

conjunction	1100 Mar 25 j 15:24	11° Υ 13'41	-16°49'15	minimum elong	1108 Apr 02 j 16:06	19° Υ 06'50	16°33'44
minimum elong	1100 Mar 25 j 15:28	11° Υ 13'41	16°49'15	max. Earth dist.	1108 Apr 04 j 06:20	19° Υ 09'03	49.79274 AU
max. Earth dist.	1100 Mar 27 j 12:32	11° Υ 16'20	49.19120 AU	retrograde	1108 Jul 14 j 13:00	20° Υ 37'48	
retrograde	1100 Jul 06 j 18:10	12° Υ 46'08		min. Earth dist.	1108 Oct 05 j 01:16	19° Υ 39'05	47.90941 AU
min. Earth dist.	1100 Sep 26 j 21:46	11° Υ 47'03	47.32451 AU	opposition	1108 Oct 06 j 11:53	19° Υ 37'26	-17°12'58
opposition	1100 Sep 28 j 15:35	11° Υ 45'03	-17°30'50	direct	1108 Dec 26 j 19:34	18° Υ 38'22	
direct	1100 Dec 18 j 18:34	10° Υ 45'20					
conjunction	1101 Mar 26 j 21:52	12° Υ 13'40	-16°48'19	conjunction	1109 Apr 03 j 21:54	20° Υ 05'27	-16°30'33
minimum elong	1101 Mar 26 j 21:57	12° Υ 13'40	16°48'20	minimum elong	1109 Apr 03 j 22:01	20° Υ 05'27	16°30'33
max. Earth dist.	1101 Mar 28 j 18:12	12° Υ 16'16	49.27770 AU	max. Earth dist.	1109 Apr 05 j 09:59	20° Υ 07'32	49.85182 AU
retrograde	1101 Jul 07 j 21:54	13° Υ 45'52		retrograde	1109 Jul 15 j 21:20	21° Υ 36'18	
min. Earth dist.	1101 Sep 28 j 03:40	12° Υ 46'50	47.40880 AU	min. Earth dist.	1109 Oct 06 j 07:08	20° Υ 37'38	47.96539 AU
opposition	1101 Sep 29 j 21:16	12° Υ 44'51	-17°29'38	opposition	1109 Oct 07 j 17:01	20° Υ 36'02	-17°09'30
direct	1101 Dec 20 j 01:14	11° Υ 45'11		direct	1109 Dec 27 j 23:00	19° Υ 37'02	
conjunction	1102 Mar 28 j 04:02	13° Υ 13'19	-16°47'06	conjunction	1110 Apr 05 j 03:51	21° Υ 04'01	-16°27'09
minimum elong	1102 Mar 28 j 04:08	13° Υ 13'19	16°47'05	minimum elong	1110 Apr 05 j 03:59	21° Υ 04'01	16°27'09
max. Earth dist.	1102 Mar 29 j 22:41	13° Υ 15'48	49.36042 AU	max. Earth dist.	1110 Apr 06 j 14:51	21° Υ 06'02	49.90562 AU
retrograde	1102 Jul 09 j 03:07	14° Υ 45'17		retrograde	1110 Jul 17 j 04:41	22° Υ 34'43	
min. Earth dist.	1102 Sep 29 j 10:45	13° Υ 46'16	47.48971 AU	opposition	1110 Oct 08 j 22:20	21° Υ 34'32	-17°05'48
opposition	1102 Oct 01 j 03:08	13° Υ 44'20	-17°28'08	min. Earth dist.	1110 Oct 07 j 14:43	21° Υ 36'01	48.01591 AU
direct	1102 Dec 21 j 08:22	12° Υ 44'44		direct	1110 Dec 29 j 02:22	20° Υ 35'35	
conjunction	1103 Mar 29 j 10:07	14° Υ 12'39	-16°45'35	conjunction	1111 Apr 06 j 09:37	22° Υ 02'27	-16°23'31
minimum elong	1103 Mar 29 j 10:12	14° Υ 12'39	16°45'36	minimum elong	1111 Apr 06 j 09:44	22° Υ 02'27	16°23'30
max. Earth dist.	1103 Mar 31 j 05:04	14° Υ 15'09	49.43997 AU	max. Earth dist.	1111 Apr 07 j 19:25	22° Υ 04'23	49.95415 AU
retrograde	1103 Jul 10 j 07:50	15° Υ 44'25		retrograde	1111 Jul 18 j 09:14	23° Υ 32'59	
min. Earth dist.	1103 Sep 30 j 17:24	14° Υ 45'26	47.56745 AU	min. Earth dist.	1111 Oct 08 j 20:15	22° Υ 34'20	48.06104 AU
opposition	1103 Oct 02 j 08:49	14° Υ 43'32	-17°26'20	opposition	1111 Oct 10 j 03:27	22° Υ 32'52	-17°01'52
direct	1103 Dec 22 j 16:20	13° Υ 44'01		direct	1111 Dec 30 j 07:02	21° Υ 33'58	
conjunction	1104 Mar 29 j 16:10	15° Υ 11'45	-16°43'47	conjunction	1112 Apr 06 j 15:21	23° Υ 00'42	-16°19'39
minimum elong	1104 Mar 29 j 16:16	15° Υ 11'45	16°43'47	minimum elong	1112 Apr 06 j 15:29	23° Υ 00'42	16°19'40
max. Earth dist.	1104 Mar 31 j 09:22	15° Υ 14'09	49.51668 AU	max. Earth dist.	1112 Apr 07 j 23:04	23° Υ 02'31	49.99740 AU
retrograde	1104 Jul 10 j 16:33	16° Υ 43'20		retrograde	1112 Jul 18 j 13:35	24° Υ 31'05	
min. Earth dist.	1104 Sep 30 j 22:54	15° Υ 44'25	47.64241 AU	min. Earth dist.	1112 Oct 09 j 03:11	23° Υ 32'23	48.10124 AU
opposition	1104 Oct 02 j 14:16	15° Υ 42'32	-17°24'14	opposition	1112 Oct 10 j 08:27	23° Υ 31'00	-16°57'41
direct	1104 Dec 22 j 19:28	14° Υ 43'05		direct	1112 Dec 30 j 13:33	22° Υ 32'08	
conjunction	1105 Mar 30 j 22:14	16° Υ 10'40	-16°41'41	conjunction	1113 Apr 07 j 21:10	23° Υ 58'44	-16°15'33
minimum elong	1105 Mar 30 j 22:19	16° Υ 10'40	16°41'42	minimum elong	1113 Apr 07 j 21:18	23° Υ 58'44	16°15'32
max. Earth dist.	1105 Apr 01 j 15:01	16° Υ 13'02	49.59049 AU	max. Earth dist.	1113 Apr 09 j 04:38	24° Υ 00'32	50.03599 AU
retrograde	1105 Jul 11 j 23:33	17° Υ 42'04		retrograde	1113 Jul 19 j 15:54	25° Υ 28'58	
min. Earth dist.	1105 Oct 02 j 06:21	16° Υ 43'10	47.71441 AU	min. Earth dist.	1113 Oct 10 j 09:09	24° Υ 30'15	48.13692 AU
opposition	1105 Oct 03 j 19:51	16° Υ 41'23	-17°21'51	opposition	1113 Oct 11 j 13:21	24° Υ 28'55	-16°53'15
direct	1105 Dec 23 j 23:22	15° Υ 42'01		direct	1113 Dec 31 j 22:20	23° Υ 30'04	
conjunction	1106 Apr 01 j 04:08	17° Υ 09'27	-16°39'18	conjunction	1114 Apr 09 j 02:35	24° Υ 56'33	-16°11'12
minimum elong	1106 Apr 01 j 04:15	17° Υ 09'28	16°39'19	minimum elong	1114 Apr 09 j 02:43	24° Υ 56'33	16°11'12
max. Earth dist.	1106 Apr 02 j 20:22	17° Υ 11'47	49.66143 AU	max. Earth dist.	1114 Apr 10 j 08:04	24° Υ 58'14	50.07049 AU
retrograde	1106 Jul 13 j 02:56	18° Υ 40'41		retrograde	1114 Jul 20 j 23:33	26° Υ 26'39	
min. Earth dist.	1106 Oct 03 j 11:38	17° Υ 41'53	47.78322 AU	opposition	1114 Oct 12 j 18:11	25° Υ 26'38	-16°48'34
opposition	1106 Oct 05 j 01:11	17° Υ 40'06	-17°19'10	min. Earth dist.	1114 Oct 11 j 14:23	25° Υ 27'56	48.16884 AU
direct	1106 Dec 25 j 06:01	16° Υ 40'51		direct	1115 Jan 02 j 02:09	24° Υ 27'48	
conjunction	1107 Apr 02 j 09:58	18° Υ 08'10	-16°36'39	conjunction	1115 Apr 10 j 08:07	25° Υ 54'09	-16°06'36
minimum elong	1107 Apr 02 j 10:04	18° Υ 08'10	16°36'39	minimum elong	1115 Apr 10 j 08:16	25° Υ 54'10	16°06'35
max. Earth dist.	1107 Apr 04 j 00:23	18° Υ 10'23	49.72901 AU	max. Earth dist.	1115 Apr 11 j 13:07	25° Υ 55'49	50.10138 AU
retrograde	1107 Jul 14 j 07:55	19° Υ 39'16		retrograde	1115 Jul 22 j 07:12	27° Υ 24'07	
min. Earth dist.	1107 Oct 04 j 18:34	18° Υ 40'30	47.84853 AU	opposition	1115 Oct 13 j 23:00	26° Υ 24'08	-16°43'37
opposition	1107 Oct 06 j 06:36	18° Υ 38'47	-17°16'12	min. Earth dist.	1115 Oct 12 j 21:03	26° Υ 25'22	48.19735 AU
direct	1107 Dec 26 j 12:26	17° Υ 39'37		direct	1116 Jan 03 j 05:05	25° Υ 25'20	
conjunction	1108 Apr 02 j 15:58	19° Υ 06'50	-16°33'44	conjunction	1116 Apr 10 j 13:37	26° Υ 51'35	-16°01'44
				minimum elong	1116 Apr 10 j 13:45	26° Υ 51'35	16°01'44


























































































































max. Earth dist.	1116 Apr 11 j 17:53	26° Υ 53'12	50.12921 AU	conjunction	1124 Apr 18 j 08:58	4° \mathcal{B} 28'11	-15°13'57
retrograde	1116 Jul 22 j 10:56	28° Υ 21'24		minimum elong	1124 Apr 18 j 09:08	4° \mathcal{B} 28'12	15°13'56
min. Earth dist.	1116 Oct 13 j 01:38	27° Υ 22'42	48.22272 AU	max. Earth dist.	1124 Apr 19 j 02:29	4° \mathcal{B} 29'11	50.21577 AU
opposition	1116 Oct 14 j 03:40	27° Υ 21'28	-16°38'24	retrograde	1124 Jul 30 j 02:12	5° \mathcal{B} 57'22	
direct	1117 Jan 03 j 09:51	26° Υ 22'41		opposition	1124 Oct 21 j 16:05	4° \mathcal{B} 57'46	-15°47'41
				min. Earth dist.	1124 Oct 20 j 23:48	4° \mathcal{B} 58'32	48.28363 AU
conjunction	1117 Apr 11 j 19:00	27° Υ 48'51	-15°56'36	direct	1125 Jan 11 j 02:11	3° \mathcal{B} 59'11	
minimum elong	1117 Apr 11 j 19:10	27° Υ 48'52	15°56'35				
max. Earth dist.	1117 Apr 12 j 21:29	27° Υ 50'22	50.15387 AU	conjunction	1125 Apr 19 j 14:22	5° \mathcal{B} 24'57	-15°06'58
retrograde	1117 Jul 23 j 14:30	29° Υ 18'34		minimum elong	1125 Apr 19 j 14:32	5° \mathcal{B} 24'58	15°06'58
min. Earth dist.	1117 Oct 14 j 07:45	28° Υ 19'50	48.24504 AU	max. Earth dist.	1125 Apr 20 j 07:02	5° \mathcal{B} 25'54	50.20497 AU
opposition	1117 Oct 15 j 08:19	28° Υ 18'41	-16°32'55	retrograde	1125 Jul 31 j 09:30	6° \mathcal{B} 54'04	
direct	1118 Jan 04 j 15:19	27° Υ 19'56		opposition	1125 Oct 22 j 20:25	5° \mathcal{B} 54'28	-15°40'19
				min. Earth dist.	1125 Oct 22 j 06:15	5° \mathcal{B} 55'08	48.26960 AU
conjunction	1118 Apr 13 j 00:27	28° Υ 46'02	-15°51'13	direct	1126 Jan 12 j 05:00	4° \mathcal{B} 55'52	
minimum elong	1118 Apr 13 j 00:35	28° Υ 46'02	15°51'13				
max. Earth dist.	1118 Apr 14 j 03:04	28° Υ 47'33	50.17551 AU	conjunction	1126 Apr 20 j 19:40	6° \mathcal{B} 21'36	-14°59'45
	1118 Jun 15 j 14:26	0° \mathcal{B}		minimum elong	1126 Apr 20 j 19:51	6° \mathcal{B} 21'37	14°59'44
retrograde	1118 Jul 24 j 17:17	0° \mathcal{B} 15'39		evening set	1126 Apr 20 j 10:37	6° \mathcal{B} 21'06	
	1118 Sep 02 j 09:45	30° κ Υ		morning rise	1126 Apr 21 j 05:07	6° \mathcal{B} 22'09	
opposition	1118 Oct 16 j 12:57	29° Υ 15'49	-16°27'10	max. Earth dist.	1126 Apr 21 j 11:25	6° \mathcal{B} 22'30	50.19021 AU
min. Earth dist.	1118 Oct 15 j 13:18	29° Υ 16'55	48.26406 AU	retrograde	1126 Aug 01 j 13:47	7° \mathcal{B} 50'39	
direct	1119 Jan 05 j 22:45	28° Υ 17'07		min. Earth dist.	1126 Oct 23 j 10:27	6° \mathcal{B} 51'44	48.25181 AU
				opposition	1126 Oct 24 j 00:40	6° \mathcal{B} 51'04	-15°32'42
conjunction	1119 Apr 14 j 05:38	29° Υ 43'08	-15°45'34	direct	1127 Jan 13 j 08:44	5° \mathcal{B} 52'27	
minimum elong	1119 Apr 14 j 05:49	29° Υ 43'09	15°45'34	evening set	1127 Apr 19 j 22:31	7° \mathcal{B} 15'20	
max. Earth dist.	1119 Apr 15 j 06:24	29° Υ 44'33	50.19384 AU				
	1119 Apr 26 j 15:47	0° \mathcal{B}		conjunction	1127 Apr 22 j 00:44	7° \mathcal{B} 18'11	-14°52'18
retrograde	1119 Jul 26 j 00:02	0° \mathcal{B} 12'41		minimum elong	1127 Apr 22 j 00:54	7° \mathcal{B} 18'11	14°52'18
opposition	1119 Oct 17 j 17:34	0° \mathcal{B} 12'54	-16°21'09	max. Earth dist.	1127 Apr 22 j 14:41	7° \mathcal{B} 18'58	50.17187 AU
min. Earth dist.	1119 Oct 16 j 18:28	0° \mathcal{B} 13'59	48.27955 AU	morning rise	1127 Apr 24 j 03:21	7° \mathcal{B} 21'02	
	1119 Oct 29 j 05:59	30° κ Υ		retrograde	1127 Aug 02 j 17:24	8° \mathcal{B} 47'10	
direct	1120 Jan 07 j 02:41	29° Υ 14'15		opposition	1127 Oct 25 j 05:03	7° \mathcal{B} 47'36	-15°24'50
	1120 Mar 14 j 19:12	0° \mathcal{B}		min. Earth dist.	1127 Oct 24 j 16:29	7° \mathcal{B} 48'11	48.23076 AU
conjunction	1120 Apr 14 j 11:08	0° \mathcal{B} 40'13	-15°39'41	direct	1128 Jan 14 j 14:01	6° \mathcal{B} 48'58	
minimum elong	1120 Apr 14 j 11:17	0° \mathcal{B} 40'14	15°39'41	evening set	1128 Apr 19 j 07:09	8° \mathcal{B} 10'41	
max. Earth dist.	1120 Apr 15 j 11:01	0° \mathcal{B} 41'35	50.20816 AU				
retrograde	1120 Jul 26 j 07:02	2° \mathcal{B} 09'42		conjunction	1128 Apr 22 j 06:06	8° \mathcal{B} 14'42	-14°44'36
opposition	1120 Oct 17 j 22:05	1° \mathcal{B} 09'59	-16°14'54	minimum elong	1128 Apr 22 j 06:18	8° \mathcal{B} 14'42	14°44'35
min. Earth dist.	1120 Oct 17 j 01:12	1° \mathcal{B} 10'58	48.29069 AU	max. Earth dist.	1128 Apr 22 j 20:12	8° \mathcal{B} 15'29	50.15046 AU
direct	1121 Jan 07 j 06:04	0° \mathcal{B} 11'22		morning rise	1128 Apr 25 j 05:32	8° \mathcal{B} 18'44	
				retrograde	1128 Aug 02 j 19:14	9° \mathcal{B} 43'39	
conjunction	1121 Apr 15 j 16:42	1° \mathcal{B} 37'18	-15°33'34	opposition	1128 Oct 25 j 09:12	8° \mathcal{B} 44'05	-15°16'43
minimum elong	1121 Apr 15 j 16:53	1° \mathcal{B} 37'18	15°33'35	min. Earth dist.	1128 Oct 24 j 21:21	8° \mathcal{B} 44'39	48.20664 AU
max. Earth dist.	1121 Apr 16 j 15:26	1° \mathcal{B} 38'35	50.21798 AU	direct	1129 Jan 14 j 21:40	7° \mathcal{B} 45'28	
retrograde	1121 Jul 27 j 12:50	3° \mathcal{B} 06'41		evening set	1129 Apr 19 j 20:09	9° \mathcal{B} 06'16	
min. Earth dist.	1121 Oct 18 j 06:10	2° \mathcal{B} 07'59	48.29689 AU				
opposition	1121 Oct 19 j 02:34	2° \mathcal{B} 07'02	-16°08'26	conjunction	1129 Apr 23 j 11:18	9° \mathcal{B} 11'11	-14°36'39
direct	1122 Jan 08 j 09:15	1° \mathcal{B} 08'26		minimum elong	1129 Apr 23 j 11:28	9° \mathcal{B} 11'12	14°36'39
				max. Earth dist.	1129 Apr 23 j 23:30	9° \mathcal{B} 11'53	50.12623 AU
conjunction	1122 Apr 16 j 22:02	2° \mathcal{B} 34'20	-15°27'15	morning rise	1129 Apr 27 j 02:58	9° \mathcal{B} 16'09	
minimum elong	1122 Apr 16 j 22:11	2° \mathcal{B} 34'21	15°27'14	retrograde	1129 Aug 04 j 01:23	10° \mathcal{B} 40'09	
max. Earth dist.	1122 Apr 17 j 18:27	2° \mathcal{B} 35'30	50.22251 AU	opposition	1129 Oct 26 j 13:28	9° \mathcal{B} 40'36	-15°08'20
retrograde	1122 Jul 28 j 17:46	4° \mathcal{B} 03'40		min. Earth dist.	1129 Oct 26 j 02:03	9° \mathcal{B} 41'09	48.17978 AU
opposition	1122 Oct 20 j 07:13	3° \mathcal{B} 04'02	-16°01'44	direct	1130 Jan 16 j 01:32	8° \mathcal{B} 41'59	
min. Earth dist.	1122 Oct 19 j 12:52	3° \mathcal{B} 04'54	48.29775 AU	evening set	1130 Apr 20 j 11:16	10° \mathcal{B} 02'01	
direct	1123 Jan 09 j 14:04	2° \mathcal{B} 05'27					
				conjunction	1130 Apr 24 j 16:25	10° \mathcal{B} 07'43	-14°28'27
conjunction	1123 Apr 18 j 03:36	3° \mathcal{B} 31'19	-15°20'42	minimum elong	1130 Apr 24 j 16:37	10° \mathcal{B} 07'44	14°28'27
minimum elong	1123 Apr 18 j 03:46	3° \mathcal{B} 31'19	15°20'43	max. Earth dist.	1130 Apr 25 j 04:06	10° \mathcal{B} 08'23	50.09909 AU
max. Earth dist.	1123 Apr 18 j 23:29	3° \mathcal{B} 32'26	50.22172 AU	morning rise	1130 Apr 28 j 22:11	10° \mathcal{B} 13'28	
retrograde	1123 Jul 29 j 19:44	5° \mathcal{B} 00'34		retrograde	1130 Aug 05 j 08:11	11° \mathcal{B} 36'41	
opposition	1123 Oct 21 j 11:40	4° \mathcal{B} 00'57	-15°54'49	opposition	1130 Oct 27 j 17:50	10° \mathcal{B} 37'10	-14°59'42
min. Earth dist.	1123 Oct 20 j 18:32	4° \mathcal{B} 01'46	48.29315 AU	min. Earth dist.	1130 Oct 27 j 08:05	10° \mathcal{B} 37'38	48.14990 AU
direct	1124 Jan 10 j 21:54	3° \mathcal{B} 02'22		direct	1131 Jan 17 j 04:44	9° \mathcal{B} 38'34	
				evening set	1131 Apr 21 j 04:04	10° \mathcal{B} 57'55	




















































































































conjunction	1131 Apr 25 j 21:42	11°804'20	-14°20'00	max. Earth dist.	1137 May 01 j 07:49	16°845'33	49.79429 AU
minimum elong	1131 Apr 25 j 21:53	11°804'21	14°20'00	morning rise	1137 May 08 j 12:15	16°855'16	
max. Earth dist.	1131 Apr 26 j 08:40	11°804'57	50.06903 AU	retrograde	1137 Aug 11 j 21:17	18°814'29	
morning rise	1131 Apr 30 j 15:55	11°810'47		opposition	1137 Nov 02 j 23:48	17°814'57	-13°52'41
retrograde	1131 Aug 06 j 15:01	12°833'18		min. Earth dist.	1137 Nov 02 j 22:54	17°815'00	47.81944 AU
opposition	1131 Oct 28 j 21:58	11°833'49	-14°50'48	direct	1138 Jan 23 j 09:58	16°816'09	
min. Earth dist.	1131 Oct 28 j 12:23	11°834'16	48.11676 AU	evening set	1138 Apr 24 j 22:26	17°832'02	
direct	1132 Jan 18 j 06:33	10°835'13					
evening set	1132 Apr 20 j 21:54	11°853'59		conjunction	1138 May 02 j 11:45	17°842'16	-13°14'36
				minimum elong	1138 May 02 j 11:57	17°842'16	13°14'36
conjunction	1132 Apr 26 j 03:00	12°801'03	-14°11'18	max. Earth dist.	1138 May 02 j 13:09	17°842'21	49.73184 AU
minimum elong	1132 Apr 26 j 03:12	12°801'04	14°11'19	morning rise	1138 May 10 j 01:55	17°852'33	
max. Earth dist.	1132 Apr 26 j 11:56	12°801'34	50.03529 AU	retrograde	1138 Aug 12 j 22:43	19°811'17	
morning rise	1132 May 01 j 08:49	12°808'09		opposition	1138 Nov 04 j 04:06	18°811'43	-13°42'12
retrograde	1132 Aug 06 j 20:43	13°830'01		min. Earth dist.	1138 Nov 04 j 04:00	18°811'44	47.75365 AU
opposition	1132 Oct 29 j 02:19	12°830'35	-14°41'40	direct	1139 Jan 24 j 17:33	17°812'51	
min. Earth dist.	1132 Oct 28 j 18:42	12°830'56	48.07968 AU	evening set	1139 Apr 25 j 19:56	18°828'20	
direct	1133 Jan 18 j 09:52	11°831'59					
evening set	1133 Apr 21 j 16:42	12°850'12		conjunction	1139 May 03 j 17:11	18°839'01	-13°04'22
				minimum elong	1139 May 03 j 17:23	18°839'02	13°04'21
conjunction	1133 Apr 27 j 08:30	12°857'52	-14°02'24	max. Earth dist.	1139 May 03 j 16:33	18°838'59	49.66581 AU
minimum elong	1133 Apr 27 j 08:41	12°857'53	14°02'23	morning rise	1139 May 11 j 15:28	18°849'46	
max. Earth dist.	1133 Apr 27 j 17:00	12°858'21	49.99723 AU	retrograde	1139 Aug 14 j 03:51	20°808'05	
morning rise	1133 May 03 j 00:57	13°805'34		opposition	1139 Nov 05 j 08:18	19°808'28	-13°31'28
retrograde	1133 Aug 07 j 22:17	14°826'52		min. Earth dist.	1139 Nov 05 j 08:50	19°808'27	47.68457 AU
opposition	1133 Oct 30 j 06:30	13°827'26	-14°32'19	direct	1140 Jan 25 j 22:12	18°809'33	
min. Earth dist.	1133 Oct 30 j 00:00	13°827'44	48.03782 AU	evening set	1140 Apr 25 j 17:34	19°824'40	
direct	1134 Jan 19 j 17:25	12°828'50					
evening set	1134 Apr 22 j 12:12	13°846'33		conjunction	1140 May 03 j 22:45	19°835'47	-12°53'53
				minimum elong	1140 May 03 j 22:56	19°835'48	12°53'54
conjunction	1134 Apr 28 j 13:54	13°854'46	-13°53'16	max. Earth dist.	1140 May 03 j 21:25	19°835'43	49.59649 AU
minimum elong	1134 Apr 28 j 14:06	13°854'47	13°53'16	morning rise	1140 May 12 j 04:55	19°846'59	
max. Earth dist.	1134 Apr 28 j 20:01	13°855'07	49.95426 AU	retrograde	1140 Aug 14 j 09:41	21°804'54	
morning rise	1134 May 04 j 16:25	14°803'03		opposition	1140 Nov 05 j 12:43	20°805'15	-13°20'29
	1134 Jun 21 j 10:27	15°8		min. Earth dist.	1140 Nov 05 j 14:57	20°805'09	47.61234 AU
retrograde	1134 Aug 09 j 03:11	15°823'47		direct	1141 Jan 26 j 02:48	19°806'17	
	1134 Sep 27 j 12:21	15°823'47		evening set	1141 Apr 26 j 15:36	20°821'03	
opposition	1134 Oct 31 j 10:52	14°824'21	-14°22'44				
min. Earth dist.	1134 Oct 31 j 05:24	14°824'36	47.99089 AU	conjunction	1141 May 05 j 04:17	20°832'36	-12°43'10
direct	1135 Jan 20 j 23:01	13°825'43		minimum elong	1141 May 05 j 04:30	20°832'37	12°43'09
evening set	1135 Apr 23 j 08:01	14°842'56		max. Earth dist.	1141 May 05 j 02:18	20°832'29	49.52432 AU
				morning rise	1141 May 13 j 17:58	20°844'14	
conjunction	1135 Apr 29 j 19:19	14°851'42	-13°43'55	retrograde	1141 Aug 15 j 16:20	22°801'46	
minimum elong	1135 Apr 29 j 19:30	14°851'42	13°43'54	opposition	1141 Nov 06 j 16:57	21°802'07	-13°09'15
max. Earth dist.	1135 Apr 30 j 00:16	14°851'58	49.90595 AU	min. Earth dist.	1141 Nov 06 j 19:07	21°802'01	47.53724 AU
	1135 May 05 j 22:19	15°8		direct	1142 Jan 27 j 05:26	20°803'05	
morning rise	1135 May 06 j 07:25	15°800'31		evening set	1142 Apr 27 j 13:45	21°817'33	
retrograde	1135 Aug 10 j 10:21	16°820'43					
opposition	1135 Nov 01 j 15:18	15°821'16	-14°12'57	conjunction	1142 May 06 j 09:47	21°829'33	-12°32'11
min. Earth dist.	1135 Nov 01 j 12:03	15°821'25	47.93857 AU	minimum elong	1142 May 06 j 09:58	21°829'33	12°32'12
	1135 Nov 20 j 21:01	15°821'25		max. Earth dist.	1142 May 06 j 05:53	21°829'20	49.44925 AU
direct	1136 Jan 22 j 02:45	14°822'35		morning rise	1142 May 15 j 07:00	21°841'36	
	1136 Mar 23 j 00:23	15°8		retrograde	1142 Aug 16 j 22:55	22°858'47	
evening set	1136 Apr 23 j 04:37	15°839'20		opposition	1142 Nov 07 j 21:26	21°859'08	-12°57'45
				min. Earth dist.	1142 Nov 08 j 01:18	21°858'57	47.45929 AU
conjunction	1136 Apr 30 j 00:53	15°848'36	-13°34'22	direct	1143 Jan 28 j 08:12	21°800'04	
minimum elong	1136 Apr 30 j 01:05	15°848'37	13°34'22	evening set	1143 Apr 28 j 12:06	22°814'16	
max. Earth dist.	1136 Apr 30 j 04:33	15°848'49	49.85255 AU				
morning rise	1136 May 06 j 21:58	15°857'56		conjunction	1143 May 07 j 15:26	22°826'40	-12°20'58
retrograde	1136 Aug 10 j 16:21	17°817'37		minimum elong	1143 May 07 j 15:38	22°826'41	12°20'58
opposition	1136 Nov 01 j 19:25	16°818'09	-14°02'56	max. Earth dist.	1143 May 07 j 11:33	22°826'27	49.37120 AU
min. Earth dist.	1136 Nov 01 j 16:33	16°818'17	47.88123 AU	morning rise	1143 May 16 j 19:46	22°839'08	
direct	1137 Jan 22 j 05:31	15°819'24		retrograde	1143 Aug 18 j 02:00	23°856'01	
evening set	1137 Apr 24 j 01:26	16°835'42		opposition	1143 Nov 09 j 01:53	22°856'21	-12°45'59
				min. Earth dist.	1143 Nov 09 j 06:27	22°856'08	47.37795 AU
conjunction	1137 May 01 j 06:21	16°845'28	-13°24'36	direct	1144 Jan 29 j 14:54	21°857'16	
minimum elong	1137 May 01 j 06:33	16°845'28	13°24'35	evening set	1144 Apr 28 j 10:58	23°811'12	

conjunction	1144 May 07 j 21:11	23° 8 24'01	-12°09'30	opposition	1150 Nov 15 j 10:36	29° 8 42'40	-11°17'10
minimum elong	1144 May 07 j 21:22	23° 8 24'01	12°09'30	min. Earth dist.	1150 Nov 16 j 00:57	29° 8 41'59	46.67679 AU
max. Earth dist.	1144 May 07 j 15:11	23° 8 23'40	49.28958 AU	direct	1151 Feb 05 j 02:31	28° 8 43'03	
morning rise	1144 May 17 j 08:36	23° 8 36'54		evening set	1151 May 04 j 09:04	29° 8 55'30	
retrograde	1144 Aug 18 j 07:05	24° 8 53'29			1151 May 07 j 16:29	0° II	
opposition	1144 Nov 09 j 06:16	23° 8 53'49	-12°34'00				
min. Earth dist.	1144 Nov 09 j 11:56	23° 8 53'33	47.29280 AU	conjunction	1151 May 15 j 15:39	0° II 10'56	-10°43'01
direct	1145 Jan 29 j 20:13	22° 8 54'42		minimum elong	1151 May 15 j 15:50	0° II 10'56	10°43'01
evening set	1145 Apr 29 j 10:01	24° 8 08'25		max. Earth dist.	1151 May 15 j 00:06	0° II 10'02	48.58251 AU
				morning rise	1151 May 26 j 23:24	0° II 26'28	
conjunction	1145 May 09 j 03:08	24° 8 21'37	-11°57'49	retrograde	1151 Aug 26 j 00:42	1° II 41'16	
minimum elong	1145 May 09 j 03:21	24° 8 21'38	11°57'49	opposition	1151 Nov 16 j 15:24	0° II 41'12	-11°03'31
max. Earth dist.	1145 May 08 j 20:03	24° 8 21'13	49.20357 AU	min. Earth dist.	1151 Nov 17 j 05:53	0° II 40'30	46.55887 AU
morning rise	1145 May 18 j 21:25	24° 8 34'55			1151 Dec 26 j 03:42	30° R 8	
retrograde	1145 Aug 19 j 14:19	25° 8 51'14		direct	1152 Feb 06 j 05:49	29° 8 41'28	
opposition	1145 Nov 10 j 10:57	24° 8 51'33	-12°21'46		1152 Mar 18 j 22:38	0° II	
min. Earth dist.	1145 Nov 10 j 18:44	24° 8 51'11	47.20289 AU	evening set	1152 May 04 j 09:41	0° II 53'44	
direct	1146 Jan 31 j 00:08	23° 8 52'24					
evening set	1146 Apr 30 j 09:18	25° 8 05'52		conjunction	1152 May 15 j 21:56	1° II 09'32	-10°29'44
				minimum elong	1152 May 15 j 22:08	1° II 09'33	10°29'43
conjunction	1146 May 10 j 09:00	25° 8 19'28	-11°45'54	max. Earth dist.	1152 May 15 j 04:23	1° II 08'32	48.46444 AU
minimum elong	1146 May 10 j 09:11	25° 8 19'29	11°45'54	morning rise	1152 May 27 j 11:34	1° II 25'25	
max. Earth dist.	1146 May 10 j 00:36	25° 8 18'59	49.11268 AU	retrograde	1152 Aug 26 j 09:21	2° II 40'00	
morning rise	1146 May 20 j 09:50	25° 8 33'09		opposition	1152 Nov 16 j 20:17	1° II 39'51	-10°49'36
retrograde	1146 Aug 20 j 22:17	26° 8 49'12		min. Earth dist.	1152 Nov 17 j 12:32	1° II 39'04	46.43790 AU
opposition	1146 Nov 11 j 15:36	25° 8 49'30	-12°09'18	direct	1153 Feb 06 j 08:01	0° II 40'00	
min. Earth dist.	1146 Nov 11 j 23:46	25° 8 49'07	47.10778 AU	evening set	1153 May 05 j 10:23	1° II 52'08	
direct	1147 Feb 01 j 02:06	24° 8 50'17		max. Earth dist.	1153 May 16 j 10:52	2° II 07'16	48.34354 AU
evening set	1147 May 01 j 08:54	26° 8 03'32					
				conjunction	1153 May 17 j 04:22	2° II 08'17	-10°16'11
conjunction	1147 May 11 j 15:02	26° 8 17'31	-11°33'47	minimum elong	1153 May 17 j 04:33	2° II 08'17	10°16'11
minimum elong	1147 May 11 j 15:15	26° 8 17'32	11°33'47	morning rise	1153 May 28 j 23:27	2° II 24'30	
max. Earth dist.	1147 May 11 j 04:12	26° 8 16'54	49.01635 AU	retrograde	1153 Aug 27 j 13:35	3° II 38'54	
morning rise	1147 May 21 j 22:31	26° 8 31'36		opposition	1153 Nov 18 j 01:17	2° II 38'40	-10°35'25
retrograde	1147 Aug 22 j 04:30	27° 8 47'22		min. Earth dist.	1153 Nov 18 j 17:54	2° II 37'52	46.31411 AU
opposition	1147 Nov 12 j 20:20	26° 8 47'37	-11°56'37	direct	1154 Feb 07 j 14:48	1° II 38'42	
min. Earth dist.	1147 Nov 13 j 06:52	26° 8 47'07	47.00731 AU	evening set	1154 May 06 j 11:17	2° II 50'43	
direct	1148 Feb 02 j 06:35	25° 8 48'20					
evening set	1148 May 01 j 08:42	27° 8 01'22		conjunction	1154 May 18 j 10:35	3° II 07'12	-10°02'23
				minimum elong	1154 May 18 j 10:47	3° II 07'12	10°02'23
conjunction	1148 May 11 j 21:18	27° 8 15'44	-11°21'26	max. Earth dist.	1154 May 17 j 15:17	3° II 06'05	48.21999 AU
minimum elong	1148 May 11 j 21:29	27° 8 15'45	11°21'26	morning rise	1154 May 30 j 11:17	3° II 23'46	
max. Earth dist.	1148 May 11 j 09:53	27° 8 15'05	48.91474 AU	retrograde	1154 Aug 28 j 17:54	4° II 37'59	
morning rise	1148 May 22 j 10:57	27° 8 30'10		opposition	1154 Nov 19 j 06:24	3° II 37'41	-10°20'58
retrograde	1148 Aug 22 j 06:48	28° 8 45'41		min. Earth dist.	1154 Nov 19 j 23:49	3° II 36'51	46.18773 AU
opposition	1148 Nov 13 j 01:04	27° 8 45'52	-11°43'42	direct	1155 Feb 08 j 21:16	2° II 37'37	
min. Earth dist.	1148 Nov 13 j 12:35	27° 8 45'19	46.90155 AU	evening set	1155 May 07 j 12:24	3° II 49'32	
direct	1149 Feb 02 j 14:41	26° 8 46'29					
evening set	1149 May 02 j 08:45	27° 8 59'19		conjunction	1155 May 19 j 17:12	4° II 06'21	-9°48'20
				minimum elong	1155 May 19 j 17:23	4° II 06'21	9°48'20
conjunction	1149 May 13 j 03:20	28° 8 14'03	-11°08'52	max. Earth dist.	1155 May 18 j 21:12	4° II 05'11	48.09360 AU
minimum elong	1149 May 13 j 03:31	28° 8 14'03	11°08'52	morning rise	1155 May 31 j 23:13	4° II 23'15	
max. Earth dist.	1149 May 12 j 13:31	28° 8 13'15	48.80817 AU	retrograde	1155 Aug 29 j 23:13	5° II 37'21	
morning rise	1149 May 23 j 23:15	28° 8 28'51		opposition	1155 Nov 20 j 11:34	4° II 36'58	-10°06'15
retrograde	1149 Aug 23 j 11:42	29° 8 44'07		min. Earth dist.	1155 Nov 21 j 06:39	4° II 36'03	46.05833 AU
opposition	1149 Nov 14 j 05:46	28° 8 44'13	-11°30'33	direct	1156 Feb 10 j 03:52	3° II 36'49	
min. Earth dist.	1149 Nov 14 j 18:20	28° 8 43'37	46.79123 AU	evening set	1156 May 07 j 13:58	4° II 48'38	
direct	1150 Feb 03 j 20:41	27° 8 44'43					
evening set	1150 May 03 j 08:48	28° 8 57'22		conjunction	1156 May 19 j 23:58	5° II 05'47	-9°34'01
				minimum elong	1156 May 20 j 00:10	5° II 05'48	9°34'01
conjunction	1150 May 14 j 09:30	29° 8 12'26	-10°56'04	max. Earth dist.	1156 May 19 j 02:59	5° II 04'34	47.96411 AU
minimum elong	1150 May 14 j 09:42	29° 8 12'27	10°56'03	morning rise	1156 Jun 01 j 11:11	5° II 23'02	
max. Earth dist.	1150 May 13 j 18:49	29° 8 11'36	48.69716 AU	retrograde	1156 Aug 30 j 07:43	6° II 37'00	
morning rise	1150 May 25 j 11:26	29° 8 27'37		opposition	1156 Nov 20 j 16:46	5° II 36'34	-9°51'16
	1150 Jun 19 j 18:21	0° II		min. Earth dist.	1156 Nov 21 j 12:04	5° II 35'38	45.92546 AU
retrograde	1150 Aug 24 j 17:06	0° II 42'39		direct	1157 Feb 10 j 07:12	4° II 36'18	
	1150 Oct 31 j 02:36	30° R 8		evening set	1157 May 08 j 15:45	5° II 48'04	

max. Earth dist.	1157 May 20 j 07:38	6°II04'13	47.83060 AU	min. Earth dist.	1163 Nov 29 j 13:07	12°II40'25	44.86860 AU
				direct	1164 Feb 17 j 23:11	11°II40'31	
conjunction	1157 May 21 j 06:46	6°II05'33	-9°19'27	evening set	1164 May 14 j 11:13	12°II52'11	
minimum elong	1157 May 21 j 06:56	6°II05'34	9°19'27	max. Earth dist.	1164 May 27 j 01:34	13°II09'55	46.76900 AU
morning rise	1157 Jun 02 j 23:09	6°II23'08					
retrograde	1157 Aug 31 j 15:58	7°II37'00		conjunction	1164 May 28 j 10:19	13°II11'51	-7°30'47
opposition	1157 Nov 21 j 22:12	6°II36'29	-9°36'02	minimum elong	1164 May 28 j 10:28	13°II11'52	7°30'47
min. Earth dist.	1157 Nov 22 j 19:47	6°II35'26	45.78836 AU	morning rise	1164 Jun 11 j 10:38	13°II31'37	
direct	1158 Feb 11 j 10:49	5°II36'07		retrograde	1164 Sep 07 j 16:24	14°II45'01	
evening set	1158 May 09 j 17:45	6°II47'49		opposition	1164 Nov 28 j 14:55	13°II43'41	-7°42'14
				min. Earth dist.	1164 Nov 29 j 20:21	13°II42'14	44.70278 AU
conjunction	1158 May 22 j 13:52	7°II05'38	-9°04'40	direct	1165 Feb 18 j 05:58	12°II42'14	
minimum elong	1158 May 22 j 14:04	7°II05'39	9°04'40	evening set	1165 May 15 j 14:51	13°II53'57	
max. Earth dist.	1158 May 21 j 14:15	7°II04'16	47.69261 AU	max. Earth dist.	1165 May 28 j 08:54	14°II11'57	46.60311 AU
morning rise	1158 Jun 04 j 11:04	7°II23'32					
retrograde	1158 Sep 01 j 21:30	8°II37'18		conjunction	1165 May 29 j 18:06	14°II13'55	-7°14'14
opposition	1158 Nov 23 j 03:42	7°II36'42	-9°20'33	minimum elong	1165 May 29 j 18:16	14°II13'56	7°14'14
min. Earth dist.	1158 Nov 24 j 02:06	7°II35'37	45.64643 AU	morning rise	1165 Jun 12 j 22:17	14°II33'59	
direct	1159 Feb 12 j 18:01	6°II36'12		retrograde	1165 Sep 08 j 21:09	15°II47'23	
evening set	1159 May 10 j 20:07	7°II47'53		opposition	1165 Nov 29 j 21:16	14°II45'56	-7°24'53
				min. Earth dist.	1165 Dec 01 j 03:53	14°II44'25	44.53444 AU
conjunction	1159 May 23 j 20:56	8°II06'01	-8°49'38	direct	1166 Feb 19 j 14:50	13°II44'20	
minimum elong	1159 May 23 j 21:06	8°II06'02	8°49'37	evening set	1166 May 16 j 18:53	14°II56'06	
max. Earth dist.	1159 May 22 j 18:43	8°II04'29	47.54971 AU	max. Earth dist.	1166 May 29 j 15:56	15°II14'21	46.43506 AU
morning rise	1159 Jun 05 j 23:07	8°II24'14					
retrograde	1159 Sep 03 j 03:53	9°II37'54		conjunction	1166 May 31 j 02:01	15°II16'23	-6°57'25
opposition	1159 Nov 24 j 09:21	8°II37'12	-9°04'49	minimum elong	1166 May 31 j 02:10	15°II16'23	6°57'26
min. Earth dist.	1159 Nov 25 j 09:06	8°II36'03	45.49957 AU	morning rise	1166 Jun 14 j 10:07	15°II36'44	
direct	1160 Feb 14 j 00:38	7°II36'34		retrograde	1166 Sep 10 j 06:09	16°II50'11	
evening set	1160 May 10 j 22:40	8°II48'13		opposition	1166 Dec 01 j 03:37	15°II48'36	-7°07'15
max. Earth dist.	1160 May 23 j 01:01	9°II05'04	47.40170 AU	min. Earth dist.	1166 Dec 02 j 10:11	15°II47'05	44.36397 AU
				direct	1167 Feb 20 j 19:40	14°II46'51	
conjunction	1160 May 24 j 04:21	9°II06'40	-8°34'21	evening set	1167 May 17 j 23:13	15°II58'44	
minimum elong	1160 May 24 j 04:31	9°II06'40	8°34'22	max. Earth dist.	1167 May 30 j 22:23	16°II17'10	46.26459 AU
morning rise	1160 Jun 06 j 11:08	9°II25'12					
retrograde	1160 Sep 03 j 09:17	10°II38'47		conjunction	1167 Jun 01 j 10:07	16°II19'18	-6°40'20
opposition	1160 Nov 24 j 15:04	9°II37'58	-8°48'50	minimum elong	1167 Jun 01 j 10:16	16°II19'18	6°40'20
min. Earth dist.	1160 Nov 25 j 16:46	9°II36'43	45.34775 AU	morning rise	1167 Jun 15 j 22:03	16°II39'56	
direct	1161 Feb 14 j 07:50	8°II37'11		retrograde	1167 Sep 11 j 16:23	17°II53'27	
evening set	1161 May 12 j 01:32	9°II48'48		opposition	1167 Dec 02 j 10:19	16°II51'46	-6°49'20
max. Earth dist.	1161 May 24 j 07:09	10°II05'53	47.24917 AU	min. Earth dist.	1167 Dec 03 j 18:49	16°II50'09	44.19099 AU
				direct	1168 Feb 21 j 23:14	15°II49'52	
conjunction	1161 May 25 j 11:44	10°II07'33	-8°18'50	evening set	1168 May 18 j 03:56	17°II01'53	
minimum elong	1161 May 25 j 11:54	10°II07'34	8°18'50	max. Earth dist.	1168 May 31 j 06:42	17°II20'35	46.09141 AU
morning rise	1161 Jun 07 j 23:03	10°II26'24					
retrograde	1161 Sep 04 j 17:12	11°II39'55		conjunction	1168 Jun 01 j 18:36	17°II22'44	-6°22'59
opposition	1161 Nov 25 j 20:50	10°II38'59	-8°32'35	minimum elong	1168 Jun 01 j 18:44	17°II22'44	6°22'58
min. Earth dist.	1161 Nov 26 j 22:51	10°II37'43	45.19165 AU	morning rise	1168 Jun 16 j 09:59	17°II43'40	
direct	1162 Feb 15 j 12:47	9°II38'02		retrograde	1168 Sep 12 j 01:11	18°II57'15	
evening set	1162 May 13 j 04:24	10°II49'38		opposition	1168 Dec 02 j 16:57	17°II55'27	-6°31'08
				min. Earth dist.	1168 Dec 04 j 01:53	17°II53'49	44.01494 AU
conjunction	1162 May 26 j 19:00	11°II08'42	-8°03'05	direct	1169 Feb 22 j 06:31	16°II53'24	
minimum elong	1162 May 26 j 19:10	11°II08'43	8°03'05	evening set	1169 May 19 j 09:11	18°II05'34	
max. Earth dist.	1162 May 25 j 12:21	11°II06'54	47.09244 AU	max. Earth dist.	1169 Jun 01 j 12:55	18°II24'24	45.91483 AU
morning rise	1162 Jun 09 j 10:51	11°II27'52					
retrograde	1162 Sep 06 j 03:07	12°II41'20		conjunction	1169 Jun 03 j 03:10	18°II26'42	-6°05'22
opposition	1162 Nov 27 j 02:51	11°II40'15	-8°16'05	minimum elong	1169 Jun 03 j 03:18	18°II26'43	6°05'21
min. Earth dist.	1162 Nov 28 j 06:52	11°II38'53	45.03176 AU	morning rise	1169 Jun 17 j 22:09	18°II47'55	
direct	1163 Feb 16 j 16:12	10°II39'08		retrograde	1169 Sep 13 j 10:22	20°II01'36	
evening set	1163 May 14 j 07:35	11°II50'45		opposition	1169 Dec 03 j 23:58	18°II59'41	-6°12'39
max. Earth dist.	1163 May 26 j 19:58	12°II08'19	46.93222 AU	min. Earth dist.	1169 Dec 05 j 10:21	18°II57'58	43.83527 AU
				direct	1170 Feb 23 j 13:50	17°II57'28	
conjunction	1163 May 28 j 02:39	12°II10'08	-7°47'04	evening set	1170 May 20 j 14:29	19°II09'48	
minimum elong	1163 May 28 j 02:49	12°II10'09	7°47'03	max. Earth dist.	1170 Jun 02 j 20:57	19°II28'52	45.73408 AU
morning rise	1163 Jun 10 j 22:39	12°II29'36					
retrograde	1163 Sep 07 j 09:46	13°II43'01		conjunction	1170 Jun 04 j 11:57	19°II31'13	-5°47'29
opposition	1163 Nov 28 j 08:45	12°II41'48	-7°59'18	minimum elong	1170 Jun 04 j 12:05	19°II31'14	5°47'28

morning rise	1170 Jun 19 j 10:07	19°II52'43		conjunction	1177 Jun 12 j 07:38	27°II15'32	-3°35'01
retrograde	1170 Sep 14 j 17:04	21°II06'30		minimum elong	1177 Jun 12 j 07:44	27°II15'32	3°35'01
opposition	1170 Dec 05 j 07:16	20°II04'26	-5°53'53	morning rise	1177 Jun 28 j 00:32	27°II38'49	
min. Earth dist.	1170 Dec 06 j 19:19	20°II02'38	43.65113 AU	retrograde	1177 Sep 22 j 10:15	28°II53'41	
direct	1171 Feb 24 j 22:55	19°II02'02		opposition	1177 Dec 12 j 14:45	27°II50'17	-3°34'44
evening set	1171 May 21 j 20:27	20°II14'32		min. Earth dist.	1177 Dec 14 j 10:49	27°II48'01	42.25043 AU
max. Earth dist.	1171 Jun 04 j 04:25	20°II33'45	45.54884 AU	direct	1178 Mar 04 j 05:47	26°II46'12	
				evening set	1178 May 28 j 23:17	28°II00'19	
conjunction	1171 Jun 05 j 21:05	20°II36'14	-5°29'21	max. Earth dist.	1178 Jun 11 j 17:10	28°II20'44	44.14303 AU
minimum elong	1171 Jun 05 j 21:13	20°II36'14	5°29'21				
morning rise	1171 Jun 20 j 22:28	20°II58'00		conjunction	1178 Jun 13 j 18:02	28°II23'47	-3°15'01
retrograde	1171 Sep 16 j 00:49	22°II11'53		minimum elong	1178 Jun 13 j 18:07	28°II23'48	3°15'00
opposition	1171 Dec 06 j 14:30	21°II09'41	-5°34'52	morning rise	1178 Jun 29 j 12:52	28°II47'18	
min. Earth dist.	1171 Dec 08 j 03:14	21°II07'50	43.46241 AU		1178 Sep 09 j 12:29	0°☾	
direct	1172 Feb 26 j 06:47	20°II07'04		retrograde	1178 Sep 23 j 21:26	0°☾02'27	
evening set	1172 May 22 j 02:46	21°II19'44			1178 Oct 08 j 08:04	30°R II	
max. Earth dist.	1172 Jun 04 j 11:31	21°II39'05	45.35878 AU	opposition	1178 Dec 13 j 23:33	28°II58'50	-3°13'42
				min. Earth dist.	1178 Dec 15 j 19:27	28°II56'34	42.03961 AU
conjunction	1172 Jun 06 j 06:26	21°II41'42	-5°10'57	direct	1179 Mar 05 j 14:03	27°II54'32	
minimum elong	1172 Jun 06 j 06:34	21°II41'43	5°10'57	evening set	1179 May 30 j 08:17	29°II09'00	
morning rise	1172 Jun 21 j 10:50	22°II03'44		max. Earth dist.	1179 Jun 13 j 01:48	29°II29'30	43.93194 AU
retrograde	1172 Sep 16 j 11:34	23°II17'45					
opposition	1172 Dec 06 j 22:11	22°II15'22	-5°15'33	conjunction	1179 Jun 15 j 04:47	29°II32'42	-2°54'44
min. Earth dist.	1172 Dec 08 j 13:09	22°II13'24	43.26906 AU	minimum elong	1179 Jun 15 j 04:51	29°II32'43	2°54'45
direct	1173 Feb 26 j 12:18	21°II12'32		morning rise	1179 Jul 01 j 01:34	29°II56'27	
evening set	1173 May 23 j 09:12	22°II25'23			1179 Jul 03 j 11:46	0°☾	
max. Earth dist.	1173 Jun 05 j 20:35	22°II44'58	45.16432 AU	retrograde	1179 Sep 25 j 10:57	1°☾11'53	
				opposition	1179 Dec 15 j 08:33	0°☾08'06	-2°52'21
conjunction	1173 Jun 07 j 15:53	22°II47'36	-4°52'18	min. Earth dist.	1179 Dec 17 j 05:58	0°☾05'45	41.82685 AU
minimum elong	1173 Jun 07 j 16:00	22°II47'37	4°52'18		1179 Dec 21 j 21:06	30°R II	
morning rise	1173 Jun 22 j 23:00	23°II09'54		direct	1180 Mar 05 j 21:11	29°II03'33	
retrograde	1173 Sep 17 j 21:54	24°II24'03			1180 May 17 j 19:49	0°☾	
opposition	1173 Dec 08 j 05:52	23°II21'28	-4°55'58	evening set	1180 May 30 j 17:38	0°☾18'26	
min. Earth dist.	1173 Dec 09 j 21:12	23°II19'28	43.07150 AU	max. Earth dist.	1180 Jun 13 j 12:55	0°☾39'08	43.71858 AU
direct	1174 Feb 27 j 19:01	22°II18'23					
evening set	1174 May 24 j 16:11	23°II31'27		conjunction	1180 Jun 15 j 16:00	0°☾42'22	-2°34'11
max. Earth dist.	1174 Jun 07 j 03:46	23°II51'07	44.96589 AU	minimum elong	1180 Jun 15 j 16:04	0°☾42'22	2°34'11
				morning rise	1180 Jul 01 j 14:14	1°☾06'20	
conjunction	1174 Jun 09 j 01:26	23°II53'56	-4°33'23	retrograde	1180 Sep 25 j 21:29	2°☾22'06	
minimum elong	1174 Jun 09 j 01:33	23°II53'56	4°33'22	opposition	1180 Dec 15 j 17:55	1°☾18'08	-2°30'43
morning rise	1174 Jun 24 j 11:24	24°II16'28		min. Earth dist.	1180 Dec 17 j 16:17	1°☾15'43	41.61155 AU
retrograde	1174 Sep 19 j 08:13	25°II30'46		direct	1181 Mar 07 j 07:43	0°☾13'22	
opposition	1174 Dec 09 j 13:44	24°II27'58	-4°36'06	evening set	1181 Jun 01 j 03:31	1°☾28'39	
min. Earth dist.	1174 Dec 11 j 06:41	24°II25'53	42.87042 AU	max. Earth dist.	1181 Jun 14 j 22:29	1°☾49'28	43.50245 AU
direct	1175 Mar 01 j 02:24	23°II24'39					
evening set	1175 May 25 j 23:19	24°II37'56		conjunction	1181 Jun 17 j 03:14	1°☾52'49	-2°13'22
max. Earth dist.	1175 Jun 08 j 13:11	24°II57'49	44.76402 AU	minimum elong	1181 Jun 17 j 03:17	1°☾52'49	2°13'22
				morning rise	1181 Jul 03 j 03:00	2°☾17'01	
conjunction	1175 Jun 10 j 11:21	25°II00'40	-4°14'12	retrograde	1181 Sep 27 j 07:57	3°☾33'08	
minimum elong	1175 Jun 10 j 11:27	25°II00'40	4°14'12	opposition	1181 Dec 17 j 03:30	2°☾28'59	-2°08'48
morning rise	1175 Jun 25 j 23:41	25°II23'27		min. Earth dist.	1181 Dec 19 j 02:37	2°☾26'31	41.39327 AU
retrograde	1175 Sep 20 j 15:05	26°II37'54		direct	1182 Mar 08 j 17:47	1°☾23'59	
opposition	1175 Dec 10 j 21:53	25°II34'54	-4°15'56	evening set	1182 Jun 02 j 13:56	2°☾39'43	
min. Earth dist.	1175 Dec 12 j 15:57	25°II32'46	42.66612 AU	max. Earth dist.	1182 Jun 16 j 08:39	3°☾00'37	43.28274 AU
direct	1176 Mar 01 j 13:45	24°II31'20					
evening set	1176 May 26 j 07:02	25°II44'52		conjunction	1182 Jun 18 j 15:00	3°☾04'06	-1°52'17
max. Earth dist.	1176 Jun 08 j 21:53	26°II04'54	44.55931 AU	minimum elong	1182 Jun 18 j 15:03	3°☾04'06	1°52'17
				morning rise	1182 Jul 04 j 15:54	3°☾28'31	
conjunction	1176 Jun 10 j 21:22	26°II07'51	-3°54'45	retrograde	1182 Sep 28 j 18:31	4°☾45'00	
minimum elong	1176 Jun 10 j 21:28	26°II07'52	3°54'44	opposition	1182 Dec 18 j 13:26	3°☾40'39	-1°46'35
morning rise	1176 Jun 26 j 12:08	26°II30'53		min. Earth dist.	1182 Dec 20 j 14:38	3°☾38'04	41.17125 AU
retrograde	1176 Sep 21 j 00:01	27°II45'32		direct	1183 Mar 10 j 03:12	2°☾35'24	
opposition	1176 Dec 11 j 06:04	26°II42'19	-3°55'29	evening set	1183 Jun 04 j 00:53	3°☾51'36	
min. Earth dist.	1176 Dec 13 j 00:23	26°II40'09	42.45935 AU	max. Earth dist.	1183 Jun 17 j 19:58	4°☾12'39	43.05920 AU
direct	1177 Mar 02 j 22:44	25°II38'30					
evening set	1177 May 27 j 15:04	26°II52'18		conjunction	1183 Jun 20 j 03:07	4°☾16'11	-1°30'56
max. Earth dist.	1177 Jun 10 j 06:48	27°II12'30	44.35212 AU	minimum elong	1183 Jun 20 j 03:09	4°☾16'12	1°30'56

morning rise	1183 Jul 06 j 05:02	4°  40'48	direct	1190 Mar 18 j 05:42	11°  16'18	
retrograde	1183 Sep 30 j 07:32	5°  57'42	evening set	1190 Jun 12 j 20:32	12°  36'25	
opposition	1183 Dec 19 j 23:39	4°  53'08 -1°24'06	max. Earth dist.	1190 Jun 26 j 09:22	12°  57'59	41.40389 AU
min. Earth dist.	1183 Dec 22 j 01:09	4°  50'31 40.94521 AU				
direct	1184 Mar 10 j 11:20	3°  47'36	conjunction	1190 Jun 29 j 00:12	13°  02'12	1°05'46
evening set	1184 Jun 04 j 12:31	5°  04'16	minimum elong	1190 Jun 29 j 00:10	13°  02'12	1°05'45
max. Earth dist.	1184 Jun 18 j 05:49	5°  25'20 42.83145 AU	morning rise	1190 Jul 15 j 02:47	13°  27'57	
			retrograde	1190 Oct 09 j 05:05	14°  48'16	
conjunction	1184 Jun 20 j 15:30	5°  29'04 -1°09'19	opposition	1190 Dec 28 j 07:40	13°  41'45	1°21'18
minimum elong	1184 Jun 20 j 15:32	5°  29'04 1°09'19	min. Earth dist.	1190 Dec 30 j 15:50	13°  38'42	39.28182 AU
morning rise	1184 Jul 06 j 18:17	5°  53'52	direct	1191 Mar 19 j 17:14	12°  33'55	
retrograde	1184 Sep 30 j 21:37	7°  11'11	evening set	1191 Jun 14 j 12:07	13°  54'44	
opposition	1184 Dec 20 j 10:10	6°  06'22 -1°01'18	max. Earth dist.	1191 Jun 27 j 22:16	14°  16'16	41.16082 AU
min. Earth dist.	1184 Dec 22 j 13:48	6°  03'38 40.71526 AU				
direct	1185 Mar 11 j 19:47	5°  00'32	conjunction	1191 Jun 30 j 14:51	14°  20'38	1°29'09
evening set	1185 Jun 06 j 00:27	6°  17'43	minimum elong	1191 Jun 30 j 14:48	14°  20'38	1°29'10
max. Earth dist.	1185 Jun 19 j 18:13	6°  38'56 42.59989 AU	morning rise	1191 Jul 16 j 16:42	14°  46'31	
			retrograde	1191 Oct 10 j 21:58	16°  07'28	
conjunction	1185 Jun 22 j 04:17	6°  42'42 -0°47'27	opposition	1191 Dec 29 j 20:31	15°  00'41	1°46'01
minimum elong	1185 Jun 22 j 04:18	6°  42'42 0°47'27	min. Earth dist.	1192 Jan 01 j 05:39	14°  57'33	39.03873 AU
morning rise	1185 Jul 08 j 07:30	7°  07'41	direct	1192 Mar 20 j 05:12	13°  52'30	
retrograde	1185 Oct 02 j 10:26	8°  25'25	evening set	1192 Jun 15 j 04:17	15°  14'05	
opposition	1185 Dec 21 j 21:00	7°  20'21 -0°38'14	max. Earth dist.	1192 Jun 28 j 13:12	15°  35'42	40.91674 AU
min. Earth dist.	1185 Dec 24 j 01:20	7°  17'34 40.48173 AU				
direct	1186 Mar 13 j 08:26	6°  14'12	conjunction	1192 Jul 01 j 06:03	15°  40'07	1°52'46
evening set	1186 Jun 07 j 12:55	7°  31'54	minimum elong	1192 Jul 01 j 06:00	15°  40'06	1°52'45
max. Earth dist.	1186 Jun 21 j 05:03	7°  53'09 42.36507 AU	morning rise	1192 Jul 17 j 06:33	16°  06'05	
			retrograde	1192 Oct 11 j 12:18	17°  27'43	
conjunction	1186 Jun 23 j 17:04	7°  57'04 -0°25'19	opposition	1192 Dec 30 j 09:47	16°  20'40	2°11'00
minimum elong	1186 Jun 23 j 17:05	7°  57'04 0°25'20	min. Earth dist.	1193 Jan 01 j 20:00	16°  17'27	38.79451 AU
morning rise	1186 Jul 09 j 20:50	8°  22'14	direct	1193 Mar 21 j 20:33	15°  12'09	
retrograde	1186 Oct 04 j 00:13	9°  40'25	evening set	1193 Jun 16 j 21:17	16°  34'33	
opposition	1186 Dec 23 j 08:04	8°  35'03 -0°14'53	max. Earth dist.	1193 Jun 30 j 03:46	16°  56'09	40.67141 AU
min. Earth dist.	1186 Dec 25 j 13:18	8°  32'13 40.24533 AU				
direct	1187 Mar 14 j 20:43	7°  28'35	conjunction	1193 Jul 02 j 21:35	17°  00'40	2°16'36
evening set	1187 Jun 09 j 02:00	8°  46'50	minimum elong	1193 Jul 02 j 21:31	17°  00'40	2°16'37
max. Earth dist.	1187 Jun 22 j 17:32	9°  08'10 42.12735 AU	morning rise	1193 Jul 18 j 20:44	17°  26'45	
			retrograde	1193 Oct 13 j 04:23	18°  49'06	
conjunction	1187 Jun 25 j 06:29	9°  12'11 -0°02'59	opposition	1193 Dec 31 j 23:24	17°  41'46	2°36'13
minimum elong	1187 Jun 25 j 06:28	9°  12'11 0°02'59	min. Earth dist.	1194 Jan 03 j 09:46	17°  38'32	38.54887 AU
behind sun begin	1187 Jun 24 j 23:58	9°  11'47	direct	1194 Mar 23 j 10:26	16°  32'55	
behind sun end	1187 Jun 25 j 12:59	9°  12'35	evening set	1194 Jun 18 j 14:56	17°  56'10	
morning rise	1187 Jul 11 j 10:13	9°  37'30	max. Earth dist.	1194 Jul 01 j 18:11	18°  17'43	40.42402 AU
asc. node	1187 Aug 11 j 16:29	10°  21'04				
retrograde	1187 Oct 05 j 11:09	10°  56'10	conjunction	1194 Jul 04 j 13:35	18°  22'22	2°40'39
opposition	1187 Dec 24 j 19:26	9°  50'31 0°08'45	minimum elong	1194 Jul 04 j 13:30	18°  22'22	2°40'39
min. Earth dist.	1187 Dec 27 j 02:17	9°  47'34 40.00647 AU	morning rise	1194 Jul 20 j 10:56	18°  48'32	
direct	1188 Mar 15 j 09:14	8°  43'42	retrograde	1194 Oct 14 j 19:27	20°  11'39	
evening set	1188 Jun 09 j 15:41	10°  02'32	opposition	1195 Jan 02 j 13:41	19°  04'01	3°01'41
max. Earth dist.	1188 Jun 23 j 06:37	10°  23'57 41.88759 AU	min. Earth dist.	1195 Jan 05 j 02:04	19°  00'39	38.30103 AU
			direct	1195 Mar 24 j 22:55	17°  54'50	
conjunction	1188 Jun 25 j 20:06	10°  28'02 0°19'45	evening set	1195 Jun 20 j 09:30	19°  18'57	
minimum elong	1188 Jun 25 j 20:06	10°  28'02 0°19'45	max. Earth dist.	1195 Jul 03 j 10:33	19°  40'30	40.17423 AU
morning rise	1188 Jul 11 j 23:47	10°  53'31				
retrograde	1188 Oct 05 j 23:04	12°  12'41	conjunction	1195 Jul 06 j 06:16	19°  45'13	3°04'55
opposition	1188 Dec 25 j 07:07	11°  06'45 0°32'40	minimum elong	1195 Jul 06 j 06:10	19°  45'13	3°04'56
min. Earth dist.	1188 Dec 27 j 13:51	11°  03'48 39.76595 AU	morning rise	1195 Jul 22 j 01:29	20°  11'26	
direct	1189 Mar 16 j 20:57	9°  59'36	retrograde	1195 Oct 16 j 11:59	21°  35'22	
evening set	1189 Jun 11 j 05:49	11°  19'02	opposition	1196 Jan 04 j 04:12	20°  27'26	3°27'23
max. Earth dist.	1189 Jun 24 j 18:39	11°  40'28 41.64621 AU	min. Earth dist.	1196 Jan 06 j 16:48	20°  24'01	38.05068 AU
			direct	1196 Mar 25 j 12:50	19°  17'51	
conjunction	1189 Jun 27 j 09:52	11°  44'41 0°42'38	evening set	1196 Jun 21 j 05:01	20°  42'54	
minimum elong	1189 Jun 27 j 09:51	11°  44'41 0°42'39	max. Earth dist.	1196 Jul 04 j 01:12	21°  04'18	39.92176 AU
morning rise	1189 Jul 13 j 13:11	12°  10'19				
retrograde	1189 Oct 07 j 14:24	13°  30'02	conjunction	1196 Jul 06 j 23:19	21°  09'13	3°29'24
opposition	1189 Dec 26 j 19:17	12°  23'49 0°56'51	minimum elong	1196 Jul 06 j 23:12	21°  09'13	3°29'23
min. Earth dist.	1189 Dec 29 j 03:34	12°  20'45 39.52428 AU	morning rise	1196 Jul 22 j 16:15	21°  35'28	

retrograde	1196 Oct 17 j 07:44	23°  00'15		direct	1203 Apr 05 j 03:33	29°  32'00	
opposition	1197 Jan 04 j 19:22	21°  51'58	3°53'19		1203 May 21 j 14:16	0° 	
min. Earth dist.	1197 Jan 07 j 09:37	21°  48'28	37.79793 AU	evening set	1203 Jul 03 j 19:52	1°  04'54	
direct	1197 Mar 27 j 01:22	20°  42'01		max. Earth dist.	1203 Jul 15 j 08:50	1°  25'19	38.11682 AU
evening set	1197 Jun 23 j 00:56	22°  08'02					
max. Earth dist.	1197 Jul 05 j 18:32	22°  29'24	39.66683 AU	conjunction	1203 Jul 18 j 11:52	1°  30'54	6°25'14
				minimum elong	1203 Jul 18 j 11:39	1°  30'53	6°25'13
conjunction	1197 Jul 08 j 16:46	22°  34'22	3°54'04	morning rise	1203 Aug 02 j 02:00	1°  56'47	
minimum elong	1197 Jul 08 j 16:38	22°  34'22	3°54'04	retrograde	1203 Oct 28 j 23:10	3°  02'46	
morning rise	1197 Jul 24 j 06:48	23°  00'38		opposition	1204 Jan 15 j 18:40	2°  01'57	6°59'53
retrograde	1197 Oct 19 j 00:48	24°  26'17		min. Earth dist.	1204 Jan 18 j 12:52	2°  14'05	36.00163 AU
opposition	1198 Jan 06 j 10:58	23°  17'40	4°19'28	direct	1204 Apr 05 j 20:01	1°  05'05	
min. Earth dist.	1198 Jan 09 j 01:54	23°  14'06	37.54294 AU	evening set	1204 Jul 04 j 22:23	2°  03'23	
direct	1198 Mar 28 j 17:22	22°  07'18		max. Earth dist.	1204 Jul 16 j 06:25	2°  59'37	37.86004 AU
evening set	1198 Jun 24 j 21:57	23°  34'20					
max. Earth dist.	1198 Jul 07 j 10:54	23°  55'33	39.40998 AU	conjunction	1204 Jul 19 j 09:09	3°  05'13	6°50'45
				minimum elong	1204 Jul 19 j 08:56	3°  05'12	6°50'45
conjunction	1198 Jul 10 j 10:38	24°  00'40	4°18'55	morning rise	1204 Aug 02 j 17:41	3°  03'56	
minimum elong	1198 Jul 10 j 10:30	24°  00'40	4°18'54	retrograde	1204 Oct 29 j 20:48	5°  04'12	
morning rise	1198 Jul 25 j 21:47	24°  26'56		opposition	1205 Jan 16 j 14:05	3°  53'04	7°27'00
retrograde	1198 Oct 20 j 19:48	25°  53'30		min. Earth dist.	1205 Jan 19 j 08:52	3°  49'07	35.74715 AU
opposition	1199 Jan 08 j 02:49	24°  44'32	4°45'49	direct	1205 Apr 07 j 15:54	2°  03'46	
min. Earth dist.	1199 Jan 10 j 18:22	24°  40'54	37.28646 AU	evening set	1205 Jul 07 j 02:00	4°  01'32	
direct	1199 Mar 30 j 10:14	23°  33'44		max. Earth dist.	1205 Jul 18 j 03:26	4°  35'28	37.60408 AU
evening set	1199 Jun 26 j 19:43	25°  01'49					
max. Earth dist.	1199 Jul 09 j 04:29	25°  22'56	39.15158 AU	conjunction	1205 Jul 21 j 06:45	4°  04'10	7°16'19
				minimum elong	1205 Jul 21 j 06:30	4°  04'09	7°16'19
conjunction	1199 Jul 12 j 05:10	25°  28'10	4°43'55	morning rise	1205 Aug 04 j 09:31	5°  06'41	
minimum elong	1199 Jul 12 j 05:01	25°  28'09	4°43'56	retrograde	1205 Oct 31 j 20:24	6°  04'18	
morning rise	1199 Jul 27 j 12:47	25°  54'24		opposition	1206 Jan 18 j 09:59	5°  29'50	7°54'10
retrograde	1199 Oct 22 j 13:10	27°  21'55		min. Earth dist.	1206 Jan 21 j 04:40	5°  25'51	35.49338 AU
opposition	1200 Jan 09 j 19:24	26°  12'35	5°12'21	direct	1206 Apr 09 j 12:42	4°  01'07	
min. Earth dist.	1200 Jan 12 j 12:25	26°  08'51	37.02889 AU	evening set	1206 Jul 09 j 06:47	5°  05'24	
direct	1200 Mar 31 j 03:05	25°  01'22		max. Earth dist.	1206 Jul 20 j 01:03	6°  12'59	37.34820 AU
evening set	1200 Jun 27 j 18:21	26°  30'34					
max. Earth dist.	1200 Jul 09 j 23:11	26°  51'34	38.89247 AU	conjunction	1206 Jul 23 j 05:18	6°  18'49	7°41'54
				minimum elong	1206 Jul 23 j 05:03	6°  18'48	7°41'54
conjunction	1200 Jul 13 j 00:02	26°  56'51	5°09'05	morning rise	1206 Aug 06 j 01:39	6°  44'06	
minimum elong	1200 Jul 12 j 23:52	26°  56'50	5°09'05	retrograde	1206 Nov 02 j 19:06	8°  20'07	
morning rise	1200 Jul 28 j 03:52	27°  23'03		opposition	1207 Jan 20 j 06:37	7°  08'18	8°21'21
retrograde	1200 Oct 23 j 07:22	28°  51'35		min. Earth dist.	1207 Jan 23 j 02:57	7°  04'12	35.23962 AU
opposition	1201 Jan 10 j 12:18	27°  41'53	5°39'03	direct	1207 Apr 11 j 07:49	5°  05'41	
min. Earth dist.	1201 Jan 13 j 04:53	27°  38'09	36.77104 AU	evening set	1207 Jul 11 j 12:55	7°  03'30	
direct	1201 Apr 01 j 19:30	26°  30'14		max. Earth dist.	1207 Jul 22 j 00:17	7°  52'16	37.09216 AU
evening set	1201 Jun 29 j 17:55	28°  00'36					
max. Earth dist.	1201 Jul 11 j 17:08	28°  21'23	38.63320 AU	conjunction	1207 Jul 25 j 04:34	7°  58'10	8°07'28
				minimum elong	1207 Jul 25 j 04:18	7°  58'09	8°07'28
conjunction	1201 Jul 14 j 19:25	28°  26'49	5°34'22	morning rise	1207 Aug 07 j 18:02	8°  23'10	
minimum elong	1201 Jul 14 j 19:13	28°  26'48	5°34'22	retrograde	1207 Nov 04 j 17:16	10°  00'39	
morning rise	1201 Jul 29 j 19:06	28°  52'56		opposition	1208 Jan 22 j 03:56	8°  48'28	8°48'34
	1201 Sep 14 j 02:13	0° 		min. Earth dist.	1208 Jan 24 j 23:56	8°  44'21	34.98557 AU
retrograde	1201 Oct 25 j 03:04	0°  22'34		direct	1208 Apr 12 j 04:45	7°  03'53	
	1201 Dec 05 j 18:59	30°  R 		evening set	1208 Jul 12 j 20:10	9°  01'42	
opposition	1202 Jan 12 j 05:55	29°  12'30	6°05'53	max. Earth dist.	1208 Jul 22 j 22:19	9°  03'07	36.83558 AU
min. Earth dist.	1202 Jan 14 j 23:49	29°  08'39	36.51362 AU				
direct	1202 Apr 03 j 10:25	28°  00'25		conjunction	1208 Jul 26 j 04:23	9°  39'13	8°33'01
evening set	1202 Jul 01 j 18:14	29°  32'01		minimum elong	1208 Jul 26 j 04:07	9°  39'11	8°33'02
max. Earth dist.	1202 Jul 13 j 13:48	29°  52'43	38.37454 AU	morning rise	1208 Aug 08 j 10:33	10°  03'53	
				retrograde	1208 Nov 05 j 17:33	11°  04'54	
conjunction	1202 Jul 16 j 15:20	29°  58'08	5°59'45	opposition	1209 Jan 23 j 02:03	10°  30'19	9°15'44
minimum elong	1202 Jul 16 j 15:09	29°  58'07	5°59'45	min. Earth dist.	1209 Jan 25 j 23:30	10°  26'05	34.73125 AU
	1202 Jul 17 j 16:35	0° 		direct	1209 Apr 13 j 23:33	9°  01'51	
morning rise	1202 Jul 31 j 10:20	0°  24'09		evening set	1209 Jul 15 j 04:36	10°  05'29	
retrograde	1202 Oct 27 j 00:05	1° 54'55		max. Earth dist.	1209 Jul 24 j 23:29	11° 01'54	36.57875 AU
opposition	1203 Jan 14 j 00:03	0° 44'29	6°32'50				
min. Earth dist.	1203 Jan 16 j 17:37	0° 40'39	36.25701 AU	conjunction	1209 Jul 28 j 05:02	11° 21'56	8°58'30
	1203 Feb 17 j 01:30	30° R		minimum elong	1209 Jul 28 j 04:43	11° 21'54	8°58'30




























































































































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retrograde	1209 Nov 07 j 18:07	13° Ω 26'50		min. Earth dist.	1216 Feb 08 j 06:42	23° Ω 06'13	32.98592 AU
opposition	1210 Jan 25 j 00:47	12° Ω 13'49	9°42'51	direct	1216 Apr 26 j 00:03	21° Ω 52'10	
min. Earth dist.	1210 Jan 27 j 22:15	12° Ω 09'34	34.47687 AU	evening set	1216 Jul 31 j 05:09	23° Ω 48'44	
direct	1210 Apr 15 j 21:18	10° Ω 58'18		max. Earth dist.	1216 Aug 06 j 22:32	24° Ω 02'16	34.82211 AU
evening set	1210 Jul 17 j 14:20	12° Ω 42'17					
max. Earth dist.	1210 Jul 26 j 23:06	13° Ω 00'01	36.32209 AU	conjunction	1216 Aug 10 j 03:56	24° Ω 08'48	11°51'28
				minimum elong	1216 Aug 10 j 03:34	24° Ω 08'46	11°51'28
conjunction	1210 Jul 30 j 06:08	13° Ω 06'18	9°23'54	morning rise	1216 Aug 20 j 00:45	24° Ω 28'43	
minimum elong	1210 Jul 30 j 05:49	13° Ω 06'16	9°23'54	retrograde	1216 Nov 20 j 21:55	26° Ω 22'48	
morning rise	1210 Aug 11 j 19:56	13° Ω 30'10		opposition	1217 Feb 06 j 12:32	25° Ω 06'46	12°46'46
	1210 Oct 11 j 20:16	15° Ω		min. Earth dist.	1217 Feb 09 j 09:50	25° Ω 02'19	32.74934 AU
retrograde	1210 Nov 09 j 21:31	15° Ω 12'27		direct	1217 Apr 28 j 02:56	23° Ω 47'48	
	1210 Dec 09 j 06:19	15° \Re Ω		evening set	1217 Aug 03 j 01:04	25° Ω 46'51	
opposition	1211 Jan 27 j 00:11	13° Ω 58'59	10°09'52	max. Earth dist.	1217 Aug 09 j 04:12	25° Ω 59'19	34.58460 AU
min. Earth dist.	1211 Jan 29 j 22:16	13° Ω 54'41	34.22305 AU				
direct	1211 Apr 17 j 19:06	12° Ω 42'57		conjunction	1217 Aug 12 j 10:09	26° Ω 05'58	12°14'44
evening set	1211 Jul 20 j 01:19	14° Ω 28'48		minimum elong	1217 Aug 12 j 09:46	26° Ω 05'56	12°14'44
max. Earth dist.	1211 Jul 29 j 01:19	14° Ω 46'01	36.06598 AU	morning rise	1217 Aug 21 j 17:33	26° Ω 24'57	
				retrograde	1217 Nov 23 j 06:46	28° Ω 21'24	
conjunction	1211 Aug 01 j 08:10	14° Ω 52'20	9°49'09	opposition	1218 Feb 08 j 17:20	27° Ω 04'58	13°11'30
minimum elong	1211 Aug 01 j 07:51	14° Ω 52'19	9°49'08	min. Earth dist.	1218 Feb 11 j 14:35	27° Ω 00'30	32.51692 AU
	1211 Aug 05 j 07:38	15° Ω		direct	1218 Apr 30 j 05:52	25° Ω 45'34	
morning rise	1211 Aug 13 j 12:43	15° Ω 15'43		evening set	1218 Aug 05 j 22:50	27° Ω 47'15	
retrograde	1211 Nov 12 j 00:08	16° Ω 59'43		max. Earth dist.	1218 Aug 11 j 12:39	27° Ω 58'42	34.35085 AU
opposition	1212 Jan 29 j 00:19	15° Ω 45'49	10°36'44				
min. Earth dist.	1212 Jan 31 j 23:03	15° Ω 41'26	33.97022 AU	conjunction	1218 Aug 14 j 17:22	28° Ω 05'18	12°37'30
	1212 Mar 01 j 23:21	15° \Re Ω		minimum elong	1218 Aug 14 j 16:59	28° Ω 05'16	12°37'31
direct	1212 Apr 18 j 20:36	14° Ω 29'16		morning rise	1218 Aug 23 j 10:06	28° Ω 23'15	
	1212 Jun 04 j 20:29	15° Ω			1218 Oct 19 j 01:16	0° \Re	
evening set	1212 Jul 21 j 13:45	16° Ω 17'04		retrograde	1218 Nov 25 j 14:54	0° \Re 22'10	
max. Earth dist.	1212 Jul 30 j 03:32	16° Ω 33'38	35.81137 AU		1219 Jan 02 j 22:59	30° \Re Ω	
				opposition	1219 Feb 10 j 23:14	29° Ω 05'21	13°35'40
conjunction	1212 Aug 02 j 10:41	16° Ω 40'03	10°14'12	min. Earth dist.	1219 Feb 13 j 20:35	29° Ω 00'51	32.28802 AU
minimum elong	1212 Aug 02 j 10:21	16° Ω 40'01	10°14'13	direct	1219 May 02 j 11:27	27° Ω 45'32	
morning rise	1212 Aug 14 j 05:37	17° Ω 02'53		evening set	1219 Aug 08 j 22:45	29° Ω 49'58	
retrograde	1212 Nov 13 j 05:03	18° Ω 48'41			1219 Aug 13 j 18:35	0° \Re	
opposition	1213 Jan 30 j 01:09	17° Ω 34'20	11°03'24	max. Earth dist.	1219 Aug 13 j 20:24	0° \Re 00'10	34.12063 AU
min. Earth dist.	1213 Feb 01 j 23:14	17° Ω 29'57	33.71940 AU				
direct	1213 Apr 20 j 22:08	16° Ω 17'16		conjunction	1219 Aug 17 j 01:19	0° \Re 06'50	12°59'42
evening set	1213 Jul 24 j 03:10	18° Ω 07'06		minimum elong	1219 Aug 17 j 00:55	0° \Re 06'48	12°59'41
max. Earth dist.	1213 Aug 01 j 06:31	18° Ω 22'59	35.55886 AU	morning rise	1219 Aug 25 j 02:23	0° \Re 23'36	
				retrograde	1219 Nov 28 j 01:27	2° \Re 25'09	
conjunction	1213 Aug 04 j 13:48	18° Ω 29'28	10°39'02	opposition	1220 Feb 13 j 05:51	1° \Re 07'57	13°59'13
minimum elong	1213 Aug 04 j 13:27	18° Ω 29'26	10°39'01	min. Earth dist.	1220 Feb 16 j 02:23	1° \Re 03'28	32.06260 AU
morning rise	1213 Aug 15 j 22:19	18° Ω 51'41			1220 Apr 04 j 21:50	30° \Re Ω	
retrograde	1213 Nov 15 j 07:27	20° Ω 39'24		direct	1220 May 03 j 17:31	29° Ω 47'40	
opposition	1214 Feb 01 j 02:54	19° Ω 24'36	11°29'47		1220 Jun 01 j 04:23	0° \Re	
min. Earth dist.	1214 Feb 04 j 01:50	19° Ω 20'08	33.47126 AU	evening set	1220 Aug 11 j 00:47	1° \Re 55'01	
direct	1214 Apr 22 j 22:24	18° Ω 07'02		max. Earth dist.	1220 Aug 15 j 05:44	2° \Re 03'51	33.89369 AU
evening set	1214 Jul 26 j 18:19	19° Ω 58'59					
max. Earth dist.	1214 Aug 03 j 11:27	20° Ω 14'11	35.30949 AU	conjunction	1220 Aug 18 j 10:15	2° \Re 10'34	13°21'16
				minimum elong	1220 Aug 18 j 09:52	2° \Re 10'32	13°21'17
conjunction	1214 Aug 06 j 17:44	20° Ω 20'40	11°03'33	morning rise	1220 Aug 25 j 18:13	2° \Re 26'00	
minimum elong	1214 Aug 06 j 17:23	20° Ω 20'38	11°03'33	retrograde	1220 Nov 29 j 11:12	4° \Re 30'18	
morning rise	1214 Aug 17 j 15:07	20° Ω 42'12		opposition	1221 Feb 14 j 13:38	3° \Re 12'42	14°22'05
retrograde	1214 Nov 17 j 11:01	22° Ω 31'55		min. Earth dist.	1221 Feb 17 j 10:44	3° \Re 08'10	31.84055 AU
opposition	1215 Feb 03 j 05:08	21° Ω 16'41	11°55'52	direct	1221 May 06 j 00:17	1° \Re 52'00	
min. Earth dist.	1215 Feb 06 j 02:54	21° Ω 12'15	33.22658 AU	evening set	1221 Aug 14 j 05:20	4° \Re 02'23	
direct	1215 Apr 25 j 00:28	19° Ω 58'37		max. Earth dist.	1221 Aug 17 j 16:05	4° \Re 09'43	33.67043 AU
evening set	1215 Jul 29 j 10:57	21° Ω 52'49					
max. Earth dist.	1215 Aug 05 j 15:26	22° Ω 07'08	35.06375 AU	conjunction	1221 Aug 20 j 19:44	4° \Re 16'26	13°42'09
				minimum elong	1221 Aug 20 j 19:20	4° \Re 16'23	13°42'08
conjunction	1215 Aug 08 j 22:28	22° Ω 13'44	11°27'43	morning rise	1221 Aug 27 j 08:51	4° \Re 30'21	
minimum elong	1215 Aug 08 j 22:05	22° Ω 13'42	11°27'42	retrograde	1221 Dec 01 j 23:22	6° \Re 37'34	
morning rise	1215 Aug 19 j 08:05	22° Ω 34'30		opposition	1222 Feb 16 j 22:05	5° \Re 19'34	14°44'13
retrograde	1215 Nov 19 j 16:24	24° Ω 26'21		min. Earth dist.	1222 Feb 19 j 17:48	5° \Re 15'05	31.62218 AU

direct	1222 May 08 j 08:58	3° \mathring{M} 58'24		conjunction	1229 Sep 08 j 03:40	22° \mathring{M} 14'41	15°54'43
evening set	1222 Aug 17 j 12:59	6° \mathring{M} 12'06		minimum elong	1229 Sep 08 j 03:22	22° \mathring{M} 14'39	15°54'42
max. Earth dist.	1222 Aug 20 j 02:27	6° \mathring{M} 17'36	33.45093 AU	retrograde	1229 Dec 20 j 11:04	24° \mathring{M} 46'24	
				opposition	1230 Mar 07 j 01:04	23° \mathring{M} 25'19	17°03'15
conjunction	1222 Aug 23 j 06:14	6° \mathring{M} 24'23	14°02'16	min. Earth dist.	1230 Mar 09 j 12:24	23° \mathring{M} 21'13	30.08464 AU
minimum elong	1222 Aug 23 j 05:51	6° \mathring{M} 24'21	14°02'16	direct	1230 May 26 j 02:05	22° \mathring{M} 00'54	
morning rise	1222 Aug 28 j 22:19	6° \mathring{M} 36'33		max. Earth dist.	1230 Sep 08 j 04:54	24° \mathring{M} 32'04	31.92114 AU
retrograde	1222 Dec 04 j 09:19	8° \mathring{M} 46'55					
opposition	1223 Feb 19 j 07:23	7° \mathring{M} 28'30	15°05'30	conjunction	1230 Sep 10 j 19:51	24° \mathring{M} 38'06	16°05'41
min. Earth dist.	1223 Feb 22 j 03:45	7° \mathring{M} 23'57	31.40790 AU	minimum elong	1230 Sep 10 j 19:36	24° \mathring{M} 38'05	16°05'41
direct	1223 May 10 j 15:48	6° \mathring{M} 06'53		retrograde	1230 Dec 23 j 05:45	27° \mathring{M} 11'01	
evening set	1223 Aug 21 j 00:57	8° \mathring{M} 24'10		opposition	1231 Mar 09 j 17:06	25° \mathring{M} 49'39	17°14'30
max. Earth dist.	1223 Aug 22 j 15:27	8° \mathring{M} 27'39	33.23596 AU	min. Earth dist.	1231 Mar 12 j 01:52	25° \mathring{M} 45'43	29.92750 AU
				direct	1231 May 28 j 18:54	24° \mathring{M} 24'58	
conjunction	1223 Aug 25 j 17:32	8° \mathring{M} 34'21	14°21'33	max. Earth dist.	1231 Sep 10 j 23:28	26° \mathring{M} 57'28	31.76629 AU
minimum elong	1223 Aug 25 j 17:09	8° \mathring{M} 34'19	14°21'32				
morning rise	1223 Aug 30 j 09:03	8° \mathring{M} 44'26		conjunction	1231 Sep 13 j 12:49	27° \mathring{M} 03'24	16°15'10
retrograde	1223 Dec 06 j 19:56	10° \mathring{M} 58'16		minimum elong	1231 Sep 13 j 12:34	27° \mathring{M} 03'22	16°15'09
opposition	1224 Feb 21 j 17:38	9° \mathring{M} 39'26	15°25'52	retrograde	1231 Dec 25 j 23:08	29° \mathring{M} 37'27	
min. Earth dist.	1224 Feb 24 j 12:27	9° \mathring{M} 34'57	31.19831 AU	opposition	1232 Mar 11 j 10:14	28° \mathring{M} 15'49	17°24'07
direct	1224 May 12 j 02:04	8° \mathring{M} 17'21		min. Earth dist.	1232 Mar 13 j 18:23	28° \mathring{M} 11'55	29.77842 AU
evening set	1224 Aug 23 j 19:31	10° \mathring{M} 38'50		direct	1232 May 30 j 09:51	26° \mathring{M} 50'53	
max. Earth dist.	1224 Aug 24 j 03:10	10° \mathring{M} 39'32	33.02611 AU	max. Earth dist.	1232 Sep 12 j 19:41	29° \mathring{M} 24'45	31.61977 AU
conjunction	1224 Aug 27 j 05:20	10° \mathring{M} 46'18	14°39'55	conjunction	1232 Sep 15 j 06:16	29° \mathring{M} 30'27	16°23'06
minimum elong	1224 Aug 27 j 04:58	10° \mathring{M} 46'16	14°39'55	minimum elong	1232 Sep 15 j 06:04	29° \mathring{M} 30'26	16°23'06
morning rise	1224 Aug 30 j 14:18	10° \mathring{M} 53'42			1232 Sep 27 j 23:10	0° \mathring{A}	
retrograde	1224 Dec 08 j 08:33	13° \mathring{M} 11'34		retrograde	1232 Dec 27 j 18:05	2° \mathring{A} 05'34	
opposition	1225 Feb 23 j 04:44	11° \mathring{M} 52'19	15°45'13	opposition	1233 Mar 14 j 04:04	0° \mathring{A} 43'42	17°32'03
min. Earth dist.	1225 Feb 25 j 23:15	11° \mathring{M} 47'50	30.99430 AU	min. Earth dist.	1233 Mar 16 j 09:38	0° \mathring{A} 39'58	29.63723 AU
direct	1225 May 14 j 09:58	10° \mathring{M} 29'47			1233 Apr 10 j 13:45	30° \mathring{R} \mathring{M}	
max. Earth dist.	1225 Aug 26 j 18:19	12° \mathring{M} 53'34	32.82233 AU	direct	1233 Jun 02 j 03:57	29° \mathring{M} 18'32	
evening set	1225 Aug 28 j 11:27	12° \mathring{M} 57'22			1233 Jul 22 j 18:51	0° \mathring{A}	
				max. Earth dist.	1233 Sep 15 j 14:57	1° \mathring{A} 53'32	31.48138 AU
conjunction	1225 Aug 29 j 18:02	13° \mathring{M} 00'11	14°57'15				
minimum elong	1225 Aug 29 j 17:40	13° \mathring{M} 00'09	14°57'15	conjunction	1233 Sep 18 j 00:24	1° \mathring{A} 59'10	16°29'27
morning rise	1225 Aug 30 j 23:54	13° \mathring{M} 02'56		minimum elong	1233 Sep 18 j 00:13	1° \mathring{A} 59'08	16°29'26
retrograde	1225 Dec 10 j 20:38	15° \mathring{M} 26'47		retrograde	1233 Dec 30 j 13:29	4° \mathring{A} 35'16	
opposition	1226 Feb 25 j 16:38	14° \mathring{M} 07'07	16°03'28	opposition	1234 Mar 16 j 22:32	3° \mathring{A} 13'10	17°38'14
min. Earth dist.	1226 Feb 28 j 09:43	14° \mathring{M} 02'42	30.79663 AU	min. Earth dist.	1234 Mar 19 j 02:59	3° \mathring{A} 09'29	29.50410 AU
direct	1226 May 16 j 20:44	12° \mathring{M} 44'08		direct	1234 Jun 04 j 19:57	1° \mathring{A} 47'45	
max. Earth dist.	1226 Aug 29 j 08:08	15° \mathring{M} 09'20	32.62555 AU	max. Earth dist.	1234 Sep 18 j 12:51	4° \mathring{A} 24'00	31.35141 AU
conjunction	1226 Sep 01 j 07:19	15° \mathring{M} 15'57	15°13'30	conjunction	1234 Sep 20 j 19:12	4° \mathring{A} 29'21	16°34'07
minimum elong	1226 Sep 01 j 06:59	15° \mathring{M} 15'55	15°13'31	minimum elong	1234 Sep 20 j 19:05	4° \mathring{A} 29'21	16°34'08
retrograde	1226 Dec 13 j 11:25	17° \mathring{M} 43'52		retrograde	1235 Jan 02 j 07:32	7° \mathring{A} 06'22	
opposition	1227 Feb 28 j 05:24	16° \mathring{M} 23'48	16°20'29	opposition	1235 Mar 19 j 17:46	5° \mathring{A} 44'02	17°42'37
min. Earth dist.	1227 Mar 02 j 21:04	16° \mathring{M} 19'27	30.60632 AU	min. Earth dist.	1235 Mar 21 j 19:54	5° \mathring{A} 40'31	29.37901 AU
direct	1227 May 19 j 08:42	15° \mathring{M} 00'23		direct	1235 Jun 07 j 15:22	4° \mathring{A} 18'25	
max. Earth dist.	1227 Sep 01 j 00:54	17° \mathring{M} 27'11	32.43650 AU	max. Earth dist.	1235 Sep 21 j 09:04	6° \mathring{A} 55'37	31.23003 AU
conjunction	1227 Sep 03 j 21:29	17° \mathring{M} 33'37	15°28'33	conjunction	1235 Sep 23 j 14:15	7° \mathring{A} 00'53	16°37'05
minimum elong	1227 Sep 03 j 21:09	17° \mathring{M} 33'35	15°28'33	minimum elong	1235 Sep 23 j 14:08	7° \mathring{A} 00'52	16°37'05
retrograde	1227 Dec 16 j 01:19	20° \mathring{M} 02'49		retrograde	1236 Jan 05 j 03:15	9° \mathring{A} 38'44	
opposition	1228 Mar 01 j 19:10	18° \mathring{M} 42'22	16°36'10	opposition	1236 Mar 21 j 13:35	8° \mathring{A} 16'10	17°45'08
min. Earth dist.	1228 Mar 04 j 09:43	18° \mathring{M} 38'06	30.42390 AU	min. Earth dist.	1236 Mar 23 j 13:45	8° \mathring{A} 12'47	29.26257 AU
direct	1228 May 20 j 21:52	17° \mathring{M} 18'35		direct	1236 Jun 09 j 09:32	6° \mathring{A} 50'21	
max. Earth dist.	1228 Sep 02 j 16:59	19° \mathring{M} 46'49	32.25605 AU	max. Earth dist.	1236 Sep 23 j 08:19	9° \mathring{A} 28'38	31.11780 AU
conjunction	1228 Sep 05 j 12:13	19° \mathring{M} 53'10	15°42'19	conjunction	1236 Sep 25 j 09:52	9° \mathring{A} 33'35	16°38'17
minimum elong	1228 Sep 05 j 11:55	19° \mathring{M} 53'09	15°42'19	minimum elong	1236 Sep 25 j 09:49	9° \mathring{A} 33'34	16°38'18
retrograde	1228 Dec 17 j 18:29	22° \mathring{M} 23'39		retrograde	1237 Jan 06 j 22:07	12° \mathring{A} 12'09	
opposition	1229 Mar 04 j 09:39	21° \mathring{M} 02'53	16°50'28	opposition	1237 Mar 24 j 09:59	10° \mathring{A} 49'23	17°45'43
min. Earth dist.	1229 Mar 06 j 21:45	20° \mathring{M} 58'45	30.25006 AU	min. Earth dist.	1237 Mar 26 j 08:08	10° \mathring{A} 46'07	29.15517 AU
direct	1229 May 23 j 11:34	19° \mathring{M} 38'45		direct	1237 Jun 12 j 05:01	9° \mathring{A} 23'23	
max. Earth dist.	1229 Sep 05 j 10:39	22° \mathring{M} 08'29	32.08424 AU	max. Earth dist.	1237 Sep 26 j 05:39	12° \mathring{A} 02'28	31.01538 AU

conjunction	1237 Sep 28 j 05:28	12° <u>♂</u> 07'15	16°37'40	conjunction	1245 Oct 19 j 00:07	2° <u>♂</u> 56'34	15°23'48
minimum elong	1237 Sep 28 j 05:26	12° <u>♂</u> 07'15	16°37'40	minimum elong	1245 Oct 19 j 00:23	2° <u>♂</u> 56'36	15°23'49
retrograde	1238 Jan 09 j 18:45	14° <u>♂</u> 46'28		retrograde	1246 Jan 30 j 17:25	5° <u>♂</u> 37'30	
opposition	1238 Mar 27 j 06:41	13° <u>♂</u> 23'30	17°44'18	opposition	1246 Apr 17 j 15:26	4° <u>♂</u> 14'13	16°18'26
min. Earth dist.	1238 Mar 29 j 01:54	13° <u>♂</u> 20'27	29.05764 AU	min. Earth dist.	1246 Apr 18 j 11:07	4° <u>♂</u> 12'50	28.68303 AU
direct	1238 Jun 15 j 00:56	11° <u>♂</u> 57'21		direct	1246 Jul 06 j 11:54	2° <u>♂</u> 48'23	
max. Earth dist.	1238 Sep 29 j 05:35	14° <u>♂</u> 37'20	30.92336 AU				
conjunction	1238 Oct 01 j 01:34	14° <u>♂</u> 41'46	16°35'10	conjunction	1246 Oct 21 j 20:12	5° <u>♂</u> 33'10	15°06'11
minimum elong	1238 Oct 01 j 01:36	14° <u>♂</u> 41'46	16°35'10	minimum elong	1246 Oct 21 j 20:30	5° <u>♂</u> 33'12	15°06'10
retrograde	1239 Jan 12 j 13:39	17° <u>♂</u> 21'31		max. Earth dist.	1246 Oct 21 j 01:12	5° <u>♂</u> 31'15	30.60890 AU
opposition	1239 Mar 30 j 03:55	15° <u>♂</u> 58'22	17°40'51	retrograde	1247 Feb 02 j 14:05	8° <u>♂</u> 13'51	
min. Earth dist.	1239 Mar 31 j 21:08	15° <u>♂</u> 55'27	28.97056 AU	opposition	1247 Apr 20 j 13:52	6° <u>♂</u> 50'38	15°58'42
direct	1239 Jun 17 j 22:31	14° <u>♂</u> 32'07		min. Earth dist.	1247 Apr 21 j 06:44	6° <u>♂</u> 49'27	28.68538 AU
max. Earth dist.	1239 Oct 02 j 04:08	17° <u>♂</u> 12'46	30.84272 AU	direct	1247 Jul 09 j 09:43	5° <u>♂</u> 24'56	
conjunction	1239 Oct 03 j 21:41	17° <u>♂</u> 16'57	16°30'46	evening set	1247 Oct 22 j 00:22	8° <u>♂</u> 02'48	
minimum elong	1239 Oct 03 j 21:44	17° <u>♂</u> 16'58	16°30'45	conjunction	1247 Oct 24 j 16:11	8° <u>♂</u> 09'15	14°46'51
retrograde	1240 Jan 15 j 11:13	19° <u>♂</u> 57'10		minimum elong	1247 Oct 24 j 16:30	8° <u>♂</u> 09'17	14°46'51
opposition	1240 Apr 01 j 01:29	18° <u>♂</u> 33'53	17°35'19	max. Earth dist.	1247 Oct 24 j 01:18	8° <u>♂</u> 07'45	30.61946 AU
min. Earth dist.	1240 Apr 02 j 14:46	18° <u>♂</u> 31'15	28.89488 AU	morning rise	1247 Oct 27 j 08:32	8° <u>♂</u> 15'46	
direct	1240 Jun 19 j 20:05	17° <u>♂</u> 07'34		retrograde	1248 Feb 05 j 09:12	10° <u>♂</u> 49'34	
max. Earth dist.	1240 Oct 04 j 04:14	19° <u>♂</u> 48'55	30.77394 AU	opposition	1248 Apr 22 j 12:19	9° <u>♂</u> 26'25	15°37'10
conjunction	1240 Oct 05 j 17:58	19° <u>♂</u> 52'44	16°24'25	min. Earth dist.	1248 Apr 23 j 02:26	9° <u>♂</u> 25'25	28.69777 AU
minimum elong	1240 Oct 05 j 18:05	19° <u>♂</u> 52'45	16°24'24	direct	1248 Jul 11 j 09:05	8° <u>♂</u> 00'53	
retrograde	1241 Jan 17 j 07:17	22° <u>♂</u> 33'19		evening set	1248 Oct 22 j 05:18	10° <u>♂</u> 34'16	
opposition	1241 Apr 03 j 23:30	21° <u>♂</u> 09'57	17°27'40	conjunction	1248 Oct 26 j 11:32	10° <u>♂</u> 44'35	14°25'51
min. Earth dist.	1241 Apr 05 j 10:43	21° <u>♂</u> 07'28	28.83095 AU	minimum elong	1248 Oct 26 j 11:53	10° <u>♂</u> 44'37	14°25'51
direct	1241 Jun 22 j 17:04	19° <u>♂</u> 43'38		max. Earth dist.	1248 Oct 25 j 22:46	10° <u>♂</u> 43'17	30.64033 AU
max. Earth dist.	1241 Oct 07 j 03:45	22° <u>♂</u> 25'31	30.71752 AU	morning rise	1248 Oct 30 j 18:18	10° <u>♂</u> 54'56	
conjunction	1241 Oct 08 j 14:22	22° <u>♂</u> 29'01	16°16'06	retrograde	1249 Feb 07 j 04:50	13° <u>♂</u> 24'26	
minimum elong	1241 Oct 08 j 14:29	22° <u>♂</u> 29'02	16°16'06	opposition	1249 Apr 25 j 10:21	12° <u>♂</u> 01'21	15°13'52
retrograde	1242 Jan 20 j 05:29	25° <u>♂</u> 09'52		min. Earth dist.	1249 Apr 25 j 20:54	12° <u>♂</u> 00'37	28.72043 AU
opposition	1242 Apr 06 j 21:23	23° <u>♂</u> 46'28	17°17'55	direct	1249 Jul 14 j 07:10	10° <u>♂</u> 35'59	
min. Earth dist.	1242 Apr 08 j 04:35	23° <u>♂</u> 44'15	28.77890 AU	evening set	1249 Oct 23 j 19:54	13° <u>♂</u> 05'49	
direct	1242 Jun 25 j 16:45	22° <u>♂</u> 20'10		conjunction	1249 Oct 29 j 06:44	13° <u>♂</u> 18'58	14°03'17
max. Earth dist.	1242 Oct 10 j 03:39	25° <u>♂</u> 02'31	30.67310 AU	minimum elong	1249 Oct 29 j 07:06	13° <u>♂</u> 19'00	14°03'17
conjunction	1242 Oct 11 j 10:56	25° <u>♂</u> 05'41	16°05'51	max. Earth dist.	1249 Oct 28 j 22:09	13° <u>♂</u> 18'06	30.67162 AU
minimum elong	1242 Oct 11 j 11:07	25° <u>♂</u> 05'43	16°05'51	morning rise	1249 Nov 03 j 17:56	13° <u>♂</u> 32'09	
retrograde	1243 Jan 23 j 02:02	27° <u>♂</u> 46'43			1249 Dec 13 j 12:16	15° <u>♂</u>	
opposition	1243 Apr 09 j 19:49	26° <u>♂</u> 23'19	17°06'04	retrograde	1250 Feb 09 j 21:19	15° <u>♂</u> 58'15	
min. Earth dist.	1243 Apr 11 j 01:00	26° <u>♂</u> 21'16	28.73850 AU		1250 Apr 13 j 06:57	15° <u>♂</u> 58'15	
direct	1243 Jun 28 j 14:15	24° <u>♂</u> 57'06		opposition	1250 Apr 28 j 08:00	14° <u>♂</u> 35'15	14°48'53
max. Earth dist.	1243 Oct 13 j 03:41	27° <u>♂</u> 39'49	30.64051 AU	min. Earth dist.	1250 Apr 28 j 16:15	14° <u>♂</u> 34'41	28.75341 AU
conjunction	1243 Oct 14 j 07:23	27° <u>♂</u> 42'37	15°53'42	direct	1250 Jul 17 j 05:42	13° <u>♂</u> 10'04	
minimum elong	1243 Oct 14 j 07:34	27° <u>♂</u> 42'39	15°53'42		1250 Oct 09 j 22:37	15° <u>♂</u>	
retrograde	1244 Jan 25 j 23:42	0° <u>♂</u>		evening set	1250 Oct 25 j 14:29	15° <u>♂</u> 36'43	
	1244 Mar 03 j 13:34	30° <u>♂</u> 4		conjunction	1250 Nov 01 j 01:17	15° <u>♂</u> 52'14	13°39'11
opposition	1244 Apr 11 j 18:18	29° <u>♂</u> 00'21	16°52'11	minimum elong	1250 Nov 01 j 01:39	15° <u>♂</u> 52'16	13°39'11
min. Earth dist.	1244 Apr 12 j 19:35	28° <u>♂</u> 58'34	28.70926 AU	max. Earth dist.	1250 Oct 31 j 18:59	15° <u>♂</u> 51'36	30.71371 AU
direct	1244 Jun 30 j 13:48	27° <u>♂</u> 34'15		morning rise	1250 Nov 07 j 12:29	16° <u>♂</u> 07'46	
max. Earth dist.	1244 Oct 08 j 01:38	0° <u>♂</u>		retrograde	1251 Feb 12 j 16:25	18° <u>♂</u> 30'52	
	1244 Oct 15 j 02:47	0° <u>♂</u> 17'07	30.61914 AU	opposition	1251 May 01 j 05:18	17° <u>♂</u> 07'58	14°22'18
conjunction	1244 Oct 16 j 03:48	0° <u>♂</u> 19'39	15°39'40	min. Earth dist.	1251 May 01 j 09:22	17° <u>♂</u> 07'41	28.79732 AU
minimum elong	1244 Oct 16 j 04:03	0° <u>♂</u> 19'41	15°39'40	direct	1251 Jul 20 j 03:14	15° <u>♂</u> 42'58	
retrograde	1245 Jan 27 j 21:47	3° <u>♂</u> 00'44		evening set	1251 Oct 27 j 11:08	18° <u>♂</u> 06'41	
opposition	1245 Apr 14 j 16:52	1° <u>♂</u> 37'23	16°36'17	conjunction	1251 Nov 03 j 19:16	18° <u>♂</u> 24'15	13°13'39
min. Earth dist.	1245 Apr 15 j 15:49	1° <u>♂</u> 35'46	28.69098 AU	minimum elong	1251 Nov 03 j 19:39	18° <u>♂</u> 24'17	13°13'39
direct	1245 Jul 03 j 11:53	0° <u>♂</u> 11'24		max. Earth dist.	1251 Nov 03 j 17:17	18° <u>♂</u> 24'03	30.76694 AU
max. Earth dist.	1245 Oct 18 j 02:57	2° <u>♂</u> 54'26	30.60880 AU	morning rise	1251 Nov 11 j 03:36	18° <u>♂</u> 41'50	
				retrograde	1252 Feb 15 j 08:23	21° <u>♂</u> 02'10	
				opposition	1252 May 03 j 02:22	19° <u>♂</u> 39'24	13°54'10
				min. Earth dist.	1252 May 03 j 04:04	19° <u>♂</u> 39'17	28.85261 AU
				direct	1252 Jul 21 j 23:59	18° <u>♂</u> 14'38	

evening set	1252 Oct 28 j 09:30	20° \mathbb{M} .35'34		max. Earth dist.	1258 Nov 21 j 05:31	5° \mathbb{A} 32'02	31.45624 AU
				morning rise	1258 Dec 02 j 02:36	5° \mathbb{A} 57'02	
conjunction	1252 Nov 05 j 12:41	20° \mathbb{M} .54'56	12°46'43	retrograde	1259 Mar 03 j 22:13	8° \mathbb{A} 01'37	
minimum elong	1252 Nov 05 j 13:05	20° \mathbb{M} .54'58	12°46'43	opposition	1259 May 21 j 13:27	6° \mathbb{A} 40'36	10°03'12
max. Earth dist.	1252 Nov 05 j 13:38	20° \mathbb{M} .55'02	30.83199 AU	min. Earth dist.	1259 May 20 j 16:44	6° \mathbb{A} 41'59	29.55187 AU
morning rise	1252 Nov 13 j 16:06	21° \mathbb{M} .14'20		direct	1259 Aug 09 j 18:25	5° \mathbb{A} 18'21	
retrograde	1253 Feb 17 j 01:57	23° \mathbb{M} .32'05		evening set	1259 Nov 10 j 16:57	7° \mathbb{A} 22'47	
opposition	1253 May 05 j 22:37	22° \mathbb{M} .09'28	13°24'37				
min. Earth dist.	1253 May 05 j 19:48	22° \mathbb{M} .09'40	28.91971 AU	conjunction	1259 Nov 22 j 21:42	7° \mathbb{A} 50'37	9°08'02
direct	1253 Jul 24 j 22:05	20° \mathbb{M} .44'59		minimum elong	1259 Nov 22 j 22:03	7° \mathbb{A} 50'39	9°08'03
evening set	1253 Oct 30 j 08:44	23° \mathbb{M} .03'16		max. Earth dist.	1259 Nov 23 j 20:05	7° \mathbb{A} 52'45	31.59344 AU
				morning rise	1259 Dec 05 j 02:28	8° \mathbb{A} 18'27	
conjunction	1253 Nov 08 j 05:35	23° \mathbb{M} .24'16	12°18'31	retrograde	1260 Mar 05 j 12:31	10° \mathbb{A} 21'07	
minimum elong	1253 Nov 08 j 05:59	23° \mathbb{M} .24'19	12°18'31	min. Earth dist.	1260 May 22 j 05:36	9° \mathbb{A} 02'00	29.68968 AU
max. Earth dist.	1253 Nov 08 j 10:23	23° \mathbb{M} .24'45	30.90884 AU	opposition	1260 May 23 j 05:46	9° \mathbb{A} 00'23	9°26'44
morning rise	1253 Nov 17 j 02:31	23° \mathbb{M} .45'18		direct	1260 Aug 11 j 11:14	7° \mathbb{A} 38'31	
retrograde	1254 Feb 19 j 18:07	26° \mathbb{M} .00'37		evening set	1260 Nov 11 j 19:26	9° \mathbb{A} 40'54	
opposition	1254 May 08 j 18:35	24° \mathbb{M} .38'12	12°53'42				
min. Earth dist.	1254 May 08 j 13:15	24° \mathbb{M} .38'34	28.99860 AU	conjunction	1260 Nov 24 j 10:15	10° \mathbb{A} 09'28	8°33'46
direct	1254 Jul 27 j 17:20	23° \mathbb{M} .14'01		minimum elong	1260 Nov 24 j 10:35	10° \mathbb{A} 09'30	8°33'46
evening set	1254 Nov 01 j 08:55	25° \mathbb{M} .29'47		max. Earth dist.	1260 Nov 25 j 12:09	10° \mathbb{A} 11'56	31.73845 AU
				morning rise	1260 Dec 07 j 00:47	10° \mathbb{A} 38'02	
conjunction	1254 Nov 10 j 21:49	25° \mathbb{M} .52'15	11°49'06	retrograde	1261 Mar 07 j 22:01	12° \mathbb{A} 38'51	
minimum elong	1254 Nov 10 j 22:13	25° \mathbb{M} .52'18	11°49'06	opposition	1261 May 25 j 21:16	11° \mathbb{A} 18'25	8°49'45
max. Earth dist.	1254 Nov 11 j 05:57	25° \mathbb{M} .53'04	30.99746 AU	min. Earth dist.	1261 May 24 j 19:33	11° \mathbb{A} 20'07	29.83520 AU
morning rise	1254 Nov 20 j 10:45	26° \mathbb{M} .14'45		direct	1261 Aug 14 j 04:04	9° \mathbb{A} 56'55	
retrograde	1255 Feb 22 j 10:40	28° \mathbb{M} .27'44		evening set	1261 Nov 13 j 22:08	11° \mathbb{A} 57'18	
opposition	1255 May 11 j 13:51	27° \mathbb{M} .05'34	12°21'34				
min. Earth dist.	1255 May 11 j 04:20	27° \mathbb{M} .06'13	29.08887 AU	conjunction	1261 Nov 26 j 21:53	12° \mathbb{A} 26'30	7°59'03
direct	1255 Jul 30 j 14:17	25° \mathbb{M} .41'45		minimum elong	1261 Nov 26 j 22:12	12° \mathbb{A} 26'32	7°59'03
evening set	1255 Nov 03 j 09:38	27° \mathbb{M} .55'05		max. Earth dist.	1261 Nov 28 j 01:14	12° \mathbb{A} 29'05	31.89097 AU
				morning rise	1261 Dec 09 j 21:35	12° \mathbb{A} 55'42	
conjunction	1255 Nov 13 j 13:27	28° \mathbb{M} .18'52	11°18'37	retrograde	1262 Mar 10 j 08:55	14° \mathbb{A} 54'43	
minimum elong	1255 Nov 13 j 13:51	28° \mathbb{M} .18'55	11°18'38	min. Earth dist.	1262 May 27 j 06:43	13° \mathbb{A} 36'29	29.98827 AU
max. Earth dist.	1255 Nov 14 j 00:39	28° \mathbb{M} .19'58	31.09716 AU	opposition	1262 May 28 j 11:59	13° \mathbb{A} 34'34	8°12'21
morning rise	1255 Nov 23 j 17:21	28° \mathbb{M} .42'41		direct	1262 Aug 16 j 19:27	12° \mathbb{A} 13'25	
	1255 Dec 30 j 09:18	0° \mathbb{A}		evening set	1262 Nov 16 j 00:40	14° \mathbb{A} 11'54	
retrograde	1256 Feb 25 j 03:27	0° \mathbb{A} 53'27					
	1256 Apr 25 j 13:05	30° \mathbb{R} \mathbb{M} .		conjunction	1262 Nov 29 j 08:44	14° \mathbb{A} 41'38	7°23'57
opposition	1256 May 13 j 08:45	29° \mathbb{M} .31'33	11°48'20	minimum elong	1262 Nov 29 j 09:02	14° \mathbb{A} 41'40	7°23'57
min. Earth dist.	1256 May 12 j 20:32	29° \mathbb{M} .32'22	29.19015 AU	max. Earth dist.	1262 Nov 30 j 15:24	14° \mathbb{A} 44'30	32.05077 AU
direct	1256 Aug 01 j 09:16	28° \mathbb{M} .08'06		morning rise	1262 Dec 12 j 16:38	15° \mathbb{A} 11'22	
	1256 Oct 27 j 01:27	0° \mathbb{A}		retrograde	1263 Mar 12 j 18:05	17° \mathbb{A} 08'41	
evening set	1256 Nov 04 j 10:49	0° \mathbb{A} 19'06		min. Earth dist.	1263 May 29 j 19:16	15° \mathbb{A} 50'48	30.14902 AU
				opposition	1263 May 31 j 02:08	15° \mathbb{A} 48'47	7°34'36
conjunction	1256 Nov 15 j 04:27	0° \mathbb{A} 44'05	10°47'09	direct	1263 Aug 19 j 09:01	14° \mathbb{A} 28'00	
minimum elong	1256 Nov 15 j 04:51	0° \mathbb{A} 44'07	10°47'09	evening set	1263 Nov 18 j 03:19	16° \mathbb{A} 24'36	
max. Earth dist.	1256 Nov 15 j 19:19	0° \mathbb{A} 45'32	31.20745 AU				
morning rise	1256 Nov 25 j 21:57	1° \mathbb{A} 09'05		conjunction	1263 Dec 01 j 18:48	16° \mathbb{A} 54'47	6°48'34
retrograde	1257 Feb 26 j 18:35	3° \mathbb{A} 17'42		minimum elong	1263 Dec 01 j 19:04	16° \mathbb{A} 54'49	6°48'35
min. Earth dist.	1257 May 15 j 11:30	1° \mathbb{A} 57'08	29.30148 AU	max. Earth dist.	1263 Dec 03 j 03:39	16° \mathbb{A} 57'51	32.21830 AU
opposition	1257 May 16 j 02:56	1° \mathbb{A} 56'05	11°14'06	morning rise	1263 Dec 15 j 10:10	17° \mathbb{A} 24'59	
direct	1257 Aug 04 j 05:51	0° \mathbb{A} 33'03		retrograde	1264 Mar 14 j 03:29	19° \mathbb{A} 20'38	
evening set	1257 Nov 06 j 12:33	2° \mathbb{A} 41'46		min. Earth dist.	1264 May 31 j 04:51	18° \mathbb{A} 03'15	30.31777 AU
				opposition	1264 Jun 01 j 15:19	18° \mathbb{A} 01'01	6°56'36
conjunction	1257 Nov 17 j 18:50	3° \mathbb{A} 07'50	10°14'50	direct	1264 Aug 21 j 00:05	16° \mathbb{A} 40'35	
minimum elong	1257 Nov 17 j 19:13	3° \mathbb{A} 07'52	10°14'51	evening set	1264 Nov 19 j 05:51	18° \mathbb{A} 35'25	
max. Earth dist.	1257 Nov 18 j 11:52	3° \mathbb{A} 09'29	31.32733 AU				
morning rise	1257 Nov 29 j 01:10	3° \mathbb{A} 33'53		conjunction	1264 Dec 03 j 03:59	19° \mathbb{A} 05'59	6°12'59
retrograde	1258 Mar 01 j 09:20	5° \mathbb{A} 40'27		minimum elong	1264 Dec 03 j 04:14	19° \mathbb{A} 06'00	6°12'58
opposition	1258 May 18 j 20:25	4° \mathbb{A} 19'08	10°39'01	max. Earth dist.	1264 Dec 04 j 15:36	19° \mathbb{A} 09'16	32.39369 AU
min. Earth dist.	1258 May 18 j 02:02	4° \mathbb{A} 20'22	29.42234 AU	morning rise	1264 Dec 17 j 02:09	19° \mathbb{A} 36'32	
direct	1258 Aug 06 j 22:53	2° \mathbb{A} 56'29		retrograde	1265 Mar 16 j 12:54	21° \mathbb{A} 30'38	
evening set	1258 Nov 08 j 14:38	5° \mathbb{A} 03'02		min. Earth dist.	1265 Jun 02 j 15:14	20° \mathbb{A} 13'39	30.49490 AU
				opposition	1265 Jun 04 j 03:52	20° \mathbb{A} 11'17	6°18'27
conjunction	1258 Nov 20 j 08:45	5° \mathbb{A} 30'02	9°41'46	direct	1265 Aug 23 j 12:02	18° \mathbb{A} 51'14	
minimum elong	1258 Nov 20 j 09:07	5° \mathbb{A} 30'04	9°41'45	evening set	1265 Nov 21 j 08:26	20° \mathbb{A} 44'23	

conjunction	1265 Dec 05 j 12:36	21° \nearrow 15'14	5°37'15	retrograde	1272 Mar 30 j 08:27	5° \searrow 50'38	
minimum elong	1265 Dec 05 j 12:50	21° \nearrow 15'16	5°37'15	min. Earth dist.	1272 Jun 16 j 18:42	4° \searrow 36'57	31.93818 AU
max. Earth dist.	1265 Dec 07 j 03:02	21° \nearrow 18'45	32.57733 AU	opposition	1272 Jun 18 j 22:41	4° \searrow 33'43	1°53'23
morning rise	1265 Dec 19 j 16:38	21° \nearrow 46'06		direct	1272 Sep 07 j 12:24	3° \searrow 16'41	
retrograde	1266 Mar 18 j 20:52	23° \nearrow 38'42		evening set	1272 Dec 04 j 01:51	5° \searrow 00'18	
min. Earth dist.	1266 Jun 04 j 23:55	22° \nearrow 22'12	30.68026 AU				
opposition	1266 Jun 06 j 15:26	22° \nearrow 19'39	5°40'12	conjunction	1272 Dec 19 j 05:22	5° \searrow 31'27	1°29'25
direct	1266 Aug 26 j 00:58	21° \nearrow 00'01		minimum elong	1272 Dec 19 j 05:25	5° \searrow 31'27	1°29'24
evening set	1266 Nov 23 j 11:07	22° \nearrow 51'34		max. Earth dist.	1272 Dec 21 j 09:59	5° \searrow 36'00	34.05150 AU
				morning rise	1273 Jan 03 j 09:12	6° \searrow 02'39	
conjunction	1266 Dec 07 j 20:23	23° \nearrow 22'39	5°01'28	retrograde	1273 Apr 01 j 12:04	7° \searrow 46'55	
minimum elong	1266 Dec 07 j 20:35	23° \nearrow 22'40	5°01'27	min. Earth dist.	1273 Jun 18 j 23:12	6° \searrow 33'42	32.16468 AU
max. Earth dist.	1266 Dec 09 j 12:46	23° \nearrow 26'18	32.76894 AU	opposition	1273 Jun 21 j 05:22	6° \searrow 30'21	1°16'38
morning rise	1266 Dec 22 j 05:50	23° \nearrow 53'44		direct	1273 Sep 09 j 20:17	5° \searrow 13'43	
retrograde	1267 Mar 21 j 05:40	25° \nearrow 44'56		evening set	1273 Dec 06 j 04:14	6° \searrow 56'14	
min. Earth dist.	1267 Jun 07 j 08:08	24° \nearrow 28'55	30.87386 AU				
opposition	1267 Jun 09 j 02:29	24° \nearrow 26'13	5°01'58	conjunction	1273 Dec 21 j 08:38	7° \searrow 27'13	0°55'04
direct	1267 Aug 28 j 11:53	23° \nearrow 07'00		minimum elong	1273 Dec 21 j 08:40	7° \searrow 27'13	0°55'04
evening set	1267 Nov 25 j 13:28	24° \nearrow 57'02		max. Earth dist.	1273 Dec 23 j 14:23	7° \searrow 31'50	34.28000 AU
				morning rise	1274 Jan 05 j 13:38	7° \searrow 58'15	
conjunction	1267 Dec 10 j 03:30	25° \nearrow 28'16	4°25'42	retrograde	1274 Apr 03 j 16:44	9° \searrow 41'35	
minimum elong	1267 Dec 10 j 03:40	25° \nearrow 28'17	4°25'42	min. Earth dist.	1274 Jun 21 j 04:03	8° \searrow 28'43	32.39437 AU
max. Earth dist.	1267 Dec 11 j 23:17	25° \nearrow 32'13	32.96825 AU	opposition	1274 Jun 23 j 11:26	8° \searrow 25'20	0°40'19
morning rise	1267 Dec 24 j 17:26	25° \nearrow 59'31		direct	1274 Sep 12 j 01:11	7° \searrow 09'06	
retrograde	1268 Mar 22 j 12:28	27° \nearrow 49'23		evening set	1274 Dec 08 j 06:20	8° \searrow 50'33	
min. Earth dist.	1268 Jun 08 j 16:30	26° \nearrow 33'50	31.07488 AU				
opposition	1268 Jun 10 j 12:47	26° \nearrow 31'01	4°23'48	conjunction	1274 Dec 23 j 11:23	9° \searrow 21'20	0°21'08
direct	1268 Aug 30 j 00:51	25° \nearrow 12'14		minimum elong	1274 Dec 23 j 11:24	9° \searrow 21'20	0°21'07
evening set	1268 Nov 26 j 16:06	27° \nearrow 00'52		max. Earth dist.	1274 Dec 25 j 19:05	9° \searrow 26'04	34.51146 AU
				morning rise	1275 Jan 07 j 16:49	9° \searrow 52'10	
conjunction	1268 Dec 11 j 09:53	27° \nearrow 32'11	3°50'01	retrograde	1275 Apr 05 j 19:04	11° \searrow 34'35	
minimum elong	1268 Dec 11 j 10:02	27° \nearrow 32'12	3°50'00	min. Earth dist.	1275 Jun 23 j 08:15	10° \searrow 22'05	32.62703 AU
max. Earth dist.	1268 Dec 13 j 06:54	27° \nearrow 36'12	33.17441 AU	opposition	1275 Jun 25 j 16:50	10° \searrow 18'38	0°04'29
morning rise	1268 Dec 26 j 03:59	28° \nearrow 03'32		desc. node	1275 Aug 11 j 01:22	9° \searrow 19'19	
retrograde	1269 Mar 24 j 20:17	29° \nearrow 52'09		direct	1275 Sep 14 j 07:42	9° \searrow 02'47	
min. Earth dist.	1269 Jun 10 j 22:46	28° \nearrow 37'08	31.28273 AU	evening set	1275 Dec 10 j 08:17	10° \searrow 43'14	
opposition	1269 Jun 12 j 22:07	28° \nearrow 34'08	3°45'48				
direct	1269 Sep 01 j 10:31	27° \nearrow 15'48		conjunction	1275 Dec 25 j 13:11	11° \searrow 13'46	-0°12'27
evening set	1269 Nov 28 j 18:33	29° \nearrow 03'04		minimum elong	1275 Dec 25 j 13:10	11° \searrow 13'46	0°12'26
				behind sun begin	1275 Dec 25 j 08:56	11° \searrow 13'26	
conjunction	1269 Dec 13 j 15:46	29° \nearrow 34'26	3°14'29	behind sun end	1275 Dec 25 j 17:25	11° \searrow 14'07	
minimum elong	1269 Dec 13 j 15:54	29° \nearrow 34'27	3°14'30	max. Earth dist.	1275 Dec 27 j 21:33	11° \searrow 18'31	34.74580 AU
max. Earth dist.	1269 Dec 15 j 15:49	29° \nearrow 38'41	33.38665 AU	morning rise	1276 Jan 09 j 18:52	11° \searrow 44'22	
	1269 Dec 25 j 17:58	0° \searrow		retrograde	1276 Apr 06 j 21:55	13° \searrow 25'55	
morning rise	1269 Dec 28 j 13:05	0° \searrow 05'49		min. Earth dist.	1276 Jun 24 j 10:44	12° \searrow 13'51	32.86312 AU
retrograde	1270 Mar 26 j 23:53	1° \searrow 53'15		opposition	1276 Jun 26 j 21:30	12° \searrow 10'17	-0°30'50
min. Earth dist.	1270 Jun 13 j 06:43	0° \searrow 38'39	31.49640 AU	direct	1276 Sep 15 j 12:14	10° \searrow 54'47	
opposition	1270 Jun 15 j 07:01	0° \searrow 35'37	3°08'01	evening set	1276 Dec 11 j 10:00	12° \searrow 34'18	
	1270 Jul 09 j 19:03	30° \nearrow					
direct	1270 Sep 03 j 20:46	29° \nearrow 17'43		conjunction	1276 Dec 26 j 14:35	13° \searrow 04'34	-0°45'28
	1270 Oct 27 j 00:43	0° \searrow		minimum elong	1276 Dec 26 j 14:33	13° \searrow 04'34	0°45'28
evening set	1270 Nov 30 j 21:02	1° \searrow 03'42		max. Earth dist.	1276 Dec 29 j 01:33	13° \searrow 09'30	34.98345 AU
				morning rise	1277 Jan 10 j 19:43	13° \searrow 34'52	
conjunction	1270 Dec 15 j 20:49	1° \searrow 35'03	2°39'10	retrograde	1277 Apr 08 j 21:25	15° \searrow 15'37	
minimum elong	1270 Dec 15 j 20:55	1° \searrow 35'04	2°39'10	min. Earth dist.	1277 Jun 26 j 13:55	14° \searrow 03'52	33.10281 AU
max. Earth dist.	1270 Dec 17 j 21:50	1° \searrow 39'22	33.60411 AU	opposition	1277 Jun 29 j 01:20	14° \searrow 00'17	-1°05'36
morning rise	1270 Dec 30 j 20:56	2° \searrow 06'25		direct	1277 Sep 17 j 19:10	12° \searrow 45'10	
retrograde	1271 Mar 29 j 04:39	3° \searrow 52'45		evening set	1277 Dec 13 j 11:41	14° \searrow 23'48	
min. Earth dist.	1271 Jun 15 j 11:56	2° \searrow 38'40	31.71513 AU				
opposition	1271 Jun 17 j 15:08	2° \searrow 35'28	2°30'31	conjunction	1277 Dec 28 j 15:14	14° \searrow 53'45	-1°18'00
direct	1271 Sep 06 j 05:38	1° \searrow 18'01		minimum elong	1277 Dec 28 j 15:11	14° \searrow 53'45	1°17'59
evening set	1271 Dec 02 j 23:30	3° \searrow 02'47		max. Earth dist.	1277 Dec 31 j 02:41	14° \searrow 58'41	35.22475 AU
				morning rise	1278 Jan 12 j 19:36	15° \searrow 23'45	
conjunction	1271 Dec 18 j 01:24	3° \searrow 34'03	2°04'08	retrograde	1278 Apr 10 j 22:34	17° \searrow 03'45	
minimum elong	1271 Dec 18 j 01:29	3° \searrow 34'04	2°04'09	min. Earth dist.	1278 Jun 28 j 14:28	15° \searrow 52'28	33.34645 AU
max. Earth dist.	1271 Dec 20 j 04:47	3° \searrow 38'32	33.82592 AU	opposition	1278 Jul 01 j 04:33	15° \searrow 48'44	-1°39'48
morning rise	1272 Jan 02 j 03:40	4° \searrow 05'22		direct	1278 Sep 19 j 23:24	14° \searrow 33'59	

evening set	1278 Dec 15 j 13:02	16°  11'48	min. Earth dist.	1285 Jul 10 j 13:23	27°  53'56	35.12804 AU
			opposition	1285 Jul 13 j 10:58	27°  49'55	-5°21'24
conjunction	1278 Dec 30 j 15:14	16°  41'24 -1°50'01	direct	1285 Oct 02 j 05:52	26°  37'51	
minimum elong	1278 Dec 30 j 15:10	16°  41'24 1°50'01	evening set	1285 Dec 27 j 19:40	28°  11'20	
max. Earth dist.	1279 Jan 02 j 05:02	16°  46'30 35.46974 AU				
morning rise	1279 Jan 14 j 18:15	17°  11'05	conjunction	1286 Jan 11 j 01:39	28°  37'54	-5°17'50
retrograde	1279 Apr 12 j 20:29	18°  50'24	minimum elong	1286 Jan 11 j 01:30	28°  37'53	5°17'49
min. Earth dist.	1279 Jun 30 j 16:40	17°  39'27 33.59394 AU	max. Earth dist.	1286 Jan 13 j 22:11	28°  43'15	37.24867 AU
opposition	1279 Jul 03 j 07:20	17°  35'42 -2°13'24	morning rise	1286 Jan 25 j 08:44	29°  04'32	
direct	1279 Sep 22 j 02:52	16°  21'21		1286 Feb 28 j 01:38	0° 	
evening set	1279 Dec 17 j 14:18	17°  58'24	retrograde	1286 Apr 24 j 07:28	0°  40'18	
				1286 Jun 21 j 07:31	30°  R 	
conjunction	1280 Jan 01 j 14:48	18°  27'38 -2°21'29	min. Earth dist.	1286 Jul 12 j 12:46	29°  31'51	35.38539 AU
minimum elong	1280 Jan 01 j 14:43	18°  27'38 2°21'28	opposition	1286 Jul 15 j 09:52	29°  27'52	-5°50'23
max. Earth dist.	1280 Jan 04 j 05:39	18°  32'47 35.71838 AU	direct	1286 Oct 04 j 06:45	28°  16'08	
morning rise	1280 Jan 16 j 16:04	18°  56'57	evening set	1286 Dec 29 j 19:59	29°  49'08	
retrograde	1280 Apr 13 j 19:05	20°  35'38		1287 Jan 04 j 18:02	0° 	
min. Earth dist.	1280 Jul 01 j 16:24	19°  25'08 33.84489 AU				
opposition	1280 Jul 04 j 09:15	19°  21'16 -2°46'23	conjunction	1287 Jan 12 j 21:47	0°  15'10	-5°45'04
direct	1280 Sep 23 j 05:20	18°  07'19	minimum elong	1287 Jan 12 j 21:37	0°  15'09	5°45'04
evening set	1280 Dec 18 j 15:29	19°  43'40	max. Earth dist.	1287 Jan 15 j 18:28	0°  20'31	37.50407 AU
			morning rise	1287 Jan 27 j 00:35	0°  41'18	
conjunction	1281 Jan 02 j 13:43	20°  12'31 -2°52'22	retrograde	1287 Apr 26 j 02:11	2°  16'41	
minimum elong	1281 Jan 02 j 13:37	20°  12'30 2°52'23	min. Earth dist.	1287 Jul 14 j 09:51	1°  08'32	35.64200 AU
max. Earth dist.	1281 Jan 05 j 05:52	20°  17'43 35.96995 AU	opposition	1287 Jul 17 j 08:04	1°  04'31	-6°18'41
morning rise	1281 Jan 17 j 13:00	20°  41'26		1287 Sep 13 j 13:27	30°  R 	
retrograde	1281 Apr 15 j 19:38	22°  19'33	direct	1287 Oct 06 j 06:24	29°  53'04	
min. Earth dist.	1281 Jul 03 j 16:55	21°  09'25 34.09878 AU		1287 Oct 28 j 10:25	0° 	
opposition	1281 Jul 06 j 10:45	21°  05'31 -3°18'43	evening set	1287 Dec 31 j 20:16	1°  25'37	
direct	1281 Sep 25 j 04:17	19°  51'58				
evening set	1281 Dec 20 j 16:26	21°  27'39	conjunction	1288 Jan 14 j 17:26	1°  51'08	-6°11'41
			minimum elong	1288 Jan 14 j 17:15	1°  51'07	6°11'41
conjunction	1282 Jan 04 j 12:14	21°  56'05 -3°22'40	max. Earth dist.	1288 Jan 17 j 14:30	1°  56'28	37.75871 AU
minimum elong	1282 Jan 04 j 12:07	21°  56'05 3°22'40	morning rise	1288 Jan 28 j 15:51	2°  16'44	
max. Earth dist.	1282 Jan 07 j 06:00	22°  01'23 36.22395 AU	retrograde	1288 Apr 26 j 22:38	3°  51'45	
morning rise	1282 Jan 19 j 08:50	22°  24'35	min. Earth dist.	1288 Jul 15 j 07:10	2°  43'51	35.89836 AU
retrograde	1282 Apr 17 j 17:42	24°  02'10	opposition	1288 Jul 18 j 05:43	2°  39'50	-6°46'18
min. Earth dist.	1282 Jul 05 j 16:51	22°  52'25 34.35468 AU	direct	1288 Oct 07 j 02:56	1°  28'41	
opposition	1282 Jul 08 j 11:34	22°  48'30 -3°50'23	evening set	1289 Jan 01 j 20:10	3°  00'48	
direct	1282 Sep 27 j 06:07	21°  35'20				
evening set	1282 Dec 22 j 17:28	23°  10'25	conjunction	1289 Jan 15 j 12:40	3°  25'46	-6°37'40
			minimum elong	1289 Jan 15 j 12:29	3°  25'46	6°37'40
conjunction	1283 Jan 06 j 10:11	23°  38'24 -3°52'23	max. Earth dist.	1289 Jan 18 j 11:03	3°  31'10	38.01323 AU
minimum elong	1283 Jan 06 j 10:03	23°  38'23 3°52'23	morning rise	1289 Jan 29 j 06:08	3°  50'50	
max. Earth dist.	1283 Jan 09 j 04:04	23°  43'40 36.47953 AU	retrograde	1289 Apr 28 j 17:25	5°  25'32	
morning rise	1283 Jan 21 j 04:04	24°  06'28	min. Earth dist.	1289 Jul 17 j 03:52	4°  17'53	36.15470 AU
retrograde	1283 Apr 19 j 18:25	25°  43'33	opposition	1289 Jul 20 j 02:46	4°  13'51	-7°13'13
min. Earth dist.	1283 Jul 07 j 15:47	24°  34'12 34.61214 AU	direct	1289 Oct 09 j 00:57	3°  02'59	
opposition	1283 Jul 10 j 12:00	24°  30'13 -4°21'24	evening set	1290 Jan 03 j 20:02	4°  34'45	
direct	1283 Sep 29 j 05:12	23°  17'26				
evening set	1283 Dec 24 j 18:10	24°  51'57	conjunction	1290 Jan 17 j 07:13	4°  59'09	-7°03'00
			minimum elong	1290 Jan 17 j 07:02	4°  59'09	7°03'01
conjunction	1284 Jan 08 j 07:46	25°  19'29 -4°21'29	max. Earth dist.	1290 Jan 20 j 05:20	5°  04'29	38.26791 AU
minimum elong	1284 Jan 08 j 07:38	25°  19'28 4°21'28	morning rise	1290 Jan 30 j 19:42	5°  23'39	
max. Earth dist.	1284 Jan 11 j 03:33	25°  24'52 36.73602 AU	retrograde	1290 Apr 30 j 14:07	6°  58'04	
morning rise	1284 Jan 22 j 22:16	25°  47'05	min. Earth dist.	1290 Jul 18 j 22:59	5°  50'44	36.41167 AU
retrograde	1284 Apr 20 j 16:03	27°  23'43	opposition	1290 Jul 21 j 23:21	5°  46'39	-7°39'27
min. Earth dist.	1284 Jul 08 j 15:54	26°  14'38 34.87013 AU	direct	1290 Oct 10 j 20:07	4°  36'04	
opposition	1284 Jul 11 j 11:53	26°  10'41 -4°51'44	evening set	1291 Jan 05 j 19:36	6°  07'30	
direct	1284 Sep 30 j 06:21	24°  58'17				
evening set	1284 Dec 25 j 19:02	26°  32'16	conjunction	1291 Jan 19 j 01:33	6°  31'21	-7°27'42
			minimum elong	1291 Jan 19 j 01:21	6°  31'20	7°27'42
conjunction	1285 Jan 09 j 04:55	26°  59'19 -4°49'58	max. Earth dist.	1291 Jan 22 j 01:27	6°  36'47	38.52329 AU
minimum elong	1285 Jan 09 j 04:46	26°  59'18 4°49'58	morning rise	1291 Feb 01 j 08:33	6°  55'17	
max. Earth dist.	1285 Jan 12 j 00:17	27°  04'38 36.99262 AU	retrograde	1291 May 02 j 07:55	8°  29'27	
morning rise	1285 Jan 23 j 15:56	27°  26'27	min. Earth dist.	1291 Jul 20 j 19:27	7°  22'21	36.66939 AU
retrograde	1285 Apr 22 j 13:14	29°  02'38	opposition	1291 Jul 23 j 19:32	7°  18'18	-8°04'58

direct	1291 Oct 12 j 16:50	6°08'02		minimum elong	1298 Jan 28 j 22:37	16°49'51	10°02'43
evening set	1292 Jan 07 j 19:02	7°39'11		max. Earth dist.	1298 Feb 01 j 00:55	16°55'13	40.30744 AU
				morning rise	1298 Feb 09 j 09:16	17°09'36	
conjunction	1292 Jan 20 j 19:19	8°02'27	-7°51'44	retrograde	1298 May 12 j 06:19	18°42'57	
minimum elong	1292 Jan 20 j 19:07	8°02'26	7°51'45	min. Earth dist.	1298 Jul 31 j 02:30	17°37'47	38.46467 AU
max. Earth dist.	1292 Jan 23 j 19:07	8°07'51	38.77945 AU	opposition	1298 Aug 03 j 04:09	17°33'46	-10°44'28
morning rise	1292 Feb 02 j 20:42	8°25'49		direct	1298 Oct 23 j 01:18	16°25'42	
retrograde	1292 May 03 j 00:24	9°59'46		evening set	1299 Jan 19 j 12:11	17°55'43	
min. Earth dist.	1292 Jul 21 j 13:17	8°53'02	36.92777 AU				
opposition	1292 Jul 24 j 15:07	8°48'54	-8°29'47	conjunction	1299 Jan 30 j 14:22	18°14'45	-10°22'25
direct	1292 Oct 13 j 13:45	7°38'58		minimum elong	1299 Jan 30 j 14:09	18°14'44	10°22'24
evening set	1293 Jan 08 j 18:24	9°09'51		max. Earth dist.	1299 Feb 02 j 15:48	18°20'01	40.55546 AU
				morning rise	1299 Feb 10 j 17:23	18°33'50	
conjunction	1293 Jan 21 j 12:47	9°32'33	-8°15'08	retrograde	1299 May 13 j 19:06	20°07'08	
minimum elong	1293 Jan 21 j 12:34	9°32'32	8°15'08	min. Earth dist.	1299 Aug 01 j 18:33	19°02'13	38.71342 AU
max. Earth dist.	1293 Jan 24 j 13:38	9°37'59	39.03595 AU	opposition	1299 Aug 04 j 20:55	18°58'11	-11°04'40
morning rise	1293 Feb 03 j 08:21	9°55'20		direct	1299 Oct 24 j 20:52	17°50'22	
retrograde	1293 May 04 j 16:49	11°29'07		evening set	1300 Jan 21 j 10:44	19°20'18	
min. Earth dist.	1293 Jul 23 j 08:42	10°22'38	37.18648 AU				
opposition	1293 Jul 26 j 10:13	10°18'32	-8°53'54	conjunction	1300 Feb 01 j 05:23	19°38'41	-10°41'32
direct	1293 Oct 15 j 09:50	9°08'56		minimum elong	1300 Feb 01 j 05:10	19°38'40	10°41'33
evening set	1294 Jan 10 j 17:33	10°39'37		max. Earth dist.	1300 Feb 04 j 06:44	19°43'55	40.80073 AU
				morning rise	1300 Feb 12 j 01:01	19°57'07	
conjunction	1294 Jan 23 j 05:54	11°01'43	-8°37'54	retrograde	1300 May 14 j 10:07	21°30'23	
minimum elong	1294 Jan 23 j 05:42	11°01'42	8°37'54	min. Earth dist.	1300 Aug 02 j 11:37	20°25'38	38.95976 AU
max. Earth dist.	1294 Jan 26 j 07:16	11°07'10	39.29262 AU	opposition	1300 Aug 05 j 13:25	20°21'38	-11°24'15
morning rise	1294 Feb 04 j 19:11	11°23'54		direct	1300 Oct 25 j 13:51	19°14'03	
retrograde	1294 May 06 j 09:31	12°57'34		evening set	1301 Jan 22 j 09:12	20°43'55	
min. Earth dist.	1294 Jul 25 j 02:40	11°51'24	37.44495 AU				
opposition	1294 Jul 28 j 04:56	11°47'17	-9°17'20	conjunction	1301 Feb 01 j 20:12	21°01'38	-11°00'04
direct	1294 Oct 17 j 04:55	10°38'00		minimum elong	1301 Feb 01 j 20:00	21°01'37	11°00'04
evening set	1295 Jan 12 j 16:35	12°08'30		max. Earth dist.	1301 Feb 04 j 22:05	21°06'53	41.04384 AU
				morning rise	1301 Feb 12 j 07:54	21°19'26	
conjunction	1295 Jan 24 j 22:26	12°30'01	-9°00'01	retrograde	1301 May 15 j 23:50	22°52'40	
minimum elong	1295 Jan 24 j 22:13	12°30'00	9°00'00	min. Earth dist.	1301 Aug 04 j 03:33	21°48'06	39.20402 AU
max. Earth dist.	1295 Jan 27 j 23:41	12°35'24	39.54869 AU	opposition	1301 Aug 07 j 05:13	21°44'08	-11°43'12
morning rise	1295 Feb 06 j 05:30	12°51'36		direct	1301 Oct 27 j 06:46	20°36'46	
retrograde	1295 May 08 j 04:24	14°25'10		evening set	1302 Jan 24 j 07:37	22°06'35	
min. Earth dist.	1295 Jul 26 j 20:45	13°19'17	37.70276 AU				
opposition	1295 Jul 29 j 23:25	13°15'10	-9°40'06	conjunction	1302 Feb 03 j 10:29	22°23'38	-11°18'02
direct	1295 Oct 18 j 21:28	12°06'13		minimum elong	1302 Feb 03 j 10:16	22°23'38	11°18'02
evening set	1296 Jan 14 j 15:32	13°36'34		max. Earth dist.	1302 Feb 06 j 11:36	22°28'48	41.28525 AU
				morning rise	1302 Feb 13 j 14:14	22°40'46	
conjunction	1296 Jan 26 j 14:57	13°57'28	-9°21'31	retrograde	1302 May 17 j 16:40	24°14'01	
minimum elong	1296 Jan 26 j 14:45	13°57'27	9°21'31	min. Earth dist.	1302 Aug 05 j 18:31	23°09'40	39.44704 AU
max. Earth dist.	1296 Jan 29 j 17:24	14°02'55	39.80367 AU	opposition	1302 Aug 08 j 20:53	23°05'41	-12°01'31
morning rise	1296 Feb 07 j 15:17	14°18'27		direct	1302 Oct 28 j 20:13	21°58'33	
	1296 Mar 04 j 08:07	15°		evening set	1303 Jan 26 j 05:41	23°28'20	
retrograde	1296 May 08 j 21:48	15°51'55					
	1296 Jul 17 j 02:23	15°		conjunction	1303 Feb 05 j 00:27	23°44'44	-11°35'24
min. Earth dist.	1296 Jul 27 j 15:14	14°46'17	37.95901 AU	minimum elong	1303 Feb 05 j 00:15	23°44'43	11°35'23
opposition	1296 Jul 30 j 17:16	14°42'13	-10°02'12	max. Earth dist.	1303 Feb 08 j 02:56	23°49'57	41.52554 AU
direct	1296 Oct 19 j 14:47	13°33'35		morning rise	1303 Feb 14 j 19:54	24°01'11	
	1297 Jan 13 j 09:03	15°		retrograde	1303 May 19 j 07:02	25°34'28	
evening set	1297 Jan 15 j 14:35	15°03'49		min. Earth dist.	1303 Aug 07 j 10:33	24°30'16	39.68896 AU
				opposition	1303 Aug 10 j 12:12	24°26'20	-12°19'14
conjunction	1297 Jan 27 j 07:03	15°24'06	-9°42'24	direct	1303 Oct 30 j 11:12	23°19'27	
minimum elong	1297 Jan 27 j 06:50	15°24'05	9°42'24	evening set	1304 Jan 28 j 03:58	24°49'15	
max. Earth dist.	1297 Jan 30 j 08:22	15°29'26	40.05680 AU				
morning rise	1297 Feb 08 j 00:35	15°44'28		conjunction	1304 Feb 06 j 14:12	25°04'59	-11°52'11
retrograde	1297 May 10 j 16:24	17°17'51		minimum elong	1304 Feb 06 j 14:00	25°04'58	11°52'11
min. Earth dist.	1297 Jul 29 j 07:55	16°12'31	38.21317 AU	max. Earth dist.	1304 Feb 09 j 15:59	25°10'07	41.76494 AU
opposition	1297 Aug 01 j 10:50	16°08'26	-10°23'39	morning rise	1304 Feb 16 j 01:05	25°20'44	
direct	1297 Oct 21 j 06:43	15°00'05		retrograde	1304 May 19 j 20:59	26°54'05	
evening set	1298 Jan 17 j 13:21	16°30'13		min. Earth dist.	1304 Aug 08 j 00:08	25°50'10	39.92995 AU
				opposition	1304 Aug 11 j 02:54	25°46'11	-12°36'19
conjunction	1298 Jan 28 j 22:50	16°49'52	-10°02'42	direct	1304 Oct 31 j 01:19	24°39'31	

evening set	1305 Jan 29 j 02:04	26°09'23		conjunction	1311 Feb 15 j 07:24	4°07'32 -13°34'18
				minimum elong	1311 Feb 15 j 07:15	4°07'31 13°34'18
conjunction	1305 Feb 07 j 03:38	26°24'26 -12°08'23		max. Earth dist.	1311 Feb 18 j 07:48	4°12'24 43.38743 AU
minimum elong	1305 Feb 07 j 03:27	26°24'25 12°08'23		morning rise	1311 Feb 21 j 22:13	4°18'11
max. Earth dist.	1305 Feb 10 j 05:54	26°29'35 42.00326 AU		retrograde	1311 May 29 j 12:01	5°52'50
morning rise	1305 Feb 16 j 05:53	26°39'30		min. Earth dist.	1311 Aug 18 j 02:54	4°50'16 41.55646 AU
retrograde	1305 May 21 j 08:26	28°12'57		opposition	1311 Aug 21 j 02:51	4°46'32 -14°19'53
min. Earth dist.	1305 Aug 09 j 15:37	27°09'12 40.16979 AU		direct	1311 Nov 10 j 03:40	3°41'35
opposition	1305 Aug 12 j 17:33	27°05'16 -12°52'48		evening set	1312 Feb 10 j 16:04	5°12'43
direct	1305 Nov 01 j 17:45	25°58'52				
evening set	1306 Jan 31 j 00:08	27°28'49		conjunction	1312 Feb 16 j 19:14	5°22'32 -13°46'53
				minimum elong	1312 Feb 16 j 19:04	5°22'32 13°46'52
conjunction	1306 Feb 08 j 16:46	27°43'10 -12°24'02		max. Earth dist.	1312 Feb 19 j 18:35	5°27'19 43.60566 AU
minimum elong	1306 Feb 08 j 16:34	27°43'09 12°24'02		morning rise	1312 Feb 22 j 22:38	5°32'23
max. Earth dist.	1306 Feb 11 j 19:19	27°48'18 42.24038 AU		retrograde	1312 May 30 j 00:01	7°07'20
morning rise	1306 Feb 17 j 09:50	27°57'33		min. Earth dist.	1312 Aug 18 j 16:27	6°04'53 41.77469 AU
retrograde	1306 May 22 j 19:56	29°31'07		opposition	1312 Aug 21 j 15:22	6°01'13 -14°32'36
min. Earth dist.	1306 Aug 11 j 05:28	28°27'37 40.40802 AU		direct	1312 Nov 10 j 16:49	4°56'28
opposition	1306 Aug 14 j 07:46	28°23'40 -13°08'41		evening set	1313 Feb 11 j 15:48	6°27'54
direct	1306 Nov 03 j 09:47	27°17'32				
evening set	1307 Feb 01 j 22:22	28°47'36		conjunction	1313 Feb 17 j 06:54	6°36'52 -13°58'59
				minimum elong	1313 Feb 17 j 06:45	6°36'52 13°58'59
conjunction	1307 Feb 10 j 05:37	29°01'14 -12°39'07		max. Earth dist.	1313 Feb 20 j 06:40	6°41'39 43.82031 AU
minimum elong	1307 Feb 10 j 05:27	29°01'14 12°39'07		morning rise	1313 Feb 22 j 22:04	6°45'52
max. Earth dist.	1307 Feb 13 j 07:28	29°06'18 42.47569 AU		retrograde	1313 May 31 j 12:04	8°21'09
morning rise	1307 Feb 18 j 13:29	29°14'55		min. Earth dist.	1313 Aug 20 j 05:29	7°18'50 41.98940 AU
	1307 Mar 20 j 01:04	0°		opposition	1313 Aug 23 j 03:35	7°15'12 -14°44'48
retrograde	1307 May 24 j 11:13	0°48'39		direct	1313 Nov 12 j 05:02	6°10'39
	1307 Aug 01 j 01:22	30°		evening set	1314 Feb 13 j 15:59	7°42'28
min. Earth dist.	1307 Aug 12 j 19:32	29°45'22 40.64437 AU				
opposition	1307 Aug 15 j 21:48	29°41'27 -13°24'00		conjunction	1314 Feb 18 j 17:59	7°50'32 -14°10'36
direct	1307 Nov 04 j 21:52	28°35'34		minimum elong	1314 Feb 18 j 17:49	7°50'31 14°10'36
	1308 Jan 31 j 06:54	0°		max. Earth dist.	1314 Feb 21 j 16:24	7°55'11 44.03184 AU
evening set	1308 Feb 03 j 20:37	0°05'47		morning rise	1314 Feb 23 j 20:04	7°58'37
				retrograde	1314 Jun 02 j 01:50	9°34'18
conjunction	1308 Feb 11 j 18:25	0°18'42 -12°53'40		min. Earth dist.	1314 Aug 21 j 16:59	8°32'10 42.20141 AU
minimum elong	1308 Feb 11 j 18:14	0°18'41 12°53'41		opposition	1314 Aug 24 j 15:35	8°28'32 -14°56'30
max. Earth dist.	1308 Feb 14 j 20:59	0°23'47 42.70874 AU		direct	1314 Nov 13 j 14:34	7°24'10
morning rise	1308 Feb 19 j 16:36	0°31'39		evening set	1315 Feb 15 j 17:11	8°56'26
retrograde	1308 May 25 j 00:14	2°05'35				
min. Earth dist.	1308 Aug 13 j 10:21	1°02'28 40.87790 AU		conjunction	1315 Feb 20 j 05:04	9°03'32 -14°21'44
opposition	1308 Aug 16 j 11:28	0°58'37 -13°38'45		minimum elong	1315 Feb 20 j 04:55	9°03'32 14°21'45
	1308 Oct 12 j 15:29	30°		max. Earth dist.	1315 Feb 23 j 04:09	9°08'13 44.24089 AU
direct	1308 Nov 05 j 11:43	29°53'00		morning rise	1315 Feb 24 j 16:58	9°10'38
	1308 Nov 28 j 22:31	0°		retrograde	1315 Jun 03 j 11:43	10°46'50
evening set	1309 Feb 04 j 19:13	1°23'24		min. Earth dist.	1315 Aug 23 j 06:05	9°44'47 42.41106 AU
				opposition	1315 Aug 26 j 03:18	9°41'14 -15°07'41
conjunction	1309 Feb 12 j 06:56	1°35'35 -13°07'43		direct	1315 Nov 15 j 02:38	8°37'03
minimum elong	1309 Feb 12 j 06:47	1°35'34 13°07'43		evening set	1316 Feb 17 j 19:54	10°09'54
max. Earth dist.	1309 Feb 15 j 08:01	1°40'32 42.93873 AU				
morning rise	1309 Feb 19 j 19:05	1°47'47		conjunction	1316 Feb 21 j 15:54	10°15'56 -14°32'23
retrograde	1309 May 26 j 14:09	3°21'55		minimum elong	1316 Feb 21 j 15:46	10°15'56 14°32'23
min. Earth dist.	1309 Aug 14 j 23:17	2°19'03 41.10809 AU		morning rise	1316 Feb 25 j 11:50	10°21'58
opposition	1309 Aug 18 j 00:44	2°15'12 -13°52'59		max. Earth dist.	1316 Feb 24 j 14:13	10°20'33 44.44789 AU
direct	1309 Nov 06 j 23:21	1°09'49		retrograde	1316 Jun 03 j 20:28	11°58'45
evening set	1310 Feb 06 j 17:52	2°40'26		min. Earth dist.	1316 Aug 23 j 16:47	10°56'55 42.61855 AU
				opposition	1316 Aug 26 j 14:39	10°53'20 -15°18'22
conjunction	1310 Feb 13 j 19:20	2°51'52 -13°21'15		direct	1316 Nov 15 j 15:16	9°49'21
minimum elong	1310 Feb 13 j 19:09	2°51'51 13°21'15		evening set	1317 Feb 19 j 01:01	11°22'59
max. Earth dist.	1310 Feb 16 j 20:34	2°56'48 43.16504 AU				
morning rise	1310 Feb 20 j 21:07	3°03'18		conjunction	1317 Feb 22 j 02:26	11°27'47 -14°42'34
retrograde	1310 May 28 j 01:57	4°37'41		minimum elong	1317 Feb 22 j 02:19	11°27'47 14°42'34
min. Earth dist.	1310 Aug 16 j 14:11	3°34'56 41.33437 AU		morning rise	1317 Feb 25 j 03:45	11°32'34
opposition	1310 Aug 19 j 14:00	3°31'11 -14°06'41		max. Earth dist.	1317 Feb 25 j 00:27	11°32'22 44.65267 AU
direct	1310 Nov 08 j 12:58	2°26'02		retrograde	1317 Jun 05 j 06:14	13°10'09
evening set	1311 Feb 08 j 16:49	3°56'53		min. Earth dist.	1317 Aug 25 j 04:56	12°08'27 42.82389 AU
				opposition	1317 Aug 28 j 01:50	12°04'56 -15°28'34

direct	1317 Nov 17 j 03:25	11° H 01'09	conjunction	1326 Mar 04 j 18:12	21° H 52'48	-15°54'51
evening set	1318 Feb 21 j 11:47	12° H 35'56	minimum elong	1326 Mar 04 j 18:09	21° H 52'48	15°54'52
			max. Earth dist.	1326 Mar 07 j 09:44	21° H 56'48	46.34553 AU
conjunction	1318 Feb 23 j 12:54	12° H 39'07 -14°52'16	retrograde	1326 Jun 15 j 23:21	23° H 31'26	
minimum elong	1318 Feb 23 j 12:47	12° H 39'07 14°52'16	min. Earth dist.	1326 Sep 05 j 06:10	22° H 30'48	44.51099 AU
morning rise	1318 Feb 25 j 13:52	12° H 42'18	opposition	1326 Sep 07 j 20:42	22° H 27'41	-16°40'29
max. Earth dist.	1318 Feb 26 j 11:13	12° H 43'42 44.85538 AU	direct	1326 Nov 27 j 21:51	21° H 25'23	
retrograde	1318 Jun 06 j 15:32	14° H 21'04				
min. Earth dist.	1318 Aug 26 j 16:07	13° H 19'32 43.02677 AU	conjunction	1327 Mar 06 j 02:55	22° H 59'36	-16°00'55
opposition	1318 Aug 29 j 12:46	13° H 16'02 -15°38'16	minimum elong	1327 Mar 06 j 02:51	22° H 59'36	16°00'55
direct	1318 Nov 18 j 15:56	12° H 12'28	max. Earth dist.	1327 Mar 08 j 18:19	23° H 03'34	46.51378 AU
			retrograde	1327 Jun 17 j 07:28	24° H 37'51	
conjunction	1319 Feb 24 j 22:57	13° H 49'59 -15°01'32	min. Earth dist.	1327 Sep 06 j 16:48	23° H 37'15	44.67892 AU
minimum elong	1319 Feb 24 j 22:50	13° H 49'59 15°01'32	opposition	1327 Sep 09 j 05:49	23° H 34'13	-16°46'26
max. Earth dist.	1319 Feb 27 j 19:53	13° H 54'27 45.05551 AU	direct	1327 Nov 29 j 06:44	22° H 32'04	
retrograde	1319 Jun 08 j 04:56	15° H 31'31				
min. Earth dist.	1319 Aug 28 j 03:05	14° H 30'10 43.22693 AU	conjunction	1328 Mar 06 j 11:41	24° H 05'55	-16°06'35
opposition	1319 Aug 30 j 23:34	14° H 26'41 -15°47'30	minimum elong	1328 Mar 06 j 11:38	24° H 05'54	16°06'35
direct	1319 Nov 20 j 00:27	13° H 23'19	max. Earth dist.	1328 Mar 09 j 02:49	24° H 09'51	46.67945 AU
			retrograde	1328 Jun 17 j 13:17	25° H 43'47	
conjunction	1320 Feb 26 j 09:07	15° H 00'25 -15°10'21	min. Earth dist.	1328 Sep 07 j 01:18	24° H 43'20	44.84417 AU
minimum elong	1320 Feb 26 j 09:01	15° H 00'25 15°10'20	opposition	1328 Sep 09 j 14:24	24° H 40'18	-16°51'58
max. Earth dist.	1320 Feb 29 j 06:34	15° H 04'54 45.25258 AU	direct	1328 Nov 29 j 17:55	23° H 38'17	
retrograde	1320 Jun 08 j 16:54	16° H 41'32				
min. Earth dist.	1320 Aug 28 j 15:12	15° H 40'17 43.42360 AU	conjunction	1329 Mar 07 j 20:05	25° H 11'47	-16°11'51
opposition	1320 Aug 31 j 10:01	15° H 36'54 -15°56'18	minimum elong	1329 Mar 07 j 20:02	25° H 11'46	16°11'50
direct	1320 Nov 20 j 09:19	14° H 33'44	max. Earth dist.	1329 Mar 10 j 09:52	25° H 15'37	46.84258 AU
			retrograde	1329 Jun 18 j 22:29	26° H 49'19	
conjunction	1321 Feb 26 j 19:05	16° H 10'25 -15°18'44	min. Earth dist.	1329 Sep 08 j 10:36	25° H 48'58	45.00704 AU
minimum elong	1321 Feb 26 j 18:59	16° H 10'25 15°18'44	opposition	1329 Sep 10 j 23:05	25° H 45'58	-16°57'06
max. Earth dist.	1321 Mar 01 j 15:02	16° H 14'47 45.44600 AU	direct	1329 Dec 01 j 02:48	24° H 44'07	
retrograde	1321 Jun 10 j 02:57	17° H 51'07				
min. Earth dist.	1321 Aug 30 j 01:19	16° H 50'03 43.61624 AU	conjunction	1330 Mar 09 j 04:20	26° H 17'17	-16°16'44
opposition	1321 Sep 01 j 20:17	16° H 46'40 -16°04'40	minimum elong	1330 Mar 09 j 04:18	26° H 17'17	16°16'45
direct	1321 Nov 21 j 18:25	15° H 43'41	max. Earth dist.	1330 Mar 11 j 18:48	26° H 21'09	47.00330 AU
			retrograde	1330 Jun 20 j 07:58	27° H 54'30	
conjunction	1322 Feb 28 j 04:45	17° H 19'58 -15°26'44	min. Earth dist.	1330 Sep 09 j 20:12	26° H 54'15	45.16720 AU
minimum elong	1322 Feb 28 j 04:40	17° H 19'57 15°26'44	opposition	1330 Sep 12 j 07:36	26° H 51'19	-17°01'50
max. Earth dist.	1322 Mar 02 j 23:58	17° H 24'15 45.63500 AU	direct	1330 Dec 02 j 10:47	25° H 49'38	
retrograde	1322 Jun 11 j 10:31	19° H 00'15				
min. Earth dist.	1322 Aug 31 j 13:24	17° H 59'15 43.80429 AU	conjunction	1331 Mar 10 j 12:30	27° H 22'29	-16°21'14
opposition	1322 Sep 03 j 06:35	17° H 55'58 -16°12'37	minimum elong	1331 Mar 10 j 12:28	27° H 22'29	16°21'14
direct	1322 Nov 23 j 06:42	16° H 53'09	max. Earth dist.	1331 Mar 13 j 01:27	27° H 26'14	47.16139 AU
			retrograde	1331 Jun 21 j 18:40	28° H 59'23	
conjunction	1323 Mar 01 j 14:32	18° H 29'01 -15°34'20	min. Earth dist.	1331 Sep 11 j 04:09	27° H 59'19	45.32454 AU
minimum elong	1323 Mar 01 j 14:26	18° H 29'00 15°34'20	opposition	1331 Sep 13 j 15:49	27° H 56'23	-17°06'11
max. Earth dist.	1323 Mar 04 j 09:13	18° H 33'16 45.81940 AU	direct	1331 Dec 03 j 16:15	26° H 54'52	
retrograde	1323 Jun 12 j 17:26	20° H 08'53				
min. Earth dist.	1323 Sep 01 j 23:55	19° H 08'00 43.98741 AU	conjunction	1332 Mar 10 j 20:37	28° H 27'25	-16°25'22
opposition	1323 Sep 04 j 16:25	19° H 04'45 -16°20'11	minimum elong	1332 Mar 10 j 20:35	28° H 27'25	16°25'23
direct	1323 Nov 24 j 19:24	18° H 02'05	max. Earth dist.	1332 Mar 13 j 09:18	28° H 31'08	47.31630 AU
				1332 Jun 02 j 22:15	0° Y	
conjunction	1324 Mar 01 j 23:56	19° H 37'31 -15°41'34	retrograde	1332 Jun 22 j 01:40	0° Y 04'01	
minimum elong	1324 Mar 01 j 23:52	19° H 37'31 15°41'34		1332 Jul 11 j 05:57	30° R H	
max. Earth dist.	1324 Mar 04 j 16:47	19° H 41'38 45.99896 AU	min. Earth dist.	1332 Sep 11 j 14:19	29° H 04'01	45.47838 AU
retrograde	1324 Jun 13 j 04:10	21° H 16'59	opposition	1332 Sep 14 j 00:02	29° H 01'11	-17°10'09
min. Earth dist.	1324 Sep 02 j 10:23	20° H 16'10 44.16591 AU	direct	1332 Dec 04 j 00:35	27° H 59'50	
opposition	1324 Sep 05 j 02:10	20° H 12'58 -16°27'21				
direct	1324 Nov 25 j 04:36	19° H 10'26	conjunction	1333 Mar 12 j 04:39	29° H 32'06	-16°29'09
			minimum elong	1333 Mar 12 j 04:39	29° H 32'06	16°29'09
conjunction	1325 Mar 03 j 09:14	20° H 45'27 -15°48'24	max. Earth dist.	1333 Mar 14 j 16:35	29° H 35'47	47.46754 AU
minimum elong	1325 Mar 03 j 09:09	20° H 45'27 15°48'24		1333 Mar 31 j 10:17	0° Y	
max. Earth dist.	1325 Mar 06 j 02:13	20° H 49'33 46.17409 AU	retrograde	1333 Jun 23 j 06:42	1° Y 08'24	
retrograde	1325 Jun 14 j 13:25	22° H 24'30	min. Earth dist.	1333 Sep 12 j 22:27	0° Y 08'33	45.62806 AU
min. Earth dist.	1325 Sep 03 j 21:17	21° H 23'44 44.34013 AU	opposition	1333 Sep 15 j 07:54	0° Y 05'44	-17°13'47
opposition	1325 Sep 06 j 11:32	21° H 20'37 -16°34'07		1333 Sep 20 j 05:08	30° R H	
direct	1325 Nov 26 j 14:29	20° H 18'12	direct	1333 Dec 05 j 10:26	29° H 04'33	

	1334 Feb 15 j 22:14	0°♈	minimum elong	1342 Mar 21 j 23:06	8°♈58'55	16°48'48
			max. Earth dist.	1342 Mar 24 j 02:48	9°♈02'00	48.63450 AU
conjunction	1334 Mar 13 j 12:32	0°♈36'32 -16°32'36	retrograde	1342 Jul 03 j 01:32	10°♈32'35	
minimum elong	1334 Mar 13 j 12:31	0°♈36'32 16°32'37	min. Earth dist.	1342 Sep 23 j 00:31	9°♈33'16	46.78115 AU
max. Earth dist.	1334 Mar 15 j 22:43	0°♈40'06 47.61435 AU	opposition	1342 Sep 25 j 01:00	9°♈30'56	-17°31'39
retrograde	1334 Jun 24 j 15:01	2°♈12'33	direct	1342 Dec 15 j 04:35	8°♈30'42	
min. Earth dist.	1334 Sep 14 j 07:49	1°♈12'47 45.77318 AU				
opposition	1334 Sep 16 j 15:53	1°♈10'02 -17°17'04	conjunction	1343 Mar 23 j 05:50	10°♈00'10	-16°49'22
direct	1334 Dec 06 j 18:59	0°♈09'00	minimum elong	1343 Mar 23 j 05:53	10°♈00'10	16°49'23
			max. Earth dist.	1343 Mar 25 j 08:50	10°♈03'12	48.74769 AU
conjunction	1335 Mar 14 j 20:26	1°♈40'41 -16°35'45	retrograde	1343 Jul 04 j 07:18	11°♈33'35	
minimum elong	1335 Mar 14 j 20:26	1°♈40'41 16°35'44	min. Earth dist.	1343 Sep 24 j 06:58	10°♈34'24	46.89271 AU
max. Earth dist.	1335 Mar 17 j 06:26	1°♈44'13 47.75637 AU	opposition	1343 Sep 26 j 07:29	10°♈32'03	-17°31'58
retrograde	1335 Jun 25 j 22:23	3°♈16'24	direct	1343 Dec 16 j 10:40	9°♈31'57	
min. Earth dist.	1335 Sep 15 j 17:00	2°♈16'41 45.91311 AU				
opposition	1335 Sep 17 j 23:38	2°♈14'01 -17°20'03	conjunction	1344 Mar 23 j 12:33	11°♈01'12	-16°49'37
direct	1335 Dec 08 j 04:18	1°♈13'06	minimum elong	1344 Mar 23 j 12:36	11°♈01'13	16°49'37
			max. Earth dist.	1344 Mar 25 j 14:04	11°♈04'09	48.85743 AU
conjunction	1336 Mar 15 j 04:10	2°♈44'29 -16°38'34	retrograde	1344 Jul 04 j 13:20	12°♈34'24	
minimum elong	1336 Mar 15 j 04:09	2°♈44'29 16°38'34	min. Earth dist.	1344 Sep 24 j 14:56	11°♈35'15	47.00067 AU
max. Earth dist.	1336 Mar 17 j 11:57	2°♈47'52 47.89337 AU	opposition	1344 Sep 26 j 13:52	11°♈33'00	-17°31'59
retrograde	1336 Jun 26 j 08:50	4°♈19'53	direct	1344 Dec 16 j 17:29	10°♈33'01	
min. Earth dist.	1336 Sep 16 j 00:53	3°♈20'16 46.04814 AU				
opposition	1336 Sep 18 j 07:03	3°♈17'37 -17°22'42	conjunction	1345 Mar 24 j 19:20	12°♈02'04	-16°49'35
direct	1336 Dec 08 j 09:11	2°♈16'48	minimum elong	1345 Mar 24 j 19:24	12°♈02'04	16°49'36
			max. Earth dist.	1345 Mar 26 j 20:43	12°♈04'59	48.96332 AU
conjunction	1337 Mar 16 j 11:42	3°♈47'54 -16°41'05	retrograde	1345 Jul 05 j 18:17	13°♈35'03	
minimum elong	1337 Mar 16 j 11:44	3°♈47'54 16°41'05	min. Earth dist.	1345 Sep 25 j 22:24	12°♈35'59	47.10425 AU
max. Earth dist.	1337 Mar 18 j 19:08	3°♈51'15 48.02557 AU	opposition	1345 Sep 27 j 20:11	12°♈33'47	-17°31'42
retrograde	1337 Jun 27 j 17:48	5°♈22'59	direct	1345 Dec 18 j 02:00	11°♈33'55	
min. Earth dist.	1337 Sep 17 j 10:20	4°♈23'21 46.17863 AU				
opposition	1337 Sep 19 j 14:31	4°♈20'49 -17°25'02	conjunction	1346 Mar 26 j 01:49	13°♈02'46	-16°49'16
direct	1337 Dec 09 j 14:44	3°♈20'06	minimum elong	1346 Mar 26 j 01:54	13°♈02'46	16°49'15
			max. Earth dist.	1346 Mar 28 j 01:00	13°♈05'33	49.06464 AU
conjunction	1338 Mar 17 j 18:58	4°♈50'53 -16°43'17	retrograde	1346 Jul 07 j 03:10	14°♈35'33	
minimum elong	1338 Mar 17 j 18:58	4°♈50'53 16°43'17	min. Earth dist.	1346 Sep 27 j 05:28	13°♈36'33	47.20300 AU
max. Earth dist.	1338 Mar 20 j 01:31	4°♈54'10 48.15374 AU	opposition	1346 Sep 29 j 02:31	13°♈34'23	-17°31'08
retrograde	1338 Jun 28 j 22:05	6°♈25'39	direct	1346 Dec 19 j 07:02	12°♈34'38	
min. Earth dist.	1338 Sep 18 j 17:24	5°♈26'07 46.30524 AU				
opposition	1338 Sep 20 j 21:41	5°♈23'35 -17°27'02	conjunction	1347 Mar 27 j 08:32	14°♈03'17	-16°48'41
direct	1338 Dec 10 j 23:21	4°♈22'57	minimum elong	1347 Mar 27 j 08:35	14°♈03'17	16°48'42
			max. Earth dist.	1347 Mar 29 j 07:05	14°♈06'01	49.16073 AU
conjunction	1339 Mar 19 j 02:08	5°♈53'26 -16°45'10	retrograde	1347 Jul 08 j 11:39	15°♈35'51	
minimum elong	1339 Mar 19 j 02:10	5°♈53'26 16°45'10	min. Earth dist.	1347 Sep 28 j 13:57	14°♈36'51	47.29630 AU
max. Earth dist.	1339 Mar 21 j 07:19	5°♈56'38 48.27828 AU	opposition	1347 Sep 30 j 08:42	14°♈34'48	-17°30'19
retrograde	1339 Jun 30 j 03:05	7°♈27'55	direct	1347 Dec 20 j 11:37	13°♈35'08	
min. Earth dist.	1339 Sep 20 j 01:45	6°♈28'24 46.42861 AU				
opposition	1339 Sep 22 j 04:44	6°♈25'56 -17°28'42	conjunction	1348 Mar 27 j 15:09	15°♈03'35	-16°47'51
direct	1339 Dec 12 j 08:37	5°♈25'23	minimum elong	1348 Mar 27 j 15:15	15°♈03'36	16°47'51
			max. Earth dist.	1348 Mar 29 j 12:07	15°♈06'14	49.25156 AU
conjunction	1340 Mar 19 j 09:20	6°♈55'36 -16°46'42	retrograde	1348 Jul 08 j 17:22	16°♈35'56	
minimum elong	1340 Mar 19 j 09:21	6°♈55'36 16°46'42	min. Earth dist.	1348 Sep 28 j 20:12	15°♈37'00	47.38422 AU
max. Earth dist.	1340 Mar 21 j 14:49	6°♈58'49 48.39983 AU	opposition	1348 Sep 30 j 14:42	15°♈34'58	-17°29'14
retrograde	1340 Jun 30 j 08:48	8°♈29'48	direct	1348 Dec 20 j 16:55	14°♈35'22	
min. Earth dist.	1340 Sep 20 j 09:26	7°♈30'20 46.54890 AU				
opposition	1340 Sep 22 j 11:35	7°♈27'54 -17°30'01	conjunction	1349 Mar 28 j 21:25	16°♈03'38	-16°46'46
direct	1340 Dec 12 j 18:02	6°♈27'28	minimum elong	1349 Mar 28 j 21:28	16°♈03'38	16°46'46
			max. Earth dist.	1349 Mar 30 j 16:35	16°♈06'09	49.33710 AU
conjunction	1341 Mar 20 j 16:11	7°♈57'25 -16°47'55	retrograde	1349 Jul 09 j 21:35	17°♈35'45	
minimum elong	1341 Mar 20 j 16:13	7°♈57'25 16°47'55	min. Earth dist.	1349 Sep 30 j 04:07	16°♈36'48	47.46723 AU
max. Earth dist.	1341 Mar 22 j 19:59	8°♈00'30 48.51854 AU	opposition	1349 Oct 01 j 20:42	16°♈34'52	-17°27'53
retrograde	1341 Jul 01 j 17:57	9°♈31'20	direct	1349 Dec 22 j 00:51	15°♈35'20	
min. Earth dist.	1341 Sep 21 j 16:07	8°♈31'59 46.66646 AU				
opposition	1341 Sep 23 j 18:17	8°♈29'34 -17°31'00	conjunction	1350 Mar 30 j 03:45	17°♈03'23	-16°45'24
direct	1341 Dec 13 j 23:09	7°♈29'13	minimum elong	1350 Mar 30 j 03:52	17°♈03'24	16°45'25
			max. Earth dist.	1350 Mar 31 j 22:53	17°♈05'55	49.41814 AU
conjunction	1342 Mar 21 j 23:04	8°♈58'55 -16°48'48	retrograde	1350 Jul 11 j 01:06	18°♈35'18	

min. Earth dist.	1350 Oct 01 j 10:44	17°♊36'22	47.54587 AU	conjunction	1359 Apr 08 j 08:43	25°♊52'21	-16°20'48
opposition	1350 Oct 03 j 02:26	17°♊34'29	-17°26'16	minimum elong	1359 Apr 08 j 08:51	25°♊52'21	16°20'47
direct	1350 Dec 23 j 09:56	16°♊35'01		max. Earth dist.	1359 Apr 09 j 17:38	25°♊54'14	49.98981 AU
				retrograde	1359 Jul 20 j 08:18	27°♊22'46	
conjunction	1351 Mar 31 j 09:49	18°♊02'52	-16°43'47	min. Earth dist.	1359 Oct 10 j 20:17	26°♊24'06	48.09587 AU
minimum elong	1351 Mar 31 j 09:54	18°♊02'53	16°43'47	opposition	1359 Oct 12 j 02:27	26°♊22'41	-16°58'56
max. Earth dist.	1351 Apr 02 j 02:53	18°♊05'16	49.49520 AU	direct	1360 Jan 01 j 06:53	25°♊23'49	
retrograde	1351 Jul 12 j 09:10	19°♊34'35					
min. Earth dist.	1351 Oct 02 j 16:53	18°♊35'42	47.62085 AU	conjunction	1360 Apr 08 j 14:37	26°♊50'25	-16°16'48
opposition	1351 Oct 04 j 08:07	18°♊33'50	-17°24'21	minimum elong	1360 Apr 08 j 14:44	26°♊50'26	16°16'48
direct	1351 Dec 24 j 14:42	17°♊34'26		max. Earth dist.	1360 Apr 09 j 22:57	26°♊52'17	50.03210 AU
				retrograde	1360 Jul 20 j 09:41	28°♊20'42	
conjunction	1352 Mar 31 j 15:58	19°♊02'07	-16°41'52	min. Earth dist.	1360 Oct 11 j 02:11	27°♊22'01	48.13474 AU
minimum elong	1352 Mar 31 j 16:04	19°♊02'07	16°41'52	opposition	1360 Oct 12 j 07:19	27°♊20'38	-16°54'37
max. Earth dist.	1352 Apr 02 j 08:51	19°♊04'29	49.56869 AU	direct	1361 Jan 01 j 15:23	26°♊21'48	
retrograde	1352 Jul 12 j 16:07	20°♊33'38					
min. Earth dist.	1352 Oct 03 j 00:08	19°♊34'44	47.69240 AU	conjunction	1361 Apr 09 j 20:12	27°♊48'17	-16°12'34
opposition	1352 Oct 04 j 13:37	19°♊32'57	-17°22'09	minimum elong	1361 Apr 09 j 20:21	27°♊48'17	16°12'34
direct	1352 Dec 24 j 19:29	18°♊33'37		max. Earth dist.	1361 Apr 11 j 02:07	27°♊50'00	50.06927 AU
				retrograde	1361 Jul 21 j 15:32	29°♊18'24	
conjunction	1353 Apr 01 j 21:57	20°♊01'08	-16°39'41	min. Earth dist.	1361 Oct 12 j 08:01	28°♊19'42	48.16880 AU
minimum elong	1353 Apr 01 j 22:02	20°♊01'08	16°39'40	opposition	1361 Oct 13 j 12:15	28°♊18'22	-16°50'04
max. Earth dist.	1353 Apr 03 j 13:51	20°♊03'27	49.63917 AU	direct	1362 Jan 02 j 20:52	27°♊19'33	
retrograde	1353 Jul 13 j 21:56	21°♊32'27					
min. Earth dist.	1353 Oct 04 j 05:22	20°♊33'39	47.76093 AU	conjunction	1362 Apr 11 j 01:40	28°♊45'53	-16°08'07
opposition	1353 Oct 05 j 19:02	20°♊31'52	-17°19'40	minimum elong	1362 Apr 11 j 01:48	28°♊45'54	16°08'07
direct	1353 Dec 25 j 23:22	19°♊32'36		max. Earth dist.	1362 Apr 12 j 07:12	28°♊47'35	50.10179 AU
					1362 Jun 13 j 10:57	0°♈	
conjunction	1354 Apr 03 j 03:38	20°♊59'58	-16°37'12	retrograde	1362 Jul 22 j 21:25	0°♈15'52	
minimum elong	1354 Apr 03 j 03:45	20°♊59'58	16°37'12		1362 Aug 31 j 17:39	30°♈♊	
max. Earth dist.	1354 Apr 04 j 18:18	21°♊02'12	49.70661 AU	opposition	1362 Oct 14 j 17:09	29°♊15'51	-16°45'17
retrograde	1354 Jul 15 j 02:38	22°♊31'07		min. Earth dist.	1362 Oct 13 j 14:48	29°♊17'06	48.19846 AU
min. Earth dist.	1354 Oct 05 j 12:27	21°♊32'19	47.82648 AU	direct	1363 Jan 04 j 02:25	28°♊17'03	
opposition	1354 Oct 07 j 00:34	21°♊30'37	-17°16'53				
direct	1354 Dec 27 j 04:40	20°♊31'25		conjunction	1363 Apr 12 j 07:13	29°♊43'16	-16°03'24
				minimum elong	1363 Apr 12 j 07:23	29°♊43'16	16°03'24
conjunction	1355 Apr 04 j 09:35	21°♊58'39	-16°34'26	max. Earth dist.	1363 Apr 13 j 11:35	29°♊44'53	50.13040 AU
minimum elong	1355 Apr 04 j 09:42	21°♊58'39	16°34'26		1363 Apr 24 j 13:50	0°♈	
max. Earth dist.	1355 Apr 06 j 00:16	22°♊00'53	49.77110 AU	retrograde	1363 Jul 24 j 03:25	1°♈13'05	
retrograde	1355 Jul 16 j 05:41	23°♊29'39		opposition	1363 Oct 15 j 21:42	0°♈13'07	-16°40'14
min. Earth dist.	1355 Oct 06 j 18:16	22°♊30'55	47.88876 AU	min. Earth dist.	1363 Oct 14 j 19:26	0°♈14'21	48.22441 AU
opposition	1355 Oct 08 j 05:44	22°♊29'14	-17°13'48		1363 Oct 27 j 14:04	30°♈♊	
direct	1355 Dec 28 j 12:45	21°♊30'07		direct	1364 Jan 05 j 05:30	29°♊14'18	
					1364 Mar 12 j 19:13	0°♈	
conjunction	1356 Apr 04 j 15:22	22°♊57'13	-16°31'24				
minimum elong	1356 Apr 04 j 15:29	22°♊57'13	16°31'25	conjunction	1364 Apr 12 j 12:38	0°♈40'26	-15°58'26
max. Earth dist.	1356 Apr 06 j 04:03	22°♊59'20	49.83224 AU	minimum elong	1364 Apr 12 j 12:46	0°♈40'26	15°58'26
retrograde	1356 Jul 16 j 12:28	24°♊28'05		max. Earth dist.	1364 Apr 13 j 15:27	0°♈41'58	50.15545 AU
min. Earth dist.	1356 Oct 07 j 00:19	23°♊29'24	47.94750 AU	retrograde	1364 Jul 24 j 08:34	2°♈10'07	
opposition	1356 Oct 08 j 10:59	23°♊27'45	-17°10'28	min. Earth dist.	1364 Oct 15 j 01:52	1°♈11'20	48.24712 AU
direct	1356 Dec 28 j 18:24	22°♊28'43		opposition	1364 Oct 16 j 02:27	1°♈10'11	-16°34'55
				direct	1365 Jan 05 j 09:23	0°♈11'24	
conjunction	1357 Apr 05 j 21:07	23°♊55'42	-16°28'07				
minimum elong	1357 Apr 05 j 21:15	23°♊55'42	16°28'06	conjunction	1365 Apr 13 j 17:57	1°♈37'26	-15°53'13
max. Earth dist.	1357 Apr 07 j 09:29	23°♊57'47	49.88941 AU	minimum elong	1365 Apr 13 j 18:07	1°♈37'27	15°53'13
retrograde	1357 Jul 17 j 20:28	25°♊26'25		max. Earth dist.	1365 Apr 14 j 20:53	1°♈38'58	50.17749 AU
min. Earth dist.	1357 Oct 08 j 07:29	24°♊27'44	48.00192 AU	retrograde	1365 Jul 25 j 10:53	3°♈07'01	
opposition	1357 Oct 09 j 16:12	24°♊26'11	-17°06'52	min. Earth dist.	1365 Oct 16 j 06:49	2°♈08'16	48.26677 AU
direct	1357 Dec 29 j 22:30	23°♊27'14		opposition	1365 Oct 17 j 07:02	2°♈07'07	-16°29'20
				direct	1366 Jan 06 j 16:30	1°♈08'22	
conjunction	1358 Apr 07 j 02:57	24°♊54'05	-16°24'34				
minimum elong	1358 Apr 07 j 03:04	24°♊54'05	16°24'35	conjunction	1366 Apr 14 j 23:11	2°♈34'20	-15°47'44
max. Earth dist.	1358 Apr 08 j 13:45	24°♊56'05	49.94219 AU	minimum elong	1366 Apr 14 j 23:20	2°♈34'20	15°47'44
retrograde	1358 Jul 19 j 03:57	26°♊24'40		max. Earth dist.	1366 Apr 16 j 00:15	2°♈35'46	50.19674 AU
opposition	1358 Oct 10 j 21:15	25°♊24'31	-17°03'01	retrograde	1366 Jul 26 j 16:20	4°♈03'50	
min. Earth dist.	1358 Oct 09 j 12:52	25°♊26'02	48.05155 AU	opposition	1366 Oct 18 j 11:36	3°♈03'59	-16°23'29
direct	1358 Dec 31 j 00:54	24°♊25'36		min. Earth dist.	1366 Oct 17 j 12:03	3°♈05'06	48.28373 AU



























































































































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conjunction	1367 Apr 16 j 04:32	3°831'12 -15°41'59		conjunction	1375 Apr 23 j 23:17	11°806'34 -14°47'39	
minimum elong	1367 Apr 16 j 04:42	3°831'12 15°42'00		minimum elong	1375 Apr 23 j 23:27	11°806'34 14°47'39	
max. Earth dist.	1367 Apr 17 j 05:27	3°832'36 50.21310 AU		max. Earth dist.	1375 Apr 24 j 13:58	11°807'24 50.19148 AU	
retrograde	1367 Jul 27 j 23:00	5°800'38		morning rise	1375 Apr 26 j 15:13	11°810'11	
opposition	1367 Oct 19 j 16:13	4°800'51 -16°17'21		retrograde	1375 Aug 04 j 14:56	12°835'32	
min. Earth dist.	1367 Oct 18 j 18:15	4°801'53 48.29757 AU		opposition	1375 Oct 27 j 03:28	11°836'02 -15°19'57	
direct	1368 Jan 09 j 01:43	3°802'12		min. Earth dist.	1375 Oct 26 j 14:53	11°836'38 48.24879 AU	
				direct	1376 Jan 16 j 13:16	10°837'29	
conjunction	1368 Apr 16 j 09:52	4°828'04 -15°35'59		evening set	1376 Apr 20 j 19:32	11°858'36	
minimum elong	1368 Apr 16 j 10:01	4°828'05 15°35'59					
max. Earth dist.	1368 Apr 17 j 09:32	4°829'25 50.22640 AU		conjunction	1376 Apr 24 j 04:29	12°803'10 -14°39'51	
retrograde	1368 Jul 28 j 06:49	5°857'26		minimum elong	1376 Apr 24 j 04:40	12°803'11 14°39'51	
opposition	1368 Oct 19 j 20:33	4°857'44 -16°10'59		max. Earth dist.	1376 Apr 24 j 17:05	12°803'53 50.16839 AU	
min. Earth dist.	1368 Oct 18 j 22:39	4°858'46 48.30804 AU		morning rise	1376 Apr 27 j 13:58	12°807'47	
direct	1369 Jan 09 j 02:53	3°859'08		retrograde	1376 Aug 04 j 18:47	13°832'06	
				opposition	1376 Oct 27 j 07:40	12°832'36 -15°11'43	
conjunction	1369 Apr 17 j 15:08	5°825'00 -15°29'45		min. Earth dist.	1376 Oct 26 j 20:02	12°833'09 48.22286 AU	
minimum elong	1369 Apr 17 j 15:17	5°825'00 15°29'45		direct	1377 Jan 16 j 18:40	11°834'02	
max. Earth dist.	1369 Apr 18 j 13:14	5°826'15 50.23594 AU		evening set	1377 Apr 21 j 10:05	12°854'18	
retrograde	1369 Jul 29 j 11:52	6°854'19					
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opposition	1369 Oct 21 j 01:08	5°854'41 -16°04'22		minimum elong	1377 Apr 25 j 09:54	12°859'42 14°31'48	
direct	1370 Jan 10 j 06:53	4°856'09		max. Earth dist.	1377 Apr 25 j 22:02	13°800'23 50.14202 AU	
				morning rise	1377 Apr 29 j 09:56	13°805'08	
conjunction	1370 Apr 18 j 20:28	6°821'59 -15°23'16		retrograde	1377 Aug 05 j 23:25	14°828'36	
minimum elong	1370 Apr 18 j 20:39	6°822'00 15°23'16		opposition	1377 Oct 28 j 11:59	13°829'05 -15°03'15	
max. Earth dist.	1370 Apr 19 j 18:13	6°823'13 50.24122 AU		min. Earth dist.	1377 Oct 28 j 01:46	13°829'34 48.19373 AU	
retrograde	1370 Jul 30 j 13:18	7°851'16		direct	1378 Jan 18 j 00:49	12°830'30	
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opposition	1370 Oct 22 j 05:36	6°851'41 -15°57'31					
direct	1371 Jan 11 j 14:36	5°853'11		conjunction	1378 Apr 26 j 14:51	13°856'10 -14°23'31	
				minimum elong	1378 Apr 26 j 15:03	13°856'11 14°23'31	
conjunction	1371 Apr 20 j 01:53	7°819'01 -15°16'35		max. Earth dist.	1378 Apr 27 j 02:06	13°856'48 50.11278 AU	
minimum elong	1371 Apr 20 j 02:02	7°819'01 15°16'35		morning rise	1378 May 01 j 03:59	14°802'20	
max. Earth dist.	1371 Apr 20 j 20:59	7°820'06 50.24147 AU			1378 Jun 18 j 01:36	15°8	
retrograde	1371 Jul 31 j 18:37	8°848'14		retrograde	1378 Aug 07 j 07:13	15°825'02	
opposition	1371 Oct 23 j 10:00	7°848'43 -15°50'26			1378 Sep 27 j 00:18	15°8	
min. Earth dist.	1371 Oct 22 j 16:24	7°849'32 48.31276 AU		opposition	1378 Oct 29 j 16:12	14°825'33 -14°54'31	
direct	1372 Jan 12 j 20:06	6°850'13		min. Earth dist.	1378 Oct 29 j 05:57	14°826'01 48.16168 AU	
				direct	1379 Jan 19 j 02:39	13°826'56	
conjunction	1372 Apr 20 j 07:24	8°816'01 -15°09'40		evening set	1379 Apr 22 j 19:46	14°845'51	
minimum elong	1372 Apr 20 j 07:35	8°816'02 15°09'40					
max. Earth dist.	1372 Apr 21 j 01:43	8°817'04 50.23631 AU		conjunction	1379 Apr 27 j 20:07	14°852'38 -14°14'59	
retrograde	1372 Aug 01 j 00:31	9°845'12		minimum elong	1379 Apr 27 j 20:18	14°852'38 14°14'58	
opposition	1372 Oct 23 j 14:31	8°845'42 -15°43'09		max. Earth dist.	1379 Apr 28 j 05:51	14°853'11 50.08046 AU	
min. Earth dist.	1372 Oct 22 j 22:58	8°846'26 48.30379 AU		morning rise	1379 May 02 j 21:09	14°859'27	
direct	1373 Jan 13 j 01:23	7°847'13			1379 May 03 j 06:52	15°8	
				retrograde	1379 Aug 08 j 13:31	16°821'29	
conjunction	1373 Apr 21 j 12:38	9°812'59 -15°02'33		opposition	1379 Oct 30 j 20:27	15°822'01 -14°45'32	
minimum elong	1373 Apr 21 j 12:47	9°812'59 15°02'34		min. Earth dist.	1379 Oct 30 j 12:08	15°822'24 48.12655 AU	
max. Earth dist.	1373 Apr 22 j 05:23	9°813'55 50.22600 AU			1379 Nov 19 j 19:59	15°8	
retrograde	1373 Aug 02 j 07:03	10°842'05		direct	1380 Jan 20 j 04:51	14°823'24	
opposition	1373 Oct 24 j 18:51	9°842'36 -15°35'39			1380 Mar 20 j 12:02	15°8	
min. Earth dist.	1373 Oct 24 j 03:39	9°843'19 48.28980 AU		evening set	1380 Apr 22 j 14:15	15°841'44	
direct	1374 Jan 14 j 03:47	8°844'06					
evening set	1374 Apr 21 j 02:26	10°807'36		conjunction	1380 Apr 28 j 01:31	15°849'08 -14°06'12	
				minimum elong	1380 Apr 28 j 01:42	15°849'09 14°06'13	
conjunction	1374 Apr 22 j 17:55	10°809'50 -14°55'13		max. Earth dist.	1380 Apr 28 j 11:06	15°849'40 50.04500 AU	
minimum elong	1374 Apr 22 j 18:06	10°809'51 14°55'14		morning rise	1380 May 03 j 13:27	15°856'34	
max. Earth dist.	1374 Apr 23 j 08:50	10°810'40 50.21081 AU		retrograde	1380 Aug 08 j 15:48	17°818'00	
morning rise	1374 Apr 24 j 09:50	10°812'05		opposition	1380 Oct 31 j 00:42	16°818'32 -14°36'18	
retrograde	1374 Aug 03 j 13:04	11°838'52		min. Earth dist.	1380 Oct 30 j 16:52	16°818'54 48.08791 AU	
opposition	1374 Oct 25 j 23:14	10°839'23 -15°27'55		direct	1381 Jan 20 j 11:24	15°819'56	
min. Earth dist.	1374 Oct 25 j 10:04	10°840'00 48.27132 AU		evening set	1381 Apr 23 j 09:13	16°837'44	
direct	1375 Jan 15 j 06:33	9°840'52					

conjunction	1381 Apr 29 j 06:38	16°8'45"43	-13°57'11"	direct	1388 Jan 27 j 21:42	21°8'57"29	
minimum elong	1381 Apr 29 j 06:50	16°8'45"44	13°57'11"	evening set	1388 Apr 27 j 12:03	23°8'12"23	
max. Earth dist.	1381 Apr 29 j 14:00	16°8'46"08	50.00583 AU				
morning rise	1381 May 05 j 04:52	16°8'53"44		conjunction	1388 May 05 j 21:15	23°8'23"44	-12°48'00"
retrograde	1381 Aug 09 j 20:05	18°8'14"36		minimum elong	1388 May 05 j 21:26	23°8'23"45	12°48'00"
opposition	1381 Nov 01 j 05:01	17°8'15"10	-14°26'50"	max. Earth dist.	1388 May 05 j 19:13	23°8'23"37	49.59404 AU
min. Earth dist.	1381 Oct 31 j 22:21	17°8'15"29	48.04532 AU	morning rise	1388 May 14 j 07:27	23°8'35"10	
direct	1382 Jan 21 j 16:45	16°8'16"34		retrograde	1388 Aug 16 j 09:59	24°8'52"51	
evening set	1382 Apr 24 j 04:55	17°8'33"53		opposition	1388 Nov 07 j 11:16	23°8'53"17	-13°14'20"
				min. Earth dist.	1388 Nov 07 j 13:18	23°8'53"12	47.60716 AU
conjunction	1382 Apr 30 j 12:08	17°8'42"24	-13°47'57"	direct	1389 Jan 27 j 23:55	22°8'54"22	
minimum elong	1382 Apr 30 j 12:19	17°8'42"25	13°47'57"	evening set	1389 Apr 28 j 09:59	24°8'08"55	
max. Earth dist.	1382 Apr 30 j 18:52	17°8'42"47	49.96222 AU				
morning rise	1382 May 06 j 20:07	17°8'50"59		conjunction	1389 May 07 j 02:35	24°8'20"43	-12°37'13"
retrograde	1382 Aug 11 j 01:15	19°8'11"20		minimum elong	1389 May 07 j 02:48	24°8'20"43	12°37'13"
opposition	1382 Nov 02 j 09:20	18°8'11"55	-14°17'08"	max. Earth dist.	1389 May 06 j 23:04	24°8'20"31	49.51803 AU
min. Earth dist.	1382 Nov 02 j 04:43	18°8'12"08	47.99790 AU	morning rise	1389 May 15 j 20:22	24°8'32"34	
direct	1383 Jan 22 j 22:07	17°8'13"18		retrograde	1389 Aug 17 j 17:36	25°8'49"54	
evening set	1383 Apr 25 j 01:21	18°8'30"10		opposition	1389 Nov 08 j 15:44	24°8'50"18	-13°03'02"
				min. Earth dist.	1389 Nov 08 j 19:37	24°8'50"07	47.52827 AU
conjunction	1383 May 01 j 17:41	18°8'39"12	-13°38'29"	direct	1390 Jan 29 j 01:10	23°8'51"19	
minimum elong	1383 May 01 j 17:53	18°8'39"13	13°38'29"	evening set	1390 Apr 29 j 08:20	25°8'05"34	
max. Earth dist.	1383 May 01 j 22:40	18°8'39"29	49.91365 AU				
morning rise	1383 May 08 j 10:51	18°8'48"18		conjunction	1390 May 08 j 08:13	25°8'17"46	-12°26'11"
retrograde	1383 Aug 12 j 08:08	20°8'08"09		minimum elong	1390 May 08 j 08:25	25°8'17"47	12°26'11"
opposition	1383 Nov 03 j 13:40	19°8'08"44	-14°07'13"	max. Earth dist.	1390 May 08 j 04:38	25°8'17"34	49.43919 AU
min. Earth dist.	1383 Nov 03 j 09:33	19°8'08"56	47.94517 AU	morning rise	1390 May 17 j 09:07	25°8'30"02	
direct	1384 Jan 24 j 00:57	18°8'10"06		retrograde	1390 Aug 18 j 20:16	26°8'47"02	
evening set	1384 Apr 24 j 22:02	19°8'26"31		opposition	1390 Nov 09 j 20:00	25°8'47"24	-12°51'28"
				min. Earth dist.	1390 Nov 10 j 00:04	25°8'47"12	47.44653 AU
conjunction	1384 May 01 j 23:11	19°8'36"04	-13°28'49"	direct	1391 Jan 30 j 07:54	24°8'48"21	
minimum elong	1384 May 01 j 23:22	19°8'36"05	13°28'49"	evening set	1391 Apr 30 j 06:59	26°8'02"20	
max. Earth dist.	1384 May 02 j 01:55	19°8'36"13	49.85946 AU				
morning rise	1384 May 09 j 01:16	19°8'45"40		conjunction	1391 May 09 j 13:48	26°8'14"57	-12°14'54"
retrograde	1384 Aug 12 j 14:49	21°8'05"03		minimum elong	1391 May 09 j 14:00	26°8'14"58	12°14'55"
opposition	1384 Nov 03 j 18:04	20°8'05"37	-13°57'06"	max. Earth dist.	1391 May 09 j 08:10	26°8'14"38	49.35759 AU
min. Earth dist.	1384 Nov 03 j 16:18	20°8'05"42	47.88689 AU	morning rise	1391 May 18 j 21:53	26°8'27"38	
direct	1385 Jan 24 j 03:51	19°8'06"56		retrograde	1391 Aug 19 j 23:48	27°8'44"18	
evening set	1385 Apr 25 j 19:09	20°8'22"57		opposition	1391 Nov 11 j 00:28	26°8'44"38	-12°39'39"
				min. Earth dist.	1391 Nov 11 j 05:33	26°8'44"24	47.36204 AU
conjunction	1385 May 03 j 04:46	20°8'32"58	-13°18'57"	direct	1392 Jan 31 j 14:01	25°8'45"33	
minimum elong	1385 May 03 j 04:59	20°8'32"59	13°18'57"	evening set	1392 Apr 30 j 05:42	26°8'59"17	
max. Earth dist.	1385 May 03 j 07:01	20°8'33"06	49.79998 AU				
morning rise	1385 May 10 j 15:15	20°8'43"03		conjunction	1392 May 09 j 19:31	27°8'12"17	-12°03'22"
retrograde	1385 Aug 13 j 17:37	22°8'01"58		minimum elong	1392 May 09 j 19:43	27°8'12"18	12°03'22"
opposition	1385 Nov 04 j 22:23	21°8'02"31	-13°46'46"	max. Earth dist.	1392 May 09 j 13:36	27°8'11"57	49.27298 AU
min. Earth dist.	1385 Nov 04 j 21:21	21°8'02"34	47.82338 AU	morning rise	1392 May 19 j 10:26	27°8'25"22	
direct	1386 Jan 25 j 10:04	20°8'03"47		retrograde	1392 Aug 20 j 04:11	28°8'41"45	
evening set	1386 Apr 26 j 16:26	21°8'19"24		opposition	1392 Nov 11 j 04:56	27°8'42"04	-12°27'34"
				min. Earth dist.	1392 Nov 11 j 11:31	27°8'41"46	47.27432 AU
conjunction	1386 May 04 j 10:07	21°8'29"53	-13°08'52"	direct	1393 Jan 31 j 20:19	26°8'42"57	
minimum elong	1386 May 04 j 10:18	21°8'29"54	13°08'51"	evening set	1393 May 01 j 04:50	27°8'56"26	
max. Earth dist.	1386 May 04 j 09:56	21°8'29"52	49.73555 AU				
morning rise	1386 May 12 j 04:50	21°8'40"25		conjunction	1393 May 11 j 01:15	28°8'09"50	-11°51'36"
retrograde	1386 Aug 14 j 22:21	22°8'58"55		minimum elong	1393 May 11 j 01:27	28°8'09"51	11°51'36"
opposition	1386 Nov 06 j 02:45	21°8'59"25	-13°36'11"	max. Earth dist.	1393 May 10 j 18:01	28°8'09"25	49.18517 AU
min. Earth dist.	1386 Nov 06 j 03:04	21°8'59"25	47.75526 AU	morning rise	1393 May 20 j 22:51	28°8'23"19	
direct	1387 Jan 26 j 15:04	21°8'00"38		retrograde	1393 Aug 21 j 11:33	29°8'39"25	
evening set	1387 Apr 27 j 14:05	22°8'15"53		opposition	1393 Nov 12 j 09:23	28°8'39"44	-12°15'15"
				min. Earth dist.	1393 Nov 12 j 16:15	28°8'39"24	47.18309 AU
conjunction	1387 May 05 j 15:44	22°8'26"48	-12°58'33"	direct	1394 Feb 01 j 23:24	27°8'40"33	
minimum elong	1387 May 05 j 15:56	22°8'26"49	12°58'33"	evening set	1394 May 02 j 04:04	28°8'53"49	
max. Earth dist.	1387 May 05 j 14:56	22°8'26"45	49.66665 AU				
morning rise	1387 May 13 j 18:22	22°8'37"48		conjunction	1394 May 12 j 07:03	29°8'07"36	-11°39'35"
retrograde	1387 Aug 16 j 02:16	23°8'55"53		minimum elong	1394 May 12 j 07:16	29°8'07"36	11°39'34"
opposition	1387 Nov 07 j 07:00	22°8'56"21	-13°25'23"	max. Earth dist.	1394 May 11 j 21:56	29°8'07"05	49.09327 AU
min. Earth dist.	1387 Nov 07 j 08:55	22°8'56"15	47.68294 AU	morning rise	1394 May 22 j 11:21	29°8'21"28	

	1394 Jun 22 j 03:21	0°II	min. Earth dist.	1400 Nov 19 j 10:41	5°II26'38	46.41269 AU
retrograde	1394 Aug 22 j 19:46	0°II37'19	direct	1401 Feb 08 j 08:45	4°II27'31	
	1394 Oct 24 j 09:55	30°R8	evening set	1401 May 07 j 05:53	5°II39'28	
opposition	1394 Nov 13 j 14:05	29°R37'35 -12°02'41	max. Earth dist.	1401 May 18 j 07:34	5°II54'40	48.31823 AU
min. Earth dist.	1394 Nov 13 j 23:13	29°R37'09 47.08745 AU				
direct	1395 Feb 03 j 01:40	28°R38'21	conjunction	1401 May 19 j 02:22	5°II55'45	-10°09'11
evening set	1395 May 03 j 03:47	29°R51'24	minimum elong	1401 May 19 j 02:33	5°II55'46	10°09'11
	1395 May 09 j 11:31	0°II	morning rise	1401 May 31 j 00:17	6°II12'08	
			retrograde	1401 Aug 29 j 10:19	7°II26'21	
conjunction	1395 May 13 j 13:14	0°II05'34 -11°27'21	opposition	1401 Nov 19 j 23:48	6°II26'05	-10°28'06
minimum elong	1395 May 13 j 13:25	0°II05'35 11°27'21	min. Earth dist.	1401 Nov 20 j 16:50	6°II25'16	46.28712 AU
max. Earth dist.	1395 May 13 j 03:32	0°II05'01 48.99670 AU	direct	1402 Feb 09 j 14:26	5°II26'05	
morning rise	1395 May 23 j 23:46	0°II19'49	evening set	1402 May 08 j 06:44	6°II37'55	
retrograde	1395 Aug 24 j 00:53	1°II35'24				
opposition	1395 Nov 14 j 18:39	0°II35'38 -11°49'53	conjunction	1402 May 20 j 08:48	6°II54'33	-9°55'19
min. Earth dist.	1395 Nov 15 j 04:35	0°II35'09 46.98676 AU	minimum elong	1402 May 20 j 09:00	6°II54'33	9°55'19
	1395 Dec 18 j 05:17	30°R8	max. Earth dist.	1402 May 19 j 13:47	6°II53'27	48.19269 AU
direct	1396 Feb 04 j 06:41	29°R36'19	morning rise	1402 Jun 01 j 12:03	7°II11'16	
	1396 Mar 22 j 20:34	0°II	retrograde	1402 Aug 30 j 14:25	8°II25'20	
evening set	1396 May 03 j 03:47	0°II49'10	opposition	1402 Nov 21 j 04:57	7°II24'58	-10°13'34
			min. Earth dist.	1402 Nov 21 j 23:11	7°II24'06	46.15876 AU
conjunction	1396 May 13 j 19:18	1°II03'42 -11°14'54	direct	1403 Feb 10 j 21:50	6°II24'52	
minimum elong	1396 May 13 j 19:30	1°II03'43 11°14'54	evening set	1403 May 09 j 08:07	7°II36'37	
max. Earth dist.	1396 May 13 j 06:55	1°II03'00 48.89497 AU				
morning rise	1396 May 24 j 12:12	1°II18'19	conjunction	1403 May 21 j 15:21	7°II53'34	-9°41'10
retrograde	1396 Aug 24 j 06:39	2°II33'38	minimum elong	1403 May 21 j 15:32	7°II53'35	9°41'10
opposition	1396 Nov 14 j 23:28	1°II33'49 -11°36'51	max. Earth dist.	1403 May 20 j 19:05	7°II52'24	48.06462 AU
min. Earth dist.	1396 Nov 15 j 10:55	1°II33'16 46.88096 AU	morning rise	1403 Jun 02 j 23:52	8°II10'37	
direct	1397 Feb 04 j 11:48	0°II34'24	retrograde	1403 Aug 31 j 21:38	9°II24'34	
evening set	1397 May 04 j 03:38	1°II47'03	opposition	1403 Nov 22 j 09:59	8°II24'09	-9°58'46
			min. Earth dist.	1403 Nov 23 j 04:17	8°II23'16	46.02787 AU
conjunction	1397 May 15 j 01:22	2°II01'56 -11°02'14	direct	1404 Feb 12 j 02:08	7°II23'57	
minimum elong	1397 May 15 j 01:33	2°II01'57 11°02'14	evening set	1404 May 09 j 09:37	8°II35'37	
max. Earth dist.	1397 May 14 j 12:10	2°II01'11 48.78807 AU				
morning rise	1397 May 26 j 00:17	2°II16'55	conjunction	1404 May 21 j 22:00	8°II52'55	-9°26'46
retrograde	1397 Aug 25 j 09:10	3°II32'00	minimum elong	1404 May 21 j 22:11	8°II52'56	9°26'47
opposition	1397 Nov 16 j 04:21	2°II32'05 -11°23'36	max. Earth dist.	1404 May 21 j 00:13	8°II51'39	47.93377 AU
min. Earth dist.	1397 Nov 16 j 17:29	2°II31'28 46.77007 AU	morning rise	1404 Jun 03 j 11:45	9°II10'18	
direct	1398 Feb 05 j 19:50	1°II32'34	retrograde	1404 Sep 01 j 06:14	10°II24'08	
evening set	1398 May 05 j 04:00	2°II45'01	opposition	1404 Nov 22 j 15:22	9°II23'40	-9°43'41
			min. Earth dist.	1404 Nov 23 j 11:35	9°II22'41	45.89414 AU
conjunction	1398 May 16 j 07:34	3°II00'15 -10°49'19	direct	1405 Feb 12 j 05:10	8°II23'23	
minimum elong	1398 May 16 j 07:47	3°II00'16 10°49'20	evening set	1405 May 10 j 11:12	9°II35'01	
max. Earth dist.	1398 May 15 j 16:54	2°II59'25 48.67650 AU	max. Earth dist.	1405 May 22 j 06:51	9°II51'22	47.79995 AU
morning rise	1398 May 27 j 12:25	3°II15'36				
retrograde	1398 Aug 26 j 15:49	4°II30'26	conjunction	1405 May 23 j 04:42	9°II52'38	-9°12'07
opposition	1398 Nov 17 j 09:01	3°II30'26 -11°10'06	minimum elong	1405 May 23 j 04:53	9°II52'39	9°12'07
min. Earth dist.	1398 Nov 17 j 22:37	3°II29'47 46.65477 AU	morning rise	1405 Jun 04 j 23:19	10°II10'21	
direct	1399 Feb 07 j 00:25	2°II30'48	retrograde	1405 Sep 02 j 13:32	11°II24'06	
evening set	1399 May 06 j 04:27	3°II43'03	opposition	1405 Nov 23 j 20:44	10°II23'34	-9°28'21
			min. Earth dist.	1405 Nov 24 j 17:19	10°II22'35	45.75700 AU
conjunction	1399 May 17 j 13:50	3°II58'39 -10°36'11	direct	1406 Feb 13 j 10:04	9°II23'12	
minimum elong	1399 May 17 j 14:01	3°II58'40 10°36'12	evening set	1406 May 11 j 13:25	10°II34'49	
max. Earth dist.	1399 May 16 j 21:17	3°II57'42 48.56057 AU	max. Earth dist.	1406 May 23 j 11:19	10°II51'21	47.66233 AU
morning rise	1399 May 29 j 00:35	4°II14'21				
retrograde	1399 Aug 28 j 00:31	5°II28'58	conjunction	1406 May 24 j 11:40	10°II52'46	-8°57'13
opposition	1399 Nov 18 j 13:58	4°II28'52 -10°56'22	minimum elong	1406 May 24 j 11:51	10°II52'47	8°57'14
min. Earth dist.	1399 Nov 19 j 05:41	4°II28'07 46.53547 AU	morning rise	1406 Jun 06 j 11:21	11°II10'49	
direct	1400 Feb 08 j 02:36	3°II29'06	retrograde	1406 Sep 03 j 21:19	12°II24'29	
evening set	1400 May 06 j 05:02	4°II41'12	opposition	1406 Nov 25 j 02:11	11°II23'54	-9°12'45
			min. Earth dist.	1406 Nov 26 j 00:29	11°II22'49	45.61585 AU
conjunction	1400 May 17 j 20:08	4°II57'09 -10°22'49	direct	1407 Feb 14 j 15:15	10°II23'26	
minimum elong	1400 May 17 j 20:20	4°II57'09 10°22'49	evening set	1407 May 12 j 15:50	11°II35'02	
max. Earth dist.	1400 May 17 j 03:23	4°II56'11 48.44098 AU				
morning rise	1400 May 29 j 12:23	5°II13'11	conjunction	1407 May 25 j 19:00	11°II53'19	-8°42'05
retrograde	1400 Aug 28 j 05:05	6°II27'35	minimum elong	1407 May 25 j 19:11	11°II53'19	8°42'04
opposition	1400 Nov 18 j 18:48	5°II27'24 -10°42'22	max. Earth dist.	1407 May 24 j 17:51	11°II51'50	47.52017 AU

morning rise	1407 Jun 07 j 23:18	12°II11'41	conjunction	1414 Jun 02 j 00:36	19°II05'53	-6°49'14
retrograde	1407 Sep 05 j 01:18	13°II25'18	minimum elong	1414 Jun 02 j 00:45	19°II05'53	6°49'14
opposition	1407 Nov 26 j 07:56	12°II24'38 -8°56'54	morning rise	1414 Jun 16 j 10:29	19°II26'21	
min. Earth dist.	1407 Nov 27 j 07:49	12°II23'28 45.46977 AU	retrograde	1414 Sep 12 j 05:01	20°II39'46	
direct	1408 Feb 15 j 23:26	11°II24'02	opposition	1414 Dec 03 j 02:47	19°II38'10 -6°58'41	
evening set	1408 May 12 j 18:34	12°II35'38	min. Earth dist.	1414 Dec 04 j 10:58	19°II36'34 44.32442 AU	
max. Earth dist.	1408 May 24 j 23:19	12°II52'39 47.37306 AU	direct	1415 Feb 22 j 18:51	18°II36'23	
			evening set	1415 May 19 j 20:18	19°II48'12	
conjunction	1408 May 26 j 02:16	12°II54'14 -8°26'42	max. Earth dist.	1415 Jun 01 j 21:36	20°II06'46 46.22408 AU	
minimum elong	1408 May 26 j 02:26	12°II54'14 8°26'42				
morning rise	1408 Jun 08 j 11:13	13°II12'55	conjunction	1415 Jun 03 j 08:56	20°II08'53 -6°32'05	
retrograde	1408 Sep 05 j 08:18	14°II26'28	minimum elong	1415 Jun 03 j 09:05	20°II08'53 6°32'06	
opposition	1408 Nov 26 j 13:40	13°II25'43 -8°40'48	morning rise	1415 Jun 17 j 22:23	20°II29'38	
min. Earth dist.	1408 Nov 27 j 14:16	13°II24'31 45.31868 AU	retrograde	1415 Sep 13 j 14:45	21°II43'05	
direct	1409 Feb 16 j 05:31	12°II24'59	opposition	1415 Dec 04 j 09:26	20°II41'21 -6°40'42	
evening set	1409 May 13 j 21:29	13°II36'34	min. Earth dist.	1415 Dec 05 j 17:37	20°II39'45 44.14830 AU	
max. Earth dist.	1409 May 26 j 04:42	13°II53'46 47.22080 AU	direct	1416 Feb 24 j 00:07	19°II39'23	
			evening set	1416 May 20 j 01:09	20°II51'20	
conjunction	1409 May 27 j 09:43	13°II55'29 -8°11'05	max. Earth dist.	1416 Jun 02 j 03:41	21°II10'02 46.04792 AU	
minimum elong	1409 May 27 j 09:53	13°II55'29 8°11'05				
morning rise	1409 Jun 09 j 23:11	14°II14'28	conjunction	1416 Jun 03 j 17:10	21°II12'17 -6°14'40	
retrograde	1409 Sep 06 j 18:28	15°II27'59	minimum elong	1416 Jun 03 j 17:19	21°II12'18 6°14'39	
opposition	1409 Nov 27 j 19:38	14°II27'06 -8°24'27	morning rise	1416 Jun 18 j 10:17	21°II33'19	
min. Earth dist.	1409 Nov 28 j 22:32	14°II25'47 45.16263 AU	retrograde	1416 Sep 14 j 01:26	22°II46'51	
direct	1410 Feb 17 j 08:20	13°II26'14	opposition	1416 Dec 04 j 16:18	21°II44'59 -6°22'25	
evening set	1410 May 15 j 00:34	14°II37'49	min. Earth dist.	1416 Dec 06 j 01:57	21°II43'18 43.96969 AU	
max. Earth dist.	1410 May 27 j 11:41	14°II55'17 47.06384 AU	direct	1417 Feb 24 j 05:03	20°II42'51	
			evening set	1417 May 21 j 06:13	21°II54'56	
conjunction	1410 May 28 j 17:18	14°II57'01 -7°55'13	max. Earth dist.	1417 Jun 03 j 12:10	22°II13'54 45.86901 AU	
minimum elong	1410 May 28 j 17:28	14°II57'02 7°55'13				
morning rise	1410 Jun 11 j 11:02	15°II16'19	conjunction	1417 Jun 05 j 01:50	22°II16'11 -5°56'58	
retrograde	1410 Sep 08 j 01:51	16°II29'47	minimum elong	1417 Jun 05 j 01:59	22°II16'11 5°56'59	
opposition	1410 Nov 29 j 01:35	15°II28'46 -8°07'50	morning rise	1417 Jun 19 j 22:10	22°II37'29	
min. Earth dist.	1410 Nov 30 j 04:54	15°II27'26 45.00197 AU	retrograde	1417 Sep 15 j 08:00	23°II51'06	
direct	1411 Feb 18 j 14:07	14°II27'43	opposition	1417 Dec 05 j 23:17	22°II49'06 -6°03'51	
evening set	1411 May 16 j 04:08	15°II39'19	min. Earth dist.	1417 Dec 07 j 09:58	22°II47'22 43.78803 AU	
max. Earth dist.	1411 May 28 j 16:56	15°II56'56 46.90246 AU	direct	1418 Feb 25 j 13:42	21°II46'48	
			evening set	1418 May 22 j 11:49	22°II59'04	
conjunction	1411 May 30 j 00:57	15°II58'50 -7°39'07	max. Earth dist.	1418 Jun 04 j 19:16	23°II18'12 45.68682 AU	
minimum elong	1411 May 30 j 01:08	15°II58'50 7°39'07				
morning rise	1411 Jun 12 j 23:04	16°II18'26	conjunction	1418 Jun 06 j 10:38	23°II20'35 -5°39'00	
retrograde	1411 Sep 09 j 09:34	17°II31'50	minimum elong	1418 Jun 06 j 10:46	23°II20'35 5°38'59	
opposition	1411 Nov 30 j 07:38	16°II30'41 -7°50'58	morning rise	1418 Jun 21 j 10:20	23°II42'10	
min. Earth dist.	1411 Dec 01 j 12:37	16°II29'16 44.83733 AU	retrograde	1418 Sep 16 j 15:24	24°II55'54	
direct	1412 Feb 19 j 20:36	15°II29'27	opposition	1418 Dec 07 j 06:28	23°II53'46 -5°45'00	
evening set	1412 May 16 j 07:45	16°II41'06	min. Earth dist.	1418 Dec 08 j 17:57	23°II51'59 43.60275 AU	
max. Earth dist.	1412 May 29 j 00:24	16°II58'59 46.73726 AU	direct	1419 Feb 26 j 22:10	22°II51'17	
			evening set	1419 May 23 j 17:51	24°II03'44	
conjunction	1412 May 30 j 08:50	17°II00'54 -7°22'45	max. Earth dist.	1419 Jun 06 j 02:38	24°II23'01 45.50038 AU	
minimum elong	1412 May 30 j 08:59	17°II00'55 7°22'45				
morning rise	1412 Jun 13 j 10:51	17°II20'47	conjunction	1419 Jun 07 j 19:48	24°II25'31 -5°20'47	
retrograde	1412 Sep 09 j 13:43	18°II34'11	minimum elong	1419 Jun 07 j 19:56	24°II25'32 5°20'47	
opposition	1412 Nov 30 j 13:55	17°II32'53 -7°33'49	morning rise	1419 Jun 22 j 22:31	24°II47'23	
min. Earth dist.	1412 Dec 01 j 20:03	17°II31'24 44.66915 AU	retrograde	1419 Sep 18 j 00:31	26°II01'15	
direct	1413 Feb 20 j 06:21	16°II31'28	opposition	1419 Dec 08 j 13:55	24°II58'58 -5°25'53	
evening set	1413 May 17 j 11:34	17°II43'08	min. Earth dist.	1419 Dec 10 j 03:40	24°II57'04 43.41306 AU	
max. Earth dist.	1413 May 30 j 06:43	18°II01'14 46.56893 AU	direct	1420 Feb 28 j 04:44	23°II56'18	
			evening set	1420 May 24 j 00:12	25°II08'56	
conjunction	1413 May 31 j 16:31	18°II03'14 -7°06'08	max. Earth dist.	1420 Jun 06 j 11:13	25°II28'26 45.30949 AU	
minimum elong	1413 May 31 j 16:41	18°II03'15 7°06'08				
morning rise	1413 Jun 14 j 22:35	18°II23'25	conjunction	1420 Jun 08 j 05:11	25°II31'00 -5°02'18	
retrograde	1413 Sep 10 j 20:35	19°II36'48	minimum elong	1420 Jun 08 j 05:19	25°II31'00 5°02'18	
opposition	1413 Dec 01 j 20:15	18°II35'22 -7°16'24	morning rise	1420 Jun 23 j 10:45	25°II53'07	
min. Earth dist.	1413 Dec 03 j 02:37	18°II33'51 44.49810 AU	retrograde	1420 Sep 18 j 10:29	27°II07'08	
direct	1414 Feb 21 j 13:21	17°II33'45	opposition	1420 Dec 08 j 21:33	26°II04'41 -5°06'29	
evening set	1414 May 18 j 15:47	18°II45'30	min. Earth dist.	1420 Dec 10 j 11:36	26°II02'46 43.21876 AU	
max. Earth dist.	1414 May 31 j 13:25	19°II03'47 46.39771 AU	direct	1421 Feb 28 j 11:05	25°II01'48	

evening set	1421 May 25 j 06:52	26° Π 14'39		conjunction	1427 Jun 17 j 04:10	3° \mathfrak{D} 23'30	-2°45'34
max. Earth dist.	1421 Jun 07 j 18:02	26° Π 34'15	45.11391 AU	minimum elong	1427 Jun 17 j 04:14	3° \mathfrak{D} 23'30	2°45'34
				morning rise	1427 Jul 03 j 01:26	3° \mathfrak{D} 47'19	
conjunction	1421 Jun 09 j 14:33	26° Π 36'58	-4°43'34	retrograde	1427 Sep 27 j 10:15	5° \mathfrak{D} 02'51	
minimum elong	1421 Jun 09 j 14:39	26° Π 36'59	4°43'34	opposition	1427 Dec 17 j 08:26	3° \mathfrak{D} 59'00	-2°42'44
morning rise	1421 Jun 24 j 23:00	26° Π 59'22		min. Earth dist.	1427 Dec 19 j 05:54	3° \mathfrak{D} 56'38	41.75966 AU
retrograde	1421 Sep 19 j 21:43	28° Π 13'32		direct	1428 Mar 07 j 20:34	2° \mathfrak{D} 54'23	
opposition	1421 Dec 10 j 05:28	27° Π 10'54	-4°46'48	evening set	1428 Jun 01 j 16:23	4° \mathfrak{D} 09'21	
min. Earth dist.	1421 Dec 11 j 21:34	27° Π 08'52	43.01998 AU	max. Earth dist.	1428 Jun 15 j 11:09	4° \mathfrak{D} 30'03	43.65069 AU
direct	1422 Mar 01 j 17:49	26° Π 07'47					
evening set	1422 May 26 j 13:53	27° Π 20'52		conjunction	1428 Jun 17 j 15:10	4° \mathfrak{D} 33'21	-2°24'57
max. Earth dist.	1422 Jun 09 j 03:26	27° Π 40'41	44.91390 AU	minimum elong	1428 Jun 17 j 15:14	4° \mathfrak{D} 33'21	2°24'58
				morning rise	1428 Jul 03 j 14:08	4° \mathfrak{D} 57'24	
conjunction	1422 Jun 11 j 00:25	27° Π 43'27	-4°24'34	retrograde	1428 Sep 27 j 21:05	6° \mathfrak{D} 13'15	
minimum elong	1422 Jun 11 j 00:32	27° Π 43'27	4°24'34	opposition	1428 Dec 17 j 17:48	5° \mathfrak{D} 09'12	-2°21'01
morning rise	1422 Jun 26 j 11:19	28° Π 06'05		min. Earth dist.	1428 Dec 19 j 15:57	5° \mathfrak{D} 06'47	41.54262 AU
retrograde	1422 Sep 21 j 05:45	29° Π 20'24		direct	1429 Mar 09 j 07:03	4° \mathfrak{D} 04'21	
opposition	1422 Dec 11 j 13:23	28° Π 17'35	-4°26'51	evening set	1429 Jun 03 j 02:10	5° \mathfrak{D} 19'43	
min. Earth dist.	1422 Dec 13 j 06:33	28° Π 15'30	42.81696 AU	max. Earth dist.	1429 Jun 16 j 21:43	5° \mathfrak{D} 40'36	43.43310 AU
direct	1423 Mar 03 j 04:15	27° Π 14'14					
evening set	1423 May 27 j 21:27	28° Π 27'34		conjunction	1429 Jun 19 j 02:29	5° \mathfrak{D} 43'58	-2°04'04
max. Earth dist.	1423 Jun 10 j 11:22	28° Π 47'30	44.71000 AU	minimum elong	1429 Jun 19 j 02:32	5° \mathfrak{D} 43'58	2°04'03
				morning rise	1429 Jul 05 j 02:41	6° \mathfrak{D} 08'13	
conjunction	1423 Jun 12 j 10:22	28° Π 50'24	-4°05'19	retrograde	1429 Sep 29 j 06:23	7° \mathfrak{D} 24'26	
minimum elong	1423 Jun 12 j 10:28	28° Π 50'24	4°05'19	opposition	1429 Dec 19 j 03:32	6° \mathfrak{D} 20'11	-1°59'01
morning rise	1423 Jun 27 j 23:51	29° Π 13'17		min. Earth dist.	1429 Dec 21 j 03:16	6° \mathfrak{D} 17'41	41.32343 AU
	1423 Aug 03 j 11:49	0° \mathfrak{D}		direct	1430 Mar 10 j 18:10	5° \mathfrak{D} 15'06	
retrograde	1423 Sep 22 j 15:21	0° \mathfrak{D} 27'47		evening set	1430 Jun 04 j 12:44	6° \mathfrak{D} 30'55	
	1423 Nov 12 j 08:14	30° \mathfrak{R} Π		max. Earth dist.	1430 Jun 18 j 08:43	6° \mathfrak{D} 51'56	43.21319 AU
opposition	1423 Dec 12 j 21:32	29° Π 24'46	-4°06'37				
min. Earth dist.	1423 Dec 14 j 15:27	29° Π 22'38	42.61046 AU	conjunction	1430 Jun 20 j 14:16	6° \mathfrak{D} 55'22	-1°42'54
direct	1424 Mar 03 j 13:11	28° Π 21'10		minimum elong	1430 Jun 20 j 14:19	6° \mathfrak{D} 55'22	1°42'55
evening set	1424 May 28 j 05:08	29° Π 34'46		morning rise	1430 Jul 06 j 15:40	7° \mathfrak{D} 19'51	
max. Earth dist.	1424 Jun 10 j 20:17	29° Π 54'51	44.50263 AU	retrograde	1430 Sep 30 j 17:48	8° \mathfrak{D} 36'27	
				opposition	1430 Dec 20 j 13:19	7° \mathfrak{D} 32'00	-1°36'44
conjunction	1424 Jun 12 j 20:25	29° Π 57'50	-3°45'47	min. Earth dist.	1430 Dec 22 j 13:15	7° \mathfrak{D} 29'29	41.10161 AU
minimum elong	1424 Jun 12 j 20:31	29° Π 57'51	3°45'47	direct	1431 Mar 12 j 03:16	6° \mathfrak{D} 26'40	
	1424 Jun 14 j 07:11	0° \mathfrak{D}		evening set	1431 Jun 05 j 23:59	7° \mathfrak{D} 42'57	
morning rise	1424 Jun 28 j 12:03	0° \mathfrak{D} 20'59		max. Earth dist.	1431 Jun 19 j 18:40	8° \mathfrak{D} 04'01	42.99006 AU
retrograde	1424 Sep 22 j 23:23	1° \mathfrak{D} 35'42					
opposition	1424 Dec 13 j 05:59	0° \mathfrak{D} 32'28	-3°46'05	conjunction	1431 Jun 22 j 02:25	8° \mathfrak{D} 07'36	-1°21'29
min. Earth dist.	1424 Dec 15 j 01:39	0° \mathfrak{D} 30'13	42.40088 AU	minimum elong	1431 Jun 22 j 02:28	8° \mathfrak{D} 07'37	1°21'29
	1425 Jan 09 j 21:39	30° \mathfrak{R} Π		morning rise	1431 Jul 08 j 04:45	8° \mathfrak{D} 32'17	
direct	1425 Mar 04 j 22:05	29° Π 28'37		retrograde	1431 Oct 02 j 07:32	9° \mathfrak{D} 49'18	
	1425 Apr 27 j 01:13	0° \mathfrak{D}		opposition	1431 Dec 21 j 23:42	8° \mathfrak{D} 44'38	-1°14'09
evening set	1425 May 29 j 13:16	0° \mathfrak{D} 42'29		min. Earth dist.	1431 Dec 24 j 01:49	8° \mathfrak{D} 42'00	40.87646 AU
max. Earth dist.	1425 Jun 12 j 06:14	1° \mathfrak{D} 02'47	44.29264 AU	direct	1432 Mar 12 j 11:02	7° \mathfrak{D} 39'02	
				evening set	1432 Jun 06 j 11:28	8° \mathfrak{D} 55'49	
conjunction	1425 Jun 14 j 06:44	1° \mathfrak{D} 05'48	-3°25'59	max. Earth dist.	1432 Jun 20 j 06:48	9° \mathfrak{D} 17'02	42.76332 AU
minimum elong	1425 Jun 14 j 06:49	1° \mathfrak{D} 05'49	3°25'59				
morning rise	1425 Jun 30 j 00:27	1° \mathfrak{D} 29'11		conjunction	1432 Jun 22 j 14:51	9° \mathfrak{D} 20'40	-0°59'48
retrograde	1425 Sep 24 j 10:14	2° \mathfrak{D} 44'08		minimum elong	1432 Jun 22 j 14:52	9° \mathfrak{D} 20'40	0°59'49
opposition	1425 Dec 14 j 14:27	1° \mathfrak{D} 40'42	-3°25'16	morning rise	1432 Jul 08 j 17:44	9° \mathfrak{D} 45'31	
min. Earth dist.	1425 Dec 16 j 10:04	1° \mathfrak{D} 38'27	42.18900 AU	retrograde	1432 Oct 02 j 21:29	11° \mathfrak{D} 02'58	
direct	1426 Mar 06 j 05:26	0° \mathfrak{D} 36'35		opposition	1432 Dec 22 j 10:20	9° \mathfrak{D} 58'04	-0°51'18
evening set	1426 May 30 j 21:52	1° \mathfrak{D} 50'47		min. Earth dist.	1432 Dec 24 j 12:59	9° \mathfrak{D} 55'23	40.64753 AU
max. Earth dist.	1426 Jun 13 j 14:41	2° \mathfrak{D} 11'11	44.08041 AU	direct	1433 Mar 13 j 21:08	8° \mathfrak{D} 52'10	
				evening set	1433 Jun 07 j 23:45	10° \mathfrak{D} 09'28	
conjunction	1426 Jun 15 j 17:15	2° \mathfrak{D} 14'21	-3°05'55	max. Earth dist.	1433 Jun 21 j 17:04	10° \mathfrak{D} 30'42	42.53282 AU
minimum elong	1426 Jun 15 j 17:20	2° \mathfrak{D} 14'21	3°05'55				
morning rise	1426 Jul 01 j 12:59	2° \mathfrak{D} 37'56		conjunction	1433 Jun 24 j 03:33	10° \mathfrak{D} 34'30	-0°37'52
retrograde	1426 Sep 26 j 00:09	3° \mathfrak{D} 53'11		minimum elong	1433 Jun 24 j 03:34	10° \mathfrak{D} 34'30	0°37'52
opposition	1426 Dec 15 j 23:22	2° \mathfrak{D} 49'31	-3°04'08	morning rise	1433 Jul 10 j 07:06	10° \mathfrak{D} 59'32	
min. Earth dist.	1426 Dec 17 j 20:35	2° \mathfrak{D} 47'11	41.97521 AU	retrograde	1433 Oct 04 j 12:31	12° \mathfrak{D} 17'25	
direct	1427 Mar 07 j 10:45	1° \mathfrak{D} 45'09		opposition	1433 Dec 23 j 21:11	11° \mathfrak{D} 12'15	-0°28'09
evening set	1427 Jun 01 j 06:50	2° \mathfrak{D} 59'43		min. Earth dist.	1433 Dec 26 j 01:13	11° \mathfrak{D} 09'29	40.41507 AU
max. Earth dist.	1427 Jun 15 j 01:45	3° \mathfrak{D} 20'20	43.86634 AU	direct	1434 Mar 15 j 07:13	10° \mathfrak{D} 06'02	

evening set	1434 Jun 09 j 12:26	11°  23'53		conjunction	1440 Jul 03 j 06:17	19°  33'24	2°02'45
max. Earth dist.	1434 Jun 23 j 05:25	11°  45'12	42.29864 AU	minimum elong	1440 Jul 03 j 06:13	19°  33'24	2°02'44
				morning rise	1440 Jul 19 j 06:21	19°  59'24	
conjunction	1434 Jun 25 j 16:45	11°  49'05	-0°15'41	retrograde	1440 Oct 13 j 14:22	21°  21'15	
minimum elong	1434 Jun 25 j 16:46	11°  49'05	0°15'42	opposition	1441 Jan 01 j 10:57	20°  14'04	2°21'32
behind sun begin	1434 Jun 25 j 16:19	11°  49'04		min. Earth dist.	1441 Jan 03 j 20:25	20°  10'54	38.72339 AU
behind sun end	1434 Jun 25 j 17:13	11°  49'07		direct	1441 Mar 23 j 21:27	19°  05'27	
morning rise	1434 Jul 11 j 20:26	12°  14'18		evening set	1441 Jun 18 j 22:22	20°  28'04	
retrograde	1434 Oct 05 j 23:22	13°  32'38		max. Earth dist.	1441 Jul 02 j 03:57	20°  49'39	40.59976 AU
opposition	1434 Dec 25 j 08:28	12°  27'12	-0°04'43				
min. Earth dist.	1434 Dec 27 j 13:58	12°  24'20	40.17909 AU	conjunction	1441 Jul 04 j 22:01	20°  54'12	2°26'37
asc. node	1435 Mar 08 j 17:40	11°  21'27		minimum elong	1441 Jul 04 j 21:56	20°  54'11	2°26'37
direct	1435 Mar 16 j 20:16	11°  20'39		morning rise	1441 Jul 20 j 20:25	21°  20'17	
evening set	1435 Jun 11 j 01:48	12°  39'03		retrograde	1441 Oct 15 j 04:12	22°  42'53	
max. Earth dist.	1435 Jun 24 j 17:40	13°  00'26	42.06128 AU	opposition	1442 Jan 03 j 00:46	21°  35'26	2°46'48
				min. Earth dist.	1442 Jan 05 j 11:52	21°  32'09	38.47749 AU
conjunction	1435 Jun 27 j 06:10	13°  04'25	0°06'51	direct	1442 Mar 25 j 10:34	20°  26'30	
minimum elong	1435 Jun 27 j 06:09	13°  04'25	0°06'52	evening set	1442 Jun 20 j 16:21	21°  49'59	
behind sun begin	1435 Jun 27 j 00:06	13°  04'03		max. Earth dist.	1442 Jul 03 j 20:02	22°  11'36	40.35261 AU
behind sun end	1435 Jun 27 j 12:12	13°  04'48					
morning rise	1435 Jul 13 j 09:55	13°  29'48		conjunction	1442 Jul 06 j 14:15	22°  16'12	2°50'43
retrograde	1435 Oct 07 j 10:58	14°  48'37		minimum elong	1442 Jul 06 j 14:10	22°  16'11	2°50'43
opposition	1435 Dec 26 j 19:53	13°  42'53	0°18'59	morning rise	1442 Jul 22 j 10:48	22°  42'21	
min. Earth dist.	1435 Dec 29 j 01:43	13°  39'59	39.94032 AU	retrograde	1442 Oct 16 j 20:25	24°  05'46	
direct	1436 Mar 17 j 09:05	12°  35'59		opposition	1443 Jan 04 j 15:00	22°  58'03	3°12'18
evening set	1436 Jun 11 j 15:41	13°  54'58		min. Earth dist.	1443 Jan 07 j 02:06	22°  54'44	38.23017 AU
max. Earth dist.	1436 Jun 25 j 05:38	14°  16'22	41.82117 AU	direct	1443 Mar 26 j 23:26	21°  48'47	
				evening set	1443 Jun 22 j 11:17	23°  13'11	
conjunction	1436 Jun 27 j 19:53	14°  20'31	0°29'31	max. Earth dist.	1443 Jul 05 j 10:30	23°  34'41	40.10348 AU
minimum elong	1436 Jun 27 j 19:52	14°  20'31	0°29'31				
morning rise	1436 Jul 13 j 23:25	14°  46'02		conjunction	1443 Jul 08 j 06:55	23°  39'28	3°15'01
retrograde	1436 Oct 08 j 00:21	16°  05'22		minimum elong	1443 Jul 08 j 06:49	23°  39'27	3°15'01
opposition	1436 Dec 27 j 07:49	14°  59'21	0°42'58	morning rise	1443 Jul 24 j 01:18	24°  05'41	
min. Earth dist.	1436 Dec 29 j 15:30	14°  56'20	39.69931 AU	retrograde	1443 Oct 18 j 15:15	25°  29'56	
direct	1437 Mar 18 j 18:57	13°  52'06		opposition	1444 Jan 06 j 05:48	24°  21'56	3°38'02
evening set	1437 Jun 13 j 05:55	15°  11'42		min. Earth dist.	1444 Jan 08 j 18:49	24°  18'30	37.98083 AU
max. Earth dist.	1437 Jun 26 j 19:43	15°  33'13	41.57912 AU	direct	1444 Mar 27 j 10:13	23°  12'19	
				evening set	1444 Jun 23 j 06:52	24°  37'41	
conjunction	1437 Jun 29 j 09:52	15°  37'23	0°52'28	max. Earth dist.	1444 Jul 06 j 03:40	24°  59'11	39.85200 AU
minimum elong	1437 Jun 29 j 09:50	15°  37'23	0°52'28				
morning rise	1437 Jul 15 j 12:53	16°  03'02		conjunction	1444 Jul 09 j 00:14	25°  04'00	3°39'30
retrograde	1437 Oct 09 j 14:15	17°  22'56		minimum elong	1444 Jul 09 j 00:07	25°  04'00	3°39'31
opposition	1437 Dec 28 j 20:00	16°  16'37	1°07'13	morning rise	1444 Jul 24 j 15:57	25°  30'15	
min. Earth dist.	1437 Dec 31 j 03:31	16°  13'36	39.45662 AU	retrograde	1444 Oct 19 j 09:02	26°  55'23	
direct	1438 Mar 20 j 06:50	15°  09'01		opposition	1445 Jan 06 j 21:06	25°  47'05	4°04'00
evening set	1438 Jun 14 j 21:08	16°  29'18		min. Earth dist.	1445 Jan 09 j 10:37	25°  43'36	37.72904 AU
max. Earth dist.	1438 Jun 28 j 08:14	16°  50'47	41.33556 AU	direct	1445 Mar 29 j 01:48	24°  37'05	
				evening set	1445 Jun 25 j 03:20	26°  03'28	
conjunction	1438 Jul 01 j 00:17	16°  55'06	1°15'39	max. Earth dist.	1445 Jul 07 j 19:14	26°  24'48	39.59804 AU
minimum elong	1438 Jul 01 j 00:15	16°  55'06	1°15'39				
morning rise	1438 Jul 17 j 02:41	17°  20'53		conjunction	1445 Jul 10 j 17:48	26°  29'48	4°04'11
retrograde	1438 Oct 11 j 07:09	18°  41'23		minimum elong	1445 Jul 10 j 17:40	26°  29'48	4°04'11
opposition	1438 Dec 30 j 08:30	17°  34'46	1°31'44	morning rise	1445 Jul 26 j 06:51	26°  56'04	
min. Earth dist.	1439 Jan 01 j 17:18	17°  31'40	39.21291 AU	retrograde	1445 Oct 21 j 05:28	28°  22'06	
direct	1439 Mar 21 j 17:45	16°  26'48		opposition	1446 Jan 08 j 12:52	27°  13'28	4°30'10
evening set	1439 Jun 16 j 12:51	17°  47'49		min. Earth dist.	1446 Jan 11 j 03:25	27°  09'55	37.47489 AU
max. Earth dist.	1439 Jun 29 j 23:16	18°  09'25	41.09097 AU	direct	1446 Mar 30 j 18:08	26°  03'05	
				evening set	1446 Jun 27 j 00:41	27°  30'31	
conjunction	1439 Jul 02 j 15:15	18°  13'45	1°39'05	max. Earth dist.	1446 Jul 09 j 12:44	27°  51'44	39.34148 AU
minimum elong	1439 Jul 02 j 15:12	18°  13'44	1°39'05				
morning rise	1439 Jul 18 j 16:27	18°  39'38		conjunction	1446 Jul 12 j 12:10	27°  56'51	4°29'03
retrograde	1439 Oct 12 j 22:04	20°  00'47		minimum elong	1446 Jul 12 j 12:02	27°  56'50	4°29'03
opposition	1439 Dec 31 j 21:36	18°  53'53	1°56'30	morning rise	1446 Jul 27 j 21:52	28°  23'06	
min. Earth dist.	1440 Jan 03 j 06:59	18°  50'43	38.96839 AU	retrograde	1446 Oct 22 j 23:45	29°  50'04	
direct	1440 Mar 22 j 08:08	17°  45'35		opposition	1447 Jan 10 j 05:07	28°  41'05	4°56'32
evening set	1440 Jun 17 j 05:13	19°  07'22		min. Earth dist.	1447 Jan 12 j 21:14	28°  37'25	37.21844 AU
max. Earth dist.	1440 Jun 30 j 13:13	19°  28'58	40.84580 AU	direct	1447 Apr 01 j 11:33	27°  30'17	




























































































































evening set	1447 Jun 28 j 22:58	28° $\mathring{\text{D}}$ 58'48		minimum elong	1453 Jul 23 j 09:32	8° $\mathring{\text{N}}$ 41'30	7°26'27
max. Earth dist.	1447 Jul 11 j 06:36	29° $\mathring{\text{D}}$ 19'53	39.08298 AU	morning rise	1453 Aug 06 j 10:04	9° $\mathring{\text{N}}$ 06'55	
				retrograde	1453 Nov 02 j 23:40	10° $\mathring{\text{N}}$ 41'58	
conjunction	1447 Jul 14 j 06:53	29° $\mathring{\text{D}}$ 25'06	4°54'05	opposition	1454 Jan 20 j 13:45	9° $\mathring{\text{N}}$ 30'18	8°04'55
minimum elong	1447 Jul 14 j 06:43	29° $\mathring{\text{D}}$ 25'05	4°54'04	min. Earth dist.	1454 Jan 23 j 09:22	9° $\mathring{\text{N}}$ 26'16	35.41338 AU
morning rise	1447 Jul 29 j 13:06	29° $\mathring{\text{D}}$ 51'19		direct	1454 Apr 11 j 15:25	8° $\mathring{\text{N}}$ 16'24	
	1447 Aug 03 j 17:48	0° $\mathring{\text{N}}$		evening set	1454 Jul 11 j 12:34	9° $\mathring{\text{N}}$ 54'07	
retrograde	1447 Oct 24 j 17:14	1° $\mathring{\text{N}}$ 19'16		max. Earth dist.	1454 Jul 22 j 04:49	10° $\mathring{\text{N}}$ 13'35	37.26711 AU
opposition	1448 Jan 11 j 21:49	0° $\mathring{\text{N}}$ 09'55	5°23'05				
min. Earth dist.	1448 Jan 14 j 13:54	0° $\mathring{\text{N}}$ 06'14	36.96041 AU	conjunction	1454 Jul 25 j 08:27	10° $\mathring{\text{N}}$ 19'24	7°52'00
	1448 Jan 19 j 02:48	30° $\mathring{\text{R}}$ $\mathring{\text{D}}$		minimum elong	1454 Jul 25 j 08:11	10° $\mathring{\text{N}}$ 19'22	7°52'00
direct	1448 Apr 02 j 04:47	28° $\mathring{\text{D}}$ 58'41		morning rise	1454 Aug 08 j 02:14	10° $\mathring{\text{N}}$ 44'33	
	1448 Jun 12 j 12:52	0° $\mathring{\text{N}}$		retrograde	1454 Nov 04 j 21:44	12° $\mathring{\text{N}}$ 21'01	
evening set	1448 Jun 29 j 21:53	0° $\mathring{\text{N}}$ 28'19		opposition	1455 Jan 22 j 10:25	11° $\mathring{\text{N}}$ 08'59	8°32'04
max. Earth dist.	1448 Jul 12 j 00:04	0° $\mathring{\text{N}}$ 49'11	38.82289 AU	min. Earth dist.	1455 Jan 25 j 05:36	11° $\mathring{\text{N}}$ 04'57	35.15917 AU
				direct	1455 Apr 13 j 12:02	9° $\mathring{\text{N}}$ 54'39	
conjunction	1448 Jul 15 j 01:55	0° $\mathring{\text{N}}$ 54'34	5°19'15	evening set	1455 Jul 13 j 19:00	11° $\mathring{\text{N}}$ 33'59	
minimum elong	1448 Jul 15 j 01:45	0° $\mathring{\text{N}}$ 54'33	5°19'15	max. Earth dist.	1455 Jul 24 j 02:44	11° $\mathring{\text{N}}$ 53'00	37.01092 AU
morning rise	1448 Jul 30 j 04:11	1° $\mathring{\text{N}}$ 20'44					
retrograde	1448 Oct 25 j 10:54	2° $\mathring{\text{N}}$ 49'43		conjunction	1455 Jul 27 j 07:49	11° $\mathring{\text{N}}$ 58'58	8°17'31
opposition	1449 Jan 12 j 15:09	1° $\mathring{\text{N}}$ 39'59	5°49'48	minimum elong	1455 Jul 27 j 07:33	11° $\mathring{\text{N}}$ 58'57	8°17'30
min. Earth dist.	1449 Jan 15 j 08:53	1° $\mathring{\text{N}}$ 36'10	36.70136 AU	morning rise	1455 Aug 09 j 18:36	12° $\mathring{\text{N}}$ 23'50	
direct	1449 Apr 03 j 20:08	0° $\mathring{\text{N}}$ 28'18		retrograde	1455 Nov 06 j 21:19	14° $\mathring{\text{N}}$ 01'48	
evening set	1449 Jul 01 j 21:46	1° $\mathring{\text{N}}$ 59'06		opposition	1456 Jan 24 j 08:03	12° $\mathring{\text{N}}$ 49'24	8°59'12
max. Earth dist.	1449 Jul 13 j 20:12	2° $\mathring{\text{N}}$ 19'53	38.56210 AU	min. Earth dist.	1456 Jan 27 j 04:40	12° $\mathring{\text{N}}$ 45'15	34.90551 AU
				direct	1456 Apr 14 j 06:22	11° $\mathring{\text{N}}$ 34'38	
conjunction	1449 Jul 16 j 21:37	2° $\mathring{\text{N}}$ 25'16	5°44'32	evening set	1456 Jul 15 j 02:26	13° $\mathring{\text{N}}$ 15'38	
minimum elong	1449 Jul 16 j 21:26	2° $\mathring{\text{N}}$ 25'15	5°44'32	max. Earth dist.	1456 Jul 25 j 03:18	13° $\mathring{\text{N}}$ 34'18	36.75500 AU
morning rise	1449 Jul 31 j 19:29	2° $\mathring{\text{N}}$ 51'20					
retrograde	1449 Oct 27 j 06:08	4° $\mathring{\text{N}}$ 21'24		conjunction	1456 Jul 28 j 07:47	13° $\mathring{\text{N}}$ 40'17	8°42'59
opposition	1450 Jan 14 j 08:46	3° $\mathring{\text{N}}$ 11'17	6°16'39	minimum elong	1456 Jul 28 j 07:30	13° $\mathring{\text{N}}$ 40'16	8°42'59
min. Earth dist.	1450 Jan 17 j 02:14	3° $\mathring{\text{N}}$ 07'28	36.44200 AU	morning rise	1456 Aug 10 j 10:53	14° $\mathring{\text{N}}$ 04'48	
direct	1450 Apr 05 j 12:15	1° $\mathring{\text{N}}$ 59'09			1456 Sep 12 j 05:17	15° $\mathring{\text{N}}$	
evening set	1450 Jul 03 j 22:45	3° $\mathring{\text{N}}$ 31'11		retrograde	1456 Nov 07 j 21:18	15° $\mathring{\text{N}}$ 44'21	
max. Earth dist.	1450 Jul 15 j 14:40	3° $\mathring{\text{N}}$ 51'41	38.30120 AU		1457 Jan 05 j 06:31	15° $\mathring{\text{R}}$ $\mathring{\text{N}}$	
				opposition	1457 Jan 25 j 06:18	14° $\mathring{\text{N}}$ 31'34	9°26'17
conjunction	1450 Jul 18 j 17:47	3° $\mathring{\text{N}}$ 57'14	6°09'56	min. Earth dist.	1457 Jan 28 j 02:44	14° $\mathring{\text{N}}$ 27'23	34.65200 AU
minimum elong	1450 Jul 18 j 17:35	3° $\mathring{\text{N}}$ 57'13	6°09'57	direct	1457 Apr 16 j 03:24	13° $\mathring{\text{N}}$ 16'20	
morning rise	1450 Aug 02 j 11:03	4° $\mathring{\text{N}}$ 23'11		evening set	1457 Jul 17 j 11:25	14° $\mathring{\text{N}}$ 59'06	
retrograde	1450 Oct 29 j 04:06	5° $\mathring{\text{N}}$ 54'25			1457 Jul 17 j 23:04	15° $\mathring{\text{N}}$	
opposition	1451 Jan 16 j 03:07	4° $\mathring{\text{N}}$ 43'53	6°43'37	max. Earth dist.	1457 Jul 27 j 02:22	15° $\mathring{\text{N}}$ 17'11	36.49914 AU
min. Earth dist.	1451 Jan 18 j 21:37	4° $\mathring{\text{N}}$ 39'59	36.18309 AU				
direct	1451 Apr 07 j 03:56	3° $\mathring{\text{N}}$ 31'17		conjunction	1457 Jul 30 j 08:30	15° $\mathring{\text{N}}$ 23'21	9°08'22
evening set	1451 Jul 06 j 00:31	5° $\mathring{\text{N}}$ 04'38		minimum elong	1457 Jul 30 j 08:12	15° $\mathring{\text{N}}$ 23'20	9°08'21
max. Earth dist.	1451 Jul 17 j 11:56	5° $\mathring{\text{N}}$ 24'58	38.04084 AU	morning rise	1457 Aug 12 j 03:38	15° $\mathring{\text{N}}$ 47'29	
				retrograde	1457 Nov 10 j 00:15	17° $\mathring{\text{N}}$ 28'40	
conjunction	1451 Jul 20 j 14:34	5° $\mathring{\text{N}}$ 30'32	6°35'24	opposition	1458 Jan 27 j 05:09	16° $\mathring{\text{N}}$ 15'28	9°53'17
minimum elong	1451 Jul 20 j 14:21	5° $\mathring{\text{N}}$ 30'31	6°35'24	min. Earth dist.	1458 Jan 30 j 02:33	16° $\mathring{\text{N}}$ 11'13	34.39875 AU
morning rise	1451 Aug 04 j 02:27	5° $\mathring{\text{N}}$ 56'20			1458 Apr 14 j 00:54	15° $\mathring{\text{R}}$ $\mathring{\text{N}}$	
retrograde	1451 Oct 31 j 01:40	7° $\mathring{\text{N}}$ 28'46		direct	1458 Apr 18 j 00:19	14° $\mathring{\text{N}}$ 59'46	
opposition	1452 Jan 17 j 22:04	6° $\mathring{\text{N}}$ 17'51	7°10'40		1458 Apr 22 j 00:54	15° $\mathring{\text{N}}$	
min. Earth dist.	1452 Jan 20 j 16:42	6° $\mathring{\text{N}}$ 13'55	35.92508 AU	evening set	1458 Jul 19 j 21:34	16° $\mathring{\text{N}}$ 44'21	
direct	1452 Apr 07 j 23:53	5° $\mathring{\text{N}}$ 04'49		max. Earth dist.	1458 Jul 29 j 04:12	17° $\mathring{\text{N}}$ 01'58	36.24338 AU
evening set	1452 Jul 07 j 03:28	6° $\mathring{\text{N}}$ 39'32					
max. Earth dist.	1452 Jul 18 j 08:21	6° $\mathring{\text{N}}$ 59'35	37.78172 AU	conjunction	1458 Aug 01 j 10:08	17° $\mathring{\text{N}}$ 08'11	9°33'38
				minimum elong	1458 Aug 01 j 09:49	17° $\mathring{\text{N}}$ 08'09	9°33'38
conjunction	1452 Jul 21 j 11:48	7° $\mathring{\text{N}}$ 05'16	7°00'55	morning rise	1458 Aug 13 j 20:25	17° $\mathring{\text{N}}$ 31'51	
minimum elong	1452 Jul 21 j 11:34	7° $\mathring{\text{N}}$ 05'15	7°00'56	retrograde	1458 Nov 12 j 02:41	19° $\mathring{\text{N}}$ 14'44	
morning rise	1452 Aug 04 j 18:15	7° $\mathring{\text{N}}$ 30'53		opposition	1459 Jan 29 j 04:54	18° $\mathring{\text{N}}$ 01'08	10°20'11
retrograde	1452 Nov 01 j 01:51	9° $\mathring{\text{N}}$ 04'35		min. Earth dist.	1459 Feb 01 j 02:55	17° $\mathring{\text{N}}$ 56'48	34.14581 AU
opposition	1453 Jan 18 j 17:31	7° $\mathring{\text{N}}$ 53'17	7°37'47	direct	1459 Apr 20 j 00:46	16° $\mathring{\text{N}}$ 44'57	
min. Earth dist.	1453 Jan 21 j 11:58	7° $\mathring{\text{N}}$ 49'20	35.66861 AU	evening set	1459 Jul 22 j 09:07	18° $\mathring{\text{N}}$ 31'27	
direct	1453 Apr 09 j 19:45	6° $\mathring{\text{N}}$ 39'48		max. Earth dist.	1459 Jul 31 j 05:24	18° $\mathring{\text{N}}$ 48'25	35.98825 AU
evening set	1453 Jul 09 j 07:19	8° $\mathring{\text{N}}$ 15'59					
max. Earth dist.	1453 Jul 20 j 06:03	8° $\mathring{\text{N}}$ 35'46	37.52384 AU	conjunction	1459 Aug 03 j 12:10	18° $\mathring{\text{N}}$ 54'45	9°58'46
				minimum elong	1459 Aug 03 j 11:51	18° $\mathring{\text{N}}$ 54'44	9°58'45
conjunction	1453 Jul 23 j 09:46	8° $\mathring{\text{N}}$ 41'31	7°26'28	morning rise	1459 Aug 15 j 13:15	19° $\mathring{\text{N}}$ 17'56	

retrograde	1459 Nov 14 j 07:09	21°02'35		direct	1466 May 02 j 11:21	29°05'217	
opposition	1460 Jan 31 j 05:14	19°048'33	10°46'55		1466 May 25 j 03:32	0°00	
min. Earth dist.	1460 Feb 03 j 02:59	19°044'13	33.89388 AU	evening set	1466 Aug 08 j 10:26	1°0054'51	
direct	1460 Apr 21 j 01:13	18°031'52		max. Earth dist.	1466 Aug 13 j 18:21	2°0005'51	34.27550 AU
evening set	1460 Jul 23 j 21:50	20°020'21					
max. Earth dist.	1460 Aug 01 j 08:00	20°036'41	35.73417 AU	conjunction	1466 Aug 16 j 23:10	2°0012'28	12°45'49
				minimum elong	1466 Aug 16 j 22:46	2°0012'26	12°45'49
conjunction	1460 Aug 04 j 15:04	20°043'06	10°23'41	morning rise	1466 Aug 25 j 10:22	2°0029'59	
minimum elong	1460 Aug 04 j 14:43	20°043'04	10°23'41	retrograde	1466 Nov 27 j 22:19	4°0029'49	
morning rise	1460 Aug 16 j 06:08	21°005'42		opposition	1467 Feb 13 j 05:38	3°0012'49	13°44'26
retrograde	1460 Nov 15 j 09:22	22°052'13		min. Earth dist.	1467 Feb 16 j 01:49	3°0008'23	32.21488 AU
opposition	1461 Feb 01 j 06:22	21°037'44	11°13'26	direct	1467 May 04 j 16:06	1°0052'49	
min. Earth dist.	1461 Feb 04 j 05:11	21°033'18	33.64351 AU	evening set	1467 Aug 11 j 10:44	3°0058'11	
direct	1461 Apr 23 j 01:37	20°020'34		max. Earth dist.	1467 Aug 16 j 03:25	4°0007'59	34.04758 AU
evening set	1461 Jul 26 j 12:05	22°011'07					
max. Earth dist.	1461 Aug 03 j 12:01	22°026'47	35.48210 AU	conjunction	1467 Aug 19 j 07:18	4°0014'35	13°07'43
				minimum elong	1467 Aug 19 j 06:56	4°0014'33	13°07'42
conjunction	1461 Aug 06 j 18:32	22°033'14	10°48'21	morning rise	1467 Aug 27 j 02:18	4°0030'53	
minimum elong	1461 Aug 06 j 18:12	22°033'12	10°48'21	retrograde	1467 Nov 30 j 08:03	6°0033'22	
morning rise	1461 Aug 17 j 22:59	22°055'12		opposition	1468 Feb 15 j 12:41	5°0016'00	14°07'39
retrograde	1461 Nov 17 j 13:16	24°043'39		min. Earth dist.	1468 Feb 18 j 09:10	5°0011'31	31.99221 AU
opposition	1462 Feb 03 j 08:10	23°028'44	11°39'41	direct	1468 May 05 j 23:08	3°0055'35	
min. Earth dist.	1462 Feb 06 j 06:02	23°024'19	33.39549 AU	evening set	1468 Aug 13 j 13:32	6°0003'54	
direct	1462 Apr 25 j 03:34	22°011'03		max. Earth dist.	1468 Aug 17 j 13:01	6°0012'17	33.82397 AU
evening set	1462 Jul 29 j 03:42	24°003'47					
max. Earth dist.	1462 Aug 05 j 15:30	24°018'36	35.23254 AU	conjunction	1468 Aug 20 j 16:16	6°0018'54	13°28'56
				minimum elong	1468 Aug 20 j 15:53	6°0018'52	13°28'57
conjunction	1462 Aug 08 j 22:47	24°025'10	11°12'43	morning rise	1468 Aug 27 j 17:39	6°0033'49	
minimum elong	1462 Aug 08 j 22:25	24°025'09	11°12'44	retrograde	1468 Dec 01 j 19:49	8°0039'07	
morning rise	1462 Aug 19 j 15:57	24°046'25		opposition	1469 Feb 16 j 20:22	7°0021'21	14°30'09
retrograde	1462 Nov 19 j 17:39	26°036'56		min. Earth dist.	1469 Feb 19 j 15:34	7°0016'56	31.77369 AU
opposition	1463 Feb 05 j 10:49	25°021'34	12°05'35	direct	1469 May 08 j 07:18	6°0000'30	
min. Earth dist.	1463 Feb 08 j 09:32	25°017'04	33.15063 AU	evening set	1469 Aug 16 j 18:57	8°0011'58	
direct	1463 Apr 27 j 02:44	24°003'23		max. Earth dist.	1469 Aug 19 j 22:58	8°0018'42	33.60428 AU
evening set	1463 Jul 31 j 20:55	25°058'24					
max. Earth dist.	1463 Aug 07 j 21:59	26°012'28	34.98656 AU	conjunction	1469 Aug 23 j 02:11	8°0025'24	13°49'26
				minimum elong	1469 Aug 23 j 01:49	8°0025'22	13°49'26
conjunction	1463 Aug 11 j 03:48	26°018'59	11°36'43	morning rise	1469 Aug 29 j 08:12	8°0038'43	
minimum elong	1463 Aug 11 j 03:26	26°018'57	11°36'42	retrograde	1469 Dec 04 j 05:35	10°0047'01	
morning rise	1463 Aug 21 j 08:42	26°039'26		opposition	1470 Feb 19 j 05:14	9°0028'52	14°51'51
retrograde	1463 Nov 21 j 21:55	28°032'06		min. Earth dist.	1470 Feb 22 j 01:05	9°0024'22	31.55909 AU
opposition	1464 Feb 07 j 14:20	27°016'18	12°31'05	direct	1470 May 10 j 13:57	8°0007'35	
min. Earth dist.	1464 Feb 10 j 11:48	27°011'52	32.90970 AU	evening set	1470 Aug 20 j 03:55	10°0022'24	
direct	1464 Apr 28 j 05:52	25°057'39		max. Earth dist.	1470 Aug 22 j 11:09	10°0027'22	33.38872 AU
evening set	1464 Aug 02 j 15:30	27°055'02					
max. Earth dist.	1464 Aug 09 j 02:56	28°008'07	34.74484 AU	conjunction	1470 Aug 25 j 12:57	10°0034'00	14°09'09
				minimum elong	1470 Aug 25 j 12:34	10°0033'58	14°09'09
conjunction	1464 Aug 12 j 09:17	28°014'44	12°00'16	morning rise	1470 Aug 30 j 20:51	10°0045'28	
minimum elong	1464 Aug 12 j 08:53	28°014'43	12°00'16	retrograde	1470 Dec 06 j 16:55	12°0056'59	
morning rise	1464 Aug 22 j 01:21	28°034'19		opposition	1471 Feb 21 j 14:52	11°0038'27	15°12'41
	1464 Oct 10 j 12:13	0°00		min. Earth dist.	1471 Feb 24 j 09:20	11°0034'01	31.34860 AU
retrograde	1464 Nov 23 j 05:19	0°0029'15		direct	1471 May 12 j 23:29	10°0016'44	
	1465 Jan 06 j 23:25	30°0000		evening set	1471 Aug 23 j 17:32	12°0035'19	
opposition	1465 Feb 08 j 18:37	29°013'02	12°56'06	max. Earth dist.	1471 Aug 24 j 22:22	12°0037'56	33.17751 AU
min. Earth dist.	1465 Feb 11 j 16:00	29°008'34	32.67341 AU				
direct	1465 Apr 30 j 07:24	27°053'54		conjunction	1471 Aug 28 j 00:28	12°0044'39	14°28'00
evening set	1465 Aug 05 j 12:00	29°053'49		minimum elong	1471 Aug 28 j 00:06	12°0044'37	14°28'00
	1465 Aug 08 j 12:50	0°00		morning rise	1471 Sep 01 j 06:29	12°0053'53	
max. Earth dist.	1465 Aug 11 j 11:11	0°0005'59	34.50777 AU	retrograde	1471 Dec 09 j 05:22	15°0009'01	
				opposition	1472 Feb 24 j 01:29	13°0050'05	15°32'35
conjunction	1465 Aug 14 j 15:53	0°0012'33	12°23'19	min. Earth dist.	1472 Feb 26 j 20:01	13°0045'37	31.14276 AU
minimum elong	1465 Aug 14 j 15:31	0°0012'31	12°23'18	direct	1472 May 14 j 06:49	12°0027'54	
morning rise	1465 Aug 23 j 17:56	0°0031'09		evening set	1472 Aug 26 j 16:01	14°0051'00	
retrograde	1465 Nov 25 j 12:00	2°0028'27		max. Earth dist.	1472 Aug 26 j 12:36	14°0050'41	32.97126 AU
opposition	1466 Feb 10 j 23:41	1°0011'51	13°20'34				
min. Earth dist.	1466 Feb 13 j 20:40	1°0007'23	32.44177 AU	conjunction	1472 Aug 29 j 12:42	14°0057'17	14°45'55
	1466 Apr 09 j 17:21	30°0000		minimum elong	1472 Aug 29 j 12:19	14°0057'15	14°45'55

morning rise	1472 Sep 01 j 08:32	15° <u>0</u> 03'30		minimum elong	1480 Sep 17 j 15:37	3° <u>0</u> 46'02	16°24'54
retrograde	1472 Dec 10 j 16:39	17° <u>0</u> 23'01		retrograde	1480 Dec 30 j 05:19	6° <u>0</u> 21'30	
opposition	1473 Feb 25 j 12:55	16° <u>0</u> 03'40	15°51'27	opposition	1481 Mar 16 j 14:14	4° <u>0</u> 59'35	17°33'41
min. Earth dist.	1473 Feb 28 j 06:12	15° <u>0</u> 59'15	30.94194 AU	min. Earth dist.	1481 Mar 18 j 19:36	4° <u>0</u> 55'51	29.60363 AU
direct	1473 May 16 j 17:59	14° <u>0</u> 41'03		direct	1481 Jun 04 j 11:34	3° <u>0</u> 34'24	
max. Earth dist.	1473 Aug 29 j 01:38	17° <u>0</u> 05'13	32.77057 AU	max. Earth dist.	1481 Sep 18 j 02:49	6° <u>0</u> 09'53	31.44946 AU
conjunction	1473 Sep 01 j 01:40	17° <u>0</u> 11'52	15°02'48	conjunction	1481 Sep 20 j 10:12	6° <u>0</u> 15'20	16°30'34
minimum elong	1473 Sep 01 j 01:19	17° <u>0</u> 11'50	15°02'47	minimum elong	1481 Sep 20 j 10:03	6° <u>0</u> 15'19	16°30'33
retrograde	1473 Dec 13 j 06:35	19° <u>0</u> 38'54		retrograde	1482 Jan 01 j 23:21	8° <u>0</u> 51'45	
opposition	1474 Feb 28 j 01:01	18° <u>0</u> 19'09	16°09'12	opposition	1482 Mar 19 j 08:52	7° <u>0</u> 29'38	17°39'09
min. Earth dist.	1474 Mar 02 j 17:28	18° <u>0</u> 14'46	30.74704 AU	min. Earth dist.	1482 Mar 21 j 11:49	7° <u>0</u> 26'04	29.47420 AU
direct	1474 May 19 j 04:31	16° <u>0</u> 56'05		direct	1482 Jun 07 j 06:37	6° <u>0</u> 04'16	
max. Earth dist.	1474 Aug 31 j 17:49	19° <u>0</u> 21'50	32.57617 AU	max. Earth dist.	1482 Sep 20 j 22:42	8° <u>0</u> 40'47	31.32344 AU
conjunction	1474 Sep 03 j 15:30	19° <u>0</u> 28'19	15°18'34	conjunction	1482 Sep 23 j 05:03	8° <u>0</u> 46'09	16°34'34
minimum elong	1474 Sep 03 j 15:10	19° <u>0</u> 28'18	15°18'35	minimum elong	1482 Sep 23 j 04:55	8° <u>0</u> 46'08	16°34'34
retrograde	1474 Dec 15 j 19:52	21° <u>0</u> 56'39		retrograde	1483 Jan 04 j 19:24	11° <u>0</u> 23'28	
opposition	1475 Mar 02 j 14:15	20° <u>0</u> 36'30	16°25'43	opposition	1483 Mar 22 j 04:20	10° <u>0</u> 01'09	17°42'47
min. Earth dist.	1475 Mar 05 j 05:47	20° <u>0</u> 32'10	30.55870 AU	min. Earth dist.	1483 Mar 24 j 05:38	9° <u>0</u> 57'41	29.35316 AU
direct	1475 May 21 j 16:43	19° <u>0</u> 13'02		direct	1483 Jun 09 j 23:37	8° <u>0</u> 35'35	
max. Earth dist.	1475 Sep 03 j 09:05	21° <u>0</u> 40'11	32.38912 AU	max. Earth dist.	1483 Sep 23 j 21:26	11° <u>0</u> 13'16	31.20611 AU
conjunction	1475 Sep 06 j 05:42	21° <u>0</u> 46'37	15°33'08	conjunction	1483 Sep 26 j 00:19	11° <u>0</u> 18'19	16°36'50
minimum elong	1475 Sep 06 j 05:23	21° <u>0</u> 46'36	15°33'08	minimum elong	1483 Sep 26 j 00:14	11° <u>0</u> 18'19	16°36'49
retrograde	1475 Dec 18 j 12:19	24° <u>0</u> 16'14		retrograde	1484 Jan 07 j 14:13	13° <u>0</u> 56'27	
opposition	1476 Mar 04 j 04:10	22° <u>0</u> 55'42	16°40'53	opposition	1484 Mar 24 j 00:25	12° <u>0</u> 33'56	17°44'33
min. Earth dist.	1476 Mar 06 j 17:35	22° <u>0</u> 51'29	30.37803 AU	min. Earth dist.	1484 Mar 25 j 23:42	12° <u>0</u> 30'36	29.24045 AU
direct	1476 May 23 j 06:04	21° <u>0</u> 31'50		direct	1484 Jun 11 j 18:37	11° <u>0</u> 08'12	
max. Earth dist.	1476 Sep 05 j 02:29	24° <u>0</u> 00'30	32.21013 AU	max. Earth dist.	1484 Sep 25 j 18:24	13° <u>0</u> 46'42	31.09770 AU
conjunction	1476 Sep 07 j 20:51	24° <u>0</u> 06'47	15°46'24	conjunction	1484 Sep 27 j 19:56	13° <u>0</u> 51'39	16°37'20
minimum elong	1476 Sep 07 j 20:32	24° <u>0</u> 06'45	15°46'25	minimum elong	1484 Sep 27 j 19:54	13° <u>0</u> 51'39	16°37'20
retrograde	1476 Dec 20 j 04:01	26° <u>0</u> 37'38		retrograde	1485 Jan 09 j 10:15	16° <u>0</u> 30'29	
opposition	1477 Mar 06 j 18:58	25° <u>0</u> 16'45	16°54'38	opposition	1485 Mar 26 j 20:46	15° <u>0</u> 07'46	17°44'22
min. Earth dist.	1477 Mar 09 j 07:32	25° <u>0</u> 12'34	30.20564 AU	min. Earth dist.	1485 Mar 28 j 17:39	15° <u>0</u> 04'37	29.13662 AU
direct	1477 May 25 j 20:25	23° <u>0</u> 52'33		direct	1485 Jun 14 j 14:32	13° <u>0</u> 41'52	
max. Earth dist.	1477 Sep 07 j 20:09	26° <u>0</u> 22'39	32.04010 AU	max. Earth dist.	1485 Sep 28 j 18:02	16° <u>0</u> 21'20	30.99857 AU
conjunction	1477 Sep 10 j 12:36	26° <u>0</u> 28'48	15°58'17	conjunction	1485 Sep 30 j 16:05	16° <u>0</u> 25'57	16°36'01
minimum elong	1477 Sep 10 j 12:20	26° <u>0</u> 28'46	15°58'16	minimum elong	1485 Sep 30 j 16:04	16° <u>0</u> 25'57	16°36'00
retrograde	1477 Dec 22 j 22:01	29° <u>0</u> 00'51		retrograde	1486 Jan 12 j 05:00	19° <u>0</u> 05'23	
opposition	1478 Mar 09 j 10:32	27° <u>0</u> 39'40	17°06'52	opposition	1486 Mar 29 j 17:50	17° <u>0</u> 42'28	17°42'13
min. Earth dist.	1478 Mar 11 j 20:17	27° <u>0</u> 35'41	30.04203 AU	min. Earth dist.	1486 Mar 31 j 12:58	17° <u>0</u> 39'26	29.04191 AU
direct	1478 May 28 j 12:31	26° <u>0</u> 15'10		direct	1486 Jun 17 j 11:27	16° <u>0</u> 16'25	
max. Earth dist.	1478 Sep 10 j 14:30	28° <u>0</u> 46'41	31.87902 AU	max. Earth dist.	1486 Oct 01 j 16:05	18° <u>0</u> 56'33	30.90937 AU
conjunction	1478 Sep 13 j 05:05	28° <u>0</u> 52'42	16°08'42	conjunction	1486 Oct 03 j 12:09	19° <u>0</u> 00'59	16°32'50
minimum elong	1478 Sep 13 j 04:50	28° <u>0</u> 52'40	16°08'43	minimum elong	1486 Oct 03 j 12:11	19° <u>0</u> 00'59	16°32'51
	1478 Oct 13 j 07:39	0° <u>0</u>		retrograde	1487 Jan 15 j 02:24	21° <u>0</u> 40'55	
retrograde	1478 Dec 25 j 15:07	1° <u>0</u> 25'56		opposition	1487 Apr 01 j 15:08	20° <u>0</u> 17'49	17°38'03
opposition	1479 Mar 12 j 03:02	0° <u>0</u> 04'29	17°17'29	min. Earth dist.	1487 Apr 03 j 06:52	20° <u>0</u> 15'01	28.95720 AU
	1479 Mar 14 j 19:45	30° <u>0</u> 8'00		direct	1487 Jun 20 j 08:21	18° <u>0</u> 51'39	
min. Earth dist.	1479 Mar 14 j 12:04	0° <u>0</u> 00'32	29.88726 AU	max. Earth dist.	1487 Oct 04 j 16:05	21° <u>0</u> 32'30	30.83073 AU
direct	1479 May 31 j 02:52	28° <u>0</u> 39'44		conjunction	1487 Oct 06 j 08:32	21° <u>0</u> 36'35	16°27'45
	1479 Aug 11 j 13:46	0° <u>0</u>		minimum elong	1487 Oct 06 j 08:36	21° <u>0</u> 36'35	16°27'45
max. Earth dist.	1479 Sep 13 j 10:24	1° <u>0</u> 12'41	31.72712 AU	retrograde	1488 Jan 17 j 21:44	24° <u>0</u> 16'54	
conjunction	1479 Sep 15 j 22:11	1° <u>0</u> 18'28	16°17'35	opposition	1488 Apr 03 j 12:53	22° <u>0</u> 53'39	17°31'48
minimum elong	1479 Sep 15 j 21:58	1° <u>0</u> 18'27	16°17'35	min. Earth dist.	1488 Apr 05 j 02:43	22° <u>0</u> 50'59	28.88318 AU
retrograde	1479 Dec 28 j 10:31	3° <u>0</u> 52'50		direct	1488 Jun 22 j 06:14	21° <u>0</u> 27'23	
opposition	1480 Mar 13 j 20:14	2° <u>0</u> 31'09	17°26'27	max. Earth dist.	1488 Oct 06 j 15:16	24° <u>0</u> 08'46	30.76365 AU
min. Earth dist.	1480 Mar 16 j 02:30	2° <u>0</u> 27'22	29.74121 AU				
direct	1480 Jun 01 j 20:14	1° <u>0</u> 06'11		conjunction	1488 Oct 08 j 04:48	24° <u>0</u> 12'34	16°20'45
max. Earth dist.	1480 Sep 15 j 05:22	3° <u>0</u> 40'21	31.58396 AU	minimum elong	1488 Oct 08 j 04:55	24° <u>0</u> 12'35	16°20'46
				retrograde	1489 Jan 19 j 19:11	26° <u>0</u> 53'11	
conjunction	1480 Sep 17 j 15:49	3° <u>0</u> 46'03	16°24'54	opposition	1489 Apr 06 j 10:44	25° <u>0</u> 29'48	17°23'28

min. Earth dist.	1489 Apr 07 j 20:33	25° <u>♄</u> 27'25	28.82059 AU	evening set	1496 Oct 24 j 03:15	14° <u>♄</u> 49'36	
direct	1489 Jun 25 j 05:45	24° <u>♄</u> 03'29					
max. Earth dist.	1489 Oct 09 j 15:12	26° <u>♄</u> 45'23	30.70850 AU	conjunction	1496 Oct 28 j 21:38	15° <u>♄</u> 01'08	14°17'05
				minimum elong	1496 Oct 28 j 22:00	15° <u>♄</u> 01'10	14°17'05
conjunction	1489 Oct 11 j 01:17	26° <u>♄</u> 48'50	16°11'49	max. Earth dist.	1496 Oct 28 j 11:10	15° <u>♄</u> 00'04	30.65604 AU
minimum elong	1489 Oct 11 j 01:26	26° <u>♄</u> 48'50	16°11'48		1496 Oct 28 j 10:27	15° <u>♄</u>	
retrograde	1490 Jan 22 j 15:13	29° <u>♄</u> 29'39		morning rise	1496 Nov 02 j 16:27	15° <u>♄</u> 12'41	
opposition	1490 Apr 09 j 08:53	28° <u>♄</u> 06'12	17°13'01	retrograde	1497 Feb 09 j 12:34	17° <u>♄</u> 40'43	
min. Earth dist.	1490 Apr 10 j 16:35	28° <u>♄</u> 03'58	28.76996 AU	opposition	1497 Apr 27 j 20:42	16° <u>♄</u> 17'42	15°04'09
direct	1490 Jun 28 j 02:53	26° <u>♄</u> 39'53		min. Earth dist.	1497 Apr 28 j 06:51	16° <u>♄</u> 17'00	28.73709 AU
					1497 Jun 25 j 05:01	15° <u>♄</u>	
conjunction	1490 Oct 13 j 21:45	29° <u>♄</u> 25'16	16°00'55	direct	1497 Jul 16 j 17:36	14° <u>♄</u> 52'25	
minimum elong	1490 Oct 13 j 21:57	29° <u>♄</u> 25'17	16°00'56		1497 Aug 06 j 20:59	15° <u>♄</u>	
max. Earth dist.	1490 Oct 12 j 15:21	29° <u>♄</u> 22'11	30.66591 AU	evening set	1497 Oct 25 j 19:45	17° <u>♄</u> 20'59	
	1490 Oct 28 j 06:57	0° <u>♄</u>					
retrograde	1491 Jan 25 j 13:00	2° <u>♄</u> 06'12		conjunction	1497 Oct 31 j 16:31	17° <u>♄</u> 35'07	13°53'56
opposition	1491 Apr 12 j 07:10	0° <u>♄</u> 42'44	17°00'29	minimum elong	1497 Oct 31 j 16:52	17° <u>♄</u> 35'09	13°53'56
min. Earth dist.	1491 Apr 13 j 10:44	0° <u>♄</u> 40'47	28.73145 AU	max. Earth dist.	1497 Oct 31 j 08:02	17° <u>♄</u> 34'16	30.69202 AU
	1491 May 08 j 15:54	30° <u>♄</u>		morning rise	1497 Nov 06 j 13:42	17° <u>♄</u> 49'17	
direct	1491 Jul 01 j 02:47	29° <u>♄</u> 16'29		retrograde	1498 Feb 12 j 08:24	20° <u>♄</u> 14'09	
	1491 Aug 21 j 06:39	0° <u>♄</u>		opposition	1498 Apr 30 j 18:10	18° <u>♄</u> 51'15	14°38'34
				min. Earth dist.	1498 May 01 j 00:23	18° <u>♄</u> 50'49	28.77460 AU
conjunction	1491 Oct 16 j 18:01	2° <u>♄</u> 01'49	15°48'07	direct	1498 Jul 19 j 14:53	17° <u>♄</u> 26'09	
minimum elong	1491 Oct 16 j 18:14	2° <u>♄</u> 01'50	15°48'07	evening set	1498 Oct 27 j 15:26	19° <u>♄</u> 51'42	
max. Earth dist.	1491 Oct 15 j 14:38	1° <u>♄</u> 59'02	30.63563 AU				
retrograde	1492 Jan 28 j 10:18	4° <u>♄</u> 42'46		conjunction	1498 Nov 03 j 11:03	20° <u>♄</u> 08'03	13°29'18
opposition	1492 Apr 14 j 05:36	3° <u>♄</u> 19'19	16°45'53	minimum elong	1498 Nov 03 j 11:27	20° <u>♄</u> 08'05	13°29'18
min. Earth dist.	1492 Apr 15 j 06:41	3° <u>♄</u> 17'33	28.70494 AU	max. Earth dist.	1498 Nov 03 j 06:39	20° <u>♄</u> 07'36	30.73834 AU
direct	1492 Jul 03 j 00:44	1° <u>♄</u> 53'09		morning rise	1498 Nov 10 j 06:56	20° <u>♄</u> 24'26	
				retrograde	1499 Feb 15 j 00:26	22° <u>♄</u> 46'26	
conjunction	1492 Oct 18 j 14:23	4° <u>♄</u> 38'20	15°33'26	opposition	1499 May 03 j 15:26	21° <u>♄</u> 23'39	14°11'26
minimum elong	1492 Oct 18 j 14:39	4° <u>♄</u> 38'21	15°33'26	min. Earth dist.	1499 May 03 j 19:33	21° <u>♄</u> 23'22	28.82246 AU
max. Earth dist.	1492 Oct 17 j 15:01	4° <u>♄</u> 35'58	30.61746 AU	direct	1499 Jul 22 j 12:25	19° <u>♄</u> 58'48	
retrograde	1493 Jan 30 j 06:20	7° <u>♄</u> 19'12		evening set	1499 Oct 29 j 12:55	22° <u>♄</u> 21'28	
opposition	1493 Apr 17 j 03:51	5° <u>♄</u> 55'48	16°29'17				
min. Earth dist.	1493 Apr 18 j 01:25	5° <u>♄</u> 54'17	28.68985 AU	conjunction	1499 Nov 06 j 04:45	22° <u>♄</u> 39'46	13°03'16
direct	1493 Jul 06 j 00:19	4° <u>♄</u> 29'47		minimum elong	1499 Nov 06 j 05:08	22° <u>♄</u> 39'48	13°03'16
				max. Earth dist.	1499 Nov 06 j 02:55	22° <u>♄</u> 39'35	30.79540 AU
conjunction	1493 Oct 21 j 10:33	7° <u>♄</u> 14'42	15°16'56	morning rise	1499 Nov 13 j 20:52	22° <u>♄</u> 58'06	
minimum elong	1493 Oct 21 j 10:49	7° <u>♄</u> 14'43	15°16'55	retrograde	1500 Feb 17 j 18:16	25° <u>♄</u> 17'25	
max. Earth dist.	1493 Oct 20 j 13:32	7° <u>♄</u> 12'34	30.61075 AU	opposition	1500 May 05 j 12:03	23° <u>♄</u> 54'46	13°42'49
retrograde	1494 Feb 02 j 03:42	9° <u>♄</u> 55'24		min. Earth dist.	1500 May 05 j 11:55	23° <u>♄</u> 54'47	28.88109 AU
opposition	1494 Apr 20 j 02:18	8° <u>♄</u> 32'04	16°10'44	direct	1500 Jul 24 j 10:34	22° <u>♄</u> 30'08	
min. Earth dist.	1494 Apr 20 j 21:04	8° <u>♄</u> 30'45	28.68593 AU	evening set	1500 Oct 30 j 11:40	24° <u>♄</u> 50'06	
direct	1494 Jul 08 j 21:59	7° <u>♄</u> 06'12					
evening set	1494 Oct 23 j 10:17	9° <u>♄</u> 48'41		conjunction	1500 Nov 07 j 22:04	25° <u>♄</u> 10'08	12°35'55
				minimum elong	1500 Nov 07 j 22:29	25° <u>♄</u> 10'11	12°35'54
conjunction	1494 Oct 24 j 06:31	9° <u>♄</u> 50'44	14°58'39	max. Earth dist.	1500 Nov 08 j 00:09	25° <u>♄</u> 10'20	30.86336 AU
minimum elong	1494 Oct 24 j 06:51	9° <u>♄</u> 50'46	14°58'39	morning rise	1500 Nov 16 j 08:37	25° <u>♄</u> 30'12	
max. Earth dist.	1494 Oct 23 j 13:47	9° <u>♄</u> 49'02	30.61519 AU	retrograde	1501 Feb 19 j 10:07	27° <u>♄</u> 46'59	
morning rise	1494 Oct 25 j 03:26	9° <u>♄</u> 52'51		opposition	1501 May 08 j 08:10	26° <u>♄</u> 24'30	13°12'48
retrograde	1495 Feb 04 j 23:10	12° <u>♄</u> 31'10		min. Earth dist.	1501 May 08 j 05:46	26° <u>♄</u> 24'40	28.95095 AU
opposition	1495 Apr 23 j 00:43	11° <u>♄</u> 07'56	15°50'19	direct	1501 Jul 27 j 05:46	25° <u>♄</u> 00'08	
min. Earth dist.	1495 Apr 23 j 16:35	11° <u>♄</u> 06'49	28.69259 AU	evening set	1501 Nov 01 j 11:29	27° <u>♄</u> 17'29	
direct	1495 Jul 11 j 21:19	9° <u>♄</u> 42'15					
evening set	1495 Oct 23 j 17:04	12° <u>♄</u> 18'04		conjunction	1501 Nov 10 j 14:44	27° <u>♄</u> 39'04	12°07'19
max. Earth dist.	1495 Oct 26 j 11:33	12° <u>♄</u> 24'47	30.63036 AU	minimum elong	1501 Nov 10 j 15:07	27° <u>♄</u> 39'07	12°07'19
				max. Earth dist.	1501 Nov 10 j 20:02	27° <u>♄</u> 39'36	30.94291 AU
conjunction	1495 Oct 27 j 02:11	12° <u>♄</u> 26'16	14°38'41	morning rise	1501 Nov 19 j 18:03	28° <u>♄</u> 00'42	
minimum elong	1495 Oct 27 j 02:30	12° <u>♄</u> 26'18	14°38'41		1502 Jan 23 j 17:33	0° <u>♄</u>	
morning rise	1495 Oct 30 j 11:52	12° <u>♄</u> 34'31		retrograde	1502 Feb 22 j 03:00	0° <u>♄</u> 15'04	
	1496 Jan 19 j 23:10	15° <u>♄</u>			1502 Mar 24 j 10:05	30° <u>♄</u>	
retrograde	1496 Feb 07 j 19:08	15° <u>♄</u> 06'20		opposition	1502 May 11 j 03:48	28° <u>♄</u> 52'46	12°41'30
	1496 Feb 26 j 20:29	15° <u>♄</u>		min. Earth dist.	1502 May 10 j 20:59	28° <u>♄</u> 53'14	29.03237 AU
opposition	1496 Apr 24 j 22:46	13° <u>♄</u> 43'12	15°28'06	direct	1502 Jul 30 j 03:43	27° <u>♄</u> 28'42	
min. Earth dist.	1496 Apr 25 j 11:15	13° <u>♄</u> 42'20	28.70981 AU	evening set	1502 Nov 03 j 11:46	29° <u>♄</u> 43'33	
direct	1496 Jul 13 j 19:06	12° <u>♄</u> 17'42			1502 Nov 10 j 11:56	0° <u>♄</u>	

conjunction	1502 Nov 13 j 06:40	0°♏06'33	11°37'33	min. Earth dist.	1509 May 27 j 00:25	15°♏29'55	29.89849 AU
minimum elong	1502 Nov 13 j 07:04	0°♏06'36	11°37'33	opposition	1509 May 28 j 04:18	15°♏28'04	8°35'36
max. Earth dist.	1502 Nov 13 j 15:23	0°♏07'25	31.03406 AU	direct	1509 Aug 16 j 11:20	14°♏06'42	
morning rise	1502 Nov 23 j 01:37	0°♏29'34		evening set	1509 Nov 16 j 01:38	16°♏06'24	
retrograde	1503 Feb 24 j 19:41	2°♏41'39					
opposition	1503 May 13 j 23:00	1°♏19'35	12°09'00	conjunction	1509 Nov 29 j 04:49	16°♏35'49	7°45'47
min. Earth dist.	1503 May 13 j 13:20	1°♏20'14	29.12555 AU	minimum elong	1509 Nov 29 j 05:07	16°♏35'51	7°45'47
	1503 Jul 17 j 00:58	30°♏		max. Earth dist.	1509 Nov 30 j 10:07	16°♏38'34	31.95789 AU
direct	1503 Aug 01 j 23:07	29°♏55'51		morning rise	1509 Dec 12 j 07:45	17°♏05'14	
	1503 Aug 17 j 18:59	0°♏		retrograde	1510 Mar 12 j 15:07	19°♏03'34	
evening set	1503 Nov 05 j 12:46	2°♏08'18		opposition	1510 May 30 j 19:03	17°♏43'34	7°58'04
				min. Earth dist.	1510 May 29 j 13:46	17°♏45'29	30.05647 AU
conjunction	1503 Nov 15 j 22:06	2°♏32'34	11°06'44	direct	1510 Aug 19 j 02:10	16°♏22'35	
minimum elong	1503 Nov 15 j 22:30	2°♏32'36	11°06'45	evening set	1510 Nov 18 j 04:25	18°♏20'23	
max. Earth dist.	1503 Nov 16 j 10:32	2°♏33'47	31.13687 AU				
morning rise	1503 Nov 26 j 07:20	2°♏56'51		conjunction	1510 Dec 01 j 15:27	18°♏50'18	7°10'34
retrograde	1504 Feb 27 j 10:38	5°♏06'43		minimum elong	1510 Dec 01 j 15:44	18°♏50'20	7°10'34
opposition	1504 May 15 j 17:21	3°♏44'55	11°35'25	max. Earth dist.	1510 Dec 02 j 22:32	18°♏53'13	32.12233 AU
min. Earth dist.	1504 May 15 j 04:02	3°♏45'49	29.23001 AU	morning rise	1510 Dec 15 j 02:21	19°♏20'14	
direct	1504 Aug 03 j 19:25	2°♏21'33		retrograde	1511 Mar 15 j 00:54	21°♏16'52	
evening set	1504 Nov 06 j 14:08	4°♏31'41		min. Earth dist.	1511 Jun 01 j 00:08	19°♏59'18	30.22143 AU
				opposition	1511 Jun 02 j 08:50	19°♏57'09	7°20'14
conjunction	1504 Nov 17 j 12:48	4°♏57'05	10°34'58	direct	1511 Aug 21 j 17:26	18°♏36'33	
minimum elong	1504 Nov 17 j 13:11	4°♏57'08	10°34'58	evening set	1511 Nov 20 j 07:13	20°♏32'32	
max. Earth dist.	1504 Nov 18 j 03:48	4°♏58'33	31.25060 AU				
morning rise	1504 Nov 28 j 11:30	5°♏22'31		conjunction	1511 Dec 04 j 01:26	21°♏02'53	6°35'07
retrograde	1505 Mar 01 j 02:17	7°♏30'16		minimum elong	1511 Dec 04 j 01:41	21°♏02'54	6°35'08
opposition	1505 May 18 j 11:14	6°♏08'45	11°00'53	max. Earth dist.	1511 Dec 05 j 11:09	21°♏06'00	32.29345 AU
min. Earth dist.	1505 May 17 j 18:50	6°♏09'51	29.34529 AU	morning rise	1511 Dec 17 j 19:33	21°♏33'13	
direct	1505 Aug 06 j 13:04	4°♏45'47		retrograde	1512 Mar 16 j 10:09	23°♏28'15	
evening set	1505 Nov 08 j 15:50	6°♏53'40		min. Earth dist.	1512 Jun 02 j 11:29	22°♏11'02	30.39349 AU
				opposition	1512 Jun 03 j 21:49	22°♏08'49	6°42'12
conjunction	1505 Nov 20 j 02:56	7°♏20'06	10°02'22	direct	1512 Aug 23 j 05:41	20°♏48'35	
minimum elong	1505 Nov 20 j 03:18	7°♏20'08	10°02'23	evening set	1512 Nov 21 j 09:58	22°♏42'49	
max. Earth dist.	1505 Nov 20 j 21:53	7°♏21'56	31.37463 AU				
morning rise	1505 Dec 01 j 13:45	7°♏46'32		conjunction	1512 Dec 05 j 10:38	23°♏13'30	5°59'30
retrograde	1506 Mar 03 j 16:17	9°♏52'15		minimum elong	1512 Dec 05 j 10:53	23°♏13'32	5°59'30
min. Earth dist.	1506 May 20 j 09:25	8°♏32'19	29.47041 AU	max. Earth dist.	1512 Dec 06 j 22:45	23°♏16'49	32.47158 AU
opposition	1506 May 21 j 04:32	8°♏31'02	10°25'31	morning rise	1512 Dec 19 j 11:07	23°♏44'11	
direct	1506 Aug 09 j 09:12	7°♏08'29		retrograde	1513 Mar 18 j 18:32	25°♏37'40	
evening set	1506 Nov 10 j 18:01	9°♏14'13		min. Earth dist.	1513 Jun 04 j 20:45	24°♏20'55	30.57271 AU
				opposition	1513 Jun 06 j 10:00	24°♏18'31	6°04'02
conjunction	1506 Nov 22 j 16:19	9°♏41'33	9°29'03	direct	1513 Aug 25 j 19:28	22°♏58'39	
minimum elong	1506 Nov 22 j 16:41	9°♏41'35	9°29'03	evening set	1513 Nov 23 j 12:38	24°♏51'14	
max. Earth dist.	1506 Nov 23 j 13:12	9°♏43'33	31.50811 AU				
morning rise	1506 Dec 04 j 14:38	10°♏08'53		conjunction	1513 Dec 07 j 18:50	25°♏22'11	5°23'47
retrograde	1507 Mar 06 j 06:31	12°♏12'39		minimum elong	1513 Dec 07 j 19:03	25°♏22'12	5°23'47
opposition	1507 May 23 j 21:10	10°♏51'44	9°49'27	max. Earth dist.	1513 Dec 09 j 09:01	25°♏25'39	32.65677 AU
min. Earth dist.	1507 May 22 j 22:32	10°♏53'15	29.60492 AU	morning rise	1513 Dec 22 j 01:09	25°♏53'08	
direct	1507 Aug 12 j 01:56	9°♏29'35		retrograde	1514 Mar 21 j 03:44	27°♏45'09	
evening set	1507 Nov 12 j 20:13	11°♏33'14		min. Earth dist.	1514 Jun 07 j 05:46	26°♏28'50	30.75963 AU
				opposition	1514 Jun 08 j 21:33	26°♏26'17	5°25'50
conjunction	1507 Nov 25 j 05:08	12°♏01'22	8°55'07	direct	1514 Aug 28 j 07:15	25°♏06'49	
minimum elong	1507 Nov 25 j 05:29	12°♏01'24	8°55'07	evening set	1514 Nov 25 j 15:13	26°♏57'50	
max. Earth dist.	1507 Nov 26 j 05:46	12°♏03'43	31.65031 AU				
morning rise	1507 Dec 07 j 13:46	12°♏29'29		conjunction	1514 Dec 10 j 02:33	27°♏28'58	4°48'02
retrograde	1508 Mar 07 j 17:07	14°♏31'22		minimum elong	1514 Dec 10 j 02:45	27°♏28'59	4°48'02
opposition	1508 May 25 j 13:12	13°♏10'46	9°12'46	max. Earth dist.	1514 Dec 11 j 19:59	27°♏32'43	32.84957 AU
min. Earth dist.	1508 May 24 j 12:48	13°♏12'24	29.74780 AU	morning rise	1514 Dec 24 j 13:44	28°♏00'07	
direct	1508 Aug 13 j 19:27	11°♏49'01		retrograde	1515 Mar 23 j 11:06	29°♏50'45	
evening set	1508 Nov 13 j 22:55	13°♏50'39		min. Earth dist.	1515 Jun 09 j 14:16	28°♏34'54	30.95420 AU
				opposition	1515 Jun 11 j 08:16	28°♏32'13	4°47'39
conjunction	1508 Nov 26 j 17:15	14°♏19'29	8°20'39	direct	1515 Aug 30 j 20:24	27°♏13'09	
minimum elong	1508 Nov 26 j 17:35	14°♏19'31	8°20'38	evening set	1515 Nov 27 j 17:49	29°♏02'42	
max. Earth dist.	1508 Nov 27 j 19:18	14°♏21'57	31.80045 AU				
morning rise	1508 Dec 09 j 11:32	14°♏48'17		conjunction	1515 Dec 12 j 09:20	29°♏33'58	4°12'20
retrograde	1509 Mar 10 j 05:27	16°♏48'22		minimum elong	1515 Dec 12 j 09:30	29°♏33'59	4°12'20

max. Earth dist.	1515 Dec 14 j 04:14	29°  37'49	33.04972 AU	opposition	1522 Jun 25 j 15:26	12°  27'48	0°27'01
	1515 Dec 24 j 13:12	0° 		direct	1522 Sep 14 j 05:31	11°  11'46	
morning rise	1515 Dec 27 j 01:04	0°  05'15		evening set	1522 Dec 10 j 10:33	12°  35'25'7	
retrograde	1516 Mar 24 j 19:00	1°  35'43'6					
min. Earth dist.	1516 Jun 10 j 20:58	0°  39'16	31.15629 AU	conjunction	1522 Dec 25 j 15:33	13°  23'39	0°08'43
opposition	1516 Jun 12 j 18:12	0°  36'24	4°09'35	minimum elong	1522 Dec 25 j 15:33	13°  23'39	0°08'44
	1516 Jul 07 j 13:41	30°  R 		behind sun begin	1522 Dec 25 j 10:01	13°  23'12	
direct	1516 Sep 01 j 06:07	29°  R 	17'46	behind sun end	1522 Dec 25 j 21:06	13°  24'06	
	1516 Oct 24 j 04:47	0° 		max. Earth dist.	1522 Dec 27 j 22:42	13°  28'19	34.60413 AU
evening set	1516 Nov 28 j 20:17	1°  30'55'5		morning rise	1523 Jan 09 j 21:14	13°  35'24	
				desc. node	1523 Mar 30 j 16:11	15°  35'30	
conjunction	1516 Dec 13 j 15:37	1°  33'7'16	3°36'44	retrograde	1523 Apr 07 j 23:51	15°  36'31	
minimum elong	1516 Dec 13 j 15:46	1°  33'7'16	3°36'43	min. Earth dist.	1523 Jun 25 j 11:18	14°  24'17	32.72047 AU
max. Earth dist.	1516 Dec 15 j 13:48	1°  34'1'22	33.25683 AU	opposition	1523 Jun 27 j 20:36	14°  20'48	-0°08'36
morning rise	1516 Dec 28 j 10:55	2°  30'8'37		direct	1523 Sep 16 j 10:40	13°  30'5'09	
retrograde	1517 Mar 26 j 23:07	3°  35'6'44		evening set	1523 Dec 12 j 12:27	14°  34'5'21	
min. Earth dist.	1517 Jun 13 j 04:53	2°  34'1'51	31.36518 AU				
opposition	1517 Jun 15 j 03:25	2°  33'8'55	3°31'41	conjunction	1523 Dec 27 j 17:28	15°  31'5'48	-0°24'40
direct	1517 Sep 03 j 17:27	1°  32'0'43		minimum elong	1523 Dec 27 j 17:27	15°  31'5'48	0°24'40
evening set	1517 Nov 30 j 22:52	3°  30'7'33		max. Earth dist.	1523 Dec 30 j 02:51	15°  32'0'37	34.83961 AU
				morning rise	1524 Jan 11 j 22:54	15°  32'4'6'18	
conjunction	1517 Dec 15 j 21:08	3°  33'8'55	3°01'18	retrograde	1524 Apr 09 j 01:09	17°  32'7'34	
minimum elong	1517 Dec 15 j 21:15	3°  33'8'56	3°01'19	min. Earth dist.	1524 Jun 26 j 15:16	16°  32'15'38	32.95714 AU
max. Earth dist.	1517 Dec 17 j 20:24	3°  34'3'06	33.47029 AU	opposition	1524 Jun 29 j 01:05	16°  32'12'08	-0°43'42
morning rise	1517 Dec 30 j 19:40	4°  31'0'18		direct	1524 Sep 17 j 17:44	14°  32'5'6'50	
retrograde	1518 Mar 29 j 04:55	5°  35'7'16		evening set	1524 Dec 13 j 14:19	16°  32'3'6'06	
min. Earth dist.	1518 Jun 15 j 10:17	4°  34'2'56	31.58031 AU				
opposition	1518 Jun 17 j 11:58	4°  33'9'49	2°54'02	conjunction	1524 Dec 28 j 18:32	17°  32'0'6'16	-0°57'30
direct	1518 Sep 06 j 02:45	3°  32'2'05		minimum elong	1524 Dec 28 j 18:30	17°  32'0'6'15	0°57'31
evening set	1518 Dec 03 j 01:12	5°  30'7'39		max. Earth dist.	1524 Dec 31 j 04:11	17°  32'11'04	35.07736 AU
				morning rise	1525 Jan 12 j 23:31	17°  32'3'6'28	
conjunction	1518 Dec 18 j 01:59	5°  33'8'59	2°26'07	retrograde	1525 Apr 11 j 03:05	19°  32'16'56	
minimum elong	1518 Dec 18 j 02:04	5°  33'9'00	2°26'06	min. Earth dist.	1525 Jun 28 j 16:31	18°  32'05'25	33.19655 AU
max. Earth dist.	1518 Dec 20 j 04:03	5°  34'3'22	33.68922 AU	opposition	1525 Jul 01 j 04:44	18°  32'01'47	-1°18'15
morning rise	1519 Jan 02 j 02:59	6°  31'0'21		direct	1525 Sep 19 j 21:56	16°  32'4'6'49	
retrograde	1519 Mar 31 j 08:42	7°  35'6'15		evening set	1525 Dec 15 j 15:54	18°  32'25'13	
min. Earth dist.	1519 Jun 17 j 17:25	6°  34'2'19	31.80081 AU				
opposition	1519 Jun 19 j 19:59	6°  33'9'09	2°16'41	conjunction	1525 Dec 30 j 19:06	18°  32'55'02	-1°29'50
direct	1519 Sep 08 j 10:41	5°  32'1'52		minimum elong	1525 Dec 30 j 19:03	18°  32'55'02	1°29'51
evening set	1519 Dec 05 j 03:38	7°  30'6'15		max. Earth dist.	1526 Jan 02 j 07:04	19°  32'00'00	35.31784 AU
				morning rise	1526 Jan 14 j 22:58	19°  32'24'56	
conjunction	1519 Dec 20 j 06:19	7°  33'7'30	1°51'12	retrograde	1526 Apr 13 j 00:28	21°  32'04'38	
minimum elong	1519 Dec 20 j 06:24	7°  33'7'30	1°51'13	min. Earth dist.	1526 Jun 30 j 19:19	19°  32'53'25	33.43915 AU
max. Earth dist.	1519 Dec 22 j 09:40	7°  34'1'58	33.91292 AU	opposition	1526 Jul 03 j 07:58	19°  32'49'46	-1°52'13
morning rise	1520 Jan 04 j 09:17	8°  30'8'47		direct	1526 Sep 22 j 03:17	18°  32'35'09	
retrograde	1520 Apr 01 j 12:23	9°  35'3'39		evening set	1526 Dec 17 j 17:15	20°  32'12'43	
min. Earth dist.	1520 Jun 18 j 21:55	8°  34'0'13	32.02577 AU				
opposition	1520 Jun 21 j 02:56	8°  33'6'56	1°39'42	conjunction	1527 Jan 01 j 18:55	20°  32'42'11	-2°01'38
direct	1520 Sep 09 j 18:22	7°  32'0'05		minimum elong	1527 Jan 01 j 18:51	20°  32'42'11	2°01'39
evening set	1520 Dec 06 j 06:05	9°  30'3'21		max. Earth dist.	1527 Jan 04 j 07:45	20°  32'47'11	35.56156 AU
				morning rise	1527 Jan 16 j 21:21	21°  32'11'43	
conjunction	1520 Dec 21 j 10:01	9°  33'4'28	1°16'38	retrograde	1527 Apr 14 j 22:48	22°  32'30'44	
minimum elong	1520 Dec 21 j 10:04	9°  33'4'28	1°16'38	min. Earth dist.	1527 Jul 02 j 19:19	21°  32'39'55	33.68517 AU
max. Earth dist.	1520 Dec 23 j 14:56	9°  33'9'02	34.14036 AU	opposition	1527 Jul 05 j 10:21	21°  32'36'09	-2°25'35
morning rise	1521 Jan 05 j 14:26	10°  30'5'36		direct	1527 Sep 24 j 07:15	20°  32'21'53	
retrograde	1521 Apr 03 j 17:09	11°  30'49'32		evening set	1527 Dec 19 j 18:36	21°  32'58'41	
min. Earth dist.	1521 Jun 21 j 03:24	10°  30'3'6'29	32.25449 AU				
opposition	1521 Jun 23 j 09:33	10°  30'3'3'10	1°03'08	conjunction	1528 Jan 03 j 18:17	22°  32'27'46	-2°32'53
direct	1521 Sep 11 j 22:54	9°  30'1'6'44		minimum elong	1528 Jan 03 j 18:11	22°  32'27'46	2°32'53
evening set	1521 Dec 08 j 08:15	10°  30'5'8'56		max. Earth dist.	1528 Jan 06 j 08:46	22°  32'32'52	35.80851 AU
				morning rise	1528 Jan 18 j 18:53	22°  32'5'6'56	
conjunction	1521 Dec 23 j 13:06	11°  30'2'9'51	0°42'27	retrograde	1528 Apr 15 j 21:59	24°  32'35'19	
minimum elong	1521 Dec 23 j 13:08	11°  30'2'9'52	0°42'28	min. Earth dist.	1528 Jul 03 j 20:08	23°  32'24'50	33.93472 AU
max. Earth dist.	1521 Dec 25 j 19:44	11°  30'3'4'32	34.37101 AU	opposition	1528 Jul 06 j 12:03	23°  32'21'02	-2°58'19
morning rise	1522 Jan 07 j 18:15	12°  30'0'49		direct	1528 Sep 25 j 08:07	22°  32'0'7'08	
retrograde	1522 Apr 05 j 19:41	13°  30'3'4'50		evening set	1528 Dec 20 j 19:38	23°  32'4'3'13	
min. Earth dist.	1522 Jun 23 j 07:53	12°  30'3'1'12	32.48612 AU				





conjunction	1529 Jan 04 j 17:08	24° $\overline{3}$ 11'54 -3°03'33	retrograde	1535 Apr 28 j 03:54	6° \approx 11'22
minimum elong	1529 Jan 04 j 17:01	24° $\overline{3}$ 11'54 3°03'33	min. Earth dist.	1535 Jul 16 j 11:05	5° \approx 03'20 35.73544 AU
max. Earth dist.	1529 Jan 07 j 09:13	24° $\overline{3}$ 17'05 36.05878 AU	opposition	1535 Jul 19 j 09:08	4° \approx 59'20 -6°28'43
morning rise	1529 Jan 19 j 15:20	24° $\overline{3}$ 40'40	direct	1535 Oct 08 j 07:03	3° \approx 48'00
retrograde	1529 Apr 17 j 20:15	26° $\overline{3}$ 18'28	evening set	1536 Jan 02 j 23:37	5° \approx 20'28
min. Earth dist.	1529 Jul 05 j 19:47	25° $\overline{3}$ 08'22 34.18734 AU			
opposition	1529 Jul 08 j 13:12	25° $\overline{3}$ 04'30 -3°30'24	conjunction	1536 Jan 16 j 19:12	5° \approx 45'47 -6°21'07
direct	1529 Sep 27 j 10:12	23° $\overline{3}$ 50'59	minimum elong	1536 Jan 16 j 19:02	5° \approx 45'47 6°21'07
evening set	1529 Dec 22 j 20:34	25° $\overline{3}$ 26'25	max. Earth dist.	1536 Jan 19 j 16:54	5° \approx 51'09 37.85219 AU
			morning rise	1536 Jan 30 j 15:42	6° \approx 11'12
conjunction	1530 Jan 06 j 15:12	25° $\overline{3}$ 54'40 -3°33'37	retrograde	1536 Apr 28 j 23:24	7° \approx 46'07
minimum elong	1530 Jan 06 j 15:05	25° $\overline{3}$ 54'39 3°33'37	min. Earth dist.	1536 Jul 17 j 08:02	6° \approx 38'22 35.99287 AU
max. Earth dist.	1530 Jan 09 j 07:52	25° $\overline{3}$ 59'52 36.31176 AU	opposition	1536 Jul 20 j 06:26	6° \approx 34'21 -6°56'03
morning rise	1530 Jan 21 j 10:55	26° $\overline{3}$ 23'00	direct	1536 Oct 09 j 04:46	5° \approx 23'20
retrograde	1530 Apr 19 j 21:03	28° $\overline{3}$ 00'17	evening set	1537 Jan 03 j 23:42	6° \approx 55'25
min. Earth dist.	1530 Jul 07 j 18:52	26° $\overline{3}$ 50'34 34.44276 AU			
opposition	1530 Jul 10 j 13:54	26° $\overline{3}$ 46'39 -4°01'49	conjunction	1537 Jan 17 j 14:12	7° \approx 20'11 -6°46'50
direct	1530 Sep 29 j 08:49	25° $\overline{3}$ 33'30	minimum elong	1537 Jan 17 j 14:00	7° \approx 20'11 6°46'49
evening set	1530 Dec 24 j 21:17	27° $\overline{3}$ 08'20	max. Earth dist.	1537 Jan 20 j 11:30	7° \approx 25'29 38.10749 AU
			morning rise	1537 Jan 31 j 05:56	7° \approx 45'03
conjunction	1531 Jan 08 j 13:02	27° $\overline{3}$ 36'09 -4°03'05	retrograde	1537 Apr 30 j 21:09	9° \approx 19'39
minimum elong	1531 Jan 08 j 12:54	27° $\overline{3}$ 36'08 4°03'05	min. Earth dist.	1537 Jul 19 j 04:00	8° \approx 12'12 36.24984 AU
max. Earth dist.	1531 Jan 11 j 07:47	27° $\overline{3}$ 41'28 36.56704 AU	opposition	1537 Jul 22 j 03:27	8° \approx 08'09 -7°22'42
morning rise	1531 Jan 23 j 05:35	28° $\overline{3}$ 04'02	direct	1537 Oct 10 j 23:20	6° \approx 57'26
retrograde	1531 Apr 21 j 18:47	29° $\overline{3}$ 40'50	evening set	1538 Jan 05 j 23:16	8° \approx 29'09
min. Earth dist.	1531 Jul 09 j 18:42	28° $\overline{3}$ 31'27 34.70013 AU			
opposition	1531 Jul 12 j 13:54	28° $\overline{3}$ 27'32 -4°32'33	conjunction	1538 Jan 19 j 08:43	8° \approx 53'23 -7°11'55
direct	1531 Oct 01 j 09:23	27° $\overline{3}$ 14'46	minimum elong	1538 Jan 19 j 08:31	8° \approx 53'22 7°11'56
evening set	1531 Dec 26 j 22:01	28° $\overline{3}$ 49'04	max. Earth dist.	1538 Jan 22 j 07:40	8° \approx 58'45 38.36240 AU
			morning rise	1538 Feb 01 j 19:08	9° \approx 17'41
conjunction	1532 Jan 10 j 10:15	29° $\overline{3}$ 16'25 -4°31'56	retrograde	1538 May 02 j 14:53	10° \approx 52'01
minimum elong	1532 Jan 10 j 10:07	29° $\overline{3}$ 16'24 4°31'57	min. Earth dist.	1538 Jul 21 j 00:53	9° \approx 44'46 36.50664 AU
max. Earth dist.	1532 Jan 13 j 04:57	29° $\overline{3}$ 21'41 36.82383 AU	opposition	1538 Jul 23 j 23:59	9° \approx 40'46 -7°48'39
morning rise	1532 Jan 24 j 23:35	29° $\overline{3}$ 43'50	direct	1538 Oct 12 j 20:44	8° \approx 30'20
	1532 Feb 02 j 21:02	0° \approx	evening set	1539 Jan 07 j 22:55	10° \approx 01'44
retrograde	1532 Apr 22 j 16:46	1° \approx 20'11			
min. Earth dist.	1532 Jul 10 j 16:18	0° \approx 11'14 34.95882 AU	conjunction	1539 Jan 21 j 02:48	10° \approx 25'23 -7°36'22
opposition	1532 Jul 13 j 13:24	0° \approx 07'13 -5°02'37	minimum elong	1539 Jan 21 j 02:36	10° \approx 25'22 7°36'21
	1532 Jul 18 j 17:55	30° \overline{R} $\overline{3}$	max. Earth dist.	1539 Jan 24 j 01:27	10° \approx 30'42 38.61742 AU
direct	1532 Oct 02 j 08:55	28° $\overline{3}$ 54'50	morning rise	1539 Feb 03 j 07:48	10° \approx 49'07
	1532 Dec 11 j 17:55	0° \approx	retrograde	1539 May 04 j 08:09	12° \approx 23'12
evening set	1532 Dec 27 j 22:33	0° \approx 28'37	min. Earth dist.	1539 Jul 22 j 18:59	11° \approx 16'17 36.76386 AU
			opposition	1539 Jul 25 j 19:46	11° \approx 12'12 -8°13'54
conjunction	1533 Jan 11 j 07:05	0° \approx 55'29 -5°00'10	direct	1539 Oct 14 j 17:59	10° \approx 02'05
minimum elong	1533 Jan 11 j 06:56	0° \approx 55'29 5°00'10	evening set	1540 Jan 09 j 22:18	11° \approx 33'11
max. Earth dist.	1533 Jan 14 j 03:27	1° \approx 00'52 37.08131 AU			
morning rise	1533 Jan 25 j 16:38	1° \approx 22'26	conjunction	1540 Jan 22 j 20:30	11° \approx 56'16 -8°00'10
retrograde	1533 Apr 24 j 11:53	2° \approx 58'23	minimum elong	1540 Jan 22 j 20:18	11° \approx 56'15 8°00'10
min. Earth dist.	1533 Jul 12 j 15:44	1° \approx 49'43 35.21799 AU	max. Earth dist.	1540 Jan 25 j 20:35	12° \approx 01'40 38.87283 AU
opposition	1533 Jul 15 j 12:29	1° \approx 45'44 -5°32'00	morning rise	1540 Feb 04 j 19:48	12° \approx 19'25
direct	1533 Oct 04 j 09:58	0° \approx 33'44	retrograde	1540 May 05 j 00:13	13° \approx 53'18
evening set	1533 Dec 29 j 23:04	2° \approx 07'03	min. Earth dist.	1540 Jul 23 j 14:47	12° \approx 46'37 37.02163 AU
			opposition	1540 Jul 26 j 15:19	12° \approx 42'34 -8°38'27
conjunction	1534 Jan 13 j 03:34	2° \approx 33'25 -5°27'47	direct	1540 Oct 15 j 15:09	11° \approx 32'45
minimum elong	1534 Jan 13 j 03:24	2° \approx 33'25 5°27'47	evening set	1541 Jan 10 j 21:29	13° \approx 03'36
max. Earth dist.	1534 Jan 15 j 23:54	2° \approx 38'45 37.33896 AU			
morning rise	1534 Jan 27 j 09:03	2° \approx 59'52	conjunction	1541 Jan 23 j 13:44	13° \approx 26'06 -8°23'19
retrograde	1534 Apr 26 j 07:28	4° \approx 35'27	minimum elong	1541 Jan 23 j 13:32	13° \approx 26'05 8°23'18
min. Earth dist.	1534 Jul 14 j 12:54	3° \approx 27'09 35.47701 AU	max. Earth dist.	1541 Jan 26 j 14:11	13° \approx 31'29 39.12884 AU
opposition	1534 Jul 17 j 11:00	3° \approx 23'07 -6°00'42	morning rise	1541 Feb 05 j 06:56	13° \approx 48'39
direct	1534 Oct 06 j 09:35	2° \approx 11'27		1541 Mar 25 j 23:50	15° \approx
evening set	1534 Dec 31 j 23:26	3° \approx 44'20	retrograde	1541 May 06 j 16:04	15° \approx 22'22
				1541 Jun 18 j 19:09	15° \overline{R} \approx
conjunction	1535 Jan 14 j 23:31	4° \approx 10'12 -5°54'45	min. Earth dist.	1541 Jul 25 j 08:26	14° \approx 16'02 37.27980 AU
minimum elong	1535 Jan 14 j 23:20	4° \approx 10'11 5°54'45	opposition	1541 Jul 28 j 10:16	14° \approx 11'55 -9°02'19
max. Earth dist.	1535 Jan 17 j 20:23	4° \approx 15'32 37.59598 AU	direct	1541 Oct 17 j 11:30	13° \approx 02'24
morning rise	1535 Jan 29 j 00:47	4° \approx 36'08	evening set	1542 Jan 12 j 20:38	14° \approx 33'03

conjunction	1542 Jan 25 j 06:35	14° \approx 54'56	-8°45'49	retrograde	1548 May 16 j 08:34	25° \approx 21'04	
minimum elong	1542 Jan 25 j 06:22	14° \approx 54'55	8°45'50	min. Earth dist.	1548 Aug 04 j 10:34	24° \approx 16'27	39.05952 AU
max. Earth dist.	1542 Jan 28 j 07:20	15° \approx 00'19	39.38511 AU	opposition	1548 Aug 07 j 12:20	24° \approx 12'27	-11°30'44
	1542 Jan 28 j 03:02	15° \approx		direct	1548 Oct 27 j 13:58	23° \approx 04'59	
morning rise	1542 Feb 06 j 17:43	15° \approx 16'55		evening set	1549 Jan 24 j 11:54	24° \approx 34'51	
retrograde	1542 May 08 j 10:12	16° \approx 50'29					
min. Earth dist.	1542 Jul 27 j 02:49	15° \approx 44'25	37.53831 AU	conjunction	1549 Feb 03 j 20:01	24° \approx 52'20	-11°06'13
opposition	1542 Jul 30 j 04:58	15° \approx 40'19	-9°25'29	minimum elong	1549 Feb 03 j 19:49	24° \approx 52'20	11°06'13
	1542 Aug 31 j 11:40	15° \approx		max. Earth dist.	1549 Feb 06 j 20:46	24° \approx 57'29	41.14299 AU
direct	1542 Oct 19 j 05:00	14° \approx 31'08		morning rise	1549 Feb 14 j 05:02	25° \approx 09'54	
	1542 Dec 05 j 00:54	15° \approx		retrograde	1549 May 18 j 01:13	26° \approx 43'06	
evening set	1543 Jan 14 j 19:29	16° \approx 01'35		min. Earth dist.	1549 Aug 06 j 02:30	25° \approx 38'41	39.30378 AU
				opposition	1549 Aug 09 j 04:21	25° \approx 34'42	-11°49'27
conjunction	1543 Jan 26 j 23:10	16° \approx 22'52	-9°07'42	direct	1549 Oct 29 j 04:22	24° \approx 27'28	
minimum elong	1543 Jan 26 j 22:58	16° \approx 22'51	9°07'41	evening set	1550 Jan 26 j 10:13	25° \approx 57'16	
max. Earth dist.	1543 Jan 30 j 01:12	16° \approx 28'18	39.64141 AU				
morning rise	1543 Feb 08 j 03:43	16° \approx 44'14		conjunction	1550 Feb 05 j 10:25	26° \approx 14'07	-11°23'57
retrograde	1543 May 10 j 03:52	18° \approx 17'42		minimum elong	1550 Feb 05 j 10:12	26° \approx 14'06	11°23'58
min. Earth dist.	1543 Jul 28 j 21:02	17° \approx 11'54	37.79636 AU	max. Earth dist.	1550 Feb 08 j 12:10	26° \approx 19'18	41.38384 AU
opposition	1543 Jul 31 j 23:09	17° \approx 07'49	-9°47'58	morning rise	1550 Feb 15 j 11:16	26° \approx 31'00	
direct	1543 Oct 20 j 22:19	15° \approx 58'57		retrograde	1550 May 19 j 16:00	28° \approx 04'13	
evening set	1544 Jan 16 j 18:30	17° \approx 29'14		min. Earth dist.	1550 Aug 07 j 18:59	26° \approx 59'55	39.54564 AU
				opposition	1550 Aug 10 j 19:56	26° \approx 56'01	-12°07'33
conjunction	1544 Jan 28 j 15:21	17° \approx 49'55	-9°28'57	direct	1550 Oct 30 j 19:37	25° \approx 49'00	
minimum elong	1544 Jan 28 j 15:09	17° \approx 49'55	9°28'57	evening set	1551 Jan 28 j 08:33	27° \approx 18'48	
max. Earth dist.	1544 Jan 31 j 16:40	17° \approx 55'16	39.89696 AU				
morning rise	1544 Feb 09 j 13:19	18° \approx 10'41		conjunction	1551 Feb 07 j 00:20	27° \approx 34'58	-11°41'07
retrograde	1544 May 10 j 22:44	19° \approx 44'03		minimum elong	1551 Feb 07 j 00:09	27° \approx 34'57	11°41'07
min. Earth dist.	1544 Jul 29 j 13:44	18° \approx 38'34	38.05352 AU	max. Earth dist.	1551 Feb 10 j 01:12	27° \approx 40'04	41.62266 AU
opposition	1544 Aug 01 j 16:48	18° \approx 34'27	-10°09'48	morning rise	1551 Feb 16 j 16:52	27° \approx 51'11	
direct	1544 Oct 21 j 13:34	17° \approx 25'53		retrograde	1551 May 21 j 06:39	29° \approx 24'26	
evening set	1545 Jan 17 j 17:17	18° \approx 56'04		min. Earth dist.	1551 Aug 09 j 09:04	28° \approx 20'23	39.78573 AU
				opposition	1551 Aug 12 j 11:04	28° \approx 16'26	-12°25'02
conjunction	1545 Jan 29 j 07:21	19° \approx 16'08	-9°49'34	direct	1551 Nov 01 j 09:52	27° \approx 09'39	
minimum elong	1545 Jan 29 j 07:09	19° \approx 16'07	9°49'34	evening set	1552 Jan 30 j 06:43	28° \approx 39'28	
max. Earth dist.	1545 Feb 01 j 09:47	19° \approx 21'31	40.15118 AU				
morning rise	1545 Feb 09 j 22:20	19° \approx 36'16		conjunction	1552 Feb 08 j 14:02	28° \approx 54'58	-11°57'42
retrograde	1545 May 12 j 13:45	21° \approx 09'35		minimum elong	1552 Feb 08 j 13:49	28° \approx 54'57	11°57'42
min. Earth dist.	1545 Jul 31 j 08:18	20° \approx 04'17	38.30899 AU	max. Earth dist.	1552 Feb 11 j 15:35	29° \approx 00'04	41.85981 AU
opposition	1545 Aug 03 j 10:19	20° \approx 00'15	-10°30'58	morning rise	1552 Feb 17 j 22:01	29° \approx 10'29	
direct	1545 Oct 23 j 08:05	18° \approx 51'59			1552 Mar 21 j 09:13	0° \approx	
evening set	1546 Jan 19 j 16:00	20° \approx 22'04		retrograde	1552 May 21 j 18:07	0° \approx 43'49	
					1552 Jul 24 j 21:35	30° \approx	
conjunction	1546 Jan 30 j 22:54	20° \approx 41'30	-10°09'36	min. Earth dist.	1552 Aug 10 j 00:49	29° \approx 39'55	40.02437 AU
minimum elong	1546 Jan 30 j 22:41	20° \approx 41'29	10°09'36	opposition	1552 Aug 13 j 01:51	29° \approx 36'02	-12°41'55
max. Earth dist.	1546 Feb 03 j 00:34	20° \approx 46'49	40.40345 AU	direct	1552 Nov 02 j 02:40	28° \approx 29'29	
morning rise	1546 Feb 11 j 06:41	21° \approx 01'00		evening set	1553 Jan 31 j 04:56	29° \approx 59'22	
retrograde	1546 May 14 j 04:16	22° \approx 34'16			1553 Jan 31 j 14:08	0° \approx	
min. Earth dist.	1546 Aug 02 j 00:34	21° \approx 29'16	38.56214 AU				
opposition	1546 Aug 05 j 03:22	21° \approx 25'12	-10°51'30	conjunction	1553 Feb 09 j 03:27	0° \approx 14'10	-12°13'43
direct	1546 Oct 25 j 02:37	20° \approx 17'13		minimum elong	1553 Feb 09 j 03:16	0° \approx 14'09	12°13'43
evening set	1547 Jan 21 j 14:46	21° \approx 47'13		max. Earth dist.	1553 Feb 12 j 04:57	0° \approx 19'15	42.09580 AU
				morning rise	1553 Feb 18 j 02:27	0° \approx 29'00	
conjunction	1547 Feb 01 j 14:19	22° \approx 06'01	-10°29'03	retrograde	1553 May 23 j 05:34	2° \approx 02'26	
minimum elong	1547 Feb 01 j 14:06	22° \approx 06'00	10°29'02	min. Earth dist.	1553 Aug 11 j 14:31	0° \approx 58'47	40.26170 AU
max. Earth dist.	1547 Feb 04 j 16:06	22° \approx 11'18	40.65298 AU	opposition	1553 Aug 14 j 16:17	0° \approx 54'52	-12°58'12
morning rise	1547 Feb 12 j 14:50	22° \approx 24'52			1553 Oct 04 j 05:12	30° \approx	
retrograde	1547 May 15 j 18:54	23° \approx 58'06		direct	1553 Nov 03 j 18:54	29° \approx 48'34	
min. Earth dist.	1547 Aug 03 j 18:14	22° \approx 53'17	38.81246 AU		1553 Dec 03 j 14:58	0° \approx	
opposition	1547 Aug 06 j 20:04	22° \approx 49'17	-11°11'25	evening set	1554 Feb 02 j 02:57	1° \approx 18'34	
direct	1547 Oct 26 j 20:10	21° \approx 41'34					
evening set	1548 Jan 23 j 13:25	23° \approx 11'29		conjunction	1554 Feb 10 j 16:21	1° \approx 32'39	-12°29'11
				minimum elong	1554 Feb 10 j 16:09	1° \approx 32'39	12°29'10
conjunction	1548 Feb 03 j 05:29	23° \approx 29'38	-10°47'55	max. Earth dist.	1554 Feb 13 j 17:36	1° \approx 37'42	42.33043 AU
minimum elong	1548 Feb 03 j 05:16	23° \approx 29'37	10°47'55	morning rise	1554 Feb 19 j 06:22	1° \approx 46'48	
max. Earth dist.	1548 Feb 06 j 07:12	23° \approx 34'54	40.89957 AU	retrograde	1554 May 24 j 19:57	3° \approx 20'23	
morning rise	1548 Feb 13 j 22:14	23° \approx 47'51		min. Earth dist.	1554 Aug 13 j 04:57	2° \approx 16'56	40.49773 AU

opposition	1554 Aug 16 j 06:34	2° ✕ 13'03 -13°13'54	morning rise	1561 Feb 24 j 16:42	10° ✕ 34'07	
direct	1554 Nov 05 j 08:18	1° ✕ 07'00	retrograde	1561 Jun 02 j 10:50	12° ✕ 09'31	
evening set	1555 Feb 04 j 01:09	2° ✕ 37'07	min. Earth dist.	1561 Aug 22 j 03:24	11° ✕ 07'19	42.07133 AU
			opposition	1561 Aug 25 j 01:41	11° ✕ 03'42	-14°48'35
conjunction	1555 Feb 12 j 05:18	2° ✕ 50'30 -12°44'05	direct	1561 Nov 14 j 03:09	9° ✕ 59'15	
minimum elong	1555 Feb 12 j 05:07	2° ✕ 50'29 12°44'05	evening set	1562 Feb 15 j 19:12	11° ✕ 31'13	
max. Earth dist.	1555 Feb 15 j 07:23	2° ✕ 55'35 42.56362 AU				
morning rise	1555 Feb 20 j 09:50	3° ✕ 03'56	conjunction	1562 Feb 20 j 16:52	11° ✕ 38'59	-14°14'12
retrograde	1555 May 26 j 09:11	4° ✕ 37'41	minimum elong	1562 Feb 20 j 16:44	11° ✕ 38'58	14°14'12
min. Earth dist.	1555 Aug 14 j 19:13	3° ✕ 34'27 40.73190 AU	max. Earth dist.	1562 Feb 23 j 15:37	11° ✕ 43'39	44.11223 AU
opposition	1555 Aug 17 j 20:17	3° ✕ 30'36 -13°29'01	morning rise	1562 Feb 25 j 14:35	11° ✕ 46'45	
direct	1555 Nov 06 j 22:09	2° ✕ 24'49	retrograde	1562 Jun 03 j 22:30	13° ✕ 22'35	
evening set	1556 Feb 05 j 23:30	3° ✕ 55'05	min. Earth dist.	1562 Aug 23 j 16:45	12° ✕ 20'27	42.28119 AU
			opposition	1562 Aug 26 j 13:38	12° ✕ 16'54	-15°00'06
conjunction	1556 Feb 13 j 17:50	4° ✕ 07'46 -12°58'27	direct	1562 Nov 15 j 14:31	11° ✕ 12'37	
minimum elong	1556 Feb 13 j 17:39	4° ✕ 07'45 12°58'26	evening set	1563 Feb 17 j 20:53	12° ✕ 45'03	
max. Earth dist.	1556 Feb 16 j 18:39	4° ✕ 12'43 42.79484 AU				
morning rise	1556 Feb 21 j 12:38	4° ✕ 20'28	conjunction	1563 Feb 22 j 03:51	12° ✕ 51'49	-14°25'11
retrograde	1556 May 27 j 00:53	5° ✕ 54'25	minimum elong	1563 Feb 22 j 03:42	12° ✕ 51'49	14°25'11
min. Earth dist.	1556 Aug 15 j 08:16	4° ✕ 51'26 40.96393 AU	max. Earth dist.	1563 Feb 25 j 01:24	12° ✕ 56'24	44.31899 AU
opposition	1556 Aug 18 j 09:51	4° ✕ 47'35 -13°43'34	morning rise	1563 Feb 26 j 10:47	12° ✕ 58'35	
direct	1556 Nov 07 j 08:29	3° ✕ 42'03	retrograde	1563 Jun 05 j 09:43	14° ✕ 34'54	
evening set	1557 Feb 06 j 21:45	5° ✕ 12'31	min. Earth dist.	1563 Aug 25 j 03:37	13° ✕ 32'56	42.48824 AU
			opposition	1563 Aug 28 j 01:00	13° ✕ 29'23	-15°11'08
conjunction	1557 Feb 14 j 06:08	5° ✕ 24'27 -13°12'17	direct	1563 Nov 17 j 01:01	12° ✕ 25'15	
minimum elong	1557 Feb 14 j 05:58	5° ✕ 24'27 13°12'18	evening set	1564 Feb 20 j 00:07	13° ✕ 58'18	
max. Earth dist.	1557 Feb 17 j 07:42	5° ✕ 29'26 43.02352 AU				
morning rise	1557 Feb 21 j 14:51	5° ✕ 36'24	conjunction	1564 Feb 23 j 14:33	14° ✕ 03'58	-14°35'41
retrograde	1557 May 28 j 14:05	7° ✕ 10'36	minimum elong	1564 Feb 23 j 14:26	14° ✕ 03'57	14°35'41
min. Earth dist.	1557 Aug 16 j 23:11	6° ✕ 07'45 41.19309 AU	morning rise	1564 Feb 27 j 04:57	14° ✕ 09'37	
opposition	1557 Aug 19 j 23:15	6° ✕ 04'00 -13°57'35	max. Earth dist.	1564 Feb 26 j 12:07	14° ✕ 08'31	44.52314 AU
direct	1557 Nov 08 j 20:56	4° ✕ 58'44	retrograde	1564 Jun 05 j 18:56	15° ✕ 46'33	
evening set	1558 Feb 08 j 20:32	6° ✕ 29'26	min. Earth dist.	1564 Aug 25 j 16:11	14° ✕ 44'40	42.69297 AU
			opposition	1564 Aug 28 j 12:24	14° ✕ 41'11	-15°21'40
conjunction	1558 Feb 15 j 18:22	6° ✕ 40'36 -13°25'37	direct	1564 Nov 17 j 13:10	13° ✕ 37'13	
minimum elong	1558 Feb 15 j 18:11	6° ✕ 40'35 13°25'37	evening set	1565 Feb 21 j 06:28	15° ✕ 11'06	
max. Earth dist.	1558 Feb 18 j 18:57	6° ✕ 45'30 43.24920 AU				
morning rise	1558 Feb 22 j 16:27	6° ✕ 51'47	conjunction	1565 Feb 24 j 00:59	15° ✕ 15'26	-14°45'43
retrograde	1558 May 29 j 23:54	8° ✕ 26'14	minimum elong	1565 Feb 24 j 00:51	15° ✕ 15'26	14°45'43
min. Earth dist.	1558 Aug 18 j 11:45	7° ✕ 23'38 41.41881 AU	morning rise	1565 Feb 26 j 19:20	15° ✕ 19'46	
opposition	1558 Aug 21 j 12:12	7° ✕ 19'52 -14°11'05	max. Earth dist.	1565 Feb 26 j 22:42	15° ✕ 19'59	44.72526 AU
direct	1558 Nov 10 j 11:41	6° ✕ 14'49	retrograde	1565 Jun 07 j 02:25	16° ✕ 57'34	
evening set	1559 Feb 10 j 19:28	7° ✕ 45'47	min. Earth dist.	1565 Aug 27 j 03:01	15° ✕ 55'51	42.89555 AU
			opposition	1565 Aug 29 j 23:27	15° ✕ 52'21	-15°31'43
conjunction	1559 Feb 17 j 06:20	7° ✕ 56'10 -13°38'28	direct	1565 Nov 19 j 03:09	14° ✕ 48'35	
minimum elong	1559 Feb 17 j 06:10	7° ✕ 56'09 13°38'29	evening set	1566 Feb 23 j 20:47	16° ✕ 23'50	
max. Earth dist.	1559 Feb 20 j 06:13	8° ✕ 01'00 43.47105 AU				
morning rise	1559 Feb 23 j 17:29	8° ✕ 06'34	conjunction	1566 Feb 25 j 11:11	16° ✕ 26'19	-14°55'17
retrograde	1559 May 31 j 10:37	9° ✕ 41'18	minimum elong	1566 Feb 25 j 11:05	16° ✕ 26'19	14°55'17
min. Earth dist.	1559 Aug 20 j 01:58	8° ✕ 38'49 41.64056 AU	morning rise	1566 Feb 27 j 01:26	16° ✕ 28'48	
opposition	1559 Aug 23 j 01:06	8° ✕ 35'08 -14°24'04	max. Earth dist.	1566 Feb 28 j 07:50	16° ✕ 30'47	44.92538 AU
direct	1559 Nov 12 j 02:20	7° ✕ 30'19	retrograde	1566 Jun 08 j 14:20	18° ✕ 08'00	
evening set	1560 Feb 12 j 18:55	9° ✕ 01'34	min. Earth dist.	1566 Aug 28 j 14:01	17° ✕ 06'27	43.09623 AU
			opposition	1566 Aug 31 j 10:18	17° ✕ 02'58	-15°41'16
conjunction	1560 Feb 18 j 18:14	9° ✕ 11'08 -13°50'51	direct	1566 Nov 20 j 13:19	15° ✕ 59'23	
minimum elong	1560 Feb 18 j 18:05	9° ✕ 11'07 13°50'50				
max. Earth dist.	1560 Feb 21 j 17:58	9° ✕ 15'55 43.68882 AU	conjunction	1567 Feb 26 j 21:21	17° ✕ 36'40	-15°04'23
morning rise	1560 Feb 24 j 17:39	9° ✕ 20'42	minimum elong	1567 Feb 26 j 21:13	17° ✕ 36'40	15°04'23
retrograde	1560 May 31 j 21:26	10° ✕ 55'45	max. Earth dist.	1567 Mar 01 j 18:44	17° ✕ 41'09	45.12349 AU
min. Earth dist.	1560 Aug 20 j 15:01	9° ✕ 53'25 41.85790 AU	retrograde	1567 Jun 10 j 01:16	19° ✕ 17'56	
opposition	1560 Aug 23 j 13:26	9° ✕ 49'46 -14°36'34	min. Earth dist.	1567 Aug 30 j 01:47	18° ✕ 16'29	43.29455 AU
direct	1560 Nov 12 j 16:24	8° ✕ 45'08	opposition	1567 Sep 01 j 20:56	18° ✕ 13'05	-15°50'20
evening set	1561 Feb 13 j 18:46	10° ✕ 16'43	direct	1567 Nov 21 j 23:40	17° ✕ 09'41	
conjunction	1561 Feb 19 j 05:40	10° ✕ 25'24 -14°02'46	conjunction	1568 Feb 28 j 07:12	18° ✕ 46'33	-15°13'02
minimum elong	1561 Feb 19 j 05:30	10° ✕ 25'24 14°02'46	minimum elong	1568 Feb 28 j 07:07	18° ✕ 46'33	15°13'02
max. Earth dist.	1561 Feb 22 j 03:51	10° ✕ 30'04 43.90239 AU	max. Earth dist.	1568 Mar 02 j 03:20	18° ✕ 50'56	45.31923 AU

retrograde	1568 Jun 10 j 12:24	20° $\mathbf{\text{H}}$ 27'23		direct	1576 Dec 01 j 15:12	27° $\mathbf{\text{H}}$ 23'02	
min. Earth dist.	1568 Aug 30 j 11:35	19° $\mathbf{\text{H}}$ 26'10	43.49027 AU				
opposition	1568 Sep 02 j 07:12	19° $\mathbf{\text{H}}$ 22'45	-15°58'57	conjunction	1577 Mar 09 j 17:27	28° $\mathbf{\text{H}}$ 56'26	-16°13'00
direct	1568 Nov 22 j 07:59	18° $\mathbf{\text{H}}$ 19'33		minimum elong	1577 Mar 09 j 17:25	28° $\mathbf{\text{H}}$ 56'26	16°12'59
				max. Earth dist.	1577 Mar 12 j 07:50	29° $\mathbf{\text{H}}$ 00'19	46.90898 AU
conjunction	1569 Feb 28 j 16:56	19° $\mathbf{\text{H}}$ 56'01	-15°21'15		1577 Apr 25 j 05:27	0° $\mathbf{\text{Y}}$	
minimum elong	1569 Feb 28 j 16:50	19° $\mathbf{\text{H}}$ 56'00	15°21'15	retrograde	1577 Jun 20 j 18:26	0° $\mathbf{\text{Y}}$ 33'52	
max. Earth dist.	1569 Mar 03 j 13:00	20° $\mathbf{\text{H}}$ 00'22	45.51207 AU		1577 Aug 18 j 01:41	30° $\mathbf{\text{R}}$ $\mathbf{\text{H}}$	
retrograde	1569 Jun 11 j 21:26	21° $\mathbf{\text{H}}$ 36'27		min. Earth dist.	1577 Sep 10 j 08:09	29° $\mathbf{\text{H}}$ 33'36	45.07277 AU
min. Earth dist.	1569 Aug 31 j 23:31	20° $\mathbf{\text{H}}$ 35'20	43.68284 AU	opposition	1577 Sep 12 j 19:47	29° $\mathbf{\text{H}}$ 30'39	-16°58'10
opposition	1569 Sep 03 j 17:31	20° $\mathbf{\text{H}}$ 32'00	-16°07'08	direct	1577 Dec 03 j 01:13	28° $\mathbf{\text{H}}$ 28'54	
direct	1569 Nov 23 j 18:34	19° $\mathbf{\text{H}}$ 29'01			1578 Mar 09 j 17:59	0° $\mathbf{\text{Y}}$	
conjunction	1570 Mar 02 j 02:34	21° $\mathbf{\text{H}}$ 05'05	-15°29'03	conjunction	1578 Mar 11 j 01:35	0° $\mathbf{\text{Y}}$ 01'57	-16°17'45
minimum elong	1570 Mar 02 j 02:29	21° $\mathbf{\text{H}}$ 05'05	15°29'04	minimum elong	1578 Mar 11 j 01:32	0° $\mathbf{\text{Y}}$ 01'57	16°17'45
max. Earth dist.	1570 Mar 04 j 22:05	21° $\mathbf{\text{H}}$ 09'23	45.70158 AU	max. Earth dist.	1578 Mar 13 j 14:28	0° $\mathbf{\text{Y}}$ 05'43	47.06814 AU
retrograde	1570 Jun 13 j 04:55	22° $\mathbf{\text{H}}$ 45'08		retrograde	1578 Jun 22 j 05:13	1° $\mathbf{\text{Y}}$ 39'03	
min. Earth dist.	1570 Sep 02 j 09:44	21° $\mathbf{\text{H}}$ 44'11	43.87153 AU	min. Earth dist.	1578 Sep 11 j 16:24	0° $\mathbf{\text{Y}}$ 38'55	45.23145 AU
opposition	1570 Sep 05 j 03:29	21° $\mathbf{\text{H}}$ 40'53	-16°14'53	opposition	1578 Sep 14 j 04:11	0° $\mathbf{\text{Y}}$ 35'59	-17°02'46
direct	1570 Nov 25 j 06:16	20° $\mathbf{\text{H}}$ 38'05			1578 Oct 16 j 12:58	30° $\mathbf{\text{R}}$ $\mathbf{\text{H}}$	
				direct	1578 Dec 04 j 07:34	29° $\mathbf{\text{H}}$ 34'23	
conjunction	1571 Mar 03 j 12:06	22° $\mathbf{\text{H}}$ 13'46	-15°36'28		1579 Jan 20 j 19:24	0° $\mathbf{\text{Y}}$	
minimum elong	1571 Mar 03 j 12:00	22° $\mathbf{\text{H}}$ 13'46	15°36'27				
max. Earth dist.	1571 Mar 06 j 06:02	22° $\mathbf{\text{H}}$ 17'58	45.88686 AU	conjunction	1579 Mar 12 j 09:47	1° $\mathbf{\text{Y}}$ 07'07	-16°22'07
retrograde	1571 Jun 14 j 15:22	23° $\mathbf{\text{H}}$ 53'27		minimum elong	1579 Mar 12 j 09:47	1° $\mathbf{\text{Y}}$ 07'07	16°22'07
min. Earth dist.	1571 Sep 03 j 20:40	22° $\mathbf{\text{H}}$ 52'37	44.05585 AU	max. Earth dist.	1579 Mar 14 j 22:51	1° $\mathbf{\text{Y}}$ 10'52	47.22465 AU
opposition	1571 Sep 06 j 13:16	22° $\mathbf{\text{H}}$ 49'22	-16°22'14	retrograde	1579 Jun 23 j 14:11	2° $\mathbf{\text{Y}}$ 43'53	
direct	1571 Nov 26 j 15:59	21° $\mathbf{\text{H}}$ 46'45		min. Earth dist.	1579 Sep 13 j 02:11	1° $\mathbf{\text{Y}}$ 43'49	45.38732 AU
				opposition	1579 Sep 15 j 12:21	1° $\mathbf{\text{Y}}$ 40'57	-17°06'59
conjunction	1572 Mar 03 j 21:36	23° $\mathbf{\text{H}}$ 22'03	-15°43'30	direct	1579 Dec 05 j 14:09	0° $\mathbf{\text{Y}}$ 39'31	
minimum elong	1572 Mar 03 j 21:32	23° $\mathbf{\text{H}}$ 22'03	15°43'30				
max. Earth dist.	1572 Mar 06 j 15:33	23° $\mathbf{\text{H}}$ 26'14	46.06758 AU	conjunction	1580 Mar 12 j 17:50	2° $\mathbf{\text{Y}}$ 11'56	-16°26'07
retrograde	1572 Jun 15 j 01:02	25° $\mathbf{\text{H}}$ 01'22		minimum elong	1580 Mar 12 j 17:47	2° $\mathbf{\text{Y}}$ 11'56	16°26'07
min. Earth dist.	1572 Sep 04 j 07:43	24° $\mathbf{\text{H}}$ 00'37	44.23525 AU	max. Earth dist.	1580 Mar 15 j 05:57	2° $\mathbf{\text{Y}}$ 15'38	47.37845 AU
opposition	1572 Sep 06 j 22:55	23° $\mathbf{\text{H}}$ 57'27	-16°29'12	retrograde	1580 Jun 23 j 21:21	3° $\mathbf{\text{Y}}$ 48'23	
direct	1572 Nov 27 j 02:15	22° $\mathbf{\text{H}}$ 55'00		min. Earth dist.	1580 Sep 13 j 10:01	2° $\mathbf{\text{Y}}$ 48'29	45.54014 AU
				opposition	1580 Sep 15 j 20:22	2° $\mathbf{\text{Y}}$ 45'37	-17°10'49
conjunction	1573 Mar 05 j 06:38	24° $\mathbf{\text{H}}$ 29'54	-15°50'09	direct	1580 Dec 05 j 21:18	1° $\mathbf{\text{Y}}$ 44'20	
minimum elong	1573 Mar 05 j 06:33	24° $\mathbf{\text{H}}$ 29'54	15°50'08				
max. Earth dist.	1573 Mar 07 j 22:35	24° $\mathbf{\text{H}}$ 33'56	46.24358 AU	conjunction	1581 Mar 14 j 01:31	3° $\mathbf{\text{Y}}$ 16'28	-16°29'46
retrograde	1573 Jun 16 j 12:56	26° $\mathbf{\text{H}}$ 08'49		minimum elong	1581 Mar 14 j 01:31	3° $\mathbf{\text{Y}}$ 16'28	16°29'46
min. Earth dist.	1573 Sep 05 j 17:13	25° $\mathbf{\text{H}}$ 08'12	44.41005 AU	max. Earth dist.	1581 Mar 16 j 12:40	3° $\mathbf{\text{Y}}$ 20'05	47.52893 AU
opposition	1573 Sep 08 j 08:23	25° $\mathbf{\text{H}}$ 05'03	-16°35'47	retrograde	1581 Jun 25 j 04:28	4° $\mathbf{\text{Y}}$ 52'37	
direct	1573 Nov 28 j 08:47	24° $\mathbf{\text{H}}$ 02'45		min. Earth dist.	1581 Sep 14 j 19:35	3° $\mathbf{\text{Y}}$ 52'47	45.68947 AU
				opposition	1581 Sep 17 j 04:27	3° $\mathbf{\text{Y}}$ 50'00	-17°14'17
conjunction	1574 Mar 06 j 15:39	25° $\mathbf{\text{H}}$ 37'16	-15°56'26	direct	1581 Dec 07 j 06:18	2° $\mathbf{\text{Y}}$ 48'53	
minimum elong	1574 Mar 06 j 15:35	25° $\mathbf{\text{H}}$ 37'16	15°56'27				
max. Earth dist.	1574 Mar 09 j 07:30	25° $\mathbf{\text{H}}$ 41'16	46.41510 AU	conjunction	1582 Mar 15 j 09:29	4° $\mathbf{\text{Y}}$ 20'42	-16°33'04
retrograde	1574 Jun 17 j 22:00	27° $\mathbf{\text{H}}$ 15'47		minimum elong	1582 Mar 15 j 09:28	4° $\mathbf{\text{Y}}$ 20'42	16°33'04
min. Earth dist.	1574 Sep 07 j 04:25	26° $\mathbf{\text{H}}$ 15'12	44.58064 AU	max. Earth dist.	1582 Mar 17 j 20:33	4° $\mathbf{\text{Y}}$ 24'19	47.67566 AU
opposition	1574 Sep 09 j 17:36	26° $\mathbf{\text{H}}$ 12'10	-16°41'58	retrograde	1582 Jun 26 j 09:57	5° $\mathbf{\text{Y}}$ 56'34	
direct	1574 Nov 29 j 17:07	25° $\mathbf{\text{H}}$ 10'00		min. Earth dist.	1582 Sep 16 j 04:19	4° $\mathbf{\text{Y}}$ 56'50	45.83453 AU
				opposition	1582 Sep 18 j 12:09	4° $\mathbf{\text{Y}}$ 54'06	-17°17'25
conjunction	1575 Mar 08 j 00:29	26° $\mathbf{\text{H}}$ 44'08	-16°02'20	direct	1582 Dec 18 17:01	3° $\mathbf{\text{Y}}$ 53'07	
minimum elong	1575 Mar 08 j 00:26	26° $\mathbf{\text{H}}$ 44'08	16°02'20				
max. Earth dist.	1575 Mar 10 j 15:34	26° $\mathbf{\text{H}}$ 48'05	46.58289 AU	conjunction	1583 Mar 26 17:16	5° $\mathbf{\text{Y}}$ 24'40	-16°36'03
retrograde	1575 Jun 19 j 03:12	28° $\mathbf{\text{H}}$ 22'16		minimum elong	1583 Mar 26 17:16	5° $\mathbf{\text{Y}}$ 24'40	16°36'04
min. Earth dist.	1575 Sep 08 j 13:06	27° $\mathbf{\text{H}}$ 21'49	44.74761 AU	max. Earth dist.	1583 Mar 29 02:06	5° $\mathbf{\text{Y}}$ 28'08	47.81788 AU
opposition	1575 Sep 11 j 02:28	27° $\mathbf{\text{H}}$ 18'46	-16°47'46	retrograde	1583 Jul 07 20:21	7° $\mathbf{\text{Y}}$ 00'14	
direct	1575 Dec 01 j 04:44	26° $\mathbf{\text{H}}$ 16'44		min. Earth dist.	1583 Sep 27 12:42	6° $\mathbf{\text{Y}}$ 00'36	45.97480 AU
				opposition	1583 Sep 29 19:51	5° $\mathbf{\text{Y}}$ 57'55	-17°20'14
conjunction	1576 Mar 08 j 08:57	27° $\mathbf{\text{H}}$ 50'30	-16°07'52	direct	1583 Dec 19 23:21	4° $\mathbf{\text{Y}}$ 57'03	
minimum elong	1576 Mar 08 j 08:54	27° $\mathbf{\text{H}}$ 50'30	16°07'52				
max. Earth dist.	1576 Mar 10 j 22:53	27° $\mathbf{\text{H}}$ 54'22	46.74728 AU	conjunction	1584 Mar 27 00:58	6° $\mathbf{\text{Y}}$ 28'18	-16°38'44
retrograde	1576 Jun 19 j 10:34	29° $\mathbf{\text{H}}$ 28'17		minimum elong	1584 Mar 27 00:58	6° $\mathbf{\text{Y}}$ 28'18	16°38'43
min. Earth dist.	1576 Sep 08 j 22:52	28° $\mathbf{\text{H}}$ 27'55	44.91157 AU	max. Earth dist.	1584 Mar 29 09:25	6° $\mathbf{\text{Y}}$ 31'44	47.95496 AU
opposition	1576 Sep 11 j 11:14	28° $\mathbf{\text{H}}$ 24'55	-16°53'10	retrograde	1584 Jul 08 05:30	8° $\mathbf{\text{Y}}$ 03'34	

min. Earth dist.	1584 Sep 27 22:27	7°♈03'57	46.10970 AU	conjunction	1593 Apr 05 15:41	15°♈44'35	-16°48'55
opposition	1584 Sep 30 03:27	7°♈01'22	-17°22'44	minimum elong	1593 Apr 05 15:44	15°♈44'35	16°48'56
direct	1584 Dec 20 06:06	6°♈00'38		max. Earth dist.	1593 Apr 07 15:24	15°♈47'25	49.00312 AU
				retrograde	1593 Jul 17 15:27	17°♈17'29	
conjunction	1585 Mar 28 08:33	7°♈31'35	-16°41'06	min. Earth dist.	1593 Oct 07 18:31	16°♈18'26	47.14311 AU
minimum elong	1585 Mar 28 08:34	7°♈31'35	16°41'07	opposition	1593 Oct 09 16:21	16°♈16'14	-17°30'55
max. Earth dist.	1585 Mar 30 15:28	7°♈34'54	48.08693 AU	direct	1593 Dec 29 22:11	15°♈16'25	
retrograde	1585 Jul 09 11:54	9°♈06'32					
min. Earth dist.	1585 Sep 29 05:58	8°♈07'00	46.23945 AU	conjunction	1594 Apr 06 22:15	16°♈45'11	-16°48'30
opposition	1585 Oct 01 10:49	8°♈04'26	-17°24'56	minimum elong	1594 Apr 06 22:20	16°♈45'11	16°48'30
direct	1585 Dec 21 13:03	7°♈03'47		max. Earth dist.	1594 Apr 08 21:58	16°♈47'59	49.10289 AU
				retrograde	1594 Jul 19 00:05	18°♈17'53	
conjunction	1586 Mar 29 15:50	8°♈34'26	-16°43'11	min. Earth dist.	1594 Oct 09 02:41	17°♈18'52	47.24060 AU
minimum elong	1586 Mar 29 15:51	8°♈34'26	16°43'11	opposition	1594 Oct 10 22:34	17°♈16'46	-17°30'15
max. Earth dist.	1586 Mar 31 21:18	8°♈37'39	48.21384 AU	direct	1594 Dec 31 03:36	16°♈17'04	
retrograde	1586 Jul 10 17:36	10°♈09'05					
min. Earth dist.	1586 Sep 30 15:04	9°♈09'33	46.36446 AU	conjunction	1595 Apr 08 04:49	17°♈45'38	-16°47'49
opposition	1586 Oct 02 18:08	9°♈07'04	-17°26'49	minimum elong	1595 Apr 08 04:53	17°♈45'38	16°47'48
direct	1586 Dec 22 21:26	8°♈06'30		max. Earth dist.	1595 Apr 10 02:45	17°♈48'20	49.19825 AU
				retrograde	1595 Jul 20 07:21	19°♈18'08	
conjunction	1587 Mar 30 23:12	9°♈36'52	-16°44'57	min. Earth dist.	1595 Oct 10 08:51	18°♈19'13	47.33334 AU
minimum elong	1587 Mar 30 23:13	9°♈36'52	16°44'58	opposition	1595 Oct 12 04:28	18°♈17'08	-17°29'18
max. Earth dist.	1587 Apr 02 04:32	9°♈40'04	48.33638 AU	direct	1596 Jan 01 07:23	17°♈17'32	
retrograde	1587 Jul 11 22:05	11°♈11'12					
min. Earth dist.	1587 Oct 01 22:46	10°♈11'43	46.48522 AU	conjunction	1596 Apr 08 11:16	18°♈45'56	-16°46'51
opposition	1587 Oct 04 00:59	10°♈09'17	-17°28'23	minimum elong	1596 Apr 08 11:21	18°♈45'56	16°46'51
direct	1587 Dec 24 07:17	9°♈08'48		max. Earth dist.	1596 Apr 10 07:40	18°♈48'32	49.28851 AU
				retrograde	1596 Jul 20 12:42	20°♈18'12	
conjunction	1588 Mar 31 06:12	10°♈38'53	-16°46'25	min. Earth dist.	1596 Oct 10 17:08	19°♈19'17	47.42087 AU
minimum elong	1588 Mar 31 06:14	10°♈38'53	16°46'24	opposition	1596 Oct 12 10:36	19°♈17'19	-17°28'06
max. Earth dist.	1588 Apr 02 09:42	10°♈41'58	48.45509 AU	direct	1597 Jan 01 13:38	18°♈17'48	
retrograde	1588 Jul 12 06:24	12°♈12'57					
min. Earth dist.	1588 Oct 02 06:03	11°♈13'32	46.60254 AU	conjunction	1597 Apr 09 17:35	19°♈46'00	-16°45'39
opposition	1588 Oct 04 07:54	11°♈11'07	-17°29'38	minimum elong	1597 Apr 09 17:40	19°♈46'00	16°45'38
direct	1588 Dec 24 13:33	10°♈10'44		max. Earth dist.	1597 Apr 11 13:26	19°♈48'34	49.37366 AU
				retrograde	1597 Jul 21 15:08	21°♈18'03	
conjunction	1589 Apr 01 13:02	11°♈40'33	-16°47'33	min. Earth dist.	1597 Oct 11 23:49	20°♈19'11	47.50311 AU
minimum elong	1589 Apr 01 13:04	11°♈40'33	16°47'34	opposition	1597 Oct 13 16:30	20°♈17'14	-17°26'38
max. Earth dist.	1589 Apr 03 16:44	11°♈43'38	48.57052 AU	direct	1598 Jan 02 22:36	19°♈17'47	
retrograde	1589 Jul 13 14:11	13°♈14'21					
min. Earth dist.	1589 Oct 03 14:25	12°♈14'57	46.71665 AU	conjunction	1598 Apr 10 23:48	20°♈45'47	-16°44'11
opposition	1589 Oct 05 14:44	12°♈12'37	-17°30'32	minimum elong	1598 Apr 10 23:54	20°♈45'47	16°44'12
direct	1589 Dec 25 19:45	11°♈12'20		max. Earth dist.	1598 Apr 12 17:26	20°♈48'13	49.45375 AU
				retrograde	1598 Jul 22 21:28	22°♈17'37	
conjunction	1590 Apr 02 19:54	12°♈41'54	-16°48'22	min. Earth dist.	1598 Oct 13 06:39	21°♈18'45	47.58064 AU
minimum elong	1590 Apr 02 19:57	12°♈41'54	16°48'22	opposition	1598 Oct 14 22:12	21°♈16'52	-17°24'54
max. Earth dist.	1590 Apr 04 22:27	12°♈44'54	48.68312 AU	direct	1599 Jan 04 04:57	20°♈17'27	
retrograde	1590 Jul 14 21:45	14°♈15'26					
min. Earth dist.	1590 Oct 04 20:38	13°♈16'09	46.82789 AU	conjunction	1599 Apr 12 06:02	21°♈45'15	-16°42'28
opposition	1590 Oct 06 21:12	13°♈13'49	-17°31'07	minimum elong	1599 Apr 12 06:08	21°♈45'15	16°42'27
direct	1590 Dec 27 00:12	12°♈13'38		max. Earth dist.	1599 Apr 13 23:26	21°♈47'40	49.52932 AU
				retrograde	1599 Jul 24 03:47	23°♈16'53	
conjunction	1591 Apr 04 02:36	13°♈42'59	-16°48'52	min. Earth dist.	1599 Oct 14 13:56	22°♈17'59	47.65383 AU
minimum elong	1591 Apr 04 02:38	13°♈42'59	16°48'52	opposition	1599 Oct 16 03:52	22°♈16'11	-17°22'54
max. Earth dist.	1591 Apr 06 04:14	13°♈45'56	48.79278 AU	direct	1600 Jan 05 11:59	21°♈16'49	
retrograde	1591 Jul 16 03:49	15°♈16'17					
min. Earth dist.	1591 Oct 06 04:50	14°♈17'03	46.93624 AU	conjunction	1600 Apr 12 11:57	22°♈44'24	-16°40'28
opposition	1591 Oct 08 03:47	14°♈14'48	-17°31'22	minimum elong	1600 Apr 12 12:02	22°♈44'24	16°40'28
direct	1591 Dec 28 06:35	13°♈14'44		max. Earth dist.	1600 Apr 14 03:56	22°♈46'44	49.60105 AU
				retrograde	1600 Jul 24 11:53	24°♈15'49	
conjunction	1592 Apr 04 09:14	14°♈43'52	-16°49'03	min. Earth dist.	1600 Oct 14 19:21	23°♈16'58	47.72344 AU
minimum elong	1592 Apr 04 09:18	14°♈43'52	16°49'03	opposition	1600 Oct 16 09:18	23°♈15'10	-17°20'37
max. Earth dist.	1592 Apr 06 10:53	14°♈46'49	48.89957 AU	direct	1601 Jan 05 14:56	22°♈15'51	
retrograde	1592 Jul 16 07:11	16°♈16'57					
min. Earth dist.	1592 Oct 06 11:29	15°♈17'50	47.04136 AU	conjunction	1601 Apr 13 17:49	23°♈43'16	-16°38'12
opposition	1592 Oct 08 10:04	15°♈15'35	-17°31'18	minimum elong	1601 Apr 13 17:55	23°♈43'16	16°38'11
direct	1592 Dec 28 16:06	14°♈15'39		max. Earth dist.	1601 Apr 15 08:53	23°♈45'32	49.66939 AU

retrograde	1601 Jul 25 18:21	25°  14'28
min. Earth dist.	1601 Oct 16 02:33	24°  15'36 47.78994 AU
opposition	1601 Oct 17 14:48	24°  13'53 -17°18'03
direct	1602 Jan 06 18:30	23°  14'37