

opposition	9100 Mar 15 20:01	27° <u>11</u> 15'50 -8°52'28	opposition	9106 Mar 22 07:39	3° <u>18</u> 18'51 -7°18'09
min. Earth dist.	9100 Mar 16 11:38	27° <u>11</u> 15'05 45.92771 AU	min. Earth dist.	9106 Mar 23 05:28	3° <u>18</u> 17'47 45.04938 AU
direct	9100 Jun 05 11:52	26° <u>11</u> 15'57	direct	9106 Jun 11 20:32	2° <u>18</u> 18'14
evening set	9100 Aug 30 11:14	27° <u>11</u> 26'22	evening set	9106 Sep 05 04:49	3° <u>18</u> 28'45
			max. Earth dist.	9106 Sep 18 08:15	3° <u>18</u> 47'15 46.95565 AU
conjunction	9100 Sep 12 14:45	27° <u>11</u> 44'37 -8°23'11	conjunction	9106 Sep 19 07:54	3° <u>18</u> 48'39 -6°51'43
minimum elong	9100 Sep 12 14:56	27° <u>11</u> 44'37 8°23'12	minimum elong	9106 Sep 19 08:03	3° <u>18</u> 48'40 6°51'42
max. Earth dist.	9100 Sep 11 20:35	27° <u>11</u> 43'33 47.83726 AU	morning rise	9106 Oct 03 12:39	4° <u>18</u> 08'41
morning rise	9100 Sep 25 20:16	28° <u>11</u> 02'59	retrograde	9106 Dec 30 19:06	5° <u>18</u> 21'45
retrograde	9100 Dec 23 23:29	29° <u>11</u> 16'02	opposition	9107 Mar 23 14:06	4° <u>18</u> 20'37 -7°01'34
opposition	9101 Mar 17 01:43	28° <u>11</u> 15'33 -8°37'23	min. Earth dist.	9107 Mar 24 13:00	4° <u>18</u> 19'30 44.88856 AU
min. Earth dist.	9101 Mar 17 18:35	28° <u>11</u> 14'44 45.78912 AU	direct	9107 Jun 13 03:53	3° <u>18</u> 19'51
direct	9101 Jun 06 17:58	27° <u>11</u> 15'33	evening set	9107 Sep 06 08:55	4° <u>18</u> 30'26
evening set	9101 Aug 31 13:18	28° <u>11</u> 25'55			
conjunction	9101 Sep 13 21:09	28° <u>11</u> 44'27 -8°08'32	conjunction	9107 Sep 20 15:22	4° <u>18</u> 50'35 -6°35'40
minimum elong	9101 Sep 13 21:20	28° <u>11</u> 44'28 8°08'34	minimum elong	9107 Sep 20 15:30	4° <u>18</u> 50'36 6°35'40
max. Earth dist.	9101 Sep 13 03:09	28° <u>11</u> 43'24 47.69855 AU	max. Earth dist.	9107 Sep 19 13:42	4° <u>18</u> 49'04 46.79357 AU
morning rise	9101 Sep 27 06:43	29° <u>11</u> 03'06	morning rise	9107 Oct 04 23:42	5° <u>18</u> 10'53
	9101 Nov 16 03:10	0° <u>18</u>	retrograde	9108 Jan 01 05:29	6° <u>18</u> 23'59
retrograde	9101 Dec 25 06:11	0° <u>18</u> 16'07	opposition	9108 Mar 23 20:30	5° <u>18</u> 22'42 -6°44'46
	9102 Feb 02 21:29	30° <u>18</u>	min. Earth dist.	9108 Mar 24 20:15	5° <u>18</u> 21'33 44.72280 AU
opposition	9102 Mar 18 07:31	29° <u>11</u> 15'32 -8°22'02	direct	9108 Jun 13 07:25	4° <u>18</u> 21'46
min. Earth dist.	9102 Mar 19 01:03	29° <u>11</u> 14'41 45.64773 AU	evening set	9108 Sep 06 13:09	5° <u>18</u> 32'25
direct	9102 Jun 07 23:59	28° <u>11</u> 15'24			
evening set	9102 Sep 01 15:55	29° <u>11</u> 25'46	conjunction	9108 Sep 20 23:00	5° <u>18</u> 52'51 -6°19'24
max. Earth dist.	9102 Sep 14 08:27	29° <u>11</u> 43'26 47.55719 AU	minimum elong	9108 Sep 20 23:09	5° <u>18</u> 52'51 6°19'23
			max. Earth dist.	9108 Sep 19 19:55	5° <u>18</u> 51'14 46.62652 AU
conjunction	9102 Sep 15 03:45	29° <u>11</u> 44'34 -7°53'39	morning rise	9108 Oct 05 10:42	6° <u>18</u> 13'24
minimum elong	9102 Sep 15 03:55	29° <u>11</u> 44'35 7°53'40	retrograde	9109 Jan 01 13:53	7° <u>18</u> 26'33
	9102 Sep 26 04:28	0° <u>18</u>	opposition	9109 Mar 25 03:16	6° <u>18</u> 25'06 -6°27'42
morning rise	9102 Sep 28 17:27	0° <u>18</u> 03'30	min. Earth dist.	9109 Mar 26 04:59	6° <u>18</u> 23'51 44.55238 AU
retrograde	9102 Dec 26 15:40	1° <u>18</u> 16'30	direct	9109 Jun 14 12:45	5° <u>18</u> 24'00
opposition	9103 Mar 19 13:14	0° <u>18</u> 15'48 -8°06'26	evening set	9109 Sep 07 17:26	6° <u>18</u> 34'44
min. Earth dist.	9103 Mar 20 07:08	0° <u>18</u> 14'57 45.50364 AU	max. Earth dist.	9109 Sep 21 03:07	6° <u>18</u> 53'46 46.45523 AU
	9103 Apr 02 08:52	30° <u>18</u>			
direct	9103 Jun 09 02:33	29° <u>11</u> 15'34	conjunction	9109 Sep 22 06:38	6° <u>18</u> 55'25 -6°02'53
	9103 Aug 13 22:56	0° <u>18</u>	minimum elong	9109 Sep 22 06:47	6° <u>18</u> 55'25 6°02'52
evening set	9103 Sep 02 18:43	0° <u>18</u> 25'56	morning rise	9109 Oct 06 21:32	7° <u>18</u> 16'13
			retrograde	9110 Jan 02 19:29	8° <u>18</u> 29'26
conjunction	9103 Sep 16 10:32	0° <u>18</u> 45'02 -7°38'31	opposition	9110 Mar 26 09:59	7° <u>18</u> 27'49 -6°10'24
minimum elong	9103 Sep 16 10:42	0° <u>18</u> 45'02 7°38'32	min. Earth dist.	9110 Mar 27 11:47	7° <u>18</u> 26'33 44.37798 AU
max. Earth dist.	9103 Sep 15 13:59	0° <u>18</u> 43'49 47.41274 AU	direct	9110 Jun 15 21:37	6° <u>18</u> 26'32
morning rise	9103 Sep 30 04:14	1° <u>18</u> 04'14	evening set	9110 Sep 08 22:16	7° <u>18</u> 37'22
retrograde	9103 Dec 27 23:53	2° <u>18</u> 17'13	max. Earth dist.	9110 Sep 22 08:49	7° <u>18</u> 56'31 46.28012 AU
opposition	9104 Mar 19 19:19	1° <u>18</u> 16'26 -7°50'35			
min. Earth dist.	9104 Mar 20 15:02	1° <u>18</u> 15'29 45.35627 AU	conjunction	9110 Sep 23 14:29	7° <u>18</u> 58'18 -5°46'09
direct	9104 Jun 09 06:58	0° <u>18</u> 16'05	minimum elong	9110 Sep 23 14:37	7° <u>18</u> 58'18 5°46'08
evening set	9104 Sep 02 21:41	1° <u>18</u> 26'29	morning rise	9110 Oct 08 08:39	8° <u>18</u> 19'22
			retrograde	9111 Jan 04 02:34	9° <u>18</u> 32'40
conjunction	9104 Sep 16 17:23	1° <u>18</u> 45'51 -7°23'09	opposition	9111 Mar 27 16:50	8° <u>18</u> 30'52 -5°52'50
minimum elong	9104 Sep 16 17:33	1° <u>18</u> 45'52 7°23'08	min. Earth dist.	9111 Mar 28 20:19	8° <u>18</u> 29'31 44.20021 AU
max. Earth dist.	9104 Sep 15 20:36	1° <u>18</u> 44'38 47.26484 AU	direct	9111 Jun 17 05:15	7° <u>18</u> 29'23
morning rise	9104 Sep 30 14:48	2° <u>18</u> 05'20	evening set	9111 Sep 10 03:12	8° <u>18</u> 40'21
retrograde	9104 Dec 28 05:08	3° <u>18</u> 18'20			
opposition	9105 Mar 21 01:21	2° <u>18</u> 17'26 -7°34'29	conjunction	9111 Sep 24 22:36	9° <u>18</u> 01'32 -5°29'09
min. Earth dist.	9105 Mar 21 21:10	2° <u>18</u> 16'29 45.20505 AU	minimum elong	9111 Sep 24 22:44	9° <u>18</u> 01'33 5°29'08
direct	9105 Jun 10 14:05	1° <u>18</u> 16'58	max. Earth dist.	9111 Sep 23 17:00	8° <u>18</u> 59'46 46.10182 AU
evening set	9105 Sep 04 01:11	2° <u>18</u> 27'26	morning rise	9111 Oct 09 19:36	9° <u>18</u> 22'51
max. Earth dist.	9105 Sep 17 01:21	2° <u>18</u> 45'42 47.11267 AU	retrograde	9112 Jan 05 09:36	10° <u>18</u> 36'16
			opposition	9112 Mar 27 23:53	9° <u>18</u> 34'18 -5°35'01
conjunction	9105 Sep 18 00:27	2° <u>18</u> 47'04 -7°07'33	min. Earth dist.	9112 Mar 29 03:49	9° <u>18</u> 32'55 44.01947 AU
minimum elong	9105 Sep 18 00:37	2° <u>18</u> 47'04 7°07'33	direct	9112 Jun 17 13:07	8° <u>18</u> 32'38
morning rise	9105 Oct 02 01:45	3° <u>18</u> 06'49	evening set	9112 Sep 10 08:25	9° <u>18</u> 43'45
retrograde	9105 Dec 29 12:15	4° <u>18</u> 19'51	max. Earth dist.	9112 Sep 23 23:35	10° <u>18</u> 03'18 45.92088 AU

conjunction	9112 Sep 25 06:33	10° <u>05</u> '10 -5°11'55	evening set	9119 Sep 18 07:27	17° <u>02</u> '52	
minimum elong	9112 Sep 25 06:41	10° <u>05</u> '11 5°11'54	max. Earth dist.	9119 Oct 02 08:13	17° <u>04</u> '35	44.57915 AU
morning rise	9112 Oct 10 06:33	10° <u>02</u> '44				
retrograde	9113 Jan 05 20:22	11° <u>04</u> '17	conjunction	9119 Oct 03 22:07	17° <u>04</u> '57	-3°04'17
opposition	9113 Mar 29 07:04	10° <u>03</u> '10 -5°16'56	minimum elong	9119 Oct 03 22:12	17° <u>04</u> '57	3°04'13
min. Earth dist.	9113 Mar 30 11:27	10° <u>03</u> '45 43.83640 AU	morning rise	9119 Oct 19 14:12	18° <u>09</u> '09	
direct	9113 Jun 18 17:31	9° <u>03</u> '19	retrograde	9120 Jan 14 17:11	19° <u>02</u> '14	
evening set	9113 Sep 11 13:58	10° <u>04</u> '36	opposition	9120 Apr 05 15:10	18° <u>02</u> '55	-3°02'51
max. Earth dist.	9113 Sep 25 07:04	11° <u>07</u> '20 45.73756 AU	min. Earth dist.	9120 Apr 07 02:03	18° <u>01</u> '08	42.47739 AU
			direct	9120 Jun 25 19:53	17° <u>01</u> '42	
conjunction	9113 Sep 26 14:55	11° <u>09</u> '16 -4°54'26	evening set	9120 Sep 18 15:43	18° <u>03</u> '49	
minimum elong	9113 Sep 26 15:02	11° <u>09</u> '17 4°54'23	max. Earth dist.	9120 Oct 02 15:53	18° <u>05</u> '37	44.37214 AU
morning rise	9113 Oct 11 17:35	11° <u>03</u> '05				
retrograde	9114 Jan 07 06:49	12° <u>04</u> '47	conjunction	9120 Oct 04 08:01	18° <u>05</u> '47	-2°45'05
opposition	9114 Mar 30 14:30	11° <u>04</u> '29 -4°58'34	minimum elong	9120 Oct 04 08:05	18° <u>05</u> '47	2°45'01
min. Earth dist.	9114 Mar 31 20:15	11° <u>04</u> '01 43.65110 AU	morning rise	9120 Oct 20 01:53	19° <u>01</u> '32	
direct	9114 Jun 19 22:46	10° <u>04</u> '28	retrograde	9121 Jan 15 03:32	20° <u>03</u> '53	
evening set	9114 Sep 12 19:49	11° <u>05</u> '17	opposition	9121 Apr 07 00:12	19° <u>02</u> '20	-2°42'39
			min. Earth dist.	9121 Apr 08 13:03	19° <u>02</u> '27	42.26781 AU
conjunction	9114 Sep 27 23:29	12° <u>01</u> '35 -4°36'41	direct	9121 Jun 27 05:16	18° <u>02</u> '52	
minimum elong	9114 Sep 27 23:36	12° <u>01</u> '35 4°36'39	evening set	9121 Sep 20 00:20	19° <u>03</u> '18	
max. Earth dist.	9114 Sep 26 15:29	12° <u>01</u> '15 45.55220 AU	max. Earth dist.	9121 Oct 04 02:13	20° <u>00</u> '17	44.16129 AU
morning rise	9114 Oct 13 04:45	12° <u>03</u> '55				
retrograde	9115 Jan 08 16:04	13° <u>04</u> '48	conjunction	9121 Oct 05 18:23	20° <u>02</u> '49	-2°25'38
opposition	9115 Mar 31 22:01	12° <u>04</u> '21 -4°39'56	minimum elong	9121 Oct 05 18:27	20° <u>02</u> '49	2°25'33
min. Earth dist.	9115 Apr 02 03:29	12° <u>04</u> '53 43.46365 AU	morning rise	9121 Oct 21 13:39	20° <u>02</u> '26	
direct	9115 Jun 21 05:57	11° <u>04</u> '59	retrograde	9122 Jan 16 11:27	21° <u>04</u> '20	
evening set	9115 Sep 14 02:12	12° <u>05</u> '52	opposition	9122 Apr 08 09:12	20° <u>03</u> '16	-2°22'12
max. Earth dist.	9115 Sep 27 22:21	13° <u>01</u> '58 45.36441 AU	min. Earth dist.	9122 Apr 09 22:22	20° <u>03</u> '22	42.05465 AU
			direct	9122 Jun 28 16:37	19° <u>03</u> '42	
conjunction	9115 Sep 29 08:12	13° <u>01</u> '02 -4°18'42	evening set	9122 Sep 21 09:30	20° <u>04</u> '18	
minimum elong	9115 Sep 29 08:19	13° <u>01</u> '03 4°18'38	max. Earth dist.	9122 Oct 05 10:45	21° <u>00</u> '21	43.94715 AU
morning rise	9115 Oct 14 16:02	13° <u>04</u> '20				
retrograde	9116 Jan 10 00:19	14° <u>05</u> '25	conjunction	9122 Oct 07 04:50	21° <u>01</u> '20	-2°05'57
opposition	9116 Apr 01 05:48	13° <u>05</u> '24 -4°21'03	minimum elong	9122 Oct 07 04:54	21° <u>01</u> '20	2°05'52
min. Earth dist.	9116 Apr 02 13:02	13° <u>05</u> '16 43.27373 AU	morning rise	9122 Oct 23 01:41	21° <u>03</u> '51	
direct	9116 Jun 21 13:56	12° <u>05</u> '27	retrograde	9123 Jan 17 22:10	22° <u>05</u> '47	
evening set	9116 Sep 14 08:48	14° <u>02</u> '25	opposition	9123 Apr 09 18:31	21° <u>04</u> '44	-2°01'28
max. Earth dist.	9116 Sep 28 07:28	14° <u>02</u> '45 45.17387 AU	min. Earth dist.	9123 Apr 11 08:49	21° <u>04</u> '46	41.83860 AU
			direct	9123 Jun 30 00:59	20° <u>04</u> '44	
conjunction	9116 Sep 29 17:19	14° <u>02</u> '49 -4°00'28	evening set	9123 Sep 22 19:01	21° <u>05</u> '51	
minimum elong	9116 Sep 29 17:25	14° <u>02</u> '50 4°00'25	max. Earth dist.	9123 Oct 06 20:57	22° <u>01</u> '02	43.73010 AU
morning rise	9116 Oct 15 03:17	14° <u>04</u> '22				
retrograde	9117 Jan 10 06:58	16° <u>01</u> '40	conjunction	9123 Oct 08 15:40	22° <u>02</u> '45	-1°46'01
opposition	9117 Apr 02 13:47	14° <u>05</u> '56 -4°01'53	minimum elong	9123 Oct 08 15:43	22° <u>02</u> '45	1°45'55
min. Earth dist.	9117 Apr 03 21:31	14° <u>05</u> '20 43.08072 AU	morning rise	9123 Oct 24 13:32	22° <u>04</u> '46	
direct	9117 Jun 22 23:53	13° <u>05</u> '23	retrograde	9124 Jan 19 09:19	24° <u>02</u> '03	
evening set	9117 Sep 15 15:52	15° <u>08</u> '37	opposition	9124 Apr 10 04:05	22° <u>05</u> '45	-1°40'29
max. Earth dist.	9117 Sep 29 14:44	15° <u>09</u> '03 44.97994 AU	min. Earth dist.	9124 Apr 11 19:30	22° <u>05</u> '43	41.61999 AU
			direct	9124 Jun 30 09:21	21° <u>05</u> '28	
conjunction	9117 Oct 01 02:28	15° <u>03</u> '15 -3°41'59	evening set	9124 Sep 23 04:57	23° <u>07</u> '59	
minimum elong	9117 Oct 01 02:33	15° <u>03</u> '15 3°41'54	max. Earth dist.	9124 Oct 07 07:25	23° <u>02</u> '19	43.51095 AU
morning rise	9117 Oct 16 14:46	15° <u>05</u> '01				
retrograde	9118 Jan 11 18:52	17° <u>08</u> '35	conjunction	9124 Oct 09 02:40	23° <u>03</u> '20	-1°25'50
opposition	9118 Apr 03 22:02	16° <u>05</u> '40 -3°42'28	minimum elong	9124 Oct 09 02:42	23° <u>03</u> '20	1°25'44
min. Earth dist.	9118 Apr 05 06:48	16° <u>04</u> '01 42.88402 AU	morning rise	9124 Oct 25 01:36	23° <u>05</u> '17	
direct	9118 Jun 24 05:17	15° <u>02</u> '55	retrograde	9125 Jan 19 23:05	25° <u>01</u> '25	
evening set	9118 Sep 16 23:29	16° <u>01</u> '52	opposition	9125 Apr 11 13:52	24° <u>08</u> '23	-1°19'14
max. Earth dist.	9118 Sep 30 23:16	16° <u>03</u> '01 44.78172 AU	min. Earth dist.	9125 Apr 13 05:04	24° <u>06</u> '21	41.39958 AU
			direct	9125 Jul 01 16:42	23° <u>03</u> '49	
conjunction	9118 Oct 02 12:12	16° <u>03</u> '18 -3°23'15	evening set	9125 Sep 24 15:20	24° <u>01</u> '46	
minimum elong	9118 Oct 02 12:17	16° <u>03</u> '19 3°23'12	max. Earth dist.	9125 Oct 08 17:08	24° <u>04</u> '11	43.28991 AU
morning rise	9118 Oct 18 02:26	17° <u>01</u> '17				
retrograde	9119 Jan 13 06:19	18° <u>01</u> '07	conjunction	9125 Oct 10 13:53	24° <u>04</u> '03	-1°05'25
opposition	9119 Apr 05 06:31	17° <u>01</u> '30 -3°22'47	minimum elong	9125 Oct 10 13:55	24° <u>04</u> '03	1°05'19
min. Earth dist.	9119 Apr 06 17:08	17° <u>01</u> '16 42.68289 AU	morning rise	9125 Oct 26 13:42	25° <u>07</u> '26	
direct	9119 Jun 25 11:13	16° <u>01</u> '03	retrograde	9126 Jan 21 11:14	26° <u>02</u> '49	

opposition	9126 Apr 13 00:07	25° <u>♄</u> 19'42	-0°57'42	retrograde	9132 Jan 29 19:55	3° <u>♄</u> 52'17	
min. Earth dist.	9126 Apr 14 16:57	25° <u>♄</u> 17'34	41.17752 AU	opposition	9132 Apr 19 19:39	2° <u>♄</u> 46'05	1°16'49
direct	9126 Jul 03 01:57	24° <u>♄</u> 14'52		min. Earth dist.	9132 Apr 21 17:06	2° <u>♄</u> 43'39	39.79885 AU
evening set	9126 Sep 26 02:15	25° <u>♄</u> 30'17		direct	9132 Jul 09 18:04	1° <u>♄</u> 39'38	
max. Earth dist.	9126 Oct 10 05:08	25° <u>♄</u> 51'53	43.06733 AU	evening set	9132 Oct 03 08:19	2° <u>♄</u> 58'35	
				max. Earth dist.	9132 Oct 17 03:04	3° <u>♄</u> 20'29	41.67979 AU
conjunction	9126 Oct 12 01:39	25° <u>♄</u> 54'45	-0°44'45				
minimum elong	9126 Oct 12 01:41	25° <u>♄</u> 54'45	0°44'39	conjunction	9132 Oct 19 07:21	3° <u>♄</u> 23'59	1°24'08
morning rise	9126 Oct 28 01:59	26° <u>♄</u> 19'19		minimum elong	9132 Oct 19 07:19	3° <u>♄</u> 23'59	1°24'17
retrograde	9127 Jan 22 21:18	27° <u>♄</u> 36'48		morning rise	9132 Nov 04 07:11	3° <u>♄</u> 49'28	
opposition	9127 Apr 14 10:24	26° <u>♄</u> 31'47	-0°35'55	retrograde	9133 Jan 30 09:37	5° <u>♄</u> 10'16	
min. Earth dist.	9127 Apr 16 03:04	26° <u>♄</u> 29'39	40.95392 AU	opposition	9133 Apr 21 08:12	4° <u>♄</u> 03'46	1°40'06
direct	9127 Jul 04 14:22	25° <u>♄</u> 26'42		min. Earth dist.	9133 Apr 23 07:28	4° <u>♄</u> 01'13	39.55778 AU
evening set	9127 Sep 27 13:51	26° <u>♄</u> 42'37		direct	9133 Jul 11 06:04	2° <u>♄</u> 56'59	
max. Earth dist.	9127 Oct 11 15:14	27° <u>♄</u> 04'15	42.84313 AU	evening set	9133 Oct 04 23:15	4° <u>♄</u> 16'37	
				max. Earth dist.	9133 Oct 18 17:06	4° <u>♄</u> 38'35	41.43679 AU
conjunction	9127 Oct 13 13:35	27° <u>♄</u> 07'16	-0°23'52				
minimum elong	9127 Oct 13 13:36	27° <u>♄</u> 07'16	0°23'45	conjunction	9133 Oct 20 21:40	4° <u>♄</u> 42'08	1°46'23
morning rise	9127 Oct 29 14:31	27° <u>♄</u> 32'01		minimum elong	9133 Oct 20 21:37	4° <u>♄</u> 42'08	1°46'31
retrograde	9128 Jan 24 09:54	28° <u>♄</u> 49'58		morning rise	9133 Nov 05 20:28	5° <u>♄</u> 07'44	
opposition	9128 Apr 14 21:11	27° <u>♄</u> 44'44	-0°13'53	retrograde	9134 Jan 31 21:14	6° <u>♄</u> 29'10	
min. Earth dist.	9128 Apr 16 15:00	27° <u>♄</u> 42'31	40.72869 AU	opposition	9134 Apr 22 21:05	5° <u>♄</u> 22'21	2°03'37
direct	9128 Jul 04 23:58	26° <u>♄</u> 39'24		min. Earth dist.	9134 Apr 24 21:01	5° <u>♄</u> 19'45	39.31370 AU
evening set	9128 Sep 28 01:43	27° <u>♄</u> 55'52		direct	9134 Jul 12 20:15	4° <u>♄</u> 15'14	
max. Earth dist.	9128 Oct 12 03:21	28° <u>♄</u> 17'39	42.61683 AU	evening set	9134 Oct 06 15:05	5° <u>♄</u> 35'33	
				max. Earth dist.	9134 Oct 20 06:14	5° <u>♄</u> 57'30	41.19113 AU
conjunction	9128 Oct 14 01:54	28° <u>♄</u> 20'41	-0°02'46				
minimum elong	9128 Oct 14 01:53	28° <u>♄</u> 20'41	0°02'39	conjunction	9134 Oct 22 12:19	6° <u>♄</u> 01'11	2°08'51
behind sun begin	9128 Oct 13 19:23	28° <u>♄</u> 20'17		minimum elong	9134 Oct 22 12:15	6° <u>♄</u> 01'11	2°09'00
behind sun end	9128 Oct 14 08:22	28° <u>♄</u> 21'04		morning rise	9134 Nov 07 10:07	6° <u>♄</u> 26'52	
morning rise	9128 Oct 30 02:52	28° <u>♄</u> 45'36		retrograde	9135 Feb 02 13:02	7° <u>♄</u> 48'59	
asc. node	9128 Nov 29 16:19	29° <u>♄</u> 27'57		opposition	9135 Apr 24 10:07	6° <u>♄</u> 41'51	2°27'23
	9129 Jan 06 15:01	0° <u>♄</u>		min. Earth dist.	9135 Apr 26 10:39	6° <u>♄</u> 39'12	39.06742 AU
retrograde	9129 Jan 24 22:01	0° <u>♄</u> 04'05		direct	9135 Jul 14 06:40	5° <u>♄</u> 34'21	
	9129 Feb 12 10:23	30° <u>♄</u>		evening set	9135 Oct 08 07:28	6° <u>♄</u> 55'26	
opposition	9129 Apr 16 08:20	28° <u>♄</u> 58'37	0°08'25	max. Earth dist.	9135 Oct 21 20:21	7° <u>♄</u> 17'23	40.94324 AU
min. Earth dist.	9129 Apr 18 03:08	28° <u>♄</u> 56'21	40.50110 AU				
direct	9129 Jul 06 10:02	27° <u>♄</u> 53'03		conjunction	9135 Oct 24 03:24	7° <u>♄</u> 21'08	2°31'31
evening set	9129 Sep 29 14:26	29° <u>♄</u> 10'05		minimum elong	9135 Oct 24 03:20	7° <u>♄</u> 21'08	2°31'40
max. Earth dist.	9129 Oct 13 14:56	29° <u>♄</u> 31'56	42.38794 AU	morning rise	9135 Nov 08 23:41	7° <u>♄</u> 46'55	
				retrograde	9136 Feb 04 04:56	9° <u>♄</u> 09'44	
conjunction	9129 Oct 15 14:37	29° <u>♄</u> 35'03	0°18'42	opposition	9136 Apr 24 23:48	8° <u>♄</u> 02'16	2°51'21
minimum elong	9129 Oct 15 14:37	29° <u>♄</u> 35'03	0°18'48	min. Earth dist.	9136 Apr 27 01:42	7° <u>♄</u> 59'31	38.81936 AU
morning rise	9129 Oct 31 15:44	0° <u>♄</u> 00'08		direct	9136 Jul 14 17:45	6° <u>♄</u> 54'24	
	9129 Oct 31 13:37	0° <u>♄</u>		evening set	9136 Oct 09 00:18	8° <u>♄</u> 16'16	
retrograde	9130 Jan 26 13:35	1° <u>♄</u> 19'10		max. Earth dist.	9136 Oct 22 11:37	8° <u>♄</u> 38'16	40.69398 AU
opposition	9130 Apr 17 19:38	0° <u>♄</u> 13'29	0°30'58				
min. Earth dist.	9130 Apr 19 14:58	0° <u>♄</u> 11'11	40.27067 AU	conjunction	9136 Oct 24 18:40	8° <u>♄</u> 42'03	2°54'23
	9130 Apr 28 10:47	30° <u>♄</u>		minimum elong	9136 Oct 24 18:35	8° <u>♄</u> 42'02	2°54'32
direct	9130 Jul 07 18:42	29° <u>♄</u> 07'38		morning rise	9136 Nov 09 13:15	9° <u>♄</u> 07'54	
	9130 Sep 13 22:48	0° <u>♄</u>		retrograde	9137 Feb 04 22:35	10° <u>♄</u> 31'27	
evening set	9130 Oct 01 03:50	0° <u>♄</u> 25'18		opposition	9137 Apr 26 13:43	9° <u>♄</u> 23'39	3°15'33
max. Earth dist.	9130 Oct 15 02:15	0° <u>♄</u> 47'09	42.15558 AU	min. Earth dist.	9137 Apr 28 15:15	9° <u>♄</u> 20'54	38.57029 AU
				direct	9137 Jul 16 07:54	8° <u>♄</u> 15'24	
conjunction	9130 Oct 17 03:53	0° <u>♄</u> 50'25	0°40'17	evening set	9137 Oct 10 18:06	9° <u>♄</u> 38'06	
minimum elong	9130 Oct 17 03:51	0° <u>♄</u> 50'25	0°40'25	max. Earth dist.	9137 Oct 24 01:41	10° <u>♄</u> 00'01	40.44375 AU
morning rise	9130 Nov 02 04:46	1° <u>♄</u> 15'38					
retrograde	9131 Jan 28 05:42	2° <u>♄</u> 35'15		conjunction	9137 Oct 26 10:28	10° <u>♄</u> 03'57	3°17'25
opposition	9131 Apr 19 07:34	1° <u>♄</u> 29'19	0°53'46	minimum elong	9137 Oct 26 10:22	10° <u>♄</u> 03'57	3°17'35
min. Earth dist.	9131 Apr 21 04:55	1° <u>♄</u> 26'53	40.03661 AU	morning rise	9137 Nov 11 03:10	10° <u>♄</u> 29'51	
direct	9131 Jul 09 04:49	0° <u>♄</u> 23'10		retrograde	9138 Feb 06 17:16	11° <u>♄</u> 54'11	
evening set	9131 Oct 02 17:43	1° <u>♄</u> 41'28		opposition	9138 Apr 28 04:06	10° <u>♄</u> 46'03	3°39'57
max. Earth dist.	9131 Oct 16 15:31	2° <u>♄</u> 03'25	41.91951 AU	min. Earth dist.	9138 Apr 30 07:04	10° <u>♄</u> 43'13	38.32065 AU
				direct	9138 Jul 17 21:39	9° <u>♄</u> 37'26	
conjunction	9131 Oct 18 17:29	2° <u>♄</u> 06'45	1°02'06	evening set	9138 Oct 12 12:32	11° <u>♄</u> 01'01	
minimum elong	9131 Oct 18 17:28	2° <u>♄</u> 06'44	1°02'13	max. Earth dist.	9138 Oct 25 18:35	11° <u>♄</u> 22'59	40.19303 AU
morning rise	9131 Nov 03 17:51	2° <u>♄</u> 32'06					

conjunction	9138 Oct 28 02:54	11° \mathbb{M} .26'55	3°40'38	opposition	9145 May 07 22:28	20° \mathbb{M} .57'15	6°35'23
minimum elong	9138 Oct 28 02:47	11° \mathbb{M} .26'54	3°40'49	min. Earth dist.	9145 May 10 06:18	20° \mathbb{M} .54'01	36.54994 AU
morning rise	9138 Nov 12 17:12	11° \mathbb{M} .52'51		direct	9145 Jul 27 10:17	19° \mathbb{M} .45'56	
retrograde	9139 Feb 08 08:25	13° \mathbb{M} .18'00		evening set	9145 Oct 23 22:01	21° \mathbb{M} .17'06	
opposition	9139 Apr 29 18:57	12° \mathbb{M} .09'33	4°04'32	max. Earth dist.	9145 Nov 04 21:33	21° \mathbb{M} .38'08	38.40895 AU
min. Earth dist.	9139 May 01 21:39	12° \mathbb{M} .06'43	38.07064 AU				
direct	9139 Jul 19 13:39	11° \mathbb{M} .00'34		conjunction	9145 Nov 07 12:04	21° \mathbb{M} .42'45	6°26'57
evening set	9139 Oct 14 07:50	12° \mathbb{M} .25'05		minimum elong	9145 Nov 07 11:52	21° \mathbb{M} .42'44	6°27'10
max. Earth dist.	9139 Oct 27 09:50	12° \mathbb{M} .46'56	39.94198 AU	morning rise	9145 Nov 22 01:25	22° \mathbb{M} .08'25	
				retrograde	9146 Feb 18 22:28	23° \mathbb{M} .40'44	
conjunction	9139 Oct 29 19:33	12° \mathbb{M} .51'00	4°04'00	opposition	9146 May 09 16:49	22° \mathbb{M} .29'50	7°00'58
minimum elong	9139 Oct 29 19:25	12° \mathbb{M} .51'00	4°04'11	min. Earth dist.	9146 May 12 01:03	22° \mathbb{M} .26'33	36.29120 AU
morning rise	9139 Nov 14 07:25	13° \mathbb{M} .16'59		direct	9146 Jul 29 05:15	21° \mathbb{M} .18'04	
retrograde	9140 Feb 10 01:00	14° \mathbb{M} .43'01		evening set	9146 Oct 25 23:47	22° \mathbb{M} .50'30	
opposition	9140 Apr 30 10:12	13° \mathbb{M} .34'14	4°29'17	max. Earth dist.	9146 Nov 06 16:59	23° \mathbb{M} .11'16	38.14823 AU
min. Earth dist.	9140 May 02 13:41	13° \mathbb{M} .31'20	37.82041 AU				
direct	9140 Jul 20 03:52	12° \mathbb{M} .24'54		conjunction	9146 Nov 09 08:45	23° \mathbb{M} .16'02	6°51'06
evening set	9140 Oct 15 03:53	13° \mathbb{M} .50'24		minimum elong	9146 Nov 09 08:31	23° \mathbb{M} .16'01	6°51'19
max. Earth dist.	9140 Oct 28 02:55	14° \mathbb{M} .12'13	39.69033 AU	morning rise	9146 Nov 23 17:14	23° \mathbb{M} .41'33	
				retrograde	9147 Feb 20 19:30	25° \mathbb{M} .15'04	
conjunction	9140 Oct 30 12:56	14° \mathbb{M} .16'20	4°27'32	opposition	9147 May 11 11:44	24° \mathbb{M} .03'46	7°26'36
minimum elong	9140 Oct 30 12:47	14° \mathbb{M} .16'20	4°27'43	min. Earth dist.	9147 May 13 20:22	24° \mathbb{M} .00'26	36.03201 AU
morning rise	9140 Nov 14 21:47	14° \mathbb{M} .42'19		direct	9147 Jul 30 22:25	22° \mathbb{M} .51'33	
	9140 Nov 25 19:31	15° \mathbb{M} .		evening set	9147 Oct 28 02:15	24° \mathbb{M} .25'19	
retrograde	9141 Feb 10 17:29	16° \mathbb{M} .09'18		max. Earth dist.	9147 Nov 08 13:37	24° \mathbb{M} .45'50	37.88703 AU
opposition	9141 May 02 02:02	15° \mathbb{M} .00'12	4°54'13				
	9141 May 02 05:30	15° \mathbb{R} \mathbb{M} .		conjunction	9147 Nov 11 05:57	24° \mathbb{M} .50'41	7°15'16
min. Earth dist.	9141 May 04 06:30	14° \mathbb{M} .57'13	37.56945 AU	minimum elong	9147 Nov 11 05:44	24° \mathbb{M} .50'40	7°15'30
direct	9141 Jul 21 17:59	13° \mathbb{M} .50'30		morning rise	9147 Nov 25 08:54	25° \mathbb{M} .16'01	
	9141 Oct 06 14:18	15° \mathbb{M} .		retrograde	9148 Feb 22 16:20	26° \mathbb{M} .50'49	
evening set	9141 Oct 17 00:51	15° \mathbb{M} .17'02		opposition	9148 May 12 07:20	25° \mathbb{M} .39'07	7°52'17
max. Earth dist.	9141 Oct 29 20:03	15° \mathbb{M} .38'46	39.43774 AU	min. Earth dist.	9148 May 14 17:03	25° \mathbb{M} .35'41	35.77286 AU
				direct	9148 Jul 31 15:04	24° \mathbb{M} .26'26	
conjunction	9141 Nov 01 06:45	15° \mathbb{M} .42'58	4°51'11	evening set	9148 Oct 29 05:51	26° \mathbb{M} .01'36	
minimum elong	9141 Nov 01 06:36	15° \mathbb{M} .42'57	4°51'23	max. Earth dist.	9148 Nov 09 11:30	26° \mathbb{M} .21'53	37.62636 AU
morning rise	9141 Nov 16 12:30	16° \mathbb{M} .08'55					
retrograde	9142 Feb 12 13:16	17° \mathbb{M} .36'54		conjunction	9148 Nov 12 03:44	26° \mathbb{M} .26'45	7°39'27
opposition	9142 May 03 18:16	16° \mathbb{M} .27'28	5°19'18	minimum elong	9148 Nov 12 03:29	26° \mathbb{M} .26'44	7°39'40
min. Earth dist.	9142 May 05 22:49	16° \mathbb{M} .24'29	37.31730 AU	morning rise	9148 Nov 26 00:51	26° \mathbb{M} .51'53	
direct	9142 Jul 23 07:26	15° \mathbb{M} .17'24		retrograde	9149 Feb 23 15:47	28° \mathbb{M} .28'01	
evening set	9142 Oct 18 22:53	16° \mathbb{M} .45'01		opposition	9149 May 14 03:20	27° \mathbb{M} .15'55	8°17'59
max. Earth dist.	9142 Oct 31 12:53	17° \mathbb{M} .06'34	39.18334 AU	min. Earth dist.	9149 May 16 12:22	27° \mathbb{M} .12'30	35.51469 AU
				direct	9149 Aug 02 10:02	26° \mathbb{M} .02'46	
conjunction	9142 Nov 03 01:18	17° \mathbb{M} .10'55	5°14'58	evening set	9149 Oct 31 10:26	27° \mathbb{M} .39'25	
minimum elong	9142 Nov 03 01:08	17° \mathbb{M} .10'54	5°15'10	max. Earth dist.	9149 Nov 11 08:40	27° \mathbb{M} .59'20	37.36671 AU
morning rise	9142 Nov 18 03:30	17° \mathbb{M} .36'51					
retrograde	9143 Feb 14 09:36	19° \mathbb{M} .05'51		conjunction	9149 Nov 14 02:06	28° \mathbb{M} .04'20	8°03'36
opposition	9143 May 05 11:08	17° \mathbb{M} .56'05	5°44'32	minimum elong	9149 Nov 14 01:51	28° \mathbb{M} .04'19	8°03'50
min. Earth dist.	9143 May 07 17:33	17° \mathbb{M} .52'58	37.06331 AU	morning rise	9149 Nov 27 17:02	28° \mathbb{M} .29'14	
direct	9143 Jul 24 22:45	16° \mathbb{M} .45'37			9150 Feb 03 19:25	0° \mathbb{A} .	
evening set	9143 Oct 20 21:43	18° \mathbb{M} .14'22		retrograde	9150 Feb 25 16:45	0° \mathbb{A} .06'45	
max. Earth dist.	9143 Nov 02 08:01	18° \mathbb{M} .35'49	38.92701 AU		9150 Mar 19 15:49	30° \mathbb{R} \mathbb{M} .	
				opposition	9150 May 16 00:09	28° \mathbb{M} .54'14	8°43'39
conjunction	9143 Nov 04 20:26	18° \mathbb{M} .40'13	5°38'52	min. Earth dist.	9150 May 18 10:18	28° \mathbb{M} .50'45	35.25796 AU
minimum elong	9143 Nov 04 20:16	18° \mathbb{M} .40'12	5°39'05	direct	9150 Aug 04 05:39	27° \mathbb{M} .40'39	
morning rise	9143 Nov 19 18:39	19° \mathbb{M} .06'04		evening set	9150 Nov 02 16:12	29° \mathbb{M} .18'51	
retrograde	9144 Feb 16 06:33	20° \mathbb{M} .36'08		max. Earth dist.	9150 Nov 13 08:47	29° \mathbb{M} .38'31	37.10872 AU
opposition	9144 May 06 04:31	19° \mathbb{M} .26'00	6°09'54				
min. Earth dist.	9144 May 08 10:50	19° \mathbb{M} .22'52	36.80742 AU	conjunction	9150 Nov 16 01:17	29° \mathbb{M} .43'30	8°27'41
direct	9144 Jul 25 17:08	18° \mathbb{M} .15'07		minimum elong	9150 Nov 16 01:00	29° \mathbb{M} .43'29	8°27'54
evening set	9144 Oct 21 21:25	19° \mathbb{M} .45'03			9150 Nov 24 23:06	0° \mathbb{A} .	
max. Earth dist.	9144 Nov 03 01:17	20° \mathbb{M} .06'14	38.66877 AU	morning rise	9150 Nov 29 09:19	0° \mathbb{A} .08'06	
				retrograde	9151 Feb 27 17:43	1° \mathbb{A} .47'06	
conjunction	9144 Nov 05 15:49	20° \mathbb{M} .10'49	6°02'52	opposition	9151 May 17 21:27	0° \mathbb{A} .34'12	9°09'14
minimum elong	9144 Nov 05 15:37	20° \mathbb{M} .10'48	6°03'04	min. Earth dist.	9151 May 20 06:50	0° \mathbb{A} .30'44	35.00316 AU
morning rise	9144 Nov 20 09:56	20° \mathbb{M} .36'36			9151 Jun 11 09:25	30° \mathbb{R} \mathbb{M} .	
retrograde	9145 Feb 17 04:00	22° \mathbb{M} .07'46		direct	9151 Aug 06 04:13	29° \mathbb{M} .20'10	

	9151 Sep 29 13:00	0°♂		retrograde	9158 Mar 12 13:48	14°♂21'01	
evening set	9151 Nov 04 23:09	1°♂00'01		opposition	9158 May 29 23:11	13°♂05'23	12°03'37
max. Earth dist.	9151 Nov 15 07:15	1°♂19'13	36.85280 AU	min. Earth dist.	9158 Jun 01 10:30	13°♂01'38	33.26566 AU
				direct	9158 Aug 17 19:50	11°♂48'10	
conjunction	9151 Nov 18 00:56	1°♂24'21	8°51'40	evening set	9158 Nov 20 11:56	13°♂41'35	
minimum elong	9151 Nov 18 00:40	1°♂24'19	8°51'55	max. Earth dist.	9158 Nov 28 00:31	13°♂56'35	35.10221 AU
morning rise	9151 Dec 01 01:56	1°♂48'38					
retrograde	9152 Feb 29 19:05	3°♂29'10		conjunction	9158 Nov 30 20:25	14°♂02'14	11°34'01
opposition	9152 May 18 19:32	2°♂15'54	9°34'44	minimum elong	9158 Nov 30 20:05	14°♂02'13	11°34'17
min. Earth dist.	9152 May 21 05:32	2°♂12'22	34.75066 AU	morning rise	9158 Dec 11 03:52	14°♂22'50	
direct	9152 Aug 07 00:23	1°♂01'26		retrograde	9159 Mar 14 21:18	16°♂16'11	
evening set	9152 Nov 06 07:01	2°♂43'00		opposition	9159 Jun 01 02:23	15°♂00'06	12°27'22
max. Earth dist.	9152 Nov 16 08:19	3°♂01'51	36.59891 AU	min. Earth dist.	9159 Jun 03 14:20	14°♂56'17	33.02337 AU
				direct	9159 Aug 19 22:11	13°♂42'23	
conjunction	9152 Nov 19 01:20	3°♂06'58	9°15'31	evening set	9159 Nov 23 05:37	15°♂38'03	
minimum elong	9152 Nov 19 01:03	3°♂06'57	9°15'45	max. Earth dist.	9159 Nov 30 07:23	15°♂52'17	34.85835 AU
morning rise	9152 Dec 01 18:30	3°♂30'54					
retrograde	9153 Mar 02 18:37	5°♂13'04		conjunction	9159 Dec 03 02:21	15°♂57'55	11°55'56
opposition	9153 May 20 18:21	3°♂59'26	10°00'05	minimum elong	9159 Dec 03 02:00	15°♂57'53	11°56'13
min. Earth dist.	9153 May 23 04:25	3°♂55'52	34.50005 AU	morning rise	9159 Dec 12 21:46	16°♂17'42	
direct	9153 Aug 08 23:00	2°♂44'33		retrograde	9160 Mar 16 03:34	18°♂13'10	
evening set	9153 Nov 08 16:30	4°♂27'55		opposition	9160 Jun 02 06:27	16°♂56'39	12°50'39
max. Earth dist.	9153 Nov 18 08:51	4°♂46'15	36.34679 AU	min. Earth dist.	9160 Jun 04 18:13	16°♂52'49	32.78383 AU
				direct	9160 Aug 21 02:59	15°♂38'26	
conjunction	9153 Nov 21 02:31	4°♂51'29	9°39'12	evening set	9160 Nov 25 00:48	17°♂36'25	
minimum elong	9153 Nov 21 02:13	4°♂51'27	9°39'27	max. Earth dist.	9160 Dec 01 13:25	17°♂49'42	34.61777 AU
morning rise	9153 Dec 03 11:36	5°♂14'59					
retrograde	9154 Mar 04 21:33	6°♂58'51		conjunction	9160 Dec 04 08:43	17°♂55'25	12°17'22
opposition	9154 May 22 17:38	5°♂44'51	10°25'16	minimum elong	9160 Dec 04 08:23	17°♂55'23	12°17'38
min. Earth dist.	9154 May 25 03:41	5°♂41'16	34.25108 AU	morning rise	9160 Dec 13 15:37	18°♂14'20	
direct	9154 Aug 10 19:53	4°♂29'33		retrograde	9161 Mar 18 11:43	20°♂12'01	
evening set	9154 Nov 11 03:13	6°♂14'47		opposition	9161 Jun 04 11:11	18°♂55'03	13°13'24
max. Earth dist.	9154 Nov 20 10:28	6°♂32'34	36.09573 AU	min. Earth dist.	9161 Jun 06 22:23	18°♂51'13	32.54801 AU
				direct	9161 Aug 23 06:40	17°♂36'19	
conjunction	9154 Nov 23 04:39	6°♂37'53	10°02'42	evening set	9161 Nov 27 21:36	19°♂36'46	
minimum elong	9154 Nov 23 04:20	6°♂37'51	10°02'56	max. Earth dist.	9161 Dec 03 21:24	19°♂49'03	34.38104 AU
morning rise	9154 Dec 05 04:56	7°♂00'56					
retrograde	9155 Mar 06 23:11	8°♂46'34		conjunction	9161 Dec 06 16:11	19°♂54'47	12°38'16
opposition	9155 May 24 17:59	7°♂32'11	10°50'15	minimum elong	9161 Dec 06 15:50	19°♂54'45	12°38'33
min. Earth dist.	9155 May 27 05:12	7°♂28'31	34.00308 AU	morning rise	9161 Dec 15 09:35	20°♂12'44	
direct	9155 Aug 12 16:35	6°♂16'26		retrograde	9162 Mar 20 17:33	22°♂12'44	
evening set	9155 Nov 13 15:19	8°♂03'36		opposition	9162 Jun 06 16:46	20°♂55'20	13°35'33
max. Earth dist.	9155 Nov 22 13:20	8°♂20'50	35.84564 AU	min. Earth dist.	9162 Jun 09 04:12	20°♂51'28	32.31647 AU
				direct	9162 Aug 25 10:27	19°♂36'06	
conjunction	9155 Nov 25 07:22	8°♂26'11	10°25'58	evening set	9162 Nov 30 20:18	21°♂39'07	
minimum elong	9155 Nov 25 07:03	8°♂26'09	10°26'14	max. Earth dist.	9162 Dec 06 06:28	21°♂50'22	34.14917 AU
morning rise	9155 Dec 06 22:18	8°♂48'43					
retrograde	9156 Mar 08 03:09	10°♂36'11		conjunction	9162 Dec 09 00:20	21°♂56'05	12°58'31
opposition	9156 May 25 18:56	9°♂21'24	11°15'00	minimum elong	9162 Dec 08 23:59	21°♂56'03	12°58'47
min. Earth dist.	9156 May 28 05:35	9°♂17'44	33.75604 AU	morning rise	9162 Dec 17 03:19	22°♂12'57	
direct	9156 Aug 13 17:20	8°♂05'11		retrograde	9163 Mar 23 02:48	24°♂15'23	
evening set	9156 Nov 15 04:44	9°♂54'21		opposition	9163 Jun 08 23:10	22°♂57'35	13°57'01
max. Earth dist.	9156 Nov 23 15:30	10°♂10'51	35.59641 AU	min. Earth dist.	9163 Jun 11 09:05	22°♂53'47	32.09007 AU
				direct	9163 Aug 27 15:26	21°♂37'53	
conjunction	9156 Nov 26 10:56	10°♂16'22	10°48'59	evening set	9163 Dec 03 20:28	23°♂43'36	
minimum elong	9156 Nov 26 10:36	10°♂16'20	10°49'14	max. Earth dist.	9163 Dec 08 15:24	23°♂53'37	33.92257 AU
morning rise	9156 Dec 07 16:04	10°♂38'19					
retrograde	9157 Mar 10 08:42	12°♂27'41		conjunction	9163 Dec 11 09:10	23°♂59'22	13°18'05
opposition	9157 May 27 20:42	11°♂12'28	11°39'29	minimum elong	9163 Dec 11 08:50	23°♂59'20	13°18'23
min. Earth dist.	9157 May 30 08:37	11°♂08'43	33.51013 AU	morning rise	9163 Dec 18 20:52	24°♂15'04	
direct	9157 Aug 15 16:51	9°♂55'46		retrograde	9164 Mar 24 11:58	26°♂20'04	
evening set	9157 Nov 17 19:36	11°♂47'01		opposition	9164 Jun 10 06:33	25°♂01'53	14°17'43
max. Earth dist.	9157 Nov 25 20:41	12°♂02'53	35.34847 AU	min. Earth dist.	9164 Jun 12 16:51	24°♂58'02	31.86918 AU
				direct	9164 Aug 28 19:16	23°♂41'44	
conjunction	9157 Nov 28 15:22	12°♂08'23	11°11'41	evening set	9164 Dec 05 22:58	25°♂50'18	
minimum elong	9157 Nov 28 15:02	12°♂08'22	11°11'57	max. Earth dist.	9164 Dec 10 02:55	25°♂59'06	33.70178 AU
morning rise	9157 Dec 09 09:52	12°♂29'42					

conjunction	9164 Dec 12 19:00	26° \mathring{A} 04'46	13°36'53	direct	9171 Sep 13 16:52	9° \mathring{B} 09'02	
minimum elong	9164 Dec 12 18:40	26° \mathring{A} 04'44	13°37'10	max. Earth dist.	9171 Dec 27 03:56	11° \mathring{B} 36'50	32.30422 AU
morning rise	9164 Dec 19 14:02	26° \mathring{A} 19'10					
retrograde	9165 Mar 26 22:56	28° \mathring{A} 26'52		conjunction	9171 Dec 29 14:54	11° \mathring{B} 42'22	15°22'03
opposition	9165 Jun 12 14:31	27° \mathring{A} 08'19	14°37'35	minimum elong	9171 Dec 29 14:40	11° \mathring{B} 42'21	15°22'20
min. Earth dist.	9165 Jun 14 23:16	27° \mathring{A} 04'33	31.65392 AU	retrograde	9172 Apr 12 03:04	14° \mathring{B} 13'39	
direct	9165 Aug 31 03:26	25° \mathring{A} 47'46		opposition	9172 Jun 27 23:23	12° \mathring{B} 52'44	16°27'52
evening set	9165 Dec 09 03:42	27° \mathring{A} 59'21		min. Earth dist.	9172 Jun 30 03:28	12° \mathring{B} 49'08	30.29229 AU
max. Earth dist.	9165 Dec 12 13:07	28° \mathring{A} 06'36	33.48649 AU	direct	9172 Sep 15 06:12	11° \mathring{B} 29'23	
				max. Earth dist.	9172 Dec 28 20:59	13° \mathring{B} 58'32	32.12833 AU
conjunction	9165 Dec 15 05:39	28° \mathring{A} 12'21	13°54'52				
minimum elong	9165 Dec 15 05:19	28° \mathring{A} 12'19	13°55'10	conjunction	9172 Dec 31 07:02	14° \mathring{B} 04'01	15°32'28
morning rise	9165 Dec 21 06:46	28° \mathring{A} 25'17		minimum elong	9172 Dec 31 06:49	14° \mathring{B} 04'00	15°32'45
	9166 Feb 09 18:47	0° \mathring{B}		retrograde	9173 Apr 14 17:59	16° \mathring{B} 36'26	
retrograde	9166 Mar 29 12:02	0° \mathring{B} 35'51		opposition	9173 Jun 30 14:03	15° \mathring{B} 15'10	16°38'34
	9166 May 17 12:08	30° \mathring{R} \mathring{A}		min. Earth dist.	9173 Jul 02 17:59	15° \mathring{B} 11'35	30.12201 AU
opposition	9166 Jun 14 23:33	29° \mathring{A} 16'58	14°56'34	direct	9173 Sep 17 17:54	13° \mathring{B} 51'26	
min. Earth dist.	9166 Jun 17 08:33	29° \mathring{A} 13'10	31.44403 AU	max. Earth dist.	9173 Dec 31 16:06	16° \mathring{B} 22'00	31.96043 AU
direct	9166 Sep 02 10:51	27° \mathring{A} 56'00					
	9166 Dec 07 10:12	0° \mathring{B}		conjunction	9174 Jan 02 23:50	16° \mathring{B} 27'19	15°41'30
evening set	9166 Dec 12 11:23	0° \mathring{B} 10'50		minimum elong	9174 Jan 02 23:39	16° \mathring{B} 27'18	15°41'47
max. Earth dist.	9166 Dec 15 02:33	0° \mathring{B} 16'31	33.27640 AU	retrograde	9174 Apr 17 10:03	19° \mathring{B} 00'48	
				opposition	9174 Jul 03 05:26	17° \mathring{B} 39'13	16°47'45
conjunction	9166 Dec 17 17:16	0° \mathring{B} 22'09	14°11'58	min. Earth dist.	9174 Jul 05 07:01	17° \mathring{B} 35'46	29.95981 AU
minimum elong	9166 Dec 17 16:57	0° \mathring{B} 22'07	14°12'15	direct	9174 Sep 20 10:36	16° \mathring{B} 15'07	
morning rise	9166 Dec 22 22:18	0° \mathring{B} 33'24		max. Earth dist.	9175 Jan 03 10:13	18° \mathring{B} 46'54	31.80121 AU
retrograde	9167 Apr 01 00:05	2° \mathring{B} 47'02					
opposition	9167 Jun 17 09:25	1° \mathring{B} 27'49	15°14'35	conjunction	9175 Jan 05 17:05	18° \mathring{B} 52'10	15°49'04
min. Earth dist.	9167 Jun 19 17:26	1° \mathring{B} 24'04	31.23902 AU	minimum elong	9175 Jan 05 16:55	18° \mathring{B} 52'09	15°49'20
direct	9167 Sep 04 20:45	0° \mathring{B} 06'28		retrograde	9175 Apr 20 03:17	21° \mathring{B} 26'41	
evening set	9167 Dec 15 22:43	2° \mathring{B} 24'48		opposition	9175 Jul 05 21:36	20° \mathring{B} 04'48	16°55'18
max. Earth dist.	9167 Dec 17 14:30	2° \mathring{B} 28'24	33.07133 AU	min. Earth dist.	9175 Jul 07 22:11	20° \mathring{B} 01'25	29.80663 AU
				direct	9175 Sep 23 01:08	18° \mathring{B} 40'22	
conjunction	9167 Dec 20 05:35	2° \mathring{B} 34'08	14°28'08	max. Earth dist.	9176 Jan 06 07:18	21° \mathring{B} 13'33	31.65168 AU
minimum elong	9167 Dec 20 05:16	2° \mathring{B} 34'06	14°28'25				
morning rise	9167 Dec 24 11:45	2° \mathring{B} 43'24		conjunction	9176 Jan 08 11:02	21° \mathring{B} 18'32	15°55'04
retrograde	9168 Apr 02 15:14	5° \mathring{B} 00'23		minimum elong	9176 Jan 08 10:54	21° \mathring{B} 18'32	15°55'21
opposition	9168 Jun 18 20:10	3° \mathring{B} 40'50	15°31'35	retrograde	9176 Apr 21 20:56	23° \mathring{B} 54'01	
min. Earth dist.	9168 Jun 21 03:50	3° \mathring{B} 37'05	31.03901 AU	opposition	9176 Jul 07 14:23	22° \mathring{B} 31'53	17°01'10
direct	9168 Sep 06 06:10	2° \mathring{B} 19'05		min. Earth dist.	9176 Jul 09 12:36	22° \mathring{B} 28'39	29.66306 AU
evening set	9168 Dec 18 16:11	4° \mathring{B} 41'24		direct	9176 Sep 24 17:49	21° \mathring{B} 07'10	
max. Earth dist.	9168 Dec 19 05:13	4° \mathring{B} 42'36	32.87121 AU	max. Earth dist.	9177 Jan 08 02:42	23° \mathring{B} 41'28	31.51232 AU
conjunction	9168 Dec 21 18:48	4° \mathring{B} 48'14	14°43'17	conjunction	9177 Jan 10 05:22	23° \mathring{B} 46'23	15°59'27
minimum elong	9168 Dec 21 18:30	4° \mathring{B} 48'13	14°43'33	minimum elong	9177 Jan 10 05:16	23° \mathring{B} 46'23	15°59'42
morning rise	9168 Dec 24 20:45	4° \mathring{B} 55'01		retrograde	9177 Apr 24 16:33	26° \mathring{B} 22'48	
retrograde	9169 Apr 05 05:09	7° \mathring{B} 15'49		opposition	9177 Jul 10 07:49	25° \mathring{B} 00'26	17°05'15
opposition	9169 Jun 21 07:51	5° \mathring{B} 55'55	15°47'29	min. Earth dist.	9177 Jul 12 04:23	24° \mathring{B} 57'19	29.52952 AU
min. Earth dist.	9169 Jun 23 15:11	5° \mathring{B} 52'10	30.84380 AU	direct	9177 Sep 27 10:44	23° \mathring{B} 35'29	
direct	9169 Sep 08 17:33	4° \mathring{B} 33'47		max. Earth dist.	9178 Jan 11 01:07	26° \mathring{B} 11'04	31.38315 AU
max. Earth dist.	9169 Dec 21 19:20	6° \mathring{B} 58'42	32.67636 AU				
evening set	9169 Dec 23 04:24	7° \mathring{B} 01'45		conjunction	9178 Jan 13 00:30	26° \mathring{B} 15'42	16°02'10
				minimum elong	9178 Jan 13 00:27	26° \mathring{B} 15'42	16°02'26
conjunction	9169 Dec 24 08:47	7° \mathring{B} 04'23	14°57'23	retrograde	9178 Apr 27 11:09	28° \mathring{B} 52'57	
minimum elong	9169 Dec 24 08:30	7° \mathring{B} 04'21	14°57'40	opposition	9178 Jul 13 01:51	27° \mathring{B} 30'25	17°07'31
morning rise	9169 Dec 25 12:36	7° \mathring{B} 06'57		min. Earth dist.	9178 Jul 14 20:48	27° \mathring{B} 27'23	29.40572 AU
retrograde	9170 Apr 07 20:47	9° \mathring{B} 33'14		direct	9178 Sep 30 05:44	26° \mathring{B} 05'16	
opposition	9170 Jun 23 20:08	8° \mathring{B} 13'00	16°02'14	max. Earth dist.	9179 Jan 13 21:45	28° \mathring{B} 41'51	31.26404 AU
min. Earth dist.	9170 Jun 26 02:15	8° \mathring{B} 09'19	30.65395 AU				
direct	9170 Sep 11 05:13	6° \mathring{B} 50'27		conjunction	9179 Jan 15 19:57	28° \mathring{B} 46'23	16°03'10
max. Earth dist.	9170 Dec 24 11:17	9° \mathring{B} 16'50	32.48707 AU	minimum elong	9179 Jan 15 19:55	28° \mathring{B} 46'23	16°03'25
					9179 Feb 17 05:38	0° \mathring{B}	
conjunction	9170 Dec 26 23:38	9° \mathring{B} 22'28	15°10'20	retrograde	9179 Apr 30 08:05	1° \mathring{B} 24'25	
minimum elong	9170 Dec 26 23:22	9° \mathring{B} 22'26	15°10'36	opposition	9179 Jul 15 20:29	0° \mathring{B} 01'43	17°07'56
retrograde	9171 Apr 10 10:16	11° \mathring{B} 52'33			9179 Jul 16 20:56	30° \mathring{R} \mathring{B}	
opposition	9171 Jun 26 09:29	10° \mathring{B} 31'58	16°15'43	min. Earth dist.	9179 Jul 17 13:09	29° \mathring{B} 58'52	29.29162 AU
min. Earth dist.	9171 Jun 28 15:31	10° \mathring{B} 28'16	30.46985 AU	direct	9179 Oct 03 00:04	28° \mathring{B} 36'24	

	9179 Dec 15 02:27	0°♊		direct	9187 Oct 23 20:48	19°♊13'50	
max. Earth dist.	9180 Jan 16 20:38	1°♊14'05	31.15460 AU	evening set	9188 Feb 06 13:47	21°♊53'17	
conjunction	9180 Jan 18 15:53	1°♊18'21	16°02'26	conjunction	9188 Feb 08 14:59	21°♊58'13	14°52'18
minimum elong	9180 Jan 18 15:55	1°♊18'21	16°02'42	minimum elong	9188 Feb 08 15:17	21°♊58'15	14°52'30
retrograde	9180 May 02 03:53	3°♊57'03		max. Earth dist.	9188 Feb 07 14:50	21°♊55'48	30.63807 AU
opposition	9180 Jul 17 15:48	2°♊34'14	17°06'28	morning rise	9188 Feb 10 16:47	22°♊03'13	
min. Earth dist.	9180 Jul 19 07:20	2°♊31'26	29.18673 AU	retrograde	9188 May 22 20:49	24°♊38'45	
direct	9180 Oct 04 19:18	1°♊08'46		opposition	9188 Aug 07 12:29	23°♊15'23	15°45'11
max. Earth dist.	9181 Jan 18 18:27	3°♊47'16	31.05476 AU	min. Earth dist.	9188 Aug 08 09:32	23°♊13'54	28.70036 AU
				direct	9188 Oct 25 17:26	21°♊49'26	
conjunction	9181 Jan 20 12:14	3°♊51'24	15°59'57	evening set	9189 Feb 06 19:27	24°♊24'48	
minimum elong	9181 Jan 20 12:16	3°♊51'25	16°00'12				
retrograde	9181 May 05 01:36	6°♊30'41		conjunction	9189 Feb 10 11:50	24°♊33'39	14°35'27
opposition	9181 Jul 20 11:17	5°♊07'45	17°03'07	minimum elong	9189 Feb 10 12:08	24°♊33'41	14°35'38
min. Earth dist.	9181 Jul 22 00:08	5°♊05'08	29.09109 AU	max. Earth dist.	9189 Feb 09 15:51	24°♊31'39	30.62464 AU
direct	9181 Oct 07 15:45	3°♊42'08		morning rise	9189 Feb 14 04:39	24°♊42'34	
max. Earth dist.	9182 Jan 21 17:44	6°♊21'29	30.96431 AU	retrograde	9189 May 25 15:27	27°♊13'58	
				opposition	9189 Aug 10 09:24	25°♊50'41	15°26'18
conjunction	9182 Jan 23 09:05	6°♊25'24	15°55'42	min. Earth dist.	9189 Aug 11 03:50	25°♊49'23	28.69040 AU
minimum elong	9182 Jan 23 09:11	6°♊25'24	15°55'57	direct	9189 Oct 28 16:26	24°♊24'51	
retrograde	9182 May 07 20:53	9°♊05'10		evening set	9190 Feb 08 11:44	26°♊57'08	
opposition	9182 Jul 23 07:31	7°♊42'06	16°57'50				
min. Earth dist.	9182 Jul 24 19:32	7°♊39'33	29.00460 AU	conjunction	9190 Feb 13 08:19	27°♊08'48	14°16'52
direct	9182 Oct 10 11:04	6°♊16'23		minimum elong	9190 Feb 13 08:40	27°♊08'50	14°17'02
max. Earth dist.	9183 Jan 24 16:49	8°♊56'25	30.88357 AU	max. Earth dist.	9190 Feb 12 14:22	27°♊07'00	30.62390 AU
				morning rise	9190 Feb 18 05:24	27°♊20'31	
conjunction	9183 Jan 26 05:56	9°♊00'07	15°49'39	retrograde	9190 May 28 12:08	29°♊48'50	
minimum elong	9183 Jan 26 06:02	9°♊00'08	15°49'53	opposition	9190 Aug 13 06:18	28°♊25'39	15°05'34
retrograde	9183 May 10 18:13	11°♊40'15		min. Earth dist.	9190 Aug 13 21:19	28°♊24'36	28.69290 AU
opposition	9183 Jul 26 03:54	10°♊17'07	16°50'37	direct	9190 Oct 31 13:34	26°♊59'58	
min. Earth dist.	9183 Jul 27 12:52	10°♊14'46	28.92757 AU	evening set	9191 Feb 10 08:03	29°♊29'32	
direct	9183 Oct 13 08:46	8°♊51'17					
max. Earth dist.	9184 Jan 27 16:04	11°♊31'53	30.81266 AU	conjunction	9191 Feb 16 04:35	29°♊43'33	13°56'37
				minimum elong	9191 Feb 16 04:56	29°♊43'35	13°56'47
conjunction	9184 Jan 29 03:02	11°♊35'23	15°41'48	max. Earth dist.	9191 Feb 15 14:42	29°♊42'10	30.63550 AU
minimum elong	9184 Jan 29 03:12	11°♊35'24	15°42'02	morning rise	9191 Feb 22 01:23	29°♊57'37	
retrograde	9184 May 12 14:19	14°♊15'48			9191 Feb 23 01:16	0°♊	
opposition	9184 Jul 28 00:35	12°♊52'34	16°41'26	retrograde	9191 May 31 06:50	2°♊23'14	
min. Earth dist.	9184 Jul 29 08:25	12°♊50'18	28.86038 AU	opposition	9191 Aug 16 03:10	1°♊00'12	14°43'04
direct	9184 Oct 15 03:49	11°♊26'39		min. Earth dist.	9191 Aug 16 16:12	0°♊59'17	28.70723 AU
max. Earth dist.	9185 Jan 29 16:07	14°♊07'47	30.75218 AU		9191 Sep 24 15:18	30°♊	
				direct	9191 Nov 03 11:18	29°♊34'42	
conjunction	9185 Jan 31 00:11	14°♊11'00	15°32'09		9191 Dec 12 08:05	0°♊	
minimum elong	9185 Jan 31 00:21	14°♊11'01	15°32'22	evening set	9192 Feb 12 06:51	2°♊01'42	
	9185 Feb 20 17:02	15°♊					
retrograde	9185 May 15 09:54	16°♊51'35		conjunction	9192 Feb 19 00:30	2°♊17'48	13°34'47
opposition	9185 Jul 30 21:23	15°♊28'17	16°30'19	minimum elong	9192 Feb 19 00:53	2°♊17'51	13°34'56
min. Earth dist.	9185 Aug 01 02:05	15°♊26'15	28.80336 AU	max. Earth dist.	9192 Feb 18 12:37	2°♊16'37	30.65894 AU
	9185 Aug 16 19:07	15°♊		morning rise	9192 Feb 25 18:30	2°♊33'57	
direct	9185 Oct 18 02:27	14°♊02'19		retrograde	9192 Jun 02 03:38	4°♊57'02	
	9185 Dec 16 12:24	15°♊		opposition	9192 Aug 17 23:34	3°♊34'09	14°18'55
				min. Earth dist.	9192 Aug 18 09:07	3°♊33'29	28.73298 AU
conjunction	9186 Feb 02 21:15	16°♊46'47	15°20'40	direct	9192 Nov 05 10:11	2°♊08'52	
minimum elong	9186 Feb 02 21:30	16°♊46'49	15°20'53	evening set	9193 Feb 13 07:08	4°♊33'26	
max. Earth dist.	9186 Feb 01 15:09	16°♊43'46	30.70239 AU				
retrograde	9186 May 18 05:27	19°♊27'26		conjunction	9193 Feb 20 20:15	4°♊51'25	13°11'28
opposition	9186 Aug 02 18:20	18°♊04'05	16°17'13	minimum elong	9193 Feb 20 20:38	4°♊51'27	13°11'36
min. Earth dist.	9186 Aug 03 21:13	18°♊02'11	28.75726 AU	max. Earth dist.	9193 Feb 20 11:53	4°♊50'35	30.69349 AU
direct	9186 Oct 20 22:47	16°♊38'05		morning rise	9193 Feb 28 09:29	5°♊09'25	
				retrograde	9193 Jun 04 21:14	7°♊30'06	
conjunction	9187 Feb 05 18:18	19°♊22'35	15°07'23	opposition	9193 Aug 20 20:02	6°♊07'24	13°53'11
minimum elong	9187 Feb 05 18:33	19°♊22'36	15°07'35	min. Earth dist.	9193 Aug 21 04:06	6°♊06'50	28.76946 AU
max. Earth dist.	9187 Feb 04 16:00	19°♊19'56	30.66417 AU	direct	9193 Nov 08 07:21	4°♊42'19	
retrograde	9187 May 21 00:56	22°♊03'12		evening set	9194 Feb 15 08:40	7°♊04'32	
opposition	9187 Aug 05 15:26	20°♊39'50	16°02'10				
min. Earth dist.	9187 Aug 06 15:14	20°♊38'08	28.72266 AU	conjunction	9194 Feb 23 15:29	7°♊24'12	12°46'43

minimum elong	9194 Feb 23 15:53	7° ✕ 24'15	12°46'50	evening set	9201 Feb 28 08:59	24° ✕ 09'45	
max. Earth dist.	9194 Feb 23 09:18	7° ✕ 23'35	30.73873 AU				
morning rise	9194 Mar 03 22:25	7° ✕ 43'54		conjunction	9201 Mar 12 14:36	24° ✕ 37'45	9°21'36
retrograde	9194 Jun 07 16:48	10° ✕ 02'15		minimum elong	9201 Mar 12 14:58	24° ✕ 37'47	9°21'40
opposition	9194 Aug 23 16:01	8° ✕ 39'44	13°25'59	max. Earth dist.	9201 Mar 13 02:48	24° ✕ 38'55	31.33542 AU
min. Earth dist.	9194 Aug 23 20:32	8° ✕ 39'25	28.81624 AU	morning rise	9201 Mar 24 19:46	25° ✕ 05'41	
direct	9194 Nov 11 05:43	7° ✕ 14'53		retrograde	9201 Jun 24 03:00	27° ✕ 09'27	
evening set	9195 Feb 17 10:53	9° ✕ 34'46		opposition	9201 Sep 09 23:10	25° ✕ 48'22	9°42'25
				min. Earth dist.	9201 Sep 09 09:30	25° ✕ 49'17	29.42353 AU
conjunction	9195 Feb 26 10:22	9° ✕ 56'01	12°20'40	direct	9201 Nov 28 22:09	24° ✕ 25'22	
minimum elong	9195 Feb 26 10:46	9° ✕ 56'03	12°20'48	evening set	9202 Mar 02 13:11	26° ✕ 30'20	
max. Earth dist.	9195 Feb 26 07:04	9° ✕ 55'41	30.79411 AU				
morning rise	9195 Mar 07 09:48	10° ✕ 17'15		conjunction	9202 Mar 15 04:57	26° ✕ 59'06	8°48'48
retrograde	9195 Jun 10 10:48	12° ✕ 33'21		minimum elong	9202 Mar 15 05:18	26° ✕ 59'08	8°48'49
opposition	9195 Aug 26 11:50	11° ✕ 11'01	12°57'24	max. Earth dist.	9202 Mar 15 21:01	27° ✕ 00'38	31.46196 AU
min. Earth dist.	9195 Aug 26 14:45	11° ✕ 10'48	28.87311 AU	morning rise	9202 Mar 27 19:51	27° ✕ 27'48	
direct	9195 Nov 14 02:18	9° ✕ 46'24		retrograde	9202 Jun 26 14:46	29° ✕ 29'45	
evening set	9196 Feb 19 13:46	12° ✕ 04'00		opposition	9202 Sep 12 15:08	28° ✕ 08'58	9°06'55
				min. Earth dist.	9202 Sep 11 23:38	28° ✕ 10'00	29.55200 AU
conjunction	9196 Feb 29 04:37	12° ✕ 26'39	11°53'23	direct	9202 Dec 01 14:47	26° ✕ 46'21	
minimum elong	9196 Feb 29 05:02	12° ✕ 26'42	11°53'29	evening set	9203 Mar 04 17:41	28° ✕ 49'26	
max. Earth dist.	9196 Feb 29 03:54	12° ✕ 26'35	30.85956 AU				
morning rise	9196 Mar 09 19:19	12° ✕ 49'18		conjunction	9203 Mar 17 18:30	29° ✕ 18'52	8°15'23
retrograde	9196 Jun 12 03:27	15° ✕ 03'12		minimum elong	9203 Mar 17 18:50	29° ✕ 18'54	8°15'24
opposition	9196 Aug 28 07:04	13° ✕ 41'03	12°27'32	max. Earth dist.	9203 Mar 18 12:18	29° ✕ 20'33	31.59883 AU
min. Earth dist.	9196 Aug 28 06:45	13° ✕ 41'04	28.93966 AU	morning rise	9203 Mar 30 18:40	29° ✕ 48'15	
direct	9196 Nov 16 00:21	12° ✕ 16'40			9203 Apr 05 02:19	0° ∇	
evening set	9197 Feb 20 17:06	14° ✕ 32'02		retrograde	9203 Jun 29 04:51	1° ∇ 48'28	
				min. Earth dist.	9203 Sep 14 11:08	0° ∇ 29'17	29.69064 AU
conjunction	9197 Mar 02 22:24	14° ✕ 55'59	11°24'58	opposition	9203 Sep 15 06:14	0° ∇ 28'00	8°30'50
minimum elong	9197 Mar 02 22:48	14° ✕ 56'01	11°25'04		9203 Oct 03 00:36	30° ℞ ✕	
max. Earth dist.	9197 Mar 02 23:51	14° ✕ 56'08	30.93460 AU	direct	9203 Dec 04 08:19	29° ✕ 05'46	
morning rise	9197 Mar 13 03:30	15° ✕ 19'54			9204 Feb 01 13:10	0° ∇	
retrograde	9197 Jun 14 19:03	17° ✕ 31'39		evening set	9204 Mar 05 22:03	1° ∇ 07'04	
opposition	9197 Aug 31 01:47	16° ✕ 09'42	11°56'30				
min. Earth dist.	9197 Aug 30 23:36	16° ✕ 09'51	29.01601 AU	conjunction	9204 Mar 19 07:25	1° ∇ 37'06	7°41'28
direct	9197 Nov 18 19:31	14° ✕ 45'34		minimum elong	9204 Mar 19 07:45	1° ∇ 37'08	7°41'28
evening set	9198 Feb 22 20:53	16° ✕ 58'44		max. Earth dist.	9204 Mar 20 04:36	1° ∇ 39'05	31.74520 AU
				morning rise	9204 Apr 01 15:53	2° ∇ 07'03	
conjunction	9198 Mar 05 15:37	17° ✕ 23'51	10°55'29	retrograde	9204 Jun 30 16:44	4° ∇ 05'37	
minimum elong	9198 Mar 05 16:01	17° ✕ 23'54	10°55'33	opposition	9204 Sep 16 20:55	2° ∇ 45'29	7°54'16
max. Earth dist.	9198 Mar 05 20:17	17° ✕ 24'18	31.01951 AU	min. Earth dist.	9204 Sep 16 00:21	2° ∇ 46'51	29.83856 AU
morning rise	9198 Mar 16 09:55	17° ✕ 48'56		direct	9204 Dec 06 00:12	1° ∇ 23'40	
retrograde	9198 Jun 17 09:54	19° ✕ 58'35		evening set	9205 Mar 08 02:44	3° ∇ 23'15	
opposition	9198 Sep 02 20:04	18° ✕ 36'49	11°24'22				
min. Earth dist.	9198 Sep 02 15:09	18° ✕ 37'09	29.10213 AU	conjunction	9205 Mar 21 19:41	3° ∇ 53'46	7°07'10
direct	9198 Nov 21 16:01	17° ✕ 12'56		minimum elong	9205 Mar 21 19:59	3° ∇ 53'48	7°07'10
evening set	9199 Feb 25 00:39	19° ✕ 23'57		max. Earth dist.	9205 Mar 22 18:39	3° ∇ 55'55	31.90030 AU
				morning rise	9205 Apr 04 11:45	4° ∇ 24'13	
conjunction	9199 Mar 08 07:51	19° ✕ 50'08	10°25'03	retrograde	9205 Jul 03 04:28	6° ∇ 21'11	
minimum elong	9199 Mar 08 08:14	19° ✕ 50'10	10°25'07	min. Earth dist.	9205 Sep 18 11:04	5° ∇ 02'58	29.99487 AU
max. Earth dist.	9199 Mar 08 14:31	19° ✕ 50'47	31.11431 AU	opposition	9205 Sep 19 10:43	5° ∇ 01'24	7°17'22
morning rise	9199 Mar 19 14:44	20° ✕ 16'16		direct	9205 Dec 08 16:35	3° ∇ 40'00	
retrograde	9199 Jun 20 00:31	22° ✕ 23'54		evening set	9206 Mar 10 07:27	5° ∇ 37'55	
opposition	9199 Sep 05 13:46	21° ✕ 02'19	10°51'15				
min. Earth dist.	9199 Sep 05 05:59	21° ✕ 02'51	29.19861 AU	conjunction	9206 Mar 24 07:18	6° ∇ 08'51	6°32'33
direct	9199 Nov 24 10:01	19° ✕ 38'42		minimum elong	9206 Mar 24 07:34	6° ∇ 08'53	6°32'32
evening set	9200 Feb 27 04:41	21° ✕ 47'38		max. Earth dist.	9206 Mar 25 08:36	6° ∇ 11'12	32.06317 AU
				morning rise	9206 Apr 07 06:14	6° ∇ 39'43	
conjunction	9200 Mar 09 23:39	22° ✕ 14'46	9°53'43	retrograde	9206 Jul 05 15:20	8° ∇ 35'10	
minimum elong	9200 Mar 10 00:02	22° ✕ 14'48	9°53'46	min. Earth dist.	9206 Sep 20 23:00	7° ∇ 17'23	30.15899 AU
max. Earth dist.	9200 Mar 10 10:09	22° ✕ 15'47	31.21954 AU	opposition	9206 Sep 22 00:11	7° ∇ 15'43	6°40'12
morning rise	9200 Mar 21 17:56	22° ✕ 41'52		direct	9206 Dec 11 07:02	5° ∇ 54'45	
retrograde	9200 Jun 21 12:38	24° ✕ 47'30		evening set	9207 Mar 12 12:02	7° ∇ 51'02	
opposition	9200 Sep 07 06:45	23° ✕ 26'10	10°17'14				
min. Earth dist.	9200 Sep 06 20:39	23° ✕ 26'51	29.30562 AU	conjunction	9207 Mar 26 18:08	8° ∇ 22'19	5°57'44
direct	9200 Nov 26 05:15	22° ✕ 02'50		minimum elong	9207 Mar 26 18:23	8° ∇ 22'20	5°57'43

max. Earth dist.	9207 Mar 27 21:37	8°♈24'51	32.23329 AU	conjunction	9214 Apr 10 01:48	23°♈06'41	1°54'15
morning rise	9207 Apr 09 23:09	8°♈53'31		minimum elong	9214 Apr 10 01:53	23°♈06'41	1°54'08
retrograde	9207 Jul 08 01:07	10°♈47'29		max. Earth dist.	9214 Apr 11 18:01	23°♈10'12	33.59233 AU
min. Earth dist.	9207 Sep 23 09:27	9°♈30'11	30.33001 AU	morning rise	9214 Apr 25 07:53	23°♈38'25	
opposition	9207 Sep 24 12:51	9°♈28'24	6°02'52	retrograde	9214 Jul 21 21:43	25°♈23'39	
direct	9207 Dec 13 22:49	8°♈07'49		min. Earth dist.	9214 Oct 07 16:12	24°♈09'18	31.70020 AU
evening set	9208 Mar 13 16:51	10°♈02'33		opposition	9214 Oct 09 09:25	24°♈06'42	1°43'26
				direct	9214 Dec 29 03:39	22°♈48'44	
conjunction	9208 Mar 28 04:19	10°♈34'06	5°22'47	evening set	9215 Mar 27 22:24	24°♈34'08	
minimum elong	9208 Mar 28 04:33	10°♈34'07	5°22'45				
max. Earth dist.	9208 Mar 29 09:09	10°♈36'44	32.40977 AU	conjunction	9215 Apr 12 06:42	25°♈05'48	1°20'13
morning rise	9208 Apr 11 14:55	11°♈05'34		minimum elong	9215 Apr 12 06:45	25°♈05'48	1°20'07
retrograde	9208 Jul 09 09:32	12°♈58'08		max. Earth dist.	9215 Apr 14 00:51	25°♈09'27	33.81099 AU
min. Earth dist.	9208 Sep 24 19:19	11°♈41'16	30.50753 AU	morning rise	9215 Apr 27 14:06	25°♈37'23	
opposition	9208 Sep 26 00:42	11°♈39'22	5°25'28	retrograde	9215 Jul 24 02:32	27°♈21'38	
direct	9208 Dec 15 11:07	10°♈19'10		min. Earth dist.	9215 Oct 09 21:42	26°♈07'42	31.92134 AU
evening set	9209 Mar 15 21:30	12°♈12'24		opposition	9215 Oct 11 16:27	26°♈05'01	1°07'24
				direct	9215 Dec 31 12:10	24°♈47'27	
conjunction	9209 Mar 30 13:57	12°♈44'09	4°47'47	evening set	9216 Mar 29 01:59	26°♈31'48	
minimum elong	9209 Mar 30 14:09	12°♈44'10	4°47'45				
max. Earth dist.	9209 Mar 31 21:20	12°♈47'00	32.59228 AU	conjunction	9216 Apr 13 11:07	27°♈03'17	0°46'33
morning rise	9209 Apr 14 05:11	13°♈15'49		minimum elong	9216 Apr 13 11:09	27°♈03'17	0°46'25
retrograde	9209 Jul 11 15:13	15°♈07'00		max. Earth dist.	9216 Apr 15 07:18	27°♈07'05	34.03543 AU
min. Earth dist.	9209 Sep 27 05:16	13°♈50'33	30.69090 AU	morning rise	9216 Apr 28 19:10	27°♈34'42	
opposition	9209 Sep 28 12:00	13°♈48'33	4°48'04	retrograde	9216 Jul 25 05:07	29°♈18'00	
direct	9209 Dec 18 00:41	12°♈28'45		min. Earth dist.	9216 Oct 11 02:20	28°♈04'30	32.14788 AU
evening set	9210 Mar 18 02:06	14°♈20'31		opposition	9216 Oct 12 22:36	28°♈01'45	0°31'48
				direct	9217 Jan 01 21:42	26°♈44'36	
conjunction	9210 Apr 01 22:32	14°♈52'23	4°12'48	evening set	9217 Mar 31 05:37	28°♈27'56	
minimum elong	9210 Apr 01 22:43	14°♈52'24	4°12'44				
max. Earth dist.	9210 Apr 03 06:42	14°♈55'18	32.78036 AU	conjunction	9217 Apr 15 14:48	28°♈59'12	0°13'17
morning rise	9210 Apr 16 18:06	15°♈24'11		minimum elong	9217 Apr 15 14:48	28°♈59'12	0°13'10
retrograde	9210 Jul 13 23:07	17°♈14'04		behind sun begin	9217 Apr 15 10:57	28°♈58'53	
opposition	9210 Sep 30 22:33	15°♈55'55	4°10'44	behind sun end	9217 Apr 15 18:39	28°♈59'31	
min. Earth dist.	9210 Sep 29 13:09	15°♈58'04	30.88020 AU	max. Earth dist.	9217 Apr 17 11:52	29°♈03'03	34.26469 AU
direct	9210 Dec 20 11:02	14°♈36'28		morning rise	9217 Apr 30 23:14	29°♈30'24	
evening set	9211 Mar 20 06:26	16°♈26'49			9217 May 16 09:04	0°♈	
				retrograde	9217 Jul 27 08:15	1°♈12'50	
conjunction	9211 Apr 04 06:35	16°♈58'46	3°37'54	desc. node	9217 Sep 10 02:18	0°♈45'02	
minimum elong	9211 Apr 04 06:44	16°♈58'47	3°37'51	min. Earth dist.	9217 Oct 13 05:57	29°♈59'48	32.37928 AU
max. Earth dist.	9211 Apr 05 17:35	17°♈01'54	32.97415 AU		9217 Oct 13 02:45	30°♈	
morning rise	9211 Apr 19 05:32	17°♈30'38		opposition	9217 Oct 15 04:20	29°♈56'56	-0°03'20
retrograde	9211 Jul 16 04:06	19°♈19'15		direct	9218 Jan 04 03:29	28°♈40'12	
min. Earth dist.	9211 Oct 01 22:08	18°♈03'35	31.07548 AU		9218 Mar 21 15:20	0°♈	
opposition	9211 Oct 03 08:22	18°♈01'23	3°33'33	evening set	9218 Apr 02 08:50	0°♈22'35	
direct	9211 Dec 22 22:12	16°♈42'18					
evening set	9212 Mar 21 10:40	18°♈31'18		conjunction	9218 Apr 17 17:53	0°♈53'36	-0°19'37
				minimum elong	9218 Apr 17 17:52	0°♈53'36	0°19'46
conjunction	9212 Apr 05 13:38	19°♈03'15	3°03'08	max. Earth dist.	9218 Apr 19 17:23	0°♈57'37	34.49811 AU
minimum elong	9212 Apr 05 13:46	19°♈03'15	3°03'03	morning rise	9218 May 03 01:55	1°♈24'33	
max. Earth dist.	9212 Apr 07 01:34	19°♈06'26	33.17390 AU	retrograde	9218 Jul 29 08:09	3°♈06'11	
morning rise	9212 Apr 20 15:41	19°♈35'07		min. Earth dist.	9218 Oct 15 10:34	1°♈53'31	32.61452 AU
retrograde	9212 Jul 17 11:11	21°♈22'33		opposition	9218 Oct 17 09:31	1°♈50'37	-0°37'58
min. Earth dist.	9212 Oct 03 04:05	20°♈07'20	31.27710 AU	direct	9219 Jan 06 10:26	0°♈34'19	
opposition	9212 Oct 04 17:21	20°♈04'58	2°56'34	evening set	9219 Apr 04 12:10	2°♈15'47	
direct	9212 Dec 24 08:52	18°♈46'13					
evening set	9213 Mar 23 14:44	20°♈33'58		conjunction	9219 Apr 19 20:21	2°♈46'30	-0°52'00
				minimum elong	9219 Apr 19 20:19	2°♈46'30	0°52'07
conjunction	9213 Apr 07 20:05	21°♈05'52	2°28'34	max. Earth dist.	9219 Apr 21 19:59	2°♈50'31	34.73487 AU
minimum elong	9213 Apr 07 20:11	21°♈05'52	2°28'29	morning rise	9219 May 05 03:51	3°♈17'10	
max. Earth dist.	9213 Apr 09 10:49	21°♈09'17	33.37982 AU	retrograde	9219 Jul 31 10:44	4°♈58'02	
morning rise	9213 Apr 23 00:22	21°♈37'41		min. Earth dist.	9219 Oct 17 12:45	3°♈45'50	32.85301 AU
retrograde	9213 Jul 19 16:47	23°♈24'00		opposition	9219 Oct 19 13:53	3°♈42'50	-1°12'04
min. Earth dist.	9213 Oct 05 11:20	22°♈09'08	31.48535 AU	direct	9220 Jan 08 14:19	2°♈26'55	
opposition	9213 Oct 07 01:46	22°♈06'43	2°19'51	evening set	9220 Apr 05 15:16	4°♈07'33	
direct	9213 Dec 26 17:36	20°♈48'21					
evening set	9214 Mar 25 18:41	22°♈34'53		conjunction	9220 Apr 20 22:23	4°♈37'57	-1°23'53

minimum elong	9220 Apr 20 22:19	4°8'37.56" 1°24'02"	min. Earth dist.	9226 Oct 29 19:38	16°8'10.17" 34.58031 AU
max. Earth dist.	9220 Apr 22 23:59	4°8'42.05" 34.97423 AU	opposition	9226 Nov 01 04:24	16°8'06.57" -4°53'37"
morning rise	9220 May 06 04:39	5°8'08.17"		9226 Dec 30 19:33	15°8'8"
retrograde	9220 Aug 01 11:36	6°8'48.27"	direct	9227 Jan 21 13:42	14°8'53.33"
min. Earth dist.	9220 Oct 18 16:44	5°8'36.33" 33.09393 AU		9227 Feb 11 21:53	15°8'
opposition	9220 Oct 20 17:52	5°8'33.35" -1°45'35"	evening set	9227 Apr 19 07:07	16°8'29.24"
direct	9221 Jan 09 18:18	4°8'18.04"			
evening set	9221 Apr 07 18:16	5°8'57.53"	conjunction	9227 May 03 19:16	16°8'56.48" -4°51'25"
			minimum elong	9227 May 03 19:07	16°8'56.47" 4°51'37"
conjunction	9221 Apr 22 23:44	6°8'27.55" -1°55'15"	max. Earth dist.	9227 May 06 04:04	17°8'01.19" 36.70221 AU
minimum elong	9221 Apr 22 23:40	6°8'27.55" 1°55'24"	morning rise	9227 May 18 06:56	17°8'24.11"
max. Earth dist.	9221 Apr 25 01:33	6°8'32.03" 35.21559 AU	retrograde	9227 Aug 14 02:18	19°8'00.22"
morning rise	9221 May 08 04:28	6°8'57.54"	min. Earth dist.	9227 Oct 31 19:17	17°8'50.57" 34.83663 AU
retrograde	9221 Aug 03 13:19	8°8'37.23"	opposition	9227 Nov 03 04:05	17°8'47.38" -5°22'36"
min. Earth dist.	9221 Oct 20 18:04	7°8'25.55" 33.33667 AU	direct	9228 Jan 23 13:19	16°8'34.37"
opposition	9221 Oct 22 21:05	7°8'22.50" -2°18'31"	evening set	9228 Apr 20 08:31	18°8'09.58"
direct	9222 Jan 11 23:19	6°8'07.42"			
evening set	9222 Apr 09 21:06	7°8'46.46"	conjunction	9228 May 04 16:36	18°8'36.52" -5°18'38"
			minimum elong	9228 May 04 16:26	18°8'36.51" 5°18'51"
conjunction	9222 Apr 25 00:33	8°8'16.25" -2°26'04"	max. Earth dist.	9228 May 07 01:37	18°8'41.22" 36.95823 AU
minimum elong	9222 Apr 25 00:27	8°8'16.25" 2°26'15"	morning rise	9228 May 19 00:18	19°8'03.45"
max. Earth dist.	9222 Apr 27 03:35	8°8'20.37" 35.45847 AU	retrograde	9228 Aug 15 01:12	20°8'39.32"
morning rise	9222 May 10 03:23	8°8'46.01"	min. Earth dist.	9228 Nov 01 16:37	19°8'30.32" 35.09501 AU
retrograde	9222 Aug 05 15:03	10°8'24.51"	opposition	9228 Nov 04 03:12	19°8'27.08" -5°50'54"
min. Earth dist.	9222 Oct 22 20:20	9°8'13.42" 33.58121 AU	direct	9229 Jan 24 11:42	18°8'14.29"
opposition	9222 Oct 24 23:54	9°8'10.37" -2°50'50"	evening set	9229 Apr 22 09:41	19°8'49.23"
direct	9223 Jan 14 02:30	7°8'55.50"			
evening set	9223 Apr 11 23:29	9°8'34.10"	conjunction	9229 May 06 13:22	20°8'15.46" -5°45'12"
			minimum elong	9229 May 06 13:11	20°8'15.45" 5°45'25"
conjunction	9223 Apr 27 00:41	10°8'03.25" -2°56'20"	max. Earth dist.	9229 May 08 23:36	20°8'20.19" 37.21583 AU
minimum elong	9223 Apr 27 00:35	10°8'03.24" 2°56'30"	morning rise	9229 May 20 16:50	20°8'42.08"
max. Earth dist.	9223 Apr 29 04:47	10°8'07.40" 35.70298 AU	retrograde	9229 Aug 16 23:20	22°8'17.34"
morning rise	9223 May 12 01:08	10°8'32.37"	min. Earth dist.	9229 Nov 03 14:57	21°8'08.53" 35.35496 AU
retrograde	9223 Aug 07 13:04	12°8'10.49"	opposition	9229 Nov 06 02:00	21°8'05.29" -6°18'29"
min. Earth dist.	9223 Oct 24 21:22	11°8'00.01" 33.82735 AU	direct	9230 Jan 26 08:59	19°8'53.13"
opposition	9223 Oct 27 01:54	10°8'56.53" -3°22'31"	evening set	9230 Apr 24 10:40	21°8'27.41"
direct	9224 Jan 16 07:19	9°8'42.26"			
evening set	9224 Apr 13 01:51	11°8'20.05"	conjunction	9230 May 08 09:51	21°8'53.32" -6°11'07"
			minimum elong	9230 May 08 09:39	21°8'53.31" 6°11'21"
conjunction	9224 Apr 28 00:09	11°8'48.54" -3°26'01"	max. Earth dist.	9230 May 10 21:04	21°8'58.08" 37.47462 AU
minimum elong	9224 Apr 28 00:02	11°8'48.53" 3°26'12"	morning rise	9230 May 22 08:37	22°8'19.23"
max. Earth dist.	9224 Apr 30 04:38	11°8'53.09" 35.94912 AU	retrograde	9230 Aug 18 18:07	23°8'54.29"
morning rise	9224 May 12 22:04	12°8'17.41"	min. Earth dist.	9230 Nov 05 12:33	22°8'46.09" 35.61563 AU
retrograde	9224 Aug 08 11:12	13°8'55.18"	opposition	9230 Nov 08 00:13	22°8'42.44" -6°45'22"
min. Earth dist.	9224 Oct 25 21:13	12°8'44.51" 34.07573 AU	direct	9231 Jan 28 10:04	21°8'30.50"
opposition	9224 Oct 28 03:13	12°8'41.39" -3°53'34"	evening set	9231 Apr 26 11:31	23°8'04.54"
direct	9225 Jan 17 09:58	11°8'27.33"			
evening set	9225 Apr 15 03:49	13°8'04.33"	conjunction	9231 May 10 05:41	23°8'30.13" -6°36'24"
			minimum elong	9231 May 10 05:30	23°8'30.12" 6°36'38"
conjunction	9225 Apr 29 23:11	13°8'32.55" -3°55'06"	max. Earth dist.	9231 May 12 16:45	23°8'34.46" 37.73367 AU
minimum elong	9225 Apr 29 23:03	13°8'32.54" 3°55'17"	morning rise	9231 May 23 23:48	23°8'55.31"
max. Earth dist.	9225 May 02 05:44	13°8'37.18" 36.19756 AU	retrograde	9231 Aug 20 13:42	25°8'30.19"
morning rise	9225 May 14 17:52	14°8'01.14"	min. Earth dist.	9231 Nov 07 09:21	24°8'22.21" 35.87645 AU
	9225 Jun 18 18:54	15°8'	opposition	9231 Nov 09 22:00	24°8'18.53" -7°11'34"
retrograde	9225 Aug 10 06:54	15°8'38.20"	direct	9232 Jan 30 09:07	23°8'07.20"
	9225 Oct 04 10:06	15°8'8"	evening set	9232 Apr 27 12:12	24°8'41.03"
min. Earth dist.	9225 Oct 27 21:41	14°8'28.12" 34.32660 AU			
opposition	9225 Oct 30 04:08	14°8'24.58" -4°23'56"	conjunction	9232 May 11 01:24	25°8'05.48" -7°01'02"
direct	9226 Jan 19 13:30	13°8'11.14"	minimum elong	9232 May 11 01:12	25°8'05.47" 7°01'16"
evening set	9226 Apr 17 05:35	14°8'47.37"	max. Earth dist.	9232 May 13 13:44	25°8'10.26" 37.99235 AU
	9226 Apr 23 18:53	15°8'	morning rise	9232 May 24 14:16	25°8'30.33"
			retrograde	9232 Aug 21 07:03	27°8'05.04"
conjunction	9226 May 01 21:22	15°8'15.31" -4°23'35"	min. Earth dist.	9232 Nov 08 07:13	25°8'57.21" 36.13650 AU
minimum elong	9226 May 01 21:13	15°8'15.30" 4°23'47"	opposition	9232 Nov 10 19:14	25°8'53.56" -7°37'04"
max. Earth dist.	9226 May 04 04:06	15°8'19.53" 36.44857 AU	direct	9233 Jan 31 08:47	24°8'42.44"
morning rise	9226 May 16 12:49	15°8'43.22"	evening set	9233 Apr 29 12:51	26°8'16.06"
retrograde	9226 Aug 12 05:10	17°8'19.59"			

conjunction	9233 May 12 20:32	26° 8 40'17 -7°25'03	max. Earth dist.	9239 May 24 20:48	5° II 47'37 39.76994 AU
minimum elong	9233 May 12 20:20	26° 8 40'16 7°25'17	morning rise	9239 Jun 03 01:13	6° II 03'40
max. Earth dist.	9233 May 15 08:07	26° 8 44'50 38.25000 AU	retrograde	9239 Sep 01 07:34	7° II 36'46
morning rise	9233 May 26 04:10	27° 8 04'29	min. Earth dist.	9239 Nov 19 21:18	6° II 30'50 37.92510 AU
retrograde	9233 Aug 23 01:36	28° 8 38'44	opposition	9239 Nov 22 11:45	6° II 27'24 -10°16'37
min. Earth dist.	9233 Nov 10 02:44	27° 8 31'22 36.39536 AU	direct	9240 Feb 12 06:19	5° II 18'12
opposition	9233 Nov 12 16:07	27° 8 27'53 -8°01'53	evening set	9240 May 11 10:13	6° II 49'45
direct	9234 Feb 02 06:00	26° 8 17'00			
evening set	9234 May 01 13:04	27° 8 50'01	conjunction	9240 May 22 22:23	7° II 09'46 -9°55'32
			minimum elong	9240 May 22 22:09	7° II 09'45 9°55'47
conjunction	9234 May 14 15:15	28° 8 13'38 -7°48'26	max. Earth dist.	9240 May 25 12:26	7° II 14'17 40.02176 AU
minimum elong	9234 May 14 15:02	28° 8 13'37 7°48'40	morning rise	9240 Jun 03 10:35	7° II 29'47
max. Earth dist.	9234 May 17 03:52	28° 8 18'14 38.50611 AU	retrograde	9240 Sep 02 00:03	9° II 02'48
morning rise	9234 May 27 17:18	28° 8 37'16	min. Earth dist.	9240 Nov 20 13:27	7° II 57'13 38.17874 AU
	9234 Jul 26 21:25	0° II	opposition	9240 Nov 23 05:19	7° II 53'43 -10°36'43
retrograde	9234 Aug 24 20:13	0° II 11'16	direct	9241 Feb 12 23:47	6° II 44'49
	9234 Sep 23 11:31	30° 8 8	evening set	9241 May 13 08:59	8° II 16'14
min. Earth dist.	9234 Nov 12 00:02	29° 8 04'06 36.65266 AU			
opposition	9234 Nov 14 12:41	29° 8 00'41 -8°26'02	conjunction	9241 May 24 14:11	8° II 35'38 -10°14'32
direct	9235 Feb 04 02:30	27° 8 50'06	minimum elong	9241 May 24 13:58	8° II 35'37 10°14'48
evening set	9235 May 03 13:14	29° 8 22'48	max. Earth dist.	9241 May 27 05:10	8° II 40'12 40.27306 AU
			morning rise	9241 Jun 04 19:29	8° II 55'03
conjunction	9235 May 16 09:37	29° 8 45'50 -8°11'11	retrograde	9241 Sep 03 18:11	10° II 28'01
minimum elong	9235 May 16 09:24	29° 8 45'49 8°11'26	min. Earth dist.	9241 Nov 22 07:23	9° II 22'39 38.43177 AU
max. Earth dist.	9235 May 18 21:52	29° 8 50'22 38.76069 AU	opposition	9241 Nov 24 22:50	9° II 19'12 -10°56'09
	9235 May 24 06:22	0° II	direct	9242 Feb 14 15:10	8° II 10'38
morning rise	9235 May 29 05:50	0° II 08'52	evening set	9242 May 15 07:32	9° II 41'56
retrograde	9235 Aug 26 15:10	1° II 42'38			
min. Earth dist.	9235 Nov 13 19:01	0° II 35'44 36.90837 AU	conjunction	9242 May 26 05:37	10° II 00'43 -10°32'55
opposition	9235 Nov 16 08:25	0° II 32'18 -8°49'30	minimum elong	9242 May 26 05:24	10° II 00'42 10°33'11
	9235 Dec 11 06:36	30° 8 8	max. Earth dist.	9242 May 28 20:49	10° II 05'16 40.52352 AU
direct	9236 Feb 05 21:51	29° 8 21'59	morning rise	9242 Jun 06 03:39	10° II 19'31
	9236 Mar 31 03:47	0° II	retrograde	9242 Sep 05 09:48	11° II 52'27
evening set	9236 May 04 13:08	0° II 54'23	min. Earth dist.	9242 Nov 23 23:59	10° II 47'23 38.68348 AU
			opposition	9242 Nov 26 15:50	10° II 43'55 -11°14'57
conjunction	9236 May 17 03:25	1° II 16'50 -8°33'19	direct	9243 Feb 16 07:51	9° II 35'39
minimum elong	9236 May 17 03:11	1° II 16'49 8°33'34	evening set	9243 May 17 06:06	11° II 06'53
max. Earth dist.	9236 May 19 15:52	1° II 21'20 39.01375 AU			
morning rise	9236 May 29 17:46	1° II 39'16	conjunction	9243 May 27 20:46	11° II 25'03 -10°50'42
retrograde	9236 Aug 27 09:12	3° II 12'50	minimum elong	9243 May 27 20:33	11° II 25'02 10°50'59
min. Earth dist.	9236 Nov 14 14:25	2° II 06'09 37.16305 AU	max. Earth dist.	9243 May 30 11:28	11° II 29'32 40.77233 AU
opposition	9236 Nov 17 03:57	2° II 02'43 -9°12'18	morning rise	9243 Jun 07 11:37	11° II 43'13
direct	9237 Feb 06 17:21	0° II 52'40	retrograde	9243 Sep 07 01:30	13° II 16'08
evening set	9237 May 06 12:37	2° II 24'49	min. Earth dist.	9243 Nov 25 16:26	12° II 11'20 38.93345 AU
			opposition	9243 Nov 28 08:24	12° II 07'53 -11°33'07
conjunction	9237 May 18 20:47	2° II 46'39 -8°54'49	direct	9244 Feb 18 00:23	10° II 59'56
minimum elong	9237 May 18 20:34	2° II 46'38 8°55'05	evening set	9244 May 18 04:31	12° II 31'07
max. Earth dist.	9237 May 21 10:18	2° II 51'13 39.26604 AU			
morning rise	9237 May 31 04:44	3° II 08'30	conjunction	9244 May 28 11:47	12° II 48'39 -11°07'55
retrograde	9237 Aug 29 00:23	4° II 41'51	minimum elong	9244 May 28 11:35	12° II 48'38 11°08'11
min. Earth dist.	9237 Nov 16 09:16	3° II 35'25 37.41709 AU	max. Earth dist.	9244 May 31 03:19	12° II 53'10 41.01905 AU
opposition	9237 Nov 18 22:59	3° II 31'59 -9°34'25	morning rise	9244 Jun 07 19:00	13° II 06'11
direct	9238 Feb 08 15:07	2° II 22'13	retrograde	9244 Sep 07 13:37	14° II 39'06
evening set	9238 May 08 12:06	3° II 54'07	min. Earth dist.	9244 Nov 26 09:41	13° II 34'31 39.18082 AU
			opposition	9244 Nov 29 00:46	13° II 31'07 -11°50'41
conjunction	9238 May 20 13:39	4° II 15'21 -9°15'41	direct	9245 Feb 18 19:40	12° II 23'27
minimum elong	9238 May 20 13:25	4° II 15'20 9°15'57	evening set	9245 May 20 02:51	13° II 54'36
max. Earth dist.	9238 May 23 02:43	4° II 19'51 39.51798 AU			
morning rise	9238 Jun 01 15:20	4° II 36'36	conjunction	9245 May 30 02:16	14° II 11'29 -11°24'34
retrograde	9238 Aug 30 16:59	6° II 09'48	minimum elong	9245 May 30 02:04	14° II 11'28 11°24'52
min. Earth dist.	9238 Nov 18 02:30	5° II 03'40 37.67116 AU	max. Earth dist.	9245 Jun 01 16:33	14° II 15'54 41.26294 AU
opposition	9238 Nov 20 17:33	5° II 00'11 -9°55'51	morning rise	9245 Jun 09 01:50	14° II 28'23
direct	9239 Feb 10 10:24	3° II 50'41	retrograde	9245 Sep 09 03:57	16° II 01'19
evening set	9239 May 10 11:08	5° II 22'24	min. Earth dist.	9245 Nov 28 00:57	14° II 57'01 39.42520 AU
			opposition	9245 Nov 30 16:47	14° II 53'35 -12°07'40
conjunction	9239 May 22 06:14	5° II 43'02 -9°35'56	direct	9246 Feb 20 12:09	13° II 46'12
minimum elong	9239 May 22 06:01	5° II 43'01 9°36'12	evening set	9246 May 22 01:02	15° II 17'19

conjunction	9246 May 31 16:41	15°II33'33	-11°40'40	direct	9253 Mar 01 22:21	23°II01'26	
minimum elong	9246 May 31 16:29	15°II33'32	11°40'57	evening set	9253 Jun 02 08:45	24°II32'44	
max. Earth dist.	9246 Jun 03 07:27	15°II37'58	41.50360 AU				
morning rise	9246 Jun 10 08:24	15°II49'49		conjunction	9253 Jun 09 11:32	24°II44'18	-13°18'23
retrograde	9246 Sep 10 17:40	17°II22'47		minimum elong	9253 Jun 09 11:21	24°II44'17	13°18'40
min. Earth dist.	9246 Nov 29 18:05	16°II18'36	39.66621 AU	max. Earth dist.	9253 Jun 12 01:33	24°II48'30	43.11694 AU
opposition	9246 Dec 02 08:32	16°II15'16	-12°24'04	morning rise	9253 Jun 16 14:22	24°II55'52	
direct	9247 Feb 22 05:14	15°II08'07		retrograde	9253 Sep 19 11:52	26°II29'23	
evening set	9247 May 23 23:10	16°II39'12		min. Earth dist.	9253 Dec 08 22:02	25°II26'30	41.28550 AU
				opposition	9253 Dec 11 12:18	25°II23'16	-14°03'03
conjunction	9247 Jun 02 06:44	16°II54'47	-11°56'14	direct	9254 Mar 03 11:02	24°II17'40	
minimum elong	9247 Jun 02 06:31	16°II54'47	11°56'32	evening set	9254 Jun 04 06:21	25°II49'07	
max. Earth dist.	9247 Jun 04 20:40	16°II59'08	41.74095 AU				
morning rise	9247 Jun 11 14:17	17°II10'24		conjunction	9254 Jun 10 23:29	25°II59'57	-13°30'13
retrograde	9247 Sep 12 08:44	18°II43'23		minimum elong	9254 Jun 10 23:20	25°II59'57	13°30'32
min. Earth dist.	9247 Dec 01 08:53	17°II39'26	39.90378 AU	max. Earth dist.	9254 Jun 13 13:45	26°II04'10	43.34063 AU
opposition	9247 Dec 03 23:43	17°II36'05	-12°39'54	morning rise	9254 Jun 17 16:34	26°II10'49	
direct	9248 Feb 23 20:00	16°II29'10		retrograde	9254 Sep 21 00:44	27°II44'31	
evening set	9248 May 24 21:02	18°II00'13		min. Earth dist.	9254 Dec 10 11:04	26°II41'51	41.50967 AU
				opposition	9254 Dec 13 01:15	26°II38'38	-14°14'58
conjunction	9248 Jun 02 20:18	18°II15'10	-12°11'16	direct	9255 Mar 04 22:51	25°II33'17	
minimum elong	9248 Jun 02 20:06	18°II15'09	12°11'33	evening set	9255 Jun 06 03:56	27°II04'54	
max. Earth dist.	9248 Jun 05 09:57	18°II19'27	41.97500 AU				
morning rise	9248 Jun 11 19:43	18°II30'07		conjunction	9255 Jun 12 11:03	27°II15'02	-13°41'34
retrograde	9248 Sep 13 00:53	20°II03'07		minimum elong	9255 Jun 12 10:53	27°II15'01	13°41'52
min. Earth dist.	9248 Dec 02 00:14	18°II59'19	40.13850 AU	max. Earth dist.	9255 Jun 15 00:20	27°II19'08	43.56192 AU
opposition	9248 Dec 04 14:37	18°II56'01	-12°55'11	morning rise	9255 Jun 18 18:11	27°II25'10	
direct	9249 Feb 24 08:08	17°II49'18		retrograde	9255 Sep 22 14:09	28°II59'05	
evening set	9249 May 26 18:48	19°II20'21		min. Earth dist.	9255 Dec 11 23:45	27°II56'38	41.73130 AU
				opposition	9255 Dec 14 14:04	27°II53'25	-14°26'23
conjunction	9249 Jun 04 09:40	19°II34'38	-12°25'46	direct	9256 Mar 05 09:52	26°II48'18	
minimum elong	9249 Jun 04 09:28	19°II34'37	12°26'03	evening set	9256 Jun 07 01:46	28°II20'08	
max. Earth dist.	9249 Jun 06 23:52	19°II38'56	42.20663 AU				
morning rise	9249 Jun 13 00:28	19°II48'55		conjunction	9256 Jun 12 22:33	28°II29'32	-13°52'26
retrograde	9249 Sep 14 12:15	21°II21'58		minimum elong	9256 Jun 12 22:24	28°II29'32	13°52'44
min. Earth dist.	9249 Dec 03 15:08	20°II18'19	40.37094 AU	max. Earth dist.	9256 Jun 15 12:28	28°II33'40	43.78031 AU
opposition	9249 Dec 06 05:13	20°II15'03	-13°09'53	morning rise	9256 Jun 18 19:16	28°II38'55	
direct	9250 Feb 26 00:40	19°II08'33			9256 Aug 20 16:19	0°☾	
evening set	9250 May 28 16:22	20°II39'36		retrograde	9256 Sep 22 22:54	0°☾13'06	
					9256 Oct 26 22:50	30°☾II	
conjunction	9250 Jun 05 22:26	20°II53'13	-12°39'43	min. Earth dist.	9256 Dec 12 13:41	29°II10'48	41.94956 AU
minimum elong	9250 Jun 05 22:16	20°II53'13	12°40'00	opposition	9256 Dec 15 02:36	29°II07'40	-14°37'18
max. Earth dist.	9250 Jun 08 11:46	20°II57'27	42.43633 AU	direct	9257 Mar 07 00:41	28°II02'47	
morning rise	9250 Jun 14 04:39	21°II06'50		evening set	9257 Jun 08 23:59	29°II34'52	
retrograde	9250 Sep 15 23:44	22°II39'58					
min. Earth dist.	9250 Dec 05 04:35	21°II36'32	40.60181 AU	conjunction	9257 Jun 14 09:48	29°II43'30	-14°02'50
opposition	9250 Dec 07 19:27	21°II33'14	-13°24'01	minimum elong	9257 Jun 14 09:39	29°II43'29	14°03'08
direct	9251 Feb 27 15:44	20°II26'56		max. Earth dist.	9257 Jun 16 22:11	29°II47'31	43.99525 AU
evening set	9251 May 30 13:52	21°II58'03		morning rise	9257 Jun 19 19:34	29°II52'07	
					9257 Jun 24 18:55	0°☾	
conjunction	9251 Jun 07 11:11	22°II11'00	-12°53'08	retrograde	9257 Sep 24 09:20	1°☾26'35	
minimum elong	9251 Jun 07 11:00	22°II10'59	12°53'26	min. Earth dist.	9257 Dec 14 01:34	0°☾24'30	42.16410 AU
max. Earth dist.	9251 Jun 10 01:38	22°II15'16	42.66459 AU	opposition	9257 Dec 16 14:55	0°☾21'21	-14°47'45
morning rise	9251 Jun 15 08:30	22°II23'55			9258 Jan 03 07:15	30°☾II	
retrograde	9251 Sep 17 09:58	23°II57'09		direct	9258 Mar 08 14:11	29°II16'42	
min. Earth dist.	9251 Dec 06 19:21	22°II53'52	40.83121 AU		9258 May 08 18:57	0°☾	
opposition	9251 Dec 09 09:16	22°II50'37	-13°37'35	evening set	9258 Jun 10 22:28	0°☾49'05	
direct	9252 Feb 29 08:11	21°II44'33					
evening set	9252 May 31 11:29	23°II15'45		conjunction	9258 Jun 15 20:50	0°☾56'54	-14°12'48
				minimum elong	9258 Jun 15 20:42	0°☾56'54	14°13'06
conjunction	9252 Jun 07 23:34	23°II28'00	-13°06'01	max. Earth dist.	9258 Jun 18 09:15	1°☾00'54	44.20611 AU
minimum elong	9252 Jun 07 23:25	23°II27'59	13°06'19	morning rise	9258 Jun 20 19:09	1°☾04'44	
max. Earth dist.	9252 Jun 10 13:17	23°II32'12	42.89156 AU	retrograde	9258 Sep 25 21:31	2°☾39'32	
morning rise	9252 Jun 15 11:42	23°II40'15		min. Earth dist.	9258 Dec 15 15:23	1°☾37'32	42.37438 AU
retrograde	9252 Sep 17 22:06	25°II13'36		opposition	9258 Dec 18 03:08	1°☾34'29	-14°57'45
min. Earth dist.	9252 Dec 07 07:50	24°II10'34	41.05917 AU	direct	9259 Mar 10 02:51	0°☾30'03	
opposition	9252 Dec 09 22:49	24°II07'16	-13°50'35	evening set	9259 Jun 12 21:50	2°☾02'45	

conjunction	9259 Jun 17 07:49	2°09'44" -14°22'20"	max. Earth dist.	9266 Jun 27 14:30	10°02'47" 45.77138 AU
minimum elong	9259 Jun 17 07:41	2°09'43" 14°22'37"	retrograde	9266 Oct 05 06:50	12°02'13"
max. Earth dist.	9259 Jun 19 19:27	2°013'40" 44.41277 AU	min. Earth dist.	9266 Dec 25 09:37	11°01'24" 43.93789 AU
morning rise	9259 Jun 21 17:41	2°016'43"	opposition	9266 Dec 27 18:17	10°058'35" -16°01'31"
retrograde	9259 Sep 27 08:19	3°051'53"	direct	9267 Mar 19 17:07	9°055'39"
min. Earth dist.	9259 Dec 17 03:07	2°050'03" 42.58024 AU			
opposition	9259 Dec 19 14:44	2°047'01" -15°07'18"	conjunction	9267 Jun 26 13:51	11°031'41" -15°23'05"
direct	9260 Mar 10 14:30	1°042'45"	minimum elong	9267 Jun 26 13:48	11°031'40" 15°23'23"
evening set	9260 Jun 13 21:54	3°015'53"	max. Earth dist.	9267 Jun 28 22:03	11°035'15" 45.95519 AU
			retrograde	9267 Oct 06 15:08	13°010'24"
conjunction	9260 Jun 17 18:21	3°021'57" -14°31'26"	min. Earth dist.	9267 Dec 26 19:19	12°009'46" 44.12104 AU
minimum elong	9260 Jun 17 18:14	3°021'56" 14°31'45"	opposition	9267 Dec 29 04:04	12°006'57" -16°07'31"
max. Earth dist.	9260 Jun 20 04:49	3°025'46" 44.61522 AU	direct	9268 Mar 20 02:01	11°004'12"
morning rise	9260 Jun 21 14:43	3°028'00"			
retrograde	9260 Sep 27 20:45	5°003'36"	conjunction	9268 Jun 26 22:54	12°039'52" -15°28'49"
min. Earth dist.	9260 Dec 17 15:20	4°001'54" 42.78230 AU	minimum elong	9268 Jun 26 22:49	12°039'51" 15°29'06"
opposition	9260 Dec 20 02:20	3°058'55" -15°16'24"	max. Earth dist.	9268 Jun 29 07:23	12°043'27" 46.13549 AU
direct	9261 Mar 11 23:54	2°054'50"	retrograde	9268 Oct 06 22:26	14°018'13"
evening set	9261 Jun 15 23:22	4°028'29"	min. Earth dist.	9268 Dec 27 06:57	13°017'40" 44.30032 AU
			opposition	9268 Dec 29 13:56	13°014'56" -16°13'07"
conjunction	9261 Jun 19 04:38	4°033'31" -14°40'07"	direct	9269 Mar 21 13:19	12°012'24"
minimum elong	9261 Jun 19 04:31	4°033'31" 14°40'24"			
morning rise	9261 Jun 22 09:44	4°038'33"	conjunction	9269 Jun 28 07:41	13°047'39" -15°34'10"
max. Earth dist.	9261 Jun 21 15:43	4°037'23" 44.81417 AU	minimum elong	9269 Jun 28 07:38	13°047'39" 15°34'28"
retrograde	9261 Sep 29 05:14	6°014'43"	max. Earth dist.	9269 Jun 30 15:01	13°051'09" 46.31178 AU
min. Earth dist.	9261 Dec 19 03:35	5°013'07" 42.98101 AU	retrograde	9269 Oct 08 06:47	15°025'38"
opposition	9261 Dec 21 13:40	5°010'11" -15°25'03"	min. Earth dist.	9269 Dec 28 16:26	14°025'16" 44.47515 AU
direct	9262 Mar 13 12:05	4°006'17"	opposition	9269 Dec 30 23:32	14°022'32" -16°18'22"
evening set	9262 Jun 18 03:43	5°040'39"	direct	9270 Mar 23 00:31	13°020'09"
conjunction	9262 Jun 20 14:39	5°044'29" -14°48'21"	conjunction	9270 Jun 29 16:26	14°055'01" -15°39'11"
minimum elong	9262 Jun 20 14:32	5°044'29" 14°48'40"	minimum elong	9270 Jun 29 16:23	14°055'01" 15°39'28"
morning rise	9262 Jun 23 01:25	5°048'18"	max. Earth dist.	9270 Jul 01 22:36	14°058'26" 46.48329 AU
max. Earth dist.	9262 Jun 23 00:29	5°048'15" 45.01024 AU	retrograde	9270 Oct 09 17:56	16°032'39"
retrograde	9262 Sep 30 14:23	7°025'13"	min. Earth dist.	9270 Dec 30 03:27	15°032'20" 44.64512 AU
min. Earth dist.	9262 Dec 20 13:48	6°023'49" 43.17716 AU	opposition	9271 Jan 01 08:59	15°029'42" -16°23'15"
opposition	9262 Dec 23 00:33	6°020'51" -15°33'14"	direct	9271 Mar 24 09:38	14°027'28"
direct	9263 Mar 14 22:58	5°017'08"			
evening set	9263 Jun 20 15:24	6°052'43"	conjunction	9271 Jul 01 01:10	16°001'56" -15°43'51"
			minimum elong	9271 Jul 01 01:08	16°001'56" 15°44'09"
conjunction	9263 Jun 22 00:30	6°054'52" -14°56'09"	max. Earth dist.	9271 Jul 03 07:05	16°005'19" 46.64992 AU
minimum elong	9263 Jun 22 00:25	6°054'52" 14°56'27"	retrograde	9271 Oct 11 03:25	17°039'10"
morning rise	9263 Jun 23 09:29	6°057'00"	min. Earth dist.	9271 Dec 31 13:39	16°038'56" 44.80989 AU
max. Earth dist.	9263 Jun 24 10:50	6°058'39" 45.20389 AU	opposition	9272 Jan 02 18:12	16°036'21" -16°27'47"
retrograde	9263 Oct 01 22:47	8°035'11"	direct	9272 Mar 24 17:46	15°034'15"
min. Earth dist.	9263 Dec 22 01:54	7°033'53" 43.37093 AU			
opposition	9263 Dec 24 11:21	7°030'59" -15°40'58"	conjunction	9272 Jul 01 09:25	17°008'19" -15°48'11"
direct	9264 Mar 15 12:46	6°027'27"	minimum elong	9272 Jul 01 09:22	17°008'19" 15°48'28"
			max. Earth dist.	9272 Jul 03 13:28	17°011'34" 46.81157 AU
conjunction	9264 Jun 22 10:08	8°004'44" -15°03'31"	retrograde	9272 Oct 11 12:50	18°045'11"
minimum elong	9264 Jun 22 10:02	8°004'44" 15°03'49"	min. Earth dist.	9272 Dec 31 22:52	17°045'02" 44.97004 AU
max. Earth dist.	9264 Jun 24 19:56	8°008'28" 45.39539 AU	opposition	9273 Jan 03 03:13	17°042'28" -16°31'59"
retrograde	9264 Oct 02 09:37	9°044'38"	direct	9273 Mar 26 01:20	16°040'30"
min. Earth dist.	9264 Dec 22 11:48	8°043'32" 43.56239 AU			
opposition	9264 Dec 24 21:46	8°040'37" -15°48'15"	conjunction	9273 Jul 02 17:38	18°014'10" -15°52'11"
direct	9265 Mar 16 23:29	7°037'17"	minimum elong	9273 Jul 02 17:36	18°014'10" 15°52'29"
			max. Earth dist.	9273 Jul 04 21:57	18°017'26" 46.96890 AU
conjunction	9265 Jun 23 19:30	9°014'08" -15°10'27"	retrograde	9273 Oct 12 17:36	19°050'39"
minimum elong	9265 Jun 23 19:25	9°014'08" 15°10'45"	min. Earth dist.	9274 Jan 02 09:23	18°050'32" 45.12613 AU
max. Earth dist.	9265 Jun 26 04:46	9°017'49" 45.58458 AU	opposition	9274 Jan 04 12:05	18°048'03" -16°35'49"
retrograde	9265 Oct 03 22:14	10°053'38"	direct	9274 Mar 27 12:27	17°046'12"
min. Earth dist.	9265 Dec 23 22:47	9°052'40" 43.75157 AU			
opposition	9265 Dec 26 08:10	9°049'49" -15°55'06"	conjunction	9274 Jul 04 01:33	19°019'29" -15°55'49"
direct	9266 Mar 18 06:52	8°046'40"	minimum elong	9274 Jul 04 01:32	19°019'29" 15°56'06"
			max. Earth dist.	9274 Jul 06 04:45	19°022'40" 47.12268 AU
conjunction	9266 Jun 25 04:46	10°023'06" -15°16'58"	retrograde	9274 Oct 13 23:56	20°055'36"
minimum elong	9266 Jun 25 04:41	10°023'06" 15°17'16"	min. Earth dist.	9275 Jan 03 17:30	19°055'36" 45.27885 AU

opposition	9275 Jan 05 20:37	19°☾53'06 -16°39'18	conjunction	9283 Jul 13 19:16	28°☾51'24 -16°13'24
direct	9275 Mar 28 22:43	18°☾51'22	minimum elong	9283 Jul 13 19:19	28°☾51'24 16°13'40
			max. Earth dist.	9283 Jul 15 16:46	28°☾54'08 48.36340 AU
conjunction	9275 Jul 05 09:20	20°☾24'18 -15°59'07		9283 Sep 05 02:38	0°♂
minimum elong	9275 Jul 05 09:19	20°☾24'18 15°59'25	retrograde	9283 Oct 23 22:04	0°♂24'56
max. Earth dist.	9275 Jul 07 12:03	20°☾27'26 47.27324 AU		9283 Dec 12 21:43	30°♂☾
retrograde	9275 Oct 15 09:25	22°☾00'04	min. Earth dist.	9284 Jan 13 23:24	29°☾25'46 46.50559 AU
min. Earth dist.	9276 Jan 05 03:09	21°☾00'08 45.42864 AU	opposition	9284 Jan 15 18:49	29°☾23'42 -16°55'00
opposition	9276 Jan 07 04:59	20°☾57'42 -16°42'24	direct	9284 Apr 06 17:33	28°☾23'15
direct	9276 Mar 29 07:21	19°☾56'06			
			conjunction	9284 Jul 14 02:03	29°☾53'33 -16°13'51
conjunction	9276 Jul 05 17:04	21°☾28'41 -16°02'04	minimum elong	9284 Jul 14 02:06	29°☾53'33 16°14'08
minimum elong	9276 Jul 05 17:04	21°☾28'41 16°02'20	max. Earth dist.	9284 Jul 15 21:49	29°☾56'11 48.47995 AU
max. Earth dist.	9276 Jul 07 19:55	21°☾31'49 47.42115 AU		9284 Jul 18 13:29	0°♂
retrograde	9276 Oct 15 17:05	23°☾04'08	retrograde	9284 Oct 24 01:57	1°♂26'48
min. Earth dist.	9277 Jan 05 11:29	22°☾04'20 45.57559 AU	min. Earth dist.	9285 Jan 14 06:32	0°♂27'44 46.61981 AU
opposition	9277 Jan 07 13:12	22°☾01'54 -16°45'09	opposition	9285 Jan 16 01:55	0°♂25'39 -16°55'13
direct	9277 Mar 30 15:27	21°☾00'27		9285 Feb 08 03:30	30°♂☾
			direct	9285 Apr 08 01:56	29°☾25'17
conjunction	9277 Jul 07 00:21	22°☾32'42 -16°04'39		9285 Jun 03 23:18	0°♂
minimum elong	9277 Jul 07 00:20	22°☾32'42 16°04'56			
max. Earth dist.	9277 Jul 09 01:47	22°☾35'44 47.56634 AU	conjunction	9285 Jul 15 08:30	0°♂55'19 -16°14'02
retrograde	9277 Oct 17 02:10	24°☾07'51	minimum elong	9285 Jul 15 08:33	0°♂55'19 16°14'18
min. Earth dist.	9278 Jan 06 19:48	23°☾08'10 45.71989 AU	max. Earth dist.	9285 Jul 17 03:42	0°♂57'54 48.59189 AU
opposition	9278 Jan 08 21:21	23°☾05'46 -16°47'32	retrograde	9285 Oct 25 08:18	2°♂28'18
direct	9278 Mar 31 20:34	22°☾04'28	min. Earth dist.	9286 Jan 15 15:21	1°♂29'13 46.72982 AU
			opposition	9286 Jan 17 09:00	1°♂27'13 -16°55'09
conjunction	9278 Jul 08 07:48	23°☾36'26 -16°06'53	direct	9286 Apr 09 10:49	0°♂26'57
minimum elong	9278 Jul 08 07:50	23°☾36'26 16°07'11			
max. Earth dist.	9278 Jul 10 09:48	23°☾39'29 47.70874 AU	conjunction	9286 Jul 16 15:03	1°♂56'41 -16°13'55
retrograde	9278 Oct 18 08:04	25°☾11'17	minimum elong	9286 Jul 16 15:07	1°♂56'41 16°14'12
min. Earth dist.	9279 Jan 08 05:08	24°☾11'40 45.86110 AU	max. Earth dist.	9286 Jul 18 10:00	1°♂59'15 48.70007 AU
opposition	9279 Jan 10 05:13	24°☾09'21 -16°49'34	retrograde	9286 Oct 26 14:30	3°♂29'24
direct	9279 Apr 02 04:50	23°☾08'12	min. Earth dist.	9287 Jan 16 22:05	2°♂30'23 46.83619 AU
			opposition	9287 Jan 18 15:37	2°♂28'24 -16°54'47
conjunction	9279 Jul 09 15:04	24°☾39'53 -16°08'48	direct	9287 Apr 10 19:02	1°♂28'12
minimum elong	9279 Jul 09 15:04	24°☾39'53 16°09'05			
max. Earth dist.	9279 Jul 11 15:43	24°☾42'51 47.84805 AU	conjunction	9287 Jul 17 21:19	2°♂57'40 -16°13'30
retrograde	9279 Oct 19 14:05	26°☾14'28	minimum elong	9287 Jul 17 21:23	2°♂57'40 16°13'46
min. Earth dist.	9280 Jan 09 12:30	25°☾15'01 45.99893 AU	max. Earth dist.	9287 Jul 19 14:41	3°♂00'08 48.80493 AU
opposition	9280 Jan 11 12:55	25°☾12'41 -16°51'15	retrograde	9287 Oct 27 23:57	4°♂30'08
direct	9280 Apr 02 13:11	24°☾11'42	min. Earth dist.	9288 Jan 18 05:23	3°♂31'09 46.93957 AU
			opposition	9288 Jan 19 22:18	3°♂29'12 -16°54'06
conjunction	9280 Jul 09 22:05	25°☾43'06 -16°10'24	direct	9288 Apr 10 23:10	2°♂29'06
minimum elong	9280 Jul 09 22:08	25°☾43'06 16°10'41			
max. Earth dist.	9280 Jul 11 22:07	25°☾46'01 47.98363 AU	conjunction	9288 Jul 18 03:28	3°♂58'18 -16°12'48
retrograde	9280 Oct 19 22:19	27°☾17'26	minimum elong	9288 Jul 18 03:32	3°♂58'19 16°13'04
min. Earth dist.	9281 Jan 09 21:58	26°☾18'04 46.13283 AU	max. Earth dist.	9288 Jul 19 21:25	4°♂00'48 48.90690 AU
opposition	9281 Jan 11 20:39	26°☾15'49 -16°52'38	retrograde	9288 Oct 28 06:00	5°♂30'31
direct	9281 Apr 03 22:30	25°☾14'59	min. Earth dist.	9289 Jan 18 13:04	4°♂31'34 47.04002 AU
			opposition	9289 Jan 20 04:53	4°♂29'41 -16°53'07
conjunction	9281 Jul 11 05:17	26°☾46'07 -16°11'41	direct	9289 Apr 12 04:27	3°♂29'40
minimum elong	9281 Jul 11 05:18	26°☾46'07 16°11'58			
max. Earth dist.	9281 Jul 13 04:56	26°☾49'00 48.11516 AU	conjunction	9289 Jul 19 09:32	4°♂58'39 -16°11'47
retrograde	9281 Oct 21 07:31	28°☾20'12	minimum elong	9289 Jul 19 09:37	4°♂58'39 16°12'03
min. Earth dist.	9282 Jan 11 06:04	27°☾20'56 46.26218 AU	max. Earth dist.	9289 Jul 21 02:10	5°♂01'03 49.00625 AU
opposition	9282 Jan 13 04:09	27°☾18'43 -16°53'42	retrograde	9289 Oct 29 11:01	6°♂30'37
direct	9282 Apr 05 05:14	26°☾18'02	min. Earth dist.	9290 Jan 19 18:58	5°♂31'48 47.13780 AU
			opposition	9290 Jan 21 11:15	5°♂29'53 -16°51'49
conjunction	9282 Jul 12 12:13	27°☾48'54 -16°12'41	direct	9290 Apr 13 09:42	4°♂29'58
minimum elong	9282 Jul 12 12:16	27°☾48'54 16°12'58			
max. Earth dist.	9282 Jul 14 09:56	27°☾51'39 48.24185 AU	conjunction	9290 Jul 20 15:29	5°♂58'43 -16°10'29
retrograde	9282 Oct 22 17:36	29°☾22'43	minimum elong	9290 Jul 20 15:34	5°♂58'43 16°10'45
min. Earth dist.	9283 Jan 12 14:25	28°☾23'32 46.38656 AU	max. Earth dist.	9290 Jul 22 07:43	6°♂01'06 49.10275 AU
opposition	9283 Jan 14 11:36	28°☾21'22 -16°54'29	retrograde	9290 Oct 30 15:24	7°♂30'29
direct	9283 Apr 06 09:34	27°☾20'48	min. Earth dist.	9291 Jan 21 03:03	6°♂31'41 47.23259 AU
			opposition	9291 Jan 22 17:39	6°♂29'51 -16°50'14

direct	9291 Apr 14 18:44	5°Ω30'02	conjunction	9299 Jul 29 18:59	14°Ω51'08 -15°47'07
			minimum elong	9299 Jul 29 19:06	14°Ω51'08 15°47'21
conjunction	9291 Jul 21 21:30	6°Ω58'35 -16°08'53	max. Earth dist.	9299 Jul 31 02:21	14°Ω52'57 49.78366 AU
minimum elong	9291 Jul 21 21:37	6°Ω58'35 16°09'08		9299 Aug 05 04:21	15°Ω
max. Earth dist.	9291 Jul 23 13:30	7°Ω00'56 49.19624 AU	retrograde	9299 Nov 08 22:27	16°Ω21'16
retrograde	9291 Oct 31 21:26	8°Ω30'09	opposition	9300 Jan 31 22:19	15°Ω21'23 -16°24'12
min. Earth dist.	9292 Jan 22 09:14	7°Ω31'27 47.32399 AU	min. Earth dist.	9300 Jan 30 15:32	15°Ω22'49 47.88982 AU
opposition	9292 Jan 23 23:43	7°Ω29'38 -16°48'21		9300 Feb 20 09:09	15°RΩ
direct	9292 Apr 15 02:23	6°Ω29'56	direct	9300 Apr 23 19:22	14°Ω22'18
				9300 Jun 23 08:34	15°Ω
conjunction	9292 Jul 22 03:18	7°Ω58'16 -16°07'01			
minimum elong	9292 Jul 22 03:23	7°Ω58'17 16°07'16	conjunction	9300 Jul 31 00:16	15°Ω49'15 -15°43'18
max. Earth dist.	9292 Jul 23 17:37	8°Ω00'32 49.28614 AU	minimum elong	9300 Jul 31 00:25	15°Ω49'16 15°43'31
retrograde	9292 Nov 01 06:48	9°Ω29'39	max. Earth dist.	9300 Aug 01 07:13	15°Ω51'03 49.83807 AU
min. Earth dist.	9293 Jan 22 16:28	8°Ω31'01 47.41166 AU	retrograde	9300 Nov 10 01:13	17°Ω19'15
opposition	9293 Jan 24 05:56	8°Ω29'15 -16°46'11	min. Earth dist.	9301 Jan 31 22:41	16°Ω20'47 47.94213 AU
direct	9293 Apr 16 06:02	7°Ω29'40	opposition	9301 Feb 02 03:50	16°Ω19'26 -16°20'02
			direct	9301 Apr 25 03:22	15°Ω20'25
conjunction	9293 Jul 23 09:10	8°Ω57'49 -16°04'53			
minimum elong	9293 Jul 23 09:17	8°Ω57'50 16°05'08	conjunction	9301 Aug 01 05:29	16°Ω47'13 -15°39'13
max. Earth dist.	9293 Jul 24 23:33	9°Ω00'04 49.37193 AU	minimum elong	9301 Aug 01 05:37	16°Ω47'14 15°39'26
retrograde	9293 Nov 02 12:35	10°Ω29'02	max. Earth dist.	9301 Aug 02 12:13	16°Ω49'00 49.88961 AU
min. Earth dist.	9294 Jan 24 00:07	9°Ω30'25 47.49471 AU	retrograde	9301 Nov 11 05:34	18°Ω17'06
opposition	9294 Jan 25 12:05	9°Ω28'43 -16°43'46	min. Earth dist.	9302 Feb 02 03:53	17°Ω18'43 47.99139 AU
direct	9294 Apr 17 11:54	8°Ω29'15	opposition	9302 Feb 03 09:08	17°Ω17'21 -16°15'36
			direct	9302 Apr 26 11:14	16°Ω18'25
conjunction	9294 Jul 24 15:03	9°Ω57'13 -16°02'31			
minimum elong	9294 Jul 24 15:09	9°Ω57'14 16°02'45	conjunction	9302 Aug 02 10:38	17°Ω45'05 -15°34'52
max. Earth dist.	9294 Jul 26 03:29	9°Ω59'22 49.45295 AU	minimum elong	9302 Aug 02 10:48	17°Ω45'06 15°35'05
retrograde	9294 Nov 03 17:10	11°Ω28'15	max. Earth dist.	9302 Aug 03 15:45	17°Ω46'46 49.93805 AU
min. Earth dist.	9295 Jan 25 06:20	10°Ω29'43 47.57273 AU	retrograde	9302 Nov 12 14:45	19°Ω14'50
opposition	9295 Jan 26 17:55	10°Ω28'02 -16°41'07	min. Earth dist.	9303 Feb 03 10:08	18°Ω16'29 48.03759 AU
direct	9295 Apr 18 16:54	9°Ω28'39	opposition	9303 Feb 04 14:20	18°Ω15'10 -16°10'55
			direct	9303 Apr 27 14:35	17°Ω16'18
conjunction	9295 Jul 25 20:54	10°Ω56'27 -15°59'55			
minimum elong	9295 Jul 25 21:02	10°Ω56'28 16°00'10	conjunction	9303 Aug 03 15:54	18°Ω42'52 -15°30'16
max. Earth dist.	9295 Jul 27 08:21	10°Ω58'32 49.52862 AU	minimum elong	9303 Aug 03 16:03	18°Ω42'53 15°30'30
retrograde	9295 Nov 04 21:54	12°Ω27'18	max. Earth dist.	9303 Aug 04 21:12	18°Ω44'33 49.98327 AU
opposition	9296 Jan 27 23:56	11°Ω27'10 -16°38'13	retrograde	9303 Nov 13 20:56	20°Ω12'31
min. Earth dist.	9296 Jan 26 14:32	11°Ω28'44 47.64530 AU	opposition	9304 Feb 05 19:34	19°Ω12'55 -16°05'58
direct	9296 Apr 19 00:15	10°Ω27'52	min. Earth dist.	9304 Feb 04 16:29	19°Ω14'11 48.08021 AU
			direct	9304 Apr 27 19:09	18°Ω14'09
conjunction	9296 Jul 26 02:35	11°Ω55'29 -15°57'04			
minimum elong	9296 Jul 26 02:42	11°Ω55'29 15°57'18	conjunction	9304 Aug 03 20:53	19°Ω40'36 -15°25'26
max. Earth dist.	9296 Jul 27 13:12	11°Ω57'30 49.59908 AU	minimum elong	9304 Aug 03 21:03	19°Ω40'37 15°25'39
retrograde	9296 Nov 05 02:54	13°Ω26'09	max. Earth dist.	9304 Aug 05 00:36	19°Ω42'12 50.02487 AU
min. Earth dist.	9297 Jan 26 20:32	12°Ω27'38 47.71265 AU	retrograde	9304 Nov 14 01:43	21°Ω10'08
opposition	9297 Jan 28 05:42	12°Ω26'05 -16°35'05	min. Earth dist.	9305 Feb 04 21:53	20°Ω11'52 48.11896 AU
direct	9297 Apr 20 07:54	11°Ω26'50	opposition	9305 Feb 06 00:45	20°Ω10'37 -16°00'47
			direct	9305 Apr 28 21:37	19°Ω11'55
conjunction	9297 Jul 27 08:05	12°Ω54'15 -15°54'00			
minimum elong	9297 Jul 27 08:13	12°Ω54'16 15°54'15	conjunction	9305 Aug 05 02:03	20°Ω38'17 -15°20'22
max. Earth dist.	9297 Jul 28 16:52	12°Ω56'10 49.66462 AU	minimum elong	9305 Aug 05 02:12	20°Ω38'17 15°20'34
retrograde	9297 Nov 06 11:20	14°Ω24'45	max. Earth dist.	9305 Aug 06 04:57	20°Ω39'50 50.06215 AU
min. Earth dist.	9298 Jan 28 03:34	13°Ω26'14 47.77556 AU	retrograde	9305 Nov 15 04:59	22°Ω07'43
opposition	9298 Jan 29 11:24	13°Ω24'45 -16°31'43	min. Earth dist.	9306 Feb 06 05:13	21°Ω09'25 48.15310 AU
direct	9298 Apr 21 12:08	12°Ω25'33	opposition	9306 Feb 07 05:56	21°Ω08'16 -15°55'22
			direct	9306 Apr 30 03:29	20°Ω09'37
conjunction	9298 Jul 28 13:38	13°Ω52'48 -15°50'41			
minimum elong	9298 Jul 28 13:46	13°Ω52'49 15°50'55	conjunction	9306 Aug 06 07:19	21°Ω35'54 -15°15'04
max. Earth dist.	9298 Jul 29 22:38	13°Ω54'43 49.72597 AU	minimum elong	9306 Aug 06 07:30	21°Ω35'54 15°15'17
	9298 Sep 20 23:12	15°Ω	max. Earth dist.	9306 Aug 07 09:19	21°Ω37'23 50.09462 AU
retrograde	9298 Nov 07 17:13	15°Ω23'07	retrograde	9306 Nov 16 08:36	23°Ω05'14
	9298 Dec 26 08:38	15°RΩ	min. Earth dist.	9307 Feb 07 10:37	22°Ω06'58 48.18195 AU
min. Earth dist.	9299 Jan 29 10:18	14°Ω24'36 47.83438 AU	opposition	9307 Feb 08 10:59	22°Ω05'50 -15°49'44
opposition	9299 Jan 30 16:58	14°Ω23'10 -16°28'05	direct	9307 May 01 10:46	21°Ω07'14
direct	9299 Apr 22 16:07	13°Ω24'02			

conjunction	9307 Aug 07 12:25	22° Ω 33'23	-15°09'35	conjunction	9314 Aug 13 22:44	29° Ω 10'49	-14°25'02
minimum elong	9307 Aug 07 12:35	22° Ω 33'24	15°09'46	minimum elong	9314 Aug 13 22:54	29° Ω 10'49	14°25'12
max. Earth dist.	9307 Aug 08 12:11	22° Ω 34'45	50.12155 AU	max. Earth dist.	9314 Aug 14 16:22	29° Ω 11'49	50.18528 AU
retrograde	9307 Nov 17 15:47	24° Ω 02'38		morning rise	9314 Aug 18 07:22	29° Ω 16'45	
opposition	9308 Feb 09 16:03	23° Ω 03'16	-15°43'54		9314 Sep 21 03:38	0° Υ	
min. Earth dist.	9308 Feb 08 17:26	23° Ω 04'19	48.20527 AU	retrograde	9314 Nov 24 03:32	0° Υ 39'25	
direct	9308 May 01 16:04	22° Ω 04'41			9315 Jan 28 20:59	30° Υ Ω	
				min. Earth dist.	9315 Feb 15 08:22	29° Ω 40'57	48.24880 AU
conjunction	9308 Aug 07 17:38	23° Ω 30'44	-15°03'53	opposition	9315 Feb 16 01:25	29° Ω 40'09	-14°56'41
minimum elong	9308 Aug 07 17:48	23° Ω 30'44	15°04'05	direct	9315 May 08 22:36	28° Ω 41'40	
max. Earth dist.	9308 Aug 08 17:11	23° Ω 32'05	50.14304 AU		9315 Aug 09 20:49	0° Υ	
retrograde	9308 Nov 17 22:10	24° Ω 59'51		evening set	9315 Aug 10 09:12	0° Υ 00'42	
opposition	9309 Feb 09 21:06	24° Ω 00'30	-15°37'51				
min. Earth dist.	9309 Feb 08 23:47	24° Ω 01'29	48.22316 AU	conjunction	9315 Aug 15 03:29	0° Υ 07'12	-14°17'43
direct	9309 May 02 20:25	23° Ω 01'56		minimum elong	9315 Aug 15 03:41	0° Υ 07'13	14°17'53
evening set	9309 Aug 07 22:31	24° Ω 26'30		max. Earth dist.	9315 Aug 15 20:32	0° Υ 08'10	50.18112 AU
				morning rise	9315 Aug 19 22:27	0° Υ 13'43	
conjunction	9309 Aug 08 22:31	24° Ω 27'52	-14°57'59	retrograde	9315 Nov 25 06:39	1° Υ 35'46	
minimum elong	9309 Aug 08 22:41	24° Ω 27'52	14°58'10	opposition	9316 Feb 17 06:05	0° Υ 36'33	-14°48'58
morning rise	9309 Aug 09 22:52	24° Ω 29'15		min. Earth dist.	9316 Feb 16 14:44	0° Υ 37'16	48.24191 AU
max. Earth dist.	9309 Aug 09 20:08	24° Ω 29'06	50.15951 AU		9316 Mar 23 15:13	30° Υ Ω	
retrograde	9309 Nov 19 04:36	25° Ω 56'51		direct	9316 May 09 03:42	29° Ω 38'07	
min. Earth dist.	9310 Feb 10 04:58	24° Ω 58'29	48.23635 AU		9316 Jun 23 19:29	0° Υ	
opposition	9310 Feb 11 01:58	24° Ω 57'30	-15°31'35	evening set	9316 Aug 10 04:28	0° Υ 56'36	
direct	9310 May 03 22:37	23° Ω 58'56					
evening set	9310 Aug 08 01:30	25° Ω 21'55		conjunction	9316 Aug 15 08:19	1° Υ 03'38	-14°10'11
				minimum elong	9316 Aug 15 08:30	1° Υ 03'39	14°10'21
conjunction	9310 Aug 10 03:31	25° Ω 24'46	-14°51'51	max. Earth dist.	9316 Aug 16 00:54	1° Υ 04'35	50.17372 AU
minimum elong	9310 Aug 10 03:41	25° Ω 24'47	14°52'03	morning rise	9316 Aug 20 12:48	1° Υ 10'42	
max. Earth dist.	9310 Aug 11 00:24	25° Ω 25'58	50.17142 AU	retrograde	9316 Nov 25 09:54	2° Υ 32'13	
morning rise	9310 Aug 12 05:57	25° Ω 27'39		opposition	9317 Feb 17 10:39	1° Υ 33'02	-14°41'01
retrograde	9310 Nov 20 07:05	26° Ω 53'39		min. Earth dist.	9317 Feb 16 19:18	1° Υ 33'45	48.23141 AU
min. Earth dist.	9311 Feb 11 11:45	25° Ω 55'11	48.24534 AU	direct	9317 May 10 09:53	0° Υ 34'38	
opposition	9311 Feb 12 06:44	25° Ω 54'18	-15°25'05	evening set	9317 Aug 11 00:08	1° Υ 52'37	
direct	9311 May 05 04:36	24° Ω 55'44					
evening set	9311 Aug 08 13:27	26° Ω 17'39		conjunction	9317 Aug 16 13:01	2° Υ 00'10	-14°02'26
				minimum elong	9317 Aug 16 13:14	2° Υ 00'10	14°02'35
conjunction	9311 Aug 11 08:29	26° Ω 21'28	-14°45'30	max. Earth dist.	9317 Aug 17 03:46	2° Υ 01'00	50.16231 AU
minimum elong	9311 Aug 11 08:40	26° Ω 21'29	14°45'41	morning rise	9317 Aug 22 02:42	2° Υ 07'45	
max. Earth dist.	9311 Aug 12 04:57	26° Ω 22'38	50.17962 AU	retrograde	9317 Nov 26 17:03	3° Υ 28'45	
morning rise	9311 Aug 14 03:58	26° Ω 25'19		opposition	9318 Feb 18 15:21	2° Υ 29'37	-14°32'50
retrograde	9311 Nov 21 09:13	27° Ω 50'15		min. Earth dist.	9318 Feb 18 01:45	2° Υ 30'15	48.21666 AU
opposition	9312 Feb 13 11:25	26° Ω 50'55	-15°18'21	direct	9318 May 11 14:16	1° Υ 31'15	
min. Earth dist.	9312 Feb 12 16:18	26° Ω 51'48	48.25077 AU	evening set	9318 Aug 11 20:30	2° Υ 48'46	
direct	9312 May 05 12:00	25° Ω 52'21					
evening set	9312 Aug 08 04:11	27° Ω 13'24		conjunction	9318 Aug 17 18:06	2° Υ 56'47	-13°54'28
				minimum elong	9318 Aug 17 18:17	2° Υ 56'47	13°54'37
conjunction	9312 Aug 11 13:05	27° Ω 18'00	-14°38'55	max. Earth dist.	9318 Aug 18 08:32	2° Υ 57'36	50.14625 AU
minimum elong	9312 Aug 11 13:15	27° Ω 18'01	14°39'07	morning rise	9318 Aug 23 16:25	3° Υ 04'51	
max. Earth dist.	9312 Aug 12 07:54	27° Ω 19'05	50.18442 AU	retrograde	9318 Nov 27 23:48	4° Υ 25'22	
morning rise	9312 Aug 14 22:28	27° Ω 22'39		opposition	9319 Feb 19 19:52	3° Υ 26'16	-14°24'28
retrograde	9312 Nov 21 16:22	28° Ω 46'43		min. Earth dist.	9319 Feb 19 07:32	3° Υ 26'50	48.19682 AU
opposition	9313 Feb 13 16:12	27° Ω 47'23	-15°11'23	direct	9319 May 12 17:58	2° Υ 27'56	
min. Earth dist.	9313 Feb 12 22:14	27° Ω 48'13	48.25310 AU	evening set	9319 Aug 12 17:18	3° Υ 44'58	
direct	9313 May 06 16:22	26° Ω 48'51					
evening set	9313 Aug 08 20:55	28° Ω 09'09		conjunction	9319 Aug 18 23:02	3° Υ 53'27	-13°46'18
				minimum elong	9319 Aug 18 23:14	3° Υ 53'28	13°46'28
conjunction	9313 Aug 12 17:59	28° Ω 14'26	-14°32'06	max. Earth dist.	9319 Aug 19 11:20	3° Υ 54'09	50.12504 AU
minimum elong	9313 Aug 12 18:11	28° Ω 14'27	14°32'16	morning rise	9319 Aug 25 05:38	4° Υ 02'00	
max. Earth dist.	9313 Aug 13 13:08	28° Ω 15'31	50.18628 AU	retrograde	9319 Nov 29 07:11	5° Υ 22'01	
morning rise	9313 Aug 16 15:36	28° Ω 19'45		opposition	9320 Feb 21 00:30	4° Υ 22'57	-14°15'53
retrograde	9313 Nov 22 22:05	29° Ω 43'05		min. Earth dist.	9320 Feb 20 12:47	4° Υ 23'29	48.17171 AU
opposition	9314 Feb 14 20:49	28° Ω 43'47	-15°04'09	direct	9320 May 12 18:47	3° Υ 24'36	
min. Earth dist.	9314 Feb 14 03:38	28° Ω 44'35	48.25240 AU	evening set	9320 Aug 12 14:05	4° Υ 41'12	
direct	9314 May 07 20:46	27° Ω 45'16					
evening set	9314 Aug 09 14:42	29° Ω 04'54		conjunction	9320 Aug 19 03:51	4° Υ 50'08	-13°37'57
				minimum elong	9320 Aug 19 04:02	4° Υ 50'09	13°38'05

max. Earth dist.	9320 Aug 19 15:06	4° \mathring{M} 50'46	50.09842 AU	conjunction	9327 Aug 26 13:42	11° \mathring{M} 25'24	-12°33'22
morning rise	9320 Aug 25 18:30	4° \mathring{M} 59'07		minimum elong	9327 Aug 26 13:54	11° \mathring{M} 25'25	12°33'29
retrograde	9320 Nov 29 10:34	6° \mathring{M} 18'41		max. Earth dist.	9327 Aug 26 18:14	11° \mathring{M} 25'40	49.80120 AU
opposition	9321 Feb 21 05:15	5° \mathring{M} 19'36	-14°07'06	morning rise	9327 Sep 04 06:12	11° \mathring{M} 37'12	
min. Earth dist.	9321 Feb 20 19:39	5° \mathring{M} 20'02	48.14132 AU	retrograde	9327 Dec 06 17:58	12° \mathring{M} 54'02	
direct	9321 May 13 23:18	4° \mathring{M} 21'15		opposition	9328 Feb 28 12:42	11° \mathring{M} 54'47	-12°59'17
evening set	9321 Aug 13 11:24	5° \mathring{M} 37'23		min. Earth dist.	9328 Feb 28 08:39	11° \mathring{M} 54'58	47.82309 AU
				direct	9328 May 20 09:47	10° \mathring{M} 56'15	
				evening set	9328 Aug 17 20:52	12° \mathring{M} 09'52	
conjunction	9321 Aug 20 08:48	5° \mathring{M} 46'45	-13°29'23				
minimum elong	9321 Aug 20 09:00	5° \mathring{M} 46'46	13°29'32				
max. Earth dist.	9321 Aug 20 19:22	5° \mathring{M} 47'21	50.06693 AU	conjunction	9328 Aug 26 18:37	12° \mathring{M} 21'57	-12°23'13
morning rise	9321 Aug 27 07:04	5° \mathring{M} 56'10		minimum elong	9328 Aug 26 18:50	12° \mathring{M} 21'57	12°23'21
retrograde	9321 Nov 30 11:41	7° \mathring{M} 15'18		max. Earth dist.	9328 Aug 26 23:17	12° \mathring{M} 22'13	49.74604 AU
opposition	9322 Feb 22 09:40	6° \mathring{M} 16'11	-13°58'07	morning rise	9328 Sep 04 17:31	12° \mathring{M} 34'07	
min. Earth dist.	9322 Feb 22 00:15	6° \mathring{M} 16'37	48.10623 AU	retrograde	9328 Dec 06 23:47	13° \mathring{M} 50'39	
direct	9322 May 15 07:24	5° \mathring{M} 17'48		opposition	9329 Feb 28 17:19	12° \mathring{M} 51'24	-12°48'39
evening set	9322 Aug 14 08:48	6° \mathring{M} 33'32		min. Earth dist.	9329 Feb 28 14:04	12° \mathring{M} 51'33	47.76467 AU
				direct	9329 May 21 14:59	11° \mathring{M} 52'51	
				evening set	9329 Aug 18 19:43	13° \mathring{M} 06'11	
conjunction	9322 Aug 21 13:36	6° \mathring{M} 43'18	-13°20'37				
minimum elong	9322 Aug 21 13:48	6° \mathring{M} 43'19	13°20'45				
max. Earth dist.	9322 Aug 21 22:08	6° \mathring{M} 43'47	50.03095 AU	conjunction	9329 Aug 27 23:38	13° \mathring{M} 18'38	-12°12'52
morning rise	9322 Aug 28 19:27	6° \mathring{M} 53'09		minimum elong	9329 Aug 27 23:49	13° \mathring{M} 18'39	12°12'58
retrograde	9322 Dec 01 17:52	8° \mathring{M} 11'50		max. Earth dist.	9329 Aug 28 02:29	13° \mathring{M} 18'48	49.68706 AU
opposition	9323 Feb 23 14:14	7° \mathring{M} 12'41	-13°48'54	morning rise	9329 Sep 06 04:53	13° \mathring{M} 31'10	
min. Earth dist.	9323 Feb 23 06:19	7° \mathring{M} 13'03	48.06707 AU	retrograde	9329 Dec 08 07:52	14° \mathring{M} 47'24	
direct	9323 May 16 12:58	6° \mathring{M} 14'16		opposition	9330 Mar 01 21:48	13° \mathring{M} 48'09	-12°37'48
evening set	9323 Aug 15 06:20	7° \mathring{M} 29'36		min. Earth dist.	9330 Mar 01 19:14	13° \mathring{M} 48'16	47.70213 AU
				direct	9330 May 22 16:03	12° \mathring{M} 49'36	
				evening set	9330 Aug 19 18:42	14° \mathring{M} 02'40	
conjunction	9323 Aug 22 18:27	7° \mathring{M} 39'46	-13°11'37				
minimum elong	9323 Aug 22 18:39	7° \mathring{M} 39'47	13°11'46				
max. Earth dist.	9323 Aug 23 03:10	7° \mathring{M} 40'16	49.99113 AU	conjunction	9330 Aug 29 04:52	14° \mathring{M} 15'28	-12°02'18
morning rise	9323 Aug 30 07:30	7° \mathring{M} 50'02		minimum elong	9330 Aug 29 05:05	14° \mathring{M} 15'29	12°02'24
retrograde	9323 Dec 02 23:53	9° \mathring{M} 08'18		max. Earth dist.	9330 Aug 29 06:35	14° \mathring{M} 15'34	49.62336 AU
opposition	9324 Feb 24 18:42	8° \mathring{M} 09'08	-13°39'27	morning rise	9330 Sep 07 16:24	14° \mathring{M} 28'21	
min. Earth dist.	9324 Feb 24 11:36	8° \mathring{M} 09'27	48.02423 AU	retrograde	9330 Dec 09 13:34	15° \mathring{M} 44'19	
direct	9324 May 16 17:33	7° \mathring{M} 10'41		opposition	9331 Mar 03 02:34	14° \mathring{M} 45'03	-12°26'44
evening set	9324 Aug 15 04:10	8° \mathring{M} 25'36		min. Earth dist.	9331 Mar 03 02:14	14° \mathring{M} 45'04	47.63452 AU
				direct	9331 May 23 19:22	13° \mathring{M} 46'28	
				evening set	9331 Aug 20 17:56	14° \mathring{M} 59'18	
conjunction	9324 Aug 22 23:11	8° \mathring{M} 36'11	-13°02'24				
minimum elong	9324 Aug 22 23:24	8° \mathring{M} 36'12	13°02'32				
max. Earth dist.	9324 Aug 23 06:24	8° \mathring{M} 36'36	49.94809 AU	conjunction	9331 Aug 30 10:06	15° \mathring{M} 12'27	-11°51'32
morning rise	9324 Aug 30 19:19	8° \mathring{M} 46'50		minimum elong	9331 Aug 30 10:18	15° \mathring{M} 12'27	11°51'37
retrograde	9324 Dec 03 06:33	10° \mathring{M} 04'43		max. Earth dist.	9331 Aug 30 10:52	15° \mathring{M} 12'29	49.55449 AU
opposition	9325 Feb 24 23:10	9° \mathring{M} 05'31	-13°29'47	morning rise	9331 Sep 09 03:32	15° \mathring{M} 25'40	
min. Earth dist.	9325 Feb 24 16:13	9° \mathring{M} 05'50	47.97842 AU	retrograde	9331 Dec 10 15:51	16° \mathring{M} 41'22	
direct	9325 May 17 19:03	8° \mathring{M} 07'02		opposition	9332 Mar 03 07:14	15° \mathring{M} 42'05	-12°15'28
evening set	9325 Aug 16 01:57	9° \mathring{M} 21'36		min. Earth dist.	9332 Mar 03 07:10	15° \mathring{M} 42'05	47.56148 AU
				direct	9332 May 24 02:19	14° \mathring{M} 43'27	
				evening set	9332 Aug 20 17:20	15° \mathring{M} 56'02	
conjunction	9325 Aug 24 03:57	9° \mathring{M} 32'34	-12°52'57				
minimum elong	9325 Aug 24 04:09	9° \mathring{M} 32'35	12°53'05				
max. Earth dist.	9325 Aug 24 10:30	9° \mathring{M} 32'57	49.90199 AU	conjunction	9332 Aug 30 15:19	16° \mathring{M} 09'31	-11°40'34
morning rise	9325 Sep 01 07:05	9° \mathring{M} 43'36		minimum elong	9332 Aug 30 15:31	16° \mathring{M} 09'31	11°40'40
retrograde	9325 Dec 04 10:03	11° \mathring{M} 01'06		max. Earth dist.	9332 Aug 30 13:44	16° \mathring{M} 09'25	49.48014 AU
opposition	9326 Feb 26 03:47	10° \mathring{M} 01'53	-13°19'51	morning rise	9332 Sep 09 14:51	16° \mathring{M} 23'05	
min. Earth dist.	9326 Feb 25 22:25	10° \mathring{M} 02'08	47.92960 AU	retrograde	9332 Dec 10 21:27	17° \mathring{M} 38'32	
direct	9326 May 18 23:11	9° \mathring{M} 03'23		opposition	9333 Mar 04 12:03	16° \mathring{M} 39'11	-12°04'00
evening set	9326 Aug 17 00:12	10° \mathring{M} 17'37		min. Earth dist.	9333 Mar 04 13:54	16° \mathring{M} 39'06	47.48315 AU
				direct	9333 May 25 07:59	15° \mathring{M} 40'30	
				evening set	9333 Aug 21 16:44	16° \mathring{M} 52'50	
conjunction	9326 Aug 25 08:54	10° \mathring{M} 28'58	-12°43'17				
minimum elong	9326 Aug 25 09:07	10° \mathring{M} 28'58	12°43'24				
max. Earth dist.	9326 Aug 25 15:10	10° \mathring{M} 29'19	49.85311 AU	conjunction	9333 Aug 31 20:40	17° \mathring{M} 06'39	-11°29'24
morning rise	9326 Sep 02 18:40	10° \mathring{M} 40'22		minimum elong	9333 Aug 31 20:52	17° \mathring{M} 06'40	11°29'29
retrograde	9326 Dec 05 11:57	11° \mathring{M} 57'31		max. Earth dist.	9333 Aug 31 18:53	17° \mathring{M} 06'33	49.40063 AU
opposition	9327 Feb 27 08:05	10° \mathring{M} 58'18	-13°09'41	morning rise	9333 Sep 11 01:53	17° \mathring{M} 20'34	
min. Earth dist.	9327 Feb 27 02:32	10° \mathring{M} 58'33	47.87786 AU	retrograde	9333 Dec 12 03:37	18° \mathring{M} 35'45	
direct	9327 May 20 04:55	9° \mathring{M} 59'46		opposition	9334 Mar 05 16:49	17° \mathring{M} 36'21	-11°52'19
evening set	9327 Aug 17 22:30	11° \mathring{M} 13'41		min. Earth dist.	9334 Mar 05 19:42	17° \mathring{M} 36'13	47.39976 AU

direct	9334 May 26 12:55	16° $\mathring{\mu}$ 37'36	retrograde	9340 Dec 18 22:39	25° $\mathring{\mu}$ 19'34
evening set	9334 Aug 22 16:31	17° $\mathring{\mu}$ 49'42	opposition	9341 Mar 12 02:58	24° $\mathring{\mu}$ 19'47 -10°24'02
			min. Earth dist.	9341 Mar 12 12:15	24° $\mathring{\mu}$ 19'21 46.71659 AU
conjunction	9334 Sep 02 01:57	18° $\mathring{\mu}$ 03'51 -11°18'02	direct	9341 Jun 01 16:13	23° $\mathring{\mu}$ 20'35
minimum elong	9334 Sep 02 02:09	18° $\mathring{\mu}$ 03'52 11°18'07	evening set	9341 Aug 27 18:03	24° $\mathring{\mu}$ 31'33
max. Earth dist.	9334 Sep 01 22:15	18° $\mathring{\mu}$ 03'38 49.31647 AU			
morning rise	9334 Sep 12 12:55	18° $\mathring{\mu}$ 18'06	conjunction	9341 Sep 08 16:13	24° $\mathring{\mu}$ 47'55 -9°52'07
retrograde	9334 Dec 13 11:13	19° $\mathring{\mu}$ 33'02	minimum elong	9341 Sep 08 16:25	24° $\mathring{\mu}$ 47'56 9°52'10
opposition	9335 Mar 06 21:25	18° $\mathring{\mu}$ 33'35 -11°40'25	max. Earth dist.	9341 Sep 08 06:46	24° $\mathring{\mu}$ 47'22 48.63134 AU
min. Earth dist.	9335 Mar 07 00:58	18° $\mathring{\mu}$ 33'25 47.31212 AU	morning rise	9341 Sep 20 16:00	25° $\mathring{\mu}$ 04'24
direct	9335 May 27 14:56	17° $\mathring{\mu}$ 34'46	retrograde	9341 Dec 20 01:52	26° $\mathring{\mu}$ 18'07
evening set	9335 Aug 23 16:14	18° $\mathring{\mu}$ 46'38	opposition	9342 Mar 13 08:02	25° $\mathring{\mu}$ 18'17 -10°10'28
			min. Earth dist.	9342 Mar 13 17:26	25° $\mathring{\mu}$ 17'50 46.60544 AU
conjunction	9335 Sep 03 07:16	19° $\mathring{\mu}$ 01'07 -11°06'27	direct	9342 Jun 02 22:46	24° $\mathring{\mu}$ 19'01
minimum elong	9335 Sep 03 07:29	19° $\mathring{\mu}$ 01'08 11°06'31	evening set	9342 Aug 28 19:15	25° $\mathring{\mu}$ 29'53
max. Earth dist.	9335 Sep 03 02:40	19° $\mathring{\mu}$ 00'51 49.22816 AU			
morning rise	9335 Sep 13 23:51	19° $\mathring{\mu}$ 15'42	conjunction	9342 Sep 09 22:07	25° $\mathring{\mu}$ 46'33 -9°38'56
retrograde	9335 Dec 14 15:26	20° $\mathring{\mu}$ 30'24	minimum elong	9342 Sep 09 22:18	25° $\mathring{\mu}$ 46'34 9°38'58
opposition	9336 Mar 07 02:18	19° $\mathring{\mu}$ 30'53 -11°28'17	max. Earth dist.	9342 Sep 09 10:23	25° $\mathring{\mu}$ 45'53 48.51923 AU
min. Earth dist.	9336 Mar 07 07:30	19° $\mathring{\mu}$ 30'38 47.22064 AU	morning rise	9342 Sep 22 02:53	26° $\mathring{\mu}$ 03'20
direct	9336 May 27 19:26	18° $\mathring{\mu}$ 32'00	retrograde	9342 Dec 21 06:26	27° $\mathring{\mu}$ 16'57
evening set	9336 Aug 23 16:01	19° $\mathring{\mu}$ 43'40	opposition	9343 Mar 14 13:15	26° $\mathring{\mu}$ 17'03 -9°56'40
			min. Earth dist.	9343 Mar 15 00:43	26° $\mathring{\mu}$ 16'30 46.48954 AU
conjunction	9336 Sep 03 12:30	19° $\mathring{\mu}$ 58'29 -10°54'38	direct	9343 Jun 04 05:45	25° $\mathring{\mu}$ 17'42
minimum elong	9336 Sep 03 12:42	19° $\mathring{\mu}$ 58'29 10°54'43	evening set	9343 Aug 29 20:33	26° $\mathring{\mu}$ 28'28
max. Earth dist.	9336 Sep 03 07:37	19° $\mathring{\mu}$ 58'12 49.13644 AU			
morning rise	9336 Sep 14 10:27	20° $\mathring{\mu}$ 13'22	conjunction	9343 Sep 11 04:18	26° $\mathring{\mu}$ 45'26 -9°25'33
retrograde	9336 Dec 14 17:49	21° $\mathring{\mu}$ 27'52	minimum elong	9343 Sep 11 04:30	26° $\mathring{\mu}$ 45'27 9°25'35
opposition	9337 Mar 08 07:05	20° $\mathring{\mu}$ 28'17 -11°15'55	max. Earth dist.	9343 Sep 10 16:14	26° $\mathring{\mu}$ 44'45 48.40209 AU
min. Earth dist.	9337 Mar 08 12:08	20° $\mathring{\mu}$ 28'03 47.12587 AU	morning rise	9343 Sep 23 13:38	27° $\mathring{\mu}$ 02'31
direct	9337 May 29 01:47	19° $\mathring{\mu}$ 29'20	retrograde	9343 Dec 22 12:16	28° $\mathring{\mu}$ 16'02
evening set	9337 Aug 24 16:08	20° $\mathring{\mu}$ 40'50	opposition	9344 Mar 14 18:38	27° $\mathring{\mu}$ 16'02 -9°42'40
			min. Earth dist.	9344 Mar 15 07:04	27° $\mathring{\mu}$ 15'26 46.36835 AU
conjunction	9337 Sep 04 17:51	20° $\mathring{\mu}$ 55'57 -10°42'36	direct	9344 Jun 04 12:30	26° $\mathring{\mu}$ 16'35
minimum elong	9337 Sep 04 18:04	20° $\mathring{\mu}$ 55'58 10°42'40	evening set	9344 Aug 29 22:01	27° $\mathring{\mu}$ 27'15
max. Earth dist.	9337 Sep 04 11:11	20° $\mathring{\mu}$ 55'34 49.04150 AU			
morning rise	9337 Sep 15 21:19	21° $\mathring{\mu}$ 11'10	conjunction	9344 Sep 11 10:14	27° $\mathring{\mu}$ 44'31 -9°11'56
retrograde	9337 Dec 15 23:45	22° $\mathring{\mu}$ 25'29	minimum elong	9344 Sep 11 10:26	27° $\mathring{\mu}$ 44'31 9°11'58
opposition	9338 Mar 09 11:56	21° $\mathring{\mu}$ 25'51 -11°03'19	max. Earth dist.	9344 Sep 10 20:02	27° $\mathring{\mu}$ 43'41 48.27976 AU
min. Earth dist.	9338 Mar 09 18:30	21° $\mathring{\mu}$ 25'32 47.02814 AU	morning rise	9344 Sep 24 00:19	28° $\mathring{\mu}$ 01'53
direct	9338 May 30 07:10	20° $\mathring{\mu}$ 26'49	retrograde	9344 Dec 22 21:07	29° $\mathring{\mu}$ 15'17
evening set	9338 Aug 25 16:19	21° $\mathring{\mu}$ 38'10	opposition	9345 Mar 16 00:04	28° $\mathring{\mu}$ 15'11 -9°28'26
			min. Earth dist.	9345 Mar 16 13:25	28° $\mathring{\mu}$ 14'33 46.24208 AU
conjunction	9338 Sep 05 23:26	21° $\mathring{\mu}$ 53'36 -10°30'20	direct	9345 Jun 05 15:38	27° $\mathring{\mu}$ 15'37
minimum elong	9338 Sep 05 23:37	21° $\mathring{\mu}$ 53'36 10°30'24	evening set	9345 Aug 30 23:42	28° $\mathring{\mu}$ 26'11
max. Earth dist.	9338 Sep 05 16:50	21° $\mathring{\mu}$ 53'13 48.94365 AU			
morning rise	9338 Sep 17 08:02	22° $\mathring{\mu}$ 09'08	conjunction	9345 Sep 12 16:32	28° $\mathring{\mu}$ 43'44 -8°58'08
retrograde	9338 Dec 17 05:32	23° $\mathring{\mu}$ 23'17	minimum elong	9345 Sep 12 16:43	28° $\mathring{\mu}$ 43'45 8°58'10
opposition	9339 Mar 10 16:52	22° $\mathring{\mu}$ 23'35 -10°50'28	max. Earth dist.	9345 Sep 12 01:07	28° $\mathring{\mu}$ 42'50 48.15230 AU
min. Earth dist.	9339 Mar 10 23:55	22° $\mathring{\mu}$ 23'15 46.92739 AU	morning rise	9345 Sep 25 11:09	29° $\mathring{\mu}$ 01'24
direct	9339 May 31 12:58	21° $\mathring{\mu}$ 24'30		9345 Nov 16 14:13	0° $\mathring{\Delta}$
evening set	9339 Aug 26 16:43	22° $\mathring{\mu}$ 35'42	retrograde	9345 Dec 24 03:50	0° $\mathring{\Delta}$ 14'41
				9346 Jan 30 22:44	30° $\mathring{\mathcal{R}}$ $\mathring{\mu}$
conjunction	9339 Sep 07 04:49	22° $\mathring{\mu}$ 51'27 -10°17'49	opposition	9346 Mar 17 05:30	29° $\mathring{\mu}$ 14'27 -9°13'59
minimum elong	9339 Sep 07 05:01	22° $\mathring{\mu}$ 51'27 10°17'53	min. Earth dist.	9346 Mar 17 20:48	29° $\mathring{\mu}$ 13'44 46.11094 AU
max. Earth dist.	9339 Sep 06 20:44	22° $\mathring{\mu}$ 50'59 48.84290 AU	direct	9346 Jun 06 19:56	28° $\mathring{\mu}$ 14'45
morning rise	9339 Sep 18 18:38	23° $\mathring{\mu}$ 07'18	evening set	9346 Sep 01 01:37	29° $\mathring{\mu}$ 25'14
retrograde	9339 Dec 18 14:45	24° $\mathring{\mu}$ 21'18			
opposition	9340 Mar 10 21:49	23° $\mathring{\mu}$ 21'33 -10°37'22	conjunction	9346 Sep 13 22:52	29° $\mathring{\mu}$ 43'04 -8°44'06
min. Earth dist.	9340 Mar 11 05:17	23° $\mathring{\mu}$ 21'12 46.82370 AU	minimum elong	9346 Sep 13 23:04	29° $\mathring{\mu}$ 43'05 8°44'07
direct	9340 May 31 14:00	22° $\mathring{\mu}$ 22'25	max. Earth dist.	9346 Sep 13 06:50	29° $\mathring{\mu}$ 42'08 48.02042 AU
evening set	9340 Aug 26 17:14	23° $\mathring{\mu}$ 33'29	morning rise	9346 Sep 26 21:49	0° $\mathring{\Delta}$ 01'02
				9346 Sep 26 03:50	0° $\mathring{\Delta}$
conjunction	9340 Sep 07 10:27	23° $\mathring{\mu}$ 49'33 -10°05'05	retrograde	9346 Dec 25 08:34	1° $\mathring{\Delta}$ 14'11
minimum elong	9340 Sep 07 10:38	23° $\mathring{\mu}$ 49'33 10°05'08	opposition	9347 Mar 18 10:56	0° $\mathring{\Delta}$ 13'50 -8°59'18
max. Earth dist.	9340 Sep 07 01:35	23° $\mathring{\mu}$ 49'02 48.73891 AU	min. Earth dist.	9347 Mar 19 02:19	0° $\mathring{\Delta}$ 13'06 45.97564 AU
morning rise	9340 Sep 19 05:21	24° $\mathring{\mu}$ 05'43		9347 Mar 30 14:52	30° $\mathring{\mathcal{R}}$ $\mathring{\mu}$

direct	9347 Jun 08 01:56	29° <u>11</u> 13'59	morning rise	9353 Oct 05 00:19	7° <u>04</u> '22
	9347 Aug 14 11:14	0° <u>01</u> '	retrograde	9354 Jan 01 07:13	8° <u>17</u> '26
evening set	9347 Sep 02 03:36	0° <u>02</u> '24'25	opposition	9354 Mar 25 04:18	7° <u>16</u> '18 -7°09'27
max. Earth dist.	9347 Sep 14 11:01	0° <u>04</u> '1'29 47.88454 AU	min. Earth dist.	9354 Mar 26 01:46	7° <u>15</u> '16 44.94510 AU
			direct	9354 Jun 14 19:13	6° <u>15</u> '36
conjunction	9347 Sep 15 05:02	0° <u>04</u> '2'32 -8°29'50	evening set	9354 Sep 08 00:06	7° <u>16</u> '10
minimum elong	9347 Sep 15 05:13	0° <u>04</u> '2'32 8°29'51	max. Earth dist.	9354 Sep 21 04:29	7° <u>14</u> '46 46.85229 AU
morning rise	9347 Sep 28 08:26	1° <u>00</u> '0'46			
retrograde	9347 Dec 26 14:05	2° <u>13</u> '51	conjunction	9354 Sep 22 04:43	7° <u>14</u> '6'12 -6°43'17
opposition	9348 Mar 18 16:36	1° <u>13</u> '22 -8°44'22	minimum elong	9354 Sep 22 04:53	7° <u>14</u> '6'13 6°43'16
min. Earth dist.	9348 Mar 19 09:43	1° <u>12</u> '33 45.83679 AU	morning rise	9354 Oct 06 11:19	8° <u>06</u> '23
direct	9348 Jun 08 08:18	0° <u>13</u> '22	retrograde	9355 Jan 02 17:29	9° <u>19</u> '31
evening set	9348 Sep 02 05:44	1° <u>12</u> '3'45	opposition	9355 Mar 26 10:46	8° <u>18</u> '18 -6°52'44
			min. Earth dist.	9355 Mar 27 09:20	8° <u>17</u> '12 44.78492 AU
conjunction	9348 Sep 15 11:31	1° <u>12</u> '08 -8°15'21	direct	9355 Jun 15 22:51	7° <u>17</u> '28
minimum elong	9348 Sep 15 11:42	1° <u>12</u> '09 8°15'21	evening set	9355 Sep 09 04:06	8° <u>28</u> '07
max. Earth dist.	9348 Sep 14 17:38	1° <u>11</u> '06 47.74539 AU	max. Earth dist.	9355 Sep 22 10:53	8° <u>14</u> '55 46.69078 AU
morning rise	9348 Sep 28 18:58	2° <u>00</u> '0'39			
retrograde	9348 Dec 26 18:55	3° <u>13</u> '41	conjunction	9355 Sep 23 12:13	8° <u>48</u> '26 -6°27'07
opposition	9349 Mar 19 22:13	2° <u>13</u> '04 -8°29'12	minimum elong	9355 Sep 23 12:21	8° <u>48</u> '26 6°27'05
min. Earth dist.	9349 Mar 20 15:38	2° <u>12</u> '14 45.69485 AU	morning rise	9355 Oct 07 22:08	9° <u>08</u> '52
direct	9349 Jun 09 15:42	1° <u>12</u> '56	retrograde	9356 Jan 04 02:36	10° <u>22</u> '05
evening set	9349 Sep 03 08:12	2° <u>23</u> '16	opposition	9356 Mar 26 17:32	9° <u>20</u> '44 -6°35'48
			min. Earth dist.	9356 Mar 27 17:52	9° <u>19</u> '33 44.61984 AU
conjunction	9349 Sep 16 17:57	2° <u>41</u> '57 -8°00'36	direct	9356 Jun 16 03:44	8° <u>19</u> '46
minimum elong	9349 Sep 16 18:07	2° <u>41</u> '57 8°00'37	evening set	9356 Sep 09 08:29	9° <u>30</u> '31
max. Earth dist.	9349 Sep 15 22:31	2° <u>40</u> '48 47.60345 AU			
morning rise	9349 Sep 30 05:39	3° <u>00</u> '45	conjunction	9356 Sep 23 19:57	9° <u>51</u> '05 -6°10'43
retrograde	9349 Dec 28 04:04	4° <u>13</u> '44	minimum elong	9356 Sep 23 20:06	9° <u>51</u> '06 6°10'42
opposition	9350 Mar 21 03:59	3° <u>13</u> '00 -8°13'45	max. Earth dist.	9356 Sep 22 17:39	9° <u>49</u> '31 46.52452 AU
min. Earth dist.	9350 Mar 21 21:58	3° <u>12</u> '08 45.55032 AU	morning rise	9356 Oct 08 09:10	10° <u>11</u> '47
direct	9350 Jun 10 19:11	2° <u>12</u> '44	retrograde	9357 Jan 04 10:51	11° <u>25</u> '04
evening set	9350 Sep 04 10:50	3° <u>23</u> '04	opposition	9357 Mar 28 00:12	10° <u>23</u> '35 -6°18'37
max. Earth dist.	9350 Sep 17 04:33	3° <u>40</u> '50 47.45878 AU	min. Earth dist.	9357 Mar 29 00:53	10° <u>22</u> '22 44.44999 AU
			direct	9357 Jun 17 10:01	9° <u>22</u> '26
conjunction	9350 Sep 18 00:39	3° <u>42</u> '01 -7°45'38	evening set	9357 Sep 10 13:11	10° <u>33</u> '19
minimum elong	9350 Sep 18 00:50	3° <u>42</u> '02 7°45'37	max. Earth dist.	9357 Sep 23 23:10	10° <u>52</u> '25 46.35340 AU
morning rise	9350 Oct 01 16:17	4° <u>01</u> '06			
retrograde	9350 Dec 29 12:48	5° <u>14</u> '03	conjunction	9357 Sep 25 03:46	10° <u>54</u> '08 -5°54'05
opposition	9351 Mar 22 09:52	4° <u>13</u> '13 -7°58'04	minimum elong	9357 Sep 25 03:54	10° <u>54</u> '09 5°54'02
min. Earth dist.	9351 Mar 23 05:16	4° <u>12</u> '17 45.40317 AU	morning rise	9357 Oct 09 20:18	11° <u>15</u> '06
direct	9351 Jun 11 22:48	3° <u>12</u> '50	retrograde	9358 Jan 05 18:10	12° <u>28</u> '27
evening set	9351 Sep 05 13:42	4° <u>23</u> '12	opposition	9358 Mar 29 07:13	11° <u>26</u> '48 -6°01'11
max. Earth dist.	9351 Sep 18 10:56	4° <u>41</u> '13 47.31176 AU	min. Earth dist.	9358 Mar 30 09:59	11° <u>25</u> '29 44.27556 AU
			direct	9358 Jun 18 17:31	10° <u>25</u> '29
conjunction	9351 Sep 19 07:25	4° <u>42</u> '25 -7°30'24	evening set	9358 Sep 11 18:03	11° <u>36</u> '28
minimum elong	9351 Sep 19 07:35	4° <u>42</u> '26 7°30'24	max. Earth dist.	9358 Sep 25 07:05	11° <u>55</u> '49 46.17792 AU
morning rise	9351 Oct 03 02:54	5° <u>01</u> '46			
retrograde	9351 Dec 30 19:01	6° <u>14</u> '44	conjunction	9358 Sep 26 11:51	11° <u>57</u> '32 -5°37'14
opposition	9352 Mar 22 15:51	5° <u>13</u> '48 -7°42'07	minimum elong	9358 Sep 26 11:59	11° <u>57</u> '33 5°37'11
min. Earth dist.	9352 Mar 23 10:56	5° <u>12</u> '53 45.25357 AU	morning rise	9358 Oct 11 07:16	12° <u>18</u> '45
direct	9352 Jun 12 04:20	4° <u>13</u> '18	retrograde	9359 Jan 06 23:31	13° <u>32</u> '12
evening set	9352 Sep 05 16:45	5° <u>23</u> '43	opposition	9359 Mar 30 14:06	12° <u>30</u> '23 -5°43'30
			min. Earth dist.	9359 Mar 31 17:16	12° <u>29</u> '02 44.09702 AU
conjunction	9352 Sep 19 14:09	5° <u>43</u> '13 -7°14'56	direct	9359 Jun 20 02:46	11° <u>28</u> '52
minimum elong	9352 Sep 19 14:19	5° <u>43</u> '13 7°14'56	evening set	9359 Sep 12 23:18	12° <u>39</u> '58
max. Earth dist.	9352 Sep 18 15:59	5° <u>41</u> '54 47.16202 AU			
morning rise	9352 Oct 03 13:34	6° <u>02</u> '51	conjunction	9359 Sep 27 19:53	13° <u>01</u> '17 -5°20'08
retrograde	9352 Dec 31 01:06	7° <u>15</u> '51	minimum elong	9359 Sep 27 20:01	13° <u>01</u> '18 5°20'04
opposition	9353 Mar 23 22:08	6° <u>14</u> '49 -7°25'54	max. Earth dist.	9359 Sep 26 13:16	12° <u>59</u> '27 45.99872 AU
min. Earth dist.	9353 Mar 24 18:57	6° <u>13</u> '48 45.10112 AU	morning rise	9359 Oct 12 18:23	13° <u>22</u> '45
direct	9353 Jun 13 11:28	5° <u>14</u> '13	retrograde	9360 Jan 08 08:43	14° <u>36</u> '19
evening set	9353 Sep 06 20:11	6° <u>24</u> '41	opposition	9360 Mar 30 21:17	13° <u>34</u> '19 -5°25'33
			min. Earth dist.	9360 Apr 01 01:26	13° <u>32</u> '55 43.91520 AU
conjunction	9353 Sep 20 21:24	6° <u>44</u> '28 -6°59'14	direct	9360 Jun 20 08:57	12° <u>32</u> '36
minimum elong	9353 Sep 20 21:34	6° <u>44</u> '28 6°59'13	evening set	9360 Sep 13 04:36	13° <u>43</u> '50
max. Earth dist.	9353 Sep 19 23:16	6° <u>43</u> '09 47.00909 AU	max. Earth dist.	9360 Sep 26 20:56	14° <u>03</u> '31 45.81625 AU

conjunction	9360 Sep 28 04:07	14° <u>05</u> '25 -5°02'47	evening set	9367 Sep 21 05:06	21° <u>02</u> '36	
minimum elong	9360 Sep 28 04:14	14° <u>05</u> '25 5°02'44	max. Earth dist.	9367 Oct 05 05:41	21° <u>04</u> '23	44.46570 AU
morning rise	9360 Oct 13 05:20	14° <u>02</u> '06				
retrograde	9361 Jan 08 19:11	15° <u>04</u> '49	conjunction	9367 Oct 06 20:22	21° <u>04</u> '48	-2°54'24
opposition	9361 Apr 01 04:42	14° <u>03</u> '37 -5°07'21	minimum elong	9367 Oct 06 20:27	21° <u>04</u> '48	2°54'18
min. Earth dist.	9361 Apr 02 10:09	14° <u>03</u> '09 43.73035 AU	morning rise	9367 Oct 22 13:15	22° <u>01</u> '06	
direct	9361 Jun 21 14:05	13° <u>03</u> '42	retrograde	9368 Jan 17 16:40	23° <u>02</u> '21	
evening set	9361 Sep 14 10:26	14° <u>04</u> '06	opposition	9368 Apr 08 13:44	22° <u>02</u> '54	-2°52'27
max. Earth dist.	9361 Sep 28 04:48	15° <u>07</u> '59 45.63114 AU	min. Earth dist.	9368 Apr 10 01:38	22° <u>02</u> '10	42.36369 AU
			direct	9368 Jun 28 17:54	21° <u>01</u> '35	
conjunction	9361 Sep 29 12:38	15° <u>09</u> '55 -4°45'11	evening set	9368 Sep 21 13:32	22° <u>03</u> '51	
minimum elong	9361 Sep 29 12:45	15° <u>09</u> '55 4°45'07	max. Earth dist.	9368 Oct 05 15:35	22° <u>05</u> '49	44.25860 AU
morning rise	9361 Oct 14 16:31	15° <u>03</u> '51				
retrograde	9362 Jan 10 05:40	16° <u>04</u> '52	conjunction	9368 Oct 07 06:39	22° <u>05</u> '16	-2°35'05
opposition	9362 Apr 02 12:01	15° <u>04</u> '19 -4°48'52	minimum elong	9368 Oct 07 06:43	22° <u>05</u> '16	2°34'58
min. Earth dist.	9362 Apr 03 17:19	15° <u>04</u> '51 43.54309 AU	morning rise	9368 Oct 23 01:03	23° <u>01</u> '48	
direct	9362 Jun 22 19:01	14° <u>04</u> '11	retrograde	9369 Jan 18 01:14	24° <u>03</u> '20	
evening set	9362 Sep 15 16:38	15° <u>05</u> '48	opposition	9369 Apr 09 22:51	23° <u>03</u> '40	-2°32'08
max. Earth dist.	9362 Sep 29 11:50	16° <u>01</u> '24 45.44354 AU	min. Earth dist.	9369 Apr 11 11:01	23° <u>02</u> '49	42.15366 AU
			direct	9369 Jun 30 04:48	22° <u>02</u> '06	
conjunction	9362 Sep 30 21:18	16° <u>01</u> '45 -4°27'21	evening set	9369 Sep 22 22:42	23° <u>04</u> '43	
minimum elong	9362 Sep 30 21:24	16° <u>01</u> '45 4°27'17	max. Earth dist.	9369 Oct 06 23:43	24° <u>02</u> '43	44.04700 AU
morning rise	9362 Oct 16 03:47	16° <u>03</u> '01				
retrograde	9363 Jan 11 13:50	17° <u>05</u> '02	conjunction	9369 Oct 08 17:10	24° <u>05</u> '20	-2°15'31
opposition	9363 Apr 03 19:50	16° <u>04</u> '28 -4°30'08	minimum elong	9369 Oct 08 17:13	24° <u>05</u> '20	2°15'26
min. Earth dist.	9363 Apr 05 02:46	16° <u>04</u> '55 43.53534 AU	morning rise	9369 Oct 24 13:11	24° <u>02</u> '04	
direct	9363 Jun 24 03:25	15° <u>04</u> '09	retrograde	9370 Jan 19 11:17	25° <u>04</u> '55	
evening set	9363 Sep 16 22:54	16° <u>05</u> '58	opposition	9370 Apr 11 08:06	24° <u>04</u> '01	-2°11'34
max. Earth dist.	9363 Sep 30 20:58	17° <u>01</u> '13 45.25375 AU	min. Earth dist.	9370 Apr 12 22:00	24° <u>03</u> '05	41.93946 AU
			direct	9370 Jul 01 14:01	23° <u>03</u> '12	
conjunction	9363 Oct 02 06:07	17° <u>02</u> '15 -4°09'15	evening set	9370 Sep 24 08:05	24° <u>05</u> '11	
minimum elong	9363 Oct 02 06:14	17° <u>02</u> '16 4°09'10	max. Earth dist.	9370 Oct 08 10:01	25° <u>01</u> '20	43.83124 AU
morning rise	9363 Oct 17 14:50	17° <u>04</u> '40				
retrograde	9364 Jan 12 19:52	18° <u>05</u> '52	conjunction	9370 Oct 10 04:02	25° <u>01</u> '00	-1°55'44
opposition	9364 Apr 04 03:46	17° <u>05</u> '48 -4°11'08	minimum elong	9370 Oct 10 04:05	25° <u>01</u> '00	1°55'37
min. Earth dist.	9364 Apr 05 10:38	17° <u>05</u> '34 43.16174 AU	morning rise	9370 Oct 26 01:11	25° <u>03</u> '56	
direct	9364 Jun 24 13:54	16° <u>05</u> '37	retrograde	9371 Jan 20 21:33	26° <u>05</u> '07	
evening set	9364 Sep 17 05:49	18° <u>03</u> '41	opposition	9371 Apr 12 17:43	25° <u>05</u> '59	-1°50'43
max. Earth dist.	9364 Oct 01 04:09	18° <u>02</u> '40 45.06166 AU	min. Earth dist.	9371 Apr 14 08:42	25° <u>04</u> '58	41.72142 AU
			direct	9371 Jul 02 23:11	24° <u>04</u> '54	
conjunction	9364 Oct 02 15:10	18° <u>02</u> '12 -3°50'54	evening set	9371 Sep 25 17:48	26° <u>01</u> '15	
minimum elong	9364 Oct 02 15:16	18° <u>02</u> '12 3°50'50	max. Earth dist.	9371 Oct 09 19:38	26° <u>02</u> '31	43.61209 AU
morning rise	9364 Oct 18 02:18	18° <u>04</u> '51				
retrograde	9365 Jan 13 06:04	20° <u>03</u> '17	conjunction	9371 Oct 11 14:49	26° <u>02</u> '51	-1°35'42
opposition	9365 Apr 05 11:50	19° <u>00</u> '22 -3°51'51	minimum elong	9371 Oct 11 14:52	26° <u>02</u> '51	1°35'35
min. Earth dist.	9365 Apr 06 19:50	18° <u>05</u> '45 42.96759 AU	morning rise	9371 Oct 27 13:10	26° <u>04</u> '23	
direct	9365 Jun 25 20:49	17° <u>05</u> '40	retrograde	9372 Jan 22 10:50	28° <u>05</u> '57	
evening set	9365 Sep 18 13:03	19° <u>01</u> '00	opposition	9372 Apr 13 03:28	27° <u>01</u> '33	-1°29'37
max. Earth dist.	9365 Oct 02 13:10	19° <u>03</u> '33 44.86673 AU	min. Earth dist.	9372 Apr 14 18:43	26° <u>05</u> '31	41.50039 AU
			direct	9372 Jul 03 05:58	25° <u>05</u> '11	
conjunction	9365 Oct 04 00:40	19° <u>03</u> '24 -3°32'18	evening set	9372 Sep 26 04:05	27° <u>01</u> '11	
minimum elong	9365 Oct 04 00:46	19° <u>03</u> '24 3°32'13	max. Earth dist.	9372 Oct 10 05:28	27° <u>03</u> '19	43.38997 AU
morning rise	9365 Oct 19 13:47	19° <u>05</u> '38				
retrograde	9366 Jan 14 16:01	21° <u>01</u> '19	conjunction	9372 Oct 12 02:04	27° <u>03</u> '10	-1°15'25
opposition	9366 Apr 06 20:15	20° <u>07</u> '14 -3°32'18	minimum elong	9372 Oct 12 02:06	27° <u>03</u> '10	1°15'17
min. Earth dist.	9366 Apr 08 05:32	20° <u>05</u> '33 42.77024 AU	morning rise	9372 Oct 28 01:20	28° <u>00</u> '29	
direct	9366 Jun 27 04:25	19° <u>04</u> '21	retrograde	9373 Jan 22 23:16	29° <u>01</u> '25	
evening set	9366 Sep 19 20:51	20° <u>01</u> '59	opposition	9373 Apr 14 13:32	28° <u>01</u> '46	-1°08'16
max. Earth dist.	9366 Oct 03 21:47	20° <u>03</u> '40 44.66835 AU	min. Earth dist.	9373 Apr 16 06:28	28° <u>01</u> '38	41.27681 AU
			direct	9373 Jul 04 15:08	27° <u>08</u> '07	
conjunction	9366 Oct 05 10:22	20° <u>03</u> '57 -3°13'28	evening set	9373 Sep 27 14:45	28° <u>02</u> '20	
minimum elong	9366 Oct 05 10:27	20° <u>03</u> '57 3°13'22	max. Earth dist.	9373 Oct 11 17:08	28° <u>04</u> '52	43.16562 AU
morning rise	9366 Oct 21 01:27	21° <u>03</u> '03				
retrograde	9367 Jan 16 04:25	22° <u>01</u> '48	conjunction	9373 Oct 13 13:39	28° <u>04</u> '44	-0°54'54
opposition	9367 Apr 08 04:44	21° <u>01</u> '45 -3°12'30	minimum elong	9373 Oct 13 13:41	28° <u>04</u> '44	0°54'46
min. Earth dist.	9367 Apr 09 14:29	21° <u>01</u> '30 42.56916 AU	morning rise	9373 Oct 29 13:35	29° <u>01</u> '13	
direct	9367 Jun 28 10:32	20° <u>01</u> '39		9373 Dec 04 09:55	0° <u>01</u> '	

retrograde	9374 Jan 24 10:38	0° ℳ 29'34		minimum elong	9379 Oct 21 17:41	6° ℳ 14'25	1°13'20
	9374 Mar 17 04:47	30° ℞ ♂		morning rise	9379 Nov 06 17:47	6° ℳ 39'51	
opposition	9374 Apr 15 23:46	29° ♂ 24'40	-0°46'38	retrograde	9380 Feb 01 20:47	8° ℳ 00'24	
min. Earth dist.	9374 Apr 17 16:28	29° ♂ 22'32	41.05123 AU	opposition	9380 Apr 22 20:25	6° ℳ 54'00	1°28'30
direct	9374 Jul 06 03:04	28° ♂ 19'44		min. Earth dist.	9380 Apr 24 18:43	6° ℳ 51'31	39.66126 AU
evening set	9374 Sep 29 02:02	29° ♂ 35'26		direct	9380 Jul 12 17:09	5° ℳ 47'23	
max. Earth dist.	9374 Oct 13 02:55	29° ♂ 57'00	42.93935 AU	evening set	9380 Oct 06 09:17	7° ℳ 06'41	
				max. Earth dist.	9380 Oct 20 04:48	7° ℳ 28'43	41.54198 AU
conjunction	9374 Oct 15 01:21	0° ℳ 00'01	-0°34'09				
minimum elong	9374 Oct 15 01:22	0° ℳ 00'01	0°34'00	conjunction	9380 Oct 22 07:58	7° ℳ 32'09	1°35'17
	9374 Oct 15 01:12	0° ℳ		minimum elong	9380 Oct 22 07:55	7° ℳ 32'09	1°35'27
morning rise	9374 Oct 31 01:55	0° ℳ 24'41		morning rise	9380 Nov 07 07:06	7° ℳ 57'42	
retrograde	9375 Jan 25 22:47	1° ℳ 42'28		retrograde	9381 Feb 02 08:59	9° ℳ 18'52	
opposition	9375 Apr 17 10:22	0° ℳ 37'19	-0°24'45	opposition	9381 Apr 24 09:03	8° ℳ 12'11	1°51'53
min. Earth dist.	9375 Apr 19 04:24	0° ℳ 35'07	40.82410 AU	min. Earth dist.	9381 Apr 26 07:53	8° ℳ 09'39	39.42011 AU
	9375 May 18 21:24	30° ℞ ♂		direct	9381 Jul 14 08:13	7° ℳ 05'13	
direct	9375 Jul 07 13:36	29° ♂ 32'07		evening set	9381 Oct 08 00:52	8° ℳ 25'13	
	9375 Aug 25 08:28	0° ℳ		max. Earth dist.	9381 Oct 21 17:14	8° ℳ 47'11	41.29891 AU
evening set	9375 Sep 30 13:40	0° ℳ 48'20					
max. Earth dist.	9375 Oct 14 15:18	1° ℳ 10'03	42.71157 AU	conjunction	9381 Oct 23 22:28	8° ℳ 50'48	1°57'37
				minimum elong	9381 Oct 23 22:25	8° ℳ 50'47	1°57'48
conjunction	9375 Oct 16 13:33	1° ℳ 13'04	-0°13'10	morning rise	9381 Nov 08 20:45	9° ℳ 16'27	
minimum elong	9375 Oct 16 13:33	1° ℳ 13'04	0°13'02	retrograde	9382 Feb 04 00:21	10° ℳ 38'16	
behind sun begin	9375 Oct 16 09:44	1° ℳ 12'50		opposition	9382 Apr 25 22:07	9° ℳ 31'16	2°15'30
behind sun end	9375 Oct 16 17:22	1° ℳ 13'18		min. Earth dist.	9382 Apr 27 22:02	9° ℳ 28'39	39.17592 AU
morning rise	9375 Nov 01 14:17	1° ℳ 37'55		direct	9382 Jul 15 20:07	8° ℳ 23'56	
retrograde	9376 Jan 27 09:03	2° ℳ 56'11		evening set	9382 Oct 09 16:54	9° ℳ 44'39	
opposition	9376 Apr 17 21:19	1° ℳ 50'48	-0°02'36	max. Earth dist.	9382 Oct 23 07:16	10° ℳ 06'38	41.05271 AU
min. Earth dist.	9376 Apr 19 15:35	1° ℳ 48'34	40.59554 AU				
asc. node	9376 May 30 13:57	1° ℳ 02'35		conjunction	9382 Oct 25 13:23	10° ℳ 10'19	2°20'10
direct	9376 Jul 08 01:04	0° ℳ 45'19		minimum elong	9382 Oct 25 13:18	10° ℳ 10'19	2°20'21
evening set	9376 Oct 01 01:53	2° ℳ 02'05		morning rise	9382 Nov 10 10:13	10° ℳ 36'04	
max. Earth dist.	9376 Oct 15 02:31	2° ℳ 23'53	42.48247 AU	retrograde	9383 Feb 05 14:05	11° ℳ 58'34	
				opposition	9383 Apr 27 11:35	10° ℳ 51'14	2°39'20
conjunction	9376 Oct 17 01:53	2° ℳ 26'59	0°08'09	min. Earth dist.	9383 Apr 29 12:47	10° ℳ 48'32	38.92898 AU
minimum elong	9376 Oct 17 01:52	2° ℳ 26'59	0°08'18	direct	9383 Jul 17 08:29	9° ℳ 43'32	
behind sun begin	9376 Oct 16 20:10	2° ℳ 26'38		evening set	9383 Oct 11 09:37	11° ℳ 05'00	
behind sun end	9376 Oct 17 07:35	2° ℳ 27'20		max. Earth dist.	9383 Oct 24 21:59	11° ℳ 27'00	40.80423 AU
morning rise	9376 Nov 02 02:55	2° ℳ 51'59					
retrograde	9377 Jan 27 23:20	4° ℳ 10'47		conjunction	9383 Oct 27 04:37	11° ℳ 30'45	2°42'54
opposition	9377 Apr 19 08:31	3° ℳ 05'10	0°19'48	minimum elong	9383 Oct 27 04:32	11° ℳ 30'44	2°43'07
min. Earth dist.	9377 Apr 21 03:13	3° ℳ 02'54	40.36559 AU	morning rise	9383 Nov 11 23:59	11° ℳ 56'34	
direct	9377 Jul 09 09:28	1° ℳ 59'25		retrograde	9384 Feb 07 07:28	13° ℳ 19'46	
evening set	9377 Oct 02 14:50	3° ℳ 16'46		opposition	9384 Apr 28 01:17	12° ℳ 12'05	3°03'24
max. Earth dist.	9377 Oct 16 14:22	3° ℳ 38'38	42.25144 AU	min. Earth dist.	9384 Apr 30 02:26	12° ℳ 09'23	38.68018 AU
				direct	9384 Jul 17 20:20	11° ℳ 04'01	
conjunction	9377 Oct 18 14:51	3° ℳ 41'50	0°29'34	evening set	9384 Oct 12 02:58	12° ℳ 26'16	
minimum elong	9377 Oct 18 14:50	3° ℳ 41'49	0°29'44	max. Earth dist.	9384 Oct 25 11:53	12° ℳ 48'12	40.55387 AU
morning rise	9377 Nov 03 15:43	4° ℳ 06'59					
retrograde	9378 Jan 29 15:00	5° ℳ 26'21		conjunction	9384 Oct 27 20:12	12° ℳ 52'05	3°05'50
opposition	9378 Apr 20 20:04	4° ℳ 20'29	0°42'27	minimum elong	9384 Oct 27 20:07	12° ℳ 52'05	3°06'02
min. Earth dist.	9378 Apr 22 16:27	4° ℳ 18'07	40.13358 AU	morning rise	9384 Nov 12 13:48	13° ℳ 17'58	
direct	9378 Jul 10 17:23	3° ℳ 14'27		retrograde	9385 Feb 08 01:30	14° ℳ 41'56	
evening set	9378 Oct 04 04:22	4° ℳ 32'26		opposition	9385 Apr 29 15:34	13° ℳ 33'54	3°27'41
max. Earth dist.	9378 Oct 18 03:22	4° ℳ 54'24	42.01814 AU	min. Earth dist.	9385 May 01 18:24	13° ℳ 31'05	38.42994 AU
				direct	9385 Jul 19 08:32	12° ℳ 25'25	
conjunction	9378 Oct 20 04:11	4° ℳ 57'38	0°51'15	evening set	9385 Oct 13 21:04	13° ℳ 48'32	
minimum elong	9378 Oct 20 04:10	4° ℳ 57'38	0°51'25	max. Earth dist.	9385 Oct 27 04:24	14° ℳ 10'30	40.30234 AU
morning rise	9378 Nov 05 04:42	5° ℳ 22'56					
retrograde	9379 Jan 31 05:58	6° ℳ 42'53		conjunction	9385 Oct 29 12:25	14° ℳ 14'24	3°28'57
opposition	9379 Apr 22 07:58	5° ℳ 36'46	1°05'21	minimum elong	9385 Oct 29 12:18	14° ℳ 14'24	3°29'10
min. Earth dist.	9379 Apr 24 04:20	5° ℳ 34'23	39.89900 AU	morning rise	9385 Nov 14 03:47	14° ℳ 40'19	
direct	9379 Jul 12 04:29	4° ℳ 30'27			9385 Nov 26 14:05	15° ℳ	
evening set	9379 Oct 05 18:31	5° ℳ 49'05		retrograde	9386 Feb 09 16:58	16° ℳ 05'04	
max. Earth dist.	9379 Oct 19 14:45	6° ℳ 11'01	41.78175 AU		9386 Apr 28 18:47	15° ℞ ℳ	
				opposition	9386 May 01 06:02	14° ℳ 56'42	3°52'09
conjunction	9379 Oct 21 17:43	6° ℳ 14'25	1°13'10	min. Earth dist.	9386 May 03 08:30	14° ℳ 53'53	38.17888 AU

direct	9386 Jul 21 00:34	13° ℳ 47'50		morning rise	9392 Nov 23 10:51	24° ℳ 50'39	
	9386 Oct 08 07:31	15° ℳ		retrograde	9393 Feb 20 07:04	26° ℳ 22'29	
evening set	9386 Oct 15 16:01	15° ℳ 11'50		opposition	9393 May 11 02:12	25° ℳ 11'49	6°47'52
max. Earth dist.	9386 Oct 28 19:17	15° ℳ 33'42	40.05019 AU	min. Earth dist.	9393 May 13 09:04	25° ℳ 08'38	36.41280 AU
				direct	9393 Jul 30 13:51	24° ℳ 00'21	
conjunction	9386 Oct 31 04:51	15° ℳ 37'45	3°52'14	evening set	9393 Oct 27 04:14	25° ℳ 32'13	
minimum elong	9386 Oct 31 04:44	15° ℳ 37'44	3°52'26	max. Earth dist.	9393 Nov 08 00:56	25° ℳ 53'10	38.27208 AU
morning rise	9386 Nov 15 17:58	16° ℳ 03'42					
retrograde	9387 Feb 11 10:08	17° ℳ 29'18		conjunction	9393 Nov 10 15:38	25° ℳ 57'50	6°38'42
opposition	9387 May 02 21:08	16° ℳ 20'35	4°16'49	minimum elong	9393 Nov 10 15:25	25° ℳ 57'49	6°38'58
min. Earth dist.	9387 May 05 00:31	16° ℳ 17'42	37.92764 AU	morning rise	9393 Nov 25 02:40	26° ℳ 23'26	
direct	9387 Jul 22 15:15	15° ℳ 11'21		retrograde	9394 Feb 22 04:21	27° ℳ 56'28	
evening set	9387 Oct 17 11:24	16° ℳ 36'17		opposition	9394 May 12 20:52	26° ℳ 45'26	7°13'25
max. Earth dist.	9387 Oct 30 12:28	16° ℳ 58'10	39.79782 AU	min. Earth dist.	9394 May 15 04:39	26° ℳ 42'10	36.15613 AU
				direct	9394 Aug 01 07:29	25° ℳ 33'32	
conjunction	9387 Nov 01 21:47	17° ℳ 02'13	4°15'40	evening set	9394 Oct 29 06:22	27° ℳ 06'43	
minimum elong	9387 Nov 01 21:39	17° ℳ 02'13	4°15'53	max. Earth dist.	9394 Nov 09 21:36	27° ℳ 27'26	38.01296 AU
morning rise	9387 Nov 17 08:01	17° ℳ 28'12					
retrograde	9388 Feb 13 02:02	18° ℳ 54'42		conjunction	9394 Nov 12 12:47	27° ℳ 32'11	7°02'49
opposition	9388 May 03 12:47	17° ℳ 45'39	4°41'39	minimum elong	9394 Nov 12 12:34	27° ℳ 32'10	7°03'04
min. Earth dist.	9388 May 05 16:30	17° ℳ 42'43	37.67637 AU	morning rise	9394 Nov 26 18:29	27° ℳ 57'38	
direct	9388 Jul 23 06:20	16° ℳ 36'03		retrograde	9395 Feb 24 00:31	29° ℳ 31'55	
evening set	9388 Oct 18 07:53	18° ℳ 02'00		opposition	9395 May 14 16:19	28° ℳ 20'29	7°39'03
max. Earth dist.	9388 Oct 31 05:11	18° ℳ 23'47	39.54561 AU	min. Earth dist.	9395 May 17 01:06	28° ℳ 17'08	35.89836 AU
				direct	9395 Aug 03 01:00	27° ℳ 08'09	
conjunction	9388 Nov 02 15:15	18° ℳ 27'56	4°39'14	evening set	9395 Oct 31 09:26	28° ℳ 42'41	
minimum elong	9388 Nov 02 15:06	18° ℳ 27'55	4°39'27	max. Earth dist.	9395 Nov 11 18:34	29° ℳ 03'09	37.75314 AU
morning rise	9388 Nov 17 22:36	18° ℳ 53'54					
retrograde	9389 Feb 13 21:03	20° ℳ 21'22		conjunction	9395 Nov 14 10:15	29° ℳ 07'58	7°26'58
opposition	9389 May 05 04:38	19° ℳ 12'00	5°06'37	minimum elong	9395 Nov 14 10:00	29° ℳ 07'57	7°27'14
min. Earth dist.	9389 May 07 08:23	19° ℳ 09'04	37.42531 AU	morning rise	9395 Nov 28 10:24	29° ℳ 33'14	
direct	9389 Jul 24 19:40	18° ℳ 02'03			9395 Dec 13 23:42	0° ℳ	
evening set	9389 Oct 20 05:15	19° ℳ 29'04		retrograde	9396 Feb 25 22:52	1° ℳ 08'49	
max. Earth dist.	9389 Nov 01 22:18	19° ℳ 50'45	39.29314 AU		9396 May 13 09:19	30° ℳ	
				opposition	9396 May 15 12:10	29° ℳ 56'59	8°04'42
conjunction	9389 Nov 04 09:23	19° ℳ 54'59	5°02'56	min. Earth dist.	9396 May 17 20:48	29° ℳ 53'37	35.64027 AU
minimum elong	9389 Nov 04 09:14	19° ℳ 54'58	5°03'10	direct	9396 Aug 03 19:23	28° ℳ 44'11	
morning rise	9389 Nov 19 13:20	20° ℳ 20'56			9396 Oct 21 01:14	0° ℳ	
retrograde	9390 Feb 15 16:50	21° ℳ 49'26		evening set	9396 Nov 01 13:39	0° ℳ 20'08	
opposition	9390 May 06 21:17	20° ℳ 39'45	5°31'45	max. Earth dist.	9396 Nov 12 15:31	0° ℳ 40'15	37.49299 AU
min. Earth dist.	9390 May 09 02:26	20° ℳ 36'43	37.17389 AU				
direct	9390 Jul 26 09:49	19° ℳ 29'27		conjunction	9396 Nov 15 08:30	0° ℳ 45'12	7°51'06
evening set	9390 Oct 22 03:27	20° ℳ 57'36		minimum elong	9396 Nov 15 08:16	0° ℳ 45'11	7°51'21
max. Earth dist.	9390 Nov 03 17:05	21° ℳ 19'13	39.04007 AU	morning rise	9396 Nov 29 02:39	1° ℳ 10'15	
				retrograde	9397 Feb 26 22:47	2° ℳ 47'11	
conjunction	9390 Nov 06 03:59	21° ℳ 23'29	5°26'44	opposition	9397 May 17 08:38	1° ℳ 34'55	8°30'21
minimum elong	9390 Nov 06 03:49	21° ℳ 23'28	5°26'58	min. Earth dist.	9397 May 19 18:40	1° ℳ 31'27	35.38237 AU
morning rise	9390 Nov 21 04:10	21° ℳ 49'23		direct	9397 Aug 05 13:22	0° ℳ 21'39	
retrograde	9391 Feb 17 14:30	23° ℳ 18'57		evening set	9397 Nov 03 18:56	1° ℳ 59'06	
opposition	9391 May 08 14:16	22° ℳ 08'58	5°57'00	max. Earth dist.	9397 Nov 14 15:03	2° ℳ 18'58	37.23336 AU
min. Earth dist.	9391 May 10 19:09	22° ℳ 05'56	36.92164 AU				
direct	9391 Jul 28 02:14	20° ℳ 58'17		conjunction	9397 Nov 17 07:26	2° ℳ 23'55	8°15'12
evening set	9391 Oct 24 02:45	22° ℳ 27'38		minimum elong	9397 Nov 17 07:10	2° ℳ 23'54	8°15'29
max. Earth dist.	9391 Nov 05 10:17	22° ℳ 49'01	38.78571 AU	morning rise	9397 Nov 30 19:00	2° ℳ 48'41	
				retrograde	9398 Feb 28 23:06	4° ℳ 27'02	
conjunction	9391 Nov 07 23:12	22° ℳ 53'27	5°50'38	opposition	9398 May 19 05:42	3° ℳ 14'22	8°55'58
minimum elong	9391 Nov 07 23:01	22° ℳ 53'27	5°50'54	min. Earth dist.	9398 May 21 15:02	3° ℳ 10'55	35.12538 AU
morning rise	9391 Nov 22 19:26	23° ℳ 19'18		direct	9398 Aug 07 10:37	2° ℳ 00'36	
retrograde	9392 Feb 19 11:42	24° ℳ 49'59		evening set	9398 Nov 06 01:16	3° ℳ 39'38	
opposition	9392 May 09 07:57	23° ℳ 39'39	6°22'23	max. Earth dist.	9398 Nov 16 13:04	3° ℳ 59'02	36.97485 AU
min. Earth dist.	9392 May 11 14:36	23° ℳ 36'30	36.66808 AU				
direct	9392 Jul 28 18:12	22° ℳ 28'36		conjunction	9398 Nov 19 06:44	4° ℳ 04'08	8°39'13
evening set	9392 Oct 25 02:53	23° ℳ 59'11		minimum elong	9398 Nov 19 06:28	4° ℳ 04'07	8°39'30
max. Earth dist.	9392 Nov 06 06:16	24° ℳ 20'25	38.52973 AU	morning rise	9398 Dec 02 11:28	4° ℳ 28'37	
				retrograde	9399 Mar 03 00:28	6° ℳ 08'26	
conjunction	9392 Nov 08 19:10	24° ℳ 24'55	6°14'38	opposition	9399 May 21 03:30	4° ℳ 55'20	9°21'31
minimum elong	9392 Nov 08 18:59	24° ℳ 24'54	6°14'53	min. Earth dist.	9399 May 23 13:42	4° ℳ 51'49	34.87004 AU

direct	9399 Aug 09 07:05	3°♂41'07		retrograde	9406 Mar 17 00:49	18°♂48'11	
evening set	9399 Nov 08 08:41	5°♂21'47		opposition	9406 Jun 03 07:59	17°♂32'19	12°14'46
max. Earth dist.	9399 Nov 18 14:05	5°♂40'52	36.71813 AU	min. Earth dist.	9406 Jun 05 19:35	17°♂28'32	33.13896 AU
				direct	9406 Aug 22 03:15	16°♂14'52	
conjunction	9399 Nov 21 06:56	5°♂45'57	9°03'08	evening set	9406 Nov 25 02:01	18°♂09'23	
minimum elong	9399 Nov 21 06:39	5°♂45'56	9°03'25	max. Earth dist.	9406 Dec 02 10:43	18°♂24'07	34.97496 AU
morning rise	9399 Dec 04 04:04	6°♂10'05					
retrograde	9400 Mar 05 00:58	7°♂51'27		conjunction	9406 Dec 05 05:07	18°♂29'41	11°44'16
opposition	9400 May 23 01:56	6°♂37'57	9°46'56	minimum elong	9406 Dec 05 04:47	18°♂29'40	11°44'35
min. Earth dist.	9400 May 25 11:49	6°♂34'25	34.61678 AU	morning rise	9406 Dec 15 06:57	18°♂49'55	
direct	9400 Aug 11 06:57	5°♂23'15		retrograde	9407 Mar 19 07:01	20°♂44'22	
evening set	9400 Nov 10 17:28	7°♂05'39		opposition	9407 Jun 05 11:46	19°♂28'04	12°38'15
max. Earth dist.	9400 Nov 20 14:03	7°♂24'15	36.46376 AU	min. Earth dist.	9407 Jun 07 23:04	19°♂24'17	32.89814 AU
				direct	9407 Aug 24 07:49	18°♂10'09	
conjunction	9400 Nov 23 07:42	7°♂29'27	9°26'54	evening set	9407 Nov 27 20:35	20°♂06'57	
minimum elong	9400 Nov 23 07:25	7°♂29'25	9°27'11	max. Earth dist.	9407 Dec 04 16:02	20°♂20'44	34.73257 AU
morning rise	9400 Dec 05 21:05	7°♂53'11					
retrograde	9401 Mar 07 04:08	9°♂36'11		conjunction	9407 Dec 07 11:21	20°♂26'26	12°05'55
opposition	9401 May 25 01:02	8°♂22'17	10°12'11	minimum elong	9407 Dec 07 10:59	20°♂26'24	12°06'15
min. Earth dist.	9401 May 27 10:50	8°♂18'44	34.36600 AU	morning rise	9407 Dec 17 01:05	20°♂45'50	
direct	9401 Aug 13 04:37	7°♂07'08		retrograde	9408 Mar 20 14:56	22°♂42'28	
evening set	9401 Nov 13 03:24	8°♂51'21		opposition	9408 Jun 06 16:07	21°♂25'44	13°01'15
max. Earth dist.	9401 Nov 22 15:50	9°♂09'28	36.21154 AU	min. Earth dist.	9408 Jun 09 03:29	21°♂21'55	32.65993 AU
				direct	9408 Aug 25 11:03	20°♂07'18	
conjunction	9401 Nov 25 09:23	9°♂14'42	9°50'28	evening set	9408 Nov 29 16:37	22°♂06'31	
minimum elong	9401 Nov 25 09:04	9°♂14'41	9°50'46	max. Earth dist.	9408 Dec 05 23:43	22°♂19'23	34.49288 AU
morning rise	9401 Dec 07 14:14	9°♂38'00					
retrograde	9402 Mar 09 04:15	11°♂22'44		conjunction	9408 Dec 08 18:31	22°♂25'06	12°27'05
opposition	9402 May 27 00:54	10°♂08'27	10°37'15	minimum elong	9408 Dec 08 18:11	22°♂25'04	12°27'24
min. Earth dist.	9402 May 29 11:23	10°♂04'50	34.11737 AU	morning rise	9408 Dec 17 19:14	22°♂43'35	
direct	9402 Aug 15 02:30	8°♂52'52		retrograde	9409 Mar 22 21:04	24°♂42'28	
evening set	9402 Nov 15 14:49	10°♂38'59		opposition	9409 Jun 08 21:26	23°♂25'19	13°23'43
max. Earth dist.	9402 Nov 24 18:21	10°♂56'34	35.96147 AU	min. Earth dist.	9409 Jun 11 09:03	23°♂21'27	32.42475 AU
				direct	9409 Aug 27 15:16	22°♂06'23	
conjunction	9402 Nov 27 11:43	11°♂01'51	10°13'49	evening set	9409 Dec 02 14:25	24°♂08'06	
minimum elong	9402 Nov 27 11:25	11°♂01'49	10°14'07	max. Earth dist.	9409 Dec 08 07:46	24°♂19'55	34.25681 AU
morning rise	9402 Dec 09 07:36	11°♂24'39					
retrograde	9403 Mar 11 07:38	13°♂11'10		conjunction	9409 Dec 11 02:18	24°♂25'40	12°47'39
opposition	9403 May 29 01:27	11°♂56'31	11°02'04	minimum elong	9409 Dec 11 01:57	24°♂25'38	12°47'59
min. Earth dist.	9403 May 31 11:20	11°♂52'55	33.87074 AU	morning rise	9409 Dec 19 13:10	24°♂43'08	
direct	9403 Aug 17 01:12	10°♂40'30		retrograde	9410 Mar 25 06:33	26°♂44'24	
evening set	9403 Nov 18 03:19	12°♂28'35		opposition	9410 Jun 11 03:21	25°♂26'49	13°45'32
max. Earth dist.	9403 Nov 26 20:21	12°♂45'30	35.71288 AU	min. Earth dist.	9410 Jun 13 13:52	25°♂23'00	32.19362 AU
				direct	9410 Aug 29 19:29	24°♂07'23	
conjunction	9403 Nov 29 14:46	12°♂50'54	10°36'55	evening set	9410 Dec 05 13:46	26°♂11'44	
minimum elong	9403 Nov 29 14:26	12°♂50'53	10°37'13	max. Earth dist.	9410 Dec 10 16:36	26°♂22'24	34.02504 AU
morning rise	9403 Dec 11 01:09	13°♂13'10					
retrograde	9404 Mar 12 11:49	15°♂01'35		conjunction	9410 Dec 13 10:54	26°♂28'10	13°07'36
opposition	9404 May 30 02:56	13°♂46'32	11°26'38	minimum elong	9410 Dec 13 10:34	26°♂28'08	13°07'55
min. Earth dist.	9404 Jun 01 14:11	13°♂42'49	33.62551 AU	morning rise	9410 Dec 21 07:01	26°♂44'32	
direct	9404 Aug 17 23:11	12°♂30'02		retrograde	9411 Mar 27 14:08	28°♂48'17	
evening set	9404 Nov 19 17:31	14°♂20'11		opposition	9411 Jun 13 10:18	27°♂30'16	14°06'39
max. Earth dist.	9404 Nov 28 01:02	14°♂36'30	35.46561 AU	min. Earth dist.	9411 Jun 15 21:12	27°♂26'24	31.96731 AU
				direct	9411 Aug 31 23:17	26°♂10'21	
conjunction	9404 Nov 30 18:51	14°♂41'55	10°59'43	evening set	9411 Dec 08 15:01	28°♂17'27	
minimum elong	9404 Nov 30 18:32	14°♂41'53	11°00'01	max. Earth dist.	9411 Dec 13 03:23	28°♂26'56	33.79866 AU
morning rise	9404 Dec 11 18:58	15°♂03'34					
retrograde	9405 Mar 14 17:12	16°♂53'54		conjunction	9411 Dec 15 20:10	28°♂32'38	13°26'49
opposition	9405 Jun 01 04:59	15°♂38'28	11°50'53	minimum elong	9411 Dec 15 19:49	28°♂32'37	13°27'08
min. Earth dist.	9405 Jun 03 15:35	15°♂34'46	33.38152 AU	morning rise	9411 Dec 23 00:17	28°♂47'47	
direct	9405 Aug 20 01:22	14°♂21'30			9412 Jan 29 05:54	0°♂	
evening set	9405 Nov 22 09:08	16°♂13'47		retrograde	9412 Mar 29 00:05	0°♂54'07	
max. Earth dist.	9405 Nov 30 04:17	16°♂29'15	35.21952 AU		9412 May 30 04:23	30°♂♂	
				opposition	9412 Jun 14 17:56	29°♂35'43	14°26'59
conjunction	9405 Dec 02 23:37	16°♂34'50	11°22'11	min. Earth dist.	9412 Jun 17 03:09	29°♂31'56	31.74658 AU
minimum elong	9405 Dec 02 23:16	16°♂34'49	11°22'29	direct	9412 Sep 02 07:06	28°♂15'20	
morning rise	9405 Dec 13 13:05	16°♂55'50			9412 Nov 28 15:45	0°♂	

evening set	9412 Dec 10 18:26	0° $\overline{3}$ 25'20		conjunction	9420 Jan 03 04:44	16° $\overline{3}$ 23'15	15°26'18
max. Earth dist.	9412 Dec 14 13:23	0° $\overline{3}$ 33'23	33.57813 AU	minimum elong	9420 Jan 03 04:30	16° $\overline{3}$ 23'14	15°26'38
				retrograde	9420 Apr 16 16:58	18° $\overline{3}$ 55'10	
conjunction	9412 Dec 17 06:22	0° $\overline{3}$ 39'09	13°45'14	opposition	9420 Jul 02 13:52	17° $\overline{3}$ 34'02	16°32'11
minimum elong	9412 Dec 17 06:03	0° $\overline{3}$ 39'07	13°45'33	min. Earth dist.	9420 Jul 04 17:49	17° $\overline{3}$ 30'27	30.19753 AU
morning rise	9412 Dec 23 17:26	0° $\overline{3}$ 52'54		direct	9420 Sep 19 18:47	16° $\overline{3}$ 10'30	
retrograde	9413 Mar 31 11:29	3° $\overline{3}$ 02'01		max. Earth dist.	9421 Jan 02 13:08	18° $\overline{3}$ 40'25	32.03533 AU
opposition	9413 Jun 17 02:24	1° $\overline{3}$ 43'13	14°46'26				
min. Earth dist.	9413 Jun 19 11:45	1° $\overline{3}$ 39'24	31.53200 AU	conjunction	9421 Jan 04 21:16	18° $\overline{3}$ 45'45	15°35'59
direct	9413 Sep 04 13:12	0° $\overline{3}$ 22'24		minimum elong	9421 Jan 04 21:05	18° $\overline{3}$ 45'44	15°36'17
evening set	9413 Dec 14 00:25	2° $\overline{3}$ 35'29		retrograde	9421 Apr 19 09:22	21° $\overline{3}$ 18'45	
max. Earth dist.	9413 Dec 17 02:31	2° $\overline{3}$ 42'06	33.36399 AU	opposition	9421 Jul 05 04:47	19° $\overline{3}$ 57'18	16°42'06
				min. Earth dist.	9421 Jul 07 06:39	19° $\overline{3}$ 53'51	30.03186 AU
conjunction	9413 Dec 19 17:29	2° $\overline{3}$ 47'45	14°02'47	direct	9421 Sep 22 10:23	18° $\overline{3}$ 33'23	
minimum elong	9413 Dec 19 17:09	2° $\overline{3}$ 47'43	14°03'06	max. Earth dist.	9422 Jan 05 06:54	21° $\overline{3}$ 04'32	31.87197 AU
morning rise	9413 Dec 25 09:37	2° $\overline{3}$ 59'57					
retrograde	9414 Apr 02 23:24	5° $\overline{3}$ 11'59		conjunction	9422 Jan 07 14:23	21° $\overline{3}$ 09'51	15°44'15
opposition	9414 Jun 19 11:47	3° $\overline{3}$ 52'51	15°04'56	minimum elong	9422 Jan 07 14:12	21° $\overline{3}$ 09'50	15°44'34
min. Earth dist.	9414 Jun 21 19:37	3° $\overline{3}$ 49'07	31.32365 AU	retrograde	9422 Apr 22 02:14	23° $\overline{3}$ 43'54	
direct	9414 Sep 06 22:03	2° $\overline{3}$ 31'37		opposition	9422 Jul 07 20:41	22° $\overline{3}$ 22'08	16°50'27
evening set	9414 Dec 17 09:15	4° $\overline{3}$ 48'02		min. Earth dist.	9422 Jul 09 22:04	22° $\overline{3}$ 18'41	29.87403 AU
max. Earth dist.	9414 Dec 19 14:07	4° $\overline{3}$ 52'48	33.15620 AU	direct	9422 Sep 24 23:52	20° $\overline{3}$ 57'51	
				max. Earth dist.	9423 Jan 08 03:18	23° $\overline{3}$ 30'22	31.71712 AU
conjunction	9414 Dec 22 05:06	4° $\overline{3}$ 58'30	14°19'24				
minimum elong	9414 Dec 22 04:48	4° $\overline{3}$ 58'28	14°19'43	conjunction	9423 Jan 10 07:56	23° $\overline{3}$ 35'26	15°51'02
morning rise	9414 Dec 27 00:15	5° $\overline{3}$ 08'54		minimum elong	9423 Jan 10 07:48	23° $\overline{3}$ 35'25	15°51'20
retrograde	9415 Apr 05 14:23	7° $\overline{3}$ 24'07		retrograde	9423 Apr 24 19:11	26° $\overline{3}$ 10'28	
opposition	9415 Jun 21 22:01	6° $\overline{3}$ 04'38	15°22'24	opposition	9423 Jul 10 13:07	24° $\overline{3}$ 48'25	16°57'10
min. Earth dist.	9415 Jun 24 05:28	6° $\overline{3}$ 00'54	31.12154 AU	min. Earth dist.	9423 Jul 12 12:07	24° $\overline{3}$ 45'07	29.72476 AU
direct	9415 Sep 09 07:31	4° $\overline{3}$ 43'01		direct	9423 Sep 27 16:52	23° $\overline{3}$ 23'48	
evening set	9415 Dec 20 22:46	7° $\overline{3}$ 03'06		max. Earth dist.	9424 Jan 10 22:19	25° $\overline{3}$ 57'26	31.57152 AU
max. Earth dist.	9415 Dec 22 04:47	7° $\overline{3}$ 05'50	32.95444 AU				
				conjunction	9424 Jan 13 02:04	26° $\overline{3}$ 02'27	15°56'14
conjunction	9415 Dec 24 17:54	7° $\overline{3}$ 11'25	14°35'01	minimum elong	9424 Jan 13 01:57	26° $\overline{3}$ 02'27	15°56'33
minimum elong	9415 Dec 24 17:36	7° $\overline{3}$ 11'23	14°35'21	retrograde	9424 Apr 26 13:46	28° $\overline{3}$ 38'25	
morning rise	9415 Dec 28 12:19	7° $\overline{3}$ 19'39		opposition	9424 Jul 12 06:07	27° $\overline{3}$ 16'05	17°02'09
retrograde	9416 Apr 07 03:44	9° $\overline{3}$ 38'23		min. Earth dist.	9424 Jul 14 03:48	27° $\overline{3}$ 12'53	29.58502 AU
opposition	9416 Jun 23 09:04	8° $\overline{3}$ 18'34	15°38'48	direct	9424 Sep 29 09:18	25° $\overline{3}$ 51'11	
min. Earth dist.	9416 Jun 25 15:55	8° $\overline{3}$ 14'51	30.92515 AU	max. Earth dist.	9425 Jan 12 20:32	28° $\overline{3}$ 26'08	31.43602 AU
direct	9416 Sep 10 18:52	6° $\overline{3}$ 56'34					
evening set	9416 Dec 23 20:51	9° $\overline{3}$ 21'02		conjunction	9425 Jan 14 20:57	28° $\overline{3}$ 30'51	15°59'48
max. Earth dist.	9416 Dec 23 18:23	9° $\overline{3}$ 20'49	32.75856 AU	minimum elong	9425 Jan 14 20:53	28° $\overline{3}$ 30'51	16°00'05
					9425 Feb 24 06:53	0° \approx	
conjunction	9416 Dec 26 07:26	9° $\overline{3}$ 26'26	14°49'35	retrograde	9425 Apr 29 07:51	1° \approx 07'41	
minimum elong	9416 Dec 26 07:10	9° $\overline{3}$ 26'24	14°49'54		9425 Jul 06 03:30	30° \overline{R} $\overline{3}$	
morning rise	9416 Dec 28 17:28	9° $\overline{3}$ 31'46		opposition	9425 Jul 14 23:55	29° $\overline{3}$ 45'08	17°05'21
retrograde	9417 Apr 09 19:16	11° $\overline{3}$ 54'43		min. Earth dist.	9425 Jul 16 19:29	29° $\overline{3}$ 42'04	29.45527 AU
opposition	9417 Jun 25 21:00	10° $\overline{3}$ 34'34	15°54'03	direct	9425 Oct 02 03:40	28° $\overline{3}$ 20'00	
min. Earth dist.	9417 Jun 28 02:50	10° $\overline{3}$ 30'55	30.73445 AU		9425 Dec 22 05:19	0° \approx	
direct	9417 Sep 13 06:01	9° $\overline{3}$ 12'11		max. Earth dist.	9426 Jan 15 16:55	0° \approx 55'59	31.31117 AU
max. Earth dist.	9417 Dec 26 10:02	11° $\overline{3}$ 37'56	32.56829 AU				
				conjunction	9426 Jan 17 16:02	1° \approx 00'36	16°01'40
conjunction	9417 Dec 28 21:52	11° $\overline{3}$ 43'29	15°03'02	minimum elong	9426 Jan 17 15:59	1° \approx 00'36	16°01'58
minimum elong	9417 Dec 28 21:35	11° $\overline{3}$ 43'28	15°03'21	retrograde	9426 May 02 04:29	3° \approx 38'14	
retrograde	9418 Apr 12 09:36	14° $\overline{3}$ 13'02		opposition	9426 Jul 17 18:13	2° \approx 15'31	17°06'41
opposition	9418 Jun 28 09:53	12° $\overline{3}$ 52'34	16°08'05	min. Earth dist.	9426 Jul 19 11:32	2° \approx 12'36	29.33610 AU
min. Earth dist.	9418 Jun 30 15:36	12° $\overline{3}$ 48'53	30.54930 AU	direct	9426 Oct 04 21:14	0° \approx 50'12	
direct	9418 Sep 15 17:41	11° $\overline{3}$ 29'47		max. Earth dist.	9427 Jan 18 16:02	3° \approx 27'22	31.19713 AU
max. Earth dist.	9418 Dec 29 02:01	13° $\overline{3}$ 56'57	32.38411 AU				
				conjunction	9427 Jan 20 11:48	3° \approx 31'41	16°01'47
conjunction	9418 Dec 31 12:56	14° $\overline{3}$ 02'28	15°15'18	minimum elong	9427 Jan 20 11:48	3° \approx 31'41	16°02'04
minimum elong	9418 Dec 31 12:42	14° $\overline{3}$ 02'27	15°15'37	retrograde	9427 May 05 00:13	6° \approx 10'03	
retrograde	9419 Apr 15 02:48	16° $\overline{3}$ 33'13		opposition	9427 Jul 20 13:05	4° \approx 47'12	17°06'07
opposition	9419 Jun 30 23:25	15° $\overline{3}$ 12'25	16°20'50	min. Earth dist.	9427 Jul 22 04:52	4° \approx 44'24	29.22731 AU
min. Earth dist.	9419 Jul 03 03:19	15° $\overline{3}$ 08'51	30.37022 AU	direct	9427 Oct 07 16:28	3° \approx 21'46	
direct	9419 Sep 18 06:30	13° $\overline{3}$ 49'15		max. Earth dist.	9428 Jan 21 13:33	5° \approx 59'51	31.09377 AU
max. Earth dist.	9419 Dec 31 18:42	16° $\overline{3}$ 17'47	32.20622 AU				

conjunction	9428 Jan 23 07:49	6°04'01	16°00'07	evening set	9436 Feb 10 05:16	26°04'05	
minimum elong	9428 Jan 23 07:50	6°04'01	16°00'24	max. Earth dist.	9436 Feb 12 10:19	26°45'24	30.62961 AU
retrograde	9428 May 06 21:38	8°43'04					
opposition	9428 Jul 22 08:22	7°20'07	17°03'38	conjunction	9436 Feb 13 08:10	26°47'36	14°42'23
min. Earth dist.	9428 Jul 23 21:29	7°17'29	29.12868 AU	minimum elong	9436 Feb 13 08:28	26°47'38	14°42'35
direct	9428 Oct 09 12:18	5°54'33		morning rise	9436 Feb 16 11:34	26°55'10	
max. Earth dist.	9429 Jan 23 12:56	8°33'36	31.00049 AU	retrograde	9436 May 27 13:53	29°28'06	
				opposition	9436 Aug 12 06:11	28°04'49	15°34'10
conjunction	9429 Jan 25 04:26	8°37'31	15°56'41	min. Earth dist.	9436 Aug 13 02:21	28°03'24	28.69231 AU
minimum elong	9429 Jan 25 04:30	8°37'31	15°56'56	direct	9436 Oct 30 11:59	26°38'58	
retrograde	9429 May 09 17:28	11°17'07		evening set	9437 Feb 10 19:01	29°12'29	
opposition	9429 Jul 25 04:16	9°54'06	16°59'13	max. Earth dist.	9437 Feb 14 08:53	29°21'05	30.62032 AU
min. Earth dist.	9429 Jul 26 16:22	9°51'32	29.03971 AU				
direct	9429 Oct 12 07:22	8°28'27		conjunction	9437 Feb 15 04:47	29°23'05	14°24'42
max. Earth dist.	9430 Jan 26 11:43	11°08'15	30.91726 AU	minimum elong	9437 Feb 15 05:06	29°23'06	14°24'52
				morning rise	9437 Feb 19 15:02	29°33'43	
conjunction	9430 Jan 28 01:14	11°11'59	15°51'26		9437 Mar 02 16:29	0°	
minimum elong	9430 Jan 28 01:21	11°12'00	15°51'42	retrograde	9437 May 30 10:04	2°03'18	
retrograde	9430 May 12 15:58	13°52'02		opposition	9437 Aug 15 03:07	0°40'03	15°14'25
opposition	9430 Jul 28 00:30	12°28'57	16°52'52	min. Earth dist.	9437 Aug 15 20:05	0°38'52	28.68637 AU
min. Earth dist.	9430 Jul 29 09:41	12°26'36	28.96036 AU		9437 Sep 08 16:15	30°	
direct	9430 Oct 15 04:21	11°03'15		direct	9437 Nov 02 08:45	29°14'17	
max. Earth dist.	9431 Jan 29 11:02	13°43'43	30.84377 AU		9437 Dec 25 01:51	0°	
				evening set	9438 Feb 12 14:24	1°44'57	
conjunction	9431 Jan 30 22:13	13°47'14	15°44'24	max. Earth dist.	9438 Feb 17 09:37	1°56'27	30.62350 AU
minimum elong	9431 Jan 30 22:22	13°47'15	15°44'38				
	9431 Mar 03 09:16	15°		conjunction	9438 Feb 18 01:19	1°58'01	14°05'20
retrograde	9431 May 15 11:41	16°27'39		minimum elong	9438 Feb 18 01:40	1°58'04	14°05'31
opposition	9431 Jul 30 21:12	15°04'30	16°44'34	morning rise	9438 Feb 23 12:35	2°11'09	
min. Earth dist.	9431 Aug 01 05:23	15°02'13	28.89052 AU	retrograde	9438 Jun 02 04:10	4°37'53	
	9431 Aug 02 12:42	15°		opposition	9438 Aug 18 00:03	3°14'44	14°52'51
direct	9431 Oct 17 23:23	13°38'44		min. Earth dist.	9438 Aug 18 14:38	3°13'42	28.69272 AU
	9431 Dec 28 12:43	15°		direct	9438 Nov 05 07:38	1°49'05	
max. Earth dist.	9432 Feb 01 10:51	16°19'47	30.78022 AU	evening set	9439 Feb 14 12:20	4°17'08	
conjunction	9432 Feb 02 19:29	16°23'03	15°35'34	conjunction	9439 Feb 20 21:15	4°32'22	13°44'20
minimum elong	9432 Feb 02 19:40	16°23'04	15°35'49	minimum elong	9439 Feb 20 21:37	4°32'25	13°44'29
retrograde	9432 May 17 08:01	19°03'42		max. Earth dist.	9439 Feb 20 07:37	4°31'01	30.63931 AU
opposition	9432 Aug 01 17:52	17°40'31	16°34'20	morning rise	9439 Feb 27 06:33	4°47'40	
min. Earth dist.	9432 Aug 02 23:06	17°38'26	28.83025 AU	retrograde	9439 Jun 05 00:25	7°11'49	
direct	9432 Oct 19 22:07	16°14'41		opposition	9439 Aug 20 20:38	5°48'46	14°29'33
max. Earth dist.	9433 Feb 03 09:59	18°56'07	30.72658 AU	min. Earth dist.	9439 Aug 21 07:32	5°48'00	28.71142 AU
				direct	9439 Nov 08 05:55	4°23'17	
conjunction	9433 Feb 04 16:51	18°59'13	15°24'56	evening set	9440 Feb 16 12:10	6°48'52	
minimum elong	9433 Feb 04 17:03	18°59'14	15°25'09				
retrograde	9433 May 20 04:37	21°39'59		conjunction	9440 Feb 23 17:11	7°06'04	13°21'46
opposition	9433 Aug 04 14:58	20°16'45	16°22'10	minimum elong	9440 Feb 23 17:35	7°06'06	13°21'55
min. Earth dist.	9433 Aug 05 18:45	20°14'47	28.77988 AU	max. Earth dist.	9440 Feb 23 07:27	7°05'05	30.66729 AU
direct	9433 Oct 22 17:47	18°50'54		morning rise	9440 Mar 01 22:22	7°23'17	
max. Earth dist.	9434 Feb 06 10:30	21°32'43	30.68332 AU	retrograde	9440 Jun 06 18:13	9°44'59	
				opposition	9440 Aug 22 17:01	8°22'06	14°04'37
conjunction	9434 Feb 07 14:04	21°35'29	15°12'31	min. Earth dist.	9440 Aug 23 02:15	8°21'28	28.74187 AU
minimum elong	9434 Feb 07 14:19	21°35'31	15°12'45	direct	9440 Nov 10 02:50	6°56'50	
retrograde	9434 May 22 23:59	24°16'17		evening set	9441 Feb 17 13:20	9°20'02	
opposition	9434 Aug 07 12:04	22°53'01	16°08'04				
min. Earth dist.	9434 Aug 08 12:59	22°51'15	28.73966 AU	conjunction	9441 Feb 25 12:37	9°38'59	12°57'44
direct	9434 Oct 25 16:00	21°27'09		minimum elong	9441 Feb 25 13:00	9°39'02	12°57'52
evening set	9435 Feb 09 13:28	24°09'30		max. Earth dist.	9441 Feb 25 05:04	9°38'14	30.70699 AU
max. Earth dist.	9435 Feb 09 09:22	24°09'06	30.65077 AU	morning rise	9441 Mar 05 12:05	9°57'58	
				retrograde	9441 Jun 09 14:21	12°17'20	
conjunction	9435 Feb 10 11:09	24°11'41	14°58'19	opposition	9441 Aug 25 13:09	10°54'38	13°38'08
minimum elong	9435 Feb 10 11:25	24°11'43	14°58'32	min. Earth dist.	9441 Aug 25 18:43	10°54'15	28.78359 AU
morning rise	9435 Feb 11 09:23	24°13'55		direct	9441 Nov 13 01:33	9°29'36	
retrograde	9435 May 25 19:16	26°52'23		evening set	9442 Feb 19 15:08	11°50'29	
opposition	9435 Aug 10 09:05	25°29'06	15°52'04				
min. Earth dist.	9435 Aug 11 07:51	25°27'29	28.71035 AU	conjunction	9442 Feb 28 07:36	12°11'03	12°32'19
direct	9435 Oct 28 13:17	24°03'13		minimum elong	9442 Feb 28 08:01	12°11'06	12°32'26

max. Earth dist.	9442 Feb 28 03:24	12° ✕ 10'38	30.75760 AU	conjunction	9449 Mar 17 05:11	29° ✕ 20'19	9°03'50
morning rise	9442 Mar 09 00:03	12° ✕ 31'38		minimum elong	9449 Mar 17 05:33	29° ✕ 20'21	9°03'51
retrograde	9442 Jun 12 07:56	14° ✕ 48'45		max. Earth dist.	9449 Mar 17 19:16	29° ✕ 21'40	31.38756 AU
opposition	9442 Aug 28 09:08	13° ✕ 26'15	13°10'13	morning rise	9449 Mar 29 15:51	29° ✕ 48'43	
min. Earth dist.	9442 Aug 28 13:08	13° ✕ 25'58	28.83599 AU		9449 Apr 03 16:51	0° ☾	
direct	9442 Nov 15 22:20	12° ✕ 01'28		retrograde	9449 Jun 28 15:49	1° ☾ 51'35	
evening set	9443 Feb 21 17:56	14° ✕ 20'04		opposition	9449 Sep 14 14:27	0° ☾ 30'39	9°23'15
				min. Earth dist.	9449 Sep 14 00:57	0° ☾ 31'34	29.47509 AU
conjunction	9443 Mar 03 02:11	14° ✕ 42'07	12°05'37		9449 Oct 03 22:36	30° ☾	
minimum elong	9443 Mar 03 02:35	14° ✕ 42'10	12°05'44	direct	9449 Dec 03 13:19	29° ✕ 07'50	
max. Earth dist.	9443 Mar 03 00:24	14° ✕ 41'57	30.81879 AU		9450 Jan 30 08:04	0° ☾	
morning rise	9443 Mar 12 10:22	15° ✕ 04'10		evening set	9450 Mar 06 22:08	1° ☾ 11'51	
retrograde	9443 Jun 15 01:41	17° ✕ 19'04					
opposition	9443 Aug 31 04:25	15° ✕ 56'47	12°40'58	conjunction	9450 Mar 19 18:59	1° ☾ 41'01	8°30'46
min. Earth dist.	9443 Aug 31 05:03	15° ✕ 56'45	28.89852 AU	minimum elong	9450 Mar 19 19:21	1° ☾ 41'03	8°30'47
direct	9443 Nov 18 20:15	14° ✕ 32'16		max. Earth dist.	9450 Mar 20 10:49	1° ☾ 42'32	31.51652 AU
evening set	9444 Feb 23 21:09	16° ✕ 48'39		morning rise	9450 Apr 01 15:15	2° ☾ 10'08	
				retrograde	9450 Jul 01 05:33	4° ☾ 11'13	
conjunction	9444 Mar 04 20:18	17° ✕ 12'04	11°37'44	opposition	9450 Sep 17 05:54	2° ☾ 50'32	8°47'30
minimum elong	9444 Mar 04 20:44	17° ✕ 12'06	11°37'50	min. Earth dist.	9450 Sep 16 12:40	2° ☾ 51'42	29.60608 AU
max. Earth dist.	9444 Mar 04 20:56	17° ✕ 12'07	30.88983 AU	direct	9450 Dec 06 06:46	1° ☾ 28'04	
morning rise	9444 Mar 14 19:19	17° ✕ 35'27		evening set	9451 Mar 09 02:35	3° ☾ 30'15	
retrograde	9444 Jun 16 18:31	19° ✕ 48'13					
opposition	9444 Sep 01 23:33	18° ✕ 26'08	12°10'29	conjunction	9451 Mar 22 08:21	4° ☾ 00'02	7°57'09
min. Earth dist.	9444 Sep 01 22:28	18° ✕ 26'13	28.97084 AU	minimum elong	9451 Mar 22 08:40	4° ☾ 00'04	7°57'09
direct	9444 Nov 20 15:40	17° ✕ 01'53		max. Earth dist.	9451 Mar 23 03:50	4° ☾ 01'53	31.65575 AU
evening set	9445 Feb 25 00:52	19° ✕ 16'06		morning rise	9451 Apr 04 13:11	4° ☾ 29'46	
				retrograde	9451 Jul 03 16:32	6° ☾ 29'09	
conjunction	9445 Mar 07 13:50	19° ✕ 40'44	11°08'46	opposition	9451 Sep 19 20:41	5° ☾ 08'46	8°11'13
minimum elong	9445 Mar 07 14:14	19° ✕ 40'46	11°08'51	min. Earth dist.	9451 Sep 19 01:50	5° ☾ 10'01	29.74737 AU
max. Earth dist.	9445 Mar 07 17:17	19° ✕ 41'04	30.97054 AU	direct	9451 Dec 08 22:04	3° ☾ 46'40	
morning rise	9445 Mar 18 02:26	20° ✕ 05'20		evening set	9452 Mar 10 07:15	5° ☾ 47'05	
retrograde	9445 Jun 19 10:23	22° ✕ 16'00					
opposition	9445 Sep 04 18:06	20° ✕ 54'09	11°38'53	conjunction	9452 Mar 23 20:55	6° ☾ 17'24	7°23'04
min. Earth dist.	9445 Sep 04 14:10	20° ✕ 54'26	29.05252 AU	minimum elong	9452 Mar 23 21:14	6° ☾ 17'26	7°23'03
direct	9445 Nov 23 12:29	19° ✕ 30'11		max. Earth dist.	9452 Mar 24 18:17	6° ☾ 19'24	31.80502 AU
evening set	9446 Feb 27 04:52	21° ✕ 42'16		morning rise	9452 Apr 06 09:45	6° ☾ 47'40	
				retrograde	9452 Jul 05 05:16	8° ☾ 45'24	
conjunction	9446 Mar 10 06:42	22° ✕ 08'00	10°38'48	opposition	9452 Sep 21 10:46	7° ☾ 25'21	7°34'31
minimum elong	9446 Mar 10 07:06	22° ✕ 08'03	10°38'52	min. Earth dist.	9452 Sep 20 12:21	7° ☾ 26'50	29.89845 AU
max. Earth dist.	9446 Mar 10 12:02	22° ✕ 08'32	31.06055 AU	direct	9452 Dec 10 14:52	6° ☾ 03'39	
morning rise	9446 Mar 21 08:15	22° ✕ 33'43		evening set	9453 Mar 12 11:45	8° ☾ 02'21	
retrograde	9446 Jun 22 01:04	24° ✕ 42'22					
opposition	9446 Sep 07 12:07	23° ✕ 20'44	11°06'16	conjunction	9453 Mar 26 08:42	8° ☾ 33'08	6°48'38
min. Earth dist.	9446 Sep 07 05:53	23° ✕ 21'09	29.14373 AU	minimum elong	9453 Mar 26 08:59	8° ☾ 33'10	6°48'36
direct	9446 Nov 26 07:00	21° ✕ 57'02		max. Earth dist.	9453 Mar 27 09:00	8° ☾ 35'24	31.96342 AU
evening set	9447 Mar 01 08:57	24° ✕ 07'01		morning rise	9453 Apr 09 04:43	9° ☾ 03'51	
				retrograde	9453 Jul 07 16:59	11° ☾ 00'01	
conjunction	9447 Mar 12 22:56	24° ✕ 33'46	10°07'56	min. Earth dist.	9453 Sep 23 00:20	9° ☾ 41'54	30.05865 AU
minimum elong	9447 Mar 12 23:18	24° ✕ 33'48	10°07'59	opposition	9453 Sep 24 00:23	9° ☾ 40'18	6°57'29
max. Earth dist.	9447 Mar 13 07:39	24° ✕ 34'36	31.16000 AU	direct	9453 Dec 13 06:10	8° ☾ 19'01	
morning rise	9447 Mar 24 12:16	25° ✕ 00'28		evening set	9454 Mar 14 16:23	10° ☾ 16'05	
retrograde	9447 Jun 24 13:47	27° ✕ 07'07					
opposition	9447 Sep 10 05:32	25° ✕ 45'43	10°32'43	conjunction	9454 Mar 28 19:52	10° ☾ 47'15	6°13'55
min. Earth dist.	9447 Sep 09 21:03	25° ✕ 46'18	29.24425 AU	minimum elong	9454 Mar 28 20:08	10° ☾ 47'16	6°13'53
direct	9447 Nov 29 02:31	24° ✕ 22'18		max. Earth dist.	9454 Mar 29 22:20	10° ☾ 49'42	32.13043 AU
evening set	9448 Mar 02 13:21	26° ✕ 30'14		morning rise	9454 Apr 11 22:19	11° ☾ 18'19	
				retrograde	9454 Jul 10 03:14	13° ☾ 12'59	
conjunction	9448 Mar 14 14:21	26° ✕ 57'53	9°36'15	min. Earth dist.	9454 Sep 25 10:27	11° ☾ 55'23	30.22706 AU
minimum elong	9448 Mar 14 14:44	26° ✕ 57'56	9°36'17	opposition	9454 Sep 26 13:10	11° ☾ 53'37	6°20'14
max. Earth dist.	9448 Mar 15 00:40	26° ✕ 58'53	31.26884 AU	direct	9454 Dec 15 22:07	10° ☾ 32'45	
morning rise	9448 Mar 26 14:56	27° ✕ 25'29		evening set	9455 Mar 16 21:00	12° ☾ 28'14	
retrograde	9448 Jun 26 04:19	29° ✕ 30'13					
opposition	9448 Sep 11 22:10	28° ✕ 09'02	9°58'21	conjunction	9455 Mar 31 06:15	12° ☾ 59'42	5°39'02
min. Earth dist.	9448 Sep 11 10:35	28° ✕ 09'49	29.35461 AU	minimum elong	9455 Mar 31 06:29	12° ☾ 59'43	5°38'59
direct	9448 Nov 30 19:16	26° ✕ 45'54		max. Earth dist.	9455 Apr 01 10:33	13° ☾ 02'18	32.30495 AU
evening set	9449 Mar 04 17:42	28° ✕ 51'52		morning rise	9455 Apr 14 14:36	13° ☾ 31'04	

retrograde	9455 Jul 12 12:07	15° Υ 24'18		minimum elong	9462 Apr 14 11:45	27° Υ 37'33	1°35'57
min. Earth dist.	9455 Sep 27 20:49	14° Υ 07'09	30.40299 AU	max. Earth dist.	9462 Apr 16 04:42	27° Υ 41'07	33.69185 AU
opposition	9455 Sep 29 01:25	14° Υ 05'17	5°42'52	morning rise	9462 Apr 29 18:42	28° Υ 09'14	
direct	9455 Dec 18 10:42	12° Υ 44'49		retrograde	9462 Jul 26 07:32	29° Υ 53'57	
evening set	9456 Mar 18 01:38	14° Υ 38'47		min. Earth dist.	9462 Oct 12 02:28	28° Υ 39'42	31.80041 AU
				opposition	9462 Oct 13 19:39	28° Υ 37'07	1°24'13
conjunction	9456 Apr 01 16:07	15° Υ 10'28	5°04'04	direct	9463 Jan 02 14:57	27° Υ 19'18	
minimum elong	9456 Apr 01 16:20	15° Υ 10'29	5°03'59	evening set	9463 Apr 01 07:23	29° Υ 04'10	
max. Earth dist.	9456 Apr 02 22:57	15° Υ 13'17	32.48635 AU				
morning rise	9456 Apr 16 05:24	15° Υ 42'04		conjunction	9463 Apr 16 16:25	29° Υ 35'46	1°02'16
retrograde	9456 Jul 13 19:09	17° Υ 33'54		minimum elong	9463 Apr 16 16:28	29° Υ 35'46	1°02'08
min. Earth dist.	9456 Sep 29 06:40	16° Υ 17'12	30.58545 AU	max. Earth dist.	9463 Apr 18 11:15	29° Υ 39'28	33.91234 AU
opposition	9456 Sep 30 12:57	16° Υ 15'14	5°05'27		9463 Apr 28 10:08	0° \mathcal{B}	
direct	9456 Dec 20 01:10	14° Υ 55'10		morning rise	9463 May 02 00:22	0° \mathcal{B} 07'17	
evening set	9457 Mar 20 06:25	16° Υ 47'40		retrograde	9463 Jul 28 10:50	1° \mathcal{B} 51'03	
				min. Earth dist.	9463 Oct 14 07:01	0° \mathcal{B} 37'15	32.02324 AU
conjunction	9457 Apr 04 01:11	17° Υ 19'30	4°29'04	opposition	9463 Oct 16 02:15	0° \mathcal{B} 34'33	0°48'26
minimum elong	9457 Apr 04 01:23	17° Υ 19'31	4°29'00		9463 Nov 09 00:06	30° $\mathcal{R}\Upsilon$	
max. Earth dist.	9457 Apr 05 08:58	17° Υ 22'23	32.67382 AU	direct	9464 Jan 05 00:38	29° Υ 17'08	
morning rise	9457 Apr 18 19:04	17° Υ 51'16			9464 Feb 28 09:25	0° \mathcal{B}	
retrograde	9457 Jul 16 03:46	19° Υ 41'47		evening set	9464 Apr 02 11:05	1° \mathcal{B} 00'59	
opposition	9457 Oct 02 23:54	18° Υ 23'26	4°28'05				
min. Earth dist.	9457 Oct 01 15:07	18° Υ 25'33	30.77412 AU	conjunction	9464 Apr 17 20:24	1° \mathcal{B} 32'22	0°28'50
direct	9457 Dec 22 12:17	17° Υ 03'46		minimum elong	9464 Apr 17 20:25	1° \mathcal{B} 32'22	0°28'40
evening set	9458 Mar 22 10:49	18° Υ 54'50		max. Earth dist.	9464 Apr 19 16:30	1° \mathcal{B} 36'09	34.13842 AU
				morning rise	9464 May 03 04:54	2° \mathcal{B} 03'42	
conjunction	9458 Apr 06 09:35	19° Υ 26'47	3°54'08	retrograde	9464 Jul 29 13:47	3° \mathcal{B} 46'33	
minimum elong	9458 Apr 06 09:45	19° Υ 26'48	3°54'02	min. Earth dist.	9464 Oct 15 10:58	2° \mathcal{B} 33'14	32.25189 AU
max. Earth dist.	9458 Apr 07 20:05	19° Υ 29'53	32.86693 AU	opposition	9464 Oct 17 08:15	2° \mathcal{B} 30'25	0°13'05
morning rise	9458 Apr 21 07:08	19° Υ 58'38		direct	9465 Jan 06 06:57	1° \mathcal{B} 13'25	
retrograde	9458 Jul 18 08:28	21° Υ 47'53		desc. node	9465 Mar 03 15:08	1° \mathcal{B} 58'58	
min. Earth dist.	9458 Oct 04 00:32	20° Υ 32'01	30.96828 AU	evening set	9465 Apr 04 14:29	2° \mathcal{B} 56'18	
opposition	9458 Oct 05 10:10	20° Υ 29'51	3°50'50				
direct	9458 Dec 25 00:30	19° Υ 10'33		conjunction	9465 Apr 19 23:54	3° \mathcal{B} 27'27	-0°04'18
evening set	9459 Mar 24 15:24	21° Υ 00'16		minimum elong	9465 Apr 19 23:54	3° \mathcal{B} 27'27	0°04'28
				behind sun begin	9465 Apr 19 17:38	3° \mathcal{B} 26'57	
conjunction	9459 Apr 08 17:14	21° Υ 32'14	3°19'18	behind sun end	9465 Apr 20 06:11	3° \mathcal{B} 27'58	
minimum elong	9459 Apr 08 17:23	21° Υ 32'15	3°19'13	max. Earth dist.	9465 Apr 21 22:30	3° \mathcal{B} 31'25	34.36983 AU
max. Earth dist.	9459 Apr 10 04:14	21° Υ 35'22	33.06524 AU	morning rise	9465 May 05 08:15	3° \mathcal{B} 58'33	
morning rise	9459 Apr 23 18:09	22° Υ 04'08		retrograde	9465 Jul 31 14:09	5° \mathcal{B} 40'34	
retrograde	9459 Jul 20 15:25	23° Υ 52'09		min. Earth dist.	9465 Oct 17 15:22	4° \mathcal{B} 27'40	32.48555 AU
min. Earth dist.	9459 Oct 06 07:09	22° Υ 36'44	31.16783 AU	opposition	9465 Oct 19 13:41	4° \mathcal{B} 24'49	-0°21'46
opposition	9459 Oct 07 19:25	22° Υ 34'25	3°13'46	direct	9466 Jan 08 14:38	3° \mathcal{B} 08'15	
direct	9459 Dec 27 10:24	21° Υ 15'29		evening set	9466 Apr 06 17:46	4° \mathcal{B} 50'12	
evening set	9460 Mar 25 19:42	23° Υ 03'53					
				conjunction	9466 Apr 22 02:32	5° \mathcal{B} 21'06	-0°36'50
conjunction	9460 Apr 10 00:16	23° Υ 35'51	2°44'39	minimum elong	9466 Apr 22 02:30	5° \mathcal{B} 21'06	0°37'01
minimum elong	9460 Apr 10 00:23	23° Υ 35'52	2°44'32	max. Earth dist.	9466 Apr 24 01:38	5° \mathcal{B} 25'04	34.60568 AU
max. Earth dist.	9460 Apr 11 13:53	23° Υ 39'11	33.26863 AU	morning rise	9466 May 07 10:35	5° \mathcal{B} 51'55	
morning rise	9460 Apr 25 03:40	24° Υ 07'44		retrograde	9466 Aug 02 17:06	7° \mathcal{B} 33'10	
retrograde	9460 Jul 21 20:19	25° Υ 54'35		min. Earth dist.	9466 Oct 19 17:42	6° \mathcal{B} 20'46	32.72356 AU
min. Earth dist.	9460 Oct 07 15:18	24° Υ 39'30	31.37281 AU	opposition	9466 Oct 21 18:24	6° \mathcal{B} 17'47	-0°56'06
opposition	9460 Oct 09 04:17	24° Υ 37'09	2°36'56	direct	9467 Jan 10 18:55	5° \mathcal{B} 01'39	
direct	9460 Dec 28 19:30	23° Υ 18'34		evening set	9467 Apr 08 20:57	6° \mathcal{B} 42'45	
evening set	9461 Mar 27 23:45	25° Υ 05'43					
				conjunction	9467 Apr 24 04:52	7° \mathcal{B} 13'20	-1°08'56
conjunction	9461 Apr 12 06:17	25° Υ 37'36	2°10'14	minimum elong	9467 Apr 24 04:49	7° \mathcal{B} 13'20	1°09'07
minimum elong	9461 Apr 12 06:22	25° Υ 37'37	2°10'07	max. Earth dist.	9467 Apr 26 06:13	7° \mathcal{B} 17'28	34.84518 AU
max. Earth dist.	9461 Apr 13 21:03	25° Υ 41'00	33.47743 AU	morning rise	9467 May 09 11:50	7° \mathcal{B} 43'52	
morning rise	9461 Apr 27 11:48	26° Υ 09'24		retrograde	9467 Aug 04 17:30	9° \mathcal{B} 24'23	
retrograde	9461 Jul 24 02:08	27° Υ 55'10		min. Earth dist.	9467 Oct 21 21:42	8° \mathcal{B} 12'21	32.96496 AU
min. Earth dist.	9461 Oct 09 20:29	26° Υ 40'32	31.58351 AU	opposition	9467 Oct 23 22:30	8° \mathcal{B} 09'22	-1°29'52
opposition	9461 Oct 11 12:18	26° Υ 38'01	2°00'24	direct	9468 Jan 12 23:40	6° \mathcal{B} 53'40	
direct	9461 Dec 31 06:18	25° Υ 19'49		evening set	9468 Apr 10 00:06	8° \mathcal{B} 33'58	
evening set	9462 Mar 30 03:42	27° Υ 05'47					
				conjunction	9468 Apr 25 06:31	9° \mathcal{B} 04'12	-1°40'31
conjunction	9462 Apr 14 11:41	27° Υ 37'33	1°36'05	minimum elong	9468 Apr 25 06:27	9° \mathcal{B} 04'12	1°40'43

max. Earth dist.	9468 Apr 27 08:01	9°8'08"19	35.08756 AU	opposition	9474 Nov 05 11:22	20°8'30"45	-5°08'53
morning rise	9468 May 10 12:12	9°8'34"23		direct	9475 Jan 25 21:33	19°8'17"32	
retrograde	9468 Aug 05 20:10	11°8'14"14		evening set	9475 Apr 23 15:59	20°8'53"10	
min. Earth dist.	9468 Oct 22 23:11	10°8'02"39	33.20900 AU				
opposition	9468 Oct 25 02:02	9°8'59"35	-2°03'03	conjunction	9475 May 08 02:07	21°8'20"20	-5°05'44
direct	9469 Jan 14 03:11	8°8'44"17		minimum elong	9475 May 08 01:57	21°8'20"19	5°05'59
evening set	9469 Apr 12 02:58	10°8'23"49		max. Earth dist.	9475 May 10 09:41	21°8'24"44	36.82350 AU
				morning rise	9475 May 22 11:52	21°8'47"28	
conjunction	9469 Apr 27 07:34	10°8'53"41	-2°11'35	retrograde	9475 Aug 18 08:52	23°8'23"26	
minimum elong	9469 Apr 27 07:29	10°8'53"41	2°11'47	min. Earth dist.	9475 Nov 05 01:22	22°8'14"11	34.95778 AU
max. Earth dist.	9469 Apr 29 10:42	10°8'57"55	35.33195 AU	opposition	9475 Nov 07 10:40	22°8'10"51	-5°37'30
morning rise	9469 May 12 11:28	11°8'23"31		direct	9476 Jan 27 20:27	20°8'57"58	
retrograde	9469 Aug 07 22:09	13°8'02"44		evening set	9476 Apr 24 17:21	22°8'33"06	
min. Earth dist.	9469 Oct 25 02:04	11°8'51"29	33.45503 AU				
opposition	9469 Oct 27 05:11	11°8'48"25	-2°35'38	conjunction	9476 May 08 23:17	22°8'59"45	-5°32'36
direct	9470 Jan 16 05:10	10°8'33"30		minimum elong	9476 May 08 23:06	22°8'59"44	5°32'51
evening set	9470 Apr 14 05:43	12°8'12"19		max. Earth dist.	9476 May 11 08:23	23°8'04"14	37.07767 AU
				morning rise	9476 May 23 04:52	23°8'26"22	
conjunction	9470 Apr 29 08:11	12°8'41"47	-2°42'05	retrograde	9476 Aug 19 06:16	25°8'01"57	
minimum elong	9470 Apr 29 08:05	12°8'41"47	2°42'17	min. Earth dist.	9476 Nov 06 00:08	23°8'53"00	35.21459 AU
max. Earth dist.	9470 May 01 11:56	12°8'46"02	35.57790 AU	opposition	9476 Nov 08 09:47	23°8'49"39	-6°05'25
morning rise	9470 May 14 09:52	13°8'11"13		direct	9477 Jan 28 18:49	22°8'37"07	
retrograde	9470 Aug 09 21:26	14°8'49"49		evening set	9477 Apr 26 18:20	24°8'11"47	
min. Earth dist.	9470 Oct 27 03:09	13°8'38"57	33.70231 AU				
opposition	9470 Oct 29 07:27	13°8'35"50	-3°07'35	conjunction	9477 May 10 19:51	24°8'37"54	-5°58'49
direct	9471 Jan 18 10:20	12°8'21"17		minimum elong	9477 May 10 19:40	24°8'37"53	5°59'05
evening set	9471 Apr 16 08:21	13°8'59"25		max. Earth dist.	9477 May 13 05:51	24°8'42"25	37.33380 AU
				morning rise	9477 May 24 20:56	25°8'04"00	
conjunction	9471 May 01 08:09	14°8'28"28	-3°12'01	retrograde	9477 Aug 21 02:48	26°8'39"13	
minimum elong	9471 May 01 08:02	14°8'28"27	3°12'14	min. Earth dist.	9477 Nov 07 21:21	25°8'30"37	35.47301 AU
max. Earth dist.	9471 May 03 12:14	14°8'32"42	35.82472 AU	opposition	9477 Nov 10 08:14	25°8'27"14	-6°32'38
morning rise	9471 May 16 07:27	14°8'57"29		direct	9478 Jan 30 18:59	24°8'15"02	
	9471 May 17 15:20	15°8'		evening set	9478 Apr 28 19:19	25°8'49"18	
retrograde	9471 Aug 11 21:22	16°8'35"28					
min. Earth dist.	9471 Oct 29 04:10	15°8'24"57	33.95064 AU	conjunction	9478 May 12 15:58	26°8'14"53	-6°24'24
opposition	9471 Oct 31 09:20	15°8'21"47	-3°38'54	minimum elong	9478 May 12 15:46	26°8'14"52	6°24'39
	9471 Nov 15 20:58	15°8'		max. Earth dist.	9478 May 15 02:22	26°8'19"24	37.59117 AU
direct	9472 Jan 20 13:55	14°8'07"36		morning rise	9478 May 26 12:30	26°8'40"27	
	9472 Mar 22 17:33	15°8'		retrograde	9478 Aug 22 23:53	28°8'15"20	
evening set	9472 Apr 17 10:35	15°8'45"03		min. Earth dist.	9478 Nov 09 18:16	27°8'07"05	35.73268 AU
				opposition	9478 Nov 12 06:06	27°8'03"39	-6°59'08
conjunction	9472 May 02 07:36	16°8'13"40	-3°41'21	direct	9479 Feb 01 16:58	25°8'51"49	
minimum elong	9472 May 02 07:28	16°8'13"39	3°41'35	evening set	9479 Apr 30 19:59	27°8'25"42	
max. Earth dist.	9472 May 04 13:07	16°8'17"59	36.07241 AU				
morning rise	9472 May 17 03:51	16°8'42"14		conjunction	9479 May 14 11:49	27°8'50"44	-6°49'19
retrograde	9472 Aug 12 18:05	18°8'19"40		minimum elong	9479 May 14 11:37	27°8'50"43	6°49'36
min. Earth dist.	9472 Oct 30 05:10	17°8'09"26	34.19984 AU	max. Earth dist.	9479 May 16 23:34	27°8'55"20	37.84935 AU
opposition	9472 Nov 01 10:35	17°8'06"16	-4°09'34	morning rise	9479 May 28 03:13	28°8'15"46	
direct	9473 Jan 21 18:41	15°8'52"24		retrograde	9479 Aug 24 17:31	29°8'50"21	
evening set	9473 Apr 19 12:43	17°8'29"13		min. Earth dist.	9479 Nov 11 15:59	28°8'42"24	35.99268 AU
				opposition	9479 Nov 14 03:38	28°8'39"00	-7°24'56
conjunction	9473 May 04 06:18	17°8'57"22	-4°10'06	direct	9480 Feb 03 16:40	27°8'27"31	
minimum elong	9473 May 04 06:10	17°8'57"21	4°10'21	evening set	9480 May 01 20:36	29°8'01"03	
max. Earth dist.	9473 May 06 11:47	18°8'01"39	36.32110 AU				
morning rise	9473 May 18 23:31	18°8'25"29		conjunction	9480 May 15 06:59	29°8'25"31	-7°13'36
retrograde	9473 Aug 14 15:44	20°8'02"22		minimum elong	9480 May 15 06:47	29°8'25"30	7°13'52
min. Earth dist.	9473 Nov 01 03:55	18°8'52"30	34.45058 AU	max. Earth dist.	9480 May 17 18:13	29°8'30"03	38.10749 AU
opposition	9473 Nov 03 11:14	18°8'49"14	-4°39'34	morning rise	9480 May 28 17:18	29°8'50"00	
direct	9474 Jan 23 19:54	17°8'35"42			9480 Jun 03 08:26	0°II	
evening set	9474 Apr 21 14:21	19°8'11"54		retrograde	9480 Aug 25 11:56	1°II24"20	
				min. Earth dist.	9480 Nov 12 11:36	0°II16"45	36.25252 AU
conjunction	9474 May 06 04:29	19°8'39"34	-4°38'14	opposition	9480 Nov 15 00:42	0°II13"17	-7°50'03
minimum elong	9474 May 06 04:20	19°8'39"33	4°38'28		9480 Nov 24 20:14	30°8'	
max. Earth dist.	9474 May 08 12:02	19°8'43"59	36.57133 AU	direct	9481 Feb 04 14:28	29°8'02"09	
morning rise	9474 May 20 18:03	20°8'07"12			9481 Apr 12 23:16	0°II	
retrograde	9474 Aug 16 11:07	21°8'43"37		evening set	9481 May 03 20:58	0°II35"22	
min. Earth dist.	9474 Nov 03 04:02	20°8'33"59	34.70314 AU				

conjunction	9481 May 17 01:59	0°II59'16 -7°37'15	direct	9488 Feb 16 10:51	9°II34'47
minimum elong	9481 May 17 01:47	0°II59'16 7°37'32	evening set	9488 May 15 17:57	11°II06'21
max. Earth dist.	9481 May 19 14:38	1°II03'53 38.36503 AU			
morning rise	9481 May 30 06:46	1°II23'11	conjunction	9488 May 27 02:39	11°II26'04 -10°05'19
retrograde	9481 Aug 27 06:02	2°II57'18	minimum elong	9488 May 27 02:26	11°II26'03 10°05'38
min. Earth dist.	9481 Nov 14 09:04	1°II49'57 36.51150 AU	max. Earth dist.	9488 May 29 16:52	11°II30'36 40.12859 AU
opposition	9481 Nov 16 21:26	1°II46'33 -8°14'28	morning rise	9488 Jun 07 11:22	11°II45'47
direct	9482 Feb 06 11:40	0°II35'45	retrograde	9488 Sep 06 03:58	13°II18'48
evening set	9482 May 05 21:14	2°II08'40	min. Earth dist.	9488 Nov 24 18:46	12°II13'15 38.28560 AU
			opposition	9488 Nov 27 09:11	12°II09'50 -10°46'45
conjunction	9482 May 18 20:29	2°II32'00 -8°00'15	direct	9489 Feb 17 04:05	11°II01'02
minimum elong	9482 May 18 20:16	2°II31'59 8°00'32	evening set	9489 May 17 16:41	12°II32'28
max. Earth dist.	9482 May 21 08:31	2°II36'32 38.62140 AU			
morning rise	9482 May 31 19:36	2°II55'20	conjunction	9489 May 28 18:18	12°II51'33 -10°24'00
retrograde	9482 Aug 29 01:08	4°II29'14	minimum elong	9489 May 28 18:05	12°II51'32 10°24'19
min. Earth dist.	9482 Nov 16 04:08	3°II22'14 36.76896 AU	max. Earth dist.	9489 May 31 08:35	12°II56'04 40.37788 AU
opposition	9482 Nov 18 17:32	3°II18'47 -8°38'13	morning rise	9489 Jun 08 19:52	13°II10'40
direct	9483 Feb 08 07:18	2°II08'18	retrograde	9489 Sep 07 19:53	14°II43'37
evening set	9483 May 07 21:20	3°II40'56	min. Earth dist.	9489 Nov 26 10:48	13°II38'21 38.53670 AU
			opposition	9489 Nov 29 02:14	13°II34'54 -11°05'50
conjunction	9483 May 20 14:39	4°II03'41 -8°22'39	direct	9490 Feb 18 20:46	12°II26'24
minimum elong	9483 May 20 14:26	4°II03'40 8°22'57	evening set	9490 May 19 15:09	13°II57'43
max. Earth dist.	9483 May 23 02:58	4°II08'12 38.87592 AU			
morning rise	9483 Jun 02 07:56	4°II26'26	conjunction	9490 May 30 09:29	14°II16'12 -10°42'03
retrograde	9483 Aug 30 20:02	6°II00'09	minimum elong	9490 May 30 09:16	14°II16'11 10°42'22
min. Earth dist.	9483 Nov 18 00:20	4°II53'21 37.02463 AU	max. Earth dist.	9490 Jun 01 23:52	14°II20'40 40.62666 AU
opposition	9483 Nov 20 13:15	4°II49'57 -9°01'18	morning rise	9490 Jun 10 03:58	14°II34'41
direct	9484 Feb 10 02:44	3°II39'47	retrograde	9490 Sep 09 13:19	16°II07'35
evening set	9484 May 08 21:12	5°II12'09	min. Earth dist.	9490 Nov 28 03:30	15°II02'35 38.78721 AU
			opposition	9490 Nov 30 19:05	14°II59'08 -11°24'17
conjunction	9484 May 21 08:28	5°II34'19 -8°44'25	direct	9491 Feb 20 11:49	13°II50'56
minimum elong	9484 May 21 08:15	5°II34'18 8°44'42	evening set	9491 May 21 13:29	15°II22'11
max. Earth dist.	9484 May 23 21:06	5°II38'50 39.12869 AU			
morning rise	9484 Jun 02 19:30	5°II56'28	conjunction	9491 Jun 01 00:31	15°II40'02 -10°59'31
retrograde	9484 Aug 31 13:05	7°II29'59	minimum elong	9491 Jun 01 00:18	15°II40'01 10°59'50
min. Earth dist.	9484 Nov 18 19:25	6°II23'27 37.27843 AU	max. Earth dist.	9491 Jun 03 15:46	15°II44'33 40.87459 AU
opposition	9484 Nov 21 08:32	6°II20'03 -9°23'43	morning rise	9491 Jun 11 11:26	15°II57'53
direct	9485 Feb 10 23:29	5°II10'09	retrograde	9491 Sep 11 03:11	17°II30'46
evening set	9485 May 10 20:43	6°II42'17	min. Earth dist.	9491 Nov 29 20:13	16°II26'00 39.03640 AU
			opposition	9491 Dec 02 11:25	16°II22'35 -11°42'06
conjunction	9485 May 23 01:30	7°II03'51 -9°05'35	direct	9492 Feb 22 05:26	15°II14'41
minimum elong	9485 May 23 01:17	7°II03'50 9°05'53	evening set	9492 May 22 11:50	16°II45'53
max. Earth dist.	9485 May 25 13:45	7°II08'18 39.37973 AU			
morning rise	9485 Jun 04 06:24	7°II25'24	conjunction	9492 Jun 01 15:06	17°II03'06 -11°16'23
retrograde	9485 Sep 02 06:46	8°II58'45	minimum elong	9492 Jun 01 14:54	17°II03'05 11°16'42
min. Earth dist.	9485 Nov 20 13:28	7°II52'28 37.53101 AU	max. Earth dist.	9492 Jun 04 05:32	17°II07'31 41.12102 AU
opposition	9485 Nov 23 03:23	7°II49'03 -9°45'29	morning rise	9492 Jun 11 18:33	17°II20'18
direct	9486 Feb 12 18:30	6°II39'25	retrograde	9492 Sep 11 17:59	18°II53'12
evening set	9486 May 12 19:59	8°II11'21	min. Earth dist.	9492 Nov 30 11:28	17°II48'44 39.28395 AU
			opposition	9492 Dec 03 03:34	17°II45'17 -11°59'18
conjunction	9486 May 24 18:24	8°II32'17 -9°26'07	direct	9493 Feb 22 21:22	16°II37'40
minimum elong	9486 May 24 18:11	8°II32'16 9°26'25	evening set	9493 May 24 09:48	18°II08'49
max. Earth dist.	9486 May 27 07:57	8°II36'49 39.62976 AU			
morning rise	9486 Jun 05 16:39	8°II53'14	conjunction	9493 Jun 03 05:28	18°II25'24 -11°32'42
retrograde	9486 Sep 03 19:55	10°II26'26	minimum elong	9493 Jun 03 05:15	18°II25'23 11°33'01
min. Earth dist.	9486 Nov 22 08:18	9°II20'21 37.78274 AU	max. Earth dist.	9493 Jun 05 20:51	18°II29'52 41.36538 AU
opposition	9486 Nov 24 21:38	9°II16'58 -10°06'34	morning rise	9493 Jun 13 01:07	18°II41'58
direct	9487 Feb 14 15:49	8°II07'37	retrograde	9493 Sep 13 05:36	20°II14'54
evening set	9487 May 14 19:11	9°II39'21	min. Earth dist.	9493 Dec 02 04:36	19°II10'36 39.52905 AU
			opposition	9493 Dec 04 19:28	19°II07'14 -12°15'55
conjunction	9487 May 26 10:44	9°II59'40 -9°46'02	direct	9494 Feb 24 16:16	17°II59'53
minimum elong	9487 May 26 10:30	9°II59'39 9°46'21	evening set	9494 May 26 08:02	19°II31'01
max. Earth dist.	9487 May 28 23:37	10°II04'08 39.87928 AU			
morning rise	9487 Jun 07 02:20	10°II20'00	conjunction	9494 Jun 04 19:39	19°II46'56 -11°48'27
retrograde	9487 Sep 05 11:21	11°II53'06	minimum elong	9494 Jun 04 19:28	19°II46'56 11°48'46
min. Earth dist.	9487 Nov 24 00:42	10°II47'20 38.03423 AU	max. Earth dist.	9494 Jun 07 09:57	19°II51'19 41.60707 AU
opposition	9487 Nov 26 15:30	10°II43'52 -10°26'59	morning rise	9494 Jun 14 07:20	20°II02'53

retrograde	9494 Sep 14 19:55	21°II35'49		minimum elong	9501 Jun 14 13:51	28°II55'01	13°24'18
min. Earth dist.	9494 Dec 03 19:21	20°II31'47	39.77110 AU	max. Earth dist.	9501 Jun 17 03:31	28°II59'12	43.21555 AU
opposition	9494 Dec 06 10:44	20°II28'24	-12°31'56	morning rise	9501 Jun 21 12:14	29°II06'16	
direct	9495 Feb 26 08:06	19°II21'19			9501 Jul 27 18:17	0°☾	
evening set	9495 May 28 06:01	20°II52'26		retrograde	9501 Sep 24 14:26	0°☾39'51	
					9501 Nov 24 23:43	30°RII	
conjunction	9495 Jun 06 09:34	21°II07'42	-12°03'40	min. Earth dist.	9501 Dec 13 23:54	29°II37'03	41.38377 AU
minimum elong	9495 Jun 06 09:21	21°II07'41	12°03'59	opposition	9501 Dec 16 13:52	29°II33'50	-14°08'41
max. Earth dist.	9495 Jun 08 23:44	21°II12'03	41.84541 AU	direct	9502 Mar 08 12:23	28°II28'19	
morning rise	9495 Jun 15 13:12	21°II23'00		evening set	9502 Jun 09 13:16	29°II59'53	
retrograde	9495 Sep 16 11:24	22°II55'59			9502 Jun 09 14:59	0°☾	
min. Earth dist.	9495 Dec 05 11:35	21°II52'05	40.00974 AU				
opposition	9495 Dec 08 02:00	21°II48'47	-12°47'25	conjunction	9502 Jun 16 01:44	0°☾10'24	-13°35'33
direct	9496 Feb 27 22:04	20°II41'56		minimum elong	9502 Jun 16 01:35	0°☾10'23	13°35'54
evening set	9496 May 29 03:53	22°II13'02		max. Earth dist.	9502 Jun 18 14:43	0°☾14'30	43.43714 AU
				morning rise	9502 Jun 22 14:16	0°☾20'55	
conjunction	9496 Jun 06 23:08	22°II27'39	-12°18'21	retrograde	9502 Sep 26 03:49	1°☾54'43	
minimum elong	9496 Jun 06 22:57	22°II27'39	12°18'41	min. Earth dist.	9502 Dec 15 12:52	0°☾52'08	41.60613 AU
max. Earth dist.	9496 Jun 09 13:16	22°II31'58	42.08035 AU	opposition	9502 Dec 18 02:41	0°☾48'56	-14°20'19
morning rise	9496 Jun 15 18:19	22°II42'18			9503 Jan 31 13:01	30°RII	
retrograde	9496 Sep 17 00:24	24°II15'19		direct	9503 Mar 09 23:27	29°II43'40	
min. Earth dist.	9496 Dec 06 02:39	23°II11'36	40.24475 AU		9503 Apr 15 15:47	0°☾	
opposition	9496 Dec 08 16:51	23°II08'19	-13°02'20	evening set	9503 Jun 11 10:57	1°☾15'26	
direct	9497 Feb 28 13:40	22°II01'41					
evening set	9497 May 31 01:40	23°II32'47		conjunction	9503 Jun 17 13:23	1°☾25'14	-13°46'37
				minimum elong	9503 Jun 17 13:14	1°☾25'13	13°46'57
conjunction	9497 Jun 08 12:18	23°II46'45	-12°32'31	max. Earth dist.	9503 Jun 20 03:06	1°☾29'22	43.65676 AU
minimum elong	9497 Jun 08 12:06	23°II46'45	12°32'51	morning rise	9503 Jun 23 15:43	1°☾35'01	
max. Earth dist.	9497 Jun 11 01:20	23°II50'58	42.31189 AU	retrograde	9503 Sep 27 13:26	3°☾09'03	
morning rise	9497 Jun 16 23:03	24°II00'43		min. Earth dist.	9503 Dec 17 02:20	2°☾06'39	41.82607 AU
retrograde	9497 Sep 18 14:09	25°II33'48		opposition	9503 Dec 19 15:24	2°☾03'30	-14°31'26
min. Earth dist.	9497 Dec 07 16:56	24°II30'16	40.47680 AU	direct	9504 Mar 10 13:20	0°☾58'29	
opposition	9497 Dec 10 07:18	24°II26'59	-13°16'42	evening set	9504 Jun 12 08:44	2°☾30'29	
direct	9498 Mar 02 03:18	23°II20'34					
evening set	9498 Jun 01 23:14	24°II51'42		conjunction	9504 Jun 18 00:31	2°☾39'33	-13°57'13
				minimum elong	9504 Jun 18 00:22	2°☾39'32	13°57'34
conjunction	9498 Jun 10 01:15	25°II05'00	-12°46'10	max. Earth dist.	9504 Jun 20 12:57	2°☾43'34	43.87384 AU
minimum elong	9498 Jun 10 01:04	25°II04'59	12°46'31	morning rise	9504 Jun 23 16:17	2°☾48'35	
max. Earth dist.	9498 Jun 12 15:11	25°II09'15	42.54069 AU	retrograde	9504 Sep 28 00:00	4°☾22'54	
morning rise	9498 Jun 18 03:12	25°II18'17		min. Earth dist.	9504 Dec 17 14:16	3°☾20'45	42.04326 AU
retrograde	9498 Sep 20 00:56	26°II51'26		opposition	9504 Dec 20 03:52	3°☾17'35	-14°42'04
min. Earth dist.	9498 Dec 09 08:10	25°II48'02	40.70622 AU	direct	9505 Mar 12 02:17	2°☾12'49	
opposition	9498 Dec 11 21:27	25°II44'49	-13°30'31	evening set	9505 Jun 14 06:55	3°☾45'05	
direct	9499 Mar 03 19:31	24°II38'36					
evening set	9499 Jun 03 20:51	26°II09'48		conjunction	9505 Jun 19 11:43	3°☾53'22	-14°07'20
				minimum elong	9505 Jun 19 11:35	3°☾53'22	14°07'40
conjunction	9499 Jun 11 13:45	26°II22'24	-12°59'18	max. Earth dist.	9505 Jun 22 00:36	3°☾57'25	44.08783 AU
minimum elong	9499 Jun 11 13:34	26°II22'24	12°59'37	morning rise	9505 Jun 24 16:28	4°☾01'39	
max. Earth dist.	9499 Jun 14 02:42	26°II26'34	42.76729 AU	retrograde	9505 Sep 29 10:29	5°☾36'16	
morning rise	9499 Jun 19 06:41	26°II35'01		min. Earth dist.	9505 Dec 19 04:08	4°☾34'15	42.25705 AU
retrograde	9499 Sep 21 12:13	28°II08'17		opposition	9505 Dec 21 16:05	4°☾31'11	-14°52'13
min. Earth dist.	9499 Dec 10 20:44	27°II05'07	40.93370 AU	direct	9506 Mar 13 15:56	3°☾26'39	
opposition	9499 Dec 13 11:07	27°II01'51	-13°43'47	evening set	9506 Jun 16 05:44	4°☾59'15	
direct	9500 Mar 05 10:22	25°II55'51					
evening set	9500 Jun 05 18:16	27°II27'08		conjunction	9506 Jun 20 22:44	5°☾06'43	-14°17'01
				minimum elong	9506 Jun 20 22:35	5°☾06'42	14°17'21
conjunction	9500 Jun 13 02:02	27°II39'03	-13°11'54	max. Earth dist.	9506 Jun 23 10:37	5°☾10'41	44.29820 AU
minimum elong	9500 Jun 13 01:52	27°II39'03	13°12'15	morning rise	9506 Jun 25 15:37	5°☾14'11	
max. Earth dist.	9500 Jun 15 15:39	27°II43'15	42.99213 AU	retrograde	9506 Sep 30 22:00	6°☾49'10	
morning rise	9500 Jun 20 09:50	27°II50'59		min. Earth dist.	9506 Dec 20 15:54	5°☾47'21	42.46672 AU
retrograde	9500 Sep 23 01:03	29°II24'24		opposition	9506 Dec 23 03:59	5°☾44'17	-15°01'55
min. Earth dist.	9500 Dec 12 11:13	28°II21'22	41.15960 AU	direct	9507 Mar 15 04:30	4°☾39'58	
opposition	9500 Dec 15 00:44	28°II18'10	-13°56'30	evening set	9507 Jun 18 05:07	6°☾12'57	
direct	9501 Mar 07 00:29	27°II12'25					
evening set	9501 Jun 07 15:45	28°II43'49		conjunction	9507 Jun 22 09:27	6°☾19'33	-14°26'16
				minimum elong	9507 Jun 22 09:20	6°☾19'32	14°26'35
conjunction	9501 Jun 14 14:01	28°II55'02	-13°23'59	max. Earth dist.	9507 Jun 24 20:23	6°☾23'25	44.50416 AU

morning rise	9507 Jun 26 13:44	6°☾26'09		opposition	9515 Jan 01 18:46	15°☾07'17	-16°03'49
retrograde	9507 Oct 02 12:14	8°☾01'32		direct	9515 Mar 24 17:35	14°☾04'19	
min. Earth dist.	9507 Dec 22 04:47	6°☾59'51	42.67193 AU				
opposition	9507 Dec 24 15:48	6°☾56'51	-15°11'10	conjunction	9515 Jul 01 15:13	15°☾40'09	-15°25'16
direct	9508 Mar 15 13:39	5°☾52'44		minimum elong	9515 Jul 01 15:09	15°☾40'08	15°25'36
evening set	9508 Jun 19 05:48	7°☾26'10		max. Earth dist.	9515 Jul 03 23:27	15°☾43'43	46.02135 AU
				retrograde	9515 Oct 11 14:59	17°☾18'36	
conjunction	9508 Jun 22 20:08	7°☾31'49	-14°35'05	min. Earth dist.	9515 Dec 31 21:45	16°☾17'52	44.18599 AU
minimum elong	9508 Jun 22 20:01	7°☾31'48	14°35'26	opposition	9516 Jan 03 04:37	16°☾15'09	-16°09'37
max. Earth dist.	9508 Jun 25 07:00	7°☾35'40	44.70570 AU	direct	9516 Mar 25 04:18	15°☾12'23	
morning rise	9508 Jun 26 10:20	7°☾37'27					
retrograde	9508 Oct 02 22:55	9°☾13'20		conjunction	9516 Jul 02 00:02	16°☾47'48	-15°30'47
min. Earth dist.	9508 Dec 22 17:17	8°☾11'45	42.87248 AU	minimum elong	9516 Jul 01 23:59	16°☾47'48	15°31'07
opposition	9508 Dec 25 03:19	8°☾08'49	-15°19'59	max. Earth dist.	9516 Jul 04 07:06	16°☾51'17	46.19879 AU
direct	9509 Mar 17 00:36	7°☾04'53		retrograde	9516 Oct 11 22:11	18°☾25'54	
evening set	9509 Jun 21 08:09	8°☾38'53		min. Earth dist.	9517 Jan 01 06:48	17°☾25'22	44.36268 AU
				opposition	9517 Jan 03 14:11	17°☾22'37	-16°15'01
conjunction	9509 Jun 24 06:19	8°☾43'27	-14°43'31	direct	9517 Mar 26 15:20	16°☾20'02	
minimum elong	9509 Jun 24 06:13	8°☾43'27	14°43'51				
morning rise	9509 Jun 27 04:24	8°☾48'01		conjunction	9517 Jul 03 08:39	17°☾55'04	-15°35'56
max. Earth dist.	9509 Jun 26 15:36	8°☾47'11	44.90280 AU	minimum elong	9517 Jul 03 08:35	17°☾55'04	15°36'16
retrograde	9509 Oct 04 08:30	10°☾24'30		max. Earth dist.	9517 Jul 05 15:23	17°☾58'32	46.37280 AU
min. Earth dist.	9509 Dec 24 04:27	9°☾23'04	43.06887 AU	retrograde	9517 Oct 13 08:09	19°☾32'49	
opposition	9509 Dec 26 14:33	9°☾20'08	-15°28'23	min. Earth dist.	9518 Jan 02 17:55	18°☾32'23	44.53572 AU
direct	9510 Mar 18 11:45	8°☾16'21		opposition	9518 Jan 04 23:43	18°☾29'43	-16°20'02
evening set	9510 Jun 23 14:23	9°☾51'11		direct	9518 Mar 28 01:33	17°☾27'19	
conjunction	9510 Jun 25 16:26	9°☾54'26	-14°51'31	conjunction	9518 Jul 04 17:22	19°☾02'00	-15°40'43
minimum elong	9510 Jun 25 16:19	9°☾54'25	14°51'51	minimum elong	9518 Jul 04 17:20	19°☾02'00	15°41'02
morning rise	9510 Jun 27 18:19	9°☾57'40		max. Earth dist.	9518 Jul 06 23:38	19°☾05'24	46.54296 AU
max. Earth dist.	9510 Jun 28 02:10	9°☾58'11	45.09596 AU	retrograde	9518 Oct 14 17:44	20°☾39'24	
retrograde	9510 Oct 05 14:52	11°☾35'00		min. Earth dist.	9519 Jan 04 03:34	19°☾39'05	44.70436 AU
min. Earth dist.	9510 Dec 25 16:49	10°☾33'37	43.26159 AU	opposition	9519 Jan 06 08:49	19°☾36'28	-16°24'40
opposition	9510 Dec 28 01:25	10°☾30'46	-15°36'21	direct	9519 Mar 29 10:15	18°☾34'14	
direct	9511 Mar 20 02:01	9°☾27'08					
evening set	9511 Jun 26 13:11	11°☾03'53		conjunction	9519 Jul 06 01:48	20°☾08'33	-15°45'09
				minimum elong	9519 Jul 06 01:46	20°☾08'33	15°45'29
conjunction	9511 Jun 27 02:15	11°☾04'44	-14°59'07	max. Earth dist.	9519 Jul 08 06:21	20°☾11'50	46.70853 AU
minimum elong	9511 Jun 27 02:10	11°☾04'44	14°59'27	retrograde	9519 Oct 16 04:07	21°☾45'36	
evening rise	9511 Jun 27 15:11	11°☾05'34		min. Earth dist.	9520 Jan 05 13:31	20°☾45'25	44.86836 AU
max. Earth dist.	9511 Jun 29 10:58	11°☾08'24	45.28600 AU	opposition	9520 Jan 07 18:02	20°☾42'50	-16°28'58
retrograde	9511 Oct 06 23:36	12°☾44'51		direct	9520 Mar 29 17:22	19°☾40'46	
min. Earth dist.	9511 Dec 27 02:52	11°☾43'38	43.45139 AU				
opposition	9511 Dec 29 12:03	11°☾40'45	-15°43'53	conjunction	9520 Jul 06 10:08	21°☾14'43	-15°49'15
direct	9512 Mar 20 14:11	10°☾37'17		minimum elong	9520 Jul 06 10:07	21°☾14'43	15°49'34
				max. Earth dist.	9520 Jul 08 14:50	21°☾18'00	46.86930 AU
conjunction	9512 Jun 27 11:39	12°☾14'24	-15°06'17	retrograde	9520 Oct 16 10:12	22°☾51'25	
minimum elong	9512 Jun 27 11:33	12°☾14'24	15°06'36	min. Earth dist.	9521 Jan 06 00:08	21°☾51'17	45.02732 AU
max. Earth dist.	9512 Jun 29 20:12	12°☾18'03	45.47331 AU	opposition	9521 Jan 08 03:06	21°☾48'47	-16°32'56
retrograde	9512 Oct 07 10:37	13°☾54'05		direct	9521 Mar 31 03:11	20°☾46'52	
min. Earth dist.	9512 Dec 27 14:22	12°☾52'58	43.63876 AU				
opposition	9512 Dec 29 22:40	12°☾50'08	-15°50'58	conjunction	9521 Jul 07 18:18	22°☾20'27	-15°53'02
direct	9513 Mar 22 00:43	11°☾46'50		minimum elong	9521 Jul 07 18:16	22°☾20'27	15°53'22
				max. Earth dist.	9521 Jul 09 21:11	22°☾23'37	47.02534 AU
conjunction	9513 Jun 28 21:07	13°☾23'29	-15°13'01	retrograde	9521 Oct 17 16:41	23°☾56'48	
minimum elong	9513 Jun 28 21:03	13°☾23'29	15°13'22	min. Earth dist.	9522 Jan 07 08:39	22°☾56'47	45.18173 AU
max. Earth dist.	9513 Jul 01 06:01	13°☾27'08	45.65841 AU	opposition	9522 Jan 09 11:41	22°☾54'17	-16°36'33
retrograde	9513 Oct 08 20:34	15°☾02'45		direct	9522 Apr 01 12:27	21°☾52'30	
min. Earth dist.	9513 Dec 29 00:39	14°☾01'46	43.82369 AU				
opposition	9513 Dec 31 08:45	13°☾58'58	-15°57'36	conjunction	9522 Jul 09 02:14	23°☾25'43	-15°56'29
direct	9514 Mar 23 10:23	12°☾55'49		minimum elong	9522 Jul 09 02:14	23°☾25'43	15°56'48
				max. Earth dist.	9522 Jul 11 04:50	23°☾28'52	47.17701 AU
conjunction	9514 Jun 30 06:13	14°☾32'03	-15°19'21	retrograde	9522 Oct 19 00:29	25°☾01'44	
minimum elong	9514 Jun 30 06:09	14°☾32'03	15°19'40	min. Earth dist.	9523 Jan 08 18:58	24°☾01'45	45.33213 AU
max. Earth dist.	9514 Jul 02 13:46	14°☾35'36	45.84115 AU	opposition	9523 Jan 10 20:18	23°☾59'20	-16°39'50
retrograde	9514 Oct 10 07:26	16°☾10'54		direct	9523 Apr 02 22:55	22°☾57'41	
min. Earth dist.	9514 Dec 30 10:30	15°☾10'05	44.00625 AU				

conjunction	9523 Jul 10 09:57	24°☾30'32 -15°59'35	direct	9531 Apr 11 10:56	1°♈26'10
minimum elong	9523 Jul 10 09:56	24°☾30'32 15°59'54			
max. Earth dist.	9523 Jul 12 12:16	24°☾33'38 47.32515 AU	conjunction	9531 Jul 18 18:58	2°♈56'39 -16°12'18
retrograde	9523 Oct 20 08:34	26°☾06'12	minimum elong	9531 Jul 18 19:02	2°♈56'39 16°12'35
min. Earth dist.	9524 Jan 10 03:07	25°☾06'21 45.47913 AU	max. Earth dist.	9531 Jul 20 15:31	2°♈59'20 48.40357 AU
opposition	9524 Jan 12 04:34	25°☾03'56 -16°42'45	retrograde	9531 Oct 28 21:09	4°♈30'03
direct	9524 Apr 03 08:13	24°☾02'24	min. Earth dist.	9532 Jan 18 21:35	3°♈30'58 46.54574 AU
			opposition	9532 Jan 20 17:49	3°♈28'52 -16°53'41
conjunction	9524 Jul 10 17:26	25°☾34'55 -16°02'20	direct	9532 Apr 11 16:19	2°♈28'26
minimum elong	9524 Jul 10 17:27	25°☾34'55 16°02'40			
max. Earth dist.	9524 Jul 12 18:32	25°☾37'56 47.47023 AU	conjunction	9532 Jul 19 01:47	3°♈58'39 -16°12'32
retrograde	9524 Oct 20 19:39	27°☾10'16	minimum elong	9532 Jul 19 01:49	3°♈58'40 16°12'50
min. Earth dist.	9525 Jan 10 11:47	26°☾10'30 45.62343 AU	max. Earth dist.	9532 Jul 20 21:47	4°♈01'18 48.52030 AU
opposition	9525 Jan 12 12:47	26°☾08'07 -16°45'18	retrograde	9532 Oct 29 02:08	5°♈31'48
direct	9525 Apr 04 12:42	25°☾06'43	min. Earth dist.	9533 Jan 19 06:58	4°♈32'42 46.65992 AU
			opposition	9533 Jan 21 01:01	4°♈30'42 -16°53'41
conjunction	9525 Jul 12 00:53	26°☾38'55 -16°04'45	direct	9533 Apr 13 00:43	3°♈30'22
minimum elong	9525 Jul 12 00:53	26°☾38'55 16°05'03			
max. Earth dist.	9525 Jul 14 02:33	26°☾41'57 47.61274 AU	conjunction	9533 Jul 20 08:28	5°♈00'18 -16°12'30
retrograde	9525 Oct 22 03:09	28°☾13'57	minimum elong	9533 Jul 20 08:33	5°♈00'18 16°12'47
min. Earth dist.	9526 Jan 11 20:49	27°☾14'15 45.76498 AU	max. Earth dist.	9533 Jul 22 03:29	5°♈02'53 48.63196 AU
opposition	9526 Jan 13 20:47	27°☾11'56 -16°47'30	retrograde	9533 Oct 30 07:09	6°♈33'11
direct	9526 Apr 05 20:12	26°☾10'40	min. Earth dist.	9534 Jan 20 14:00	5°♈34'09 46.76896 AU
			opposition	9534 Jan 22 07:54	5°♈32'09 -16°53'25
conjunction	9526 Jul 13 08:08	27°☾42'33 -16°06'49	direct	9534 Apr 14 10:27	4°♈31'55
minimum elong	9526 Jul 13 08:10	27°☾42'33 16°07'08			
max. Earth dist.	9526 Jul 15 08:29	27°☾45'31 47.75268 AU	conjunction	9534 Jul 21 14:53	6°♈01'34 -16°12'12
retrograde	9526 Oct 23 08:02	29°☾17'17	minimum elong	9534 Jul 21 14:56	6°♈01'34 16°12'29
min. Earth dist.	9527 Jan 13 04:04	28°☾17'45 45.90392 AU	max. Earth dist.	9534 Jul 23 08:13	6°♈04'02 48.73867 AU
opposition	9527 Jan 15 04:28	28°☾15'25 -16°49'21	retrograde	9534 Oct 31 16:07	7°♈34'10
direct	9527 Apr 07 03:58	27°☾14'18	min. Earth dist.	9535 Jan 21 22:04	6°♈35'09 46.87353 AU
			opposition	9535 Jan 23 14:38	6°♈33'13 -16°52'52
conjunction	9527 Jul 14 15:17	28°☾45'53 -16°08'32	direct	9535 Apr 15 16:38	5°♈33'03
minimum elong	9527 Jul 14 15:18	28°☾45'54 16°08'51			
max. Earth dist.	9527 Jul 16 15:35	28°☾48'50 47.88988 AU	conjunction	9535 Jul 22 21:18	7°♈02'27 -16°11'37
	9527 Sep 11 00:03	0°♈	minimum elong	9535 Jul 22 21:24	7°♈02'27 16°11'54
retrograde	9527 Oct 24 13:34	0°♈20'21	max. Earth dist.	9535 Jul 24 14:56	7°♈04'55 48.84132 AU
	9527 Dec 08 06:41	30°♈☾	retrograde	9535 Nov 01 23:01	8°♈34'47
min. Earth dist.	9528 Jan 14 13:22	29°☾20'53 46.03998 AU	min. Earth dist.	9536 Jan 23 05:43	7°♈35'48 46.97418 AU
opposition	9528 Jan 16 12:18	29°☾18'37 -16°50'51	opposition	9536 Jan 24 21:19	7°♈33'55 -16°52'02
direct	9528 Apr 07 14:16	28°☾17'39	direct	9536 Apr 15 22:48	6°♈33'50
conjunction	9528 Jul 14 22:16	29°☾48'57 -16°09'56	conjunction	9536 Jul 23 03:20	8°♈02'58 -16°10'45
minimum elong	9528 Jul 14 22:18	29°☾48'57 16°10'15	minimum elong	9536 Jul 23 03:24	8°♈02'58 16°11'02
max. Earth dist.	9528 Jul 16 22:10	29°☾51'52 48.02420 AU	max. Earth dist.	9536 Jul 24 19:24	8°♈05'20 48.94047 AU
	9528 Jul 22 12:27	0°♈	retrograde	9536 Nov 02 05:07	9°♈35'03
retrograde	9528 Oct 24 21:14	1°♈23'09	min. Earth dist.	9537 Jan 23 12:09	8°♈36'09 47.07160 AU
min. Earth dist.	9529 Jan 14 20:55	0°♈23'49 46.17275 AU	opposition	9537 Jan 25 03:52	8°♈34'16 -16°50'53
opposition	9529 Jan 16 19:51	0°♈21'34 -16°52'01	direct	9537 Apr 17 03:40	7°♈34'16
	9529 Feb 04 21:05	30°♈☾			
direct	9529 Apr 08 23:09	29°☾20'45	conjunction	9537 Jul 24 09:29	9°♈03'10 -16°09'36
	9529 Jun 08 08:28	0°♈	minimum elong	9537 Jul 24 09:36	9°♈03'11 16°09'53
			max. Earth dist.	9537 Jul 26 01:32	9°♈05'33 49.03643 AU
conjunction	9529 Jul 16 05:11	0°♈51'46 -16°11'01	retrograde	9537 Nov 03 08:46	10°♈35'03
minimum elong	9529 Jul 16 05:14	0°♈51'46 16°11'19	min. Earth dist.	9538 Jan 24 20:07	9°♈36'09 47.16591 AU
max. Earth dist.	9529 Jul 18 03:43	0°♈54'35 48.15495 AU	opposition	9538 Jan 26 10:14	9°♈34'21 -16°49'27
retrograde	9529 Oct 26 06:55	2°♈25'42	direct	9538 Apr 18 11:48	8°♈34'27
min. Earth dist.	9530 Jan 16 05:26	1°♈26'28 46.30181 AU			
opposition	9530 Jan 18 03:15	1°♈24'16 -16°52'52	conjunction	9538 Jul 25 15:33	10°♈03'08 -16°08'10
direct	9530 Apr 10 04:48	0°♈23'35	minimum elong	9538 Jul 25 15:38	10°♈03'08 16°08'26
			max. Earth dist.	9538 Jul 27 06:54	10°♈05'28 49.12956 AU
conjunction	9530 Jul 17 12:14	1°♈54'20 -16°11'48	retrograde	9538 Nov 04 13:56	11°♈34'48
minimum elong	9530 Jul 17 12:16	1°♈54'20 16°12'07	min. Earth dist.	9539 Jan 26 02:04	10°♈36'02 47.25721 AU
max. Earth dist.	9530 Jul 19 10:51	1°♈57'09 48.28164 AU	opposition	9539 Jan 27 16:27	10°♈34'13 -16°47'43
retrograde	9530 Oct 27 14:22	3°♈28'01	direct	9539 Apr 19 19:33	9°♈34'25
min. Earth dist.	9531 Jan 17 14:10	2°♈28'50 46.42626 AU			
opposition	9531 Jan 19 10:36	2°♈26'42 -16°53'25	conjunction	9539 Jul 26 21:17	11°♈02'54 -16°06'26

minimum elong	9539 Jul 26 21:23	11°02'55	16°06'43	conjunction	9547 Aug 03 18:38	18°056'07	-15°43'28
max. Earth dist.	9539 Jul 28 11:30	11°05'09	49.21959 AU	minimum elong	9547 Aug 03 18:46	18°056'07	15°43'43
retrograde	9539 Nov 05 22:17	12°034'24		max. Earth dist.	9547 Aug 05 01:23	18°057'53	49.78800 AU
min. Earth dist.	9540 Jan 27 09:34	11°035'40	47.34545 AU	retrograde	9547 Nov 13 20:51	20°026'14	
opposition	9540 Jan 28 22:47	11°033'55	-16°45'42	opposition	9548 Feb 05 21:21	19°026'23	-16°20'20
direct	9540 Apr 20 01:03	10°034'15		min. Earth dist.	9548 Feb 04 16:41	19°027'43	47.89161 AU
				direct	9548 Apr 27 20:34	18°027'19	
conjunction	9540 Jul 27 03:12	12°02'32	-16°04'25	conjunction	9548 Aug 03 23:59	19°054'15	-15°39'32
minimum elong	9540 Jul 27 03:18	12°02'33	16°04'41	minimum elong	9548 Aug 04 00:08	19°054'15	15°39'47
max. Earth dist.	9540 Jul 28 17:41	12°02'48	49.30651 AU	max. Earth dist.	9548 Aug 05 06:00	19°055'59	49.83854 AU
retrograde	9540 Nov 06 05:16	13°033'51		retrograde	9548 Nov 13 23:05	21°024'11	
min. Earth dist.	9541 Jan 27 16:26	12°035'12	47.43020 AU	min. Earth dist.	9549 Feb 04 21:42	20°025'43	47.93981 AU
opposition	9541 Jan 29 04:51	12°033'29	-16°43'23	opposition	9549 Feb 06 02:35	20°024'22	-16°16'04
direct	9541 Apr 21 06:08	11°033'56		direct	9549 Apr 29 03:32	19°025'21	
conjunction	9541 Jul 28 08:55	13°02'04	-16°02'08	conjunction	9549 Aug 05 05:07	20°052'07	-15°35'20
minimum elong	9541 Jul 28 09:02	13°02'04	16°02'25	minimum elong	9549 Aug 05 05:15	20°052'07	15°35'34
max. Earth dist.	9541 Jul 29 21:34	13°02'48	49.38983 AU	max. Earth dist.	9549 Aug 06 09:51	20°053'47	49.88581 AU
retrograde	9541 Nov 07 12:19	14°033'12		retrograde	9549 Nov 15 05:27	22°021'55	
min. Earth dist.	9542 Jan 28 22:48	13°034'40	47.51109 AU	min. Earth dist.	9550 Feb 06 04:24	21°023'25	47.98497 AU
opposition	9542 Jan 30 10:52	13°032'58	-16°40'49	opposition	9550 Feb 07 07:55	21°022'08	-16°11'32
direct	9542 Apr 22 08:44	12°033'31		direct	9550 Apr 30 09:50	20°023'09	
conjunction	9542 Jul 29 14:44	14°01'30	-15°59'36	conjunction	9550 Aug 06 10:21	21°049'46	-15°30'53
minimum elong	9542 Jul 29 14:51	14°01'30	15°59'51	minimum elong	9550 Aug 06 10:30	21°049'47	15°31'07
max. Earth dist.	9542 Jul 31 03:01	14°03'37	49.46881 AU	max. Earth dist.	9550 Aug 07 15:21	21°051'26	49.93019 AU
	9542 Sep 12 20:34	15°00		retrograde	9550 Nov 16 11:01	23°019'26	
retrograde	9542 Nov 08 16:41	15°032'29		min. Earth dist.	9551 Feb 07 09:58	22°020'58	48.02711 AU
	9543 Jan 06 04:53	15°00		opposition	9551 Feb 08 13:02	22°019'42	-16°06'44
min. Earth dist.	9543 Jan 30 06:51	14°033'57	47.58730 AU	direct	9551 May 01 15:52	21°020'46	
opposition	9543 Jan 31 16:48	14°032'21	-16°37'59				
direct	9543 Apr 23 14:35	13°033'01		conjunction	9551 Aug 07 15:22	22°047'15	-15°26'11
conjunction	9543 Jul 30 20:33	15°00'50	-15°56'50	minimum elong	9551 Aug 07 15:31	22°047'16	15°26'24
minimum elong	9543 Jul 30 20:40	15°00'50	15°57'06	max. Earth dist.	9551 Aug 08 18:41	22°048'50	49.97175 AU
	9543 Jul 30 06:25	15°00		retrograde	9551 Nov 17 18:39	24°016'47	
max. Earth dist.	9543 Aug 01 07:39	15°02'53	49.54305 AU	opposition	9552 Feb 09 18:13	23°017'07	-16°01'40
retrograde	9543 Nov 09 20:21	16°031'40		min. Earth dist.	9552 Feb 08 15:20	23°018'22	48.06645 AU
opposition	9544 Feb 01 22:41	15°031'37	-16°34'55	direct	9552 May 01 17:30	22°018'15	
min. Earth dist.	9544 Jan 31 12:55	15°033'12	47.65840 AU				
	9544 Mar 02 11:26	15°00		conjunction	9552 Aug 07 20:22	23°044'37	-15°21'13
direct	9544 Apr 23 23:18	14°032'22		minimum elong	9552 Aug 07 20:32	23°044'38	15°21'27
	9544 Jun 13 22:23	15°00		max. Earth dist.	9552 Aug 08 23:43	23°046'11	50.01028 AU
conjunction	9544 Jul 31 02:07	16°00'00	-15°53'50	retrograde	9552 Nov 17 23:39	25°014'02	
minimum elong	9544 Jul 31 02:16	16°00'01	15°54'05	opposition	9553 Feb 09 23:26	24°014'26	-15°56'21
max. Earth dist.	9544 Aug 01 11:23	16°001'57	49.61190 AU	min. Earth dist.	9553 Feb 08 22:16	24°015'36	48.10252 AU
retrograde	9544 Nov 10 04:13	17°030'41		direct	9553 May 02 21:33	23°015'38	
min. Earth dist.	9545 Jan 31 20:38	16°032'12	47.72407 AU	conjunction	9553 Aug 09 01:29	24°041'54	-15°16'00
opposition	9545 Feb 02 04:39	16°030'42	-16°31'37	minimum elong	9553 Aug 09 01:39	24°041'55	15°16'13
direct	9545 Apr 25 06:06	15°031'31		max. Earth dist.	9553 Aug 10 03:55	24°043'25	50.04551 AU
conjunction	9545 Aug 01 07:54	16°058'59	-15°50'37	retrograde	9553 Nov 19 02:22	26°011'13	
minimum elong	9545 Aug 01 08:02	16°058'59	15°50'52	min. Earth dist.	9554 Feb 10 03:02	25°012'52	48.13493 AU
max. Earth dist.	9545 Aug 02 16:56	17°000'54	49.67541 AU	opposition	9554 Feb 11 04:17	25°011'41	-15°50'47
retrograde	9545 Nov 11 11:32	18°029'28		direct	9554 May 04 03:44	24°012'57	
min. Earth dist.	9546 Feb 02 03:25	17°030'59	47.78436 AU	conjunction	9554 Aug 10 06:31	25°039'08	-15°10'34
opposition	9546 Feb 03 10:13	17°029'33	-16°28'06	minimum elong	9554 Aug 10 06:41	25°039'09	15°10'48
direct	9546 Apr 26 11:06	16°030'25		max. Earth dist.	9554 Aug 11 07:19	25°040'34	50.07668 AU
conjunction	9546 Aug 02 13:22	17°057'41	-15°47'09	retrograde	9554 Nov 20 08:12	27°008'23	
minimum elong	9546 Aug 02 13:31	17°057'42	15°47'24	min. Earth dist.	9555 Feb 11 10:02	26°010'00	48.16306 AU
max. Earth dist.	9546 Aug 03 20:23	17°059'29	49.73391 AU	opposition	9555 Feb 12 09:25	26°008'55	-15°44'59
retrograde	9546 Nov 12 18:40	19°027'59		direct	9555 May 05 09:59	25°010'15	
min. Earth dist.	9547 Feb 03 09:24	18°029'32	47.84003 AU	conjunction	9555 Aug 11 11:35	26°036'21	-15°04'54
opposition	9547 Feb 04 15:47	18°028'07	-16°24'20	minimum elong	9555 Aug 11 11:46	26°036'22	15°05'07
direct	9547 Apr 27 14:18	17°029'01		max. Earth dist.	9555 Aug 12 12:18	26°037'46	50.10327 AU

retrograde	9555 Nov 21 14:37	28°05'31		min. Earth dist.	9562 Feb 18 02:20	2°04'59	48.22498 AU
opposition	9556 Feb 13 14:28	27°06'07	-15°38'58	direct	9562 May 11 17:26	1°04'48	42
min. Earth dist.	9556 Feb 12 16:01	27°07'09	48.18614 AU	evening set	9562 Aug 13 05:56	3°07'57	
direct	9556 May 05 15:05	26°07'30					
				conjunction	9562 Aug 17 22:02	3°04'19	-14°19'19
conjunction	9556 Aug 11 16:39	27°03'31	-14°59'02	minimum elong	9562 Aug 17 22:13	3°04'20	14°19'30
minimum elong	9556 Aug 11 16:49	27°03'32	14°59'15	max. Earth dist.	9562 Aug 18 15:21	3°05'18	50.15739 AU
evening set	9556 Aug 11 01:28	27°03'39		morning rise	9562 Aug 22 14:46	3°05'20	43
morning rise	9556 Aug 12 08:12	27°03'42		retrograde	9562 Nov 28 03:16	4°04'42	58
max. Earth dist.	9556 Aug 12 15:04	27°03'48	50.12471 AU	opposition	9563 Feb 19 23:58	3°04'43	-14°50'42
retrograde	9556 Nov 21 22:30	29°02'36		min. Earth dist.	9563 Feb 19 08:33	3°04'44	48.21888 AU
opposition	9557 Feb 13 19:25	28°03'15	-15°32'44	direct	9563 May 12 20:12	2°04'51	16
min. Earth dist.	9557 Feb 12 21:49	28°04'15	48.20401 AU	evening set	9563 Aug 14 01:02	4°03'56	
direct	9557 May 06 17:16	27°04'40					
evening set	9557 Aug 10 23:26	28°02'58		conjunction	9563 Aug 19 02:41	4°03'51	-14°11'53
				minimum elong	9563 Aug 19 02:53	4°03'52	14°12'05
conjunction	9557 Aug 12 21:46	28°03'37	-14°52'58	max. Earth dist.	9563 Aug 19 19:17	4°03'51	50.15102 AU
minimum elong	9557 Aug 12 21:58	28°03'37	14°53'10	morning rise	9563 Aug 24 05:00	4°03'51	48
morning rise	9557 Aug 14 20:32	28°03'17		retrograde	9563 Nov 29 05:28	5°03'39	28
max. Earth dist.	9557 Aug 13 19:29	28°03'51	50.14078 AU	opposition	9564 Feb 21 04:34	4°04'16	-14°42'51
retrograde	9557 Nov 23 01:39	29°05'36		min. Earth dist.	9564 Feb 20 12:47	4°04'10	48.20982 AU
min. Earth dist.	9558 Feb 14 04:47	29°01'11	48.21650 AU	direct	9564 May 13 01:03	3°04'15	50
opposition	9558 Feb 15 00:24	29°00'16	-15°26'18	evening set	9564 Aug 13 20:36	4°05'59	58
direct	9558 May 07 22:18	28°01'43					
evening set	9558 Aug 11 10:36	29°02'55		conjunction	9564 Aug 19 07:24	5°07'24	-14°04'13
				minimum elong	9564 Aug 19 07:35	5°07'25	14°04'23
conjunction	9558 Aug 14 02:44	29°02'35	-14°46'41	max. Earth dist.	9564 Aug 19 22:35	5°08'16	50.14153 AU
minimum elong	9558 Aug 14 02:54	29°02'35	14°46'53	morning rise	9564 Aug 24 18:58	5°08'14	52
max. Earth dist.	9558 Aug 14 23:20	29°02'45	50.15188 AU	retrograde	9564 Nov 29 09:43	6°03'60	00
morning rise	9558 Aug 16 19:19	29°03'16		opposition	9565 Feb 21 09:12	5°03'65	-14°34'45
	9558 Sep 07 08:03	0°00'		min. Earth dist.	9565 Feb 20 19:05	5°03'72	48.19760 AU
retrograde	9558 Nov 24 03:36	0°05'29		direct	9565 May 14 07:58	4°03'38	26
	9559 Feb 13 16:06	30°08'00		evening set	9565 Aug 14 16:47	5°05'56	05
min. Earth dist.	9559 Feb 15 09:38	29°05'04	48.22423 AU				
opposition	9559 Feb 16 05:07	29°05'10	-15°19'39	conjunction	9565 Aug 20 12:20	6°03'59	-13°56'19
direct	9559 May 09 04:38	28°05'38		minimum elong	9565 Aug 20 12:31	6°04'00	13°56'30
	9559 Jul 28 05:40	0°00'		max. Earth dist.	9565 Aug 21 03:39	6°04'51	50.12871 AU
evening set	9559 Aug 12 01:12	0°01'57		morning rise	9565 Aug 26 08:35	6°05'11	57
				retrograde	9565 Nov 30 15:36	7°03'32	35
conjunction	9559 Aug 15 07:34	0°02'25	-14°40'12	opposition	9566 Feb 22 13:46	6°03'33	-14°26'26
minimum elong	9559 Aug 15 07:46	0°02'26	14°40'23	min. Earth dist.	9566 Feb 22 00:20	6°03'40	48.18159 AU
max. Earth dist.	9559 Aug 16 02:38	0°02'53	50.15848 AU	direct	9566 May 15 13:51	5°03'35	05
morning rise	9559 Aug 18 14:28	0°02'58		evening set	9566 Aug 15 13:17	6°05'52	16
retrograde	9559 Nov 25 09:18	1°05'31					
opposition	9560 Feb 17 09:59	0°05'53	-15°12'47	conjunction	9566 Aug 21 17:04	7°00'38	-13°48'12
min. Earth dist.	9560 Feb 16 16:10	0°05'44	48.22794 AU	minimum elong	9566 Aug 21 17:16	7°00'39	13°48'21
	9560 Apr 18 17:36	30°08'00		max. Earth dist.	9566 Aug 22 06:19	7°01'23	50.11185 AU
direct	9560 May 09 10:37	29°05'55		morning rise	9566 Aug 27 21:43	7°00'09	05
	9560 May 29 21:16	0°00'		retrograde	9566 Dec 02 00:21	8°02'29	14
evening set	9560 Aug 11 17:43	1°05'15		opposition	9567 Feb 23 18:20	7°03'30	-14°17'54
				min. Earth dist.	9567 Feb 23 05:43	7°03'40	48.16131 AU
conjunction	9560 Aug 15 12:25	1°05'21	-14°33'28	direct	9567 May 16 15:16	6°03'31	47
minimum elong	9560 Aug 15 12:36	1°05'21	14°33'39	evening set	9567 Aug 16 10:10	7°04'48	31
max. Earth dist.	9560 Aug 16 07:36	1°05'22	50.16138 AU				
morning rise	9560 Aug 19 07:38	1°05'26		conjunction	9567 Aug 22 22:03	7°05'57	-13°39'53
retrograde	9560 Nov 25 14:21	2°04'49		minimum elong	9567 Aug 22 22:15	7°05'57	13°40'02
opposition	9561 Feb 17 14:42	1°05'30	-15°05'40	max. Earth dist.	9567 Aug 23 10:37	7°05'58	50.09026 AU
min. Earth dist.	9561 Feb 16 21:19	1°05'51	48.22800 AU	morning rise	9567 Aug 29 10:48	8°06'06	14
direct	9561 May 10 16:26	0°05'52		retrograde	9567 Dec 03 05:14	9°02'55	57
evening set	9561 Aug 12 11:28	2°05'11		opposition	9568 Feb 24 23:04	8°02'56	-14°09'09
				min. Earth dist.	9568 Feb 24 12:29	8°02'57	48.13595 AU
conjunction	9561 Aug 16 17:12	2°05'17	-14°26'31	direct	9568 May 16 18:49	7°02'28	31
minimum elong	9561 Aug 16 17:24	2°05'17	14°26'42	evening set	9568 Aug 16 07:29	8°04'44	48
max. Earth dist.	9561 Aug 17 10:39	2°05'18	50.16093 AU				
morning rise	9561 Aug 20 23:34	2°05'23		conjunction	9568 Aug 23 03:02	8°05'54	-13°31'22
retrograde	9561 Nov 26 22:10	3°04'46		minimum elong	9568 Aug 23 03:15	8°05'54	13°31'30
opposition	9562 Feb 18 19:14	2°04'47	-14°58'18	max. Earth dist.	9568 Aug 23 14:21	8°05'54	50.06351 AU

morning rise	9568 Aug 29 23:28	9° $\mathring{\mu}$ 03'24	conjunction	9575 Aug 30 13:25	15° $\mathring{\mu}$ 29'31	-12°25'57
retrograde	9568 Dec 03 07:41	10° $\mathring{\mu}$ 22'39	minimum elong	9575 Aug 30 13:37	15° $\mathring{\mu}$ 29'32	12°26'03
opposition	9569 Feb 25 03:42	9° $\mathring{\mu}$ 23'34 -14°00'12	max. Earth dist.	9575 Aug 30 17:55	15° $\mathring{\mu}$ 29'46	49.74548 AU
min. Earth dist.	9569 Feb 24 17:27	9° $\mathring{\mu}$ 24'02 48.10511 AU	morning rise	9575 Sep 08 10:27	15° $\mathring{\mu}$ 41'35	
direct	9569 May 17 23:56	8° $\mathring{\mu}$ 25'12	retrograde	9575 Dec 10 16:49	16° $\mathring{\mu}$ 58'11	
evening set	9569 Aug 17 04:59	9° $\mathring{\mu}$ 41'05	opposition	9576 Mar 03 11:43	15° $\mathring{\mu}$ 58'53	-12°51'33
			min. Earth dist.	9576 Mar 03 08:21	15° $\mathring{\mu}$ 59'03	47.76432 AU
conjunction	9569 Aug 24 08:02	9° $\mathring{\mu}$ 50'46 -13°22'39	direct	9576 May 24 10:40	15° $\mathring{\mu}$ 00'18	
minimum elong	9569 Aug 24 08:13	9° $\mathring{\mu}$ 50'47 13°22'47	evening set	9576 Aug 21 16:08	16° $\mathring{\mu}$ 13'42	
max. Earth dist.	9569 Aug 24 17:12	9° $\mathring{\mu}$ 51'17 50.03110 AU				
morning rise	9569 Aug 31 12:06	10° $\mathring{\mu}$ 00'31	conjunction	9576 Aug 30 18:14	16° $\mathring{\mu}$ 26'03	-12°15'43
retrograde	9569 Dec 04 11:44	11° $\mathring{\mu}$ 19'20	minimum elong	9576 Aug 30 18:27	16° $\mathring{\mu}$ 26'04	12°15'49
opposition	9570 Feb 26 08:19	10° $\mathring{\mu}$ 20'13 -13°51'03	max. Earth dist.	9576 Aug 30 20:56	16° $\mathring{\mu}$ 26'12	49.68642 AU
min. Earth dist.	9570 Feb 26 00:13	10° $\mathring{\mu}$ 20'36 48.06880 AU	morning rise	9576 Sep 08 21:42	16° $\mathring{\mu}$ 38'29	
direct	9570 May 19 05:52	9° $\mathring{\mu}$ 21'50	retrograde	9576 Dec 11 01:40	17° $\mathring{\mu}$ 54'48	
evening set	9570 Aug 18 02:45	10° $\mathring{\mu}$ 37'18	opposition	9577 Mar 04 16:20	16° $\mathring{\mu}$ 55'30	-12°40'49
			min. Earth dist.	9577 Mar 04 13:37	16° $\mathring{\mu}$ 55'38	47.70231 AU
conjunction	9570 Aug 25 13:05	10° $\mathring{\mu}$ 47'23 -13°13'44	direct	9577 May 25 11:55	15° $\mathring{\mu}$ 56'55	
minimum elong	9570 Aug 25 13:18	10° $\mathring{\mu}$ 47'24 13°13'52	evening set	9577 Aug 22 14:57	17° $\mathring{\mu}$ 10'03	
max. Earth dist.	9570 Aug 25 22:01	10° $\mathring{\mu}$ 47'53 49.99348 AU				
morning rise	9570 Sep 02 00:21	10° $\mathring{\mu}$ 57'32	conjunction	9577 Aug 31 23:21	17° $\mathring{\mu}$ 22'46	-12°05'15
retrograde	9570 Dec 05 15:43	12° $\mathring{\mu}$ 15'56	minimum elong	9577 Aug 31 23:33	17° $\mathring{\mu}$ 22'46	12°05'20
opposition	9571 Feb 27 12:54	11° $\mathring{\mu}$ 16'47 -13°41'42	max. Earth dist.	9577 Sep 01 01:40	17° $\mathring{\mu}$ 22'53	49.62398 AU
min. Earth dist.	9571 Feb 27 05:28	11° $\mathring{\mu}$ 17'08 48.02739 AU	morning rise	9577 Sep 10 09:02	17° $\mathring{\mu}$ 35'33	
direct	9571 May 20 12:28	10° $\mathring{\mu}$ 18'21	retrograde	9577 Dec 12 07:40	18° $\mathring{\mu}$ 51'36	
evening set	9571 Aug 19 00:30	11° $\mathring{\mu}$ 33'25	opposition	9578 Mar 05 20:55	17° $\mathring{\mu}$ 52'18	-12°29'51
			min. Earth dist.	9578 Mar 05 19:51	17° $\mathring{\mu}$ 52'21	47.63668 AU
conjunction	9571 Aug 26 17:47	11° $\mathring{\mu}$ 43'54 -13°04'37	direct	9578 May 26 14:58	16° $\mathring{\mu}$ 53'42	
minimum elong	9571 Aug 26 17:58	11° $\mathring{\mu}$ 43'54 13°04'45	evening set	9578 Aug 23 14:05	18° $\mathring{\mu}$ 06'36	
max. Earth dist.	9571 Aug 27 00:45	11° $\mathring{\mu}$ 44'17 49.95117 AU				
morning rise	9571 Sep 03 12:09	11° $\mathring{\mu}$ 54'27	conjunction	9578 Sep 02 04:27	18° $\mathring{\mu}$ 19'40	-11°54'33
retrograde	9571 Dec 06 23:16	13° $\mathring{\mu}$ 12'27	minimum elong	9578 Sep 02 04:40	18° $\mathring{\mu}$ 19'40	11°54'39
opposition	9572 Feb 28 17:32	12° $\mathring{\mu}$ 13'15 -13°32'08	max. Earth dist.	9578 Sep 02 05:52	18° $\mathring{\mu}$ 19'45	49.55785 AU
min. Earth dist.	9572 Feb 28 10:56	12° $\mathring{\mu}$ 13'34 47.98171 AU	morning rise	9578 Sep 11 20:08	18° $\mathring{\mu}$ 32'48	
direct	9572 May 20 15:11	11° $\mathring{\mu}$ 14'47	retrograde	9578 Dec 13 10:48	19° $\mathring{\mu}$ 48'36	
evening set	9572 Aug 18 22:30	12° $\mathring{\mu}$ 29'27	opposition	9579 Mar 07 01:31	18° $\mathring{\mu}$ 49'18	-12°18'39
			min. Earth dist.	9579 Mar 07 00:39	18° $\mathring{\mu}$ 49'20	47.56700 AU
conjunction	9572 Aug 26 22:44	12° $\mathring{\mu}$ 40'20 -12°55'17	direct	9579 May 27 19:40	17° $\mathring{\mu}$ 50'41	
minimum elong	9572 Aug 26 22:57	12° $\mathring{\mu}$ 40'21 12°55'26	evening set	9579 Aug 24 13:14	19° $\mathring{\mu}$ 03'22	
max. Earth dist.	9572 Aug 27 05:19	12° $\mathring{\mu}$ 40'42 49.90471 AU				
morning rise	9572 Sep 04 00:03	12° $\mathring{\mu}$ 51'16	conjunction	9579 Sep 03 09:28	19° $\mathring{\mu}$ 16'46	-11°43'39
retrograde	9572 Dec 07 04:48	14° $\mathring{\mu}$ 08'53	minimum elong	9579 Sep 03 09:41	19° $\mathring{\mu}$ 16'47	11°43'44
opposition	9573 Feb 28 22:04	13° $\mathring{\mu}$ 09'39 -13°22'21	max. Earth dist.	9579 Sep 03 08:58	19° $\mathring{\mu}$ 16'45	49.48716 AU
min. Earth dist.	9573 Feb 28 17:04	13° $\mathring{\mu}$ 09'53 47.93216 AU	morning rise	9579 Sep 13 07:14	19° $\mathring{\mu}$ 30'15	
direct	9573 May 21 18:22	12° $\mathring{\mu}$ 11'08	retrograde	9579 Dec 14 14:59	20° $\mathring{\mu}$ 45'49	
evening set	9573 Aug 19 20:46	13° $\mathring{\mu}$ 25'28	opposition	9580 Mar 07 06:23	19° $\mathring{\mu}$ 46'30	-12°07'14
			min. Earth dist.	9580 Mar 07 07:35	19° $\mathring{\mu}$ 46'27	47.49252 AU
conjunction	9573 Aug 28 03:39	13° $\mathring{\mu}$ 36'43 -12°45'44	direct	9580 May 28 01:41	18° $\mathring{\mu}$ 47'52	
minimum elong	9573 Aug 28 03:51	13° $\mathring{\mu}$ 36'44 12°45'51	evening set	9580 Aug 24 12:46	20° $\mathring{\mu}$ 00'20	
max. Earth dist.	9573 Aug 28 09:21	13° $\mathring{\mu}$ 37'02 49.85482 AU				
morning rise	9573 Sep 05 11:38	13° $\mathring{\mu}$ 48'02	conjunction	9580 Sep 03 14:56	20° $\mathring{\mu}$ 14'04	-11°32'33
retrograde	9573 Dec 08 08:06	15° $\mathring{\mu}$ 05'16	minimum elong	9580 Sep 03 15:08	20° $\mathring{\mu}$ 14'04	11°32'39
opposition	9574 Mar 02 02:32	14° $\mathring{\mu}$ 06'01 -13°12'19	max. Earth dist.	9580 Sep 03 14:02	20° $\mathring{\mu}$ 14'01	49.41144 AU
min. Earth dist.	9574 Mar 01 21:18	14° $\mathring{\mu}$ 06'16 47.87928 AU	morning rise	9580 Sep 13 18:23	20° $\mathring{\mu}$ 27'53	
direct	9574 May 22 22:14	13° $\mathring{\mu}$ 07'28	retrograde	9580 Dec 14 19:31	21° $\mathring{\mu}$ 43'13	
evening set	9574 Aug 20 19:00	14° $\mathring{\mu}$ 21'28	opposition	9581 Mar 08 11:04	20° $\mathring{\mu}$ 43'52	-11°55'38
			min. Earth dist.	9581 Mar 08 13:03	20° $\mathring{\mu}$ 43'47	47.41269 AU
conjunction	9574 Aug 29 08:25	14° $\mathring{\mu}$ 33'05 -12°35'58	direct	9581 May 29 08:21	19° $\mathring{\mu}$ 45'11	
minimum elong	9574 Aug 29 08:38	14° $\mathring{\mu}$ 33'06 12°36'05	evening set	9581 Aug 25 12:33	20° $\mathring{\mu}$ 57'25	
max. Earth dist.	9574 Aug 29 12:42	14° $\mathring{\mu}$ 33'20 49.80160 AU				
morning rise	9574 Sep 06 23:07	14° $\mathring{\mu}$ 44'47	conjunction	9581 Sep 04 20:15	21° $\mathring{\mu}$ 11'29	-11°21'16
retrograde	9574 Dec 09 12:07	16° $\mathring{\mu}$ 01'42	minimum elong	9581 Sep 04 20:28	21° $\mathring{\mu}$ 11'29	11°21'20
opposition	9575 Mar 03 07:09	15° $\mathring{\mu}$ 02'25 -13°02'04	max. Earth dist.	9581 Sep 04 17:02	21° $\mathring{\mu}$ 11'18	49.33041 AU
min. Earth dist.	9575 Mar 03 03:33	15° $\mathring{\mu}$ 02'35 47.82330 AU	morning rise	9581 Sep 15 05:31	21° $\mathring{\mu}$ 25'39	
direct	9575 May 24 04:30	14° $\mathring{\mu}$ 03'51	retrograde	9581 Dec 16 03:49	22° $\mathring{\mu}$ 40'44	
evening set	9575 Aug 21 17:29	15° $\mathring{\mu}$ 17'32	opposition	9582 Mar 09 15:52	21° $\mathring{\mu}$ 41'20	-11°43'49
			min. Earth dist.	9582 Mar 09 19:05	21° $\mathring{\mu}$ 41'11	47.32765 AU

direct	9582 May 30 11:19	20° \mathring{M} 42'35	retrograde	9588 Dec 22 19:06	29° \mathring{M} 25'14
evening set	9582 Aug 26 12:12	21° \mathring{M} 54'35	opposition	9589 Mar 16 02:10	28° \mathring{M} 25'18 -10°14'40
			min. Earth dist.	9589 Mar 16 10:56	28° \mathring{M} 24'53 46.62502 AU
conjunction	9582 Sep 06 01:35	22° \mathring{M} 08'59 -11°09'46	direct	9589 Jun 05 18:26	27° \mathring{M} 25'57
minimum elong	9582 Sep 06 01:46	22° \mathring{M} 08'59 11°09'50	evening set	9589 Aug 31 14:46	28° \mathring{M} 36'47
max. Earth dist.	9582 Sep 05 21:34	22° \mathring{M} 08'45 49.24414 AU			
morning rise	9582 Sep 16 16:25	22° \mathring{M} 23'28	conjunction	9589 Sep 12 16:04	28° \mathring{M} 53'21 -9°43'01
retrograde	9582 Dec 17 10:40	23° \mathring{M} 38'19	minimum elong	9589 Sep 12 16:15	28° \mathring{M} 53'21 9°43'04
opposition	9583 Mar 10 20:44	22° \mathring{M} 38'51 -11°31'47	max. Earth dist.	9589 Sep 12 05:14	28° \mathring{M} 52'43 48.53992 AU
min. Earth dist.	9583 Mar 11 01:39	22° \mathring{M} 38'37 47.23762 AU	morning rise	9589 Sep 24 19:13	29° \mathring{M} 10'01
direct	9583 May 31 14:09	21° \mathring{M} 40'01		9589 Nov 05 20:10	0° \mathring{A}
evening set	9583 Aug 27 12:11	22° \mathring{M} 51'48	retrograde	9589 Dec 24 00:02	0° \mathring{A} 23'36
				9590 Feb 10 20:51	30° \mathring{R} \mathring{M}
conjunction	9583 Sep 07 06:57	23° \mathring{M} 06'31 -10°58'03	opposition	9590 Mar 17 07:26	29° \mathring{M} 23'36 -10°00'57
minimum elong	9583 Sep 07 07:09	23° \mathring{M} 06'32 10°58'07	min. Earth dist.	9590 Mar 17 18:01	29° \mathring{M} 23'06 46.51262 AU
max. Earth dist.	9583 Sep 07 01:58	23° \mathring{M} 06'14 49.15344 AU	direct	9590 Jun 06 23:53	28° \mathring{M} 24'12
morning rise	9583 Sep 18 03:12	23° \mathring{M} 21'20	evening set	9590 Sep 01 15:46	29° \mathring{M} 34'56
retrograde	9583 Dec 18 15:49	24° \mathring{M} 35'56			
opposition	9584 Mar 11 01:28	23° \mathring{M} 36'23 -11°19'31	conjunction	9590 Sep 13 21:55	29° \mathring{M} 51'48 -9°29'41
min. Earth dist.	9584 Mar 11 06:24	23° \mathring{M} 36'10 47.14346 AU	minimum elong	9590 Sep 13 22:07	29° \mathring{M} 51'49 9°29'42
direct	9584 May 31 17:09	22° \mathring{M} 37'28	max. Earth dist.	9590 Sep 13 11:11	29° \mathring{M} 51'11 48.42708 AU
evening set	9584 Aug 27 12:10	23° \mathring{M} 49'03		9590 Sep 19 20:09	0° \mathring{A}
			morning rise	9590 Sep 26 05:40	0° \mathring{A} 08'46
conjunction	9584 Sep 07 12:15	24° \mathring{M} 04'05 -10°46'08	retrograde	9590 Dec 25 04:15	1° \mathring{A} 22'16
minimum elong	9584 Sep 07 12:27	24° \mathring{M} 04'06 10°46'11	opposition	9591 Mar 18 12:40	0° \mathring{A} 22'13 -9°47'00
max. Earth dist.	9584 Sep 07 05:37	24° \mathring{M} 03'42 49.05873 AU	min. Earth dist.	9591 Mar 18 23:38	0° \mathring{A} 21'42 46.39637 AU
morning rise	9584 Sep 18 14:02	24° \mathring{M} 19'13		9591 Apr 07 11:43	30° \mathring{R} \mathring{M}
retrograde	9584 Dec 18 19:24	25° \mathring{M} 33'37	direct	9591 Jun 08 07:07	29° \mathring{M} 22'44
opposition	9585 Mar 12 06:25	24° \mathring{M} 33'59 -11°07'02		9591 Aug 07 09:09	0° \mathring{A}
min. Earth dist.	9585 Mar 12 13:12	24° \mathring{M} 33'39 47.04564 AU	evening set	9591 Sep 02 17:15	0° \mathring{A} 33'24
direct	9585 Jun 01 23:49	23° \mathring{M} 34'58			
evening set	9585 Aug 28 12:23	24° \mathring{M} 46'22	conjunction	9591 Sep 15 03:53	0° \mathring{A} 50'33 -9°16'09
			minimum elong	9591 Sep 15 04:04	0° \mathring{A} 50'34 9°16'10
conjunction	9585 Sep 08 17:49	25° \mathring{M} 01'42 -10°33'58	max. Earth dist.	9591 Sep 14 14:59	0° \mathring{A} 49'49 48.31012 AU
minimum elong	9585 Sep 08 18:01	25° \mathring{M} 01'42 10°34'02	morning rise	9591 Sep 27 16:26	1° \mathring{A} 07'50
max. Earth dist.	9585 Sep 08 11:17	25° \mathring{M} 01'19 48.96062 AU	retrograde	9591 Dec 26 12:31	2° \mathring{A} 21'14
morning rise	9585 Sep 20 00:42	25° \mathring{M} 17'08	opposition	9592 Mar 18 18:02	1° \mathring{A} 21'08 -9°32'50
retrograde	9585 Dec 19 22:04	26° \mathring{M} 31'20	min. Earth dist.	9592 Mar 19 06:23	1° \mathring{A} 20'32 46.27576 AU
opposition	9586 Mar 13 11:09	25° \mathring{M} 31'37 -10°54'19	direct	9592 Jun 08 10:57	0° \mathring{A} 21'34
min. Earth dist.	9586 Mar 13 18:09	25° \mathring{M} 31'17 46.94457 AU	evening set	9592 Sep 02 18:50	1° \mathring{A} 32'09
direct	9586 Jun 03 07:57	24° \mathring{M} 32'31			
evening set	9586 Aug 29 12:48	25° \mathring{M} 43'44	conjunction	9592 Sep 15 10:09	1° \mathring{A} 49'37 -9°02'23
			minimum elong	9592 Sep 15 10:21	1° \mathring{A} 49'38 9°02'23
conjunction	9586 Sep 09 23:13	25° \mathring{M} 59'23 -10°21'35	max. Earth dist.	9592 Sep 14 20:22	1° \mathring{A} 48'49 48.18827 AU
minimum elong	9586 Sep 09 23:24	25° \mathring{M} 59'24 10°21'38	morning rise	9592 Sep 28 03:12	2° \mathring{A} 07'11
max. Earth dist.	9586 Sep 09 14:52	25° \mathring{M} 58'54 48.85957 AU	retrograde	9592 Dec 26 20:24	3° \mathring{A} 20'31
morning rise	9586 Sep 21 11:23	26° \mathring{M} 15'08	opposition	9593 Mar 19 23:38	2° \mathring{A} 20'19 -9°18'26
retrograde	9586 Dec 21 06:27	27° \mathring{M} 29'09	min. Earth dist.	9593 Mar 20 13:40	2° \mathring{A} 19'39 46.14995 AU
opposition	9587 Mar 14 16:07	26° \mathring{M} 29'21 -10°41'21	direct	9593 Jun 09 15:03	1° \mathring{A} 20'41
min. Earth dist.	9587 Mar 14 23:45	26° \mathring{M} 29'00 46.84081 AU	evening set	9593 Sep 03 20:48	2° \mathring{A} 31'12
direct	9587 Jun 04 11:07	25° \mathring{M} 30'10			
evening set	9587 Aug 30 13:05	26° \mathring{M} 41'13	conjunction	9593 Sep 16 16:30	2° \mathring{A} 48'57 -8°48'25
			minimum elong	9593 Sep 16 16:41	2° \mathring{A} 48'57 8°48'25
conjunction	9587 Sep 11 04:40	26° \mathring{M} 57'11 -10°08'58	max. Earth dist.	9593 Sep 16 01:21	2° \mathring{A} 48'04 48.06129 AU
minimum elong	9587 Sep 11 04:52	26° \mathring{M} 57'12 10°09'01	morning rise	9593 Sep 29 13:58	3° \mathring{A} 06'49
max. Earth dist.	9587 Sep 10 20:11	26° \mathring{M} 56'42 48.75574 AU	retrograde	9593 Dec 28 03:50	4° \mathring{A} 20'03
morning rise	9587 Sep 22 21:53	27° \mathring{M} 13'15	opposition	9594 Mar 21 05:03	3° \mathring{A} 19'46 -9°03'49
retrograde	9587 Dec 22 13:50	28° \mathring{M} 27'06	min. Earth dist.	9594 Mar 21 19:28	3° \mathring{A} 19'04 46.01899 AU
opposition	9588 Mar 14 21:15	27° \mathring{M} 27'14 -10°28'07	direct	9594 Jun 10 18:39	2° \mathring{A} 20'00
min. Earth dist.	9588 Mar 15 06:08	27° \mathring{M} 26'49 46.73426 AU	evening set	9594 Sep 04 22:52	3° \mathring{A} 30'29
direct	9588 Jun 04 14:47	26° \mathring{M} 27'58			
evening set	9588 Aug 30 13:51	27° \mathring{M} 38'53	conjunction	9594 Sep 17 22:51	3° \mathring{A} 48'31 -8°34'14
			minimum elong	9594 Sep 17 23:03	3° \mathring{A} 48'32 8°34'14
conjunction	9588 Sep 11 10:20	27° \mathring{M} 55'09 -9°56'06	max. Earth dist.	9594 Sep 17 05:44	3° \mathring{A} 47'31 47.92915 AU
minimum elong	9588 Sep 11 10:32	27° \mathring{M} 55'10 9°56'09	morning rise	9594 Oct 01 00:46	4° \mathring{A} 06'40
max. Earth dist.	9588 Sep 11 01:10	27° \mathring{M} 54'38 48.64934 AU	retrograde	9594 Dec 29 09:27	5° \mathring{A} 19'50
morning rise	9588 Sep 23 08:29	28° \mathring{M} 11'32	opposition	9595 Mar 22 10:49	4° \mathring{A} 19'26 -8°48'58

min. Earth dist.	9595 Mar 23 03:23	4° <u>0</u> 18'39	45.88320 AU	morning rise	9601 Oct 09 03:28	11° <u>0</u> 12'51
direct	9595 Jun 12 00:43	3° <u>0</u> 19'33		retrograde	9602 Jan 05 08:45	12° <u>0</u> 25'58
evening set	9595 Sep 06 00:54	4° <u>0</u> 29'59				
max. Earth dist.	9595 Sep 18 11:58	4° <u>0</u> 47'17	47.79249 AU			
conjunction	9595 Sep 19 05:15	4° <u>0</u> 48'18	-8°19'49			
minimum elong	9595 Sep 19 05:26	4° <u>0</u> 48'18	8°19'49			
morning rise	9595 Oct 02 11:16	5° <u>0</u> 06'44				
retrograde	9595 Dec 30 12:56	6° <u>0</u> 19'51				
opposition	9596 Mar 22 16:30	5° <u>0</u> 19'20	-8°33'54			
min. Earth dist.	9596 Mar 23 09:22	5° <u>0</u> 18'31	45.74308 AU			
direct	9596 Jun 12 09:25	4° <u>0</u> 19'19				
evening set	9596 Sep 06 03:26	5° <u>0</u> 29'43				
conjunction	9596 Sep 19 11:44	5° <u>0</u> 48'19	-8°05'11			
minimum elong	9596 Sep 19 11:55	5° <u>0</u> 48'19	8°05'11			
max. Earth dist.	9596 Sep 18 16:25	5° <u>0</u> 47'11	47.65180 AU			
morning rise	9596 Oct 02 22:03	6° <u>0</u> 07'01				
retrograde	9596 Dec 30 21:29	7° <u>0</u> 20'06				
opposition	9597 Mar 23 22:10	6° <u>0</u> 19'28	-8°18'34			
min. Earth dist.	9597 Mar 24 16:11	6° <u>0</u> 18'36	45.59934 AU			
direct	9597 Jun 13 13:57	5° <u>0</u> 19'19				
evening set	9597 Sep 07 06:02	6° <u>0</u> 29'42				
conjunction	9597 Sep 20 18:29	6° <u>0</u> 48'34	-7°50'19			
minimum elong	9597 Sep 20 18:39	6° <u>0</u> 48'35	7°50'18			
max. Earth dist.	9597 Sep 19 22:47	6° <u>0</u> 47'25	47.50755 AU			
morning rise	9597 Oct 04 08:42	7° <u>0</u> 07'34				
retrograde	9598 Jan 01 06:03	8° <u>0</u> 20'36				
opposition	9598 Mar 25 04:07	7° <u>0</u> 19'51	-8°03'00			
min. Earth dist.	9598 Mar 25 23:21	7° <u>0</u> 18'55	45.45225 AU			
direct	9598 Jun 14 18:13	6° <u>0</u> 19'35				
evening set	9598 Sep 08 08:48	7° <u>0</u> 29'58				
max. Earth dist.	9598 Sep 21 04:35	7° <u>0</u> 47'54	47.36034 AU			
conjunction	9598 Sep 22 01:06	7° <u>0</u> 49'06	-7°35'13			
minimum elong	9598 Sep 22 01:16	7° <u>0</u> 49'07	7°35'12			
morning rise	9598 Oct 05 19:13	8° <u>0</u> 08'22				
retrograde	9599 Jan 02 13:36	9° <u>0</u> 21'24				
opposition	9599 Mar 26 10:03	8° <u>0</u> 20'32	-7°47'11			
min. Earth dist.	9599 Mar 27 05:11	8° <u>0</u> 19'36	45.30240 AU			
direct	9599 Jun 15 22:12	7° <u>0</u> 20'07				
evening set	9599 Sep 09 11:54	8° <u>0</u> 30'32				
max. Earth dist.	9599 Sep 22 09:54	8° <u>0</u> 48'39	47.21034 AU			
conjunction	9599 Sep 23 07:56	8° <u>0</u> 49'57	-7°19'52			
minimum elong	9599 Sep 23 08:05	8° <u>0</u> 49'58	7°19'50			
morning rise	9599 Oct 07 05:56	9° <u>0</u> 09'30				
retrograde	9600 Jan 03 19:56	10° <u>0</u> 22'32				
opposition	9600 Mar 26 16:15	9° <u>0</u> 21'32	-7°31'06			
min. Earth dist.	9600 Mar 27 13:01	9° <u>0</u> 20'32	45.14994 AU			
direct	9600 Jun 16 04:34	8° <u>0</u> 21'00				
evening set	9600 Sep 09 15:08	9° <u>0</u> 31'28				
conjunction	9600 Sep 23 15:02	9° <u>0</u> 51'09	-7°04'17			
minimum elong	9600 Sep 23 15:12	9° <u>0</u> 51'10	7°04'15			
max. Earth dist.	9600 Sep 22 17:14	9° <u>0</u> 49'52	47.05780 AU			
morning rise	9600 Oct 07 16:37	10° <u>0</u> 10'58				
retrograde	9601 Jan 04 00:19	11° <u>0</u> 24'02				
opposition	9601 Mar 27 22:29	10° <u>0</u> 22'56	-7°14'45			
min. Earth dist.	9601 Mar 28 19:14	10° <u>0</u> 21'56	44.99476 AU			
direct	9601 Jun 17 13:18	9° <u>0</u> 22'17				
evening set	9601 Sep 10 18:52	10° <u>0</u> 32'49				
conjunction	9601 Sep 24 22:10	10° <u>0</u> 52'46	-6°48'27			
minimum elong	9601 Sep 24 22:19	10° <u>0</u> 52'46	6°48'23			
max. Earth dist.	9601 Sep 23 22:25	10° <u>0</u> 51'21	46.90244 AU			