:01	6°♄19'51	

max. Earth dist.	1651 Jan 13 21:19	19°☿08'02	1.42580 AU	desc. node	1651 Dec 12 03:56	9°♁00'14	
	1651 Jan 20 10:02	0°♁		morning set	1651 Dec 15 16:59	14°♁27'29	
					1651 Dec 25 15:38	0°♁	
superior conj	1651 Jan 20 23:39	0°♁57'56	-2°-3'-54	max. Earth dist.	1651 Dec 27 07:39	2°♁38'53	1.44082 AU
minimum elong	1651 Jan 20 22:17	0°♁52'05	2°03'53				
evening rise	1651 Feb 01 14:07	21°♁21'29		superior conj	1652 Jan 01 07:37	10°♁41'07	-1°-50'-23
	1651 Feb 06 10:09	0°♁		minimum elong	1652 Jan 01 00:55	10°♁13'54	1°49'57
asc. node	1651 Feb 12 17:31	10°♁31'51			1652 Jan 12 22:13	0°♁	
evening max el	1651 Feb 18 08:04	17°♁43'59	18°07'30	evening rise	1652 Jan 14 16:56	3°♁02'04	
retrograde	1651 Feb 24 23:22	21°♁08'32		asc. node	1652 Jan 30 14:32	28°♁27'00	
evening set	1651 Feb 27 14:57	20°♁35'56			1652 Jan 31 22:00	0°♁	
inferior conj	1651 Mar 06 05:34	15°♁35'18	3°36'26	evening max el	1652 Feb 01 20:36	0°♁59'56	18°14'18
minimum elong	1651 Mar 06 07:15	15°♁31'11	3°36'17	retrograde	1652 Feb 08 07:44	4°♁27'13	
min. Earth dist.	1651 Mar 09 08:38	12°♁33'49	0.61284 AU	evening set	1652 Feb 11 04:14	3°♁44'33	
morning rise	1651 Mar 12 20:44	9°♁42'25			1652 Feb 15 20:00	30°♁	
direct	1651 Mar 19 16:28	7°♁22'23		inferior conj	1652 Feb 17 07:49	28°♁23'51	3°44'40
desc. node	1651 Mar 23 06:06	7°♁57'39		minimum elong	1652 Feb 17 07:33	28°♁24'36	3°44'39
morning max el	1651 Apr 02 21:06	15°♁16'00	27°45'38	min. Earth dist.	1652 Feb 19 21:17	25°♁35'58	0.63280 AU
	1651 Apr 14 20:52	0°♁		morning rise	1652 Feb 23 08:57	22°♁20'02	
	1651 May 02 11:57	0°♁		direct	1652 Mar 01 07:33	19°♁37'05	
morning set	1651 May 05 14:31	6°♁14'30		desc. node	1652 Mar 09 03:07	22°♁26'15	
max. Earth dist.	1651 May 11 15:39	19°♁03'59	1.32366 AU	morning max el	1652 Mar 15 04:19	27°♁32'30	27°43'47
asc. node	1651 May 11 16:50	19°♁10'26			1652 Mar 17 12:34	0°♁	
					1652 Apr 07 13:23	0°♁	
superior conj	1651 May 12 23:12	21°♁56'06	0°13'22	morning set	1652 Apr 18 13:23	20°♁25'03	
minimum elong	1651 May 12 22:36	21°♁52'45	0°13'14		1652 Apr 23 05:15	0°♁	
behind sun begin	1651 May 12 19:46	21°♁37'20		max. Earth dist.	1652 Apr 23 21:15	1°♁24'34	1.32930 AU
behind sun end	1651 May 13 01:25	22°♁08'10					
	1651 May 16 15:41	0°♁		superior conj	1652 Apr 26 07:13	6°♁34'10	0°-13'-25
evening rise	1651 May 19 21:33	6°♁59'12		minimum elong	1652 Apr 26 07:52	6°♁37'41	0°13'18
	1651 May 31 23:17	0°♁		behind sun begin	1652 Apr 26 04:56	6°♁21'58	
evening max el	1651 Jun 14 21:58	18°♁22'41	24°54'08	behind sun end	1652 Apr 26 10:47	6°♁53'25	
desc. node	1651 Jun 19 05:23	21°♁58'02		asc. node	1652 Apr 27 13:51	9°♁19'26	
retrograde	1651 Jun 28 21:16	25°♁28'10		evening rise	1652 May 03 09:22	21°♁49'45	
evening set	1651 Jul 04 03:58	24°♁24'36			1652 May 07 08:39	0°♁	
min. Earth dist.	1651 Jul 09 09:20	21°♁37'15	0.57323 AU	evening max el	1652 May 26 11:48	28°♁55'07	23°19'48
inferior conj	1651 Jul 12 08:37	19°♁39'16	-4°-52'-13		1652 May 27 15:43	0°♁	
minimum elong	1651 Jul 12 06:22	19°♁43'02	4°52'06	desc. node	1652 Jun 05 02:24	5°♁05'59	
morning rise	1651 Jul 20 12:34	15°♁30'17		retrograde	1652 Jun 09 01:11	5°♁41'29	
direct	1651 Jul 23 02:28	15°♁11'13		evening set	1652 Jun 12 19:59	5°♁10'05	
morning max el	1651 Aug 01 02:50	19°♁23'53	19°12'25	min. Earth dist.	1652 Jun 19 21:46	1°♁56'11	0.55773 AU
asc. node	1651 Aug 07 16:01	27°♁33'38		inferior conj	1652 Jun 21 19:47	0°♁48'17	-4°-11'-16
	1651 Aug 09 04:54	0°♁		minimum elong	1652 Jun 21 12:49	0°♁58'38	4°09'52
morning set	1651 Aug 18 01:09	16°♁25'14			1652 Jun 23 04:46	30°♁	
	1651 Aug 24 21:14	0°♁		morning rise	1652 Jun 30 08:51	26°♁53'58	
				direct	1652 Jul 03 03:38	26°♁35'06	
superior conj	1651 Aug 26 07:34	2°♁47'20	1°44'20		1652 Jul 11 23:37	0°♁	
minimum elong	1651 Aug 26 08:45	2°♁53'08	1°44'18	morning max el	1652 Jul 13 17:11	1°♁28'35	20°20'59
max. Earth dist.	1651 Sep 01 19:54	15°♁02'31	1.38322 AU	asc. node	1652 Jul 24 13:04	16°♁11'13	
evening rise	1651 Sep 05 15:55	21°♁52'32			1652 Jul 31 18:24	0°♁	
	1651 Sep 10 10:32	0°♁		morning set	1652 Aug 01 06:24	1°♁01'03	
desc. node	1651 Sep 15 04:42	7°♁41'29					
	1651 Sep 30 14:16	0°♁		superior conj	1652 Aug 08 22:53	16°♁47'12	1°45'31
evening max el	1651 Oct 11 06:32	12°♁29'24	24°50'51	minimum elong	1652 Aug 08 22:23	16°♁44'36	1°45'31
retrograde	1651 Oct 22 22:00	19°♁15'52		max. Earth dist.	1652 Aug 14 01:41	26°♁54'13	1.36405 AU
evening set	1651 Oct 28 12:13	16°♁55'47			1652 Aug 15 16:38	0°♁	
min. Earth dist.	1651 Nov 02 02:40	11°♁43'27	0.67376 AU	evening rise	1652 Aug 18 01:37	4°♁25'33	
inferior conj	1651 Nov 03 00:33	10°♁31'05	0°-12'-37	desc. node	1652 Sep 01 01:43	28°♁01'54	
minimum elong	1651 Nov 03 00:52	10°♁30'03	0°12'31		1652 Sep 02 08:38	0°♁	
transit begin	1651 Nov 02 23:07	10°♁35'52		evening max el	1652 Sep 22 18:25	26°♁08'43	26°00'17
transit end	1651 Nov 03 02:38	10°♁24'14			1652 Sep 27 06:04	0°♁	
asc. node	1651 Nov 03 15:12	9°♁42'50		retrograde	1652 Oct 05 06:36	3°♁15'22	
morning rise	1651 Nov 08 14:02	4°♁27'57		evening set	1652 Oct 11 11:05	0°♁41'34	
direct	1651 Nov 12 03:21	3°♁15'08			1652 Oct 12 05:43	30°♁	
morning max el	1651 Nov 19 15:44	7°♁32'15	19°53'33	min. Earth dist.	1652 Oct 15 17:53	26°♁05'08	0.66676 AU
greatest brilliancy	1651 Nov 27 03:00	16°♁42'34	-0.6m	inferior conj	1652 Oct 17 02:49	24°♁21'56	-1°-9'-39
	1651 Dec 06 05:50	0°♁		minimum elong	1652 Oct 17 04:39	24°♁16'13	1°08'54

asc. node	1652 Oct 20 12:15	20°♁26'13		direct	1653 Oct 09 22:55	1°♁44'08	
morning rise	1652 Oct 22 23:08	18°♁27'56		morning max el	1653 Oct 16 12:27	5°♁18'21	18°18'51
direct	1652 Oct 26 01:52	17°♁32'18			1653 Nov 02 08:41	0°♁	
morning max el	1652 Nov 01 23:23	21°♁23'10	18°58'04	morning set	1653 Nov 04 14:20	3°♁38'17	
	1652 Nov 08 20:22	0°♁		desc. node	1653 Nov 14 22:00	20°♁15'17	
morning set	1652 Nov 24 01:44	23°♁20'22					
desc. node	1652 Nov 28 00:58	29°♁33'44		superior conj	1653 Nov 19 17:52	27°♁54'02	0°-31'-51
	1652 Nov 28 07:40	0°♁		minimum elong	1653 Nov 19 13:44	27°♁37'44	0°31'18
max. Earth dist.	1652 Dec 08 23:38	16°♁43'58	1.44952 AU		1653 Nov 21 01:52	0°♁	
				max. Earth dist.	1653 Nov 21 18:46	1°♁06'28	1.45097 AU
superior conj	1652 Dec 10 16:30	19°♁24'54	-1°-17'-59	evening rise	1653 Dec 06 02:46	23°♁33'04	
minimum elong	1652 Dec 10 07:53	18°♁50'57	1°17'04		1653 Dec 10 05:40	0°♁	
	1652 Dec 17 08:41	0°♁		greatest brilliancy	1653 Dec 20 16:30	16°♁04'37	-0.7m
evening rise	1652 Dec 25 21:29	13°♁45'26		evening max el	1653 Dec 29 16:49	27°♁52'41	19°21'44
	1653 Jan 04 22:05	0°♁			1654 Jan 01 00:56	0°♁	
evening max el	1653 Jan 15 08:18	14°♁24'33	18°39'28	asc. node	1654 Jan 03 08:35	1°♁25'10	
asc. node	1653 Jan 16 11:33	15°♁29'39		retrograde	1654 Jan 05 19:56	1°♁58'37	
retrograde	1653 Jan 21 23:43	18°♁06'09		evening set	1654 Jan 09 04:55	0°♁52'04	
evening set	1653 Jan 25 01:49	17°♁12'13			1654 Jan 10 08:22	30°♁	
inferior conj	1653 Jan 30 21:31	11°♁33'13	3°34'55	inferior conj	1654 Jan 14 19:16	24°♁57'01	3°11'55
minimum elong	1653 Jan 30 19:48	11°♁38'21	3°34'43	minimum elong	1654 Jan 14 16:47	25°♁05'00	3°11'24
min. Earth dist.	1653 Feb 01 19:27	9°♁15'04	0.64961 AU	min. Earth dist.	1654 Jan 16 02:13	23°♁17'04	0.66252 AU
morning rise	1653 Feb 05 12:34	5°♁23'11		morning rise	1654 Jan 20 03:53	18°♁43'27	
direct	1653 Feb 12 05:50	2°♁32'14		direct	1654 Jan 26 10:10	15°♁58'05	
desc. node	1653 Feb 24 00:08	8°♁48'07		morning max el	1654 Feb 07 23:11	23°♁23'56	26°04'37
morning max el	1653 Feb 25 13:45	10°♁19'11	27°07'44	desc. node	1654 Feb 10 21:11	26°♁30'54	
	1653 Mar 13 02:46	0°♁			1654 Feb 13 20:24	0°♁	
	1653 Mar 30 23:50	0°♁		morning set	1654 Mar 06 11:08	0°♁	
morning set	1653 Apr 02 02:57	4°♁04'02			1654 Mar 16 03:11	16°♁58'29	
max. Earth dist.	1653 Apr 06 17:44	13°♁14'17	1.33935 AU	max. Earth dist.	1654 Mar 20 02:42	24°♁31'23	1.35399 AU
					1654 Mar 22 21:35	0°♁	
superior conj	1653 Apr 10 10:28	20°♁53'36	0°-41'-9	superior conj	1654 Mar 25 06:28	4°♁46'04	-1°-8'-28
minimum elong	1653 Apr 10 12:32	21°♁04'25	0°40'45	minimum elong	1654 Mar 25 09:50	5°♁03'13	1°07'55
asc. node	1653 Apr 14 10:53	29°♁23'51		asc. node	1654 Apr 01 07:55	19°♁18'41	
	1653 Apr 14 17:42	0°♁		evening rise	1654 Apr 02 03:22	20°♁58'39	
evening rise	1653 Apr 17 19:59	6°♁32'00			1654 Apr 06 15:49	0°♁	
	1653 Apr 30 13:34	0°♁		evening max el	1654 Apr 20 10:25	20°♁37'35	20°23'50
evening max el	1653 May 08 06:04	9°♁31'54	21°45'46	retrograde	1654 May 01 06:32	25°♁52'29	
retrograde	1653 May 20 17:16	15°♁38'48		evening set	1654 May 03 08:22	25°♁41'45	
desc. node	1653 May 22 23:23	15°♁27'21		desc. node	1654 May 09 20:24	23°♁13'11	
evening set	1653 May 23 07:19	15°♁23'49		inferior conj	1654 May 12 11:21	21°♁43'50	0°-45'-46
inferior conj	1653 Jun 01 16:31	11°♁21'30	-2°-43'-10	minimum elong	1654 May 12 09:11	21°♁46'59	0°45'00
minimum elong	1653 Jun 01 09:26	11°♁31'25	2°40'56	min. Earth dist.	1654 May 13 22:33	20°♁52'30	0.55131 AU
min. Earth dist.	1653 Jun 01 09:46	11°♁30'57	0.54983 AU	morning rise	1654 May 21 08:10	17°♁29'54	
morning rise	1653 Jun 10 12:37	7°♁26'52		direct	1654 May 25 03:08	16°♁58'51	
direct	1653 Jun 13 15:53	7°♁05'12		morning max el	1654 Jun 07 14:05	23°♁32'07	23°28'42
morning max el	1653 Jun 25 20:07	12°♁48'56	21°48'35		1654 Jun 13 09:26	0°♁	
	1653 Jul 08 11:58	0°♁		asc. node	1654 Jun 28 07:12	24°♁55'00	
asc. node	1653 Jul 11 10:08	5°♁21'11			1654 Jun 30 18:29	0°♁	
morning set	1653 Jul 16 15:40	15°♁49'32		morning set	1654 Jul 01 03:06	0°♁45'10	
	1653 Jul 23 09:04	0°♁					
superior conj	1653 Jul 23 23:10	1°♁14'01	1°39'35	superior conj	1654 Jul 08 05:27	15°♁58'45	1°27'55
minimum elong	1653 Jul 23 21:29	1°♁05'08	1°39'28	minimum elong	1654 Jul 08 03:08	15°♁46'20	1°27'38
max. Earth dist.	1653 Jul 27 15:19	8°♁48'57	1.34793 AU	max. Earth dist.	1654 Jul 10 14:25	21°♁02'36	1.33561 AU
evening rise	1653 Aug 01 04:21	17°♁48'05			1654 Jul 14 22:13	0°♁	
	1653 Aug 07 19:34	0°♁		evening rise	1654 Jul 15 19:41	1°♁47'44	
desc. node	1653 Aug 18 22:45	18°♁02'04			1654 Jul 31 17:17	0°♁	
	1653 Aug 27 14:54	0°♁		desc. node	1654 Aug 05 19:46	7°♁33'19	
evening max el	1653 Sep 05 06:46	9°♁44'04	26°53'11	evening max el	1654 Aug 18 18:28	23°♁04'04	27°22'14
retrograde	1653 Sep 18 09:47	17°♁00'03			1654 Aug 29 12:38	0°♁	
evening set	1653 Sep 25 03:07	14°♁18'00		retrograde	1654 Sep 01 07:08	0°♁22'12	
min. Earth dist.	1653 Sep 29 02:43	10°♁18'41	0.65628 AU		1654 Sep 03 23:08	30°♁	
inferior conj	1653 Sep 30 23:40	8°♁08'04	-2°-7'-44	evening set	1654 Sep 08 09:36	27°♁40'39	
minimum elong	1653 Oct 01 03:03	7°♁58'13	2°06'25	min. Earth dist.	1654 Sep 12 02:58	24°♁17'07	0.64221 AU
morning rise	1653 Oct 07 04:26	2°♁26'25		inferior conj	1654 Sep 14 12:42	21°♁44'29	-3°-4'-27
asc. node	1653 Oct 07 09:18	2°♁20'30		minimum elong	1654 Sep 14 17:25	21°♁32'01	3°02'53

morning rise	1654 Sep 21 03:15	16°♎18'45		retrograde	1655 Aug 14 22:11	13°♎11'45	
direct	1654 Sep 23 16:00	15°♎46'13		evening set	1655 Aug 22 03:00	10°♎42'42	
asc. node	1654 Sep 24 06:22	15°♎48'04		min. Earth dist.	1655 Aug 25 17:01	7°♎48'39	0.62477 AU
morning max el	1654 Sep 30 04:20	19°♎12'26	17°56'46	inferior conj	1655 Aug 28 15:00	5°♎03'34	-3°-56'-3
	1654 Oct 08 03:47	0°♎		minimum elong	1655 Aug 28 20:16	4°♎51'07	3°54'46
morning set	1654 Oct 17 06:53	15°♎18'07		morning rise	1655 Sep 04 16:11	29°♎57'03	
	1654 Oct 26 00:32	0°♎			1655 Sep 04 12:56	30°♎	
				direct	1655 Sep 07 01:48	29°♎31'10	
superior conj	1654 Oct 30 09:23	7°♎09'08	0°16'09		1655 Sep 09 13:42	0°♎	
minimum elong	1654 Oct 30 11:12	7°♎16'32	0°15'53	asc. node	1655 Sep 11 03:27	0°♎47'29	
behind sun begin	1654 Oct 30 09:17	7°♎08'46		morning max el	1655 Sep 13 20:04	2°♎57'50	17°52'33
behind sun end	1654 Oct 30 13:07	7°♎24'18		morning set	1655 Sep 29 21:25	28°♎00'23	
desc. node	1654 Nov 01 19:04	11°♎01'47			1655 Oct 01 00:10	0°♎	
max. Earth dist.	1654 Nov 04 13:31	15°♎27'02	1.44504 AU				
	1654 Nov 13 20:36	0°♎		superior conj	1655 Oct 11 02:53	17°♎41'18	0°55'58
evening rise	1654 Nov 15 14:50	2°♎42'53		minimum elong	1655 Oct 11 07:25	18°♎00'31	0°55'23
	1654 Dec 03 20:24	0°♎		max. Earth dist.	1655 Oct 18 04:21	29°♎24'40	1.43252 AU
greatest brilliancy	1654 Dec 06 11:55	3°♎39'30	-0.6m		1655 Oct 18 13:04	0°♎	
evening max el	1654 Dec 12 20:28	11°♎22'26	20°19'04	desc. node	1655 Oct 19 16:07	1°♎49'13	
retrograde	1654 Dec 20 17:50	16°♎00'56		evening rise	1655 Oct 25 23:51	11°♎49'31	
asc. node	1654 Dec 21 05:37	15°♎59'35			1655 Nov 06 23:55	0°♎	
evening set	1654 Dec 24 11:17	14°♎40'17		greatest brilliancy	1655 Nov 20 18:44	19°♎08'25	-0.4m
inferior conj	1654 Dec 29 22:25	8°♎32'04	2°38'56	evening max el	1655 Nov 25 18:25	24°♎52'30	21°28'45
minimum elong	1654 Dec 29 19:46	8°♎41'02	2°38'10		1655 Dec 03 07:20	0°♎	
min. Earth dist.	1654 Dec 30 15:56	7°♎32'46	0.67142 AU	retrograde	1655 Dec 04 15:12	0°♎08'55	
morning rise	1655 Jan 04 03:44	2°♎16'52			1655 Dec 05 22:08	30°♎	
	1655 Jan 08 02:25	30°♎		asc. node	1655 Dec 08 02:40	29°♎01'57	
direct	1655 Jan 09 19:53	29°♎46'50		evening set	1655 Dec 08 19:01	28°♎32'39	
	1655 Jan 11 15:06	0°♎		inferior conj	1655 Dec 14 04:40	22°♎14'46	1°58'07
morning max el	1655 Jan 21 07:49	6°♎38'13	24°43'50	minimum elong	1655 Dec 14 02:20	22°♎22'47	1°57'16
desc. node	1655 Jan 28 18:15	15°♎11'38		min. Earth dist.	1655 Dec 14 10:19	21°♎55'13	0.67649 AU
	1655 Feb 08 11:56	0°♎		morning rise	1655 Dec 19 09:22	15°♎59'53	
morning set	1655 Feb 26 08:48	28°♎54'06		direct	1655 Dec 24 10:19	13°♎50'40	
	1655 Feb 26 23:41	0°♎		morning max el	1656 Jan 03 16:56	19°♎57'17	23°15'40
max. Earth dist.	1655 Mar 02 01:37	5°♎33'36	1.37272 AU	greatest brilliancy	1656 Jan 08 21:04	25°♎45'38	-0.2m
					1656 Jan 12 05:38	0°♎	
superior conj	1655 Mar 08 16:07	18°♎03'17	-1°-33'-25	desc. node	1656 Jan 15 15:18	4°♎33'23	
minimum elong	1655 Mar 08 20:18	18°♎23'38	1°32'55		1656 Feb 01 17:04	0°♎	
	1655 Mar 14 16:42	0°♎		morning set	1656 Feb 07 13:36	9°♎34'55	
evening rise	1655 Mar 17 05:16	5°♎03'09		max. Earth dist.	1656 Feb 11 20:27	16°♎53'43	1.39390 AU
asc. node	1655 Mar 19 04:57	8°♎59'20			1656 Feb 19 03:48	0°♎	
	1655 Mar 31 21:29	0°♎					
evening max el	1655 Apr 03 02:19	2°♎22'12	19°20'01	superior conj	1656 Feb 19 11:26	0°♎35'20	-1°-53'-10
retrograde	1655 Apr 12 05:59	6°♎47'35		minimum elong	1656 Feb 19 15:12	0°♎52'47	1°52'54
evening set	1655 Apr 14 08:08	6°♎34'44		evening rise	1656 Feb 28 22:53	18°♎38'16	
inferior conj	1655 Apr 22 18:27	2°♎26'21	1°07'01	asc. node	1656 Mar 05 01:59	28°♎20'31	
minimum elong	1655 Apr 22 21:07	2°♎21'57	1°06'07		1656 Mar 05 23:55	0°♎	
min. Earth dist.	1655 Apr 25 13:18	0°♎36'30	0.56194 AU	evening max el	1656 Mar 16 04:05	14°♎43'43	18°36'12
	1655 Apr 26 12:41	30°♎		retrograde	1656 Mar 23 23:09	18°♎32'34	
desc. node	1655 Apr 26 17:26	29°♎52'48		evening set	1656 Mar 26 06:28	18°♎13'42	
morning rise	1655 May 01 06:08	27°♎39'15		inferior conj	1656 Apr 02 21:48	13°♎46'56	2°31'00
direct	1655 May 06 00:30	26°♎47'16		minimum elong	1656 Apr 03 01:52	13°♎39'05	2°29'57
	1655 May 15 07:14	0°♎		min. Earth dist.	1656 Apr 06 07:21	11°♎10'56	0.57949 AU
morning max el	1655 May 20 04:37	3°♎59'37	25°08'59	morning rise	1656 Apr 10 16:58	8°♎27'16	
	1655 Jun 07 16:21	0°♎		desc. node	1656 Apr 12 14:28	7°♎41'05	
asc. node	1655 Jun 15 04:15	14°♎45'41		direct	1656 Apr 16 12:23	7°♎02'10	
morning set	1655 Jun 15 14:57	15°♎42'02		morning max el	1656 Apr 30 21:27	14°♎39'09	26°33'50
	1655 Jun 22 05:33	0°♎			1656 May 13 04:33	0°♎	
					1656 May 29 19:03	0°♎	
superior conj	1655 Jun 22 15:21	0°♎53'32	1°11'33	morning set	1656 May 30 01:40	0°♎34'44	
minimum elong	1655 Jun 22 12:57	0°♎40'27	1°11'10	asc. node	1656 Jun 01 01:18	4°♎47'45	
max. Earth dist.	1655 Jun 23 21:09	3°♎35'53	1.32727 AU				
evening rise	1655 Jun 29 19:54	16°♎13'16		superior conj	1656 Jun 06 02:58	15°♎51'53	0°51'20
	1655 Jul 06 21:31	0°♎		minimum elong	1656 Jun 06 00:58	15°♎40'49	0°50'57
desc. node	1655 Jul 23 16:48	26°♎23'05		max. Earth dist.	1656 Jun 06 08:26	16°♎21'54	1.32282 AU
	1655 Jul 26 14:47	0°♎			1656 Jun 12 15:33	0°♎	
evening max el	1655 Aug 01 03:19	5°♎54'56	27°21'29	evening rise	1656 Jun 13 02:12	0°♎55'56	

	1656 Jun 28 23:17	0°♁		superior conj	1657 May 21 14:31	0°♁46'35	0°27'58
desc. node	1656 Jul 09 13:47	14°♁14'08		minimum elong	1657 May 21 13:18	0°♁39'52	0°27'43
evening max el	1656 Jul 13 06:58	18°♁05'47	26°47'46	evening rise	1657 May 28 12:10	15°♁46'45	
retrograde	1656 Jul 27 05:55	25°♁19'46			1657 Jun 04 14:35	0°♁	
evening set	1656 Aug 03 02:52	23°♁17'09		evening max el	1657 Jun 25 03:41	29°♁29'50	25°42'44
min. Earth dist.	1656 Aug 06 20:53	20°♁39'33	0.60485 AU		1657 Jun 25 16:32	0°♁	
inferior conj	1656 Aug 10 03:12	17°♁57'23	-4°-36'-26	desc. node	1657 Jun 26 10:47	0°♁41'17	
minimum elong	1656 Aug 10 07:24	17°♁48'39	4°35'51	retrograde	1657 Jul 09 04:16	6°♁39'15	
morning rise	1656 Aug 17 15:10	13°♁12'43		evening set	1657 Jul 15 04:28	5°♁13'44	
direct	1656 Aug 20 00:26	12°♁50'53		min. Earth dist.	1657 Jul 19 16:02	2°♁34'55	0.58427 AU
morning max el	1656 Aug 27 08:33	16°♁26'56	18°07'20	inferior conj	1657 Jul 22 21:42	0°♁15'29	-4°-55'-50
asc. node	1656 Aug 28 00:30	17°♁07'03		minimum elong	1657 Jul 22 22:25	0°♁14'11	4°55'50
	1656 Sep 05 21:24	0°♁			1657 Jul 23 06:17	30°♁	
morning set	1656 Sep 12 04:03	11°♁28'58		morning rise	1657 Jul 30 19:57	25°♁53'42	
				direct	1657 Aug 02 07:38	25°♁33'55	
superior conj	1656 Sep 21 22:33	29°♁30'23	1°23'43	morning max el	1657 Aug 10 14:31	29°♁29'53	18°42'31
minimum elong	1656 Sep 22 02:39	29°♁48'45	1°23'19		1657 Aug 11 02:52	0°♁	
	1656 Sep 22 05:10	0°♁		asc. node	1657 Aug 14 21:33	4°♁30'51	
max. Earth dist.	1656 Sep 29 13:39	12°♁45'08	1.41513 AU	morning set	1657 Aug 26 22:06	25°♁30'54	
evening rise	1656 Oct 04 22:44	21°♁36'32			1657 Aug 29 05:16	0°♁	
desc. node	1656 Oct 05 13:08	22°♁34'26					
	1656 Oct 10 06:06	0°♁		superior conj	1657 Sep 04 15:21	12°♁22'06	1°39'45
	1656 Oct 31 05:02	0°♁		minimum elong	1657 Sep 04 17:40	12°♁33'04	1°39'37
greatest brilliancy	1656 Nov 02 10:48	2°♁47'13	-0.3m	max. Earth dist.	1657 Sep 11 18:31	25°♁23'39	1.39504 AU
evening max el	1656 Nov 07 11:13	8°♁24'28	22°46'31		1657 Sep 14 10:01	0°♁	
retrograde	1656 Nov 17 10:21	14°♁19'31		evening rise	1657 Sep 15 20:49	2°♁28'26	
evening set	1656 Nov 22 02:25	12°♁26'23		desc. node	1657 Sep 22 10:09	13°♁13'48	
asc. node	1656 Nov 23 23:43	10°♁35'43			1657 Oct 03 12:34	0°♁	
min. Earth dist.	1656 Nov 27 06:53	6°♁20'40	0.67805 AU	evening max el	1657 Oct 21 00:37	22°♁00'19	24°06'32
inferior conj	1656 Nov 27 12:05	6°♁02'43	1°11'02	retrograde	1657 Nov 01 01:57	28°♁29'41	
minimum elong	1656 Nov 27 10:31	6°♁08'08	1°10'23	evening set	1657 Nov 06 07:52	26°♁19'16	
	1656 Dec 02 13:54	30°♁		asc. node	1657 Nov 10 20:45	21°♁08'40	
morning rise	1656 Dec 02 18:32	29°♁50'24		min. Earth dist.	1657 Nov 11 03:12	20°♁46'58	0.67630 AU
direct	1656 Dec 07 04:39	28°♁03'55		inferior conj	1657 Nov 11 18:53	19°♁53'57	0°19'02
	1656 Dec 12 07:53	0°♁		minimum elong	1657 Nov 11 18:26	19°♁55'30	0°18'50
morning max el	1656 Dec 16 05:46	3°♁22'46	21°49'25	morning rise	1657 Nov 17 05:15	13°♁46'42	
greatest brilliancy	1656 Dec 21 01:00	8°♁48'21	-0.4m	direct	1657 Nov 21 01:44	12°♁22'10	
desc. node	1657 Jan 01 12:21	24°♁24'27		morning max el	1657 Nov 29 01:32	16°♁58'39	20°32'09
	1657 Jan 05 07:45	0°♁		greatest brilliancy	1657 Dec 05 05:44	24°♁16'47	-0.5m
morning set	1657 Jan 17 13:12	18°♁51'25			1657 Dec 09 10:15	0°♁	
max. Earth dist.	1657 Jan 23 18:54	29°♁01'37	1.41494 AU	desc. node	1657 Dec 19 09:23	14°♁36'40	
	1657 Jan 24 08:54	0°♁		morning set	1657 Dec 27 13:31	27°♁06'27	
					1657 Dec 29 10:06	0°♁	
superior conj	1657 Jan 31 11:20	12°♁09'52	-2°-3'-48	max. Earth dist.	1658 Jan 06 01:23	12°♁06'59	1.43292 AU
minimum elong	1657 Jan 31 12:34	12°♁15'17	2°03'47				
	1657 Feb 10 08:01	0°♁		superior conj	1658 Jan 12 10:46	22°♁35'28	-2°00'-27
evening rise	1657 Feb 11 04:42	1°♁35'26		minimum elong	1658 Jan 12 07:05	22°♁20'10	2°00'20
asc. node	1657 Feb 19 23:01	17°♁15'11			1658 Jan 16 20:13	0°♁	
evening max el	1657 Feb 27 12:32	27°♁33'17	18°12'22	evening rise	1658 Jan 24 18:38	13°♁46'25	
	1657 Mar 02 16:45	0°♁			1658 Feb 03 04:28	0°♁	
retrograde	1657 Mar 06 10:34	1°♁01'54		asc. node	1658 Feb 06 20:03	5°♁35'08	
evening set	1657 Mar 08 23:23	0°♁34'39		evening max el	1658 Feb 11 00:28	10°♁42'03	18°08'06
	1657 Mar 10 07:17	30°♁		retrograde	1658 Feb 17 12:39	14°♁05'52	
inferior conj	1657 Mar 15 21:59	25°♁46'31	3°21'04	evening set	1658 Feb 20 06:26	13°♁28'56	
minimum elong	1657 Mar 16 00:50	25°♁40'06	3°20'37	inferior conj	1658 Feb 26 15:55	8°♁19'30	3°42'27
min. Earth dist.	1657 Mar 19 06:34	22°♁47'02	0.60056 AU	minimum elong	1658 Feb 26 16:44	8°♁17'25	3°42'25
morning rise	1657 Mar 22 22:51	20°♁03'24		min. Earth dist.	1658 Mar 01 13:38	5°♁21'36	0.62169 AU
direct	1657 Mar 29 12:49	18°♁01'33		morning rise	1658 Mar 05 00:40	2°♁21'33	
desc. node	1657 Mar 30 11:30	18°♁03'59			1658 Mar 10 03:58	30°♁	
morning max el	1657 Apr 12 19:50	25°♁51'03	27°29'44	direct	1658 Mar 11 22:53	29°♁50'10	
	1657 Apr 16 16:40	0°♁			1658 Mar 13 18:48	0°♁	
	1657 May 06 14:16	0°♁		desc. node	1658 Mar 17 08:32	1°♁11'10	
morning set	1657 May 14 09:24	15°♁16'04		morning max el	1658 Mar 26 00:19	7°♁44'36	27°49'19
asc. node	1657 May 18 22:19	24°♁55'32			1658 Apr 12 01:06	0°♁	
max. Earth dist.	1657 May 20 20:33	29°♁07'59	1.32225 AU	morning set	1658 Apr 28 12:11	29°♁39'44	
	1657 May 21 06:02	0°♁			1658 Apr 28 16:10	0°♁	
				max. Earth dist.	1658 May 04 05:50	11°♁42'02	1.32560 AU

superior conj	1658 May 06 00:19	15°♄32'05	0°02'12	max. Earth dist.	1659 Apr 17 08:13	23°♃51'14	1.33306 AU
minimum elong	1658 May 06 00:13	15°♄31'30	0°02'11				
behind sun begin	1658 May 05 19:06	15°♄03'43		superior conj	1659 Apr 20 06:33	0°♄02'31	0°-25'-8
behind sun end	1658 May 06 05:20	15°♄59'19		minimum elong	1659 Apr 20 07:48	0°♄09'10	0°24'54
asc. node	1658 May 05 19:20	15°♄04'59			1659 Apr 20 06:05	0°♄	
	1658 May 12 16:29	0°♄		asc. node	1659 Apr 22 16:24	5°♄12'23	
evening rise	1658 May 12 23:51	0°♄39'09		evening rise	1659 Apr 27 11:24	15°♄26'47	
	1658 May 29 05:55	0°♄			1659 May 04 19:05	0°♄	
evening max el	1658 Jun 06 18:34	10°♄14'06	24°14'53	evening max el	1659 May 19 09:14	20°♄43'44	22°38'52
desc. node	1658 Jun 13 07:48	15°♄12'15		desc. node	1659 May 31 04:48	27°♄11'54	
retrograde	1658 Jun 20 14:51	17°♄12'48		retrograde	1659 Jun 01 13:20	27°♄16'06	
evening set	1658 Jun 25 06:41	16°♄24'32		evening set	1659 Jun 04 18:25	26°♄53'24	
min. Earth dist.	1658 Jul 01 05:28	13°♄27'33	0.56594 AU	min. Earth dist.	1659 Jun 12 17:10	23°♄24'46	0.55326 AU
inferior conj	1658 Jul 03 20:03	11°♄49'36	-4°-40'-41	inferior conj	1659 Jun 13 23:56	22°♄40'52	-3°-39'-11
minimum elong	1658 Jul 03 15:30	11°♄56'46	4°40'09	minimum elong	1659 Jun 13 16:08	22°♄52'00	3°37'12
morning rise	1658 Jul 12 03:57	7°♄48'04		morning rise	1659 Jun 22 16:29	18°♄49'09	
direct	1658 Jul 14 19:59	7°♄29'06		direct	1659 Jun 25 14:17	18°♄29'40	
morning max el	1658 Jul 24 11:04	11°♄57'22	19°39'04	morning max el	1659 Jul 06 20:31	23°♄43'13	20°56'20
asc. node	1658 Aug 01 18:35	22°♄44'44			1659 Jul 12 08:46	0°♄	
	1658 Aug 05 21:46	0°♄		asc. node	1659 Jul 19 15:38	11°♄37'10	
morning set	1658 Aug 11 00:02	9°♄56'23		morning set	1659 Jul 26 07:16	24°♄38'36	
					1659 Jul 28 21:14	0°♄	
superior conj	1658 Aug 18 23:47	26°♄00'46	1°45'49	superior conj	1659 Aug 02 19:23	10°♄13'46	1°43'48
minimum elong	1658 Aug 19 00:12	26°♄02'50	1°45'48	minimum elong	1659 Aug 02 18:18	10°♄08'12	1°43'45
	1658 Aug 21 00:37	0°♄		max. Earth dist.	1659 Aug 07 07:30	19°♄18'34	1.35668 AU
max. Earth dist.	1658 Aug 24 22:43	7°♄27'47	1.37480 AU	evening rise	1659 Aug 11 12:02	27°♄22'05	
evening rise	1658 Aug 28 18:31	14°♄26'30			1659 Aug 12 22:02	0°♄	
	1658 Sep 06 22:57	0°♄		desc. node	1659 Aug 27 04:11	23°♄55'32	
desc. node	1658 Sep 09 07:09	3°♄42'36			1659 Aug 31 06:56	0°♄	
	1658 Sep 28 07:08	0°♄		evening max el	1659 Sep 16 00:32	19°♄17'29	26°25'11
evening max el	1658 Oct 03 12:35	5°♄39'10	25°21'57	retrograde	1659 Sep 28 19:35	26°♄29'31	
retrograde	1658 Oct 15 13:12	12°♄34'48		evening set	1659 Oct 05 05:58	23°♄50'59	
evening set	1658 Oct 21 09:41	10°♄08'21		min. Earth dist.	1659 Oct 09 09:32	19°♄30'37	0.66275 AU
min. Earth dist.	1658 Oct 25 20:50	5°♄11'18	0.67124 AU	inferior conj	1659 Oct 10 23:34	17°♄34'58	-1°-34'-16
inferior conj	1658 Oct 26 23:20	3°♄45'32	0°-36'-34	minimum elong	1659 Oct 11 02:04	17°♄27'23	1°33'15
minimum elong	1658 Oct 27 00:16	3°♄42'30	0°36'10	asc. node	1659 Oct 15 14:50	12°♄40'43	
asc. node	1658 Oct 28 17:47	1°♄31'27		morning rise	1659 Oct 16 23:19	11°♄46'08	
	1658 Oct 30 01:48	30°♄		direct	1659 Oct 19 22:13	10°♄56'44	
morning rise	1658 Nov 01 15:31	27°♄46'05		morning max el	1659 Oct 26 15:33	14°♄39'16	18°39'25
direct	1658 Nov 05 00:10	26°♄40'56			1659 Nov 06 21:56	0°♄	
	1658 Nov 11 10:35	0°♄		morning set	1659 Nov 16 07:57	14°♄53'22	
morning max el	1658 Nov 12 05:11	0°♄45'09	19°28'05	desc. node	1659 Nov 23 03:28	25°♄41'14	
greatest brilliancy	1658 Nov 21 01:57	12°♄01'56	-0.7m		1659 Nov 25 21:07	0°♄	
	1658 Dec 02 23:49	0°♄		superior conj	1659 Dec 02 10:56	10°♄20'07	0°-59'-29
morning set	1658 Dec 06 12:06	5°♄25'44		minimum elong	1659 Dec 02 03:36	9°♄51'16	0°58'35
desc. node	1658 Dec 06 06:24	5°♄03'38		max. Earth dist.	1659 Dec 02 08:54	10°♄12'08	1.45107 AU
max. Earth dist.	1658 Dec 19 15:08	25°♄57'05	1.44544 AU		1659 Dec 14 22:00	0°♄	
	1658 Dec 22 04:19	0°♄		evening rise	1659 Dec 18 06:57	5°♄22'32	
superior conj	1658 Dec 23 07:48	1°♄49'41	-1°-38'-51		1660 Jan 03 01:05	0°♄	
minimum elong	1658 Dec 22 23:31	1°♄16'36	1°38'09	evening max el	1660 Jan 08 23:26	7°♄27'58	18°55'21
evening rise	1659 Jan 06 12:22	25°♄03'13		asc. node	1660 Jan 11 14:07	9°♄45'11	
	1659 Jan 09 11:17	0°♄		retrograde	1660 Jan 15 19:08	11°♄19'12	
asc. node	1659 Jan 24 17:05	23°♄09'21		evening set	1660 Jan 18 23:54	10°♄20'10	
evening max el	1659 Jan 25 12:55	24°♄01'55	18°22'45	inferior conj	1660 Jan 24 17:02	4°♄33'49	3°26'32
retrograde	1659 Feb 01 00:51	27°♄34'00		minimum elong	1660 Jan 24 14:55	4°♄40'23	3°26'13
evening set	1659 Feb 03 23:39	26°♄46'33		min. Earth dist.	1660 Jan 26 08:25	2°♄31'13	0.65560 AU
inferior conj	1659 Feb 09 23:30	21°♄17'29	3°42'21		1660 Jan 28 12:38	30°♄	
minimum elong	1659 Feb 09 22:32	21°♄20'14	3°42'19	morning rise	1660 Jan 30 04:55	28°♄21'42	
min. Earth dist.	1659 Feb 12 06:15	18°♄41'05	0.64043 AU	direct	1660 Feb 05 17:53	25°♄31'43	
morning rise	1659 Feb 15 19:53	15°♄10'34			1660 Feb 15 07:36	0°♄	
direct	1659 Feb 22 16:56	12°♄22'48		morning max el	1660 Feb 18 18:53	3°♄12'02	26°43'37
desc. node	1659 Mar 04 05:34	16°♄32'01		desc. node	1660 Feb 19 02:37	3°♄31'36	
morning max el	1659 Mar 08 08:58	20°♄15'29	27°32'19		1660 Mar 10 01:36	0°♄	
	1659 Mar 16 18:12	0°♄		morning set	1660 Mar 25 16:00	26°♄59'27	
	1659 Apr 05 01:47	0°♄			1660 Mar 27 05:38	0°♄	
morning set	1659 Apr 12 07:31	13°♄37'44					

max. Earth dist.	1660 Mar 30 00:01	5°♃26'24	1.34500 AU	desc. node	1661 Feb 04 23:42	21°♁41'48	
					1661 Feb 11 11:39	0°♁	
superior conj	1660 Apr 03 07:03	14°♃11'01	0°-52'-54		1661 Mar 02 23:36	0°♁	
minimum elong	1660 Apr 03 09:42	14°♃24'46	0°52'25	morning set	1661 Mar 08 09:08	9°♁31'42	
asc. node	1660 Apr 08 13:27	25°♃12'59		max. Earth dist.	1661 Mar 12 03:58	16°♁32'55	1.36148 AU
evening rise	1660 Apr 10 20:55	0°♁02'54					
	1660 Apr 10 20:22	0°♁		superior conj	1661 Mar 17 23:09	27°♁50'14	-1°-19'-30
	1660 Apr 28 20:08	0°♁		minimum elong	1661 Mar 18 02:58	28°♁09'17	1°18'56
evening max el	1660 Apr 30 07:13	1°♁29'58	21°08'58		1661 Mar 19 01:03	0°♃	
retrograde	1660 May 12 03:15	7°♁16'08		evening rise	1661 Mar 26 02:19	14°♃21'13	
evening set	1660 May 14 09:43	7°♁04'09		asc. node	1661 Mar 26 10:30	15°♃02'36	
desc. node	1660 May 17 01:49	6°♁21'43			1661 Apr 03 06:55	0°♁	
inferior conj	1660 May 23 18:03	3°♁05'36	-1°-55'-3	evening max el	1661 Apr 12 16:42	12°♁52'49	19°54'21
minimum elong	1660 May 23 12:42	3°♁13'09	1°53'12	retrograde	1661 Apr 22 19:06	17°♁45'09	
min. Earth dist.	1660 May 24 05:37	2°♁49'17	0.54917 AU	evening set	1661 Apr 24 19:58	17°♁34'10	
	1660 May 29 19:26	30°♁		inferior conj	1661 May 03 16:42	13°♁33'45	0°04'27
morning rise	1660 Jun 01 15:29	29°♁04'52		minimum elong	1661 May 03 16:54	13°♁33'27	0°04'23
direct	1660 Jun 05 00:00	28°♁40'32		transit begin	1661 May 03 13:05	13°♁39'17	
	1660 Jun 10 22:12	0°♁		transit end	1661 May 03 20:43	13°♁27'36	
morning max el	1660 Jun 17 19:19	4°♁46'37	22°30'21	desc. node	1661 May 03 22:51	13°♁24'22	
	1660 Jul 05 00:48	0°♁		min. Earth dist.	1661 May 05 19:28	12°♁16'27	0.55480 AU
asc. node	1660 Jul 05 12:42	0°♁57'52		morning rise	1661 May 12 10:47	9°♁06'16	
morning set	1660 Jul 09 17:39	9°♁30'29		direct	1661 May 16 15:08	8°♁27'43	
				morning max el	1661 May 30 11:04	15°♁20'01	24°12'07
superior conj	1660 Jul 16 22:33	24°♁49'14	1°35'17		1661 Jun 11 01:54	0°♁	
minimum elong	1660 Jul 16 20:32	24°♁38'31	1°35'05	asc. node	1661 Jun 22 09:46	20°♁39'26	
	1660 Jul 19 09:42	0°♁		morning set	1661 Jun 24 05:27	24°♁26'53	
max. Earth dist.	1660 Jul 20 00:50	1°♁18'30	1.34211 AU		1661 Jun 26 19:52	0°♁	
evening rise	1660 Jul 24 20:37	11°♁01'36					
	1660 Aug 04 07:05	0°♁		superior conj	1661 Jul 01 06:38	9°♁38'54	1°21'29
desc. node	1660 Aug 13 01:12	13°♁44'25		minimum elong	1661 Jul 01 04:13	9°♁25'51	1°21'10
	1660 Aug 25 18:51	0°♁		max. Earth dist.	1661 Jul 03 03:22	13°♁40'03	1.33159 AU
evening max el	1660 Aug 28 12:36	2°♁46'51	27°08'50	evening rise	1661 Jul 08 16:08	25°♁13'27	
retrograde	1660 Sep 10 20:36	10°♁05'24			1661 Jul 11 01:45	0°♁	
evening set	1660 Sep 17 18:20	7°♁22'07			1661 Jul 28 18:54	0°♁	
min. Earth dist.	1660 Sep 21 14:59	3°♁38'25	0.65068 AU	desc. node	1661 Jul 30 22:12	2°♁59'18	
inferior conj	1660 Sep 23 17:24	1°♁17'16	-2°-32'-8	evening max el	1661 Aug 10 23:30	15°♁56'04	27°25'54
minimum elong	1660 Sep 23 21:24	1°♁06'03	2°30'41	retrograde	1661 Aug 24 15:26	23°♁13'57	
	1660 Sep 24 21:20	30°♁		evening set	1661 Aug 31 19:43	20°♁36'23	
morning rise	1660 Sep 30 02:12	25°♁42'05		min. Earth dist.	1661 Sep 04 11:13	17°♁26'09	0.63513 AU
asc. node	1660 Oct 01 11:53	25°♁12'54		inferior conj	1661 Sep 07 02:14	14°♁46'53	-3°-27'-16
direct	1660 Oct 02 17:49	25°♁04'31		minimum elong	1661 Sep 07 07:19	14°♁34'01	3°25'47
morning max el	1660 Oct 09 06:11	28°♁34'38	18°07'20	morning rise	1661 Sep 13 21:13	9°♁28'38	
	1660 Oct 10 13:56	0°♁		direct	1661 Sep 16 08:13	8°♁59'20	
morning set	1660 Oct 27 08:55	25°♁47'23		asc. node	1661 Sep 18 08:58	9°♁19'42	
	1660 Oct 29 22:00	0°♁		morning max el	1661 Sep 22 22:18	12°♁25'03	17°52'39
desc. node	1660 Nov 09 00:32	16°♁25'13			1661 Oct 04 21:52	0°♁	
				morning set	1661 Oct 09 11:34	7°♁55'32	
superior conj	1660 Nov 10 16:04	19°♁02'48	0°-11'-1				
minimum elong	1660 Nov 10 14:40	18°♁57'15	0°10'51	superior conj	1661 Oct 21 17:50	28°♁47'56	0°34'25
behind sun begin	1660 Nov 10 06:33	18°♁24'57		minimum elong	1661 Oct 21 21:17	29°♁02'11	0°33'56
behind sun end	1660 Nov 10 22:47	19°♁29'32			1661 Oct 22 11:19	0°♁	
max. Earth dist.	1660 Nov 14 03:40	24°♁33'45	1.44927 AU	desc. node	1661 Oct 26 21:33	7°♁12'00	
	1660 Nov 17 14:45	0°♁		max. Earth dist.	1661 Oct 27 20:49	8°♁45'22	1.44043 AU
evening rise	1660 Nov 27 03:38	14°♁50'28		evening rise	1661 Nov 06 12:09	23°♁52'54	
	1660 Dec 06 23:50	0°♁			1661 Nov 10 12:02	0°♁	
greatest brilliancy	1660 Dec 14 14:47	11°♁18'31	-0.6m	greatest brilliancy	1661 Nov 29 16:08	27°♁47'21	-0.5m
evening max el	1660 Dec 22 06:04	20°♁57'14	19°44'25		1661 Dec 01 09:51	0°♁	
asc. node	1660 Dec 28 11:09	25°♁08'09		evening max el	1661 Dec 05 07:24	4°♁27'18	20°47'32
retrograde	1660 Dec 29 16:23	25°♁16'22		retrograde	1661 Dec 13 14:09	9°♁21'09	
evening set	1661 Jan 02 04:39	24°♁04'15		asc. node	1661 Dec 15 08:11	9°♁03'58	
inferior conj	1661 Jan 07 17:25	18°♁03'21	2°59'02	evening set	1661 Dec 17 11:47	7°♁54'07	
minimum elong	1661 Jan 07 14:48	18°♁12'00	2°58'23	inferior conj	1661 Dec 22 22:06	1°♁41'39	2°22'30
min. Earth dist.	1661 Jan 08 18:33	16°♁40'17	0.66678 AU	minimum elong	1661 Dec 22 19:32	1°♁50'26	2°21'40
morning rise	1661 Jan 13 00:15	11°♁48'39		min. Earth dist.	1661 Dec 23 10:29	0°♁59'18	0.67404 AU
direct	1661 Jan 19 00:49	9°♁08'34			1661 Dec 24 03:58	30°♁	
morning max el	1661 Jan 31 03:57	16°♁22'01	25°31'44	morning rise	1661 Dec 28 02:51	25°♁26'27	

direct	1662 Jan 02 12:43	23°♁04'34		morning rise	1662 Dec 12 10:15	9°♁12'50	
morning max el	1662 Jan 13 12:13	29°♁37'25	24°06'39	direct	1662 Dec 17 04:51	7°♁13'17	
	1662 Jan 13 21:06	0°♁		morning max el	1662 Dec 26 22:28	12°♁58'44	22°38'21
desc. node	1662 Jan 22 20:45	10°♁41'31		greatest brilliancy	1662 Dec 31 12:31	18°♁05'53	-0.3m
	1662 Feb 05 08:12	0°♁			1663 Jan 09 13:01	0°♁	
morning set	1662 Feb 18 04:55	20°♁57'10		desc. node	1663 Jan 09 17:48	0°♁16'48	
max. Earth dist.	1662 Feb 21 23:59	27°♁37'32	1.38160 AU		1663 Jan 29 06:22	0°♁	
	1662 Feb 23 07:36	0°♁		morning set	1663 Jan 29 21:27	1°♁01'43	
				max. Earth dist.	1663 Feb 03 20:07	9°♁17'43	1.40312 AU
superior conj	1662 Mar 01 03:16	10°♁49'55	-1°-42'-39				
minimum elong	1662 Mar 01 07:28	11°♁09'58	1°42'12	superior conj	1663 Feb 11 14:59	22°♁59'01	-1°-59'-3
evening rise	1662 Mar 10 01:03	28°♁14'03		minimum elong	1663 Feb 11 17:59	23°♁12'37	1°58'55
	1662 Mar 10 22:38	0°♁			1663 Feb 15 10:39	0°♁	
asc. node	1662 Mar 13 07:31	4°♁35'36		evening rise	1663 Feb 21 14:05	11°♁34'07	
evening max el	1662 Mar 26 13:12	24°♁54'07	18°58'52	asc. node	1663 Feb 28 04:32	23°♁46'18	
retrograde	1662 Apr 04 01:20	29°♁01'31			1663 Mar 03 22:21	0°♁	
evening set	1662 Apr 06 05:42	28°♁46'21		evening max el	1663 Mar 09 18:07	7°♁28'09	18°23'31
inferior conj	1662 Apr 14 07:52	24°♁30'43	1°46'50	retrograde	1663 Mar 17 02:47	11°♁06'34	
minimum elong	1662 Apr 14 11:33	24°♁24'13	1°45'42	evening set	1663 Mar 19 12:31	10°♁44'18	
min. Earth dist.	1662 Apr 17 11:09	22°♁19'11	0.56885 AU	inferior conj	1663 Mar 26 20:17	6°♁08'07	2°56'12
desc. node	1662 Apr 20 19:53	20°♁17'14		minimum elong	1663 Mar 27 00:03	6°♁00'21	2°55'22
morning rise	1662 Apr 22 13:11	19°♁29'23		min. Earth dist.	1663 Mar 30 06:50	3°♁19'19	0.58830 AU
direct	1662 Apr 27 18:50	18°♁24'21		morning rise	1663 Apr 03 07:37	0°♁37'15	
morning max el	1662 May 12 01:42	25°♁48'06	25°47'47		1663 Apr 04 14:31	30°♁	
	1662 May 16 00:22	0°♁		desc. node	1663 Apr 07 16:56	29°♁05'08	
	1662 Jun 04 02:37	0°♁		direct	1663 Apr 09 11:54	28°♁56'40	
morning set	1662 Jun 08 17:01	9°♁22'12			1663 Apr 14 12:35	0°♁	
asc. node	1662 Jun 09 06:49	10°♁35'12		morning max el	1663 Apr 23 20:44	6°♁39'22	27°01'48
					1663 May 11 06:41	0°♁	
superior conj	1662 Jun 15 17:28	24°♁35'25	1°03'23	morning set	1663 May 24 02:41	24°♁10'41	
minimum elong	1662 Jun 15 15:10	24°♁22'52	1°03'00		1663 May 26 20:26	0°♁	
max. Earth dist.	1662 Jun 16 12:35	26°♁20'12	1.32497 AU	asc. node	1663 May 27 03:50	0°♁39'57	
	1662 Jun 18 04:53	0°♁					
evening rise	1662 Jun 22 19:16	9°♁47'08		superior conj	1663 May 31 05:14	9°♁32'29	0°41'45
	1662 Jul 03 09:26	0°♁		minimum elong	1663 May 31 03:31	9°♁23'00	0°41'25
desc. node	1662 Jul 17 19:12	21°♁26'15		max. Earth dist.	1663 May 31 00:52	9°♁08'27	1.32215 AU
evening max el	1662 Jul 24 06:40	28°♁31'40	27°11'17	evening rise	1663 Jun 07 03:23	24°♁33'50	
	1662 Jul 25 21:36	0°♁			1663 Jun 09 18:27	0°♁	
retrograde	1662 Aug 07 03:15	5°♁46'25			1663 Jun 27 09:24	0°♁	
evening set	1662 Aug 14 06:12	3°♁27'18		desc. node	1663 Jul 04 16:12	8°♁44'51	
min. Earth dist.	1662 Aug 17 20:53	0°♁42'04	0.61652 AU	evening max el	1663 Jul 06 07:22	10°♁22'06	26°23'31
	1662 Aug 18 16:07	30°♁		retrograde	1663 Jul 20 07:01	17°♁34'16	
inferior conj	1662 Aug 20 23:00	27°♁56'24	-4°-15'-4	evening set	1663 Jul 26 21:03	15°♁46'17	
minimum elong	1662 Aug 21 04:03	27°♁45'03	4°14'02	min. Earth dist.	1663 Jul 30 20:23	13°♁10'50	0.59603 AU
morning rise	1662 Aug 28 04:44	22°♁58'38		inferior conj	1663 Aug 03 04:02	10°♁35'47	-4°-48'00
direct	1662 Aug 30 13:59	22°♁34'37		minimum elong	1663 Aug 03 07:04	10°♁29'51	4°47'44
asc. node	1662 Sep 05 06:02	24°♁54'46		morning rise	1663 Aug 10 20:29	6°♁01'07	
morning max el	1662 Sep 06 12:57	26°♁04'02	17°56'25	direct	1663 Aug 13 06:37	5°♁40'16	
	1662 Sep 09 21:45	0°♁		morning max el	1663 Aug 20 23:03	9°♁22'58	18°19'49
morning set	1662 Sep 22 09:38	20°♁59'38		asc. node	1663 Aug 23 03:05	11°♁43'16	
	1662 Sep 27 08:38	0°♁			1663 Sep 03 09:45	0°♁	
				morning set	1663 Sep 05 21:37	4°♁43'30	
superior conj	1662 Oct 02 22:53	9°♁53'51	1°09'16				
minimum elong	1662 Oct 03 03:30	10°♁13'55	1°08'43	superior conj	1663 Sep 15 04:16	22°♁11'37	1°31'52
max. Earth dist.	1662 Oct 10 09:56	22°♁30'42	1.42562 AU	minimum elong	1663 Sep 15 07:41	22°♁27'17	1°31'35
desc. node	1662 Oct 13 18:33	27°♁58'44			1663 Sep 19 12:28	0°♁	
	1662 Oct 15 00:49	0°♁		max. Earth dist.	1663 Sep 22 17:24	5°♁34'25	1.40672 AU
evening rise	1662 Oct 17 01:21	3°♁12'30		evening rise	1663 Sep 27 09:30	13°♁24'56	
	1662 Nov 03 22:48	0°♁		desc. node	1663 Sep 30 15:33	18°♁41'35	
greatest brilliancy	1662 Nov 13 09:35	12°♁37'04	-0.3m		1663 Oct 07 22:06	0°♁	
evening max el	1662 Nov 18 03:07	17°♁58'20	22°01'10		1663 Oct 30 07:02	0°♁	
retrograde	1662 Nov 27 10:39	23°♁30'49		evening max el	1663 Oct 31 18:03	1°♁30'52	23°20'36
evening set	1662 Dec 01 19:35	21°♁47'19		retrograde	1663 Nov 11 04:27	7°♁41'32	
asc. node	1662 Dec 02 05:14	21°♁27'08		evening set	1663 Nov 16 02:20	5°♁40'43	
inferior conj	1662 Dec 07 05:03	15°♁26'38	1°38'50	asc. node	1663 Nov 19 02:17	2°♁29'40	
minimum elong	1662 Dec 07 03:00	15°♁33'44	1°38'03		1663 Nov 20 23:29	30°♁	
min. Earth dist.	1662 Dec 07 05:58	15°♁23'29	0.67760 AU	min. Earth dist.	1663 Nov 21 02:38	29°♁49'12	0.67770 AU

inferior conj	1663 Nov 21 12:24	29°♍15'41	0°49'29	transit begin	1664 Nov 04 15:53	13°♍15'38	
minimum elong	1663 Nov 21 11:16	29°♍19'35	0°49'01	transit end	1664 Nov 04 21:11	12°♍57'56	
morning rise	1663 Nov 26 20:17	23°♍05'23		asc. node	1664 Nov 04 23:20	12°♍50'48	
direct	1663 Dec 01 00:20	21°♍28'42		morning rise	1664 Nov 10 07:02	7°♍02'45	
morning max el	1663 Dec 09 14:07	26°♍28'34	21°15'12	direct	1664 Nov 13 22:08	5°♍47'00	
	1663 Dec 12 18:59	0°♁		morning max el	1664 Nov 21 13:17	10°♍08'56	20°03'03
greatest brilliancy	1663 Dec 14 20:11	2°♁30'15	-0.4m	greatest brilliancy	1664 Nov 28 15:38	18°♍46'27	-0.6m
desc. node	1663 Dec 27 14:49	20°♁17'16			1664 Dec 06 11:15	0°♁	
	1664 Jan 03 02:02	0°♁		desc. node	1664 Dec 13 11:50	10°♁35'56	
morning set	1664 Jan 09 09:30	9°♁46'38		morning set	1664 Dec 18 05:42	17°♁53'09	
max. Earth dist.	1664 Jan 16 21:56	21°♁50'48	1.42308 AU		1664 Dec 25 23:55	0°♁	
	1664 Jan 21 19:29	0°♁		max. Earth dist.	1664 Dec 29 07:04	5°♁14'15	1.43894 AU
superior conj	1664 Jan 24 04:58	4°♁04'45	-2°-4'-22	superior conj	1665 Jan 03 16:54	13°♁58'26	-1°-53'-40
minimum elong	1664 Jan 24 04:21	4°♁02'06	2°04'24	minimum elong	1665 Jan 03 10:55	13°♁34'02	1°53'19
evening rise	1664 Feb 04 13:42	24°♁12'46			1665 Jan 13 07:16	0°♁	
	1664 Feb 07 18:37	0°♁		evening rise	1665 Jan 16 19:30	6°♁00'56	
asc. node	1664 Feb 15 01:33	12°♁27'27			1665 Jan 31 13:38	0°♁	
evening max el	1664 Feb 21 04:23	20°♁26'41	18°08'11	asc. node	1665 Jan 31 22:36	0°♁29'22	
retrograde	1664 Feb 27 21:09	23°♁51'55		evening max el	1665 Feb 03 16:52	3°♁40'48	18°12'10
evening set	1664 Mar 01 11:59	23°♁20'49		retrograde	1665 Feb 10 03:59	7°♁06'45	
inferior conj	1664 Mar 08 04:33	18°♁23'29	3°33'11	evening set	1665 Feb 12 23:47	6°♁25'36	
minimum elong	1664 Mar 08 06:34	18°♁18'42	3°32'58	inferior conj	1665 Feb 19 04:47	1°♁07'54	3°44'39
min. Earth dist.	1664 Mar 11 09:19	15°♁21'38	0.60964 AU	minimum elong	1665 Feb 19 04:47	1°♁07'54	3°44'39
morning rise	1664 Mar 14 22:08	12°♁32'45			1665 Feb 20 05:49	30°♁	
direct	1664 Mar 21 16:39	10°♁17'04		min. Earth dist.	1665 Feb 21 20:32	28°♁16'46	0.62998 AU
desc. node	1664 Mar 24 13:58	10°♁40'09		morning rise	1665 Feb 25 07:46	25°♁05'30	
morning max el	1664 Apr 04 22:08	18°♁10'13	27°42'44	direct	1665 Mar 04 06:36	22°♁24'58	
	1664 Apr 14 20:12	0°♁		desc. node	1665 Mar 11 11:01	24°♁48'15	
	1664 May 02 23:11	0°♁			1665 Mar 17 20:21	0°♁	
morning set	1664 May 07 08:39	8°♁46'17		morning max el	1665 Mar 18 04:39	0°♁20'31	27°46'22
asc. node	1664 May 13 00:51	20°♁49'23			1665 Apr 08 20:59	0°♁	
max. Earth dist.	1664 May 13 12:20	21°♁51'51	1.32316 AU	morning set	1665 Apr 21 08:37	23°♁00'22	
					1665 Apr 24 18:27	0°♁	
superior conj	1664 May 14 16:18	24°♁24'37	0°17'18	max. Earth dist.	1665 Apr 26 18:58	4°♁15'57	1.32819 AU
minimum elong	1664 May 14 15:31	24°♁20'20	0°17'08				
	1664 May 17 05:30	0°♁		superior conj	1665 Apr 29 00:50	9°♁04'47	0°-9'-14
evening rise	1664 May 21 14:21	9°♁26'34		minimum elong	1665 Apr 29 01:17	9°♁07'12	0°09'11
	1664 Jun 01 05:00	0°♁		behind sun begin	1665 Apr 28 20:58	8°♁43'56	
evening max el	1664 Jun 17 01:01	21°♁27'08	25°07'19	behind sun end	1665 Apr 29 05:35	9°♁30'28	
desc. node	1664 Jun 20 13:13	24°♁27'30		asc. node	1665 Apr 29 21:53	10°♁58'34	
retrograde	1664 Jul 01 01:00	28°♁34'10		evening rise	1665 May 06 02:11	24°♁17'42	
evening set	1664 Jul 06 12:32	27°♁24'59			1665 May 08 20:03	0°♁	
min. Earth dist.	1664 Jul 11 12:41	24°♁40'18	0.57598 AU		1665 May 27 15:29	0°♁	
inferior conj	1664 Jul 14 14:08	22°♁36'07	-4°-54'-31	evening max el	1665 May 29 14:59	2°♁01'49	23°34'11
minimum elong	1664 Jul 14 12:42	22°♁38'34	4°54'28	desc. node	1665 Jun 07 10:15	7°♁58'21	
morning rise	1664 Jul 22 16:38	18°♁24'00		retrograde	1665 Jun 12 06:40	8°♁51'48	
direct	1664 Jul 25 05:51	18°♁04'50		evening set	1665 Jun 16 06:47	8°♁16'36	
morning max el	1664 Aug 03 01:29	22°♁12'49	19°03'59	min. Earth dist.	1665 Jun 23 01:22	5°♁07'24	0.55967 AU
asc. node	1664 Aug 09 00:07	29°♁30'14		inferior conj	1665 Jun 25 04:07	3°♁51'28	-4°-20'-35
	1664 Aug 09 08:02	0°♁		minimum elong	1665 Jun 24 21:39	4°♁01'12	4°19'27
morning set	1664 Aug 19 19:24	18°♁56'26			1665 Jul 03 08:17	30°♁	
	1664 Aug 25 09:30	0°♁		morning rise	1665 Jul 03 15:51	29°♁55'32	
				direct	1665 Jul 06 09:55	29°♁36'40	
superior conj	1664 Aug 28 04:25	5°♁25'31	1°43'25		1665 Jul 09 09:15	0°♁	
minimum elong	1664 Aug 28 05:54	5°♁32'41	1°43'21	morning max el	1665 Jul 16 17:29	4°♁23'23	20°09'27
max. Earth dist.	1664 Sep 03 20:54	17°♁54'28	1.38628 AU	asc. node	1665 Jul 26 21:10	18°♁01'43	
evening rise	1664 Sep 07 17:58	24°♁45'44			1665 Aug 02 06:18	0°♁	
	1664 Sep 10 19:45	0°♁		morning set	1665 Aug 03 23:53	3°♁29'36	
desc. node	1664 Sep 16 12:33	9°♁16'49					
	1664 Sep 30 15:11	0°♁		superior conj	1665 Aug 11 18:06	19°♁20'02	1°45'50
evening max el	1664 Oct 13 06:25	15°♁07'15	24°39'35	minimum elong	1665 Aug 11 17:49	19°♁18'37	1°45'49
retrograde	1664 Oct 24 18:27	21°♁49'47		max. Earth dist.	1665 Aug 17 02:05	29°♁48'20	1.36676 AU
evening set	1664 Oct 30 06:28	19°♁32'13			1665 Aug 17 04:32	0°♁	
min. Earth dist.	1664 Nov 03 22:11	14°♁14'32	0.67452 AU	evening rise	1665 Aug 21 00:43	7°♁10'03	
inferior conj	1664 Nov 04 18:26	13°♁07'07	0°-4'-13	desc. node	1665 Sep 03 09:35	29°♁39'32	
minimum elong	1664 Nov 04 18:32	13°♁06'47	0°04'10		1665 Sep 03 14:53	0°♁	

evening max el	1665 Sep 25 18:25	28°♁47'05	25°50'52	evening max el	1666 Sep 08 06:43	12°♁23'30	26°46'40
	1665 Sep 27 01:20	0°♁		retrograde	1666 Sep 21 07:45	19°♁38'29	
retrograde	1665 Oct 08 03:47	5°♁51'03		evening set	1666 Sep 27 23:25	16°♁57'08	
evening set	1665 Oct 14 06:12	3°♁19'08		min. Earth dist.	1666 Oct 02 00:03	12°♁52'25	0.65807 AU
	1665 Oct 17 11:08	30°♁		inferior conj	1666 Oct 03 19:10	10°♁45'36	-1°-58'-56
min. Earth dist.	1665 Oct 18 14:09	28°♁37'15	0.66802 AU	minimum elong	1666 Oct 03 22:19	10°♁36'18	1°57'42
inferior conj	1665 Oct 19 21:22	26°♁58'34	-1°00'-53	morning rise	1666 Oct 09 22:35	5°♁02'01	
minimum elong	1665 Oct 19 22:57	26°♁53'33	1°00'13	asc. node	1666 Oct 09 17:27	5°♁08'54	
asc. node	1665 Oct 22 20:23	23°♁27'24		direct	1666 Oct 12 18:11	4°♁17'57	
morning rise	1665 Oct 25 16:33	21°♁02'58		morning max el	1666 Oct 19 08:24	7°♁53'54	18°23'40
direct	1665 Oct 28 20:45	20°♁04'55			1666 Nov 03 16:18	0°♁	
morning max el	1665 Nov 04 19:57	23°♁58'54	19°05'20	morning set	1666 Nov 07 19:30	6°♁40'57	
	1665 Nov 09 20:32	0°♁		desc. node	1666 Nov 17 05:55	21°♁48'28	
morning set	1665 Nov 27 11:17	26°♁35'59			1666 Nov 22 10:15	0°♁	
	1665 Nov 29 15:30	0°♁		superior conj	1666 Nov 23 05:43	1°♁16'38	0°-39'-16
desc. node	1665 Nov 30 08:53	1°♁07'53		minimum elong	1666 Nov 23 00:38	0°♁56'37	0°38'37
max. Earth dist.	1665 Dec 11 22:44	19°♁16'41	1.44871 AU	max. Earth dist.	1666 Nov 24 17:52	3°♁38'45	1.45125 AU
				evening rise	1666 Dec 09 12:14	26°♁48'48	
superior conj	1665 Dec 14 04:36	22°♁49'12	-1°-24'-1		1666 Dec 11 12:52	0°♁	
minimum elong	1665 Dec 13 19:50	22°♁14'35	1°23'06	greatest brilliancy	1666 Dec 22 20:58	17°♁37'45	-0.7m
	1665 Dec 18 17:05	0°♁			1667 Jan 01 01:49	0°♁	
evening rise	1665 Dec 29 03:34	16°♁53'02		evening max el	1667 Jan 01 13:59	0°♁31'59	19°14'20
	1666 Jan 06 03:56	0°♁		asc. node	1667 Jan 05 16:44	3°♁47'20	
evening max el	1666 Jan 18 04:53	17°♁04'21	18°34'36	retrograde	1667 Jan 08 14:56	4°♁33'47	
asc. node	1666 Jan 18 19:40	17°♁40'44		evening set	1667 Jan 11 22:47	3°♁29'11	
retrograde	1666 Jan 24 19:04	20°♁43'00			1667 Jan 15 15:31	30°♁	
evening set	1666 Jan 27 20:21	19°♁50'43		inferior conj	1667 Jan 17 13:46	27°♁36'10	3°16'06
inferior conj	1666 Feb 02 17:01	14°♁14'14	3°37'17	minimum elong	1667 Jan 17 11:22	27°♁43'51	3°15'37
minimum elong	1666 Feb 02 15:29	14°♁18'47	3°37'08	min. Earth dist.	1667 Jan 18 22:49	25°♁50'22	0.66089 AU
min. Earth dist.	1666 Feb 04 17:13	11°♁51'06	0.64738 AU	morning rise	1667 Jan 22 23:08	21°♁22'55	
morning rise	1666 Feb 08 09:21	8°♁05'00		direct	1667 Jan 29 07:14	18°♁36'09	
direct	1666 Feb 15 03:50	5°♁14'28		morning max el	1667 Feb 10 23:34	26°♁06'00	26°15'20
desc. node	1666 Feb 26 08:04	10°♁54'56		desc. node	1667 Feb 13 05:07	28°♁27'07	
morning max el	1666 Feb 28 13:56	13°♁03'00	27°15'00		1667 Feb 14 14:11	0°♁	
	1666 Mar 14 05:37	0°♁			1667 Mar 07 19:06	0°♁	
	1666 Apr 01 10:50	0°♁		morning set	1667 Mar 19 02:17	19°♁45'48	
morning set	1666 Apr 04 23:46	6°♁44'03		max. Earth dist.	1667 Mar 23 03:52	27°♁31'54	1.35153 AU
max. Earth dist.	1666 Apr 09 17:03	16°♁10'20	1.33759 AU		1667 Mar 24 10:00	0°♁	
				superior conj	1667 Mar 28 02:11	7°♁23'29	-1°-4'-27
superior conj	1666 Apr 13 04:55	23°♁26'52	0°-36'-55	minimum elong	1667 Mar 28 05:23	7°♁39'49	1°03'54
minimum elong	1666 Apr 13 06:46	23°♁36'36	0°36'34	asc. node	1667 Apr 03 16:01	21°♁00'08	
	1666 Apr 16 07:00	0°♁		evening rise	1667 Apr 04 21:07	23°♁30'24	
asc. node	1666 Apr 16 18:57	1°♁03'38			1667 Apr 08 02:11	0°♁	
evening rise	1666 Apr 20 13:06	9°♁01'10		evening max el	1667 Apr 23 10:40	23°♁35'24	20°34'59
	1666 May 01 15:27	0°♁		retrograde	1667 May 04 13:10	28°♁58'42	
evening max el	1666 May 11 08:07	12°♁35'31	21°59'12	evening set	1667 May 06 15:43	28°♁47'52	
retrograde	1666 May 24 00:04	18°♁49'22		desc. node	1667 May 12 04:17	26°♁51'21	
desc. node	1666 May 25 07:17	18°♁45'33		inferior conj	1667 May 15 20:29	24°♁50'14	-1°-4'-6
evening set	1666 May 26 17:33	18°♁32'48		minimum elong	1667 May 15 17:27	24°♁54'36	1°03'00
min. Earth dist.	1666 Jun 04 13:08	14°♁46'48	0.55045 AU	min. Earth dist.	1667 May 17 01:45	24°♁08'03	0.55040 AU
inferior conj	1666 Jun 05 02:19	14°♁28'19	-2°-59'-5	morning rise	1667 May 24 17:46	20°♁40'21	
minimum elong	1666 Jun 04 18:51	14°♁38'47	2°56'51	direct	1667 May 28 09:38	20°♁11'29	
morning rise	1666 Jun 13 21:39	10°♁35'07		morning max el	1667 Jun 10 17:04	26°♁37'53	23°13'31
direct	1666 Jun 16 23:25	10°♁14'08			1667 Jun 13 22:55	0°♁	
morning max el	1666 Jun 28 21:58	15°♁49'45	21°34'34	asc. node	1667 Jun 30 15:15	26°♁37'56	
	1666 Jul 09 18:04	0°♁			1667 Jul 02 07:02	0°♁	
asc. node	1666 Jul 13 18:12	7°♁07'06		morning set	1667 Jul 03 19:55	3°♁11'46	
morning set	1666 Jul 19 08:41	18°♁16'31					
	1666 Jul 24 22:36	0°♁		superior conj	1667 Jul 10 22:48	18°♁26'17	1°30'00
superior conj	1666 Jul 26 17:14	3°♁43'16	1°40'53	minimum elong	1667 Jul 10 20:33	18°♁14'13	1°29'46
minimum elong	1666 Jul 26 15:41	3°♁35'11	1°40'47	max. Earth dist.	1667 Jul 13 12:13	23°♁52'27	1.33715 AU
max. Earth dist.	1666 Jul 30 14:31	11°♁41'55	1.35009 AU		1667 Jul 16 11:06	0°♁	
evening rise	1666 Aug 04 01:12	20°♁25'44		evening rise	1667 Jul 18 14:53	4°♁20'46	
	1666 Aug 09 05:36	0°♁			1667 Aug 01 23:05	0°♁	
desc. node	1666 Aug 21 06:37	19°♁43'14		desc. node	1667 Aug 08 03:38	9°♁19'45	
	1666 Aug 28 13:35	0°♁					

evening max el	1667 Aug 21 18:31	25° Υ 46'16	27°19'37	max. Earth dist.	1668 Jun 25 17:51	6° Ω 22'26	1.32821 AU
	1667 Aug 26 21:39	0° $\underline{\Omega}$		evening rise	1668 Jul 01 13:58	18° Ω 42'58	
retrograde	1667 Sep 04 06:02	3° $\underline{\Omega}$ 04'43			1668 Jul 07 07:55	0° Ω	
evening set	1667 Sep 11 07:31	0° $\underline{\Omega}$ 22'12		desc. node	1668 Jul 25 00:38	28° Ω 16'43	
	1667 Sep 11 18:46	30° Υ			1668 Jul 26 08:39	0° Υ	
min. Earth dist.	1667 Sep 15 01:38	26° Υ 53'43	0.64455 AU	evening max el	1668 Aug 03 03:53	8° Υ 42'08	27°23'40
inferior conj	1667 Sep 17 09:31	24° Υ 23'42	-2°-56'-3	retrograde	1668 Aug 16 22:11	15° Υ 59'33	
minimum elong	1667 Sep 17 14:04	24° Υ 11'29	2°54'32	evening set	1668 Aug 24 03:07	13° Υ 27'47	
morning rise	1667 Sep 23 22:34	18° Υ 55'30		min. Earth dist.	1668 Aug 27 17:18	10° Υ 29'53	0.62756 AU
direct	1667 Sep 26 11:58	18° Υ 21'48		inferior conj	1668 Aug 30 13:35	7° Υ 45'46	-3°-48'-49
asc. node	1667 Sep 26 14:29	18° Υ 21'51		minimum elong	1668 Aug 30 18:51	7° Υ 33'05	3°47'27
morning max el	1667 Oct 03 00:05	21° Υ 48'40	17°58'56	morning rise	1668 Sep 06 13:10	2° Υ 36'10	
	1667 Oct 09 07:47	0° $\underline{\Omega}$		direct	1668 Sep 08 23:00	2° Υ 09'32	
morning set	1667 Oct 20 08:08	18° $\underline{\Omega}$ 09'11		asc. node	1668 Sep 12 11:31	3° Υ 07'46	
	1667 Oct 27 09:44	0° Υ		morning max el	1668 Sep 15 16:00	5° Υ 35'46	17°51'56
					1668 Oct 01 10:02	0° $\underline{\Omega}$	
superior conj	1667 Nov 02 18:00	10° Υ 21'48	0°09'15	morning set	1668 Oct 01 19:45	0° $\underline{\Omega}$ 43'06	
minimum elong	1667 Nov 02 19:05	10° Υ 26'10	0°09'05				
behind sun begin	1667 Nov 02 10:26	9° Υ 51'16		superior conj	1668 Oct 13 07:21	20° $\underline{\Omega}$ 41'42	0°50'41
behind sun end	1667 Nov 03 03:44	11° Υ 01'00		minimum elong	1668 Oct 13 11:42	21° $\underline{\Omega}$ 00'04	0°50'07
desc. node	1667 Nov 04 02:58	12° Υ 34'18			1668 Oct 18 22:09	0° Υ	
max. Earth dist.	1667 Nov 07 12:40	17° Υ 59'49	1.44636 AU	max. Earth dist.	1668 Oct 20 03:54	2° Υ 00'41	1.43475 AU
	1667 Nov 15 04:28	0° Υ		desc. node	1668 Oct 20 23:59	3° Υ 21'40	
evening rise	1667 Nov 19 02:06	6° Υ 02'00		evening rise	1668 Oct 28 10:21	15° Υ 05'55	
	1667 Dec 04 23:05	0° $\underline{\Omega}$			1668 Nov 07 05:42	0° Υ	
greatest brilliancy	1667 Dec 09 02:46	5° $\underline{\Omega}$ 52'12	-0.6m	greatest brilliancy	1668 Nov 22 14:17	21° Υ 35'50	-0.4m
evening max el	1667 Dec 15 18:23	14° $\underline{\Omega}$ 01'17	20°09'37	evening max el	1668 Nov 27 17:10	27° Υ 31'26	21°17'50
retrograde	1667 Dec 23 12:44	18° $\underline{\Omega}$ 34'45			1668 Nov 30 09:33	0° $\underline{\Omega}$	
asc. node	1667 Dec 23 13:45	18° $\underline{\Omega}$ 34'44		retrograde	1668 Dec 06 10:18	2° $\underline{\Omega}$ 42'05	
evening set	1667 Dec 27 04:47	17° $\underline{\Omega}$ 16'21		asc. node	1668 Dec 09 10:46	1° $\underline{\Omega}$ 51'22	
inferior conj	1668 Jan 01 16:15	11° $\underline{\Omega}$ 09'50	2°44'29	evening set	1668 Dec 10 12:24	1° $\underline{\Omega}$ 08'21	
minimum elong	1668 Jan 01 13:36	11° $\underline{\Omega}$ 18'47	2°43'44		1668 Dec 11 19:11	30° Υ	
min. Earth dist.	1668 Jan 02 11:42	10° $\underline{\Omega}$ 04'24	0.67035 AU	inferior conj	1668 Dec 15 22:10	24° Υ 51'45	2°04'45
morning rise	1668 Jan 06 21:52	4° $\underline{\Omega}$ 54'36		minimum elong	1668 Dec 15 19:46	25° Υ 00'02	2°03'55
direct	1668 Jan 12 16:11	2° $\underline{\Omega}$ 21'48		min. Earth dist.	1668 Dec 16 05:33	24° Υ 26'16	0.67594 AU
morning max el	1668 Jan 24 08:20	9° $\underline{\Omega}$ 19'29	24°56'32	morning rise	1668 Dec 21 02:47	18° Υ 36'39	
desc. node	1668 Jan 31 02:11	17° $\underline{\Omega}$ 00'23		direct	1668 Dec 26 06:04	16° Υ 23'58	
	1668 Feb 09 16:21	0° \approx		morning max el	1669 Jan 05 17:08	22° Υ 37'49	23°28'53
	1668 Feb 28 09:54	0° Υ		greatest brilliancy	1669 Jan 11 17:50	29° Υ 28'50	-0.2m
morning set	1668 Feb 29 11:06	1° Υ 51'32			1669 Jan 12 03:51	0° $\underline{\Omega}$	
max. Earth dist.	1668 Mar 04 03:56	8° Υ 34'18	1.36970 AU	desc. node	1669 Jan 16 23:14	6° $\underline{\Omega}$ 17'01	
					1669 Feb 02 00:50	0° \approx	
superior conj	1668 Mar 10 13:37	20° Υ 46'35	-1°-29'-56	morning set	1669 Feb 09 20:01	12° \approx 44'54	
minimum elong	1668 Mar 10 17:44	21° Υ 06'47	1°29'23	max. Earth dist.	1669 Feb 13 22:42	19° \approx 49'11	1.39068 AU
	1668 Mar 15 04:52	0° Υ			1669 Feb 19 14:47	0° Υ	
evening rise	1668 Mar 19 00:01	7° Υ 38'39					
asc. node	1668 Mar 20 13:03	10° Υ 43'17		superior conj	1669 Feb 21 11:22	3° Υ 26'38	-1°-50'-40
	1668 Mar 31 14:19	0° Υ		minimum elong	1669 Feb 21 15:19	3° Υ 45'03	1°50'22
evening max el	1668 Apr 05 00:55	5° Υ 14'11	19°28'16	evening rise	1669 Mar 02 19:04	21° Υ 18'58	
retrograde	1668 Apr 14 10:21	9° Υ 46'18			1669 Mar 07 08:21	0° Υ	
evening set	1668 Apr 16 11:53	9° Υ 34'07		asc. node	1669 Mar 07 10:05	0° Υ 08'05	
inferior conj	1668 Apr 25 01:02	5° Υ 28'11	0°51'28	evening max el	1669 Mar 19 01:27	17° Υ 31'13	18°41'26
minimum elong	1668 Apr 25 03:09	5° Υ 24'45	0°50'43	retrograde	1669 Mar 27 00:34	21° Υ 24'11	
min. Earth dist.	1668 Apr 27 16:16	3° Υ 46'23	0.55979 AU	evening set	1669 Mar 29 07:05	21° Υ 06'23	
desc. node	1668 Apr 28 01:20	3° Υ 32'17		inferior conj	1669 Apr 06 01:12	16° Υ 42'43	2°20'29
morning rise	1668 May 03 14:37	0° Υ 46'08		minimum elong	1669 Apr 06 05:16	16° Υ 35'03	2°19'22
	1668 May 07 07:17	30° Υ		min. Earth dist.	1669 Apr 09 09:43	14° Υ 12'20	0.57662 AU
direct	1668 May 08 05:11	29° Υ 58'05		morning rise	1669 Apr 13 23:05	11° Υ 27'31	
	1668 May 09 03:05	0° Υ		desc. node	1669 Apr 14 22:22	11° Υ 02'51	
morning max el	1668 May 22 07:46	7° Υ 06'04	24°54'42	direct	1669 Apr 19 15:11	10° Υ 07'42	
	1668 Jun 08 00:24	0° Υ		morning max el	1669 May 03 23:50	17° Υ 41'45	26°22'42
asc. node	1668 Jun 16 12:18	16° Υ 26'19			1669 May 14 04:42	0° Υ	
morning set	1668 Jun 17 07:48	18° Υ 08'37			1669 May 31 07:50	0° Υ	
	1668 Jun 22 19:38	0° $\underline{\Omega}$		morning set	1669 Jun 01 18:44	3° Υ 01'47	
				asc. node	1669 Jun 03 09:21	6° Υ 26'43	
superior conj	1668 Jun 24 08:17	3° $\underline{\Omega}$ 19'57	1°14'18				
minimum elong	1668 Jun 24 05:52	3° $\underline{\Omega}$ 06'48	1°13'56	superior conj	1669 Jun 08 19:44	18° Υ 17'46	0°54'38

minimum elong	1669 Jun 08 17:38	18°♊06'13	0°54'14	max. Earth dist.	1670 May 23 16:56	1°♊53'45	1.32213 AU
max. Earth dist.	1669 Jun 09 04:36	19°♊06'28	1.32326 AU				
	1669 Jun 14 04:57	0°♋		superior conj	1670 May 24 07:24	3°♊13'17	0°31'42
evening rise	1669 Jun 15 19:30	3°♋23'17		minimum elong	1670 May 24 06:02	3°♊05'46	0°31'24
	1669 Jun 30 03:41	0°♌		evening rise	1670 May 31 05:04	18°♊13'25	
desc. node	1669 Jul 11 21:38	16°♌17'38			1670 Jun 06 00:44	0°♋	
evening max el	1669 Jul 16 08:31	20°♌59'26	26°54'56		1670 Jun 25 19:12	0°♌	
retrograde	1669 Jul 30 07:02	28°♌13'38		evening max el	1670 Jun 28 06:23	2°♌30'38	25°54'08
evening set	1669 Aug 06 05:51	26°♌06'28		desc. node	1670 Jun 28 18:39	2°♌59'27	
min. Earth dist.	1669 Aug 09 22:41	23°♌27'19	0.60789 AU	retrograde	1670 Jul 12 06:45	9°♌40'36	
inferior conj	1669 Aug 13 04:05	20°♌43'43	-4°-31'-30	evening set	1670 Jul 18 10:59	8°♌09'12	
minimum elong	1669 Aug 13 08:35	20°♌34'10	4°30'46	min. Earth dist.	1670 Jul 22 18:51	5°♌31'53	0.58725 AU
morning rise	1669 Aug 20 14:27	15°♌55'31		inferior conj	1670 Jul 26 01:26	3°♌07'52	-4°-54'-52
direct	1669 Aug 22 23:35	15°♌33'12		minimum elong	1670 Jul 26 02:50	3°♌05'17	4°54'49
morning max el	1669 Aug 30 05:06	19°♌07'22	18°03'50		1670 Jul 30 18:45	30°♋	
asc. node	1669 Aug 30 08:34	19°♌15'50		morning rise	1670 Aug 02 22:11	28°♋42'44	
	1669 Sep 07 04:10	0°♍		direct	1670 Aug 05 09:28	28°♋22'40	
morning set	1669 Sep 15 00:19	14°♍05'45			1670 Aug 10 15:41	0°♌	
	1669 Sep 23 16:01	0°♎		morning max el	1670 Aug 13 12:14	2°♌14'50	18°36'00
				asc. node	1670 Aug 17 05:37	6°♌30'57	
superior conj	1669 Sep 24 23:20	2°♎19'51	1°20'19	morning set	1670 Aug 29 16:59	28°♌03'50	
minimum elong	1669 Sep 25 03:38	2°♎38'55	1°19'52		1670 Aug 30 16:57	0°♍	
max. Earth dist.	1669 Oct 02 14:08	15°♎27'46	1.41796 AU				
desc. node	1669 Oct 07 20:58	24°♎07'22		superior conj	1670 Sep 07 13:25	15°♍03'41	1°38'01
evening rise	1669 Oct 08 06:20	24°♎44'58		minimum elong	1670 Sep 07 16:03	15°♍15'58	1°37'50
	1669 Oct 11 13:55	0°♏		max. Earth dist.	1670 Sep 14 19:53	28°♍14'06	1.39809 AU
	1669 Nov 01 04:19	0°♐			1670 Sep 15 20:12	0°♎	
greatest brilliancy	1669 Nov 05 14:46	5°♐38'22	-0.3m	evening rise	1670 Sep 19 00:50	5°♎26'59	
evening max el	1669 Nov 10 10:42	11°♐03'15	22°34'42	desc. node	1670 Sep 24 17:58	14°♎48'02	
retrograde	1669 Nov 20 05:45	16°♐52'25			1670 Oct 04 17:18	0°♏	
evening set	1669 Nov 24 19:55	15°♐01'52		evening max el	1670 Oct 24 00:30	24°♏38'47	23°54'41
asc. node	1669 Nov 26 07:48	13°♐37'19			1670 Oct 30 21:55	0°♐	
inferior conj	1669 Nov 30 05:30	8°♐38'58	1°18'30	retrograde	1670 Nov 03 21:56	1°♐03'16	
minimum elong	1669 Nov 30 03:48	8°♐44'52	1°17'50		1670 Nov 07 13:44	30°♏	
min. Earth dist.	1669 Nov 30 01:54	8°♐51'26	0.67804 AU	evening set	1670 Nov 09 01:47	28°♏55'17	
morning rise	1669 Dec 05 11:34	2°♐26'11		asc. node	1670 Nov 13 04:50	24°♏16'52	
direct	1669 Dec 09 23:53	0°♑		min. Earth dist.	1670 Nov 13 22:21	23°♏18'02	0.67681 AU
morning max el	1669 Dec 19 05:05	6°♑01'43	22°01'50	inferior conj	1670 Nov 14 12:32	22°♏29'57	0°27'11
greatest brilliancy	1669 Dec 23 21:39	11°♑18'25	-0.4m	minimum elong	1670 Nov 14 11:53	22°♏32'09	0°26'55
desc. node	1670 Jan 03 20:14	26°♑04'07		morning rise	1670 Nov 19 22:11	16°♏21'56	
	1670 Jan 06 13:08	0°♒		direct	1670 Nov 23 20:38	14°♏54'19	
morning set	1670 Jan 20 23:52	22°♒13'14		morning max el	1670 Dec 01 23:46	19°♏36'19	20°42'54
	1670 Jan 25 18:06	0°♓		greatest brilliancy	1670 Dec 07 21:24	26°♏31'21	-0.5m
max. Earth dist.	1670 Jan 26 20:19	1°♓49'18	1.41196 AU		1670 Dec 10 11:57	0°♑	
				desc. node	1670 Dec 21 17:16	16°♑13'35	
superior conj	1670 Feb 03 14:29	15°♓10'32	-2°-2'-58		1670 Dec 30 17:50	0°♒	
minimum elong	1670 Feb 03 16:16	15°♓18'25	2°02'57	morning set	1670 Dec 31 02:37	0°♒34'09	
	1670 Feb 11 18:21	0°♔		max. Earth dist.	1671 Jan 09 01:49	14°♒47'27	1.43057 AU
evening rise	1670 Feb 14 02:50	4°♔22'11					
asc. node	1670 Feb 22 07:07	19°♔07'19		superior conj	1671 Jan 15 17:46	25°♒46'38	-2°-2'-4
	1670 Mar 02 02:12	0°♕		minimum elong	1671 Jan 15 14:56	25°♒34'42	2°01'59
evening max el	1670 Mar 02 09:08	0°♕17'14	18°14'39		1671 Jan 18 05:43	0°♓	
retrograde	1670 Mar 09 09:28	3°♕47'47		evening rise	1671 Jan 27 19:24	16°♓40'33	
evening set	1670 Mar 11 21:34	3°♕21'48			1671 Feb 04 10:07	0°♔	
	1670 Mar 17 07:37	30°♕		asc. node	1671 Feb 09 04:10	7°♔33'03	
inferior conj	1670 Mar 18 22:25	28°♕36'44	3°15'25	evening max el	1671 Feb 13 20:42	13°♔23'24	18°07'31
minimum elong	1670 Mar 19 01:33	28°♕29'51	3°14'53	retrograde	1671 Feb 20 09:46	16°♔47'12	
min. Earth dist.	1670 Mar 22 07:52	25°♕39'18	0.59740 AU	evening set	1671 Feb 23 02:48	16°♔11'47	
morning rise	1670 Mar 26 01:59	22°♕56'35		inferior conj	1671 Mar 01 13:59	11°♔05'18	3°40'42
direct	1670 Apr 01 13:48	21°♕00'08		minimum elong	1671 Mar 01 15:06	11°♔02'28	3°40'39
desc. node	1670 Apr 01 19:25	21°♕00'17		min. Earth dist.	1671 Mar 04 13:37	8°♔05'47	0.61863 AU
morning max el	1670 Apr 15 21:15	28°♕47'45	27°23'35	morning rise	1671 Mar 08 00:54	5°♔09'00	
	1670 Apr 17 01:50	0°♖		direct	1671 Mar 14 22:26	2°♔41'26	
	1670 May 07 23:23	0°♗		desc. node	1671 Mar 19 16:28	3°♔44'04	
morning set	1670 May 17 03:02	17°♗45'07		morning max el	1671 Mar 29 01:03	10°♔35'35	27°48'50
asc. node	1670 May 21 06:24	26°♗33'55			1671 Apr 13 05:06	0°♕	
	1670 May 22 20:11	0°♘			1671 Apr 30 04:36	0°♖	

morning set	1671 May 01 06:44	2°♄12'19		desc. node	1672 Mar 05 13:31	18°♁47'26	
max. Earth dist.	1671 May 07 03:01	14°♄31'16	1.32485 AU	morning max el	1672 Mar 10 09:22	23°♁02'17	27°37'05
asc. node	1671 May 08 03:27	16°♄43'44			1672 Mar 16 14:03	0°♁	
					1672 Apr 05 11:03	0°♁	
superior conj	1671 May 08 17:36	18°♄00'47	0°06'15	morning set	1672 Apr 14 03:26	16°♁15'33	
minimum elong	1671 May 08 17:19	17°♄59'12	0°06'11	max. Earth dist.	1672 Apr 19 06:42	26°♁45'28	1.33163 AU
behind sun begin	1671 May 08 12:34	17°♄33'18			1672 Apr 20 19:33	0°♄	
behind sun end	1671 May 08 22:04	18°♄25'06					
	1671 May 14 05:46	0°♁		superior conj	1672 Apr 22 00:32	2°♄34'32	0°-20'-55
evening rise	1671 May 15 16:39	3°♁06'21		minimum elong	1672 Apr 22 01:34	2°♄40'04	0°20'43
	1671 May 30 05:53	0°♁		asc. node	1672 Apr 24 00:30	6°♄52'10	
evening max el	1671 Jun 09 21:49	13°♁19'41	24°28'50	evening rise	1672 Apr 29 04:23	17°♄55'38	
desc. node	1671 Jun 15 15:41	17°♁50'44			1672 May 05 03:58	0°♁	
retrograde	1671 Jun 23 19:17	20°♁21'01		evening max el	1672 May 21 12:02	23°♁49'58	22°53'07
evening set	1671 Jun 28 16:31	19°♁27'32			1672 May 31 08:00	0°♁	
min. Earth dist.	1671 Jul 04 08:50	16°♁34'15	0.56838 AU	desc. node	1672 Jun 01 12:44	0°♁15'52	
inferior conj	1671 Jul 07 02:51	14°♁49'01	-4°-45'-48	retrograde	1672 Jun 03 19:45	0°♁27'51	
minimum elong	1671 Jul 06 23:06	14°♁55'02	4°45'27	evening set	1672 Jun 07 05:27	0°♁02'25	
morning rise	1671 Jul 15 09:22	10°♁45'07			1672 Jun 07 09:19	30°♁	
direct	1671 Jul 18 00:41	10°♁26'07		min. Earth dist.	1672 Jun 14 20:47	26°♁39'10	0.55467 AU
morning max el	1671 Jul 27 10:24	14°♁48'32	19°29'22	inferior conj	1672 Jun 16 09:12	25°♁46'40	-3°-51'-40
asc. node	1671 Aug 04 02:40	24°♁38'14		minimum elong	1672 Jun 16 01:34	25°♁57'41	3°49'52
	1671 Aug 07 06:24	0°♁		morning rise	1672 Jun 25 00:35	21°♁54'25	
morning set	1671 Aug 13 17:57	12°♁26'31		direct	1672 Jun 27 21:13	21°♁35'15	
				morning max el	1672 Jul 08 21:39	26°♁41'32	20°43'34
superior conj	1671 Aug 21 19:54	28°♁36'40	1°45'27		1672 Jul 12 01:06	0°♁	
minimum elong	1671 Aug 21 20:36	28°♁40'04	1°45'26	asc. node	1672 Jul 20 23:44	13°♁25'43	
	1671 Aug 22 12:56	0°♁		morning set	1672 Jul 28 00:32	27°♁06'38	
max. Earth dist.	1671 Aug 27 23:48	10°♁22'06	1.37769 AU		1672 Jul 29 10:10	0°♁	
evening rise	1671 Aug 31 19:14	17°♁15'47		superior conj	1672 Aug 04 14:05	12°♁45'21	1°44'32
	1671 Sep 08 07:12	0°♁		minimum elong	1672 Aug 04 13:12	12°♁40'48	1°44'31
desc. node	1671 Sep 11 15:00	5°♁18'53		max. Earth dist.	1672 Aug 09 07:18	22°♁12'06	1.35919 AU
	1671 Sep 29 02:48	0°♁		evening rise	1672 Aug 13 10:06	0°♁03'37	
evening max el	1671 Oct 06 12:29	8°♁17'05	25°11'14		1672 Aug 13 09:19	0°♁	
retrograde	1671 Oct 18 09:57	15°♁09'46		desc. node	1672 Aug 28 12:02	25°♁34'32	
evening set	1671 Oct 24 04:17	12°♁45'25			1672 Aug 31 10:56	0°♁	
min. Earth dist.	1671 Oct 28 16:34	7°♁43'03	0.67222 AU	evening max el	1672 Sep 18 00:21	21°♁55'38	26°16'50
inferior conj	1671 Oct 29 17:28	6°♁21'51	0°-27'-56	retrograde	1672 Sep 30 17:12	29°♁06'12	
minimum elong	1671 Oct 29 18:10	6°♁19'32	0°27'39	evening set	1672 Oct 07 01:32	26°♁29'10	
asc. node	1671 Oct 31 01:53	4°♁37'42		min. Earth dist.	1672 Oct 11 06:11	22°♁03'11	0.66421 AU
morning rise	1671 Nov 04 08:40	0°♁21'07		inferior conj	1672 Oct 12 18:27	20°♁11'43	-1°-25'-27
	1671 Nov 04 22:39	30°♁		minimum elong	1672 Oct 12 20:42	20°♁04'47	1°24'32
direct	1671 Nov 07 18:54	29°♁13'24		asc. node	1672 Oct 16 22:56	15°♁36'39	
	1671 Nov 10 18:23	0°♁		morning rise	1672 Oct 18 16:58	14°♁21'03	
morning max el	1671 Nov 15 02:21	3°♁21'51	19°36'41	direct	1672 Oct 21 17:08	13°♁29'35	
greatest brilliancy	1671 Nov 23 09:35	13°♁46'59	-0.6m	morning max el	1672 Oct 28 11:50	17°♁14'56	18°45'36
	1671 Dec 04 06:34	0°♁			1672 Nov 07 02:46	0°♁	
desc. node	1671 Dec 08 14:18	6°♁38'46		morning set	1672 Nov 18 15:33	18°♁03'08	
morning set	1671 Dec 09 23:51	8°♁48'21		desc. node	1672 Nov 24 11:20	27°♁14'52	
max. Earth dist.	1671 Dec 22 14:29	28°♁31'32	1.44397 AU		1672 Nov 26 05:17	0°♁	
	1671 Dec 23 12:46	0°♁		max. Earth dist.	1672 Dec 04 07:37	12°♁43'11	1.45067 AU
superior conj	1671 Dec 26 18:35	5°♁10'56	-1°-43'-22	superior conj	1672 Dec 04 23:21	13°♁45'00	-1°-6'-18
minimum elong	1671 Dec 26 10:45	4°♁39'30	1°42'45	minimum elong	1672 Dec 04 15:25	13°♁13'50	1°05'24
evening rise	1672 Jan 09 16:27	28°♁06'12			1672 Dec 15 06:04	0°♁	
	1672 Jan 10 19:28	0°♁		evening rise	1672 Dec 20 14:31	8°♁33'53	
asc. node	1672 Jan 27 01:12	25°♁15'13			1673 Jan 03 02:48	0°♁	
evening max el	1672 Jan 28 09:15	26°♁42'13	18°19'26	evening max el	1673 Jan 10 20:13	10°♁07'50	18°49'27
	1672 Feb 02 08:13	0°♁		asc. node	1673 Jan 12 22:14	12°♁00'58	
retrograde	1672 Feb 03 20:46	0°♁12'29		retrograde	1673 Jan 17 14:18	13°♁55'32	
	1672 Feb 05 09:10	30°♁		evening set	1673 Jan 20 18:05	12°♁58'22	
evening set	1672 Feb 06 18:44	29°♁26'46		inferior conj	1673 Jan 26 12:03	7°♁14'36	3°29'47
inferior conj	1672 Feb 12 19:49	24°♁00'34	3°43'30	minimum elong	1673 Jan 26 10:05	7°♁20'41	3°29'29
minimum elong	1672 Feb 12 19:05	24°♁02'37	3°43'28	min. Earth dist.	1673 Jan 28 05:45	5°♁06'18	0.65358 AU
min. Earth dist.	1672 Feb 15 04:56	21°♁19'49	0.63779 AU	morning rise	1673 Feb 01 00:58	1°♁03'06	
morning rise	1672 Feb 18 17:46	17°♁54'34			1673 Feb 02 09:10	30°♁	
direct	1672 Feb 25 15:27	15°♁08'14					

direct	1673 Feb 07 15:33	28°♁12'26		morning rise	1674 Jan 15 18:58	14°♁28'09	
	1673 Feb 13 11:34	0°♁		direct	1674 Jan 21 21:38	11°♁45'58	
desc. node	1673 Feb 20 10:33	5°♁34'09		morning max el	1674 Feb 03 04:17	19°♁03'58	25°43'31
morning max el	1673 Feb 20 19:10	5°♁55'37	26°52'34	desc. node	1674 Feb 07 07:35	23°♁35'08	
	1673 Mar 11 07:03	0°♁			1674 Feb 12 11:27	0°♁	
morning set	1673 Mar 28 13:45	29°♁43'25			1674 Mar 04 08:33	0°♁	
	1673 Mar 28 17:13	0°♁		morning set	1674 Mar 11 09:26	12°♁23'40	
max. Earth dist.	1673 Apr 02 00:05	8°♁25'09	1.34290 AU	max. Earth dist.	1674 Mar 15 05:36	19°♁34'24	1.35880 AU
					1674 Mar 20 13:23	0°♁	
superior conj	1673 Apr 06 02:01	16°♁46'49	0°-48'-44	superior conj	1674 Mar 20 19:32	0°♁30'52	-1°-15'-38
minimum elong	1673 Apr 06 04:28	16°♁59'33	0°48'16	minimum elong	1674 Mar 20 23:12	0°♁49'19	1°15'04
asc. node	1673 Apr 10 21:33	26°♁54'10		evening rise	1674 Mar 28 20:24	16°♁55'02	
	1673 Apr 12 08:52	0°♁		asc. node	1674 Mar 28 18:35	16°♁45'45	
evening rise	1673 Apr 13 14:17	2°♁33'45			1674 Apr 04 13:41	0°♁	
	1673 Apr 29 07:24	0°♁		evening max el	1674 Apr 15 16:15	15°♁48'57	20°04'15
evening max el	1673 May 03 08:36	4°♁32'24	21°21'35	retrograde	1674 Apr 26 00:46	20°♁48'55	
retrograde	1673 May 15 10:17	10°♁26'03		evening set	1674 Apr 28 01:45	20°♁38'07	
evening set	1673 May 17 18:57	10°♁13'17		desc. node	1674 May 06 06:47	17°♁05'58	
desc. node	1673 May 19 09:46	9°♁50'38		inferior conj	1674 May 07 00:52	16°♁38'57	0°-13'-7
inferior conj	1673 May 27 03:56	6°♁13'48	-2°-12'-44	minimum elong	1674 May 07 00:16	16°♁39'51	0°12'55
minimum elong	1673 May 26 21:52	6°♁22'19	2°10'41	transit begin	1674 May 06 21:56	16°♁43'21	
min. Earth dist.	1673 May 27 09:07	6°♁06'32	0.54919 AU	transit end	1674 May 07 02:37	16°♁36'20	
morning rise	1673 Jun 05 01:02	2°♁15'33		min. Earth dist.	1674 May 08 22:31	15°♁30'38	0.55340 AU
direct	1673 Jun 08 07:32	1°♁52'17		morning rise	1674 May 15 20:07	12°♁16'29	
morning max el	1673 Jun 20 21:50	7°♁50'45	22°15'28	direct	1674 May 19 21:06	11°♁40'46	
	1673 Jul 06 10:38	0°♁		morning max el	1674 Jun 02 14:06	18°♁26'37	23°57'00
asc. node	1673 Jul 07 20:47	2°♁42'46			1674 Jun 12 02:58	0°♁	
morning set	1673 Jul 12 10:32	11°♁57'23		asc. node	1674 Jun 24 17:49	22°♁21'39	
				morning set	1674 Jun 26 22:13	26°♁53'35	
superior conj	1673 Jul 19 16:17	27°♁17'59	1°36'55		1674 Jun 28 09:21	0°♁	
minimum elong	1673 Jul 19 14:21	27°♁07'52	1°36'46	superior conj	1674 Jul 03 23:44	12°♁06'01	1°23'53
	1673 Jul 20 23:06	0°♁		minimum elong	1674 Jul 03 21:21	11°♁53'08	1°23'34
max. Earth dist.	1673 Jul 22 23:16	4°♁09'50	1.34407 AU	max. Earth dist.	1674 Jul 06 00:39	16°♁28'48	1.33292 AU
evening rise	1673 Jul 27 16:42	13°♁37'31		evening rise	1674 Jul 11 10:48	27°♁45'22	
	1673 Aug 05 15:42	0°♁			1674 Jul 12 13:44	0°♁	
desc. node	1673 Aug 15 09:04	15°♁27'46			1674 Jul 29 21:23	0°♁	
	1673 Aug 26 09:12	0°♁		desc. node	1674 Aug 02 06:05	4°♁48'55	
evening max el	1673 Aug 31 12:35	5°♁27'32	27°03'56	evening max el	1674 Aug 13 23:50	18°♁41'01	27°25'18
retrograde	1673 Sep 13 19:01	12°♁45'26		retrograde	1674 Aug 27 14:40	25°♁58'51	
evening set	1673 Sep 20 15:15	10°♁02'27		evening set	1674 Sep 03 18:28	23°♁19'43	
min. Earth dist.	1673 Sep 24 12:56	6°♁13'15	0.65268 AU	min. Earth dist.	1674 Sep 07 10:35	20°♁04'56	0.63768 AU
inferior conj	1673 Sep 26 13:23	3°♁55'41	-2°-23'-28	inferior conj	1674 Sep 09 23:45	17°♁27'52	-3°-19'-18
minimum elong	1673 Sep 26 17:11	3°♁44'54	2°22'04	minimum elong	1674 Sep 10 04:43	17°♁15'04	3°17'46
	1673 Sep 30 08:38	30°♁		morning rise	1674 Sep 16 17:09	12°♁06'50	
morning rise	1673 Oct 02 20:45	28°♁18'06		direct	1674 Sep 19 04:44	11°♁36'26	
asc. node	1673 Oct 03 19:59	27°♁55'06		asc. node	1674 Sep 20 17:02	11°♁47'55	
direct	1673 Oct 05 13:17	27°♁38'59		morning max el	1674 Sep 25 18:00	15°♁02'08	17°53'41
	1673 Oct 10 19:35	0°♁			1674 Oct 06 05:23	0°♁	
morning max el	1673 Oct 12 01:57	1°♁10'27	18°10'59	morning set	1674 Oct 12 11:28	10°♁43'32	
morning set	1673 Oct 30 12:16	28°♁44'58			1674 Oct 23 20:29	0°♁	
	1673 Oct 31 06:30	0°♁		superior conj	1674 Oct 25 00:39	1°♁55'53	0°28'07
desc. node	1673 Nov 11 08:21	17°♁58'08		minimum elong	1674 Oct 25 03:37	2°♁08'00	0°27'43
				desc. node	1674 Oct 29 05:22	8°♁44'45	
superior conj	1673 Nov 14 02:44	22°♁22'05	0°-18'-25	max. Earth dist.	1674 Oct 30 20:18	11°♁20'42	1.44218 AU
minimum elong	1673 Nov 14 00:22	22°♁12'43	0°18'06	evening rise	1674 Nov 09 23:25	27°♁12'32	
max. Earth dist.	1673 Nov 17 02:31	27°♁05'33	1.45001 AU		1674 Nov 11 19:02	0°♁	
	1673 Nov 18 22:54	0°♁		greatest brilliancy	1674 Dec 02 09:00	0°♁07'27	-0.5m
evening rise	1673 Nov 30 14:04	18°♁08'34			1674 Dec 02 06:45	0°♁	
	1673 Dec 08 05:43	0°♁		evening max el	1674 Dec 08 05:43	7°♁07'06	20°37'20
greatest brilliancy	1673 Dec 17 02:21	13°♁19'57	-0.7m	retrograde	1674 Dec 16 09:01	11°♁55'23	
evening max el	1673 Dec 25 03:33	23°♁37'11	19°36'09	asc. node	1674 Dec 17 16:18	11°♁45'51	
asc. node	1673 Dec 30 19:16	27°♁36'09		evening set	1674 Dec 20 05:11	10°♁30'34	
retrograde	1674 Jan 01 11:13	27°♁51'26		inferior conj	1674 Dec 25 15:44	4°♁19'32	2°28'29
evening set	1674 Jan 04 22:17	26°♁41'19		minimum elong	1674 Dec 25 13:08	4°♁28'25	2°27'41
inferior conj	1674 Jan 10 11:34	20°♁42'28	3°03'49				
minimum elong	1674 Jan 10 08:59	20°♁50'55	3°03'13				
min. Earth dist.	1674 Jan 11 14:43	19°♁13'25	0.66541 AU				

min. Earth dist.	1674 Dec 26 05:53	3°☿31'20	0.67322 AU	evening set	1675 Dec 04 12:59	24°♁23'25	
	1674 Dec 28 23:46	30°♁		asc. node	1675 Dec 04 13:20	24°♁22'44	
morning rise	1674 Dec 30 20:38	28°♁04'22		inferior conj	1675 Dec 09 22:29	18°♁03'34	1°45'49
direct	1675 Jan 05 08:44	25°♁39'33		minimum elong	1675 Dec 09 20:20	18°♁11'01	1°45'01
	1675 Jan 14 01:46	0°☿		min. Earth dist.	1675 Dec 10 01:00	17°♁54'50	0.67729 AU
morning max el	1675 Jan 16 12:35	2°☿18'52	24°19'46	morning rise	1675 Dec 15 03:27	11°♁49'23	
desc. node	1675 Jan 25 04:36	12°☿28'15		direct	1675 Dec 20 00:15	9°♁46'30	
	1675 Feb 06 14:09	0°♁		morning max el	1675 Dec 29 22:25	15°♁39'21	22°51'19
morning set	1675 Feb 21 08:48	24°♁00'06		greatest brilliancy	1676 Jan 03 14:31	20°♁52'10	-0.3m
	1675 Feb 24 18:08	0°♁			1676 Jan 10 15:19	0°☿	
max. Earth dist.	1675 Feb 25 02:34	0°♁37'59	1.37847 AU	desc. node	1676 Jan 12 01:38	1°☿58'40	
					1676 Jan 30 14:45	0°♁	
superior conj	1675 Mar 04 01:41	13°♁37'04	-1°-39'-29	morning set	1676 Feb 02 05:41	4°♁17'25	
minimum elong	1675 Mar 04 05:54	13°♁57'23	1°39'01	max. Earth dist.	1676 Feb 06 22:11	12°♁10'56	1.39989 AU
	1675 Mar 12 09:43	0°♁					
evening rise	1675 Mar 12 20:18	0°♁52'18		superior conj	1676 Feb 14 16:08	25°♁54'21	-1°-57'-11
asc. node	1675 Mar 15 15:37	6°♁21'49		minimum elong	1676 Feb 14 19:27	26°♁09'32	1°57'01
evening max el	1675 Mar 29 11:10	27°♁44'35	19°05'49		1676 Feb 16 21:29	0°♁	
	1675 Apr 01 05:26	0°♁		evening rise	1676 Feb 24 11:01	14°♁17'54	
retrograde	1675 Apr 07 04:29	1°♁58'01		asc. node	1676 Mar 01 12:39	25°♁36'34	
evening set	1675 Apr 09 08:03	1°♁43'43			1676 Mar 04 01:36	0°♁	
	1675 Apr 13 15:30	30°♁		evening max el	1676 Mar 11 15:04	10°♁14'31	18°27'33
inferior conj	1675 Apr 17 13:04	27°♁30'41	1°33'19	retrograde	1676 Mar 19 03:11	13°♁56'21	
minimum elong	1675 Apr 17 16:28	27°♁24'50	1°32'14	evening set	1676 Mar 21 12:02	13°♁35'21	
min. Earth dist.	1675 Apr 20 13:45	25°♁26'29	0.56629 AU	inferior conj	1676 Mar 28 22:23	9°♁02'28	2°47'50
desc. node	1675 Apr 23 03:47	23°♁51'28		minimum elong	1676 Mar 29 02:17	8°♁54'34	2°46'56
morning rise	1675 Apr 25 20:45	22°♁34'20		min. Earth dist.	1676 Apr 01 08:50	6°♁17'39	0.58513 AU
direct	1675 Apr 30 22:27	21°♁34'11		morning rise	1676 Apr 05 12:27	3°♁35'15	
morning max el	1675 May 15 04:35	28°♁54'05	25°34'41	desc. node	1676 Apr 09 00:50	2°♁16'58	
	1675 May 16 07:11	0°♁		direct	1676 Apr 11 13:45	2°♁00'10	
	1675 Jun 05 13:02	0°♁		morning max el	1676 Apr 25 22:52	9°♁41'12	26°52'43
morning set	1675 Jun 11 09:56	11°♁49'59			1676 May 11 11:36	0°♁	
asc. node	1675 Jun 11 14:52	12°♁16'03		morning set	1676 May 25 20:00	26°♁40'06	
					1676 May 27 09:49	0°♁	
superior conj	1675 Jun 18 10:18	27°♁02'25	1°06'24	asc. node	1676 May 28 11:55	2°♁20'00	
minimum elong	1675 Jun 18 07:57	26°♁49'37	1°06'00				
max. Earth dist.	1675 Jun 19 09:09	29°♁07'28	1.32568 AU	superior conj	1676 Jun 01 22:03	12°♁00'03	0°45'16
	1675 Jun 19 18:47	0°♁		minimum elong	1676 Jun 01 20:13	11°♁49'57	0°44'54
evening rise	1675 Jun 25 12:59	12°♁16'46		max. Earth dist.	1676 Jun 01 21:09	11°♁55'06	1.32229 AU
	1675 Jul 04 17:43	0°♁		evening rise	1676 Jun 08 20:30	27°♁02'06	
desc. node	1675 Jul 20 03:06	23°♁24'45			1676 Jun 10 06:40	0°♁	
	1675 Jul 25 22:00	0°♁		desc. node	1676 Jun 27 07:51	0°♁	
evening max el	1675 Jul 27 07:40	1°♁22'39	27°15'32		1676 Jul 06 00:08	10°♁55'29	
retrograde	1675 Aug 10 03:34	8°♁37'58		evening max el	1676 Jul 08 09:21	13°♁20'02	26°32'37
evening set	1675 Aug 17 07:28	6°♁15'02		retrograde	1676 Jul 22 08:49	20°♁33'02	
min. Earth dist.	1675 Aug 20 21:44	3°♁27'05	0.61949 AU	evening set	1676 Jul 29 01:35	18°♁39'39	
inferior conj	1675 Aug 23 22:31	0°♁41'18	-4°-8'-37	min. Earth dist.	1676 Aug 01 22:42	16°♁03'53	0.59912 AU
minimum elong	1675 Aug 24 03:41	0°♁29'28	4°07'28	inferior conj	1676 Aug 05 06:08	13°♁25'52	-4°-44'-26
	1675 Aug 24 16:41	30°♁		minimum elong	1676 Aug 05 09:38	13°♁18'51	4°44'04
morning rise	1675 Aug 31 02:40	25°♁40'25		morning rise	1676 Aug 12 21:03	8°♁47'47	
direct	1675 Sep 02 12:01	25°♁15'47		direct	1676 Aug 15 06:49	8°♁26'39	
asc. node	1675 Sep 07 14:04	27°♁10'53		morning max el	1676 Aug 22 20:09	12°♁06'46	18°15'02
morning max el	1675 Sep 09 09:08	28°♁43'55	17°54'39	asc. node	1676 Aug 24 11:07	13°♁49'21	
	1675 Sep 10 14:03	0°♁			1676 Sep 03 19:24	0°♁	
morning set	1675 Sep 25 07:03	23°♁40'38		morning set	1676 Sep 07 17:16	7°♁19'31	
	1675 Sep 28 18:59	0°♁					
superior conj	1675 Oct 06 01:44	12°♁50'25	1°04'46	superior conj	1676 Sep 17 03:53	24°♁58'46	1°29'11
minimum elong	1675 Oct 06 06:23	13°♁10'24	1°04'12	minimum elong	1676 Sep 17 07:34	25°♁15'29	1°28'51
max. Earth dist.	1675 Oct 13 10:11	25°♁11'16	1.42817 AU		1676 Sep 19 22:58	0°♁	
desc. node	1675 Oct 16 02:24	29°♁31'54		max. Earth dist.	1676 Sep 24 18:11	8°♁20'43	1.40973 AU
	1675 Oct 16 09:23	0°♁		evening rise	1676 Sep 29 15:38	16°♁30'13	
evening rise	1675 Oct 20 10:51	6°♁26'52		desc. node	1676 Oct 01 23:26	20°♁15'51	
	1675 Nov 05 02:35	0°♁			1676 Oct 08 04:47	0°♁	
greatest brilliancy	1675 Nov 16 07:08	15°♁10'27	-0.4m	greatest brilliancy	1676 Oct 27 17:48	27°♁23'22	-0.2m
evening max el	1675 Nov 21 02:09	20°♁37'34	21°49'41		1676 Oct 29 22:02	0°♁	
retrograde	1675 Nov 30 05:51	26°♁04'26		evening max el	1676 Nov 02 17:41	4°♁09'55	23°08'39
				retrograde	1676 Nov 13 00:13	10°♁15'26	

evening set	1676 Nov 17 20:02	8°♁17'18		evening max el	1677 Oct 16 06:24	17°♌46'18	24°28'10
asc. node	1676 Nov 20 10:22	5°♁36'05		retrograde	1677 Oct 27 14:51	24°♌24'28	
inferior conj	1676 Nov 23 05:55	1°♁52'34	0°57'17	evening set	1677 Nov 02 00:40	22°♌09'28	
minimum elong	1676 Nov 23 04:37	1°♁57'02	0°56'45	min. Earth dist.	1677 Nov 06 17:39	16°♌46'34	0.67522 AU
min. Earth dist.	1676 Nov 22 21:45	2°♁20'43	0.67788 AU	inferior conj	1677 Nov 07 12:17	15°♌44'09	0°04'12
	1676 Nov 24 15:03	30°♌		minimum elong	1677 Nov 07 12:11	15°♌44'30	0°04'09
morning rise	1676 Nov 28 13:15	25°♌41'29		transit begin	1677 Nov 07 09:32	15°♌53'23	
direct	1676 Dec 02 19:22	24°♌01'25		transit end	1677 Nov 07 14:50	15°♌35'38	
morning max el	1676 Dec 11 13:05	29°♌07'55	21°26'57	asc. node	1677 Nov 07 07:25	16°♌00'29	
	1676 Dec 12 09:14	0°♁		morning rise	1677 Nov 13 00:03	9°♌38'39	
greatest brilliancy	1676 Dec 16 14:53	4°♁55'21	-0.4m	direct	1677 Nov 16 17:00	8°♌19'52	
desc. node	1676 Dec 28 22:40	21°♁56'01		morning max el	1677 Nov 24 11:02	12°♌46'42	20°12'54
	1677 Jan 03 08:33	0°♁		greatest brilliancy	1677 Dec 01 05:09	20°♌54'20	-0.6m
morning set	1677 Jan 11 21:38	13°♁12'59			1677 Dec 07 15:42	0°♁	
max. Earth dist.	1677 Jan 18 22:41	24°♁34'54	1.42028 AU	desc. node	1677 Dec 15 19:42	12°♁12'30	
	1677 Jan 22 04:47	0°♁		morning set	1677 Dec 21 18:43	21°♁20'39	
					1677 Dec 27 07:55	0°♁	
superior conj	1677 Jan 26 09:42	7°♁10'28	-2°-4'-31	max. Earth dist.	1678 Jan 01 06:51	7°♁51'57	1.43697 AU
minimum elong	1677 Jan 26 09:47	7°♁10'51	2°04'32				
evening rise	1677 Feb 06 12:54	27°♁03'20		superior conj	1678 Jan 07 01:41	17°♁15'12	-1°-56'-30
	1677 Feb 08 03:42	0°♁		minimum elong	1678 Jan 06 20:29	16°♁53'52	1°56'14
asc. node	1677 Feb 16 09:42	14°♁22'55			1678 Jan 14 16:19	0°♁	
evening max el	1677 Feb 23 00:47	23°♁10'18	18°09'18	evening rise	1678 Jan 19 21:38	8°♁59'19	
retrograde	1677 Mar 01 19:14	26°♁36'28			1678 Feb 01 11:44	0°♁	
evening set	1677 Mar 04 09:21	26°♁06'46		asc. node	1678 Feb 03 06:45	2°♁31'15	
inferior conj	1677 Mar 11 03:57	21°♁12'43	3°29'20	evening max el	1678 Feb 06 13:09	6°♁22'30	18°10'23
minimum elong	1677 Mar 11 06:16	21°♁07'18	3°29'03	retrograde	1678 Feb 13 00:25	9°♁47'20	
min. Earth dist.	1677 Mar 14 10:15	18°♁11'07	0.60645 AU	evening set	1678 Feb 15 19:32	9°♁07'39	
morning rise	1677 Mar 18 00:01	15°♁24'26		inferior conj	1678 Feb 22 02:02	3°♁52'53	3°44'13
direct	1677 Mar 24 17:08	13°♁13'20		minimum elong	1678 Feb 22 02:19	3°♁52'09	3°44'13
desc. node	1677 Mar 26 21:52	13°♁26'39		min. Earth dist.	1678 Feb 24 19:58	0°♁58'57	0.62714 AU
morning max el	1677 Apr 07 23:16	21°♁05'32	27°38'55		1678 Feb 25 19:44	30°♁	
	1677 Apr 15 16:51	0°♁		morning rise	1678 Feb 28 06:58	27°♁51'58	
	1677 May 04 09:51	0°♁		direct	1678 Mar 07 05:49	25°♁14'19	
morning set	1677 May 10 02:38	11°♁17'51		desc. node	1678 Mar 13 18:54	27°♁13'22	
asc. node	1677 May 15 08:59	22°♁29'07			1678 Mar 17 17:53	0°♁	
max. Earth dist.	1677 May 16 08:54	24°♁39'27	1.32276 AU	morning max el	1678 Mar 21 05:03	3°♁09'37	27°48'09
					1678 Apr 10 03:41	0°♁	
superior conj	1677 May 17 09:20	26°♁53'13	0°21'11	morning set	1678 Apr 24 03:39	25°♁35'16	
minimum elong	1677 May 17 08:23	26°♁48'01	0°20'58		1678 Apr 26 07:26	0°♁	
	1677 May 18 19:23	0°♁		max. Earth dist.	1678 Apr 29 16:30	7°♁06'58	1.32718 AU
evening rise	1677 May 24 07:10	11°♁54'14					
	1677 Jun 02 12:10	0°♁		superior conj	1678 May 01 18:22	11°♁35'19	0°-5'-8
evening max el	1677 Jun 20 04:02	24°♁31'16	25°20'06	minimum elong	1678 May 01 18:37	11°♁36'39	0°05'05
desc. node	1677 Jun 22 21:09	26°♁54'30		behind sun begin	1678 May 01 13:39	11°♁09'49	
	1677 Jun 27 15:02	0°♁		behind sun end	1678 May 01 23:34	12°♁03'30	
retrograde	1677 Jul 04 04:28	1°♁39'24		asc. node	1678 May 02 06:03	12°♁38'34	
evening set	1677 Jul 09 20:37	0°♁24'34		evening rise	1678 May 08 19:00	26°♁45'53	
	1677 Jul 10 18:06	30°♁			1678 May 10 08:01	0°♁	
min. Earth dist.	1677 Jul 14 15:59	27°♁42'12	0.57882 AU		1678 May 28 02:07	0°♁	
inferior conj	1677 Jul 17 19:12	25°♁32'19	-4°-55'-50	evening max el	1678 Jun 01 18:16	5°♁09'06	23°48'34
minimum elong	1677 Jul 17 18:33	25°♁33'26	4°55'51	desc. node	1678 Jun 09 18:10	10°♁47'42	
morning rise	1677 Jul 25 20:14	21°♁16'52		retrograde	1678 Jun 15 11:51	12°♁02'22	
direct	1677 Jul 28 08:50	20°♁57'33		evening set	1678 Jun 19 17:27	11°♁22'55	
morning max el	1677 Aug 05 23:53	25°♁01'11	18°56'02	min. Earth dist.	1678 Jun 26 04:55	8°♁18'16	0.56173 AU
	1677 Aug 10 07:08	0°♁		inferior conj	1678 Jun 28 12:06	6°♁54'29	-4°-28'-53
asc. node	1677 Aug 11 08:11	1°♁28'08		minimum elong	1678 Jun 28 06:15	7°♁03'25	4°27'57
morning set	1677 Aug 22 13:48	21°♁28'34		morning rise	1678 Jul 06 22:30	2°♁56'45	
	1677 Aug 26 21:36	0°♁		direct	1678 Jul 09 15:50	2°♁37'52	
				morning max el	1678 Jul 19 17:30	7°♁17'55	19°58'23
superior conj	1677 Aug 31 01:34	8°♁05'02	1°42'17	asc. node	1678 Jul 29 05:15	19°♁53'50	
minimum elong	1677 Aug 31 03:21	8°♁13'34	1°42'12		1678 Aug 03 17:23	0°♁	
max. Earth dist.	1677 Sep 06 21:59	20°♁46'31	1.38933 AU	morning set	1678 Aug 06 17:28	5°♁59'26	
evening rise	1677 Sep 10 20:31	27°♁40'58					
	1677 Sep 12 05:07	0°♁		superior conj	1678 Aug 14 13:31	21°♁54'25	1°45'58
desc. node	1677 Sep 18 20:28	10°♁52'44		minimum elong	1678 Aug 14 13:28	21°♁54'13	1°45'58
	1677 Oct 01 17:14	0°♁			1678 Aug 18 16:26	0°♁	

max. Earth dist.	1678 Aug 20 02:50	2°♄44'09	1.36953 AU	max. Earth dist.	1679 Aug 02 13:57	14°♃36'29	1.35231 AU
evening rise	1678 Aug 24 00:13	9°♄56'38		evening rise	1679 Aug 06 22:19	23°♃05'17	
	1678 Sep 04 21:32	0°♃			1679 Aug 10 15:50	0°♄	
desc. node	1678 Sep 05 17:30	1°♃17'55		desc. node	1679 Aug 23 14:31	21°♄24'59	
	1678 Sep 27 08:07	0°♃			1679 Aug 29 13:50	0°♃	
evening max el	1678 Sep 28 18:27	1°♃26'19	25°41'01	evening max el	1679 Sep 11 06:36	15°♃03'20	26°39'34
retrograde	1678 Oct 11 00:49	8°♃27'25		retrograde	1679 Sep 24 05:34	22°♃17'20	
evening set	1678 Oct 17 01:10	5°♃57'23		evening set	1679 Sep 30 19:29	19°♃36'48	
min. Earth dist.	1678 Oct 21 10:16	1°♃10'09	0.66924 AU	min. Earth dist.	1679 Oct 04 21:07	15°♃26'41	0.65981 AU
	1678 Oct 22 08:17	30°♃		inferior conj	1679 Oct 06 14:28	13°♃23'39	-1°-50'-7
inferior conj	1678 Oct 22 15:48	29°♃36'00	0°-52'-6	minimum elong	1679 Oct 06 17:23	13°♃14'56	1°48'58
minimum elong	1678 Oct 22 17:08	29°♃31'42	0°51'33	asc. node	1679 Oct 12 01:29	8°♃00'18	
asc. node	1678 Oct 25 04:26	26°♃31'21		morning rise	1679 Oct 12 16:34	7°♃38'14	
morning rise	1678 Oct 28 09:53	23°♃38'57		direct	1679 Oct 15 13:18	6°♃52'22	
direct	1678 Oct 31 15:37	22°♃38'26		morning max el	1679 Oct 22 04:25	10°♃30'18	18°28'49
morning max el	1678 Nov 07 16:41	26°♃35'43	19°12'57		1679 Nov 04 23:12	0°♃	
	1678 Nov 10 17:01	0°♃		morning set	1679 Nov 11 01:14	9°♃46'02	
greatest brilliancy	1678 Nov 18 08:57	10°♃39'26	-0.7m	desc. node	1679 Nov 19 13:47	23°♃22'26	
morning set	1678 Nov 30 21:29	29°♃54'27			1679 Nov 23 18:25	0°♃	
	1678 Nov 30 22:54	0°♃					
desc. node	1678 Dec 02 16:46	2°♃43'00		superior conj	1679 Nov 26 17:47	4°♃40'44	0°-46'-35
max. Earth dist.	1678 Dec 14 22:02	21°♃51'00	1.44777 AU	minimum elong	1679 Nov 26 11:49	4°♃17'15	0°45'50
				max. Earth dist.	1679 Nov 27 16:49	6°♃11'10	1.45137 AU
superior conj	1678 Dec 17 16:29	26°♃13'48	-1°-29'-39	evening rise	1679 Dec 12 21:14	0°♃04'07	
minimum elong	1678 Dec 17 07:44	25°♃39'09	1°28'49		1679 Dec 12 20:11	0°♃	
	1678 Dec 20 01:21	0°♃		greatest brilliancy	1679 Dec 24 17:12	18°♃39'17	-0.7m
evening rise	1679 Jan 01 09:10	20°♃00'19			1680 Jan 01 16:07	0°♃	
	1679 Jan 07 10:30	0°♃		evening max el	1680 Jan 04 10:59	3°♃11'58	19°07'19
evening max el	1679 Jan 21 01:22	19°♃44'47	18°30'02	asc. node	1680 Jan 08 00:46	6°♃08'17	
asc. node	1679 Jan 21 03:46	19°♃50'51		retrograde	1680 Jan 11 09:56	7°♃09'56	
retrograde	1679 Jan 27 14:33	23°♃20'47		evening set	1680 Jan 14 16:41	6°♃07'16	
evening set	1679 Jan 30 14:58	22°♃30'11		inferior conj	1680 Jan 20 08:22	0°♃16'28	3°20'02
inferior conj	1679 Feb 05 12:41	16°♃56'11	3°39'22	minimum elong	1680 Jan 20 06:04	0°♃23'47	3°19'37
minimum elong	1679 Feb 05 11:21	17°♃00'06	3°39'14		1680 Jan 20 13:32	30°♃	
min. Earth dist.	1679 Feb 07 15:09	14°♃28'15	0.64507 AU	min. Earth dist.	1680 Jan 21 19:35	28°♃24'43	0.65913 AU
morning rise	1679 Feb 11 06:22	10°♃47'44		morning rise	1680 Jan 25 18:33	24°♃03'31	
direct	1679 Feb 18 01:54	7°♃57'55		direct	1680 Feb 01 04:23	21°♃15'29	
desc. node	1679 Feb 28 15:57	13°♃04'15		morning max el	1680 Feb 13 23:58	28°♃49'19	26°25'42
morning max el	1679 Mar 03 14:07	15°♃47'54	27°21'41		1680 Feb 15 03:23	0°♃	
	1679 Mar 15 06:56	0°♃		desc. node	1680 Feb 15 13:00	0°♃25'34	
	1679 Apr 02 21:19	0°♃			1680 Mar 08 02:17	0°♃	
morning set	1679 Apr 07 20:19	9°♃23'49		morning set	1680 Mar 21 01:03	22°♃33'06	
max. Earth dist.	1679 Apr 12 16:08	19°♃06'18	1.33589 AU		1680 Mar 24 22:04	0°♃	
				max. Earth dist.	1680 Mar 25 04:51	0°♃33'16	1.34914 AU
superior conj	1679 Apr 15 23:14	26°♃00'09	0°-32'-43				
minimum elong	1679 Apr 16 00:52	26°♃08'47	0°32'23	superior conj	1680 Mar 29 21:41	10°♃01'14	-1°00'-21
	1679 Apr 17 20:20	0°♃		minimum elong	1680 Mar 30 00:42	10°♃16'43	0°59'50
asc. node	1679 Apr 19 03:05	2°♃44'17		asc. node	1680 Apr 05 00:07	22°♃42'21	
evening rise	1679 Apr 23 06:10	11°♃30'42		evening rise	1680 Apr 06 14:46	26°♃02'42	
	1679 May 02 19:50	0°♃			1680 Apr 08 13:11	0°♃	
evening max el	1679 May 14 10:21	15°♃40'24	22°12'55	evening max el	1680 Apr 25 11:11	26°♃35'05	20°46'31
retrograde	1679 May 27 06:48	22°♃01'06			1680 Apr 29 19:10	0°♃	
desc. node	1679 May 27 15:11	22°♃00'49		retrograde	1680 May 06 20:00	2°♃06'39	
evening set	1679 May 30 04:06	21°♃42'40		evening set	1680 May 08 23:35	1°♃55'34	
min. Earth dist.	1679 Jun 07 16:30	18°♃03'09	0.55121 AU	desc. node	1680 May 13 12:12	0°♃28'21	
inferior conj	1679 Jun 08 12:02	17°♃35'39	-3°-14'-17		1680 May 14 12:08	30°♃	
minimum elong	1679 Jun 08 04:19	17°♃46'32	3°12'04	inferior conj	1680 May 18 05:52	27°♃57'54	-1°-22'-24
morning rise	1679 Jun 17 06:28	13°♃43'30		minimum elong	1680 May 18 01:58	28°♃03'28	1°21'01
direct	1679 Jun 20 06:47	13°♃23'07		min. Earth dist.	1680 May 19 05:01	27°♃24'50	0.54974 AU
morning max el	1679 Jul 01 23:40	18°♃50'48	21°20'54	morning rise	1680 May 27 03:23	23°♃51'38	
	1679 Jul 10 21:39	0°♃		direct	1680 May 30 16:26	23°♃24'37	
asc. node	1679 Jul 16 02:18	8°♃54'49		morning max el	1680 Jun 12 20:00	29°♃44'03	22°58'20
morning set	1679 Jul 22 01:45	20°♃44'48			1680 Jun 13 02:45	0°♃	
	1679 Jul 26 11:52	0°♃		asc. node	1680 Jul 01 23:22	28°♃22'10	
					1680 Jul 02 18:54	0°♃	
superior conj	1679 Jul 29 11:27	6°♃14'07	1°42'02	morning set	1680 Jul 05 12:43	5°♃38'54	
minimum elong	1679 Jul 29 10:03	6°♃06'53	1°41'58				

superior conj	1680 Jul 12 16:13	20°☿54'36	1°32'00	morning set	1681 Jun 20 00:35	20°♁35'21	
minimum elong	1680 Jul 12 14:02	20°☿42'58	1°31'46		1681 Jun 24 09:36	0°☿	
max. Earth dist.	1680 Jul 15 10:06	26°☿42'57	1.33879 AU				
	1680 Jul 17 00:04	0°♁		superior conj	1681 Jun 27 01:15	5°☿46'46	1°16'58
evening rise	1680 Jul 20 10:16	6°♁54'55		minimum elong	1681 Jun 26 22:50	5°☿33'35	1°16'36
	1680 Aug 02 05:42	0°♁		max. Earth dist.	1681 Jun 28 14:37	9°☿09'17	1.32929 AU
desc. node	1680 Aug 09 11:31	11°♁06'01		evening rise	1681 Jul 04 08:10	21°☿13'25	
evening max el	1680 Aug 23 18:27	28°♁28'15	27°16'23		1681 Jul 08 18:48	0°♁	
	1680 Aug 25 10:31	0°♁			1681 Jul 27 05:40	0°♁	
retrograde	1680 Sep 06 04:49	5°♁46'58		desc. node	1681 Jul 27 08:33	0°♁09'36	
evening set	1680 Sep 13 05:08	3°♁03'50		evening max el	1681 Aug 06 04:23	11°♁28'54	27°25'09
	1680 Sep 16 12:44	30°♁		retrograde	1681 Aug 19 22:00	18°♁46'44	
min. Earth dist.	1680 Sep 17 00:03	29°♁30'11	0.64680 AU	evening set	1681 Aug 27 02:51	16°♁12'40	
inferior conj	1680 Sep 19 06:03	27°♁03'01	-2°-47'-38	min. Earth dist.	1681 Aug 30 17:23	13°♁10'38	0.63024 AU
minimum elong	1680 Sep 19 10:25	26°♁51'06	2°46'07	inferior conj	1681 Sep 02 11:52	10°♁27'54	-3°-41'-24
morning rise	1680 Sep 25 17:37	21°♁32'22		minimum elong	1681 Sep 02 17:06	10°♁15'04	3°39'57
asc. node	1680 Sep 27 22:32	20°♁58'12		morning rise	1681 Sep 09 09:50	5°♁15'13	
direct	1680 Sep 28 07:43	20°♁57'25		direct	1681 Sep 11 19:59	4°♁47'45	
morning max el	1680 Oct 04 19:47	24°♁25'14	18°01'26	asc. node	1681 Sep 14 19:36	5°♁30'20	
	1680 Oct 09 08:59	0°♁		morning max el	1681 Sep 18 11:52	8°♁13'43	17°51'47
morning set	1680 Oct 22 09:48	21°♁02'03			1681 Oct 02 19:22	0°♁	
	1680 Oct 27 18:41	0°♁		morning set	1681 Oct 04 18:29	3°♁27'38	
superior conj	1680 Nov 05 03:07	13°♁36'35	0°02'10	superior conj	1681 Oct 16 12:26	23°♁44'33	0°45'07
minimum elong	1680 Nov 05 03:23	13°♁37'37	0°02'08	minimum elong	1681 Oct 16 16:33	24°♁01'44	0°44'34
behind sun begin	1680 Nov 04 16:56	12°♁55'40			1681 Oct 20 07:12	0°♁	
behind sun end	1680 Nov 05 13:50	14°♁19'29		max. Earth dist.	1681 Oct 23 03:24	4°♁36'54	1.43686 AU
desc. node	1680 Nov 05 10:48	14°♁07'20		desc. node	1681 Oct 23 07:50	4°♁54'41	
max. Earth dist.	1680 Nov 09 11:33	20°♁32'12	1.44753 AU	evening rise	1681 Oct 31 21:09	18°♁23'58	
	1680 Nov 15 12:18	0°♁			1681 Nov 08 11:47	0°♁	
evening rise	1680 Nov 21 13:07	9°♁21'11		greatest brilliancy	1681 Nov 25 09:08	24°♁01'55	-0.4m
	1680 Dec 05 02:45	0°♁			1681 Nov 30 11:31	0°♁	
greatest brilliancy	1680 Dec 10 16:55	8°♁03'23	-0.6m	evening max el	1681 Nov 30 15:49	0°♁11'05	21°07'02
evening max el	1680 Dec 17 16:07	16°♁40'52	20°00'33	retrograde	1681 Dec 09 05:16	5°♁15'49	
asc. node	1680 Dec 24 21:48	21°♁08'24		asc. node	1681 Dec 11 18:50	4°♁39'07	
retrograde	1680 Dec 25 07:37	21°♁09'20		evening set	1681 Dec 13 05:46	3°♁44'30	
evening set	1680 Dec 28 22:16	19°♁53'12			1681 Dec 16 18:54	30°♁	
inferior conj	1681 Jan 03 10:09	13°♁48'33	2°49'50	inferior conj	1681 Dec 18 15:42	27°♁29'19	2°11'12
minimum elong	1681 Jan 03 07:30	13°♁57'25	2°49'08	minimum elong	1681 Dec 18 13:14	27°♁37'49	2°10'23
min. Earth dist.	1681 Jan 04 07:33	12°♁36'55	0.66916 AU	min. Earth dist.	1681 Dec 19 00:49	26°♁57'53	0.67537 AU
morning rise	1681 Jan 08 16:08	7°♁33'24		morning rise	1681 Dec 23 20:18	21°♁14'06	
direct	1681 Jan 14 12:38	4°♁57'53		direct	1681 Dec 29 01:54	18°♁58'04	
morning max el	1681 Jan 26 08:49	12°♁01'37	25°09'04	morning max el	1682 Jan 08 17:19	25°♁18'42	23°42'03
desc. node	1681 Feb 01 10:01	18°♁50'45			1682 Jan 12 23:22	0°♁	
	1681 Feb 09 19:34	0°♁		desc. node	1682 Jan 19 07:02	8°♁01'26	
	1681 Feb 28 19:36	0°♁			1682 Feb 03 08:07	0°♁	
morning set	1681 Mar 03 12:51	4°♁48'17		morning set	1682 Feb 13 01:40	15°♁52'58	
max. Earth dist.	1681 Mar 07 06:05	11°♁36'04	1.36675 AU	max. Earth dist.	1682 Feb 17 00:58	22°♁45'54	1.38751 AU
					1682 Feb 21 01:37	0°♁	
superior conj	1681 Mar 13 10:47	23°♁29'54	-1°-26'-17	superior conj	1682 Feb 24 10:52	6°♁16'53	-1°-47'-58
minimum elong	1681 Mar 13 14:49	23°♁49'48	1°25'45	minimum elong	1682 Feb 24 14:56	6°♁36'04	1°47'38
	1681 Mar 16 17:00	0°♁		evening rise	1682 Mar 05 14:57	23°♁59'00	
evening rise	1681 Mar 21 18:34	10°♁14'24			1682 Mar 08 17:46	0°♁	
asc. node	1681 Mar 22 21:08	12°♁27'40		asc. node	1682 Mar 09 18:11	1°♁55'20	
	1681 Apr 01 13:05	0°♁		evening max el	1682 Mar 21 22:59	20°♁19'38	18°47'06
evening max el	1681 Apr 07 23:46	8°♁08'02	19°36'58	retrograde	1682 Mar 30 02:22	24°♁17'11	
retrograde	1681 Apr 17 15:05	12°♁47'00		evening set	1682 Apr 01 08:08	24°♁00'21	
evening set	1681 Apr 19 16:10	12°♁35'22		inferior conj	1682 Apr 09 05:02	19°♁39'36	2°09'10
inferior conj	1681 Apr 28 08:06	8°♁31'38	0°35'13	minimum elong	1682 Apr 09 09:02	19°♁32'15	2°08'01
minimum elong	1681 Apr 28 09:36	8°♁29'15	0°34'41	min. Earth dist.	1682 Apr 12 12:08	17°♁15'22	0.57383 AU
desc. node	1681 Apr 30 09:14	7°♁13'51		morning rise	1682 Apr 17 05:36	14°♁29'08	
min. Earth dist.	1681 Apr 30 19:20	6°♁58'11	0.55788 AU	desc. node	1682 Apr 17 06:15	14°♁28'25	
morning rise	1681 May 06 23:25	3°♁54'41		direct	1682 Apr 22 18:13	13°♁14'33	
direct	1681 May 11 10:19	3°♁10'11		morning max el	1682 May 07 02:19	20°♁45'12	26°11'01
morning max el	1681 May 25 10:54	10°♁13'10	24°40'02		1682 May 15 01:51	0°♁	
	1681 Jun 09 06:58	0°♁			1682 Jun 01 20:05	0°♁	
asc. node	1681 Jun 18 20:25	18°♁07'53					

morning set	1682 Jun 04 11:46	5°♃29'01				1683 Apr 17 01:35	0°♃		
asc. node	1682 Jun 05 17:28	8°♃06'26			morning max el	1683 Apr 18 22:54	1°♃45'49	27°16'45	
						1683 May 09 07:32	0°♃		
superior conj	1682 Jun 11 12:32	20°♃44'00	0°57'51		morning set	1683 May 19 20:38	20°♃14'33		
minimum elong	1682 Jun 11 10:22	20°♃32'03	0°57'26		asc. node	1683 May 23 14:32	28°♃13'04		
max. Earth dist.	1682 Jun 12 00:53	21°♃51'47	1.32377 AU			1683 May 24 10:12	0°♃		
	1682 Jun 15 18:34	0°♃			max. Earth dist.	1683 May 26 13:23	4°♃40'19	1.32205 AU	
evening rise	1682 Jun 18 12:55	5°♃51'23							
	1682 Jul 01 09:25	0°♃			superior conj	1683 May 27 00:18	5°♃40'24	0°35'22	
desc. node	1682 Jul 14 05:35	18°♃20'06			minimum elong	1683 May 26 22:48	5°♃32'08	0°35'03	
evening max el	1682 Jul 19 10:01	23°♃52'48	27°01'23		evening rise	1683 Jun 02 22:04	20°♃40'48		
	1682 Jul 28 03:39	0°♃				1683 Jun 07 11:33	0°♃		
retrograde	1682 Aug 02 07:57	1°♃07'04				1683 Jun 26 06:29	0°♃		
	1682 Aug 07 07:53	30°♃			evening max el	1683 Jul 01 08:58	5°♃31'06	26°05'00	
evening set	1682 Aug 09 08:23	28°♃55'34			desc. node	1683 Jul 01 02:36	5°♃15'49		
min. Earth dist.	1682 Aug 13 00:17	26°♃14'34	0.61090 AU		retrograde	1683 Jul 15 09:01	12°♃41'41		
inferior conj	1682 Aug 16 04:38	23°♃29'57	-4°-26'-5		evening set	1683 Jul 21 17:03	11°♃04'20		
minimum elong	1682 Aug 16 09:22	23°♃19'40	4°25'15		min. Earth dist.	1683 Jul 25 21:35	8°♃28'06	0.59030 AU	
morning rise	1682 Aug 23 13:22	18°♃38'16			inferior conj	1683 Jul 29 04:47	5°♃59'54	-4°-53'-5	
direct	1682 Aug 25 22:29	18°♃15'23			minimum elong	1683 Jul 29 06:50	5°♃56'04	4°53'00	
asc. node	1682 Sep 01 16:40	21°♃26'41			morning rise	1683 Aug 06 00:03	1°♃31'25		
morning max el	1682 Sep 02 01:34	21°♃47'49	18°00'52		direct	1683 Aug 08 10:55	1°♃11'04		
	1682 Sep 08 08:49	0°♃			morning max el	1683 Aug 16 09:49	4°♃59'35	18°29'56	
morning set	1682 Sep 17 20:57	16°♃44'09			asc. node	1683 Aug 19 13:44	8°♃32'42		
	1682 Sep 25 02:45	0°♃				1683 Sep 01 04:15	0°♃		
					morning set	1683 Sep 01 12:05	0°♃37'39		
superior conj	1682 Sep 28 00:43	5°♃11'35	1°16'36						
minimum elong	1682 Sep 28 05:10	5°♃31'11	1°16'07		superior conj	1683 Sep 10 11:55	17°♃46'45	1°36'01	
max. Earth dist.	1682 Oct 05 14:46	18°♃10'50	1.42072 AU		minimum elong	1683 Sep 10 14:50	18°♃00'17	1°35'48	
desc. node	1682 Oct 10 04:52	25°♃40'51				1683 Sep 17 06:34	0°♃		
evening rise	1682 Oct 11 14:34	27°♃55'40			max. Earth dist.	1683 Sep 17 21:14	1°♃03'52	1.40115 AU	
	1682 Oct 12 21:56	0°♃			evening rise	1683 Sep 22 05:26	8°♃27'17		
	1682 Nov 02 05:13	0°♃			desc. node	1683 Sep 27 01:55	16°♃22'33		
greatest brilliancy	1682 Nov 08 16:24	8°♃23'13	-0.3m			1683 Oct 05 22:41	0°♃		
evening max el	1682 Nov 13 10:09	13°♃42'44	22°22'52		evening max el	1683 Oct 27 00:20	27°♃17'15	23°42'46	
retrograde	1682 Nov 23 01:06	19°♃25'56				1683 Oct 29 23:25	0°♃		
evening set	1682 Nov 27 13:26	17°♃37'52			retrograde	1683 Nov 06 17:53	3°♃36'56		
asc. node	1682 Nov 28 15:53	16°♃37'57			evening set	1683 Nov 11 19:40	1°♃31'23		
inferior conj	1682 Dec 02 22:57	11°♃15'43	1°25'53			1683 Nov 13 09:33	30°♃		
minimum elong	1682 Dec 02 21:07	11°♃22'05	1°25'10		asc. node	1683 Nov 15 12:56	27°♃24'54		
min. Earth dist.	1682 Dec 02 20:55	11°♃22'46	0.67800 AU		min. Earth dist.	1683 Nov 16 17:30	25°♃49'11	0.67723 AU	
morning rise	1682 Dec 08 04:40	5°♃02'35			inferior conj	1683 Nov 17 06:09	25°♃06'05	0°35'16	
direct	1682 Dec 12 19:12	3°♃09'13			minimum elong	1683 Nov 17 05:19	25°♃08'54	0°34'55	
morning max el	1682 Dec 22 04:37	8°♃41'26	22°14'25		morning rise	1683 Nov 22 15:09	18°♃57'17		
greatest brilliancy	1682 Dec 26 19:19	13°♃51'47	-0.3m		direct	1683 Nov 26 15:32	17°♃26'33		
desc. node	1683 Jan 06 04:04	27°♃44'21			morning max el	1683 Dec 04 22:14	22°♃14'28	20°53'55	
	1683 Jan 07 17:49	0°♃			greatest brilliancy	1683 Dec 10 13:52	28°♃48'42	-0.5m	
morning set	1683 Jan 24 09:57	25°♃33'35				1683 Dec 11 11:51	0°♃		
	1683 Jan 27 03:08	0°♃			desc. node	1683 Dec 24 01:07	17°♃50'45		
max. Earth dist.	1683 Jan 29 22:03	4°♃38'49	1.40895 AU			1684 Jan 01 01:19	0°♃		
					morning set	1684 Jan 03 15:38	4°♃01'50		
superior conj	1683 Feb 06 17:06	18°♃09'43	-2°-1'-52		max. Earth dist.	1684 Jan 12 02:22	17°♃28'46	1.42808 AU	
minimum elong	1683 Feb 06 19:22	18°♃19'51	2°01'47						
	1683 Feb 13 04:54	0°♃			superior conj	1684 Jan 19 00:13	28°♃56'15	-2°-3'-16	
evening rise	1683 Feb 17 00:38	7°♃08'03			minimum elong	1684 Jan 18 22:11	28°♃47'42	2°03'14	
asc. node	1683 Feb 24 15:13	20°♃58'40				1684 Jan 19 15:15	0°♃		
	1683 Mar 02 13:33	0°♃			evening rise	1684 Jan 30 19:46	19°♃33'42		
evening max el	1683 Mar 05 05:47	3°♃01'35	18°17'22			1684 Feb 05 17:08	0°♃		
retrograde	1683 Mar 12 08:45	6°♃34'32			asc. node	1684 Feb 11 12:15	9°♃29'58		
evening set	1683 Mar 14 20:04	6°♃09'50			evening max el	1684 Feb 16 16:57	16°♃05'07	18°07'21	
inferior conj	1683 Mar 21 23:16	1°♃27'51	3°09'10		retrograde	1684 Feb 23 07:08	19°♃29'07		
minimum elong	1683 Mar 22 02:38	1°♃20'34	3°08'32		evening set	1684 Feb 25 23:23	18°♃55'15		
	1683 Mar 23 15:54	30°♃			inferior conj	1684 Mar 03 12:22	13°♃51'52	3°38'29	
min. Earth dist.	1683 Mar 25 09:19	28°♃32'59	0.59419 AU		minimum elong	1684 Mar 03 13:48	13°♃48'19	3°38'22	
morning rise	1683 Mar 29 05:31	25°♃50'49			min. Earth dist.	1684 Mar 06 13:53	10°♃51'06	0.61550 AU	
desc. node	1683 Apr 04 03:16	24°♃00'33			morning rise	1684 Mar 10 01:32	7°♃57'19		
direct	1683 Apr 04 14:54	23°♃59'55			direct	1684 Mar 16 22:10	5°♃33'45		

desc. node	1684 Mar 21 00:18	6°♄20'08		morning rise	1685 Feb 20 15:58	20°♁38'53	
morning max el	1684 Mar 31 01:56	13°♄27'43	27°47'32	direct	1685 Feb 27 14:10	17°♁54'14	
	1684 Apr 13 07:40	0°♃		desc. node	1685 Mar 07 21:20	21°♁04'38	
	1684 Apr 30 16:37	0°♄		morning max el	1685 Mar 13 09:43	25°♁49'13	27°41'00
morning set	1684 May 03 01:09	4°♄44'40			1685 Mar 17 06:36	0°♄	
max. Earth dist.	1684 May 09 00:03	17°♄20'09	1.32416 AU		1685 Apr 06 19:49	0°♃	
asc. node	1684 May 09 11:34	18°♄22'42		morning set	1685 Apr 16 23:01	18°♃51'47	
				max. Earth dist.	1685 Apr 22 04:48	29°♃37'46	1.33034 AU
superior conj	1684 May 10 10:49	20°♄29'23	0°10'14		1685 Apr 22 09:01	0°♄	
minimum elong	1684 May 10 10:20	20°♄26'48	0°10'08				
behind sun begin	1684 May 10 06:23	20°♄05'13		superior conj	1685 Apr 24 18:19	5°♄05'19	0°-16'-44
behind sun end	1684 May 10 14:18	20°♄48'24		minimum elong	1685 Apr 24 19:08	5°♄09'43	0°16'34
	1684 May 14 19:20	0°♂		asc. node	1685 Apr 26 08:36	8°♄31'23	
evening rise	1684 May 17 09:27	5°♂33'33		evening rise	1685 May 01 21:13	20°♄23'20	
	1684 May 30 08:29	0°♆			1685 May 06 14:05	0°♂	
evening max el	1684 Jun 12 01:01	16°♆24'54	24°42'35	evening max el	1685 May 24 14:53	26°♂55'36	23°07'25
desc. node	1684 Jun 16 23:37	20°♆25'58			1685 May 28 05:48	0°♆	
retrograde	1684 Jun 25 23:32	23°♆28'38		desc. node	1685 Jun 03 20:36	3°♆14'40	
evening set	1684 Jul 01 02:00	22°♆29'45		retrograde	1685 Jun 07 01:51	3°♆38'17	
min. Earth dist.	1684 Jul 06 12:13	19°♆39'48	0.57095 AU	evening set	1685 Jun 10 16:22	3°♆09'47	
inferior conj	1684 Jul 09 09:15	17°♆47'33	-4°-49'-55		1685 Jun 17 18:33	30°♂	
minimum elong	1684 Jul 09 06:19	17°♆52'21	4°49'42	min. Earth dist.	1685 Jun 18 00:20	29°♂51'40	0.55626 AU
morning rise	1684 Jul 17 14:24	13°♆41'02		inferior conj	1685 Jun 19 18:04	28°♂50'47	-4°-3'-3
direct	1684 Jul 20 04:57	13°♆22'00		minimum elong	1685 Jun 19 10:44	29°♂01'31	4°01'27
morning max el	1684 Jul 29 09:32	17°♆39'00	19°20'02	morning rise	1685 Jun 28 08:13	24°♂57'34	
asc. node	1684 Aug 05 10:47	26°♆32'49		direct	1685 Jul 01 03:50	24°♂38'35	
	1684 Aug 07 13:29	0°♁		morning max el	1685 Jul 11 22:26	29°♂37'55	20°31'14
morning set	1684 Aug 15 11:57	14°♁56'45			1685 Jul 12 07:48	0°♆	
	1684 Aug 23 01:17	0°♃		asc. node	1685 Jul 23 07:50	15°♆14'36	
				morning set	1685 Jul 30 17:47	29°♆34'06	
superior conj	1684 Aug 23 16:15	1°♃13'07	1°44'53		1685 Jul 30 22:51	0°♁	
minimum elong	1684 Aug 23 17:13	1°♃17'50	1°44'52				
max. Earth dist.	1684 Aug 30 00:47	13°♃15'08	1.38066 AU	superior conj	1685 Aug 07 08:53	15°♁16'41	1°45'08
evening rise	1684 Sep 02 20:22	20°♃06'02		minimum elong	1685 Aug 07 08:12	15°♁13'12	1°45'07
	1684 Sep 08 15:56	0°♂		max. Earth dist.	1685 Aug 12 07:13	25°♁05'07	1.36176 AU
desc. node	1684 Sep 12 22:58	6°♂54'58			1685 Aug 14 20:56	0°♃	
	1684 Sep 29 00:58	0°♄		evening rise	1685 Aug 16 08:26	2°♃45'31	
evening max el	1684 Oct 08 12:22	10°♄54'39	25°00'21	desc. node	1685 Aug 30 19:59	27°♃12'59	
retrograde	1684 Oct 20 06:39	17°♄44'11			1685 Sep 01 16:00	0°♂	
evening set	1684 Oct 25 22:47	15°♄22'05		evening max el	1685 Sep 21 00:13	24°♂33'23	26°08'10
min. Earth dist.	1684 Oct 30 12:13	10°♄14'22	0.67307 AU		1685 Sep 27 22:45	0°♄	
inferior conj	1684 Oct 31 11:30	8°♄57'50	0°-19'-22	retrograde	1685 Oct 03 14:40	1°♄42'04	
minimum elong	1684 Oct 31 11:59	8°♄56'13	0°19'11		1685 Oct 08 16:58	30°♂	
asc. node	1684 Nov 01 09:58	7°♄44'37		evening set	1685 Oct 09 20:55	29°♂06'43	
morning rise	1684 Nov 06 01:46	2°♄55'49		min. Earth dist.	1685 Oct 14 02:42	24°♂35'06	0.66558 AU
direct	1684 Nov 09 13:37	1°♄45'25		inferior conj	1685 Oct 15 13:11	22°♂48'00	-1°-16'-40
morning max el	1684 Nov 16 23:40	5°♄58'24	19°45'37	minimum elong	1685 Oct 15 15:11	22°♂41'45	1°15'50
greatest brilliancy	1684 Nov 24 19:31	15°♄40'41	-0.6m	asc. node	1685 Oct 19 07:01	18°♂34'07	
	1684 Dec 04 12:57	0°♃		morning rise	1685 Oct 21 10:29	16°♂55'31	
desc. node	1684 Dec 09 22:11	8°♃13'58		direct	1685 Oct 24 11:59	16°♂01'52	
morning set	1684 Dec 12 12:01	12°♃12'14		morning max el	1685 Oct 31 08:10	19°♂50'10	18°52'10
	1684 Dec 23 21:10	0°♄			1685 Nov 08 06:19	0°♄	
max. Earth dist.	1684 Dec 24 13:53	1°♄06'18	1.44233 AU	morning set	1685 Nov 21 23:50	21°♄14'41	
				desc. node	1685 Nov 26 19:14	28°♄48'32	
superior conj	1684 Dec 29 04:55	8°♄31'00	-1°-47'-27		1685 Nov 27 13:25	0°♃	
minimum elong	1684 Dec 28 21:39	8°♄01'43	1°46'56	max. Earth dist.	1685 Dec 07 06:24	15°♃14'25	1.45011 AU
	1685 Jan 11 04:02	0°♁					
evening rise	1685 Jan 11 20:02	1°♁07'51		superior conj	1685 Dec 08 11:43	17°♃09'46	-1°-12'-54
asc. node	1685 Jan 28 09:16	27°♁19'35		minimum elong	1685 Dec 08 03:20	16°♃36'48	1°11'58
evening max el	1685 Jan 30 05:32	29°♁22'33	18°16'27		1685 Dec 16 14:20	0°♄	
	1685 Jan 30 21:00	0°♄		evening rise	1685 Dec 23 21:35	11°♄43'48	
retrograde	1685 Feb 05 16:46	2°♄51'08			1686 Jan 04 06:31	0°♁	
evening set	1685 Feb 08 13:56	2°♄07'03		evening max el	1686 Jan 13 16:54	12°♁47'35	18°43'53
	1685 Feb 11 12:32	30°♁		asc. node	1686 Jan 15 06:18	14°♁14'47	
inferior conj	1685 Feb 14 16:20	26°♁43'49	3°44'12	retrograde	1686 Jan 20 09:29	16°♁31'50	
minimum elong	1685 Feb 14 15:51	26°♁45'09	3°44'12	evening set	1686 Jan 23 12:21	15°♁36'26	
min. Earth dist.	1685 Feb 17 03:49	23°♁59'01	0.63514 AU	inferior conj	1686 Jan 29 07:13	9°♁55'15	3°32'40

minimum elong	1686 Jan 29 05:23	10° \approx 00'49	3°32'26	minimum elong	1687 Jan 13 03:18	23° \approx 29'15	3°07'49
min. Earth dist.	1686 Jan 31 03:12	7° \approx 41'31	0.65151 AU	min. Earth dist.	1687 Jan 14 11:01	21° \approx 46'06	0.66393 AU
morning rise	1686 Feb 03 21:15	3° \approx 44'28		morning rise	1687 Jan 18 13:51	17° \approx 07'08	
direct	1686 Feb 10 13:21	0° \approx 53'30		direct	1687 Jan 24 18:30	14° \approx 23'06	
desc. node	1686 Feb 22 18:22	7° \approx 37'40		morning max el	1687 Feb 06 04:36	21° \approx 45'20	25°54'59
morning max el	1686 Feb 23 19:20	8° \approx 38'54	27°00'56	desc. node	1687 Feb 09 15:26	25° \approx 28'50	
	1686 Mar 12 11:40	0° \approx			1687 Feb 13 09:34	0° \approx	
	1686 Mar 30 04:40	0° \approx			1687 Mar 05 17:16	0° \approx	
morning set	1686 Mar 31 11:07	2° \approx 25'26		morning set	1687 Mar 14 09:19	15° \approx 13'34	
max. Earth dist.	1686 Apr 04 23:46	11° \approx 22'06	1.34096 AU	max. Earth dist.	1687 Mar 18 07:08	22° \approx 35'30	1.35619 AU
					1687 Mar 22 01:49	0° \approx	
superior conj	1686 Apr 08 20:46	19° \approx 21'14	0°-44'-31	superior conj	1687 Mar 23 15:40	3° \approx 10'01	-1°-11'-41
minimum elong	1686 Apr 08 23:00	19° \approx 32'55	0°44'06	minimum elong	1687 Mar 23 19:11	3° \approx 27'47	1°11'08
asc. node	1686 Apr 13 05:37	28° \approx 34'26		asc. node	1687 Mar 31 02:39	18° \approx 27'49	
	1686 Apr 13 21:48	0° \approx		evening rise	1687 Mar 31 14:22	19° \approx 27'45	
evening rise	1686 Apr 16 07:31	5° \approx 03'24			1687 Apr 05 22:11	0° \approx	
	1686 Apr 30 02:24	0° \approx		evening max el	1687 Apr 18 16:02	18° \approx 45'14	20°14'34
evening max el	1686 May 06 10:09	7° \approx 34'31	21°34'26	retrograde	1687 Apr 29 06:45	23° \approx 53'10	
retrograde	1686 May 18 17:07	13° \approx 35'23		evening set	1687 May 01 08:05	23° \approx 42'28	
evening set	1686 May 21 04:27	13° \approx 21'34		desc. node	1687 May 08 14:37	20° \approx 46'21	
desc. node	1686 May 21 17:35	13° \approx 14'55		inferior conj	1687 May 10 09:24	19° \approx 44'09	0°-31'-6
inferior conj	1686 May 30 13:43	9° \approx 20'47	-2°-29'-49	minimum elong	1687 May 10 07:56	19° \approx 46'18	0°30'35
minimum elong	1686 May 30 07:03	9° \approx 30'07	2°27'39	min. Earth dist.	1687 May 12 01:34	18° \approx 44'56	0.55217 AU
min. Earth dist.	1686 May 30 12:30	9° \approx 22'29	0.54942 AU	morning rise	1687 May 19 05:33	15° \approx 26'27	
morning rise	1686 Jun 08 10:18	5° \approx 24'40		direct	1687 May 23 03:16	14° \approx 53'21	
direct	1686 Jun 11 15:01	5° \approx 02'19		morning max el	1687 Jun 05 17:08	21° \approx 32'31	23°41'51
morning max el	1686 Jun 24 00:01	10° \approx 52'56	22°00'56		1687 Jun 13 00:55	0° \approx	
	1686 Jul 07 19:22	0° \approx		asc. node	1687 Jun 27 01:56	24° \approx 04'02	
asc. node	1686 Jul 10 04:53	4° \approx 27'52		morning set	1687 Jun 29 14:59	29° \approx 19'51	
morning set	1686 Jul 15 03:25	14° \approx 23'50			1687 Jun 29 22:36	0° \approx	
superior conj	1686 Jul 22 10:04	29° \approx 46'26	1°38'27	superior conj	1687 Jul 06 16:55	14° \approx 32'49	1°26'10
minimum elong	1686 Jul 22 08:16	29° \approx 36'59	1°38'19	minimum elong	1687 Jul 06 14:34	14° \approx 20'10	1°25'53
	1686 Jul 22 12:39	0° \approx		max. Earth dist.	1687 Jul 08 22:08	19° \approx 17'43	1.33431 AU
max. Earth dist.	1686 Jul 25 21:57	7° \approx 01'26	1.34609 AU	evening rise	1687 Jul 14 05:37	0° \approx 17'14	
evening rise	1686 Jul 30 12:59	16° \approx 13'39			1687 Jul 14 02:11	0° \approx	
	1686 Aug 07 00:57	0° \approx		desc. node	1687 Jul 31 01:24	0° \approx	
desc. node	1686 Aug 17 16:58	17° \approx 10'10		evening max el	1687 Aug 04 13:58	6° \approx 37'01	
	1686 Aug 27 03:36	0° \approx		retrograde	1687 Aug 17 00:04	21° \approx 24'38	27°23'56
evening max el	1686 Sep 03 12:32	8° \approx 07'30	26°58'26	evening set	1687 Aug 30 13:45	28° \approx 42'33	
retrograde	1686 Sep 16 17:13	15° \approx 24'27		evening set	1687 Sep 06 16:53	26° \approx 02'02	
evening set	1686 Sep 23 11:54	12° \approx 41'58		min. Earth dist.	1687 Sep 10 09:39	22° \approx 42'36	0.64017 AU
min. Earth dist.	1686 Sep 27 10:38	8° \approx 47'17	0.65463 AU	inferior conj	1687 Sep 12 20:59	20° \approx 07'50	-3°-11'-9
inferior conj	1686 Sep 29 09:10	6° \approx 33'25	-2°-14'-47	minimum elong	1687 Sep 13 01:49	19° \approx 55'11	3°09'36
minimum elong	1686 Sep 29 12:44	6° \approx 23'08	2°13'25	morning rise	1687 Sep 19 12:52	14° \approx 44'14	
morning rise	1686 Oct 05 15:07	0° \approx 53'35		direct	1687 Sep 22 01:03	14° \approx 12'42	
asc. node	1686 Oct 06 04:04	0° \approx 39'09		asc. node	1687 Sep 23 01:08	14° \approx 17'50	
direct	1686 Oct 08 08:41	0° \approx 12'48		morning max el	1687 Sep 28 13:43	17° \approx 38'34	17°55'07
morning max el	1686 Oct 14 21:44	3° \approx 45'40	18°15'03		1687 Oct 07 12:00	0° \approx	
	1686 Nov 01 14:49	0° \approx		morning set	1687 Oct 15 11:50	13° \approx 32'11	
morning set	1686 Nov 02 16:12	1° \approx 43'51			1687 Oct 25 05:48	0° \approx	
desc. node	1686 Nov 13 16:16	19° \approx 30'57		superior conj	1687 Oct 28 08:07	5° \approx 05'04	0°21'36
superior conj	1686 Nov 17 13:50	25° \approx 42'07	0°-25'-51	minimum elong	1687 Oct 28 10:29	5° \approx 14'42	0°21'15
minimum elong	1686 Nov 17 10:29	25° \approx 28'53	0°25'25	desc. node	1687 Oct 31 13:17	10° \approx 17'15	
max. Earth dist.	1686 Nov 20 01:23	29° \approx 36'53	1.45060 AU	max. Earth dist.	1687 Nov 02 19:44	13° \approx 54'57	1.44381 AU
	1686 Nov 20 07:16	0° \approx			1687 Nov 13 02:31	0° \approx	
evening rise	1686 Dec 04 00:09	21° \approx 25'22		evening rise	1687 Nov 13 10:44	0° \approx 31'35	
	1686 Dec 09 12:17	0° \approx			1687 Dec 03 06:37	0° \approx	
greatest brilliancy	1686 Dec 19 12:14	15° \approx 14'22	-0.7m	greatest brilliancy	1687 Dec 05 01:05	2° \approx 24'12	-0.5m
evening max el	1686 Dec 28 00:55	26° \approx 16'27	19°28'13	evening max el	1687 Dec 11 03:52	9° \approx 46'03	20°27'26
	1687 Jan 02 01:42	0° \approx		retrograde	1687 Dec 19 03:55	14° \approx 28'59	
asc. node	1687 Jan 02 03:19	0° \approx 01'33		asc. node	1687 Dec 20 00:22	14° \approx 24'55	
retrograde	1687 Jan 04 06:02	0° \approx 26'04		evening set	1687 Dec 22 22:38	13° \approx 06'23	
	1687 Jan 06 08:46	30° \approx		inferior conj	1687 Dec 28 09:28	6° \approx 56'49	2°34'23
evening set	1687 Jan 07 15:59	29° \approx 17'51		minimum elong	1687 Dec 28 06:50	7° \approx 05'46	2°33'35
inferior conj	1687 Jan 13 05:49	23° \approx 21'03	3°08'23				

min. Earth dist.	1687 Dec 29 01:24	6°☿02'41	0.67227 AU	asc. node	1688 Dec 05 21:26	27°♁15'48	
morning rise	1688 Jan 02 14:33	0°☿41'39		evening set	1688 Dec 06 06:24	26°♁58'56	
	1688 Jan 03 10:40	30°♁		inferior conj	1688 Dec 11 15:58	20°♁40'04	1°52'43
direct	1688 Jan 08 04:50	28°♁14'01		minimum elong	1688 Dec 11 13:43	20°♁47'51	1°51'54
	1688 Jan 13 12:47	0°☿		min. Earth dist.	1688 Dec 11 20:09	20°♁25'35	0.67688 AU
morning max el	1688 Jan 19 13:05	4°☿59'55	24°32'49	morning rise	1688 Dec 16 20:45	14°♁25'30	
desc. node	1688 Jan 27 12:29	14°☿15'10		direct	1688 Dec 21 19:46	12°♁19'13	
	1688 Feb 07 19:42	0°♁		morning max el	1688 Dec 31 22:30	18°♁19'34	23°04'24
morning set	1688 Feb 24 12:10	27°♁00'57		greatest brilliancy	1689 Jan 05 19:08	23°♁45'36	-0.3m
	1688 Feb 26 04:39	0°♁			1689 Jan 10 16:31	0°☿	
max. Earth dist.	1688 Feb 28 05:15	3°♁39'00	1.37532 AU	desc. node	1689 Jan 13 09:32	3°☿40'45	
					1689 Jan 30 23:01	0°♁	
superior conj	1688 Mar 05 23:48	16°♁22'45	-1°-36'-11	morning set	1689 Feb 04 13:20	7°♁30'49	
minimum elong	1688 Mar 06 04:01	16°♁43'10	1°35'42	max. Earth dist.	1689 Feb 09 00:19	15°♁04'26	1.39663 AU
	1688 Mar 12 21:19	0°♁					
evening rise	1688 Mar 14 15:24	3°♁29'35		superior conj	1689 Feb 16 16:53	28°♁47'51	-1°-55'-5
asc. node	1688 Mar 16 23:41	8°♁06'53		minimum elong	1689 Feb 16 20:28	29°♁04'24	1°54'51
	1688 Mar 30 19:07	0°♁			1689 Feb 17 08:31	0°♁	
evening max el	1688 Mar 31 09:26	0°♁35'41	19°13'17	evening rise	1689 Feb 26 07:42	17°♁00'16	
retrograde	1688 Apr 09 08:14	4°♁55'30		asc. node	1689 Mar 03 20:45	27°♁25'18	
evening set	1688 Apr 11 10:59	4°♁42'01			1689 Mar 05 07:27	0°♁	
inferior conj	1688 Apr 19 18:54	0°♁31'30	1°18'58	evening max el	1689 Mar 14 12:12	13°♁01'03	18°32'03
minimum elong	1688 Apr 19 21:55	0°♁26'25	1°17'58	retrograde	1689 Mar 22 04:00	16°♁46'34	
	1688 Apr 20 13:32	30°♁		evening set	1689 Mar 24 11:59	16°♁26'46	
min. Earth dist.	1688 Apr 22 16:33	28°♁34'59	0.56387 AU	inferior conj	1689 Apr 01 01:00	11°♁57'12	2°38'45
desc. node	1688 Apr 24 11:39	27°♁28'17		minimum elong	1689 Apr 01 05:01	11°♁49'17	2°37'44
morning rise	1688 Apr 28 04:47	25°♁40'09		min. Earth dist.	1689 Apr 04 11:05	9°♁16'56	0.58205 AU
direct	1688 May 03 02:32	24°♁44'32		morning rise	1689 Apr 08 17:50	6°♁33'54	
	1688 May 15 02:00	0°♁		desc. node	1689 Apr 11 08:42	5°♁32'21	
morning max el	1688 May 17 07:41	2°♁00'26	25°21'01	direct	1689 Apr 14 15:59	5°♁04'14	
	1688 Jun 05 22:45	0°♁		morning max el	1689 Apr 29 01:10	12°♁43'13	26°42'51
morning set	1688 Jun 13 02:51	14°♁16'57			1689 May 12 15:07	0°♁	
asc. node	1688 Jun 12 22:59	13°♁56'37		morning set	1689 May 28 13:16	29°♁08'22	
					1689 May 28 23:06	0°♁	
superior conj	1688 Jun 20 03:11	29°♁28'44	1°09'19	asc. node	1689 May 30 20:02	3°♁59'24	
minimum elong	1688 Jun 20 00:49	29°♁15'45	1°08'56				
	1688 Jun 20 08:54	0°♁		superior conj	1689 Jun 04 14:54	14°♁26'42	0°48'41
max. Earth dist.	1688 Jun 21 05:48	1°♁54'00	1.32651 AU	minimum elong	1689 Jun 04 12:58	14°♁16'02	0°48'19
evening rise	1688 Jun 27 06:50	14°♁45'52		max. Earth dist.	1689 Jun 04 17:24	14°♁40'30	1.32256 AU
	1688 Jul 05 03:03	0°♁		evening rise	1689 Jun 11 13:43	29°♁29'39	
desc. node	1688 Jul 21 10:59	25°♁20'45			1689 Jun 11 19:31	0°♁	
	1688 Jul 25 07:49	0°♁			1689 Jun 28 09:08	0°♁	
evening max el	1688 Jul 29 08:28	4°♁11'24	27°18'59	desc. node	1689 Jul 08 08:00	13°♁02'48	
retrograde	1688 Aug 12 03:46	11°♁27'27		evening max el	1689 Jul 11 11:12	16°♁15'47	26°41'01
evening set	1688 Aug 19 08:18	9°♁01'04		retrograde	1689 Jul 25 10:25	23°♁29'23	
min. Earth dist.	1688 Aug 22 22:22	6°♁09'57	0.62240 AU	evening set	1689 Aug 01 05:34	21°♁30'56	
inferior conj	1688 Aug 25 21:41	3°♁24'25	-4°-1'-50	min. Earth dist.	1689 Aug 05 00:52	18°♁54'20	0.60220 AU
minimum elong	1688 Aug 26 02:56	3°♁12'13	4°00'36	inferior conj	1689 Aug 08 07:47	16°♁13'54	-4°-40'-21
	1688 Aug 29 22:12	30°♁		minimum elong	1689 Aug 08 11:42	16°♁05'54	4°39'51
morning rise	1688 Sep 02 00:16	28°♁20'29		morning rise	1689 Aug 15 21:08	11°♁32'20	
direct	1688 Sep 04 09:42	27°♁55'13		direct	1689 Aug 18 06:36	11°♁10'51	
asc. node	1688 Sep 08 22:12	29°♁27'55		morning max el	1689 Aug 25 17:04	14°♁48'45	18°10'42
	1688 Sep 09 15:50	0°♁		asc. node	1689 Aug 26 19:15	15°♁55'59	
morning max el	1688 Sep 11 05:13	1°♁22'25	17°53'18		1689 Sep 05 04:21	0°♁	
morning set	1688 Sep 27 04:45	26°♁21'29		morning set	1689 Sep 10 13:08	9°♁55'12	
	1688 Sep 29 05:22	0°♁					
superior conj	1688 Oct 08 05:09	15°♁47'40	0°59'59	superior conj	1689 Sep 20 03:54	27°♁46'10	1°26'14
minimum elong	1688 Oct 08 09:45	16°♁07'19	0°59'25	minimum elong	1689 Sep 20 07:50	28°♁03'50	1°25'52
max. Earth dist.	1688 Oct 15 10:09	27°♁49'27	1.43059 AU		1689 Sep 21 09:45	0°♁	
	1688 Oct 16 18:20	0°♁		max. Earth dist.	1689 Sep 27 18:51	11°♁05'07	1.41265 AU
desc. node	1688 Oct 17 10:19	1°♁04'31		evening rise	1689 Oct 02 22:19	19°♁36'13	
evening rise	1688 Oct 22 20:42	9°♁41'20		desc. node	1689 Oct 04 07:22	21°♁49'28	
	1688 Nov 05 07:22	0°♁			1689 Oct 09 12:04	0°♁	
greatest brilliancy	1688 Nov 18 03:51	17°♁40'48	-0.4m		1689 Oct 30 17:13	0°♁	
evening max el	1688 Nov 23 01:05	23°♁16'05	21°38'24	greatest brilliancy	1689 Oct 31 09:50	0°♁50'59	-0.2m
retrograde	1688 Dec 02 01:04	28°♁37'25		evening max el	1689 Nov 05 17:17	6°♁48'35	22°56'43
				retrograde	1689 Nov 15 19:53	12°♁48'35	

evening set	1689 Nov 20 13:39	10°♄53'10		evening max el	1690 Oct 19 06:22	20°♄24'48	24°16'34
asc. node	1689 Nov 22 18:28	8°♄40'38		retrograde	1690 Oct 30 11:02	26°♄58'19	
inferior conj	1689 Nov 25 23:25	4°♄28'56	1°05'00	evening set	1690 Nov 04 18:43	24°♄45'48	
minimum elong	1689 Nov 25 21:58	4°♄33'57	1°04'24	min. Earth dist.	1690 Nov 09 12:58	19°♄17'50	0.67586 AU
min. Earth dist.	1689 Nov 25 16:50	4°♄51'38	0.67802 AU	asc. node	1690 Nov 09 15:30	19°♄09'20	
	1689 Nov 29 11:17	30°♄		inferior conj	1690 Nov 10 06:01	18°♄20'27	0°12'30
morning rise	1689 Dec 01 06:15	28°♄17'09		minimum elong	1690 Nov 10 05:43	18°♄21'28	0°12'22
direct	1689 Dec 05 14:31	26°♄33'38		transit begin	1690 Nov 10 03:57	18°♄27'27	
	1689 Dec 12 14:53	0°♄		transit end	1690 Nov 10 07:29	18°♄15'30	
morning max el	1689 Dec 14 12:10	1°♄46'44	21°38'55	morning rise	1690 Nov 15 17:00	12°♄13'58	
greatest brilliancy	1689 Dec 19 10:17	7°♄21'50	-0.4m	direct	1690 Nov 19 11:51	10°♄52'05	
desc. node	1689 Dec 31 06:35	23°♄34'52		morning max el	1690 Nov 27 08:54	15°♄23'59	20°23'05
	1690 Jan 04 14:50	0°♄		greatest brilliancy	1690 Dec 03 19:17	23°♄03'56	-0.5m
morning set	1690 Jan 15 09:18	16°♄37'19			1690 Dec 08 19:23	0°♄	
max. Earth dist.	1690 Jan 21 23:36	27°♄19'22	1.41745 AU	desc. node	1690 Dec 18 03:37	13°♄49'08	
	1690 Jan 23 14:11	0°♄		morning set	1690 Dec 25 07:50	24°♄48'10	
					1690 Dec 28 15:56	0°♄	
superior conj	1690 Jan 29 13:53	10°♄13'49	-2°-4'-17	max. Earth dist.	1691 Jan 04 06:51	10°♄30'16	1.43489 AU
minimum elong	1690 Jan 29 14:38	10°♄17'05	2°04'18				
evening rise	1690 Feb 09 11:43	29°♄51'52		superior conj	1691 Jan 10 09:51	20°♄29'42	-1°-58'-53
	1690 Feb 09 13:30	0°♄		minimum elong	1691 Jan 10 05:28	20°♄11'38	1°58'42
asc. node	1690 Feb 18 17:47	16°♄16'15			1691 Jan 16 01:38	0°♄	
evening max el	1690 Feb 25 21:15	25°♄53'17	18°10'47	evening rise	1691 Jan 22 23:15	11°♄55'47	
retrograde	1690 Mar 04 17:31	29°♄20'37			1691 Feb 02 13:49	0°♄	
evening set	1690 Mar 07 06:56	28°♄52'15		asc. node	1691 Feb 05 14:48	4°♄30'59	
inferior conj	1690 Mar 14 03:40	24°♄01'25	3°24'54	evening max el	1691 Feb 09 09:23	9°♄03'31	18°08'58
minimum elong	1690 Mar 14 06:16	23°♄55'26	3°24'32	retrograde	1691 Feb 15 21:01	12°♄27'36	
min. Earth dist.	1690 Mar 17 11:19	21°♄00'41	0.60328 AU	evening set	1691 Feb 18 15:26	11°♄49'24	
morning rise	1690 Mar 21 02:18	18°♄15'49		inferior conj	1691 Feb 24 23:30	6°♄37'31	3°43'20
direct	1690 Mar 27 17:48	16°♄09'36		minimum elong	1691 Feb 25 00:04	6°♄36'01	3°43'19
desc. node	1690 Mar 29 05:44	16°♄15'45		min. Earth dist.	1691 Feb 27 19:30	3°♄41'14	0.62423 AU
morning max el	1690 Apr 11 00:27	24°♄00'30	27°34'21	morning rise	1691 Mar 03 06:28	0°♄38'09	
	1690 Apr 16 10:29	0°♄			1691 Mar 04 04:29	30°♄	
	1690 May 05 20:07	0°♄		direct	1691 Mar 10 05:04	28°♄03'45	
morning set	1690 May 12 20:31	13°♄48'01		desc. node	1691 Mar 16 02:46	29°♄40'38	
asc. node	1690 May 17 17:04	24°♄07'47			1691 Mar 16 17:05	0°♄	
max. Earth dist.	1690 May 19 05:22	27°♄25'47	1.32243 AU	morning max el	1691 Mar 24 05:30	5°♄58'41	27°49'13
					1691 Apr 11 09:33	0°♄	
superior conj	1690 May 20 02:20	29°♄20'42	0°25'00	morning set	1691 Apr 26 22:30	28°♄09'00	
minimum elong	1690 May 20 01:13	29°♄14'38	0°24'46		1691 Apr 27 20:18	0°♄	
	1690 May 20 09:29	0°♄		max. Earth dist.	1691 May 02 13:53	9°♄57'01	1.32622 AU
evening rise	1690 May 27 00:01	14°♄21'05					
	1690 Jun 03 20:45	0°♄		superior conj	1691 May 04 11:47	14°♄04'54	0°-1'-1
evening max el	1690 Jun 23 07:00	27°♄34'07	25°32'29	minimum elong	1691 May 04 11:50	14°♄05'11	0°01'01
desc. node	1690 Jun 25 05:01	29°♄17'54		behind sun begin	1691 May 04 06:40	13°♄37'10	
	1690 Jun 26 01:29	0°♄		behind sun end	1691 May 04 17:00	14°♄33'12	
retrograde	1690 Jul 07 07:36	4°♄42'58		asc. node	1691 May 04 14:08	14°♄17'37	
evening set	1690 Jul 13 04:11	3°♄22'22		evening rise	1691 May 11 11:46	29°♄13'27	
min. Earth dist.	1690 Jul 17 19:09	0°♄42'05	0.58172 AU		1691 May 11 20:35	0°♄	
	1690 Jul 18 19:29	30°♄			1691 May 28 19:28	0°♄	
inferior conj	1690 Jul 20 23:49	28°♄26'54	-4°-56'-21	evening max el	1691 Jun 04 21:35	8°♄15'55	24°02'56
minimum elong	1690 Jul 20 23:56	28°♄26'40	4°56'22	desc. node	1691 Jun 12 02:00	13°♄33'06	
morning rise	1690 Jul 28 23:22	24°♄08'02		retrograde	1691 Jun 18 16:43	15°♄12'15	
direct	1690 Jul 31 11:25	23°♄48'29		evening set	1691 Jun 23 03:55	14°♄28'09	
morning max el	1690 Aug 08 22:01	27°♄47'58	18°48'33	min. Earth dist.	1691 Jun 29 08:23	11°♄27'51	0.56393 AU
	1690 Aug 11 00:09	0°♄		inferior conj	1691 Jul 01 19:44	9°♄56'18	-4°-36'-2
asc. node	1690 Aug 13 16:18	3°♄26'41		minimum elong	1691 Jul 01 14:34	10°♄04'19	4°35'20
morning set	1690 Aug 25 08:22	24°♄00'32		morning rise	1691 Jul 10 04:46	5°♄56'37	
	1690 Aug 28 09:41	0°♄		direct	1691 Jul 12 21:25	5°♄37'42	
				morning max el	1691 Jul 22 17:16	10°♄11'14	19°47'44
superior conj	1690 Sep 02 23:00	10°♄44'45	1°40'57	asc. node	1691 Jul 31 13:21	21°♄46'29	
minimum elong	1690 Sep 03 01:05	10°♄54'38	1°40'50		1691 Aug 05 03:42	0°♄	
max. Earth dist.	1690 Sep 09 23:11	23°♄37'47	1.39240 AU	morning set	1691 Aug 09 11:09	8°♄29'13	
	1690 Sep 13 14:54	0°♄					
evening rise	1690 Sep 13 23:32	0°♄36'54		superior conj	1691 Aug 17 09:07	24°♄29'01	1°45'56
desc. node	1690 Sep 21 04:22	12°♄27'48		minimum elong	1691 Aug 17 09:20	24°♄30'04	1°45'56
	1690 Oct 02 20:35	0°♄			1691 Aug 20 04:33	0°♄	

max. Earth dist.	1691 Aug 23 03:43	5°♃39'27	1.37238 AU	max. Earth dist.	1692 Aug 04 13:32	17°♃30'43	1.35465 AU
evening rise	1691 Aug 27 00:05	12°♃43'47		evening rise	1692 Aug 08 19:44	25°♃45'22	
	1691 Sep 06 04:54	0°♃			1692 Aug 11 02:32	0°♃	
desc. node	1691 Sep 08 01:23	2°♃55'20		desc. node	1692 Aug 24 22:23	23°♃05'39	
	1691 Sep 27 21:42	0°♃			1692 Aug 29 15:44	0°♃	
evening max el	1691 Oct 01 18:23	4°♃04'30	25°30'49	evening max el	1692 Sep 13 06:25	17°♃42'17	26°31'58
retrograde	1691 Oct 13 21:40	11°♃02'38		retrograde	1692 Sep 26 03:18	24°♃55'14	
evening set	1691 Oct 19 19:57	8°♃34'31		evening set	1692 Oct 02 15:21	22°♃15'41	
min. Earth dist.	1691 Oct 24 06:10	3°♃41'59	0.67040 AU	min. Earth dist.	1692 Oct 06 18:00	18°♃00'05	0.66146 AU
inferior conj	1691 Oct 25 10:03	2°♃12'20	0°-43'-26	inferior conj	1692 Oct 08 09:35	16°♃00'56	-1°-41'-19
minimum elong	1691 Oct 25 11:10	2°♃08'45	0°42'58	minimum elong	1692 Oct 08 12:16	15°♃52'51	1°40'14
	1691 Oct 27 04:14	30°♃		asc. node	1692 Oct 13 09:35	10°♃53'00	
asc. node	1691 Oct 27 12:32	29°♃35'22		morning rise	1692 Oct 14 10:25	10°♃13'42	
morning rise	1691 Oct 31 03:06	26°♃13'59		direct	1692 Oct 17 08:17	9°♃25'59	
direct	1691 Nov 03 10:24	25°♃10'59		morning max el	1692 Oct 24 00:30	13°♃06'14	18°34'19
morning max el	1691 Nov 10 13:28	29°♃11'47	19°20'53		1692 Nov 05 05:32	0°♃	
	1691 Nov 11 08:00	0°♃		morning set	1692 Nov 13 07:34	12°♃52'23	
greatest brilliancy	1691 Nov 20 01:00	11°♃25'12	-0.7m	desc. node	1692 Nov 20 21:42	24°♃56'26	
	1691 Dec 02 06:09	0°♃			1692 Nov 24 02:38	0°♃	
morning set	1691 Dec 04 08:08	3°♃13'42					
desc. node	1691 Dec 05 00:40	4°♃17'54		superior conj	1692 Nov 29 05:59	8°♃05'00	0°-53'-46
max. Earth dist.	1691 Dec 17 21:18	24°♃24'52	1.44662 AU	minimum elong	1692 Nov 28 23:13	7°♃38'24	0°52'56
				max. Earth dist.	1692 Nov 29 15:38	8°♃42'53	1.45126 AU
superior conj	1691 Dec 21 03:54	29°♃36'38	-1°-34'-55		1692 Dec 13 03:50	0°♃	
minimum elong	1691 Dec 20 19:21	29°♃02'34	1°34'08	evening rise	1692 Dec 15 05:42	3°♃17'53	
	1691 Dec 21 09:46	0°♃			1693 Jan 01 12:38	0°♃	
evening rise	1692 Jan 04 14:08	23°♃05'32		evening max el	1693 Jan 06 07:52	5°♃51'48	19°00'43
	1692 Jan 08 17:49	0°♃		asc. node	1693 Jan 09 08:51	8°♃27'16	
asc. node	1692 Jan 23 11:49	21°♃59'02		retrograde	1693 Jan 13 05:00	9°♃46'05	
evening max el	1692 Jan 23 21:44	22°♃24'45	18°25'55	evening set	1693 Jan 16 10:40	8°♃45'23	
retrograde	1692 Jan 30 10:09	25°♃58'32		inferior conj	1693 Jan 22 03:05	2°♃56'57	3°23'43
evening set	1692 Feb 02 09:42	25°♃09'37		minimum elong	1693 Jan 22 00:54	3°♃03'51	3°23'21
inferior conj	1692 Feb 08 08:31	19°♃38'13	3°41'05	min. Earth dist.	1693 Jan 23 16:32	0°♃59'18	0.65726 AU
minimum elong	1692 Feb 08 07:23	19°♃41'29	3°41'01		1693 Jan 24 11:59	30°♃	
min. Earth dist.	1692 Feb 10 13:18	17°♃05'37	0.64262 AU	morning rise	1693 Jan 27 14:09	26°♃44'22	
morning rise	1692 Feb 14 03:38	13°♃30'33		direct	1693 Feb 03 01:41	23°♃55'13	
direct	1692 Feb 21 00:01	10°♃41'45			1693 Feb 14 10:02	0°♃	
desc. node	1692 Mar 01 23:49	15°♃15'28		morning max el	1693 Feb 16 00:19	1°♃32'48	26°35'34
morning max el	1692 Mar 05 14:21	18°♃33'14	27°27'44	desc. node	1693 Feb 16 20:52	2°♃25'28	
	1692 Mar 15 06:35	0°♃			1693 Mar 09 08:51	0°♃	
	1692 Apr 03 07:22	0°♃		morning set	1693 Mar 23 23:23	25°♃19'02	
morning set	1692 Apr 09 16:36	12°♃02'40			1693 Mar 26 09:58	0°♃	
max. Earth dist.	1692 Apr 14 15:02	22°♃01'50	1.33430 AU	max. Earth dist.	1693 Mar 28 05:27	3°♃33'35	1.34689 AU
superior conj	1692 Apr 17 17:23	28°♃32'44	0°-28'-29	superior conj	1693 Apr 01 16:58	12°♃38'06	0°-56'-14
minimum elong	1692 Apr 17 18:48	28°♃40'16	0°28'13	minimum elong	1693 Apr 01 19:47	12°♃52'38	0°55'43
	1692 Apr 18 09:46	0°♃		asc. node	1693 Apr 07 08:11	24°♃23'48	
asc. node	1692 Apr 20 11:08	4°♃24'07		evening rise	1693 Apr 09 08:17	28°♃34'18	
evening rise	1692 Apr 24 23:09	13°♃59'50			1693 Apr 10 00:53	0°♃	
	1692 May 03 02:17	0°♃		evening max el	1693 Apr 28 11:58	29°♃35'24	20°58'23
evening max el	1692 May 16 12:45	18°♃45'38	22°26'51		1693 Apr 28 22:18	0°♃	
desc. node	1692 May 28 23:01	25°♃12'05		retrograde	1693 May 10 02:57	5°♃14'55	
retrograde	1692 May 29 13:28	25°♃12'54		evening set	1693 May 12 07:52	5°♃03'27	
evening set	1692 Jun 01 14:52	24°♃52'18		desc. node	1693 May 15 20:02	4°♃02'26	
min. Earth dist.	1692 Jun 09 19:54	21°♃18'51	0.55221 AU	inferior conj	1693 May 21 15:23	1°♃05'25	-1°-40'-35
inferior conj	1692 Jun 10 21:38	20°♃42'26	-3°-28'-31	minimum elong	1693 May 21 10:40	1°♃12'07	1°38'55
minimum elong	1692 Jun 10 13:48	20°♃53'31	3°26'26	min. Earth dist.	1693 May 22 08:20	0°♃41'24	0.54934 AU
morning rise	1692 Jun 19 15:04	16°♃50'48			1693 May 23 13:53	30°♃	
direct	1692 Jun 22 14:01	16°♃30'55		morning rise	1693 May 30 12:55	27°♃02'19	
morning max el	1692 Jul 04 01:10	21°♃50'53	21°07'31	direct	1693 Jun 02 23:27	26°♃36'49	
	1692 Jul 10 22:13	0°♃			1693 Jun 12 12:10	0°♃	
asc. node	1692 Jul 17 10:24	10°♃42'42		morning max el	1693 Jun 15 22:45	2°♃49'10	22°43'16
morning set	1692 Jul 23 18:52	23°♃12'54			1693 Jul 04 06:11	0°♃	
	1692 Jul 27 01:03	0°♃		asc. node	1693 Jul 04 07:27	0°♃06'16	
				morning set	1693 Jul 08 05:32	8°♃05'42	
superior conj	1692 Jul 31 05:49	8°♃45'09	1°43'04				
minimum elong	1692 Jul 31 04:36	8°♃38'50	1°43'00	superior conj	1693 Jul 15 09:45	23°♃22'55	1°33'52

minimum elong	1693 Jul 15 07:39	23°♄11'46	1°33'40		1694 Jun 25 23:25	0°♄	
max. Earth dist.	1693 Jul 18 08:07	29°♄33'15	1.34052 AU				
	1693 Jul 18 13:16	0°♄		superior conj	1694 Jun 29 18:18	8°♄13'57	1°19'31
evening rise	1693 Jul 23 05:53	9°♄29'30		minimum elong	1694 Jun 29 15:53	8°♄00'50	1°19'12
	1693 Aug 03 13:12	0°♄		max. Earth dist.	1694 Jul 01 11:33	11°♄56'54	1.33044 AU
desc. node	1693 Aug 11 19:23	12°♄51'07		evening rise	1694 Jul 07 02:33	23°♄44'42	
	1693 Aug 25 13:58	0°♄			1694 Jul 10 06:08	0°♄	
evening max el	1693 Aug 26 18:22	1°♄09'43	27°12'36		1694 Jul 28 05:06	0°♄	
retrograde	1693 Sep 09 03:32	8°♄28'31		desc. node	1694 Jul 29 16:24	2°♄01'23	
evening set	1693 Sep 16 02:30	5°♄45'11		evening max el	1694 Aug 09 04:53	14°♄15'37	27°25'57
min. Earth dist.	1693 Sep 19 22:20	2°♄06'10	0.64891 AU	retrograde	1694 Aug 22 21:42	21°♄33'36	
	1693 Sep 21 19:59	30°♄		evening set	1694 Aug 30 02:17	18°♄57'34	
inferior conj	1693 Sep 22 02:25	29°♄42'07	-2°-39'-5	min. Earth dist.	1694 Sep 02 17:17	15°♄51'12	0.63287 AU
minimum elong	1693 Sep 22 06:35	29°♄30'34	2°37'36	inferior conj	1694 Sep 05 09:55	13°♄10'12	-3°-33'-42
morning rise	1693 Sep 28 12:30	24°♄09'02		minimum elong	1694 Sep 05 15:05	12°♄57'18	3°32'13
asc. node	1693 Sep 30 06:40	23°♄36'43		morning rise	1694 Sep 12 06:17	7°♄54'29	
direct	1693 Oct 01 03:21	23°♄32'45		direct	1694 Sep 14 16:51	7°♄26'04	
morning max el	1693 Oct 07 15:32	27°♄01'44	18°04'25	asc. node	1694 Sep 17 03:44	7°♄55'22	
	1693 Oct 10 06:07	0°♄		morning max el	1694 Sep 21 07:42	10°♄51'54	17°52'05
morning set	1693 Oct 25 12:07	23°♄56'54			1694 Oct 04 04:05	0°♄	
	1693 Oct 29 03:30	0°♄		morning set	1694 Oct 07 17:42	6°♄14'01	
desc. node	1693 Nov 07 18:43	15°♄40'51					
				superior conj	1694 Oct 19 18:12	26°♄49'48	0°39'16
superior conj	1693 Nov 08 12:54	16°♄53'28	0°-5'-5	minimum elong	1694 Oct 19 21:59	27°♄05'28	0°38'45
minimum elong	1693 Nov 08 12:16	16°♄50'56	0°05'01		1694 Oct 21 16:15	0°♄	
behind sun begin	1693 Nov 08 02:02	16°♄10'06		desc. node	1694 Oct 25 15:45	6°♄28'16	
behind sun end	1693 Nov 08 22:29	17°♄31'45		max. Earth dist.	1694 Oct 26 02:59	7°♄13'26	1.43886 AU
max. Earth dist.	1693 Nov 12 10:22	23°♄04'18	1.44853 AU	evening rise	1694 Nov 04 08:16	21°♄43'22	
	1693 Nov 16 20:15	0°♄			1694 Nov 09 18:12	0°♄	
evening rise	1693 Nov 25 00:02	12°♄40'29		greatest brilliancy	1694 Nov 28 03:20	26°♄26'26	-0.5m
	1693 Dec 06 07:22	0°♄			1694 Dec 01 00:25	0°♄	
greatest brilliancy	1693 Dec 13 06:24	10°♄12'14	-0.6m	evening max el	1694 Dec 03 14:26	2°♄51'21	20°56'25
evening max el	1693 Dec 20 13:48	19°♄20'49	19°51'45	retrograde	1694 Dec 12 00:13	7°♄50'06	
asc. node	1693 Dec 27 05:55	23°♄40'11		asc. node	1694 Dec 14 02:58	7°♄25'07	
retrograde	1693 Dec 28 02:30	23°♄44'16		evening set	1694 Dec 15 23:11	6°♄21'07	
evening set	1693 Dec 31 15:50	22°♄30'19		inferior conj	1694 Dec 21 09:18	0°♄07'24	2°17'33
inferior conj	1694 Jan 06 04:10	16°♄27'39	2°55'01	minimum elong	1694 Dec 21 06:47	0°♄16'04	2°16'43
minimum elong	1694 Jan 06 01:32	16°♄36'25	2°54'20		1694 Dec 21 11:28	30°♄	
min. Earth dist.	1694 Jan 07 03:34	15°♄09'50	0.66792 AU	min. Earth dist.	1694 Dec 21 20:11	29°♄30'04	0.67474 AU
morning rise	1694 Jan 11 10:34	10°♄12'42		morning rise	1694 Dec 26 13:58	23°♄52'08	
direct	1694 Jan 17 09:17	7°♄34'37		direct	1694 Dec 31 21:52	21°♄32'53	
morning max el	1694 Jan 29 09:16	14°♄43'49	25°21'20	morning max el	1695 Jan 11 17:37	28°♄00'03	23°55'12
desc. node	1694 Feb 03 17:55	20°♄42'26			1695 Jan 13 15:09	0°♄	
	1694 Feb 10 21:38	0°♄		desc. node	1695 Jan 21 14:59	9°♄47'15	
	1694 Mar 02 05:02	0°♄			1695 Feb 04 14:55	0°♄	
morning set	1694 Mar 06 14:05	7°♄43'27		morning set	1695 Feb 16 06:43	18°♄59'26	
max. Earth dist.	1694 Mar 10 08:02	14°♄37'44	1.36390 AU	max. Earth dist.	1695 Feb 20 03:25	25°♄44'15	1.38433 AU
					1695 Feb 22 12:19	0°♄	
superior conj	1694 Mar 16 07:41	26°♄12'22	-1°-22'-35				
minimum elong	1694 Mar 16 11:36	26°♄31'51	1°22'01	superior conj	1695 Feb 27 09:59	9°♄06'18	-1°-45'-7
	1694 Mar 18 05:14	0°♄		minimum elong	1695 Feb 27 14:09	9°♄26'04	1°44'43
evening rise	1694 Mar 24 12:57	12°♄49'31		evening rise	1695 Mar 08 10:37	26°♄38'35	
asc. node	1694 Mar 25 05:13	14°♄11'32			1695 Mar 10 03:57	0°♄	
	1694 Apr 02 15:50	0°♄		asc. node	1695 Mar 12 02:16	3°♄42'18	
evening max el	1694 Apr 10 22:53	11°♄02'47	19°46'06	evening max el	1695 Mar 24 20:42	23°♄09'07	18°53'15
retrograde	1694 Apr 20 20:08	15°♄48'51		retrograde	1695 Apr 02 04:39	27°♄11'47	
evening set	1694 Apr 22 20:59	15°♄37'37		evening set	1695 Apr 04 09:39	26°♄55'53	
inferior conj	1694 May 01 15:34	11°♄35'48	0°18'24	inferior conj	1695 Apr 12 09:24	22°♄37'57	1°57'06
minimum elong	1694 May 01 16:23	11°♄34'33	0°18'07	minimum elong	1695 Apr 12 13:15	22°♄31'01	1°55'56
desc. node	1694 May 02 17:05	10°♄56'07		min. Earth dist.	1695 Apr 15 14:37	20°♄20'22	0.57109 AU
min. Earth dist.	1694 May 03 22:27	10°♄10'55	0.55615 AU	desc. node	1695 Apr 19 14:08	17°♄57'49	
morning rise	1694 May 10 08:25	7°♄03'58		morning rise	1695 Apr 20 12:33	17°♄32'22	
direct	1694 May 14 15:46	6°♄22'45		direct	1695 Apr 25 21:30	16°♄22'59	
morning max el	1694 May 28 14:02	13°♄20'13	24°25'11	morning max el	1695 May 10 04:58	23°♄50'01	25°58'49
	1694 Jun 10 11:47	0°♄			1695 May 15 18:59	0°♄	
asc. node	1694 Jun 21 04:31	19°♄49'43			1695 Jun 03 07:39	0°♄	
morning set	1694 Jun 22 17:23	23°♄02'14		morning set	1695 Jun 07 04:47	7°♄56'56	

asc. node	1695 Jun 08 01:32	9°♁46'51		morning max el	1696 Apr 21 00:44	4°♁45'59	27°09'05
					1696 May 09 14:26	0°♁	
superior conj	1695 Jun 14 05:21	23°♁10'58	1°00'59	morning set	1696 May 21 14:06	22°♁44'29	
minimum elong	1695 Jun 14 03:06	22°♁58'39	1°00'35		1696 May 24 23:55	0°♁	
max. Earth dist.	1695 Jun 14 21:19	24°♁38'33	1.32436 AU	asc. node	1696 May 24 22:34	29°♁52'45	
	1695 Jun 17 08:16	0°♁					
evening rise	1695 Jun 21 06:27	8°♁20'34		superior conj	1696 May 28 17:09	8°♁08'05	0°38'59
	1695 Jul 02 16:09	0°♁		minimum elong	1696 May 28 15:31	7°♁59'07	0°38'38
desc. node	1695 Jul 16 13:26	20°♁21'17		max. Earth dist.	1696 May 28 09:46	7°♁27'32	1.32208 AU
evening max el	1695 Jul 22 11:25	26°♁46'03	27°07'05	evening rise	1696 Jun 04 15:04	23°♁08'55	
	1695 Jul 26 06:50	0°♁			1696 Jun 07 22:53	0°♁	
retrograde	1695 Aug 05 08:37	4°♁00'29			1696 Jun 25 23:09	0°♁	
evening set	1695 Aug 12 10:32	1°♁44'47		desc. node	1696 Jul 02 10:26	7°♁30'01	
	1695 Aug 14 21:13	30°♁		evening max el	1696 Jul 03 11:17	8°♁30'50	26°15'12
min. Earth dist.	1695 Aug 16 01:41	29°♁01'39	0.61393 AU	retrograde	1696 Jul 17 11:03	15°♁42'11	
inferior conj	1695 Aug 19 04:52	26°♁16'22	-4°-20'-14	evening set	1696 Jul 23 22:32	13°♁59'00	
minimum elong	1695 Aug 19 09:49	26°♁05'26	4°19'17	min. Earth dist.	1696 Jul 28 00:06	11°♁23'22	0.59342 AU
morning rise	1695 Aug 26 12:00	21°♁21'20		inferior conj	1696 Jul 31 07:39	8°♁51'20	-4°-50'-41
direct	1695 Aug 28 21:09	20°♁57'52		minimum elong	1696 Jul 31 10:16	8°♁46'18	4°50'29
asc. node	1695 Sep 04 00:47	23°♁39'57		morning rise	1696 Aug 08 01:25	4°♁19'31	
morning max el	1695 Sep 04 21:57	24°♁28'38	17°58'17	direct	1696 Aug 10 11:54	3°♁58'55	
	1695 Sep 09 10:18	0°♁		morning max el	1696 Aug 18 07:11	7°♁44'07	18°24'16
morning set	1695 Sep 20 17:51	19°♁24'01		asc. node	1696 Aug 20 21:49	10°♁36'10	
	1695 Sep 26 13:18	0°♁			1696 Sep 01 14:59	0°♁	
				morning set	1696 Sep 03 07:17	3°♁12'12	
superior conj	1695 Oct 01 02:38	8°♁05'33	1°12'37	superior conj	1696 Sep 12 10:43	20°♁31'15	1°33'48
minimum elong	1695 Oct 01 07:11	8°♁25'28	1°12'06	minimum elong	1696 Sep 12 13:54	20°♁45'59	1°33'32
max. Earth dist.	1695 Oct 08 15:23	20°♁53'55	1.42342 AU		1696 Sep 17 16:57	0°♁	
desc. node	1695 Oct 12 12:46	27°♁14'46		max. Earth dist.	1696 Sep 19 22:17	3°♁52'20	1.40418 AU
	1695 Oct 14 06:05	0°♁		evening rise	1696 Sep 24 10:29	11°♁29'18	
evening rise	1695 Oct 14 23:18	1°♁08'22		desc. node	1696 Sep 28 09:47	17°♁56'58	
	1695 Nov 03 07:18	0°♁			1696 Oct 06 04:33	0°♁	
greatest brilliancy	1695 Nov 11 16:23	11°♁03'54	-0.3m	evening max el	1696 Oct 29 00:03	29°♁56'05	23°30'51
evening max el	1695 Nov 16 09:31	16°♁22'46	22°11'07		1696 Oct 29 01:37	0°♁	
retrograde	1695 Nov 25 20:26	22°♁00'07		retrograde	1696 Nov 08 13:45	6°♁11'00	
evening set	1695 Nov 30 06:55	20°♁14'29		evening set	1696 Nov 13 13:27	4°♁07'59	
asc. node	1695 Dec 01 00:01	19°♁37'24		asc. node	1696 Nov 16 21:03	0°♁32'37	
inferior conj	1695 Dec 05 16:25	13°♁53'05	1°33'09		1696 Nov 17 07:06	30°♁	
minimum elong	1695 Dec 05 14:28	13°♁59'52	1°32'24	min. Earth dist.	1696 Nov 18 12:35	28°♁20'47	0.67753 AU
min. Earth dist.	1695 Dec 05 15:57	13°♁54'42	0.67786 AU	inferior conj	1696 Nov 18 23:42	27°♁42'45	0°43'13
morning rise	1695 Dec 10 21:50	7°♁39'37		minimum elong	1696 Nov 18 22:41	27°♁46'11	0°42'48
direct	1695 Dec 15 14:34	5°♁42'53		morning rise	1696 Nov 24 08:04	21°♁33'10	
morning max el	1695 Dec 25 04:19	11°♁22'06	22°27'11	direct	1696 Nov 28 10:24	19°♁59'16	
greatest brilliancy	1695 Dec 29 18:08	16°♁29'02	-0.3m	morning max el	1696 Dec 06 20:52	24°♁53'28	21°05'15
desc. node	1696 Jan 08 12:01	29°♁26'05			1696 Dec 11 09:00	0°♁	
	1696 Jan 08 21:35	0°♁		greatest brilliancy	1696 Dec 12 07:05	1°♁09'12	-0.5m
morning set	1696 Jan 27 19:28	28°♁53'09		desc. node	1696 Dec 25 09:03	19°♁29'17	
	1696 Jan 28 11:50	0°♁			1697 Jan 01 08:18	0°♁	
max. Earth dist.	1696 Feb 01 23:59	7°♁30'32	1.40582 AU	morning set	1697 Jan 06 04:28	7°♁30'04	
				max. Earth dist.	1697 Jan 14 03:01	20°♁11'44	1.42544 AU
superior conj	1696 Feb 09 19:14	21°♁08'19	-2°00'-27		1697 Jan 20 00:35	0°♁	
minimum elong	1696 Feb 09 21:56	21°♁20'29	2°00'21				
	1696 Feb 14 15:28	0°♁		superior conj	1697 Jan 21 06:05	2°♁05'15	-2°-4'-4
evening rise	1696 Feb 19 22:10	9°♁54'00		minimum elong	1697 Jan 21 04:51	2°♁00'00	2°04'04
asc. node	1696 Feb 26 23:18	22°♁50'06		evening rise	1697 Feb 01 19:45	22°♁26'44	
	1696 Mar 02 09:48	0°♁			1697 Feb 06 00:57	0°♁	
evening max el	1696 Mar 07 02:34	5°♁47'21	18°20'31	asc. node	1697 Feb 12 20:20	11°♁26'54	
retrograde	1696 Mar 14 08:28	9°♁23'07		evening max el	1697 Feb 18 13:13	18°♁47'55	18°07'35
evening set	1696 Mar 16 18:57	8°♁59'44		retrograde	1697 Feb 25 04:43	22°♁12'33	
inferior conj	1696 Mar 24 00:33	4°♁20'51	3°02'10	evening set	1697 Feb 27 20:11	21°♁40'11	
minimum elong	1696 Mar 24 04:09	4°♁13'16	3°01'26	inferior conj	1697 Mar 06 11:04	16°♁40'01	3°35'40
min. Earth dist.	1696 Mar 27 10:58	1°♁29'05	0.59096 AU	minimum elong	1697 Mar 06 12:49	16°♁35'46	3°35'30
	1696 Mar 29 10:43	30°♁		min. Earth dist.	1697 Mar 09 14:24	13°♁38'25	0.61235 AU
morning rise	1696 Mar 31 09:33	28°♁47'05		morning rise	1697 Mar 13 02:35	10°♁47'24	
desc. node	1696 Apr 05 11:10	27°♁05'42		direct	1697 Mar 19 22:07	8°♁28'00	
direct	1696 Apr 06 16:15	27°♁01'47		desc. node	1697 Mar 23 08:13	9°♁00'26	
	1696 Apr 15 06:03	0°♁					

morning max el	1697 Apr 03 02:54	16°♄21'39	27°45'21	min. Earth dist.	1698 Feb 20 02:52	26°♁39'37	0.63243 AU
	1697 Apr 14 08:13	0°♃		morning rise	1698 Feb 23 14:29	23°♁24'22	
	1697 May 02 04:02	0°♄		direct	1698 Mar 02 13:06	20°♁41'47	
morning set	1697 May 05 19:23	7°♄17'15		desc. node	1698 Mar 10 05:16	23°♁25'05	
max. Earth dist.	1697 May 11 20:52	20°♄09'01	1.32357 AU	morning max el	1698 Mar 16 10:03	28°♁37'15	27°44'11
asc. node	1697 May 11 19:36	20°♄02'05			1698 Mar 17 18:16	0°♄	
					1698 Apr 08 03:47	0°♃	
superior conj	1697 May 13 03:56	22°♄58'25	0°14'13	morning set	1698 Apr 19 18:24	21°♃27'56	
minimum elong	1697 May 13 03:17	22°♄54'52	0°14'03		1698 Apr 23 22:14	0°♄	
behind sun begin	1697 May 13 00:55	22°♄41'55		max. Earth dist.	1698 Apr 25 02:36	2°♄29'38	1.32913 AU
behind sun end	1697 May 13 05:39	23°♄07'48					
	1697 May 16 08:58	0°♂		superior conj	1698 Apr 27 12:00	7°♄36'26	0°-12'-33
evening rise	1697 May 20 02:12	8°♂01'16		minimum elong	1698 Apr 27 12:37	7°♄39'43	0°12'27
	1697 May 31 13:00	0°♄		behind sun begin	1698 Apr 27 09:18	7°♄21'54	
evening max el	1697 Jun 15 04:05	19°♄30'00	24°56'00	behind sun end	1698 Apr 27 15:56	7°♄57'32	
desc. node	1697 Jun 19 07:26	22°♄58'11		asc. node	1698 Apr 28 16:38	10°♄10'54	
retrograde	1697 Jun 29 03:28	26°♄35'40		evening rise	1698 May 04 14:02	22°♄51'32	
evening set	1697 Jul 04 10:56	25°♄31'15			1698 May 08 00:57	0°♂	
min. Earth dist.	1697 Jul 09 15:30	22°♄44'17	0.57363 AU		1698 May 27 16:55	0°♄	
inferior conj	1697 Jul 12 15:06	20°♄45'26	-4°-52'-59	evening max el	1698 May 27 17:55	0°♄02'25	23°21'49
minimum elong	1697 Jul 12 12:59	20°♄48'58	4°52'53	desc. node	1698 Jun 06 04:28	6°♄10'25	
morning rise	1697 Jul 20 18:50	16°♄36'00		retrograde	1698 Jun 10 07:38	6°♄49'16	
direct	1697 Jul 23 08:39	16°♄16'55		evening set	1698 Jun 14 03:14	6°♄17'19	
morning max el	1697 Aug 01 08:21	20°♄28'57	19°11'12	min. Earth dist.	1698 Jun 21 03:56	3°♄04'07	0.55800 AU
asc. node	1697 Aug 07 18:50	28°♄28'47		inferior conj	1698 Jun 23 02:39	1°♄55'04	-4°-13'-18
	1697 Aug 08 18:14	0°♂		minimum elong	1698 Jun 22 19:44	2°♄05'20	4°11'57
morning set	1697 Aug 18 06:02	17°♂27'47			1698 Jun 26 11:56	30°♂	
	1697 Aug 24 13:30	0°♄		morning rise	1698 Jul 01 15:29	28°♂00'31	
				direct	1698 Jul 04 10:13	27°♂41'38	
superior conj	1697 Aug 26 12:48	3°♄50'49	1°44'08		1698 Jul 11 16:19	0°♄	
minimum elong	1697 Aug 26 14:03	3°♄56'53	1°44'05	morning max el	1698 Jul 14 22:55	2°♄34'09	20°19'20
max. Earth dist.	1697 Sep 02 01:43	16°♄07'55	1.38365 AU	asc. node	1698 Jul 25 15:53	17°♄04'57	
evening rise	1697 Sep 05 21:54	22°♄58'12			1698 Aug 01 10:56	0°♂	
	1697 Sep 10 00:50	0°♄		morning set	1698 Aug 02 11:09	2°♂02'54	
desc. node	1697 Sep 15 06:47	8°♄30'55					
	1697 Sep 30 00:44	0°♂		superior conj	1698 Aug 10 03:51	17°♂49'34	1°45'34
evening max el	1697 Oct 11 12:14	13°♂33'01	24°49'18	minimum elong	1698 Aug 10 03:24	17°♂47'13	1°45'34
retrograde	1697 Oct 23 03:14	20°♂19'01		max. Earth dist.	1698 Aug 15 07:24	27°♂59'43	1.36441 AU
evening set	1697 Oct 28 17:07	17°♂59'19			1698 Aug 16 08:34	0°♄	
min. Earth dist.	1697 Nov 02 07:45	12°♂46'15	0.67386 AU	evening rise	1698 Aug 19 07:08	5°♄29'36	
inferior conj	1697 Nov 03 05:25	11°♂34'32	0°-10'-54	desc. node	1698 Sep 02 03:47	28°♄51'29	
minimum elong	1697 Nov 03 05:42	11°♂33'38	0°10'47		1698 Sep 02 21:38	0°♄	
transit begin	1697 Nov 03 03:38	11°♂40'27		evening max el	1698 Sep 24 00:07	27°♄12'08	25°59'03
transit end	1697 Nov 03 07:45	11°♂26'48			1698 Sep 27 03:00	0°♂	
asc. node	1697 Nov 03 18:04	10°♂52'47		retrograde	1698 Oct 06 11:56	4°♂18'29	
morning rise	1697 Nov 08 18:46	5°♂31'15		evening set	1698 Oct 12 16:07	1°♂44'58	
direct	1697 Nov 12 08:21	4°♂18'00			1698 Oct 14 12:00	30°♄	
morning max el	1697 Nov 19 21:05	8°♂35'46	19°54'53	min. Earth dist.	1698 Oct 16 23:04	27°♄07'47	0.66691 AU
greatest brilliancy	1697 Nov 27 07:03	17°♂41'12	-0.6m	inferior conj	1698 Oct 18 07:47	25°♄25'11	-1°-7'-53
	1697 Dec 05 18:34	0°♄		minimum elong	1698 Oct 18 09:33	25°♄19'37	1°07'09
desc. node	1697 Dec 12 06:05	9°♄50'06		asc. node	1698 Oct 21 15:07	21°♄34'20	
morning set	1697 Dec 16 00:31	15°♄37'58		morning rise	1698 Oct 24 03:55	19°♄30'58	
	1697 Dec 25 05:18	0°♄		direct	1698 Oct 27 06:51	18°♄35'00	
max. Earth dist.	1697 Dec 27 13:18	3°♄42'13	1.44057 AU	morning max el	1698 Nov 03 04:36	22°♄26'17	18°59'05
					1698 Nov 09 07:47	0°♂	
superior conj	1698 Jan 01 14:42	11°♄50'26	-1°-51'-6	morning set	1698 Nov 25 08:45	24°♂28'59	
minimum elong	1698 Jan 01 08:06	11°♄23'41	1°50'40		1698 Nov 28 21:14	0°♄	
	1698 Jan 12 12:43	0°♁		desc. node	1698 Nov 29 03:05	0°♄22'56	
evening rise	1698 Jan 14 23:04	4°♁08'45		max. Earth dist.	1698 Dec 10 05:15	17°♄46'46	1.44944 AU
asc. node	1698 Jan 30 17:22	29°♁23'33					
	1698 Jan 31 05:12	0°♄		superior conj	1698 Dec 11 23:56	20°♄34'54	-1°-19'-11
evening max el	1698 Feb 02 01:47	2°♄03'47	18°13'55	minimum elong	1698 Dec 11 15:17	20°♄00'45	1°18'15
retrograde	1698 Feb 08 12:53	5°♄30'47			1698 Dec 17 22:30	0°♄	
evening set	1698 Feb 11 09:17	4°♄48'18		evening rise	1698 Dec 27 04:05	14°♄53'01	
	1698 Feb 17 01:20	30°♁			1699 Jan 05 11:29	0°♁	
inferior conj	1698 Feb 17 13:04	29°♁28'03	3°44'31	evening max el	1699 Jan 16 13:32	15°♁27'59	18°38'42
minimum elong	1698 Feb 17 12:51	29°♁28'39	3°44'32	asc. node	1699 Jan 17 14:25	16°♁27'46	

retrograde	1699 Jan 23 04:44	19° \approx 09'03		evening set	1700 Jan 10 09:47	1° \approx 55'02	
evening set	1699 Jan 26 06:45	18° \approx 15'20			1700 Jan 12 15:56	30° \approx	
inferior conj	1699 Feb 01 02:33	12° \approx 36'41	3°35'18	inferior conj	1700 Jan 16 00:12	26° \approx 00'16	3°12'44
minimum elong	1699 Feb 01 00:53	12° \approx 41'41	3°35'06	minimum elong	1700 Jan 15 21:45	26° \approx 08'12	3°12'13
min. Earth dist.	1699 Feb 03 00:49	10° \approx 17'47	0.64936 AU	min. Earth dist.	1700 Jan 17 07:27	24° \approx 19'27	0.66233 AU
morning rise	1699 Feb 06 17:49	6° \approx 26'42		morning rise	1700 Jan 21 08:55	19° \approx 46'42	
direct	1699 Feb 13 11:16	3° \approx 35'48		direct	1700 Jan 27 15:27	17° \approx 01'08	
desc. node	1699 Feb 25 02:18	9° \approx 43'41		morning max el	1700 Feb 09 04:57	24° \approx 27'33	26°06'07
morning max el	1699 Feb 26 19:28	11° \approx 22'59	27°08'44	desc. node	1700 Feb 11 23:21	27° \approx 24'25	
	1699 Mar 13 15:04	0° \approx			1700 Feb 14 05:06	0° \approx	
	1699 Mar 31 15:40	0° \approx			1700 Mar 07 01:22	0° \approx	
morning set	1699 Apr 03 08:12	5° \approx 07'11		morning set	1700 Mar 17 08:48	18° \approx 02'52	
max. Earth dist.	1699 Apr 07 23:16	14° \approx 19'21	1.33908 AU	max. Earth dist.	1700 Mar 21 08:35	25° \approx 37'31	1.35364 AU
					1700 Mar 23 14:06	0° \approx	
superior conj	1699 Apr 11 15:23	21° \approx 55'53	0°-40'-18	superior conj	1700 Mar 26 11:37	5° \approx 49'06	-1°-7'-42
minimum elong	1699 Apr 11 17:25	22° \approx 06'31	0°39'55	minimum elong	1700 Mar 26 14:58	6° \approx 06'07	1°07'08
	1699 Apr 15 10:50	0° \approx		asc. node	1700 Apr 02 10:46	20° \approx 10'29	
asc. node	1699 Apr 15 13:42	0° \approx 15'15		evening rise	1700 Apr 03 08:15	22° \approx 00'53	
evening rise	1699 Apr 19 00:42	7° \approx 33'40			1700 Apr 07 07:47	0° \approx	
	1699 May 01 01:54	0° \approx		evening max el	1700 Apr 21 16:08	21° \approx 43'20	20°25'21
evening max el	1699 May 09 12:02	10° \approx 38'36	21°47'41	retrograde	1700 May 02 13:10	26° \approx 59'32	
retrograde	1699 May 21 23:58	16° \approx 46'36		evening set	1700 May 04 15:03	26° \approx 48'48	
desc. node	1699 May 24 01:30	16° \approx 37'00		desc. node	1700 May 10 22:33	24° \approx 26'39	
evening set	1699 May 24 14:28	16° \approx 31'25		inferior conj	1700 May 13 18:19	22° \approx 50'58	0°-49'-19
inferior conj	1699 Jun 02 23:37	12° \approx 28'53	-2°-46'-24	minimum elong	1700 May 13 16:00	22° \approx 54'21	0°48'29
minimum elong	1699 Jun 02 16:27	12° \approx 38'55	2°44'09	min. Earth dist.	1700 May 15 04:41	22° \approx 00'57	0.55113 AU
min. Earth dist.	1699 Jun 02 15:56	12° \approx 39'37	0.54984 AU	morning rise	1700 May 22 15:10	18° \approx 37'41	
morning rise	1699 Jun 11 19:32	8° \approx 34'34		direct	1700 May 26 09:43	18° \approx 06'57	
direct	1699 Jun 14 22:38	8° \approx 12'59		morning max el	1700 Jun 08 20:12	24° \approx 39'15	23°26'38
morning max el	1699 Jun 27 02:05	13° \approx 55'33	21°46'39		1700 Jun 13 18:10	0° \approx	
	1699 Jul 09 02:22	0° \approx		asc. node	1700 Jun 29 10:00	25° \approx 47'08	
asc. node	1699 Jul 12 12:56	6° \approx 14'11			1700 Jul 01 11:22	0° \approx	
morning set	1699 Jul 17 20:25	16° \approx 51'39		morning set	1700 Jul 02 07:50	1° \approx 47'02	
	1699 Jul 24 02:04	0° \approx					
superior conj	1699 Jul 25 04:02	2° \approx 16'21	1°39'51	superior conj	1700 Jul 09 10:14	17° \approx 00'40	1°28'21
minimum elong	1699 Jul 25 02:23	2° \approx 07'39	1°39'44	minimum elong	1700 Jul 09 07:56	16° \approx 48'20	1°28'05
max. Earth dist.	1699 Jul 28 20:58	9° \approx 54'59	1.34820 AU	max. Earth dist.	1700 Jul 11 19:52	22° \approx 07'54	1.33580 AU
evening rise	1699 Aug 02 09:37	18° \approx 51'40			1700 Jul 15 14:52	0° \approx	
	1699 Aug 08 10:32	0° \approx		evening rise	1700 Jul 17 00:43	2° \approx 50'24	
desc. node	1699 Aug 20 00:49	18° \approx 52'33			1700 Aug 01 06:28	0° \approx	
	1699 Aug 28 00:38	0° \approx		desc. node	1700 Aug 06 21:51	8° \approx 24'38	
evening max el	1699 Sep 06 12:30	10° \approx 47'55	26°52'17	evening max el	1700 Aug 20 00:13	24° \approx 07'57	27°21'52
retrograde	1699 Sep 19 15:15	18° \approx 03'44					
evening set	1699 Sep 26 08:19	15° \approx 21'50					
min. Earth dist.	1699 Sep 30 08:06	11° \approx 21'43	0.65656 AU				
inferior conj	1699 Oct 02 04:47	9° \approx 11'36	-2°-5'-58				
minimum elong	1699 Oct 02 08:08	9° \approx 01'51	2°04'42				
morning rise	1699 Oct 08 09:22	3° \approx 29'41					
asc. node	1699 Oct 08 12:10	3° \approx 26'13					
direct	1699 Oct 11 04:00	2° \approx 47'09					
morning max el	1699 Oct 17 17:35	6° \approx 21'32	18°19'27				
	1699 Nov 02 22:37	0° \approx					
morning set	1699 Nov 05 20:43	4° \approx 44'55					
desc. node	1699 Nov 16 00:07	21° \approx 04'08					
superior conj	1699 Nov 21 01:15	29° \approx 03'36	0°-33'-16				
minimum elong	1699 Nov 20 20:56	28° \approx 46'34	0°32'42				
	1699 Nov 21 15:34	0° \approx					
max. Earth dist.	1699 Nov 23 00:20	2° \approx 08'53	1.45105 AU				
evening rise	1699 Dec 07 09:49	24° \approx 41'37					
	1699 Dec 10 19:09	0° \approx					
greatest brilliancy	1699 Dec 21 19:50	17° \approx 00'09	-0.7m				
evening max el	1699 Dec 30 22:09	28° \approx 56'03	19°20'38				
	1700 Jan 01 00:23	0° \approx					
asc. node	1700 Jan 04 11:29	2° \approx 25'33					
retrograde	1700 Jan 07 00:57	3° \approx 01'21					