

evening set	6100 Jan 06 12:04	1°56'00	conjunction	6106 Feb 18 02:20	29°19'44 -0°38'03
			minimum elong	6106 Feb 18 02:20	29°19'44 0°38'01
conjunction	6100 Jan 22 11:01	2°54'31 -0°20'18	max. Earth dist.	6106 Feb 18 08:49	29°20'42 20.24704 AU
minimum elong	6100 Jan 22 11:01	2°54'31 0°20'16		6106 Mar 01 06:02	0°
max. Earth dist.	6100 Jan 22 08:27	2°54'07 19.86632 AU	morning rise	6106 Mar 05 19:18	0°16'12
morning rise	6100 Feb 07 07:23	3°52'39	retrograde	6106 Jun 05 08:27	3°27'49
retrograde	6100 May 09 15:05	7°08'12	opposition	6106 Aug 20 11:58	1°28'24 -0°43'27
opposition	6100 Jul 23 16:48	5°08'05 -0°24'26	min. Earth dist.	6106 Aug 20 05:42	1°29'02 18.27995 AU
min. Earth dist.	6100 Jul 23 18:47	5°07'53 17.89706 AU		6106 Sep 29 19:58	30°
direct	6100 Oct 08 20:06	3°05'09	direct	6106 Nov 05 18:16	29°27'22
evening set	6101 Jan 11 05:47	6°25'29		6106 Dec 11 16:19	0°
			evening set	6107 Feb 06 19:55	2°40'48
conjunction	6101 Jan 27 03:52	7°23'41 -0°23'43	conjunction	6107 Feb 22 13:40	3°37'10 -0°40'16
minimum elong	6101 Jan 27 03:52	7°23'41 0°23'41	minimum elong	6107 Feb 22 13:40	3°37'10 0°40'15
max. Earth dist.	6101 Jan 27 02:24	7°23'28 19.92818 AU	max. Earth dist.	6107 Feb 22 20:55	3°38'16 20.31302 AU
morning rise	6101 Feb 11 23:35	8°21'32	morning rise	6107 Mar 10 06:24	4°33'23
retrograde	6101 May 14 09:10	11°36'25	retrograde	6107 Jun 09 22:50	7°44'27
opposition	6101 Jul 28 13:34	9°36'27 -0°28'09	opposition	6107 Aug 25 04:53	5°45'10 -0°45'46
min. Earth dist.	6101 Jul 28 13:24	9°36'28 17.95913 AU	min. Earth dist.	6107 Aug 24 20:09	5°46'04 18.34600 AU
direct	6101 Oct 13 19:18	7°33'49	direct	6107 Nov 10 10:42	3°44'31
evening set	6102 Jan 15 22:38	10°53'03	evening set	6108 Feb 11 07:07	6°56'51
conjunction	6102 Jan 31 19:53	11°50'56 -0°26'59	conjunction	6108 Feb 27 00:29	7°52'57 -0°42'14
minimum elong	6102 Jan 31 19:53	11°50'56 0°26'58	minimum elong	6108 Feb 27 00:29	7°52'57 0°42'13
max. Earth dist.	6102 Jan 31 19:59	11°50'57 19.99048 AU	max. Earth dist.	6108 Feb 27 10:01	7°54'23 20.37891 AU
morning rise	6102 Feb 16 14:53	12°48'30	morning rise	6108 Mar 13 16:49	8°48'56
	6102 Mar 30 20:10	15°	retrograde	6108 Jun 13 10:29	11°59'26
retrograde	6102 May 18 23:33	16°02'42	opposition	6108 Aug 28 21:14	10°00'20 -0°47'48
	6102 Jul 09 10:54	15°	min. Earth dist.	6108 Aug 28 12:08	10°01'15 18.41169 AU
opposition	6102 Aug 02 09:46	14°02'51 -0°31'40	direct	6108 Nov 14 01:37	8°00'05
min. Earth dist.	6102 Aug 02 09:25	14°02'53 18.02176 AU	evening set	6109 Feb 14 17:38	11°11'19
direct	6102 Oct 18 15:26	12°00'31			
	6103 Jan 15 08:08	15°	conjunction	6109 Mar 02 10:28	12°07'10 -0°43'58
evening set	6103 Jan 20 14:28	15°18'36	minimum elong	6109 Mar 02 10:28	12°07'10 0°43'58
conjunction	6103 Feb 05 10:53	16°16'10 -0°30'04	max. Earth dist.	6109 Mar 02 20:21	12°08'38 20.44420 AU
minimum elong	6103 Feb 05 10:53	16°16'10 0°30'02	morning rise	6109 Mar 18 02:45	13°02'55
max. Earth dist.	6103 Feb 05 11:59	16°16'20 20.05347 AU	retrograde	6109 Jun 18 00:06	16°12'54
morning rise	6103 Feb 21 05:22	17°13'26	opposition	6109 Sep 02 12:54	14°13'57 -0°49'35
retrograde	6103 May 23 16:08	20°26'59	min. Earth dist.	6109 Sep 02 01:46	14°15'05 18.47635 AU
opposition	6103 Aug 07 05:19	18°27'13 -0°34'59	direct	6109 Nov 18 16:19	12°14'05
min. Earth dist.	6103 Aug 07 02:31	18°27'30 18.08504 AU	evening set	6110 Feb 19 03:23	15°24'17
direct	6103 Oct 23 12:58	16°25'11			
evening set	6104 Jan 25 05:07	19°42'05	conjunction	6110 Mar 06 19:56	16°19'53 -0°45'28
conjunction	6104 Feb 10 00:51	20°39'20 -0°32'56	minimum elong	6110 Mar 06 19:56	16°19'53 0°45'28
minimum elong	6104 Feb 10 00:51	20°39'20 0°32'55	max. Earth dist.	6110 Mar 07 07:53	16°21'39 20.50794 AU
max. Earth dist.	6104 Feb 10 04:06	20°39'50 20.11708 AU	morning rise	6110 Mar 22 11:54	17°15'25
morning rise	6104 Feb 25 18:43	21°36'20	retrograde	6110 Jun 22 10:48	20°24'55
retrograde	6104 May 27 04:59	24°49'13	opposition	6110 Sep 07 04:08	18°26'08 -0°51'05
opposition	6104 Aug 11 00:20	22°49'32 -0°38'03	min. Earth dist.	6110 Sep 06 16:47	18°27'17 18.53915 AU
min. Earth dist.	6104 Aug 10 21:06	22°49'52 18.14917 AU	direct	6110 Nov 23 06:06	16°26'40
direct	6104 Oct 27 07:10	20°47'49	evening set	6111 Feb 23 12:39	19°35'49
evening set	6105 Jan 28 18:59	24°03'33	conjunction	6111 Mar 11 04:45	20°31'11 -0°46'42
conjunction	6105 Feb 13 13:57	25°00'29 -0°35'36	minimum elong	6111 Mar 11 04:45	20°31'11 0°46'42
minimum elong	6105 Feb 13 13:57	25°00'29 0°35'36	max. Earth dist.	6111 Mar 11 16:42	20°32'57 20.56965 AU
max. Earth dist.	6105 Feb 13 18:10	25°01'07 20.18168 AU	morning rise	6111 Mar 26 20:47	21°26'31
morning rise	6105 Mar 01 07:26	25°57'13	retrograde	6111 Jun 26 23:43	24°35'35
retrograde	6105 May 31 20:19	29°09'27	opposition	6111 Sep 11 18:46	22°36'55 -0°52'18
opposition	6105 Aug 15 18:19	27°09'53 -0°40'52	min. Earth dist.	6111 Sep 11 05:46	22°38'13 18.59964 AU
min. Earth dist.	6105 Aug 15 12:33	27°10'29 18.21422 AU	direct	6111 Nov 27 19:31	20°37'48
direct	6105 Nov 01 01:53	25°08'29	evening set	6112 Feb 27 21:05	23°45'57
evening set	6106 Feb 02 07:54	28°23'04	conjunction	6112 Mar 14 13:05	24°41'06 -0°47'42
			minimum elong	6112 Mar 14 13:05	24°41'06 0°47'43

max. Earth dist.	6112 Mar 15 02:52	24° H 43'08	20.62855 AU	min. Earth dist.	6118 Oct 10 16:25	21° Y 17'24	18.91954 AU
morning rise	6112 Mar 30 04:58	25° H 36'16		direct	6118 Dec 26 23:45	19° Y 18'20	
retrograde	6112 Jun 30 09:37	28° H 44'53		evening set	6119 Mar 27 17:38	22° Y 20'30	
opposition	6112 Sep 15 08:54	26° H 46'20	-0°53'15				
min. Earth dist.	6112 Sep 14 19:52	26° H 47'39	18.65691 AU	conjunction	6119 Apr 12 09:42	23° Y 14'36	-0°47'36
direct	6112 Dec 01 07:47	24° H 47'35		minimum elong	6119 Apr 12 09:42	23° Y 14'36	0°47'37
evening set	6113 Mar 03 05:13	27° H 54'45		max. Earth dist.	6119 Apr 13 02:44	23° Y 17'05	20.93550 AU
				morning rise	6119 Apr 28 03:28	24° Y 08'57	
conjunction	6113 Mar 18 20:54	28° H 49'42	-0°48'26	retrograde	6119 Jul 30 03:45	27° Y 15'18	
minimum elong	6113 Mar 18 20:54	28° H 49'42	0°48'26	opposition	6119 Oct 15 19:08	25° Y 16'46	-0°52'05
max. Earth dist.	6113 Mar 19 10:15	28° H 51'40	20.68404 AU	min. Earth dist.	6119 Oct 15 01:49	25° Y 18'29	18.95136 AU
morning rise	6113 Apr 03 12:59	29° H 44'42		direct	6119 Dec 31 07:41	23° Y 19'31	
	6113 Apr 08 00:14	0° Y		evening set	6120 Mar 30 22:09	26° Y 21'04	
retrograde	6113 Jul 04 21:20	2° Y 52'55					
opposition	6113 Sep 19 22:13	0° Y 54'26	-0°53'55	conjunction	6120 Apr 15 14:40	27° Y 15'06	-0°46'37
min. Earth dist.	6113 Sep 19 08:03	0° Y 55'52	18.71054 AU	minimum elong	6120 Apr 15 14:40	27° Y 15'06	0°46'37
	6113 Oct 13 09:19	30° R H		max. Earth dist.	6120 Apr 16 09:21	27° Y 17'48	20.96567 AU
direct	6113 Dec 05 20:11	28° H 55'58		morning rise	6120 May 01 08:47	28° Y 09'24	
	6114 Jan 25 21:50	0° Y			6120 Jun 06 21:12	0° H	
evening set	6114 Mar 07 12:37	2° Y 02'13		retrograde	6120 Aug 02 11:46	1° H 15'35	
					6120 Sep 30 20:18	30° R Y	
conjunction	6114 Mar 23 04:21	2° Y 57'00	-0°48'55	min. Earth dist.	6120 Oct 18 11:10	29° Y 18'49	18.97986 AU
minimum elong	6114 Mar 23 04:21	2° Y 57'00	0°48'56	opposition	6120 Oct 19 04:51	29° Y 17'03	-0°50'52
max. Earth dist.	6114 Mar 23 19:16	2° Y 59'11	20.73556 AU	direct	6121 Jan 03 16:14	27° Y 19'59	
morning rise	6114 Apr 07 20:23	3° Y 51'50			6121 Mar 28 19:43	0° H	
retrograde	6114 Jul 09 06:36	6° Y 59'39		evening set	6121 Apr 04 02:40	0° H 20'59	
opposition	6114 Sep 24 11:13	5° Y 01'14	-0°54'18				
min. Earth dist.	6114 Sep 23 21:01	5° Y 02'39	18.75998 AU	conjunction	6121 Apr 19 19:22	1° H 14'58	-0°45'24
direct	6114 Dec 10 07:09	3° Y 03'02		minimum elong	6121 Apr 19 19:22	1° H 14'58	0°45'26
evening set	6115 Mar 11 19:26	6° Y 08'22		max. Earth dist.	6121 Apr 20 13:21	1° H 17'34	20.99255 AU
				morning rise	6121 May 05 14:09	2° H 09'14	
conjunction	6115 Mar 27 11:00	7° Y 02'57	-0°49'09	retrograde	6121 Aug 06 19:57	5° H 15'19	
minimum elong	6115 Mar 27 10:59	7° Y 02'57	0°49'09	opposition	6121 Oct 23 14:08	3° H 16'46	-0°49'24
max. Earth dist.	6115 Mar 28 01:27	7° Y 05'04	20.78298 AU	min. Earth dist.	6121 Oct 22 20:05	3° H 18'34	19.00504 AU
morning rise	6115 Apr 12 03:24	7° Y 57'40		direct	6122 Jan 07 22:49	1° H 19'53	
retrograde	6115 Jul 13 17:04	11° Y 05'08		evening set	6122 Apr 08 06:52	4° H 20'24	
opposition	6115 Sep 28 23:35	9° Y 06'42	-0°54'24				
min. Earth dist.	6115 Sep 28 08:26	9° Y 08'13	18.80539 AU	conjunction	6122 Apr 24 00:07	5° H 14'21	-0°43'59
direct	6115 Dec 14 18:33	7° Y 08'43		minimum elong	6122 Apr 24 00:07	5° H 14'21	0°44'00
evening set	6116 Mar 15 01:38	10° Y 13'10		max. Earth dist.	6122 Apr 24 19:31	5° H 17'08	21.01588 AU
				morning rise	6122 May 09 19:19	6° H 08'37	
conjunction	6116 Mar 30 17:24	11° Y 07'38	-0°49'08	retrograde	6122 Aug 11 03:27	9° H 14'36	
minimum elong	6116 Mar 30 17:24	11° Y 07'38	0°49'08	opposition	6122 Oct 27 23:13	7° H 16'05	-0°47'43
max. Earth dist.	6116 Mar 31 09:31	11° Y 09'59	20.82632 AU	min. Earth dist.	6122 Oct 27 04:55	7° H 17'54	19.02641 AU
morning rise	6116 Apr 15 09:55	12° Y 02'13		direct	6123 Jan 12 06:38	5° H 19'22	
retrograde	6116 Jul 17 01:44	15° Y 09'19		evening set	6123 Apr 12 11:05	8° H 19'27	
opposition	6116 Oct 02 11:12	13° Y 10'52	-0°54'13				
min. Earth dist.	6116 Oct 01 19:56	13° Y 12'24	18.84682 AU	conjunction	6123 Apr 28 04:38	9° H 13'23	-0°42'21
direct	6116 Dec 18 04:37	11° Y 13'05		minimum elong	6123 Apr 28 04:38	9° H 13'23	0°42'22
evening set	6117 Mar 19 07:27	14° Y 16'43		max. Earth dist.	6123 Apr 28 23:09	9° H 16'03	21.03533 AU
				morning rise	6123 May 14 00:38	10° H 07'39	
conjunction	6117 Apr 03 23:10	15° Y 11'02	-0°48'52	retrograde	6123 Aug 15 12:14	13° H 13'39	
minimum elong	6117 Apr 03 23:10	15° Y 11'02	0°48'53	opposition	6123 Nov 01 08:04	11° H 15'06	-0°45'47
max. Earth dist.	6117 Apr 04 14:51	15° Y 13'19	20.86598 AU	min. Earth dist.	6123 Oct 31 13:49	11° H 16'55	19.04378 AU
morning rise	6117 Apr 19 16:11	16° Y 05'32		direct	6124 Jan 16 12:27	9° H 18'31	
retrograde	6117 Jul 21 10:59	19° Y 12'20		evening set	6124 Apr 15 15:16	12° H 18'16	
opposition	6117 Oct 06 22:19	17° Y 13'51	-0°53'47				
min. Earth dist.	6117 Oct 06 06:11	17° Y 15'27	18.88483 AU	conjunction	6124 May 01 09:29	13° H 12'12	-0°40'31
direct	6117 Dec 22 14:22	15° Y 16'14		minimum elong	6124 May 01 09:29	13° H 12'12	0°40'33
evening set	6118 Mar 23 12:37	18° Y 19'06		max. Earth dist.	6124 May 02 05:05	13° H 15'01	21.05040 AU
				morning rise	6124 May 17 06:00	14° H 06'30	
conjunction	6118 Apr 08 04:37	19° Y 13'19	-0°48'21		6124 Jun 02 18:22	15° H	
minimum elong	6118 Apr 08 04:37	19° Y 13'19	0°48'22	retrograde	6124 Aug 18 19:09	17° H 12'29	
max. Earth dist.	6118 Apr 08 22:06	19° Y 15'51	20.90225 AU	opposition	6124 Nov 04 16:28	15° H 13'57	-0°43'39
morning rise	6118 Apr 23 21:48	20° Y 07'43		min. Earth dist.	6124 Nov 03 22:20	15° H 15'46	19.05643 AU
retrograde	6118 Jul 25 19:16	23° Y 14'16			6124 Nov 10 12:39	15° R H	
opposition	6118 Oct 11 08:59	21° Y 15'45	-0°53'04	direct	6125 Jan 19 19:26	13° H 17'29	

	6125 Mar 26 09:10	15°♄	minimum elong	6131 May 29 23:07	11°♄03'08 0°22'50
evening set	6125 Apr 19 19:42	16°♄16'57	max. Earth dist.	6131 May 30 14:25	11°♄05'19 21.00943 AU
			morning rise	6131 Jun 15 01:22	11°♄58'02
conjunction	6125 May 05 14:19	17°♄10'54 -0°38'29	retrograde	6131 Sep 17 04:17	15°♄05'01
minimum elong	6125 May 05 14:19	17°♄10'54 0°38'31	min. Earth dist.	6131 Dec 03 09:57	13°♄07'03 18.99785 AU
max. Earth dist.	6125 May 06 08:33	17°♄13'31 21.06064 AU	opposition	6131 Dec 04 00:12	13°♄05'37 -0°23'28
morning rise	6125 May 21 11:41	18°♄05'14	direct	6132 Feb 17 12:16	11°♄08'47
retrograde	6125 Aug 23 04:08	21°♄11'17	evening set	6132 May 17 05:46	14°♄07'54
min. Earth dist.	6125 Nov 08 07:19	19°♄14'28 19.06411 AU			
opposition	6125 Nov 09 00:55	19°♄12'42 -0°41'18	conjunction	6132 Jun 02 05:37	15°♄02'29 -0°19'43
direct	6126 Jan 24 00:53	17°♄16'19	minimum elong	6132 Jun 02 05:37	15°♄02'29 0°19'44
evening set	6126 Apr 23 23:58	20°♄15'33	max. Earth dist.	6132 Jun 02 21:29	15°♄04'45 20.98508 AU
			morning rise	6132 Jun 18 08:33	15°♄57'32
conjunction	6126 May 09 19:20	21°♄09'33 -0°36'17	retrograde	6132 Sep 20 13:04	19°♄04'49
minimum elong	6126 May 09 19:20	21°♄09'33 0°36'19	opposition	6132 Dec 07 07:33	17°♄05'15 -0°19'59
max. Earth dist.	6126 May 10 14:20	21°♄12'16 21.06554 AU	min. Earth dist.	6132 Dec 06 17:21	17°♄06'42 18.97173 AU
morning rise	6126 May 25 17:15	22°♄03'56	direct	6133 Feb 20 18:18	15°♄08'19
retrograde	6126 Aug 27 11:18	25°♄10'04	evening set	6133 May 21 11:48	18°♄07'40
opposition	6126 Nov 13 09:13	23°♄11'25 -0°38'45			
min. Earth dist.	6126 Nov 12 15:49	23°♄13'10 19.06615 AU	conjunction	6133 Jun 06 12:18	19°♄02'25 -0°16'31
direct	6127 Jan 28 07:40	21°♄15'04	minimum elong	6133 Jun 06 12:18	19°♄02'25 0°16'34
evening set	6127 Apr 28 04:39	24°♄14'07	max. Earth dist.	6133 Jun 07 02:30	19°♄04'26 20.95739 AU
			morning rise	6133 Jun 22 16:18	19°♄57'38
conjunction	6127 May 14 00:31	25°♄08'10 -0°33'53	retrograde	6133 Sep 24 22:04	23°♄05'16
minimum elong	6127 May 14 00:31	25°♄08'10 0°33'55	opposition	6133 Dec 11 15:15	21°♄05'34 -0°16'24
max. Earth dist.	6127 May 14 17:52	25°♄10'39 21.06481 AU	min. Earth dist.	6133 Dec 11 02:05	21°♄06'54 18.94247 AU
morning rise	6127 May 29 23:23	26°♄02'38	direct	6134 Feb 24 23:20	19°♄08'29
retrograde	6127 Aug 31 19:54	29°♄08'53	evening set	6134 May 25 17:58	22°♄08'10
opposition	6127 Nov 17 17:19	27°♄10'07 -0°36'01			
min. Earth dist.	6127 Nov 17 00:48	27°♄11'46 19.06259 AU	conjunction	6134 Jun 10 19:30	23°♄03'05 -0°13'15
direct	6128 Feb 01 12:53	25°♄13'44	minimum elong	6134 Jun 10 19:31	23°♄03'05 0°13'17
evening set	6128 May 01 09:16	28°♄12'39	behind sun begin	6134 Jun 10 15:40	23°♄02'33
			behind sun end	6134 Jun 10 23:21	23°♄03'37
conjunction	6128 May 17 06:01	29°♄06'47 -0°31'20	max. Earth dist.	6134 Jun 11 10:17	23°♄05'12 20.92657 AU
minimum elong	6128 May 17 06:01	29°♄06'47 0°31'23	morning rise	6134 Jun 27 00:14	23°♄58'29
max. Earth dist.	6128 May 17 23:52	29°♄09'20 21.05839 AU	retrograde	6134 Sep 29 07:54	27°♄06'31
	6128 Jun 01 19:59	0°♄	opposition	6134 Dec 15 23:00	25°♄06'42 -0°12'44
morning rise	6128 Jun 02 05:33	0°♄01'20	min. Earth dist.	6134 Dec 15 09:49	25°♄08'02 18.91002 AU
retrograde	6128 Sep 04 03:39	3°♄07'42	direct	6135 Mar 01 05:21	23°♄09'30
min. Earth dist.	6128 Nov 20 08:58	1°♄10'26 19.05331 AU	evening set	6135 May 30 01:01	26°♄09'35
opposition	6128 Nov 21 01:12	1°♄08'48 -0°33'07			
	6128 Dec 21 15:09	30°♄	conjunction	6135 Jun 15 03:17	27°♄04'41 -0°09'54
direct	6129 Feb 04 19:40	29°♄12'21	minimum elong	6135 Jun 15 03:17	27°♄04'41 0°09'57
	6129 Mar 20 10:33	0°♄	behind sun begin	6135 Jun 14 21:54	27°♄03'56
evening set	6129 May 05 14:07	2°♄11'13	behind sun end	6135 Jun 15 08:39	27°♄05'26
			max. Earth dist.	6135 Jun 15 16:13	27°♄06'32 20.89267 AU
conjunction	6129 May 21 11:25	3°♄05'25 -0°28'38	morning rise	6135 Jul 01 09:04	28°♄00'17
minimum elong	6129 May 21 11:25	3°♄05'25 0°28'40			
max. Earth dist.	6129 May 22 03:37	3°♄07'44 21.04659 AU	retrograde	6135 Oct 03 17:54	1°♄08'45
morning rise	6129 Jun 06 11:56	4°♄00'05			
retrograde	6129 Sep 08 11:43	7°♄06'37	opposition	6135 Nov 28 15:07	30°♄
opposition	6129 Nov 25 08:58	5°♄07'33 -0°30'02	min. Earth dist.	6135 Dec 20 06:54	29°♄08'49 -0°09'00
min. Earth dist.	6129 Nov 24 17:41	5°♄09'05 19.03907 AU	direct	6135 Dec 19 19:06	29°♄10'01 18.87461 AU
direct	6130 Feb 09 00:46	3°♄10'59			
evening set	6130 May 09 19:01	6°♄09'51	evening set	6136 Mar 04 10:27	27°♄11'29
				6136 May 29 18:06	0°♄
conjunction	6130 May 25 17:14	7°♄04'10 -0°25'47	conjunction	6136 Jun 02 08:30	0°♄12'03
minimum elong	6130 May 25 17:15	7°♄04'10 0°25'49			
max. Earth dist.	6130 May 26 10:06	7°♄06'34 21.03007 AU	minimum elong	6136 Jun 18 11:50	1°♄07'22 -0°06'31
morning rise	6130 Jun 10 18:26	7°♄58'56	behind sun begin	6136 Jun 18 11:50	1°♄07'22 0°06'33
retrograde	6130 Sep 12 20:00	11°♄05'40	behind sun end	6136 Jun 18 05:35	1°♄06'30
opposition	6130 Nov 29 16:34	9°♄06'25 -0°26'49	max. Earth dist.	6136 Jun 18 18:04	1°♄08'14
min. Earth dist.	6130 Nov 29 01:22	9°♄07'57 19.02035 AU	morning rise	6136 Jun 19 01:03	1°♄09'15 20.85569 AU
direct	6131 Feb 13 07:17	7°♄09'45	retrograde	6136 Jul 04 18:21	2°♄03'10
evening set	6131 May 14 00:15	10°♄08'41	opposition	6136 Oct 07 05:11	5°♄12'07
			min. Earth dist.	6136 Dec 23 14:59	3°♄12'06 -0°05'12
conjunction	6131 May 29 23:07	11°♄03'08 -0°22'48	direct	6136 Dec 23 03:24	3°♄13'17 18.83592 AU
			evening set	6137 Mar 08 17:16	1°♄14'37
				6137 Jun 06 16:44	4°♄15'45

conjunction	6137 Jun 22 20:45	5°☾11'16	-0°03'04			6142 Oct 27 09:10	0°♈	
minimum elong	6137 Jun 22 20:46	5°☾11'16	0°03'06	retrograde		6142 Nov 02 09:30	0°♈00'54	
behind sun begin	6137 Jun 22 14:08	5°☾10'20				6142 Nov 08 08:30	30°♈☾	
behind sun end	6137 Jun 23 03:24	5°☾12'12		opposition		6143 Jan 17 22:58	27°☾59'54	0°17'57
max. Earth dist.	6137 Jun 23 07:56	5°☾12'52	20.81539 AU	min. Earth dist.		6143 Jan 17 18:54	28°☾00'19	18.52680 AU
morning rise	6137 Jul 09 04:18	6°☾07'17		direct		6143 Apr 02 16:35	26°☾00'52	
retrograde	6137 Oct 11 16:05	9°☾16'46		evening set		6143 Jul 02 10:28	29°☾06'25	
opposition	6137 Dec 27 23:32	7°☾16'39	-0°01'21			6143 Jul 17 20:00	0°♈	
min. Earth dist.	6137 Dec 27 13:40	7°☾17'39	18.79392 AU					
direct	6138 Mar 12 22:29	5°☾19'01		conjunction		6143 Jul 18 19:52	0°♈03'29	0°17'53
asc. node	6138 May 05 14:00	6°☾30'33		minimum elong		6143 Jul 18 19:52	0°♈03'29	0°17'52
evening set	6138 Jun 11 01:40	8°☾20'45		max. Earth dist.		6143 Jul 18 22:30	0°♈03'52	20.49587 AU
				morning rise		6143 Aug 04 08:15	1°♈00'59	
conjunction	6138 Jun 27 06:46	9°☾16'31	0°00'31	retrograde		6143 Nov 06 22:41	4°♈13'52	
minimum elong	6138 Jun 27 06:45	9°☾16'31	0°00'29	opposition		6144 Jan 22 09:33	2°♈12'38	0°21'40
behind sun begin	6138 Jun 27 00:07	9°☾15'35		min. Earth dist.		6144 Jan 22 07:41	2°♈12'49	18.46414 AU
behind sun end	6138 Jun 27 13:24	9°☾17'27		direct		6144 Apr 06 01:34	0°♈13'12	
max. Earth dist.	6138 Jun 27 17:54	9°☾18'07	20.77160 AU	evening set		6144 Jul 06 00:06	3°♈19'41	
morning rise	6138 Jul 13 14:59	10°☾12'46						
retrograde	6138 Oct 16 05:09	13°☾22'48		conjunction		6144 Jul 22 10:30	4°♈17'02	0°21'12
opposition	6139 Jan 01 08:13	11°☾22'33	0°02'32	minimum elong		6144 Jul 22 10:29	4°♈17'02	0°21'10
min. Earth dist.	6138 Dec 31 22:50	11°☾23'31	18.74819 AU	max. Earth dist.		6144 Jul 22 12:42	4°♈17'21	20.43236 AU
direct	6139 Mar 17 06:41	9°☾24'44		morning rise		6144 Aug 07 23:26	5°♈14'47	
evening set	6139 Jun 15 11:32	12°☾27'09		retrograde		6144 Nov 10 13:45	8°♈28'16	
				opposition		6145 Jan 25 20:31	6°♈26'48	0°25'18
conjunction	6139 Jul 01 17:22	13°☾23'10	0°04'05	min. Earth dist.		6145 Jan 25 18:51	6°♈26'59	18.39991 AU
minimum elong	6139 Jul 01 17:22	13°☾23'10	0°04'03	direct		6145 Apr 10 13:06	4°♈27'01	
behind sun begin	6139 Jul 01 10:47	13°☾22'14		evening set		6145 Jul 10 14:34	7°♈34'26	
behind sun end	6139 Jul 01 23:58	13°☾24'05						
max. Earth dist.	6139 Jul 02 02:00	13°☾24'23	20.72393 AU	conjunction		6145 Jul 27 01:36	8°♈32'04	0°24'25
morning rise	6139 Jul 18 02:37	14°☾19'39		minimum elong		6145 Jul 27 01:36	8°♈32'04	0°24'23
retrograde	6139 Oct 20 16:45	17°☾30'15		max. Earth dist.		6145 Jul 27 01:40	8°♈32'04	20.36759 AU
opposition	6140 Jan 05 17:26	15°☾29'52	0°06'25	morning rise		6145 Aug 12 15:17	9°♈30'05	
min. Earth dist.	6140 Jan 05 10:12	15°☾30'36	18.69851 AU	retrograde		6145 Nov 15 03:59	12°♈44'13	
direct	6140 Mar 20 12:43	13°☾31'48		opposition		6146 Jan 30 08:10	10°♈42'31	0°28'49
evening set	6140 Jun 18 22:07	16°☾34'57		min. Earth dist.		6146 Jan 30 08:30	10°♈42'29	18.33487 AU
				direct		6146 Apr 14 23:23	8°♈42'20	
conjunction	6140 Jul 05 05:01	17°☾31'12	0°07'34	evening set		6146 Jul 15 05:53	11°♈50'46	
minimum elong	6140 Jul 05 05:00	17°☾31'12	0°07'32					
behind sun begin	6140 Jul 04 22:56	17°☾30'21		conjunction		6146 Jul 31 17:51	12°♈48'42	0°27'31
behind sun end	6140 Jul 05 11:04	17°☾32'04		minimum elong		6146 Jul 31 17:51	12°♈48'42	0°27'30
max. Earth dist.	6140 Jul 05 13:09	17°☾32'22	20.67218 AU	max. Earth dist.		6146 Jul 31 17:29	12°♈48'39	20.30237 AU
morning rise	6140 Jul 21 14:53	18°☾27'56		morning rise		6146 Aug 17 08:03	13°♈46'59	
retrograde	6140 Oct 24 06:50	21°☾39'05				6146 Sep 08 15:19	15°♈	
opposition	6141 Jan 09 02:48	19°☾38'32	0°10'18	retrograde		6146 Nov 19 20:20	17°♈01'45	
min. Earth dist.	6141 Jan 08 20:09	19°☾39'13	18.64467 AU	opposition		6147 Feb 03 20:02	14°♈59'52	0°32'12
direct	6141 Mar 24 22:19	17°☾40'11				6147 Feb 03 18:46	15°♈♈	
evening set	6141 Jun 23 09:32	20°☾44'06		min. Earth dist.		6147 Feb 03 20:28	14°♈59'49	18.26956 AU
				direct		6147 Apr 19 11:51	12°♈59'19	
conjunction	6141 Jul 09 17:09	21°☾40'37	0°11'03			6147 Jun 29 00:32	15°♈	
minimum elong	6141 Jul 09 17:09	21°☾40'37	0°11'02	evening set		6147 Jul 19 22:18	16°♈08'49	
behind sun begin	6141 Jul 09 12:10	21°☾39'54						
behind sun end	6141 Jul 09 22:09	21°☾41'19		conjunction		6147 Aug 05 10:53	17°♈07'02	0°30'29
max. Earth dist.	6141 Jul 09 22:40	21°☾41'24	20.61650 AU	minimum elong		6147 Aug 05 10:53	17°♈07'02	0°30'27
morning rise	6141 Jul 26 04:00	22°☾37'35		max. Earth dist.		6147 Aug 05 08:31	17°♈06'41	20.23705 AU
retrograde	6141 Oct 28 19:03	25°☾49'19		morning rise		6147 Aug 22 01:43	18°♈05'36	
opposition	6142 Jan 13 12:47	23°☾48'33	0°14'09	retrograde		6147 Nov 24 11:52	21°♈21'02	
min. Earth dist.	6142 Jan 13 08:18	23°☾49'01	18.58727 AU	opposition		6148 Feb 08 08:45	19°♈18'58	0°35'25
direct	6142 Mar 29 05:56	21°☾49'52		min. Earth dist.		6148 Feb 08 11:11	19°♈18'43	18.20448 AU
evening set	6142 Jun 27 21:26	24°☾54'34		direct		6148 Apr 22 23:28	17°♈18'05	
				evening set		6148 Jul 23 15:28	20°♈28'41	
conjunction	6142 Jul 14 06:08	25°☾51'22	0°14'30					
minimum elong	6142 Jul 14 06:08	25°☾51'22	0°14'28	conjunction		6148 Aug 09 04:50	21°♈27'12	0°33'17
behind sun begin	6142 Jul 14 03:16	25°☾50'57		minimum elong		6148 Aug 09 04:50	21°♈27'12	0°33'17
behind sun end	6142 Jul 14 09:00	25°☾51'46		max. Earth dist.		6148 Aug 09 01:52	21°♈26'46	20.17224 AU
max. Earth dist.	6142 Jul 14 11:14	25°☾52'05	20.55755 AU	morning rise		6148 Aug 25 20:04	22°♈26'02	
morning rise	6142 Jul 30 17:38	26°☾48'36		retrograde		6148 Nov 28 05:40	25°♈42'09	

opposition	6149 Feb 11 21:51	23° Ω 39'57	0°38'27	conjunction	6155 Sep 11 12:47	22° η 44'44	0°47'08
min. Earth dist.	6149 Feb 12 00:18	23° Ω 39'41	18.13999 AU	minimum elong	6155 Sep 11 12:47	22° η 44'44	0°47'08
direct	6149 Apr 27 13:19	21° Ω 38'44		max. Earth dist.	6155 Sep 10 23:44	22° η 42'45	19.73895 AU
evening set	6149 Jul 28 09:44	24° Ω 50'30		morning rise	6155 Sep 28 05:33	23° η 45'17	
				retrograde	6155 Dec 31 00:38	27° η 05'49	
conjunction	6149 Aug 13 23:40	25° Ω 49'19	0°35'55	opposition	6156 Mar 14 13:32	25° η 03'00	0°53'01
minimum elong	6149 Aug 13 23:40	25° Ω 49'19	0°35'54	min. Earth dist.	6156 Mar 15 01:29	25° η 01'42	17.70996 AU
max. Earth dist.	6149 Aug 13 19:00	25° Ω 48'37	20.10813 AU	direct	6156 May 28 07:51	22° η 59'31	
morning rise	6149 Aug 30 15:22	26° Ω 48'25		evening set	6156 Aug 29 20:42	26° η 19'36	
	6149 Nov 18 20:25	0° η					
retrograde	6149 Dec 02 22:38	0° η 05'13		conjunction	6156 Sep 15 13:32	27° η 20'19	0°48'04
	6149 Dec 17 03:27	30° κ Ω		minimum elong	6156 Sep 15 13:32	27° η 20'19	0°48'05
opposition	6150 Feb 16 11:48	28° Ω 02'56	0°41'17	max. Earth dist.	6156 Sep 14 22:31	27° η 18'01	19.68130 AU
min. Earth dist.	6150 Feb 16 16:18	28° Ω 02'27	18.07639 AU	morning rise	6156 Oct 02 06:22	28° η 21'04	
direct	6150 May 02 02:10	26° Ω 01'25			6156 Nov 01 04:12	0° Ω	
evening set	6150 Aug 02 04:53	29° Ω 14'22		retrograde	6157 Jan 03 23:01	1° Ω 42'06	
	6150 Aug 15 01:26	0° η			6157 Mar 11 07:16	30° κ η	
conjunction	6150 Aug 18 19:31	0° η 13'29	0°38'22	opposition	6157 Mar 19 08:03	29° η 39'09	0°53'54
minimum elong	6150 Aug 18 19:31	0° η 13'29	0°38'21	min. Earth dist.	6157 Mar 19 20:26	29° η 37'48	17.65354 AU
max. Earth dist.	6150 Aug 18 13:54	0° η 12'39	20.04503 AU	direct	6157 Jun 02 03:57	27° η 35'17	
morning rise	6150 Sep 04 11:37	1° η 12'50		evening set	6157 Sep 03 22:03	0° Ω	
retrograde	6150 Dec 07 18:12	4° η 30'20				0° Ω 56'27	
opposition	6151 Feb 21 02:17	2° η 27'58	0°43'54	conjunction	6157 Sep 20 15:09	1° Ω 57'24	0°48'42
min. Earth dist.	6151 Feb 21 07:02	2° η 27'28	18.01364 AU	minimum elong	6157 Sep 20 15:09	1° Ω 57'24	0°48'42
direct	6151 May 06 17:57	0° η 26'10		max. Earth dist.	6157 Sep 19 23:56	1° Ω 55'05	19.62615 AU
evening set	6151 Aug 07 01:19	3° η 40'21		morning rise	6157 Oct 07 07:41	2° Ω 58'20	
				retrograde	6158 Jan 08 21:25	6° Ω 19'47	
conjunction	6151 Aug 23 16:26	4° η 39'46	0°40'37	opposition	6158 Mar 24 03:10	4° Ω 16'44	0°54'27
minimum elong	6151 Aug 23 16:26	4° η 39'45	0°40'36	min. Earth dist.	6158 Mar 24 16:51	4° Ω 15'14	17.59997 AU
max. Earth dist.	6151 Aug 23 09:09	4° η 38'40	19.98250 AU	direct	6158 Jun 07 00:07	2° Ω 12'31	
morning rise	6151 Sep 09 08:47	5° η 39'23		evening set	6158 Sep 09 00:08	5° Ω 34'43	
retrograde	6151 Dec 12 12:25	8° η 57'33					
opposition	6152 Feb 25 17:32	6° η 55'08	0°46'17	conjunction	6158 Sep 25 17:10	6° Ω 35'52	0°49'01
min. Earth dist.	6152 Feb 26 00:34	6° η 54'23	17.95149 AU	minimum elong	6158 Sep 25 17:10	6° Ω 35'52	0°49'02
direct	6152 May 10 08:21	4° η 53'02		max. Earth dist.	6158 Sep 24 23:59	6° Ω 33'14	19.57433 AU
evening set	6152 Aug 10 22:41	8° η 08'26		morning rise	6158 Oct 12 09:41	7° Ω 36'58	
				retrograde	6159 Jan 13 19:38	10° Ω 58'49	
conjunction	6152 Aug 27 14:16	9° η 08'08	0°42'37	opposition	6159 Mar 28 22:52	8° Ω 55'38	0°54'38
minimum elong	6152 Aug 27 14:16	9° η 08'08	0°42'37	min. Earth dist.	6159 Mar 29 13:01	8° Ω 54'05	17.55006 AU
max. Earth dist.	6152 Aug 27 05:26	9° η 06'48	19.92064 AU	direct	6159 Jun 11 21:32	6° Ω 51'04	
morning rise	6152 Sep 13 06:53	10° η 08'00		evening set	6159 Sep 14 02:41	10° Ω 14'16	
retrograde	6152 Dec 16 09:32	13° η 26'50					
opposition	6153 Mar 01 09:30	11° η 24'20	0°48'24	conjunction	6159 Sep 30 19:50	11° Ω 15'37	0°49'01
min. Earth dist.	6153 Mar 01 16:57	11° η 23'32	17.88990 AU	minimum elong	6159 Sep 30 19:50	11° Ω 15'37	0°49'01
direct	6153 May 15 02:05	9° η 21'55		max. Earth dist.	6159 Sep 30 03:01	11° Ω 13'01	19.52630 AU
evening set	6153 Aug 15 20:50	12° η 38'31		morning rise	6159 Oct 17 11:52	12° Ω 16'51	
				retrograde	6160 Jan 18 18:42	15° Ω 39'01	
conjunction	6153 Sep 01 12:52	13° η 38'30	0°44'24	opposition	6160 Apr 01 19:10	13° Ω 35'46	0°54'28
minimum elong	6153 Sep 01 12:51	13° η 38'30	0°44'24	min. Earth dist.	6160 Apr 02 09:59	13° Ω 34'09	17.50422 AU
max. Earth dist.	6153 Sep 01 02:39	13° η 36'58	19.85917 AU	direct	6160 Jun 15 19:54	11° Ω 30'55	
morning rise	6153 Sep 18 05:33	14° η 38'36		evening set	6160 Sep 18 05:52	14° Ω 55'03	
retrograde	6153 Dec 21 05:17	17° η 58'04					
opposition	6154 Mar 06 02:18	15° η 55'28	0°50'15	conjunction	6160 Oct 04 22:44	15° Ω 56'33	0°48'40
min. Earth dist.	6154 Mar 06 11:53	15° η 54'26	17.82879 AU	minimum elong	6160 Oct 04 22:45	15° Ω 56'33	0°48'41
direct	6154 May 19 18:31	13° η 52'43		max. Earth dist.	6160 Oct 04 04:13	15° Ω 53'41	19.48287 AU
evening set	6154 Aug 20 20:02	17° η 10'30		morning rise	6160 Oct 21 14:33	16° Ω 57'55	
				retrograde	6161 Jan 22 16:47	20° Ω 20'24	
conjunction	6154 Sep 06 12:24	18° η 10'44	0°45'54	opposition	6161 Apr 06 16:03	18° Ω 17'04	0°53'55
minimum elong	6154 Sep 06 12:24	18° η 10'44	0°45'53	min. Earth dist.	6161 Apr 07 07:17	18° Ω 15'24	17.46341 AU
max. Earth dist.	6154 Sep 06 00:15	18° η 08'54	19.79853 AU	direct	6161 Jun 20 18:53	16° Ω 11'56	
morning rise	6154 Sep 23 05:18	19° η 11'05		evening set	6161 Sep 23 09:14	19° Ω 36'59	
retrograde	6154 Dec 26 03:15	22° η 31'06		max. Earth dist.	6161 Oct 09 08:23	20° Ω 35'53	19.44459 AU
opposition	6155 Mar 10 19:30	20° η 28'24	0°51'47				
min. Earth dist.	6155 Mar 11 05:38	20° η 27'18	17.76867 AU	conjunction	6161 Oct 10 02:07	20° Ω 38'38	0°48'01
direct	6155 May 24 13:33	18° η 25'17		minimum elong	6161 Oct 10 02:07	20° Ω 38'38	0°48'02
evening set	6155 Aug 25 20:03	21° η 44'14		morning rise	6161 Oct 26 17:21	21° Ω 40'05	

retrograde	6162 Jan 27 16:34	25° <u>02</u> '49		direct	6168 Jul 24 05:30	19° <u>12</u> '03	
opposition	6162 Apr 11 13:32	22° <u>05</u> '30	0°53'01	evening set	6168 Oct 27 18:36	22° <u>11</u> '56	12
min. Earth dist.	6162 Apr 12 04:49	22° <u>05</u> '50	17.42777 AU				
direct	6162 Jun 25 19:04	20° <u>05</u> '41	10	conjunction	6168 Nov 13 07:56	23° <u>11</u> '58	00°34'41
evening set	6162 Sep 28 13:23	24° <u>02</u> '03		minimum elong	6168 Nov 13 07:57	23° <u>11</u> '58	00°34'44
max. Earth dist.	6162 Oct 14 10:40	25° <u>01</u> '84	19.41176 AU	max. Earth dist.	6168 Nov 12 12:47	23° <u>11</u> '55	00°34'26
				morning rise	6168 Nov 29 18:16	24° <u>11</u> '59	36
conjunction	6162 Oct 15 05:51	25° <u>01</u> '48	0°47'01	retrograde	6169 Mar 01 18:51	28° <u>11</u> '22	37
minimum elong	6162 Oct 15 05:51	25° <u>01</u> '48	0°47'02	opposition	6169 May 14 09:19	26° <u>11</u> '19	59 0°37'04
morning rise	6162 Oct 31 20:42	26° <u>02</u> '23	20	min. Earth dist.	6169 May 15 02:11	26° <u>11</u> '18	00°37'32
retrograde	6163 Feb 01 15:23	29° <u>04</u> '61	17	direct	6169 Jul 29 06:47	24° <u>11</u> '14	02
opposition	6163 Apr 16 11:28	27° <u>04</u> '31	0°51'45	evening set	6169 Nov 01 23:19	27° <u>11</u> '43	21
min. Earth dist.	6163 Apr 17 03:22	27° <u>04</u> '17	17.39779 AU				
direct	6163 Jun 30 19:08	25° <u>03</u> '37	31	conjunction	6169 Nov 18 11:52	28° <u>11</u> '45	11 0°31'41
evening set	6163 Oct 03 17:44	29° <u>04</u> '11		minimum elong	6169 Nov 18 11:52	28° <u>11</u> '45	11 0°31'43
	6163 Oct 18 19:17	0° <u>11</u> '		max. Earth dist.	6169 Nov 17 16:37	28° <u>11</u> '42	00°32'43
				morning rise	6169 Dec 04 21:26	29° <u>11</u> '46	35
conjunction	6163 Oct 20 10:01	0° <u>11</u> '06	02 0°45'43		6169 Dec 08 13:29	0° <u>11</u> '	
minimum elong	6163 Oct 20 10:01	0° <u>11</u> '06	02 0°45'45	retrograde	6170 Mar 06 20:39	3° <u>11</u> '09	23
max. Earth dist.	6163 Oct 19 15:39	0° <u>11</u> '03	10 19.38453 AU	opposition	6170 May 19 09:54	1° <u>11</u> '06	50 0°33'35
morning rise	6163 Nov 06 00:10	1° <u>11</u> '07	37	min. Earth dist.	6170 May 20 01:31	1° <u>11</u> '05	00°37'10
retrograde	6164 Feb 06 16:20	4° <u>11</u> '30	44		6170 Jun 15 09:04	30° <u>11</u> '	
opposition	6164 Apr 20 10:00	2° <u>11</u> '27	34 0°50'07	direct	6170 Aug 03 11:25	29° <u>11</u> '00	52
min. Earth dist.	6164 Apr 21 01:35	2° <u>11</u> '25	52 17.37319 AU		6170 Sep 20 07:41	0° <u>11</u> '	
direct	6164 Jul 04 20:43	0° <u>11</u> '21	58	evening set	6170 Nov 07 03:43	2° <u>11</u> '30	13
evening set	6164 Oct 07 22:24	3° <u>11</u> '49	19				
				conjunction	6170 Nov 23 15:32	3° <u>11</u> '31	57 0°28'27
conjunction	6164 Oct 24 14:07	4° <u>11</u> '51	14 0°44'06	minimum elong	6170 Nov 23 15:32	3° <u>11</u> '31	57 0°28'29
minimum elong	6164 Oct 24 14:07	4° <u>11</u> '51	14 0°44'07	max. Earth dist.	6170 Nov 22 21:16	3° <u>11</u> '29	00°33'05
max. Earth dist.	6164 Oct 23 18:45	4° <u>11</u> '48	13 19.36259 AU	morning rise	6170 Dec 10 00:01	4° <u>11</u> '33	14
morning rise	6164 Nov 10 03:42	5° <u>11</u> '52	52	retrograde	6171 Mar 11 19:15	7° <u>11</u> '55	44
retrograde	6165 Feb 10 16:00	9° <u>11</u> '16	07	opposition	6171 May 24 10:39	5° <u>11</u> '53	17 0°29'52
opposition	6165 Apr 25 09:08	7° <u>11</u> '13	02 0°48'09	min. Earth dist.	6171 May 25 02:52	5° <u>11</u> '51	31 17.33589 AU
min. Earth dist.	6165 Apr 26 01:34	7° <u>11</u> '11	14 17.35389 AU	direct	6171 Aug 08 13:07	3° <u>11</u> '47	18
direct	6165 Jul 09 21:24	5° <u>11</u> '07	20	evening set	6171 Nov 12 07:42	7° <u>11</u> '16	35
evening set	6165 Oct 13 03:19	8° <u>11</u> '35	19				
				conjunction	6171 Nov 28 18:32	8° <u>11</u> '18	11 0°25'02
conjunction	6165 Oct 29 18:38	9° <u>11</u> '37	16 0°42'10	minimum elong	6171 Nov 28 18:32	8° <u>11</u> '18	11 0°25'05
minimum elong	6165 Oct 29 18:38	9° <u>11</u> '37	16 0°42'12	max. Earth dist.	6171 Nov 28 00:11	8° <u>11</u> '15	18 19.34208 AU
max. Earth dist.	6165 Oct 28 23:46	9° <u>11</u> '34	19 19.34574 AU	morning rise	6171 Dec 15 02:13	9° <u>11</u> '19	19
morning rise	6165 Nov 15 07:29	10° <u>11</u> '38	54	retrograde	6172 Mar 15 19:55	12° <u>11</u> '41	30
retrograde	6166 Feb 15 17:42	14° <u>11</u> '02	11	opposition	6172 May 28 11:22	10° <u>11</u> '39	06 0°25'58
opposition	6166 Apr 30 08:30	11° <u>11</u> '59	14 0°45'51	min. Earth dist.	6172 May 29 02:01	10° <u>11</u> '37	31 17.34995 AU
min. Earth dist.	6166 May 01 00:24	11° <u>11</u> '57	30 17.33934 AU	direct	6172 Aug 12 18:11	8° <u>11</u> '33	09
direct	6166 Jul 15 00:11	9° <u>11</u> '53	28	evening set	6172 Nov 16 10:53	12° <u>11</u> '02	14
evening set	6166 Oct 18 08:33	13° <u>11</u> '21	57				
				conjunction	6172 Dec 02 20:57	13° <u>11</u> '03	40 0°21'27
conjunction	6166 Nov 03 23:14	14° <u>11</u> '23	54 0°39'57	minimum elong	6172 Dec 02 20:57	13° <u>11</u> '03	41 0°21'29
minimum elong	6166 Nov 03 23:14	14° <u>11</u> '23	55 0°39'59	max. Earth dist.	6172 Dec 02 04:31	13° <u>11</u> '01	06 19.35884 AU
max. Earth dist.	6166 Nov 03 03:43	14° <u>11</u> '20	51 19.33348 AU	morning rise	6172 Dec 19 03:31	14° <u>11</u> '04	38
	6166 Nov 13 13:57	15° <u>11</u> '		retrograde	6173 Mar 20 17:29	17° <u>11</u> '26	25
morning rise	6166 Nov 20 11:18	15° <u>11</u> '25	32	opposition	6173 Jun 02 12:09	15° <u>11</u> '24	08 0°21'53
retrograde	6167 Feb 20 17:33	18° <u>11</u> '48	48	min. Earth dist.	6173 Jun 03 02:51	15° <u>11</u> '22	32 17.36945 AU
opposition	6167 May 05 08:33	16° <u>11</u> '45	57 0°43'13	direct	6173 Aug 17 20:24	13° <u>11</u> '18	14
min. Earth dist.	6167 May 06 01:29	16° <u>11</u> '44	06 17.32944 AU	evening set	6173 Nov 21 13:45	16° <u>11</u> '47	01
	6167 Jun 22 11:36	15° <u>11</u> '					
direct	6167 Jul 20 01:27	14° <u>11</u> '40	06	conjunction	6173 Dec 07 22:42	17° <u>11</u> '48	16 0°17'44
	6167 Aug 16 09:09	15° <u>11</u> '		minimum elong	6173 Dec 07 22:42	17° <u>11</u> '48	16 0°17'46
evening set	6167 Oct 23 13:37	18° <u>11</u> '08	59	max. Earth dist.	6173 Dec 07 06:18	17° <u>11</u> '45	42 19.38128 AU
max. Earth dist.	6167 Nov 08 08:18	19° <u>11</u> '07	54 19.32586 AU	morning rise	6173 Dec 24 04:27	18° <u>11</u> '49	03
				retrograde	6174 Mar 25 16:53	22° <u>11</u> '10	23
conjunction	6167 Nov 09 03:39	19° <u>11</u> '10	56 0°37'27	opposition	6174 Jun 07 12:35	20° <u>11</u> '08	12 0°17'40
minimum elong	6167 Nov 09 03:39	19° <u>11</u> '10	56 0°37'28	min. Earth dist.	6174 Jun 08 01:36	20° <u>11</u> '06	48 17.39480 AU
morning rise	6167 Nov 25 14:54	20° <u>11</u> '12	30	direct	6174 Aug 23 01:26	18° <u>11</u> '02	24
retrograde	6168 Feb 25 19:34	23° <u>11</u> '35	41	evening set	6174 Nov 26 15:52	21° <u>11</u> '30	49
opposition	6168 May 09 08:47	21° <u>11</u> '32	56 0°40'17				
min. Earth dist.	6168 May 10 00:44	21° <u>11</u> '31	12 17.32400 AU	conjunction	6174 Dec 12 23:59	22° <u>11</u> '31	52 0°13'55

minimum elong	6174 Dec 12 23:59	22° \nearrow 31'52	0°13'56	max. Earth dist.	6180 Jan 05 10:28	15° $\overline{3}$ 51'28	19.62968 AU
behind sun begin	6174 Dec 12 20:36	22° \nearrow 31'21		morning rise	6180 Jan 21 18:22	16° $\overline{3}$ 52'01	
behind sun end	6174 Dec 13 03:23	22° \nearrow 32'23		retrograde	6180 Apr 22 00:25	20° $\overline{3}$ 10'09	
max. Earth dist.	6174 Dec 12 09:59	22° \nearrow 29'41	19.40957 AU	opposition	6180 Jul 05 12:21	18° $\overline{3}$ 09'15	-0°08'41
morning rise	6174 Dec 29 04:33	23° \nearrow 32'25		min. Earth dist.	6180 Jul 05 18:49	18° $\overline{3}$ 08'34	17.65691 AU
retrograde	6175 Mar 30 13:50	26° \nearrow 53'17		direct	6180 Sep 20 10:42	16° $\overline{3}$ 04'58	
opposition	6175 Jun 12 13:12	24° \nearrow 51'16	0°13'21	evening set	6180 Dec 24 13:06	19° $\overline{3}$ 29'21	
min. Earth dist.	6175 Jun 13 01:38	24° \nearrow 49'56	17.42598 AU				
direct	6175 Aug 28 03:59	22° \nearrow 45'38		conjunction	6181 Jan 09 15:04	20° $\overline{3}$ 28'49	-0°09'49
evening set	6175 Dec 01 17:17	26° \nearrow 13'34		minimum elong	6181 Jan 09 15:04	20° $\overline{3}$ 28'49	0°09'47
max. Earth dist.	6175 Dec 17 10:31	27° \nearrow 12'15	19.44379 AU	behind sun begin	6181 Jan 09 09:38	20° $\overline{3}$ 28'00	
				behind sun end	6181 Jan 09 20:30	20° $\overline{3}$ 29'39	
conjunction	6175 Dec 18 00:13	27° \nearrow 14'23	0°10'01	max. Earth dist.	6181 Jan 09 08:57	20° $\overline{3}$ 27'53	19.68490 AU
minimum elong	6175 Dec 18 00:13	27° \nearrow 14'23	0°10'03	morning rise	6181 Jan 25 13:58	21° $\overline{3}$ 27'51	
behind sun begin	6175 Dec 17 18:51	27° \nearrow 13'34		retrograde	6181 Apr 26 21:02	24° $\overline{3}$ 45'20	
behind sun end	6175 Dec 18 05:36	27° \nearrow 15'12		opposition	6181 Jul 10 11:13	22° $\overline{3}$ 44'39	-0°12'58
morning rise	6176 Jan 03 03:57	28° \nearrow 14'43		min. Earth dist.	6181 Jul 10 16:09	22° $\overline{3}$ 44'07	17.71313 AU
	6176 Feb 03 10:34	0° $\overline{3}$		direct	6181 Sep 25 12:01	20° $\overline{3}$ 40'41	
retrograde	6176 Apr 03 12:10	1° $\overline{3}$ 35'06		evening set	6181 Dec 29 09:54	24° $\overline{3}$ 04'08	
	6176 Jun 06 02:44	30° \nwarrow					
opposition	6176 Jun 16 13:31	29° \nearrow 33'16	0°08'57	conjunction	6182 Jan 14 10:46	25° $\overline{3}$ 03'17	-0°13'37
min. Earth dist.	6176 Jun 17 00:14	29° \nearrow 32'07	17.46307 AU	minimum elong	6182 Jan 14 10:46	25° $\overline{3}$ 03'17	0°13'35
direct	6176 Sep 01 07:04	27° \nearrow 27'50		behind sun begin	6182 Jan 14 07:05	25° $\overline{3}$ 02'44	
	6176 Nov 20 03:38	0° $\overline{3}$		behind sun end	6182 Jan 14 14:28	25° $\overline{3}$ 03'51	
evening set	6176 Dec 05 17:55	0° $\overline{3}$ 55'14		max. Earth dist.	6182 Jan 14 05:19	25° $\overline{3}$ 02'28	19.74209 AU
				morning rise	6182 Jan 30 08:50	26° $\overline{3}$ 02'02	
conjunction	6176 Dec 22 00:01	1° $\overline{3}$ 55'49	0°06'05	retrograde	6182 May 01 15:23	29° $\overline{3}$ 18'52	
minimum elong	6176 Dec 22 00:01	1° $\overline{3}$ 55'49	0°06'08	opposition	6182 Jul 15 09:40	27° $\overline{3}$ 18'21	-0°17'09
behind sun begin	6176 Dec 21 17:42	1° $\overline{3}$ 54'51		min. Earth dist.	6182 Jul 15 14:05	27° $\overline{3}$ 17'54	17.77128 AU
behind sun end	6176 Dec 22 06:21	1° $\overline{3}$ 56'46		direct	6182 Sep 30 10:41	25° $\overline{3}$ 14'41	
max. Earth dist.	6176 Dec 21 12:50	1° $\overline{3}$ 54'04	19.48363 AU	evening set	6183 Jan 03 05:40	28° $\overline{3}$ 37'10	
morning rise	6177 Jan 07 02:37	2° $\overline{3}$ 55'54					
retrograde	6177 Apr 08 09:27	6° $\overline{3}$ 15'45		conjunction	6183 Jan 19 05:39	29° $\overline{3}$ 36'00	-0°17'18
opposition	6177 Jun 21 13:32	4° $\overline{3}$ 14'10	0°04'32	minimum elong	6183 Jan 19 05:39	29° $\overline{3}$ 36'00	0°17'17
min. Earth dist.	6177 Jun 21 23:21	4° $\overline{3}$ 13'07	17.50537 AU	max. Earth dist.	6183 Jan 19 01:45	29° $\overline{3}$ 35'24	19.80103 AU
direct	6177 Sep 06 08:59	2° $\overline{3}$ 08'59			6183 Jan 25 17:07	0° \approx	
evening set	6177 Dec 10 18:01	5° $\overline{3}$ 35'45		morning rise	6183 Feb 04 02:51	0° \approx 34'26	
				retrograde	6183 May 06 10:22	3° \approx 50'37	
conjunction	6177 Dec 26 22:55	6° $\overline{3}$ 36'04	0°02'06	opposition	6183 Jul 20 07:38	1° \approx 50'16	-0°21'12
minimum elong	6177 Dec 26 22:57	6° $\overline{3}$ 36'04	0°02'08	min. Earth dist.	6183 Jul 20 10:08	1° \approx 50'00	17.83078 AU
behind sun begin	6177 Dec 26 16:17	6° $\overline{3}$ 35'03			6183 Sep 12 15:35	30° \nwarrow	
behind sun end	6177 Dec 27 05:36	6° $\overline{3}$ 37'05		direct	6183 Oct 05 11:19	29° $\overline{3}$ 46'55	
max. Earth dist.	6177 Dec 26 12:05	6° $\overline{3}$ 34'23	19.52840 AU		6183 Oct 27 23:11	0° \approx	
morning rise	6178 Jan 12 00:43	7° $\overline{3}$ 35'56		evening set	6184 Jan 08 00:23	3° \approx 08'18	
retrograde	6178 Apr 13 06:52	10° $\overline{3}$ 55'14					
opposition	6178 Jun 26 13:24	8° $\overline{3}$ 53'52	0°00'06	conjunction	6184 Jan 23 23:23	4° \approx 06'50	-0°20'53
min. Earth dist.	6178 Jun 26 21:59	8° $\overline{3}$ 52'57	17.55234 AU	minimum elong	6184 Jan 23 23:23	4° \approx 06'50	0°20'50
desc. node	6178 Jul 04 15:26	8° $\overline{3}$ 33'16		max. Earth dist.	6184 Jan 23 20:35	4° \approx 06'24	19.86111 AU
direct	6178 Sep 11 09:40	6° $\overline{3}$ 48'58		morning rise	6184 Feb 08 19:51	5° \approx 04'58	
evening set	6178 Dec 15 17:10	10° $\overline{3}$ 15'02		retrograde	6184 May 10 03:12	8° \approx 20'29	
				opposition	6184 Jul 24 05:07	6° \approx 20'16	-0°25'05
conjunction	6178 Dec 31 21:09	11° $\overline{3}$ 15'05	-0°02'00	min. Earth dist.	6184 Jul 24 07:14	6° \approx 20'02	17.89149 AU
minimum elong	6178 Dec 31 21:10	11° $\overline{3}$ 15'05	0°01'57	direct	6184 Oct 09 08:41	4° \approx 17'12	
behind sun begin	6178 Dec 31 14:32	11° $\overline{3}$ 14'04		evening set	6185 Jan 11 18:09	7° \approx 37'30	
behind sun end	6179 Jan 01 03:49	11° $\overline{3}$ 16'05					
max. Earth dist.	6178 Dec 31 12:37	11° $\overline{3}$ 13'46	19.57735 AU	conjunction	6185 Jan 27 16:19	8° \approx 35'42	-0°24'18
morning rise	6179 Jan 16 21:51	12° $\overline{3}$ 14'40		minimum elong	6185 Jan 27 16:19	8° \approx 35'42	0°24'16
retrograde	6179 Apr 18 04:21	15° $\overline{3}$ 33'23		max. Earth dist.	6185 Jan 27 14:51	8° \approx 35'28	19.92236 AU
opposition	6179 Jul 01 13:02	13° $\overline{3}$ 32'16	-0°04'19	morning rise	6185 Feb 12 12:06	9° \approx 33'33	
min. Earth dist.	6179 Jul 01 20:22	13° $\overline{3}$ 31'29	17.60299 AU	retrograde	6185 May 14 20:29	12° \approx 48'21	
direct	6179 Sep 16 11:23	11° $\overline{3}$ 27'41		opposition	6185 Jul 29 01:38	10° \approx 48'15	-0°28'47
evening set	6179 Dec 20 15:40	14° $\overline{3}$ 52'57		min. Earth dist.	6185 Jul 29 01:38	10° \approx 48'15	17.95313 AU
				direct	6185 Oct 14 07:50	8° \approx 45'28	
conjunction	6180 Jan 05 18:31	15° $\overline{3}$ 52'42	-0°05'57	evening set	6186 Jan 16 10:55	12° \approx 04'39	
minimum elong	6180 Jan 05 18:31	15° $\overline{3}$ 52'42	0°05'55				
behind sun begin	6180 Jan 05 12:11	15° $\overline{3}$ 51'45		conjunction	6186 Feb 01 08:15	13° \approx 02'32	-0°27'33
behind sun end	6180 Jan 06 00:52	15° $\overline{3}$ 53'40		minimum elong	6186 Feb 01 08:14	13° \approx 02'32	0°27'31

max. Earth dist.	6186 Feb 01 08:18	13°02'32	19.98449 AU	morning rise	6192 Mar 14 04:54	9°59'31	
morning rise	6186 Feb 17 03:20	14°00'05		retrograde	6192 Jun 13 22:41	13°10'04	
	6186 Mar 06 13:21	15°		opposition	6192 Aug 29 09:06	11°11'01	-0°48'16
retrograde	6186 May 19 11:41	17°14'13		min. Earth dist.	6192 Aug 28 23:59	11°11'56	18.41238 AU
opposition	6186 Aug 02 21:51	15°14'13	-0°32'17	direct	6192 Nov 14 13:17	9°10'48	
min. Earth dist.	6186 Aug 02 21:26	15°14'15	18.01591 AU	evening set	6193 Feb 15 05:44	12°22'07	
	6186 Aug 08 15:10	15°					
direct	6186 Oct 19 03:47	13°11'43		conjunction	6193 Mar 02 22:36	13°17'58	-0°44'22
	6186 Dec 25 02:05	15°		minimum elong	6193 Mar 02 22:36	13°17'58	0°44'22
evening set	6187 Jan 21 02:31	16°29'44		max. Earth dist.	6193 Mar 03 08:27	13°19'26	20.44506 AU
				morning rise	6193 Mar 18 14:53	14°13'44	
conjunction	6187 Feb 05 23:01	17°27'18	-0°30'36	retrograde	6193 Jun 18 12:07	17°23'46	
minimum elong	6187 Feb 05 23:01	17°27'18	0°30'35	opposition	6193 Sep 03 00:40	15°24'53	-0°50'00
max. Earth dist.	6187 Feb 06 00:26	17°27'31	20.04790 AU	min. Earth dist.	6193 Sep 02 13:36	15°26'00	18.47728 AU
morning rise	6187 Feb 21 17:33	18°24'34		direct	6193 Nov 19 04:25	13°25'05	
retrograde	6187 May 24 03:39	21°38'02		evening set	6194 Feb 19 15:37	16°35'21	
opposition	6187 Aug 07 17:18	19°38'08	-0°35'34				
min. Earth dist.	6187 Aug 07 14:18	19°38'27	18.07993 AU	conjunction	6194 Mar 07 08:11	17°30'58	-0°45'50
direct	6187 Oct 24 00:58	17°35'58		minimum elong	6194 Mar 07 08:11	17°30'57	0°45'49
evening set	6188 Jan 25 17:13	20°52'49		max. Earth dist.	6194 Mar 07 19:56	17°32'42	20.50887 AU
				morning rise	6194 Mar 23 00:11	18°26'30	
conjunction	6188 Feb 10 13:00	21°50'05	-0°33'28	retrograde	6194 Jun 22 23:02	21°36'03	
minimum elong	6188 Feb 10 12:59	21°50'05	0°33'27	opposition	6194 Sep 07 16:00	19°37'20	-0°51'28
max. Earth dist.	6188 Feb 10 16:25	21°50'36	20.11252 AU	min. Earth dist.	6194 Sep 07 04:56	19°38'27	18.53998 AU
morning rise	6188 Feb 26 06:55	22°47'04		direct	6194 Nov 23 17:34	17°37'54	
retrograde	6188 May 27 17:27	25°59'54		evening set	6195 Feb 24 00:49	20°47'08	
opposition	6188 Aug 11 12:07	24°00'07	-0°38'37				
min. Earth dist.	6188 Aug 11 08:35	24°00'29	18.14534 AU	conjunction	6195 Mar 11 16:57	21°42'30	-0°47'03
direct	6188 Oct 27 19:04	21°58'18		minimum elong	6195 Mar 11 16:57	21°42'30	0°47'03
evening set	6189 Jan 29 06:58	25°14'01		max. Earth dist.	6195 Mar 12 04:46	21°44'15	20.57026 AU
				morning rise	6195 Mar 27 09:00	22°37'51	
conjunction	6189 Feb 14 02:02	26°10'58	-0°36'06	retrograde	6195 Jun 27 11:30	25°46'57	
minimum elong	6189 Feb 14 02:02	26°10'58	0°36'05	opposition	6195 Sep 12 06:38	23°48'20	-0°52'40
max. Earth dist.	6189 Feb 14 06:32	26°11'39	20.17856 AU	min. Earth dist.	6195 Sep 11 17:53	23°49'37	18.59995 AU
morning rise	6189 Mar 01 19:34	27°07'42		direct	6195 Nov 28 07:04	21°49'15	
	6189 May 04 18:53	0°		evening set	6196 Feb 28 09:24	24°57'28	
retrograde	6189 Jun 01 08:17	0°19'54					
	6189 Jun 29 11:38	30°		conjunction	6196 Mar 15 01:25	25°52'37	-0°48'01
opposition	6189 Aug 16 06:10	28°20'17	-0°41'25	minimum elong	6196 Mar 15 01:25	25°52'37	0°48'00
min. Earth dist.	6189 Aug 16 00:02	28°20'55	18.21182 AU	max. Earth dist.	6196 Mar 15 14:54	25°54'37	20.62848 AU
direct	6189 Nov 01 14:04	26°18'51		morning rise	6196 Mar 30 17:19	26°47'47	
evening set	6190 Feb 02 19:50	29°33'26		retrograde	6196 Jun 30 21:42	29°56'25	
	6190 Feb 10 06:29	0°		opposition	6196 Sep 15 20:36	27°57'54	-0°53'34
				min. Earth dist.	6196 Sep 15 08:01	27°59'10	18.65645 AU
conjunction	6190 Feb 18 14:18	0°30'06	-0°38'31	direct	6196 Dec 01 19:40	25°59'08	
minimum elong	6190 Feb 18 14:18	0°30'06	0°38'31	evening set	6197 Mar 03 17:28	29°06'21	
max. Earth dist.	6190 Feb 18 20:55	0°31'06	20.24535 AU				
morning rise	6190 Mar 06 07:19	1°26'34		conjunction	6197 Mar 19 09:13	0°01'18	-0°48'43
retrograde	6190 Jun 05 20:54	4°38'12		minimum elong	6197 Mar 19 09:12	0°01'18	0°48'43
opposition	6190 Aug 20 23:47	2°38'46	-0°43'58		6197 Mar 19 00:21	0°	
min. Earth dist.	6190 Aug 20 17:14	2°39'26	18.27890 AU	max. Earth dist.	6197 Mar 19 22:19	0°03'14	20.68316 AU
direct	6190 Nov 06 06:06	0°37'44		morning rise	6197 Apr 04 01:18	0°56'19	
evening set	6191 Feb 07 07:56	3°51'13		retrograde	6197 Jul 05 09:10	4°04'30	
				opposition	6197 Sep 20 10:00	2°06'01	-0°54'12
conjunction	6191 Feb 23 01:45	4°47'36	-0°40'43	min. Earth dist.	6197 Sep 19 20:04	2°07'25	18.70926 AU
minimum elong	6191 Feb 23 01:45	4°47'36	0°40'41	direct	6197 Dec 06 07:30	0°07'31	
max. Earth dist.	6191 Feb 23 09:10	4°48'42	20.31258 AU	evening set	6198 Mar 08 00:42	3°13'45	
morning rise	6191 Mar 10 18:31	5°43'49					
retrograde	6191 Jun 10 11:07	8°54'54		conjunction	6198 Mar 23 16:27	4°08'32	-0°49'10
opposition	6191 Aug 25 16:41	6°55'39	-0°46'15	minimum elong	6198 Mar 23 16:27	4°08'32	0°49'10
min. Earth dist.	6191 Aug 25 07:44	6°56'33	18.34604 AU	max. Earth dist.	6198 Mar 24 07:11	4°10'41	20.73395 AU
direct	6191 Nov 10 23:03	4°55'02		morning rise	6198 Apr 08 08:31	5°03'22	
evening set	6192 Feb 11 19:05	8°07'25		retrograde	6198 Jul 09 18:02	8°11'09	
				opposition	6198 Sep 24 22:55	6°12'40	-0°54'32
conjunction	6192 Feb 27 12:30	9°03'32	-0°42'40	min. Earth dist.	6198 Sep 24 08:59	6°14'04	18.75816 AU
minimum elong	6192 Feb 27 12:30	9°03'32	0°42'40	direct	6198 Dec 10 19:46	4°14'24	
max. Earth dist.	6192 Feb 27 22:01	9°04'57	20.37935 AU	evening set	6199 Mar 12 07:30	7°19'42	

conjunction	6199 Mar 27 23:05	8° Υ 14'17	-0°49'21	retrograde	6205 Aug 08 07:13	6° \mathcal{B} 24'47	
minimum elong	6199 Mar 27 23:05	8° Υ 14'17	0°49'22	min. Earth dist.	6205 Oct 24 07:04	4° \mathcal{B} 28'06	19.01190 AU
max. Earth dist.	6199 Mar 28 13:31	8° Υ 16'24	20.78113 AU	opposition	6205 Oct 25 01:18	4° \mathcal{B} 26'17	-0°49'22
morning rise	6199 Apr 12 15:31	9° Υ 09'00		direct	6206 Jan 09 10:06	2° \mathcal{B} 29'26	
retrograde	6199 Jul 14 04:42	12° Υ 16'23		evening set	6206 Apr 09 18:30	5° \mathcal{B} 29'54	
opposition	6199 Sep 29 11:04	10° Υ 17'52	-0°54'36				
min. Earth dist.	6199 Sep 28 19:53	10° Υ 19'23	18.80368 AU	conjunction	6206 Apr 25 11:45	6° \mathcal{B} 23'50	-0°43'56
direct	6199 Dec 15 06:15	8° Υ 19'47		minimum elong	6206 Apr 25 11:45	6° \mathcal{B} 23'50	0°43'58
evening set	6200 Mar 16 13:32	11° Υ 24'11		max. Earth dist.	6206 Apr 26 07:16	6° \mathcal{B} 26'39	21.02320 AU
				morning rise	6206 May 11 06:56	7° \mathcal{B} 18'04	
conjunction	6200 Apr 01 05:19	12° Υ 18'38	-0°49'18	retrograde	6206 Aug 12 14:55	10° \mathcal{B} 24'00	
minimum elong	6200 Apr 01 05:18	12° Υ 18'38	0°49'19	opposition	6206 Oct 29 10:28	8° \mathcal{B} 25'32	-0°47'38
max. Earth dist.	6200 Apr 01 21:29	12° Υ 21'00	20.82490 AU	min. Earth dist.	6206 Oct 28 16:19	8° \mathcal{B} 27'21	19.03405 AU
morning rise	6200 Apr 16 21:51	13° Υ 13'14		direct	6207 Jan 13 17:07	6° \mathcal{B} 28'52	
retrograde	6200 Jul 18 12:25	16° Υ 20'14		evening set	6207 Apr 13 22:52	9° \mathcal{B} 28'55	
opposition	6200 Oct 03 22:40	14° Υ 21'42	-0°54'23				
min. Earth dist.	6200 Oct 03 07:19	14° Υ 23'14	18.84590 AU	conjunction	6207 Apr 29 16:24	10° \mathcal{B} 22'50	-0°42'16
direct	6200 Dec 19 17:05	12° Υ 23'49		minimum elong	6207 Apr 29 16:24	10° \mathcal{B} 22'50	0°42'18
evening set	6201 Mar 20 19:16	15° Υ 27'23		max. Earth dist.	6207 Apr 30 10:56	10° \mathcal{B} 25'30	21.04317 AU
				morning rise	6207 May 15 12:23	11° \mathcal{B} 17'06	
conjunction	6201 Apr 05 10:58	16° Υ 21'41	-0°48'59	retrograde	6207 Aug 16 23:31	14° \mathcal{B} 23'00	
minimum elong	6201 Apr 05 10:58	16° Υ 21'41	0°49'00	opposition	6207 Nov 02 19:15	12° \mathcal{B} 24'33	-0°45'41
max. Earth dist.	6201 Apr 06 02:51	16° Υ 24'00	20.86567 AU	min. Earth dist.	6207 Nov 02 01:08	12° \mathcal{B} 26'22	19.05167 AU
morning rise	6201 Apr 21 03:56	17° Υ 16'10		direct	6208 Jan 17 23:32	10° \mathcal{B} 28'02	
retrograde	6201 Jul 22 22:18	20° Υ 22'52		evening set	6208 Apr 17 03:06	13° \mathcal{B} 27'46	
opposition	6201 Oct 08 09:36	18° Υ 24'18	-0°53'54				
min. Earth dist.	6201 Oct 07 17:04	18° Υ 25'58	18.88530 AU	conjunction	6208 May 02 21:18	14° \mathcal{B} 21'41	-0°40'24
direct	6201 Dec 24 02:19	16° Υ 26'37		minimum elong	6208 May 02 21:18	14° \mathcal{B} 21'41	0°40'26
evening set	6202 Mar 25 00:28	19° Υ 29'26		max. Earth dist.	6208 May 03 16:43	14° \mathcal{B} 24'29	21.05816 AU
					6208 May 14 00:43	15° \mathcal{B}	
conjunction	6202 Apr 09 16:27	20° Υ 23'37	-0°48'26	morning rise	6208 May 18 17:46	15° \mathcal{B} 15'58	
minimum elong	6202 Apr 09 16:27	20° Υ 23'37	0°48'28	retrograde	6208 Aug 20 07:41	18° \mathcal{B} 21'54	
max. Earth dist.	6202 Apr 10 10:05	20° Υ 26'11	20.90357 AU	min. Earth dist.	6208 Nov 05 10:07	16° \mathcal{B} 25'13	19.06394 AU
morning rise	6202 Apr 25 09:37	21° Υ 18'01		opposition	6208 Nov 06 03:52	16° \mathcal{B} 23'27	-0°43'30
retrograde	6202 Jul 27 05:31	24° Υ 24'27			6208 Dec 15 00:12	15° $\mathcal{R}\mathcal{B}$	
opposition	6202 Oct 12 20:13	22° Υ 25'53	-0°53'08	direct	6209 Jan 21 06:24	14° \mathcal{B} 27'04	
min. Earth dist.	6202 Oct 12 03:24	22° Υ 27'34	18.92178 AU		6209 Feb 26 10:45	15° \mathcal{B}	
direct	6202 Dec 28 11:19	20° Υ 28'25		evening set	6209 Apr 21 07:31	17° \mathcal{B} 26'30	
evening set	6203 Mar 29 05:18	23° Υ 30'31					
				conjunction	6209 May 07 02:05	18° \mathcal{B} 20'27	-0°38'21
conjunction	6203 Apr 13 21:23	24° Υ 24'37	-0°47'39	minimum elong	6209 May 07 02:06	18° \mathcal{B} 20'27	0°38'23
minimum elong	6203 Apr 13 21:23	24° Υ 24'37	0°47'39	max. Earth dist.	6209 May 07 20:03	18° \mathcal{B} 23'01	21.06770 AU
max. Earth dist.	6203 Apr 14 14:39	24° Υ 27'07	20.93865 AU	morning rise	6209 May 22 23:23	19° \mathcal{B} 14'46	
morning rise	6203 Apr 29 15:09	25° Υ 18'57		retrograde	6209 Aug 24 15:40	22° \mathcal{B} 20'47	
retrograde	6203 Jul 31 15:00	28° Υ 25'11		opposition	6209 Nov 10 12:19	20° \mathcal{B} 22'17	-0°41'08
opposition	6203 Oct 17 06:19	26° Υ 26'38	-0°52'08	min. Earth dist.	6209 Nov 09 18:59	20° \mathcal{B} 24'00	19.07066 AU
min. Earth dist.	6203 Oct 16 12:37	26° Υ 28'24	18.95535 AU	direct	6210 Jan 25 12:21	18° \mathcal{B} 25'57	
direct	6204 Jan 01 19:21	24° Υ 29'21		evening set	6210 Apr 25 11:54	21° \mathcal{B} 25'10	
evening set	6204 Apr 01 09:52	27° Υ 30'51					
				conjunction	6210 May 11 07:14	22° \mathcal{B} 19'09	-0°36'06
conjunction	6204 Apr 17 02:23	28° Υ 24'52	-0°46'38	minimum elong	6210 May 11 07:14	22° \mathcal{B} 19'09	0°36'08
minimum elong	6204 Apr 17 02:23	28° Υ 24'52	0°46'39	max. Earth dist.	6210 May 12 01:47	22° \mathcal{B} 21'48	21.07148 AU
max. Earth dist.	6204 Apr 17 21:13	28° Υ 27'36	20.97051 AU	morning rise	6210 May 27 05:07	23° \mathcal{B} 13'32	
morning rise	6204 May 02 20:29	29° Υ 19'09		retrograde	6210 Aug 28 23:40	26° \mathcal{B} 19'37	
	6204 May 15 05:54	0° \mathcal{B}		opposition	6210 Nov 14 20:35	24° \mathcal{B} 21'02	-0°38'33
retrograde	6204 Aug 03 22:08	2° \mathcal{B} 25'13		min. Earth dist.	6210 Nov 14 03:39	24° \mathcal{B} 22'44	19.07147 AU
opposition	6204 Oct 20 15:54	0° \mathcal{B} 26'42	-0°50'52	direct	6211 Jan 29 19:15	22° \mathcal{B} 24'43	
min. Earth dist.	6204 Oct 19 22:08	0° \mathcal{B} 28'29	18.98544 AU	evening set	6211 Apr 29 16:25	25° \mathcal{B} 23'45	
	6204 Oct 31 21:54	30° $\mathcal{R}\Upsilon$					
direct	6205 Jan 05 02:55	28° Υ 29'39		conjunction	6211 May 15 12:17	26° \mathcal{B} 17'48	-0°33'41
	6205 Mar 07 11:01	0° \mathcal{B}		minimum elong	6211 May 15 12:17	26° \mathcal{B} 17'48	0°33'44
evening set	6205 Apr 05 14:22	1° \mathcal{B} 30'36		max. Earth dist.	6211 May 16 05:13	26° \mathcal{B} 20'13	21.06954 AU
				morning rise	6211 May 31 11:08	27° \mathcal{B} 12'15	
conjunction	6205 Apr 21 07:05	2° \mathcal{B} 24'33	-0°45'23		6211 Aug 05 16:58	0° \mathcal{B}	
minimum elong	6205 Apr 21 07:05	2° \mathcal{B} 24'33	0°45'24	retrograde	6211 Sep 02 07:46	0° \mathcal{B} 18'27	
max. Earth dist.	6205 Apr 22 01:15	2° \mathcal{B} 27'11	20.99886 AU		6211 Sep 30 07:59	30° $\mathcal{R}\mathcal{B}$	
morning rise	6205 May 07 01:52	3° \mathcal{B} 18'49		opposition	6211 Nov 19 04:40	28° \mathcal{B} 19'44	-0°35'47

min. Earth dist.	6211 Nov 18 12:22	28° 8 21'21	19.06673 AU	behind sun begin	6218 Jun 12 02:46	24° II 12'19	
direct	6212 Feb 03 00:50	26° 8 23'22		behind sun end	6218 Jun 12 10:53	24° II 13'27	
evening set	6212 May 02 20:57	29° 8 22'17		max. Earth dist.	6218 Jun 12 21:42	24° II 15'01	20.93212 AU
	6212 May 13 23:17	0° II		morning rise	6218 Jun 28 11:28	25° II 08'16	
				retrograde	6218 Sep 30 19:01	28° II 16'16	
conjunction	6212 May 18 17:40	0° II 16'24	-0°31'06	opposition	6218 Dec 17 10:04	26° II 16'32	-0°12'18
minimum elong	6212 May 18 17:40	0° II 16'24	0°31'08	min. Earth dist.	6218 Dec 16 21:00	26° II 17'51	18.91576 AU
max. Earth dist.	6212 May 19 11:10	0° II 18'54	21.06211 AU	direct	6219 Mar 02 16:37	24° II 19'24	
morning rise	6212 Jun 03 17:08	1° II 10'56		evening set	6219 May 31 12:24	27° II 19'28	
retrograde	6212 Sep 05 14:57	4° II 17'14					
opposition	6212 Nov 22 12:20	2° II 18'23	-0°32'50	conjunction	6219 Jun 16 14:37	28° II 14'34	-0°09'30
min. Earth dist.	6212 Nov 21 20:24	2° II 19'59	19.05673 AU	minimum elong	6219 Jun 16 14:37	28° II 14'34	0°09'33
direct	6213 Feb 06 07:22	0° II 21'57		behind sun begin	6219 Jun 16 09:06	28° II 13'48	
evening set	6213 May 07 01:44	3° II 20'48		behind sun end	6219 Jun 16 20:07	28° II 15'20	
				max. Earth dist.	6219 Jun 17 03:33	28° II 16'25	20.89852 AU
conjunction	6213 May 22 23:00	4° II 15'00	-0°28'22	morning rise	6219 Jul 02 20:21	29° II 10'09	
minimum elong	6213 May 22 23:00	4° II 15'00	0°28'25		6219 Jul 18 04:07	0° III	
max. Earth dist.	6213 May 23 15:01	4° II 17'17	21.04989 AU	retrograde	6219 Oct 05 05:31	2° III 18'35	
morning rise	6213 Jun 07 23:28	5° II 09'38		opposition	6219 Dec 21 18:06	0° III 18'44	-0°08'32
retrograde	6213 Sep 09 23:32	8° II 16'08		min. Earth dist.	6219 Dec 21 06:22	0° III 19'56	18.88043 AU
opposition	6213 Nov 26 20:05	6° II 17'06	-0°29'44		6219 Dec 29 10:49	30° R II	
min. Earth dist.	6213 Nov 26 04:45	6° II 18'38	19.04236 AU	direct	6220 Mar 05 21:42	28° II 21'27	
direct	6214 Feb 10 12:33	4° II 20'33			6220 May 08 17:04	0° III	
evening set	6214 May 11 06:26	7° II 19'25		evening set	6220 Jun 03 19:58	1° III 22'01	
conjunction	6214 May 27 04:37	8° II 13'43	-0°25'29	conjunction	6220 Jun 19 23:11	2° III 17'19	-0°06'05
minimum elong	6214 May 27 04:37	8° II 13'43	0°25'31	minimum elong	6220 Jun 19 23:12	2° III 17'19	0°06'08
max. Earth dist.	6214 May 27 21:26	8° II 16'08	21.03344 AU	behind sun begin	6220 Jun 19 16:53	2° III 16'26	
morning rise	6214 Jun 12 05:45	9° II 08'29		behind sun end	6220 Jun 20 05:31	2° III 18'12	
retrograde	6214 Sep 14 06:47	12° II 15'11		max. Earth dist.	6220 Jun 20 12:19	2° III 19'11	20.86135 AU
opposition	6214 Dec 01 03:41	10° II 15'59	-0°26'29	morning rise	6220 Jul 06 05:36	3° III 13'06	
min. Earth dist.	6214 Nov 30 12:29	10° II 17'31	19.02391 AU	retrograde	6220 Oct 08 16:17	6° III 22'01	
direct	6215 Feb 14 18:43	8° II 19'20		opposition	6220 Dec 25 02:12	4° III 22'03	-0°04'43
evening set	6215 May 15 11:42	11° II 18'17		min. Earth dist.	6220 Dec 24 14:58	4° III 23'12	18.84131 AU
				direct	6221 Mar 10 04:34	2° III 24'38	
conjunction	6215 May 31 10:31	12° II 12'43	-0°22'29	evening set	6221 Jun 08 04:24	5° III 25'45	
minimum elong	6215 May 31 10:31	12° II 12'43	0°22'32				
max. Earth dist.	6215 Jun 01 01:51	12° II 14'54	21.01323 AU	conjunction	6221 Jun 24 08:21	6° III 21'16	-0°02'37
morning rise	6215 Jun 16 12:42	13° II 07'37		minimum elong	6221 Jun 24 08:20	6° III 21'15	0°02'39
retrograde	6215 Sep 18 15:42	16° II 14'34		behind sun begin	6221 Jun 24 01:41	6° III 20'20	
opposition	6215 Dec 05 11:08	14° II 15'12	-0°23'06	behind sun end	6221 Jun 24 14:59	6° III 22'11	
min. Earth dist.	6215 Dec 04 20:43	14° II 16'39	19.00196 AU	max. Earth dist.	6221 Jun 24 19:12	6° III 22'48	20.82040 AU
direct	6216 Feb 18 23:21	12° II 18'26		morning rise	6221 Jul 10 15:47	7° III 17'15	
evening set	6216 May 18 17:10	15° II 17'33		retrograde	6221 Oct 13 03:48	10° III 26'42	
				opposition	6221 Dec 29 10:49	8° III 26'37	-0°00'51
conjunction	6216 Jun 03 16:57	16° II 12'08	-0°19'23	min. Earth dist.	6221 Dec 29 01:17	8° III 27'36	18.79838 AU
minimum elong	6216 Jun 03 16:57	16° II 12'08	0°19'25	direct	6222 Mar 14 10:47	6° III 29'00	
max. Earth dist.	6216 Jun 04 08:54	16° II 14'24	20.98950 AU	asc. node	6222 Mar 19 09:33	6° III 29'39	
morning rise	6216 Jun 19 19:50	17° II 07'10		evening set	6222 Jun 12 13:20	9° III 30'44	
retrograde	6216 Sep 21 23:58	20° II 14'25					
opposition	6216 Dec 08 18:39	18° II 14'56	-0°19'36	conjunction	6222 Jun 28 18:21	10° III 26'29	0°01'00
min. Earth dist.	6216 Dec 08 04:24	18° II 16'22	18.97647 AU	minimum elong	6222 Jun 28 18:21	10° III 26'29	0°00'58
direct	6217 Feb 22 05:35	16° II 18'02		behind sun begin	6222 Jun 28 11:42	10° III 25'32	
evening set	6217 May 22 23:03	19° II 17'24		behind sun end	6222 Jun 29 01:01	10° III 27'25	
				max. Earth dist.	6222 Jun 29 05:02	10° III 28'00	20.77533 AU
conjunction	6217 Jun 07 23:29	20° II 12'07	-0°16'10	morning rise	6222 Jul 15 02:30	11° III 22'42	
minimum elong	6217 Jun 07 23:30	20° II 12'07	0°16'12	retrograde	6222 Oct 17 15:46	14° III 32'41	
max. Earth dist.	6217 Jun 08 13:50	20° II 14'10	20.96243 AU	opposition	6223 Jan 02 19:40	12° III 32'27	0°03'03
morning rise	6217 Jun 24 03:24	21° II 07'20		min. Earth dist.	6223 Jan 02 10:46	12° III 33'22	18.75108 AU
retrograde	6217 Sep 26 09:24	24° II 14'57		direct	6223 Mar 18 18:20	10° III 34'37	
opposition	6217 Dec 13 02:22	22° II 15'19	-0°16'00	evening set	6223 Jun 16 23:18	13° III 37'00	
min. Earth dist.	6217 Dec 12 13:01	22° II 16'40	18.94779 AU				
direct	6218 Feb 26 10:02	20° II 18'18		conjunction	6223 Jul 03 05:05	14° III 32'59	0°04'34
evening set	6218 May 27 05:22	23° II 17'59		minimum elong	6223 Jul 03 05:04	14° III 32'59	0°04'32
				behind sun begin	6223 Jul 02 22:32	14° III 32'04	
conjunction	6218 Jun 12 06:50	24° II 12'53	-0°12'52	behind sun end	6223 Jul 03 11:37	14° III 33'55	
minimum elong	6218 Jun 12 06:50	24° II 12'53	0°12'56	max. Earth dist.	6223 Jul 03 13:04	14° III 34'07	20.72591 AU

morning rise	6223 Jul 19 14:15	15°☾29'27		minimum elong	6229 Jul 28 12:38	9°♈40'33	0°24'54
retrograde	6223 Oct 22 03:57	18°☾39'59		max. Earth dist.	6229 Jul 28 12:51	9°♈40'35	20.36492 AU
opposition	6224 Jan 07 04:48	16°☾39'34	0°06'58	morning rise	6229 Aug 14 02:15	10°♈38'35	
min. Earth dist.	6224 Jan 06 21:55	16°☾40'17	18.69955 AU	retrograde	6229 Nov 16 15:04	13°♈52'45	
direct	6224 Mar 22 01:39	14°☾41'27		opposition	6230 Jan 31 19:19	11°♈51'02	0°29'22
evening set	6224 Jun 20 09:48	17°☾44'33		min. Earth dist.	6230 Jan 31 19:29	11°♈51'01	18.33247 AU
				direct	6230 Apr 16 09:39	9°♈50'51	
conjunction	6224 Jul 06 16:38	18°☾40'48	0°08'04	evening set	6230 Jul 16 16:54	12°♈59'19	
minimum elong	6224 Jul 06 16:38	18°☾40'48	0°08'03				
behind sun begin	6224 Jul 06 10:41	18°☾39'57		conjunction	6230 Aug 02 04:48	13°♈57'14	0°28'00
behind sun end	6224 Jul 06 22:35	18°☾41'38		minimum elong	6230 Aug 02 04:47	13°♈57'14	0°27'59
max. Earth dist.	6224 Jul 07 00:16	18°☾41'53	20.67236 AU	max. Earth dist.	6230 Aug 02 04:45	13°♈57'14	20.30021 AU
morning rise	6224 Jul 23 02:27	19°☾37'30		morning rise	6230 Aug 18 18:55	14°♈55'32	
retrograde	6224 Oct 25 16:56	22°☾48'35			6230 Aug 20 02:01	15°♈	
opposition	6225 Jan 10 14:16	20°☾47'58	0°10'51	retrograde	6230 Nov 21 08:22	18°♈10'22	
min. Earth dist.	6225 Jan 10 07:56	20°☾48'37	18.64401 AU	opposition	6231 Feb 05 07:17	16°♈08'29	0°32'44
direct	6225 Mar 26 10:19	18°☾49'33		min. Earth dist.	6231 Feb 05 07:32	16°♈08'28	18.26769 AU
evening set	6225 Jun 24 20:58	21°☾53'24			6231 Mar 06 00:07	15°♈♈	
				direct	6231 Apr 20 22:50	14°♈07'59	
conjunction	6225 Jul 11 04:32	22°☾49'54	0°11'34		6231 Jun 04 20:29	15°♈	
minimum elong	6225 Jul 11 04:32	22°☾49'54	0°11'31	evening set	6231 Jul 21 09:18	17°♈17'31	
behind sun begin	6225 Jul 10 23:45	22°☾49'13					
behind sun end	6225 Jul 11 09:19	22°☾50'34		conjunction	6231 Aug 06 21:47	18°♈15'45	0°30'57
max. Earth dist.	6225 Jul 11 09:41	22°☾50'38	20.61518 AU	minimum elong	6231 Aug 06 21:47	18°♈15'45	0°30'57
morning rise	6225 Jul 27 15:20	23°☾46'52		max. Earth dist.	6231 Aug 06 19:36	18°♈15'26	20.23548 AU
retrograde	6225 Oct 30 05:39	26°☾58'31		morning rise	6231 Aug 23 12:33	19°♈14'19	
opposition	6226 Jan 15 00:12	24°☾57'41	0°14'43	retrograde	6231 Nov 25 23:05	22°♈29'50	
min. Earth dist.	6226 Jan 14 19:51	24°☾58'08	18.58534 AU	opposition	6232 Feb 09 19:55	20°♈27'49	0°35'56
direct	6226 Mar 30 18:16	22°☾58'55		min. Earth dist.	6232 Feb 09 22:12	20°♈27'34	18.20318 AU
evening set	6226 Jun 29 08:53	26°☾03'34		direct	6232 Apr 24 09:40	18°♈26'59	
				evening set	6232 Jul 25 02:28	21°♈37'39	
conjunction	6226 Jul 15 17:30	27°☾00'21	0°15'01				
minimum elong	6226 Jul 15 17:30	27°☾00'21	0°14'59	conjunction	6232 Aug 10 15:47	22°♈36'11	0°33'45
behind sun begin	6226 Jul 15 15:12	27°☾00'01		minimum elong	6232 Aug 10 15:47	22°♈36'11	0°33'43
behind sun end	6226 Jul 15 19:49	27°☾00'41		max. Earth dist.	6232 Aug 10 13:07	22°♈35'47	20.17121 AU
max. Earth dist.	6226 Jul 15 22:27	27°☾01'04	20.55519 AU	morning rise	6232 Aug 27 06:57	23°♈35'01	
morning rise	6226 Aug 01 04:56	27°☾57'34		retrograde	6232 Nov 29 17:34	26°♈51'14	
	6226 Sep 10 20:29	0°♈		opposition	6233 Feb 13 09:07	24°♈49'06	0°38'57
retrograde	6226 Nov 03 20:08	1°♈09'49		min. Earth dist.	6233 Feb 13 11:28	24°♈48'51	18.13912 AU
	6226 Dec 29 05:26	30°♈☾		direct	6233 Apr 29 00:22	22°♈47'59	
opposition	6227 Jan 19 10:13	29°☾08'45	0°18'31	evening set	6233 Jul 29 20:40	25°♈59'48	
min. Earth dist.	6227 Jan 19 06:16	29°☾09'09	18.52414 AU				
direct	6227 Apr 04 04:19	27°☾09'38		conjunction	6233 Aug 15 10:32	26°♈58'38	0°36'22
	6227 Jun 29 10:24	0°♈		minimum elong	6233 Aug 15 10:32	26°♈58'38	0°36'21
evening set	6227 Jul 03 21:46	0°♈15'10		max. Earth dist.	6233 Aug 15 05:55	26°♈57'57	20.10734 AU
				morning rise	6233 Sep 01 02:13	27°♈57'45	
conjunction	6227 Jul 20 07:05	1°♈12'13	0°18'24		6233 Oct 10 12:03	0°♈	
minimum elong	6227 Jul 20 07:05	1°♈12'13	0°18'22	retrograde	6233 Dec 04 09:49	1°♈14'40	
max. Earth dist.	6227 Jul 20 09:39	1°♈12'35	20.49303 AU		6234 Jan 29 20:51	30°♈♈	
morning rise	6227 Aug 05 19:24	2°♈09'42		opposition	6234 Feb 17 23:10	29°♈12'26	0°41'46
retrograde	6227 Nov 08 09:17	5°♈22'34		min. Earth dist.	6234 Feb 18 03:44	29°♈11'57	18.07549 AU
opposition	6228 Jan 23 20:51	3°♈21'16	0°22'14	direct	6234 May 03 13:01	27°♈11'00	
min. Earth dist.	6228 Jan 23 18:54	3°♈21'28	18.46122 AU		6234 Jul 27 17:00	0°♈	
direct	6228 Apr 07 12:43	1°♈21'47		evening set	6234 Aug 03 16:01	0°♈24'02	
evening set	6228 Jul 07 11:12	4°♈28'15					
				conjunction	6234 Aug 20 06:35	1°♈23'10	0°38'48
conjunction	6228 Jul 23 21:30	5°♈25'35	0°21'43	minimum elong	6234 Aug 20 06:34	1°♈23'10	0°38'47
minimum elong	6228 Jul 23 21:30	5°♈25'35	0°21'41	max. Earth dist.	6234 Aug 20 01:00	1°♈22'20	20.04386 AU
max. Earth dist.	6228 Jul 23 23:54	5°♈25'56	20.42941 AU	morning rise	6234 Sep 05 22:35	2°♈22'32	
morning rise	6228 Aug 09 10:20	6°♈23'20		retrograde	6234 Dec 09 05:42	5°♈40'08	
retrograde	6228 Nov 12 01:21	9°♈36'50		opposition	6235 Feb 22 13:36	3°♈37'49	0°44'22
opposition	6229 Jan 27 07:45	7°♈35'19	0°25'52	min. Earth dist.	6235 Feb 22 18:33	3°♈37'18	18.01208 AU
min. Earth dist.	6229 Jan 27 05:58	7°♈35'31	18.39707 AU	direct	6235 May 08 05:10	1°♈36'04	
direct	6229 Apr 12 00:16	5°♈35'30		evening set	6235 Aug 08 12:32	4°♈50'19	
evening set	6229 Jul 12 01:42	8°♈42'55					
				conjunction	6235 Aug 25 03:33	5°♈49'44	0°41'01
conjunction	6229 Jul 28 12:39	9°♈40'33	0°24'55	minimum elong	6235 Aug 25 03:33	5°♈49'44	0°41'00

max. Earth dist.	6235 Aug 24 19:56	5° <u>0</u> 48'35	19.98037 AU	min. Earth dist.	6242 Mar 26 04:06	5° <u>0</u> 24'08	17.59221 AU
morning rise	6235 Sep 10 19:51	6° <u>0</u> 49'21		direct	6242 Jun 08 11:46	3° <u>0</u> 21'16	
retrograde	6235 Dec 13 23:43	10° <u>0</u> 07'38		evening set	6242 Sep 10 11:04	6° <u>0</u> 43'26	
opposition	6236 Feb 27 05:03	8° <u>0</u> 05'12	0°46'44	max. Earth dist.	6242 Sep 26 11:12	7° <u>0</u> 42'00	19.56689 AU
min. Earth dist.	6236 Feb 27 12:21	8° <u>0</u> 04'25	17.94871 AU				
direct	6236 May 11 19:53	6° <u>0</u> 03'07		conjunction	6242 Sep 27 04:05	7° <u>0</u> 44'36	0°49'12
evening set	6236 Aug 12 09:47	9° <u>0</u> 18'33		minimum elong	6242 Sep 27 04:05	7° <u>0</u> 44'36	0°49'12
				morning rise	6242 Oct 13 20:35	8° <u>0</u> 45'42	
conjunction	6236 Aug 29 01:18	10° <u>0</u> 18'15	0°43'01	retrograde	6243 Jan 15 06:47	12° <u>0</u> 07'34	
minimum elong	6236 Aug 29 01:18	10° <u>0</u> 18'15	0°43'01	opposition	6243 Mar 30 10:11	10° <u>0</u> 04'15	0°54'49
max. Earth dist.	6236 Aug 28 16:18	10° <u>0</u> 16'53	19.91708 AU	min. Earth dist.	6243 Mar 30 23:54	10° <u>0</u> 02'45	17.54307 AU
morning rise	6236 Sep 14 17:51	11° <u>0</u> 18'07		direct	6243 Jun 13 09:49	7° <u>0</u> 59'36	
retrograde	6236 Dec 17 20:51	14° <u>0</u> 37'02		evening set	6243 Sep 15 13:36	11° <u>0</u> 22'47	
opposition	6237 Mar 02 21:03	12° <u>0</u> 34'29	0°48'49				
min. Earth dist.	6237 Mar 03 04:41	12° <u>0</u> 33'40	17.88554 AU	conjunction	6243 Oct 02 06:44	12° <u>0</u> 24'08	0°49'09
direct	6237 May 16 13:43	10° <u>0</u> 32'01		minimum elong	6243 Oct 02 06:44	12° <u>0</u> 24'08	0°49'10
evening set	6237 Aug 17 08:05	13° <u>0</u> 48'38		max. Earth dist.	6243 Oct 01 14:17	12° <u>0</u> 21'36	19.51991 AU
				morning rise	6243 Oct 18 22:45	13° <u>0</u> 25'23	
conjunction	6237 Sep 03 00:02	14° <u>0</u> 48'36	0°44'46	retrograde	6244 Jan 20 05:05	16° <u>0</u> 47'36	
minimum elong	6237 Sep 03 00:01	14° <u>0</u> 48'36	0°44'44	opposition	6244 Apr 03 06:37	14° <u>0</u> 44'15	0°54'36
max. Earth dist.	6237 Sep 02 13:24	14° <u>0</u> 47'00	19.85404 AU	min. Earth dist.	6244 Apr 03 21:02	14° <u>0</u> 42'41	17.49854 AU
morning rise	6237 Sep 19 16:41	15° <u>0</u> 48'43		direct	6244 Jun 17 06:59	12° <u>0</u> 39'21	
retrograde	6237 Dec 22 16:10	19° <u>0</u> 08'12		evening set	6244 Sep 19 16:38	16° <u>0</u> 03'30	
opposition	6238 Mar 07 13:45	17° <u>0</u> 05'31	0°50'38				
min. Earth dist.	6238 Mar 07 23:34	17° <u>0</u> 04'28	17.82295 AU	conjunction	6244 Oct 06 09:30	17° <u>0</u> 05'00	0°48'47
direct	6238 May 21 06:00	15° <u>0</u> 02'41		minimum elong	6244 Oct 06 09:30	17° <u>0</u> 05'00	0°48'47
evening set	6238 Aug 22 07:13	18° <u>0</u> 20'27		max. Earth dist.	6244 Oct 05 15:31	17° <u>0</u> 02'13	19.47797 AU
				morning rise	6244 Oct 23 01:20	18° <u>0</u> 06'23	
conjunction	6238 Sep 07 23:33	19° <u>0</u> 20'41	0°46'14	retrograde	6245 Jan 24 04:56	21° <u>0</u> 28'56	
minimum elong	6238 Sep 07 23:33	19° <u>0</u> 20'41	0°46'14	opposition	6245 Apr 08 03:34	19° <u>0</u> 25'35	0°54'01
max. Earth dist.	6238 Sep 07 11:14	19° <u>0</u> 18'49	19.79204 AU	min. Earth dist.	6245 Apr 08 18:10	19° <u>0</u> 23'59	17.45931 AU
morning rise	6238 Sep 24 16:24	20° <u>0</u> 21'02		direct	6245 Jun 22 06:01	17° <u>0</u> 20'27	
retrograde	6238 Dec 27 14:33	23° <u>0</u> 41'04		evening set	6245 Sep 24 20:11	20° <u>0</u> 45'32	
opposition	6239 Mar 12 07:00	21° <u>0</u> 38'14	0°52'09				
min. Earth dist.	6239 Mar 12 17:09	21° <u>0</u> 37'09	17.76161 AU	conjunction	6245 Oct 11 13:04	21° <u>0</u> 47'12	0°48'05
direct	6239 May 26 01:33	19° <u>0</u> 35'00		minimum elong	6245 Oct 11 13:04	21° <u>0</u> 47'12	0°48'05
evening set	6239 Aug 27 07:09	22° <u>0</u> 53'55		max. Earth dist.	6245 Oct 10 19:52	21° <u>0</u> 44'32	19.44137 AU
				morning rise	6245 Oct 28 04:19	22° <u>0</u> 48'40	
conjunction	6239 Sep 12 23:47	23° <u>0</u> 54'25	0°47'26	retrograde	6246 Jan 29 04:11	26° <u>0</u> 11'30	
minimum elong	6239 Sep 12 23:47	23° <u>0</u> 54'25	0°47'26	opposition	6246 Apr 13 01:00	24° <u>0</u> 08'12	0°53'04
max. Earth dist.	6239 Sep 12 10:31	23° <u>0</u> 52'24	19.73145 AU	min. Earth dist.	6246 Apr 13 15:56	24° <u>0</u> 06'34	17.42534 AU
morning rise	6239 Sep 29 16:32	24° <u>0</u> 54'58		direct	6246 Jun 27 05:24	22° <u>0</u> 02'55	
retrograde	6240 Jan 01 10:46	28° <u>0</u> 15'30		evening set	6246 Sep 30 00:26	25° <u>0</u> 28'52	
opposition	6240 Mar 16 00:57	26° <u>0</u> 12'33	0°53'20				
min. Earth dist.	6240 Mar 16 12:55	26° <u>0</u> 11'15	17.70214 AU	conjunction	6246 Oct 16 16:54	26° <u>0</u> 30'39	0°47'03
direct	6240 May 29 19:24	24° <u>0</u> 08'56		minimum elong	6246 Oct 16 16:54	26° <u>0</u> 30'39	0°47'05
evening set	6240 Aug 31 07:48	27° <u>0</u> 28'57		max. Earth dist.	6246 Oct 15 22:11	26° <u>0</u> 27'44	19.41011 AU
max. Earth dist.	6240 Sep 16 09:37	28° <u>0</u> 27'24	19.67333 AU	morning rise	6246 Nov 02 07:48	27° <u>0</u> 32'13	
					6246 Dec 19 19:48	0° <u>0</u> 00'00	
conjunction	6240 Sep 17 00:36	28° <u>0</u> 29'41	0°48'20	retrograde	6247 Feb 03 03:55	0° <u>0</u> 00'00	
minimum elong	6240 Sep 17 00:36	28° <u>0</u> 29'41	0°48'20		6247 Mar 21 14:03	30° <u>0</u> 00'00	
morning rise	6240 Oct 03 17:24	29° <u>0</u> 30'26		opposition	6247 Apr 17 23:06	28° <u>0</u> 52'05	0°51'45
	6240 Oct 12 02:53	0° <u>0</u> 00'00		min. Earth dist.	6247 Apr 18 14:35	28° <u>0</u> 50'23	17.39673 AU
retrograde	6241 Jan 05 09:51	2° <u>0</u> 51'28		direct	6247 Jul 02 05:37	26° <u>0</u> 46'40	
opposition	6241 Mar 20 19:24	0° <u>0</u> 48'21	0°54'11		6247 Oct 01 11:54	0° <u>0</u> 00'00	
min. Earth dist.	6241 Mar 21 07:34	0° <u>0</u> 47'02	17.64552 AU	evening set	6247 Oct 05 04:49	0° <u>0</u> 00'00	
	6241 Apr 08 19:43	30° <u>0</u> 00'00					
direct	6241 Jun 03 16:14	28° <u>0</u> 44'22		conjunction	6247 Oct 21 21:04	1° <u>0</u> 00'00	0°45'42
	6241 Jul 27 23:13	0° <u>0</u> 00'00		minimum elong	6247 Oct 21 21:04	1° <u>0</u> 00'00	0°45'44
evening set	6241 Sep 05 08:59	2° <u>0</u> 05'28		max. Earth dist.	6247 Oct 21 03:10	1° <u>0</u> 00'00	19.38395 AU
max. Earth dist.	6241 Sep 21 10:55	3° <u>0</u> 04'07	19.61821 AU	morning rise	6247 Nov 07 11:14	2° <u>0</u> 00'00	
				retrograde	6248 Feb 08 04:17	5° <u>0</u> 00'00	
conjunction	6241 Sep 22 02:03	3° <u>0</u> 06'26	0°48'56	opposition	6248 Apr 21 21:45	3° <u>0</u> 00'00	0°50'05
minimum elong	6241 Sep 22 02:03	3° <u>0</u> 06'26	0°48'57	min. Earth dist.	6248 Apr 22 13:13	3° <u>0</u> 00'00	17.37293 AU
morning rise	6241 Oct 08 18:37	4° <u>0</u> 07'22		direct	6248 Jul 06 07:20	1° <u>0</u> 00'00	
retrograde	6242 Jan 10 07:13	7° <u>0</u> 28'49		evening set	6248 Oct 09 09:44	4° <u>0</u> 00'00	
opposition	6242 Mar 25 14:36	5° <u>0</u> 25'37	0°54'41	max. Earth dist.	6248 Oct 25 06:14	5° <u>0</u> 00'00	19.36251 AU

conjunction	6248 Oct 26 01:26	6° \mathbb{M} 00'57	0°44'03	retrograde	6255 Mar 13 07:08	9° \mathbb{Z} 06'46	
minimum elong	6248 Oct 26 01:26	6° \mathbb{M} 00'57	0°44'05	opposition	6255 May 25 22:33	7° \mathbb{Z} 04'15	0°29'33
morning rise	6248 Nov 11 15:03	7° \mathbb{M} 02'36		min. Earth dist.	6255 May 26 14:44	7° \mathbb{Z} 02'29	17.33313 AU
retrograde	6249 Feb 12 04:05	10° \mathbb{M} 26'00		direct	6255 Aug 10 01:25	4° \mathbb{Z} 58'14	
opposition	6249 Apr 26 20:54	8° \mathbb{M} 23'00	0°48'04	evening set	6255 Nov 13 19:00	8° \mathbb{Z} 27'28	
min. Earth dist.	6249 Apr 27 13:15	8° \mathbb{M} 21'12	17.35388 AU	max. Earth dist.	6255 Nov 29 11:55	9° \mathbb{Z} 26'15	19.33941 AU
direct	6249 Jul 11 08:35	6° \mathbb{M} 17'23					
evening set	6249 Oct 14 14:43	9° \mathbb{M} 45'27		conjunction	6255 Nov 30 05:52	9° \mathbb{Z} 29'04	0°24'43
max. Earth dist.	6249 Oct 30 11:21	10° \mathbb{M} 44'30	19.34563 AU	minimum elong	6255 Nov 30 05:52	9° \mathbb{Z} 29'04	0°24'45
				morning rise	6255 Dec 16 13:37	10° \mathbb{Z} 30'13	
conjunction	6249 Oct 31 06:04	10° \mathbb{M} 47'25	0°42'05	retrograde	6256 Mar 17 07:06	13° \mathbb{Z} 52'23	
minimum elong	6249 Oct 31 06:04	10° \mathbb{M} 47'25	0°42'07	opposition	6256 May 29 23:13	11° \mathbb{Z} 49'56	0°25'36
morning rise	6249 Nov 16 18:55	11° \mathbb{M} 49'04		min. Earth dist.	6256 May 30 13:41	11° \mathbb{Z} 48'22	17.34746 AU
	6250 Jan 27 02:54	15° \mathbb{M}		direct	6256 Aug 14 05:46	9° \mathbb{Z} 43'55	
retrograde	6250 Feb 17 05:37	15° \mathbb{M} 12'29		evening set	6256 Nov 17 22:18	13° \mathbb{Z} 12'58	
	6250 Mar 10 13:21	15° \mathbb{R} \mathbb{M}					
opposition	6250 May 01 20:29	13° \mathbb{M} 09'35	0°45'43	conjunction	6256 Dec 04 08:24	14° \mathbb{Z} 14'25	0°21'07
min. Earth dist.	6250 May 02 12:27	13° \mathbb{M} 07'50	17.33904 AU	minimum elong	6256 Dec 04 08:24	14° \mathbb{Z} 14'25	0°21'10
direct	6250 Jul 16 11:43	11° \mathbb{M} 03'54		max. Earth dist.	6256 Dec 03 16:17	14° \mathbb{Z} 11'53	19.35665 AU
evening set	6250 Oct 19 19:59	14° \mathbb{M} 32'26		morning rise	6256 Dec 20 15:02	15° \mathbb{Z} 15'23	
	6250 Oct 27 06:34	15° \mathbb{M}		retrograde	6257 Mar 22 05:12	18° \mathbb{Z} 37'09	
				opposition	6257 Jun 03 23:53	16° \mathbb{Z} 34'48	0°21'29
conjunction	6250 Nov 05 10:40	15° \mathbb{M} 34'25	0°39'49	min. Earth dist.	6257 Jun 04 14:23	16° \mathbb{Z} 33'14	17.36772 AU
minimum elong	6250 Nov 05 10:40	15° \mathbb{M} 34'25	0°39'51	direct	6257 Aug 19 08:51	14° \mathbb{Z} 28'51	
max. Earth dist.	6250 Nov 04 15:05	15° \mathbb{M} 31'21	19.33290 AU	evening set	6257 Nov 23 01:13	17° \mathbb{Z} 57'37	
morning rise	6250 Nov 21 22:45	16° \mathbb{M} 36'03					
retrograde	6251 Feb 22 05:30	19° \mathbb{M} 59'26		conjunction	6257 Dec 09 10:14	18° \mathbb{Z} 58'52	0°17'22
opposition	6251 May 06 20:30	17° \mathbb{M} 56'38	0°43'03	minimum elong	6257 Dec 09 10:14	18° \mathbb{Z} 58'52	0°17'24
min. Earth dist.	6251 May 07 13:27	17° \mathbb{M} 54'46	17.32855 AU	max. Earth dist.	6257 Dec 08 18:14	18° \mathbb{Z} 56'22	19.38004 AU
direct	6251 Jul 21 13:26	15° \mathbb{M} 50'50		morning rise	6257 Dec 25 16:02	19° \mathbb{Z} 59'39	
evening set	6251 Oct 25 01:07	19° \mathbb{M} 19'45		retrograde	6258 Mar 27 04:12	23° \mathbb{Z} 20'59	
				opposition	6258 Jun 09 00:28	21° \mathbb{Z} 18'46	0°17'15
conjunction	6251 Nov 10 15:11	20° \mathbb{M} 21'43	0°37'17	min. Earth dist.	6258 Jun 09 13:04	21° \mathbb{Z} 17'25	17.39413 AU
minimum elong	6251 Nov 10 15:12	20° \mathbb{M} 21'43	0°37'19	direct	6258 Aug 24 12:44	19° \mathbb{Z} 12'57	
max. Earth dist.	6251 Nov 09 19:55	20° \mathbb{M} 18'41	19.32465 AU	evening set	6258 Nov 28 03:20	22° \mathbb{Z} 41'21	
morning rise	6251 Nov 27 02:29	21° \mathbb{M} 23'18					
retrograde	6252 Feb 27 07:22	24° \mathbb{M} 46'34		conjunction	6258 Dec 14 11:30	23° \mathbb{Z} 42'24	0°13'31
opposition	6252 May 10 20:44	22° \mathbb{M} 43'50	0°40'04	minimum elong	6258 Dec 14 11:30	23° \mathbb{Z} 42'24	0°13'34
min. Earth dist.	6252 May 11 12:47	22° \mathbb{M} 42'05	17.32245 AU	behind sun begin	6258 Dec 14 07:50	23° \mathbb{Z} 41'50	
direct	6252 Jul 25 16:47	20° \mathbb{M} 37'58		behind sun end	6258 Dec 14 15:10	23° \mathbb{Z} 42'58	
evening set	6252 Oct 29 05:59	24° \mathbb{M} 07'08		max. Earth dist.	6258 Dec 13 21:52	23° \mathbb{Z} 40'16	19.40947 AU
				morning rise	6258 Dec 30 16:07	24° \mathbb{Z} 42'58	
conjunction	6252 Nov 14 19:22	25° \mathbb{M} 09'03	0°34'29	retrograde	6259 Apr 01 02:06	28° \mathbb{Z} 03'50	
minimum elong	6252 Nov 14 19:22	25° \mathbb{M} 09'03	0°34'30	opposition	6259 Jun 14 01:06	26° \mathbb{Z} 01'50	0°12'54
max. Earth dist.	6252 Nov 14 00:07	25° \mathbb{M} 06'02	19.32083 AU	min. Earth dist.	6259 Jun 14 13:14	26° \mathbb{Z} 00'31	17.42644 AU
morning rise	6252 Dec 01 05:47	26° \mathbb{M} 10'34		direct	6259 Aug 29 15:30	23° \mathbb{Z} 56'12	
retrograde	6253 Mar 03 07:12	29° \mathbb{M} 33'40		evening set	6259 Dec 03 04:58	27° \mathbb{Z} 24'09	
opposition	6253 May 15 21:18	27° \mathbb{M} 31'00	0°36'49				
min. Earth dist.	6253 May 16 14:12	27° \mathbb{M} 29'09	17.32101 AU	conjunction	6259 Dec 19 11:58	28° \mathbb{Z} 24'58	0°09'36
direct	6253 Jul 30 18:56	25° \mathbb{M} 25'03		minimum elong	6259 Dec 19 11:58	28° \mathbb{Z} 24'58	0°09'39
evening set	6253 Nov 03 10:46	28° \mathbb{M} 54'22		behind sun begin	6259 Dec 19 06:28	28° \mathbb{Z} 24'08	
				behind sun end	6259 Dec 19 17:28	28° \mathbb{Z} 25'49	
conjunction	6253 Nov 19 23:23	29° \mathbb{M} 56'13	0°31'26	max. Earth dist.	6259 Dec 18 22:31	28° \mathbb{Z} 22'53	19.44477 AU
minimum elong	6253 Nov 19 23:23	29° \mathbb{M} 56'13	0°31'28	morning rise	6260 Jan 04 15:46	29° \mathbb{Z} 25'19	
max. Earth dist.	6253 Nov 19 04:15	29° \mathbb{M} 53'12	19.32188 AU		6260 Jan 14 06:39	0° \mathbb{Z}	
	6253 Nov 20 23:29	0° \mathbb{Z}		retrograde	6260 Apr 05 00:28	2° \mathbb{Z} 45'43	
morning rise	6253 Dec 06 08:59	0° \mathbb{Z} 57'38		opposition	6260 Jun 18 01:23	0° \mathbb{Z} 43'55	0°08'29
retrograde	6254 Mar 08 08:12	4° \mathbb{Z} 20'28		min. Earth dist.	6260 Jun 18 11:48	0° \mathbb{Z} 42'48	17.46444 AU
opposition	6254 May 20 21:43	2° \mathbb{Z} 17'52	0°33'17		6260 Jul 05 11:16	30° \mathbb{R} \mathbb{Z}	
min. Earth dist.	6254 May 21 13:23	2° \mathbb{Z} 16'10	17.32444 AU	direct	6260 Sep 02 18:19	28° \mathbb{Z} 38'31	
direct	6254 Aug 04 22:45	0° \mathbb{Z} 11'53			6260 Oct 29 15:30	0° \mathbb{Z}	
evening set	6254 Nov 08 15:10	3° \mathbb{Z} 41'13		evening set	6260 Dec 07 05:39	2° \mathbb{Z} 05'56	
max. Earth dist.	6254 Nov 24 08:51	4° \mathbb{Z} 40'06	19.32788 AU				
				conjunction	6260 Dec 23 11:50	3° \mathbb{Z} 06'32	0°05'39
conjunction	6254 Nov 25 03:02	4° \mathbb{Z} 42'57	0°28'10	minimum elong	6260 Dec 23 11:50	3° \mathbb{Z} 06'32	0°05'41
minimum elong	6254 Nov 25 03:02	4° \mathbb{Z} 42'57	0°28'13	behind sun begin	6260 Dec 23 05:27	3° \mathbb{Z} 05'33	
morning rise	6254 Dec 11 11:36	5° \mathbb{Z} 44'15		behind sun end	6260 Dec 23 18:14	3° \mathbb{Z} 07'30	

max. Earth dist.	6260 Dec 23 00:51	3°30'45"0	19.48528 AU	min. Earth dist.	6266 Jul 17 02:40	28°32'48"	17.76938 AU
morning rise	6261 Jan 08 14:31	4°30'6"39		direct	6266 Oct 01 22:46	26°32'6"38	
retrograde	6261 Apr 09 21:58	7°32'6"31		evening set	6267 Jan 04 18:02	29°32'49"09	
opposition	6261 Jun 23 01:38	5°32'24"59	0°04'02"		6267 Jan 07 17:45	0°00'00"	
min. Earth dist.	6261 Jun 23 11:25	5°32'23"56	17.50713 AU				
direct	6261 Sep 07 20:27	3°32'19"52		conjunction	6267 Jan 20 18:06	0°00'48"01	-0°17'50"
evening set	6261 Dec 12 05:57	6°32'46"40		minimum elong	6267 Jan 20 18:06	0°00'48"01	0°17'47"
				max. Earth dist.	6267 Jan 20 14:00	0°00'47"23	19.79860 AU
conjunction	6261 Dec 28 10:55	7°32'47"00	0°01'38"	morning rise	6267 Feb 05 15:22	1°00'46"28	
minimum elong	6261 Dec 28 10:55	7°32'47"00	0°01'41"	retrograde	6267 May 07 23:30	5°00'02"42	
behind sun begin	6261 Dec 28 04:15	7°32'45"59		opposition	6267 Jul 21 20:06	3°00'02"22	-0°21'47"
behind sun end	6261 Dec 28 17:34	7°32'48"00		min. Earth dist.	6267 Jul 21 22:50	3°00'02"04	17.82788 AU
max. Earth dist.	6261 Dec 28 00:02	7°32'45"18	19.53015 AU	direct	6267 Oct 06 23:04	0°00'59"00	
morning rise	6262 Jan 13 12:45	8°32'46"51		evening set	6268 Jan 09 12:51	4°00'20"27	
retrograde	6262 Apr 14 19:28	12°32'06"12					
desc. node	6262 May 24 06:03	11°32'26"12		conjunction	6268 Jan 25 11:56	5°00'19"00	-0°21'24"
opposition	6262 Jun 28 01:32	10°32'04"53	-0°00'25"	minimum elong	6268 Jan 25 11:56	5°00'18"59	0°21'22"
min. Earth dist.	6262 Jun 28 10:03	10°32'03"59	17.55399 AU	max. Earth dist.	6268 Jan 25 08:50	5°00'18"31	19.85785 AU
direct	6262 Sep 12 22:06	8°32'00"03		morning rise	6268 Feb 10 08:29	6°00'17"10	
evening set	6262 Dec 17 05:17	11°32'26"10		retrograde	6268 May 11 15:49	9°00'32"43	
				opposition	6268 Jul 25 17:25	7°00'32"29	-0°25'40"
conjunction	6263 Jan 02 09:23	12°32'26"13	-0°02'29"	min. Earth dist.	6268 Jul 25 19:39	7°00'32"15	17.88797 AU
minimum elong	6263 Jan 02 09:22	12°32'26"13	0°02'27"	direct	6268 Oct 10 20:30	5°00'29"23	
behind sun begin	6263 Jan 02 02:44	12°32'25"13		evening set	6269 Jan 13 06:32	8°00'49"44	
behind sun end	6263 Jan 02 16:00	12°32'27"14					
max. Earth dist.	6263 Jan 02 00:45	12°32'24"54	19.57878 AU	conjunction	6269 Jan 29 04:48	9°00'47"58	-0°24'49"
morning rise	6263 Jan 18 10:06	13°32'25"49		minimum elong	6269 Jan 29 04:47	9°00'47"58	0°24'47"
retrograde	6263 Apr 19 16:28	16°32'44"35		max. Earth dist.	6269 Jan 29 03:20	9°00'47"44	19.91871 AU
opposition	6263 Jul 03 01:21	14°32'43"32	-0°04'51"	morning rise	6269 Feb 14 00:38	10°00'45"50	
min. Earth dist.	6263 Jul 03 08:50	14°32'42"44	17.60414 AU	retrograde	6269 May 16 09:55	14°00'00"41	
direct	6263 Sep 17 23:23	12°32'39"00		opposition	6269 Jul 30 14:04	12°00'00"33	-0°29'22"
evening set	6263 Dec 22 03:49	16°32'04"18		min. Earth dist.	6269 Jul 30 14:07	12°00'00"33	17.94949 AU
				direct	6269 Oct 15 19:51	9°00'57"44	
conjunction	6264 Jan 07 06:45	17°32'04"05	-0°06'26"	evening set	6270 Jan 17 23:13	13°00'16"57	
minimum elong	6264 Jan 07 06:44	17°32'04"04	0°06'24"				
behind sun begin	6264 Jan 07 00:28	17°32'03"07		conjunction	6270 Feb 02 20:35	14°00'14"51	-0°28'03"
behind sun end	6264 Jan 07 13:00	17°32'05"02		minimum elong	6270 Feb 02 20:35	14°00'14"51	0°28'02"
max. Earth dist.	6264 Jan 06 22:24	17°32'02"48	19.63043 AU	max. Earth dist.	6270 Feb 02 20:40	14°00'14"52	19.98100 AU
morning rise	6264 Jan 23 06:40	18°32'03"24			6270 Feb 15 04:56	15°00'00"00	
retrograde	6264 Apr 23 12:53	21°32'21"35		morning rise	6270 Feb 18 15:44	15°00'12"26	
opposition	6264 Jul 07 00:45	19°32'20"44	-0°09'14"	retrograde	6270 May 21 00:09	18°00'26"36	
min. Earth dist.	6264 Jul 07 07:16	19°32'20"02	17.65719 AU	opposition	6270 Aug 04 10:14	16°00'26"34	-0°32'51"
direct	6264 Sep 21 23:32	17°32'16"29		min. Earth dist.	6270 Aug 04 09:39	16°00'26"38	18.01277 AU
evening set	6264 Dec 26 01:27	20°32'40"56			6270 Sep 12 00:59	15°00'00"00	
				direct	6270 Oct 20 15:41	14°00'24"03	
conjunction	6265 Jan 11 03:31	21°32'40"25	-0°10'19"		6270 Nov 27 06:58	15°00'00"00	
minimum elong	6265 Jan 11 03:30	21°32'40"25	0°10'17"	evening set	6271 Jan 22 14:55	17°00'42"07	
behind sun begin	6265 Jan 10 22:14	21°32'39"37					
behind sun end	6265 Jan 11 08:46	21°32'41"13		conjunction	6271 Feb 07 11:28	18°00'39"42	-0°31'06"
max. Earth dist.	6265 Jan 10 21:07	21°32'39"27	19.68464 AU	minimum elong	6271 Feb 07 11:28	18°00'39"42	0°31'05"
morning rise	6265 Jan 27 02:26	22°32'39"28		max. Earth dist.	6271 Feb 07 13:09	18°00'39"57	20.04521 AU
retrograde	6265 Apr 28 09:11	25°32'57"00		morning rise	6271 Feb 23 06:01	19°00'36"59	
opposition	6265 Jul 11 23:33	23°32'56"21	-0°13'32"	retrograde	6271 May 25 16:41	22°00'50"29	
min. Earth dist.	6265 Jul 12 04:46	23°32'55"48	17.71233 AU	opposition	6271 Aug 09 05:37	20°00'50"35	-0°36'07"
direct	6265 Sep 27 00:06	21°32'52"25		min. Earth dist.	6271 Aug 09 02:25	20°00'50"54	18.07782 AU
evening set	6265 Dec 30 22:22	25°32'15"56		direct	6271 Oct 25 13:20	18°00'48"24	
				evening set	6272 Jan 27 05:32	22°00'05"18	
conjunction	6266 Jan 15 23:18	26°32'15"06	-0°14'08"				
minimum elong	6266 Jan 15 23:18	26°32'15"06	0°14'06"	conjunction	6272 Feb 12 01:22	23°00'02"35	-0°33'56"
behind sun begin	6266 Jan 15 19:58	26°32'14"36		minimum elong	6272 Feb 12 01:22	23°00'02"35	0°33'55"
behind sun end	6266 Jan 16 02:38	26°32'15"37		max. Earth dist.	6272 Feb 12 04:56	23°00'03"07	20.11102 AU
max. Earth dist.	6266 Jan 15 17:24	26°32'14"12	19.74075 AU	morning rise	6272 Feb 27 19:22	23°00'59"35	
morning rise	6266 Jan 31 21:26	27°32'13"52		retrograde	6272 May 29 05:40	27°00'12"27	
	6266 Mar 30 09:57	0°00'00"00		opposition	6272 Aug 13 00:29	25°00'12"41	-0°39'08"
retrograde	6266 May 03 03:59	0°00'30"46		min. Earth dist.	6272 Aug 12 20:44	25°00'13"05	18.14443 AU
	6266 Jun 06 19:43	30°00'00"00		direct	6272 Oct 29 07:00	23°00'10"53	
opposition	6266 Jul 16 22:08	28°32'30"17	-0°17'44"	evening set	6273 Jan 30 19:23	26°00'26"39	

conjunction	6273 Feb 15 14:30	27° \approx 23'37 -0°36'34	retrograde	6279 Jun 29 00:02	26° \approx 59'24
minimum elong	6273 Feb 15 14:30	27° \approx 23'37 0°36'33	opposition	6279 Sep 13 18:56	25° \approx 00'43 -0°52'59
max. Earth dist.	6273 Feb 15 19:17	27° \approx 24'20 20.17823 AU	min. Earth dist.	6279 Sep 13 06:22	25° \approx 01'59 18.59951 AU
morning rise	6273 Mar 03 08:03	28° \approx 20'21	direct	6279 Nov 29 20:39	23° \approx 01'34
	6273 Apr 03 00:13	0° \approx	evening set	6280 Feb 29 22:09	26° \approx 09'43
retrograde	6273 Jun 02 21:02	1° \approx 32'35			
	6273 Aug 06 17:25	30° \approx	conjunction	6280 Mar 16 14:13	27° \approx 04'52 -0°48'17
opposition	6273 Aug 17 18:26	29° \approx 33'00 -0°41'55	minimum elong	6280 Mar 16 14:13	27° \approx 04'52 0°48'17
min. Earth dist.	6273 Aug 17 12:12	29° \approx 33'38 18.21198 AU	max. Earth dist.	6280 Mar 17 03:12	27° \approx 06'47 20.62756 AU
direct	6273 Nov 03 02:11	27° \approx 31'35	morning rise	6280 Apr 01 06:09	28° \approx 00'02
	6274 Jan 21 20:54	0° \approx		6280 May 10 13:48	0° \approx
evening set	6274 Feb 04 08:21	0° \approx 46'13	retrograde	6280 Jul 02 09:31	1° \approx 08'34
				6280 Aug 26 23:32	30° \approx
conjunction	6274 Feb 20 02:52	1° \approx 42'54 -0°38'58	opposition	6280 Sep 17 08:56	29° \approx 09'57 -0°53'51
minimum elong	6274 Feb 20 02:52	1° \approx 42'54 0°38'56	min. Earth dist.	6280 Sep 16 20:36	29° \approx 11'12 18.65509 AU
max. Earth dist.	6274 Feb 20 09:35	1° \approx 43'54 20.24599 AU	direct	6280 Dec 03 08:30	27° \approx 11'05
morning rise	6274 Mar 07 19:56	2° \approx 39'22		6281 Feb 27 21:48	0° \approx
retrograde	6274 Jun 07 09:18	5° \approx 51'00	evening set	6281 Mar 05 06:07	0° \approx 18'14
opposition	6274 Aug 22 12:09	3° \approx 51'36 -0°44'26			
min. Earth dist.	6274 Aug 22 05:33	3° \approx 52'17 18.27990 AU	conjunction	6281 Mar 20 21:54	1° \approx 13'11 -0°48'57
direct	6274 Nov 07 18:15	1° \approx 50'36	minimum elong	6281 Mar 20 21:54	1° \approx 13'11 0°48'57
evening set	6275 Feb 08 20:24	5° \approx 04'06	max. Earth dist.	6281 Mar 21 10:43	1° \approx 15'04 20.68145 AU
			morning rise	6281 Apr 05 14:00	2° \approx 08'10
conjunction	6275 Feb 24 14:17	6° \approx 00'29 -0°41'08	retrograde	6281 Jul 06 20:46	5° \approx 16'15
minimum elong	6275 Feb 24 14:17	6° \approx 00'29 0°41'07	opposition	6281 Sep 21 22:08	3° \approx 17'40 -0°54'26
max. Earth dist.	6275 Feb 24 21:55	6° \approx 01'38 20.31384 AU	min. Earth dist.	6281 Sep 21 08:17	3° \approx 19'04 18.70728 AU
morning rise	6275 Mar 12 07:05	6° \approx 56'43	direct	6281 Dec 07 21:20	1° \approx 19'03
retrograde	6275 Jun 11 23:47	10° \approx 07'47	evening set	6282 Mar 09 13:17	4° \approx 25'14
opposition	6275 Aug 27 05:04	8° \approx 08'34 -0°46'42			
min. Earth dist.	6275 Aug 26 20:10	8° \approx 09'28 18.34743 AU	conjunction	6282 Mar 25 05:04	5° \approx 20'00 -0°49'21
direct	6275 Nov 12 11:16	6° \approx 07'57	minimum elong	6282 Mar 25 05:04	5° \approx 20'00 0°49'22
evening set	6276 Feb 13 07:46	9° \approx 20'21	max. Earth dist.	6282 Mar 25 19:35	5° \approx 22'07 20.73193 AU
			morning rise	6282 Apr 09 21:10	6° \approx 14'50
conjunction	6276 Feb 29 01:12	10° \approx 16'28 -0°43'03	retrograde	6282 Jul 11 05:29	9° \approx 22'29
minimum elong	6276 Feb 29 01:12	10° \approx 16'28 0°43'02	opposition	6282 Sep 26 10:56	7° \approx 23'55 -0°54'44
max. Earth dist.	6276 Feb 29 10:39	10° \approx 17'53 20.38080 AU	min. Earth dist.	6282 Sep 25 21:05	7° \approx 25'18 18.75625 AU
morning rise	6276 Mar 15 17:38	11° \approx 12'27	direct	6282 Dec 12 07:39	5° \approx 25'33
retrograde	6276 Jun 15 11:22	14° \approx 22'58	evening set	6283 Mar 13 19:48	8° \approx 30'46
opposition	6276 Aug 30 21:23	12° \approx 23'55 -0°48'41			
min. Earth dist.	6276 Aug 30 12:29	12° \approx 24'49 18.41382 AU	conjunction	6283 Mar 29 11:27	9° \approx 25'21 -0°49'30
direct	6276 Nov 16 01:50	10° \approx 23'42	minimum elong	6283 Mar 29 11:27	9° \approx 25'21 0°49'31
evening set	6277 Feb 16 18:28	13° \approx 35'01	max. Earth dist.	6283 Mar 30 02:00	9° \approx 27'29 20.77951 AU
			morning rise	6283 Apr 14 03:53	10° \approx 20'04
conjunction	6277 Mar 04 11:23	14° \approx 30'52 -0°44'44	retrograde	6283 Jul 15 15:39	13° \approx 27'20
minimum elong	6277 Mar 04 11:23	14° \approx 30'52 0°44'44	opposition	6283 Sep 30 22:58	11° \approx 28'46 -0°54'45
max. Earth dist.	6277 Mar 04 21:12	14° \approx 32'19 20.44637 AU	min. Earth dist.	6283 Sep 30 07:37	11° \approx 30'18 18.80250 AU
morning rise	6277 Mar 20 03:41	15° \approx 26'37	direct	6283 Dec 16 18:59	9° \approx 30'37
retrograde	6277 Jun 20 00:51	18° \approx 36'36	evening set	6284 Mar 17 01:50	12° \approx 34'58
opposition	6277 Sep 04 13:06	16° \approx 37'42 -0°50'24			
min. Earth dist.	6277 Sep 04 02:12	16° \approx 38'49 18.47839 AU	conjunction	6284 Apr 01 17:37	13° \approx 29'25 -0°49'24
direct	6277 Nov 20 17:17	14° \approx 37'52	minimum elong	6284 Apr 01 17:37	13° \approx 29'25 0°49'25
evening set	6278 Feb 21 04:20	17° \approx 48'07	max. Earth dist.	6284 Apr 02 09:56	13° \approx 31'48 20.82430 AU
			morning rise	6284 Apr 17 10:09	14° \approx 23'59
conjunction	6278 Mar 08 20:55	18° \approx 43'43 -0°46'10	retrograde	6284 Jul 18 24:00	17° \approx 30'55
minimum elong	6278 Mar 08 20:54	18° \approx 43'43 0°46'10	opposition	6284 Oct 04 10:21	15° \approx 32'22 -0°54'29
max. Earth dist.	6278 Mar 09 08:23	18° \approx 45'25 20.50964 AU	min. Earth dist.	6284 Oct 03 18:55	15° \approx 33'55 18.84603 AU
morning rise	6278 Mar 24 12:55	19° \approx 39'15	direct	6284 Dec 20 04:16	13° \approx 34'27
retrograde	6278 Jun 24 11:31	22° \approx 48'45	evening set	6285 Mar 21 07:29	16° \approx 38'00
opposition	6278 Sep 09 04:27	20° \approx 49'58 -0°51'50			
min. Earth dist.	6278 Sep 08 17:37	20° \approx 51'04 18.54042 AU	conjunction	6285 Apr 05 23:13	17° \approx 32'18 -0°49'04
direct	6278 Nov 25 06:39	18° \approx 50'30	minimum elong	6285 Apr 05 23:13	17° \approx 32'18 0°49'04
evening set	6279 Feb 25 13:40	21° \approx 59'41	max. Earth dist.	6285 Apr 06 15:25	17° \approx 34'40 20.86661 AU
			morning rise	6285 Apr 21 16:10	18° \approx 26'47
conjunction	6279 Mar 13 05:50	22° \approx 55'03 -0°47'21	retrograde	6285 Jul 23 09:29	21° \approx 33'26
minimum elong	6279 Mar 13 05:50	22° \approx 55'03 0°47'20	opposition	6285 Oct 08 21:19	19° \approx 34'54 -0°53'57
max. Earth dist.	6279 Mar 13 17:20	22° \approx 56'45 20.57025 AU	min. Earth dist.	6285 Oct 08 04:29	19° \approx 36'35 18.88707 AU
morning rise	6279 Mar 28 21:53	23° \approx 50'23	direct	6285 Dec 24 13:38	17° \approx 37'13















































































































































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			minimum elong	6292 May 03 09:25	15° \mathcal{B} 33'06 0°40'16
conjunction	6286 Apr 10 04:29	21° Υ 34'14 -0°48'28	max. Earth dist.	6292 May 04 04:33	15° \mathcal{B} 35'51 21.06639 AU
minimum elong	6286 Apr 10 04:29	21° Υ 34'14 0°48'29	morning rise	6292 May 19 05:49	16° \mathcal{B} 27'21
max. Earth dist.	6286 Apr 10 22:26	21° Υ 36'50 20.90619 AU	retrograde	6292 Aug 20 18:36	19° \mathcal{B} 33'11
morning rise	6286 Apr 25 21:40	22° Υ 28'37	opposition	6292 Nov 06 15:26	17° \mathcal{B} 34'47 -0°43'18
retrograde	6286 Jul 27 17:35	25° Υ 35'02	min. Earth dist.	6292 Nov 05 21:53	17° \mathcal{B} 36'32 19.07207 AU
opposition	6286 Oct 13 07:54	23° Υ 36'32 -0°53'09	direct	6293 Jan 21 18:24	15° \mathcal{B} 38'25
min. Earth dist.	6286 Oct 12 14:57	23° Υ 38'14 18.92522 AU	evening set	6293 Apr 21 19:40	18° \mathcal{B} 37'46
direct	6286 Dec 28 22:31	21° Υ 39'06			
evening set	6287 Mar 29 17:23	24° Υ 41'14	conjunction	6293 May 07 14:14	19° \mathcal{B} 31'41 -0°38'09
			minimum elong	6293 May 07 14:14	19° \mathcal{B} 31'41 0°38'10
conjunction	6287 Apr 14 09:30	25° Υ 35'20 -0°47'39	max. Earth dist.	6293 May 08 07:57	19° \mathcal{B} 34'13 21.07572 AU
minimum elong	6287 Apr 14 09:30	25° Υ 35'20 0°47'40	morning rise	6293 May 23 11:29	20° \mathcal{B} 25'58
max. Earth dist.	6287 Apr 15 03:06	25° Υ 37'53 20.94290 AU	retrograde	6293 Aug 25 03:39	23° \mathcal{B} 31'49
morning rise	6287 Apr 30 03:15	26° Υ 29'39	opposition	6293 Nov 10 23:52	21° \mathcal{B} 33'20 -0°40'53
retrograde	6287 Aug 01 02:50	29° Υ 35'52	min. Earth dist.	6293 Nov 10 06:31	21° \mathcal{B} 35'04 19.07852 AU
opposition	6287 Oct 17 17:52	27° Υ 37'25 -0°52'06	direct	6294 Jan 26 00:34	19° \mathcal{B} 36'59
min. Earth dist.	6287 Oct 16 23:55	27° Υ 39'12 18.96036 AU	evening set	6294 Apr 25 23:48	22° \mathcal{B} 36'03
direct	6288 Jan 02 06:08	25° Υ 40'13			
evening set	6288 Apr 01 21:55	28° Υ 41'45	conjunction	6294 May 11 19:07	23° \mathcal{B} 30'01 -0°35'52
			minimum elong	6294 May 11 19:07	23° \mathcal{B} 30'01 0°35'55
conjunction	6288 Apr 17 14:27	29° Υ 35'46 -0°46'36	max. Earth dist.	6294 May 12 13:30	23° \mathcal{B} 32'39 21.07927 AU
minimum elong	6288 Apr 17 14:27	29° Υ 35'46 0°46'37	morning rise	6294 May 27 16:58	24° \mathcal{B} 24'21
max. Earth dist.	6288 Apr 18 09:28	29° Υ 38'31 20.97622 AU	retrograde	6294 Aug 29 10:07	27° \mathcal{B} 30'14
	6288 Apr 24 14:07	0° \mathcal{B}	opposition	6294 Nov 15 08:00	25° \mathcal{B} 31'37 -0°38'16
morning rise	6288 May 03 08:33	0° \mathcal{B} 30'03	min. Earth dist.	6294 Nov 14 15:14	25° \mathcal{B} 33'18 19.07921 AU
retrograde	6288 Aug 04 10:24	3° \mathcal{B} 36'06	direct	6295 Jan 30 07:02	23° \mathcal{B} 35'16
min. Earth dist.	6288 Oct 20 09:45	1° \mathcal{B} 39'28 18.99178 AU	evening set	6295 Apr 30 04:11	26° \mathcal{B} 34'07
opposition	6288 Oct 21 03:35	1° \mathcal{B} 37'42 -0°50'49			
	6288 Dec 08 09:48	30° $\mathcal{R}\Upsilon$	conjunction	6295 May 16 00:02	27° \mathcal{B} 28'06 -0°33'25
direct	6289 Jan 05 14:30	29° Υ 40'44	minimum elong	6295 May 16 00:02	27° \mathcal{B} 28'06 0°33'27
	6289 Feb 02 05:16	0° \mathcal{B}	max. Earth dist.	6295 May 16 17:01	27° \mathcal{B} 30'32 21.07744 AU
evening set	6289 Apr 06 02:21	2° \mathcal{B} 41'42	morning rise	6295 May 31 22:50	28° \mathcal{B} 22'31
				6295 Jul 02 18:36	0° \mathcal{I}
conjunction	6289 Apr 21 19:04	3° \mathcal{B} 35'40 -0°45'19	retrograde	6295 Sep 02 18:28	1° \mathcal{I} 28'29
minimum elong	6289 Apr 21 19:04	3° \mathcal{B} 35'40 0°45'22		6295 Nov 06 21:26	30° $\mathcal{R}\mathcal{B}$
max. Earth dist.	6289 Apr 22 13:25	3° \mathcal{B} 38'19 21.00574 AU	opposition	6295 Nov 19 15:44	29° \mathcal{B} 29'43 -0°35'28
morning rise	6289 May 07 13:48	4° \mathcal{B} 29'54	min. Earth dist.	6295 Nov 18 23:23	29° \mathcal{B} 31'21 19.07487 AU
retrograde	6289 Aug 08 19:38	7° \mathcal{B} 35'52	direct	6296 Feb 03 12:44	27° \mathcal{B} 33'17
opposition	6289 Oct 25 12:58	5° \mathcal{B} 37'29 -0°49'16		6296 Apr 23 14:33	0° \mathcal{I}
min. Earth dist.	6289 Oct 24 18:32	5° \mathcal{B} 39'19 19.01925 AU	evening set	6296 May 03 08:32	0° \mathcal{I} 32'00
direct	6290 Jan 09 21:24	3° \mathcal{B} 40'43			
evening set	6290 Apr 10 06:39	6° \mathcal{B} 41'12	conjunction	6296 May 19 05:12	1° \mathcal{I} 26'04 -0°30'49
			minimum elong	6296 May 19 05:12	1° \mathcal{I} 26'04 0°30'52
conjunction	6290 Apr 25 23:52	7° \mathcal{B} 35'08 -0°43'50	max. Earth dist.	6296 May 19 22:52	1° \mathcal{I} 28'36 21.07065 AU
minimum elong	6290 Apr 25 23:52	7° \mathcal{B} 35'08 0°43'51	morning rise	6296 Jun 04 04:37	2° \mathcal{I} 20'33
max. Earth dist.	6290 Apr 26 19:21	7° \mathcal{B} 37'56 21.03095 AU	retrograde	6296 Sep 06 01:37	5° \mathcal{I} 26'37
morning rise	6290 May 11 19:01	8° \mathcal{B} 29'22	opposition	6296 Nov 22 23:22	3° \mathcal{I} 27'43 -0°32'30
retrograde	6290 Aug 13 02:47	11° \mathcal{B} 35'15	min. Earth dist.	6296 Nov 22 07:25	3° \mathcal{I} 29'19 19.06579 AU
opposition	6290 Oct 29 22:06	9° \mathcal{B} 36'53 -0°47'30	direct	6297 Feb 06 18:45	1° \mathcal{I} 31'13
min. Earth dist.	6290 Oct 29 04:01	9° \mathcal{B} 38'42 19.04211 AU	evening set	6297 May 07 13:00	4° \mathcal{I} 29'52
direct	6291 Jan 14 05:02	7° \mathcal{B} 40'19			
evening set	6291 Apr 14 10:58	10° \mathcal{B} 40'21	conjunction	6297 May 23 10:12	5° \mathcal{I} 24'01 -0°28'03
			minimum elong	6297 May 23 10:12	5° \mathcal{I} 24'01 0°28'05
conjunction	6291 Apr 30 04:30	11° \mathcal{B} 34'15 -0°42'08	max. Earth dist.	6297 May 24 02:34	5° \mathcal{I} 26'21 21.05954 AU
minimum elong	6291 Apr 30 04:30	11° \mathcal{B} 34'15 0°42'10	morning rise	6297 Jun 08 10:35	6° \mathcal{I} 18'37
max. Earth dist.	6291 Apr 30 22:56	11° \mathcal{B} 36'54 21.05140 AU	retrograde	6297 Sep 10 09:41	9° \mathcal{I} 24'52
morning rise	6291 May 16 00:26	12° \mathcal{B} 28'29	opposition	6297 Nov 27 06:57	7° \mathcal{I} 25'48 -0°29'23
	6291 Jul 10 16:35	15° \mathcal{B}	min. Earth dist.	6297 Nov 26 15:20	7° \mathcal{I} 27'22 19.05270 AU
retrograde	6291 Aug 17 12:10	15° \mathcal{B} 34'21	direct	6298 Feb 11 00:01	5° \mathcal{I} 29'13
	6291 Sep 25 03:55	15° $\mathcal{R}\mathcal{B}$	evening set	6298 May 11 17:42	8° \mathcal{I} 27'54
opposition	6291 Nov 03 06:57	13° \mathcal{B} 35'59 -0°45'31			
min. Earth dist.	6291 Nov 02 12:47	13° \mathcal{B} 37'47 19.05996 AU	conjunction	6298 May 27 15:48	9° \mathcal{I} 22'09 -0°25'10
direct	6292 Jan 18 11:28	11° \mathcal{B} 39'31	minimum elong	6298 May 27 15:48	9° \mathcal{I} 22'09 0°25'12
evening set	6292 Apr 17 15:16	14° \mathcal{B} 39'12	max. Earth dist.	6298 May 28 08:51	9° \mathcal{I} 24'35 21.04447 AU
	6292 Apr 23 18:25	15° \mathcal{B}	morning rise	6298 Jun 12 16:52	10° \mathcal{I} 16'52

retrograde	6298 Sep 14 17:43	13°II23'20		behind sun begin	6304 Jun 21 03:38	3°☾23'53	
opposition	6298 Dec 01 14:20	11°II24'08 -0°26'06		behind sun end	6304 Jun 21 16:23	3°☾25'40	
min. Earth dist.	6298 Nov 30 23:03	11°II25'40 19.03573 AU		max. Earth dist.	6304 Jun 21 22:53	3°☾26'37	20.87702 AU
direct	6299 Feb 15 05:47	9°II27'29		morning rise	6304 Jul 07 16:19	4°☾20'31	
evening set	6299 May 15 22:47	12°II26'16		retrograde	6304 Oct 10 02:54	7°☾29'22	
				opposition	6304 Dec 26 12:45	5°☾29'35 -0°04'14	
conjunction	6299 May 31 21:32	13°II20'39 -0°22'09		min. Earth dist.	6304 Dec 26 01:50	5°☾30'42	18.85653 AU
minimum elong	6299 May 31 21:32	13°II20'39 0°22'11		direct	6305 Mar 11 15:27	3°☾32'19	
max. Earth dist.	6299 Jun 01 13:05	13°II22'52 21.02576 AU		evening set	6305 Jun 09 15:10	6°☾33'23	
morning rise	6299 Jun 16 23:38	14°II15'30					
retrograde	6299 Sep 19 02:15	17°II22'15		conjunction	6305 Jun 25 19:01	7°☾28'51 -0°02'10	
opposition	6299 Dec 05 21:47	15°II22'56 -0°22'42		minimum elong	6305 Jun 25 19:02	7°☾28'52 0°02'13	
min. Earth dist.	6299 Dec 05 07:04	15°II24'25 19.01520 AU		behind sun begin	6305 Jun 25 12:22	7°☾27'56	
direct	6300 Feb 19 10:43	13°II26'12		behind sun end	6305 Jun 26 01:41	7°☾29'47	
evening set	6300 May 20 04:06	16°II25'10		max. Earth dist.	6305 Jun 26 05:33	7°☾30'22	20.83498 AU
				morning rise	6305 Jul 12 02:23	8°☾24'50	
conjunction	6300 Jun 05 03:48	17°II19'42 -0°19'01		retrograde	6305 Oct 14 14:13	11°☾34'12	
minimum elong	6300 Jun 05 03:47	17°II19'42 0°19'03		opposition	6305 Dec 30 21:25	9°☾34'16 -0°00'21	
max. Earth dist.	6300 Jun 05 19:53	17°II22'00 21.00337 AU		min. Earth dist.	6305 Dec 30 12:07	9°☾35'13	18.81217 AU
morning rise	6300 Jun 21 06:34	18°II14'42		asc. node	6306 Feb 02 12:30	8°☾18'19	
retrograde	6300 Sep 23 10:48	21°II21'46		direct	6306 Mar 15 21:10	7°☾36'47	
opposition	6300 Dec 10 05:12	19°II22'22 -0°19'11		evening set	6306 Jun 14 00:09	10°☾38'27	
min. Earth dist.	6300 Dec 09 14:50	19°II23'49 18.99096 AU					
direct	6301 Feb 23 16:26	17°II25'34		conjunction	6306 Jun 30 05:06	11°☾34'09 0°01'28	
evening set	6301 May 24 09:59	20°II24'48		minimum elong	6306 Jun 30 05:05	11°☾34'09 0°01'25	
				behind sun begin	6306 Jun 29 22:25	11°☾33'13	
conjunction	6301 Jun 09 10:22	21°II19'29 -0°15'47		behind sun end	6306 Jun 30 11:45	11°☾35'05	
minimum elong	6301 Jun 09 10:22	21°II19'29 0°15'50		max. Earth dist.	6306 Jun 30 15:19	11°☾35'37	20.78825 AU
behind sun begin	6301 Jun 09 09:20	21°II19'20		morning rise	6306 Jul 16 13:09	12°☾30'21	
behind sun end	6301 Jun 09 11:25	21°II19'38		retrograde	6306 Oct 19 02:09	15°☾40'14	
max. Earth dist.	6301 Jun 10 00:48	21°II21'33 20.97749 AU		opposition	6307 Jan 04 06:07	13°☾40'07 0°03'33	
morning rise	6301 Jun 25 14:12	22°II14'39		min. Earth dist.	6307 Jan 03 21:41	13°☾40'59	18.76309 AU
retrograde	6301 Sep 27 20:23	25°II22'07		direct	6307 Mar 20 05:22	11°☾42'23	
opposition	6301 Dec 14 12:52	23°II22'36 -0°15'34		evening set	6307 Jun 18 09:57	14°☾44'41	
min. Earth dist.	6301 Dec 13 23:19	23°II23'58 18.96330 AU					
direct	6302 Feb 27 21:26	21°II25'43		conjunction	6307 Jul 04 15:39	15°☾40'38 0°05'01	
evening set	6302 May 28 16:11	24°II25'18		minimum elong	6307 Jul 04 15:39	15°☾40'38 0°04'59	
				behind sun begin	6307 Jul 04 09:09	15°☾39'43	
conjunction	6302 Jun 13 17:35	25°II20'10 -0°12'29		behind sun end	6307 Jul 04 22:08	15°☾41'33	
minimum elong	6302 Jun 13 17:36	25°II20'10 0°12'31		max. Earth dist.	6307 Jul 04 23:15	15°☾41'43	20.73707 AU
behind sun begin	6302 Jun 13 13:18	25°II19'34		morning rise	6307 Jul 21 00:44	16°☾37'04	
behind sun end	6302 Jun 13 21:53	25°II20'46		retrograde	6307 Oct 23 14:01	19°☾47'29	
max. Earth dist.	6302 Jun 14 08:27	25°II22'17 20.94797 AU		opposition	6308 Jan 08 15:16	17°☾47'09 0°07'28	
morning rise	6302 Jun 29 22:10	26°II15'31		min. Earth dist.	6308 Jan 08 08:40	17°☾47'50	18.70985 AU
retrograde	6302 Oct 02 05:46	29°II23'24		direct	6308 Mar 23 11:49	15°☾49'05	
opposition	6302 Dec 18 20:38	27°II23'49 -0°11'52		evening set	6308 Jun 21 20:09	18°☾52'05	
min. Earth dist.	6302 Dec 18 07:37	27°II25'08 18.93179 AU					
direct	6303 Mar 04 03:22	25°II26'50		conjunction	6308 Jul 08 02:55	19°☾48'17 0°08'32	
evening set	6303 Jun 01 23:17	28°II26'51		minimum elong	6308 Jul 08 02:54	19°☾48'17 0°08'29	
				behind sun begin	6308 Jul 07 21:04	19°☾47'27	
conjunction	6303 Jun 18 01:24	29°II21'54 -0°09'06		behind sun end	6308 Jul 08 08:44	19°☾49'06	
minimum elong	6303 Jun 18 01:24	29°II21'54 0°09'09		max. Earth dist.	6308 Jul 08 10:19	19°☾49'20	20.68193 AU
behind sun begin	6303 Jun 17 19:46	29°II21'07		morning rise	6308 Jul 24 12:37	20°☾44'57	
behind sun end	6303 Jun 18 07:02	29°II22'41		retrograde	6308 Oct 27 02:52	23°☾55'55	
max. Earth dist.	6303 Jun 18 14:14	29°II23'44 20.91461 AU		opposition	6309 Jan 12 00:35	21°☾55'21 0°11'22	
	6303 Jun 29 03:26	0°☾		min. Earth dist.	6309 Jan 11 18:36	21°☾55'58	18.65296 AU
morning rise	6303 Jul 04 07:01	0°☾17'26		direct	6309 Mar 27 21:01	19°☾56'57	
retrograde	6303 Oct 06 16:18	3°☾25'48		evening set	6309 Jun 26 07:17	23°☾00'41	
opposition	6303 Dec 23 04:31	1°☾26'07 -0°08'05					
min. Earth dist.	6303 Dec 22 16:50	1°☾27'18 18.89638 AU		conjunction	6309 Jul 12 14:44	23°☾57'08 0°12'01	
	6304 Jan 31 19:11	30°☾II		minimum elong	6309 Jul 12 14:44	23°☾57'08 0°12'00	
direct	6304 Mar 07 08:39	29°II29'00		behind sun begin	6309 Jul 12 10:11	23°☾56'30	
	6304 Apr 11 03:22	0°☾		behind sun end	6309 Jul 12 19:17	23°☾57'47	
evening set	6304 Jun 05 06:52	2°☾29'31		max. Earth dist.	6309 Jul 12 19:44	23°☾57'51	20.62366 AU
				morning rise	6309 Jul 29 01:27	24°☾54'03	
conjunction	6304 Jun 21 10:01	3°☾24'47 -0°05'40		retrograde	6309 Oct 31 15:33	28°☾05'36	
minimum elong	6304 Jun 21 10:01	3°☾24'47 0°05'42		opposition	6310 Jan 16 10:18	26°☾04'46 0°15'14	

min. Earth dist.	6310 Jan 16 06:06	26° Ω 05'12	18.59345 AU	direct	6316 Apr 25 19:48	19° Ω 32'11	
direct	6310 Apr 01 04:48	24° Ω 06'01		evening set	6316 Jul 26 11:52	22° Ω 42'45	
evening set	6310 Jun 30 18:58	27° Ω 10'32					
				conjunction	6316 Aug 12 01:05	23° Ω 41'15	0°34'10
conjunction	6310 Jul 17 03:30	28° Ω 07'16	0°15'28	minimum elong	6316 Aug 12 01:05	23° Ω 41'15	0°34'09
minimum elong	6310 Jul 17 03:30	28° Ω 07'16	0°15'26	max. Earth dist.	6316 Aug 11 22:28	23° Ω 40'52	20.17838 AU
behind sun begin	6310 Jul 17 01:51	28° Ω 07'02		morning rise	6316 Aug 28 16:09	24° Ω 40'03	
behind sun end	6310 Jul 17 05:08	28° Ω 07'30		retrograde	6316 Dec 01 02:59	27° Ω 56'13	
max. Earth dist.	6310 Jul 17 08:23	28° Ω 07'58	20.56299 AU	opposition	6317 Feb 14 18:53	25° Ω 54'07	0°39'24
morning rise	6310 Aug 02 14:49	29° Ω 04'27		min. Earth dist.	6317 Feb 14 21:23	25° Ω 53'51	18.14584 AU
	6310 Aug 19 12:40	0° Ω		direct	6317 Apr 30 09:36	23° Ω 53'02	
retrograde	6310 Nov 05 05:18	2° Ω 16'34		evening set	6317 Jul 31 06:17	27° Ω 04'48	
opposition	6311 Jan 20 20:17	0° Ω 15'30	0°19'02				
min. Earth dist.	6311 Jan 20 16:29	0° Ω 15'54	18.53175 AU	conjunction	6317 Aug 16 20:01	28° Ω 03'36	0°36'46
	6311 Jan 27 01:26	30° $\mathcal{R}\Omega$		minimum elong	6317 Aug 16 20:01	28° Ω 03'36	0°36'45
direct	6311 Apr 05 14:29	28° Ω 16'23		max. Earth dist.	6317 Aug 16 15:06	28° Ω 02'52	20.11346 AU
	6311 Jun 09 17:59	0° Ω		morning rise	6317 Sep 02 11:37	29° Ω 02'41	
evening set	6311 Jul 05 07:41	1° Ω 21'46			6317 Sep 19 13:03	0° \mathcal{N}	
				retrograde	6317 Dec 05 20:07	2° \mathcal{N} 19'34	
conjunction	6311 Jul 21 16:52	2° Ω 18'47	0°18'52	opposition	6318 Feb 19 08:52	0° \mathcal{N} 17'22	0°42'12
minimum elong	6311 Jul 21 16:52	2° Ω 18'47	0°18'50	min. Earth dist.	6318 Feb 19 13:44	0° \mathcal{N} 16'51	18.08087 AU
max. Earth dist.	6311 Jul 21 19:22	2° Ω 19'08	20.50048 AU		6318 Feb 26 04:14	30° $\mathcal{R}\Omega$	
morning rise	6311 Aug 07 05:04	3° Ω 16'13		direct	6318 May 04 22:27	28° Ω 15'58	
retrograde	6311 Nov 09 19:03	6° Ω 28'57			6318 Jul 08 18:24	0° \mathcal{N}	
opposition	6312 Jan 25 06:41	4° Ω 27'39	0°22'45	evening set	6318 Aug 05 01:38	1° \mathcal{N} 28'56	
min. Earth dist.	6312 Jan 25 04:41	4° Ω 27'51	18.46864 AU				
direct	6312 Apr 08 23:36	2° Ω 28'10		conjunction	6318 Aug 21 16:07	2° \mathcal{N} 28'02	0°39'11
evening set	6312 Jul 08 21:00	5° Ω 34'29		minimum elong	6318 Aug 21 16:06	2° \mathcal{N} 28'02	0°39'10
				max. Earth dist.	6318 Aug 21 10:14	2° \mathcal{N} 27'10	20.04829 AU
conjunction	6312 Jul 25 07:12	6° Ω 31'47	0°22'10	morning rise	6318 Sep 07 08:01	3° \mathcal{N} 27'23	
minimum elong	6312 Jul 25 07:11	6° Ω 31'47	0°22'08	retrograde	6318 Dec 10 15:44	6° \mathcal{N} 44'59	
max. Earth dist.	6312 Jul 25 09:37	6° Ω 32'08	20.43682 AU	opposition	6319 Feb 23 23:29	4° \mathcal{N} 42'40	0°44'47
morning rise	6312 Aug 10 19:55	7° Ω 29'29		min. Earth dist.	6319 Feb 24 04:46	4° \mathcal{N} 42'06	18.01546 AU
retrograde	6312 Nov 13 09:42	10° Ω 42'51		direct	6319 May 09 14:35	2° \mathcal{N} 40'56	
opposition	6313 Jan 28 17:33	8° Ω 41'20	0°26'22	evening set	6319 Aug 09 22:06	5° \mathcal{N} 55'06	
min. Earth dist.	6313 Jan 28 15:44	8° Ω 41'32	18.40455 AU				
direct	6313 Apr 13 10:10	6° Ω 41'31		conjunction	6319 Aug 26 12:59	6° \mathcal{N} 54'31	0°41'23
evening set	6313 Jul 13 11:16	9° Ω 48'48		minimum elong	6319 Aug 26 12:59	6° \mathcal{N} 54'31	0°41'23
				max. Earth dist.	6319 Aug 26 04:50	6° \mathcal{N} 53'17	19.98258 AU
conjunction	6313 Jul 29 22:07	10° Ω 46'23	0°25'22	morning rise	6319 Sep 12 05:12	7° \mathcal{N} 54'07	
minimum elong	6313 Jul 29 22:07	10° Ω 46'23	0°25'20	retrograde	6319 Dec 15 09:36	11° \mathcal{N} 12'23	
max. Earth dist.	6313 Jul 29 22:18	10° Ω 46'24	20.37246 AU	opposition	6320 Feb 28 14:53	9° \mathcal{N} 09'57	0°47'07
morning rise	6313 Aug 15 11:39	11° Ω 44'22		min. Earth dist.	6320 Feb 28 22:33	9° \mathcal{N} 09'07	17.94974 AU
retrograde	6313 Nov 18 00:40	14° Ω 58'25		direct	6320 May 13 05:11	7° \mathcal{N} 07'51	
opposition	6314 Feb 02 05:06	12° Ω 56'42	0°29'51	evening set	6320 Aug 13 19:19	10° \mathcal{N} 23'14	
min. Earth dist.	6314 Feb 02 05:05	12° Ω 56'42	18.34005 AU				
direct	6314 Apr 17 20:26	10° Ω 56'31		conjunction	6320 Aug 30 10:48	11° \mathcal{N} 22'55	0°43'22
evening set	6314 Jul 18 02:27	14° Ω 04'51		minimum elong	6320 Aug 30 10:48	11° \mathcal{N} 22'55	0°43'21
	6314 Aug 02 19:37	15° Ω		max. Earth dist.	6320 Aug 30 01:27	11° \mathcal{N} 21'30	19.91694 AU
				morning rise	6320 Sep 16 03:15	12° \mathcal{N} 22'47	
conjunction	6314 Aug 03 14:16	15° Ω 02'45	0°28'26	retrograde	6320 Dec 19 06:25	15° \mathcal{N} 41'41	
minimum elong	6314 Aug 03 14:16	15° Ω 02'45	0°28'25	opposition	6321 Mar 04 06:48	13° \mathcal{N} 39'05	0°49'12
max. Earth dist.	6314 Aug 03 14:16	15° Ω 02'45	20.30784 AU	min. Earth dist.	6321 Mar 04 14:46	13° \mathcal{N} 38'14	17.88426 AU
morning rise	6314 Aug 20 04:17	16° Ω 01'00		direct	6321 May 17 23:30	11° \mathcal{N} 36'37	
retrograde	6314 Nov 22 16:52	19° Ω 15'43		evening set	6321 Aug 18 17:27	14° \mathcal{N} 53'11	
opposition	6315 Feb 06 16:56	17° Ω 13'51	0°33'12				
min. Earth dist.	6315 Feb 06 17:08	17° Ω 13'50	18.27532 AU	conjunction	6321 Sep 04 09:21	15° \mathcal{N} 53'09	0°45'05
direct	6315 Apr 22 08:25	15° Ω 13'22		minimum elong	6321 Sep 04 09:21	15° \mathcal{N} 53'09	0°45'05
evening set	6315 Jul 22 18:50	18° Ω 22'48		max. Earth dist.	6321 Sep 03 22:15	15° \mathcal{N} 51'28	19.85172 AU
				morning rise	6321 Sep 21 02:00	16° \mathcal{N} 53'16	
conjunction	6315 Aug 08 07:13	19° Ω 20'59	0°31'23	retrograde	6321 Dec 24 01:25	20° \mathcal{N} 12'46	
minimum elong	6315 Aug 08 07:12	19° Ω 20'59	0°31'20	opposition	6322 Mar 08 23:31	18° \mathcal{N} 10'02	0°50'58
max. Earth dist.	6315 Aug 08 04:56	19° Ω 20'39	20.24309 AU	min. Earth dist.	6322 Mar 09 09:41	18° \mathcal{N} 08'56	17.81959 AU
morning rise	6315 Aug 24 21:54	20° Ω 19'32		direct	6322 May 22 15:52	16° \mathcal{N} 07'09	
retrograde	6315 Nov 27 08:54	23° Ω 34'57		evening set	6322 Aug 23 16:29	19° \mathcal{N} 24'54	
opposition	6316 Feb 11 05:40	21° Ω 32'58	0°36'24				
min. Earth dist.	6316 Feb 11 07:53	21° Ω 32'44	18.21062 AU	conjunction	6322 Sep 09 08:47	20° \mathcal{N} 25'08	0°46'32

minimum elong	6322 Sep 09 08:47	20° <u>♏</u> 25'08	0°46'31	opposition	6329 Apr 09 13:07	20° <u>♏</u> 30'42	0°54'04
max. Earth dist.	6322 Sep 08 20:20	20° <u>♏</u> 23'15	19.78780 AU	min. Earth dist.	6329 Apr 10 03:29	20° <u>♏</u> 29'07	17.45174 AU
morning rise	6322 Sep 26 01:35	21° <u>♏</u> 25'29		direct	6329 Jun 23 15:15	18° <u>♏</u> 25'34	
retrograde	6322 Dec 28 23:12	24° <u>♏</u> 45'33		evening set	6329 Sep 26 05:10	21° <u>♏</u> 50'46	
opposition	6323 Mar 13 16:35	22° <u>♏</u> 42'39	0°52'27				
min. Earth dist.	6323 Mar 14 02:57	22° <u>♏</u> 41'32	17.75656 AU	conjunction	6329 Oct 12 22:04	22° <u>♏</u> 52'28	0°48'07
direct	6323 May 27 11:26	20° <u>♏</u> 39'23		minimum elong	6329 Oct 12 22:04	22° <u>♏</u> 52'28	0°48'08
evening set	6323 Aug 28 16:19	23° <u>♏</u> 58'17		max. Earth dist.	6329 Oct 12 04:59	22° <u>♏</u> 49'49	19.43372 AU
				morning rise	6329 Oct 29 13:22	23° <u>♏</u> 53'59	
conjunction	6323 Sep 14 08:55	24° <u>♏</u> 58'47	0°47'41	retrograde	6330 Jan 30 14:08	27° <u>♏</u> 17'00	
minimum elong	6323 Sep 14 08:55	24° <u>♏</u> 58'47	0°47'41	opposition	6330 Apr 14 10:47	25° <u>♏</u> 13'41	0°53'05
max. Earth dist.	6323 Sep 13 19:26	24° <u>♏</u> 56'44	19.72575 AU	min. Earth dist.	6330 Apr 15 01:46	25° <u>♏</u> 12'03	17.41749 AU
morning rise	6323 Oct 01 01:39	25° <u>♏</u> 59'21		direct	6330 Jun 28 14:29	23° <u>♏</u> 08'25	
retrograde	6324 Jan 02 19:57	29° <u>♏</u> 19'57		evening set	6330 Oct 01 09:36	26° <u>♏</u> 34'29	
opposition	6324 Mar 17 10:33	27° <u>♏</u> 16'55	0°53'35	max. Earth dist.	6330 Oct 17 07:19	27° <u>♏</u> 33'23	19.40193 AU
min. Earth dist.	6324 Mar 17 22:43	27° <u>♏</u> 15'36	17.69588 AU				
direct	6324 May 31 05:25	25° <u>♏</u> 13'15		conjunction	6330 Oct 18 02:03	27° <u>♏</u> 36'18	0°47'03
evening set	6324 Sep 01 16:41	28° <u>♏</u> 33'18		minimum elong	6330 Oct 18 02:03	27° <u>♏</u> 36'18	0°47'04
				morning rise	6330 Nov 03 16:58	28° <u>♏</u> 37'54	
conjunction	6324 Sep 18 09:28	29° <u>♏</u> 34'02	0°48'33		6330 Nov 27 13:35	0° <u>♏</u>	
minimum elong	6324 Sep 18 09:28	29° <u>♏</u> 34'02	0°48'33	retrograde	6331 Feb 04 13:45	2° <u>♏</u> 01'10	
max. Earth dist.	6324 Sep 17 18:41	29° <u>♏</u> 31'46	19.66659 AU		6331 Apr 18 14:03	30° <u>♏</u>	
	6324 Sep 25 11:29	0° <u>♏</u>		opposition	6331 Apr 19 08:58	29° <u>♏</u> 57'56	0°51'44
morning rise	6324 Oct 05 02:17	0° <u>♏</u> 34'49		min. Earth dist.	6331 Apr 20 00:26	29° <u>♏</u> 56'14	17.38812 AU
retrograde	6325 Jan 06 18:36	3° <u>♏</u> 55'55		direct	6331 Jul 03 15:25	27° <u>♏</u> 52'30	
opposition	6325 Mar 22 04:58	1° <u>♏</u> 52'44	0°54'24		6331 Sep 13 14:25	0° <u>♏</u>	
min. Earth dist.	6325 Mar 22 17:08	1° <u>♏</u> 51'25	17.63838 AU	evening set	6331 Oct 06 14:14	1° <u>♏</u> 19'23	
	6325 May 15 11:34	30° <u>♏</u>					
direct	6325 Jun 05 01:55	29° <u>♏</u> 48'42		conjunction	6331 Oct 23 06:31	2° <u>♏</u> 21'18	0°45'40
	6325 Jun 25 11:39	0° <u>♏</u>		minimum elong	6331 Oct 23 06:31	2° <u>♏</u> 21'18	0°45'42
evening set	6325 Sep 06 17:55	3° <u>♏</u> 09'51		max. Earth dist.	6331 Oct 22 12:30	2° <u>♏</u> 18'29	19.37478 AU
				morning rise	6331 Nov 08 20:42	3° <u>♏</u> 22'57	
conjunction	6325 Sep 23 10:57	4° <u>♏</u> 10'49	0°49'06	retrograde	6332 Feb 09 14:29	6° <u>♏</u> 46'23	
minimum elong	6325 Sep 23 10:57	4° <u>♏</u> 10'49	0°49'06	opposition	6332 Apr 23 07:49	4° <u>♏</u> 43'14	0°50'01
max. Earth dist.	6325 Sep 22 19:51	4° <u>♏</u> 08'30	19.61077 AU	min. Earth dist.	6332 Apr 23 23:28	4° <u>♏</u> 41'31	17.36317 AU
morning rise	6325 Oct 10 03:30	5° <u>♏</u> 11'47		direct	6332 Jul 07 16:42	2° <u>♏</u> 37'42	
retrograde	6326 Jan 11 16:42	8° <u>♏</u> 33'20		evening set	6332 Oct 10 19:15	6° <u>♏</u> 05'15	
opposition	6326 Mar 27 00:03	6° <u>♏</u> 30'04	0°54'51				
min. Earth dist.	6326 Mar 27 13:36	6° <u>♏</u> 28'35	17.58462 AU	conjunction	6332 Oct 27 10:59	7° <u>♏</u> 07'13	0°43'58
direct	6326 Jun 09 21:15	4° <u>♏</u> 25'41		minimum elong	6332 Oct 27 10:59	7° <u>♏</u> 07'13	0°43'59
evening set	6326 Sep 11 19:55	7° <u>♏</u> 47'54		max. Earth dist.	6332 Oct 26 15:28	7° <u>♏</u> 04'11	19.35204 AU
				morning rise	6332 Nov 13 00:40	8° <u>♏</u> 08'55	
conjunction	6326 Sep 28 12:55	8° <u>♏</u> 49'05	0°49'21	retrograde	6333 Feb 13 14:27	11° <u>♏</u> 32'28	
minimum elong	6326 Sep 28 12:55	8° <u>♏</u> 49'05	0°49'21	opposition	6333 Apr 28 07:11	9° <u>♏</u> 29'23	0°47'58
max. Earth dist.	6326 Sep 27 20:18	8° <u>♏</u> 46'32	19.55918 AU	min. Earth dist.	6333 Apr 28 23:33	9° <u>♏</u> 27'35	17.34267 AU
morning rise	6326 Oct 15 05:25	9° <u>♏</u> 50'13		direct	6333 Jul 12 18:32	7° <u>♏</u> 23'42	
retrograde	6327 Jan 16 15:52	13° <u>♏</u> 12'12		evening set	6333 Oct 16 00:28	10° <u>♏</u> 51'51	
opposition	6327 Mar 31 19:45	11° <u>♏</u> 08'51	0°54'57				
min. Earth dist.	6327 Apr 01 09:13	11° <u>♏</u> 07'22	17.53535 AU	conjunction	6333 Nov 01 15:51	11° <u>♏</u> 53'52	0°41'58
direct	6327 Jun 14 18:56	9° <u>♏</u> 04'10		minimum elong	6333 Nov 01 15:51	11° <u>♏</u> 53'52	0°41'59
evening set	6327 Sep 16 22:20	12° <u>♏</u> 27'25		max. Earth dist.	6333 Oct 31 20:55	11° <u>♏</u> 50'55	19.33367 AU
				morning rise	6333 Nov 18 04:45	12° <u>♏</u> 55'34	
conjunction	6327 Oct 03 15:26	13° <u>♏</u> 28'48	0°49'15		6333 Dec 26 03:34	15° <u>♏</u>	
minimum elong	6327 Oct 03 15:26	13° <u>♏</u> 28'48	0°49'16	retrograde	6334 Feb 18 15:51	16° <u>♏</u> 19'08	
max. Earth dist.	6327 Oct 02 23:11	13° <u>♏</u> 26'17	19.51219 AU		6334 Apr 16 05:03	15° <u>♏</u>	
morning rise	6327 Oct 20 07:28	14° <u>♏</u> 30'05		opposition	6334 May 03 06:48	14° <u>♏</u> 16'08	0°45'34
retrograde	6328 Jan 21 14:59	17° <u>♏</u> 52'27		min. Earth dist.	6334 May 03 22:55	14° <u>♏</u> 14'22	17.32640 AU
opposition	6328 Apr 04 16:14	15° <u>♏</u> 49'04	0°54'42	direct	6334 Jul 17 21:30	12° <u>♏</u> 10'20	
min. Earth dist.	6328 Apr 05 06:31	15° <u>♏</u> 47'30	17.49089 AU		6334 Oct 10 09:17	15° <u>♏</u>	
direct	6328 Jun 18 16:06	13° <u>♏</u> 44'09		evening set	6334 Oct 21 05:54	15° <u>♏</u> 38'59	
evening set	6328 Sep 21 01:32	17° <u>♏</u> 08'23					
				conjunction	6334 Nov 06 20:37	16° <u>♏</u> 41'00	0°39'40
conjunction	6328 Oct 07 18:24	18° <u>♏</u> 09'56	0°48'51	minimum elong	6334 Nov 06 20:37	16° <u>♏</u> 41'00	0°39'42
minimum elong	6328 Oct 07 18:24	18° <u>♏</u> 09'56	0°48'52	max. Earth dist.	6334 Nov 06 00:42	16° <u>♏</u> 37'53	19.31967 AU
max. Earth dist.	6328 Oct 07 00:39	18° <u>♏</u> 07'11	19.47039 AU	morning rise	6334 Nov 23 08:48	17° <u>♏</u> 42'41	
morning rise	6328 Oct 24 10:16	19° <u>♏</u> 11'21		retrograde	6335 Feb 23 15:43	21° <u>♏</u> 06'12	
retrograde	6329 Jan 25 14:10	22° <u>♏</u> 34'04		opposition	6335 May 08 06:59	19° <u>♏</u> 03'16	0°42'51

min. Earth dist.	6335 May 08 23:53	19° M 01'25	17.31478 AU	conjunction	6341 Dec 10 20:53	20° X 06'45	0°16'58
direct	6335 Jul 22 23:37	16° M 57'21		minimum elong	6341 Dec 10 20:54	20° X 06'45	0°17'01
evening set	6335 Oct 26 10:59	20° M 26'22		max. Earth dist.	6341 Dec 10 05:22	20° X 04'19	19.37061 AU
max. Earth dist.	6335 Nov 11 05:53	21° M 25'21	19.31046 AU	morning rise	6341 Dec 27 02:46	21° X 07'35	
				retrograde	6342 Mar 28 16:43	24° X 29'08	
conjunction	6335 Nov 12 01:08	21° M 28'22	0°37'05	opposition	6342 Jun 10 11:30	22° X 26'57	0°16'48
minimum elong	6335 Nov 12 01:08	21° M 28'22	0°37'06	min. Earth dist.	6342 Jun 10 23:38	22° X 25'39	17.38551 AU
morning rise	6335 Nov 28 12:30	22° M 30'00		direct	6342 Aug 25 23:03	20° X 21'11	
retrograde	6336 Feb 28 17:32	25° M 53'25		evening set	6342 Nov 29 14:08	23° X 49'48	
opposition	6336 May 12 07:19	23° M 50'33	0°39'50				
min. Earth dist.	6336 May 12 23:20	23° M 48'48	17.30792 AU	conjunction	6342 Dec 15 22:24	24° X 50'55	0°13'06
direct	6336 Jul 27 03:44	21° M 44'34		minimum elong	6342 Dec 15 22:24	24° X 50'55	0°13'09
evening set	6336 Oct 30 16:06	25° M 13'49		behind sun begin	6342 Dec 15 18:27	24° X 50'19	
max. Earth dist.	6336 Nov 15 10:12	26° M 12'45	19.30615 AU	behind sun end	6342 Dec 16 02:20	24° X 51'31	
				max. Earth dist.	6342 Dec 15 09:05	24° X 48'50	19.40167 AU
conjunction	6336 Nov 16 05:32	26° M 15'47	0°34'14	morning rise	6343 Jan 01 03:07	25° X 51'32	
minimum elong	6336 Nov 16 05:32	26° M 15'47	0°34'17	retrograde	6343 Apr 02 13:47	29° X 12'39	
morning rise	6336 Dec 02 16:03	27° M 17'21		opposition	6343 Jun 15 12:18	27° X 10'42	0°12'25
	6337 Jan 25 09:11	0° X		min. Earth dist.	6343 Jun 16 00:14	27° X 09'25	17.41926 AU
retrograde	6337 Mar 04 16:46	0° X 40'35		direct	6343 Aug 31 01:03	25° X 05'09	
	6337 Apr 12 22:30	30° R M		evening set	6343 Dec 04 15:49	28° X 33'19	
opposition	6337 May 17 07:49	28° M 37'47	0°36'32				
min. Earth dist.	6337 May 18 00:35	28° M 35'57	17.30628 AU	conjunction	6343 Dec 20 22:55	29° X 34'12	0°09'10
direct	6337 Aug 01 05:27	26° M 31'42		minimum elong	6343 Dec 20 22:55	29° X 34'12	0°09'13
evening set	6337 Nov 04 20:57	0° X 01'08		behind sun begin	6343 Dec 20 17:17	29° X 33'20	
	6337 Nov 04 13:35	0° X		behind sun end	6343 Dec 21 04:34	29° X 35'04	
				max. Earth dist.	6343 Dec 20 09:47	29° X 32'09	19.43810 AU
conjunction	6337 Nov 21 09:39	1° X 03'01	0°31'09		6343 Dec 27 19:26	0° X	
minimum elong	6337 Nov 21 09:39	1° X 03'01	0°31'12	morning rise	6344 Jan 06 02:50	0° X 34'37	
max. Earth dist.	6337 Nov 20 14:46	1° X 00'03	19.30725 AU	retrograde	6344 Apr 06 12:57	3° X 55'15	
morning rise	6337 Dec 07 19:20	2° X 04'29		opposition	6344 Jun 19 12:47	1° X 53'32	0°07'59
retrograde	6338 Mar 09 18:49	5° X 27'28		min. Earth dist.	6344 Jun 19 23:03	1° X 52'26	17.45806 AU
opposition	6338 May 22 08:26	3° X 24'44	0°32'58		6344 Aug 13 19:28	30° R X	
min. Earth dist.	6338 May 22 23:52	3° X 23'03	17.31003 AU	direct	6344 Sep 04 05:06	29° X 48'14	
direct	6338 Aug 06 10:07	1° X 18'37			6344 Sep 25 07:29	0° X	
evening set	6338 Nov 10 01:22	4° X 48'05		evening set	6344 Dec 08 16:51	3° X 15'52	
conjunction	6338 Nov 26 13:15	5° X 49'52	0°27'52	conjunction	6344 Dec 24 23:06	4° X 16'31	0°05'11
minimum elong	6338 Nov 26 13:16	5° X 49'52	0°27'54	minimum elong	6344 Dec 24 23:06	4° X 16'31	0°05'14
max. Earth dist.	6338 Nov 25 19:17	5° X 47'02	19.31382 AU	behind sun begin	6344 Dec 24 16:39	4° X 15'32	
morning rise	6338 Dec 12 21:55	6° X 51'12		behind sun end	6344 Dec 25 05:34	4° X 17'30	
retrograde	6339 Mar 14 17:21	10° X 13'53		max. Earth dist.	6344 Dec 24 12:14	4° X 14'50	19.47908 AU
opposition	6339 May 27 09:18	8° X 11'15	0°29'11	morning rise	6345 Jan 10 01:52	5° X 16'40	
min. Earth dist.	6339 May 28 01:07	8° X 09'32	17.31961 AU	retrograde	6345 Apr 11 09:54	8° X 36'47	
direct	6339 Aug 11 11:40	6° X 05'08		opposition	6345 Jun 24 13:09	6° X 35'19	0°03'31
evening set	6339 Nov 15 05:22	9° X 34'31		min. Earth dist.	6345 Jun 24 23:04	6° X 34'15	17.50099 AU
				direct	6345 Sep 09 07:10	4° X 30'17	
conjunction	6339 Dec 01 16:19	10° X 36'10	0°24'23	evening set	6345 Dec 13 17:24	7° X 57'17	
minimum elong	6339 Dec 01 16:19	10° X 36'10	0°24'26				
max. Earth dist.	6339 Nov 30 22:48	10° X 33'25	19.32653 AU	conjunction	6345 Dec 29 22:25	8° X 57'40	0°01'09
morning rise	6339 Dec 18 00:08	11° X 37'22		minimum elong	6345 Dec 29 22:26	8° X 57'40	0°01'10
retrograde	6340 Mar 18 18:38	14° X 59'42		behind sun begin	6345 Dec 29 15:47	8° X 56'39	
opposition	6340 May 31 10:00	12° X 57'11	0°25'12	behind sun end	6345 Dec 30 05:05	8° X 58'41	
min. Earth dist.	6340 May 31 23:59	12° X 55'39	17.33538 AU	max. Earth dist.	6345 Dec 29 11:33	8° X 55'59	19.52396 AU
direct	6340 Aug 15 16:22	10° X 51'07		morning rise	6346 Jan 15 00:22	9° X 57'35	
evening set	6340 Nov 19 08:45	14° X 20'19		desc. node	6346 Apr 10 13:24	13° X 16'12	
				retrograde	6346 Apr 16 07:52	13° X 17'08	
conjunction	6340 Dec 05 18:56	15° X 21'49	0°20'45	opposition	6346 Jun 29 13:20	11° X 15'53	-0°00'58
minimum elong	6340 Dec 05 18:56	15° X 21'49	0°20'46	min. Earth dist.	6346 Jun 29 21:52	11° X 14'58	17.54764 AU
max. Earth dist.	6340 Dec 05 03:08	15° X 19'21	19.34542 AU	direct	6346 Sep 14 09:14	9° X 11'06	
morning rise	6340 Dec 22 01:39	16° X 22'51		evening set	6346 Dec 18 16:50	12° X 37'23	
retrograde	6341 Mar 23 16:26	19° X 44'48					
opposition	6341 Jun 05 10:53	17° X 42'26	0°21'04	conjunction	6347 Jan 03 20:59	13° X 37'29	-0°02'59
min. Earth dist.	6341 Jun 06 00:55	17° X 40'55	17.35738 AU	minimum elong	6347 Jan 03 21:00	13° X 37'29	0°02'56
direct	6341 Aug 20 17:59	15° X 36'29		behind sun begin	6347 Jan 03 14:22	13° X 36'29	
evening set	6341 Nov 24 11:48	19° X 05'27		behind sun end	6347 Jan 04 03:37	13° X 38'30	
				max. Earth dist.	6347 Jan 03 12:23	13° X 36'10	19.57217 AU

morning rise	6347 Jan 19 21:48	14°  37'08	minimum elong	6353 Jan 30 17:10	11°  00'02 0°25'19
retrograde	6347 Apr 21 04:46	17°  56'05	max. Earth dist.	6353 Jan 30 16:04	10°  59'52 19.91035 AU
opposition	6347 Jul 04 13:19	15°  55'03 -0°05'25	morning rise	6353 Feb 15 13:03	11°  57'56
min. Earth dist.	6347 Jul 04 21:02	15°  54'14 17.59724 AU		6353 Apr 26 00:38	15° 
direct	6347 Sep 19 10:52	13°  50'32	retrograde	6353 May 17 21:13	15°  12'48
evening set	6347 Dec 23 15:42	17°  16'00		6353 Jun 09 00:38	15°  R 
			opposition	6353 Aug 01 02:25	13°  12'35 -0°29'56
conjunction	6348 Jan 08 18:40	18°  15'49 -0°06'57	min. Earth dist.	6353 Aug 01 02:13	13°  12'36 17.94173 AU
minimum elong	6348 Jan 08 18:41	18°  15'49 0°06'54	direct	6353 Oct 17 08:07	11°  09'40
behind sun begin	6348 Jan 08 12:31	18°  14'53	evening set	6354 Jan 19 11:41	14°  28'55
behind sun end	6348 Jan 09 00:51	18°  16'45		6354 Jan 28 01:32	15° 
max. Earth dist.	6348 Jan 08 10:11	18°  14'31 19.62317 AU			
morning rise	6348 Jan 24 18:41	19°  15'11	conjunction	6354 Feb 04 09:06	15°  26'51 -0°28'33
retrograde	6348 Apr 25 01:25	22°  33'31	minimum elong	6354 Feb 04 09:05	15°  26'51 0°28'32
opposition	6348 Jul 08 12:44	20°  32'39 -0°09'49	max. Earth dist.	6354 Feb 04 09:25	15°  26'54 19.97397 AU
min. Earth dist.	6348 Jul 08 19:23	20°  31'57 17.64957 AU	morning rise	6354 Feb 20 04:18	16°  24'26
direct	6348 Sep 23 11:06	18°  28'23	retrograde	6354 May 22 13:02	19°  38'39
evening set	6348 Dec 27 13:30	21°  52'59	opposition	6354 Aug 05 22:42	17°  38'33 -0°33'24
			min. Earth dist.	6354 Aug 05 21:38	17°  38'40 18.00656 AU
conjunction	6349 Jan 12 15:38	22°  52'29 -0°10'51	direct	6354 Oct 22 04:02	15°  35'59
minimum elong	6349 Jan 12 15:38	22°  52'29 0°10'48	evening set	6355 Jan 24 03:20	18°  54'06
behind sun begin	6349 Jan 12 10:33	22°  51'43			
behind sun end	6349 Jan 12 20:43	22°  53'16	conjunction	6355 Feb 08 23:59	19°  51'42 -0°31'35
max. Earth dist.	6349 Jan 12 09:11	22°  51'30 19.67662 AU	minimum elong	6355 Feb 08 23:58	19°  51'42 0°31'34
morning rise	6349 Jan 28 14:39	23°  51'34	max. Earth dist.	6355 Feb 09 02:07	19°  52'02 20.03983 AU
retrograde	6349 Apr 29 21:31	27°  09'14	morning rise	6355 Feb 24 18:35	20°  49'01
opposition	6349 Jul 13 11:48	25°  08'32 -0°14'07	retrograde	6355 May 27 05:08	24°  02'34
min. Earth dist.	6349 Jul 13 17:16	25°  07'57 17.70394 AU	opposition	6355 Aug 10 18:10	22°  02'39 -0°36'39
direct	6349 Sep 28 12:10	23°  04'33	min. Earth dist.	6355 Aug 10 14:35	22°  03'01 18.07326 AU
evening set	6350 Jan 01 10:29	26°  28'09	direct	6355 Oct 27 00:53	20°  00'28
			evening set	6356 Jan 28 18:13	23°  17'27
conjunction	6350 Jan 17 11:30	27°  27'22 -0°14'39			
minimum elong	6350 Jan 17 11:29	27°  27'22 0°14'37	conjunction	6356 Feb 13 14:06	24°  14'45 -0°34'25
behind sun begin	6350 Jan 17 08:36	27°  26'55	minimum elong	6356 Feb 13 14:06	24°  14'45 0°34'23
behind sun end	6350 Jan 17 14:23	27°  27'48	max. Earth dist.	6356 Feb 13 17:51	24°  15'19 20.10727 AU
max. Earth dist.	6350 Jan 17 05:27	27°  26'26 19.73203 AU	morning rise	6356 Feb 29 08:10	25°  11'47
morning rise	6350 Feb 02 09:43	28°  26'09	retrograde	6356 May 30 19:21	28°  24'42
	6350 Mar 02 07:00	0° 	opposition	6356 Aug 14 12:58	26°  24'59 -0°39'39
retrograde	6350 May 04 16:28	1°  43'08	min. Earth dist.	6356 Aug 14 08:55	26°  25'24 18.14138 AU
	6350 Jul 11 11:54	30°  R 	direct	6356 Oct 30 19:07	24°  23'12
opposition	6350 Jul 18 10:25	29°  34'23 -0°18'19	evening set	6357 Feb 01 08:12	27°  39'04
min. Earth dist.	6350 Jul 18 14:59	29°  34'05 17.76041 AU			
direct	6350 Oct 03 11:29	27°  38'49	conjunction	6357 Feb 17 03:23	28°  36'04 -0°37'01
	6350 Dec 19 13:56	0° 	minimum elong	6357 Feb 17 03:23	28°  36'04 0°36'59
evening set	6351 Jan 06 06:19	1°  01'25	max. Earth dist.	6357 Feb 17 08:27	28°  36'50 20.17584 AU
			morning rise	6357 Mar 04 20:59	29°  32'49
conjunction	6351 Jan 22 06:29	2°  00'18 -0°18'22		6357 Mar 12 15:46	0°  H 
minimum elong	6351 Jan 22 06:28	2°  00'18 0°18'20	retrograde	6357 Jun 04 10:33	2°  H  45'08
max. Earth dist.	6351 Jan 22 02:28	1°  59'41 19.78949 AU	opposition	6357 Aug 19 07:10	0°  H  45'37 -0°42'25
morning rise	6351 Feb 07 03:49	2°  58'47	min. Earth dist.	6357 Aug 19 00:45	0°  H  46'16 18.21009 AU
retrograde	6351 May 09 11:00	6°  15'04		6357 Sep 07 06:35	30°  R 
opposition	6351 Jul 23 08:23	4°  14'37 -0°22'22	direct	6357 Nov 04 14:16	28°  44'15
min. Earth dist.	6351 Jul 23 11:13	4°  14'19 17.81875 AU		6357 Dec 30 00:06	0°  H 
direct	6351 Oct 08 11:37	2°  11'09	evening set	6358 Feb 05 21:15	1°  H  59'01
evening set	6352 Jan 11 01:05	5°  32'38			
			conjunction	6358 Feb 21 15:48	2°  H  55'42 -0°39'24
conjunction	6352 Jan 27 00:15	6°  31'12 -0°21'55	minimum elong	6358 Feb 21 15:47	2°  H  55'42 0°39'24
minimum elong	6352 Jan 27 00:15	6°  31'12 0°21'53	max. Earth dist.	6358 Feb 21 22:32	2°  H  56'43 20.24452 AU
max. Earth dist.	6352 Jan 26 21:12	6°  30'44 19.84885 AU	morning rise	6358 Mar 09 08:55	3°  H  52'12
morning rise	6352 Feb 11 20:55	7°  29'24	retrograde	6358 Jun 08 23:22	7°  H  03'56
retrograde	6352 May 13 04:17	10°  44'59	opposition	6358 Aug 24 00:58	5°  H  04'37 -0°44'55
opposition	6352 Jul 27 05:48	8°  44'37 -0°26'15	min. Earth dist.	6358 Aug 23 18:19	5°  H  05'17 18.27874 AU
min. Earth dist.	6352 Jul 27 07:49	8°  44'25 17.87922 AU	direct	6358 Nov 09 06:41	3°  H  03'41
direct	6352 Oct 12 09:21	6°  41'25	evening set	6359 Feb 10 09:32	6°  H  17'18
evening set	6353 Jan 14 18:51	10°  01'48			
			conjunction	6359 Feb 26 03:28	7°  H  13'43 -0°41'33
conjunction	6353 Jan 30 17:10	11°  00'02 -0°25'20	minimum elong	6359 Feb 26 03:28	7°  H  13'43 0°41'31

max. Earth dist.	6359 Feb 26 11:07	7° \mathring{K} 14'52	20.31288 AU	min. Earth dist.	6365 Sep 22 21:16	4° \mathring{V} 33'32	18.70355 AU
morning rise	6359 Mar 13 20:18	8° \mathring{K} 09'57		direct	6365 Dec 09 10:00	2° \mathring{V} 33'27	
retrograde	6359 Jun 13 13:40	11° \mathring{K} 21'08		evening set	6366 Mar 11 02:23	5° \mathring{V} 39'36	
opposition	6359 Aug 28 17:53	9° \mathring{K} 21'59	-0°47'09				
min. Earth dist.	6359 Aug 28 09:05	9° \mathring{K} 22'53	18.34658 AU	conjunction	6366 Mar 26 18:11	6° \mathring{V} 34'21	-0°49'32
direct	6359 Nov 14 00:07	7° \mathring{K} 21'27		minimum elong	6366 Mar 26 18:11	6° \mathring{V} 34'21	0°49'32
evening set	6360 Feb 14 21:01	10° \mathring{K} 33'59		max. Earth dist.	6366 Mar 27 08:50	6° \mathring{V} 36'30	20.72843 AU
				morning rise	6366 Apr 11 10:19	7° \mathring{V} 29'11	
conjunction	6360 Mar 01 14:29	11° \mathring{K} 30'07	-0°43'27	retrograde	6366 Jul 12 17:51	10° \mathring{V} 36'48	
minimum elong	6360 Mar 01 14:29	11° \mathring{K} 30'07	0°43'27	opposition	6366 Sep 27 23:48	8° \mathring{V} 38'09	-0°54'54
max. Earth dist.	6360 Mar 01 23:41	11° \mathring{K} 31'29	20.37993 AU	min. Earth dist.	6366 Sep 27 09:54	8° \mathring{V} 39'33	18.75316 AU
morning rise	6360 Mar 17 06:58	12° \mathring{K} 26'07		direct	6366 Dec 13 21:28	6° \mathring{V} 39'41	
retrograde	6360 Jun 17 01:04	15° \mathring{K} 36'44		evening set	6367 Mar 15 08:56	9° \mathring{V} 44'53	
opposition	6360 Sep 01 10:25	13° \mathring{K} 37'45	-0°49'06				
min. Earth dist.	6360 Sep 01 01:41	13° \mathring{K} 38'39	18.41284 AU	conjunction	6367 Mar 31 00:36	10° \mathring{V} 39'28	-0°49'39
direct	6360 Nov 17 14:44	11° \mathring{K} 37'37		minimum elong	6367 Mar 31 00:36	10° \mathring{V} 39'28	0°49'39
evening set	6361 Feb 18 07:47	14° \mathring{K} 49'02		max. Earth dist.	6367 Mar 31 15:23	10° \mathring{V} 41'38	20.77691 AU
				morning rise	6367 Apr 15 17:02	11° \mathring{V} 34'10	
conjunction	6361 Mar 06 00:44	15° \mathring{K} 44'54	-0°45'06	retrograde	6367 Jul 17 04:35	14° \mathring{V} 41'23	
minimum elong	6361 Mar 06 00:44	15° \mathring{K} 44'54	0°45'06	opposition	6367 Oct 02 11:35	12° \mathring{V} 42'44	-0°54'52
max. Earth dist.	6361 Mar 06 10:22	15° \mathring{K} 46'21	20.44513 AU	min. Earth dist.	6367 Oct 01 19:58	12° \mathring{V} 44'18	18.80054 AU
morning rise	6361 Mar 21 17:02	16° \mathring{K} 40'41		direct	6367 Dec 18 07:50	10° \mathring{V} 44'29	
retrograde	6361 Jun 21 14:28	19° \mathring{K} 50'45		evening set	6368 Mar 18 14:52	13° \mathring{V} 48'49	
opposition	6361 Sep 06 02:10	17° \mathring{K} 51'55	-0°50'47				
min. Earth dist.	6361 Sep 05 15:29	17° \mathring{K} 53'00	18.47686 AU	conjunction	6368 Apr 03 06:40	14° \mathring{V} 43'15	-0°49'30
direct	6361 Nov 22 06:22	15° \mathring{K} 52'08		minimum elong	6368 Apr 03 06:40	14° \mathring{V} 43'15	0°49'31
evening set	6362 Feb 22 17:49	19° \mathring{K} 02'28		max. Earth dist.	6368 Apr 03 23:06	14° \mathring{V} 45'39	20.82300 AU
				morning rise	6368 Apr 18 23:13	15° \mathring{V} 37'50	
conjunction	6362 Mar 10 10:26	19° \mathring{K} 58'05	-0°46'31	retrograde	6368 Jul 20 12:01	18° \mathring{V} 44'41	
minimum elong	6362 Mar 10 10:26	19° \mathring{K} 58'05	0°46'30	opposition	6368 Oct 05 23:02	16° \mathring{V} 46'04	-0°54'34
max. Earth dist.	6362 Mar 10 21:32	19° \mathring{K} 59'44	20.50775 AU	min. Earth dist.	6368 Oct 05 07:22	16° \mathring{V} 47'39	18.84543 AU
morning rise	6362 Mar 26 02:29	20° \mathring{K} 53'39		direct	6368 Dec 21 17:37	14° \mathring{V} 48'06	
retrograde	6362 Jun 26 00:49	24° \mathring{K} 03'12		evening set	6369 Mar 22 20:22	17° \mathring{V} 51'37	
opposition	6362 Sep 10 17:33	22° \mathring{K} 04'28	-0°52'11				
min. Earth dist.	6362 Sep 10 07:03	22° \mathring{K} 05'32	18.53814 AU	conjunction	6369 Apr 07 12:08	18° \mathring{V} 45'54	-0°49'07
direct	6362 Nov 26 19:46	20° \mathring{K} 05'00		minimum elong	6369 Apr 07 12:08	18° \mathring{V} 45'54	0°49'08
evening set	6363 Feb 27 03:02	23° \mathring{K} 14'15		max. Earth dist.	6369 Apr 08 04:32	18° \mathring{V} 48'18	20.86668 AU
				morning rise	6369 Apr 23 05:05	19° \mathring{V} 40'22	
conjunction	6363 Mar 14 19:18	24° \mathring{K} 09'38	-0°47'39	retrograde	6369 Jul 24 22:17	22° \mathring{V} 46'57	
minimum elong	6363 Mar 14 19:17	24° \mathring{K} 09'38	0°47'40	opposition	6369 Oct 10 09:56	20° \mathring{V} 48'22	-0°53'59
max. Earth dist.	6363 Mar 15 06:36	24° \mathring{K} 11'18	20.56755 AU	min. Earth dist.	6369 Oct 09 16:45	20° \mathring{V} 50'05	18.88778 AU
morning rise	6363 Mar 30 11:23	25° \mathring{K} 05'00		direct	6369 Dec 26 03:03	18° \mathring{V} 50'38	
retrograde	6363 Jun 30 13:05	28° \mathring{K} 14'02		evening set	6370 Mar 27 01:28	21° \mathring{V} 53'25	
opposition	6363 Sep 15 08:03	26° \mathring{K} 15'21	-0°53'18				
min. Earth dist.	6363 Sep 14 19:47	26° \mathring{K} 16'36	18.59635 AU	conjunction	6370 Apr 11 17:29	22° \mathring{V} 47'36	-0°48'29
direct	6363 Dec 01 09:34	24° \mathring{K} 16'10		minimum elong	6370 Apr 11 17:29	22° \mathring{V} 47'36	0°48'31
evening set	6364 Mar 02 11:34	27° \mathring{K} 24'22		max. Earth dist.	6370 Apr 12 11:28	22° \mathring{V} 50'12	20.90753 AU
				morning rise	6370 Apr 27 10:41	23° \mathring{V} 41'59	
conjunction	6364 Mar 18 03:40	28° \mathring{K} 19'32	-0°48'33	retrograde	6370 Jul 29 05:32	26° \mathring{V} 48'18	
minimum elong	6364 Mar 18 03:40	28° \mathring{K} 19'32	0°48'32	opposition	6370 Oct 14 20:27	24° \mathring{V} 49'47	-0°53'09
max. Earth dist.	6364 Mar 18 16:25	28° \mathring{K} 21'25	20.62407 AU	min. Earth dist.	6370 Oct 14 03:23	24° \mathring{V} 51'29	18.92711 AU
morning rise	6364 Apr 02 19:39	29° \mathring{K} 14'42		direct	6370 Dec 30 11:04	22° \mathring{V} 52'20	
	6364 Apr 16 07:16	0° \mathring{V}		evening set	6371 Mar 31 06:17	25° \mathring{V} 54'25	
retrograde	6364 Jul 03 22:24	2° \mathring{V} 23'13					
opposition	6364 Sep 18 21:53	0° \mathring{V} 24'35	-0°54'07	conjunction	6371 Apr 15 22:26	26° \mathring{V} 48'30	-0°47'37
min. Earth dist.	6364 Sep 18 09:52	0° \mathring{V} 25'47	18.65135 AU	minimum elong	6371 Apr 15 22:26	26° \mathring{V} 48'30	0°47'38
	6364 Sep 29 03:32	30° \mathring{K}		max. Earth dist.	6371 Apr 16 16:07	26° \mathring{V} 51'03	20.94528 AU
direct	6364 Dec 04 22:00	28° \mathring{K} 25'39		morning rise	6371 May 01 16:12	27° \mathring{V} 42'48	
	6365 Feb 05 14:06	0° \mathring{V}			6371 Jun 18 13:41	0° \mathring{B}	
evening set	6365 Mar 06 19:25	1° \mathring{V} 32'48		retrograde	6371 Aug 02 15:12	0° \mathring{B} 48'57	
					6371 Sep 18 05:25	30° \mathring{K}	
conjunction	6365 Mar 22 11:16	2° \mathring{V} 27'45	-0°49'10	opposition	6371 Oct 19 06:28	28° \mathring{V} 50'29	-0°52'03
minimum elong	6365 Mar 22 11:16	2° \mathring{V} 27'45	0°49'11	min. Earth dist.	6371 Oct 18 12:22	28° \mathring{V} 52'17	18.96307 AU
max. Earth dist.	6365 Mar 23 00:08	2° \mathring{V} 29'39	20.67766 AU	direct	6372 Jan 03 19:37	26° \mathring{V} 53'16	
morning rise	6365 Apr 07 03:24	3° \mathring{V} 22'45		evening set	6372 Apr 03 10:53	29° \mathring{V} 54'44	
retrograde	6365 Jul 08 09:35	6° \mathring{V} 30'48			6372 Apr 05 00:06	0° \mathring{B}	
opposition	6365 Sep 23 11:05	4° \mathring{V} 32'09	-0°54'39				






























































































































conjunction	6372 Apr 19 03:23	0°848'45 -0°46'32	retrograde	6378 Aug 30 22:43	28°842'11
minimum elong	6372 Apr 19 03:23	0°848'45 0°46'34	opposition	6378 Nov 16 20:07	26°843'33 -0°37'57
max. Earth dist.	6372 Apr 19 22:21	0°851'30 20.97920 AU	min. Earth dist.	6378 Nov 16 03:32	26°845'12 19.07944 AU
morning rise	6372 May 04 21:28	1°843'01	direct	6379 Jan 31 19:38	24°847'09
retrograde	6372 Aug 05 22:31	4°849'00	evening set	6379 May 01 16:46	27°845'58
opposition	6372 Oct 22 16:07	2°850'35 -0°50'43			
min. Earth dist.	6372 Oct 21 22:26	2°852'21 18.99494 AU	conjunction	6379 May 17 12:36	28°839'58 -0°33'07
direct	6373 Jan 07 02:36	0°853'37	minimum elong	6379 May 17 12:36	28°839'58 0°33'10
evening set	6373 Apr 07 15:25	3°854'33	max. Earth dist.	6379 May 18 05:36	28°842'24 21.07788 AU
			morning rise	6379 Jun 02 11:22	29°834'22
conjunction	6373 Apr 23 08:07	4°848'30 -0°45'13		6379 Jun 10 05:47	0°II
minimum elong	6373 Apr 23 08:07	4°848'30 0°45'15	retrograde	6379 Sep 04 07:06	2°II40'15
max. Earth dist.	6373 Apr 24 02:26	4°851'08 21.00900 AU	min. Earth dist.	6379 Nov 20 11:17	0°II43'08 19.07570 AU
morning rise	6373 May 09 02:50	5°842'44	opposition	6379 Nov 21 03:51	0°II41'28 -0°35'07
retrograde	6373 Aug 10 07:42	8°848'37		6379 Dec 08 19:39	30°R8
min. Earth dist.	6373 Oct 26 07:13	6°852'04 19.02247 AU	direct	6380 Feb 05 01:12	28°845'01
opposition	6373 Oct 27 01:32	6°850'15 -0°49'09		6380 Mar 31 11:09	0°II
direct	6374 Jan 11 10:17	4°853'28	evening set	6380 May 04 20:57	1°II43'43
evening set	6374 Apr 11 19:38	7°853'55			
			conjunction	6380 May 20 17:33	2°II37'47 -0°30'29
conjunction	6374 Apr 27 12:50	8°847'50 -0°43'42	minimum elong	6380 May 20 17:33	2°II37'47 0°30'31
minimum elong	6374 Apr 27 12:51	8°847'50 0°43'44	max. Earth dist.	6380 May 21 11:19	2°II40'19 21.07197 AU
max. Earth dist.	6374 Apr 28 08:09	8°850'37 21.03399 AU	morning rise	6380 Jun 05 16:55	3°II32'16
morning rise	6374 May 13 07:59	9°842'03	retrograde	6380 Sep 07 13:33	6°II38'17
retrograde	6374 Aug 14 15:23	12°847'52	opposition	6380 Nov 24 11:22	4°II39'23 -0°32'07
opposition	6374 Oct 31 10:41	10°849'31 -0°47'20	min. Earth dist.	6380 Nov 23 19:14	4°II41'00 19.06779 AU
min. Earth dist.	6374 Oct 30 17:00	10°851'17 19.04487 AU	direct	6381 Feb 08 07:15	2°II42'54
direct	6375 Jan 15 17:06	8°852'56	evening set	6381 May 09 01:25	5°II41'32
evening set	6375 Apr 16 00:04	11°852'57			
			conjunction	6381 May 24 22:36	6°II35'41 -0°27'42
conjunction	6375 May 01 17:36	12°846'50 -0°41'58	minimum elong	6381 May 24 22:36	6°II35'41 0°27'45
minimum elong	6375 May 01 17:36	12°846'50 0°41'59	max. Earth dist.	6381 May 25 15:11	6°II38'03 21.06229 AU
max. Earth dist.	6375 May 02 11:47	12°849'27 21.05376 AU	morning rise	6381 Jun 09 22:55	7°II30'15
morning rise	6375 May 17 13:29	13°841'04	retrograde	6381 Sep 11 22:40	10°II36'28
retrograde	6375 Jun 11 13:59	15°8	opposition	6381 Nov 28 18:51	8°II37'26 -0°28'58
			min. Earth dist.	6381 Nov 28 02:49	8°II39'02 19.05629 AU
retrograde	6375 Aug 19 00:02	16°846'50	direct	6382 Feb 12 12:20	6°II40'53
	6375 Oct 30 23:27	15°R8	evening set	6382 May 13 05:56	9°II39'33
opposition	6375 Nov 04 19:20	14°848'28 -0°45'18			
min. Earth dist.	6375 Nov 04 01:29	14°850'15 19.06188 AU	conjunction	6382 May 29 04:01	10°II33'48 -0°24'47
direct	6376 Jan 19 23:52	12°851'59	minimum elong	6382 May 29 04:01	10°II33'48 0°24'49
	6376 Apr 03 05:37	15°8	max. Earth dist.	6382 May 29 21:19	10°II36'17 21.04890 AU
evening set	6376 Apr 19 04:18	15°851'39	morning rise	6382 Jun 14 05:03	11°II28'30
			retrograde	6382 Sep 16 05:18	14°II34'56
conjunction	6376 May 04 22:27	16°845'32 -0°40'02	min. Earth dist.	6382 Dec 02 10:43	12°II37'22 19.04102 AU
minimum elong	6376 May 04 22:27	16°845'32 0°40'04	opposition	6382 Dec 03 02:16	12°II35'48 -0°25'41
max. Earth dist.	6376 May 05 17:12	16°848'14 21.06783 AU	direct	6383 Feb 16 17:52	10°II39'12
morning rise	6376 May 20 18:51	17°839'47	evening set	6383 May 17 11:00	13°II37'58
retrograde	6376 Aug 22 07:31	20°845'32			
min. Earth dist.	6376 Nov 07 10:45	18°848'50 19.07304 AU	conjunction	6383 Jun 02 09:43	14°II32'20 -0°21'45
opposition	6376 Nov 08 03:53	18°847'07 -0°43'03	minimum elong	6383 Jun 02 09:43	14°II32'20 0°21'47
direct	6377 Jan 23 06:46	16°850'43	max. Earth dist.	6383 Jun 03 01:37	14°II34'36 21.03193 AU
evening set	6377 Apr 23 08:27	19°850'01	morning rise	6383 Jun 18 11:45	15°II27'10
			retrograde	6383 Sep 20 14:42	18°II33'52
conjunction	6377 May 09 03:02	20°843'56 -0°37'54	opposition	6383 Dec 07 09:33	16°II34'38 -0°22'15
minimum elong	6377 May 09 03:02	20°843'56 0°37'57	min. Earth dist.	6383 Dec 06 18:27	16°II36'09 19.02221 AU
max. Earth dist.	6377 May 09 20:33	20°846'27 21.07631 AU	direct	6384 Feb 20 22:43	14°II37'58
morning rise	6377 May 25 00:16	21°838'12	evening set	6384 May 20 16:18	17°II36'56
retrograde	6377 Aug 26 15:43	24°843'59			
opposition	6377 Nov 12 12:12	22°845'28 -0°40'36	conjunction	6384 Jun 05 15:57	18°II31'27 -0°18'36
min. Earth dist.	6377 Nov 11 19:00	22°847'11 19.07880 AU	minimum elong	6384 Jun 05 15:57	18°II31'27 0°18'39
direct	6378 Jan 27 12:58	20°849'04	max. Earth dist.	6384 Jun 06 08:21	18°II33'47 21.01122 AU
evening set	6378 Apr 27 12:33	23°848'07	morning rise	6384 Jun 21 18:41	19°II26'25
			retrograde	6384 Sep 23 22:32	22°II33'26
conjunction	6378 May 13 07:51	24°842'03 -0°35'36	opposition	6384 Dec 10 17:04	20°II34'07 -0°18'43
minimum elong	6378 May 13 07:51	24°842'03 0°35'38	min. Earth dist.	6384 Dec 10 02:33	20°II35'35 18.99955 AU
max. Earth dist.	6378 May 14 02:03	24°844'39 21.07944 AU	direct	6385 Feb 24 04:15	18°II37'24
morning rise	6378 May 29 05:42	25°836'23			

evening set	6385 May 24 22:02	21° Π 36'36	minimum elong	6390 Jun 30 17:04	12° \mathfrak{D} 45'04	0°01'55
			behind sun begin	6390 Jun 30 10:23	12° \mathfrak{D} 44'08	
conjunction	6385 Jun 09 22:23	22° Π 31'16 -0°15'22	behind sun end	6390 Jun 30 23:44	12° \mathfrak{D} 46'00	
minimum elong	6385 Jun 09 22:23	22° Π 31'16 0°15'24	max. Earth dist.	6390 Jul 01 02:55	12° \mathfrak{D} 46'28	20.79660 AU
behind sun begin	6385 Jun 09 20:29	22° Π 31'00	morning rise	6390 Jul 17 01:03	13° \mathfrak{D} 41'12	
behind sun end	6385 Jun 10 00:17	22° Π 31'31	retrograde	6390 Oct 19 13:15	16° \mathfrak{D} 50'55	
max. Earth dist.	6385 Jun 10 13:12	22° Π 33'22 20.98676 AU	opposition	6391 Jan 04 17:57	14° \mathfrak{D} 50'47	0°04'06
morning rise	6385 Jun 26 02:10	23° Π 26'24	min. Earth dist.	6391 Jan 04 09:46	14° \mathfrak{D} 51'37	18.77098 AU
retrograde	6385 Sep 28 08:24	26° Π 33'48	direct	6391 Mar 20 17:36	12° \mathfrak{D} 53'01	
min. Earth dist.	6385 Dec 14 11:00	24° Π 35'47 18.97308 AU	evening set	6391 Jun 18 21:48	15° \mathfrak{D} 55'09	
opposition	6385 Dec 15 00:46	24° Π 34'23 -0°15'05				
direct	6386 Feb 28 09:14	22° Π 37'35	conjunction	6391 Jul 05 03:26	16° \mathfrak{D} 51'03	0°05'31
evening set	6386 May 29 04:23	25° Π 37'07	minimum elong	6391 Jul 05 03:25	16° \mathfrak{D} 51'03	0°05'28
			behind sun begin	6391 Jul 04 20:59	16° \mathfrak{D} 50'09	
conjunction	6386 Jun 14 05:44	26° Π 31'57 -0°12'02	behind sun end	6391 Jul 05 09:50	16° \mathfrak{D} 51'57	
minimum elong	6386 Jun 14 05:43	26° Π 31'57 0°12'06	max. Earth dist.	6391 Jul 05 10:49	16° \mathfrak{D} 52'06	20.74463 AU
behind sun begin	6386 Jun 14 01:13	26° Π 31'20	morning rise	6391 Jul 21 12:24	17° \mathfrak{D} 47'26	
behind sun end	6386 Jun 14 10:13	26° Π 32'35	retrograde	6391 Oct 24 01:02	20° \mathfrak{D} 57'41	
max. Earth dist.	6386 Jun 14 20:43	26° Π 34'06 20.95817 AU	opposition	6392 Jan 09 02:51	18° \mathfrak{D} 57'19	0°08'01
morning rise	6386 Jun 30 10:14	27° Π 27'16	min. Earth dist.	6392 Jan 08 20:14	18° \mathfrak{D} 58'00	18.71717 AU
	6386 Aug 25 13:45	0° \mathfrak{D}	direct	6392 Mar 24 01:02	16° \mathfrak{D} 59'13	
retrograde	6386 Oct 02 17:43	0° \mathfrak{D} 35'04	evening set	6392 Jun 22 07:56	20° \mathfrak{D} 02'04	
	6386 Nov 10 17:06	30° \mathfrak{R} Π				
opposition	6386 Dec 19 08:26	28° Π 35'35 -0°11'22	conjunction	6392 Jul 08 14:35	20° \mathfrak{D} 58'13	0°09'02
min. Earth dist.	6386 Dec 18 19:35	28° Π 36'53 18.94224 AU	minimum elong	6392 Jul 08 14:35	20° \mathfrak{D} 58'13	0°09'00
direct	6387 Mar 04 15:13	26° Π 38'40	behind sun begin	6392 Jul 08 08:54	20° \mathfrak{D} 57'25	
evening set	6387 Jun 02 11:30	29° Π 38'36	behind sun end	6392 Jul 08 20:17	20° \mathfrak{D} 59'01	
	6387 Jun 08 18:58	0° \mathfrak{D}	max. Earth dist.	6392 Jul 08 21:54	20° \mathfrak{D} 59'16	20.68916 AU
			morning rise	6392 Jul 25 00:13	21° \mathfrak{D} 54'50	
conjunction	6387 Jun 18 13:33	0° \mathfrak{D} 33'38 -0°08'39	retrograde	6392 Oct 27 13:21	25° \mathfrak{D} 05'38	
minimum elong	6387 Jun 18 13:33	0° \mathfrak{D} 33'38 0°08'41	opposition	6393 Jan 12 12:05	23° \mathfrak{D} 05'03	0°11'55
behind sun begin	6387 Jun 18 07:48	0° \mathfrak{D} 32'50	min. Earth dist.	6393 Jan 12 06:06	23° \mathfrak{D} 05'40	18.66020 AU
behind sun end	6387 Jun 18 19:19	0° \mathfrak{D} 34'26	direct	6393 Mar 28 09:15	21° \mathfrak{D} 06'38	
max. Earth dist.	6387 Jun 19 02:23	0° \mathfrak{D} 35'28 20.92514 AU	evening set	6393 Jun 26 18:48	24° \mathfrak{D} 10'13	
morning rise	6387 Jul 04 19:06	1° \mathfrak{D} 29'08				
retrograde	6387 Oct 07 04:22	4° \mathfrak{D} 37'24	conjunction	6393 Jul 13 02:11	25° \mathfrak{D} 06'38	0°12'31
opposition	6387 Dec 23 16:28	2° \mathfrak{D} 37'47 -0°07'34	minimum elong	6393 Jul 13 02:11	25° \mathfrak{D} 06'38	0°12'28
min. Earth dist.	6387 Dec 23 04:53	2° \mathfrak{D} 38'57 18.90684 AU	behind sun begin	6393 Jul 12 21:53	25° \mathfrak{D} 06'02	
direct	6388 Mar 07 20:52	0° \mathfrak{D} 40'43	behind sun end	6393 Jul 13 06:29	25° \mathfrak{D} 07'15	
evening set	6388 Jun 05 19:01	3° \mathfrak{D} 41'08	max. Earth dist.	6393 Jul 13 07:14	25° \mathfrak{D} 07'21	20.63099 AU
			morning rise	6393 Jul 29 12:49	26° \mathfrak{D} 03'31	
conjunction	6388 Jun 21 22:02	4° \mathfrak{D} 36'21 -0°05'12	retrograde	6393 Nov 01 02:00	29° \mathfrak{D} 14'55	
minimum elong	6388 Jun 21 22:03	4° \mathfrak{D} 36'22 0°05'15	opposition	6394 Jan 16 21:44	27° \mathfrak{D} 14'05	0°15'46
behind sun begin	6388 Jun 21 15:37	4° \mathfrak{D} 35'28	min. Earth dist.	6394 Jan 16 17:19	27° \mathfrak{D} 14'32	18.60092 AU
behind sun end	6388 Jun 22 04:30	4° \mathfrak{D} 37'16	direct	6394 Apr 01 16:57	25° \mathfrak{D} 15'20	
max. Earth dist.	6388 Jun 22 10:42	4° \mathfrak{D} 38'10 20.88719 AU	evening set	6394 Jul 01 06:28	28° \mathfrak{D} 19'45	
morning rise	6388 Jul 08 04:16	5° \mathfrak{D} 32'04				
retrograde	6388 Oct 10 14:42	8° \mathfrak{D} 40'47	conjunction	6394 Jul 17 14:54	29° \mathfrak{D} 16'27	0°15'58
opposition	6388 Dec 27 00:43	6° \mathfrak{D} 41'02 -0°03'43	minimum elong	6394 Jul 17 14:54	29° \mathfrak{D} 16'27	0°15'56
min. Earth dist.	6388 Dec 26 14:07	6° \mathfrak{D} 42'07 18.86633 AU	max. Earth dist.	6394 Jul 17 19:54	29° \mathfrak{D} 17'10	20.57067 AU
direct	6389 Mar 12 03:34	4° \mathfrak{D} 43'48		6394 Jul 30 03:02	0° \mathfrak{D}	
evening set	6389 Jun 10 03:23	7° \mathfrak{D} 44'44	morning rise	6394 Aug 03 02:07	0° \mathfrak{D} 13'35	
			retrograde	6394 Nov 05 16:02	3° \mathfrak{D} 25'35	
conjunction	6389 Jun 26 07:11	8° \mathfrak{D} 40'10 -0°01'41	opposition	6395 Jan 21 07:32	1° \mathfrak{D} 24'33	0°19'34
minimum elong	6389 Jun 26 07:10	8° \mathfrak{D} 40'10 0°01'43	min. Earth dist.	6395 Jan 21 03:39	1° \mathfrak{D} 24'57	18.53971 AU
behind sun begin	6389 Jun 26 00:31	8° \mathfrak{D} 39'14		6395 Feb 27 22:12	30° \mathfrak{R} \mathfrak{D}	
behind sun end	6389 Jun 26 13:50	8° \mathfrak{D} 41'06	direct	6395 Apr 06 02:29	29° \mathfrak{D} 25'28	
max. Earth dist.	6389 Jun 26 17:21	8° \mathfrak{D} 41'37 20.84431 AU		6395 May 12 14:19	0° \mathfrak{D}	
morning rise	6389 Jul 12 14:26	9° \mathfrak{D} 36'05	evening set	6395 Jul 05 19:04	2° \mathfrak{D} 30'46	
retrograde	6389 Oct 15 02:04	12° \mathfrak{D} 45'19				
asc. node	6389 Dec 13 17:32	11° \mathfrak{D} 27'42	conjunction	6395 Jul 22 04:11	3° \mathfrak{D} 27'45	0°19'21
opposition	6389 Dec 31 09:16	10° \mathfrak{D} 45'23 0°00'11	minimum elong	6395 Jul 22 04:11	3° \mathfrak{D} 27'45	0°19'18
min. Earth dist.	6389 Dec 31 00:09	10° \mathfrak{D} 46'18 18.82101 AU	max. Earth dist.	6395 Jul 22 06:52	3° \mathfrak{D} 28'08	20.50878 AU
direct	6390 Mar 16 10:14	8° \mathfrak{D} 47'53	morning rise	6395 Aug 07 16:18	4° \mathfrak{D} 25'09	
evening set	6390 Jun 14 12:11	11° \mathfrak{D} 49'23	retrograde	6395 Nov 10 05:31	7° \mathfrak{D} 37'48	
			opposition	6396 Jan 25 18:01	5° \mathfrak{D} 36'34	0°23'16
conjunction	6390 Jun 30 17:03	12° \mathfrak{D} 45'04 0°01'58	min. Earth dist.	6396 Jan 25 15:45	5° \mathfrak{D} 36'48	18.47730 AU

direct	6396 Apr 09 10:27	3°Ω37'09	evening set	6402 Aug 05 13:02	2°♊39'11	
evening set	6396 Jul 09 08:12	6°Ω43'24				
conjunction	6396 Jul 25 18:18	7°Ω40'40 0°22'38	conjunction	6402 Aug 22 03:26	3°♊38'16 0°39'36	
minimum elong	6396 Jul 25 18:18	7°Ω40'40 0°22'36	minimum elong	6402 Aug 22 03:25	3°♊38'16 0°39'35	
max. Earth dist.	6396 Jul 25 21:02	7°Ω41'04 20.44583 AU	max. Earth dist.	6402 Aug 21 21:10	3°♊37'20 20.05522 AU	
morning rise	6396 Aug 11 06:56	8°Ω38'21	morning rise	6402 Sep 07 19:14	4°♊37'36	
retrograde	6396 Nov 13 21:33	11°Ω51'41	retrograde	6402 Dec 11 03:03	7°♊55'10	
opposition	6397 Jan 29 04:56	9°Ω50'16 0°26'53	opposition	6403 Feb 24 10:57	5°♊52'55 0°45'14	
min. Earth dist.	6397 Jan 29 02:58	9°Ω50'28 18.41390 AU	min. Earth dist.	6403 Feb 24 16:33	5°♊52'19 18.02148 AU	
direct	6397 Apr 13 21:33	7°Ω50'33	direct	6403 May 10 02:00	3°♊51'14	
evening set	6397 Jul 13 22:33	10°Ω57'48	evening set	6403 Aug 10 09:25	7°♊05'20	
conjunction	6397 Jul 30 09:19	11°Ω55'21 0°25'50	conjunction	6403 Aug 27 00:14	8°♊04'43 0°41'46	
minimum elong	6397 Jul 30 09:18	11°Ω55'21 0°25'47	minimum elong	6403 Aug 27 00:14	8°♊04'43 0°41'45	
max. Earth dist.	6397 Jul 30 09:42	11°Ω55'25 20.38217 AU	max. Earth dist.	6403 Aug 26 15:33	8°♊03'25 19.98776 AU	
morning rise	6397 Aug 15 22:46	12°Ω53'19	morning rise	6403 Sep 12 16:26	9°♊04'18	
retrograde	6397 Sep 26 21:19	15°Ω	retrograde	6403 Dec 15 20:46	12°♊22'31	
opposition	6397 Nov 18 11:52	16°Ω07'21	opposition	6404 Feb 29 02:23	10°♊20'04 0°47'32	
min. Earth dist.	6398 Jan 11 09:15	15°♋Ω	min. Earth dist.	6404 Feb 29 10:15	10°♊19'14 17.95407 AU	
direct	6398 Feb 02 16:23	14°Ω05'46 0°30'22	direct	6404 May 13 17:10	8°♊17'59	
evening set	6398 Feb 02 16:14	14°Ω05'47 18.35005 AU	evening set	6404 Aug 14 06:22	11°♊33'15	
conjunction	6398 Apr 18 06:43	12°Ω05'44	conjunction	6404 Aug 30 21:49	12°♊32'55 0°43'43	
minimum elong	6398 Jul 14 11:08	15°Ω	minimum elong	6404 Aug 30 21:48	12°♊32'55 0°43'43	
max. Earth dist.	6398 Jul 18 13:43	15°Ω14'03	max. Earth dist.	6404 Aug 30 12:16	12°♊31'29 19.92053 AU	
morning rise	6398 Aug 04 01:27	16°Ω11'55 0°28'54	morning rise	6404 Sep 16 14:14	13°♊32'45	
retrograde	6398 Aug 04 01:27	16°Ω11'55 0°28'51	retrograde	6404 Dec 19 17:15	16°♊51'35	
opposition	6398 Aug 04 01:41	16°Ω11'57 20.31806 AU	opposition	6405 Mar 04 18:15	14°♊48'57 0°49'34	
min. Earth dist.	6398 Aug 20 15:23	17°Ω10'10	min. Earth dist.	6405 Mar 05 02:21	14°♊48'05 17.88713 AU	
direct	6398 Nov 23 05:19	20°Ω24'54	direct	6405 May 18 10:56	12°♊46'27	
evening set	6399 Feb 07 04:21	18°Ω23'12 0°33'42	evening set	6405 Aug 19 04:28	16°♊02'53	
conjunction	6399 Feb 07 04:35	18°Ω23'10 18.28563 AU	conjunction	6405 Sep 04 20:17	17°♊02'49 0°45'24	
minimum elong	6399 Apr 22 19:14	16°Ω22'52	minimum elong	6405 Sep 04 20:17	17°♊02'49 0°45'23	
max. Earth dist.	6399 Jul 23 06:03	19°Ω32'18	max. Earth dist.	6405 Sep 04 08:54	17°♊01'06 19.85404 AU	
morning rise	6399 Aug 08 18:19	20°Ω30'29 0°31'49	morning rise	6405 Sep 21 12:55	18°♊02'54	
retrograde	6399 Aug 08 18:19	20°Ω30'29 0°31'49	retrograde	6405 Dec 24 12:08	21°♊22'19	
opposition	6399 Aug 08 16:06	20°Ω30'09 20.25338 AU	opposition	6406 Mar 09 10:44	19°♊19'30 0°51'19	
min. Earth dist.	6399 Aug 25 08:55	21°Ω28'59	min. Earth dist.	6406 Mar 09 21:00	19°♊18'24 17.82144 AU	
direct	6399 Nov 27 20:45	24°Ω44'28	direct	6406 May 23 03:28	17°♊16'34	
evening set	6400 Feb 11 17:03	22°Ω42'38 0°36'53	evening set	6406 Aug 24 03:19	20°♊34'10	
conjunction	6400 Feb 11 19:23	22°Ω42'23 18.22075 AU	conjunction	6406 Sep 09 19:34	21°♊34'23 0°46'49	
minimum elong	6400 Apr 26 06:23	20°Ω42'00	minimum elong	6406 Sep 09 19:34	21°♊34'23 0°46'49	
max. Earth dist.	6400 Jul 26 23:17	23°Ω52'35	max. Earth dist.	6406 Sep 09 07:10	21°♊32'30 19.78928 AU	
morning rise	6400 Aug 12 12:24	24°Ω51'04 0°34'36	morning rise	6406 Sep 26 12:19	22°♊34'42	
retrograde	6400 Aug 12 12:23	24°Ω51'04 0°34'34	retrograde	6406 Dec 29 10:03	25°♊54'41	
opposition	6400 Aug 12 09:42	24°Ω50'40 20.18816 AU	opposition	6407 Mar 14 03:48	23°♊51'41 0°52'45	
min. Earth dist.	6400 Aug 29 03:21	25°Ω49'52	min. Earth dist.	6407 Mar 14 14:05	23°♊50'34 17.75776 AU	
direct	6400 Dec 01 15:05	29°Ω06'03	direct	6407 May 27 22:50	21°♊48'20	
evening set	6401 Feb 15 06:18	27°Ω04'06 0°39'52	evening set	6407 Aug 29 02:53	25°♊07'05	
conjunction	6401 Feb 15 09:06	27°Ω03'48 18.15514 AU	conjunction	6407 Sep 14 19:23	26°♊07'33 0°47'57	
minimum elong	6401 Apr 30 20:36	25°Ω03'10	minimum elong	6407 Sep 14 19:23	26°♊07'33 0°47'57	
max. Earth dist.	6401 Jul 31 17:41	28°Ω14'55	max. Earth dist.	6407 Sep 14 05:54	26°♊05'30 19.72675 AU	
morning rise	6401 Aug 17 07:19	29°Ω13'42 0°37'12	morning rise	6407 Oct 01 12:06	27°♊08'06	
retrograde	6401 Aug 17 07:19	29°Ω13'42 0°37'11	retrograde	6407 Dec 01 11:21	0°♊	
opposition	6401 Aug 17 01:59	29°Ω12'54 20.12209 AU	opposition	6408 Jan 03 05:54	0°♊28'36	
min. Earth dist.	6401 Aug 30 07:33	0°♊	min. Earth dist.	6408 Feb 05 10:44	30°♋♊	
direct	6401 Sep 02 22:52	0°♊12'46	direct	6408 Mar 17 21:39	28°♊25'28 0°53'51	
evening set	6401 Dec 06 07:45	3°♊29'40	evening set	6408 Mar 18 09:41	28°♊24'09 17.69680 AU	
conjunction	6402 Feb 19 20:26	1°♊27'34 0°42'40	conjunction	6408 May 31 16:36	26°♊21'43	
minimum elong	6402 Feb 20 01:35	1°♊27'01 18.08871 AU	minimum elong	6408 Sep 02 03:14	29°♊41'37	
max. Earth dist.	6402 Mar 30 02:23	30°♋Ω	max. Earth dist.	6408 Sep 07 05:57	0°♊	
morning rise	6402 May 05 09:50	29°Ω26'15	morning rise	6408 Sep 18 19:58	0°♊42'19 0°48'46	
retrograde	6402 Jun 10 06:00	0°♊	retrograde	6408 Sep 18 19:58	0°♊42'19 0°48'46	

max. Earth dist.	6408 Sep 18 05:23	0° <u>0</u> 40'06	19.66749 AU	direct	6415 Jul 04 01:18	29° <u>0</u> 00'22	
morning rise	6408 Oct 05 12:43	1° <u>0</u> 43'04			6415 Aug 20 23:07	0° <u>0</u>	
retrograde	6409 Jan 07 04:59	5° <u>0</u> 04'06		evening set	6415 Oct 07 00:42	2° <u>0</u> 27'16	
opposition	6409 Mar 22 15:54	3° <u>0</u> 00'49	0°54'37				
min. Earth dist.	6409 Mar 23 03:47	2° <u>0</u> 59'31	17.63939 AU	conjunction	6415 Oct 23 16:59	3° <u>0</u> 29'11	0°45'36
direct	6409 Jun 05 13:17	0° <u>0</u> 56'43		minimum elong	6415 Oct 23 16:59	3° <u>0</u> 29'11	0°45'37
evening set	6409 Sep 07 04:22	4° <u>0</u> 17'44		max. Earth dist.	6415 Oct 22 22:46	3° <u>0</u> 26'21	19.37383 AU
				morning rise	6415 Nov 09 07:11	4° <u>0</u> 30'51	
conjunction	6409 Sep 23 21:20	5° <u>0</u> 18'41	0°49'17	retrograde	6416 Feb 10 01:50	7° <u>0</u> 54'23	
minimum elong	6409 Sep 23 21:20	5° <u>0</u> 18'41	0°49'18	opposition	6416 Apr 23 18:56	5° <u>0</u> 51'14	0°49'56
max. Earth dist.	6409 Sep 23 06:18	5° <u>0</u> 16'22	19.61191 AU	min. Earth dist.	6416 Apr 24 10:57	5° <u>0</u> 49'29	17.36133 AU
morning rise	6409 Oct 10 13:52	6° <u>0</u> 19'37		direct	6416 Jul 08 03:11	3° <u>0</u> 45'43	
retrograde	6410 Jan 12 02:16	9° <u>0</u> 41'06		evening set	6416 Oct 11 05:51	7° <u>0</u> 13'18	
opposition	6410 Mar 27 11:03	7° <u>0</u> 37'46	0°55'02				
min. Earth dist.	6410 Mar 28 00:22	7° <u>0</u> 36'18	17.58596 AU	conjunction	6416 Oct 27 21:34	8° <u>0</u> 15'18	0°43'52
direct	6410 Jun 10 08:34	5° <u>0</u> 33'21		minimum elong	6416 Oct 27 21:34	8° <u>0</u> 15'18	0°43'54
evening set	6410 Sep 12 06:16	8° <u>0</u> 55'28		max. Earth dist.	6416 Oct 27 01:44	8° <u>0</u> 12'12	19.34928 AU
				morning rise	6416 Nov 13 11:18	9° <u>0</u> 17'00	
conjunction	6410 Sep 28 23:13	9° <u>0</u> 56'37	0°49'29	retrograde	6417 Feb 14 01:35	12° <u>0</u> 40'38	
minimum elong	6410 Sep 28 23:13	9° <u>0</u> 56'37	0°49'29	opposition	6417 Apr 28 18:09	10° <u>0</u> 37'32	0°47'50
max. Earth dist.	6410 Sep 28 06:54	9° <u>0</u> 54'06	19.56073 AU	min. Earth dist.	6417 Apr 29 10:46	10° <u>0</u> 35'43	17.33899 AU
morning rise	6410 Oct 15 15:40	10° <u>0</u> 57'44		direct	6417 Jul 13 04:59	8° <u>0</u> 31'51	
retrograde	6411 Jan 17 02:15	14° <u>0</u> 19'41		evening set	6417 Oct 16 11:02	12° <u>0</u> 00'03	
opposition	6411 Apr 01 06:40	12° <u>0</u> 16'17	0°55'05	max. Earth dist.	6417 Nov 01 07:21	12° <u>0</u> 59'06	19.32911 AU
min. Earth dist.	6411 Apr 01 19:47	12° <u>0</u> 14'51	17.53713 AU				
direct	6411 Jun 15 06:19	10° <u>0</u> 11'37		conjunction	6417 Nov 02 02:28	13° <u>0</u> 02'05	0°41'49
evening set	6411 Sep 17 08:46	13° <u>0</u> 34'48		minimum elong	6417 Nov 02 02:28	13° <u>0</u> 02'05	0°41'51
max. Earth dist.	6411 Oct 03 09:43	14° <u>0</u> 33'41	19.51421 AU	morning rise	6417 Nov 18 15:23	14° <u>0</u> 03'48	
					6417 Dec 04 11:36	15° <u>0</u>	
conjunction	6411 Oct 04 01:49	14° <u>0</u> 36'10	0°49'21	retrograde	6418 Feb 19 02:31	17° <u>0</u> 27'27	
minimum elong	6411 Oct 04 01:49	14° <u>0</u> 36'10	0°49'23	opposition	6418 May 03 17:51	15° <u>0</u> 24'25	0°45'23
morning rise	6411 Oct 20 17:51	15° <u>0</u> 37'26		min. Earth dist.	6418 May 04 10:19	15° <u>0</u> 22'36	17.32099 AU
retrograde	6412 Jan 22 00:58	18° <u>0</u> 59'48			6418 May 13 02:04	15° <u>0</u> 11'	
opposition	6412 Apr 05 03:07	16° <u>0</u> 56'26	0°54'47	direct	6418 Jul 18 08:28	13° <u>0</u> 18'36	
min. Earth dist.	6412 Apr 05 17:20	16° <u>0</u> 54'52	17.49303 AU		6418 Sep 19 19:38	15° <u>0</u>	
direct	6412 Jun 19 03:05	14° <u>0</u> 51'33		evening set	6418 Oct 21 16:21	16° <u>0</u> 47'16	
evening set	6412 Sep 21 11:53	18° <u>0</u> 15'45		max. Earth dist.	6418 Nov 06 10:57	17° <u>0</u> 46'10	19.31350 AU
max. Earth dist.	6412 Oct 07 11:12	19° <u>0</u> 14'34	19.47257 AU				
				conjunction	6418 Nov 07 07:04	17° <u>0</u> 49'19	0°39'28
conjunction	6412 Oct 08 04:46	19° <u>0</u> 17'17	0°48'54	minimum elong	6418 Nov 07 07:04	17° <u>0</u> 49'19	0°39'31
minimum elong	6412 Oct 08 04:46	19° <u>0</u> 17'17	0°48'55	morning rise	6418 Nov 23 19:18	18° <u>0</u> 51'01	
morning rise	6412 Oct 24 20:38	20° <u>0</u> 18'42		retrograde	6419 Feb 24 02:21	22° <u>0</u> 14'38	
retrograde	6413 Jan 26 01:40	23° <u>0</u> 41'28		opposition	6419 May 08 17:56	20° <u>0</u> 11'37	0°42'37
opposition	6413 Apr 10 00:06	21° <u>0</u> 38'08	0°54'07	min. Earth dist.	6419 May 09 10:59	20° <u>0</u> 09'46	17.30793 AU
min. Earth dist.	6413 Apr 10 14:24	21° <u>0</u> 36'34	17.45372 AU	direct	6419 Jul 23 10:48	18° <u>0</u> 05'40	
direct	6413 Jun 24 01:56	19° <u>0</u> 33'04		evening set	6419 Oct 26 21:28	21° <u>0</u> 34'43	
evening set	6413 Sep 26 15:42	22° <u>0</u> 58'15					
				conjunction	6419 Nov 12 11:41	22° <u>0</u> 36'44	0°36'51
conjunction	6413 Oct 13 08:34	23° <u>0</u> 59'58	0°48'08	minimum elong	6419 Nov 12 11:41	22° <u>0</u> 36'44	0°36'54
minimum elong	6413 Oct 13 08:34	23° <u>0</u> 59'58	0°48'09	max. Earth dist.	6419 Nov 11 16:26	22° <u>0</u> 33'43	19.30304 AU
max. Earth dist.	6413 Oct 12 15:26	23° <u>0</u> 57'18	19.43540 AU	morning rise	6419 Nov 28 23:05	23° <u>0</u> 38'24	
morning rise	6413 Oct 29 23:50	25° <u>0</u> 01'29		retrograde	6420 Feb 29 03:46	27° <u>0</u> 01'53	
retrograde	6414 Jan 31 01:16	28° <u>0</u> 24'33		opposition	6420 May 12 18:06	24° <u>0</u> 58'56	0°39'33
opposition	6414 Apr 14 21:44	26° <u>0</u> 21'17	0°53'05	min. Earth dist.	6420 May 13 10:21	24° <u>0</u> 57'09	17.30005 AU
min. Earth dist.	6414 Apr 15 12:59	26° <u>0</u> 19'37	17.41871 AU	direct	6420 Jul 27 14:23	22° <u>0</u> 52'52	
direct	6414 Jun 29 01:01	24° <u>0</u> 16'05		evening set	6420 Oct 31 02:28	26° <u>0</u> 22'09	
evening set	6414 Oct 01 20:11	27° <u>0</u> 42'10					
				conjunction	6420 Nov 16 15:58	27° <u>0</u> 24'09	0°33'58
conjunction	6414 Oct 18 12:37	28° <u>0</u> 43'59	0°47'02	minimum elong	6420 Nov 16 15:58	27° <u>0</u> 24'09	0°34'01
minimum elong	6414 Oct 18 12:37	28° <u>0</u> 43'59	0°47'04	max. Earth dist.	6420 Nov 15 20:32	27° <u>0</u> 21'06	19.29793 AU
max. Earth dist.	6414 Oct 17 17:44	28° <u>0</u> 41'03	19.40255 AU	morning rise	6420 Dec 03 02:35	28° <u>0</u> 25'44	
morning rise	6414 Nov 04 03:33	29° <u>0</u> 45'36			6420 Dec 30 13:54	0° <u>0</u> 27'	
retrograde	6414 Nov 08 03:00	0° <u>0</u>		retrograde	6421 Mar 05 03:48	1° <u>0</u> 27'49'02	
opposition	6415 Feb 05 01:34	3° <u>0</u> 08'57			6421 May 12 11:19	30° <u>0</u> 11'	
min. Earth dist.	6415 Apr 19 20:03	1° <u>0</u> 05'44	0°51'41	opposition	6421 May 17 18:39	29° <u>0</u> 46'08	0°36'13
	6415 Apr 20 11:39	1° <u>0</u> 04'02	17.38802 AU	min. Earth dist.	6421 May 18 11:24	29° <u>0</u> 44'18	17.29783 AU
	6415 May 16 03:56	30° <u>0</u> 11'02		direct	6421 Aug 01 16:45	27° <u>0</u> 39'57	

	6421 Oct 16 13:38	0°♈	conjunction	6427 Dec 21 09:48	0°♈42'57	0°08'43
evening set	6421 Nov 05 07:13	1°♈09'24	minimum elong	6427 Dec 21 09:48	0°♈42'57	0°08'46
			behind sun begin	6427 Dec 21 04:02	0°♈42'04	
conjunction	6421 Nov 21 19:59	2°♈11'19 0°30'52	behind sun end	6427 Dec 21 15:34	0°♈43'50	
minimum elong	6421 Nov 21 19:59	2°♈11'19 0°30'54	max. Earth dist.	6427 Dec 20 20:51	0°♈40'56	19.43427 AU
max. Earth dist.	6421 Nov 21 01:23	2°♈08'24 19.29870 AU	morning rise	6428 Jan 06 13:47	1°♈43'23	
morning rise	6421 Dec 08 05:44	3°♈12'49	retrograde	6428 Apr 07 00:20	5°♈04'06	
retrograde	6422 Mar 10 04:48	6°♈35'51	opposition	6428 Jun 19 23:54	3°♈02'22	0°07'29
opposition	6422 May 22 19:11	4°♈33'01 0°32'37	min. Earth dist.	6428 Jun 20 09:59	3°♈01'17	17.45433 AU
min. Earth dist.	6422 May 23 10:30	4°♈31'21 17.30156 AU	direct	6428 Sep 04 15:28	0°♈57'04	
direct	6422 Aug 06 20:24	2°♈26'49	evening set	6428 Dec 09 03:52	4°♈24'46	
evening set	6422 Nov 10 11:38	5°♈56'17				
			conjunction	6428 Dec 25 10:12	5°♈25'26	0°04'43
conjunction	6422 Nov 26 23:35	6°♈58'06 0°27'32	minimum elong	6428 Dec 25 10:12	5°♈25'26	0°04'46
minimum elong	6422 Nov 26 23:35	6°♈58'06 0°27'35	behind sun begin	6428 Dec 25 03:41	5°♈24'27	
max. Earth dist.	6422 Nov 26 05:49	6°♈55'18 19.30558 AU	behind sun end	6428 Dec 25 16:43	5°♈26'26	
morning rise	6422 Dec 13 08:20	7°♈59'28	max. Earth dist.	6428 Dec 24 23:20	5°♈23'45	19.47535 AU
retrograde	6423 Mar 15 04:17	11°♈22'13	morning rise	6429 Jan 10 13:02	6°♈25'37	
opposition	6423 May 27 20:04	9°♈19'28 0°28'48	retrograde	6429 Apr 11 21:47	9°♈45'48	
min. Earth dist.	6423 May 28 11:33	9°♈17'47 17.31176 AU	opposition	6429 Jun 25 00:30	7°♈44'19	0°02'59
direct	6423 Aug 11 22:42	7°♈13'17	min. Earth dist.	6429 Jun 25 10:26	7°♈43'15	17.49723 AU
evening set	6423 Nov 15 15:29	10°♈42'41	direct	6429 Sep 09 17:54	5°♈39'16	
max. Earth dist.	6423 Dec 01 09:32	11°♈41'41 19.31914 AU	evening set	6429 Dec 14 04:31	9°♈06'20	
conjunction	6423 Dec 02 02:32	11°♈44'22 0°24'02	conjunction	6429 Dec 30 09:37	10°♈06'44	0°00'38
minimum elong	6423 Dec 02 02:32	11°♈44'22 0°24'04	minimum elong	6429 Dec 30 09:36	10°♈06'44	0°00'42
morning rise	6423 Dec 18 10:27	12°♈45'35	behind sun begin	6429 Dec 30 02:58	10°♈05'43	
retrograde	6424 Mar 19 04:45	16°♈08'00	behind sun end	6429 Dec 30 16:15	10°♈07'44	
opposition	6424 May 31 20:51	14°♈05'24 0°24'48	max. Earth dist.	6429 Dec 29 22:39	10°♈05'02	19.52003 AU
min. Earth dist.	6424 Jun 01 10:25	14°♈03'55 17.32850 AU	morning rise	6430 Jan 15 11:36	11°♈06'39	
direct	6424 Aug 16 02:47	11°♈59'17	desc. node	6430 Feb 24 20:36	13°♈16'49	
evening set	6424 Nov 19 19:03	15°♈28'32	retrograde	6430 Apr 16 19:40	14°♈26'17	
			opposition	6430 Jun 30 00:45	12°♈25'00	-0°01'31
conjunction	6424 Dec 06 05:17	16°♈30'04 0°20'22	min. Earth dist.	6430 Jun 30 09:10	12°♈24'06	17.54356 AU
minimum elong	6424 Dec 06 05:17	16°♈30'04 0°20'25	direct	6430 Sep 14 20:37	10°♈20'12	
max. Earth dist.	6424 Dec 05 13:50	16°♈27'38 19.33915 AU	evening set	6430 Dec 19 04:10	13°♈46'33	
morning rise	6424 Dec 22 12:06	17°♈31'07				
retrograde	6425 Mar 24 03:21	20°♈53'09	conjunction	6431 Jan 04 08:25	14°♈46'40	-0°03'29
opposition	6425 Jun 05 21:40	18°♈50'44 0°20'38	minimum elong	6431 Jan 04 08:24	14°♈46'40	0°03'27
min. Earth dist.	6425 Jun 06 11:22	18°♈49'15 17.35167 AU	behind sun begin	6431 Jan 04 01:48	14°♈45'40	
direct	6425 Aug 21 05:15	16°♈44'46	behind sun end	6431 Jan 04 15:00	14°♈47'40	
evening set	6425 Nov 24 22:13	20°♈13'47	max. Earth dist.	6431 Jan 03 23:39	14°♈45'19	19.56786 AU
			morning rise	6431 Jan 20 09:16	15°♈46'20	
conjunction	6425 Dec 11 07:24	21°♈15'07 0°16'34	retrograde	6431 Apr 21 16:13	19°♈05'21	
minimum elong	6425 Dec 11 07:24	21°♈15'07 0°16'37	opposition	6431 Jul 05 00:44	17°♈04'16	-0°05'59
max. Earth dist.	6425 Dec 10 16:20	21°♈12'46 19.36550 AU	min. Earth dist.	6431 Jul 05 08:34	17°♈03'26	17.59271 AU
morning rise	6425 Dec 27 13:23	22°♈15'59	direct	6431 Sep 19 22:16	14°♈59'44	
retrograde	6426 Mar 29 03:11	25°♈37'38	evening set	6431 Dec 24 03:01	18°♈25'15	
opposition	6426 Jun 10 22:28	23°♈35'26 0°16'20				
min. Earth dist.	6426 Jun 11 10:16	23°♈34'09 17.38083 AU	conjunction	6432 Jan 09 06:06	19°♈25'05	-0°07'27
direct	6426 Aug 26 09:16	21°♈29'39	minimum elong	6432 Jan 09 06:05	19°♈25'05	0°07'24
evening set	6426 Nov 30 00:37	24°♈58'20	behind sun begin	6432 Jan 09 00:01	19°♈24'10	
			behind sun end	6432 Jan 09 12:10	19°♈26'00	
conjunction	6426 Dec 16 08:56	25°♈59'28 0°12'41	max. Earth dist.	6432 Jan 08 21:20	19°♈23'44	19.61837 AU
minimum elong	6426 Dec 16 08:56	25°♈59'28 0°12'44	morning rise	6432 Jan 25 06:12	20°♈24'28	
behind sun begin	6426 Dec 16 04:45	25°♈58'49	retrograde	6432 Apr 25 12:46	23°♈42'52	
behind sun end	6426 Dec 16 13:07	26°♈00'06	opposition	6432 Jul 09 00:14	21°♈41'57	-0°10'23
max. Earth dist.	6426 Dec 15 19:55	25°♈57'26 19.39738 AU	min. Earth dist.	6432 Jul 09 06:50	21°♈41'15	17.64448 AU
morning rise	6427 Jan 01 13:45	27°♈00'07	direct	6432 Sep 23 23:07	19°♈37'40	
	6427 Mar 06 09:41	0°♈	evening set	6432 Dec 28 00:53	23°♈02'18	
retrograde	6427 Apr 03 01:25	0°♈21'19				
	6427 May 01 05:24	30°♈♈	conjunction	6433 Jan 13 03:06	24°♈01'50	-0°11'21
opposition	6427 Jun 15 23:24	28°♈19'22 0°11'56	minimum elong	6433 Jan 13 03:06	24°♈01'50	0°11'19
min. Earth dist.	6427 Jun 16 11:10	28°♈18'06 17.41525 AU	behind sun begin	6433 Jan 12 22:13	24°♈01'06	
direct	6427 Aug 31 11:54	26°♈13'49	behind sun end	6433 Jan 13 07:58	24°♈02'35	
evening set	6427 Dec 05 02:38	29°♈42'03	max. Earth dist.	6433 Jan 12 20:30	24°♈00'50	19.67128 AU
	6427 Dec 09 23:13	0°♈	morning rise	6433 Jan 29 02:09	25°♈00'56	

retrograde	6433 Apr 30 08:37	28°  18'39	morning rise	6439 Feb 25 06:18	21°  59'33
opposition	6433 Jul 13 23:13	26°  17'55 -0°14'42	retrograde	6439 May 27 17:40	25°  13'12
min. Earth dist.	6433 Jul 14 04:49	26°  17'20 17.69840 AU	opposition	6439 Aug 11 05:31	23°  13'22 -0°37'09
direct	6433 Sep 28 23:51	24°  13'53	min. Earth dist.	6439 Aug 11 01:57	23°  13'44 18.07219 AU
evening set	6434 Jan 01 21:54	27°  37'33	direct	6439 Oct 27 12:05	21°  11'16
			evening set	6440 Jan 29 05:53	24°  28'23
conjunction	6434 Jan 17 22:59	28°  36'46 -0°15'10			
minimum elong	6434 Jan 17 22:59	28°  36'46 0°15'08	conjunction	6440 Feb 14 01:51	25°  25'42 -0°34'52
behind sun begin	6434 Jan 17 20:37	28°  36'25	minimum elong	6440 Feb 14 01:50	25°  25'42 0°34'50
behind sun end	6434 Jan 18 01:20	28°  37'08	max. Earth dist.	6440 Feb 14 05:36	25°  26'16 20.10661 AU
max. Earth dist.	6434 Jan 17 16:45	28°  35'49 19.72640 AU	morning rise	6440 Feb 29 19:59	26°  22'46
morning rise	6434 Feb 02 21:18	29°  35'35	retrograde	6440 May 31 07:26	29°  35'47
	6434 Feb 09 16:48	0°  22'38	opposition	6440 Aug 15 00:32	27°  36'08 -0°40'08
retrograde	6434 May 05 03:33	2°  52'38	min. Earth dist.	6440 Aug 14 20:28	27°  36'34 18.14100 AU
opposition	6434 Jul 18 21:50	0°  52'01 -0°18'54	direct	6440 Oct 31 05:46	25°  34'27
min. Earth dist.	6434 Jul 19 02:17	0°  51'33 17.75474 AU	evening set	6441 Feb 01 19:58	28°  50'26
	6434 Aug 09 03:54	30°  R 			
direct	6434 Oct 03 22:36	28°  348'14	conjunction	6441 Feb 17 15:13	29°  47'27 -0°37'27
	6434 Nov 26 12:38	0°  22'38	minimum elong	6441 Feb 17 15:13	29°  47'27 0°37'26
evening set	6435 Jan 06 17:33	2°  10'52	max. Earth dist.	6441 Feb 17 20:26	29°  48'14 20.17562 AU
				6441 Feb 21 02:03	0°  22'38
conjunction	6435 Jan 22 17:49	3°  09'47 -0°18'52	morning rise	6441 Mar 05 08:51	0°  22'38
minimum elong	6435 Jan 22 17:49	3°  09'47 0°18'50	retrograde	6441 Jun 04 22:52	3°  56'38
max. Earth dist.	6435 Jan 22 13:56	3°  09'12 19.78391 AU	opposition	6441 Aug 19 18:52	1°  57'11 -0°42'53
morning rise	6435 Feb 07 15:14	4°  08'18	min. Earth dist.	6441 Aug 19 12:35	1°  57'50 18.20995 AU
retrograde	6435 May 09 22:48	7°  24'38		6441 Oct 23 06:20	30°  R 
opposition	6435 Jul 23 19:48	5°  24'09 -0°22'56	direct	6441 Nov 05 01:46	29°  55'54
min. Earth dist.	6435 Jul 23 22:37	5°  23'52 17.81335 AU		6441 Nov 17 15:54	0°  22'38
direct	6435 Oct 08 22:45	3°  20'39	evening set	6442 Feb 06 09:17	3°  56'38
evening set	6436 Jan 11 12:27	6°  42'13			
			conjunction	6442 Feb 22 03:52	4°  07'28 -0°39'49
conjunction	6436 Jan 27 11:40	7°  40'48 -0°22'26	minimum elong	6442 Feb 22 03:52	4°  07'28 0°39'47
minimum elong	6436 Jan 27 11:39	7°  40'48 0°22'24	max. Earth dist.	6442 Feb 22 10:28	4°  08'28 20.24437 AU
max. Earth dist.	6436 Jan 27 08:41	7°  40'21 19.84377 AU	morning rise	6442 Mar 09 21:03	5°  03'59
morning rise	6436 Feb 12 08:23	8°  39'01	retrograde	6442 Jun 09 11:41	8°  15'48
retrograde	6436 May 13 15:31	11°  54'40	opposition	6442 Aug 24 12:49	6°  16'31 -0°45'22
opposition	6436 Jul 27 17:03	9°  54'18 -0°26'48	min. Earth dist.	6442 Aug 24 06:18	6°  17'11 18.27849 AU
min. Earth dist.	6436 Jul 27 18:51	9°  54'07 17.87461 AU	direct	6442 Nov 09 17:59	4°  15'38
direct	6436 Oct 12 19:44	7°  51'05	evening set	6443 Feb 10 21:38	7°  29'21
evening set	6437 Jan 15 06:17	11°  11'34			
			conjunction	6443 Feb 26 15:39	8°  25'46 -0°41'56
conjunction	6437 Jan 31 04:41	12°  09'50 -0°25'49	minimum elong	6443 Feb 26 15:39	8°  25'46 0°41'56
minimum elong	6437 Jan 31 04:40	12°  09'50 0°25'47	max. Earth dist.	6443 Feb 26 23:15	8°  26'55 20.31238 AU
max. Earth dist.	6437 Jan 31 03:53	12°  09'43 19.90630 AU	morning rise	6443 Mar 14 08:31	9°  22'02
morning rise	6437 Feb 16 00:36	13°  07'45	retrograde	6443 Jun 14 02:03	12°  33'15
	6437 Mar 22 15:34	15°  22'42	opposition	6443 Aug 29 05:57	10°  34'09 -0°47'34
retrograde	6437 May 18 09:52	16°  22'42	min. Earth dist.	6443 Aug 28 21:22	10°  35'01 18.34576 AU
	6437 Jul 17 07:53	15°  R 	direct	6443 Nov 14 11:54	8°  33'38
opposition	6437 Aug 01 13:49	14°  22'30 -0°30'28	evening set	6444 Feb 15 09:22	11°  46'13
min. Earth dist.	6437 Aug 01 13:27	14°  22'33 17.93831 AU			
direct	6437 Oct 17 18:52	12°  19'38	conjunction	6444 Mar 02 02:52	12°  42'22 -0°43'49
	6438 Jan 08 19:41	15°  22'33	minimum elong	6444 Mar 02 02:52	12°  42'22 0°43'48
evening set	6438 Jan 19 23:05	15°  39'00	max. Earth dist.	6444 Mar 02 11:42	12°  43'41 20.37867 AU
			morning rise	6444 Mar 17 19:22	13°  38'23
conjunction	6438 Feb 04 20:32	16°  36'57 -0°29'02	retrograde	6444 Jun 17 13:48	16°  49'01
minimum elong	6438 Feb 04 20:32	16°  36'57 0°29'00	opposition	6444 Sep 01 22:31	14°  50'03 -0°49'30
max. Earth dist.	6438 Feb 04 21:02	16°  37'01 19.97119 AU	min. Earth dist.	6444 Sep 01 14:03	14°  50'55 18.41113 AU
morning rise	6438 Feb 20 15:49	17°  34'34	direct	6444 Nov 18 02:42	12°  49'54
retrograde	6438 May 23 00:50	20°  48'52	evening set	6445 Feb 18 20:19	16°  01'22
opposition	6438 Aug 06 10:05	18°  48'50 -0°33'55			
min. Earth dist.	6438 Aug 06 08:47	18°  48'58 18.00441 AU	conjunction	6445 Mar 06 13:20	16°  57'15 -0°45'27
direct	6438 Oct 22 14:21	16°  46'20	minimum elong	6445 Mar 06 13:20	16°  57'15 0°45'27
evening set	6439 Jan 24 14:56	20°  04'35	max. Earth dist.	6445 Mar 06 22:42	16°  58'39 20.44290 AU
			morning rise	6445 Mar 22 05:39	17°  53'01
conjunction	6439 Feb 09 11:39	21°  02'13 -0°32'03	retrograde	6445 Jun 22 02:59	21°  03'06
minimum elong	6439 Feb 09 11:39	21°  02'13 0°32'01	opposition	6445 Sep 06 14:26	19°  04'14 -0°51'09
max. Earth dist.	6439 Feb 09 14:04	21°  02'35 20.03827 AU	min. Earth dist.	6445 Sep 06 03:59	19°  05'18 18.47407 AU

direct	6445 Nov 22 19:01	17° ✕ 04'25	minimum elong	6452 Apr 03 19:15	15° Υ 55'03	0°49'36
evening set	6446 Feb 23 06:19	20° ✕ 14'46	max. Earth dist.	6452 Apr 04 11:50	15° Υ 57'28	20.82182 AU
			morning rise	6452 Apr 19 11:48	16° Υ 49'37	
conjunction	6446 Mar 10 22:59	21° ✕ 10'24 -0°46'50	retrograde	6452 Jul 21 00:32	19° Υ 56'32	
minimum elong	6446 Mar 10 22:59	21° ✕ 10'24 0°46'49	opposition	6452 Oct 06 11:15	17° Υ 57'58	-0°54'38
max. Earth dist.	6446 Mar 11 09:40	21° ✕ 11'59 20.50442 AU	min. Earth dist.	6452 Oct 05 19:32	17° Υ 59'33	18.84487 AU
morning rise	6446 Mar 26 15:06	22° ✕ 05'57	direct	6452 Dec 22 05:18	16° Υ 00'02	
retrograde	6446 Jun 26 13:35	25° ✕ 15'30	evening set	6453 Mar 23 09:03	19° Υ 03'39	
opposition	6446 Sep 11 05:51	23° ✕ 16'42 -0°52'31				
min. Earth dist.	6446 Sep 10 19:36	23° ✕ 17'44 18.53429 AU	conjunction	6453 Apr 08 00:51	19° Υ 57'57	-0°49'09
direct	6446 Nov 27 08:23	21° ✕ 17'10	minimum elong	6453 Apr 08 00:51	19° Υ 57'57	0°49'11
evening set	6447 Feb 27 15:39	24° ✕ 26'25	max. Earth dist.	6453 Apr 08 17:31	20° Υ 00'23	20.86674 AU
			morning rise	6453 Apr 23 17:48	20° Υ 52'26	
conjunction	6447 Mar 15 07:59	25° ✕ 21'49 -0°47'57	retrograde	6453 Jul 25 10:22	23° Υ 59'03	
minimum elong	6447 Mar 15 07:59	25° ✕ 21'49 0°47'56	opposition	6453 Oct 10 22:12	22° Υ 00'34	-0°54'01
max. Earth dist.	6447 Mar 15 19:02	25° ✕ 23'27 20.56329 AU	min. Earth dist.	6453 Oct 10 04:55	22° Υ 02'18	18.88835 AU
morning rise	6447 Mar 31 00:06	26° ✕ 17'10	direct	6453 Dec 26 14:30	20° Υ 02'55	
retrograde	6447 Jul 01 01:29	29° ✕ 26'10	evening set	6454 Mar 27 14:08	23° Υ 05'47	
opposition	6447 Sep 15 20:12	27° ✕ 27'25 -0°53'36				
min. Earth dist.	6447 Sep 15 08:06	27° ✕ 28'38 18.59176 AU	conjunction	6454 Apr 12 06:10	23° Υ 59'59	-0°48'29
direct	6447 Dec 01 22:59	25° ✕ 28'08	minimum elong	6454 Apr 12 06:10	23° Υ 59'59	0°48'30
evening set	6448 Mar 03 00:09	28° ✕ 36'20	max. Earth dist.	6454 Apr 13 00:16	24° Υ 02'36	20.90856 AU
			morning rise	6454 Apr 27 23:23	24° Υ 54'22	
conjunction	6448 Mar 18 16:18	29° ✕ 31'30 -0°48'48	retrograde	6454 Jul 29 18:17	28° Υ 00'46	
minimum elong	6448 Mar 18 16:18	29° ✕ 31'30 0°48'48	opposition	6454 Oct 15 08:48	26° Υ 02'20	-0°53'08
max. Earth dist.	6448 Mar 19 04:47	29° ✕ 33'20 20.61936 AU	min. Earth dist.	6454 Oct 14 15:49	26° Υ 04'02	18.92849 AU
	6448 Mar 26 17:21	0° Υ	direct	6454 Dec 30 23:06	24° Υ 04'58	
morning rise	6448 Apr 03 08:19	0° Υ 26'40	evening set	6455 Mar 31 19:05	27° Υ 07'09	
retrograde	6448 Jul 04 10:38	3° Υ 35'10				
opposition	6448 Sep 19 10:08	1° Υ 36'26 -0°54'23	conjunction	6455 Apr 16 11:15	28° Υ 01'15	-0°47'35
min. Earth dist.	6448 Sep 18 22:10	1° Υ 37'38 18.64666 AU	minimum elong	6455 Apr 16 11:15	28° Υ 01'15	0°47'37
	6448 Nov 04 20:37	30° ✕ 3	max. Earth dist.	6455 Apr 17 05:01	28° Υ 03'49	20.94693 AU
direct	6448 Dec 05 10:35	29° ✕ 37'24	morning rise	6455 May 02 04:59	28° Υ 55'34	
	6449 Jan 04 09:11	0° Υ		6455 May 22 03:16	0° ♄	
evening set	6449 Mar 07 07:53	2° Υ 44'34	retrograde	6455 Aug 03 04:03	2° ♄ 01'45	
			opposition	6455 Oct 19 18:41	0° ♄ 03'24	-0°52'00
conjunction	6449 Mar 22 23:45	3° Υ 39'31 -0°49'23	min. Earth dist.	6455 Oct 19 00:39	0° ♄ 05'12	18.96489 AU
minimum elong	6449 Mar 22 23:45	3° Υ 39'31 0°49'23		6455 Oct 21 04:43	30° ✕ Υ	
max. Earth dist.	6449 Mar 23 12:44	3° Υ 41'25 20.67312 AU	direct	6456 Jan 04 06:48	28° Υ 06'15	
morning rise	6449 Apr 07 15:54	4° Υ 34'30		6456 Mar 13 20:12	0° ♄	
retrograde	6449 Jul 08 21:36	7° Υ 42'32	evening set	6456 Apr 03 23:47	1° ♄ 07'50	
opposition	6449 Sep 23 23:19	5° Υ 43'49 -0°54'52				
min. Earth dist.	6449 Sep 23 09:20	5° Υ 45'13 18.69937 AU	conjunction	6456 Apr 19 16:17	2° ♄ 01'51	-0°46'27
direct	6449 Dec 09 23:32	3° Υ 45'03	minimum elong	6456 Apr 19 16:17	2° ♄ 01'51	0°46'28
evening set	6450 Mar 11 14:59	6° Υ 51'14	max. Earth dist.	6456 Apr 20 11:05	2° ♄ 04'34	20.98112 AU
			morning rise	6456 May 05 10:21	2° ♄ 56'08	
conjunction	6450 Mar 27 06:47	7° Υ 46'00 -0°49'42	retrograde	6456 Aug 06 11:14	6° ♄ 02'09	
minimum elong	6450 Mar 27 06:47	7° Υ 46'00 0°49'44	min. Earth dist.	6456 Oct 22 11:03	4° ♄ 05'35	18.99685 AU
max. Earth dist.	6450 Mar 27 21:28	7° Υ 48'09 20.72473 AU	opposition	6456 Oct 23 04:30	4° ♄ 03'50	-0°50'37
morning rise	6450 Apr 11 22:57	8° Υ 40'50	direct	6457 Jan 07 15:04	2° ♄ 06'56	
retrograde	6450 Jul 13 06:01	11° Υ 48'27	evening set	6457 Apr 08 04:16	5° ♄ 07'56	
opposition	6450 Sep 28 11:56	9° Υ 49'46 -0°55'04				
min. Earth dist.	6450 Sep 27 21:56	9° Υ 51'10 18.75008 AU	conjunction	6457 Apr 23 20:59	6° ♄ 01'53	-0°45'06
direct	6450 Dec 14 09:22	7° Υ 51'16	minimum elong	6457 Apr 23 20:59	6° ♄ 01'53	0°45'08
evening set	6451 Mar 15 21:28	10° Υ 56'31	max. Earth dist.	6457 Apr 24 15:07	6° ♄ 04'30	21.01077 AU
			morning rise	6457 May 09 15:39	6° ♄ 56'07	
conjunction	6451 Mar 31 13:12	11° Υ 51'07 -0°49'46	retrograde	6457 Aug 10 21:07	10° ♄ 02'02	
minimum elong	6451 Mar 31 13:11	11° Υ 51'07 0°49'47	opposition	6457 Oct 27 13:57	8° ♄ 03'43	-0°48'59
max. Earth dist.	6451 Apr 01 04:12	11° Υ 53'19 20.77445 AU	min. Earth dist.	6457 Oct 26 19:46	8° ♄ 05'32	19.02400 AU
morning rise	6451 Apr 16 05:38	12° Υ 45'49	direct	6458 Jan 11 22:28	6° ♄ 06'59	
retrograde	6451 Jul 17 16:19	15° Υ 53'03	evening set	6458 Apr 12 08:40	9° ♄ 07'28	
opposition	6451 Oct 02 23:50	13° Υ 54'25 -0°54'59				
min. Earth dist.	6451 Oct 02 07:59	13° Υ 56'00 18.79872 AU	conjunction	6458 Apr 28 01:51	10° ♄ 01'23	-0°43'32
direct	6451 Dec 18 20:25	11° Υ 56'12	minimum elong	6458 Apr 28 01:51	10° ♄ 01'23	0°43'33
evening set	6452 Mar 19 03:28	15° Υ 00'36	max. Earth dist.	6458 Apr 28 20:42	10° ♄ 04'06	21.03518 AU
			morning rise	6458 May 13 20:59	10° ♄ 55'37	
conjunction	6452 Apr 03 19:15	15° Υ 55'03 -0°49'35	retrograde	6458 Aug 15 03:42	14° ♄ 01'24	

opposition	6458 Oct 31 23:02	12° 8 03'05 -0°47'08	min. Earth dist.	6464 Nov 24 06:53	5° II 52'09 19.07083 AU
min. Earth dist.	6458 Oct 31 05:39	12° 8 04'49 19.04570 AU	direct	6465 Feb 08 19:02	3° II 53'58
direct	6459 Jan 16 05:48	10° 8 06'29	evening set	6465 May 09 13:26	6° II 52'29
evening set	6459 Apr 16 13:00	13° 8 06'30			
			conjunction	6465 May 25 10:37	7° II 46'36 -0°27'18
conjunction	6459 May 02 06:34	14° 8 00'23 -0°41'46	minimum elong	6465 May 25 10:37	7° II 46'36 0°27'20
minimum elong	6459 May 02 06:34	14° 8 00'23 0°41'48	max. Earth dist.	6465 May 26 03:36	7° II 49'02 21.06613 AU
max. Earth dist.	6459 May 03 00:21	14° 8 02'57 21.05418 AU	morning rise	6465 Jun 10 10:54	8° II 41'09
morning rise	6459 May 18 02:26	14° 8 54'36	retrograde	6465 Sep 12 09:30	11° II 47'13
	6459 May 19 17:02	15° 8	opposition	6465 Nov 29 06:36	9° II 48'09 -0°28'31
retrograde	6459 Aug 19 13:05	18° 8 00'19	min. Earth dist.	6465 Nov 28 14:14	9° II 49'48 19.06093 AU
opposition	6459 Nov 05 07:46	16° 8 01'56 -0°45'03	direct	6466 Feb 13 00:18	7° II 51'34
min. Earth dist.	6459 Nov 04 14:02	16° 8 03'42 19.06187 AU	evening set	6466 May 13 17:59	10° II 50'08
	6459 Dec 02 14:39	15° 8 8			
direct	6460 Jan 20 13:02	14° 8 05'23	conjunction	6466 May 29 16:01	11° II 44'21 -0°24'22
	6460 Mar 07 13:31	15° 8	minimum elong	6466 May 29 16:01	11° II 44'21 0°24'25
evening set	6460 Apr 19 17:04	17° 8 04'59	max. Earth dist.	6466 May 30 09:32	11° II 46'52 21.05433 AU
			morning rise	6466 Jun 14 17:01	12° II 39'02
conjunction	6460 May 05 11:13	17° 8 58'52 -0°39'47	retrograde	6466 Sep 16 17:20	15° II 45'19
minimum elong	6460 May 05 11:13	17° 8 58'52 0°39'50	opposition	6466 Dec 03 13:50	13° II 46'11 -0°25'12
max. Earth dist.	6460 May 06 05:37	18° 8 01'31 21.06751 AU	min. Earth dist.	6466 Dec 02 22:10	13° II 47'46 19.04722 AU
morning rise	6460 May 21 07:36	18° 8 53'06	direct	6467 Feb 17 05:30	11° II 49'35
retrograde	6460 Aug 22 19:01	21° 8 58'46	evening set	6467 May 17 22:57	14° II 48'16
opposition	6460 Nov 08 16:13	20° 8 00'16 -0°42'46			
min. Earth dist.	6460 Nov 07 23:17	20° 8 01'58 19.07250 AU	conjunction	6467 Jun 02 21:39	15° II 42'37 -0°21'18
direct	6461 Jan 23 19:31	18° 8 03'46	minimum elong	6467 Jun 02 21:39	15° II 42'37 0°21'21
evening set	6461 Apr 23 21:09	21° 8 03'00	max. Earth dist.	6467 Jun 03 13:48	15° II 44'55 21.03886 AU
			morning rise	6467 Jun 18 23:38	16° II 37'25
conjunction	6461 May 09 15:45	21° 8 56'53 -0°37'37	retrograde	6467 Sep 21 02:19	19° II 44'01
minimum elong	6461 May 09 15:45	21° 8 56'53 0°37'40	opposition	6467 Dec 07 21:12	17° II 44'49 -0°21'45
max. Earth dist.	6461 May 10 09:14	21° 8 59'23 21.07577 AU	min. Earth dist.	6467 Dec 07 05:48	17° II 46'22 19.02979 AU
morning rise	6461 May 25 12:57	22° 8 51'09	direct	6468 Feb 21 10:29	15° II 48'11
retrograde	6461 Aug 27 03:42	25° 8 56'47	evening set	6468 May 21 04:07	18° II 47'04
min. Earth dist.	6461 Nov 12 07:06	23° 8 59'53 19.07837 AU			
opposition	6461 Nov 13 00:20	23° 8 58'10 -0°40'16	conjunction	6468 Jun 06 03:42	19° II 41'33 -0°18'08
direct	6462 Jan 28 02:13	22° 8 01'39	minimum elong	6468 Jun 06 03:42	19° II 41'33 0°18'11
evening set	6462 Apr 28 01:02	25° 8 00'35	max. Earth dist.	6468 Jun 06 20:13	19° II 43'55 21.01938 AU
			morning rise	6468 Jun 22 06:23	20° II 36'30
conjunction	6462 May 13 20:19	25° 8 54'30 -0°35'17	retrograde	6468 Sep 24 10:40	23° II 43'26
minimum elong	6462 May 13 20:19	25° 8 54'30 0°35'20	opposition	6468 Dec 11 04:43	21° II 44'11 -0°18'12
max. Earth dist.	6462 May 14 14:36	25° 8 57'07 21.07930 AU	min. Earth dist.	6468 Dec 10 14:08	21° II 45'39 19.00819 AU
morning rise	6462 May 29 18:10	26° 8 48'48	direct	6469 Feb 24 16:01	19° II 47'32
retrograde	6462 Aug 31 09:51	29° 8 54'28	evening set	6469 May 25 10:00	22° II 46'41
opposition	6462 Nov 17 08:12	27° 8 55'43 -0°37'35			
min. Earth dist.	6462 Nov 16 15:36	27° 8 57'23 19.07973 AU	conjunction	6469 Jun 10 10:17	23° II 41'19 -0°14'53
direct	6463 Feb 01 07:56	25° 8 59'12	minimum elong	6469 Jun 10 10:17	23° II 41'19 0°14'56
evening set	6463 May 02 05:08	28° 8 57'54	behind sun begin	6469 Jun 10 07:48	23° II 40'58
			behind sun end	6469 Jun 10 12:46	23° II 41'40
conjunction	6463 May 18 00:57	29° 8 51'52 -0°32'46	max. Earth dist.	6469 Jun 11 01:09	23° II 43'26 20.99579 AU
minimum elong	6463 May 18 00:57	29° 8 51'52 0°32'48	morning rise	6469 Jun 26 13:58	24° II 36'26
max. Earth dist.	6463 May 18 18:15	29° 8 54'21 21.07871 AU	retrograde	6469 Sep 28 20:48	27° II 43'46
	6463 May 20 09:41	0° II	opposition	6469 Dec 15 12:17	25° II 44'26 -0°14'33
morning rise	6463 Jun 02 23:38	0° II 46'14	min. Earth dist.	6469 Dec 14 22:25	25° II 45'50 18.98239 AU
retrograde	6463 Sep 04 18:05	3° II 51'58	direct	6470 Feb 28 21:14	23° II 47'42
opposition	6463 Nov 21 15:40	1° II 53'06 -0°34'43	evening set	6470 May 29 16:19	26° II 47'12
min. Earth dist.	6463 Nov 20 22:51	1° II 54'47 19.07720 AU			
	6464 Jan 24 20:57	30° 8 8	conjunction	6470 Jun 14 17:34	27° II 42'01 -0°11'32
direct	6464 Feb 05 13:47	29° 8 56'33	minimum elong	6470 Jun 14 17:34	27° II 42'01 0°11'35
	6464 Feb 17 03:34	0° II	behind sun begin	6470 Jun 14 12:49	27° II 41'21
evening set	6464 May 05 09:14	2° II 55'09	behind sun end	6470 Jun 14 22:18	27° II 42'41
			max. Earth dist.	6470 Jun 15 08:25	27° II 44'08 20.96757 AU
conjunction	6464 May 21 05:47	3° II 49'11 -0°30'06	morning rise	6470 Jun 30 22:00	28° II 37'18
minimum elong	6464 May 21 05:47	3° II 49'11 0°30'09		6470 Jul 27 07:09	0° 8
max. Earth dist.	6464 May 21 23:48	3° II 51'45 21.07420 AU	retrograde	6470 Oct 03 05:31	1° 8 45'03
morning rise	6464 Jun 06 05:08	4° II 43'37		6470 Dec 13 21:54	30° 8 II
retrograde	6464 Sep 08 01:06	7° II 49'29	opposition	6470 Dec 19 20:02	29° II 45'38 -0°10'48
opposition	6464 Nov 24 23:11	5° II 50'31 -0°31'41	min. Earth dist.	6470 Dec 19 07:19	29° II 46'56 18.95165 AU

direct	6471 Mar 05 03:09	27° Π 48'48	behind sun begin	6476 Jul 08 19:53	22° \mathfrak{D} 06'31	
	6471 May 18 23:23	0° \mathfrak{D}	behind sun end	6476 Jul 09 06:57	22° \mathfrak{D} 08'04	
evening set	6471 Jun 02 23:24	0° \mathfrak{D} 48'43	max. Earth dist.	6476 Jul 09 09:03	22° \mathfrak{D} 08'22	20.69904 AU
			morning rise	6476 Jul 25 10:58	23° \mathfrak{D} 03'52	
conjunction	6471 Jun 19 01:22	1° \mathfrak{D} 43'43 -0°08'08	retrograde	6476 Oct 27 23:21	26° \mathfrak{D} 14'31	
minimum elong	6471 Jun 19 01:22	1° \mathfrak{D} 43'43 0°08'11	opposition	6477 Jan 12 22:55	24° \mathfrak{D} 13'56	0°12'30
behind sun begin	6471 Jun 18 19:29	1° \mathfrak{D} 42'53	min. Earth dist.	6477 Jan 12 16:50	24° \mathfrak{D} 14'34	18.67068 AU
behind sun end	6471 Jun 19 07:15	1° \mathfrak{D} 44'32	direct	6477 Mar 28 20:26	22° \mathfrak{D} 15'33	
max. Earth dist.	6471 Jun 19 14:03	1° \mathfrak{D} 45'31 20.93438 AU	evening set	6477 Jun 27 05:40	25° \mathfrak{D} 18'59	
morning rise	6471 Jul 05 06:47	2° \mathfrak{D} 39'11				
retrograde	6471 Oct 07 16:23	5° \mathfrak{D} 47'22	conjunction	6477 Jul 13 12:57	26° \mathfrak{D} 15'21	0°13'03
opposition	6471 Dec 24 03:56	3° \mathfrak{D} 47'50 -0°06'59	minimum elong	6477 Jul 13 12:57	26° \mathfrak{D} 15'21	0°13'01
min. Earth dist.	6471 Dec 23 16:21	3° \mathfrak{D} 49'01 18.91588 AU	behind sun begin	6477 Jul 13 08:58	26° \mathfrak{D} 14'47	
direct	6472 Mar 08 08:59	1° \mathfrak{D} 50'50	behind sun end	6477 Jul 13 16:56	26° \mathfrak{D} 15'55	
evening set	6472 Jun 06 06:54	4° \mathfrak{D} 51'12	max. Earth dist.	6477 Jul 13 18:20	26° \mathfrak{D} 16'07	20.64210 AU
			morning rise	6477 Jul 29 23:29	27° \mathfrak{D} 12'11	
conjunction	6472 Jun 22 09:52	5° \mathfrak{D} 46'25 -0°04'41		6477 Oct 01 18:24	0° Ω	
minimum elong	6472 Jun 22 09:52	5° \mathfrak{D} 46'24 0°04'43	retrograde	6477 Nov 01 12:29	0° Ω 23'25	
behind sun begin	6472 Jun 22 03:22	5° \mathfrak{D} 45'30		6477 Dec 02 15:01	30° \mathfrak{R} \mathfrak{D}	
behind sun end	6472 Jun 22 16:22	5° \mathfrak{D} 47'19	opposition	6478 Jan 17 08:19	28° \mathfrak{D} 22'37	0°16'21
max. Earth dist.	6472 Jun 22 22:15	5° \mathfrak{D} 48'11 20.89600 AU	min. Earth dist.	6478 Jan 17 03:36	28° \mathfrak{D} 23'06	18.61275 AU
morning rise	6472 Jul 08 16:00	6° \mathfrak{D} 42'05	direct	6478 Apr 02 04:13	26° \mathfrak{D} 23'53	
retrograde	6472 Oct 11 01:50	9° \mathfrak{D} 50'43	evening set	6478 Jul 01 17:07	29° \mathfrak{D} 28'08	
opposition	6472 Dec 27 12:08	7° \mathfrak{D} 51'02 -0°03'07		6478 Jul 10 22:58	0° Ω	
min. Earth dist.	6472 Dec 27 01:41	7° \mathfrak{D} 52'05 18.87492 AU				
direct	6473 Mar 12 15:38	5° \mathfrak{D} 53'49	conjunction	6478 Jul 18 01:27	0° Ω 24'47	0°16'29
evening set	6473 Jun 10 14:59	8° \mathfrak{D} 54'41	minimum elong	6478 Jul 18 01:27	0° Ω 24'47	0°16'26
			max. Earth dist.	6478 Jul 18 06:44	0° Ω 25'33	20.58315 AU
conjunction	6473 Jun 26 18:43	9° \mathfrak{D} 50'05 -0°01'08	morning rise	6478 Aug 03 12:34	1° Ω 21'52	
minimum elong	6473 Jun 26 18:44	9° \mathfrak{D} 50'05 0°01'11	retrograde	6478 Nov 06 01:40	4° Ω 33'42	
behind sun begin	6473 Jun 26 12:05	9° \mathfrak{D} 49'09	opposition	6479 Jan 21 18:08	2° Ω 32'42	0°20'08
behind sun end	6473 Jun 27 01:23	9° \mathfrak{D} 51'01	min. Earth dist.	6479 Jan 21 14:02	2° Ω 33'08	18.55292 AU
max. Earth dist.	6473 Jun 27 04:53	9° \mathfrak{D} 51'31 20.85276 AU	direct	6479 Apr 06 12:52	0° Ω 33'40	
morning rise	6473 Jul 13 01:56	10° \mathfrak{D} 45'58	evening set	6479 Jul 06 05:28	3° Ω 38'48	
retrograde	6473 Oct 15 13:04	13° \mathfrak{D} 55'05				
asc. node	6473 Oct 19 00:38	13° \mathfrak{D} 54'47	conjunction	6479 Jul 22 14:28	4° Ω 35'43	0°19'51
opposition	6473 Dec 31 20:32	11° \mathfrak{D} 55'11 0°00'47	minimum elong	6479 Jul 22 14:28	4° Ω 35'43	0°19'49
min. Earth dist.	6473 Dec 31 11:23	11° \mathfrak{D} 56'07 18.82934 AU	max. Earth dist.	6479 Jul 22 17:27	4° Ω 36'09	20.52263 AU
direct	6474 Mar 16 21:55	9° \mathfrak{D} 57'42	morning rise	6479 Aug 08 02:28	5° Ω 33'04	
evening set	6474 Jun 14 23:40	12° \mathfrak{D} 59'07	retrograde	6479 Nov 10 16:02	8° Ω 45'33	
			opposition	6480 Jan 26 04:29	6° Ω 44'22	0°23'49
conjunction	6474 Jul 01 04:29	13° \mathfrak{D} 54'46 0°02'31	min. Earth dist.	6480 Jan 26 01:49	6° Ω 44'38	18.49180 AU
minimum elong	6474 Jul 01 04:28	13° \mathfrak{D} 54'45 0°02'28	direct	6480 Apr 09 22:01	4° Ω 45'01	
behind sun begin	6474 Jun 30 21:48	13° \mathfrak{D} 53'49	evening set	6480 Jul 09 18:35	7° Ω 51'05	
behind sun end	6474 Jul 01 11:07	13° \mathfrak{D} 55'41				
max. Earth dist.	6474 Jul 01 14:21	13° \mathfrak{D} 56'10 20.80501 AU	conjunction	6480 Jul 26 04:35	8° Ω 48'18	0°23'08
morning rise	6474 Jul 17 12:22	14° \mathfrak{D} 50'52	minimum elong	6480 Jul 26 04:35	8° Ω 48'18	0°23'05
retrograde	6474 Oct 19 23:36	18° \mathfrak{D} 00'26	max. Earth dist.	6480 Jul 26 07:32	8° Ω 48'44	20.46090 AU
opposition	6475 Jan 05 04:57	16° \mathfrak{D} 00'20 0°04'42	morning rise	6480 Aug 11 17:07	9° Ω 45'55	
min. Earth dist.	6475 Jan 04 20:51	16° \mathfrak{D} 01'10 18.77957 AU	retrograde	6480 Nov 14 06:37	12° Ω 59'04	
direct	6475 Mar 21 05:29	14° \mathfrak{D} 02'34	opposition	6481 Jan 29 15:17	10° Ω 57'44	0°27'25
evening set	6475 Jun 19 09:04	17° \mathfrak{D} 04'36	min. Earth dist.	6481 Jan 29 13:08	10° Ω 57'57	18.42950 AU
			direct	6481 Apr 14 07:43	8° Ω 58'06	
conjunction	6475 Jul 05 14:37	18° \mathfrak{D} 00'28 0°06'03	evening set	6481 Jul 14 08:47	12° Ω 05'10	
minimum elong	6475 Jul 05 14:37	18° \mathfrak{D} 00'28 0°06'01				
behind sun begin	6475 Jul 05 08:16	17° \mathfrak{D} 59'34	conjunction	6481 Jul 30 19:27	13° Ω 02'41	0°26'18
behind sun end	6475 Jul 05 20:58	18° \mathfrak{D} 01'21	minimum elong	6481 Jul 30 19:27	13° Ω 02'40	0°26'16
max. Earth dist.	6475 Jul 05 22:15	18° \mathfrak{D} 01'33 20.75357 AU	max. Earth dist.	6481 Jul 30 19:59	13° Ω 02'45	20.39817 AU
morning rise	6475 Jul 21 23:31	18° \mathfrak{D} 56'48	morning rise	6481 Aug 16 08:51	14° Ω 00'35	
retrograde	6475 Oct 24 11:31	22° \mathfrak{D} 06'54		6481 Sep 03 08:47	15° Ω	
opposition	6476 Jan 09 13:47	20° \mathfrak{D} 06'33 0°08'37	retrograde	6481 Nov 18 22:15	17° Ω 14'26	
min. Earth dist.	6476 Jan 09 06:58	20° \mathfrak{D} 07'15 18.72654 AU	opposition	6482 Feb 03 02:45	15° Ω 12'57	0°30'53
direct	6476 Mar 24 12:12	18° \mathfrak{D} 08'28	min. Earth dist.	6482 Feb 03 02:22	15° Ω 13'00	18.36627 AU
evening set	6476 Jun 22 18:52	21° \mathfrak{D} 11'10		6482 Feb 08 06:14	15° \mathfrak{R} Ω	
			direct	6482 Apr 18 18:00	13° Ω 13'02	
conjunction	6476 Jul 09 01:25	22° \mathfrak{D} 07'17 0°09'34		6482 Jun 23 21:01	15° Ω	
minimum elong	6476 Jul 09 01:25	22° \mathfrak{D} 07'17 0°09'31	evening set	6482 Jul 18 23:57	16° Ω 21'11	

conjunction	6482 Aug 04 11:33	17° Ω 18'59	0°29'22	retrograde	6488 Dec 20 03:09	17° η 56'43	
minimum elong	6482 Aug 04 11:33	17° Ω 18'59	0°29'20	opposition	6489 Mar 05 04:04	15° η 54'05	0°49'57
max. Earth dist.	6482 Aug 04 11:49	17° Ω 19'02	20.33434 AU	min. Earth dist.	6489 Mar 05 12:23	15° η 53'12	17.89446 AU
morning rise	6482 Aug 21 01:22	18° Ω 17'10		direct	6489 May 18 20:52	13° η 51'37	
retrograde	6482 Nov 23 14:31	21° Ω 31'44		evening set	6489 Aug 19 13:56	17° η 07'55	
opposition	6483 Feb 07 14:37	19° Ω 30'09	0°34'13				
min. Earth dist.	6483 Feb 07 14:54	19° Ω 30'07	18.30181 AU	conjunction	6489 Sep 05 05:40	18° η 07'49	0°45'43
direct	6483 Apr 23 05:38	17° Ω 29'56		minimum elong	6489 Sep 05 05:40	18° η 07'49	0°45'44
evening set	6483 Jul 23 16:19	20° Ω 39'12		max. Earth dist.	6489 Sep 04 18:08	18° η 06'05	19.86089 AU
				morning rise	6489 Sep 21 22:14	19° η 07'53	
conjunction	6483 Aug 09 04:27	21° Ω 37'18	0°32'17	retrograde	6489 Dec 24 21:27	22° η 27'13	
minimum elong	6483 Aug 09 04:27	21° Ω 37'18	0°32'15	opposition	6490 Mar 09 20:33	20° η 24'25	0°51'39
max. Earth dist.	6483 Aug 09 02:03	21° Ω 36'57	20.26929 AU	min. Earth dist.	6490 Mar 10 06:55	20° η 23'17	17.82788 AU
morning rise	6483 Aug 25 18:58	22° Ω 35'46		direct	6490 May 23 12:59	18° η 21'30	
retrograde	6483 Nov 28 06:57	25° Ω 51'05		evening set	6490 Aug 24 12:36	21° η 39'00	
opposition	6484 Feb 12 03:23	23° Ω 49'21	0°37'22				
min. Earth dist.	6484 Feb 12 05:47	23° Ω 49'06	18.23618 AU	conjunction	6490 Sep 10 04:45	22° η 39'11	0°47'06
direct	6484 Apr 26 16:59	21° Ω 48'49		minimum elong	6490 Sep 10 04:45	22° η 39'11	0°47'06
evening set	6484 Jul 27 09:22	24° Ω 59'14		max. Earth dist.	6490 Sep 09 16:32	22° η 37'20	19.79536 AU
				morning rise	6490 Sep 26 21:24	23° η 39'28	
conjunction	6484 Aug 12 22:24	25° Ω 57'39	0°35'02	retrograde	6490 Dec 29 19:02	26° η 59'24	
minimum elong	6484 Aug 12 22:24	25° Ω 57'39	0°35'01	opposition	6491 Mar 14 13:27	24° η 56'26	0°53'03
max. Earth dist.	6484 Aug 12 19:28	25° Ω 57'13	20.20291 AU	min. Earth dist.	6491 Mar 14 23:44	24° η 55'19	17.76361 AU
morning rise	6484 Aug 29 13:16	26° Ω 56'23		direct	6491 May 28 08:42	22° η 53'08	
	6484 Nov 10 01:12	0° η		evening set	6491 Aug 29 12:07	26° η 11'48	
retrograde	6484 Dec 02 01:08	0° η 12'26					
	6484 Dec 24 01:38	30° κ Ω		conjunction	6491 Sep 15 04:32	27° η 12'14	0°48'12
opposition	6485 Feb 15 16:42	28° Ω 10'33	0°40'21	minimum elong	6491 Sep 15 04:32	27° η 12'14	0°48'12
min. Earth dist.	6485 Feb 15 19:45	28° Ω 10'14	18.16906 AU	max. Earth dist.	6491 Sep 14 15:02	27° η 10'11	19.73245 AU
direct	6485 May 01 06:55	26° Ω 09'41		morning rise	6491 Oct 01 21:12	28° η 12'45	
evening set	6485 Aug 01 03:48	29° Ω 21'15			6491 Nov 03 19:17	0° Ω	
	6485 Aug 12 03:07	0° η		retrograde	6492 Jan 03 15:04	1° Ω 33'15	
					6492 Mar 06 17:21	30° κ η	
conjunction	6485 Aug 17 17:20	0° η 19'59	0°37'37	opposition	6492 Mar 18 07:14	29° η 30'08	0°54'07
minimum elong	6485 Aug 17 17:19	0° η 19'59	0°37'35	min. Earth dist.	6492 Mar 18 19:14	29° η 28'50	17.70245 AU
max. Earth dist.	6485 Aug 17 11:34	0° η 19'07	20.13511 AU	direct	6492 Jun 01 02:17	27° η 26'28	
morning rise	6485 Sep 03 08:47	1° η 19'00			6492 Aug 20 04:30	0° Ω	
retrograde	6485 Dec 06 18:02	4° η 35'45		evening set	6492 Sep 02 12:17	0° Ω 46'17	
opposition	6486 Feb 20 06:40	2° η 33'42	0°43'07				
min. Earth dist.	6486 Feb 20 12:04	2° η 33'07	18.10076 AU	conjunction	6492 Sep 19 04:59	1° Ω 46'59	0°48'59
direct	6486 May 05 19:50	0° η 32'26		minimum elong	6492 Sep 19 04:59	1° Ω 46'59	0°49'00
evening set	6486 Aug 05 22:59	3° η 45'11		max. Earth dist.	6492 Sep 18 14:41	1° Ω 44'48	19.67308 AU
				morning rise	6492 Oct 05 21:42	2° Ω 47'43	
conjunction	6486 Aug 22 13:18	4° η 44'13	0°40'00	retrograde	6493 Jan 07 13:57	6° Ω 08'44	
minimum elong	6486 Aug 22 13:18	4° η 44'13	0°39'59	opposition	6493 Mar 23 01:32	4° Ω 05'31	0°54'50
max. Earth dist.	6486 Aug 22 06:49	4° η 43'15	20.06634 AU	min. Earth dist.	6493 Mar 23 13:16	4° Ω 04'15	17.64497 AU
morning rise	6486 Sep 08 05:01	5° η 43'30		direct	6493 Jun 05 22:57	2° Ω 01'30	
retrograde	6486 Dec 11 13:25	9° η 00'56		evening set	6493 Sep 07 13:25	5° Ω 22'29	
opposition	6487 Feb 24 21:10	6° η 58'42	0°45'39				
min. Earth dist.	6487 Feb 25 03:04	6° η 58'04	18.03166 AU	conjunction	6493 Sep 24 06:19	6° Ω 23'25	0°49'28
direct	6487 May 10 12:01	4° η 57'03		minimum elong	6493 Sep 24 06:19	6° Ω 23'25	0°49'28
evening set	6487 Aug 10 19:04	8° η 10'58		max. Earth dist.	6493 Sep 23 15:20	6° Ω 21'07	19.61750 AU
				morning rise	6493 Oct 10 22:50	7° Ω 24'20	
conjunction	6487 Aug 27 09:47	9° η 10'18	0°42'09	retrograde	6494 Jan 12 11:42	10° Ω 45'51	
minimum elong	6487 Aug 27 09:47	9° η 10'18	0°42'09	opposition	6494 Mar 27 20:35	8° Ω 42'35	0°55'13
max. Earth dist.	6487 Aug 27 00:52	9° η 08'58	19.99712 AU	min. Earth dist.	6494 Mar 28 09:50	8° Ω 41'08	17.59155 AU
morning rise	6487 Sep 13 01:55	10° η 09'51		direct	6494 Jun 10 17:46	6° Ω 38'17	
retrograde	6487 Dec 16 06:45	13° η 27'57		evening set	6494 Sep 12 15:17	10° Ω 00'23	
opposition	6488 Feb 29 12:26	11° η 25'31	0°47'56				
min. Earth dist.	6488 Feb 29 20:32	11° η 24'39	17.96264 AU	conjunction	6494 Sep 29 08:13	11° Ω 01'31	0°49'37
direct	6488 May 14 02:35	9° η 23'27		minimum elong	6494 Sep 29 08:13	11° Ω 01'31	0°49'39
evening set	6488 Aug 14 16:00	12° η 38'34		max. Earth dist.	6494 Sep 28 16:08	10° Ω 59'03	19.56633 AU
				morning rise	6494 Oct 16 00:39	12° Ω 02'38	
conjunction	6488 Aug 31 07:22	13° η 38'11	0°44'04	retrograde	6495 Jan 17 11:51	15° Ω 24'38	
minimum elong	6488 Aug 31 07:22	13° η 38'11	0°44'03	opposition	6495 Apr 01 16:16	13° Ω 21'20	0°55'14
max. Earth dist.	6488 Aug 30 21:49	13° η 36'45	19.92844 AU	min. Earth dist.	6495 Apr 02 05:15	13° Ω 19'55	17.54257 AU
morning rise	6488 Sep 16 23:41	14° η 37'59		direct	6495 Jun 15 15:40	11° Ω 16'47	

evening set	6495 Sep 17 17:40	14° <u>♏</u> 39'57		morning rise	6501 Nov 20 00:37	15° <u>♏</u> 09'00	
				retrograde	6502 Feb 20 11:54	18° <u>♏</u> 32'39	
conjunction	6495 Oct 04 10:42	15° <u>♏</u> 41'18 0°49'28		opposition	6502 May 05 03:34	16° <u>♏</u> 29'28 0°45'13	
minimum elong	6495 Oct 04 10:42	15° <u>♏</u> 41'18 0°49'28		min. Earth dist.	6502 May 05 20:19	16° <u>♏</u> 27'38 17.31390 AU	
max. Earth dist.	6495 Oct 03 18:34	15° <u>♏</u> 38'49 19.51943 AU			6502 Jun 12 00:40	15° <u>♏</u>	
morning rise	6495 Oct 21 02:45	16° <u>♏</u> 42'35		direct	6502 Jul 19 17:39	14° <u>♏</u> 23'32	
retrograde	6496 Jan 22 10:49	20° <u>♏</u> 05'01			6502 Aug 25 20:54	15° <u>♏</u>	
opposition	6496 Apr 05 12:47	18° <u>♏</u> 01'44 0°54'53		evening set	6502 Oct 23 01:30	17° <u>♏</u> 52'09	
min. Earth dist.	6496 Apr 06 03:07	18° <u>♏</u> 00'10 17.49783 AU					
direct	6496 Jun 19 11:59	15° <u>♏</u> 56'58		conjunction	6502 Nov 08 16:16	18° <u>♏</u> 54'12 0°39'17	
evening set	6496 Sep 21 21:00	19° <u>♏</u> 21'10		minimum elong	6502 Nov 08 16:16	18° <u>♏</u> 54'13 0°39'20	
				max. Earth dist.	6502 Nov 07 19:45	18° <u>♏</u> 51'00 19.30559 AU	
conjunction	6496 Oct 08 13:51	20° <u>♏</u> 22'42 0°48'59		morning rise	6502 Nov 25 04:36	19° <u>♏</u> 55'56	
minimum elong	6496 Oct 08 13:51	20° <u>♏</u> 22'42 0°49'00		retrograde	6503 Feb 25 11:48	23° <u>♏</u> 19'33	
max. Earth dist.	6496 Oct 07 20:12	20° <u>♏</u> 19'58 19.47681 AU		opposition	6503 May 10 03:37	21° <u>♏</u> 16'23 0°42'24	
morning rise	6496 Oct 25 05:43	21° <u>♏</u> 24'07		min. Earth dist.	6503 May 10 20:40	21° <u>♏</u> 14'31 17.29929 AU	
retrograde	6497 Jan 26 11:13	24° <u>♏</u> 46'56		direct	6503 Jul 24 20:26	19° <u>♏</u> 10'18	
opposition	6497 Apr 10 09:42	22° <u>♏</u> 43'39 0°54'11		evening set	6503 Oct 28 06:24	22° <u>♏</u> 39'18	
min. Earth dist.	6497 Apr 11 00:08	22° <u>♏</u> 42'05 17.45724 AU					
direct	6497 Jun 24 11:34	20° <u>♏</u> 38'40		conjunction	6503 Nov 13 20:43	23° <u>♏</u> 41'21 0°36'38	
evening set	6497 Sep 27 00:54	24° <u>♏</u> 03'51		minimum elong	6503 Nov 13 20:43	23° <u>♏</u> 41'21 0°36'40	
				max. Earth dist.	6503 Nov 13 01:24	23° <u>♏</u> 38'19 19.29377 AU	
conjunction	6497 Oct 13 17:45	25° <u>♏</u> 05'33 0°48'10		morning rise	6503 Nov 30 08:13	24° <u>♏</u> 43'02	
minimum elong	6497 Oct 13 17:45	25° <u>♏</u> 05'33 0°48'11		retrograde	6504 Mar 01 12:57	28° <u>♏</u> 06'33	
max. Earth dist.	6497 Oct 13 00:13	25° <u>♏</u> 02'50 19.43803 AU		opposition	6504 May 14 03:50	26° <u>♏</u> 03'26 0°39'17	
morning rise	6497 Oct 30 09:01	26° <u>♏</u> 07'04		min. Earth dist.	6504 May 14 20:08	26° <u>♏</u> 01'39 17.29024 AU	
retrograde	6498 Jan 31 10:54	29° <u>♏</u> 30'11		direct	6504 Jul 29 00:09	23° <u>♏</u> 57'14	
opposition	6498 Apr 15 07:32	27° <u>♏</u> 26'57 0°53'06		evening set	6504 Nov 01 11:28	27° <u>♏</u> 26'31	
min. Earth dist.	6498 Apr 15 23:07	27° <u>♏</u> 25'15 17.42038 AU		max. Earth dist.	6504 Nov 17 05:26	28° <u>♏</u> 25'27 19.28772 AU	
direct	6498 Jun 29 10:08	25° <u>♏</u> 21'46					
evening set	6498 Oct 02 05:20	28° <u>♏</u> 47'50		conjunction	6504 Nov 18 01:00	28° <u>♏</u> 28'32 0°33'43	
				minimum elong	6504 Nov 18 01:00	28° <u>♏</u> 28'32 0°33'45	
conjunction	6498 Oct 18 21:45	29° <u>♏</u> 49'39 0°47'01		morning rise	6504 Dec 04 11:43	29° <u>♏</u> 30'09	
minimum elong	6498 Oct 18 21:45	29° <u>♏</u> 49'39 0°47'03			6504 Dec 12 17:13	0° <u>♏</u>	
max. Earth dist.	6498 Oct 18 02:28	29° <u>♏</u> 46'39 19.40310 AU		retrograde	6505 Mar 06 12:19	2° <u>♏</u> 53'30	
	6498 Oct 21 16:16	0° <u>♏</u>		opposition	6505 May 19 04:15	0° <u>♏</u> 50'27 0°35'54	
morning rise	6498 Nov 04 12:41	0° <u>♏</u> 51'15		min. Earth dist.	6505 May 19 20:53	0° <u>♏</u> 48'38 17.28737 AU	
retrograde	6499 Feb 05 11:11	4° <u>♏</u> 14'38			6505 Jun 07 22:37	30° <u>♏</u>	
opposition	6499 Apr 20 05:51	2° <u>♏</u> 11'24 0°51'39		direct	6505 Aug 03 02:23	28° <u>♏</u> 44'10	
min. Earth dist.	6499 Apr 20 21:38	2° <u>♏</u> 09'40 17.38744 AU			6505 Sep 26 12:36	0° <u>♏</u>	
direct	6499 Jul 04 11:47	0° <u>♏</u> 06'00		evening set	6505 Nov 06 16:14	2° <u>♏</u> 13'38	
evening set	6499 Oct 07 10:00	3° <u>♏</u> 32'51		max. Earth dist.	6505 Nov 22 10:40	3° <u>♏</u> 12'41 19.28809 AU	
max. Earth dist.	6499 Oct 23 07:34	4° <u>♏</u> 31'52 19.37207 AU					
conjunction	6499 Oct 24 02:17	4° <u>♏</u> 34'47 0°45'33		conjunction	6505 Nov 23 05:04	3° <u>♏</u> 15'35 0°30'34	
minimum elong	6499 Oct 24 02:17	4° <u>♏</u> 34'47 0°45'36		minimum elong	6505 Nov 23 05:04	3° <u>♏</u> 15'35 0°30'36	
morning rise	6499 Nov 09 16:30	5° <u>♏</u> 36'27		morning rise	6505 Dec 09 14:53	4° <u>♏</u> 17'07	
retrograde	6500 Feb 10 11:08	8° <u>♏</u> 59'59		retrograde	6506 Mar 11 14:17	7° <u>♏</u> 40'15	
opposition	6500 Apr 25 04:40	6° <u>♏</u> 56'46 0°49'51		opposition	6506 May 24 04:55	5° <u>♏</u> 37'18 0°32'16	
min. Earth dist.	6500 Apr 25 21:05	6° <u>♏</u> 54'58 17.35844 AU		min. Earth dist.	6506 May 24 20:05	5° <u>♏</u> 35'39 17.29093 AU	
direct	6500 Jul 09 12:25	4° <u>♏</u> 51'11		direct	6506 Aug 08 06:37	3° <u>♏</u> 31'01	
evening set	6500 Oct 12 15:05	8° <u>♏</u> 18'43		evening set	6506 Nov 11 20:37	7° <u>♏</u> 00'33	
max. Earth dist.	6500 Oct 28 10:30	9° <u>♏</u> 17'32 19.34525 AU					
conjunction	6500 Oct 29 06:51	9° <u>♏</u> 20'43 0°43'46		conjunction	6506 Nov 28 08:36	8° <u>♏</u> 02'24 0°27'12	
minimum elong	6500 Oct 29 06:51	9° <u>♏</u> 20'43 0°43'48		minimum elong	6506 Nov 28 08:36	8° <u>♏</u> 02'24 0°27'15	
morning rise	6500 Nov 14 20:39	10° <u>♏</u> 22'26		max. Earth dist.	6506 Nov 27 14:53	7° <u>♏</u> 59'37 19.29502 AU	
retrograde	6501 Feb 15 11:25	13° <u>♏</u> 46'04		morning rise	6506 Dec 14 17:26	9° <u>♏</u> 03'49	
opposition	6501 Apr 30 03:58	11° <u>♏</u> 42'52 0°47'42		retrograde	6507 Mar 16 13:13	12° <u>♏</u> 26'43	
min. Earth dist.	6501 Apr 30 20:44	11° <u>♏</u> 41'01 17.33386 AU		opposition	6507 May 29 05:50	10° <u>♏</u> 23'55 0°28'25	
direct	6501 Jul 14 15:07	9° <u>♏</u> 37'05		min. Earth dist.	6507 May 29 21:06	10° <u>♏</u> 22'15 17.30131 AU	
evening set	6501 Oct 17 20:13	13° <u>♏</u> 05'13		direct	6507 Aug 13 08:06	8° <u>♏</u> 17'40	
				evening set	6507 Nov 17 00:42	11° <u>♏</u> 47'13	
conjunction	6501 Nov 03 11:40	14° <u>♏</u> 07'16 0°41'41					
minimum elong	6501 Nov 03 11:40	14° <u>♏</u> 07'16 0°41'43		conjunction	6507 Dec 03 11:51	12° <u>♏</u> 48'56 0°23'40	
max. Earth dist.	6501 Nov 02 16:12	14° <u>♏</u> 04'13 19.32295 AU		minimum elong	6507 Dec 03 11:51	12° <u>♏</u> 48'56 0°23'43	
	6501 Nov 17 13:58	15° <u>♏</u>		max. Earth dist.	6507 Dec 02 19:04	12° <u>♏</u> 46'18 19.30885 AU	
				morning rise	6507 Dec 19 19:50	13° <u>♏</u> 50'13	
				retrograde	6508 Mar 20 15:10	17° <u>♏</u> 12'49	

opposition	6508 Jun 02 06:32	15°♂10'12	0°24'22	behind sun end	6514 Jan 01 02:41	11°♂15'53	
min. Earth dist.	6508 Jun 02 20:02	15°♂08'44	17.31829 AU	max. Earth dist.	6513 Dec 31 08:56	11°♂13'09	19.50550 AU
direct	6508 Aug 17 12:12	13°♂04'05		desc. node	6514 Jan 09 20:18	11°♂48'41	
evening set	6508 Nov 21 04:27	16°♂33'31		morning rise	6514 Jan 16 22:13	12°♂14'53	
				retrograde	6514 Apr 18 06:42	15°♂34'44	
conjunction	6508 Dec 07 14:46	17°♂35'06	0°19'58	opposition	6514 Jul 01 11:24	13°♂33'24	-0°02'06
minimum elong	6508 Dec 07 14:46	17°♂35'06	0°20'01	min. Earth dist.	6514 Jul 01 19:59	13°♂32'29	17.52842 AU
max. Earth dist.	6508 Dec 06 23:16	17°♂32'40	19.32901 AU	direct	6514 Sep 16 07:06	11°♂28'31	
morning rise	6508 Dec 23 21:42	18°♂36'13		evening set	6514 Dec 20 14:37	14°♂55'04	
retrograde	6509 Mar 25 13:41	21°♂58'29					
opposition	6509 Jun 07 07:36	19°♂56'05	0°20'10	conjunction	6515 Jan 05 18:57	15°♂55'15	-0°04'01
min. Earth dist.	6509 Jun 07 21:19	19°♂54'36	17.34146 AU	minimum elong	6515 Jan 05 18:58	15°♂55'16	0°03'58
direct	6509 Aug 22 13:43	17°♂50'08		behind sun begin	6515 Jan 05 12:24	15°♂54'16	
evening set	6509 Nov 26 07:45	21°♂19'22		behind sun end	6515 Jan 06 01:32	15°♂56'16	
				max. Earth dist.	6515 Jan 05 10:03	15°♂53'53	19.55217 AU
conjunction	6509 Dec 12 17:01	22°♂20'47	0°16'09	morning rise	6515 Jan 21 19:56	16°♂54'59	
minimum elong	6509 Dec 12 17:01	22°♂20'47	0°16'13	retrograde	6515 Apr 23 03:00	20°♂14'12	
max. Earth dist.	6509 Dec 12 02:01	22°♂18'25	19.35510 AU	opposition	6515 Jul 06 11:31	18°♂13'02	-0°06'35
morning rise	6509 Dec 28 23:04	23°♂21'42		min. Earth dist.	6515 Jul 06 19:38	18°♂12'10	17.57654 AU
retrograde	6510 Mar 30 14:40	26°♂43'35		direct	6515 Sep 21 08:42	16°♂08'24	
opposition	6510 Jun 12 08:31	24°♂41'25	0°15'51	evening set	6515 Dec 25 13:43	19°♂34'06	
min. Earth dist.	6510 Jun 12 20:24	24°♂40'08	17.37015 AU				
direct	6510 Aug 27 18:34	22°♂35'40		conjunction	6516 Jan 10 16:53	20°♂33'59	-0°08'00
evening set	6510 Dec 01 10:29	26°♂04'35		minimum elong	6516 Jan 10 16:53	20°♂33'59	0°07'57
				behind sun begin	6516 Jan 10 10:56	20°♂33'05	
conjunction	6510 Dec 17 18:52	27°♂05'48	0°12'14	behind sun end	6516 Jan 10 22:50	20°♂34'54	
minimum elong	6510 Dec 17 18:52	27°♂05'48	0°12'17	max. Earth dist.	6516 Jan 10 08:00	20°♂32'37	19.60184 AU
behind sun begin	6510 Dec 17 14:26	27°♂05'07		morning rise	6516 Jan 26 17:06	21°♂33'26	
behind sun end	6510 Dec 17 23:18	27°♂06'29		retrograde	6516 Apr 26 23:51	24°♂51'59	
max. Earth dist.	6510 Dec 17 05:38	27°♂03'44	19.38632 AU	opposition	6516 Jul 10 10:57	22°♂50'58	-0°11'00
morning rise	6511 Jan 02 23:46	28°♂06'31		min. Earth dist.	6516 Jul 10 17:35	22°♂50'15	17.62769 AU
	6511 Feb 05 23:20	0°♂		direct	6516 Sep 25 09:57	20°♂46'31	
retrograde	6511 Apr 04 12:06	1°♂27'58		evening set	6516 Dec 29 11:41	24°♂11'20	
	6511 Jun 04 02:04	30°♂♂					
opposition	6511 Jun 17 09:33	29°♂26'02	0°11'25	conjunction	6517 Jan 14 14:01	25°♂10'55	-0°11'54
min. Earth dist.	6511 Jun 17 21:36	29°♂24'44	17.40377 AU	minimum elong	6517 Jan 14 14:01	25°♂10'55	0°11'51
direct	6511 Sep 01 20:32	27°♂20'30		behind sun begin	6517 Jan 14 09:22	25°♂10'13	
	6511 Nov 22 19:18	0°♂		behind sun end	6517 Jan 14 18:39	25°♂11'37	
evening set	6511 Dec 06 12:37	0°♂48'59		max. Earth dist.	6517 Jan 14 07:32	25°♂09'56	19.65442 AU
				morning rise	6517 Jan 30 13:10	26°♂10'04	
conjunction	6511 Dec 22 19:53	1°♂49'57	0°08'15	retrograde	6517 May 01 19:16	29°♂27'55	
minimum elong	6511 Dec 22 19:54	1°♂49'58	0°08'18	opposition	6517 Jul 15 10:07	27°♂27'02	-0°15'19
behind sun begin	6511 Dec 22 14:00	1°♂49'03		min. Earth dist.	6517 Jul 15 15:47	27°♂26'26	17.68161 AU
behind sun end	6511 Dec 23 01:47	1°♂50'52		direct	6517 Sep 30 10:35	25°♂22'51	
max. Earth dist.	6511 Dec 22 06:46	1°♂47'55	19.42223 AU	evening set	6518 Jan 03 08:39	28°♂46'38	
morning rise	6512 Jan 07 24:00	2°♂50'28					
retrograde	6512 Apr 08 11:49	6°♂11'26		conjunction	6518 Jan 19 09:50	29°♂45'55	-0°15'43
opposition	6512 Jun 21 10:19	4°♂09'42	0°06'56	minimum elong	6518 Jan 19 09:49	29°♂45'55	0°15'40
min. Earth dist.	6512 Jun 21 20:38	4°♂08'35	17.44169 AU	behind sun begin	6518 Jan 19 08:14	29°♂45'40	
direct	6512 Sep 06 01:24	2°♂04'23		behind sun end	6518 Jan 19 11:25	29°♂46'09	
evening set	6512 Dec 10 14:05	5°♂32'20		max. Earth dist.	6518 Jan 19 03:51	29°♂45'00	19.70988 AU
					6518 Jan 23 04:38	0°♂	
conjunction	6512 Dec 26 20:28	6°♂33'04	0°04'14	morning rise	6518 Feb 04 08:16	0°♂44'46	
minimum elong	6512 Dec 26 20:29	6°♂33'04	0°04'16	retrograde	6518 May 06 14:43	4°♂01'56	
behind sun begin	6512 Dec 26 13:55	6°♂32'04		opposition	6518 Jul 20 08:46	2°♂01'09	-0°19'30
behind sun end	6512 Dec 27 03:03	6°♂34'04		min. Earth dist.	6518 Jul 20 12:55	2°♂00'43	17.73869 AU
max. Earth dist.	6512 Dec 26 09:20	6°♂31'20	19.46205 AU		6518 Sep 25 01:02	30°♂♂	
morning rise	6513 Jan 11 23:23	7°♂33'19		direct	6518 Oct 05 10:20	29°♂57'12	
retrograde	6513 Apr 13 08:30	10°♂53'44			6518 Oct 15 19:04	0°♂	
opposition	6513 Jun 26 11:01	8°♂52'13	0°02'25	evening set	6519 Jan 08 04:30	3°♂19'58	
min. Earth dist.	6513 Jun 26 21:18	8°♂51'07	17.48331 AU				
direct	6513 Sep 11 03:49	6°♂47'08		conjunction	6519 Jan 24 04:51	4°♂18'55	-0°19'25
evening set	6513 Dec 15 14:57	10°♂14'26		minimum elong	6519 Jan 24 04:51	4°♂18'55	0°19'23
				max. Earth dist.	6519 Jan 24 01:26	4°♂18'24	19.76849 AU
conjunction	6513 Dec 31 20:07	11°♂14'53	0°00'06	morning rise	6519 Feb 09 02:20	5°♂17'28	
minimum elong	6513 Dec 31 20:08	11°♂14'53	0°00'09	retrograde	6519 May 11 08:54	8°♂33'54	
behind sun begin	6513 Dec 31 13:35	11°♂13'54		opposition	6519 Jul 25 06:42	6°♂33'17	-0°23'32

min. Earth dist.	6519 Jul 25 09:15	6° \approx 33'01	17.79880 AU	direct	6525 Nov 06 12:31	1° \approx 06'33	
direct	6519 Oct 10 09:37	4° \approx 29'37		evening set	6526 Feb 07 21:18	4° \approx 21'33	
evening set	6520 Jan 12 23:29	7° \approx 51'18					
				conjunction	6526 Feb 23 15:56	5° \approx 18'17	-0°40'16
conjunction	6520 Jan 28 22:46	8° \approx 49'56	-0°22'58	minimum elong	6526 Feb 23 15:56	5° \approx 18'17	0°40'15
minimum elong	6520 Jan 28 22:46	8° \approx 49'56	0°22'55	max. Earth dist.	6526 Feb 23 22:24	5° \approx 19'16	20.23940 AU
max. Earth dist.	6520 Jan 28 20:10	8° \approx 49'32	19.83018 AU	morning rise	6526 Mar 11 09:10	6° \approx 14'50	
morning rise	6520 Feb 13 19:36	9° \approx 48'12		retrograde	6526 Jun 11 00:49	9° \approx 26'47	
retrograde	6520 May 15 02:55	13° \approx 03'56		opposition	6526 Aug 26 00:50	7° \approx 27'33	-0°45'51
opposition	6520 Jul 29 04:12	11° \approx 03'28	-0°27'23	min. Earth dist.	6526 Aug 25 18:22	7° \approx 28'13	18.27353 AU
min. Earth dist.	6520 Jul 29 05:23	11° \approx 03'21	17.86209 AU	direct	6526 Nov 11 05:34	5° \approx 26'42	
direct	6520 Oct 14 07:33	9° \approx 00'08		evening set	6527 Feb 12 09:57	8° \approx 40'34	
evening set	6521 Jan 16 17:22	12° \approx 20'44					
				conjunction	6527 Feb 28 04:01	9° \approx 37'02	-0°42'22
conjunction	6521 Feb 01 15:52	13° \approx 19'03	-0°26'21	minimum elong	6527 Feb 28 04:01	9° \approx 37'02	0°42'21
minimum elong	6521 Feb 01 15:51	13° \approx 19'03	0°26'20	max. Earth dist.	6527 Feb 28 11:31	9° \approx 38'09	20.30730 AU
max. Earth dist.	6521 Feb 01 15:37	13° \approx 19'01	19.89487 AU	morning rise	6527 Mar 15 20:54	10° \approx 33'19	
morning rise	6521 Feb 17 11:50	14° \approx 17'00		retrograde	6527 Jun 15 15:18	13° \approx 44'40	
	6521 Mar 01 18:16	15° \approx		opposition	6527 Aug 30 17:55	11° \approx 45'35	-0°48'02
retrograde	6521 May 19 20:05	17° \approx 32'04		min. Earth dist.	6527 Aug 30 09:35	11° \approx 46'27	18.34050 AU
opposition	6521 Aug 03 01:03	15° \approx 31'48	-0°31'03	direct	6527 Nov 15 23:42	9° \approx 45'07	
min. Earth dist.	6521 Aug 03 00:14	15° \approx 31'53	17.92797 AU	evening set	6528 Feb 16 21:50	12° \approx 57'51	
	6521 Aug 15 21:36	15° \approx					
direct	6521 Oct 19 05:36	13° \approx 28'52		conjunction	6528 Mar 03 15:22	13° \approx 54'02	-0°44'14
	6521 Dec 19 03:55	15° \approx		minimum elong	6528 Mar 03 15:22	13° \approx 54'02	0°44'13
evening set	6522 Jan 21 10:25	16° \approx 48'21		max. Earth dist.	6528 Mar 03 23:51	13° \approx 55'18	20.37316 AU
				morning rise	6528 Mar 19 07:56	14° \approx 50'05	
conjunction	6522 Feb 06 07:57	17° \approx 46'20	-0°29'33	retrograde	6528 Jun 19 02:35	18° \approx 00'51	
minimum elong	6522 Feb 06 07:57	17° \approx 46'20	0°29'31	opposition	6528 Sep 03 10:41	16° \approx 01'54	-0°49'56
max. Earth dist.	6522 Feb 06 08:45	17° \approx 46'28	19.96193 AU	min. Earth dist.	6528 Sep 03 02:27	16° \approx 02'44	18.40534 AU
morning rise	6522 Feb 22 03:20	18° \approx 44'00		direct	6528 Nov 19 14:51	14° \approx 01'45	
retrograde	6522 May 24 12:46	21° \approx 58'25		evening set	6529 Feb 20 08:45	17° \approx 13'22	
opposition	6522 Aug 07 21:26	19° \approx 58'22	-0°34'29				
min. Earth dist.	6522 Aug 07 19:37	19° \approx 58'33	17.99611 AU	conjunction	6529 Mar 08 01:50	18° \approx 09'16	-0°45'50
direct	6522 Oct 24 01:35	17° \approx 55'50		minimum elong	6529 Mar 08 01:50	18° \approx 09'16	0°45'49
evening set	6523 Jan 26 02:19	21° \approx 14'13		max. Earth dist.	6529 Mar 08 11:05	18° \approx 10'39	20.43680 AU
				morning rise	6529 Mar 23 18:10	19° \approx 05'05	
conjunction	6523 Feb 10 23:09	22° \approx 11'53	-0°32'33	retrograde	6529 Jun 23 15:53	22° \approx 15'16	
minimum elong	6523 Feb 10 23:09	22° \approx 11'53	0°32'32	opposition	6529 Sep 08 02:38	20° \approx 16'24	-0°51'34
max. Earth dist.	6523 Feb 11 01:59	22° \approx 12'19	20.03084 AU	min. Earth dist.	6529 Sep 07 16:26	20° \approx 17'26	18.46769 AU
morning rise	6523 Feb 26 17:54	23° \approx 09'15		direct	6529 Nov 24 07:15	18° \approx 16'34	
retrograde	6523 May 29 05:17	26° \approx 23'02		evening set	6530 Feb 24 18:54	21° \approx 27'03	
opposition	6523 Aug 12 17:06	24° \approx 23'12	-0°37'42				
min. Earth dist.	6523 Aug 12 13:15	24° \approx 23'36	18.06544 AU	conjunction	6530 Mar 12 11:37	22° \approx 22'42	-0°47'10
direct	6523 Oct 28 22:20	22° \approx 21'06		minimum elong	6530 Mar 12 11:37	22° \approx 22'42	0°47'10
evening set	6524 Jan 30 17:34	25° \approx 38'21		max. Earth dist.	6530 Mar 12 22:04	22° \approx 24'15	20.49787 AU
				morning rise	6530 Mar 28 03:47	23° \approx 18'18	
conjunction	6524 Feb 15 13:34	26° \approx 35'43	-0°35'21	retrograde	6530 Jun 28 01:46	26° \approx 27'55	
minimum elong	6524 Feb 15 13:34	26° \approx 35'43	0°35'20	opposition	6530 Sep 12 17:58	24° \approx 29'06	-0°52'53
max. Earth dist.	6524 Feb 15 17:24	26° \approx 36'18	20.10047 AU	min. Earth dist.	6530 Sep 12 07:55	24° \approx 30'07	18.52767 AU
morning rise	6524 Mar 02 07:46	27° \approx 32'48		direct	6530 Nov 28 20:49	22° \approx 29'32	
	6524 Apr 20 18:49	0° \approx		evening set	6531 Mar 01 04:08	25° \approx 38'54	
retrograde	6524 Jun 01 20:04	0° \approx 45'57					
	6524 Jul 15 10:13	30° \approx		conjunction	6531 Mar 16 20:32	26° \approx 34'18	-0°48'15
opposition	6524 Aug 16 12:12	28° \approx 46'20	-0°40'41	minimum elong	6531 Mar 16 20:32	26° \approx 34'18	0°48'16
min. Earth dist.	6524 Aug 16 07:55	28° \approx 46'47	18.13532 AU	max. Earth dist.	6531 Mar 17 07:41	26° \approx 35'57	20.55672 AU
direct	6524 Nov 01 17:00	26° \approx 44'40		morning rise	6531 Apr 01 12:42	27° \approx 29'41	
evening set	6525 Feb 03 07:54	0° \approx 00'48			6531 May 24 08:20	0° \approx	
	6525 Feb 03 02:28	0° \approx		retrograde	6531 Jul 02 13:47	0° \approx 38'45	
					6531 Aug 12 03:02	30° \approx	
conjunction	6525 Feb 19 03:14	0° \approx 57'51	-0°37'55	opposition	6531 Sep 17 08:24	28° \approx 39'58	-0°53'55
minimum elong	6525 Feb 19 03:13	0° \approx 57'51	0°37'54	min. Earth dist.	6531 Sep 16 20:19	28° \approx 41'11	18.58538 AU
max. Earth dist.	6525 Feb 19 08:35	0° \approx 58'40	20.17031 AU	direct	6531 Dec 03 10:58	26° \approx 40'39	
morning rise	6525 Mar 06 20:53	1° \approx 54'40		evening set	6532 Mar 04 12:38	29° \approx 48'56	
retrograde	6525 Jun 06 11:47	5° \approx 07'12			6532 Mar 07 17:01	0° \approx	
opposition	6525 Aug 21 06:45	3° \approx 07'47	-0°43'24				
min. Earth dist.	6525 Aug 21 00:27	3° \approx 08'26	18.20487 AU	conjunction	6532 Mar 20 04:46	0° \approx 44'07	-0°49'04

minimum elong	6532 Mar 20 04:46	0° Υ 44'07	0°49'04	evening set	6539 Apr 02 08:12	28° Υ 20'43
max. Earth dist.	6532 Mar 20 17:24	0° Υ 45'59	20.61331 AU			
morning rise	6532 Apr 04 20:49	1° Υ 39'19		conjunction	6539 Apr 18 00:24	29° Υ 14'49 -0°47'35
retrograde	6532 Jul 05 22:45	4° Υ 47'51		minimum elong	6539 Apr 18 00:24	29° Υ 14'49 0°47'37
opposition	6532 Sep 20 22:19	2° Υ 49'06	-0°54'39	max. Earth dist.	6539 Apr 18 18:01	29° Υ 17'22 20.94732 AU
min. Earth dist.	6532 Sep 20 10:13	2° Υ 50'19	18.64114 AU		6539 May 01 01:44	0° \mathcal{B}
direct	6532 Dec 06 23:04	0° Υ 50'03		morning rise	6539 May 03 18:07	0° \mathcal{B} 09'08
evening set	6533 Mar 08 20:28	3° Υ 57'17		retrograde	6539 Aug 04 16:42	3° \mathcal{B} 15'19
				opposition	6539 Oct 21 07:28	1° \mathcal{B} 16'59 -0°51'58
conjunction	6533 Mar 24 12:23	4° Υ 52'16	-0°49'37	min. Earth dist.	6539 Oct 20 13:36	1° \mathcal{B} 18'46 18.96508 AU
minimum elong	6533 Mar 24 12:23	4° Υ 52'16	0°49'38		6539 Nov 25 09:21	30° $\mathcal{R}\Upsilon$
max. Earth dist.	6533 Mar 25 01:40	4° Υ 54'13	20.66821 AU	direct	6540 Jan 05 20:33	29° Υ 19'51
morning rise	6533 Apr 09 04:31	5° Υ 47'16			6540 Feb 15 00:11	0° \mathcal{B}
retrograde	6533 Jul 10 09:59	8° Υ 55'21		evening set	6540 Apr 05 12:58	2° \mathcal{B} 21'27
opposition	6533 Sep 25 11:30	6° Υ 56'38	-0°55'06			
min. Earth dist.	6533 Sep 24 21:15	6° Υ 58'04	18.69518 AU	conjunction	6540 Apr 21 05:27	3° \mathcal{B} 15'29 -0°46'25
direct	6533 Dec 11 11:16	4° Υ 57'51		minimum elong	6540 Apr 21 05:27	3° \mathcal{B} 15'29 0°46'27
evening set	6534 Mar 13 03:30	8° Υ 04'06		max. Earth dist.	6540 Apr 21 23:56	3° \mathcal{B} 18'09 20.98095 AU
				morning rise	6540 May 06 23:31	4° \mathcal{B} 09'45
conjunction	6534 Mar 28 19:20	8° Υ 58'53	-0°49'54	retrograde	6540 Aug 08 00:09	7° \mathcal{B} 15'46
minimum elong	6534 Mar 28 19:20	8° Υ 58'53	0°49'54	opposition	6540 Oct 24 17:24	5° \mathcal{B} 17'28 -0°50'32
max. Earth dist.	6534 Mar 29 10:11	9° Υ 01'04	20.72125 AU	min. Earth dist.	6540 Oct 24 00:19	5° \mathcal{B} 19'10 18.99625 AU
morning rise	6534 Apr 13 11:32	9° Υ 53'44		direct	6541 Jan 09 03:29	3° \mathcal{B} 20'32
retrograde	6534 Jul 14 18:24	13° Υ 01'23		evening set	6541 Apr 09 17:39	6° \mathcal{B} 21'33
min. Earth dist.	6534 Sep 29 09:57	11° Υ 04'09	18.74731 AU			
opposition	6534 Sep 30 00:11	11° Υ 02'43	-0°55'16	conjunction	6541 Apr 25 10:23	7° \mathcal{B} 15'31 -0°45'01
direct	6534 Dec 15 21:51	9° Υ 04'14		minimum elong	6541 Apr 25 10:23	7° \mathcal{B} 15'31 0°45'03
evening set	6535 Mar 17 10:07	12° Υ 09'33		max. Earth dist.	6541 Apr 26 04:14	7° \mathcal{B} 18'05 21.00962 AU
				morning rise	6541 May 11 05:03	8° \mathcal{B} 09'45
conjunction	6535 Apr 02 01:53	13° Υ 04'10	-0°49'56	retrograde	6541 Aug 12 09:16	11° \mathcal{B} 15'38
minimum elong	6535 Apr 02 01:53	13° Υ 04'10	0°49'57	min. Earth dist.	6541 Oct 28 09:02	9° \mathcal{B} 19'06 19.02226 AU
max. Earth dist.	6535 Apr 02 17:06	13° Υ 06'23	20.77237 AU	opposition	6541 Oct 29 02:52	9° \mathcal{B} 17'19 -0°48'52
morning rise	6535 Apr 17 18:19	13° Υ 58'52		direct	6542 Jan 13 11:47	7° \mathcal{B} 20'32
retrograde	6535 Jul 19 05:16	17° Υ 06'08		evening set	6542 Apr 13 22:01	10° \mathcal{B} 21'02
opposition	6535 Oct 04 12:00	15° Υ 07'32	-0°55'08			
min. Earth dist.	6535 Oct 03 19:56	15° Υ 09'09	18.79725 AU	conjunction	6542 Apr 29 15:14	11° \mathcal{B} 14'57 -0°43'24
direct	6535 Dec 20 08:38	13° Υ 09'19		minimum elong	6542 Apr 29 15:14	11° \mathcal{B} 14'57 0°43'27
evening set	6536 Mar 20 16:13	16° Υ 13'48		max. Earth dist.	6542 Apr 30 09:38	11° \mathcal{B} 17'36 21.03279 AU
				morning rise	6542 May 15 10:23	12° \mathcal{B} 09'10
conjunction	6536 Apr 05 08:02	17° Υ 08'15	-0°49'42		6542 Jul 22 22:59	15° \mathcal{B}
minimum elong	6536 Apr 05 08:02	17° Υ 08'15	0°49'43	retrograde	6542 Aug 16 16:35	15° \mathcal{B} 14'57
max. Earth dist.	6536 Apr 06 00:37	17° Υ 10'40	20.82095 AU		6542 Sep 10 19:31	15° $\mathcal{R}\mathcal{B}$
morning rise	6536 Apr 21 00:38	18° Υ 02'51		opposition	6542 Nov 02 12:02	13° \mathcal{B} 16'35 -0°46'58
retrograde	6536 Jul 22 13:01	21° Υ 09'46		min. Earth dist.	6542 Nov 01 19:07	13° \mathcal{B} 18'16 19.04265 AU
opposition	6536 Oct 07 23:38	19° Υ 11'14	-0°54'45	direct	6543 Jan 17 18:38	11° \mathcal{B} 19'55
min. Earth dist.	6536 Oct 07 07:48	19° Υ 12'50	18.84447 AU	evening set	6543 Apr 18 02:18	14° \mathcal{B} 19'56
direct	6536 Dec 23 17:45	17° Υ 13'20			6543 Apr 29 19:53	15° \mathcal{B}
evening set	6537 Mar 24 21:48	20° Υ 16'59				
				conjunction	6543 May 03 19:54	15° \mathcal{B} 13'49 -0°41'35
conjunction	6537 Apr 09 13:38	21° Υ 11'18	-0°49'14	minimum elong	6543 May 03 19:54	15° \mathcal{B} 13'49 0°41'37
minimum elong	6537 Apr 09 13:38	21° Υ 11'18	0°49'15	max. Earth dist.	6543 May 04 13:27	15° \mathcal{B} 16'20 21.05058 AU
max. Earth dist.	6537 Apr 10 06:23	21° Υ 13'45	20.86672 AU	morning rise	6543 May 19 15:44	16° \mathcal{B} 08'02
morning rise	6537 Apr 25 06:36	22° Υ 05'47		retrograde	6543 Aug 21 01:03	19° \mathcal{B} 13'43
retrograde	6537 Jul 26 23:32	25° Υ 12'26		opposition	6543 Nov 06 20:35	17° \mathcal{B} 15'16 -0°44'50
opposition	6537 Oct 12 10:42	23° Υ 13'58	-0°54'05	min. Earth dist.	6543 Nov 06 03:08	17° \mathcal{B} 17'00 19.05779 AU
min. Earth dist.	6537 Oct 11 17:19	23° Υ 15'42	18.88859 AU	direct	6544 Jan 22 01:41	15° \mathcal{B} 18'39
direct	6537 Dec 28 03:44	21° Υ 16'20		evening set	6544 Apr 21 06:20	18° \mathcal{B} 18'15
evening set	6538 Mar 29 03:07	24° Υ 19'15				
				conjunction	6544 May 07 00:29	19° \mathcal{B} 12'08 -0°39'34
conjunction	6538 Apr 13 19:10	25° Υ 13'27	-0°48'32	minimum elong	6544 May 07 00:29	19° \mathcal{B} 12'08 0°39'37
minimum elong	6538 Apr 13 19:10	25° Υ 13'27	0°48'33	max. Earth dist.	6544 May 07 18:41	19° \mathcal{B} 14'45 21.06319 AU
max. Earth dist.	6538 Apr 14 13:05	25° Υ 16'03	20.90897 AU	morning rise	6544 May 22 20:52	20° \mathcal{B} 06'22
morning rise	6538 Apr 29 12:24	26° Υ 07'51		retrograde	6544 Aug 24 07:45	23° \mathcal{B} 11'59
retrograde	6538 Jul 31 06:58	29° Υ 14'15		opposition	6544 Nov 10 05:02	21° \mathcal{B} 13'26 -0°42'30
opposition	6538 Oct 16 21:18	27° Υ 15'51	-0°53'09	min. Earth dist.	6544 Nov 09 12:18	21° \mathcal{B} 15'07 19.06805 AU
min. Earth dist.	6538 Oct 16 04:30	27° Υ 17'32	18.92896 AU	direct	6545 Jan 25 08:28	19° \mathcal{B} 16'52
direct	6539 Jan 01 11:18	25° Υ 18'29		evening set	6545 Apr 25 10:12	22° \mathcal{B} 16'06

conjunction	6545 May 11 04:48	23° 8 09'59 -0°37'22	retrograde	6551 Sep 22 15:37	20° II 57'48
minimum elong	6545 May 11 04:48	23° 8 09'59 0°37'24	opposition	6551 Dec 09 09:48	18° II 58'40 -0°21'14
max. Earth dist.	6545 May 11 22:21	23° 8 12'30 21.07135 AU	min. Earth dist.	6551 Dec 08 18:22	19° II 00'13 19.03041 AU
morning rise	6545 May 27 02:00	24° 8 04'15	direct	6552 Feb 22 23:24	17° II 02'05
retrograde	6545 Aug 28 16:18	27° 8 09'53	evening set	6552 May 22 17:13	20° II 01'01
opposition	6545 Nov 14 13:04	25° 8 11'13 -0°39'57			
min. Earth dist.	6545 Nov 13 19:44	25° 8 12'56 19.07412 AU	conjunction	6552 Jun 07 16:44	20° II 55'31 -0°17'39
direct	6546 Jan 29 14:32	23° 8 14'38	minimum elong	6552 Jun 07 16:44	20° II 55'31 0°17'43
evening set	6546 Apr 29 14:07	26° 8 13'36	max. Earth dist.	6552 Jun 08 09:11	20° II 57'52 21.02006 AU
			morning rise	6552 Jun 23 19:22	21° II 50'28
conjunction	6546 May 15 09:23	27° 8 07'32 -0°34'59	retrograde	6552 Sep 25 23:23	24° II 57'25
minimum elong	6546 May 15 09:23	27° 8 07'32 0°35'01	opposition	6552 Dec 12 17:21	22° II 58'12 -0°17'39
max. Earth dist.	6546 May 16 03:36	27° 8 10'08 21.07533 AU	min. Earth dist.	6552 Dec 12 03:03	22° II 59'39 19.00882 AU
morning rise	6546 May 31 07:12	28° 8 01'51	direct	6553 Feb 26 04:32	21° II 01'34
	6546 Jul 10 06:40	0° II	evening set	6553 May 26 23:03	24° II 00'46
retrograde	6546 Sep 01 22:36	1° II 07'30			
	6546 Oct 27 18:01	30° 8	conjunction	6553 Jun 11 23:19	24° II 55'24 -0°14'22
opposition	6546 Nov 18 20:44	29° 8 08'44 -0°37'14	minimum elong	6553 Jun 11 23:19	24° II 55'24 0°14'25
min. Earth dist.	6546 Nov 18 04:05	29° 8 10'24 19.07618 AU	behind sun begin	6553 Jun 11 20:19	24° II 54'59
direct	6547 Feb 02 20:39	27° 8 12'11	behind sun end	6553 Jun 12 02:20	24° II 55'49
	6547 Apr 30 11:13	0° II	max. Earth dist.	6553 Jun 12 14:06	24° II 57'30 20.99619 AU
evening set	6547 May 03 18:08	0° II 10'57	morning rise	6553 Jun 28 02:57	25° II 50'31
			retrograde	6553 Sep 30 09:24	28° II 57'50
conjunction	6547 May 19 13:57	1° II 04'55 -0°32'26	min. Earth dist.	6553 Dec 16 11:23	26° II 59'54 18.98242 AU
minimum elong	6547 May 19 13:57	1° II 04'55 0°32'29	opposition	6553 Dec 17 01:00	26° II 58'32 -0°13'58
max. Earth dist.	6547 May 20 07:21	1° II 07'24 21.07562 AU	direct	6554 Mar 02 10:16	25° II 01'47
morning rise	6547 Jun 04 12:36	1° II 59'18	evening set	6554 May 31 05:31	28° II 01'18
retrograde	6547 Sep 06 07:35	5° II 05'03			
min. Earth dist.	6547 Nov 22 11:10	3° II 07'54 19.07462 AU	conjunction	6554 Jun 16 06:43	28° II 56'06 -0°11'00
opposition	6547 Nov 23 04:16	3° II 06'11 -0°34'20	minimum elong	6554 Jun 16 06:42	28° II 56'06 0°11'04
direct	6548 Feb 07 02:14	1° II 09'38	behind sun begin	6554 Jun 16 01:44	28° II 55'25
evening set	6548 May 06 22:06	4° II 08'17	behind sun end	6554 Jun 16 11:40	28° II 56'48
			max. Earth dist.	6554 Jun 16 21:09	28° II 58'10 20.96710 AU
conjunction	6548 May 22 18:37	5° II 02'19 -0°29'44	morning rise	6554 Jul 02 11:05	29° II 51'23
minimum elong	6548 May 22 18:37	5° II 02'19 0°29'46		6554 Jul 05 00:59	0° III
max. Earth dist.	6548 May 23 12:40	5° II 04'54 21.07213 AU	retrograde	6554 Oct 04 18:21	2° III 59'05
morning rise	6548 Jun 07 17:56	5° II 56'47	opposition	6554 Dec 21 08:42	0° III 59'39 -0°10'12
retrograde	6548 Sep 09 13:48	9° II 02'41	min. Earth dist.	6554 Dec 20 20:27	1° III 00'54 18.95063 AU
opposition	6548 Nov 26 11:47	7° II 03'45 -0°31'16		6555 Jan 16 02:27	30° 8 II
min. Earth dist.	6548 Nov 25 19:21	7° II 05'24 19.06928 AU	direct	6555 Mar 06 16:01	29° II 02'46
direct	6549 Feb 10 07:36	5° II 07'13		6555 Apr 23 11:40	0° III
evening set	6549 May 11 02:24	8° II 05'48	evening set	6555 Jun 04 12:32	2° III 02'39
conjunction	6549 May 26 23:33	8° II 59'56 -0°26'54	conjunction	6555 Jun 20 14:30	2° III 57'39 -0°07'35
minimum elong	6549 May 26 23:33	8° II 59'56 0°26'57	minimum elong	6555 Jun 20 14:30	2° III 57'39 0°07'37
max. Earth dist.	6549 May 27 16:41	9° II 02'23 21.06510 AU	behind sun begin	6555 Jun 20 08:29	2° III 56'48
morning rise	6549 Jun 11 23:47	9° II 54'29	behind sun end	6555 Jun 20 20:31	2° III 58'29
retrograde	6549 Sep 13 23:19	13° II 00'35	max. Earth dist.	6555 Jun 21 02:50	2° III 59'24 20.93281 AU
opposition	6549 Nov 30 19:05	11° II 01'34 -0°28'03	morning rise	6555 Jul 06 19:52	3° III 53'07
min. Earth dist.	6549 Nov 30 02:30	11° II 03'14 19.06037 AU	retrograde	6555 Oct 09 04:40	7° III 01'14
direct	6550 Feb 14 13:00	9° II 05'01	opposition	6555 Dec 25 16:42	5° III 01'37 -0°06'22
evening set	6550 May 15 06:55	12° II 03'40	min. Earth dist.	6555 Dec 25 05:20	5° III 02'47 18.91372 AU
			direct	6556 Mar 09 22:17	3° III 04'32
conjunction	6550 May 31 04:55	12° II 57'54 -0°23'56	evening set	6556 Jun 07 19:49	6° III 04'50
minimum elong	6550 May 31 04:55	12° II 57'54 0°23'59			
max. Earth dist.	6550 May 31 22:28	13° II 00'24 21.05420 AU	conjunction	6556 Jun 23 22:44	7° III 00'01 -0°04'06
morning rise	6550 Jun 16 05:54	13° II 52'34	minimum elong	6556 Jun 23 22:45	7° III 00'01 0°04'10
retrograde	6550 Sep 18 05:53	16° II 58'54	behind sun begin	6556 Jun 23 16:12	6° III 59'06
min. Earth dist.	6550 Dec 04 10:48	15° II 01'24 19.04742 AU	behind sun end	6556 Jun 24 05:19	7° III 00'56
opposition	6550 Dec 05 02:28	14° II 59'50 -0°24'42	max. Earth dist.	6556 Jun 24 10:48	7° III 01'44 20.89336 AU
direct	6551 Feb 18 17:55	13° II 03'17	morning rise	6556 Jul 10 04:53	7° III 55'41
evening set	6551 May 19 11:52	16° II 02'02	retrograde	6556 Oct 12 14:22	11° III 04'13
			opposition	6556 Dec 29 00:52	9° III 04'26 -0°02'29
conjunction	6551 Jun 04 10:32	16° II 56'23 -0°20'51	min. Earth dist.	6556 Dec 28 14:42	9° III 05'28 18.87186 AU
minimum elong	6551 Jun 04 10:32	16° II 56'23 0°20'54	direct	6557 Mar 14 04:46	7° III 07'06
max. Earth dist.	6551 Jun 05 02:50	16° II 58'42 21.03932 AU	evening set	6557 Jun 12 03:53	10° III 07'53
morning rise	6551 Jun 20 12:26	17° II 51'11			

conjunction	6557 Jun 28 07:37	11°☾03'16	-0°00'32	morning rise	6562 Aug 05 00:47	2°♈33'24	
minimum elong	6557 Jun 28 07:37	11°☾03'16	0°00'35	retrograde	6562 Nov 07 13:37	5°♈45'13	
behind sun begin	6557 Jun 28 00:58	11°☾02'21		opposition	6563 Jan 23 06:29	3°♈44'15	0°20'46
behind sun end	6557 Jun 28 14:15	11°☾04'12		min. Earth dist.	6563 Jan 23 02:02	3°♈44'42	18.55496 AU
max. Earth dist.	6557 Jun 28 17:36	11°☾04'42	20.84948 AU	direct	6563 Apr 08 01:55	1°♈45'15	
morning rise	6557 Jul 14 14:45	11°☾59'09		evening set	6563 Jul 07 17:52	4°♈50'23	
asc. node	6557 Aug 20 04:38	13°☾49'47					
retrograde	6557 Oct 17 01:21	15°☾08'08		conjunction	6563 Jul 24 02:48	5°♈47'18	0°20'25
opposition	6558 Jan 02 09:03	13°☾08'07	0°01'26	minimum elong	6563 Jul 24 02:48	5°♈47'18	0°20'22
min. Earth dist.	6558 Jan 01 23:54	13°☾09'03	18.82597 AU	max. Earth dist.	6563 Jul 24 06:16	5°♈47'48	20.52554 AU
direct	6558 Mar 18 11:32	11°☾10'31		morning rise	6563 Aug 09 14:44	6°♈44'38	
evening set	6558 Jun 16 12:26	14°☾11'51		retrograde	6563 Nov 12 03:44	9°♈57'08	
				opposition	6564 Jan 27 16:53	7°♈56'01	0°24'27
conjunction	6558 Jul 02 17:10	15°☾07'28	0°03'07	min. Earth dist.	6564 Jan 27 13:45	7°♈56'20	18.49553 AU
minimum elong	6558 Jul 02 17:10	15°☾07'28	0°03'03	direct	6564 Apr 11 09:52	5°♈56'45	
behind sun begin	6558 Jul 02 10:32	15°☾06'32		evening set	6564 Jul 11 06:52	9°♈02'51	
behind sun end	6558 Jul 02 23:49	15°☾08'24					
max. Earth dist.	6558 Jul 03 02:59	15°☾08'52	20.80169 AU	conjunction	6564 Jul 27 16:48	10°♈00'03	0°23'41
morning rise	6558 Jul 19 01:02	16°☾03'34		minimum elong	6564 Jul 27 16:48	10°♈00'03	0°23'39
retrograde	6558 Oct 21 11:46	19°☾13'02		max. Earth dist.	6564 Jul 27 20:14	10°♈00'33	20.46541 AU
opposition	6559 Jan 06 17:31	17°☾12'49	0°05'21	morning rise	6564 Aug 13 05:17	10°♈57'39	
min. Earth dist.	6559 Jan 06 09:23	17°☾13'39	18.77647 AU	retrograde	6564 Nov 15 19:21	14°♈10'51	
direct	6559 Mar 22 18:30	15°☾14'56		opposition	6565 Jan 31 03:46	12°♈09'37	0°28'02
evening set	6559 Jun 20 21:37	18°☾16'53		min. Earth dist.	6565 Jan 31 01:27	12°♈09'52	18.43464 AU
				direct	6565 Apr 15 20:20	10°♈10'06	
conjunction	6559 Jul 07 03:06	19°☾12'44	0°06'39	evening set	6565 Jul 15 21:14	13°♈17'13	
minimum elong	6559 Jul 07 03:05	19°☾12'44	0°06'36				
behind sun begin	6559 Jul 06 20:50	19°☾11'51		conjunction	6565 Aug 01 07:49	14°♈14'43	0°26'52
behind sun end	6559 Jul 07 09:20	19°☾13'36		minimum elong	6565 Aug 01 07:49	14°♈14'43	0°26'50
max. Earth dist.	6559 Jul 07 10:56	19°☾13'50	20.75078 AU	max. Earth dist.	6565 Aug 01 08:41	14°♈14'50	20.40386 AU
morning rise	6559 Jul 23 11:55	20°☾09'03			6565 Aug 14 05:36	15°♈	
retrograde	6559 Oct 25 23:35	23°☾19'04		morning rise	6565 Aug 17 21:07	15°♈12'36	
opposition	6560 Jan 11 02:15	21°☾18'37	0°09'16	retrograde	6565 Nov 20 10:35	18°♈26'31	
min. Earth dist.	6560 Jan 10 19:05	21°☾19'21	18.72423 AU	opposition	6566 Feb 04 15:08	16°♈25'10	0°31'30
direct	6560 Mar 26 01:47	19°☾20'27		min. Earth dist.	6566 Feb 04 14:38	16°♈25'13	18.37236 AU
evening set	6560 Jun 24 07:27	22°☾23'06			6566 Mar 14 04:59	15°♈♈	
				direct	6566 Apr 20 05:44	14°♈25'21	
conjunction	6560 Jul 10 13:55	23°☾19'12	0°10'09		6566 May 26 17:35	15°♈	
minimum elong	6560 Jul 10 13:55	23°☾19'12	0°10'07	evening set	6566 Jul 20 12:28	17°♈33'33	
behind sun begin	6560 Jul 10 08:35	23°☾18'27					
behind sun end	6560 Jul 10 19:16	23°☾19'57		conjunction	6566 Aug 05 23:58	18°♈31'21	0°29'54
max. Earth dist.	6560 Jul 10 21:46	23°☾20'19	20.69726 AU	minimum elong	6566 Aug 05 23:58	18°♈31'21	0°29'52
morning rise	6560 Jul 26 23:24	24°☾15'45		max. Earth dist.	6566 Aug 06 00:23	18°♈31'25	20.34065 AU
retrograde	6560 Oct 29 11:15	27°☾26'20		morning rise	6566 Aug 22 13:41	19°♈29'31	
opposition	6561 Jan 14 11:17	25°☾25'42	0°13'09	retrograde	6566 Nov 25 03:42	22°♈44'08	
min. Earth dist.	6561 Jan 14 04:56	25°☾26'21	18.66959 AU	opposition	6567 Feb 09 03:10	20°♈42'40	0°34'48
direct	6561 Mar 30 09:28	23°☾27'15		min. Earth dist.	6567 Feb 09 03:35	20°♈42'37	18.30821 AU
evening set	6561 Jun 28 18:06	26°☾30'39		direct	6567 Apr 24 17:36	18°♈42'34	
				evening set	6567 Jul 25 04:45	21°♈51'51	
conjunction	6561 Jul 15 01:20	27°☾27'01	0°13'38				
minimum elong	6561 Jul 15 01:20	27°☾27'00	0°13'35	conjunction	6567 Aug 10 16:47	22°♈49'57	0°32'49
behind sun begin	6561 Jul 14 21:44	27°☾26'30		minimum elong	6567 Aug 10 16:47	22°♈49'57	0°32'48
behind sun end	6561 Jul 15 04:57	27°☾27'31		max. Earth dist.	6567 Aug 10 14:22	22°♈49'36	20.27556 AU
max. Earth dist.	6561 Jul 15 07:06	27°☾27'50	20.64172 AU	morning rise	6567 Aug 27 07:13	23°♈48'24	
morning rise	6561 Jul 31 11:48	28°☾23'49		retrograde	6567 Nov 29 19:57	27°♈03'45	
	6561 Aug 31 06:14	0°♈		opposition	6568 Feb 13 15:58	25°♈02'07	0°37'57
retrograde	6561 Nov 03 00:11	1°♈35'01		min. Earth dist.	6568 Feb 13 18:26	25°♈01'51	18.24225 AU
	6562 Jan 08 09:36	30°♈☾		direct	6568 Apr 28 05:23	23°♈01'40	
opposition	6562 Jan 18 20:44	29°☾34'11	0°17'00	evening set	6568 Jul 28 21:56	26°♈12'04	
min. Earth dist.	6562 Jan 18 15:31	29°☾34'44	18.61315 AU				
direct	6562 Apr 03 17:02	27°☾35'27		conjunction	6568 Aug 14 10:52	27°♈10'28	0°35'33
	6562 Jun 21 06:37	0°♈		minimum elong	6568 Aug 14 10:52	27°♈10'28	0°35'31
evening set	6562 Jul 03 05:31	0°♈39'42		max. Earth dist.	6568 Aug 14 07:48	27°♈10'01	20.20864 AU
				morning rise	6568 Aug 31 01:39	28°♈09'12	
conjunction	6562 Jul 19 13:45	1°♈36'20	0°17'03		6568 Oct 05 08:00	0°♈	
minimum elong	6562 Jul 19 13:45	1°♈36'20	0°17'02	retrograde	6568 Dec 03 13:38	1°♈25'14	
max. Earth dist.	6562 Jul 19 19:27	1°♈37'09	20.58433 AU		6569 Feb 02 14:46	30°♈♈	

opposition	6569 Feb 17 05:11	29° <u>Ω</u> 23'25	0°40'55	minimum elong	6575 Sep 16 16:07	28° <u>Π</u> 23'25	0°48'29
min. Earth dist.	6569 Feb 17 08:26	29° <u>Ω</u> 23'04	18.17447 AU	max. Earth dist.	6575 Sep 16 02:52	28° <u>Π</u> 21'24	19.73846 AU
direct	6569 May 02 18:58	27° <u>Ω</u> 22'36		morning rise	6575 Oct 03 08:47	29° <u>Π</u> 23'54	
	6569 Jul 23 16:07	0° <u>Π</u>			6575 Oct 13 16:58	0° <u>Ω</u>	
evening set	6569 Aug 02 16:15	0° <u>Π</u> 34'08		retrograde	6576 Jan 05 02:51	2° <u>Ω</u> 44'18	
				opposition	6576 Mar 19 19:25	0° <u>Ω</u> 41'11	0°54'25
conjunction	6569 Aug 19 05:43	1° <u>Π</u> 32'50	0°38'07	min. Earth dist.	6576 Mar 20 07:04	0° <u>Ω</u> 39'55	17.70892 AU
minimum elong	6569 Aug 19 05:43	1° <u>Π</u> 32'50	0°38'06		6576 Apr 04 21:54	30° <u>℞</u> <u>Π</u>	
max. Earth dist.	6569 Aug 18 23:43	1° <u>Π</u> 31'57	20.14018 AU	direct	6576 Jun 02 14:12	28° <u>Π</u> 37'32	
morning rise	6569 Sep 04 21:07	2° <u>Π</u> 31'50			6576 Jul 29 11:42	0° <u>Ω</u>	
retrograde	6569 Dec 08 06:42	5° <u>Π</u> 48'33		evening set	6576 Sep 04 00:00	1° <u>Ω</u> 57'14	
opposition	6570 Feb 21 19:10	3° <u>Π</u> 46'31	0°43'39				
min. Earth dist.	6570 Feb 22 00:36	3° <u>Π</u> 45'56	18.10551 AU	conjunction	6576 Sep 20 16:40	2° <u>Ω</u> 57'54	0°49'15
direct	6570 May 07 08:46	1° <u>Π</u> 45'17		minimum elong	6576 Sep 20 16:40	2° <u>Ω</u> 57'54	0°49'14
evening set	6570 Aug 07 11:17	4° <u>Π</u> 57'58		max. Earth dist.	6576 Sep 20 02:47	2° <u>Ω</u> 55'47	19.68002 AU
				morning rise	6576 Oct 07 09:20	3° <u>Ω</u> 58'36	
conjunction	6570 Aug 24 01:30	5° <u>Π</u> 56'58	0°40'28	retrograde	6577 Jan 09 01:56	7° <u>Ω</u> 19'33	
minimum elong	6570 Aug 24 01:30	5° <u>Π</u> 56'58	0°40'27	opposition	6577 Mar 24 13:37	5° <u>Ω</u> 16'21	0°55'06
max. Earth dist.	6570 Aug 23 18:57	5° <u>Π</u> 56'00	20.07082 AU	min. Earth dist.	6577 Mar 25 01:00	5° <u>Ω</u> 15'07	17.65233 AU
morning rise	6570 Sep 09 17:07	6° <u>Π</u> 56'14		direct	6577 Jun 07 10:45	3° <u>Ω</u> 12'24	
retrograde	6570 Dec 13 01:04	10° <u>Π</u> 13'35		evening set	6577 Sep 09 01:10	6° <u>Ω</u> 33'17	
opposition	6571 Feb 26 09:33	8° <u>Π</u> 11'21	0°46'10				
min. Earth dist.	6571 Feb 26 15:28	8° <u>Π</u> 10'43	18.03596 AU	conjunction	6577 Sep 25 18:00	7° <u>Ω</u> 34'11	0°49'41
direct	6571 May 12 00:21	6° <u>Π</u> 09'43		minimum elong	6577 Sep 25 17:59	7° <u>Ω</u> 34'11	0°49'42
evening set	6571 Aug 12 07:20	9° <u>Π</u> 23'33		max. Earth dist.	6577 Sep 25 03:12	7° <u>Ω</u> 31'55	19.62529 AU
				morning rise	6577 Oct 12 10:30	8° <u>Ω</u> 35'05	
conjunction	6571 Aug 28 21:58	10° <u>Π</u> 22'50	0°42'35	retrograde	6578 Jan 13 23:23	11° <u>Ω</u> 56'34	
minimum elong	6571 Aug 28 21:58	10° <u>Π</u> 22'50	0°42'35	opposition	6578 Mar 29 08:47	9° <u>Ω</u> 53'21	0°55'26
max. Earth dist.	6571 Aug 28 12:56	10° <u>Π</u> 21'29	20.00135 AU	min. Earth dist.	6578 Mar 29 21:51	9° <u>Ω</u> 51'56	17.59963 AU
morning rise	6571 Sep 14 14:03	11° <u>Π</u> 22'22		direct	6578 Jun 12 05:50	7° <u>Ω</u> 49'09	
retrograde	6571 Dec 17 18:49	14° <u>Π</u> 40'22		evening set	6578 Sep 14 02:57	11° <u>Ω</u> 11'10	
opposition	6572 Mar 02 00:42	12° <u>Π</u> 37'55	0°48'24				
min. Earth dist.	6572 Mar 02 08:40	12° <u>Π</u> 37'03	17.96687 AU	conjunction	6578 Sep 30 19:50	12° <u>Ω</u> 12'17	0°49'49
direct	6572 May 15 15:39	10° <u>Π</u> 35'50		minimum elong	6578 Sep 30 19:50	12° <u>Ω</u> 12'17	0°49'49
evening set	6572 Aug 16 04:02	13° <u>Π</u> 50'49		max. Earth dist.	6578 Sep 30 04:05	12° <u>Ω</u> 09'52	19.57457 AU
				morning rise	6578 Oct 17 12:13	13° <u>Ω</u> 13'22	
conjunction	6572 Sep 01 19:21	14° <u>Π</u> 50'25	0°44'28	retrograde	6579 Jan 18 23:41	16° <u>Ω</u> 35'21	
minimum elong	6572 Sep 01 19:21	14° <u>Π</u> 50'25	0°44'29	opposition	6579 Apr 03 04:29	14° <u>Ω</u> 32'08	0°55'25
max. Earth dist.	6572 Sep 01 09:55	14° <u>Π</u> 49'00	19.93272 AU	min. Earth dist.	6579 Apr 03 17:22	14° <u>Ω</u> 30'44	17.55081 AU
morning rise	6572 Sep 18 11:38	15° <u>Π</u> 50'12		direct	6579 Jun 17 03:42	12° <u>Ω</u> 27'42	
retrograde	6572 Dec 21 14:37	19° <u>Π</u> 08'49		evening set	6579 Sep 19 05:34	15° <u>Ω</u> 50'49	
opposition	6573 Mar 06 16:20	17° <u>Π</u> 06'10	0°50'23				
min. Earth dist.	6573 Mar 07 00:29	17° <u>Π</u> 05'17	17.89885 AU	conjunction	6579 Oct 05 22:31	16° <u>Ω</u> 52'09	0°49'36
direct	6573 May 20 08:58	15° <u>Π</u> 03'40		minimum elong	6579 Oct 05 22:31	16° <u>Ω</u> 52'09	0°49'38
evening set	6573 Aug 21 01:55	18° <u>Π</u> 19'50		max. Earth dist.	6579 Oct 05 06:22	16° <u>Ω</u> 49'40	19.52752 AU
				morning rise	6579 Oct 22 14:33	17° <u>Ω</u> 53'24	
conjunction	6573 Sep 06 17:33	19° <u>Π</u> 19'42	0°46'06	retrograde	6580 Jan 23 22:41	21° <u>Ω</u> 15'50	
minimum elong	6573 Sep 06 17:33	19° <u>Π</u> 19'42	0°46'05	opposition	6580 Apr 07 00:59	19° <u>Ω</u> 12'39	0°55'01
max. Earth dist.	6573 Sep 06 06:04	19° <u>Π</u> 17'58	19.86546 AU	min. Earth dist.	6580 Apr 07 15:31	19° <u>Ω</u> 11'03	17.50563 AU
morning rise	6573 Sep 23 10:05	20° <u>Π</u> 19'44		direct	6580 Jun 21 00:31	17° <u>Ω</u> 07'59	
retrograde	6573 Dec 26 09:25	23° <u>Π</u> 38'57		evening set	6580 Sep 23 08:55	20° <u>Ω</u> 32'09	
opposition	6574 Mar 11 08:40	21° <u>Π</u> 36'07	0°52'03	max. Earth dist.	6580 Oct 09 08:03	21° <u>Ω</u> 30'56	19.48412 AU
min. Earth dist.	6574 Mar 11 18:47	21° <u>Π</u> 35'01	17.83273 AU				
direct	6574 May 25 01:34	19° <u>Π</u> 33'12		conjunction	6580 Oct 10 01:45	21° <u>Ω</u> 33'40	0°49'05
evening set	6574 Aug 26 00:28	22° <u>Π</u> 50'33		minimum elong	6580 Oct 10 01:45	21° <u>Ω</u> 33'40	0°49'06
				morning rise	6580 Oct 26 17:36	22° <u>Ω</u> 35'04	
conjunction	6574 Sep 11 16:34	23° <u>Π</u> 50'42	0°47'26	retrograde	6581 Jan 27 23:40	25° <u>Ω</u> 57'53	
minimum elong	6574 Sep 11 16:34	23° <u>Π</u> 50'42	0°47'27	opposition	6581 Apr 11 22:05	23° <u>Ω</u> 54'42	0°54'16
max. Earth dist.	6574 Sep 11 04:40	23° <u>Π</u> 48'54	19.80054 AU	min. Earth dist.	6581 Apr 12 12:39	23° <u>Ω</u> 53'06	17.46397 AU
morning rise	6574 Sep 28 09:10	24° <u>Π</u> 50'57		direct	6581 Jun 25 23:41	21° <u>Ω</u> 49'49	
retrograde	6574 Dec 31 06:52	28° <u>Π</u> 10'47		evening set	6581 Sep 28 12:50	25° <u>Ω</u> 14'57	
opposition	6575 Mar 16 01:37	26° <u>Π</u> 07'47	0°53'24	max. Earth dist.	6581 Oct 14 11:52	26° <u>Ω</u> 13'53	19.44404 AU
min. Earth dist.	6575 Mar 16 11:33	26° <u>Π</u> 06'42	17.76920 AU				
direct	6575 May 29 20:30	24° <u>Π</u> 04'29		conjunction	6581 Oct 15 05:37	26° <u>Ω</u> 16'38	0°48'13
evening set	6575 Aug 30 23:47	27° <u>Π</u> 23'00		minimum elong	6581 Oct 15 05:37	26° <u>Ω</u> 16'38	0°48'15
				morning rise	6581 Oct 31 20:52	27° <u>Ω</u> 18'08	
conjunction	6575 Sep 16 16:08	28° <u>Π</u> 23'25	0°48'30		6581 Dec 24 21:27	0° <u>Π</u>	

retrograde	6582 Feb 01 23:22	0° $\overline{\text{M}}$ 41'16	evening set	6588 Nov 01 22:58	28° $\overline{\text{M}}$ 37'34	
	6582 Mar 13 16:23	30° $\overline{\text{R}}$ $\overline{\text{A}}$				
opposition	6582 Apr 16 19:54	28° $\overline{\text{A}}$ 38'06 0°53'08	conjunction	6588 Nov 18 12:30	29° $\overline{\text{M}}$ 39'34 0°33'26	
min. Earth dist.	6582 Apr 17 11:47	28° $\overline{\text{A}}$ 36'21 17.42566 AU	minimum elong	6588 Nov 18 12:30	29° $\overline{\text{M}}$ 39'34 0°33'29	
direct	6582 Jun 30 22:39	26° $\overline{\text{A}}$ 32'59	max. Earth dist.	6588 Nov 17 17:07	29° $\overline{\text{M}}$ 36'32 19.28817 AU	
evening set	6582 Oct 03 17:17	29° $\overline{\text{A}}$ 59'01		6588 Nov 23 22:26	0° $\overline{\text{A}}$	
	6582 Oct 03 23:48	0° $\overline{\text{M}}$	morning rise	6588 Dec 04 23:15	0° $\overline{\text{A}}$ 41'11	
			retrograde	6589 Mar 07 00:18	4° $\overline{\text{A}}$ 04'33	
conjunction	6582 Oct 20 09:42	1° $\overline{\text{M}}$ 00'49 0°47'02	opposition	6589 May 19 16:11	2° $\overline{\text{A}}$ 01'28 0°35'34	
minimum elong	6582 Oct 20 09:42	1° $\overline{\text{M}}$ 00'49 0°47'04	min. Earth dist.	6589 May 20 08:31	1° $\overline{\text{A}}$ 59'41 17.28810 AU	
max. Earth dist.	6582 Oct 19 14:14	0° $\overline{\text{M}}$ 57'47 19.40765 AU		6589 Jul 21 03:21	30° $\overline{\text{R}}$ $\overline{\text{M}}$	
morning rise	6582 Nov 06 00:38	2° $\overline{\text{M}}$ 02'26	direct	6589 Aug 03 14:31	29° $\overline{\text{M}}$ 55'10	
retrograde	6583 Feb 06 23:54	5° $\overline{\text{M}}$ 25'48		6589 Aug 16 23:25	0° $\overline{\text{A}}$	
opposition	6583 Apr 21 18:11	3° $\overline{\text{M}}$ 22'37 0°51'39	evening set	6589 Nov 07 03:36	3° $\overline{\text{A}}$ 24'36	
min. Earth dist.	6583 Apr 22 10:07	3° $\overline{\text{M}}$ 20'52 17.39125 AU				
direct	6583 Jul 05 23:04	1° $\overline{\text{M}}$ 17'17	conjunction	6589 Nov 23 16:27	4° $\overline{\text{A}}$ 26'32 0°30'15	
evening set	6583 Oct 08 21:47	4° $\overline{\text{M}}$ 44'05	minimum elong	6589 Nov 23 16:28	4° $\overline{\text{A}}$ 26'32 0°30'18	
			max. Earth dist.	6589 Nov 22 22:27	4° $\overline{\text{A}}$ 23'43 19.28914 AU	
conjunction	6583 Oct 25 14:05	5° $\overline{\text{M}}$ 46'01 0°45'31	morning rise	6589 Dec 10 02:16	5° $\overline{\text{A}}$ 28'04	
minimum elong	6583 Oct 25 14:05	5° $\overline{\text{M}}$ 46'01 0°45'32	retrograde	6590 Mar 12 01:25	8° $\overline{\text{A}}$ 51'13	
max. Earth dist.	6583 Oct 24 19:12	5° $\overline{\text{M}}$ 43'04 19.37519 AU	opposition	6590 May 24 16:47	6° $\overline{\text{A}}$ 48'15 0°31'54	
morning rise	6583 Nov 11 04:20	6° $\overline{\text{M}}$ 47'41	min. Earth dist.	6590 May 25 07:42	6° $\overline{\text{A}}$ 46'38 17.29235 AU	
retrograde	6584 Feb 11 23:58	10° $\overline{\text{M}}$ 11'14	direct	6590 Aug 08 17:58	4° $\overline{\text{A}}$ 41'59	
opposition	6584 Apr 25 17:02	8° $\overline{\text{M}}$ 08'02 0°49'47	evening set	6590 Nov 12 08:05	8° $\overline{\text{A}}$ 11'29	
min. Earth dist.	6584 Apr 26 09:42	8° $\overline{\text{M}}$ 06'13 17.36086 AU				
direct	6584 Jul 10 00:36	6° $\overline{\text{M}}$ 02'30	conjunction	6590 Nov 28 20:06	9° $\overline{\text{A}}$ 13'20 0°26'51	
evening set	6584 Oct 13 02:53	9° $\overline{\text{M}}$ 30'00	minimum elong	6590 Nov 28 20:06	9° $\overline{\text{A}}$ 13'20 0°26'54	
			max. Earth dist.	6590 Nov 28 02:31	9° $\overline{\text{A}}$ 10'34 19.29681 AU	
conjunction	6584 Oct 29 18:39	10° $\overline{\text{M}}$ 31'59 0°43'41	morning rise	6590 Dec 15 05:01	10° $\overline{\text{A}}$ 14'45	
minimum elong	6584 Oct 29 18:39	10° $\overline{\text{M}}$ 31'59 0°43'43	retrograde	6591 Mar 17 01:26	13° $\overline{\text{A}}$ 37'39	
max. Earth dist.	6584 Oct 28 22:11	10° $\overline{\text{M}}$ 28'48 19.34710 AU	opposition	6591 May 29 17:35	11° $\overline{\text{A}}$ 34'51 0°28'00	
morning rise	6584 Nov 15 08:27	11° $\overline{\text{M}}$ 33'42	min. Earth dist.	6591 May 30 08:36	11° $\overline{\text{A}}$ 33'13 17.30338 AU	
retrograde	6585 Feb 15 23:32	14° $\overline{\text{M}}$ 57'21	direct	6591 Aug 13 19:55	9° $\overline{\text{A}}$ 28'38	
opposition	6585 Apr 30 16:07	12° $\overline{\text{M}}$ 54'09 0°47'35	evening set	6591 Nov 17 12:07	12° $\overline{\text{A}}$ 58'09	
min. Earth dist.	6585 May 01 08:58	12° $\overline{\text{M}}$ 52'18 17.33517 AU				
direct	6585 Jul 15 02:31	10° $\overline{\text{M}}$ 48'23	conjunction	6591 Dec 03 23:21	13° $\overline{\text{A}}$ 59'52 0°23'16	
evening set	6585 Oct 18 07:56	14° $\overline{\text{M}}$ 16'30	minimum elong	6591 Dec 03 23:21	13° $\overline{\text{A}}$ 59'52 0°23'19	
	6585 Oct 30 01:04	15° $\overline{\text{M}}$	max. Earth dist.	6591 Dec 03 06:49	13° $\overline{\text{A}}$ 57'17 19.31111 AU	
conjunction	6585 Nov 03 23:24	15° $\overline{\text{M}}$ 18'32 0°41'32	morning rise	6591 Dec 20 07:24	15° $\overline{\text{A}}$ 01'09	
minimum elong	6585 Nov 03 23:24	15° $\overline{\text{M}}$ 18'32 0°41'35	retrograde	6592 Mar 21 02:28	18° $\overline{\text{A}}$ 23'45	
max. Earth dist.	6585 Nov 03 03:59	15° $\overline{\text{M}}$ 15'30 19.32385 AU	opposition	6592 Jun 02 18:25	16° $\overline{\text{A}}$ 21'09 0°23'55	
morning rise	6585 Nov 20 12:23	16° $\overline{\text{M}}$ 20'16	min. Earth dist.	6592 Jun 03 07:50	16° $\overline{\text{A}}$ 19'41 17.32056 AU	
retrograde	6586 Feb 20 23:54	19° $\overline{\text{M}}$ 43'55	direct	6592 Aug 17 23:52	14° $\overline{\text{A}}$ 15'04	
opposition	6586 May 05 15:44	17° $\overline{\text{M}}$ 40'44 0°45'02	evening set	6592 Nov 21 15:58	17° $\overline{\text{A}}$ 44'28	
min. Earth dist.	6586 May 06 08:37	17° $\overline{\text{M}}$ 38'53 17.31446 AU	max. Earth dist.	6592 Dec 07 10:44	18° $\overline{\text{A}}$ 43'37 19.33116 AU	
direct	6586 Jul 20 05:51	15° $\overline{\text{M}}$ 34'48				
evening set	6586 Oct 23 13:00	19° $\overline{\text{M}}$ 03'22	conjunction	6592 Dec 08 02:17	18° $\overline{\text{A}}$ 46'03 0°19'33	
max. Earth dist.	6586 Nov 08 07:23	20° $\overline{\text{M}}$ 02'14 19.30593 AU	minimum elong	6592 Dec 08 02:17	18° $\overline{\text{A}}$ 46'03 0°19'36	
			morning rise	6592 Dec 24 09:17	19° $\overline{\text{A}}$ 47'10	
conjunction	6586 Nov 09 03:46	20° $\overline{\text{M}}$ 05'26 0°39'06	retrograde	6593 Mar 26 01:31	23° $\overline{\text{A}}$ 09'25	
minimum elong	6586 Nov 09 03:46	20° $\overline{\text{M}}$ 05'26 0°39'09	opposition	6593 Jun 07 19:26	21° $\overline{\text{A}}$ 07'02 0°19'41	
morning rise	6586 Nov 25 16:09	21° $\overline{\text{M}}$ 07'09	min. Earth dist.	6593 Jun 08 09:11	21° $\overline{\text{A}}$ 05'33 17.34337 AU	
retrograde	6587 Feb 25 23:27	24° $\overline{\text{M}}$ 30'47	direct	6593 Aug 23 02:00	19° $\overline{\text{A}}$ 01'06	
opposition	6587 May 10 15:40	22° $\overline{\text{M}}$ 27'35 0°42'10	evening set	6593 Nov 26 19:21	22° $\overline{\text{A}}$ 30'18	
min. Earth dist.	6587 May 11 08:38	22° $\overline{\text{M}}$ 25'44 17.29949 AU				
direct	6587 Jul 25 08:31	20° $\overline{\text{M}}$ 21'29	conjunction	6593 Dec 13 04:40	23° $\overline{\text{A}}$ 31'42 0°15'42	
evening set	6587 Oct 28 17:57	23° $\overline{\text{M}}$ 50'27	minimum elong	6593 Dec 13 04:40	23° $\overline{\text{A}}$ 31'42 0°15'44	
			behind sun begin	6593 Dec 13 03:30	23° $\overline{\text{A}}$ 31'31	
conjunction	6587 Nov 14 08:16	24° $\overline{\text{M}}$ 52'30 0°36'24	behind sun end	6593 Dec 13 05:50	23° $\overline{\text{A}}$ 31'53	
minimum elong	6587 Nov 14 08:16	24° $\overline{\text{M}}$ 52'30 0°36'27	max. Earth dist.	6593 Dec 12 13:38	23° $\overline{\text{A}}$ 29'20 19.35663 AU	
max. Earth dist.	6587 Nov 13 13:14	24° $\overline{\text{M}}$ 49'31 19.29393 AU	morning rise	6593 Dec 29 10:46	24° $\overline{\text{A}}$ 32'38	
morning rise	6587 Nov 30 19:47	25° $\overline{\text{M}}$ 54'10	retrograde	6594 Mar 31 02:00	27° $\overline{\text{A}}$ 54'30	
retrograde	6588 Mar 02 00:16	27° $\overline{\text{M}}$ 17'41	opposition	6594 Jun 12 20:26	25° $\overline{\text{A}}$ 52'19 0°15'19	
opposition	6588 May 14 15:42	27° $\overline{\text{M}}$ 14'33 0°39'00	min. Earth dist.	6594 Jun 13 08:25	25° $\overline{\text{A}}$ 51'01 17.37120 AU	
min. Earth dist.	6588 May 15 08:00	27° $\overline{\text{M}}$ 12'45 17.29050 AU	direct	6594 Aug 28 06:21	23° $\overline{\text{A}}$ 46'33	
direct	6588 Jul 29 12:09	25° $\overline{\text{M}}$ 08'19	evening set	6594 Dec 01 22:00	27° $\overline{\text{A}}$ 15'25	

conjunction	6594 Dec 18 06:27	28° \mathring{A} 16'38	0°11'45	behind sun end	6600 Jan 11 10:18	21° \mathring{B} 44'43	
minimum elong	6594 Dec 18 06:27	28° \mathring{A} 16'37	0°11'48	max. Earth dist.	6600 Jan 10 19:21	21° \mathring{B} 42'25	19.59499 AU
behind sun begin	6594 Dec 18 01:47	28° \mathring{A} 15'54		morning rise	6600 Jan 27 04:48	22° \mathring{B} 43'18	
behind sun end	6594 Dec 18 11:07	28° \mathring{A} 17'20		retrograde	6600 Apr 28 11:19	26° \mathring{B} 01'51	
max. Earth dist.	6594 Dec 17 16:55	28° \mathring{A} 14'30	19.38675 AU	opposition	6600 Jul 11 22:36	24° \mathring{B} 00'43	-0°11'38
morning rise	6595 Jan 03 11:27	29° \mathring{A} 17'21		min. Earth dist.	6600 Jul 12 05:17	24° \mathring{B} 00'00	17.62044 AU
	6595 Jan 15 08:18	0° \mathring{B}		direct	6600 Sep 26 22:07	21° \mathring{B} 56'10	
retrograde	6595 Apr 05 00:11	2° \mathring{B} 38'47		evening set	6600 Dec 30 23:02	25° \mathring{B} 20'59	
opposition	6595 Jun 17 21:31	0° \mathring{B} 36'48	0°10'52				
min. Earth dist.	6595 Jun 18 09:46	0° \mathring{B} 35'29	17.40351 AU	conjunction	6601 Jan 16 01:27	26° \mathring{B} 20'36	-0°12'29
	6595 Jul 02 07:46	30° \mathring{R} \mathring{A}		minimum elong	6601 Jan 16 01:26	26° \mathring{B} 20'36	0°12'26
direct	6595 Sep 02 08:44	28° \mathring{A} 31'14		behind sun begin	6601 Jan 15 21:05	26° \mathring{B} 19'56	
	6595 Oct 31 20:25	0° \mathring{B}		behind sun end	6601 Jan 16 05:48	26° \mathring{B} 21'15	
evening set	6595 Dec 07 00:16	1° \mathring{B} 59'39		max. Earth dist.	6601 Jan 15 18:55	26° \mathring{B} 19'36	19.64693 AU
				morning rise	6601 Feb 01 00:40	27° \mathring{B} 19'46	
conjunction	6595 Dec 23 07:37	3° \mathring{B} 00'38	0°07'44		6601 Mar 27 00:17	0° \mathring{A}	
minimum elong	6595 Dec 23 07:37	3° \mathring{B} 00'38	0°07'47	retrograde	6601 May 03 06:26	0° \mathring{A} 37'39	
behind sun begin	6595 Dec 23 01:36	2° \mathring{B} 59'43			6601 Jun 10 17:05	30° \mathring{R} \mathring{B}	
behind sun end	6595 Dec 23 13:38	3° \mathring{B} 01'33		opposition	6601 Jul 16 21:42	28° \mathring{B} 36'39	-0°15'57
max. Earth dist.	6595 Dec 22 18:10	2° \mathring{B} 58'32	19.42119 AU	min. Earth dist.	6601 Jul 17 03:25	28° \mathring{B} 36'03	17.67408 AU
morning rise	6596 Jan 08 11:45	4° \mathring{B} 01'08		direct	6601 Oct 01 22:41	26° \mathring{B} 32'22	
retrograde	6596 Apr 08 23:29	7° \mathring{B} 22'04		evening set	6602 Jan 04 20:03	29° \mathring{B} 56'13	
opposition	6596 Jun 21 22:08	5° \mathring{B} 20'17	0°06'21		6602 Jan 05 21:04	0° \mathring{A}	
min. Earth dist.	6596 Jun 22 08:40	5° \mathring{B} 19'09	17.43985 AU				
direct	6596 Sep 06 12:58	3° \mathring{B} 14'54					
evening set	6596 Dec 11 01:47	6° \mathring{B} 42'48					
conjunction	6596 Dec 27 08:15	7° \mathring{B} 43'33	0°03'41				
minimum elong	6596 Dec 27 08:14	7° \mathring{B} 43'33	0°03'44				
behind sun begin	6596 Dec 27 01:38	7° \mathring{B} 42'32					
behind sun end	6596 Dec 27 14:51	7° \mathring{B} 44'33					
max. Earth dist.	6596 Dec 26 20:38	7° \mathring{B} 41'44	19.45939 AU				
morning rise	6597 Jan 12 11:13	8° \mathring{B} 43'48					
retrograde	6597 Apr 13 20:40	12° \mathring{B} 04'12					
opposition	6597 Jun 26 22:55	10° \mathring{B} 02'36	0°01'48				
min. Earth dist.	6597 Jun 27 09:28	10° \mathring{B} 01'28	17.47983 AU				
direct	6597 Sep 11 15:16	7° \mathring{B} 57'26					
desc. node	6597 Nov 20 16:06	9° \mathring{B} 57'18					
evening set	6597 Dec 16 02:29	11° \mathring{B} 24'41					
conjunction	6598 Jan 01 07:45	12° \mathring{B} 25'09	-0°00'29				
minimum elong	6598 Jan 01 07:45	12° \mathring{B} 25'09	0°00'25				
behind sun begin	6598 Jan 01 01:07	12° \mathring{B} 24'09					
behind sun end	6598 Jan 01 14:22	12° \mathring{B} 26'10					
max. Earth dist.	6597 Dec 31 20:12	12° \mathring{B} 23'22	19.50120 AU				
morning rise	6598 Jan 17 09:55	13° \mathring{B} 25'10					
retrograde	6598 Apr 18 18:47	16° \mathring{B} 45'00					
opposition	6598 Jul 01 23:12	14° \mathring{B} 43'33	-0°02'44				
min. Earth dist.	6598 Jul 02 07:57	14° \mathring{B} 42'37	17.52335 AU				
direct	6598 Sep 16 18:53	12° \mathring{B} 38'35					
evening set	6598 Dec 21 02:14	16° \mathring{B} 05'06					
conjunction	6599 Jan 06 06:40	17° \mathring{B} 05'19	-0°04'35				
minimum elong	6599 Jan 06 06:39	17° \mathring{B} 05'19	0°04'32				
behind sun begin	6599 Jan 06 00:08	17° \mathring{B} 04'19					
behind sun end	6599 Jan 06 13:10	17° \mathring{B} 06'18					
max. Earth dist.	6599 Jan 05 21:23	17° \mathring{B} 03'53	19.54640 AU				
morning rise	6599 Jan 22 07:42	18° \mathring{B} 05'03					
retrograde	6599 Apr 23 14:36	21° \mathring{B} 24'15					
opposition	6599 Jul 06 23:07	19° \mathring{B} 22'59	-0°07'13				
min. Earth dist.	6599 Jul 07 07:33	19° \mathring{B} 22'05	17.57018 AU				
direct	6599 Sep 21 20:31	17° \mathring{B} 18'13					
evening set	6599 Dec 26 01:13	20° \mathring{B} 43'55					
conjunction	6600 Jan 11 04:29	21° \mathring{B} 43'50	-0°08'34				
minimum elong	6600 Jan 11 04:29	21° \mathring{B} 43'50	0°08'30				
behind sun begin	6600 Jan 10 22:40	21° \mathring{B} 42'57					