

retrograde	5100 Feb 18 06:53	5°♍17'04		conjunction	5105 Mar 10 07:18	19°♐17'50 -0°34'15
opposition	5100 Apr 19 16:15	0°♍19'41 1°21'33		minimum elong	5105 Mar 10 07:17	19°♐17'50 0°34'15
min. Earth dist.	5100 Apr 19 14:11	0°♍20'22 4.43300 AU		morning rise	5105 Mar 23 02:39	22°♐18'36
	5100 Apr 22 04:25	30°♋♂			5105 Apr 26 05:20	0°♑
direct	5100 Jun 20 10:26	25°♊17'24		retrograde	5105 Jul 29 16:51	11°♑46'48
	5100 Aug 18 02:24	0°♍		opposition	5105 Sep 28 00:11	6°♑50'43 -1°09'17
evening set	5100 Oct 24 17:14	12°♍45'23		min. Earth dist.	5105 Sep 28 17:02	6°♑45'13 4.03371 AU
	5100 Nov 04 04:16	15°♍		direct	5105 Nov 26 15:11	1°♑55'35
				evening set	5106 Apr 01 10:05	21°♑25'36
conjunction	5100 Nov 06 20:35	15°♍34'37 0°57'30				
minimum elong	5100 Nov 06 20:35	15°♍34'37 0°57'31		conjunction	5106 Apr 14 09:30	24°♑33'37 -0°54'07
max. Earth dist.	5100 Nov 06 08:28	15°♍28'05 6.46591 AU		minimum elong	5106 Apr 14 09:29	24°♑33'36 0°54'07
morning rise	5100 Nov 19 21:24	18°♍22'35		max. Earth dist.	5106 Apr 14 00:48	24°♑28'21 5.97533 AU
	5101 Jan 19 11:15	0°♌		morning rise	5106 Apr 27 11:11	27°♑43'00
retrograde	5101 Mar 20 03:30	5°♌03'33			5106 May 07 00:42	0°♌
opposition	5101 May 19 20:10	0°♌09'14 1°19'26			5106 Jul 22 05:45	15°♌
min. Earth dist.	5101 May 20 13:30	0°♌03'40 4.47985 AU		retrograde	5106 Sep 06 00:39	18°♌13'37
	5101 May 21 00:53	30°♋♍			5106 Oct 22 08:26	15°♋♌
direct	5101 Jul 21 10:29	25°♍07'07		opposition	5106 Nov 04 21:46	13°♌13'55 -1°25'34
	5101 Sep 19 14:48	0°♌		min. Earth dist.	5106 Nov 04 14:09	13°♌16'28 3.93718 AU
evening set	5101 Nov 24 08:34	12°♌26'52		direct	5107 Jan 02 06:28	8°♌20'00
max. Earth dist.	5101 Dec 05 17:13	14°♌53'38 6.47219 AU			5107 Mar 09 03:46	15°♌
				evening set	5107 May 08 08:26	28°♌15'24
conjunction	5101 Dec 07 06:28	15°♌13'45 0°48'30			5107 May 15 12:45	0°♍
minimum elong	5101 Dec 07 06:29	15°♌13'45 0°48'31				
morning rise	5101 Dec 20 02:01	17°♌59'33		conjunction	5107 May 21 15:38	1°♍29'28 -0°53'36
	5102 Feb 20 20:58	0°♎		minimum elong	5107 May 21 15:40	1°♍29'29 0°53'37
retrograde	5102 Apr 19 10:03	4°♎43'01		max. Earth dist.	5107 May 22 20:10	1°♍46'51 5.92327 AU
	5102 Jun 18 01:47	30°♋♌		morning rise	5107 Jun 04 01:34	4°♍45'04
opposition	5102 Jun 19 07:43	29°♌50'26 0°56'39		retrograde	5107 Oct 14 13:18	25°♍34'13
min. Earth dist.	5102 Jun 20 15:41	29°♌40'14 4.44574 AU		min. Earth dist.	5107 Dec 11 21:47	20°♍40'29 3.93679 AU
direct	5102 Aug 21 02:13	24°♌49'06		opposition	5107 Dec 13 01:34	20°♍31'04 -1°07'19
	5102 Oct 21 23:22	0°♎		direct	5108 Feb 08 22:07	15°♍36'09
evening set	5102 Dec 24 17:30	12°♎20'44			5108 May 22 01:56	0°♏
max. Earth dist.	5103 Jan 04 09:22	14°♎41'07 6.39967 AU		evening set	5108 Jun 14 06:13	5°♏24'44
conjunction	5103 Jan 06 12:00	15°♎09'00 0°26'29		conjunction	5108 Jun 27 20:37	8°♏39'51 -0°31'35
minimum elong	5103 Jan 06 12:01	15°♎09'00 0°26'30		minimum elong	5108 Jun 27 20:39	8°♏39'52 0°31'36
morning rise	5103 Jan 19 04:27	17°♎56'31		max. Earth dist.	5108 Jun 30 02:31	9°♏12'05 5.97390 AU
	5103 Mar 21 13:49	0°♏		morning rise	5108 Jul 11 13:33	11°♏56'03
retrograde	5103 May 21 02:59	5°♏12'15			5108 Oct 13 13:53	0°♏
opposition	5103 Jul 21 01:50	0°♏19'59 0°17'44		retrograde	5108 Nov 19 06:10	2°♏08'26
min. Earth dist.	5103 Jul 22 16:13	0°♏07'44 4.33860 AU			5108 Dec 25 18:11	30°♋♏
	5103 Jul 23 16:32	30°♋♎		min. Earth dist.	5109 Jan 16 05:09	27°♏16'32 4.03251 AU
direct	5103 Sep 21 07:52	25°♎20'15		opposition	5109 Jan 17 18:52	27°♏03'41 -0°22'40
	5103 Nov 17 21:58	0°♏		direct	5109 Mar 17 00:23	22°♏06'11
desc. node	5103 Dec 21 16:38	6°♏01'12			5109 May 29 17:22	0°♏
evening set	5104 Jan 24 19:39	13°♏22'25		asc. node	5109 Jul 12 15:09	9°♏17'12
	5104 Feb 01 00:10	15°♏		evening set	5109 Jul 21 13:51	11°♏20'03
max. Earth dist.	5104 Feb 04 07:59	15°♏45'21 6.26572 AU				
				conjunction	5109 Aug 04 07:07	14°♏30'20 0°02'00
conjunction	5104 Feb 06 12:46	16°♏15'22 -0°03'50		minimum elong	5109 Aug 04 07:06	14°♏30'20 0°01'59
minimum elong	5104 Feb 06 12:45	16°♏15'22 0°03'49		behind sun begin	5109 Aug 03 22:43	14°♏25'30
behind sun begin	5104 Feb 06 04:52	16°♏10'54		behind sun end	5109 Aug 04 15:30	14°♏35'10
behind sun end	5104 Feb 06 20:39	16°♏19'49			5109 Aug 06 10:23	15°♏
morning rise	5104 Feb 19 05:16	19°♏08'14		max. Earth dist.	5109 Aug 06 15:51	15°♏03'10 6.10515 AU
	5104 Apr 11 04:12	0°♐		morning rise	5109 Aug 18 01:25	17°♏40'47
retrograde	5104 Jun 23 04:07	7°♐22'51			5109 Oct 16 01:36	0°♐
opposition	5104 Aug 22 21:03	2°♐29'20 -0°28'56		retrograde	5109 Dec 23 11:10	6°♐43'42
min. Earth dist.	5104 Aug 24 07:03	2°♐18'23 4.18583 AU		min. Earth dist.	5110 Feb 19 20:05	1°♐50'54 4.18447 AU
	5104 Sep 12 03:19	30°♋♏		opposition	5110 Feb 21 04:12	1°♐40'02 0°27'34
direct	5104 Oct 23 00:27	27°♏31'47			5110 Mar 05 18:14	30°♋♏
	5104 Dec 02 06:24	0°♐		direct	5110 Apr 21 14:06	26°♏39'53
evening set	5105 Feb 25 12:29	16°♐17'42			5110 Jun 07 11:19	0°♐
max. Earth dist.	5105 Mar 08 17:54	18°♐55'49 6.10681 AU		evening set	5110 Aug 26 02:52	15°♐08'32

conjunction	5110 Sep 08 17:44	18° \mathbb{M} 10'38	0°33'17	max. Earth dist.	5116 Feb 08 21:29	20° \approx 25'00	6.24288 AU
minimum elong	5110 Sep 08 17:43	18° \mathbb{M} 10'37	0°33'17				
max. Earth dist.	5110 Sep 10 11:00	18° \mathbb{M} 33'40	6.26485 AU	conjunction	5116 Feb 11 00:28	20° \approx 54'09	-0°08'20
morning rise	5110 Sep 22 07:40	21° \mathbb{M} 12'01		minimum elong	5116 Feb 11 00:28	20° \approx 54'08	0°08'19
	5110 Nov 03 08:49	0° $\underline{\mathbb{L}}$		behind sun begin	5116 Feb 10 17:24	20° \approx 50'07	
retrograde	5111 Jan 24 06:03	9° $\underline{\mathbb{L}}$ 04'35		behind sun end	5116 Feb 11 07:31	20° \approx 58'09	
opposition	5111 Mar 25 07:41	4° $\underline{\mathbb{L}}$ 04'03	1°05'28	morning rise	5116 Feb 23 17:04	23° \approx 48'02	
min. Earth dist.	5111 Mar 24 13:15	4° $\underline{\mathbb{L}}$ 10'11	4.33783 AU		5116 Mar 22 18:58	0° \mathbb{H}	
	5111 Apr 30 07:09	30° \mathbb{R} \mathbb{M}		retrograde	5116 Jun 28 04:08	12° \mathbb{H} 13'00	
direct	5111 May 25 01:09	29° \mathbb{M} 02'17		opposition	5116 Aug 27 19:48	7° \mathbb{H} 19'16	-0°35'25
	5111 Jun 19 03:16	0° $\underline{\mathbb{L}}$		min. Earth dist.	5116 Aug 29 04:11	7° \mathbb{H} 08'50	4.16182 AU
evening set	5111 Sep 28 12:32	16° $\underline{\mathbb{L}}$ 51'34		direct	5116 Oct 27 17:35	2° \mathbb{H} 22'08	
				evening set	5117 Mar 02 07:33	21° \mathbb{H} 15'19	
conjunction	5111 Oct 11 21:21	19° $\underline{\mathbb{L}}$ 45'35	0°52'54	max. Earth dist.	5117 Mar 13 15:33	23° \mathbb{H} 55'50	6.08369 AU
minimum elong	5111 Oct 11 21:20	19° $\underline{\mathbb{L}}$ 45'35	0°52'54				
max. Earth dist.	5111 Oct 12 09:26	19° $\underline{\mathbb{L}}$ 52'09	6.40003 AU	conjunction	5117 Mar 15 02:41	24° \mathbb{H} 16'37	-0°37'58
morning rise	5111 Oct 25 04:18	22° $\underline{\mathbb{L}}$ 38'29		minimum elong	5117 Mar 15 02:39	24° \mathbb{H} 16'36	0°37'58
	5111 Nov 29 20:00	0° \mathbb{M}		morning rise	5117 Mar 27 22:53	27° \mathbb{H} 18'44	
retrograde	5112 Feb 23 13:45	9° \mathbb{M} 40'23			5117 Apr 08 11:15	0° \mathbb{Y}	
opposition	5112 Apr 23 23:29	4° \mathbb{M} 43'29	1°22'34	retrograde	5117 Aug 04 01:01	16° \mathbb{Y} 57'58	
min. Earth dist.	5112 Apr 24 01:00	4° \mathbb{M} 42'59	4.44614 AU	opposition	5117 Oct 03 06:53	12° \mathbb{Y} 01'27	-1°13'26
	5112 Jun 10 13:41	30° \mathbb{R} $\underline{\mathbb{L}}$		min. Earth dist.	5117 Oct 03 20:18	11° \mathbb{Y} 57'02	4.01368 AU
direct	5112 Jun 24 22:22	29° $\underline{\mathbb{L}}$ 41'08		direct	5117 Dec 01 16:52	7° \mathbb{Y} 06'37	
	5112 Jul 09 08:08	0° \mathbb{M}		evening set	5118 Apr 06 13:20	26° \mathbb{Y} 42'40	
	5112 Oct 19 03:57	15° \mathbb{M}					
evening set	5112 Oct 29 02:21	17° \mathbb{M} 06'06		conjunction	5118 Apr 19 13:55	29° \mathbb{Y} 51'52	-0°55'25
				minimum elong	5118 Apr 19 13:54	29° \mathbb{Y} 51'51	0°55'25
conjunction	5112 Nov 11 04:53	19° \mathbb{M} 54'43	0°57'06	max. Earth dist.	5118 Apr 19 11:48	29° \mathbb{Y} 50'35	5.96064 AU
minimum elong	5112 Nov 11 04:53	19° \mathbb{M} 54'43	0°57'07		5118 Apr 20 03:19	0° \mathbb{B}	
max. Earth dist.	5112 Nov 10 12:50	19° \mathbb{M} 46'05	6.47345 AU	morning rise	5118 May 02 16:34	3° \mathbb{B} 02'25	
morning rise	5112 Nov 24 04:48	22° \mathbb{M} 42'04			5118 Jun 25 05:15	15° \mathbb{B}	
	5112 Dec 29 22:36	0° \mathbb{Z}		retrograde	5118 Sep 11 14:36	23° \mathbb{B} 39'35	
retrograde	5113 Mar 24 08:02	9° \mathbb{Z} 21'05		opposition	5118 Nov 10 08:43	18° \mathbb{B} 39'26	-1°25'05
opposition	5113 May 24 02:21	4° \mathbb{Z} 27'04	1°17'20	min. Earth dist.	5118 Nov 09 22:11	18° \mathbb{B} 42'58	3.92985 AU
min. Earth dist.	5113 May 24 21:34	4° \mathbb{Z} 20'54	4.48148 AU		5118 Dec 11 09:05	15° \mathbb{R} \mathbb{B}	
	5113 Jul 05 23:51	30° \mathbb{R} \mathbb{M}		direct	5119 Jan 07 14:37	13° \mathbb{B} 45'36	
direct	5113 Jul 25 17:28	29° \mathbb{M} 25'00			5119 Feb 03 16:14	15° \mathbb{B}	
	5113 Aug 14 15:35	0° \mathbb{Z}			5119 Apr 28 05:19	0° \mathbb{I}	
evening set	5113 Nov 28 15:01	16° \mathbb{Z} 44'48		evening set	5119 May 13 17:28	3° \mathbb{I} 42'26	
max. Earth dist.	5113 Dec 09 21:15	19° \mathbb{Z} 10'27	6.46777 AU				
				conjunction	5119 May 27 01:43	6° \mathbb{I} 57'00	-0°51'38
conjunction	5113 Dec 11 12:21	19° \mathbb{Z} 31'37	0°46'04	minimum elong	5119 May 27 01:44	6° \mathbb{I} 57'01	0°51'38
minimum elong	5113 Dec 11 12:22	19° \mathbb{Z} 31'37	0°46'05	max. Earth dist.	5119 May 28 10:32	7° \mathbb{I} 16'58	5.92404 AU
morning rise	5113 Dec 24 07:11	22° \mathbb{Z} 17'21		morning rise	5119 Jun 09 12:59	10° \mathbb{I} 13'08	
	5114 Jan 30 22:24	0° \mathbb{B}			5119 Sep 25 02:11	0° \mathbb{G}	
retrograde	5114 Apr 23 18:10	9° \mathbb{B} 03'16		retrograde	5119 Oct 19 20:48	1° \mathbb{G} 00'06	
opposition	5114 Jun 23 16:23	4° \mathbb{B} 10'54	0°51'57		5119 Nov 13 12:29	30° \mathbb{R} \mathbb{I}	
min. Earth dist.	5114 Jun 25 02:15	4° \mathbb{B} 00'06	4.43542 AU	min. Earth dist.	5119 Dec 17 02:39	26° \mathbb{I} 07'11	3.94590 AU
	5114 Aug 01 16:10	30° \mathbb{R} \mathbb{Z}		opposition	5119 Dec 18 09:55	25° \mathbb{I} 56'34	-1°02'08
direct	5114 Aug 25 10:30	29° \mathbb{Z} 09'47		direct	5120 Feb 14 05:24	21° \mathbb{I} 01'24	
	5114 Sep 18 06:10	0° \mathbb{B}			5120 May 02 08:59	0° \mathbb{G}	
evening set	5114 Dec 29 00:51	16° \mathbb{B} 44'33		evening set	5120 Jun 19 15:15	10° \mathbb{G} 45'54	
max. Earth dist.	5115 Jan 08 13:32	19° \mathbb{B} 03'46	6.38411 AU				
				conjunction	5120 Jul 03 06:18	14° \mathbb{G} 00'32	-0°27'12
conjunction	5115 Jan 10 18:53	19° \mathbb{B} 33'16	0°22'33	minimum elong	5120 Jul 03 06:20	14° \mathbb{G} 00'33	0°27'12
minimum elong	5115 Jan 10 18:54	19° \mathbb{B} 33'17	0°22'33	max. Earth dist.	5120 Jul 05 13:50	14° \mathbb{G} 33'37	5.99034 AU
morning rise	5115 Jan 23 11:21	22° \mathbb{B} 21'23		morning rise	5120 Jul 16 23:43	17° \mathbb{G} 16'08	
	5115 Feb 28 19:38	0° \approx			5120 Sep 14 00:40	0° \mathbb{Q}	
retrograde	5115 May 25 18:45	9° \approx 44'00		retrograde	5120 Nov 24 06:14	7° \mathbb{Q} 19'03	
opposition	5115 Jul 25 16:30	4° \approx 51'40	0°11'20	min. Earth dist.	5121 Jan 21 06:08	2° \mathbb{Q} 26'56	4.05414 AU
min. Earth dist.	5115 Jul 27 07:23	4° \approx 39'15	4.31857 AU	opposition	5121 Jan 22 19:23	2° \mathbb{Q} 14'14	-0°15'23
	5115 Sep 16 15:07	30° \mathbb{R} \mathbb{B}			5121 Feb 08 21:32	30° \mathbb{R} \mathbb{G}	
direct	5115 Sep 25 19:39	29° \mathbb{B} 52'10		direct	5121 Mar 22 05:43	27° \mathbb{G} 16'18	
	5115 Oct 05 00:08	0° \approx			5121 May 02 13:38	0° \mathbb{Q}	
desc. node	5115 Oct 31 00:59	1° \approx 42'45		asc. node	5121 May 22 03:56	2° \mathbb{Q} 52'13	
	5116 Jan 15 20:50	15° \approx			5121 Jul 20 15:49	15° \mathbb{Q}	
evening set	5116 Jan 29 07:07	18° \approx 00'13		evening set	5121 Jul 26 17:12	16° \mathbb{Q} 22'53	

conjunction	5121 Aug 09 10:29	19°Ω32'00	0°06'50	direct	5127 Sep 30 08:29	4°≈27'57	
minimum elong	5121 Aug 09 10:28	19°Ω32'00	0°06'49		5127 Dec 29 08:59	15°≈	
behind sun begin	5121 Aug 09 02:42	19°Ω27'33		evening set	5128 Feb 02 20:49	22°≈42'51	
behind sun end	5121 Aug 09 18:14	19°Ω36'27		max. Earth dist.	5128 Feb 13 11:30	25°≈08'41	6.21805 AU
max. Earth dist.	5121 Aug 11 19:29	20°Ω04'48	6.13001 AU				
morning rise	5121 Aug 23 04:16	22°Ω41'05		conjunction	5128 Feb 15 14:08	25°≈37'48	-0°12'49
	5121 Sep 25 12:37	0°♐		minimum elong	5128 Feb 15 14:07	25°≈37'47	0°12'48
retrograde	5121 Dec 28 01:05	11°♐32'21		behind sun begin	5128 Feb 15 09:02	25°≈34'53	
opposition	5122 Feb 25 19:27	6°♐29'03	0°33'53	behind sun end	5128 Feb 15 19:12	25°≈40'42	
min. Earth dist.	5122 Feb 24 12:15	6°♐39'34	4.21003 AU	morning rise	5128 Feb 28 07:14	28°≈32'53	
direct	5122 Apr 26 09:18	1°♐28'35			5128 Mar 05 16:16	0°♐	
evening set	5122 Aug 30 22:04	19°♐50'00		retrograde	5128 Jul 03 06:30	17°♐08'49	
				opposition	5128 Sep 01 20:59	12°♐14'44	-0°41'45
conjunction	5122 Sep 13 12:01	22°♐50'43	0°36'51	min. Earth dist.	5128 Sep 03 02:41	12°♐05'07	4.13751 AU
minimum elong	5122 Sep 13 11:59	22°♐50'42	0°36'50	direct	5128 Nov 01 13:23	7°♐17'56	
max. Earth dist.	5122 Sep 15 00:02	23°♐10'43	6.28885 AU	evening set	5129 Mar 07 04:48	26°♐18'14	
morning rise	5122 Sep 27 01:09	25°♐50'41		max. Earth dist.	5129 Mar 18 19:12	29°♐03'13	6.06223 AU
	5122 Oct 16 06:17	0°♑					
retrograde	5123 Jan 28 13:29	13°♑33'56		conjunction	5129 Mar 20 00:40	29°♐20'45	-0°41'27
opposition	5123 Mar 29 16:01	8°♑33'52	1°09'08	minimum elong	5129 Mar 20 00:38	29°♐20'44	0°41'27
min. Earth dist.	5123 Mar 29 01:07	8°♑38'48	4.35844 AU		5129 Mar 22 18:38	0°♑	
direct	5123 May 29 14:47	3°♑31'53		morning rise	5129 Apr 01 21:27	2°♑24'06	
evening set	5123 Oct 02 23:59	21°♑16'06		retrograde	5129 Aug 09 12:00	22°♑13'17	
				opposition	5129 Oct 08 15:33	17°♑16'19	-1°17'02
conjunction	5123 Oct 16 08:03	24°♑09'08	0°54'25	min. Earth dist.	5129 Oct 09 02:02	17°♑12'52	3.99736 AU
minimum elong	5123 Oct 16 08:02	24°♑09'08	0°54'26	direct	5129 Dec 06 21:24	12°♑21'47	
max. Earth dist.	5123 Oct 16 16:52	24°♑13'55	6.41568 AU		5130 Apr 03 06:31	0°♒	
morning rise	5123 Oct 29 13:47	27°♑00'58		evening set	5130 Apr 11 18:00	2°♒02'02	
	5123 Nov 12 14:48	0°♓					
retrograde	5124 Feb 27 16:09	13°♓57'41		conjunction	5130 Apr 24 19:23	5°♒12'06	-0°56'16
opposition	5124 Apr 28 04:01	9°♓01'14	1°23'07	minimum elong	5130 Apr 24 19:23	5°♒12'06	0°56'17
min. Earth dist.	5124 Apr 28 07:36	9°♓00'04	4.45606 AU	max. Earth dist.	5130 Apr 24 21:44	5°♒13'31	5.95084 AU
direct	5124 Jun 29 04:54	3°♓58'52		morning rise	5130 May 07 23:20	8°♒23'39	
	5124 Oct 02 10:31	15°♓			5130 Jun 05 02:57	15°♒	
evening set	5124 Nov 02 09:16	21°♓21'57		retrograde	5130 Sep 17 01:01	29°♒04'46	
				opposition	5130 Nov 15 19:13	24°♒04'03	-1°23'50
conjunction	5124 Nov 15 10:52	24°♓10'05	0°56'25	min. Earth dist.	5130 Nov 15 04:09	24°♒09'06	3.92792 AU
minimum elong	5124 Nov 15 10:52	24°♓10'06	0°56'26	direct	5131 Jan 12 21:41	19°♒10'09	
max. Earth dist.	5124 Nov 14 14:01	23°♓58'53	6.47688 AU		5131 Apr 09 14:43	0°♓	
morning rise	5124 Nov 28 10:01	26°♓57'01		evening set	5131 May 19 01:56	9°♓06'17	
	5124 Dec 12 20:59	0°♈					
retrograde	5125 Mar 28 13:37	13°♈35'29		conjunction	5131 Jun 01 11:15	12°♓21'05	-0°49'14
opposition	5125 May 28 07:20	8°♈41'49	1°14'55	minimum elong	5131 Jun 01 11:16	12°♓21'06	0°49'15
min. Earth dist.	5125 May 29 06:06	8°♈34'30	4.47833 AU	max. Earth dist.	5131 Jun 03 00:26	12°♓43'40	5.92996 AU
direct	5125 Jul 30 00:30	3°♈39'47		morning rise	5131 Jun 14 23:28	15°♓37'22	
evening set	5125 Dec 02 20:29	21°♈01'05			5131 Aug 20 13:59	0°♉	
max. Earth dist.	5125 Dec 13 22:31	23°♈24'52	6.45814 AU	retrograde	5131 Oct 25 02:56	6°♉19'58	
				min. Earth dist.	5131 Dec 22 07:36	1°♉27'04	3.95877 AU
conjunction	5125 Dec 15 17:18	23°♈48'04	0°43'26	opposition	5131 Dec 23 15:55	1°♉16'04	-0°56'28
minimum elong	5125 Dec 15 17:19	23°♈48'04	0°43'27		5132 Jan 02 02:27	30°♒♓	
morning rise	5125 Dec 28 11:46	26°♈34'02		direct	5132 Feb 19 13:28	26°♓20'33	
	5126 Jan 13 15:13	0°♈			5132 Apr 07 05:15	0°♉	
retrograde	5126 Apr 28 03:14	13°♈24'09		evening set	5132 Jun 24 22:00	15°♉59'57	
opposition	5126 Jun 28 01:31	8°♈31'50	0°47'01				
min. Earth dist.	5126 Jun 29 12:20	8°♈20'43	4.41999 AU	conjunction	5132 Jul 08 13:46	19°♉14'00	-0°22'39
direct	5126 Aug 29 17:14	3°♈30'51		minimum elong	5132 Jul 08 13:47	19°♉14'01	0°22'39
evening set	5127 Jan 02 08:37	21°♈10'16		max. Earth dist.	5132 Jul 10 23:54	19°♉48'28	6.00888 AU
max. Earth dist.	5127 Jan 12 21:49	23°♈30'23	6.36407 AU	morning rise	5132 Jul 22 07:29	22°♉28'52	
					5132 Aug 24 12:37	0°♊	
conjunction	5127 Jan 15 02:33	23°♈59'41	0°18'30	retrograde	5132 Nov 29 03:58	12°♊21'49	
minimum elong	5127 Jan 15 02:34	23°♈59'42	0°18'30	min. Earth dist.	5133 Jan 26 03:48	7°♊29'49	4.07624 AU
morning rise	5127 Jan 27 18:47	26°♈48'32		opposition	5133 Jan 27 17:04	7°♊17'08	-0°08'07
	5127 Feb 11 09:33	0°♋		direct	5133 Mar 27 06:13	2°♊18'52	
retrograde	5127 May 30 12:17	14°♋19'31		asc. node	5133 Mar 31 21:49	2°♊21'04	
opposition	5127 Jul 30 08:54	9°♋27'07	0°04'50		5133 Jul 03 06:47	15°♊	
min. Earth dist.	5127 Jul 31 23:55	9°♋14'39	4.29520 AU	evening set	5133 Jul 31 18:04	21°♊18'34	
desc. node	5127 Sep 09 13:37	5°♋07'30					





























































































































conjunction	5133 Aug 14 10:58	24° Ω 26'30	0°11'31		5139 Apr 12 20:55	15° \approx	
minimum elong	5133 Aug 14 10:57	24° Ω 26'30	0°11'31	retrograde	5139 Jun 04 06:35	18° \approx 59'54	
behind sun begin	5133 Aug 14 05:02	24° Ω 23'08		desc. node	5139 Jul 19 15:22	16° \approx 02'44	
behind sun end	5133 Aug 14 16:51	24° Ω 29'51			5139 Jul 28 05:29	15° \mathbb{R} \approx	
max. Earth dist.	5133 Aug 16 16:32	24° Ω 57'09	6.15358 AU	opposition	5139 Aug 04 03:03	14° \approx 07'20	-0°01'50
morning rise	5133 Aug 28 04:30	27° Ω 34'21		min. Earth dist.	5139 Aug 05 16:21	13° \approx 55'23	4.27412 AU
	5133 Sep 07 23:42	0° \mathbb{M}		direct	5139 Oct 04 22:04	9° \approx 08'32	
retrograde	5134 Jan 01 12:52	16° \mathbb{M} 15'10			5139 Dec 08 12:31	15° \approx	
min. Earth dist.	5134 Mar 01 03:52	11° \mathbb{M} 22'00	4.23292 AU	evening set	5140 Feb 07 11:17	27° \approx 29'19	
opposition	5134 Mar 02 08:49	11° \mathbb{M} 12'15	0°39'55	max. Earth dist.	5140 Feb 18 06:06	29° \approx 58'12	6.19694 AU
direct	5134 May 01 03:21	6° \mathbb{M} 11'31			5140 Feb 18 09:14	0° \mathbb{H}	
evening set	5134 Sep 04 15:26	24° \mathbb{M} 26'58					
				conjunction	5140 Feb 20 04:52	0° \mathbb{H} 25'12	-0°17'17
conjunction	5134 Sep 18 04:49	27° \mathbb{M} 26'32	0°40'10	minimum elong	5140 Feb 20 04:50	0° \mathbb{H} 25'11	0°17'17
minimum elong	5134 Sep 18 04:47	27° \mathbb{M} 26'31	0°40'09	morning rise	5140 Mar 03 22:08	3° \mathbb{H} 21'16	
max. Earth dist.	5134 Sep 19 14:11	27° \mathbb{M} 45'00	6.30942 AU	retrograde	5140 Jul 08 09:58	22° \mathbb{H} 06'52	
	5134 Sep 29 18:51	0° $\underline{\Omega}$		opposition	5140 Sep 06 22:57	17° \mathbb{H} 12'27	-0°47'49
morning rise	5134 Oct 01 16:50	0° $\underline{\Omega}$ 25'14		min. Earth dist.	5140 Sep 08 02:46	17° \mathbb{H} 03'27	4.11813 AU
retrograde	5135 Feb 01 19:43	18° $\underline{\Omega}$ 00'39		direct	5140 Nov 06 11:34	12° \mathbb{H} 16'05	
opposition	5135 Apr 02 23:26	13° $\underline{\Omega}$ 01'11	1°12'25		5141 Mar 06 07:40	0° \mathbb{Y}	
min. Earth dist.	5135 Apr 02 10:48	13° $\underline{\Omega}$ 05'22	4.37528 AU	evening set	5141 Mar 12 01:58	1° \mathbb{Y} 21'29	
direct	5135 Jun 03 01:36	7° $\underline{\Omega}$ 59'10					
evening set	5135 Oct 07 11:12	25° $\underline{\Omega}$ 39'43		conjunction	5141 Mar 24 22:13	4° \mathbb{Y} 24'53	-0°44'36
				minimum elong	5141 Mar 24 22:11	4° \mathbb{Y} 24'52	0°44'35
conjunction	5135 Oct 20 18:12	28° $\underline{\Omega}$ 31'55	0°55'37	max. Earth dist.	5141 Mar 23 19:54	4° \mathbb{Y} 09'12	6.04633 AU
minimum elong	5135 Oct 20 18:11	28° $\underline{\Omega}$ 31'54	0°55'38	morning rise	5141 Apr 06 19:52	7° \mathbb{Y} 29'17	
max. Earth dist.	5135 Oct 20 21:05	28° $\underline{\Omega}$ 33'28	6.42749 AU	retrograde	5141 Aug 14 18:47	27° \mathbb{Y} 26'03	
	5135 Oct 27 13:09	0° \mathbb{L}		opposition	5141 Oct 13 22:24	22° \mathbb{Y} 28'32	-1°19'55
morning rise	5135 Nov 02 23:09	1° \mathbb{L} 22'55		min. Earth dist.	5141 Oct 14 04:18	22° \mathbb{Y} 26'36	3.98676 AU
	5136 Jan 15 21:33	15° \mathbb{L}		direct	5141 Dec 11 23:36	17° \mathbb{Y} 34'11	
retrograde	5136 Mar 02 21:43	18° \mathbb{L} 15'54			5142 Mar 16 16:35	0° \mathbb{B}	
	5136 Apr 19 06:44	15° \mathbb{R} \mathbb{L}		evening set	5142 Apr 16 20:42	7° \mathbb{B} 16'35	
opposition	5136 May 02 09:18	13° \mathbb{L} 19'56	1°23'14				
min. Earth dist.	5136 May 02 16:33	13° \mathbb{L} 17'34	4.46234 AU	conjunction	5142 Apr 29 23:03	10° \mathbb{B} 27'16	-0°56'38
direct	5136 Jul 03 13:31	8° \mathbb{L} 17'34		minimum elong	5142 Apr 29 23:03	10° \mathbb{B} 27'16	0°56'38
	5136 Sep 13 03:20	15° \mathbb{L}		max. Earth dist.	5142 Apr 30 07:06	10° \mathbb{B} 32'10	5.94655 AU
evening set	5136 Nov 06 16:22	25° \mathbb{L} 39'51		morning rise	5142 May 13 03:55	13° \mathbb{B} 39'27	
					5142 May 18 17:56	15° \mathbb{B}	
conjunction	5136 Nov 19 17:24	28° \mathbb{L} 27'43	0°55'25		5142 Jul 30 15:17	0° \mathbb{I}	
minimum elong	5136 Nov 19 17:25	28° \mathbb{L} 27'44	0°55'26	retrograde	5142 Sep 22 08:36	4° \mathbb{I} 22'08	
max. Earth dist.	5136 Nov 18 17:50	28° \mathbb{L} 15'02	6.47715 AU		5142 Nov 16 05:16	30° \mathbb{R} \mathbb{B}	
	5136 Nov 26 20:59	0° \mathbb{X}		min. Earth dist.	5142 Nov 20 08:54	29° \mathbb{B} 26'37	3.93047 AU
morning rise	5136 Dec 02 15:43	1° \mathbb{X} 14'22		opposition	5142 Nov 21 02:04	29° \mathbb{B} 20'51	-1°21'53
retrograde	5137 Apr 01 18:35	17° \mathbb{X} 53'26		direct	5143 Jan 18 03:57	24° \mathbb{B} 26'48	
opposition	5137 Jun 01 13:45	13° \mathbb{X} 00'03	1°12'02		5143 Mar 18 15:52	0° \mathbb{I}	
min. Earth dist.	5137 Jun 02 13:45	12° \mathbb{X} 52'21	4.47277 AU	evening set	5143 May 24 06:33	14° \mathbb{I} 20'41	
direct	5137 Aug 03 05:57	7° \mathbb{X} 58'12					
evening set	5137 Dec 07 03:13	25° \mathbb{X} 21'38		conjunction	5143 Jun 06 16:55	17° \mathbb{I} 35'31	-0°46'30
max. Earth dist.	5137 Dec 18 02:52	27° \mathbb{X} 44'32	6.44720 AU	minimum elong	5143 Jun 06 16:56	17° \mathbb{I} 35'32	0°46'31
				max. Earth dist.	5143 Jun 08 10:33	18° \mathbb{I} 00'43	5.93899 AU
conjunction	5137 Dec 19 23:29	28° \mathbb{X} 08'49	0°40'30	morning rise	5143 Jun 20 06:02	20° \mathbb{I} 51'46	
minimum elong	5137 Dec 19 23:30	28° \mathbb{X} 08'50	0°40'31		5143 Jul 30 04:11	0° \mathbb{E}	
	5137 Dec 28 11:53	0° \mathbb{Z}		retrograde	5143 Oct 30 04:39	11° \mathbb{E} 28'39	
morning rise	5138 Jan 01 17:31	0° \mathbb{Z} 55'04		min. Earth dist.	5143 Dec 27 07:30	6° \mathbb{E} 35'58	3.97334 AU
retrograde	5138 May 02 15:27	17° \mathbb{Z} 49'53		opposition	5143 Dec 28 17:08	6° \mathbb{E} 24'32	-0°50'34
opposition	5138 Jul 02 12:37	12° \mathbb{Z} 57'44	0°41'42	direct	5144 Feb 24 15:34	1° \mathbb{E} 28'40	
min. Earth dist.	5138 Jul 04 01:16	12° \mathbb{Z} 46'03	4.40432 AU	evening set	5144 Jun 30 00:18	21° \mathbb{E} 02'38	
direct	5138 Sep 03 03:34	7° \mathbb{Z} 57'03					
evening set	5139 Jan 06 17:59	25° \mathbb{Z} 41'04		conjunction	5144 Jul 13 16:20	24° \mathbb{E} 15'59	-0°18'07
max. Earth dist.	5139 Jan 17 05:46	28° \mathbb{Z} 01'03	6.34499 AU	minimum elong	5144 Jul 13 16:21	24° \mathbb{E} 15'59	0°18'07
				max. Earth dist.	5144 Jul 16 01:07	24° \mathbb{E} 49'28	6.02732 AU
conjunction	5139 Jan 19 11:42	28° \mathbb{Z} 31'09	0°14'16	morning rise	5144 Jul 27 10:29	27° \mathbb{E} 30'06	
minimum elong	5139 Jan 19 11:43	28° \mathbb{Z} 31'09	0°14'17		5144 Aug 07 05:06	0° Ω	
behind sun begin	5139 Jan 19 07:49	28° \mathbb{Z} 29'00			5144 Oct 27 06:54	15° Ω	
behind sun end	5139 Jan 19 15:36	28° \mathbb{Z} 33'19		retrograde	5144 Dec 03 19:15	17° Ω 13'31	
	5139 Jan 26 02:54	0° \approx			5145 Jan 10 02:56	15° \mathbb{R} Ω	
morning rise	5139 Feb 01 04:00	1° \approx 20'46		min. Earth dist.	5145 Jan 30 21:35	12° Ω 21'22	4.09658 AU

opposition	5145 Feb 01 10:06	12°♏08'56	-0°01'08	minimum elong	5151 Jan 23 19:56	2°♊59'50	0°09'59
asc. node	5145 Feb 10 05:10	10°♏57'57		behind sun begin	5151 Jan 23 13:28	2°♊56'13	
direct	5145 Apr 01 02:39	7°♏10'15		behind sun end	5151 Jan 24 02:24	3°♊03'26	
	5145 Jun 14 03:54	15°♏		morning rise	5151 Feb 05 12:08	5°♊50'06	
evening set	5145 Aug 05 14:47	26°♏04'02			5151 Mar 21 03:19	15°♊	
				desc. node	5151 May 29 07:35	23°♊26'05	
conjunction	5145 Aug 19 07:36	29°♏10'57	0°15'57	retrograde	5151 Jun 09 01:04	23°♊36'51	
minimum elong	5145 Aug 19 07:34	29°♏10'57	0°15'57	opposition	5151 Aug 08 20:18	18°♊44'07	-0°08'27
max. Earth dist.	5145 Aug 21 11:18	29°♏40'24	6.17426 AU	min. Earth dist.	5151 Aug 10 09:47	18°♊32'06	4.25463 AU
	5145 Aug 22 21:44	0°♐			5151 Sep 10 22:14	15°♐	
morning rise	5145 Sep 02 00:28	2°♐17'37		direct	5151 Oct 09 12:49	13°♊45'38	
retrograde	5146 Jan 05 22:47	20°♐49'18			5151 Nov 07 00:16	15°♊	
opposition	5146 Mar 06 18:48	15°♐46'51	0°45'28		5152 Feb 02 09:27	0°♋	
min. Earth dist.	5146 Mar 05 16:13	15°♐55'46	4.25214 AU	evening set	5152 Feb 12 00:35	2°♋11'47	
direct	5146 May 05 17:30	10°♐45'55		max. Earth dist.	5152 Feb 22 20:24	4°♋41'57	6.17672 AU
evening set	5146 Sep 09 05:59	28°♐56'43					
	5146 Sep 14 01:17	0°♑		conjunction	5152 Feb 24 18:17	5°♋08'34	-0°21'36
conjunction	5146 Sep 22 18:32	1°♑55'18	0°43'07	minimum elong	5152 Feb 24 18:16	5°♋08'33	0°21'35
minimum elong	5146 Sep 22 18:30	1°♑55'17	0°43'08	morning rise	5152 Mar 08 12:01	8°♋05'39	
max. Earth dist.	5146 Sep 23 22:56	2°♑10'57	6.32568 AU	retrograde	5152 Jul 13 09:49	27°♋00'42	
morning rise	5146 Oct 06 05:51	4°♑52'59		opposition	5152 Sep 11 22:59	22°♋05'55	-0°53'32
retrograde	5147 Feb 06 00:20	22°♑22'14		min. Earth dist.	5152 Sep 12 23:33	21°♋57'57	4.09875 AU
opposition	5147 Apr 07 05:11	17°♑23'13	1°15'12	direct	5152 Nov 11 06:05	17°♋09'52	
min. Earth dist.	5147 Apr 06 19:17	17°♑26'29	4.38778 AU	evening set	5153 Feb 17 08:44	0°♌	
direct	5147 Jun 07 11:03	12°♑21'05			5153 Mar 16 21:51	6°♌20'51	
evening set	5147 Oct 11 20:34	29°♑59'13		conjunction	5153 Mar 29 18:46	9°♌25'18	-0°47'24
	5147 Oct 11 22:02	0°♍		minimum elong	5153 Mar 29 18:45	9°♌25'17	0°47'24
conjunction	5147 Oct 25 02:54	2°♍50'48	0°56'29	max. Earth dist.	5153 Mar 28 21:06	9°♌12'19	6.02947 AU
minimum elong	5147 Oct 25 02:53	2°♍50'47	0°56'29	morning rise	5153 Apr 11 17:10	12°♌30'47	
max. Earth dist.	5147 Oct 25 03:12	2°♍50'58	6.43551 AU		5153 Jul 10 01:13	0°♎	
morning rise	5147 Nov 07 06:45	5°♍41'07		retrograde	5153 Aug 20 03:01	2°♎35'52	
	5147 Dec 23 17:38	15°♍			5153 Sep 30 10:28	30°♎	
retrograde	5148 Mar 07 00:47	22°♍31'30		opposition	5153 Oct 19 04:06	27°♌37'52	-1°22'14
opposition	5148 May 06 13:51	17°♍35'57	1°22'54	min. Earth dist.	5153 Oct 19 07:47	27°♌36'39	3.97408 AU
min. Earth dist.	5148 May 06 22:59	17°♍33'00	4.46566 AU	direct	5153 Dec 17 02:08	22°♌43'40	
	5148 May 27 16:30	15°♎			5154 Feb 24 14:00	0°♎	
direct	5148 Jul 07 19:48	12°♍33'41		evening set	5154 Apr 21 22:52	12°♎29'27	
	5148 Aug 18 07:00	15°♍			5154 May 02 06:58	15°♎	
evening set	5148 Nov 10 23:09	29°♍55'49		conjunction	5154 May 05 02:20	15°♎40'59	-0°56'34
	5148 Nov 11 06:59	0°♏		minimum elong	5154 May 05 02:20	15°♎40'59	0°56'34
conjunction	5148 Nov 23 23:19	2°♏43'28	0°54'07	max. Earth dist.	5154 May 05 15:17	15°♎48'52	5.93927 AU
minimum elong	5148 Nov 23 23:19	2°♏43'29	0°54'08	morning rise	5154 May 18 08:22	18°♎54'03	
max. Earth dist.	5148 Nov 22 19:33	2°♏28'31	6.47552 AU		5154 Jul 06 09:44	0°♐	
morning rise	5148 Dec 06 21:05	5°♏29'57		retrograde	5154 Sep 27 16:16	9°♐39'30	
retrograde	5149 Apr 06 01:39	22°♏10'00		opposition	5154 Nov 26 08:31	4°♐37'48	-1°19'18
opposition	5149 Jun 05 20:12	17°♏16'52	1°08'47	min. Earth dist.	5154 Nov 25 12:24	4°♐44'34	3.92971 AU
min. Earth dist.	5149 Jun 06 22:51	17°♏08'20	4.46642 AU		5155 Jan 10 18:53	30°♎	
direct	5149 Aug 07 13:58	12°♏15'07		direct	5155 Jan 23 07:45	29°♎43'40	
evening set	5149 Dec 11 09:25	29°♏40'35			5155 Feb 04 21:32	0°♐	
	5149 Dec 12 21:18	0°♑		evening set	5155 May 29 12:26	19°♐37'05	
max. Earth dist.	5149 Dec 22 07:34	2°♑03'04	6.43649 AU	conjunction	5155 Jun 11 23:40	22°♐52'07	-0°43'23
conjunction	5149 Dec 24 05:21	2°♑28'02	0°37'21	minimum elong	5155 Jun 11 23:42	22°♐52'08	0°43'24
minimum elong	5149 Dec 24 05:22	2°♑28'03	0°37'22	max. Earth dist.	5155 Jun 13 19:06	23°♐18'20	5.94459 AU
morning rise	5150 Jan 05 22:56	5°♑14'32		morning rise	5155 Jun 25 13:56	26°♐08'34	
retrograde	5150 May 07 01:06	22°♑13'51			5155 Jul 11 21:46	0°♑	
opposition	5150 Jul 06 23:24	17°♑21'40	0°36'09	retrograde	5155 Nov 04 06:28	16°♑41'07	
min. Earth dist.	5150 Jul 08 11:35	17°♑10'08	4.38985 AU	min. Earth dist.	5156 Jan 01 08:16	11°♑48'42	3.98456 AU
direct	5150 Sep 07 11:35	12°♑21'13		opposition	5156 Jan 02 19:14	11°♑36'47	-0°44'15
	5151 Jan 10 09:56	0°♒		direct	5156 Feb 29 18:53	6°♑40'32	
evening set	5151 Jan 11 02:27	0°♒09'09		evening set	5156 Jul 05 04:52	26°♑10'41	
max. Earth dist.	5151 Jan 21 14:56	2°♒30'07	6.32763 AU	conjunction	5156 Jul 18 21:33	29°♑23'33	-0°13'21
conjunction	5151 Jan 23 19:55	2°♒59'49	0°09'58	minimum elong	5156 Jul 18 21:34	29°♑23'34	0°13'22
				behind sun begin	5156 Jul 18 16:56	29°♑20'51	

behind sun end	5156 Jul 19 02:12	29°☾26'17		direct	5162 Sep 11 19:57	16°♊39'00	
max. Earth dist.	5156 Jul 21 07:38	29°☾57'42	6.04326 AU		5162 Dec 25 16:46	0°♊	
	5156 Jul 21 11:34	0°♏		evening set	5163 Jan 15 07:36	4°♊29'41	
morning rise	5156 Aug 01 15:48	2°♏36'59		max. Earth dist.	5163 Jan 25 19:13	6°♊50'37	6.31272 AU
	5156 Sep 28 20:03	15°♏					
retrograde	5156 Dec 08 15:13	22°♏11'45		conjunction	5163 Jan 28 01:00	7°♊20'51	0°05'49
asc. node	5156 Dec 20 22:48	21°♏56'28		minimum elong	5163 Jan 28 00:59	7°♊20'51	0°05'49
min. Earth dist.	5157 Feb 04 18:13	17°♏19'22	4.11535 AU	behind sun begin	5163 Jan 27 17:22	7°♊16'35	
opposition	5157 Feb 06 05:30	17°♏07'23	0°06'01	behind sun end	5163 Jan 28 08:37	7°♊25'07	
	5157 Feb 22 09:50	15°♏♏		morning rise	5163 Feb 09 17:08	10°♊11'42	
direct	5157 Apr 06 01:41	12°♏08'23			5163 Mar 03 15:25	15°♊	
	5157 May 18 20:15	15°♏		desc. node	5163 Apr 10 08:41	22°♊15'15	
	5157 Aug 06 09:20	0°♏		retrograde	5163 Jun 13 13:44	28°♊05'24	
evening set	5157 Aug 10 14:23	0°♏56'49		opposition	5163 Aug 13 09:50	23°♊12'25	-0°14'46
				min. Earth dist.	5163 Aug 14 22:05	23°♊00'47	4.23624 AU
conjunction	5157 Aug 24 06:50	4°♏02'43	0°20'25	direct	5163 Oct 13 22:04	18°♊14'09	
minimum elong	5157 Aug 24 06:48	4°♏02'43	0°20'24		5164 Jan 17 01:40	0°♋	
max. Earth dist.	5157 Aug 26 08:20	4°♏30'46	6.19431 AU	evening set	5164 Feb 16 10:20	6°♋45'33	
morning rise	5157 Sep 06 23:18	7°♏08'17		max. Earth dist.	5164 Feb 27 08:09	9°♋17'34	6.15624 AU
retrograde	5158 Jan 10 09:19	25°♏30'57					
min. Earth dist.	5158 Mar 10 05:57	20°♏37'29	4.27200 AU	conjunction	5164 Feb 29 04:13	9°♋43'15	-0°25'36
opposition	5158 Mar 11 07:28	20°♏28'56	0°50'53	minimum elong	5164 Feb 29 04:12	9°♋43'14	0°25'36
direct	5158 May 10 09:58	15°♏27'49		morning rise	5164 Mar 12 22:22	12°♋41'22	
	5158 Aug 28 10:19	0°♎			5164 Jun 14 11:04	0°♌	
evening set	5158 Sep 13 23:06	3°♎33'36		retrograde	5164 Jul 18 09:34	1°♌46'21	
					5164 Aug 21 10:34	30°♌♋	
conjunction	5158 Sep 27 10:53	6°♎31'05	0°45'56	opposition	5164 Sep 16 19:55	26°♋51'11	-0°58'42
minimum elong	5158 Sep 27 10:52	6°♎31'04	0°45'56	min. Earth dist.	5164 Sep 17 19:41	26°♋43'27	4.07756 AU
max. Earth dist.	5158 Sep 28 12:22	6°♎45'05	6.34424 AU	direct	5164 Nov 15 23:23	21°♋55'19	
morning rise	5158 Oct 10 21:06	9°♎27'35			5165 Jan 29 19:57	0°♌	
retrograde	5159 Feb 10 07:17	26°♎49'40		evening set	5165 Mar 21 14:57	11°♌12'49	
opposition	5159 Apr 11 13:03	21°♎51'13	1°17'39				
min. Earth dist.	5159 Apr 11 05:36	21°♎53'40	4.40397 AU	conjunction	5165 Apr 03 12:40	14°♌18'28	-0°49'48
direct	5159 Jun 11 23:42	16°♎49'04		minimum elong	5165 Apr 03 12:39	14°♌18'28	0°49'48
	5159 Sep 25 09:37	0°♍		max. Earth dist.	5165 Apr 02 17:59	14°♌07'15	6.00954 AU
evening set	5159 Oct 16 07:29	4°♍23'13		morning rise	5165 Apr 16 12:00	17°♌25'17	
					5165 Jun 12 21:50	0°♍	
conjunction	5159 Oct 29 12:47	7°♍13'55	0°57'06	retrograde	5165 Aug 25 07:53	7°♍39'52	
minimum elong	5159 Oct 29 12:47	7°♍13'55	0°57'06	opposition	5165 Oct 24 07:13	2°♍41'24	-1°23'55
max. Earth dist.	5159 Oct 29 08:53	7°♍11'49	6.44826 AU	min. Earth dist.	5165 Oct 24 07:42	2°♍41'15	3.95764 AU
morning rise	5159 Nov 11 15:47	10°♍03'23			5165 Nov 14 19:29	30°♌♌	
	5159 Dec 05 07:29	15°♍		direct	5165 Dec 21 23:28	27°♌47'20	
retrograde	5160 Mar 11 04:37	26°♍49'30			5166 Jan 27 16:54	0°♍	
opposition	5160 May 10 19:15	21°♍54'18	1°22'10		5166 Apr 16 00:35	15°♍	
min. Earth dist.	5160 May 11 06:40	21°♍50'37	4.47444 AU	evening set	5166 Apr 27 00:12	17°♍38'20	
direct	5160 Jul 12 04:22	16°♍52'02					
	5160 Oct 26 03:34	0°♎		conjunction	5166 May 10 04:42	20°♍50'56	-0°56'04
evening set	5160 Nov 15 05:09	4°♎11'55		minimum elong	5166 May 10 04:43	20°♍50'57	0°56'05
max. Earth dist.	5160 Nov 26 23:41	6°♎43'30	6.47974 AU	max. Earth dist.	5166 May 10 20:44	21°♍00'43	5.92787 AU
				morning rise	5166 May 23 12:08	24°♍05'09	
conjunction	5160 Nov 28 04:41	6°♎59'07	0°52'35		5166 Jun 17 12:53	0°♎	
minimum elong	5160 Nov 28 04:42	6°♎59'08	0°52'36	retrograde	5166 Oct 02 23:00	14°♎54'59	
morning rise	5160 Dec 11 01:30	9°♎45'07		opposition	5166 Dec 01 14:05	9°♎52'48	-1°16'11
retrograde	5161 Apr 10 04:35	26°♎24'21		min. Earth dist.	5166 Nov 30 15:08	10°♎00'33	3.92472 AU
opposition	5161 Jun 10 01:36	21°♎31'23	1°05'15	direct	5167 Jan 28 11:36	4°♎58'26	
min. Earth dist.	5161 Jun 11 05:18	21°♎22'32	4.46576 AU	evening set	5167 Jun 03 18:39	24°♎53'11	
direct	5161 Aug 11 20:07	16°♎29'47					
	5161 Nov 27 02:45	0°♏		conjunction	5167 Jun 17 07:12	28°♎08'42	-0°39'57
evening set	5161 Dec 15 13:32	3°♏55'15		minimum elong	5167 Jun 17 07:14	28°♎08'43	0°39'58
max. Earth dist.	5161 Dec 26 08:16	6°♏16'09	6.43084 AU	max. Earth dist.	5167 Jun 19 07:28	28°♎37'49	5.94668 AU
					5167 Jun 24 23:49	0°♏	
conjunction	5161 Dec 28 08:45	6°♏42'39	0°34'08	morning rise	5167 Jun 30 22:20	1°♏25'29	
minimum elong	5161 Dec 28 08:46	6°♏42'40	0°34'08	retrograde	5167 Nov 09 11:06	21°♏54'51	
morning rise	5162 Jan 10 02:01	9°♏29'14		min. Earth dist.	5168 Jan 06 10:37	17°♏02'25	3.99333 AU
retrograde	5162 May 11 09:29	26°♏31'34		opposition	5168 Jan 07 22:12	16°♏50'18	-0°37'37
opposition	5162 Jul 11 07:39	21°♏39'21	0°30'37	direct	5168 Mar 05 23:15	11°♏53'42	
min. Earth dist.	5162 Jul 12 21:45	21°♏27'13	4.37920 AU		5168 Jul 04 15:46	0°♏	

evening set	5168 Jul 10 10:55	1°♏20'46		5173 Nov 09 11:18	0°♁	
conjunction	5168 Jul 24 03:56	4°♏33'09 -0°08'31		evening set	5173 Dec 19 20:15	8°♁17'11
minimum elong	5168 Jul 24 03:56	4°♏33'09 0°08'30		max. Earth dist.	5173 Dec 30 13:57	10°♁37'54 6.41860 AU
behind sun begin	5168 Jul 23 20:38	4°♏28'54		conjunction	5174 Jan 01 15:14	11°♁04'55 0°30'34
behind sun end	5168 Jul 24 11:14	4°♏37'24		minimum elong	5174 Jan 01 15:15	11°♁04'55 0°30'36
max. Earth dist.	5168 Jul 26 15:01	5°♏07'43 6.05772 AU		morning rise	5174 Jan 14 08:01	13°♁51'50
morning rise	5168 Aug 06 22:28	7°♏45'58			5174 Apr 20 10:12	0°♁
	5168 Sep 08 06:31	15°♏		retrograde	5174 May 15 21:03	0°♁59'38
asc. node	5168 Oct 30 06:12	24°♏10'34			5174 Jun 10 10:06	30°♏♁
retrograde	5168 Dec 13 09:56	27°♏12'11		opposition	5174 Jul 15 20:10	26°♁07'27 0°24'37
min. Earth dist.	5169 Feb 09 13:55	22°♏20'07 4.13387 AU		min. Earth dist.	5174 Jul 17 10:27	25°♁55'15 4.36199 AU
opposition	5169 Feb 11 01:49	22°♏07'56 0°13'07		direct	5174 Sep 16 05:33	21°♁07'23
direct	5169 Apr 11 00:41	17°♏08'34			5174 Dec 07 16:01	0°♁
	5169 Jul 19 21:02	0°♏		evening set	5175 Jan 19 17:38	9°♁03'04
evening set	5169 Aug 15 15:20	5°♏51'31		max. Earth dist.	5175 Jan 30 04:41	11°♁24'25 6.29176 AU
conjunction	5169 Aug 29 07:19	8°♏56'17 0°24'45		conjunction	5175 Feb 01 10:47	11°♁55'00 0°01'20
minimum elong	5169 Aug 29 07:18	8°♏56'17 0°24'45		minimum elong	5175 Feb 01 10:47	11°♁55'00 0°01'20
max. Earth dist.	5169 Aug 31 06:22	9°♏22'50 6.21519 AU		behind sun begin	5175 Feb 01 02:49	11°♁50'31
morning rise	5169 Sep 11 23:05	12°♏00'36		behind sun end	5175 Feb 01 18:46	11°♁59'29
	5170 Jan 03 02:04	0°♏		morning rise	5175 Feb 14 03:07	14°♁46'46
retrograde	5170 Jan 14 22:41	0°♏13'44			5175 Feb 15 02:42	15°♁
	5170 Jan 26 17:14	30°♏♏		desc. node	5175 Feb 17 15:08	15°♁33'52
opposition	5170 Mar 15 20:56	25°♏12'07 0°55'58			5175 May 05 22:08	0°♏
min. Earth dist.	5170 Mar 14 22:03	25°♏19'46 4.29301 AU		retrograde	5175 Jun 18 12:00	2°♏49'51
direct	5170 May 15 05:22	20°♏10'44			5175 Aug 01 16:24	30°♏♁
	5170 Aug 10 05:45	0°♏		opposition	5175 Aug 18 06:01	27°♁56'40 -0°21'26
evening set	5170 Sep 18 16:36	8°♏10'54		min. Earth dist.	5175 Aug 19 18:08	27°♁45'04 4.21274 AU
				direct	5175 Oct 18 14:58	22°♁58'41
conjunction	5170 Oct 02 03:32	11°♏07'15 0°48'27			5175 Dec 28 06:46	0°♏
minimum elong	5170 Oct 02 03:30	11°♏07'14 0°48'28		evening set	5176 Feb 21 02:46	11°♏37'06
max. Earth dist.	5170 Oct 03 01:57	11°♏19'31 6.36336 AU		max. Earth dist.	5176 Mar 03 03:35	14°♏11'38 6.13229 AU
morning rise	5170 Oct 15 12:42	14°♏02'31				
	5171 Jan 16 18:56	0°♏		conjunction	5176 Mar 04 21:07	14°♏35'58 -0°29'43
retrograde	5171 Feb 14 13:03	1°♏17'24		minimum elong	5176 Mar 04 21:06	14°♏35'57 0°29'42
	5171 Mar 15 05:04	30°♏♏		morning rise	5176 Mar 17 15:46	17°♏35'20
opposition	5171 Apr 15 21:21	26°♏19'22 1°19'38			5176 May 15 02:30	0°♏
min. Earth dist.	5171 Apr 15 15:45	26°♏21'12 4.41973 AU		retrograde	5176 Jul 23 15:16	6°♏51'25
direct	5171 Jun 16 11:20	21°♏17'07		opposition	5176 Sep 22 00:12	1°♏55'54 -1°03'49
	5171 Sep 07 02:50	0°♏		min. Earth dist.	5176 Sep 22 20:51	1°♏49'10 4.05540 AU
evening set	5171 Oct 20 18:26	8°♏47'32			5176 Oct 07 05:33	30°♏♏
				direct	5176 Nov 20 21:08	27°♏00'24
conjunction	5171 Nov 02 22:48	11°♏37'25 0°57'22			5177 Jan 03 13:58	0°♏
minimum elong	5171 Nov 02 22:48	11°♏37'25 0°57'23		evening set	5177 Mar 26 15:48	16°♏24'38
max. Earth dist.	5171 Nov 02 15:31	11°♏33'30 6.45929 AU				
morning rise	5171 Nov 16 00:42	14°♏26'04		conjunction	5177 Apr 08 14:14	19°♏31'29 -0°51'58
	5171 Nov 18 16:21	15°♏		minimum elong	5177 Apr 08 14:13	19°♏31'28 0°51'58
	5172 Feb 17 02:31	0°♏		max. Earth dist.	5177 Apr 07 23:31	19°♏22'36 5.99123 AU
retrograde	5172 Mar 15 09:45	1°♏08'50		morning rise	5177 Apr 21 14:42	22°♏39'36
	5172 Apr 11 15:23	30°♏♏			5177 May 23 06:28	0°♏
opposition	5172 May 15 01:33	26°♏14'05 1°20'57		retrograde	5177 Aug 30 19:05	13°♏02'46
min. Earth dist.	5172 May 15 15:52	26°♏09'28 4.47999 AU		opposition	5177 Oct 29 17:27	8°♏03'46 -1°24'59
direct	5172 Jul 16 13:53	21°♏11'53		min. Earth dist.	5177 Oct 29 14:10	8°♏04'52 3.94534 AU
	5172 Oct 08 05:46	0°♏		direct	5177 Dec 27 06:13	3°♏09'49
evening set	5172 Nov 19 12:26	8°♏30'48			5178 Mar 28 17:55	15°♏
max. Earth dist.	5172 Dec 01 01:23	10°♏59'33 6.47917 AU		evening set	5178 May 02 07:48	23°♏03'59
conjunction	5172 Dec 02 11:07	11°♏17'43 0°50'43		conjunction	5178 May 15 13:40	26°♏17'25 -0°55'05
minimum elong	5172 Dec 02 11:08	11°♏17'44 0°50'44		minimum elong	5178 May 15 13:41	26°♏17'26 0°55'06
morning rise	5172 Dec 15 07:23	14°♏03'31		max. Earth dist.	5178 May 16 12:38	26°♏31'26 5.92312 AU
	5173 Mar 23 17:41	0°♁		morning rise	5178 May 28 22:10	29°♏32'24
retrograde	5173 Apr 14 12:00	0°♁43'48			5178 May 30 19:51	0°♏
	5173 May 06 05:46	30°♏♏		retrograde	5178 Oct 08 11:16	20°♏23'05
opposition	5173 Jun 14 09:18	25°♏51'02 1°01'16		min. Earth dist.	5178 Dec 05 22:58	15°♏29'00 3.92839 AU
min. Earth dist.	5173 Jun 15 15:20	25°♏41'26 4.45914 AU		opposition	5178 Dec 07 00:13	15°♏20'27 -1°12'14
direct	5173 Aug 16 04:22	20°♏49'31		direct	5179 Feb 02 21:09	10°♏25'55

	5179 Jun 07 22:07	0°♄	direct	5184 Jul 20 19:05	25°♄26'08	
evening set	5179 Jun 09 04:37	0°♄18'14		5184 Sep 16 20:32	0°♄	
			evening set	5184 Nov 23 17:45	12°♄45'25	
conjunction	5179 Jun 22 17:59	3°♄33'36 -0°36'06	max. Earth dist.	5184 Dec 05 03:46	15°♄12'49	6.47384 AU
minimum elong	5179 Jun 22 18:00	3°♄33'37 0°36'08				
max. Earth dist.	5179 Jun 24 21:16	4°♄04'26 5.95832 AU	conjunction	5184 Dec 06 15:53	15°♄32'18 0°48'38	
morning rise	5179 Jul 06 10:03	6°♄50'11	minimum elong	5184 Dec 06 15:54	15°♄32'19 0°48'38	
retrograde	5179 Nov 14 12:59	27°♄11'49	morning rise	5184 Dec 19 11:29	18°♄18'05	
min. Earth dist.	5180 Jan 11 12:03	22°♄19'54 4.01164 AU		5185 Feb 18 06:49	0°♄	
opposition	5180 Jan 13 01:37	22°♄07'06 -0°30'37	retrograde	5185 Apr 18 19:10	5°♄01'05	
direct	5180 Mar 11 04:13	17°♄10'04	opposition	5185 Jun 18 16:44	0°♄08'32 0°57'01	
	5180 Jun 16 20:01	0°♄		5185 Jun 19 19:30	30°♄	
evening set	5180 Jul 15 16:53	6°♄30'35	min. Earth dist.	5185 Jun 20 00:54	29°♄58'17 4.44747 AU	
			direct	5185 Aug 20 11:24	25°♄07'12	
conjunction	5180 Jul 29 10:01	9°♄41'54 -0°03'37		5185 Oct 19 08:57	0°♄	
minimum elong	5180 Jul 29 10:00	9°♄41'54 0°03'37	evening set	5185 Dec 24 02:52	12°♄38'32	
behind sun begin	5180 Jul 29 01:42	9°♄37'05	max. Earth dist.	5186 Jan 03 17:07	14°♄58'00 6.40135 AU	
behind sun end	5180 Jul 29 18:19	9°♄46'43				
max. Earth dist.	5180 Jul 31 20:12	10°♄15'46 6.08091 AU	conjunction	5186 Jan 05 21:23	15°♄26'47 0°26'53	
morning rise	5180 Aug 12 04:26	12°♄53'33	minimum elong	5186 Jan 05 21:25	15°♄26'48 0°26'53	
	5180 Aug 21 09:23	15°♄	morning rise	5186 Jan 18 14:11	18°♄14'21	
asc. node	5180 Sep 08 15:56	19°♄02'58		5186 Mar 19 03:33	0°♄	
	5180 Nov 11 07:58	0°♄	retrograde	5186 May 20 12:10	5°♄29'26	
retrograde	5180 Dec 18 04:01	2°♄08'14	opposition	5186 Jul 20 10:00	0°♄37'12 0°18'28	
	5181 Jan 23 17:56	30°♄	min. Earth dist.	5186 Jul 22 00:54	0°♄24'47 4.34018 AU	
min. Earth dist.	5181 Feb 14 10:26	27°♄15'41 4.15922 AU		5186 Jul 25 06:43	30°♄	
opposition	5181 Feb 15 20:20	27°♄04'11 0°20'00	direct	5186 Sep 20 16:32	25°♄37'21	
direct	5181 Apr 16 01:17	22°♄04'24		5186 Nov 15 08:36	0°♄	
	5181 Jun 30 08:30	0°♄	desc. node	5186 Dec 28 02:53	7°♄45'00	
evening set	5181 Aug 20 13:15	10°♄39'40	evening set	5187 Jan 24 04:57	13°♄39'32	
				5187 Jan 30 03:24	15°♄	
conjunction	5181 Sep 03 04:46	13°♄43'06 0°28'49	max. Earth dist.	5187 Feb 03 18:02	16°♄02'47 6.26724 AU	
minimum elong	5181 Sep 03 04:44	13°♄43'05 0°28'49				
max. Earth dist.	5181 Sep 05 02:06	14°♄08'32 6.24054 AU	conjunction	5187 Feb 05 22:19	16°♄32'29 -0°03'15	
morning rise	5181 Sep 16 19:38	16°♄45'55	minimum elong	5187 Feb 05 22:20	16°♄32'30 0°03'15	
	5181 Nov 23 00:51	0°♄	behind sun begin	5187 Feb 05 14:24	16°♄28'01	
retrograde	5182 Jan 19 06:40	4°♄48'35	behind sun end	5187 Feb 06 06:16	16°♄36'59	
	5182 Mar 18 17:34	30°♄	morning rise	5187 Feb 18 14:44	19°♄25'19	
min. Earth dist.	5182 Mar 19 09:54	29°♄54'33 4.31622 AU		5187 Apr 10 00:42	0°♄	
opposition	5182 Mar 20 07:18	29°♄47'25 1°00'31	retrograde	5187 Jun 23 11:42	7°♄39'03	
direct	5182 May 19 19:32	24°♄45'49	opposition	5187 Aug 23 04:33	2°♄45'41 -0°28'02	
	5182 Jul 19 22:29	0°♄	min. Earth dist.	5187 Aug 24 14:48	2°♄34'40 4.18738 AU	
evening set	5182 Sep 23 06:35	12°♄39'58		5187 Sep 14 22:59	30°♄	
			direct	5187 Oct 23 07:48	27°♄48'09	
conjunction	5182 Oct 06 16:28	15°♄35'06 0°50'37		5187 Nov 30 05:53	0°♄	
minimum elong	5182 Oct 06 16:26	15°♄35'05 0°50'36	evening set	5188 Feb 25 21:44	16°♄34'06	
max. Earth dist.	5182 Oct 07 09:26	15°♄44'21 6.38263 AU	max. Earth dist.	5188 Mar 08 01:32	19°♄11'16 6.10825 AU	
morning rise	5182 Oct 20 00:38	18°♄29'10				
	5182 Dec 17 20:06	0°♄	conjunction	5188 Mar 09 16:22	19°♄34'08 -0°33'40	
retrograde	5183 Feb 18 18:21	5°♄37'19	minimum elong	5188 Mar 09 16:20	19°♄34'07 0°33'41	
opposition	5183 Apr 20 02:54	0°♄39'47 1°21'06	morning rise	5188 Mar 22 11:47	22°♄34'51	
min. Earth dist.	5183 Apr 20 01:15	0°♄40'20 4.43382 AU		5188 Apr 24 08:07	0°♄	
	5183 Apr 25 04:44	30°♄	retrograde	5188 Jul 29 00:01	12°♄02'11	
direct	5183 Jun 20 21:48	25°♄37'27	opposition	5188 Sep 27 07:22	7°♄06'12 -1°08'31	
	5183 Aug 16 05:12	0°♄	min. Earth dist.	5188 Sep 28 00:25	7°♄00'37 4.03493 AU	
evening set	5183 Oct 25 02:24	13°♄04'47	direct	5188 Nov 25 23:09	2°♄11'02	
	5183 Nov 03 01:27	15°♄	evening set	5189 Mar 31 18:42	21°♄41'04	
conjunction	5183 Nov 07 05:58	15°♄54'03 0°57'19	conjunction	5189 Apr 13 18:10	24°♄49'01 -0°53'45	
minimum elong	5183 Nov 07 05:59	15°♄54'03 0°57'20	minimum elong	5189 Apr 13 18:09	24°♄49'00 0°53'45	
max. Earth dist.	5183 Nov 06 18:17	15°♄47'46 6.46709 AU	max. Earth dist.	5189 Apr 13 10:20	24°♄44'17 5.97644 AU	
morning rise	5183 Nov 20 06:59	18°♄42'02	morning rise	5189 Apr 26 19:30	27°♄58'15	
	5184 Jan 17 19:51	0°♄		5189 May 05 07:21	0°♄	
retrograde	5184 Mar 19 12:43	5°♄22'45		5189 Jul 19 17:44	15°♄	
opposition	5184 May 19 05:59	0°♄28'19 1°19'23	retrograde	5189 Sep 05 08:55	18°♄28'04	
min. Earth dist.	5184 May 19 22:27	0°♄23'00 4.48127 AU		5189 Oct 23 13:42	15°♄	
	5184 May 22 21:56	30°♄	opposition	5189 Nov 04 04:50	13°♄28'33 -1°25'17	

min. Earth dist.	5189 Nov 03 22:17	13°  30'44	3.93810 AU	min. Earth dist.	5195 Apr 24 08:43	5°  00'45	4.44406 AU
direct	5190 Jan 01 14:32	8°  34'43			5195 Jun 21 04:19	30°  12	
	5190 Mar 07 03:35	15°  8		direct	5195 Jun 25 05:11	29°  58'30	
evening set	5190 May 07 16:21	28°  29'58			5195 Jun 29 06:34	0°  16	
	5190 May 13 20:37	0°  11		evening set	5195 Oct 18 02:02	15°  16	
					5195 Oct 29 10:34	17°  12'57	
conjunction	5190 May 20 23:08	1°  43'52	-0°53'37	conjunction	5195 Nov 11 13:13	20°  12'42	0°56'58
minimum elong	5190 May 20 23:10	1°  43'52	0°53'38	minimum elong	5195 Nov 11 13:13	20°  12'42	0°56'59
max. Earth dist.	5190 May 22 02:14	2°  00'22	5.92383 AU	max. Earth dist.	5195 Nov 10 20:48	20°  03'52	6.47140 AU
morning rise	5190 Jun 03 08:57	4°  15'21		morning rise	5195 Nov 24 13:27	23°  00'14	
retrograde	5190 Oct 13 18:59	25°  14'13			5195 Dec 28 16:57	0°  12	
min. Earth dist.	5190 Dec 11 04:04	20°  15'54	3.93708 AU	retrograde	5196 Mar 23 19:08	9°  40'02	
opposition	5190 Dec 12 08:50	20°  14'09	-1°07'39	opposition	5196 May 23 11:44	4°  45'58	1°17'22
direct	5191 Feb 08 04:24	15°  15'02		min. Earth dist.	5196 May 24 07:40	4°  39'33	4.47955 AU
	5191 May 21 08:22	0°  12			5196 Jul 11 17:24	30°  12	
evening set	5191 Jun 14 13:06	5°  38'41		direct	5196 Jul 25 03:06	29°  14'51	
					5196 Aug 07 13:28	0°  12	
conjunction	5191 Jun 28 03:14	8°  35'41	-0°32'00	evening set	5196 Nov 28 00:17	17°  40'16	
minimum elong	5191 Jun 28 03:16	8°  35'42	0°32'01	max. Earth dist.	5196 Dec 09 06:17	19°  42'50	6.46610 AU
max. Earth dist.	5191 Jun 30 08:28	9°  25'34	5.97387 AU				
morning rise	5191 Jul 11 19:53	12°  09'46		conjunction	5196 Dec 10 21:52	19°  42'14	0°46'14
	5191 Oct 11 19:33	0°  12		minimum elong	5196 Dec 10 21:53	19°  42'15	0°46'15
retrograde	5191 Nov 19 13:53	2°  12'38		morning rise	5196 Dec 23 17:00	22°  43'09	
	5191 Dec 28 04:03	30°  12			5197 Jan 28 14:17	0°  12	
min. Earth dist.	5192 Jan 16 13:41	27°  30'29	4.03203 AU	retrograde	5197 Apr 23 04:06	9°  23'32	
opposition	5192 Jan 18 02:44	27°  17'51	-0°23'29	opposition	5197 Jun 23 01:54	4°  31'07	0°52'22
direct	5192 Mar 16 09:28	22°  20'26		min. Earth dist.	5197 Jun 24 11:00	4°  20'32	4.43436 AU
	5192 May 27 18:05	0°  12			5197 Aug 06 12:15	30°  12	
asc. node	5192 Jul 19 04:35	11°  11'17		direct	5197 Aug 24 18:33	29°  42'55	
evening set	5192 Jul 20 20:13	11°  13'40			5197 Sep 12 04:07	0°  12	
				evening set	5197 Dec 28 11:05	17°  20'15	
conjunction	5192 Aug 03 13:29	14°  14'23	0°01'22	max. Earth dist.	5198 Jan 08 01:46	19°  25'30	6.38395 AU
minimum elong	5192 Aug 03 13:28	14°  14'23	0°01'21				
behind sun begin	5192 Aug 03 05:05	14°  13'32		conjunction	5198 Jan 10 05:26	19°  25'40	0°22'57
behind sun end	5192 Aug 03 21:52	14°  14'13		minimum elong	5198 Jan 10 05:27	19°  25'40	0°22'57
	5192 Aug 04 16:29	15°  12		morning rise	5198 Jan 22 21:55	22°  24'14	
max. Earth dist.	5192 Aug 06 00:03	15°  18'16	6.10427 AU		5198 Feb 26 11:53	0°  12	
morning rise	5192 Aug 17 07:35	17°  15'49		retrograde	5198 May 25 04:46	10°  24'34	
	5192 Oct 13 23:25	0°  12		opposition	5198 Jul 25 01:50	5°  12'19	0°12'04
retrograde	5192 Dec 22 19:07	6°  15'31		min. Earth dist.	5198 Jul 26 16:52	4°  59'51	4.31964 AU
min. Earth dist.	5193 Feb 19 03:19	2°  16'01	4.18330 AU	direct	5198 Sep 25 05:14	0°  12'50	
opposition	5193 Feb 20 12:24	1°  15'50	0°26'37	desc. node	5198 Nov 06 01:04	2°  46'36	
	5193 Mar 07 01:44	30°  12			5199 Jan 13 17:49	15°  12	
direct	5193 Apr 20 20:55	26°  15'48		evening set	5199 Jan 28 17:53	18°  20'48	
	5193 Jun 04 21:13	0°  12		max. Earth dist.	5199 Feb 08 07:09	20°  44'56	6.24530 AU
evening set	5193 Aug 25 09:24	15°  12'24					
				conjunction	5199 Feb 10 11:08	21°  14'38	-0°07'47
conjunction	5193 Sep 08 00:06	18°  12'32	0°32'40	minimum elong	5199 Feb 10 11:08	21°  14'38	0°07'46
minimum elong	5193 Sep 08 00:04	18°  12'31	0°32'40	behind sun begin	5199 Feb 10 03:55	21°  10'32	
max. Earth dist.	5193 Sep 09 16:21	18°  14'01	6.26330 AU	behind sun end	5199 Feb 10 18:20	21°  18'44	
morning rise	5193 Sep 21 14:16	21°  12'03		morning rise	5199 Feb 23 03:56	24°  08'28	
	5193 Nov 01 07:34	0°  12			5199 Mar 21 15:40	0°  12	
retrograde	5194 Jan 23 15:19	9°  20'41		retrograde	5199 Jun 28 12:22	12°  13'57	
opposition	5194 Mar 24 16:27	4°  20'01	1°04'42	opposition	5199 Aug 28 04:23	7°  13'14	-0°34'33
min. Earth dist.	5194 Mar 23 22:30	4°  25'59	4.33601 AU	min. Earth dist.	5199 Aug 29 12:09	7°  12'59	4.16578 AU
	5194 May 03 09:30	30°  12		direct	5199 Oct 28 02:51	2°  14'02	
direct	5194 May 24 09:48	29°  18'14		evening set	5200 Mar 01 17:12	21°  13'56	
	5194 Jun 14 14:56	0°  12		max. Earth dist.	5200 Mar 13 02:53	24°  14'11	6.08913 AU
evening set	5194 Sep 27 19:28	17°  12'44					
				conjunction	5200 Mar 14 12:24	24°  13'00	-0°37'24
conjunction	5194 Oct 11 04:38	20°  12'56	0°52'29	minimum elong	5200 Mar 14 12:22	24°  13'59	0°37'24
minimum elong	5194 Oct 11 04:37	20°  12'55	0°52'30	morning rise	5200 Mar 27 08:15	27°  13'46	
max. Earth dist.	5194 Oct 11 18:32	20°  09'29	6.39802 AU		5200 Apr 06 15:34	0°  12	
morning rise	5194 Oct 24 11:40	22°  12'58		retrograde	5200 Aug 03 07:54	17°  12'01	
	5194 Nov 27 16:59	0°  12		opposition	5200 Oct 02 13:41	12°  15'35	-1°12'39
retrograde	5195 Feb 22 22:03	9°  15'57		min. Earth dist.	5200 Oct 03 03:57	12°  10'55	4.02028 AU
opposition	5195 Apr 24 08:25	5°  12'00	1°22'10				

direct	5200 Dec 01 01:37	7°♈20'44		direct	5206 May 28 19:43	3°♎43'39	
evening set	5201 Apr 05 20:41	26°♈54'16		evening set	5206 Oct 02 06:30	21°♎29'54	
conjunction	5201 Apr 18 20:50	0°♋02'59	-0°55'04	conjunction	5206 Oct 15 14:40	24°♎23'19	0°54'00
minimum elong	5201 Apr 18 20:49	0°♋02'58	0°55'04	minimum elong	5206 Oct 15 14:39	24°♎23'18	0°54'01
	5201 Apr 18 15:55	0°♋		max. Earth dist.	5206 Oct 15 22:51	24°♎27'45	6.40916 AU
max. Earth dist.	5201 Apr 18 16:54	0°♋00'36	5.96752 AU	morning rise	5206 Oct 28 20:57	27°♎15'34	
morning rise	5201 May 01 23:20	3°♋13'06			5206 Nov 10 17:33	0°♎	
	5201 Jun 23 16:39	15°♋		retrograde	5207 Feb 27 03:07	14°♎14'44	
retrograde	5201 Sep 10 16:41	23°♋46'46		opposition	5207 Apr 28 13:06	9°♎18'11	1°22'46
opposition	5201 Nov 09 12:57	18°♋46'41	-1°24'50	min. Earth dist.	5207 Apr 28 16:50	9°♎16'58	4.45043 AU
min. Earth dist.	5201 Nov 09 02:03	18°♋50'20	3.93617 AU	direct	5207 Jun 29 13:18	4°♎15'51	
	5201 Dec 11 23:51	15°♋			5207 Oct 01 05:35	15°♎	
direct	5202 Jan 06 19:26	13°♋52'48		evening set	5207 Nov 02 17:51	21°♎40'34	
	5202 Feb 01 13:41	15°♋					
	5202 Apr 27 00:55	0°♌		conjunction	5207 Nov 15 19:56	24°♎29'01	0°56'18
evening set	5202 May 12 21:37	3°♌47'15		minimum elong	5207 Nov 15 19:56	24°♎29'01	0°56'18
				max. Earth dist.	5207 Nov 15 01:08	24°♎18'55	6.47266 AU
conjunction	5202 May 26 05:29	7°♌01'23	-0°51'44	morning rise	5207 Nov 28 19:16	27°♎16'13	
minimum elong	5202 May 26 05:30	7°♌01'24	0°51'45		5207 Dec 11 17:10	0°♏	
max. Earth dist.	5202 May 27 13:15	7°♌20'42	5.92899 AU	retrograde	5208 Mar 27 23:08	13°♏56'00	
morning rise	5202 Jun 08 16:14	10°♌17'04		opposition	5208 May 27 17:13	9°♏02'16	1°14'56
	5202 Sep 23 16:58	0°♏		min. Earth dist.	5208 May 28 14:11	8°♏55'31	4.47589 AU
retrograde	5202 Oct 18 23:18	1°♏02'18		direct	5208 Jul 29 07:59	4°♏00'18	
	5202 Nov 13 02:03	30°♏		evening set	5208 Dec 02 06:30	21°♏22'17	
min. Earth dist.	5202 Dec 16 07:15	26°♏08'55	3.94861 AU	max. Earth dist.	5208 Dec 13 10:03	23°♏46'53	6.45778 AU
opposition	5202 Dec 17 13:00	25°♏58'50	-1°02'40				
direct	5203 Feb 13 10:16	21°♏03'42		conjunction	5208 Dec 15 03:28	24°♏09'21	0°43'35
	5203 May 02 08:10	0°♏		minimum elong	5208 Dec 15 03:29	24°♏09'22	0°43'36
evening set	5203 Jun 19 17:15	10°♏47'14		morning rise	5208 Dec 27 22:09	26°♏55'25	
					5209 Jan 11 08:43	0°♐	
conjunction	5203 Jul 03 08:09	14°♏01'46	-0°27'47	retrograde	5209 Apr 27 14:23	13°♐45'24	
minimum elong	5203 Jul 03 08:11	14°♏01'47	0°27'47	opposition	5209 Jun 27 11:24	8°♐53'07	0°47'25
max. Earth dist.	5203 Jul 05 15:52	14°♏34'57	5.99062 AU	min. Earth dist.	5209 Jun 28 22:21	8°♐41'58	4.42175 AU
morning rise	5203 Jul 17 01:15	17°♏17'15		direct	5209 Aug 29 03:53	3°♐52'10	
	5203 Sep 13 23:18	0°♑		evening set	5210 Jan 01 18:48	21°♐31'01	
retrograde	5203 Nov 24 09:58	7°♑20'55		max. Earth dist.	5210 Jan 12 07:40	23°♐50'50	6.36784 AU
min. Earth dist.	5204 Jan 21 09:36	2°♑28'53	4.05211 AU				
opposition	5204 Jan 22 22:48	2°♑16'13	-0°16'28	conjunction	5210 Jan 14 12:50	24°♐20'21	0°18'54
	5204 Feb 09 07:32	30°♑		minimum elong	5210 Jan 14 12:51	24°♐20'21	0°18'54
direct	5204 Mar 21 07:59	27°♑18'26		morning rise	5210 Jan 27 05:15	27°♐09'06	
	5204 May 01 09:29	0°♑			5210 Feb 09 06:03	0°♑	
asc. node	5204 May 30 04:46	4°♑27'44		retrograde	5210 May 29 20:01	14°♑38'19	
	5204 Jul 19 13:02	15°♑		opposition	5210 Jul 29 17:07	9°♑45'53	0°05'35
evening set	5204 Jul 25 19:32	16°♑25'50		min. Earth dist.	5210 Jul 31 06:59	9°♑33'47	4.30087 AU
				desc. node	5210 Sep 15 13:57	5°♑05'10	
conjunction	5204 Aug 08 12:34	19°♑35'06	0°06'03	direct	5210 Sep 29 16:38	4°♑46'40	
minimum elong	5204 Aug 08 12:34	19°♑35'06	0°06'02		5210 Dec 27 06:39	15°♑	
behind sun begin	5204 Aug 08 04:37	19°♑30'33		evening set	5211 Feb 02 05:46	22°♑59'50	
behind sun end	5204 Aug 08 20:30	19°♑39'39		max. Earth dist.	5211 Feb 12 22:03	25°♑26'18	6.22523 AU
max. Earth dist.	5204 Aug 10 19:38	20°♑06'48	6.12577 AU				
morning rise	5204 Aug 22 06:34	22°♑44'27		conjunction	5211 Feb 14 23:10	25°♑54'29	-0°12'14
	5204 Sep 24 07:26	0°♒		minimum elong	5211 Feb 14 23:09	25°♑54'29	0°12'13
retrograde	5204 Dec 27 06:10	11°♒38'18		behind sun begin	5211 Feb 14 17:43	25°♑51'23	
min. Earth dist.	5205 Feb 23 17:47	6°♒45'23	4.20422 AU	behind sun end	5211 Feb 15 04:36	25°♑57'35	
opposition	5205 Feb 25 00:39	6°♒34'57	0°32'48	morning rise	5211 Feb 27 16:02	28°♑49'13	
direct	5205 Apr 25 13:35	1°♒34'36			5211 Mar 04 20:32	0°♒	
evening set	5205 Aug 30 01:54	19°♒57'53		retrograde	5211 Jul 03 12:22	17°♒21'52	
				opposition	5211 Sep 02 02:50	12°♒27'52	-0°40'47
conjunction	5205 Sep 12 16:12	22°♒59'00	0°36'11	min. Earth dist.	5211 Sep 03 09:32	12°♒17'58	4.14566 AU
minimum elong	5205 Sep 12 16:10	22°♒58'59	0°36'10	direct	5211 Nov 01 21:27	7°♒31'02	
max. Earth dist.	5205 Sep 14 05:58	23°♒20'01	6.28218 AU	evening set	5212 Mar 06 11:18	26°♒28'36	
morning rise	5205 Sep 26 05:24	25°♒59'21		max. Earth dist.	5212 Mar 17 23:17	29°♒11'54	6.07052 AU
	5205 Oct 14 17:33	0°♓					
retrograde	5206 Jan 27 21:20	13°♓45'34		conjunction	5212 Mar 19 06:51	29°♒30'39	-0°40'50
opposition	5206 Mar 28 23:18	8°♓45'29	1°08'23	minimum elong	5212 Mar 19 06:50	29°♒30'38	0°40'50
min. Earth dist.	5206 Mar 28 07:26	8°♓50'44	4.35158 AU		5212 Mar 21 08:19	0°♓	

morning rise	5212 Apr 01 03:34	2°♎33'33	direct	5218 Jun 02 09:15	8°♏15'22	
retrograde	5212 Aug 08 12:51	22°♎18'50	evening set	5218 Oct 06 19:18	25°♏57'29	
opposition	5212 Oct 07 18:19	17°♎21'56 -1°16'13				
min. Earth dist.	5212 Oct 08 04:37	17°♎18'33 4.00499 AU	conjunction	5218 Oct 20 02:42	28°♏49'58 0°55'17	
direct	5212 Dec 06 01:11	12°♎27'17	minimum elong	5218 Oct 20 02:41	28°♏49'58 0°55'18	
	5213 Apr 02 04:36	0°♏	max. Earth dist.	5218 Oct 20 08:53	28°♏53'19 6.42350 AU	
evening set	5213 Apr 10 21:26	2°♏05'01		5218 Oct 25 12:04	0°♏	
			morning rise	5218 Nov 02 07:46	1°♏41'14	
conjunction	5213 Apr 23 22:34	5°♏14'39 -0°55'57		5219 Jan 12 21:24	15°♏	
minimum elong	5213 Apr 23 22:34	5°♏14'39 0°55'58	retrograde	5219 Mar 03 07:04	18°♏35'21	
max. Earth dist.	5213 Apr 24 00:05	5°♏15'35 5.95700 AU		5219 Apr 22 07:37	15°♏	
morning rise	5213 May 07 02:01	8°♏25'43	opposition	5219 May 02 19:17	13°♏39'15 1°22'58	
	5213 Jun 04 02:48	15°♏	min. Earth dist.	5219 May 03 00:39	13°♏37'31 4.46129 AU	
retrograde	5213 Sep 16 01:50	29°♏04'11	direct	5219 Jul 03 22:21	8°♏36'59	
opposition	5213 Nov 14 20:05	24°♏03'34 -1°23'44		5219 Sep 11 13:49	15°♏	
min. Earth dist.	5213 Nov 14 07:09	24°♏07'54 3.93166 AU	evening set	5219 Nov 07 01:40	25°♏58'59	
direct	5214 Jan 12 00:46	19°♏09'36	max. Earth dist.	5219 Nov 19 03:48	28°♏34'31 6.47930 AU	
	5214 Apr 08 18:37	0°♐				
evening set	5214 May 18 02:59	9°♐04'39	conjunction	5219 Nov 20 02:41	28°♏46'50 0°55'23	
			minimum elong	5219 Nov 20 02:42	28°♏46'50 0°55'24	
conjunction	5214 May 31 12:00	12°♐19'15 -0°49'27		5219 Nov 25 18:51	0°♐	
minimum elong	5214 May 31 12:02	12°♐19'16 0°49'29	morning rise	5219 Dec 03 01:20	1°♐33'28	
max. Earth dist.	5214 Jun 02 00:20	12°♐41'18 5.93088 AU	retrograde	5220 Apr 01 04:24	18°♐11'28	
morning rise	5214 Jun 13 23:51	15°♐35'20	opposition	5220 May 31 22:58	13°♐17'58 1°12'11	
	5214 Aug 19 18:49	0°♑	min. Earth dist.	5220 Jun 01 22:43	13°♐10'21 4.47797 AU	
retrograde	5214 Oct 24 04:23	6°♑18'02	direct	5220 Aug 02 16:35	8°♐16'04	
min. Earth dist.	5214 Dec 21 09:19	1°♑25'04 3.95684 AU	evening set	5220 Dec 06 11:25	25°♐37'23	
opposition	5214 Dec 22 17:02	1°♑14'18 -0°57'13	max. Earth dist.	5220 Dec 17 12:54	28°♐01'00 6.45510 AU	
	5214 Dec 31 22:23	30°♐				
direct	5215 Feb 18 13:56	26°♐18'51	conjunction	5220 Dec 19 07:52	28°♐24'20 0°40'48	
	5215 Apr 07 10:55	0°♑	minimum elong	5220 Dec 19 07:54	28°♐24'21 0°40'49	
evening set	5215 Jun 24 22:50	15°♑59'11		5220 Dec 26 16:04	0°♑	
			morning rise	5221 Jan 01 01:54	1°♑10'16	
conjunction	5215 Jul 08 14:15	19°♑13'21 -0°23'19	retrograde	5221 May 01 19:53	18°♑02'03	
minimum elong	5215 Jul 08 14:16	19°♑13'22 0°23'20	opposition	5221 Jul 01 18:49	13°♑09'46 0°42'23	
max. Earth dist.	5215 Jul 10 21:43	19°♑46'17 6.00413 AU	min. Earth dist.	5221 Jul 03 05:58	12°♑58'33 4.41436 AU	
morning rise	5215 Jul 22 08:01	22°♑28'26	direct	5221 Sep 02 09:52	8°♑08'58	
	5215 Aug 24 12:48	0°♒	evening set	5222 Jan 05 23:52	25°♑49'39	
retrograde	5215 Nov 29 06:31	12°♒24'13	max. Earth dist.	5222 Jan 16 12:11	28°♑09'33 6.35617 AU	
min. Earth dist.	5216 Jan 26 07:18	7°♒32'08 4.06929 AU				
opposition	5216 Jan 27 20:22	7°♒19'31 -0°09'15	conjunction	5222 Jan 18 17:32	28°♑39'16 0°14'55	
direct	5216 Mar 26 08:27	2°♒21'18	minimum elong	5222 Jan 18 17:33	28°♑39'17 0°14'56	
asc. node	5216 Apr 08 21:54	2°♒39'54	behind sun begin	5222 Jan 18 14:22	28°♑37'31	
	5216 Jul 02 01:38	15°♒	behind sun end	5222 Jan 18 20:44	28°♑41'02	
evening set	5216 Jul 30 20:45	21°♒23'30		5222 Jan 24 18:30	0°♒	
			morning rise	5222 Jan 31 09:44	1°♒28'24	
conjunction	5216 Aug 13 13:53	24°♒31'52 0°10'45		5222 Apr 11 12:07	15°♒	
minimum elong	5216 Aug 13 13:52	24°♒31'52 0°10'45	retrograde	5222 Jun 03 08:56	19°♒03'12	
behind sun begin	5216 Aug 13 07:33	24°♒28'16		5222 Jul 27 18:03	15°♒	
behind sun end	5216 Aug 13 20:11	24°♒35'28	desc. node	5222 Jul 28 15:27	14°♒53'15	
max. Earth dist.	5216 Aug 15 20:28	25°♒03'10 6.14529 AU	opposition	5222 Aug 03 05:19	14°♒10'39 -0°00'39	
morning rise	5216 Aug 27 07:22	27°♒40'08	min. Earth dist.	5222 Aug 04 20:17	13°♒58'11 4.28525 AU	
	5216 Sep 06 15:49	0°♓	direct	5222 Oct 04 03:10	9°♒11'40	
retrograde	5216 Dec 31 20:35	16°♓24'43		5222 Dec 07 11:10	15°♒	
min. Earth dist.	5217 Feb 28 10:02	11°♓31'37 4.22424 AU	evening set	5223 Feb 06 13:58	27°♒29'04	
opposition	5217 Mar 01 15:16	11°♓21'46 0°38'55	max. Earth dist.	5223 Feb 17 05:47	29°♒55'54 6.20679 AU	
direct	5217 Apr 30 08:15	6°♓21'13		5223 Feb 17 12:54	0°♓	
evening set	5217 Sep 03 21:11	24°♓39'15				
			conjunction	5223 Feb 19 07:24	0°♓24'29 -0°16'25	
conjunction	5217 Sep 17 10:38	27°♓39'15 0°39'34	minimum elong	5223 Feb 19 07:23	0°♓24'28 0°16'24	
minimum elong	5217 Sep 17 10:36	27°♓39'14 0°39'34	morning rise	5223 Mar 04 00:37	3°♓20'05	
max. Earth dist.	5217 Sep 18 20:22	27°♓57'56 6.30126 AU	retrograde	5223 Jul 08 06:37	22°♓01'38	
	5217 Sep 28 01:13	0°♔	opposition	5223 Sep 06 21:22	17°♓07'18 -0°46'30	
morning rise	5217 Sep 30 23:05	0°♔38'26	min. Earth dist.	5223 Sep 08 01:47	16°♓58'06 4.12567 AU	
retrograde	5218 Feb 01 04:48	18°♔16'57	direct	5223 Nov 06 10:50	12°♓10'43	
opposition	5218 Apr 02 08:26	13°♔17'18 1°11'46		5224 Mar 05 19:40	0°♕	
min. Earth dist.	5218 Apr 01 18:46	13°♔21'50 4.36872 AU	evening set	5224 Mar 11 01:55	1°♕14'19	

conjunction	5224 Mar 23 22:05	4°♈17'28	-0°43'51	max. Earth dist.	5229 Sep 23 12:37	2°♏38'08	6.32119 AU
minimum elong	5224 Mar 23 22:03	4°♈17'27	0°43'51	morning rise	5229 Oct 05 17:01	5°♏18'57	
max. Earth dist.	5224 Mar 22 18:02	4°♈00'45	6.05074 AU	retrograde	5230 Feb 05 13:37	22°♏49'28	
morning rise	5224 Apr 05 19:25	7°♈21'33		opposition	5230 Apr 06 18:16	17°♏50'18	1°14'42
retrograde	5224 Aug 13 17:09	27°♈16'36		min. Earth dist.	5230 Apr 06 07:13	17°♏53'57	4.38642 AU
opposition	5224 Oct 12 19:28	22°♈19'17	-1°19'09	direct	5230 Jun 07 00:11	12°♏48'15	
min. Earth dist.	5224 Oct 13 04:21	22°♈16'22	3.98718 AU		5230 Oct 09 07:47	0°♏	
direct	5224 Dec 10 22:49	17°♈24'48		evening set	5230 Oct 11 08:10	0°♏25'54	
	5225 Mar 16 07:30	0°♏					
evening set	5225 Apr 15 19:48	7°♏08'11		conjunction	5230 Oct 24 14:32	3°♏17'27	0°56'14
				minimum elong	5230 Oct 24 14:31	3°♏17'27	0°56'14
conjunction	5225 Apr 28 22:03	10°♏18'59	-0°56'24	max. Earth dist.	5230 Oct 24 16:00	3°♏18'14	6.43724 AU
minimum elong	5225 Apr 28 22:03	10°♏18'59	0°56'25	morning rise	5230 Nov 06 18:41	6°♏07'47	
max. Earth dist.	5225 Apr 29 03:23	10°♏22'14	5.94295 AU		5230 Dec 20 19:02	15°♏	
morning rise	5225 May 12 02:45	13°♏31'16		retrograde	5231 Mar 07 12:10	22°♏57'19	
	5225 May 18 06:12	15°♏		opposition	5231 May 07 01:58	18°♏01'34	1°22'41
	5225 Jul 30 08:21	0°♏		min. Earth dist.	5231 May 07 10:04	17°♏58'57	4.47019 AU
retrograde	5225 Sep 21 08:12	4°♏15'52			5231 Jun 01 04:59	15°♏	
	5225 Nov 14 09:54	30°♏		direct	5231 Jul 08 08:20	12°♏59'15	
min. Earth dist.	5225 Nov 19 08:45	29°♏20'16	3.92320 AU		5231 Aug 14 20:00	15°♏	
opposition	5225 Nov 20 00:52	29°♏14'51	-1°22'04		5231 Nov 09 21:22	0°♏	
direct	5226 Jan 17 01:26	24°♏20'53		evening set	5231 Nov 11 09:44	0°♏19'21	
	5226 Mar 18 03:04	0°♏		max. Earth dist.	5231 Nov 23 09:07	2°♏53'21	6.48256 AU
evening set	5226 May 23 07:31	14°♏18'30					
				conjunction	5231 Nov 24 10:07	3°♏06'47	0°54'07
conjunction	5226 Jun 05 17:38	17°♏33'45	-0°46'50	minimum elong	5231 Nov 24 10:07	3°♏06'47	0°54'09
minimum elong	5226 Jun 05 17:39	17°♏33'46	0°46'52	morning rise	5231 Dec 07 07:46	5°♏52'58	
max. Earth dist.	5226 Jun 07 08:26	17°♏57'18	5.92877 AU	retrograde	5232 Apr 05 09:22	22°♏30'31	
morning rise	5226 Jun 19 06:47	20°♏50'30		opposition	5232 Jun 05 05:51	17°♏37'17	1°08'58
	5226 Jul 29 04:19	0°♏		min. Earth dist.	5232 Jun 06 07:10	17°♏29'11	4.47536 AU
retrograde	5226 Oct 29 08:31	11°♏32'25		direct	5232 Aug 07 00:11	12°♏35'31	
min. Earth dist.	5226 Dec 26 10:58	6°♏39'49	3.96124 AU	evening set	5232 Dec 10 17:58	29°♏57'51	
opposition	5226 Dec 27 20:34	6°♏28'22	-0°51'25		5232 Dec 10 21:57	0°♏	
direct	5227 Feb 23 17:55	1°♏32'36		max. Earth dist.	5232 Dec 21 15:22	2°♏19'39	6.44661 AU
evening set	5227 Jun 30 04:51	21°♏11'20					
				conjunction	5232 Dec 23 13:45	2°♏44'53	0°37'42
conjunction	5227 Jul 13 21:08	24°♏25'21	-0°18'43	minimum elong	5232 Dec 23 13:46	2°♏44'54	0°37'42
minimum elong	5227 Jul 13 21:09	24°♏25'22	0°18'44	morning rise	5233 Jan 05 07:29	5°♏31'01	
max. Earth dist.	5227 Jul 16 07:28	24°♏59'53	6.01482 AU	retrograde	5233 May 06 07:23	22°♏26'49	
morning rise	5227 Jul 27 15:13	27°♏40'05		opposition	5233 Jul 06 05:42	17°♏34'34	0°36'53
	5227 Aug 06 15:49	0°♏		min. Earth dist.	5233 Jul 07 18:58	17°♏22'41	4.40029 AU
	5227 Oct 25 12:15	15°♏		direct	5233 Sep 06 20:30	12°♏33'55	
retrograde	5227 Dec 04 05:34	17°♏28'53			5234 Jan 08 22:39	0°♏	
	5228 Jan 12 17:32	15°♏		evening set	5234 Jan 10 08:16	0°♏18'36	
min. Earth dist.	5228 Jan 31 05:50	12°♏36'44	4.08481 AU	max. Earth dist.	5234 Jan 20 19:42	2°♏38'37	6.33754 AU
opposition	5228 Feb 01 18:32	12°♏24'15	-0°02'02				
asc. node	5228 Feb 17 14:23	10°♏19'17		conjunction	5234 Jan 23 01:51	3°♏08'53	0°10'39
direct	5228 Mar 31 09:39	7°♏25'42		minimum elong	5234 Jan 23 01:51	3°♏08'53	0°10'40
	5228 Jun 11 22:38	15°♏		behind sun begin	5234 Jan 22 19:40	3°♏05'27	
evening set	5228 Aug 04 23:22	26°♏23'14		behind sun end	5234 Jan 23 08:02	3°♏12'20	
				morning rise	5234 Feb 04 17:58	5°♏58'45	
conjunction	5228 Aug 18 16:13	29°♏30'40	0°15'23		5234 Mar 19 17:45	15°♏	
minimum elong	5228 Aug 18 16:13	29°♏30'39	0°15'23	desc. node	5234 Jun 06 23:09	23°♏41'36	
behind sun begin	5228 Aug 18 14:18	29°♏29'34		retrograde	5234 Jun 08 01:43	23°♏41'43	
behind sun end	5228 Aug 18 18:07	29°♏31'44		opposition	5234 Aug 07 22:43	18°♏48'57	-0°07'17
	5228 Aug 20 19:40	0°♏		min. Earth dist.	5234 Aug 09 12:20	18°♏36'55	4.26324 AU
max. Earth dist.	5228 Aug 20 21:32	0°♏01'04	6.16413 AU		5234 Sep 11 00:18	15°♏	
morning rise	5228 Sep 01 09:26	2°♏37'54		direct	5234 Oct 08 15:57	13°♏50'16	
retrograde	5229 Jan 05 09:41	21°♏13'11			5234 Nov 05 06:55	15°♏	
min. Earth dist.	5229 Mar 05 01:58	16°♏20'09	4.24450 AU		5235 Feb 01 08:25	0°♏	
opposition	5229 Mar 06 06:33	16°♏10'32	0°44'45	evening set	5235 Feb 11 04:06	2°♏14'05	
direct	5229 May 05 03:22	11°♏09'41		max. Earth dist.	5235 Feb 21 22:23	4°♏43'08	6.18318 AU
evening set	5229 Sep 08 16:53	29°♏22'11					
	5229 Sep 11 13:48	0°♏		conjunction	5235 Feb 23 21:41	5°♏10'32	-0°20'46
				minimum elong	5235 Feb 23 21:40	5°♏10'32	0°20'46
conjunction	5229 Sep 22 05:37	2°♏21'02	0°42'42	morning rise	5235 Mar 08 15:17	8°♏07'17	
minimum elong	5229 Sep 22 05:36	2°♏21'01	0°42'42	retrograde	5235 Jul 13 11:25	26°♏59'43	

opposition	5235 Sep 11 23:16	22° X 05'02	-0°52'21	opposition	5241 Mar 10 19:32	20° P 52'07	0°50'08
min. Earth dist.	5235 Sep 13 02:29	21° X 56'12	4.10219 AU	min. Earth dist.	5241 Mar 09 17:55	21° P 00'43	4.26949 AU
direct	5235 Nov 11 08:47	17° X 08'44		direct	5241 May 09 22:39	15° P 51'00	
	5236 Feb 17 13:18	0° Y			5241 Aug 26 00:49	0° A	
evening set	5236 Mar 15 23:50	6° Y 19'21		evening set	5241 Sep 13 09:22	3° A 56'41	
conjunction	5236 Mar 28 20:44	9° Y 23'45	-0°46'46	conjunction	5241 Sep 26 21:15	6° A 54'14	0°45'28
minimum elong	5236 Mar 28 20:43	9° Y 23'44	0°46'47	minimum elong	5241 Sep 26 21:13	6° A 54'13	0°45'29
max. Earth dist.	5236 Mar 27 20:19	9° Y 09'08	6.02959 AU	max. Earth dist.	5241 Sep 28 00:36	7° A 09'15	6.34330 AU
morning rise	5236 Apr 10 19:02	12° Y 29'12		morning rise	5241 Oct 10 07:36	9° A 50'49	
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retrograde	5236 Aug 19 03:24	2° B 34'12		opposition	5242 Apr 11 00:52	22° A 14'32	1°17'06
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	5237 May 01 08:11	15° B		max. Earth dist.	5242 Oct 28 20:29	7° M 35'08	6.44948 AU
conjunction	5237 May 04 04:55	15° B 41'55	-0°56'26	morning rise	5242 Nov 11 02:18	10° M 26'04	
minimum elong	5237 May 04 04:56	15° B 41'55	0°56'26		5242 Dec 02 21:24	15° M	
max. Earth dist.	5237 May 04 14:51	15° B 47'58	5.93303 AU	retrograde	5243 Mar 11 15:45	27° M 11'55	
morning rise	5237 May 17 10:55	18° B 55'14		opposition	5243 May 11 06:21	22° M 16'40	1°21'58
	5237 Jul 05 07:24	0° I		min. Earth dist.	5243 May 11 17:47	22° M 12'59	4.47615 AU
retrograde	5237 Sep 26 19:48	9° I 43'40		direct	5243 Jul 12 16:00	17° M 14'25	
opposition	5237 Nov 25 11:48	4° I 42'06	-1°19'34		5243 Oct 24 18:36	0° J	
min. Earth dist.	5237 Nov 24 16:13	4° I 48'42	3.92117 AU	evening set	5243 Nov 15 15:24	4° J 33'39	
	5238 Jan 11 17:42	30° R B		max. Earth dist.	5243 Nov 27 08:47	7° J 04'35	6.48164 AU
direct	5238 Jan 22 10:56	29° B 47'59		conjunction	5243 Nov 28 14:58	7° J 20'49	0°52'36
	5238 Feb 02 04:11	0° I		minimum elong	5243 Nov 28 14:59	7° J 20'50	0°52'37
evening set	5238 May 28 17:29	19° I 45'09		morning rise	5243 Dec 11 12:07	10° J 06'50	
conjunction	5238 Jun 11 04:51	23° I 00'39	-0°43'43	retrograde	5244 Apr 09 15:19	26° J 45'37	
minimum elong	5238 Jun 11 04:53	23° I 00'40	0°43'44	opposition	5244 Jun 09 11:52	21° J 52'37	1°05'28
max. Earth dist.	5238 Jun 13 01:34	23° I 27'44	5.93511 AU	min. Earth dist.	5244 Jun 10 15:47	21° J 43'40	4.46772 AU
morning rise	5238 Jun 24 18:51	26° I 17'30		direct	5244 Aug 11 06:35	16° J 50'56	
	5238 Jul 10 10:29	0° B			5244 Nov 24 20:29	0° Z	
retrograde	5238 Nov 03 15:56	16° B 54'17		evening set	5244 Dec 14 23:34	4° Z 15'59	
min. Earth dist.	5238 Dec 31 16:16	12° B 01'46	3.97528 AU	max. Earth dist.	5244 Dec 25 19:38	6° Z 37'29	6.43283 AU
opposition	5239 Jan 02 02:56	11° B 49'58	-0°44'59	conjunction	5244 Dec 27 19:07	7° Z 03'25	0°34'25
direct	5239 Mar 01 01:56	6° B 53'50		minimum elong	5244 Dec 27 19:09	7° Z 03'26	0°34'26
evening set	5239 Jul 05 12:52	26° B 27'03		morning rise	5245 Jan 09 12:22	9° Z 49'57	
conjunction	5239 Jul 19 05:27	29° B 40'17	-0°13'54	retrograde	5245 May 10 17:53	26° Z 51'37	
minimum elong	5239 Jul 19 05:28	29° B 40'17	0°13'55	opposition	5245 Jul 10 16:48	21° Z 59'27	0°31'13
behind sun begin	5239 Jul 19 01:20	29° B 37'52		min. Earth dist.	5245 Jul 12 06:30	21° Z 47'26	4.38118 AU
behind sun end	5239 Jul 19 09:36	29° B 42'42		direct	5245 Sep 11 04:37	16° Z 59'06	
	5239 Jul 20 14:58	0° Q			5245 Dec 23 12:55	0° A	
max. Earth dist.	5239 Jul 21 16:46	0° Q 15'11	6.03499 AU	evening set	5246 Jan 14 17:48	4° A 49'36	
morning rise	5239 Aug 01 23:52	2° Q 54'08		max. Earth dist.	5246 Jan 25 04:27	7° A 09'59	6.31454 AU
	5239 Sep 27 11:20	15° Q		conjunction	5246 Jan 27 11:10	7° A 40'44	0°06'19
retrograde	5239 Dec 09 00:53	22° Q 32'02		minimum elong	5246 Jan 27 11:10	7° A 40'44	0°06'20
asc. node	5239 Dec 27 22:52	21° Q 56'23		behind sun begin	5246 Jan 27 03:38	7° A 36'32	
min. Earth dist.	5240 Feb 05 02:56	17° Q 40'07	4.10888 AU	behind sun end	5246 Jan 27 18:41	7° A 44'57	
opposition	5240 Feb 06 16:07	17° Q 27'29	0°05'11	morning rise	5246 Feb 09 03:29	10° A 31'35	
	5240 Feb 25 15:43	15° R Q			5246 Mar 01 12:37	15° A	
direct	5240 Apr 05 10:23	12° Q 28'31		desc. node	5246 Apr 16 12:30	23° A 39'12	
	5240 May 15 11:37	15° Q		retrograde	5246 Jun 12 23:37	28° A 24'28	
	5240 Aug 04 04:44	0° P		opposition	5246 Aug 12 18:20	23° A 31'35	-0°13'55
evening set	5240 Aug 10 00:13	1° P 18'24		min. Earth dist.	5246 Aug 14 07:50	23° A 19'34	4.23774 AU
conjunction	5240 Aug 23 16:39	4° P 24'29	0°19'51	direct	5246 Oct 13 08:09	18° A 33'14	
minimum elong	5240 Aug 23 16:38	4° P 24'28	0°19'51		5247 Jan 14 22:56	0° X	
max. Earth dist.	5240 Aug 25 19:14	4° P 53'11	6.18992 AU	evening set	5247 Feb 15 20:16	7° X 04'42	
morning rise	5240 Sep 06 09:09	7° P 30'14		max. Earth dist.	5247 Feb 26 17:40	9° X 36'24	6.15747 AU
retrograde	5241 Jan 09 22:11	25° P 54'21					





























































































































conjunction	5247 Feb 28 14:18	10° K 02'23	-0°25'02	morning rise	5252 Sep 11 06:53	12° P 18'13	
minimum elong	5247 Feb 28 14:17	10° K 02'22	0°25'01		5252 Dec 27 02:52	0° A	
morning rise	5247 Mar 13 08:22	13° K 00'27		retrograde	5253 Jan 14 07:23	0° A 32'05	
	5247 Jun 11 21:51	0° Y			5253 Feb 01 09:42	30° R P	
retrograde	5247 Jul 18 17:18	2° Y 04'33		min. Earth dist.	5253 Mar 14 06:29	25° P 38'26	4.29184 AU
	5247 Aug 24 18:28	30° R K		opposition	5253 Mar 15 06:38	25° P 30'21	0°55'09
opposition	5247 Sep 17 03:53	27° K 09'33	-0°57'53	direct	5253 May 14 13:21	20° P 29'00	
min. Earth dist.	5247 Sep 18 03:36	27° K 01'50	4.07865 AU		5253 Aug 07 23:54	0° A	
direct	5247 Nov 16 06:45	22° K 13'41		evening set	5253 Sep 18 00:40	8° A 29'05	
	5248 Jan 28 14:51	0° Y					
evening set	5248 Mar 21 00:42	11° Y 31'18		conjunction	5253 Oct 01 11:36	11° A 25'29	0°47'59
				minimum elong	5253 Oct 01 11:34	11° A 25'28	0°47'59
conjunction	5248 Apr 02 22:13	14° Y 36'53	-0°49'21	max. Earth dist.	5253 Oct 02 09:32	11° A 37'29	6.36209 AU
minimum elong	5248 Apr 02 22:12	14° Y 36'52	0°49'22	morning rise	5253 Oct 14 21:01	14° A 20'53	
max. Earth dist.	5248 Apr 02 02:23	14° Y 24'57	6.01041 AU		5254 Jan 12 17:23	0° M	
morning rise	5248 Apr 15 21:31	17° Y 43'37		retrograde	5254 Feb 14 00:18	1° M .36'33	
	5248 Jun 10 16:33	0° B			5254 Mar 18 02:49	30° R A	
retrograde	5248 Aug 24 15:11	7° B 57'32		opposition	5254 Apr 15 07:25	26° A 38'23	1°19'07
opposition	5248 Oct 23 15:10	2° B 59'10	-1°23'28	min. Earth dist.	5254 Apr 15 02:27	26° A 40'01	4.41833 AU
min. Earth dist.	5248 Oct 23 15:59	2° B 58'54	3.95813 AU	direct	5254 Jun 15 21:44	21° A 36'06	
	5248 Nov 16 22:00	30° R Y			5254 Sep 04 17:38	0° M	
direct	5248 Dec 21 08:40	28° Y 05'04		evening set	5254 Oct 20 03:09	9° M .06'39	
	5249 Jan 24 10:32	0° B					
	5249 Apr 14 03:46	15° B		conjunction	5254 Nov 02 07:49	11° M .56'42	0°57'09
evening set	5249 Apr 26 09:17	17° B 56'10		minimum elong	5254 Nov 02 07:49	11° M .56'42	0°57'10
				max. Earth dist.	5254 Nov 02 00:57	11° M .53'00	6.45776 AU
conjunction	5249 May 09 13:46	21° B 08'43	-0°55'57	morning rise	5254 Nov 15 09:59	14° M .45'29	
minimum elong	5249 May 09 13:47	21° B 08'44	0°55'58		5254 Nov 16 13:08	15° M	
max. Earth dist.	5249 May 10 06:50	21° B 19'07	5.92815 AU		5255 Feb 12 16:40	0° A	
morning rise	5249 May 22 20:49	24° B 22'47		retrograde	5255 Mar 15 19:26	1° A 28'55	
	5249 Jun 15 14:42	0° I			5255 Apr 15 22:13	30° R M	
retrograde	5249 Oct 02 08:29	15° I 12'18		opposition	5255 May 15 11:30	26° M .34'01	1°20'50
opposition	5249 Nov 30 22:30	10° I 10'15	-1°16'19	min. Earth dist.	5255 May 16 00:58	26° M .29'40	4.47846 AU
min. Earth dist.	5249 Nov 30 00:20	10° I 17'43	3.92477 AU	direct	5255 Jul 16 22:08	21° M .31'44	
direct	5250 Jan 27 20:46	5° I 15'59			5255 Oct 06 19:01	0° A	
evening set	5250 Jun 03 03:07	25° I 10'35		evening set	5255 Nov 19 22:09	8° A 51'08	
conjunction	5250 Jun 16 15:17	28° I 25'58	-0°40'13	conjunction	5255 Dec 02 21:07	11° A 38'12	0°50'47
minimum elong	5250 Jun 16 15:19	28° I 25'59	0°40'14	minimum elong	5255 Dec 02 21:08	11° A 38'12	0°50'47
max. Earth dist.	5250 Jun 18 14:46	28° I 54'37	5.94641 AU	max. Earth dist.	5255 Dec 01 12:28	11° A 20'36	6.47783 AU
	5250 Jun 23 03:15	0° B		morning rise	5255 Dec 15 17:31	14° A 24'06	
morning rise	5250 Jun 30 06:20	1° B 42'41			5256 Mar 18 08:53	0° B	
retrograde	5250 Nov 08 18:19	22° B 12'14		retrograde	5256 Apr 13 22:40	1° B 04'49	
min. Earth dist.	5251 Jan 05 18:20	17° B 20'12	3.99289 AU		5256 May 10 12:29	30° R A	
opposition	5251 Jan 07 07:02	17° B 07'42	-0°38'15	opposition	5256 Jun 13 19:30	26° A 12'04	1°01'33
direct	5251 Mar 06 07:07	12° B 11'11		min. Earth dist.	5256 Jun 15 01:35	26° A 02'27	4.45807 AU
	5251 Jul 03 17:47	0° O		direct	5256 Aug 15 14:19	21° A 10'32	
evening set	5251 Jul 10 18:51	1° O 38'03			5256 Nov 06 23:44	0° B	
				evening set	5256 Dec 19 06:54	8° B 38'41	
conjunction	5251 Jul 24 11:42	4° O 50'22	-0°09'03	max. Earth dist.	5256 Dec 29 23:26	10° B 58'49	6.41793 AU
minimum elong	5251 Jul 24 11:42	4° O 50'22	0°09'03				
behind sun begin	5251 Jul 24 04:36	4° O 46'14		conjunction	5257 Jan 01 01:57	11° B 26'31	0°30'53
behind sun end	5251 Jul 24 18:48	4° O 54'30		minimum elong	5257 Jan 01 01:58	11° B 26'31	0°30'54
max. Earth dist.	5251 Jul 26 22:20	5° O 24'42	6.05715 AU	morning rise	5257 Jan 13 19:08	14° B 13'34	
morning rise	5251 Aug 07 06:05	8° O 03'09			5257 Apr 15 11:16	0° A	
	5251 Sep 07 05:43	15° O		retrograde	5257 May 15 08:27	1° A 21'28	
asc. node	5251 Nov 06 07:33	25° O 16'57			5257 Jun 14 07:44	30° R B	
retrograde	5251 Dec 13 19:51	27° O 30'00		opposition	5257 Jul 15 06:22	26° B 29'17	0°25'13
min. Earth dist.	5252 Feb 10 00:06	22° O 37'36	4.13305 AU	min. Earth dist.	5257 Jul 16 20:43	26° B 17'03	4.36198 AU
opposition	5252 Feb 11 11:17	22° O 25'39	0°12'15	direct	5257 Sep 15 15:50	21° B 29'09	
direct	5252 Apr 10 11:21	17° O 26'19			5257 Dec 05 04:04	0° A	
	5252 Jul 17 19:38	0° P		evening set	5258 Jan 19 04:50	9° A 25'12	
evening set	5252 Aug 14 23:05	6° P 09'02		max. Earth dist.	5258 Jan 29 17:25	11° A 47'19	6.29271 AU
conjunction	5252 Aug 28 15:09	9° P 13'52	0°24'09	conjunction	5258 Jan 31 22:17	12° A 17'11	0°01'50
minimum elong	5252 Aug 28 15:08	9° P 13'51	0°24'09	minimum elong	5258 Jan 31 22:19	12° A 17'12	0°01'50
max. Earth dist.	5252 Aug 30 15:58	9° P 41'24	6.21414 AU	behind sun begin	5258 Jan 31 14:20	12° A 12'43	

behind sun end	5258 Feb 01 06:17	12° \approx 21'41			5263 Aug 21 01:16	15° Ω	
	5258 Feb 12 22:42	15° \approx		asc. node	5263 Sep 17 03:00	20° Ω 55'15	
morning rise	5258 Feb 13 14:35	15° \approx 08'56			5263 Nov 10 08:34	0° Π	
desc. node	5258 Feb 23 07:56	17° \approx 19'07		retrograde	5263 Dec 18 09:59	2° Π 16'25	
	5258 May 02 12:50	0° \mathcal{H}			5264 Jan 25 05:34	30° $\mathcal{R}\Omega$	
retrograde	5258 Jun 17 21:30	3° \mathcal{H} 11'14		min. Earth dist.	5264 Feb 14 15:39	27° Ω 24'06	4.15520 AU
	5258 Aug 04 03:11	30° $\mathcal{R}\approx$		opposition	5264 Feb 16 02:07	27° Ω 12'26	0°18'56
opposition	5258 Aug 17 15:42	28° \approx 18'10	-0°20'38	direct	5264 Apr 15 05:15	22° Ω 12'50	
min. Earth dist.	5258 Aug 19 03:23	28° \approx 06'43	4.21506 AU		5264 Jun 28 17:37	0° Π	
direct	5258 Oct 18 00:25	23° \approx 20'15		evening set	5264 Aug 19 17:54	10° Π 49'29	
	5258 Dec 25 17:29	0° \mathcal{H}					
evening set	5259 Feb 20 13:59	11° \mathcal{H} 58'09		conjunction	5264 Sep 02 09:19	13° Π 53'10	0°28'08
max. Earth dist.	5259 Mar 03 14:05	14° \mathcal{H} 32'12	6.13595 AU	minimum elong	5264 Sep 02 09:18	13° Π 53'09	0°28'09
				max. Earth dist.	5264 Sep 04 05:13	14° Π 17'49	6.23510 AU
conjunction	5259 Mar 05 08:09	14° \mathcal{H} 56'50	-0°29'11	morning rise	5264 Sep 16 00:30	16° Π 56'20	
minimum elong	5259 Mar 05 08:07	14° \mathcal{H} 56'49	0°29'10		5264 Nov 20 23:35	0° Ω	
morning rise	5259 Mar 18 02:50	17° \mathcal{H} 56'03		retrograde	5265 Jan 18 15:32	5° Ω 01'45	
	5259 May 13 16:59	0° Υ		opposition	5265 Mar 19 15:02	0° Ω 00'31	0°59'42
retrograde	5259 Jul 23 23:41	7° Υ 10'09		min. Earth dist.	5265 Mar 18 18:12	0° Ω 07'29	4.31005 AU
opposition	5259 Sep 22 08:54	2° Υ 14'41	-1°03'02		5265 Mar 19 16:36	30° $\mathcal{R}\Pi$	
min. Earth dist.	5259 Sep 23 05:24	2° Υ 07'59	4.06029 AU	direct	5265 May 19 02:38	24° Π 59'01	
	5259 Oct 10 06:17	30° $\mathcal{R}\mathcal{H}$			5265 Jul 17 17:09	0° Ω	
direct	5259 Nov 21 07:10	27° \mathcal{H} 19'08		evening set	5265 Sep 22 13:06	12° Ω 55'01	
	5260 Jan 01 13:30	0° Υ					
evening set	5260 Mar 26 01:09	16° Υ 41'39		conjunction	5265 Oct 05 23:24	15° Ω 50'33	0°50'09
				minimum elong	5265 Oct 05 23:23	15° Ω 50'33	0°50'09
conjunction	5260 Apr 07 23:34	19° Υ 48'11	-0°51'33	max. Earth dist.	5265 Oct 06 18:27	16° Ω 00'57	6.37636 AU
minimum elong	5260 Apr 07 23:33	19° Υ 48'10	0°51'33	morning rise	5265 Oct 19 07:44	18° Ω 44'59	
max. Earth dist.	5260 Apr 07 10:07	19° Υ 40'05	5.99705 AU		5265 Dec 15 09:52	0° \mathcal{M}	
morning rise	5260 Apr 20 23:38	22° Υ 55'54		retrograde	5266 Feb 18 03:35	5° \mathcal{M} 55'38	
	5260 May 21 10:53	0° \mathcal{B}		opposition	5266 Apr 19 12:13	0° \mathcal{M} 58'01	1°20'39
retrograde	5260 Aug 30 02:05	13° \mathcal{B} 16'01		min. Earth dist.	5266 Apr 19 09:02	0° \mathcal{M} 59'04	4.42804 AU
opposition	5260 Oct 29 00:12	8° \mathcal{B} 17'09	-1°24'32		5266 Apr 26 22:32	30° $\mathcal{R}\Omega$	
min. Earth dist.	5260 Oct 28 21:50	8° \mathcal{B} 17'56	3.95150 AU	direct	5266 Jun 20 04:19	25° Ω 55'47	
direct	5260 Dec 26 14:27	3° \mathcal{B} 23'12			5266 Aug 13 08:10	0° \mathcal{M}	
	5261 Mar 27 03:25	15° \mathcal{B}		evening set	5266 Oct 24 11:22	13° \mathcal{M} 24'47	
evening set	5261 May 01 14:38	23° \mathcal{B} 15'02			5266 Oct 31 21:02	15° \mathcal{M}	
conjunction	5261 May 14 19:58	26° \mathcal{B} 28'00	-0°55'01	conjunction	5266 Nov 06 15:07	16° \mathcal{M} 14'20	0°57'08
minimum elong	5261 May 14 19:59	26° \mathcal{B} 28'01	0°55'03	minimum elong	5266 Nov 06 15:07	16° \mathcal{M} 14'20	0°57'08
max. Earth dist.	5261 May 15 16:49	26° \mathcal{B} 40'42	5.92862 AU	max. Earth dist.	5266 Nov 06 03:37	16° \mathcal{M} 08'08	6.46232 AU
morning rise	5261 May 28 04:16	29° \mathcal{B} 42'35		morning rise	5266 Nov 19 16:31	19° \mathcal{M} 02'39	
	5261 May 29 09:07	0° Π			5267 Jan 15 00:20	0° \mathcal{J}	
retrograde	5261 Oct 07 14:08	20° Π 30'51		retrograde	5267 Mar 20 01:22	5° \mathcal{J} 44'56	
min. Earth dist.	5261 Dec 05 03:26	15° Π 36'59	3.93251 AU	opposition	5267 May 19 16:36	0° \mathcal{J} 50'28	1°19'18
opposition	5261 Dec 06 05:03	15° Π 28'20	-1°12'30	min. Earth dist.	5267 May 20 09:19	0° \mathcal{J} 45'04	4.47782 AU
direct	5262 Feb 02 01:49	10° Π 33'50			5267 May 26 05:44	30° $\mathcal{R}\mathcal{M}$	
	5262 Jun 06 15:28	0° \mathcal{E}		direct	5267 Jul 21 05:38	25° \mathcal{M} 48'18	
evening set	5262 Jun 08 08:49	0° \mathcal{E} 24'42			5267 Sep 14 15:26	0° \mathcal{J}	
				evening set	5267 Nov 24 04:17	13° \mathcal{J} 08'32	
conjunction	5262 Jun 21 21:51	3° \mathcal{E} 39'48	-0°36'31	max. Earth dist.	5267 Dec 05 15:01	15° \mathcal{J} 36'20	6.47201 AU
minimum elong	5262 Jun 21 21:53	3° \mathcal{E} 39'49	0°36'33				
max. Earth dist.	5262 Jun 23 23:41	4° \mathcal{E} 09'45	5.96052 AU	conjunction	5267 Dec 07 02:41	15° \mathcal{J} 55'36	0°48'41
morning rise	5262 Jul 05 13:30	6° \mathcal{E} 56'07		minimum elong	5267 Dec 07 02:42	15° \mathcal{J} 55'36	0°48'42
retrograde	5262 Nov 13 17:40	27° \mathcal{E} 17'41		morning rise	5267 Dec 19 22:33	18° \mathcal{J} 41'33	
min. Earth dist.	5263 Jan 10 18:14	22° \mathcal{E} 25'22	4.01155 AU		5268 Feb 16 05:35	0° \mathcal{Z}	
opposition	5263 Jan 12 06:22	22° \mathcal{E} 13'03	-0°31'30	retrograde	5268 Apr 18 06:08	5° \mathcal{Z} 24'54	
direct	5263 Mar 11 10:01	17° \mathcal{E} 16'09		opposition	5268 Jun 18 03:32	0° \mathcal{Z} 32'17	0°57'17
	5263 Jun 16 12:27	0° Ω		min. Earth dist.	5268 Jun 19 10:25	0° \mathcal{Z} 22'25	4.44756 AU
evening set	5263 Jul 15 20:13	6° Ω 36'43			5268 Jun 22 08:43	30° $\mathcal{R}\mathcal{J}$	
				direct	5268 Aug 19 20:47	25° \mathcal{J} 30'55	
conjunction	5263 Jul 29 13:20	9° Ω 48'08	-0°04'19		5268 Oct 16 03:20	0° \mathcal{Z}	
minimum elong	5263 Jul 29 13:20	9° Ω 48'09	0°04'20	evening set	5268 Dec 23 14:01	13° \mathcal{Z} 02'10	
behind sun begin	5263 Jul 29 05:06	9° Ω 43'22		max. Earth dist.	5269 Jan 03 06:49	15° \mathcal{Z} 22'54	6.40353 AU
behind sun end	5263 Jul 29 21:35	9° Ω 52'55					
max. Earth dist.	5263 Aug 01 00:19	10° Ω 22'29	6.07862 AU	conjunction	5269 Jan 05 08:47	15° \mathcal{Z} 50'25	0°27'11
morning rise	5263 Aug 12 07:37	12° Ω 59'53		minimum elong	5269 Jan 05 08:49	15° \mathcal{Z} 50'25	0°27'12

morning rise	5269 Jan 18 01:33	18°♄37'54		morning rise	5274 Jul 10 21:08	12°♄10'23	
	5269 Mar 16 06:21	0°♄			5274 Oct 10 14:29	0°♄	
retrograde	5269 May 19 22:10	5°♄51'45		retrograde	5274 Nov 18 17:48	2°♄25'06	
opposition	5269 Jul 19 19:49	0°♄59'33	0°19'04		5274 Dec 27 16:32	30°♄♄	
min. Earth dist.	5269 Jul 21 10:34	0°♄47'12	4.34438 AU	min. Earth dist.	5275 Jan 15 17:05	27°♄33'02	4.02693 AU
	5269 Jul 27 15:39	30°♄♄		opposition	5275 Jan 17 06:11	27°♄20'24	-0°24'30
direct	5269 Sep 20 02:54	25°♄59'42		direct	5275 Mar 16 11:27	22°♄23'06	
	5269 Nov 12 05:40	0°♄			5275 May 27 13:48	0°♄	
desc. node	5270 Jan 02 17:14	9°♄24'22		evening set	5275 Jul 20 23:16	11°♄38'42	
evening set	5270 Jan 23 15:34	14°♄00'32		asc. node	5275 Jul 27 20:09	13°♄14'04	
	5270 Jan 28 01:00	15°♄					
max. Earth dist.	5270 Feb 03 03:31	16°♄23'00	6.27307 AU	conjunction	5275 Aug 03 16:20	14°♄49'17	0°00'36
				minimum elong	5275 Aug 03 16:20	14°♄49'17	0°00'36
conjunction	5270 Feb 05 08:50	16°♄53'16	-0°02'45	behind sun begin	5275 Aug 03 07:57	14°♄44'27	
minimum elong	5270 Feb 05 08:49	16°♄53'15	0°02'44	behind sun end	5275 Aug 04 00:43	14°♄54'07	
behind sun begin	5270 Feb 05 00:51	16°♄48'46			5275 Aug 04 10:50	15°♄	
behind sun end	5270 Feb 05 16:47	16°♄57'45		max. Earth dist.	5275 Aug 06 00:57	15°♄22'06	6.09713 AU
morning rise	5270 Feb 18 01:22	19°♄45'51		morning rise	5275 Aug 17 10:40	18°♄00'07	
	5270 Apr 07 16:48	0°♄			5275 Oct 13 11:30	0°♄	
retrograde	5270 Jun 22 18:56	7°♄56'51		retrograde	5275 Dec 23 01:27	7°♄07'22	
opposition	5270 Aug 22 12:16	3°♄03'27	-0°27'10	min. Earth dist.	5276 Feb 19 09:45	2°♄14'44	4.17497 AU
min. Earth dist.	5270 Aug 23 22:14	2°♄52'31	4.19445 AU	opposition	5276 Feb 20 18:38	2°♄03'36	0°25'36
	5270 Sep 17 03:41	30°♄♄			5276 Mar 07 12:17	30°♄♄	
direct	5270 Oct 22 16:41	28°♄05'47		direct	5276 Apr 20 02:07	27°♄03'39	
	5270 Nov 26 22:22	0°♄			5276 Jun 02 20:48	0°♄	
evening set	5271 Feb 25 06:12	16°♄49'23		evening set	5276 Aug 24 14:59	15°♄35'00	
max. Earth dist.	5271 Mar 08 10:56	19°♄26'46	6.11607 AU				
				conjunction	5276 Sep 07 06:03	18°♄37'38	0°32'02
conjunction	5271 Mar 10 00:51	19°♄49'04	-0°33'05	minimum elong	5276 Sep 07 06:02	18°♄37'37	0°32'02
minimum elong	5271 Mar 10 00:50	19°♄49'03	0°33'05	max. Earth dist.	5276 Sep 09 00:27	19°♄01'21	6.25478 AU
morning rise	5271 Mar 22 19:54	22°♄49'18		morning rise	5276 Sep 20 20:17	21°♄39'36	
	5271 Apr 23 14:43	0°♄			5276 Oct 30 09:41	0°♄	
retrograde	5271 Jul 29 04:39	12°♄12'50		retrograde	5277 Jan 23 01:02	9°♄36'40	
opposition	5271 Sep 27 12:21	7°♄16'57	-1°07'40	min. Earth dist.	5277 Mar 23 06:15	4°♄42'24	4.32828 AU
min. Earth dist.	5271 Sep 28 06:40	7°♄10'59	4.04282 AU	opposition	5277 Mar 24 01:34	4°♄35'58	1°03'59
direct	5271 Nov 26 06:21	2°♄21'43			5277 May 07 07:12	30°♄♄	
evening set	5272 Mar 31 00:24	21°♄48'59		direct	5277 May 23 16:32	29°♄34'23	
					5277 Jun 09 06:21	0°♄	
conjunction	5272 Apr 12 23:25	24°♄56'27	-0°53'20	evening set	5277 Sep 27 03:57	17°♄26'02	
minimum elong	5272 Apr 12 23:24	24°♄56'27	0°53'20				
max. Earth dist.	5272 Apr 12 12:55	24°♄50'06	5.98346 AU	conjunction	5277 Oct 10 13:12	20°♄20'34	0°52'05
morning rise	5272 Apr 26 00:37	28°♄05'15		minimum elong	5277 Oct 10 13:11	20°♄20'33	0°52'06
	5272 May 04 00:53	0°♄		max. Earth dist.	5277 Oct 11 03:20	20°♄28'15	6.39196 AU
	5272 Jul 18 08:17	15°♄		morning rise	5277 Oct 23 20:42	23°♄14'00	
retrograde	5272 Sep 04 09:22	18°♄31'41			5277 Nov 25 09:54	0°♄	
	5272 Oct 23 03:48	15°♄♄		retrograde	5278 Feb 22 10:25	10°♄19'00	
opposition	5272 Nov 03 07:12	13°♄32'16	-1°24'56	opposition	5278 Apr 23 19:24	5°♄21'52	1°21'48
min. Earth dist.	5272 Nov 03 00:47	13°♄34'24	3.94341 AU	min. Earth dist.	5278 Apr 23 19:10	5°♄21'57	4.44043 AU
direct	5272 Dec 31 17:42	8°♄38'19		direct	5278 Jun 24 15:45	0°♄19'37	
	5273 Mar 06 00:28	15°♄			5278 Oct 15 18:30	15°♄	
evening set	5273 May 06 19:15	28°♄31'53		evening set	5278 Oct 28 20:40	17°♄45'44	
	5273 May 12 20:31	0°♄					
conjunction	5273 May 20 01:46	1°♄45'29	-0°53'40	conjunction	5278 Nov 10 23:41	20°♄34'38	0°56'51
minimum elong	5273 May 20 01:48	1°♄45'29	0°53'41	minimum elong	5278 Nov 10 23:42	20°♄34'38	0°56'51
max. Earth dist.	5273 May 21 03:39	2°♄01'14	5.92688 AU	max. Earth dist.	5278 Nov 10 10:24	20°♄27'29	6.47085 AU
morning rise	5273 Jun 02 11:05	5°♄00'37		morning rise	5278 Nov 24 00:01	23°♄22'16	
retrograde	5273 Oct 12 20:53	25°♄48'32			5278 Dec 26 05:53	0°♄	
min. Earth dist.	5273 Dec 10 07:56	20°♄54'39	3.93724 AU	retrograde	5279 Mar 24 04:40	10°♄01'58	
opposition	5273 Dec 11 10:47	20°♄45'33	-1°08'08	opposition	5279 May 23 22:25	5°♄07'49	1°17'23
direct	5274 Feb 07 08:04	15°♄50'45		min. Earth dist.	5279 May 24 16:04	5°♄02'09	4.48225 AU
	5274 May 20 09:27	0°♄		direct	5279 Jul 25 12:11	0°♄05'47	
evening set	5274 Jun 13 14:46	5°♄39'15		evening set	5279 Nov 28 10:26	17°♄24'58	
				max. Earth dist.	5279 Dec 09 18:10	19°♄51'16	6.47205 AU
conjunction	5274 Jun 27 04:45	8°♄54'16	-0°32'32	conjunction	5279 Dec 11 08:00	20°♄11'44	0°46'24
minimum elong	5274 Jun 27 04:46	8°♄54'17	0°32'33	minimum elong	5279 Dec 11 08:02	20°♄11'44	0°46'26
max. Earth dist.	5274 Jun 29 09:44	9°♄26'00	5.97120 AU	morning rise	5279 Dec 24 03:14	22°♄57'26	

	5280 Jan 27 07:43	0°♂			5285 Nov 12 03:57	30°♄♂	
retrograde	5280 Apr 22 13:13	9°♂41'32		min. Earth dist.	5285 Dec 15 09:12	26°♂08'54	3.93788 AU
opposition	5280 Jun 22 10:45	4°♂49'05	0°52'50	opposition	5285 Dec 16 14:36	25°♂58'56	-1°03'25
min. Earth dist.	5280 Jun 23 19:52	4°♂38'31	4.44306 AU	direct	5286 Feb 12 09:52	21°♂03'56	
	5280 Aug 12 14:38	30°♄♂			5286 May 01 05:46	0°♂	
direct	5280 Aug 24 05:09	29°♂47'53		evening set	5286 Jun 18 20:20	10°♂52'02	
	5280 Sep 04 20:01	0°♂					
evening set	5280 Dec 27 19:07	17°♂20'11		conjunction	5286 Jul 02 11:04	14°♂07'08	-0°28'23
max. Earth dist.	5281 Jan 07 09:14	19°♂39'48	6.39465 AU	minimum elong	5286 Jul 02 11:05	14°♂07'09	0°28'23
				max. Earth dist.	5286 Jul 04 16:55	14°♂39'19	5.97803 AU
conjunction	5281 Jan 09 13:26	20°♂08'36	0°23'28	morning rise	5286 Jul 16 04:21	17°♂23'16	
minimum elong	5281 Jan 09 13:27	20°♂08'36	0°23'28		5286 Sep 12 07:45	0°♂	
morning rise	5281 Jan 22 06:00	22°♂56'20		retrograde	5286 Nov 23 17:08	7°♂32'42	
	5281 Feb 24 17:37	0°♂		min. Earth dist.	5287 Jan 20 15:58	2°♂40'45	4.03903 AU
retrograde	5281 May 24 08:33	10°♂22'18	0°13'03	opposition	5287 Jan 22 05:34	2°♂27'55	-0°17'26
opposition	5281 Jul 24 06:46	5°♂22'18	0°13'03		5287 Feb 10 05:36	30°♄♂	
min. Earth dist.	5281 Jul 25 21:08	5°♂10'03	4.33147 AU	direct	5287 Mar 21 13:08	27°♂30'12	
direct	5281 Sep 24 11:01	0°♂22'40			5287 Apr 29 22:20	0°♂	
desc. node	5281 Nov 14 16:58	4°♂07'56		asc. node	5287 Jun 06 21:17	6°♂04'51	
	5282 Jan 12 10:33	15°♂			5287 Jul 18 16:06	15°♂	
evening set	5282 Jan 27 22:43	18°♂26'54		evening set	5287 Jul 26 02:39	16°♂42'06	
max. Earth dist.	5282 Feb 07 12:24	20°♂50'50	6.25707 AU				
				conjunction	5287 Aug 08 20:01	19°♂52'01	0°05'26
conjunction	5282 Feb 09 15:59	21°♂20'13	-0°06'59	minimum elong	5287 Aug 08 20:02	19°♂52'01	0°05'25
minimum elong	5282 Feb 09 15:59	21°♂20'13	0°06'58	behind sun begin	5287 Aug 08 11:58	19°♂47'23	
behind sun begin	5282 Feb 09 08:35	21°♂16'01		behind sun end	5287 Aug 09 04:06	19°♂56'39	
behind sun end	5282 Feb 09 23:23	21°♂24'25		max. Earth dist.	5287 Aug 11 05:33	20°♂25'14	6.11357 AU
morning rise	5282 Feb 22 08:28	24°♂13'29		morning rise	5287 Aug 22 14:04	23°♂01'59	
	5282 Mar 20 12:31	0°♂			5287 Sep 23 03:04	0°♂	
retrograde	5282 Jun 27 12:50	12°♂32'15		retrograde	5287 Dec 27 18:35	12°♂00'30	
opposition	5282 Aug 27 05:00	7°♂38'39	-0°33'14	min. Earth dist.	5288 Feb 24 03:52	7°♂07'48	4.19385 AU
min. Earth dist.	5282 Aug 28 14:49	7°♂27'46	4.17624 AU	opposition	5288 Feb 25 11:47	6°♂57'01	0°32'00
direct	5282 Oct 27 05:54	2°♂41'18		direct	5288 Apr 24 22:55	1°♂56'46	
evening set	5283 Mar 01 18:43	21°♂30'10		evening set	5288 Aug 29 12:38	20°♂22'47	
max. Earth dist.	5283 Mar 13 00:12	24°♂08'43	6.09707 AU				
				conjunction	5288 Sep 12 02:57	23°♂24'17	0°35'42
conjunction	5283 Mar 14 13:36	24°♂30'47	-0°36'36	minimum elong	5288 Sep 12 02:55	23°♂24'16	0°35'41
minimum elong	5283 Mar 14 13:35	24°♂30'46	0°36'36	max. Earth dist.	5288 Sep 13 18:01	23°♂46'02	6.27434 AU
morning rise	5283 Mar 27 09:24	27°♂32'08		morning rise	5288 Sep 25 16:31	26°♂25'04	
	5283 Apr 06 23:19	0°♂			5288 Oct 12 03:35	0°♂	
retrograde	5283 Aug 03 04:04	17°♂05'08		retrograde	5289 Jan 27 10:12	14°♂13'44	
opposition	5283 Oct 02 11:21	12°♂08'51	-1°11'39	opposition	5289 Mar 28 12:44	9°♂13'22	1°07'50
min. Earth dist.	5283 Oct 03 02:39	12°♂03'51	4.02469 AU	min. Earth dist.	5289 Mar 27 19:25	9°♂19'08	4.34678 AU
direct	5283 Dec 01 00:10	7°♂13'49		direct	5289 May 28 08:19	4°♂11'33	
evening set	5284 Apr 04 19:59	26°♂46'46		evening set	5289 Oct 01 18:39	21°♂58'22	
conjunction	5284 Apr 17 20:02	29°♂55'23	-0°54'40	conjunction	5289 Oct 15 03:07	24°♂51'54	0°53'42
minimum elong	5284 Apr 17 20:02	29°♂55'23	0°54'41	minimum elong	5289 Oct 15 03:06	24°♂51'53	0°53'43
max. Earth dist.	5284 Apr 17 14:10	29°♂51'50	5.96797 AU	max. Earth dist.	5289 Oct 15 14:55	24°♂58'18	6.40784 AU
	5284 Apr 18 03:39	0°♂		morning rise	5289 Oct 28 09:23	27°♂44'14	
morning rise	5284 Apr 30 22:10	3°♂05'22			5289 Nov 07 23:44	0°♂	
	5284 Jun 23 06:49	15°♂		retrograde	5290 Feb 26 15:23	14°♂43'27	
retrograde	5284 Sep 09 16:24	23°♂39'19		opposition	5290 Apr 28 02:34	9°♂46'43	1°22'27
opposition	5284 Nov 08 11:00	18°♂39'27	-1°24'44	min. Earth dist.	5290 Apr 28 04:24	9°♂46'07	4.45234 AU
min. Earth dist.	5284 Nov 08 02:58	18°♂42'08	3.93224 AU	direct	5290 Jun 29 02:14	4°♂44'26	
	5284 Dec 09 12:05	15°♂			5290 Sep 28 08:17	15°♂	
direct	5285 Jan 05 18:40	13°♂45'31		evening set	5290 Nov 02 06:01	22°♂07'42	
	5285 Feb 01 21:05	15°♂					
	5285 Apr 26 09:34	0°♂		conjunction	5290 Nov 15 08:00	24°♂55'58	0°56'13
evening set	5285 May 11 21:28	3°♂42'30		minimum elong	5290 Nov 15 08:00	24°♂55'59	0°56'13
				max. Earth dist.	5290 Nov 14 13:40	24°♂46'08	6.47759 AU
conjunction	5285 May 25 05:14	6°♂56'58	-0°51'57	morning rise	5290 Nov 28 07:37	27°♂43'02	
minimum elong	5285 May 25 05:15	6°♂56'59	0°51'58		5290 Dec 09 02:29	0°♂	
max. Earth dist.	5285 May 26 11:20	7°♂15'19	5.92116 AU	retrograde	5291 Mar 28 11:04	14°♂20'54	
morning rise	5285 Jun 07 15:51	10°♂12'58		opposition	5291 May 28 05:03	9°♂27'01	1°14'59
	5285 Sep 22 20:30	0°♂		min. Earth dist.	5291 May 29 01:59	9°♂20'17	4.48330 AU
retrograde	5285 Oct 18 02:15	1°♂02'12		direct	5291 Jul 29 21:36	4°♂24'59	

evening set	5291 Dec 02 16:49	21° ♊ 44'06			5297 Aug 18 06:13	0° ♋
max. Earth dist.	5291 Dec 13 21:57	24° ♊ 09'12	6.46718 AU	retrograde	5297 Oct 23 10:27	6° ♋ 27'11
				opposition	5297 Dec 21 22:48	1° ♋ 23'32 -0°57'54
conjunction	5291 Dec 15 13:57	24° ♊ 30'51	0°43'48	min. Earth dist.	5297 Dec 20 15:02	1° ♋ 34'20 3.94677 AU
minimum elong	5291 Dec 15 13:58	24° ♊ 30'52	0°43'49		5298 Jan 01 08:24	30° ♋ II
morning rise	5291 Dec 28 08:33	27° ♊ 16'32		direct	5298 Feb 17 19:09	26° ♋ II28'12
	5292 Jan 10 03:43	0° ♋			5298 Apr 05 12:03	0° ♋
retrograde	5292 Apr 26 20:50	14° ♋ 03'11		evening set	5298 Jun 24 05:31	16° ♋ 12'25
opposition	5292 Jun 26 19:53	9° ♋ 10'46	0°47'57			
min. Earth dist.	5292 Jun 28 05:34	9° ♋ 00'02	4.43248 AU	conjunction	5298 Jul 07 21:07	19° ♋ 27'06 -0°23'51
direct	5292 Aug 28 12:38	4° ♋ 09'43		minimum elong	5298 Jul 07 21:08	19° ♋ 27'07 0°23'52
evening set	5293 Jan 01 02:36	21° ♋ 45'02		max. Earth dist.	5298 Jul 10 06:41	20° ♋ 01'22 5.99430 AU
max. Earth dist.	5293 Jan 11 15:43	24° ♋ 04'38	6.37908 AU	morning rise	5298 Jul 21 14:43	22° ♋ 42'37
					5298 Aug 22 15:08	0° ♌
conjunction	5293 Jan 13 20:34	24° ♋ 33'54	0°19'27	retrograde	5298 Nov 28 17:55	12° ♌ 42'37
minimum elong	5293 Jan 13 20:35	24° ♋ 33'54	0°19'28	min. Earth dist.	5299 Jan 25 16:50	7° ♌ 50'36 4.06067 AU
morning rise	5293 Jan 26 12:55	27° ♋ 22'11		opposition	5299 Jan 27 06:17	7° ♌ 37'51 -0°10'07
	5293 Feb 07 14:18	0° ♌		direct	5299 Mar 26 17:20	2° ♌ 39'46
retrograde	5293 May 29 00:38	14° ♌ 47'16		asc. node	5299 Apr 16 03:59	3° ♌ 21'38
opposition	5293 Jul 28 21:47	9° ♌ 54'51	0°06'37		5299 Jun 30 21:06	15° ♌
min. Earth dist.	5293 Jul 30 13:20	9° ♌ 42'13	4.31160 AU	evening set	5299 Jul 31 06:20	21° ♌ 44'27
desc. node	5293 Sep 24 01:25	4° ♌ 57'43				
direct	5293 Sep 29 00:02	4° ♌ 55'27		conjunction	5299 Aug 13 23:24	24° ♌ 53'07 0°10'10
	5293 Dec 25 22:08	15° ♌		minimum elong	5299 Aug 13 23:23	24° ♌ 53'07 0°10'10
evening set	5294 Feb 01 10:38	23° ♌ 05'23		behind sun begin	5299 Aug 13 16:47	24° ♌ 49'21
max. Earth dist.	5294 Feb 11 23:57	25° ♌ 29'52	6.23447 AU	behind sun end	5299 Aug 14 05:59	24° ♌ 56'54
				max. Earth dist.	5299 Aug 16 07:20	25° ♌ 25'13 6.13840 AU
conjunction	5294 Feb 14 03:57	25° ♌ 59'38	-0°11'26	morning rise	5299 Aug 27 17:07	28° ♌ 01'46
minimum elong	5294 Feb 14 03:56	25° ♌ 59'37	0°11'25		5299 Sep 05 10:26	0° ♍
behind sun begin	5294 Feb 13 22:04	25° ♌ 56'17		retrograde	5300 Jan 01 07:21	16° ♍ 48'45
behind sun end	5294 Feb 14 09:48	26° ♌ 02'57		min. Earth dist.	5300 Feb 28 20:18	11° ♍ 56'01 4.21947 AU
morning rise	5294 Feb 26 20:48	28° ♌ 53'56		opposition	5300 Mar 02 03:14	11° ♍ 45'35 0°38'07
	5294 Mar 03 17:10	0° ♍		direct	5300 Apr 30 18:43	6° ♍ 45'03
retrograde	5294 Jul 02 11:54	17° ♍ 22'54		evening set	5300 Sep 04 07:58	25° ♍ 03'51
opposition	5294 Sep 01 03:56	12° ♍ 28'57	-0°39'32			
min. Earth dist.	5294 Sep 02 11:10	12° ♍ 18'52	4.15254 AU	conjunction	5300 Sep 17 21:33	28° ♍ 03'59 0°39'04
direct	5294 Oct 31 23:20	7° ♍ 31'53		minimum elong	5300 Sep 17 21:31	28° ♍ 03'58 0°39'04
evening set	5295 Mar 06 13:49	26° ♍ 27'50		max. Earth dist.	5300 Sep 19 09:09	28° ♍ 23'43 6.29870 AU
max. Earth dist.	5295 Mar 18 00:20	29° ♍ 10'05	6.07440 AU		5300 Sep 26 15:06	0° ♎
				morning rise	5300 Oct 01 10:01	1° ♎ 03'17
conjunction	5295 Mar 19 09:19	29° ♍ 29'40	-0°40'06	retrograde	5301 Feb 01 17:38	18° ♎ 42'35
minimum elong	5295 Mar 19 09:18	29° ♍ 29'39	0°40'06	opposition	5301 Apr 02 21:05	13° ♎ 42'46 1°11'09
	5295 Mar 21 12:28	0° ♎		min. Earth dist.	5301 Apr 02 06:54	13° ♎ 47'28 4.36791 AU
morning rise	5295 Apr 01 05:44	2° ♎ 32'18		direct	5301 Jun 02 22:05	8° ♎ 40'50
retrograde	5295 Aug 08 14:14	22° ♎ 16'05		evening set	5301 Oct 07 06:12	26° ♎ 22'29
opposition	5295 Oct 07 18:19	17° ♎ 19'22	-1°15'23			
min. Earth dist.	5295 Oct 08 07:28	17° ♎ 15'03	4.00517 AU	conjunction	5301 Oct 20 13:39	29° ♎ 14'59 0°54'57
direct	5295 Dec 06 03:09	12° ♎ 24'35		minimum elong	5301 Oct 20 13:38	29° ♎ 14'58 0°54'58
	5296 Apr 01 09:43	0° ♏		max. Earth dist.	5301 Oct 20 20:04	29° ♎ 18'27 6.42396 AU
evening set	5296 Apr 09 23:25	2° ♏ 03'18			5301 Oct 24 00:52	0° ♏
				morning rise	5301 Nov 02 19:01	2° ♏ 06'18
conjunction	5296 Apr 23 00:27	5° ♏ 13'03	-0°55'39		5302 Jan 10 08:53	15° ♏
minimum elong	5296 Apr 23 00:27	5° ♏ 13'02	0°55'40	retrograde	5302 Mar 03 18:36	19° ♏ 00'20
max. Earth dist.	5296 Apr 22 23:11	5° ♏ 12'16	5.95356 AU		5302 Apr 26 02:16	15° ♏
morning rise	5296 May 06 03:49	8° ♏ 24'14		opposition	5302 May 03 07:15	14° ♏ 04'03 1°22'39
	5296 Jun 03 06:27	15° ♏		min. Earth dist.	5302 May 03 12:14	14° ♏ 02'26 4.46266 AU
retrograde	5296 Sep 15 03:54	29° ♏ 04'26		direct	5302 Jul 04 10:11	9° ♏ 01'43
opposition	5296 Nov 13 21:40	24° ♏ 04'05	-1°23'46		5302 Sep 09 12:20	15° ♏
min. Earth dist.	5296 Nov 13 09:26	24° ♏ 08'11	3.92506 AU	evening set	5302 Nov 07 12:23	26° ♏ 23'01
direct	5297 Jan 11 00:58	19° ♏ 10'12				
	5297 Apr 07 17:08	0° ♐		conjunction	5302 Nov 20 13:44	29° ♏ 10'52 0°55'18
evening set	5297 May 17 06:49	9° ♐ 08'43		minimum elong	5302 Nov 20 13:44	29° ♏ 10'52 0°55'19
				max. Earth dist.	5302 Nov 19 16:39	28° ♏ 59'33 6.48131 AU
conjunction	5297 May 30 15:38	12° ♐ 23'40	-0°49'41		5302 Nov 24 09:09	0° ♑
minimum elong	5297 May 30 15:40	12° ♐ 23'41	0°49'43	morning rise	5302 Dec 03 12:22	1° ♑ 57'28
max. Earth dist.	5297 Jun 01 01:35	12° ♐ 44'20	5.92199 AU	retrograde	5303 Apr 02 14:19	18° ♑ 34'53
morning rise	5297 Jun 13 03:30	15° ♐ 40'11		opposition	5303 Jun 02 09:49	13° ♑ 41'21 1°12'15

min. Earth dist.	5303 Jun 03 08:47	13°  33'58	4.48030 AU	direct	5309 Jan 17 11:17	24°  39'10	
direct	5303 Aug 04 03:09	8°  39'27			5309 Mar 16 17:25	0° 	
evening set	5303 Dec 07 22:05	26°  00'07		evening set	5309 May 23 16:39	14°  36'54	
max. Earth dist.	5303 Dec 18 22:25	28°  23'03	6.45752 AU				
				conjunction	5309 Jun 06 02:42	17°  52'06	-0°46'59
conjunction	5303 Dec 20 18:32	28°  47'00	0°41'00	minimum elong	5309 Jun 06 02:44	17°  52'07	0°47'00
minimum elong	5303 Dec 20 18:33	28°  47'00	0°41'01	max. Earth dist.	5309 Jun 07 18:52	18°  16'29	5.92829 AU
	5303 Dec 26 09:04	0° 		morning rise	5309 Jun 19 15:27	21°  10'44	
morning rise	5304 Jan 02 12:50	1°  32'55			5309 Jul 28 02:43	0° 	
retrograde	5304 May 02 06:56	18°  32'56		retrograde	5309 Oct 29 18:42	11°  50'50	
opposition	5304 Jul 02 04:49	13°  31'39	0°42'51	min. Earth dist.	5309 Dec 26 20:58	6°  58'03	3.96064 AU
min. Earth dist.	5304 Jul 03 17:00	13°  32'06	4.41667 AU	opposition	5309 Dec 28 06:00	6°  46'49	-0°51'53
direct	5304 Sep 02 21:10	8°  30'45		direct	5310 Feb 24 03:38	1°  51'08	
evening set	5305 Jan 06 10:08	26°  30'59		evening set	5310 Jun 30 13:38	21°  52'43	
max. Earth dist.	5305 Jan 16 22:07	28°  30'37	6.35826 AU				
				conjunction	5310 Jul 14 05:35	24°  43'40	-0°19'10
conjunction	5305 Jan 19 04:04	29°  30'37	0°15'22	minimum elong	5310 Jul 14 05:36	24°  43'40	0°19'12
minimum elong	5305 Jan 19 04:04	29°  30'37	0°15'23	max. Earth dist.	5310 Jul 16 15:52	25°  18'09	6.01402 AU
behind sun begin	5305 Jan 19 01:30	28°  35'12		morning rise	5310 Jul 27 23:40	27°  58'23	
behind sun end	5305 Jan 19 06:38	29°  30'23			5310 Aug 05 16:24	0° 	
	5305 Jan 23 14:46	0° 			5310 Oct 23 07:47	15° 	
morning rise	5305 Jan 31 20:20	1°  49'43		retrograde	5310 Dec 04 13:52	17°  47'41	
	5305 Apr 09 13:30	15° 			5311 Jan 15 18:40	15°  48'00	
retrograde	5305 Jun 03 16:48	19°  23'37		min. Earth dist.	5311 Jan 31 14:35	12°  55'51	4.08400 AU
	5305 Jul 30 19:34	15° 		opposition	5311 Feb 02 04:25	12°  42'58	-0°02'51
opposition	5305 Aug 03 14:08	14°  31'05	0°00'08	asc. node	5311 Feb 24 09:59	9°  53'09	
desc. node	5305 Aug 04 17:56	14°  22'12		direct	5311 Apr 01 18:28	7°  44'28	
min. Earth dist.	5305 Aug 05 04:30	14°  18'49	4.28715 AU		5311 Jun 11 14:43	15° 	
direct	5305 Oct 04 11:28	9°  32'01		evening set	5311 Aug 06 07:54	26°  41'48	
	5305 Dec 05 19:06	15° 					
evening set	5306 Feb 07 00:17	27°  49'18		conjunction	5311 Aug 20 00:43	29°  49'13	0°14'48
	5306 Feb 16 12:11	0° 		minimum elong	5311 Aug 20 00:42	29°  49'13	0°14'48
max. Earth dist.	5306 Feb 17 16:09	0°  16'07	6.20837 AU	behind sun begin	5311 Aug 19 21:42	29°  47'31	
				behind sun end	5311 Aug 20 03:41	29°  50'55	
conjunction	5306 Feb 19 17:45	0°  44'41	-0°15'50		5311 Aug 20 19:36	0° 	
minimum elong	5306 Feb 19 17:44	0°  44'40	0°15'50	max. Earth dist.	5311 Aug 22 05:58	0°  19'38	6.16336 AU
behind sun begin	5306 Feb 19 15:53	0°  43'37		morning rise	5311 Sep 02 17:51	2°  56'28	
behind sun end	5306 Feb 19 19:35	0°  45'44		retrograde	5312 Jan 06 20:53	21°  32'25	
morning rise	5306 Mar 04 10:57	3°  40'13		opposition	5312 Mar 06 16:58	16°  39'05	0°43'55
retrograde	5306 Jul 08 16:36	22°  40'51		min. Earth dist.	5312 Mar 05 13:00	16°  39'05	4.24364 AU
opposition	5306 Sep 07 05:45	17°  26'37	-0°45'39	direct	5312 May 05 14:34	11°  28'51	
min. Earth dist.	5306 Sep 08 11:41	17°  16'56	4.12679 AU	evening set	5312 Sep 09 01:28	29°  41'07	
direct	5306 Nov 06 21:04	12°  29'56			5312 Sep 10 11:52	0° 	
	5307 Mar 05 20:44	0° 					
evening set	5307 Mar 12 11:55	1°  33'37		conjunction	5312 Sep 22 14:18	2°  40'02	0°42'11
max. Earth dist.	5307 Mar 24 02:54	4°  33'37	6.05144 AU	minimum elong	5312 Sep 22 14:16	2°  40'01	0°42'11
				max. Earth dist.	5312 Sep 23 22:20	2°  57'42	6.32020 AU
conjunction	5307 Mar 25 08:04	4°  36'44	-0°43'21	morning rise	5312 Oct 06 01:49	5°  48'02	
minimum elong	5307 Mar 25 08:02	4°  36'43	0°43'21	retrograde	5313 Feb 05 22:53	23°  09'14	
morning rise	5307 Apr 07 05:22	7°  40'46		opposition	5313 Apr 07 04:41	18°  09'55	1°14'05
retrograde	5307 Aug 15 00:51	27°  35'04		min. Earth dist.	5313 Apr 06 16:38	18°  13'54	4.38542 AU
opposition	5307 Oct 14 03:41	22°  37'51	-1°18'34	direct	5313 Jun 07 09:08	13°  07'51	
min. Earth dist.	5307 Oct 14 12:16	22°  35'02	3.98763 AU		5313 Oct 08 04:05	0° 	
direct	5307 Dec 12 06:07	17°  43'21		evening set	5313 Oct 11 17:13	0°  45'30	
	5308 Mar 15 07:27	0° 					
evening set	5308 Apr 16 05:33	7°  26'55		conjunction	5313 Oct 24 23:46	3°  37'09	0°55'56
				minimum elong	5313 Oct 24 23:45	3°  37'09	0°55'56
conjunction	5308 Apr 29 07:33	10°  37'37	-0°56'10	max. Earth dist.	5313 Oct 25 01:57	3°  38'20	6.43632 AU
minimum elong	5308 Apr 29 07:33	10°  37'37	0°56'11	morning rise	5313 Nov 07 04:04	6°  38'27	
max. Earth dist.	5308 Apr 29 11:37	10°  40'06	5.94308 AU		5313 Dec 19 08:54	15° 	
morning rise	5308 May 12 12:08	13°  49'50		retrograde	5314 Mar 07 23:09	23°  38'17	
	5308 May 17 08:39	15° 		opposition	5314 May 07 12:25	18°  21'52	1°22'26
	5308 Jul 28 16:50	0° 		min. Earth dist.	5314 May 07 20:40	18°  19'12	4.46923 AU
retrograde	5308 Sep 21 16:12	4°  34'08			5314 Jun 05 01:16	15° 	
	5308 Nov 17 01:32	30°  48'08		direct	5314 Jul 08 18:56	13°  38'19	
opposition	5308 Nov 20 09:30	29°  33'10	-1°22'00		5314 Aug 11 19:35	15° 	
min. Earth dist.	5308 Nov 19 17:38	29°  38'30	3.92290 AU		5314 Nov 08 16:35	0° 	

evening set	5314 Nov 11 19:35	0°♌39'53		minimum elong	5320 May 04 13:21	15°♏57'30	0°56'14
				max. Earth dist.	5320 May 05 00:13	16°♏04'06	5.93844 AU
conjunction	5314 Nov 24 20:05	3°♌27'25	0°54'05	morning rise	5320 May 17 18:52	19°♏10'23	
minimum elong	5314 Nov 24 20:06	3°♌27'26	0°54'07		5320 Jul 04 11:16	0°♐	
max. Earth dist.	5314 Nov 23 17:54	3°♌13'21	6.48153 AU	retrograde	5320 Sep 27 02:32	9°♐56'09	
morning rise	5314 Dec 07 18:09	6°♌13'47		opposition	5320 Nov 25 18:11	4°♐54'44	-1°19'34
retrograde	5315 Apr 06 20:36	22°♌51'47		min. Earth dist.	5320 Nov 24 23:38	5°♐00'58	3.92603 AU
opposition	5315 Jun 06 16:19	17°♌58'29	1°09'08	direct	5321 Jan 22 18:43	0°♐00'39	
min. Earth dist.	5315 Jun 07 17:47	17°♌50'19	4.47433 AU	evening set	5321 May 28 23:33	19°♐55'59	
direct	5315 Aug 08 10:19	12°♌56'38					
	5315 Dec 10 16:20	0°♑		conjunction	5321 Jun 11 10:22	23°♐11'06	-0°43'58
evening set	5315 Dec 12 04:32	0°♑19'30		minimum elong	5321 Jun 11 10:24	23°♐11'07	0°43'59
max. Earth dist.	5315 Dec 23 03:34	2°♑42'07	6.44580 AU	max. Earth dist.	5321 Jun 13 04:58	23°♐36'53	5.93854 AU
				morning rise	5321 Jun 25 00:11	26°♐27'40	
conjunction	5315 Dec 25 00:41	3°♑06'40	0°37'56		5321 Jul 09 22:29	0°♑	
minimum elong	5315 Dec 25 00:43	3°♑06'41	0°37'56	retrograde	5321 Nov 03 19:21	17°♑03'22	
morning rise	5316 Jan 06 18:27	5°♑52'54		min. Earth dist.	5321 Dec 31 21:17	12°♑11'04	3.97689 AU
retrograde	5316 May 06 17:16	22°♑48'54		opposition	5322 Jan 02 08:22	11°♑59'08	-0°45'41
opposition	5316 Jul 06 16:02	17°♑56'43	0°37'24	direct	5322 Mar 01 06:42	7°♑03'05	
min. Earth dist.	5316 Jul 08 04:40	17°♑45'03	4.39991 AU	evening set	5322 Jul 05 17:15	26°♑35'45	
direct	5316 Sep 07 05:54	12°♑56'07					
	5317 Jan 07 16:57	0°♒		conjunction	5322 Jul 19 09:38	29°♑48'54	-0°14'31
evening set	5317 Jan 10 19:45	0°♒41'19		minimum elong	5322 Jul 19 09:39	29°♑48'55	0°14'32
max. Earth dist.	5317 Jan 21 06:45	3°♒01'07	6.33774 AU	behind sun begin	5322 Jul 19 06:12	29°♑46'54	
				behind sun end	5322 Jul 19 13:05	29°♑50'56	
conjunction	5317 Jan 23 13:21	3°♒31'39	0°11'05		5322 Jul 20 04:28	0°♒	
minimum elong	5317 Jan 23 13:21	3°♒31'39	0°11'06	max. Earth dist.	5322 Jul 21 19:39	0°♒23'05	6.03459 AU
behind sun begin	5317 Jan 23 07:22	3°♒28'20		morning rise	5322 Aug 02 03:48	3°♒02'42	
behind sun end	5317 Jan 23 19:20	3°♒34'59			5322 Sep 26 20:03	15°♒	
morning rise	5317 Feb 05 05:43	6°♒21'35		retrograde	5322 Dec 09 07:46	22°♒41'44	
	5317 Mar 18 05:38	15°♒		asc. node	5323 Jan 05 02:28	21°♒30'55	
retrograde	5317 Jun 08 13:29	24°♒04'16		min. Earth dist.	5323 Feb 05 10:26	17°♒49'25	4.10650 AU
desc. node	5317 Jun 13 14:17	24°♒01'53		opposition	5323 Feb 06 22:20	17°♒37'12	0°04'10
opposition	5317 Aug 08 08:57	19°♒11'39	-0°06'32		5323 Feb 27 07:31	15°♒♑	
min. Earth dist.	5317 Aug 09 23:19	18°♒59'22	4.26420 AU	direct	5323 Apr 06 17:31	12°♒38'22	
	5317 Sep 16 11:50	15°♒♑			5323 May 15 07:26	15°♒	
direct	5317 Oct 09 03:30	14°♒12'56			5323 Aug 04 14:48	0°♒♐	
	5317 Oct 31 17:00	15°♒		evening set	5323 Aug 11 05:02	1°♒29'01	
	5318 Jan 31 03:27	0°♒♐					
evening set	5318 Feb 11 15:43	2°♒36'54		conjunction	5323 Aug 24 21:35	4°♒35'19	0°19'10
max. Earth dist.	5318 Feb 22 10:21	5°♒06'04	6.18517 AU	minimum elong	5323 Aug 24 21:34	4°♒35'18	0°19'10
				max. Earth dist.	5323 Aug 27 01:12	5°♒04'37	6.18586 AU
conjunction	5318 Feb 24 09:29	5°♒33'20	-0°20'14	morning rise	5323 Sep 07 14:06	7°♒41'17	
minimum elong	5318 Feb 24 09:28	5°♒33'20	0°20'14	retrograde	5324 Jan 11 05:22	26°♒07'37	
morning rise	5318 Mar 09 03:01	8°♒30'01		min. Earth dist.	5324 Mar 10 00:27	21°♒14'18	4.26437 AU
retrograde	5318 Jul 13 20:17	27°♒21'07		opposition	5324 Mar 11 03:03	21°♒05'23	0°49'14
opposition	5318 Sep 12 08:45	22°♒26'36	-0°51'33	direct	5324 May 10 03:58	16°♒04'22	
min. Earth dist.	5318 Sep 13 11:15	22°♒18'01	4.10552 AU		5324 Aug 25 03:35	0°♑	
direct	5318 Nov 11 17:54	17°♒30'22		evening set	5324 Sep 13 15:59	4°♑11'38	
	5319 Feb 16 09:48	0°♑					
evening set	5319 Mar 17 10:41	6°♑40'04		conjunction	5324 Sep 27 03:56	7°♑09'29	0°44'57
max. Earth dist.	5319 Mar 29 06:39	9°♑29'26	6.03406 AU	minimum elong	5324 Sep 27 03:55	7°♑09'28	0°44'58
				max. Earth dist.	5324 Sep 28 06:40	7°♑24'11	6.33763 AU
conjunction	5319 Mar 30 07:19	9°♑44'11	-0°46'18	morning rise	5324 Oct 10 14:36	10°♑06'24	
minimum elong	5319 Mar 30 07:18	9°♑44'10	0°46'19	retrograde	5325 Feb 10 04:55	27°♑31'12	
morning rise	5319 Apr 12 05:28	12°♑49'22		opposition	5325 Apr 11 10:19	22°♑32'28	1°16'34
	5319 Jul 08 05:24	0°♒		min. Earth dist.	5325 Apr 11 02:00	22°♑35'12	4.39856 AU
retrograde	5319 Aug 20 10:47	2°♒52'01		direct	5325 Jun 11 19:29	17°♑30'19	
	5319 Oct 03 02:33	30°♒♑			5325 Sep 21 17:39	0°♒♐	
opposition	5319 Oct 19 12:33	27°♑54'16	-1°21'05	evening set	5325 Oct 16 02:18	5°♒05'26	
min. Earth dist.	5319 Oct 19 17:29	27°♑52'38	3.97601 AU				
direct	5319 Dec 17 11:29	22°♑59'59		conjunction	5325 Oct 29 08:07	7°♒56'28	0°56'34
	5320 Feb 23 14:03	0°♒		minimum elong	5325 Oct 29 08:07	7°♒56'28	0°56'35
evening set	5320 Apr 21 10:15	12°♒46'05		max. Earth dist.	5325 Oct 29 06:31	7°♒55'36	6.44425 AU
	5320 Apr 30 14:55	15°♒		morning rise	5325 Nov 11 11:31	10°♒46'16	
					5325 Dec 01 14:35	15°♒	
conjunction	5320 May 04 13:21	15°♒57'30	-0°56'14	retrograde	5326 Mar 12 02:18	27°♒33'56	

opposition	5326 May 11 16:56	22° \mathbb{M} 38'33	1°21'47			5332 Apr 13 23:49	15° \mathcal{B}	
min. Earth dist.	5326 May 12 03:00	22° \mathbb{M} 35'17	4.47191 AU	evening set		5332 Apr 26 13:41	18° \mathcal{B} 00'53	
direct	5326 Jul 13 00:23	17° \mathbb{M} 36'16						
	5326 Oct 23 07:50	0° \mathcal{A}		conjunction		5332 May 09 17:41	21° \mathcal{B} 13'01	-0°55'51
evening set	5326 Nov 16 01:57	4° \mathcal{A} 56'40		minimum elong		5332 May 09 17:41	21° \mathcal{B} 13'01	0°55'52
max. Earth dist.	5326 Nov 27 21:24	7° \mathcal{A} 28'46	6.47885 AU	max. Earth dist.		5332 May 10 07:47	21° \mathcal{B} 21'36	5.93287 AU
				morning rise		5332 May 23 00:32	24° \mathcal{B} 26'43	
conjunction	5326 Nov 29 01:49	7° \mathcal{A} 44'03	0°52'35			5332 Jun 15 12:03	0° \mathbb{I}	
minimum elong	5326 Nov 29 01:50	7° \mathcal{A} 44'04	0°52'36	retrograde		5332 Oct 02 09:15	15° \mathbb{I} 14'18	
morning rise	5326 Dec 11 23:06	10° \mathcal{A} 30'15		min. Earth dist.		5332 Nov 30 02:55	10° \mathbb{I} 19'48	3.92704 AU
retrograde	5327 Apr 11 02:58	27° \mathcal{A} 09'42		opposition		5332 Dec 01 00:58	10° \mathbb{I} 12'21	-1°16'32
opposition	5327 Jun 10 23:02	22° \mathcal{A} 16'41	1°05'38	direct		5333 Jan 27 23:11	5° \mathbb{I} 18'05	
min. Earth dist.	5327 Jun 12 02:31	22° \mathcal{A} 07'53	4.46659 AU	evening set		5333 Jun 03 05:34	25° \mathbb{I} 12'09	
direct	5327 Aug 12 17:35	17° \mathcal{A} 15'00						
	5327 Nov 24 08:30	0° \mathcal{B}		conjunction		5333 Jun 16 17:29	28° \mathbb{I} 27'24	-0°40'38
evening set	5327 Dec 16 11:10	4° \mathcal{B} 40'18		minimum elong		5333 Jun 16 17:30	28° \mathbb{I} 27'25	0°40'38
max. Earth dist.	5327 Dec 27 06:46	7° \mathcal{B} 01'33	6.43349 AU	max. Earth dist.		5333 Jun 18 15:27	28° \mathbb{I} 55'10	5.94602 AU
						5333 Jun 23 02:56	0° \mathcal{C}	
conjunction	5327 Dec 29 06:45	7° \mathcal{B} 27'45	0°34'39	morning rise		5333 Jun 30 08:06	1° \mathcal{C} 43'59	
minimum elong	5327 Dec 29 06:46	7° \mathcal{B} 27'46	0°34'40	retrograde		5333 Nov 08 22:08	22° \mathcal{C} 14'34	
morning rise	5328 Jan 11 00:19	10° \mathcal{B} 14'21		min. Earth dist.		5334 Jan 05 23:22	17° \mathcal{C} 22'03	3.98974 AU
retrograde	5328 May 11 05:28	27° \mathcal{B} 15'24		opposition		5334 Jan 07 10:26	17° \mathcal{C} 10'06	-0°39'09
opposition	5328 Jul 11 03:39	22° \mathcal{B} 23'11	0°31'42	direct		5334 Mar 06 11:17	12° \mathcal{C} 13'40	
min. Earth dist.	5328 Jul 12 16:59	22° \mathcal{B} 11'16	4.38374 AU			5334 Jul 03 14:11	0° \mathcal{D}	
direct	5328 Sep 11 15:51	17° \mathcal{B} 22'43		evening set		5334 Jul 10 21:28	1° \mathcal{D} 41'49	
	5328 Dec 22 04:06	0° \approx						
evening set	5329 Jan 15 05:01	5° \approx 12'22		conjunction		5334 Jul 24 14:18	4° \mathcal{D} 54'23	-0°09'45
max. Earth dist.	5329 Jan 25 17:35	7° \approx 33'35	6.31891 AU	minimum elong		5334 Jul 24 14:19	4° \mathcal{D} 54'23	0°09'45
				behind sun begin		5334 Jul 24 07:29	4° \mathcal{D} 50'24	
conjunction	5329 Jan 27 22:38	8° \approx 03'23	0°06'45	behind sun end		5334 Jul 24 21:08	4° \mathcal{D} 58'22	
minimum elong	5329 Jan 27 22:39	8° \approx 03'23	0°06'46	max. Earth dist.		5334 Jul 27 01:33	5° \mathcal{D} 29'06	6.05160 AU
behind sun begin	5329 Jan 27 15:13	7° \approx 59'14		morning rise		5334 Aug 07 08:37	8° \mathcal{D} 07'25	
behind sun end	5329 Jan 28 06:05	8° \approx 07'33				5334 Sep 06 23:02	15° \mathcal{D}	
morning rise	5329 Feb 09 14:52	10° \approx 54'02		asc. node		5334 Nov 14 21:29	26° \mathcal{D} 15'15	
	5329 Feb 28 06:42	15° \approx		retrograde		5334 Dec 14 01:51	27° \mathcal{D} 37'21	
desc. node	5329 Apr 22 22:59	24° \approx 53'10		min. Earth dist.		5335 Feb 10 05:02	22° \mathcal{D} 45'14	4.12584 AU
retrograde	5329 Jun 13 07:50	28° \approx 44'44		opposition		5335 Feb 11 16:54	22° \mathcal{D} 33'04	0°11'11
opposition	5329 Aug 13 03:23	23° \approx 51'53	-0°13'09	direct		5335 Apr 11 14:45	17° \mathcal{D} 33'54	
min. Earth dist.	5329 Aug 14 16:23	23° \approx 40'02	4.24383 AU			5335 Jul 18 06:49	0° \mathcal{E}	
direct	5329 Oct 13 17:29	18° \approx 53'29		evening set		5335 Aug 16 04:06	6° \mathcal{E} 19'08	
	5330 Jan 13 20:24	0° \mathcal{H}						
evening set	5330 Feb 16 06:16	7° \mathcal{H} 22'58		conjunction		5335 Aug 29 20:09	9° \mathcal{E} 24'22	0°23'29
max. Earth dist.	5330 Feb 27 02:39	9° \mathcal{H} 53'52	6.16465 AU	minimum elong		5335 Aug 29 20:07	9° \mathcal{E} 24'21	0°23'28
				max. Earth dist.		5335 Aug 31 19:48	9° \mathcal{E} 51'18	6.20589 AU
conjunction	5330 Mar 01 00:03	10° \mathcal{H} 20'17	-0°24'28	morning rise		5335 Sep 12 12:13	12° \mathcal{E} 29'13	
minimum elong	5330 Mar 01 00:02	10° \mathcal{H} 20'16	0°24'27			5335 Dec 24 16:10	0° \mathcal{F}	
morning rise	5330 Mar 13 18:06	13° \mathcal{H} 17'59		retrograde		5336 Jan 15 17:17	0° \mathcal{F} 46'48	
	5330 Jun 10 00:43	0° \mathcal{Y}				5336 Feb 06 13:44	30° \mathcal{R} \mathcal{E}	
retrograde	5330 Jul 18 23:23	2° \mathcal{Y} 18'42		opposition		5336 Mar 15 15:16	25° \mathcal{E} 45'00	0°54'21
	5330 Aug 27 05:23	30° \mathcal{R} \mathcal{H}		min. Earth dist.		5336 Mar 14 15:22	25° \mathcal{E} 53'01	4.28344 AU
opposition	5330 Sep 17 10:29	27° \mathcal{H} 23'42	-0°57'01	direct		5336 May 14 21:09	20° \mathcal{E} 43'48	
min. Earth dist.	5330 Sep 18 10:39	27° \mathcal{H} 15'50	4.08628 AU			5336 Aug 06 21:11	0° \mathcal{F}	
direct	5330 Nov 16 15:22	22° \mathcal{H} 27'42		evening set		5336 Sep 18 08:22	8° \mathcal{F} 46'26	
	5331 Jan 27 19:06	0° \mathcal{Y}						
evening set	5331 Mar 22 07:52	11° \mathcal{Y} 42'41		conjunction		5336 Oct 01 19:42	11° \mathcal{F} 43'18	0°47'32
max. Earth dist.	5331 Apr 03 09:50	14° \mathcal{Y} 36'10	6.01787 AU	minimum elong		5336 Oct 01 19:41	11° \mathcal{F} 43'18	0°47'31
				max. Earth dist.		5336 Oct 02 20:24	11° \mathcal{F} 56'51	6.35455 AU
conjunction	5331 Apr 04 05:19	14° \mathcal{Y} 47'51	-0°48'52	morning rise		5336 Oct 15 05:16	14° \mathcal{F} 39'08	
minimum elong	5331 Apr 04 05:18	14° \mathcal{Y} 47'50	0°48'53			5337 Jan 09 17:18	0° \mathbb{M}	
morning rise	5331 Apr 17 04:11	17° \mathcal{Y} 54'05		retrograde		5337 Feb 14 10:54	1° \mathbb{M} 57'38	
	5331 Jun 11 03:54	0° \mathcal{B}				5337 Mar 22 02:25	30° \mathcal{R} \mathcal{F}	
retrograde	5331 Aug 25 19:14	8° \mathcal{B} 04'24		opposition		5337 Apr 15 18:12	26° \mathcal{F} 59'26	1°18'40
opposition	5331 Oct 24 19:11	3° \mathcal{B} 06'10	-1°22'56	min. Earth dist.		5337 Apr 15 11:06	27° \mathcal{F} 01'46	4.41255 AU
min. Earth dist.	5331 Oct 24 21:22	3° \mathcal{B} 05'27	3.96468 AU	direct		5337 Jun 16 05:39	21° \mathcal{F} 57'21	
	5331 Nov 19 05:35	30° \mathcal{R} \mathcal{Y}				5337 Sep 03 02:18	0° \mathbb{M}	
direct	5331 Dec 22 14:13	28° \mathcal{Y} 12'02		evening set		5337 Oct 20 13:21	9° \mathbb{M} 29'22	
	5332 Jan 24 14:58	0° \mathcal{B}						

conjunction	5337 Nov 02 18:08	12°♍19'38	0°56'56			5343 Jan 02 03:59	0°♑
minimum elong	5337 Nov 02 18:07	12°♍19'38	0°56'57	evening set		5343 Mar 27 01:06	16°♑35'30
max. Earth dist.	5337 Nov 02 12:22	12°♍16'32	6.45462 AU				
morning rise	5337 Nov 15 20:39	15°♍08'41		conjunction		5343 Apr 08 23:07	19°♑41'40 -0°50'59
	5337 Nov 15 04:25	15°♍		minimum elong		5343 Apr 08 23:06	19°♑41'39 0°50'59
	5338 Feb 09 01:41	0°♊		max. Earth dist.		5343 Apr 08 05:16	19°♑30'56 6.00170 AU
retrograde	5338 Mar 16 08:44	1°♊53'04		morning rise		5343 Apr 21 23:04	22°♑49'05
	5338 Apr 20 14:36	30°♋				5343 May 22 23:18	0°♋
opposition	5338 May 15 23:13	26°♍58'09	1°20'44	retrograde		5343 Aug 30 22:17	13°♋07'27
min. Earth dist.	5338 May 16 12:13	26°♍53'57	4.47832 AU	opposition		5343 Oct 29 21:26	8°♋08'44 -1°24'06
direct	5338 Jul 17 10:06	21°♍55'59		min. Earth dist.		5343 Oct 29 20:16	8°♋09'08 3.95175 AU
	5338 Oct 04 23:58	0°♊		direct		5343 Dec 27 12:15	3°♋14'39
evening set	5338 Nov 20 09:03	9°♊14'59				5344 Mar 27 17:03	15°♋
max. Earth dist.	5338 Dec 02 01:04	11°♊45'15	6.48095 AU	evening set		5344 May 01 13:35	23°♋07'26
conjunction	5338 Dec 03 08:13	12°♊02'01	0°50'52	conjunction		5344 May 14 18:50	26°♋20'31 -0°55'04
minimum elong	5338 Dec 03 08:14	12°♊02'02	0°50'52	minimum elong		5344 May 14 18:51	26°♋20'32 0°55'05
morning rise	5338 Dec 16 04:48	14°♊47'53		max. Earth dist.		5344 May 15 13:50	26°♋32'06 5.92458 AU
	5339 Mar 15 09:30	0°♋		morning rise		5344 May 28 02:45	29°♋35'09
retrograde	5339 Apr 15 08:23	1°♋27'17				5344 May 29 19:53	0°♋
	5339 May 16 09:06	30°♋		retrograde		5344 Oct 07 14:57	20°♋25'54
opposition	5339 Jun 15 05:57	26°♊34'27	1°01'51	min. Earth dist.		5344 Dec 05 05:19	15°♋31'24 3.92436 AU
min. Earth dist.	5339 Jun 16 10:16	26°♊25'24	4.46439 AU	opposition		5344 Dec 06 04:34	15°♋23'32 -1°13'04
direct	5339 Aug 17 00:03	21°♊32'56		direct		5345 Feb 02 01:54	10°♋29'03
	5339 Nov 06 11:27	0°♋				5345 Jun 06 18:13	0°♋
evening set	5339 Dec 20 16:35	8°♋58'45		evening set		5345 Jun 08 09:49	0°♋23'44
max. Earth dist.	5339 Dec 31 11:51	11°♋20'03	6.42716 AU				
conjunction	5340 Jan 02 11:45	11°♋46'15	0°31'17	conjunction		5345 Jun 21 22:50	3°♋39'21 -0°37'05
minimum elong	5340 Jan 02 11:46	11°♋46'16	0°31'18	minimum elong		5345 Jun 21 22:51	3°♋39'22 0°37'06
morning rise	5340 Jan 15 04:46	14°♋32'56		max. Earth dist.		5345 Jun 24 00:14	4°♋09'07 5.94928 AU
	5340 Apr 12 20:24	0°♋		morning rise		5345 Jul 05 14:27	6°♋56'13
retrograde	5340 May 15 14:54	1°♋37'19		retrograde		5345 Nov 13 23:21	27°♋23'06
	5340 Jun 17 12:50	30°♋		min. Earth dist.		5346 Jan 10 22:00	22°♋31'01 3.99863 AU
opposition	5340 Jul 15 13:43	26°♋45'08	0°26'01	opposition		5346 Jan 12 10:40	22°♋18'32 -0°32'33
min. Earth dist.	5340 Jul 17 03:56	26°♋32'58	4.37340 AU	direct		5346 Mar 11 11:54	17°♋21'44
direct	5340 Sep 16 00:40	21°♋44'58				5346 Jun 16 00:51	0°♋
	5340 Dec 04 05:26	0°♋		evening set		5346 Jul 16 01:23	6°♋47'05
evening set	5341 Jan 19 11:46	9°♋37'10		conjunction		5346 Jul 29 18:27	9°♋59'08 -0°05'01
max. Earth dist.	5341 Jan 29 22:33	11°♋57'55	6.30520 AU	minimum elong		5346 Jul 29 18:27	9°♋59'09 0°05'01
conjunction	5341 Feb 01 05:02	12°♋28'37	0°02'33	behind sun begin		5346 Jul 29 10:19	9°♋54'25
minimum elong	5341 Feb 01 05:01	12°♋28'36	0°02'33	behind sun end		5346 Jul 30 02:36	10°♋03'53
behind sun begin	5341 Jan 31 21:03	12°♋24'09		max. Earth dist.		5346 Aug 01 04:33	10°♋33'05 6.06519 AU
behind sun end	5341 Feb 01 12:58	12°♋33'04		morning rise		5346 Aug 12 13:04	13°♋11'37
	5341 Feb 12 10:00	15°♋				5346 Aug 20 09:28	15°♋
morning rise	5341 Feb 13 21:20	15°♋19'49		asc. node		5346 Sep 25 09:45	22°♋47'00
desc. node	5341 Mar 04 19:54	19°♋30'16				5346 Nov 08 09:04	0°♋
	5341 May 01 19:34	0°♋		retrograde		5346 Dec 18 19:50	2°♋33'41
retrograde	5341 Jun 17 23:33	3°♋17'12				5347 Jan 28 02:46	30°♋
	5341 Aug 05 01:28	30°♋		min. Earth dist.		5347 Feb 15 00:28	27°♋41'22 4.14257 AU
opposition	5341 Aug 17 18:29	28°♋24'07	-0°19'24	opposition		5347 Feb 16 11:26	27°♋29'30 0°18'00
min. Earth dist.	5341 Aug 19 06:44	28°♋12'28	4.22738 AU	direct		5347 Apr 16 13:10	22°♋29'54
direct	5341 Oct 18 05:13	23°♋25'56				5347 Jun 28 08:48	0°♋
	5341 Dec 25 11:36	0°♋		evening set		5347 Aug 21 03:10	11°♋10'23
evening set	5342 Feb 20 17:01	11°♋59'59		conjunction		5347 Sep 03 18:59	14°♋14'38 0°27'34
max. Earth dist.	5342 Mar 03 16:29	14°♋33'13	6.14688 AU	minimum elong		5347 Sep 03 18:57	14°♋14'38 0°27'35
conjunction	5342 Mar 05 11:11	14°♋58'09	-0°28'20	max. Earth dist.		5347 Sep 05 18:12	14°♋41'14 6.22444 AU
minimum elong	5342 Mar 05 11:09	14°♋58'08	0°28'20	morning rise		5347 Sep 17 10:13	17°♋18'21
morning rise	5342 Mar 18 05:28	17°♋56'45				5347 Nov 19 21:22	0°♋
	5342 May 13 22:11	0°♑		retrograde		5348 Jan 20 04:34	5°♋27'19
retrograde	5342 Jul 23 22:07	7°♑06'16		min. Earth dist.		5348 Mar 19 04:54	0°♋33'30 4.30205 AU
opposition	5342 Sep 22 07:43	2°♑10'57	-1°01'50	opposition		5348 Mar 20 03:41	0°♋25'54 0°59'02
min. Earth dist.	5342 Sep 23 06:32	2°♑03'32	4.06858 AU			5348 Mar 23 09:20	30°♋
	5342 Oct 09 16:22	30°♋		direct		5348 May 19 13:08	25°♋24'28
direct	5342 Nov 21 08:06	27°♋15'15				5348 Jul 15 07:40	0°♋
				evening set		5348 Sep 23 01:11	13°♋22'12

conjunction	5348 Oct 06 11:28	16°♏17'58	0°49'46			5353 Nov 26 13:06	0°♐
minimum elong	5348 Oct 06 11:27	16°♏17'57	0°49'46	evening set		5354 Feb 25 09:26	16°♐50'24
max. Earth dist.	5348 Oct 07 07:26	16°♏28'52	6.37152 AU	max. Earth dist.		5354 Mar 08 10:08	19°♐25'13 6.12351 AU
morning rise	5348 Oct 19 20:12	19°♏12'41					
	5348 Dec 13 02:48	0°♎		conjunction		5354 Mar 10 03:50	19°♐49'41 -0°32'16
retrograde	5349 Feb 18 18:15	6°♎24'33		minimum elong		5354 Mar 10 03:48	19°♐49'40 0°32'16
opposition	5349 Apr 20 02:11	1°♎26'43	1°20'16	morning rise		5354 Mar 22 22:53	22°♐49'34
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	5349 May 01 06:33	30°♑♏		retrograde		5354 Jul 29 02:49	12°♑10'07
direct	5349 Jun 20 18:24	26°♏24'26		opposition		5354 Sep 27 11:54	7°♑14'23 -1°06'36
	5349 Aug 10 08:38	0°♎		min. Earth dist.		5354 Sep 28 07:12	7°♑08'05 4.04690 AU
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opposition	5350 May 20 05:28	1°♑17'29	1°19'13	retrograde		5355 Sep 05 11:17	18°♑28'36
min. Earth dist.	5350 May 20 19:59	1°♑12'48	4.48290 AU			5355 Oct 23 18:26	15°♑♑
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direct	5350 Jul 21 17:24	26°♎15'19		min. Earth dist.		5355 Nov 04 03:33	13°♑30'38 3.93990 AU
	5350 Sep 11 22:25	0°♑		direct		5356 Jan 01 18:55	8°♑35'28
evening set	5350 Nov 24 16:05	13°♑33'24				5356 Mar 06 06:29	15°♑
max. Earth dist.	5350 Dec 06 04:04	16°♑01'38	6.47987 AU	evening set		5356 May 06 21:13	28°♑31'29
						5356 May 12 22:49	0°♒
conjunction	5350 Dec 07 14:26	16°♑20'10	0°48'48	conjunction		5356 May 20 03:39	1°♒45'23 -0°53'46
minimum elong	5350 Dec 07 14:27	16°♑20'10	0°48'49	minimum elong		5356 May 20 03:40	1°♒45'23 0°53'46
morning rise	5350 Dec 20 10:23	19°♑05'50		max. Earth dist.		5356 May 21 03:41	2°♒00'02 5.91997 AU
	5351 Feb 14 08:37	0°♑		morning rise		5356 Jun 02 12:54	5°♒00'50
retrograde	5351 Apr 19 16:30	5°♑46'19		retrograde		5356 Oct 13 01:05	25°♒52'16
opposition	5351 Jun 19 13:53	0°♑53'39	0°57'39	min. Earth dist.		5356 Dec 10 11:13	20°♒58'37 3.92800 AU
min. Earth dist.	5351 Jun 20 21:02	0°♑43'42	4.45750 AU	opposition		5356 Dec 11 13:59	20°♒49'33 -1°08'44
	5351 Jun 26 14:41	30°♑♑		direct		5357 Feb 07 09:11	15°♒54'56
direct	5351 Aug 21 09:11	25°♑52'14				5357 May 20 01:20	0°♑
	5351 Oct 15 04:19	0°♑		evening set		5357 Jun 13 19:35	5°♑47'30
evening set	5351 Dec 24 23:20	13°♑20'06					
max. Earth dist.	5352 Jan 04 15:20	15°♑40'04	6.41478 AU	conjunction		5357 Jun 27 09:23	9°♑02'59 -0°33'03
conjunction	5352 Jan 06 18:04	16°♑07'55	0°27'38	minimum elong		5357 Jun 27 09:24	9°♑03'00 0°33'04
minimum elong	5352 Jan 06 18:06	16°♑07'55	0°27'39	max. Earth dist.		5357 Jun 29 12:53	9°♑33'55 5.96079 AU
morning rise	5352 Jan 19 10:53	18°♑54'58		morning rise		5357 Jul 11 01:52	12°♑19'39
	5352 Mar 15 03:12	0°♑				5357 Oct 09 01:21	0°♒
retrograde	5352 May 20 03:27	6°♑04'48		retrograde		5357 Nov 19 01:58	2°♒39'09
opposition	5352 Jul 20 02:15	1°♑12'32	0°19'57			5357 Dec 30 00:14	30°♑♑
min. Earth dist.	5352 Jul 21 16:30	1°♑00'20	4.35618 AU	min. Earth dist.		5358 Jan 16 00:24	27°♑47'14 4.01661 AU
	5352 Jul 29 15:51	30°♑♑		opposition		5358 Jan 17 13:55	27°♑34'26 -0°25'26
direct	5352 Sep 20 10:09	26°♑12'32		direct		5358 Mar 16 18:16	22°♑37'14
	5352 Nov 11 02:32	0°♑				5358 May 26 11:22	0°♒
desc. node	5353 Jan 12 05:06	11°♑34'01		evening set		5358 Jul 21 07:08	11°♒56'17
evening set	5353 Jan 23 21:44	14°♑09'43				5358 Aug 03 11:47	15°♒
	5353 Jan 27 15:13	15°♑		conjunction		5358 Aug 04 00:29	15°♒07'22 -0°00'04
max. Earth dist.	5353 Feb 03 10:03	16°♑31'58	6.28446 AU	minimum elong		5358 Aug 04 00:28	15°♒07'21 0°00'05
conjunction	5353 Feb 05 15:02	17°♑01'58	-0°01'59	behind sun begin		5358 Aug 03 16:30	15°♒02'45
minimum elong	5353 Feb 05 15:02	17°♑01'58	0°01'58	behind sun end		5358 Aug 04 08:26	15°♒11'57
behind sun begin	5353 Feb 05 07:04	16°♑57'29		asc. node		5358 Aug 04 15:51	15°♒16'17
behind sun end	5353 Feb 05 23:01	17°♑06'28		max. Earth dist.		5358 Aug 06 11:46	15°♒41'48 6.08812 AU
morning rise	5353 Feb 18 07:20	19°♑54'02		morning rise		5358 Aug 17 18:44	18°♒18'37
	5353 Apr 07 08:44	0°♐				5358 Oct 11 23:14	0°♑
retrograde	5353 Jun 22 21:10	8°♐00'40		retrograde		5358 Dec 23 13:28	7°♑29'20
opposition	5353 Aug 22 14:37	3°♐07'23	-0°25'55	min. Earth dist.		5359 Feb 19 19:47	2°♑36'55 4.16787 AU
min. Earth dist.	5353 Aug 24 02:33	2°♐55'50	4.20439 AU	opposition		5359 Feb 21 05:41	2°♑25'27 0°24'42
	5353 Sep 17 21:59	30°♑♑				5359 Mar 11 23:46	30°♑♒
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





























































































































	5359 Jun 01 06:40	0°♎		behind sun end	5365 Feb 10 09:36	21°♊43'48	
evening set	5359 Aug 26 01:15	15°♎58'34		morning rise	5365 Feb 22 18:44	24°♊32'46	
					5365 Mar 19 10:51	0°♋	
conjunction	5359 Sep 08 16:16	19°♎01'25	0°31'28	retrograde	5365 Jun 27 19:58	12°♋50'27	
minimum elong	5359 Sep 08 16:15	19°♎01'24	0°31'28	opposition	5365 Aug 27 12:57	7°♋56'52	-0°32'21
max. Earth dist.	5359 Sep 10 11:31	19°♎25'37	6.24983 AU	min. Earth dist.	5365 Aug 28 22:21	7°♋46'06	4.17772 AU
morning rise	5359 Sep 22 06:49	22°♎03'40		direct	5365 Oct 27 13:49	2°♋59'23	
	5359 Oct 29 18:01	0°♏		evening set	5366 Mar 02 04:30	21°♋48'17	
retrograde	5360 Jan 24 12:38	10°♏02'17		max. Earth dist.	5366 Mar 13 10:27	24°♋27'01	6.09808 AU
opposition	5360 Mar 24 13:58	5°♏01'18	1°03'16				
min. Earth dist.	5360 Mar 23 17:36	5°♏08'05	4.32545 AU	conjunction	5366 Mar 14 23:27	24°♋48'52	-0°36'01
	5360 May 22 07:52	30°♎♎		minimum elong	5366 Mar 14 23:26	24°♋48'51	0°36'02
direct	5360 May 24 04:20	29°♎59'40		morning rise	5366 Mar 27 19:04	27°♋50'07	
	5360 May 26 00:53	0°♏			5366 Apr 06 01:59	0°♐	
evening set	5360 Sep 27 14:44	17°♏51'20		retrograde	5366 Aug 03 13:31	17°♐22'19	
				opposition	5366 Oct 02 19:17	12°♐26'08	-1°10'55
conjunction	5360 Oct 11 00:15	20°♏45'58	0°51'41	min. Earth dist.	5366 Oct 03 12:08	12°♐20'38	4.02514 AU
minimum elong	5360 Oct 11 00:14	20°♏45'57	0°51'41	direct	5366 Dec 01 09:48	7°♐31'02	
max. Earth dist.	5360 Oct 11 17:01	20°♏55'05	6.39116 AU	evening set	5367 Apr 06 05:26	27°♐04'12	
morning rise	5360 Oct 24 07:44	23°♏39'26			5367 Apr 18 08:17	0°♑	
	5360 Nov 23 17:22	0°♒					
retrograde	5361 Feb 22 21:36	10°♒44'35		conjunction	5367 Apr 19 05:21	0°♑12'46	-0°54'19
opposition	5361 Apr 24 07:34	5°♒47'15	1°21'21	minimum elong	5367 Apr 19 05:21	0°♑12'45	0°54'20
min. Earth dist.	5361 Apr 24 06:11	5°♒47'42	4.44110 AU	max. Earth dist.	5367 Apr 18 22:15	0°♑08'27	5.96790 AU
direct	5361 Jun 25 03:18	0°♒44'59		morning rise	5367 May 02 07:25	3°♑22'41	
	5361 Oct 14 05:39	15°♒			5367 Jun 23 04:39	15°♑	
evening set	5361 Oct 29 07:33	18°♒10'19		retrograde	5367 Sep 10 23:48	23°♑56'16	
				opposition	5367 Nov 09 19:11	18°♑56'31	-1°24'29
conjunction	5361 Nov 11 10:33	20°♒59'10	0°56'40	min. Earth dist.	5367 Nov 09 10:43	18°♑59'21	3.93185 AU
minimum elong	5361 Nov 11 10:34	20°♒59'11	0°56'40		5367 Dec 14 07:07	15°♒♑	
max. Earth dist.	5361 Nov 10 20:34	20°♒51'40	6.47253 AU	direct	5368 Jan 07 02:07	14°♒02'37	
morning rise	5361 Nov 24 11:14	23°♒46'49			5368 Jan 30 20:54	15°♒	
	5361 Dec 24 15:08	0°♒♑			5368 Apr 25 13:18	0°♒♒	
retrograde	5362 Mar 24 16:43	10°♒♑25'57		evening set	5368 May 12 06:47	3°♒♒59'57	
opposition	5362 May 24 09:42	5°♒♑31'40	1°17'19				
min. Earth dist.	5362 May 25 03:57	5°♒♑25'47	4.48451 AU	conjunction	5368 May 25 14:13	7°♒♒14'19	-0°51'58
direct	5362 Jul 26 00:28	0°♒♑29'31		minimum elong	5368 May 25 14:15	7°♒♒14'20	0°51'59
evening set	5362 Nov 28 20:55	17°♒♑47'50		max. Earth dist.	5368 May 26 18:57	7°♒♒31'50	5.92046 AU
max. Earth dist.	5362 Dec 10 05:40	20°♒♑14'33	6.47461 AU	morning rise	5368 Jun 08 00:40	10°♒♒30'15	
					5368 Sep 19 18:54	0°♒♓	
conjunction	5362 Dec 11 18:49	20°♒♑34'36	0°46'31	retrograde	5368 Oct 18 10:23	1°♒♓19'43	
minimum elong	5362 Dec 11 18:50	20°♒♑34'37	0°46'33		5368 Nov 15 22:44	30°♒♒♒	
morning rise	5362 Dec 24 14:06	23°♒♑20'15		opposition	5368 Dec 16 23:31	26°♒♒16'29	-1°03'45
	5363 Jan 25 20:05	0°♒♓		min. Earth dist.	5368 Dec 15 18:14	26°♒♒26'25	3.93686 AU
retrograde	5363 Apr 23 22:18	10°♒♓03'26		direct	5369 Feb 12 19:49	21°♒♒21'30	
opposition	5363 Jun 23 20:44	5°♒♓10'54	0°53'12		5369 Apr 30 03:22	0°♒♓	
min. Earth dist.	5363 Jun 25 04:53	5°♒♓00'38	4.44575 AU	evening set	5369 Jun 19 05:07	11°♒♓09'48	
direct	5363 Aug 25 14:19	0°♒♓09'38					
evening set	5363 Dec 29 05:23	17°♒♓41'14		conjunction	5369 Jul 02 19:47	14°♒♓24'53	-0°28'45
max. Earth dist.	5364 Jan 08 19:46	20°♒♓00'54	6.39729 AU	minimum elong	5369 Jul 02 19:49	14°♒♓24'54	0°28'46
				max. Earth dist.	5369 Jul 05 03:19	14°♒♓58'05	5.97700 AU
conjunction	5364 Jan 10 23:47	20°♒♓29'34	0°23'51	morning rise	5369 Jul 16 12:41	17°♒♓40'56	
minimum elong	5364 Jan 10 23:48	20°♒♓29'35	0°23'52		5369 Sep 11 01:31	0°♒♔	
morning rise	5364 Jan 23 16:25	23°♒♓17'15		retrograde	5369 Nov 24 03:33	7°♒♒51'01	
	5364 Feb 24 10:37	0°♒♕		min. Earth dist.	5370 Jan 21 02:03	2°♒♒58'59	4.03805 AU
retrograde	5364 May 24 18:29	10°♒♕34'29		opposition	5370 Jan 22 15:28	2°♒♒46'14	-0°18'11
opposition	5364 Jul 24 15:48	5°♒♕42'11	0°13'47		5370 Feb 13 07:24	30°♒♒♓	
min. Earth dist.	5364 Jul 26 07:28	5°♒♕29'31	4.33383 AU	direct	5370 Mar 21 22:59	27°♒♓48'38	
direct	5364 Sep 24 21:29	0°♒♕42'26			5370 Apr 27 17:07	0°♒♕	
desc. node	5364 Nov 21 23:53	5°♒♕27'29		asc. node	5370 Jun 13 17:30	7°♒♒39'35	
	5365 Jan 11 08:42	15°♒♕			5370 Jul 17 16:34	15°♒♕	
evening set	5365 Jan 28 08:45	18°♒♕46'16		evening set	5370 Jul 26 11:18	17°♒♒00'25	
max. Earth dist.	5365 Feb 07 20:32	21°♒♕09'04	6.25900 AU				
				conjunction	5370 Aug 09 04:27	20°♒♒10'18	0°04'52
conjunction	5365 Feb 10 02:06	21°♒♕39'33	-0°06'25	minimum elong	5370 Aug 09 04:26	20°♒♒10'18	0°04'51
minimum elong	5365 Feb 10 02:05	21°♒♕39'32	0°06'24	behind sun begin	5370 Aug 08 20:16	20°♒♒05'36	
behind sun begin	5365 Feb 09 18:33	21°♒♕35'16		behind sun end	5370 Aug 09 12:36	20°♒♒14'59	

max. Earth dist.	5370 Aug 11 14:00	20° Ω 43'32	6.11256 AU	desc. node	5376 Sep 30 21:11	5° \approx 18'02	
morning rise	5370 Aug 22 22:34	23° Ω 20'19			5376 Dec 24 11:13	15° \approx	
	5370 Sep 22 00:29	0° Π		evening set	5377 Feb 01 22:01	23° \approx 28'09	
retrograde	5370 Dec 28 03:20	12° Π 19'33		max. Earth dist.	5377 Feb 12 12:08	25° \approx 53'04	6.23548 AU
opposition	5371 Feb 25 22:02	7° Π 15'58	0°31'09				
min. Earth dist.	5371 Feb 24 13:11	7° Π 27'04	4.19296 AU	conjunction	5377 Feb 14 15:23	26° \approx 22'25	-0°10'54
direct	5371 Apr 26 08:07	2° Π 15'47		minimum elong	5377 Feb 14 15:23	26° \approx 22'25	0°10'53
evening set	5371 Aug 30 21:18	20° Π 41'40		behind sun begin	5377 Feb 14 09:16	26° \approx 18'56	
				behind sun end	5377 Feb 14 21:29	26° \approx 25'54	
conjunction	5371 Sep 13 11:42	23° Π 43'12	0°35'08	morning rise	5377 Feb 27 08:16	29° \approx 16'43	
minimum elong	5371 Sep 13 11:40	23° Π 43'11	0°35'08		5377 Mar 02 12:29	0° H	
max. Earth dist.	5371 Sep 15 03:34	24° Π 05'25	6.27363 AU	retrograde	5377 Jul 02 22:57	17° H 44'56	
morning rise	5371 Sep 27 01:13	26° Π 44'01		opposition	5377 Sep 01 13:35	12° H 51'09	-0°38'43
	5371 Oct 12 00:50	0° Ω		min. Earth dist.	5377 Sep 02 21:48	12° H 40'46	4.15443 AU
retrograde	5372 Jan 28 21:12	14° Ω 33'20		direct	5377 Nov 01 10:47	7° H 54'07	
opposition	5372 Mar 28 23:16	9° Ω 32'55	1°07'07	evening set	5378 Mar 07 00:53	26° H 49'44	
min. Earth dist.	5372 Mar 28 06:01	9° Ω 38'39	4.34613 AU	max. Earth dist.	5378 Mar 18 10:53	29° H 31'37	6.07728 AU
direct	5372 May 28 18:58	4° Ω 31'11					
evening set	5372 Oct 02 03:35	22° Ω 17'50		conjunction	5378 Mar 19 20:20	29° H 51'26	-0°39'35
				minimum elong	5378 Mar 19 20:19	29° H 51'25	0°39'34
conjunction	5372 Oct 15 12:05	25° Ω 11'26	0°53'19		5378 Mar 20 10:48	0° Υ	
minimum elong	5372 Oct 15 12:04	25° Ω 11'26	0°53'20	morning rise	5378 Apr 01 16:42	2° Υ 53'55	
max. Earth dist.	5372 Oct 15 23:38	25° Ω 17'42	6.40714 AU	retrograde	5378 Aug 08 21:52	22° Υ 35'53	
morning rise	5372 Oct 28 18:40	28° Ω 03'54		opposition	5378 Oct 08 02:57	17° Υ 39'17	-1°14'43
	5372 Nov 06 19:45	0° M		min. Earth dist.	5378 Oct 08 15:15	17° Υ 35'14	4.00916 AU
	5373 Feb 20 21:14	15° M		direct	5378 Dec 06 11:23	12° Υ 44'32	
retrograde	5373 Feb 27 01:37	15° M 03'42			5379 Apr 01 11:48	0° B	
	5373 Mar 05 06:01	15° R M		evening set	5379 Apr 11 09:01	2° B 21'50	
opposition	5373 Apr 28 13:00	10° M 06'51	1°22'05				
min. Earth dist.	5373 Apr 28 14:39	10° M 06'18	4.45169 AU	conjunction	5379 Apr 24 09:44	5° B 31'14	-0°55'21
direct	5373 Jun 29 12:01	5° M 04'32		minimum elong	5379 Apr 24 09:44	5° B 31'14	0°55'22
	5373 Sep 26 23:12	15° M		max. Earth dist.	5379 Apr 24 07:59	5° B 30'10	5.95827 AU
evening set	5373 Nov 02 15:21	22° M 27'54		morning rise	5379 May 07 12:50	8° B 42'04	
					5379 Jun 03 08:31	15° B	
conjunction	5373 Nov 15 17:42	25° M 16'18	0°56'06	retrograde	5379 Sep 16 09:52	29° B 19'50	
minimum elong	5373 Nov 15 17:42	25° M 16'19	0°56'06	opposition	5379 Nov 15 04:55	24° B 19'31	-1°23'34
max. Earth dist.	5373 Nov 15 01:01	25° M 07'21	6.47703 AU	min. Earth dist.	5379 Nov 14 17:06	24° B 23'28	3.92976 AU
morning rise	5373 Nov 28 17:22	28° M 03'27		direct	5380 Jan 12 10:14	19° B 25'35	
	5373 Dec 07 21:24	0° J			5380 Apr 06 22:05	0° II	
retrograde	5374 Mar 28 20:47	14° J 41'43		evening set	5380 May 17 13:53	9° II 22'10	
opposition	5374 May 28 15:11	9° J 47'48	1°15'01				
min. Earth dist.	5374 May 29 11:27	9° J 41'18	4.48277 AU	conjunction	5380 May 30 22:30	12° II 36'48	-0°49'48
direct	5374 Jul 30 07:01	4° J 45'48		minimum elong	5380 May 30 22:32	12° II 36'49	0°49'49
evening set	5374 Dec 03 03:06	22° J 05'16		max. Earth dist.	5380 Jun 01 09:14	12° II 57'54	5.92612 AU
max. Earth dist.	5374 Dec 14 07:03	24° J 29'48	6.46666 AU	morning rise	5380 Jun 13 09:51	15° II 52'54	
					5380 Aug 17 09:41	0° O	
conjunction	5374 Dec 16 00:15	24° J 52'05	0°43'58	retrograde	5380 Oct 23 17:04	6° O 38'11	
minimum elong	5374 Dec 16 00:16	24° J 52'06	0°43'59	min. Earth dist.	5380 Dec 20 22:12	1° O 45'03	3.94966 AU
morning rise	5374 Dec 28 19:12	27° J 37'54		opposition	5380 Dec 22 04:56	1° O 34'37	-0°58'24
	5375 Jan 08 21:39	0° B			5381 Jan 03 00:54	30° R II	
retrograde	5375 Apr 28 08:32	14° B 24'47		direct	5381 Feb 18 02:01	26° II 39'21	
opposition	5375 Jun 28 06:03	9° B 32'25	0°48'22		5381 Apr 04 11:28	0° O	
min. Earth dist.	5375 Jun 29 16:38	9° B 21'22	4.43201 AU	evening set	5381 Jun 24 10:38	16° O 22'19	
direct	5375 Aug 29 23:35	4° B 31'20					
evening set	5376 Jan 02 13:23	22° B 07'10		conjunction	5381 Jul 08 01:46	19° O 36'46	-0°24'23
max. Earth dist.	5376 Jan 13 02:41	24° B 26'50	6.37882 AU	minimum elong	5381 Jul 08 01:47	19° O 36'47	0°24'23
				max. Earth dist.	5381 Jul 10 09:51	20° O 10'08	5.99534 AU
conjunction	5376 Jan 15 07:39	24° B 56'09	0°19'51	morning rise	5381 Jul 21 19:17	22° O 52'10	
minimum elong	5376 Jan 15 07:40	24° B 56'09	0°19'53		5381 Aug 22 02:03	0° Ω	
morning rise	5376 Jan 28 00:06	27° B 44'30		retrograde	5381 Nov 28 22:13	12° Ω 52'23	
	5376 Feb 07 08:08	0° \approx		min. Earth dist.	5382 Jan 25 22:26	8° Ω 00'31	4.05986 AU
	5376 May 19 08:15	15° \approx		opposition	5382 Jan 27 12:19	7° Ω 47'37	-0°11'05
retrograde	5376 May 29 09:52	15° \approx 09'32		direct	5382 Mar 26 22:20	2° Ω 49'37	
	5376 Jun 08 12:15	15° R \approx		asc. node	5382 Apr 24 06:12	4° Ω 08'34	
opposition	5376 Jul 29 07:37	10° \approx 17'11	0°07'20		5382 Jun 30 07:18	15° Ω	
min. Earth dist.	5376 Jul 30 22:12	10° \approx 04'52	4.31190 AU	evening set	5382 Jul 31 11:00	21° Ω 54'27	
direct	5376 Sep 29 08:48	5° \approx 17'49					

conjunction	5382 Aug 14 04:03	25°♏03'13	0°09'29		5388 Apr 06 14:44	15°♊	
minimum elong	5382 Aug 14 04:02	25°♏03'13	0°09'29	retrograde	5388 Jun 03 03:37	19°♊44'48	
behind sun begin	5382 Aug 13 21:08	24°♏59'16			5388 Aug 01 23:52	15°♊	
behind sun end	5382 Aug 14 10:56	25°♏07'10		opposition	5388 Aug 03 00:01	14°♊52'17	0°00'50
max. Earth dist.	5382 Aug 16 11:15	25°♏34'56	6.13592 AU	min. Earth dist.	5388 Aug 04 14:50	14°♊39'52	4.29189 AU
morning rise	5382 Aug 27 21:42	28°♏11'58		desc. node	5388 Aug 10 06:21	13°♊56'48	
	5382 Sep 04 20:47	0°♎		direct	5388 Oct 03 23:11	9°♊53'08	
retrograde	5383 Jan 01 15:49	17°♎00'43			5388 Dec 03 01:38	15°♊	
min. Earth dist.	5383 Mar 01 04:34	12°♎07'37	4.21557 AU	evening set	5389 Feb 06 10:42	28°♊08'55	
opposition	5383 Mar 02 10:31	11°♎57'31	0°37'09		5389 Feb 14 12:47	0°♋	
direct	5383 May 01 02:25	6°♎57'03		max. Earth dist.	5389 Feb 17 02:52	0°♋35'40	6.21451 AU
evening set	5383 Sep 04 13:51	25°♎16'57					
				conjunction	5389 Feb 19 04:16	1°♋04'04	-0°15'17
conjunction	5383 Sep 18 03:36	28°♎17'22	0°38'28	minimum elong	5389 Feb 19 04:15	1°♋04'04	0°15'18
minimum elong	5383 Sep 18 03:35	28°♎17'21	0°38'28	behind sun begin	5389 Feb 19 01:28	1°♋02'28	
max. Earth dist.	5383 Sep 19 15:54	28°♎37'30	6.29373 AU	behind sun end	5389 Feb 19 07:02	1°♋05'39	
	5383 Sep 25 20:47	0°♌		morning rise	5389 Mar 03 21:22	3°♋59'20	
morning rise	5383 Oct 01 16:18	1°♌16'59		retrograde	5389 Jul 07 22:39	22°♋36'59	
retrograde	5384 Feb 02 01:46	18°♌58'31		opposition	5389 Sep 06 13:10	17°♋42'50	-0°44'47
opposition	5384 Apr 02 05:49	13°♌58'36	1°10'29	min. Earth dist.	5389 Sep 07 18:33	17°♋33'20	4.13405 AU
min. Earth dist.	5384 Apr 01 14:36	14°♌03'38	4.36253 AU	direct	5389 Nov 06 04:45	12°♋46'07	
direct	5384 Jun 02 04:45	8°♌56'42			5390 Mar 04 05:02	0°♌	
evening set	5384 Oct 06 14:00	26°♌39'49		evening set	5390 Mar 11 20:17	1°♌47'26	
				max. Earth dist.	5390 Mar 23 10:16	4°♌32'20	6.05907 AU
conjunction	5384 Oct 19 21:43	29°♌32'37	0°54'37				
minimum elong	5384 Oct 19 21:42	29°♌32'37	0°54'37	conjunction	5390 Mar 24 16:08	4°♌50'07	-0°42'49
max. Earth dist.	5384 Oct 20 05:03	29°♌36'36	6.41878 AU	minimum elong	5390 Mar 24 16:07	4°♌50'06	0°42'49
	5384 Oct 22 00:13	0°♍		morning rise	5390 Apr 06 13:14	7°♌53'42	
morning rise	5384 Nov 02 03:18	2°♍24'15		retrograde	5390 Aug 14 05:17	27°♌44'29	
	5385 Jan 07 12:46	15°♍		opposition	5390 Oct 13 08:39	22°♌47'21	-1°17'52
retrograde	5385 Mar 03 05:48	19°♍20'13		min. Earth dist.	5390 Oct 13 18:10	22°♌44'12	3.99476 AU
	5385 Apr 28 02:08	15°♍		direct	5390 Dec 11 13:24	17°♌52'46	
opposition	5385 May 02 17:29	14°♍23'52	1°22'22		5391 Mar 14 22:56	0°♎	
min. Earth dist.	5385 May 02 22:16	14°♍22'19	4.45806 AU	evening set	5391 Apr 16 10:45	7°♎33'52	
direct	5385 Jul 03 20:03	9°♍21'34					
	5385 Sep 06 18:34	15°♍		conjunction	5391 Apr 29 12:36	10°♎44'12	-0°55'56
evening set	5385 Nov 06 22:11	26°♍44'04		minimum elong	5391 Apr 29 12:36	10°♎44'12	0°55'56
				max. Earth dist.	5391 Apr 29 16:41	10°♎46'41	5.94909 AU
conjunction	5385 Nov 19 23:43	29°♍32'10	0°55'13	morning rise	5391 May 12 16:42	13°♎55'56	
minimum elong	5385 Nov 19 23:43	29°♍32'10	0°55'14		5391 May 17 03:09	15°♎	
max. Earth dist.	5385 Nov 19 02:15	29°♍20'37	6.47766 AU		5391 Jul 28 09:18	0°♏	
	5385 Nov 22 03:30	0°♏		retrograde	5391 Sep 21 19:30	4°♏37'38	
morning rise	5385 Dec 02 22:47	2°♏19'02			5391 Nov 17 15:22	30°♏	
retrograde	5386 Apr 02 02:01	18°♏57'33		opposition	5391 Nov 20 12:31	29°♏36'50	-1°21'59
opposition	5386 Jun 01 20:46	14°♏03'54	1°12'20	min. Earth dist.	5391 Nov 19 22:02	29°♏41'42	3.92707 AU
min. Earth dist.	5386 Jun 02 19:17	13°♏56'40	4.47798 AU	direct	5392 Jan 17 15:19	24°♏42'53	
direct	5386 Aug 03 13:28	9°♏01'57			5392 Mar 15 13:22	0°♐	
evening set	5386 Dec 07 09:09	26°♏23'15		evening set	5392 May 22 19:43	14°♐39'21	
max. Earth dist.	5386 Dec 18 12:01	28°♏47'30	6.45687 AU				
				conjunction	5392 Jun 05 05:14	17°♐54'17	-0°47'15
conjunction	5386 Dec 20 05:59	29°♏10'16	0°41'10	minimum elong	5392 Jun 05 05:16	17°♐54'18	0°47'16
minimum elong	5386 Dec 20 06:00	29°♏10'17	0°41'11	max. Earth dist.	5392 Jun 06 18:24	18°♐16'50	5.92992 AU
	5386 Dec 24 01:35	0°♑		morning rise	5392 Jun 18 17:49	21°♐10'43	
morning rise	5387 Jan 02 00:19	1°♑56'16			5392 Jul 27 01:19	0°♑	
retrograde	5387 May 02 17:04	18°♑47'10		retrograde	5392 Oct 28 19:50	11°♑52'42	
opposition	5387 Jul 02 15:42	13°♑54'52	0°43'16	min. Earth dist.	5392 Dec 25 23:38	7°♑00'04	3.95959 AU
min. Earth dist.	5387 Jul 04 02:39	13°♑43'44	4.41789 AU	opposition	5392 Dec 27 08:44	6°♑48'49	-0°52'39
direct	5387 Sep 03 07:21	8°♑54'01		direct	5393 Feb 23 05:36	1°♑53'13	
evening set	5388 Jan 06 21:36	26°♑33'49		evening set	5393 Jun 29 15:55	21°♑32'30	
max. Earth dist.	5388 Jan 17 09:45	28°♑53'29	6.36132 AU				
				conjunction	5393 Jul 13 07:44	24°♑46'31	-0°19'49
conjunction	5388 Jan 19 15:29	29°♑23'21	0°15'45	minimum elong	5393 Jul 13 07:45	24°♑46'32	0°19'51
minimum elong	5388 Jan 19 15:29	29°♑23'22	0°15'46	max. Earth dist.	5393 Jul 15 16:44	25°♑20'19	6.01042 AU
behind sun begin	5388 Jan 19 13:38	29°♑22'20		morning rise	5393 Jul 27 01:33	28°♑01'21	
behind sun end	5388 Jan 19 17:21	29°♑24'23			5393 Aug 04 13:01	0°♒	
	5388 Jan 22 09:22	0°♒			5393 Oct 21 19:35	15°♒	
morning rise	5388 Feb 01 07:57	2°♒12'23		retrograde	5393 Dec 03 19:39	17°♒53'10	

	5394 Jan 15 17:17	15° κ 8 Ω		evening set	5400 Jan 11 04:01	0° \approx 57'25	
min. Earth dist.	5394 Jan 30 20:39	13° Ω 00'56 4.07820 AU		max. Earth dist.	5400 Jan 21 16:53	3° \approx 17'49	6.34961 AU
opposition	5394 Feb 01 09:10	12° Ω 48'30 -0°03'56					
asc. node	5394 Mar 04 04:14	9° Ω 07'05		conjunction	5400 Jan 23 21:44	3° \approx 47'17	0°11'42
direct	5394 Mar 31 23:26	7° Ω 50'08		minimum elong	5400 Jan 23 21:45	3° \approx 47'18	0°11'43
	5394 Jun 10 04:08	15° Ω		behind sun begin	5400 Jan 23 16:05	3° \approx 44'09	
evening set	5394 Aug 05 11:37	26° Ω 49'33		behind sun end	5400 Jan 24 03:25	3° \approx 50'26	
				morning rise	5400 Feb 05 13:53	6° \approx 36'41	
conjunction	5394 Aug 19 04:35	29° Ω 57'23 0°14'05			5400 Mar 17 09:43	15° \approx	
minimum elong	5394 Aug 19 04:34	29° Ω 57'22 0°14'04		retrograde	5400 Jun 08 16:17	24° \approx 14'37	
behind sun begin	5394 Aug 19 00:39	29° Ω 55'09		desc. node	5400 Jun 23 01:59	23° \approx 55'17	
behind sun end	5394 Aug 19 08:29	29° Ω 59'36		opposition	5400 Aug 08 13:37	19° \approx 21'58	-0°05'24
	5394 Aug 19 09:11	0° η		min. Earth dist.	5400 Aug 10 03:46	19° \approx 09'46	4.27736 AU
max. Earth dist.	5394 Aug 21 10:59	0° η 28'29 6.15588 AU			5400 Sep 19 09:21	15° κ \approx	
morning rise	5394 Sep 01 21:50	3° η 05'02		direct	5400 Oct 09 09:26	14° \approx 23'07	
retrograde	5395 Jan 06 04:09	21° η 44'34			5400 Oct 29 09:44	15° \approx	
min. Earth dist.	5395 Mar 05 19:04	16° η 51'38 4.23542 AU			5401 Jan 30 20:50	0° \mathcal{H}	
opposition	5395 Mar 07 00:14	16° η 41'49 0°42'59		evening set	5401 Feb 11 20:26	2° \mathcal{H} 42'41	
direct	5395 May 05 19:13	11° η 41'09		max. Earth dist.	5401 Feb 22 13:02	5° \mathcal{H} 10'16	6.19818 AU
evening set	5395 Sep 09 08:09	29° η 56'07					
	5395 Sep 09 15:13	0° $\underline{\Omega}$		conjunction	5401 Feb 24 13:53	5° \mathcal{H} 38'28	-0°19'24
conjunction	5395 Sep 22 21:05	2° $\underline{\Omega}$ 55'27 0°41'38		minimum elong	5401 Feb 24 13:52	5° \mathcal{H} 38'27	0°19'23
minimum elong	5395 Sep 22 21:04	2° $\underline{\Omega}$ 55'26 0°41'38		morning rise	5401 Mar 09 07:20	8° \mathcal{H} 34'31	
max. Earth dist.	5395 Sep 24 04:58	3° $\underline{\Omega}$ 13'04 6.31200 AU		retrograde	5401 Jul 13 19:39	27° \mathcal{H} 20'15	
morning rise	5395 Oct 06 08:57	5° $\underline{\Omega}$ 53'57		opposition	5401 Sep 12 08:45	22° \mathcal{H} 25'43	-0°50'15
retrograde	5396 Feb 06 10:50	23° $\underline{\Omega}$ 28'25		min. Earth dist.	5401 Sep 13 12:55	22° \mathcal{H} 16'36	4.11689 AU
opposition	5396 Apr 06 14:41	18° $\underline{\Omega}$ 29'05 1°13'31		direct	5401 Nov 11 20:45	17° \mathcal{H} 29'13	
min. Earth dist.	5396 Apr 06 02:41	18° $\underline{\Omega}$ 33'03 4.37810 AU			5402 Feb 16 17:24	0° Υ	
direct	5396 Jun 06 18:38	13° $\underline{\Omega}$ 27'09		evening set	5402 Mar 17 11:16	6° Υ 35'20	
	5396 Oct 05 21:25	0° \mathcal{M}		max. Earth dist.	5402 Mar 29 05:33	9° Υ 23'19	6.04268 AU
evening set	5396 Oct 11 02:27	1° \mathcal{M} 06'52		conjunction	5402 Mar 30 07:49	9° Υ 39'00	-0°45'35
				minimum elong	5402 Mar 30 07:47	9° Υ 38'59	0°45'36
conjunction	5396 Oct 24 09:20	3° \mathcal{M} 58'53 0°55'39		morning rise	5402 Apr 12 05:32	12° Υ 43'36	
minimum elong	5396 Oct 24 09:20	3° \mathcal{M} 58'52 0°55'39			5402 Jul 09 07:15	0° \mathcal{B}	
max. Earth dist.	5396 Oct 24 13:42	4° \mathcal{M} 01'14 6.43076 AU		retrograde	5402 Aug 20 07:38	2° \mathcal{B} 42'34	
morning rise	5396 Nov 06 13:55	6° \mathcal{M} 49'40			5402 Oct 01 15:50	30° \mathcal{R} Υ	
	5396 Dec 16 17:47	15° \mathcal{M}		opposition	5402 Oct 19 09:30	27° Υ 45'01	-1°20'19
retrograde	5397 Mar 07 10:17	23° \mathcal{M} 41'37		min. Earth dist.	5402 Oct 19 16:53	27° Υ 42'35	3.98080 AU
opposition	5397 May 06 23:49	18° \mathcal{M} 45'45 1°22'14		direct	5402 Dec 17 09:54	22° Υ 50'36	
min. Earth dist.	5397 May 07 06:00	18° \mathcal{M} 43'44 4.46624 AU			5403 Feb 24 09:52	0° \mathcal{B}	
	5397 Jun 08 22:36	15° \mathcal{R} \mathcal{M}		evening set	5403 Apr 22 08:33	12° \mathcal{B} 35'47	
direct	5397 Jul 08 04:03	13° \mathcal{M} 43'32			5403 May 02 06:03	15° \mathcal{B}	
	5397 Aug 06 17:57	15° \mathcal{M}		conjunction	5403 May 05 11:13	15° \mathcal{B} 47'00	-0°56'04
	5397 Nov 06 05:06	0° \mathcal{Z}		minimum elong	5403 May 05 11:13	15° \mathcal{B} 47'00	0°56'04
evening set	5397 Nov 11 06:27	1° \mathcal{Z} 04'24		max. Earth dist.	5403 May 05 17:33	15° \mathcal{B} 50'51	5.93879 AU
max. Earth dist.	5397 Nov 23 07:46	3° \mathcal{Z} 39'26 6.48178 AU		morning rise	5403 May 18 16:38	18° \mathcal{B} 59'47	
					5403 Jul 06 05:22	0° \mathcal{I}	
conjunction	5397 Nov 24 07:12	3° \mathcal{Z} 52'02 0°54'05		retrograde	5403 Sep 27 23:02	9° \mathcal{I} 45'56	
minimum elong	5397 Nov 24 07:12	3° \mathcal{Z} 52'03 0°54'06		opposition	5403 Nov 26 15:23	4° \mathcal{I} 44'40	-1°19'53
morning rise	5397 Dec 07 05:23	6° \mathcal{Z} 38'27		min. Earth dist.	5403 Nov 25 21:48	4° \mathcal{I} 50'35	3.92172 AU
retrograde	5398 Apr 06 07:45	23° \mathcal{Z} 16'05			5404 Jan 14 03:14	30° \mathcal{R} \mathcal{B}	
opposition	5398 Jun 06 03:29	18° \mathcal{Z} 22'46 1°09'19		direct	5404 Jan 23 15:26	29° \mathcal{B} 50'32	
min. Earth dist.	5398 Jun 07 03:54	18° \mathcal{Z} 14'57 4.47792 AU			5404 Feb 02 04:01	0° \mathcal{I}	
direct	5398 Aug 07 21:51	13° \mathcal{Z} 21'01		evening set	5404 May 28 22:21	19° \mathcal{I} 48'27	
	5398 Dec 08 08:23	0° \mathcal{B}					
evening set	5398 Dec 11 15:12	0° \mathcal{B} 42'20		conjunction	5404 Jun 11 09:09	23° \mathcal{I} 03'56	-0°44'27
max. Earth dist.	5398 Dec 22 14:27	3° \mathcal{B} 04'54 6.45261 AU		minimum elong	5404 Jun 11 09:11	23° \mathcal{I} 03'57	0°44'27
conjunction	5398 Dec 24 11:18	3° \mathcal{B} 29'16 0°38'14		max. Earth dist.	5404 Jun 13 02:06	23° \mathcal{I} 28'47	5.93025 AU
minimum elong	5398 Dec 24 11:20	3° \mathcal{B} 29'17 0°38'14		morning rise	5404 Jun 24 22:41	26° \mathcal{I} 20'48	
morning rise	5399 Jan 06 05:18	6° \mathcal{B} 15'17			5404 Jul 10 07:57	0° \mathcal{E}	
retrograde	5399 May 07 01:59	23° \mathcal{B} 08'35		retrograde	5404 Nov 03 22:23	17° \mathcal{E} 00'58	
opposition	5399 Jul 07 01:00	18° \mathcal{B} 16'19 0°38'02		min. Earth dist.	5405 Jan 01 00:16	12° \mathcal{E} 08'12	3.96540 AU
min. Earth dist.	5399 Jul 08 12:58	18° \mathcal{B} 04'51 4.40958 AU		opposition	5405 Jan 02 09:40	11° \mathcal{E} 56'49	-0°46'44
direct	5399 Sep 07 16:09	13° \mathcal{B} 15'37		direct	5405 Mar 01 07:49	7° \mathcal{E} 00'51	
	5400 Jan 06 19:42	0° \approx		evening set	5405 Jul 05 19:25	26° \mathcal{E} 38'08	

conjunction	5405 Jul 19 11:54	29° \mathfrak{C} 51'57	-0°15'17	retrograde	5411 May 12 12:24	27° \mathfrak{C} 31'58	
minimum elong	5405 Jul 19 11:55	29° \mathfrak{C} 51'57	0°15'18	opposition	5411 Jul 12 11:34	22° \mathfrak{C} 39'47	0°32'26
behind sun begin	5405 Jul 19 09:40	29° \mathfrak{C} 50'38		min. Earth dist.	5411 Jul 14 00:59	22° \mathfrak{C} 27'53	4.39560 AU
behind sun end	5405 Jul 19 14:10	29° \mathfrak{C} 53'17		direct	5411 Sep 13 01:21	17° \mathfrak{C} 39'19	
	5405 Jul 20 01:33	0° Ω			5411 Dec 22 09:04	0° \approx	
max. Earth dist.	5405 Jul 21 22:50	0° Ω 26'45	6.02124 AU	evening set	5412 Jan 16 12:25	5° \approx 25'09	
morning rise	5405 Aug 02 06:11	3° Ω 06'26		max. Earth dist.	5412 Jan 26 22:59	7° \approx 44'56	6.33131 AU
	5405 Sep 26 09:04	15° Ω					
retrograde	5405 Dec 09 15:09	22° Ω 51'19		conjunction	5412 Jan 29 05:50	8° \approx 15'39	0°07'26
asc. node	5406 Jan 14 04:48	20° Ω 49'09		minimum elong	5412 Jan 29 05:49	8° \approx 15'38	0°07'26
min. Earth dist.	5406 Feb 05 15:32	17° Ω 59'25	4.09282 AU	behind sun begin	5412 Jan 28 22:33	8° \approx 11'35	
opposition	5406 Feb 07 04:46	17° Ω 46'45	0°03'03	behind sun end	5412 Jan 29 13:06	8° \approx 19'42	
	5406 Feb 28 23:12	15° \mathfrak{R} Ω		morning rise	5412 Feb 10 22:07	11° \approx 05'47	
direct	5406 Apr 06 20:59	12° Ω 48'02			5412 Feb 28 17:13	15° \approx	
	5406 May 14 00:47	15° Ω		desc. node	5412 May 02 15:01	26° \approx 15'15	
	5406 Aug 03 20:41	0° \mathfrak{M}		retrograde	5412 Jun 13 10:57	28° \approx 51'55	
evening set	5406 Aug 11 11:54	1° \mathfrak{M} 43'14		opposition	5412 Aug 13 06:57	23° \approx 59'04	-0°11'56
				min. Earth dist.	5412 Aug 14 20:36	23° \approx 47'00	4.25574 AU
conjunction	5406 Aug 25 04:31	4° \mathfrak{M} 50'10	0°18'29	direct	5412 Oct 13 22:57	19° \approx 00'28	
minimum elong	5406 Aug 25 04:30	4° \mathfrak{M} 50'10	0°18'28		5413 Jan 13 15:22	0° \mathfrak{H}	
max. Earth dist.	5406 Aug 27 08:05	5° \mathfrak{M} 19'33	6.17302 AU	evening set	5413 Feb 16 10:04	7° \mathfrak{H} 26'25	
morning rise	5406 Sep 07 21:27	7° \mathfrak{M} 56'52		max. Earth dist.	5413 Feb 27 05:48	9° \mathfrak{H} 56'31	6.17507 AU
retrograde	5407 Jan 11 17:30	26° \mathfrak{M} 27'59					
min. Earth dist.	5407 Mar 11 10:50	21° \mathfrak{M} 34'37	4.25337 AU	conjunction	5413 Mar 01 03:54	10° \mathfrak{H} 23'16	-0°23'37
opposition	5407 Mar 12 13:52	21° \mathfrak{M} 25'32	0°48'25	minimum elong	5413 Mar 01 03:52	10° \mathfrak{H} 23'15	0°23'36
direct	5407 May 11 13:54	16° \mathfrak{M} 24'33		morning rise	5413 Mar 13 21:35	13° \mathfrak{H} 20'25	
	5407 Aug 24 18:47	0° \mathfrak{L}			5413 Jun 10 05:24	0° \mathfrak{Y}	
evening set	5407 Sep 15 02:23	4° \mathfrak{L} 34'48		retrograde	5413 Jul 18 22:51	2° \mathfrak{Y} 16'54	
					5413 Aug 26 22:51	30° \mathfrak{R} \mathfrak{H}	
conjunction	5407 Sep 28 14:45	7° \mathfrak{L} 33'07	0°44'28	opposition	5413 Sep 17 10:06	27° \mathfrak{H} 22'06	-0°55'46
minimum elong	5407 Sep 28 14:44	7° \mathfrak{L} 33'06	0°44'29	min. Earth dist.	5413 Sep 18 12:25	27° \mathfrak{H} 13'33	4.09420 AU
max. Earth dist.	5407 Sep 29 21:09	7° \mathfrak{L} 49'51	6.32938 AU	direct	5413 Nov 16 16:35	22° \mathfrak{H} 25'59	
morning rise	5407 Oct 12 01:32	10° \mathfrak{L} 30'27			5414 Jan 28 02:04	0° \mathfrak{Y}	
retrograde	5408 Feb 11 17:27	27° \mathfrak{L} 57'45		evening set	5414 Mar 22 08:58	11° \mathfrak{Y} 39'02	
opposition	5408 Apr 11 23:24	22° \mathfrak{L} 58'49	1°16'03	max. Earth dist.	5414 Apr 03 06:17	14° \mathfrak{Y} 29'37	6.02236 AU
min. Earth dist.	5408 Apr 11 12:32	23° \mathfrak{L} 02'24	4.39351 AU				
direct	5408 Jun 12 06:07	17° \mathfrak{L} 56'46		conjunction	5414 Apr 04 06:03	14° \mathfrak{Y} 43'52	-0°48'14
	5408 Sep 20 00:00	0° \mathfrak{M}		minimum elong	5414 Apr 04 06:02	14° \mathfrak{Y} 43'52	0°48'14
evening set	5408 Oct 16 14:35	5° \mathfrak{M} 32'40		morning rise	5414 Apr 17 04:50	17° \mathfrak{Y} 49'50	
					5414 Jun 11 14:42	0° \mathfrak{B}	
conjunction	5408 Oct 29 20:26	8° \mathfrak{M} 23'49	0°56'19	retrograde	5414 Aug 25 16:32	7° \mathfrak{B} 58'29	
minimum elong	5408 Oct 29 20:26	8° \mathfrak{M} 23'48	0°56'20	opposition	5414 Oct 24 17:25	3° \mathfrak{B} 00'27	-1°22'21
max. Earth dist.	5408 Oct 29 20:13	8° \mathfrak{M} 23'41	6.44277 AU	min. Earth dist.	5414 Oct 24 20:47	2° \mathfrak{B} 59'20	3.96507 AU
morning rise	5408 Nov 12 00:07	11° \mathfrak{M} 13'44			5414 Nov 18 05:52	30° \mathfrak{R} \mathfrak{Y}	
	5408 Nov 29 21:33	15° \mathfrak{M}		direct	5414 Dec 22 13:06	28° \mathfrak{Y} 06'13	
retrograde	5409 Mar 12 16:45	28° \mathfrak{M} 01'33			5415 Jan 25 11:53	0° \mathfrak{B}	
opposition	5409 May 12 06:19	23° \mathfrak{M} 06'02	1°21'35		5415 Apr 15 08:22	15° \mathfrak{B}	
min. Earth dist.	5409 May 12 15:50	23° \mathfrak{M} 02'57	4.47383 AU	evening set	5415 Apr 27 13:45	17° \mathfrak{B} 56'04	
direct	5409 Jul 13 14:28	18° \mathfrak{M} 03'47					
	5409 Oct 21 14:37	0° \mathfrak{J}		conjunction	5415 May 10 17:42	21° \mathfrak{B} 08'19	-0°55'46
evening set	5409 Nov 16 14:03	5° \mathfrak{J} 22'57		minimum elong	5415 May 10 17:43	21° \mathfrak{B} 08'19	0°55'47
max. Earth dist.	5409 Nov 28 11:13	7° \mathfrak{J} 55'45	6.48401 AU	max. Earth dist.	5415 May 11 06:26	21° \mathfrak{B} 16'05	5.92936 AU
				morning rise	5415 May 24 00:11	24° \mathfrak{B} 22'05	
conjunction	5409 Nov 29 14:05	8° \mathfrak{J} 10'12	0°52'36		5415 Jun 16 19:03	0° \mathfrak{I}	
minimum elong	5409 Nov 29 14:06	8° \mathfrak{J} 10'12	0°52'37	retrograde	5415 Oct 03 11:20	15° \mathfrak{I} 11'53	
morning rise	5409 Dec 12 11:30	10° \mathfrak{J} 56'14		min. Earth dist.	5415 Dec 01 05:35	10° \mathfrak{I} 16'50	3.91993 AU
retrograde	5410 Apr 11 13:09	27° \mathfrak{J} 33'42		opposition	5415 Dec 02 01:21	10° \mathfrak{I} 10'10	-1°16'56
opposition	5410 Jun 11 10:19	22° \mathfrak{J} 40'33	1°05'51	direct	5416 Jan 29 00:00	5° \mathfrak{I} 15'58	
min. Earth dist.	5410 Jun 12 12:12	22° \mathfrak{J} 32'16	4.47458 AU	evening set	5416 Jun 03 07:36	25° \mathfrak{I} 13'36	
direct	5410 Aug 13 04:26	17° \mathfrak{J} 38'52					
	5410 Nov 23 00:12	0° \mathfrak{Z}		conjunction	5416 Jun 16 19:26	28° \mathfrak{I} 29'18	-0°41'06
evening set	5410 Dec 16 21:32	5° \mathfrak{Z} 01'23		minimum elong	5416 Jun 16 19:28	28° \mathfrak{I} 29'19	0°41'07
max. Earth dist.	5410 Dec 27 19:25	7° \mathfrak{Z} 23'30	6.44381 AU	max. Earth dist.	5416 Jun 18 16:56	28° \mathfrak{I} 56'50	5.93634 AU
					5416 Jun 23 01:26	0° \mathfrak{G}	
conjunction	5410 Dec 29 17:12	7° \mathfrak{Z} 48'27	0°34'59	morning rise	5416 Jun 30 10:01	1° \mathfrak{G} 46'21	
minimum elong	5410 Dec 29 17:13	7° \mathfrak{Z} 48'28	0°35'01	retrograde	5416 Nov 09 03:44	22° \mathfrak{G} 21'31	
morning rise	5411 Jan 11 10:37	10° \mathfrak{Z} 34'37		min. Earth dist.	5417 Jan 06 03:12	17° \mathfrak{G} 29'24	3.97898 AU

opposition	5417 Jan 07 15:03	17°  17'12	-0°40'09	opposition	5422 Jun 15 15:41	26°  54'35	1°02'07
direct	5417 Mar 06 13:38	12°  20'56		min. Earth dist.	5422 Jun 16 20:54	26°  45'15	4.46736 AU
	5417 Jul 03 00:33	0°  0		direct	5422 Aug 17 11:04	21°  52'57	
evening set	5417 Jul 11 02:56	1°  53'06			5422 Nov 05 01:44	0°  0	
				evening set	5422 Dec 21 02:11	9°  31'52	
conjunction	5417 Jul 24 19:38	5°  06'07	-0°10'27	max. Earth dist.	5422 Dec 31 20:18	11°  38'26	6.43013 AU
minimum elong	5417 Jul 24 19:39	5°  06'08	0°10'27				
behind sun begin	5417 Jul 24 13:09	5°  02'20		conjunction	5423 Jan 02 21:28	12°  05'18	0°31'37
behind sun end	5417 Jul 25 02:09	5°  09'56		minimum elong	5423 Jan 02 21:29	12°  05'19	0°31'39
max. Earth dist.	5417 Jul 27 06:14	5°  40'34	6.04094 AU	morning rise	5423 Jan 15 14:41	14°  35'55	
morning rise	5417 Aug 07 14:09	8°  01'44			5423 Apr 11 05:33	0°  0	
	5417 Sep 06 03:43	15°  0		retrograde	5423 May 16 23:12	1°  55'08	
asc. node	5417 Nov 23 11:51	27°  01'55			5423 Jun 21 22:30	30°  R  0	
retrograde	5417 Dec 14 11:04	27°  05'45		opposition	5423 Jul 16 22:07	27°  02'54	0°26'42
min. Earth dist.	5418 Feb 10 13:21	23°  02'00	4.11637 AU	min. Earth dist.	5423 Jul 18 11:53	26°  35'50	4.37623 AU
opposition	5418 Feb 12 01:46	22°  04'38	0°10'09	direct	5423 Sep 17 08:43	22°  02'35	
direct	5418 Apr 11 22:45	17°  05'29			5423 Dec 04 00:39	0°  0	
	5418 Jul 17 03:44	0°  0		evening set	5424 Jan 20 20:57	9°  54'12	
evening set	5418 Aug 16 12:21	6°  03'38	20	max. Earth dist.	5424 Jan 31 08:40	12°  55'20	6.30776 AU
conjunction	5418 Aug 30 04:42	9°  04'35	0°22'49	conjunction	5424 Feb 02 14:24	12°  55'35	0°03'08
minimum elong	5418 Aug 30 04:41	9°  04'37	0°22'48	minimum elong	5424 Feb 02 14:24	12°  55'36	0°03'08
max. Earth dist.	5418 Sep 01 07:39	10°  07'49	6.19846 AU	behind sun begin	5424 Feb 02 06:29	12°  54'09	
morning rise	5418 Sep 12 20:46	12°  09'10		behind sun end	5424 Feb 02 22:20	12°  50'02	
	5418 Dec 20 06:15	0°  0			5424 Feb 12 13:12	15°  0	
retrograde	5419 Jan 16 04:26	1°  09'12		morning rise	5424 Feb 15 06:39	15°  56'41	
	5419 Feb 11 20:57	30°  R  0		desc. node	5424 Mar 12 13:38	21°  52'38	
min. Earth dist.	5419 Mar 16 00:48	26°  07'15	4.27830 AU		5424 Apr 30 04:23	0°  0	
opposition	5419 Mar 17 02:24	26°  07'11	0°53'30	retrograde	5424 Jun 18 07:30	3°  32'51	
direct	5419 May 16 06:27	21°  06'00			5424 Aug 07 12:19	30°  R  0	
	5419 Aug 06 07:03	0°  0		opposition	5424 Aug 18 01:49	28°  59'51	-0°18'27
evening set	5419 Sep 19 18:24	9°  09'22		min. Earth dist.	5424 Aug 19 15:15	28°  57'51	4.22951 AU
				direct	5424 Oct 18 13:25	23°  41'36	
conjunction	5419 Oct 03 05:41	12°  06'21	0°47'01		5424 Dec 24 08:15	0°  0	
minimum elong	5419 Oct 03 05:39	12°  06'20	0°47'01	evening set	5425 Feb 21 01:59	12°  51'27	
max. Earth dist.	5419 Oct 04 06:39	12°  02'02	6.35167 AU	max. Earth dist.	5425 Mar 03 22:58	14°  57'14	6.14836 AU
morning rise	5419 Oct 16 15:35	15°  02'21					
	5420 Jan 07 13:41	0°  0		conjunction	5425 Mar 05 20:02	15°  51'32	-0°27'42
retrograde	5420 Feb 15 23:03	2°  01'21	32	minimum elong	5425 Mar 05 20:01	15°  51'32	0°27'41
	5420 Mar 26 06:19	30°  R  0		morning rise	5425 Mar 18 14:29	18°  51'06	
opposition	5420 Apr 16 05:56	27°  02'30	1°18'05		5425 May 12 21:52	0°  0	
min. Earth dist.	5420 Apr 15 22:38	27°  02'57	4.41164 AU	retrograde	5425 Jul 24 03:57	7°  52'40	
direct	5420 Jun 16 17:42	22°  02'51		opposition	5425 Sep 22 14:25	2°  52'26	-1°00'58
	5420 Sep 01 08:04	0°  0		min. Earth dist.	5425 Sep 23 13:03	2°  51'03	4.06934 AU
evening set	5420 Oct 20 23:26	9°  01'52	20		5425 Oct 12 01:52	30°  R  0	
				direct	5425 Nov 21 15:04	27°  52'38	
conjunction	5420 Nov 03 04:32	12°  01'42	38		5425 Dec 31 12:47	0°  0	
minimum elong	5420 Nov 03 04:31	12°  01'42	38	evening set	5426 Mar 27 09:38	16°  52'10	
max. Earth dist.	5420 Nov 03 01:11	12°  01'40	50				
	5420 Nov 13 19:55	15°  0		conjunction	5426 Apr 09 07:41	19°  52'20	-0°50'31
morning rise	5420 Nov 16 07:04	15°  01'31	40	minimum elong	5426 Apr 09 07:40	19°  52'19	0°50'31
	5421 Feb 05 23:43	0°  0		max. Earth dist.	5426 Apr 08 14:20	19°  52'53	6.00187 AU
retrograde	5421 Mar 16 18:06	2°  01'15	38	morning rise	5426 Apr 22 07:20	23°  52'03	38
	5421 Apr 24 15:24	30°  R  0			5426 May 22 05:07	0°  0	
opposition	5421 May 16 10:02	27°  01'20	29	retrograde	5426 Aug 31 06:49	13°  52'21	40
min. Earth dist.	5421 May 16 21:36	27°  01'16	45	opposition	5426 Oct 30 04:36	8°  52'07	-1°23'40
direct	5421 Jul 17 19:32	22°  01'18	15	min. Earth dist.	5426 Oct 30 04:55	8°  52'01	3.95129 AU
	5421 Oct 03 08:41	0°  0		direct	5426 Dec 27 20:52	3°  52'03	
evening set	5421 Nov 20 19:05	9°  01'36	18		5427 Mar 27 22:31	15°  52'08	
max. Earth dist.	5421 Dec 02 11:15	12°  01'06	33	evening set	5427 May 02 21:58	23°  52'19	
conjunction	5421 Dec 03 18:17	12°  01'23	16	conjunction	5427 May 16 02:59	26°  52'35	-0°54'58
minimum elong	5421 Dec 03 18:18	12°  01'23	16	minimum elong	5427 May 16 03:00	26°  52'33	0°54'59
morning rise	5421 Dec 16 15:05	15°  01'09	05	max. Earth dist.	5427 May 16 21:08	26°  52'46	26
	5422 Mar 12 06:36	0°  0		morning rise	5427 May 29 10:48	29°  52'49	59
retrograde	5422 Apr 15 19:00	1° 01'38	47		5427 May 30 03:21	0° 0	
	5422 May 20 08:53	30° R 0		retrograde	5427 Oct 08 22:20	20° 52'40	58

opposition	5427 Dec 07 12:23	15° Π 38'45	-1°13'15	opposition	5433 May 20 15:10	1° \mathcal{A} 37'01	1°19'07
min. Earth dist.	5427 Dec 06 12:32	15° Π 46'48	3.92313 AU	min. Earth dist.	5433 May 21 06:21	1° \mathcal{A} 32'07	4.48272 AU
direct	5428 Feb 03 08:42	10° Π 44'23			5433 Jun 02 09:21	30° $\mathcal{R}\mathcal{M}$	
	5428 Jun 05 23:58	0° \mathcal{E}		direct	5433 Jul 22 03:27	26° \mathcal{M} 34'49	
evening set	5428 Jun 08 18:05	0° \mathcal{E} 39'35			5433 Sep 09 19:50	0° \mathcal{A}	
				evening set	5433 Nov 25 01:06	13° \mathcal{A} 52'58	
conjunction	5428 Jun 22 06:45	3° \mathcal{E} 55'09	-0°37'23	conjunction	5433 Dec 07 23:50	16° \mathcal{A} 39'52	0°48'53
minimum elong	5428 Jun 22 06:47	3° \mathcal{E} 55'10	0°37'24	minimum elong	5433 Dec 07 23:51	16° \mathcal{A} 39'52	0°48'54
max. Earth dist.	5428 Jun 24 06:55	4° \mathcal{E} 24'12	5.94785 AU	max. Earth dist.	5433 Dec 06 14:15	16° \mathcal{A} 21'46	6.47969 AU
morning rise	5428 Jul 05 22:14	7° \mathcal{E} 12'00		morning rise	5433 Dec 20 19:54	19° \mathcal{A} 25'36	
retrograde	5428 Nov 14 07:39	27° \mathcal{E} 39'44			5434 Feb 12 18:02	0° \mathcal{Z}	
min. Earth dist.	5429 Jan 11 06:55	22° \mathcal{E} 47'40	3.99709 AU	retrograde	5434 Apr 20 01:15	6° \mathcal{Z} 06'13	
opposition	5429 Jan 12 19:35	22° \mathcal{E} 35'10	-0°33'14	opposition	5434 Jun 19 23:02	1° \mathcal{Z} 13'30	0°57'59
direct	5429 Mar 11 21:26	17° \mathcal{E} 38'28		min. Earth dist.	5434 Jun 21 05:12	1° \mathcal{Z} 03'52	4.45739 AU
	5429 Jun 15 01:43	0° \mathcal{Q}			5434 Jun 29 15:34	30° $\mathcal{R}\mathcal{A}$	
evening set	5429 Jul 16 09:15	7° \mathcal{Q} 04'01		direct	5434 Aug 21 16:58	26° \mathcal{A} 12'04	
					5434 Oct 13 03:43	0° \mathcal{Z}	
conjunction	5429 Jul 30 02:22	10° \mathcal{Q} 16'07	-0°05'34	evening set	5434 Dec 25 09:09	13° \mathcal{Z} 40'16	
minimum elong	5429 Jul 30 02:21	10° \mathcal{Q} 16'07	0°05'34	max. Earth dist.	5435 Jan 05 01:29	16° \mathcal{Z} 00'25	6.41477 AU
behind sun begin	5429 Jul 29 18:18	10° \mathcal{Q} 11'26					
behind sun end	5429 Jul 30 10:24	10° \mathcal{Q} 20'48		conjunction	5435 Jan 07 04:00	16° \mathcal{Z} 28'09	0°27'59
max. Earth dist.	5429 Aug 01 14:20	10° \mathcal{Q} 51'11	6.06386 AU	minimum elong	5435 Jan 07 04:01	16° \mathcal{Z} 28'09	0°28'01
morning rise	5429 Aug 12 20:40	13° \mathcal{Q} 28'34		morning rise	5435 Jan 19 20:58	19° \mathcal{Z} 15'16	
	5429 Aug 19 11:24	15° \mathcal{Q}			5435 Mar 14 13:06	0° \mathcal{A}	
asc. node	5429 Oct 02 12:17	24° \mathcal{Q} 23'34		retrograde	5435 May 21 13:58	6° \mathcal{A} 25'00	
	5429 Nov 06 07:52	0° \mathcal{M}		opposition	5435 Jul 21 11:24	1° \mathcal{A} 32'48	0°20'39
retrograde	5429 Dec 19 05:54	2° \mathcal{M} 51'34		min. Earth dist.	5435 Jul 23 02:41	1° \mathcal{A} 20'17	4.35631 AU
	5430 Jan 31 00:19	30° $\mathcal{R}\mathcal{Q}$			5435 Aug 02 18:58	30° $\mathcal{R}\mathcal{Z}$	
min. Earth dist.	5430 Feb 15 09:46	27° \mathcal{Q} 59'22	4.14149 AU	direct	5435 Sep 21 20:09	26° \mathcal{Z} 32'47	
opposition	5430 Feb 16 21:09	27° \mathcal{Q} 47'22	0°17'06		5435 Nov 09 23:42	0° \mathcal{A}	
direct	5430 Apr 16 22:07	22° \mathcal{Q} 47'56		desc. node	5436 Jan 20 11:37	13° \mathcal{A} 25'21	
	5430 Jun 27 01:28	0° \mathcal{M}		evening set	5436 Jan 25 07:56	14° \mathcal{A} 30'19	
evening set	5430 Aug 21 11:15	11° \mathcal{M} 28'18			5436 Jan 27 12:48	15° \mathcal{A}	
				max. Earth dist.	5436 Feb 04 19:01	16° \mathcal{A} 51'52	6.28485 AU
conjunction	5430 Sep 04 02:54	14° \mathcal{M} 32'34	0°26'58	conjunction	5436 Feb 07 01:22	17° \mathcal{A} 22'38	-0°01'26
minimum elong	5430 Sep 04 02:52	14° \mathcal{M} 32'33	0°26'58	minimum elong	5436 Feb 07 01:21	17° \mathcal{A} 22'37	0°01'25
max. Earth dist.	5430 Sep 06 01:45	14° \mathcal{M} 58'57	6.22350 AU	behind sun begin	5436 Feb 06 17:22	17° \mathcal{A} 18'07	
morning rise	5430 Sep 17 18:22	17° \mathcal{M} 36'22		behind sun end	5436 Feb 07 09:20	17° \mathcal{A} 27'07	
	5430 Nov 18 08:45	0° \mathcal{A}		morning rise	5436 Feb 19 17:51	20° \mathcal{A} 14'45	
retrograde	5431 Jan 20 13:38	5° \mathcal{A} 46'06			5436 Apr 05 23:08	0° \mathcal{H}	
opposition	5431 Mar 21 13:34	0° \mathcal{A} 44'34	0°58'14	retrograde	5436 Jun 23 05:20	8° \mathcal{H} 20'55	
min. Earth dist.	5431 Mar 20 14:26	0° \mathcal{A} 52'18	4.30132 AU	opposition	5436 Aug 22 23:21	3° \mathcal{H} 27'41	-0°25'03
	5431 Mar 27 03:26	30° $\mathcal{R}\mathcal{M}$		min. Earth dist.	5436 Aug 24 10:22	3° \mathcal{H} 16'25	4.20537 AU
direct	5431 May 20 22:24	25° \mathcal{M} 43'11			5436 Sep 21 19:52	30° $\mathcal{R}\mathcal{A}$	
	5431 Jul 14 13:21	0° \mathcal{A}		direct	5436 Oct 23 05:33	28° \mathcal{A} 29'50	
evening set	5431 Sep 24 09:21	13° \mathcal{A} 40'46			5436 Nov 23 11:50	0° \mathcal{H}	
				evening set	5437 Feb 25 19:49	17° \mathcal{H} 10'46	
conjunction	5431 Oct 07 19:54	16° \mathcal{A} 36'38	0°49'18	max. Earth dist.	5437 Mar 08 21:53	19° \mathcal{H} 46'17	6.12528 AU
minimum elong	5431 Oct 07 19:52	16° \mathcal{A} 36'37	0°49'18				
max. Earth dist.	5431 Oct 08 17:35	16° \mathcal{A} 48'29	6.37108 AU	conjunction	5437 Mar 10 14:19	20° \mathcal{H} 10'00	-0°31'42
morning rise	5431 Oct 21 04:35	19° \mathcal{A} 31'24		minimum elong	5437 Mar 10 14:17	20° \mathcal{H} 10'00	0°31'43
	5431 Dec 12 15:12	0° \mathcal{M}		morning rise	5437 Mar 23 09:10	23° \mathcal{H} 09'46	
retrograde	5432 Feb 20 03:37	6° \mathcal{M} 43'48			5437 Apr 22 15:22	0° \mathcal{Y}	
opposition	5432 Apr 20 12:06	1° \mathcal{M} 45'53	1°19'45	retrograde	5437 Jul 29 12:31	12° \mathcal{Y} 29'03	
min. Earth dist.	5432 Apr 20 07:24	1° \mathcal{M} 47'26	4.42627 AU	opposition	5437 Sep 27 20:16	7° \mathcal{Y} 33'26	-1°05'49
	5432 May 04 06:26	30° $\mathcal{R}\mathcal{A}$		min. Earth dist.	5437 Sep 28 16:34	7° \mathcal{Y} 26'49	4.04957 AU
direct	5432 Jun 21 03:21	26° \mathcal{A} 43'42		direct	5437 Nov 26 16:58	2° \mathcal{Y} 38'01	
	5432 Aug 08 06:17	0° \mathcal{M}		evening set	5438 Apr 01 11:16	22° \mathcal{Y} 04'01	
evening set	5432 Oct 25 08:30	14° \mathcal{M} 12'07					
	5432 Oct 29 02:03	15° \mathcal{M}		conjunction	5438 Apr 14 10:03	25° \mathcal{Y} 11'11	-0°52'27
conjunction	5432 Nov 07 12:34	17° \mathcal{M} 01'43	0°56'45	minimum elong	5438 Apr 14 10:02	25° \mathcal{Y} 11'10	0°52'28
minimum elong	5432 Nov 07 12:34	17° \mathcal{M} 01'43	0°56'46	max. Earth dist.	5438 Apr 13 21:11	25° \mathcal{Y} 03'25	5.98734 AU
max. Earth dist.	5432 Nov 07 03:24	16° \mathcal{M} 56'48	6.46406 AU	morning rise	5438 Apr 27 10:47	28° \mathcal{Y} 19'37	
morning rise	5432 Nov 20 14:23	19° \mathcal{M} 50'08			5438 May 04 10:55	0° \mathcal{B}	
	5433 Jan 11 05:06	0° \mathcal{A}			5438 Jul 18 03:40	15° \mathcal{B}	
retrograde	5433 Mar 20 23:20	6° \mathcal{A} 31'44					

retrograde	5438 Sep 05 17:00	18°♄44'09	opposition	5444 Apr 24 16:44	6°♍03'51	1°20'57
	5438 Oct 26 02:39	15°♄	min. Earth dist.	5444 Apr 24 14:55	6°♍04'27	4.43619 AU
opposition	5438 Nov 04 14:28	13°♄45'02 -1°24'18	direct	5444 Jun 25 11:08	1°♍01'36	
min. Earth dist.	5438 Nov 04 10:00	13°♄46'31 3.94401 AU		5444 Oct 13 03:37	15°♍	
direct	5439 Jan 02 01:53	8°♄51'05	evening set	5444 Oct 29 15:56	18°♍28'17	
	5439 Mar 06 04:59	15°♄				
evening set	5439 May 08 04:48	28°♄45'23	conjunction	5444 Nov 11 19:22	21°♍17'27	0°56'31
	5439 May 13 07:44	0°♂	minimum elong	5444 Nov 11 19:22	21°♍17'27	0°56'31
			max. Earth dist.	5444 Nov 11 07:37	21°♍11'08	6.46839 AU
conjunction	5439 May 21 10:50	1°♂58'53 -0°53'44	morning rise	5444 Nov 24 20:11	24°♍05'21	
minimum elong	5439 May 21 10:51	1°♂58'54 0°53'45		5444 Dec 23 09:47	0°♄	
max. Earth dist.	5439 May 22 09:47	2°♂12'53 5.92414 AU	retrograde	5445 Mar 25 02:35	10°♄45'55	
morning rise	5439 Jun 03 19:46	5°♂13'58	opposition	5445 May 24 19:41	5°♄51'35	1°17'18
retrograde	5439 Oct 14 05:58	26°♂03'27	min. Earth dist.	5445 May 25 12:46	5°♄46'05	4.48145 AU
opposition	5439 Dec 12 20:07	21°♂00'42 -1°09'02	direct	5445 Jul 26 09:18	0°♄49'31	
min. Earth dist.	5439 Dec 11 17:57	21°♂09'34 3.93142 AU	evening set	5445 Nov 29 07:03	18°♄08'44	
direct	5440 Feb 08 17:14	16°♂06'02	max. Earth dist.	5445 Dec 10 15:28	20°♄35'21	6.47293 AU
	5440 May 19 13:25	0°♄				
evening set	5440 Jun 14 00:52	5°♄57'04	conjunction	5445 Dec 12 05:01	20°♄55'38	0°46'38
			minimum elong	5445 Dec 12 05:02	20°♄55'39	0°46'40
conjunction	5440 Jun 27 14:29	9°♄12'18 -0°33'29	morning rise	5445 Dec 25 00:43	23°♄41'29	
minimum elong	5440 Jun 27 14:31	9°♄12'19 0°33'30		5446 Jan 24 11:06	0°♄	
max. Earth dist.	5440 Jun 29 18:51	9°♄43'45 5.96301 AU	retrograde	5446 Apr 24 10:09	10°♄25'05	
morning rise	5440 Jul 11 06:29	12°♄28'40	opposition	5446 Jun 24 07:08	5°♄32'32	0°53'33
	5440 Oct 08 02:15	0°♂	min. Earth dist.	5446 Jun 25 15:33	5°♄22'11	4.44560 AU
retrograde	5440 Nov 19 07:57	2°♂47'41	direct	5446 Aug 26 01:23	0°♄31'15	
	5440 Dec 31 10:17	30°♄	evening set	5446 Dec 29 16:06	18°♄02'57	
min. Earth dist.	5441 Jan 16 06:55	27°♄55'32 4.01726 AU	max. Earth dist.	5447 Jan 09 07:35	20°♄23'09	6.39887 AU
opposition	5441 Jan 17 19:42	27°♄43'00 -0°26'19				
direct	5441 Mar 17 00:07	22°♄45'54	conjunction	5447 Jan 11 10:46	20°♄51'20	0°24'13
	5441 May 25 22:14	0°♂	minimum elong	5447 Jan 11 10:47	20°♄51'21	0°24'13
evening set	5441 Jul 21 11:27	12°♂04'28	morning rise	5447 Jan 24 03:29	23°♄39'00	
	5441 Aug 03 01:49	15°♂		5447 Feb 23 02:36	0°♄	
			retrograde	5447 May 26 02:58	10°♄55'21	
conjunction	5441 Aug 04 04:29	15°♂15'30 -0°00'46	opposition	5447 Jul 26 01:20	6°♄03'03	0°14'27
minimum elong	5441 Aug 04 04:28	15°♂15'29 0°00'48	min. Earth dist.	5447 Jul 27 15:32	5°♄50'52	4.33729 AU
behind sun begin	5441 Aug 03 20:04	15°♂10'38	direct	5447 Sep 26 06:11	1°♄03'21	
behind sun end	5441 Aug 04 12:52	15°♂20'20	desc. node	5447 Nov 29 20:09	6°♄48'52	
max. Earth dist.	5441 Aug 06 14:39	15°♂49'17 6.08691 AU		5448 Jan 11 05:45	15°♄	
asc. node	5441 Aug 12 22:12	17°♂17'10	evening set	5448 Jan 29 19:08	19°♄06'11	
morning rise	5441 Aug 17 22:49	18°♂26'48	max. Earth dist.	5448 Feb 09 08:06	21°♄29'29	6.26413 AU
	5441 Oct 11 08:46	0°♄				
retrograde	5441 Dec 23 18:32	7°♄38'45	conjunction	5448 Feb 11 12:28	21°♄59'17	-0°05'53
min. Earth dist.	5442 Feb 20 01:48	2°♄46'25 4.16515 AU	minimum elong	5448 Feb 11 12:27	21°♄59'17	0°05'52
opposition	5442 Feb 21 12:04	2°♄34'48 0°23'40	behind sun begin	5448 Feb 11 04:50	21°♄54'58	
	5442 Mar 13 14:35	30°♄	behind sun end	5448 Feb 11 20:05	22°♄03'36	
direct	5442 Apr 21 16:50	27°♂35'00	morning rise	5448 Feb 24 05:04	24°♄52'17	
	5442 May 31 03:38	0°♄		5448 Mar 18 09:20	0°♄	
evening set	5442 Aug 26 06:05	16°♄08'42	retrograde	5448 Jun 28 04:33	13°♄07'36	
			opposition	5448 Aug 27 20:47	8°♄14'08	-0°31'28
conjunction	5442 Sep 08 21:17	19°♄11'47 0°30'48	min. Earth dist.	5448 Aug 29 07:09	8°♄03'04	4.18417 AU
minimum elong	5442 Sep 08 21:15	19°♄11'46 0°30'48	direct	5448 Oct 28 00:02	3°♄16'37	
max. Earth dist.	5442 Sep 10 16:52	19°♄36'13 6.24595 AU	evening set	5449 Mar 02 13:07	22°♄03'29	
morning rise	5442 Sep 22 11:52	22°♄14'15	max. Earth dist.	5449 Mar 13 18:00	24°♄41'22	6.10530 AU
	5442 Oct 29 00:49	0°♄				
retrograde	5443 Jan 24 21:26	10°♄14'56	conjunction	5449 Mar 15 07:58	25°♄03'44	-0°35'27
opposition	5443 Mar 25 21:45	5°♄13'55 1°02'28	minimum elong	5449 Mar 15 07:57	25°♄03'43	0°35'27
min. Earth dist.	5443 Mar 25 01:42	5°♄20'35 4.32078 AU	morning rise	5449 Mar 28 03:28	28°♄04'37	
direct	5443 May 25 11:40	0°♄12'22		5449 Apr 05 09:33	0°♄	
evening set	5443 Sep 28 21:20	18°♄05'20	retrograde	5449 Aug 03 17:05	17°♄33'18	
			opposition	5449 Oct 03 00:23	12°♄37'17	-1°10'06
conjunction	5443 Oct 12 06:59	21°♄00'15 0°51'15	min. Earth dist.	5449 Oct 03 16:48	12°♄31'55	4.03263 AU
minimum elong	5443 Oct 12 06:57	21°♄00'14 0°51'15	direct	5449 Dec 01 15:16	7°♄42'09	
max. Earth dist.	5443 Oct 12 23:35	21°♄09'17 6.38607 AU	evening set	5450 Apr 06 11:19	27°♄12'50	
morning rise	5443 Oct 25 14:52	23°♄54'04		5450 Apr 18 00:17	0°♄	
	5443 Nov 23 18:15	0°♍				
retrograde	5444 Feb 24 06:57	11°♍01'18	conjunction	5450 Apr 19 10:52	0°♄20'56	-0°53'57

minimum elong	5450 Apr 19 10:51	0°♄20'56	0°53'58	max. Earth dist.	5455 Oct 17 09:03	25°♂36'25	6.40001 AU
max. Earth dist.	5450 Apr 19 02:43	0°♄16'00	5.97488 AU	morning rise	5455 Oct 30 02:55	28°♂22'15	
morning rise	5450 May 02 12:35	3°♄30'23			5455 Nov 06 17:16	0°♄	
	5450 Jun 22 20:18	15°♄			5456 Feb 12 10:56	15°♄	
retrograde	5450 Sep 11 01:38	24°♄00'53		retrograde	5456 Feb 28 13:09	15°♄24'31	
opposition	5450 Nov 09 22:07	19°♄01'14	-1°24'14		5456 Mar 15 13:06	15°♄♄	
min. Earth dist.	5450 Nov 09 14:51	19°♄03'39	3.93736 AU	opposition	5456 Apr 28 23:24	10°♄27'39	1°21'46
	5450 Dec 15 11:11	15°♄♄		min. Earth dist.	5456 Apr 29 00:20	10°♄27'20	4.44637 AU
direct	5451 Jan 07 07:15	14°♄07'18		direct	5456 Jun 29 21:56	5°♄25'27	
	5451 Jan 30 01:15	15°♄			5456 Sep 25 10:39	15°♄	
	5451 Apr 26 11:11	0°♄		evening set	5456 Nov 03 01:15	22°♄50'06	
evening set	5451 May 13 09:46	4°♄02'49		max. Earth dist.	5456 Nov 15 11:51	25°♄30'10	6.47424 AU
conjunction	5451 May 26 17:01	7°♄16'53	-0°52'05	conjunction	5456 Nov 16 03:47	25°♄38'43	0°56'00
minimum elong	5451 May 26 17:02	7°♄16'53	0°52'06	minimum elong	5456 Nov 16 03:47	25°♄38'43	0°56'01
max. Earth dist.	5451 May 27 21:32	7°♄34'15	5.92402 AU	morning rise	5456 Nov 29 03:52	28°♄26'06	
morning rise	5451 Jun 09 02:57	10°♄32'27			5456 Dec 06 12:42	0°♄♄	
	5451 Sep 20 15:39	0°♄♄		retrograde	5457 Mar 29 08:03	15°♄♄05'03	
retrograde	5451 Oct 19 13:17	1°♄20'44		opposition	5457 May 29 02:12	10°♄11'01	1°15'05
	5451 Nov 17 05:15	30°♄♄		min. Earth dist.	5457 May 29 21:12	10°♄04'55	4.48309 AU
min. Earth dist.	5451 Dec 16 21:37	26°♄27'09	3.93799 AU	direct	5457 Jul 30 17:32	5°♄09'02	
opposition	5451 Dec 18 01:33	26°♄17'41	-1°04'19	evening set	5457 Dec 03 13:39	22°♄28'00	
direct	5452 Feb 13 22:25	21°♄22'48		max. Earth dist.	5457 Dec 14 21:07	24°♄54'13	6.47045 AU
	5452 Apr 30 03:15	0°♄♄					
evening set	5452 Jun 19 06:51	11°♄10'57		conjunction	5457 Dec 16 11:08	25°♄14'46	0°44'10
conjunction	5452 Jul 02 21:05	14°♄25'56	-0°29'21	minimum elong	5457 Dec 16 11:09	25°♄14'47	0°44'12
minimum elong	5452 Jul 02 21:07	14°♄25'57	0°29'21	morning rise	5457 Dec 29 06:02	28°♄00'27	
max. Earth dist.	5452 Jul 05 02:14	14°♄57'44	5.97535 AU		5458 Jan 07 14:09	0°♄♄	
morning rise	5452 Jul 16 13:56	17°♄42'01		retrograde	5458 Apr 28 16:31	14°♄45'34	
	5452 Sep 10 23:17	0°♄♄		opposition	5458 Jun 28 15:34	9°♄53'09	0°48'53
retrograde	5452 Nov 24 05:17	7°♄53'36		min. Earth dist.	5458 Jun 30 00:26	9°♄42'40	4.43922 AU
min. Earth dist.	5453 Jan 21 04:53	3°♄01'43	4.03395 AU	direct	5458 Aug 30 09:15	4°♄52'05	
opposition	5453 Jan 22 18:32	2°♄48'53	-0°19'16	evening set	5459 Jan 02 22:46	22°♄25'17	
	5453 Feb 13 20:13	30°♄♄♄		max. Earth dist.	5459 Jan 13 12:27	24°♄44'53	6.38900 AU
direct	5453 Mar 22 00:40	27°♄51'23		conjunction	5459 Jan 15 16:51	25°♄13'50	0°20'23
	5453 Apr 27 09:09	0°♄♄		minimum elong	5459 Jan 15 16:52	25°♄13'51	0°20'25
asc. node	5453 Jun 22 21:56	9°♄35'31		morning rise	5459 Jan 28 09:23	28°♄01'48	
	5453 Jul 17 11:31	15°♄♄			5459 Feb 06 10:01	0°♄♄♄	
evening set	5453 Jul 26 13:33	17°♄04'44			5459 May 15 00:48	15°♄♄	
				retrograde	5459 May 30 16:07	15°♄♄22'44	
conjunction	5453 Aug 09 06:44	20°♄14'55	0°04'05		5459 Jun 15 06:11	15°♄♄♄	
minimum elong	5453 Aug 09 06:43	20°♄14'54	0°04'05	opposition	5459 Jul 30 13:56	10°♄♄30'20	0°08'21
behind sun begin	5453 Aug 08 22:28	20°♄10'09		min. Earth dist.	5459 Aug 01 04:58	10°♄♄17'52	4.32429 AU
behind sun end	5453 Aug 09 14:58	20°♄19'39		direct	5459 Sep 30 18:06	5°♄♄30'48	
max. Earth dist.	5453 Aug 11 15:43	20°♄47'53	6.10644 AU	desc. node	5459 Oct 11 12:11	5°♄♄41'30	
morning rise	5453 Aug 23 00:47	23°♄25'13			5459 Dec 24 19:59	15°♄♄	
	5453 Sep 21 16:16	0°♄♄♄		evening set	5460 Feb 03 03:51	23°♄♄36'51	
retrograde	5453 Dec 28 10:29	12°♄♄27'43		max. Earth dist.	5460 Feb 13 17:42	26°♄♄01'08	6.24900 AU
min. Earth dist.	5454 Feb 24 19:43	7°♄♄34'56	4.18541 AU				
opposition	5454 Feb 26 03:42	7°♄♄24'07	0°30'05	conjunction	5460 Feb 15 21:12	26°♄♄30'31	-0°10'05
direct	5454 Apr 26 13:44	2°♄♄24'02		minimum elong	5460 Feb 15 21:12	26°♄♄30'31	0°10'05
evening set	5454 Aug 31 02:03	20°♄♄52'22		behind sun begin	5460 Feb 15 14:45	26°♄♄26'51	
				behind sun end	5460 Feb 16 03:39	26°♄♄34'11	
conjunction	5454 Sep 13 16:39	23°♄♄54'22	0°34'29	morning rise	5460 Feb 28 13:52	29°♄♄24'10	
minimum elong	5454 Sep 13 16:38	23°♄♄54'21	0°34'29		5460 Mar 02 05:06	0°♄♄♄	
max. Earth dist.	5454 Sep 15 09:28	24°♄♄17'08	6.26527 AU	retrograde	5460 Jul 02 21:55	17°♄♄46'43	
morning rise	5454 Sep 27 06:29	26°♄♄55'40		opposition	5460 Sep 01 14:47	12°♄♄52'56	-0°37'23
	5454 Oct 11 07:44	0°♄♄		min. Earth dist.	5460 Sep 02 23:05	12°♄♄42'31	4.16793 AU
retrograde	5455 Jan 29 05:01	14°♄♄48'25		direct	5460 Nov 01 13:16	7°♄♄55'41	
opposition	5455 Mar 30 07:22	9°♄♄47'54	1°06'24	evening set	5461 Mar 07 02:35	26°♄♄46'53	
min. Earth dist.	5455 Mar 29 12:51	9°♄♄54'04	4.33792 AU	max. Earth dist.	5461 Mar 18 10:16	29°♄♄26'58	6.08923 AU
direct	5455 May 30 00:41	4°♄♄46'15					
evening set	5455 Oct 03 11:18	22°♄♄35'22		conjunction	5461 Mar 19 21:41	29°♄♄47'55	-0°38'46
				minimum elong	5461 Mar 19 21:40	29°♄♄47'54	0°38'45
conjunction	5455 Oct 16 20:06	25°♄♄29'22	0°52'56		5461 Mar 20 18:08	0°♄♄♄	
minimum elong	5455 Oct 16 20:05	25°♄♄29'22	0°52'57	morning rise	5461 Apr 01 17:45	2°♄♄49'44	





























































































































retrograde	5461 Aug 08 18:28	22°♎26'37		evening set	5467 Oct 08 00:33	27°♊03'46	
opposition	5461 Oct 07 23:54	17°♎30'07 -1°13'40					
min. Earth dist.	5461 Oct 08 14:37	17°♎25'17 4.01802 AU		conjunction	5467 Oct 21 08:34	29°♊56'54 0°54'16	
direct	5461 Dec 06 11:25	12°♎35'07		minimum elong	5467 Oct 21 08:33	29°♊56'54 0°54'16	
	5462 Apr 02 05:34	0°♏			5467 Oct 21 14:16	0°♌	
evening set	5462 Apr 11 06:49	2°♏09'55		max. Earth dist.	5467 Oct 21 18:51	0°♌02'29 6.41351 AU	
				morning rise	5467 Nov 03 14:23	2°♌48'50	
conjunction	5462 Apr 24 07:22	5°♏18'58 -0°54'58			5468 Jan 06 03:50	15°♌	
minimum elong	5462 Apr 24 07:22	5°♏18'58 0°54'59		retrograde	5468 Mar 03 17:28	19°♌46'14	
max. Earth dist.	5462 Apr 24 03:35	5°♏16'40 5.96320 AU			5468 May 01 22:20	15°♌	
morning rise	5462 May 07 10:01	8°♏29'23		opposition	5468 May 03 05:56	14°♌49'43 1°22'03	
	5462 Jun 04 04:45	15°♏		min. Earth dist.	5468 May 03 08:19	14°♌48'56 4.45628 AU	
retrograde	5462 Sep 16 06:05	29°♏05'22		direct	5468 Jul 04 06:34	9°♌47'28	
opposition	5462 Nov 15 00:27	24°♏05'18 -1°23'32			5468 Sep 04 10:56	15°♌	
min. Earth dist.	5462 Nov 14 14:56	24°♏08'29 3.93010 AU		evening set	5468 Nov 07 09:42	27°♌09'51	
direct	5463 Jan 12 06:11	19°♏11'21					
	5463 Apr 08 20:54	0°♐		conjunction	5468 Nov 20 11:23	29°♌57'56 0°55'08	
evening set	5463 May 18 10:43	9°♐08'48		minimum elong	5468 Nov 20 11:24	29°♌57'56 0°55'10	
				max. Earth dist.	5468 Nov 19 16:44	29°♌47'54 6.47961 AU	
conjunction	5463 May 31 18:56	12°♐23'29 -0°50'07			5468 Nov 20 15:15	0°♑	
minimum elong	5463 May 31 18:58	12°♐23'30 0°50'09		morning rise	5468 Dec 03 10:33	2°♑44'46	
max. Earth dist.	5463 Jun 02 01:21	12°♐42'00 5.92176 AU		retrograde	5469 Apr 02 13:16	19°♑22'19	
morning rise	5463 Jun 14 06:13	15°♐39'44		opposition	5469 Jun 02 08:19	14°♑28'37 1°12'25	
	5463 Aug 19 08:31	0°♑		min. Earth dist.	5469 Jun 03 05:50	14°♑21'43 4.48327 AU	
retrograde	5463 Oct 24 14:23	6°♑27'51		direct	5469 Aug 04 01:44	9°♑26'43	
min. Earth dist.	5463 Dec 21 20:28	1°♑34'43 3.94109 AU		evening set	5469 Dec 07 19:47	26°♑45'55	
opposition	5463 Dec 23 02:45	1°♑24'26 -0°59'22		max. Earth dist.	5469 Dec 18 22:39	29°♑09'57 6.46509 AU	
	5464 Jan 02 15:26	30°♑♐					
direct	5464 Feb 18 22:27	26°♐29'14		conjunction	5469 Dec 20 16:33	29°♑32'38 0°41'25	
	5464 Apr 05 12:15	0°♑		minimum elong	5469 Dec 20 16:34	29°♑32'39 0°41'26	
evening set	5464 Jun 24 09:35	16°♑16'13			5469 Dec 22 19:04	0°♒	
				morning rise	5470 Jan 02 11:06	2°♒18'22	
conjunction	5464 Jul 08 00:46	19°♑31'13 -0°25'10		retrograde	5470 May 03 01:27	19°♒06'15	
minimum elong	5464 Jul 08 00:47	19°♑31'14 0°25'11		opposition	5470 Jul 03 00:31	14°♒13'54 0°43'51	
max. Earth dist.	5464 Jul 10 07:51	20°♑04'06 5.98368 AU		min. Earth dist.	5470 Jul 04 11:00	14°♒02'54 4.42842 AU	
morning rise	5464 Jul 21 18:09	22°♑47'10		direct	5470 Sep 03 17:31	9°♒12'59	
	5464 Aug 22 07:43	0°♓		evening set	5471 Jan 07 05:34	26°♒49'17	
retrograde	5464 Nov 29 03:15	12°♓53'08		max. Earth dist.	5471 Jan 17 19:17	29°♒09'22 6.37348 AU	
min. Earth dist.	5465 Jan 26 02:24	8°♓00'59 4.04636 AU					
opposition	5465 Jan 27 15:16	7°♓48'25 -0°12'22		conjunction	5471 Jan 19 23:33	29°♒38'21 0°16'21	
direct	5465 Mar 27 00:24	2°♓50'34		minimum elong	5471 Jan 19 23:34	29°♒38'21 0°16'23	
asc. node	5465 May 04 08:26	5°♓12'35			5471 Jan 21 14:35	0°♓	
	5465 Jun 30 02:16	15°♓		morning rise	5471 Feb 01 15:47	2°♓26'50	
evening set	5465 Jul 31 14:14	22°♓00'16			5471 Apr 06 15:09	15°♓	
				retrograde	5471 Jun 04 06:13	19°♓54'42	
conjunction	5465 Aug 14 07:31	25°♓09'47 0°08'39		opposition	5471 Aug 04 04:35	15°♓02'13 0°01'58	
minimum elong	5465 Aug 14 07:30	25°♓09'46 0°08'39			5471 Aug 04 11:33	15°♓	
behind sun begin	5465 Aug 14 00:16	25°♓05'38		min. Earth dist.	5471 Aug 05 19:15	14°♓49'53 4.30484 AU	
behind sun end	5465 Aug 14 14:43	25°♓13'55		desc. node	5471 Aug 21 05:20	12°♓55'45	
max. Earth dist.	5465 Aug 16 16:37	25°♓42'41 6.12192 AU		direct	5471 Oct 05 04:56	10°♓03'01	
morning rise	5465 Aug 28 01:25	28°♓19'17			5471 Dec 03 08:52	15°♓	
	5465 Sep 04 10:50	0°♔		evening set	5472 Feb 07 15:18	28°♓14'40	
retrograde	5466 Jan 01 23:55	17°♔13'41			5472 Feb 15 07:50	0°♕	
min. Earth dist.	5466 Mar 01 10:25	12°♔21'09 4.20247 AU		max. Earth dist.	5472 Feb 18 05:24	0°♕39'52 6.22707 AU	
opposition	5466 Mar 02 18:15	12°♔10'24 0°36'07					
direct	5466 May 01 07:01	7°♔10'03		conjunction	5472 Feb 20 08:35	1°♕09'13 -0°14'26	
evening set	5466 Sep 04 21:37	25°♔33'58		minimum elong	5472 Feb 20 08:34	1°♕09'13 0°14'26	
				behind sun begin	5472 Feb 20 04:46	1°♕07'03	
conjunction	5466 Sep 18 11:33	28°♔34'57 0°37'52		behind sun end	5472 Feb 20 12:21	1°♕11'23	
minimum elong	5466 Sep 18 11:32	28°♔34'56 0°37'51		morning rise	5472 Mar 04 01:36	4°♕03'54	
max. Earth dist.	5466 Sep 20 00:49	28°♔55'40 6.28261 AU		retrograde	5472 Jul 07 22:36	22°♕36'35	
	5466 Sep 24 20:33	0°♕		opposition	5472 Sep 06 13:15	17°♕42'30 -0°43'25	
morning rise	5466 Oct 02 00:38	1°♕35'11		min. Earth dist.	5472 Sep 07 20:21	17°♕32'27 4.14494 AU	
retrograde	5467 Feb 02 14:52	19°♕20'31		direct	5472 Nov 06 07:34	12°♕45'32	
opposition	5467 Apr 03 17:07	14°♕20'27 1°09'50			5473 Mar 04 12:04	0°♖	
min. Earth dist.	5467 Apr 03 01:23	14°♕25'41 4.35403 AU		evening set	5473 Mar 11 21:05	1°♖43'39	
direct	5467 Jun 03 15:39	9°♕18'38		max. Earth dist.	5473 Mar 23 09:17	4°♖27'08 6.06734 AU	

conjunction	5473 Mar 24 16:54	4° Υ 45'54	-0°42'01	morning rise	5478 Oct 06 17:12	6° Ω 12'14	
minimum elong	5473 Mar 24 16:52	4° Υ 45'53	0°42'01	retrograde	5479 Feb 06 20:04	23° Ω 48'14	
morning rise	5473 Apr 06 13:36	7° Υ 48'59		min. Earth dist.	5479 Apr 07 10:45	18° Ω 53'18	4.37513 AU
retrograde	5473 Aug 14 02:00	27° Υ 36'16		opposition	5479 Apr 08 00:53	18° Ω 48'37	1°12'48
opposition	5473 Oct 13 05:45	22° Υ 39'21	-1°16'58	direct	5479 Jun 08 02:50	13° Ω 46'39	
min. Earth dist.	5473 Oct 13 17:29	22° Υ 35'30	3.99948 AU		5479 Oct 05 17:36	0° \mathbb{M}	
direct	5473 Dec 11 11:41	17° Υ 44'40		evening set	5479 Oct 12 11:25	1° \mathbb{M} 26'23	
	5474 Mar 15 13:33	0° \mathcal{B}					
evening set	5474 Apr 16 09:25	7° \mathcal{B} 24'58		conjunction	5479 Oct 25 18:18	4° \mathbb{M} 18'26	0°55'16
				minimum elong	5479 Oct 25 18:18	4° \mathbb{M} 18'26	0°55'17
conjunction	5474 Apr 29 10:50	10° \mathcal{B} 35'06	-0°55'39	max. Earth dist.	5479 Oct 25 23:05	4° \mathbb{M} 21'01	6.42999 AU
minimum elong	5474 Apr 29 10:49	10° \mathcal{B} 35'06	0°55'39	morning rise	5479 Nov 07 23:10	7° \mathbb{M} 09'19	
max. Earth dist.	5474 Apr 29 10:34	10° \mathcal{B} 34'56	5.94968 AU		5479 Dec 16 09:12	15° \mathbb{M}	
morning rise	5474 May 12 14:48	13° \mathcal{B} 46'43		retrograde	5480 Mar 07 21:26	24° \mathbb{M} 01'16	
	5474 May 17 16:37	15° \mathcal{B}		opposition	5480 May 07 09:59	19° \mathbb{M} 05'10	1°21'53
	5474 Jul 29 06:36	0° \mathbb{I}		min. Earth dist.	5480 May 07 16:19	19° \mathbb{M} 03'07	4.46715 AU
retrograde	5474 Sep 21 16:19	4° \mathbb{I} 28'39			5480 Jun 13 09:55	15° $\mathcal{R}\mathbb{M}$	
	5474 Nov 16 10:33	30° $\mathcal{R}\mathcal{B}$		direct	5480 Jul 08 14:59	14° \mathbb{M} 02'51	
opposition	5474 Nov 20 09:55	29° \mathcal{B} 28'04	-1°22'06		5480 Aug 03 01:04	15° \mathbb{M}	
min. Earth dist.	5474 Nov 19 20:23	29° \mathcal{B} 32'36	3.92335 AU		5480 Nov 05 02:50	0° \mathcal{J}	
direct	5475 Jan 17 12:43	24° \mathcal{B} 34'04		evening set	5480 Nov 11 15:10	1° \mathcal{J} 22'51	
	5475 Mar 17 07:19	0° \mathbb{I}					
evening set	5475 May 23 18:44	14° \mathbb{I} 32'56		conjunction	5480 Nov 24 16:09	4° \mathcal{J} 10'28	0°54'01
				minimum elong	5480 Nov 24 16:10	4° \mathcal{J} 10'29	0°54'02
conjunction	5475 Jun 06 04:14	17° \mathbb{I} 48'09	-0°47'37	max. Earth dist.	5480 Nov 23 17:21	3° \mathcal{J} 58'13	6.48387 AU
minimum elong	5475 Jun 06 04:16	17° \mathbb{I} 48'10	0°47'38	morning rise	5480 Dec 07 14:32	6° \mathcal{J} 56'52	
max. Earth dist.	5475 Jun 07 16:24	18° \mathbb{I} 10'10	5.92268 AU	retrograde	5481 Apr 06 15:56	23° \mathcal{J} 33'42	
morning rise	5475 Jun 19 16:30	21° \mathbb{I} 04'51		opposition	5481 Jun 06 12:20	18° \mathcal{J} 40'13	1°09'27
	5475 Jul 28 08:53	0° \mathcal{E}		min. Earth dist.	5481 Jun 07 11:51	18° \mathcal{J} 32'40	4.48080 AU
retrograde	5475 Oct 29 22:31	11° \mathcal{E} 50'45		direct	5481 Aug 08 05:43	13° \mathcal{J} 38'20	
min. Earth dist.	5475 Dec 27 02:15	6° \mathcal{E} 57'45	3.94971 AU		5481 Dec 07 10:07	0° \mathcal{Z}	
opposition	5475 Dec 28 09:47	6° \mathcal{E} 47'01	-0°53'37	evening set	5481 Dec 11 23:40	0° \mathcal{Z} 58'42	
direct	5476 Feb 24 06:34	1° \mathcal{E} 51'32		max. Earth dist.	5481 Dec 23 00:21	3° \mathcal{Z} 21'52	6.45595 AU
evening set	5476 Jun 29 17:55	21° \mathcal{E} 34'49					
				conjunction	5481 Dec 24 19:59	3° \mathcal{Z} 45'34	0°38'30
conjunction	5476 Jul 13 09:43	24° \mathcal{E} 49'23	-0°20'35	minimum elong	5481 Dec 24 20:01	3° \mathcal{Z} 45'35	0°38'31
minimum elong	5476 Jul 13 09:44	24° \mathcal{E} 49'24	0°20'36	morning rise	5482 Jan 06 13:59	6° \mathcal{Z} 31'28	
max. Earth dist.	5476 Jul 15 19:36	25° \mathcal{E} 23'46	5.99924 AU	retrograde	5482 May 07 09:24	23° \mathcal{Z} 23'32	
morning rise	5476 Jul 27 03:35	28° \mathcal{E} 04'46		opposition	5482 Jul 07 08:24	18° \mathcal{Z} 31'17	0°38'39
	5476 Aug 04 08:33	0° Ω		min. Earth dist.	5482 Jul 08 20:52	18° \mathcal{Z} 19'40	4.41301 AU
	5476 Oct 21 00:40	15° Ω		direct	5482 Sep 08 00:11	13° \mathcal{Z} 30'31	
retrograde	5476 Dec 04 01:42	18° Ω 01'28			5483 Jan 06 01:53	0° \approx	
	5477 Jan 17 02:13	15° $\mathcal{R}\Omega$		evening set	5483 Jan 11 12:04	1° \approx 11'31	
min. Earth dist.	5477 Jan 31 00:38	13° Ω 09'44	4.06726 AU	max. Earth dist.	5483 Jan 21 22:52	3° \approx 30'43	6.35278 AU
opposition	5477 Feb 01 14:45	12° Ω 56'46	-0°05'07				
asc. node	5477 Mar 13 17:47	8° Ω 32'52		conjunction	5483 Jan 24 05:45	4° \approx 01'18	0°12'16
direct	5477 Apr 01 02:32	7° Ω 58'32		minimum elong	5483 Jan 24 05:45	4° \approx 01'18	0°12'17
	5477 Jun 09 11:24	15° Ω		behind sun begin	5483 Jan 24 00:24	3° \approx 58'20	
evening set	5477 Aug 05 17:06	27° Ω 01'20		behind sun end	5483 Jan 24 11:07	4° \approx 04'16	
	5477 Aug 18 17:15	0° \mathbb{P}		morning rise	5483 Feb 05 22:07	6° \approx 50'37	
					5483 Mar 16 13:52	15° \approx	
conjunction	5477 Aug 19 10:01	0° \mathbb{P} 09'36	0°13'18	retrograde	5483 Jun 08 23:14	24° \approx 27'17	
minimum elong	5477 Aug 19 10:00	0° \mathbb{P} 09'35	0°13'17	desc. node	5483 Jul 01 11:00	23° \approx 40'30	
behind sun begin	5477 Aug 19 05:21	0° \mathbb{P} 06'56		opposition	5483 Aug 08 19:49	19° \approx 34'39	-0°04'26
behind sun end	5477 Aug 19 14:40	0° \mathbb{P} 12'15		min. Earth dist.	5483 Aug 10 10:25	19° \approx 22'18	4.28007 AU
max. Earth dist.	5477 Aug 21 16:37	0° \mathbb{P} 40'53	6.14618 AU		5483 Sep 23 11:28	15° $\mathcal{R}\approx$	
morning rise	5477 Sep 02 03:33	3° \mathbb{P} 17'46		direct	5483 Oct 09 16:16	14° \approx 35'39	
retrograde	5478 Jan 06 13:54	22° \mathbb{P} 00'56			5483 Oct 25 21:09	15° \approx	
min. Earth dist.	5478 Mar 06 03:39	17° \mathbb{P} 07'54	4.22765 AU		5484 Jan 30 06:17	0° \mathcal{H}	
opposition	5478 Mar 07 09:15	16° \mathbb{P} 57'55	0°41'58	evening set	5484 Feb 12 03:49	2° \mathcal{H} 54'53	
direct	5478 May 06 03:52	11° \mathbb{P} 57'14		max. Earth dist.	5484 Feb 22 20:47	5° \mathcal{H} 22'32	6.20030 AU
	5478 Sep 08 14:49	0° Ω					
evening set	5478 Sep 09 16:00	0° Ω 13'51		conjunction	5484 Feb 24 21:30	5° \mathcal{H} 50'39	-0°18'42
				minimum elong	5484 Feb 24 21:29	5° \mathcal{H} 50'38	0°18'41
conjunction	5478 Sep 23 05:16	3° Ω 13'29	0°41'00	morning rise	5484 Mar 08 14:48	8° \mathcal{H} 46'35	
minimum elong	5478 Sep 23 05:15	3° Ω 13'28	0°41'01	retrograde	5484 Jul 13 01:25	27° \mathcal{H} 31'11	
max. Earth dist.	5478 Sep 24 16:34	3° Ω 33'01	6.30664 AU	opposition	5484 Sep 11 13:59	22° \mathcal{H} 36'50	-0°49'14

min. Earth dist.	5484 Sep 12 19:08	22° H 27'24	4.11836 AU		5490 Aug 22 18:29	0° L	
direct	5484 Nov 11 02:09	17° H 40'18		evening set	5490 Sep 14 09:33	4° L 51'14	
	5485 Feb 15 03:55	0° Y					
evening set	5485 Mar 16 18:29	6° Y 46'35		conjunction	5490 Sep 27 21:49	7° L 49'35	0°43'55
max. Earth dist.	5485 Mar 28 10:07	9° Y 33'03	6.04328 AU	minimum elong	5490 Sep 27 21:48	7° L 49'34	0°43'55
				max. Earth dist.	5490 Sep 29 03:27	8° L 05'54	6.32883 AU
conjunction	5485 Mar 29 14:48	9° Y 50'11	-0°45'00	morning rise	5490 Oct 11 08:56	10° L 47'02	
minimum elong	5485 Mar 29 14:47	9° Y 50'10	0°45'01	retrograde	5491 Feb 11 03:04	28° L 14'52	
morning rise	5485 Apr 11 12:35	12° Y 54'45		opposition	5491 Apr 12 08:23	23° L 15'47	1°15'24
	5485 Jul 07 03:02	0° B		min. Earth dist.	5491 Apr 11 21:51	23° L 19'16	4.39323 AU
retrograde	5485 Aug 19 12:02	2° B 53'12		direct	5491 Jun 12 15:09	18° L 13'43	
	5485 Oct 02 09:22	30° R Y			5491 Sep 18 21:46	0° M	
opposition	5485 Oct 18 14:41	27° Y 55'47	-1°19'41	evening set	5491 Oct 16 21:46	5° M 49'18	
min. Earth dist.	5485 Oct 18 22:03	27° Y 53'21	3.98051 AU				
direct	5485 Dec 16 15:31	23° Y 01'21		conjunction	5491 Oct 30 03:58	8° M 40'32	0°56'00
	5486 Feb 22 16:39	0° B		minimum elong	5491 Oct 30 03:57	8° M 40'32	0°56'01
evening set	5486 Apr 21 15:21	12° B 47'11		max. Earth dist.	5491 Oct 30 05:37	8° M 41'25	6.44277 AU
	5486 Apr 30 18:07	15° B		morning rise	5491 Nov 12 07:42	11° M 30'31	
					5491 Nov 28 20:50	15° M	
conjunction	5486 May 04 18:01	15° B 58'25	-0°55'50	retrograde	5492 Mar 12 00:12	28° M 18'33	
minimum elong	5486 May 04 18:01	15° B 58'25	0°55'51	opposition	5492 May 11 14:48	23° M 22'55	1°21'21
max. Earth dist.	5486 May 05 01:02	16° B 02'42	5.93787 AU	min. Earth dist.	5492 May 11 23:08	23° M 20'13	4.47404 AU
morning rise	5486 May 17 23:03	19° B 11'08		direct	5492 Jul 12 21:07	18° M 20'39	
	5486 Jul 04 13:00	0° I			5492 Oct 19 12:35	0° J	
retrograde	5486 Sep 27 06:39	9° I 57'39		evening set	5492 Nov 15 21:45	5° J 39'35	
opposition	5486 Nov 25 21:38	4° I 56'32	-1°19'53				
min. Earth dist.	5486 Nov 25 05:20	5° I 02'01	3.92023 AU	conjunction	5492 Nov 28 21:52	8° J 26'53	0°52'37
direct	5487 Jan 22 22:40	0° I 02'29		minimum elong	5492 Nov 28 21:53	8° J 26'53	0°52'37
evening set	5487 May 29 05:11	20° I 01'08		max. Earth dist.	5492 Nov 27 18:47	8° J 12'19	6.48439 AU
				morning rise	5492 Dec 11 19:35	11° J 13'00	
conjunction	5487 Jun 11 15:44	23° I 16'37	-0°44'39	retrograde	5493 Apr 10 22:36	27° J 50'24	
minimum elong	5487 Jun 11 15:46	23° I 16'38	0°44'40	opposition	5493 Jun 10 18:25	22° J 57'13	1°06'05
max. Earth dist.	5487 Jun 13 08:42	23° I 41'29	5.92834 AU	min. Earth dist.	5493 Jun 11 21:12	22° J 48'39	4.47496 AU
morning rise	5487 Jun 25 05:09	26° I 33'31		direct	5493 Aug 12 13:14	17° J 55'26	
	5487 Jul 09 16:23	0° E			5493 Nov 20 23:19	0° Z	
retrograde	5487 Nov 04 05:14	17° E 14'33		evening set	5493 Dec 16 05:40	5° Z 17'57	
min. Earth dist.	5488 Jan 01 06:37	12° E 22'12	3.96345 AU	max. Earth dist.	5493 Dec 27 02:38	7° Z 39'33	6.44409 AU
opposition	5488 Jan 02 16:58	12° E 10'31	-0°47'21				
direct	5488 Feb 29 13:43	7° E 14'43		conjunction	5493 Dec 29 01:33	8° Z 05'06	0°35'19
evening set	5488 Jul 05 02:19	26° E 52'30		minimum elong	5493 Dec 29 01:35	8° Z 05'07	0°35'20
				morning rise	5494 Jan 10 19:15	10° Z 51'21	
conjunction	5488 Jul 18 18:29	0° O 06'18	-0°15'49	retrograde	5494 May 11 20:22	27° Z 48'29	
minimum elong	5488 Jul 18 18:30	0° O 06'19	0°15'50	opposition	5494 Jul 11 19:09	22° Z 56'15	0°33'06
behind sun begin	5488 Jul 18 18:22	0° O 06'14		min. Earth dist.	5494 Jul 13 07:59	22° Z 44'30	4.39587 AU
behind sun end	5488 Jul 18 18:38	0° O 06'23		direct	5494 Sep 12 08:03	17° Z 55'40	
	5488 Jul 18 07:49	0° O			5494 Dec 20 09:20	0° A	
max. Earth dist.	5488 Jul 21 04:24	0° O 40'32	6.01933 AU	evening set	5495 Jan 15 20:59	5° A 41'46	
morning rise	5488 Aug 01 12:43	3° O 20'50		max. Earth dist.	5495 Jan 26 08:50	8° A 02'11	6.33168 AU
	5488 Sep 24 08:01	15° O					
retrograde	5488 Dec 08 23:18	23° O 06'53		conjunction	5495 Jan 28 14:39	8° A 32'19	0°07'59
asc. node	5489 Jan 20 17:43	20° O 14'50		minimum elong	5495 Jan 28 14:39	8° A 32'19	0°08'00
min. Earth dist.	5489 Feb 05 00:02	18° O 14'55	4.09110 AU	behind sun begin	5495 Jan 28 07:32	8° A 28'21	
opposition	5489 Feb 06 13:13	18° O 02'15	0°02'08	behind sun end	5495 Jan 28 21:47	8° A 36'17	
	5489 Mar 02 16:49	15° R O		morning rise	5495 Feb 10 06:54	11° A 22'28	
direct	5489 Apr 06 05:46	13° O 03'36			5495 Feb 26 19:09	15° A	
	5489 May 10 23:44	15° O		desc. node	5495 May 10 13:02	27° A 21'33	
	5489 Aug 01 23:39	0° P		retrograde	5495 Jun 13 19:05	29° A 08'09	
evening set	5489 Aug 10 18:39	1° P 58'54		opposition	5495 Aug 13 14:21	24° A 15'24	-0°11'01
				min. Earth dist.	5495 Aug 15 04:43	24° A 03'07	4.25636 AU
conjunction	5489 Aug 24 11:25	5° P 05'54	0°17'50	direct	5495 Oct 14 06:45	19° A 16'47	
minimum elong	5489 Aug 24 11:24	5° P 05'54	0°17'49		5496 Jan 12 16:01	0° H	
max. Earth dist.	5489 Aug 26 17:17	5° P 36'36	6.17172 AU	evening set	5496 Feb 16 19:07	7° H 42'56	
morning rise	5489 Sep 07 04:12	8° P 12'38		max. Earth dist.	5496 Feb 27 13:07	10° H 12'03	6.17603 AU
retrograde	5490 Jan 11 02:10	26° P 44'36					
opposition	5490 Mar 11 22:45	21° P 42'05	0°47'30	conjunction	5496 Feb 29 12:53	10° H 39'46	-0°22'59
min. Earth dist.	5490 Mar 10 18:41	21° P 51'31	4.25250 AU	minimum elong	5496 Feb 29 12:52	10° H 39'46	0°22'58
direct	5490 May 10 21:12	16° P 41'13		morning rise	5496 Mar 13 06:47	13° H 36'57	

	5496 Jun 07 07:09	0°♈			5502 Feb 13 21:49	30°♏♏	
retrograde	5496 Jul 18 05:02	2°♈32'32	min. Earth dist.	5502 Mar 16 07:09	26°♏24'51	4.27436 AU	
	5496 Aug 28 14:18	30°♏♏	opposition	5502 Mar 17 08:45	26°♏16'16	0°52'33	
opposition	5496 Sep 16 17:04	27°♏37'47 -0°54'52	direct	5502 May 16 11:43	21°♏15'09		
min. Earth dist.	5496 Sep 17 18:44	27°♏29'27 4.09571 AU		5502 Aug 05 15:13	0°♏		
direct	5496 Nov 15 23:59	22°♏41'36	evening set	5502 Sep 19 23:21	9°♏19'42		
	5497 Jan 26 00:59	0°♈					
evening set	5497 Mar 21 17:37	11°♈54'27	conjunction	5502 Oct 03 10:59	12°♏16'59	0°46'29	
			minimum elong	5502 Oct 03 10:57	12°♏16'58	0°46'29	
conjunction	5497 Apr 03 14:46	14°♈59'11 -0°47'43	max. Earth dist.	5502 Oct 04 13:24	12°♏31'29	6.34716 AU	
minimum elong	5497 Apr 03 14:44	14°♈59'10 0°47'44	morning rise	5502 Oct 16 20:57	15°♏13'15		
max. Earth dist.	5497 Apr 02 16:18	14°♈45'43 6.02464 AU		5503 Jan 06 01:15	0°♏		
morning rise	5497 Apr 16 13:13	18°♈04'56	retrograde	5503 Feb 16 06:50	2°♏34'30		
	5497 Jun 09 16:09	0°♏		5503 Mar 29 12:17	30°♏♏		
retrograde	5497 Aug 25 00:05	8°♏12'00	opposition	5503 Apr 17 13:32	27°♏36'00	1°17'32	
opposition	5497 Oct 24 00:02	3°♏14'04 -1°21'47	min. Earth dist.	5503 Apr 17 05:34	27°♏38'37	4.40696 AU	
min. Earth dist.	5497 Oct 24 04:26	3°♏12'37 3.96806 AU	direct	5503 Jun 17 23:44	22°♏33'56		
	5497 Nov 19 18:40	30°♏♈		5503 Sep 01 07:15	0°♏		
direct	5497 Dec 21 21:34	28°♈19'50	evening set	5503 Oct 22 06:23	10°♏06'48		
	5498 Jan 22 16:16	0°♏					
	5498 Apr 13 18:29	15°♏	conjunction	5503 Nov 04 11:34	12°♏57'22	0°56'26	
evening set	5498 Apr 26 21:03	18°♏08'28	minimum elong	5503 Nov 04 11:34	12°♏57'22	0°56'27	
			max. Earth dist.	5503 Nov 04 07:27	12°♏55'09	6.45090 AU	
conjunction	5498 May 10 00:39	21°♏20'24 -0°55'36		5503 Nov 13 23:23	15°♏		
minimum elong	5498 May 10 00:40	21°♏20'24 0°55'38	morning rise	5503 Nov 17 14:35	15°♏46'44		
max. Earth dist.	5498 May 10 12:31	21°♏27'38 5.93273 AU		5504 Feb 04 22:56	0°♏♏		
morning rise	5498 May 23 06:58	24°♏33'54	retrograde	5504 Mar 17 04:30	2°♏32'24		
	5498 Jun 15 05:41	0°♏		5504 Apr 27 13:03	30°♏♏		
retrograde	5498 Oct 02 15:22	15°♏21'45	opposition	5504 May 16 18:53	27°♏37'13	1°20'26	
min. Earth dist.	5498 Nov 30 10:31	10°♏26'59 3.92336 AU	min. Earth dist.	5504 May 17 06:44	27°♏33'22	4.47645 AU	
opposition	5498 Dec 01 06:57	10°♏20'06 -1°17'02	direct	5504 Jul 18 04:00	22°♏35'00		
direct	5499 Jan 28 05:25	5°♏25'54		5504 Oct 02 00:50	0°♏♏		
evening set	5499 Jun 03 12:56	25°♏22'01	evening set	5504 Nov 21 03:31	9°♏54'12		
			max. Earth dist.	5504 Dec 02 21:49	12°♏25'37	6.48096 AU	
conjunction	5499 Jun 17 00:20	28°♏37'23 -0°41'25					
minimum elong	5499 Jun 17 00:22	28°♏37'24 0°41'26	conjunction	5504 Dec 04 03:10	12°♏41'25	0°50'57	
max. Earth dist.	5499 Jun 18 20:18	29°♏03'58 5.93916 AU	minimum elong	5504 Dec 04 03:11	12°♏41'26	0°50'58	
	5499 Jun 22 17:00	0°♏♏	morning rise	5504 Dec 17 00:08	15°♏27'26		
morning rise	5499 Jun 30 14:37	1°♏54'08		5505 Mar 09 14:52	0°♏♏		
retrograde	5499 Nov 09 07:40	22°♏28'21	retrograde	5505 Apr 16 03:53	2°♏06'41		
min. Earth dist.	5500 Jan 06 08:53	17°♏35'58 3.98054 AU		5505 May 23 22:01	30°♏♏♏		
opposition	5500 Jan 07 20:00	17°♏24'00 -0°40'55	opposition	5505 Jun 16 00:47	27°♏13'45	1°02'24	
direct	5500 Mar 06 20:01	12°♏27'45	min. Earth dist.	5505 Jun 17 04:24	27°♏04'55	4.46615 AU	
	5500 Jul 02 17:52	0°♏	direct	5505 Aug 17 18:25	22°♏12'11		
evening set	5500 Jul 11 06:34	1°♏59'07		5505 Nov 03 15:17	0°♏♏		
			evening set	5505 Dec 21 11:57	9°♏37'37		
conjunction	5500 Jul 24 23:13	5°♏12'04 -0°11'07	max. Earth dist.	5506 Jan 01 07:12	11°♏58'47	6.43056 AU	
minimum elong	5500 Jul 24 23:14	5°♏12'05 0°11'07					
behind sun begin	5500 Jul 24 17:04	5°♏08'28	conjunction	5506 Jan 03 07:21	12°♏25'07	0°31'56	
behind sun end	5500 Jul 25 05:24	5°♏15'41	minimum elong	5506 Jan 03 07:22	12°♏25'07	0°31'58	
max. Earth dist.	5500 Jul 27 10:46	5°♏47'05 6.04104 AU	morning rise	5506 Jan 16 00:44	15°♏11'46		
morning rise	5500 Aug 07 17:22	8°♏25'33		5506 Apr 08 14:23	0°♏♏		
	5500 Sep 05 19:59	15°♏	retrograde	5506 May 17 09:24	2°♏14'34		
asc. node	5500 Dec 02 03:16	27°♏45'01		5506 Jun 25 10:55	30°♏♏♏		
retrograde	5500 Dec 14 16:42	28°♏00'37	opposition	5506 Jul 17 06:59	27°♏22'24	0°27'20	
min. Earth dist.	5501 Feb 10 18:51	23°♏08'29 4.11499 AU	min. Earth dist.	5506 Jul 18 21:14	27°♏10'13	4.37837 AU	
opposition	5501 Feb 12 07:06	22°♏56'11 0°09'04	direct	5506 Sep 17 18:35	22°♏22'07		
direct	5501 Apr 12 03:18	17°♏57'11		5506 Dec 02 15:08	0°♏♏		
	5501 Jul 16 18:37	0°♏♏	evening set	5507 Jan 21 06:38	10°♏13'14		
evening set	5501 Aug 16 16:02	6°♏45'18	max. Earth dist.	5507 Jan 31 17:45	12°♏33'56	6.31153 AU	
conjunction	5501 Aug 30 08:14	9°♏51'02 0°22'05	conjunction	5507 Feb 03 00:08	13°♏04'31	0°03'40	
minimum elong	5501 Aug 30 08:12	9°♏51'01 0°22'05	minimum elong	5507 Feb 03 00:08	13°♏04'31	0°03'40	
max. Earth dist.	5501 Sep 01 09:57	10°♏19'13 6.19556 AU	behind sun begin	5507 Feb 02 16:14	13°♏00'06		
morning rise	5501 Sep 13 00:34	12°♏56'27	behind sun end	5507 Feb 03 08:01	13°♏08'56		
	5501 Dec 18 18:06	0°♏♏		5507 Feb 11 13:30	15°♏		
retrograde	5502 Jan 16 10:25	1°♏18'22	morning rise	5507 Feb 15 16:30	15°♏55'31		

desc. node	5507 Mar 20 22:18	23°≈05'02	retrograde	5512 Dec 19 08:21	2°≈54'27	
	5507 Apr 29 10:35	0°≈		5513 Jan 31 13:15	30°≈	
retrograde	5507 Jun 19 13:59	3°≈49'51	min. Earth dist.	5513 Feb 15 12:58	28°≈02'16	4.13503 AU
	5507 Aug 11 02:45	30°≈	opposition	5513 Feb 17 00:36	27°≈50'11	0°15'54
opposition	5507 Aug 19 09:12	28°≈56'52 -0°17'34	direct	5513 Apr 16 23:57	22°≈50'49	
min. Earth dist.	5507 Aug 20 21:29	28°≈45'13 4.23490 AU		5513 Jun 26 19:31	0°≈	
direct	5507 Oct 19 20:49	23°≈58'36	evening set	5513 Aug 21 13:39	11°≈33'16	
	5507 Dec 24 01:52	0°≈				
evening set	5508 Feb 22 10:22	12°≈30'50	conjunction	5513 Sep 04 05:33	14°≈37'57 0°26'12	
max. Earth dist.	5508 Mar 04 08:45	15°≈03'11 6.15499 AU	minimum elong	5513 Sep 04 05:32	14°≈37'56 0°26'12	
			max. Earth dist.	5513 Sep 06 04:58	15°≈04'42 6.21584 AU	
conjunction	5508 Mar 06 04:27	15°≈28'40 -0°27'05	morning rise	5513 Sep 17 21:06	17°≈42'09	
minimum elong	5508 Mar 06 04:26	15°≈28'39 0°27'04		5513 Nov 17 18:05	0°≈	
morning rise	5508 Mar 18 22:38	18°≈26'52	retrograde	5514 Jan 20 21:07	5°≈55'17	
	5508 May 12 00:16	0°≈	opposition	5514 Mar 21 19:43	0°≈53'41 0°57'19	
retrograde	5508 Jul 24 09:42	7°≈32'14	min. Earth dist.	5514 Mar 20 20:42	1°≈01'22 4.29310 AU	
opposition	5508 Sep 22 19:32	2°≈37'08 -1°00'03		5514 Mar 28 13:10	30°≈	
min. Earth dist.	5508 Sep 23 19:29	2°≈29'21 4.07667 AU	direct	5514 May 21 03:43	25°≈52'23	
	5508 Oct 14 01:08	30°≈		5514 Jul 13 14:40	0°≈	
direct	5508 Nov 21 22:43	27°≈41'18	evening set	5514 Sep 24 14:45	13°≈52'25	
	5508 Dec 30 05:07	0°≈				
evening set	5509 Mar 27 15:36	16°≈59'24	conjunction	5514 Oct 08 01:29	16°≈48'42 0°48'48	
			minimum elong	5514 Oct 08 01:28	16°≈48'42 0°48'48	
conjunction	5509 Apr 09 13:20	20°≈05'07 -0°50'02	max. Earth dist.	5514 Oct 08 23:27	17°≈00'44 6.36296 AU	
minimum elong	5509 Apr 09 13:19	20°≈05'06 0°50'02	morning rise	5514 Oct 21 10:39	19°≈43'59	
max. Earth dist.	5509 Apr 08 18:14	19°≈53'38 6.00915 AU		5514 Dec 11 13:42	0°≈	
morning rise	5509 Apr 22 12:48	23°≈11'59	retrograde	5515 Feb 20 12:23	6°≈59'21	
	5509 May 21 20:41	0°≈	opposition	5515 Apr 21 20:36	2°≈01'19 1°19'17	
retrograde	5509 Aug 31 07:36	13°≈26'26	min. Earth dist.	5515 Apr 21 15:03	2°≈03'08 4.41913 AU	
opposition	5509 Oct 30 07:03	8°≈28'01 -1°23'11		5515 May 07 17:46	30°≈	
min. Earth dist.	5509 Oct 30 07:08	8°≈27'59 3.95788 AU	direct	5515 Jun 22 10:15	26°≈59'11	
direct	5509 Dec 27 23:28	3°≈33'55		5515 Aug 07 10:41	0°≈	
	5510 Mar 27 19:29	15°≈	evening set	5515 Oct 26 16:28	14°≈29'32	
evening set	5510 May 03 00:55	23°≈24'56		5515 Oct 29 01:28	15°≈	
conjunction	5510 May 16 05:32	26°≈37'33 -0°54'55	conjunction	5515 Nov 08 20:58	17°≈19'29 0°56'34	
minimum elong	5510 May 16 05:33	26°≈37'34 0°54'56	minimum elong	5515 Nov 08 20:58	17°≈19'29 0°56'34	
max. Earth dist.	5510 May 16 21:59	26°≈47'35 5.92879 AU	max. Earth dist.	5515 Nov 08 14:48	17°≈16'10 6.45888 AU	
morning rise	5510 May 29 12:56	29°≈51'44	morning rise	5515 Nov 21 22:54	20°≈08'11	
	5510 May 30 02:37	0°≈		5516 Jan 10 17:59	0°≈	
retrograde	5510 Oct 08 22:33	20°≈40'39	retrograde	5516 Mar 21 08:55	6°≈51'23	
opposition	5510 Dec 07 13:30	15°≈38'31 -1°13'36	opposition	5516 May 21 01:02	1°≈56'37 1°19'05	
min. Earth dist.	5510 Dec 06 15:00	15°≈46'07 3.92608 AU	min. Earth dist.	5516 May 21 14:23	1°≈52'18 4.48012 AU	
direct	5511 Feb 03 11:47	10°≈44'07		5516 Jun 05 12:22	30°≈	
	5511 Jun 07 02:46	0°≈	direct	5516 Jul 22 12:15	26°≈54'33	
evening set	5511 Jun 09 18:51	0°≈38'23		5516 Sep 07 14:05	0°≈	
			evening set	5516 Nov 25 10:48	14°≈13'07	
conjunction	5511 Jun 23 07:21	3°≈53'48 -0°37'53	max. Earth dist.	5516 Dec 07 00:35	16°≈42'18 6.48026 AU	
minimum elong	5511 Jun 23 07:23	3°≈53'49 0°37'54				
max. Earth dist.	5511 Jun 25 07:38	4°≈22'55 5.94834 AU	conjunction	5516 Dec 08 09:34	17°≈00'04 0°49'01	
morning rise	5511 Jul 06 22:23	7°≈10'28	minimum elong	5516 Dec 08 09:35	17°≈00'04 0°49'02	
retrograde	5511 Nov 15 09:56	27°≈38'39	morning rise	5516 Dec 21 06:00	19°≈45'54	
min. Earth dist.	5512 Jan 12 09:24	22°≈46'21 3.99505 AU		5517 Feb 11 04:18	0°≈	
opposition	5512 Jan 13 21:07	22°≈34'11 -0°34'17	retrograde	5517 Apr 20 11:41	6°≈25'57	
direct	5512 Mar 11 22:34	17°≈37'35	opposition	5517 Jun 20 08:38	1°≈33'11 0°58'23	
	5512 Jun 15 03:31	0°≈	min. Earth dist.	5517 Jun 21 14:20	1°≈23'42 4.46132 AU	
evening set	5512 Jul 16 09:59	7°≈03'55		5517 Jul 02 17:04	30°≈	
			direct	5517 Aug 22 03:40	26°≈31'45	
conjunction	5512 Jul 30 02:47	10°≈16'08 -0°06'22		5517 Oct 11 02:42	0°≈	
minimum elong	5512 Jul 30 02:46	10°≈16'07 0°06'23	evening set	5517 Dec 25 18:23	13°≈58'23	
behind sun begin	5512 Jul 29 18:53	10°≈11'32	max. Earth dist.	5518 Jan 05 12:42	16°≈19'21 6.42208 AU	
behind sun end	5512 Jul 30 10:40	10°≈20'43				
max. Earth dist.	5512 Aug 01 13:05	10°≈50'14 6.05929 AU	conjunction	5518 Jan 07 13:27	16°≈46'02 0°28'27	
morning rise	5512 Aug 12 21:12	13°≈28'48	minimum elong	5518 Jan 07 13:28	16°≈46'03 0°28'27	
	5512 Aug 19 11:16	15°≈	morning rise	5518 Jan 20 06:23	19°≈32'53	
asc. node	5512 Oct 12 06:24	26°≈11'56		5518 Mar 13 08:24	0°≈	
	5512 Nov 06 02:46	0°≈	retrograde	5518 May 21 18:58	6°≈39'34	

opposition	5518 Jul 21 18:25	1°  47'19	0°21'32			5523 Dec 31 06:42	30° 	
min. Earth dist.	5518 Jul 23 07:49	1°  35'24	4.36673 AU	min. Earth dist.	5524 Jan 17 05:44	27°  47'31	4.00540 AU	
	5518 Aug 05 02:45	30°  R		opposition	5524 Jan 18 18:34	27°  34'57	-0°27'43	
direct	5518 Sep 22 03:17	26°  347'17		direct	5524 Mar 16 20:54	22°  38'00		
	5518 Nov 08 13:09	0°  0			5524 May 26 09:55	0°  0		
evening set	5519 Jan 25 14:46	14°  41'12		evening set	5524 Jul 21 10:50	12°  01'18		
	5519 Jan 27 00:23	15°  0			5524 Aug 03 05:42	15°  0		
desc. node	5519 Jan 30 08:18	15°  44'51						
max. Earth dist.	5519 Feb 05 03:03	17°  03'01	6.29759 AU	conjunction	5524 Aug 04 04:03	15°  13'02	-0°01'45	
				minimum elong	5524 Aug 04 04:02	15°  13'01	0°01'46	
conjunction	5519 Feb 07 08:03	17°  32'57	-0°00'39	behind sun begin	5524 Aug 03 19:38	15°  08'09		
minimum elong	5519 Feb 07 08:02	17°  32'57	0°00'38	behind sun end	5524 Aug 04 12:26	15°  01'54		
behind sun begin	5519 Feb 07 00:05	17°  28'28		max. Earth dist.	5524 Aug 06 14:21	15°  47'02	6.07329 AU	
behind sun end	5519 Feb 07 16:00	17°  37'25		morning rise	5524 Aug 17 22:24	18°  25'02		
morning rise	5519 Feb 20 00:22	20°  24'29		asc. node	5524 Aug 24 02:07	19°  49'57		
	5519 Apr 06 12:50	0°  X			5524 Oct 11 06:46	0°  0		
retrograde	5519 Jun 24 07:52	8°  X25'27		retrograde	5524 Dec 24 00:57	7°  43'06		
opposition	5519 Aug 24 02:08	3°  X32'15	-0°23'45	min. Earth dist.	5525 Feb 20 06:20	2°  50'37	4.15111 AU	
min. Earth dist.	5519 Aug 25 14:23	3°  X20'36	4.21931 AU	opposition	5525 Feb 21 16:18	2°  39'07	0°22'22	
	5519 Sep 23 19:29	30°  R			5525 Mar 14 09:16	30°  R		
direct	5519 Oct 24 11:50	28°  34'15		direct	5525 Apr 21 19:58	27°  39'28		
	5519 Nov 23 22:58	0°  X			5525 May 30 12:44	0°  0		
evening set	5520 Feb 26 22:28	17°  X10'27		evening set	5525 Aug 26 10:06	16°  17'43		
max. Earth dist.	5520 Mar 08 22:18	19°  X44'12	6.13902 AU					
				conjunction	5525 Sep 09 01:34	19°  21'30	0°30'02	
conjunction	5520 Mar 10 16:43	20°  X09'00	-0°30'49	minimum elong	5525 Sep 09 01:32	19°  21'29	0°30'01	
minimum elong	5520 Mar 10 16:42	20°  X08'59	0°30'49	max. Earth dist.	5525 Sep 10 23:09	19°  47'06	6.23267 AU	
morning rise	5520 Mar 23 11:22	23°  X08'04		morning rise	5525 Sep 22 16:33	22°  14'43		
	5520 Apr 22 23:09	0°  Y			5525 Oct 28 05:37	0°  0		
retrograde	5520 Jul 29 07:38	12°  Y21'24		retrograde	5526 Jan 25 05:32	10°  30'17		
opposition	5520 Sep 27 17:43	7°  Y25'54	-1°04'33	min. Earth dist.	5526 Mar 25 07:59	5°  36'27	4.30940 AU	
min. Earth dist.	5520 Sep 28 14:32	7°  Y19'07	4.06172 AU	opposition	5526 Mar 26 06:02	5°  29'05	1°01'36	
direct	5520 Nov 26 15:45	2°  Y30'19		direct	5526 May 25 17:14	0°  27'37		
evening set	5521 Apr 01 09:28	21°  Y52'31		evening set	5526 Sep 29 05:19	18°  23'43		
conjunction	5521 Apr 14 07:52	24°  Y59'05	-0°51'52	conjunction	5526 Oct 12 15:15	21°  19'05	0°50'46	
minimum elong	5521 Apr 14 07:50	24°  Y59'05	0°51'52	minimum elong	5526 Oct 12 15:14	21°  19'04	0°50'47	
max. Earth dist.	5521 Apr 13 16:35	24°  Y49'53	5.99655 AU	max. Earth dist.	5526 Oct 13 10:10	21°  29'25	6.37752 AU	
morning rise	5521 Apr 27 08:08	28°  Y06'54		morning rise	5526 Oct 25 23:23	24°  13'22		
	5521 May 05 06:07	0°  8			5526 Nov 22 11:01	0°  0		
	5521 Jul 19 19:44	15°  8		retrograde	5527 Feb 24 18:37	11°  23'11		
retrograde	5521 Sep 05 11:06	18°  827'49		opposition	5527 Apr 26 03:28	6°  25'37	1°20'30	
	5521 Oct 23 18:06	15°  R		min. Earth dist.	5527 Apr 26 00:29	6°  26'36	4.43084 AU	
opposition	5521 Nov 04 08:58	13°  828'53	-1°23'52	direct	5527 Jun 26 21:38	1°  23'27		
min. Earth dist.	5521 Nov 04 07:08	13°  829'30	3.94890 AU		5527 Oct 12 17:22	15°  15		
direct	5522 Jan 01 22:55	8°  834'49		evening set	5527 Oct 31 01:57	18°  51'05		
	5522 Mar 07 14:09	15°  8						
evening set	5522 May 08 00:00	28°  828'12		conjunction	5527 Nov 13 05:30	21°  40'24	0°56'20	
	5522 May 14 07:10	0°  II		minimum elong	5527 Nov 13 05:30	21°  40'24	0°56'21	
				max. Earth dist.	5527 Nov 12 19:05	21°  34'47	6.46656 AU	
conjunction	5522 May 21 05:49	1°  II41'34	-0°53'51	morning rise	5527 Nov 26 06:40	24°  28'28		
minimum elong	5522 May 21 05:50	1°  II41'34	0°53'52		5527 Dec 22 21:32	0°  X		
max. Earth dist.	5522 May 22 02:50	1°  II54'22	5.92438 AU	retrograde	5528 Mar 25 13:18	11°  X09'14		
morning rise	5522 Jun 03 14:18	4°  II56'28		opposition	5528 May 25 06:38	6°  X14'44	1°17'16	
retrograde	5522 Oct 14 02:22	25°  II46'45		min. Earth dist.	5528 May 25 22:17	6°  X09'41	4.48320 AU	
opposition	5522 Dec 12 15:13	20°  II44'18	-1°09'47	direct	5528 Jul 26 19:59	1°  X12'38		
min. Earth dist.	5522 Dec 11 14:54	20°  II52'31	3.92697 AU	evening set	5528 Nov 29 16:59	18°  X30'43		
direct	5523 Feb 08 11:59	15°  II49'45		max. Earth dist.	5528 Dec 11 04:57	20°  X59'00	6.47823 AU	
	5523 May 21 10:57	0°  0						
evening set	5523 Jun 14 20:53	5°  043'23		conjunction	5528 Dec 12 15:14	21°  X17'30	0°46'47	
				minimum elong	5528 Dec 12 15:16	21°  X17'30	0°46'49	
conjunction	5523 Jun 28 10:09	8°  058'55	-0°34'14	morning rise	5528 Dec 25 10:53	24°  X03'08		
minimum elong	5523 Jun 28 10:11	8°  058'56	0°34'15		5529 Jan 23 02:23	0°  0		
max. Earth dist.	5523 Jun 30 11:11	9°  028'25	5.95427 AU	retrograde	5529 Apr 24 17:14	10°  0344'34		
morning rise	5523 Jul 12 02:13	12°  015'43		opposition	5529 Jun 24 16:00	5°  351'57	0°54'00	
	5523 Oct 10 05:19	0°  0		min. Earth dist.	5529 Jun 25 22:51	5°  342'06	4.45402 AU	
retrograde	5523 Nov 20 06:34	2°  039'32		direct	5529 Aug 26 10:37	0°  350'41		

evening set	5529 Dec 30 00:29	18° S 19'25		conjunction	5535 Jul 03 19:32	14° S 18'56	-0°30'06
max. Earth dist.	5530 Jan 09 16:00	20° S 39'19	6.40975 AU	minimum elong	5535 Jul 03 19:34	14° S 18'57	0°30'07
				max. Earth dist.	5535 Jul 06 00:19	14° S 50'36	5.96529 AU
conjunction	5530 Jan 11 18:59	21° S 07'20	0°24'44	morning rise	5535 Jul 17 12:11	17° S 35'28	
minimum elong	5530 Jan 11 19:00	21° S 07'21	0°24'44		5535 Sep 12 07:00	0° J	
morning rise	5530 Jan 24 11:47	23° S 54'35		retrograde	5535 Nov 25 09:05	7° J 52'02	
	5530 Feb 22 05:56	0° \approx		min. Earth dist.	5536 Jan 22 07:35	2° J 59'55	4.02263 AU
retrograde	5530 May 26 08:14	11° \approx 06'47		opposition	5536 Jan 23 20:27	2° J 47'21	-0°20'36
opposition	5530 Jul 26 06:43	6° \approx 14'29	0°15'27		5536 Feb 14 16:20	30° R S	
min. Earth dist.	5530 Jul 27 21:36	6° \approx 02'05	4.34980 AU	direct	5536 Mar 22 01:57	27° S 50'01	
direct	5530 Sep 26 14:41	1° \approx 14'37			5536 Apr 27 13:24	0° J	
desc. node	5530 Dec 10 03:47	8° \approx 42'13		asc. node	5536 Jul 03 12:26	11° J 53'11	
	5531 Jan 10 19:59	15° \approx			5536 Jul 17 09:38	15° J	
evening set	5531 Jan 30 00:04	19° \approx 13'19		evening set	5536 Jul 26 15:29	17° J 07'17	
max. Earth dist.	5531 Feb 09 12:36	21° \approx 35'56	6.27735 AU				
				conjunction	5536 Aug 09 08:45	20° J 18'01	0°03'11
conjunction	5531 Feb 11 17:23	22° \approx 05'51	-0°05'03	minimum elong	5536 Aug 09 08:45	20° J 18'01	0°03'11
minimum elong	5531 Feb 11 17:23	22° \approx 05'51	0°05'02	behind sun begin	5536 Aug 09 00:24	20° J 13'12	
behind sun begin	5531 Feb 11 09:38	22° \approx 01'28		behind sun end	5536 Aug 09 17:06	20° J 22'50	
behind sun end	5531 Feb 12 01:09	22° \approx 10'13		max. Earth dist.	5536 Aug 11 19:43	20° J 52'12	6.09521 AU
morning rise	5531 Feb 24 09:48	24° \approx 58'14		morning rise	5536 Aug 23 03:00	23° J 28'55	
	5531 Mar 19 04:45	0° X			5536 Sep 21 09:32	0° M	
retrograde	5531 Jun 29 02:54	13° X 08'14		retrograde	5536 Dec 28 16:09	12° M 35'57	
opposition	5531 Aug 28 21:19	8° X 14'47	-0°30'04	min. Earth dist.	5537 Feb 24 23:34	7° M 43'43	4.17551 AU
min. Earth dist.	5531 Aug 30 07:44	8° X 03'43	4.19713 AU	opposition	5537 Feb 26 09:37	7° M 32'12	0°28'51
direct	5531 Oct 29 01:43	3° X 17'05		direct	5537 Apr 26 16:56	2° M 32'14	
evening set	5532 Mar 02 14:11	21° X 59'51		evening set	5537 Aug 31 07:15	21° M 03'11	
max. Earth dist.	5532 Mar 13 17:03	24° X 36'08	6.11672 AU				
				conjunction	5537 Sep 13 21:58	24° M 05'34	0°33'44
conjunction	5532 Mar 15 08:46	24° X 59'29	-0°34'33	minimum elong	5537 Sep 13 21:57	24° M 05'33	0°33'43
minimum elong	5532 Mar 15 08:44	24° X 59'28	0°34'33	max. Earth dist.	5537 Sep 15 15:49	24° M 28'58	6.25751 AU
morning rise	5532 Mar 28 04:00	27° X 59'45		morning rise	5537 Sep 27 12:06	27° M 07'19	
	5532 Apr 05 19:05	0° Y			5537 Oct 10 15:14	0° J	
retrograde	5532 Aug 03 13:38	17° Y 23'40		retrograde	5538 Jan 29 14:38	15° J 02'41	
opposition	5532 Oct 02 20:54	12° Y 27'44	-1°08'54	opposition	5538 Mar 30 15:44	10° J 01'56	1°05'30
min. Earth dist.	5532 Oct 03 15:50	12° Y 21'32	4.04113 AU	min. Earth dist.	5538 Mar 29 20:49	10° J 08'14	4.33254 AU
direct	5532 Dec 01 14:46	7° Y 32'22		direct	5538 May 30 09:06	5° J 00'16	
evening set	5533 Apr 06 08:52	27° Y 00'41		evening set	5538 Oct 03 18:12	22° J 50'13	
	5533 Apr 18 18:16	0° Z					
				conjunction	5538 Oct 17 03:16	25° J 44'25	0°52'26
conjunction	5533 Apr 19 08:16	0° Z 08'27	-0°53'26	minimum elong	5538 Oct 17 03:15	25° J 44'24	0°52'27
minimum elong	5533 Apr 19 08:15	0° Z 08'27	0°53'27	max. Earth dist.	5538 Oct 17 18:42	25° J 52'48	6.39710 AU
max. Earth dist.	5533 Apr 18 21:53	0° Z 02'11	5.97971 AU	morning rise	5538 Oct 30 10:18	28° J 37'29	
morning rise	5533 May 02 09:34	3° Z 17'31			5538 Nov 05 19:59	0° M	
	5533 Jun 23 20:44	15° Z			5539 Feb 08 04:25	15° M	
retrograde	5533 Sep 10 21:07	23° Z 46'06		retrograde	5539 Feb 28 20:41	15° M 40'28	
opposition	5533 Nov 09 17:11	18° Z 46'43	-1°23'59		5539 Mar 21 12:17	15° R M	
min. Earth dist.	5533 Nov 09 11:58	18° Z 48'27	3.93793 AU	opposition	5539 Apr 30 08:02	10° M 43'20	1°21'16
	5533 Dec 12 05:43	15° R Z		min. Earth dist.	5539 Apr 30 07:06	10° M 43'38	4.44568 AU
direct	5534 Jan 07 02:41	13° Z 52'44		direct	5539 Jul 01 04:53	5° M 41'05	
	5534 Feb 01 21:49	15° Z			5539 Sep 25 09:00	15° M	
	5534 Apr 27 07:33	0° II		evening set	5539 Nov 04 08:29	23° M 05'14	
evening set	5534 May 13 06:20	3° II 49'00					
				conjunction	5539 Nov 17 11:11	25° M 53'52	0°55'50
conjunction	5534 May 26 13:10	7° II 03'05	-0°52'17	minimum elong	5539 Nov 17 11:12	25° M 53'52	0°55'51
minimum elong	5534 May 26 13:11	7° II 03'06	0°52'18	max. Earth dist.	5539 Nov 16 20:57	25° M 46'13	6.47552 AU
max. Earth dist.	5534 May 27 13:37	7° II 17'59	5.92029 AU	morning rise	5539 Nov 30 11:24	28° M 41'15	
morning rise	5534 Jun 08 23:02	10° II 18'47			5539 Dec 06 15:43	0° J	
	5534 Sep 22 17:16	0° S		retrograde	5540 Mar 29 15:51	15° J 19'39	
retrograde	5534 Oct 19 09:55	1° S 09'29		opposition	5540 May 29 10:00	10° J 25'32	1°15'05
	5534 Nov 14 23:44	30° R II		min. Earth dist.	5540 May 30 04:48	10° J 19'29	4.48568 AU
opposition	5534 Dec 17 22:46	26° II 06'35	-1°05'09	direct	5540 Jul 31 01:48	5° J 23'29	
min. Earth dist.	5534 Dec 16 19:14	26° II 15'55	3.93046 AU	evening set	5540 Dec 03 20:37	22° J 41'24	
direct	5535 Feb 13 18:33	21° II 11'46		max. Earth dist.	5540 Dec 15 03:04	25° J 07'00	6.47382 AU
	5535 May 01 20:13	0° S					
evening set	5535 Jun 20 05:14	11° S 03'27		conjunction	5540 Dec 16 18:09	25° J 28'06	0°44'22
				minimum elong	5540 Dec 16 18:10	25° J 28'06	0°44'23

morning rise	5540 Dec 29 13:23	28°♏13'45		opposition	5546 Dec 23 08:10	1°♎33'51	-0°59'52
	5541 Jan 06 20:30	0°♎			5547 Jan 04 01:49	30°♏II	
retrograde	5541 Apr 28 23:10	14°♎57'42		direct	5547 Feb 19 04:31	26°♏II38'45	
opposition	5541 Jun 28 21:45	10°♎05'12	0°49'25		5547 Apr 05 14:09	0°♎	
min. Earth dist.	5541 Jun 30 06:52	9°♎54'38	4.44294 AU	evening set	5547 Jun 25 14:52	16°♎26'31	
direct	5541 Aug 30 15:56	5°♎04'00					
evening set	5542 Jan 03 05:02	22°♎36'17		conjunction	5547 Jul 09 05:49	19°♎41'33	-0°25'41
max. Earth dist.	5542 Jan 13 19:45	24°♎56'15	6.39275 AU	minimum elong	5547 Jul 09 05:51	19°♎41'34	0°25'42
				max. Earth dist.	5547 Jul 11 13:39	20°♎14'53	5.98100 AU
conjunction	5542 Jan 15 23:27	25°♎24'46	0°20'56	morning rise	5547 Jul 22 23:06	22°♎57'34	
minimum elong	5542 Jan 15 23:28	25°♎24'47	0°20'57		5547 Aug 22 16:55	0°♏	
morning rise	5542 Jan 28 15:55	28°♎12'36		retrograde	5547 Nov 30 09:03	13°♏04'46	
	5542 Feb 05 20:50	0°♏		min. Earth dist.	5548 Jan 27 07:36	8°♏13'04	4.04397 AU
	5542 May 12 06:04	15°♏		opposition	5548 Jan 28 21:52	8°♏00'02	-0°13'19
retrograde	5542 May 30 19:52	15°♏32'06		direct	5548 Mar 27 05:48	3°♏02'18	
	5542 Jun 18 11:03	15°♏		asc. node	5548 May 12 09:59	6°♏23'55	
opposition	5542 Jul 30 18:32	10°♏39'46	0°09'19		5548 Jun 29 09:22	15°♏	
min. Earth dist.	5542 Aug 01 09:33	10°♏27'20	4.32784 AU	evening set	5548 Jul 31 19:45	22°♏12'21	
direct	5542 Sep 30 22:37	5°♏40'11					
desc. node	5542 Oct 20 15:41	6°♏15'34		conjunction	5548 Aug 14 12:48	25°♏21'52	0°07'58
	5542 Dec 24 06:50	15°♏		minimum elong	5548 Aug 14 12:48	25°♏21'51	0°07'58
evening set	5543 Feb 03 09:39	23°♏45'35		behind sun begin	5548 Aug 14 05:21	25°♏17'35	
max. Earth dist.	5543 Feb 13 21:56	26°♏08'55	6.25199 AU	behind sun end	5548 Aug 14 20:14	25°♏26'08	
				max. Earth dist.	5548 Aug 16 21:20	25°♏54'27	6.11993 AU
conjunction	5543 Feb 16 02:57	26°♏39'09	-0°09'21	morning rise	5548 Aug 28 06:44	28°♏31'26	
minimum elong	5543 Feb 16 02:56	26°♏39'09	0°09'21		5548 Sep 03 18:33	0°♐	
behind sun begin	5543 Feb 15 20:12	26°♏35'20		retrograde	5549 Jan 02 07:42	17°♐26'57	
behind sun end	5543 Feb 16 09:39	26°♏42'58		min. Earth dist.	5549 Mar 01 18:13	12°♐34'12	4.20099 AU
morning rise	5543 Feb 28 19:45	29°♏32'43		opposition	5549 Mar 03 01:52	12°♐23'31	0°35'06
	5543 Mar 02 19:55	0°♐		direct	5549 May 01 15:03	7°♐23'11	
retrograde	5543 Jul 04 02:41	17°♐54'00		evening set	5549 Sep 05 03:10	25°♐46'55	
opposition	5543 Sep 02 18:21	13°♐00'18	-0°36'14				
min. Earth dist.	5543 Sep 04 03:52	12°♐49'29	4.17004 AU	conjunction	5549 Sep 18 17:19	28°♐47'59	0°37'13
direct	5543 Nov 02 18:20	8°♐02'55		minimum elong	5549 Sep 18 17:17	28°♐47'58	0°37'13
evening set	5544 Mar 07 07:47	26°♐54'05		max. Earth dist.	5549 Sep 20 08:56	29°♐10'01	6.28170 AU
max. Earth dist.	5544 Mar 18 14:57	29°♐33'47	6.09040 AU		5549 Sep 24 02:50	0°♑	
				morning rise	5549 Oct 02 06:23	1°♑48'16	
conjunction	5544 Mar 20 03:02	29°♐55'07	-0°38'04	retrograde	5550 Feb 02 21:26	19°♑34'10	
minimum elong	5544 Mar 20 03:01	29°♐55'06	0°38'03	min. Earth dist.	5550 Apr 03 07:29	14°♑39'40	4.35368 AU
	5544 Mar 20 11:19	0°♑		opposition	5550 Apr 04 00:43	14°♑33'57	1°09'02
morning rise	5544 Apr 01 22:56	2°♑56'50		direct	5550 Jun 03 21:19	9°♑32'09	
retrograde	5544 Aug 08 21:44	22°♑32'53		evening set	5550 Oct 08 06:35	27°♑16'53	
opposition	5544 Oct 08 02:57	17°♑36'34	-1°12'48		5550 Oct 20 20:07	0°♒	
min. Earth dist.	5544 Oct 08 18:28	17°♑31'29	4.01827 AU				
direct	5544 Dec 06 14:21	12°♑41'36		conjunction	5550 Oct 21 14:35	0°♒10'01	0°53'50
	5545 Apr 01 22:46	0°♒		minimum elong	5550 Oct 21 14:34	0°♒10'01	0°53'51
evening set	5545 Apr 11 11:57	2°♒16'58		max. Earth dist.	5550 Oct 22 00:22	0°♒15'20	6.41364 AU
				morning rise	5550 Nov 03 20:41	3°♒02'01	
conjunction	5545 Apr 24 12:11	5°♒25'58	-0°54'35		5551 Jan 05 00:03	15°♒	
minimum elong	5545 Apr 24 12:10	5°♒25'58	0°54'36	retrograde	5551 Mar 05 02:09	19°♒59'33	
max. Earth dist.	5545 Apr 24 06:04	5°♒22'15	5.96245 AU	opposition	5551 May 04 13:22	15°♒02'54	1°21'40
morning rise	5545 May 07 14:47	8°♒36'23			5551 May 04 22:14	15°♒	
	5545 Jun 03 20:50	15°♒		min. Earth dist.	5551 May 04 16:22	15°♒01'55	4.45674 AU
retrograde	5545 Sep 16 09:11	29°♒12'32		direct	5551 Jul 05 14:34	10°♒00'36	
opposition	5545 Nov 15 04:18	24°♒12'35	-1°23'20		5551 Sep 04 07:04	15°♒	
min. Earth dist.	5545 Nov 14 18:39	24°♒15'49	3.92843 AU	evening set	5551 Nov 08 15:47	27°♒22'30	
direct	5546 Jan 12 10:32	19°♒18'39			5551 Nov 20 21:57	0°♓	
	5546 Apr 08 11:11	0°♓					
evening set	5546 May 18 15:37	9°♓17'02		conjunction	5551 Nov 21 17:45	0°♓10'38	0°55'03
				minimum elong	5551 Nov 21 17:45	0°♓10'38	0°55'05
conjunction	5546 May 31 23:47	12°♓31'46	-0°50'13	max. Earth dist.	5551 Nov 20 23:29	0°♓00'49	6.48026 AU
minimum elong	5546 May 31 23:49	12°♓31'47	0°50'15	morning rise	5551 Dec 04 17:07	2°♓57'32	
max. Earth dist.	5546 Jun 02 07:08	12°♓50'52	5.91957 AU	retrograde	5552 Apr 02 19:34	19°♓34'55	
morning rise	5546 Jun 14 10:41	15°♓48'00		opposition	5552 Jun 02 14:59	14°♓41'04	1°12'32
	5546 Aug 18 17:00	0°♓		min. Earth dist.	5552 Jun 03 11:45	14°♓34'24	4.48409 AU
retrograde	5546 Oct 24 20:28	6°♓37'11		direct	5552 Aug 04 07:00	9°♓39'03	
min. Earth dist.	5546 Dec 22 02:49	1°♓43'49	3.93855 AU	evening set	5552 Dec 08 02:14	26°♓58'01	

max. Earth dist.	5552 Dec 19 06:26	29° ♂ 22'40	6.46601 AU	minimum elong	5558 Jun 06 08:41	17° ♂ 54'45	0°47'49
				max. Earth dist.	5558 Jun 07 20:17	18° ♂ 16'24	5.92519 AU
conjunction	5552 Dec 20 23:17	29° ♂ 44'47	0°41'41	morning rise	5558 Jun 19 20:42	21° ♂ 11'10	
minimum elong	5552 Dec 20 23:18	29° ♂ 44'48	0°41'42		5558 Jul 28 01:41	0° ♂	
	5552 Dec 22 03:22	0° ♂		retrograde	5558 Oct 30 01:12	11° ♂ 55'53	
morning rise	5553 Jan 02 17:55	2° ♂ 30'32		min. Earth dist.	5558 Dec 27 05:30	7° ♂ 03'10	3.95173 AU
retrograde	5553 May 03 07:51	19° ♂ 18'00		opposition	5558 Dec 28 13:44	6° ♂ 52'13	-0°54'15
opposition	5553 Jul 03 06:28	14° ♂ 25'39	0°44'28	direct	5559 Feb 24 09:46	1° ♂ 56'49	
min. Earth dist.	5553 Jul 04 17:30	14° ♂ 14'29	4.42930 AU	evening set	5559 Jun 30 21:06	21° ♂ 39'10	
direct	5553 Sep 03 23:46	9° ♂ 24'38					
evening set	5554 Jan 07 12:30	27° ♂ 00'58		conjunction	5559 Jul 14 12:31	24° ♂ 53'31	-0°21'12
max. Earth dist.	5554 Jan 18 00:19	29° ♂ 20'01	6.37417 AU	minimum elong	5559 Jul 14 12:32	24° ♂ 53'32	0°21'13
				max. Earth dist.	5559 Jul 16 20:38	25° ♂ 26'52	6.00022 AU
conjunction	5554 Jan 20 06:31	29° ♂ 50'04	0°16'54	morning rise	5559 Jul 28 06:11	28° ♂ 08'46	
minimum elong	5554 Jan 20 06:32	29° ♂ 50'04	0°16'56		5559 Aug 05 04:19	0° ♂	
	5554 Jan 21 00:28	0° ♂			5559 Oct 21 15:07	15° ♂	
morning rise	5554 Feb 01 23:03	2° ♂ 38'36		retrograde	5559 Dec 05 05:30	18° ♂ 05'43	
	5554 Apr 05 16:36	15° ♂			5560 Jan 18 19:39	15° ♂	
retrograde	5554 Jun 04 12:52	20° ♂ 05'58		min. Earth dist.	5560 Feb 01 05:34	13° ♂ 13'43	4.06682 AU
opposition	5554 Aug 04 10:06	15° ♂ 13'30	0°02'55	opposition	5560 Feb 02 18:53	13° ♂ 01'01	-0°06'13
min. Earth dist.	5554 Aug 06 01:05	15° ♂ 01'02	4.30539 AU	asc. node	5560 Mar 22 19:09	8° ♂ 12'06	
	5554 Aug 06 04:20	15° ♂		direct	5560 Apr 01 07:26	8° ♂ 02'51	
desc. node	5554 Aug 29 21:20	12° ♂ 11'58			5560 Jun 09 04:57	15° ♂	
direct	5554 Oct 05 10:48	10° ♂ 14'09		evening set	5560 Aug 05 19:27	27° ♂ 05'35	
	5554 Dec 02 09:58	15° ♂			5560 Aug 18 12:09	0° ♂	
evening set	5555 Feb 07 22:23	28° ♂ 26'10					
	5555 Feb 14 18:58	0° ♂		conjunction	5560 Aug 19 12:28	0° ♂ 13'56	0°12'31
max. Earth dist.	5555 Feb 18 13:22	0° ♂ 51'46	6.22765 AU	minimum elong	5560 Aug 19 12:27	0° ♂ 13'56	0°12'30
				behind sun begin	5560 Aug 19 07:10	0° ♂ 10'55	
conjunction	5555 Feb 20 15:57	1° ♂ 20'46	-0°13'44	behind sun end	5560 Aug 19 17:43	0° ♂ 16'56	
minimum elong	5555 Feb 20 15:56	1° ♂ 20'46	0°13'44	max. Earth dist.	5560 Aug 21 20:24	0° ♂ 46'01	6.14441 AU
behind sun begin	5555 Feb 20 11:32	1° ♂ 18'15		morning rise	5560 Sep 02 05:49	3° ♂ 22'10	
behind sun end	5555 Feb 20 20:21	1° ♂ 23'17		retrograde	5561 Jan 06 18:53	22° ♂ 06'50	
morning rise	5555 Mar 05 08:53	4° ♂ 15'26		min. Earth dist.	5561 Mar 06 07:58	17° ♂ 14'00	4.22477 AU
retrograde	5555 Jul 09 04:10	22° ♂ 47'24		opposition	5561 Mar 07 14:10	17° ♂ 03'50	0°40'53
opposition	5555 Sep 07 18:26	17° ♂ 53'29	-0°42'23	direct	5561 May 06 06:55	12° ♂ 03'19	
min. Earth dist.	5555 Sep 09 01:58	17° ♂ 43'18	4.14584 AU		5561 Sep 08 05:42	0° ♂	
direct	5555 Nov 07 12:40	12° ♂ 56'32		evening set	5561 Sep 09 19:24	0° ♂ 20'44	
	5556 Mar 03 23:58	0° ♂					
evening set	5556 Mar 12 04:24	1° ♂ 54'52		conjunction	5561 Sep 23 08:38	3° ♂ 20'34	0°40'22
max. Earth dist.	5556 Mar 23 14:48	4° ♂ 37'19	6.06857 AU	minimum elong	5561 Sep 23 08:36	3° ♂ 20'33	0°40'22
				max. Earth dist.	5561 Sep 24 18:35	3° ♂ 39'22	6.30282 AU
conjunction	5556 Mar 25 00:00	4° ♂ 57'02	-0°41'24	morning rise	5561 Oct 06 20:57	6° ♂ 19'37	
minimum elong	5556 Mar 24 23:59	4° ♂ 57'01	0°41'24	retrograde	5562 Feb 07 03:25	23° ♂ 57'37	
morning rise	5556 Apr 06 20:48	8° ♂ 00'04		opposition	5562 Apr 08 06:58	18° ♂ 57'56	1°12'05
retrograde	5556 Aug 14 06:04	27° ♂ 46'16		min. Earth dist.	5562 Apr 07 17:23	19° ♂ 02'27	4.37080 AU
opposition	5556 Oct 13 10:39	22° ♂ 49'28	-1°16'13	direct	5562 Jun 08 08:17	13° ♂ 56'02	
min. Earth dist.	5556 Oct 13 22:01	22° ♂ 45'43	4.00116 AU		5562 Oct 05 02:39	0° ♂	
direct	5556 Dec 11 17:25	17° ♂ 54'45		evening set	5562 Oct 12 16:19	1° ♂ 37'04	
	5557 Mar 15 01:56	0° ♂					
evening set	5557 Apr 16 15:47	7° ♂ 34'42		conjunction	5562 Oct 25 23:40	4° ♂ 29'27	0°54'55
				minimum elong	5562 Oct 25 23:39	4° ♂ 29'26	0°54'56
conjunction	5557 Apr 29 17:09	10° ♂ 44'40	-0°55'21	max. Earth dist.	5562 Oct 26 06:19	4° ♂ 33'02	6.42563 AU
minimum elong	5557 Apr 29 17:08	10° ♂ 44'39	0°55'21	morning rise	5562 Nov 08 04:40	7° ♂ 20'36	
max. Earth dist.	5557 Apr 29 18:10	10° ♂ 45'17	5.95196 AU		5562 Dec 15 13:58	15° ♂	
morning rise	5557 May 12 20:40	13° ♂ 56'01		retrograde	5563 Mar 09 04:11	24° ♂ 14'20	
	5557 May 17 07:02	15° ♂		opposition	5563 May 08 17:05	19° ♂ 18'12	1°21'39
	5557 Jul 28 13:53	0° ♂		min. Earth dist.	5563 May 08 22:03	19° ♂ 16'35	4.46317 AU
retrograde	5557 Sep 21 21:50	4° ♂ 36'30			5563 Jun 17 19:32	15° ♂	
	5557 Nov 17 14:57	30° ♂		direct	5563 Jul 09 19:33	14° ♂ 15'59	
opposition	5557 Nov 20 14:35	29° ♂ 36'02	-1°21'59		5563 Aug 01 02:40	15° ♂	
min. Earth dist.	5557 Nov 20 02:09	29° ♂ 40'12	3.92597 AU		5563 Nov 05 06:26	0° ♂	
direct	5558 Jan 17 19:01	24° ♂ 42'05		evening set	5563 Nov 12 21:55	1° ♂ 37'10	
	5558 Mar 16 18:33	0° ♂					
evening set	5558 May 23 23:33	14° ♂ 39'48		conjunction	5563 Nov 25 23:03	4° ♂ 25'00	0°54'00
				minimum elong	5563 Nov 25 23:04	4° ♂ 25'00	0°54'01
conjunction	5558 Jun 06 08:39	17° ♂ 54'44	-0°47'48	max. Earth dist.	5563 Nov 25 00:28	4° ♂ 12'51	6.48072 AU

morning rise	5563 Dec 08 21:47	7°♌11'39		opposition	5569 Nov 25 21:56	4°♊54'26	-1°19'59
retrograde	5564 Apr 07 01:34	23°♌49'34		min. Earth dist.	5569 Nov 25 05:33	4°♊59'56	3.92480 AU
opposition	5564 Jun 06 20:14	18°♌56'05	1°09'39	direct	5570 Jan 22 23:01	0°♊00'23	
min. Earth dist.	5564 Jun 07 20:07	18°♌48'26	4.47873 AU	evening set	5570 May 29 05:21	19°♊57'24	
direct	5564 Aug 08 13:40	13°♌54'13					
	5564 Dec 06 11:08	0°♊		conjunction	5570 Jun 11 15:28	23°♊12'32	-0°45'01
evening set	5564 Dec 12 07:42	1°♊15'17		minimum elong	5570 Jun 11 15:30	23°♊12'33	0°45'02
max. Earth dist.	5564 Dec 23 08:29	3°♊38'31	6.45520 AU	max. Earth dist.	5570 Jun 13 06:22	23°♊36'09	5.93080 AU
				morning rise	5570 Jun 25 04:29	26°♊29'09	
conjunction	5564 Dec 25 04:17	4°♊02'18	0°38'47		5570 Jul 09 23:19	0°♊	
minimum elong	5564 Dec 25 04:18	4°♊02'19	0°38'48	retrograde	5570 Nov 04 04:42	17°♊09'43	
morning rise	5565 Jan 06 22:33	6°♊48'20		min. Earth dist.	5571 Jan 01 08:00	12°♊16'56	3.96333 AU
retrograde	5565 May 07 17:30	23°♊40'24		opposition	5571 Jan 02 17:01	12°♊05'42	-0°48'18
opposition	5565 Jul 07 16:02	18°♊48'08	0°39'15	direct	5571 Mar 01 15:22	7°♊09'54	
min. Earth dist.	5565 Jul 09 03:17	18°♊36'53	4.41386 AU	evening set	5571 Jul 06 01:23	26°♊47'44	
direct	5565 Sep 08 06:44	13°♊47'20					
	5566 Jan 05 03:39	0°♊		conjunction	5571 Jul 19 17:30	0°♊01'34	-0°16'37
evening set	5566 Jan 11 20:35	1°♊28'15		minimum elong	5571 Jul 19 17:31	0°♊01'35	0°16'38
max. Earth dist.	5566 Jan 22 09:28	3°♊48'28	6.35532 AU		5571 Jul 19 14:49	0°♊	
				max. Earth dist.	5571 Jul 22 03:59	0°♊36'10	6.01671 AU
conjunction	5566 Jan 24 14:29	4°♊18'00	0°12'47	morning rise	5571 Aug 02 11:23	3°♊16'07	
minimum elong	5566 Jan 24 14:29	4°♊18'00	0°12'48		5571 Sep 25 15:19	15°♊	
behind sun begin	5566 Jan 24 09:28	4°♊15'13		retrograde	5571 Dec 10 01:13	23°♊04'04	
behind sun end	5566 Jan 24 19:31	4°♊20'47		asc. node	5572 Feb 01 02:15	18°♊52'23	
morning rise	5566 Feb 06 06:48	7°♊07'14		min. Earth dist.	5572 Feb 06 01:42	18°♊12'01	4.08633 AU
	5566 Mar 15 13:18	15°♊		opposition	5572 Feb 07 14:38	17°♊59'28	0°00'50
retrograde	5566 Jun 09 06:23	24°♊42'31			5572 Mar 02 07:38	15°♊	
desc. node	5566 Jul 09 10:12	23°♊19'47		direct	5572 Apr 06 05:58	13°♊00'56	
opposition	5566 Aug 09 02:36	19°♊49'58	-0°03'32		5572 May 11 09:46	15°♊	
min. Earth dist.	5566 Aug 10 17:22	19°♊37'34	4.28431 AU		5572 Aug 02 02:11	0°♊	
	5566 Sep 30 03:05	15°♊		evening set	5572 Aug 10 18:54	1°♊57'45	
direct	5566 Oct 09 23:43	14°♊50'59					
	5566 Oct 19 20:37	15°♊		conjunction	5572 Aug 24 11:30	5°♊05'02	0°16'58
	5567 Jan 29 12:17	0°♊		minimum elong	5572 Aug 24 11:29	5°♊05'01	0°16'57
evening set	5567 Feb 12 11:36	3°♊08'55		max. Earth dist.	5572 Aug 26 16:00	5°♊34'59	6.16505 AU
max. Earth dist.	5567 Feb 23 03:15	5°♊35'41	6.20591 AU	morning rise	5572 Sep 07 04:35	8°♊12'09	
				retrograde	5573 Jan 11 05:50	26°♊47'24	
conjunction	5567 Feb 25 05:08	6°♊04'26	-0°18'03	min. Earth dist.	5573 Mar 10 22:27	21°♊54'12	4.24471 AU
minimum elong	5567 Feb 25 05:07	6°♊04'25	0°18'02	opposition	5573 Mar 12 02:33	21°♊44'45	0°46'24
morning rise	5567 Mar 09 22:33	9°♊00'09		direct	5573 May 10 23:34	16°♊43'55	
retrograde	5567 Jul 14 04:59	27°♊42'00			5573 Aug 22 12:27	0°♊	
opposition	5567 Sep 12 18:45	22°♊47'39	-0°48'14	evening set	5573 Sep 14 12:08	4°♊56'17	
min. Earth dist.	5567 Sep 13 23:17	22°♊38'25	4.12502 AU				
direct	5567 Nov 12 08:08	17°♊51'01		conjunction	5573 Sep 28 00:50	7°♊55'07	0°43'17
	5568 Feb 15 16:37	0°♊		minimum elong	5573 Sep 28 00:48	7°♊55'06	0°43'17
evening set	5568 Mar 17 00:11	6°♊55'07		max. Earth dist.	5573 Sep 29 08:16	8°♊12'28	6.32067 AU
				morning rise	5573 Oct 11 12:05	10°♊53'00	
conjunction	5568 Mar 29 20:28	9°♊58'20	-0°44'25	retrograde	5574 Feb 11 09:42	28°♊24'06	
minimum elong	5568 Mar 29 20:27	9°♊58'19	0°44'26	opposition	5574 Apr 12 14:36	23°♊24'57	1°14'46
max. Earth dist.	5568 Mar 28 16:46	9°♊41'49	6.05050 AU	min. Earth dist.	5574 Apr 12 03:08	23°♊28'44	4.38537 AU
morning rise	5568 Apr 11 17:49	13°♊02'26		direct	5574 Jun 12 19:26	18°♊23'00	
	5568 Jul 06 14:53	0°♊			5574 Sep 18 05:21	0°♊	
retrograde	5568 Aug 19 14:46	2°♊57'16		evening set	5574 Oct 17 03:31	6°♊00'52	
	5568 Oct 03 01:06	30°♊					
opposition	5568 Oct 18 16:58	27°♊59'59	-1°18'59	conjunction	5574 Oct 30 09:50	8°♊52'28	0°55'42
min. Earth dist.	5568 Oct 19 01:51	27°♊57'03	3.98759 AU	minimum elong	5574 Oct 30 09:49	8°♊52'28	0°55'44
direct	5568 Dec 16 20:16	23°♊05'29		max. Earth dist.	5574 Oct 30 11:20	8°♊53'17	6.43591 AU
	5569 Feb 22 13:26	0°♊		morning rise	5574 Nov 12 14:05	11°♊42'54	
evening set	5569 Apr 21 18:13	12°♊48'47			5574 Nov 28 02:41	15°♊	
	5569 Apr 30 18:31	15°♊		retrograde	5575 Mar 13 09:55	28°♊33'18	
				opposition	5575 May 12 23:04	23°♊37'36	1°21'12
conjunction	5569 May 04 20:24	15°♊59'32	-0°55'38	min. Earth dist.	5575 May 13 07:07	23°♊34'59	4.46896 AU
minimum elong	5569 May 04 20:24	15°♊59'32	0°55'39	direct	5575 Jul 14 04:46	18°♊35'26	
max. Earth dist.	5569 May 05 01:12	16°♊02'27	5.94400 AU		5575 Oct 19 12:08	0°♊	
morning rise	5569 May 18 01:11	19°♊11'48		evening set	5575 Nov 17 05:32	5°♊55'41	
	5569 Jul 04 15:28	0°♊		max. Earth dist.	5575 Nov 29 05:51	8°♊30'12	6.48190 AU
retrograde	5569 Sep 27 04:54	9°♊55'26					

conjunction	5575 Nov 30 06:06	8° ♊ 43'14	0°52'39		5581 Jun 16 09:39	0° ♊
minimum elong	5575 Nov 30 06:06	8° ♊ 43'15	0°52'40	retrograde	5581 Oct 02 08:03	15° ♊ 01'00
morning rise	5575 Dec 13 03:57	11° ♊ 29'33		opposition	5581 Nov 30 23:53	9° ♊ 59'34 -1°17'27
retrograde	5576 Apr 11 06:37	28° ♊ 07'34		min. Earth dist.	5581 Nov 30 05:58	10° ♊ 05'36 3.92342 AU
opposition	5576 Jun 11 03:01	23° ♊ 14'21	1°06'22	direct	5582 Jan 27 23:59	5° ♊ 05'24
min. Earth dist.	5576 Jun 12 03:27	23° ♊ 06'32	4.47563 AU	evening set	5582 Jun 03 06:22	25° ♊ 02'22
direct	5576 Aug 12 20:12	18° ♊ 12'42				
	5576 Nov 19 21:54	0° ♋		conjunction	5582 Jun 16 17:38	28° ♊ 17'52 -0°42'03
evening set	5576 Dec 16 14:20	5° ♋ 34'48		minimum elong	5582 Jun 16 17:40	28° ♊ 17'53 0°42'04
max. Earth dist.	5576 Dec 27 13:22	7° ♋ 57'24	6.44825 AU	max. Earth dist.	5582 Jun 18 12:22	28° ♊ 43'45 5.93453 AU
					5582 Jun 23 18:23	0° ♋
conjunction	5576 Dec 29 10:17	8° ♋ 21'51	0°35'41	morning rise	5582 Jun 30 07:34	1° ♋ 34'44
minimum elong	5576 Dec 29 10:18	8° ♋ 21'52	0°35'43	retrograde	5582 Nov 09 05:00	22° ♋ 12'07
morning rise	5577 Jan 11 04:07	11° ♋ 08'00		min. Earth dist.	5583 Jan 06 05:30	17° ♋ 19'33 3.97184 AU
retrograde	5577 May 12 04:20	28° ♋ 03'18		opposition	5583 Jan 07 15:25	17° ♋ 08'00 -0°42'18
opposition	5577 Jul 12 02:29	23° ♋ 11'07	0°33'52	direct	5583 Mar 06 14:05	12° ♋ 11'55
min. Earth dist.	5577 Jul 13 15:09	22° ♋ 59'26	4.40341 AU		5583 Jul 03 11:02	0° ♌
direct	5577 Sep 12 17:00	18° ♋ 10'35		evening set	5583 Jul 11 02:29	1° ♌ 47'05
	5577 Dec 19 14:57	0° ♌				
evening set	5578 Jan 16 04:11	5° ♌ 54'05		conjunction	5583 Jul 24 18:56	5° ♌ 00'34 -0°12'08
max. Earth dist.	5578 Jan 26 16:01	8° ♌ 14'11	6.34220 AU	minimum elong	5583 Jul 24 18:57	5° ♌ 00'35 0°12'09
				behind sun begin	5583 Jul 24 13:23	4° ♌ 57'19
conjunction	5578 Jan 28 21:47	8° ♌ 44'13	0°08'41	behind sun end	5583 Jul 25 00:31	5° ♌ 03'51
minimum elong	5578 Jan 28 21:48	8° ♌ 44'13	0°08'41	max. Earth dist.	5583 Jul 27 04:25	5° ♌ 34'27 6.02911 AU
behind sun begin	5578 Jan 28 14:52	8° ♌ 40'22		morning rise	5583 Aug 07 13:21	8° ♌ 14'42
behind sun end	5578 Jan 29 04:43	8° ♌ 48'04			5583 Sep 06 09:45	15° ♌
morning rise	5578 Feb 10 14:05	11° ♌ 33'57		retrograde	5583 Dec 14 16:54	27° ♌ 55'32
	5578 Feb 26 05:55	15° ♌		asc. node	5583 Dec 14 07:02	27° ♌ 55'31
desc. node	5578 May 20 15:46	28° ♌ 21'04		min. Earth dist.	5584 Feb 10 18:38	23° ♌ 03'32 4.10131 AU
retrograde	5578 Jun 13 21:03	29° ♌ 15'19		opposition	5584 Feb 12 07:17	22° ♌ 51'04 0°07'33
opposition	5578 Aug 13 18:00	24° ♌ 22'34	-0°09'48	direct	5584 Apr 11 00:56	17° ♌ 52'12
min. Earth dist.	5578 Aug 15 07:08	24° ♌ 10'40	4.26924 AU		5584 Jul 15 21:44	0° ♍
direct	5578 Oct 14 11:20	19° ♌ 23'53		evening set	5584 Aug 15 16:05	6° ♍ 45'02
	5579 Jan 12 11:15	0° ♍				
evening set	5579 Feb 16 22:43	7° ♍ 45'40		conjunction	5584 Aug 29 08:39	9° ♍ 51'32 0°21'08
max. Earth dist.	5579 Feb 27 17:48	10° ♍ 14'55	6.19018 AU	minimum elong	5584 Aug 29 08:38	9° ♍ 51'31 0°21'08
				max. Earth dist.	5584 Aug 31 11:56	10° ♍ 20'41 6.18156 AU
conjunction	5579 Mar 01 16:23	10° ♍ 41'52	-0°22'05	morning rise	5584 Sep 12 01:09	12° ♍ 57'41
minimum elong	5579 Mar 01 16:22	10° ♍ 41'51	0°22'03		5584 Dec 16 18:43	0° ♎
morning rise	5579 Mar 14 09:54	13° ♍ 38'18		retrograde	5585 Jan 15 17:12	1° ♎ 25'11
	5579 Jun 08 19:00	0° ♎			5585 Feb 14 09:22	30° ♎
retrograde	5579 Jul 19 03:18	2° ♎ 27'54		min. Earth dist.	5585 Mar 15 11:39	26° ♎ 31'43 4.26120 AU
	5579 Aug 28 20:13	30° ♎		opposition	5585 Mar 16 13:49	26° ♎ 22'57 0°51'26
opposition	5579 Sep 17 15:44	27° ♎ 33'16	-0°53'28	direct	5585 May 15 15:16	21° ♎ 21'57
min. Earth dist.	5579 Sep 18 19:16	27° ♎ 24'21	4.10971 AU		5585 Aug 04 00:14	0° ♏
direct	5579 Nov 17 02:02	22° ♎ 36'57		evening set	5585 Sep 19 04:01	9° ♏ 30'17
	5580 Jan 27 15:06	0° ♏				
evening set	5580 Mar 21 16:31	11° ♏ 45'08		conjunction	5585 Oct 02 15:54	12° ♏ 28'10 0°45'51
max. Earth dist.	5580 Apr 02 11:32	14° ♏ 33'48	6.03690 AU	minimum elong	5585 Oct 02 15:52	12° ♏ 28'09 0°45'51
				max. Earth dist.	5585 Oct 03 19:40	12° ♏ 43'26 6.33581 AU
conjunction	5580 Apr 03 13:14	14° ♏ 49'09	-0°46'58	morning rise	5585 Oct 16 02:24	15° ♏ 25'05
minimum elong	5580 Apr 03 13:12	14° ♏ 49'09	0°46'58		5586 Jan 03 07:53	0° ♐
morning rise	5580 Apr 16 11:26	17° ♏ 54'13		retrograde	5586 Feb 15 15:09	2° ♐ 50'03
	5580 Jun 10 17:14	0° ♐			5586 Mar 31 01:22	30° ♐
retrograde	5580 Aug 24 16:06	7° ♐ 56'00		opposition	5586 Apr 16 21:43	27° ♐ 51'18 1°16'55
opposition	5580 Oct 23 18:04	2° ♐ 58'17	-1°20'59	min. Earth dist.	5586 Apr 16 12:17	27° ♐ 54'24 4.39824 AU
min. Earth dist.	5580 Oct 23 23:19	2° ♐ 56'33	3.97717 AU	direct	5586 Jun 17 06:15	22° ♐ 49'13
	5580 Nov 16 23:10	30° ♐			5586 Aug 30 00:42	0° ♑
direct	5580 Dec 21 16:34	28° ♐ 03'56		evening set	5586 Oct 21 14:03	10° ♑ 24'09
	5581 Jan 25 01:28	0° ♑				
	5581 Apr 14 20:07	15° ♑		conjunction	5586 Nov 03 19:39	13° ♑ 15'03 0°56'08
evening set	5581 Apr 26 15:48	17° ♑ 49'59		minimum elong	5586 Nov 03 19:39	13° ♑ 15'03 0°56'10
				max. Earth dist.	5586 Nov 03 19:11	13° ♑ 14'48 6.44556 AU
conjunction	5581 May 09 18:59	21° ♑ 01'29	-0°55'28		5586 Nov 11 22:16	15° ♑
minimum elong	5581 May 09 19:00	21° ♑ 01'29	0°55'30	morning rise	5586 Nov 16 22:48	16° ♑ 04'42
max. Earth dist.	5581 May 10 03:54	21° ♑ 06'54	5.93776 AU		5587 Feb 01 16:34	0° ♒
morning rise	5581 May 23 00:46	24° ♑ 14'31		retrograde	5587 Mar 17 13:25	2° ♒ 51'41

	5587 Apr 30 17:40	30° \mathbb{M}			5592 May 21 21:30	0° \mathcal{B}
opposition	5587 May 17 04:22	27° \mathbb{M} 56'20	1°20'15	retrograde	5592 Aug 30 01:14	13° \mathcal{B} 08'02
min. Earth dist.	5587 May 17 14:06	27° \mathbb{M} 53'11	4.47466 AU	opposition	5592 Oct 29 00:35	8° \mathcal{B} 09'47 -1°22'33
direct	5587 Jul 18 12:46	22° \mathbb{M} 54'10		min. Earth dist.	5592 Oct 29 03:27	8° \mathcal{B} 08'49 3.96261 AU
	5587 Sep 30 12:50	0° \mathcal{A}		direct	5592 Dec 26 19:43	3° \mathcal{B} 15'32
evening set	5587 Nov 21 12:20	10° \mathcal{A} 13'11			5593 Mar 28 01:23	15° \mathcal{B}
max. Earth dist.	5587 Dec 03 07:26	12° \mathcal{A} 45'01	6.48283 AU	evening set	5593 May 01 19:35	23° \mathcal{B} 05'42
conjunction	5587 Dec 04 11:59	13° \mathcal{A} 00'23	0°51'00	conjunction	5593 May 14 23:59	26° \mathcal{B} 18'10 -0°54'53
minimum elong	5587 Dec 04 12:00	13° \mathcal{A} 00'23	0°51'01	minimum elong	5593 May 14 23:59	26° \mathcal{B} 18'11 0°54'55
morning rise	5587 Dec 17 09:18	15° \mathcal{A} 46'25		max. Earth dist.	5593 May 15 14:18	26° \mathcal{B} 26'54 5.92916 AU
	5588 Mar 06 06:34	0° \mathcal{B}		morning rise	5593 May 28 06:58	29° \mathcal{B} 32'10
retrograde	5588 Apr 15 13:00	2° \mathcal{B} 24'35			5593 May 30 05:00	0° \mathbb{I}
	5588 May 26 01:05	30° \mathcal{R} \mathcal{A}		retrograde	5593 Oct 07 17:37	20° \mathbb{I} 21'36
opposition	5588 Jun 15 09:27	27° \mathcal{A} 31'30	1°02'42	min. Earth dist.	5593 Dec 05 10:42	15° \mathbb{I} 26'49 3.92215 AU
min. Earth dist.	5588 Jun 16 12:34	27° \mathcal{A} 22'49	4.47146 AU	opposition	5593 Dec 06 07:38	15° \mathbb{I} 19'45 -1°14'10
direct	5588 Aug 17 04:26	22° \mathcal{A} 29'51		direct	5594 Feb 02 05:17	10° \mathbb{I} 25'28
	5588 Nov 01 09:16	0° \mathcal{B}			5594 Jun 07 01:15	0° \mathcal{C}
evening set	5588 Dec 20 19:45	9° \mathcal{B} 53'08		evening set	5594 Jun 08 14:05	0° \mathcal{C} 22'07
max. Earth dist.	5588 Dec 31 16:56	12° \mathcal{B} 15'03	6.43898 AU			
				conjunction	5594 Jun 22 02:14	3° \mathcal{C} 37'47 -0°38'33
conjunction	5589 Jan 02 15:22	12° \mathcal{B} 40'22	0°32'22	minimum elong	5594 Jun 22 02:16	3° \mathcal{C} 37'49 0°38'35
minimum elong	5589 Jan 02 15:24	12° \mathcal{B} 40'23	0°32'23	max. Earth dist.	5594 Jun 23 23:13	4° \mathcal{C} 04'58 5.94059 AU
morning rise	5589 Jan 15 08:44	15° \mathcal{B} 26'42		morning rise	5594 Jul 05 17:18	6° \mathcal{C} 54'49
	5589 Apr 06 01:39	0° \approx		retrograde	5594 Nov 14 07:21	27° \mathcal{C} 27'21
retrograde	5589 May 16 12:43	2° \approx 26'08		min. Earth dist.	5595 Jan 11 07:04	22° \mathcal{C} 35'13 3.98468 AU
	5589 Jun 26 10:48	30° \mathcal{R} \mathcal{B}		opposition	5595 Jan 12 18:55	22° \mathcal{C} 23'00 -0°35'39
opposition	5589 Jul 16 12:29	27° \mathcal{B} 33'52	0°28'12	direct	5595 Mar 11 18:45	17° \mathcal{C} 26'33
min. Earth dist.	5589 Jul 18 01:06	27° \mathcal{B} 22'12	4.38941 AU		5595 Jun 15 16:46	0° \mathcal{Q}
direct	5589 Sep 17 00:22	22° \mathcal{B} 33'30		evening set	5595 Jul 16 08:13	6° \mathcal{Q} 57'03
	5589 Nov 30 23:12	0° \approx				
evening set	5590 Jan 20 11:58	10° \approx 20'53		conjunction	5595 Jul 30 01:10	10° \mathcal{Q} 09'50 -0°07'21
max. Earth dist.	5590 Jan 30 23:57	12° \approx 41'40	6.32436 AU	minimum elong	5595 Jul 30 01:10	10° \mathcal{Q} 09'50 0°07'22
				behind sun begin	5595 Jul 29 17:32	10° \mathcal{Q} 05'22
conjunction	5590 Feb 02 05:22	13° \approx 11'38	0°04'26	behind sun end	5595 Jul 30 08:49	10° \mathcal{Q} 14'18
minimum elong	5590 Feb 02 05:21	13° \approx 11'37	0°04'27	max. Earth dist.	5595 Aug 01 12:16	10° \mathcal{Q} 44'32 6.04779 AU
behind sun begin	5590 Feb 01 21:33	13° \approx 07'16		morning rise	5595 Aug 12 19:31	13° \mathcal{Q} 23'05
behind sun end	5590 Feb 02 13:10	13° \approx 15'59			5595 Aug 19 19:10	15° \mathcal{Q}
	5590 Feb 10 06:35	15° \approx		asc. node	5595 Oct 23 20:29	28° \mathcal{Q} 05'07
morning rise	5590 Feb 14 21:35	16° \approx 02'03			5595 Nov 06 08:28	0° \mathbb{P}
desc. node	5590 Mar 30 14:32	25° \approx 13'15		retrograde	5595 Dec 19 12:47	2° \mathbb{P} 53'57
	5590 Apr 28 05:23	0° \mathcal{H}			5596 Jan 31 14:07	30° \mathcal{R} \mathcal{Q}
retrograde	5590 Jun 18 15:07	3° \mathcal{H} 51'17		min. Earth dist.	5596 Feb 15 15:33	28° \mathcal{Q} 01'44 4.12374 AU
	5590 Aug 10 08:22	30° \mathcal{R} \approx		opposition	5596 Feb 17 03:08	27° \mathcal{Q} 49'39 0°14'29
opposition	5590 Aug 18 10:34	28° \approx 58'20	-0°16'12	direct	5596 Apr 16 01:33	22° \mathcal{Q} 50'29
min. Earth dist.	5590 Aug 20 00:14	28° \approx 46'15	4.24847 AU		5596 Jun 25 18:31	0° \mathbb{P}
direct	5590 Oct 19 01:40	23° \approx 59'53		evening set	5596 Aug 20 15:33	11° \mathbb{P} 36'22
	5590 Dec 23 04:52	0° \mathcal{H}				
evening set	5591 Feb 21 11:40	12° \mathcal{H} 27'38		conjunction	5596 Sep 03 07:36	14° \mathbb{P} 41'34 0°25'18
max. Earth dist.	5591 Mar 04 07:41	14° \mathcal{H} 58'10	6.16811 AU	minimum elong	5596 Sep 03 07:34	14° \mathbb{P} 41'33 0°25'18
				max. Earth dist.	5596 Sep 05 09:11	15° \mathbb{P} 09'35 6.20582 AU
conjunction	5591 Mar 06 05:34	15° \mathcal{H} 24'49	-0°26'07	morning rise	5596 Sep 16 23:27	17° \mathbb{P} 46'20
minimum elong	5591 Mar 06 05:32	15° \mathcal{H} 24'48	0°26'07		5596 Nov 16 06:15	0° \mathcal{L}
morning rise	5591 Mar 18 23:36	18° \mathcal{H} 22'23		retrograde	5597 Jan 20 01:59	6° \mathcal{L} 03'12
	5591 May 12 15:57	0° \mathcal{Y}		min. Earth dist.	5597 Mar 20 00:15	1° \mathcal{L} 09'47 4.28522 AU
retrograde	5591 Jul 24 03:54	7° \mathcal{Y} 22'11		opposition	5597 Mar 21 01:20	1° \mathcal{L} 01'23 0°56'13
opposition	5591 Sep 22 15:57	2° \mathcal{Y} 27'09	-0°58'39		5597 Mar 28 18:13	30° \mathcal{R} \mathbb{P}
min. Earth dist.	5591 Sep 23 16:20	2° \mathcal{Y} 19'14	4.08819 AU	direct	5597 May 20 07:01	26° \mathbb{P} 00'09
	5591 Oct 12 10:13	30° \mathcal{R} \mathcal{H}			5597 Jul 11 19:36	0° \mathcal{L}
direct	5591 Nov 21 20:23	27° \mathcal{H} 31'07		evening set	5597 Sep 23 19:14	14° \mathcal{L} 01'58
	5591 Dec 31 15:41	0° \mathcal{Y}				
evening set	5592 Mar 26 12:56	16° \mathcal{Y} 45'42		conjunction	5597 Oct 07 06:14	16° \mathcal{L} 58'34 0°48'10
				minimum elong	5597 Oct 07 06:13	16° \mathcal{L} 58'33 0°48'10
conjunction	5592 Apr 08 10:23	19° \mathcal{Y} 50'52	-0°49'20	max. Earth dist.	5597 Oct 08 06:22	17° \mathcal{L} 11'47 6.35776 AU
minimum elong	5592 Apr 08 10:21	19° \mathcal{Y} 50'51	0°49'20	morning rise	5597 Oct 20 15:36	19° \mathcal{L} 54'09
max. Earth dist.	5592 Apr 07 13:15	19° \mathcal{Y} 38'12	6.01789 AU		5597 Dec 09 18:07	0° \mathbb{M}
morning rise	5592 Apr 21 09:25	22° \mathcal{Y} 57'10		retrograde	5598 Feb 19 19:57	7° \mathbb{M} 11'05

opposition	5598 Apr 21 03:33	2°♑12'52	1°18'37
min. Earth dist.	5598 Apr 20 21:11	2°♑14'58	4.41647 AU
	5598 May 08 15:17	30°♑♌	
direct	5598 Jun 21 17:19	27°♌10'45	
	5598 Aug 05 02:16	0°♑	
evening set	5598 Oct 25 22:02	14°♑41'09	
	5598 Oct 27 09:18	15°♑	
conjunction	5598 Nov 08 02:39	17°♑31'10	0°56'16
minimum elong	5598 Nov 08 02:39	17°♑31'10	0°56'17
max. Earth dist.	5598 Nov 07 21:06	17°♑28'11	6.45853 AU
morning rise	5598 Nov 21 04:57	20°♑19'59	
	5599 Jan 08 21:08	0°♌	
retrograde	5599 Mar 21 15:08	7°♌03'06	
opposition	5599 May 21 07:31	2°♌08'07	1°18'56
min. Earth dist.	5599 May 21 20:07	2°♌04'02	4.48167 AU
	5599 Jun 07 09:50	30°♑♑	
direct	5599 Jul 22 18:29	27°♑05'56	
	5599 Sep 06 06:47	0°♌	
evening set	5599 Nov 25 16:07	14°♌23'37	
max. Earth dist.	5599 Dec 07 08:22	16°♌53'55	6.48331 AU
conjunction	5599 Dec 08 15:13	17°♌10'32	0°49'07
minimum elong	5599 Dec 08 15:14	17°♌10'32	0°49'09
morning rise	5599 Dec 21 11:41	19°♌56'17	
	5600 Feb 10 10:52	0°♌	
retrograde	5600 Apr 19 15:21	6°♌35'11	
opposition	5600 Jun 19 13:27	1°♌42'20	0°58'48
min. Earth dist.	5600 Jun 20 18:26	1°♌33'05	4.46530 AU
	5600 Jul 03 04:22	30°♑♌	
direct	5600 Aug 21 08:19	26°♌40'51	
	5600 Oct 09 04:11	0°♌	
evening set	5600 Dec 24 23:16	14°♌06'19	
max. Earth dist.	5601 Jan 04 16:36	16°♌26'37	6.42643 AU
conjunction	5601 Jan 06 18:19	16°♌53'50	0°28'56
minimum elong	5601 Jan 06 18:21	16°♌53'50	0°28'57
morning rise	5601 Jan 19 11:31	19°♌40'35	
	5601 Mar 11 21:18	0°♌	
retrograde	5601 May 20 23:11	6°♌45'37	
opposition	5601 Jul 20 21:34	1°♌53'23	0°22'29
min. Earth dist.	5601 Jul 22 12:19	1°♌41'02	4.37094 AU
	5601 Aug 05 02:06	30°♑♌	
direct	5601 Sep 21 08:31	26°♌53'12	
	5601 Nov 06 22:42	0°♌	