

Sun

VTPH

Location: E 99°57'00.0", N12°38'00.0", 62m
(Longitude referred to Greenwich meridian)

Time Zone: 7h 00m east of Greenwich

Date (Zone)	Begin Nautical Twilight	Rise	Az.	Transit Alt.	Set	Az.	End Nautical Twilight
	h m	h m °		h m °	h m °		h m
2024 Jan 01 (Mon)	05:52	06:41 113		12:23 55S	18:05 247		18:55
2024 Jan 02 (Tue)	05:52	06:42 113		12:24 55S	18:06 247		18:55
2024 Jan 03 (Wed)	05:53	06:42 113		12:24 55S	18:06 247		18:56
2024 Jan 04 (Thu)	05:53	06:43 113		12:25 55S	18:07 247		18:56
2024 Jan 05 (Fri)	05:54	06:43 113		12:25 55S	18:08 247		18:57
2024 Jan 06 (Sat)	05:54	06:43 113		12:26 56S	18:08 247		18:57
2024 Jan 07 (Sun)	05:54	06:44 113		12:26 56S	18:09 247		18:58
2024 Jan 08 (Mon)	05:55	06:44 113		12:27 56S	18:09 247		18:59
2024 Jan 09 (Tue)	05:55	06:44 113		12:27 56S	18:10 247		18:59
2024 Jan 10 (Wed)	05:55	06:44 112		12:27 56S	18:10 248		19:00
2024 Jan 11 (Thu)	05:56	06:45 112		12:28 56S	18:11 248		19:00
2024 Jan 12 (Fri)	05:56	06:45 112		12:28 56S	18:12 248		19:01
2024 Jan 13 (Sat)	05:56	06:45 112		12:29 57S	18:12 248		19:01
2024 Jan 14 (Sun)	05:56	06:45 112		12:29 57S	18:13 248		19:02
2024 Jan 15 (Mon)	05:57	06:46 112		12:29 57S	18:13 248		19:02
2024 Jan 16 (Tue)	05:57	06:46 111		12:30 57S	18:14 249		19:02
2024 Jan 17 (Wed)	05:57	06:46 111		12:30 57S	18:14 249		19:03
2024 Jan 18 (Thu)	05:57	06:46 111		12:30 57S	18:15 249		19:03
2024 Jan 19 (Fri)	05:58	06:46 111		12:31 58S	18:15 249		19:04
2024 Jan 20 (Sat)	05:58	06:46 111		12:31 58S	18:16 249		19:04
2024 Jan 21 (Sun)	05:58	06:46 110		12:31 58S	18:16 250		19:05
2024 Jan 22 (Mon)	05:58	06:46 110		12:32 58S	18:17 250		19:05
2024 Jan 23 (Tue)	05:58	06:46 110		12:32 59S	18:17 250		19:06
2024 Jan 24 (Wed)	05:58	06:46 110		12:32 59S	18:18 250		19:06
2024 Jan 25 (Thu)	05:58	06:46 109		12:32 59S	18:18 251		19:06
2024 Jan 26 (Fri)	05:58	06:46 109		12:33 59S	18:19 251		19:07
2024 Jan 27 (Sat)	05:58	06:46 109		12:33 59S	18:19 251		19:07
2024 Jan 28 (Sun)	05:58	06:46 109		12:33 60S	18:20 251		19:08
2024 Jan 29 (Mon)	05:58	06:46 108		12:33 60S	18:20 252		19:08
2024 Jan 30 (Tue)	05:58	06:46 108		12:33 60S	18:21 252		19:08
2024 Jan 31 (Wed)	05:58	06:46 108		12:33 61S	18:21 252		19:09
2024 Feb 01 (Thu)	05:58	06:46 108		12:34 61S	18:21 253		19:09
2024 Feb 02 (Fri)	05:58	06:46 107		12:34 61S	18:22 253		19:09
2024 Feb 03 (Sat)	05:58	06:46 107		12:34 61S	18:22 253		19:10
2024 Feb 04 (Sun)	05:58	06:46 107		12:34 62S	18:23 253		19:10
2024 Feb 05 (Mon)	05:58	06:45 106		12:34 62S	18:23 254		19:10
2024 Feb 06 (Tue)	05:58	06:45 106		12:34 62S	18:23 254		19:11
2024 Feb 07 (Wed)	05:58	06:45 106		12:34 63S	18:24 254		19:11
2024 Feb 08 (Thu)	05:58	06:45 105		12:34 63S	18:24 255		19:11
2024 Feb 09 (Fri)	05:57	06:44 105		12:34 63S	18:24 255		19:11
2024 Feb 10 (Sat)	05:57	06:44 105		12:34 64S	18:25 255		19:12
2024 Feb 11 (Sun)	05:57	06:44 104		12:34 64S	18:25 256		19:12
2024 Feb 12 (Mon)	05:57	06:44 104		12:34 64S	18:25 256		19:12
2024 Feb 13 (Tue)	05:56	06:43 104		12:34 65S	18:26 256		19:12
2024 Feb 14 (Wed)	05:56	06:43 103		12:34 65S	18:26 257		19:13
2024 Feb 15 (Thu)	05:56	06:43 103		12:34 65S	18:26 257		19:13
2024 Feb 16 (Fri)	05:56	06:42 103		12:34 66S	18:26 257		19:13
2024 Feb 17 (Sat)	05:55	06:42 102		12:34 66S	18:27 258		19:13
2024 Feb 18 (Sun)	05:55	06:42 102		12:34 66S	18:27 258		19:14
2024 Feb 19 (Mon)	05:55	06:41 102		12:34 67S	18:27 259		19:14
2024 Feb 20 (Tue)	05:54	06:41 101		12:34 67S	18:27 259		19:14
2024 Feb 21 (Wed)	05:54	06:40 101		12:34 67S	18:28 259		19:14
2024 Feb 22 (Thu)	05:53	06:40 101		12:34 68S	18:28 260		19:14
2024 Feb 23 (Fri)	05:53	06:39 100		12:34 68S	18:28 260		19:14
2024 Feb 24 (Sat)	05:53	06:39 100		12:33 68S	18:28 260		19:15

2024	Feb	25	(Sun)	05:52	06:38	99	12:33	69S	18:28	261	19:15
2024	Feb	26	(Mon)	05:52	06:38	99	12:33	69S	18:29	261	19:15
2024	Feb	27	(Tue)	05:51	06:37	99	12:33	70S	18:29	262	19:15
2024	Feb	28	(Wed)	05:51	06:37	98	12:33	70S	18:29	262	19:15
2024	Feb	29	(Thu)	05:50	06:36	98	12:33	70S	18:29	262	19:15
2024	Mar	01	(Fri)	05:50	06:36	97	12:32	71S	18:29	263	19:15
2024	Mar	02	(Sat)	05:49	06:35	97	12:32	71S	18:29	263	19:15
2024	Mar	03	(Sun)	05:49	06:35	97	12:32	71S	18:30	263	19:16
2024	Mar	04	(Mon)	05:48	06:34	96	12:32	72S	18:30	264	19:16
2024	Mar	05	(Tue)	05:48	06:34	96	12:32	72S	18:30	264	19:16
2024	Mar	06	(Wed)	05:47	06:33	96	12:31	73S	18:30	265	19:16
2024	Mar	07	(Thu)	05:47	06:32	95	12:31	73S	18:30	265	19:16
2024	Mar	08	(Fri)	05:46	06:32	95	12:31	73S	18:30	265	19:16
2024	Mar	09	(Sat)	05:45	06:31	94	12:31	74S	18:30	266	19:16
2024	Mar	10	(Sun)	05:45	06:31	94	12:30	74S	18:30	266	19:16
2024	Mar	11	(Mon)	05:44	06:30	94	12:30	75S	18:30	267	19:16
2024	Mar	12	(Tue)	05:44	06:29	93	12:30	75S	18:31	267	19:16
2024	Mar	13	(Wed)	05:43	06:29	93	12:30	75S	18:31	267	19:16
2024	Mar	14	(Thu)	05:42	06:28	92	12:29	76S	18:31	268	19:16
2024	Mar	15	(Fri)	05:42	06:28	92	12:29	76S	18:31	268	19:17
2024	Mar	16	(Sat)	05:41	06:27	91	12:29	77S	18:31	269	19:17
2024	Mar	17	(Sun)	05:41	06:26	91	12:28	77S	18:31	269	19:17
2024	Mar	18	(Mon)	05:40	06:26	91	12:28	77S	18:31	270	19:17
2024	Mar	19	(Tue)	05:39	06:25	90	12:28	78S	18:31	270	19:17
2024	Mar	20	(Wed)	05:39	06:24	90	12:28	78S	18:31	270	19:17
2024	Mar	21	(Thu)	05:38	06:24	89	12:27	79S	18:31	271	19:17
2024	Mar	22	(Fri)	05:37	06:23	89	12:27	79S	18:31	271	19:17
2024	Mar	23	(Sat)	05:37	06:22	89	12:27	79S	18:31	272	19:17
2024	Mar	24	(Sun)	05:36	06:22	88	12:26	80S	18:31	272	19:17
2024	Mar	25	(Mon)	05:35	06:21	88	12:26	80S	18:31	272	19:17
2024	Mar	26	(Tue)	05:35	06:20	87	12:26	80S	18:31	273	19:17
2024	Mar	27	(Wed)	05:34	06:20	87	12:25	81S	18:31	273	19:17
2024	Mar	28	(Thu)	05:33	06:19	87	12:25	81S	18:31	274	19:17
2024	Mar	29	(Fri)	05:32	06:18	86	12:25	82S	18:32	274	19:17
2024	Mar	30	(Sat)	05:32	06:18	86	12:25	82S	18:32	274	19:18
2024	Mar	31	(Sun)	05:31	06:17	85	12:24	82S	18:32	275	19:18
2024	Apr	01	(Mon)	05:30	06:16	85	12:24	83S	18:32	275	19:18
2024	Apr	02	(Tue)	05:30	06:16	85	12:24	83S	18:32	276	19:18
2024	Apr	03	(Wed)	05:29	06:15	84	12:23	84S	18:32	276	19:18
2024	Apr	04	(Thu)	05:28	06:15	84	12:23	84S	18:32	276	19:18
2024	Apr	05	(Fri)	05:28	06:14	83	12:23	84S	18:32	277	19:18
2024	Apr	06	(Sat)	05:27	06:13	83	12:23	85S	18:32	277	19:18
2024	Apr	07	(Sun)	05:26	06:13	83	12:22	85S	18:32	277	19:18
2024	Apr	08	(Mon)	05:26	06:12	82	12:22	85S	18:32	278	19:18
2024	Apr	09	(Tue)	05:25	06:11	82	12:22	86S	18:32	278	19:19
2024	Apr	10	(Wed)	05:24	06:11	82	12:21	86S	18:32	279	19:19
2024	Apr	11	(Thu)	05:24	06:10	81	12:21	87S	18:32	279	19:19
2024	Apr	12	(Fri)	05:23	06:10	81	12:21	87S	18:32	279	19:19
2024	Apr	13	(Sat)	05:22	06:09	80	12:21	87S	18:32	280	19:19
2024	Apr	14	(Sun)	05:22	06:08	80	12:20	88S	18:33	280	19:19
2024	Apr	15	(Mon)	05:21	06:08	80	12:20	88S	18:33	280	19:19
2024	Apr	16	(Tue)	05:21	06:07	79	12:20	88S	18:33	281	19:20
2024	Apr	17	(Wed)	05:20	06:07	79	12:20	89S	18:33	281	19:20
2024	Apr	18	(Thu)	05:19	06:06	79	12:19	89S	18:33	282	19:20
2024	Apr	19	(Fri)	05:19	06:06	78	12:19	89S	18:33	282	19:20
2024	Apr	20	(Sat)	05:18	06:05	78	12:19	90S	18:33	282	19:20
2024	Apr	21	(Sun)	05:17	06:05	78	12:19	90S	18:33	283	19:21
2024	Apr	22	(Mon)	05:17	06:04	77	12:19	90S	18:33	283	19:21
2024	Apr	23	(Tue)	05:16	06:04	77	12:18	91N	18:34	283	19:21
2024	Apr	24	(Wed)	05:16	06:03	77	12:18	90N	18:34	284	19:21
2024	Apr	25	(Thu)	05:15	06:03	76	12:18	90N	18:34	284	19:21
2024	Apr	26	(Fri)	05:15	06:02	76	12:18	90N	18:34	284	19:22
2024	Apr	27	(Sat)	05:14	06:02	76	12:18	89N	18:34	285	19:22
2024	Apr	28	(Sun)	05:13	06:01	75	12:18	89N	18:34	285	19:22
2024	Apr	29	(Mon)	05:13	06:01	75	12:18	89N	18:34	285	19:22
2024	Apr	30	(Tue)	05:12	06:00	75	12:17	88N	18:35	286	19:23
2024	May	01	(Wed)	05:12	06:00	74	12:17	88N	18:35	286	19:23

2024	May	02	(Thu)	05:11	05:59	74	12:17	88N	18:35	286	19:23
2024	May	03	(Fri)	05:11	05:59	74	12:17	88N	18:35	286	19:23
2024	May	04	(Sat)	05:11	05:59	73	12:17	87N	18:35	287	19:24
2024	May	05	(Sun)	05:10	05:58	73	12:17	87N	18:36	287	19:24
2024	May	06	(Mon)	05:10	05:58	73	12:17	87N	18:36	287	19:24
2024	May	07	(Tue)	05:09	05:58	72	12:17	86N	18:36	288	19:25
2024	May	08	(Wed)	05:09	05:57	72	12:17	86N	18:36	288	19:25
2024	May	09	(Thu)	05:08	05:57	72	12:17	86N	18:36	288	19:25
2024	May	10	(Fri)	05:08	05:57	72	12:17	86N	18:37	288	19:25
2024	May	11	(Sat)	05:08	05:56	71	12:17	85N	18:37	289	19:26
2024	May	12	(Sun)	05:07	05:56	71	12:17	85N	18:37	289	19:26
2024	May	13	(Mon)	05:07	05:56	71	12:17	85N	18:37	289	19:26
2024	May	14	(Tue)	05:07	05:56	71	12:17	85N	18:38	289	19:27
2024	May	15	(Wed)	05:06	05:55	70	12:17	84N	18:38	290	19:27
2024	May	16	(Thu)	05:06	05:55	70	12:17	84N	18:38	290	19:27
2024	May	17	(Fri)	05:06	05:55	70	12:17	84N	18:38	290	19:28
2024	May	18	(Sat)	05:05	05:55	70	12:17	84N	18:39	290	19:28
2024	May	19	(Sun)	05:05	05:55	69	12:17	83N	18:39	291	19:28
2024	May	20	(Mon)	05:05	05:54	69	12:17	83N	18:39	291	19:29
2024	May	21	(Tue)	05:05	05:54	69	12:17	83N	18:40	291	19:29
2024	May	22	(Wed)	05:04	05:54	69	12:17	83N	18:40	291	19:30
2024	May	23	(Thu)	05:04	05:54	69	12:17	83N	18:40	291	19:30
2024	May	24	(Fri)	05:04	05:54	68	12:17	82N	18:40	292	19:30
2024	May	25	(Sat)	05:04	05:54	68	12:17	82N	18:41	292	19:31
2024	May	26	(Sun)	05:04	05:54	68	12:17	82N	18:41	292	19:31
2024	May	27	(Mon)	05:04	05:54	68	12:17	82N	18:41	292	19:31
2024	May	28	(Tue)	05:03	05:54	68	12:18	82N	18:42	292	19:32
2024	May	29	(Wed)	05:03	05:54	68	12:18	82N	18:42	293	19:32
2024	May	30	(Thu)	05:03	05:54	67	12:18	81N	18:42	293	19:32
2024	May	31	(Fri)	05:03	05:54	67	12:18	81N	18:42	293	19:33
2024	Jun	01	(Sat)	05:03	05:54	67	12:18	81N	18:43	293	19:33
2024	Jun	02	(Sun)	05:03	05:54	67	12:18	81N	18:43	293	19:33
2024	Jun	03	(Mon)	05:03	05:54	67	12:18	81N	18:43	293	19:34
2024	Jun	04	(Tue)	05:03	05:54	67	12:19	81N	18:44	293	19:34
2024	Jun	05	(Wed)	05:03	05:54	67	12:19	81N	18:44	293	19:35
2024	Jun	06	(Thu)	05:03	05:54	67	12:19	81N	18:44	294	19:35
2024	Jun	07	(Fri)	05:03	05:54	66	12:19	81N	18:45	294	19:35
2024	Jun	08	(Sat)	05:03	05:54	66	12:19	80N	18:45	294	19:36
2024	Jun	09	(Sun)	05:03	05:54	66	12:20	80N	18:45	294	19:36
2024	Jun	10	(Mon)	05:03	05:54	66	12:20	80N	18:45	294	19:36
2024	Jun	11	(Tue)	05:03	05:54	66	12:20	80N	18:46	294	19:36
2024	Jun	12	(Wed)	05:04	05:54	66	12:20	80N	18:46	294	19:37
2024	Jun	13	(Thu)	05:04	05:55	66	12:20	80N	18:46	294	19:37
2024	Jun	14	(Fri)	05:04	05:55	66	12:21	80N	18:46	294	19:37
2024	Jun	15	(Sat)	05:04	05:55	66	12:21	80N	18:47	294	19:38
2024	Jun	16	(Sun)	05:04	05:55	66	12:21	80N	18:47	294	19:38
2024	Jun	17	(Mon)	05:04	05:55	66	12:21	80N	18:47	294	19:38
2024	Jun	18	(Tue)	05:04	05:55	66	12:21	80N	18:47	294	19:38
2024	Jun	19	(Wed)	05:05	05:56	66	12:22	80N	18:48	294	19:39
2024	Jun	20	(Thu)	05:05	05:56	66	12:22	80N	18:48	294	19:39
2024	Jun	21	(Fri)	05:05	05:56	66	12:22	80N	18:48	294	19:39
2024	Jun	22	(Sat)	05:05	05:56	66	12:22	80N	18:48	294	19:39
2024	Jun	23	(Sun)	05:06	05:56	66	12:23	80N	18:49	294	19:39
2024	Jun	24	(Mon)	05:06	05:57	66	12:23	80N	18:49	294	19:40
2024	Jun	25	(Tue)	05:06	05:57	66	12:23	80N	18:49	294	19:40
2024	Jun	26	(Wed)	05:06	05:57	66	12:23	80N	18:49	294	19:40
2024	Jun	27	(Thu)	05:07	05:57	66	12:23	80N	18:49	294	19:40
2024	Jun	28	(Fri)	05:07	05:58	66	12:24	80N	18:49	294	19:40
2024	Jun	29	(Sat)	05:07	05:58	66	12:24	80N	18:50	294	19:40
2024	Jun	30	(Sun)	05:07	05:58	66	12:24	80N	18:50	294	19:40
2024	Jul	01	(Mon)	05:08	05:58	66	12:24	80N	18:50	294	19:41
2024	Jul	02	(Tue)	05:08	05:59	66	12:24	80N	18:50	294	19:41
2024	Jul	03	(Wed)	05:08	05:59	66	12:25	80N	18:50	294	19:41
2024	Jul	04	(Thu)	05:09	05:59	66	12:25	81N	18:50	294	19:41
2024	Jul	05	(Fri)	05:09	06:00	66	12:25	81N	18:50	294	19:41
2024	Jul	06	(Sat)	05:09	06:00	67	12:25	81N	18:50	293	19:41
2024	Jul	07	(Sun)	05:10	06:00	67	12:25	81N	18:50	293	19:41

2024	Jul	08	(Mon)	05:10	06:00	67	12:25	81N	18:50	293	19:41
2024	Jul	09	(Tue)	05:10	06:01	67	12:26	81N	18:50	293	19:41
2024	Jul	10	(Wed)	05:11	06:01	67	12:26	81N	18:50	293	19:41
2024	Jul	11	(Thu)	05:11	06:01	67	12:26	81N	18:50	293	19:41
2024	Jul	12	(Fri)	05:11	06:02	67	12:26	81N	18:50	293	19:40
2024	Jul	13	(Sat)	05:12	06:02	67	12:26	82N	18:50	292	19:40
2024	Jul	14	(Sun)	05:12	06:02	68	12:26	82N	18:50	292	19:40
2024	Jul	15	(Mon)	05:12	06:02	68	12:26	82N	18:50	292	19:40
2024	Jul	16	(Tue)	05:13	06:03	68	12:26	82N	18:50	292	19:40
2024	Jul	17	(Wed)	05:13	06:03	68	12:26	82N	18:50	292	19:40
2024	Jul	18	(Thu)	05:13	06:03	68	12:26	82N	18:50	292	19:40
2024	Jul	19	(Fri)	05:14	06:03	68	12:27	83N	18:50	291	19:39
2024	Jul	20	(Sat)	05:14	06:04	69	12:27	83N	18:50	291	19:39
2024	Jul	21	(Sun)	05:14	06:04	69	12:27	83N	18:49	291	19:39
2024	Jul	22	(Mon)	05:15	06:04	69	12:27	83N	18:49	291	19:39
2024	Jul	23	(Tue)	05:15	06:04	69	12:27	83N	18:49	291	19:38
2024	Jul	24	(Wed)	05:15	06:05	69	12:27	84N	18:49	290	19:38
2024	Jul	25	(Thu)	05:15	06:05	70	12:27	84N	18:49	290	19:38
2024	Jul	26	(Fri)	05:16	06:05	70	12:27	84N	18:48	290	19:38
2024	Jul	27	(Sat)	05:16	06:05	70	12:27	84N	18:48	290	19:37
2024	Jul	28	(Sun)	05:16	06:06	70	12:27	84N	18:48	289	19:37
2024	Jul	29	(Mon)	05:17	06:06	71	12:27	85N	18:48	289	19:37
2024	Jul	30	(Tue)	05:17	06:06	71	12:27	85N	18:47	289	19:36
2024	Jul	31	(Wed)	05:17	06:06	71	12:27	85N	18:47	289	19:36
2024	Aug	01	(Thu)	05:18	06:06	71	12:27	85N	18:47	288	19:35
2024	Aug	02	(Fri)	05:18	06:07	72	12:26	86N	18:46	288	19:35
2024	Aug	03	(Sat)	05:18	06:07	72	12:26	86N	18:46	288	19:34
2024	Aug	04	(Sun)	05:18	06:07	72	12:26	86N	18:46	288	19:34
2024	Aug	05	(Mon)	05:19	06:07	72	12:26	87N	18:45	287	19:34
2024	Aug	06	(Tue)	05:19	06:07	73	12:26	87N	18:45	287	19:33
2024	Aug	07	(Wed)	05:19	06:07	73	12:26	87N	18:44	287	19:33
2024	Aug	08	(Thu)	05:19	06:08	73	12:26	87N	18:44	287	19:32
2024	Aug	09	(Fri)	05:20	06:08	74	12:26	88N	18:44	286	19:32
2024	Aug	10	(Sat)	05:20	06:08	74	12:26	88N	18:43	286	19:31
2024	Aug	11	(Sun)	05:20	06:08	74	12:25	88N	18:43	286	19:31
2024	Aug	12	(Mon)	05:20	06:08	75	12:25	89N	18:42	285	19:30
2024	Aug	13	(Tue)	05:20	06:08	75	12:25	89N	18:42	285	19:29
2024	Aug	14	(Wed)	05:21	06:08	75	12:25	89N	18:41	285	19:29
2024	Aug	15	(Thu)	05:21	06:08	75	12:25	89N	18:41	284	19:28
2024	Aug	16	(Fri)	05:21	06:09	76	12:24	90N	18:40	284	19:28
2024	Aug	17	(Sat)	05:21	06:09	76	12:24	90N	18:40	284	19:27
2024	Aug	18	(Sun)	05:21	06:09	76	12:24	90N	18:39	283	19:27
2024	Aug	19	(Mon)	05:21	06:09	77	12:24	91S	18:39	283	19:26
2024	Aug	20	(Tue)	05:22	06:09	77	12:24	90S	18:38	283	19:25
2024	Aug	21	(Wed)	05:22	06:09	77	12:23	90S	18:37	282	19:25
2024	Aug	22	(Thu)	05:22	06:09	78	12:23	90S	18:37	282	19:24
2024	Aug	23	(Fri)	05:22	06:09	78	12:23	89S	18:36	282	19:23
2024	Aug	24	(Sat)	05:22	06:09	79	12:23	89S	18:36	281	19:23
2024	Aug	25	(Sun)	05:22	06:09	79	12:22	89S	18:35	281	19:22
2024	Aug	26	(Mon)	05:22	06:09	79	12:22	88S	18:35	281	19:21
2024	Aug	27	(Tue)	05:22	06:09	80	12:22	88S	18:34	280	19:21
2024	Aug	28	(Wed)	05:23	06:09	80	12:21	88S	18:33	280	19:20
2024	Aug	29	(Thu)	05:23	06:09	80	12:21	87S	18:33	279	19:19
2024	Aug	30	(Fri)	05:23	06:09	81	12:21	87S	18:32	279	19:19
2024	Aug	31	(Sat)	05:23	06:09	81	12:20	87S	18:31	279	19:18
2024	Sep	01	(Sun)	05:23	06:09	81	12:20	86S	18:31	278	19:17
2024	Sep	02	(Mon)	05:23	06:09	82	12:20	86S	18:30	278	19:16
2024	Sep	03	(Tue)	05:23	06:09	82	12:19	85S	18:29	278	19:16
2024	Sep	04	(Wed)	05:23	06:09	83	12:19	85S	18:29	277	19:15
2024	Sep	05	(Thu)	05:23	06:09	83	12:19	85S	18:28	277	19:14
2024	Sep	06	(Fri)	05:23	06:09	83	12:18	84S	18:27	276	19:14
2024	Sep	07	(Sat)	05:23	06:09	84	12:18	84S	18:27	276	19:13
2024	Sep	08	(Sun)	05:23	06:09	84	12:18	84S	18:26	276	19:12
2024	Sep	09	(Mon)	05:23	06:09	84	12:17	83S	18:25	275	19:11
2024	Sep	10	(Tue)	05:23	06:09	85	12:17	83S	18:25	275	19:11
2024	Sep	11	(Wed)	05:23	06:09	85	12:17	82S	18:24	275	19:10
2024	Sep	12	(Thu)	05:23	06:09	86	12:16	82S	18:23	274	19:09

2024	Sep	13	(Fri)	05:23	06:09	86	12:16	82S	18:23	274	19:08
2024	Sep	14	(Sat)	05:23	06:09	86	12:16	81S	18:22	273	19:08
2024	Sep	15	(Sun)	05:23	06:09	87	12:15	81S	18:21	273	19:07
2024	Sep	16	(Mon)	05:23	06:09	87	12:15	81S	18:20	273	19:06
2024	Sep	17	(Tue)	05:23	06:09	88	12:15	80S	18:20	272	19:06
2024	Sep	18	(Wed)	05:23	06:09	88	12:14	80S	18:19	272	19:05
2024	Sep	19	(Thu)	05:24	06:09	88	12:14	79S	18:18	271	19:04
2024	Sep	20	(Fri)	05:24	06:09	89	12:14	79S	18:18	271	19:03
2024	Sep	21	(Sat)	05:24	06:09	89	12:13	79S	18:17	271	19:03
2024	Sep	22	(Sun)	05:24	06:09	90	12:13	78S	18:16	270	19:02
2024	Sep	23	(Mon)	05:24	06:09	90	12:12	78S	18:15	270	19:01
2024	Sep	24	(Tue)	05:24	06:09	90	12:12	77S	18:15	269	19:01
2024	Sep	25	(Wed)	05:24	06:09	91	12:12	77S	18:14	269	19:00
2024	Sep	26	(Thu)	05:24	06:09	91	12:11	77S	18:13	269	18:59
2024	Sep	27	(Fri)	05:24	06:09	92	12:11	76S	18:13	268	18:58
2024	Sep	28	(Sat)	05:24	06:09	92	12:11	76S	18:12	268	18:58
2024	Sep	29	(Sun)	05:24	06:09	92	12:10	75S	18:11	267	18:57
2024	Sep	30	(Mon)	05:24	06:09	93	12:10	75S	18:11	267	18:56
2024	Oct	01	(Tue)	05:24	06:09	93	12:10	75S	18:10	267	18:56
2024	Oct	02	(Wed)	05:24	06:09	94	12:09	74S	18:09	266	18:55
2024	Oct	03	(Thu)	05:24	06:09	94	12:09	74S	18:09	266	18:54
2024	Oct	04	(Fri)	05:24	06:10	94	12:09	74S	18:08	265	18:54
2024	Oct	05	(Sat)	05:24	06:10	95	12:09	73S	18:07	265	18:53
2024	Oct	06	(Sun)	05:24	06:10	95	12:08	73S	18:07	265	18:53
2024	Oct	07	(Mon)	05:24	06:10	96	12:08	72S	18:06	264	18:52
2024	Oct	08	(Tue)	05:24	06:10	96	12:08	72S	18:05	264	18:51
2024	Oct	09	(Wed)	05:24	06:10	96	12:07	72S	18:05	263	18:51
2024	Oct	10	(Thu)	05:24	06:10	97	12:07	71S	18:04	263	18:50
2024	Oct	11	(Fri)	05:24	06:10	97	12:07	71S	18:04	263	18:50
2024	Oct	12	(Sat)	05:24	06:10	97	12:07	70S	18:03	262	18:49
2024	Oct	13	(Sun)	05:24	06:10	98	12:06	70S	18:03	262	18:49
2024	Oct	14	(Mon)	05:24	06:10	98	12:06	70S	18:02	262	18:48
2024	Oct	15	(Tue)	05:24	06:10	99	12:06	69S	18:01	261	18:48
2024	Oct	16	(Wed)	05:24	06:10	99	12:06	69S	18:01	261	18:47
2024	Oct	17	(Thu)	05:24	06:11	99	12:06	69S	18:00	260	18:47
2024	Oct	18	(Fri)	05:24	06:11	100	12:05	68S	18:00	260	18:46
2024	Oct	19	(Sat)	05:24	06:11	100	12:05	68S	17:59	260	18:46
2024	Oct	20	(Sun)	05:25	06:11	100	12:05	68S	17:59	259	18:45
2024	Oct	21	(Mon)	05:25	06:11	101	12:05	67S	17:58	259	18:45
2024	Oct	22	(Tue)	05:25	06:11	101	12:05	67S	17:58	259	18:44
2024	Oct	23	(Wed)	05:25	06:11	102	12:04	67S	17:57	258	18:44
2024	Oct	24	(Thu)	05:25	06:12	102	12:04	66S	17:57	258	18:43
2024	Oct	25	(Fri)	05:25	06:12	102	12:04	66S	17:56	258	18:43
2024	Oct	26	(Sat)	05:25	06:12	103	12:04	65S	17:56	257	18:43
2024	Oct	27	(Sun)	05:26	06:12	103	12:04	65S	17:56	257	18:42
2024	Oct	28	(Mon)	05:26	06:13	103	12:04	65S	17:55	256	18:42
2024	Oct	29	(Tue)	05:26	06:13	104	12:04	64S	17:55	256	18:42
2024	Oct	30	(Wed)	05:26	06:13	104	12:04	64S	17:55	256	18:41
2024	Oct	31	(Thu)	05:26	06:13	104	12:04	64S	17:54	255	18:41
2024	Nov	01	(Fri)	05:26	06:14	105	12:04	63S	17:54	255	18:41
2024	Nov	02	(Sat)	05:27	06:14	105	12:04	63S	17:54	255	18:41
2024	Nov	03	(Sun)	05:27	06:14	105	12:04	63S	17:53	255	18:40
2024	Nov	04	(Mon)	05:27	06:14	106	12:04	63S	17:53	254	18:40
2024	Nov	05	(Tue)	05:27	06:15	106	12:04	62S	17:53	254	18:40
2024	Nov	06	(Wed)	05:28	06:15	106	12:04	62S	17:52	254	18:40
2024	Nov	07	(Thu)	05:28	06:15	107	12:04	62S	17:52	253	18:40
2024	Nov	08	(Fri)	05:28	06:16	107	12:04	61S	17:52	253	18:40
2024	Nov	09	(Sat)	05:28	06:16	107	12:04	61S	17:52	253	18:40
2024	Nov	10	(Sun)	05:29	06:16	107	12:04	61S	17:52	252	18:39
2024	Nov	11	(Mon)	05:29	06:17	108	12:04	61S	17:52	252	18:39
2024	Nov	12	(Tue)	05:29	06:17	108	12:04	60S	17:51	252	18:39
2024	Nov	13	(Wed)	05:30	06:18	108	12:05	60S	17:51	252	18:39
2024	Nov	14	(Thu)	05:30	06:18	109	12:05	60S	17:51	251	18:39
2024	Nov	15	(Fri)	05:30	06:18	109	12:05	59S	17:51	251	18:39
2024	Nov	16	(Sat)	05:31	06:19	109	12:05	59S	17:51	251	18:39
2024	Nov	17	(Sun)	05:31	06:19	109	12:05	59S	17:51	251	18:39
2024	Nov	18	(Mon)	05:31	06:20	110	12:05	59S	17:51	250	18:39

2024	Nov	19	(Tue)	05:32	06:20	110	12:06	59S	17:51	250	18:39
2024	Nov	20	(Wed)	05:32	06:21	110	12:06	58S	17:51	250	18:39
2024	Nov	21	(Thu)	05:33	06:21	110	12:06	58S	17:51	250	18:39
2024	Nov	22	(Fri)	05:33	06:22	111	12:06	58S	17:51	249	18:40
2024	Nov	23	(Sat)	05:33	06:22	111	12:07	58S	17:51	249	18:40
2024	Nov	24	(Sun)	05:34	06:23	111	12:07	57S	17:51	249	18:40
2024	Nov	25	(Mon)	05:34	06:23	111	12:07	57S	17:51	249	18:40
2024	Nov	26	(Tue)	05:35	06:24	111	12:08	57S	17:51	249	18:40
2024	Nov	27	(Wed)	05:35	06:24	112	12:08	57S	17:52	248	18:40
2024	Nov	28	(Thu)	05:36	06:25	112	12:08	57S	17:52	248	18:41
2024	Nov	29	(Fri)	05:36	06:25	112	12:09	57S	17:52	248	18:41
2024	Nov	30	(Sat)	05:37	06:26	112	12:09	56S	17:52	248	18:41
2024	Dec	01	(Sun)	05:37	06:26	112	12:09	56S	17:52	248	18:41
2024	Dec	02	(Mon)	05:38	06:27	112	12:10	56S	17:53	248	18:42
2024	Dec	03	(Tue)	05:38	06:27	113	12:10	56S	17:53	247	18:42
2024	Dec	04	(Wed)	05:39	06:28	113	12:10	56S	17:53	247	18:42
2024	Dec	05	(Thu)	05:39	06:28	113	12:11	56S	17:53	247	18:43
2024	Dec	06	(Fri)	05:40	06:29	113	12:11	56S	17:54	247	18:43
2024	Dec	07	(Sat)	05:40	06:29	113	12:12	55S	17:54	247	18:43
2024	Dec	08	(Sun)	05:41	06:30	113	12:12	55S	17:54	247	18:44
2024	Dec	09	(Mon)	05:41	06:30	113	12:13	55S	17:55	247	18:44
2024	Dec	10	(Tue)	05:42	06:31	113	12:13	55S	17:55	247	18:45
2024	Dec	11	(Wed)	05:42	06:32	113	12:14	55S	17:55	247	18:45
2024	Dec	12	(Thu)	05:43	06:32	113	12:14	55S	17:56	246	18:45
2024	Dec	13	(Fri)	05:43	06:33	114	12:14	55S	17:56	246	18:46
2024	Dec	14	(Sat)	05:44	06:33	114	12:15	55S	17:57	246	18:46
2024	Dec	15	(Sun)	05:44	06:34	114	12:15	55S	17:57	246	18:47
2024	Dec	16	(Mon)	05:45	06:34	114	12:16	55S	17:58	246	18:47
2024	Dec	17	(Tue)	05:45	06:35	114	12:16	55S	17:58	246	18:48
2024	Dec	18	(Wed)	05:46	06:35	114	12:17	55S	17:58	246	18:48
2024	Dec	19	(Thu)	05:46	06:36	114	12:17	55S	17:59	246	18:49
2024	Dec	20	(Fri)	05:47	06:36	114	12:18	55S	17:59	246	18:49
2024	Dec	21	(Sat)	05:47	06:37	114	12:18	55S	18:00	246	18:50
2024	Dec	22	(Sun)	05:48	06:37	114	12:19	55S	18:00	246	18:50
2024	Dec	23	(Mon)	05:48	06:38	114	12:19	55S	18:01	246	18:51
2024	Dec	24	(Tue)	05:49	06:38	114	12:20	55S	18:01	246	18:51
2024	Dec	25	(Wed)	05:49	06:39	114	12:20	55S	18:02	246	18:52
2024	Dec	26	(Thu)	05:50	06:39	114	12:21	55S	18:03	246	18:52
2024	Dec	27	(Fri)	05:50	06:40	114	12:21	55S	18:03	246	18:53
2024	Dec	28	(Sat)	05:51	06:40	114	12:22	55S	18:04	246	18:53
2024	Dec	29	(Sun)	05:51	06:41	114	12:22	55S	18:04	246	18:54
2024	Dec	30	(Mon)	05:51	06:41	114	12:23	55S	18:05	246	18:54
2024	Dec	31	(Tue)	05:52	06:41	113	12:23	55S	18:05	247	18:55

Sun

VTPH

Location: E 99°57'00.0", N12°38'00.0", 62m
(Longitude referred to Greenwich meridian)

Time Zone: 7h 00m east of Greenwich

Date (Zone)	Begin Civil Twilight h m	Rise h m °	Az. °	Transit h m °	Alt. °	Set h m °	Az. °	End Civil Twilight h m			
2024	Jan	01	(Mon)	06:18	06:41	113	12:23	55S	18:05	247	18:28
2024	Jan	02	(Tue)	06:19	06:42	113	12:24	55S	18:06	247	18:29
2024	Jan	03	(Wed)	06:19	06:42	113	12:24	55S	18:06	247	18:29
2024	Jan	04	(Thu)	06:20	06:43	113	12:25	55S	18:07	247	18:30
2024	Jan	05	(Fri)	06:20	06:43	113	12:25	55S	18:08	247	18:31
2024	Jan	06	(Sat)	06:20	06:43	113	12:26	56S	18:08	247	18:31
2024	Jan	07	(Sun)	06:21	06:44	113	12:26	56S	18:09	247	18:32
2024	Jan	08	(Mon)	06:21	06:44	113	12:27	56S	18:09	247	18:32
2024	Jan	09	(Tue)	06:21	06:44	113	12:27	56S	18:10	247	18:33
2024	Jan	10	(Wed)	06:22	06:44	112	12:27	56S	18:10	248	18:33
2024	Jan	11	(Thu)	06:22	06:45	112	12:28	56S	18:11	248	18:34

2024	Jan	12	(Fri)	06:22	06:45	112	12:28	56S	18:12	248	18:34
2024	Jan	13	(Sat)	06:22	06:45	112	12:29	57S	18:12	248	18:35
2024	Jan	14	(Sun)	06:23	06:45	112	12:29	57S	18:13	248	18:35
2024	Jan	15	(Mon)	06:23	06:46	112	12:29	57S	18:13	248	18:36
2024	Jan	16	(Tue)	06:23	06:46	111	12:30	57S	18:14	249	18:36
2024	Jan	17	(Wed)	06:23	06:46	111	12:30	57S	18:14	249	18:37
2024	Jan	18	(Thu)	06:23	06:46	111	12:30	57S	18:15	249	18:37
2024	Jan	19	(Fri)	06:24	06:46	111	12:31	58S	18:15	249	18:38
2024	Jan	20	(Sat)	06:24	06:46	111	12:31	58S	18:16	249	18:38
2024	Jan	21	(Sun)	06:24	06:46	110	12:31	58S	18:16	250	18:39
2024	Jan	22	(Mon)	06:24	06:46	110	12:32	58S	18:17	250	18:39
2024	Jan	23	(Tue)	06:24	06:46	110	12:32	59S	18:17	250	18:40
2024	Jan	24	(Wed)	06:24	06:46	110	12:32	59S	18:18	250	18:40
2024	Jan	25	(Thu)	06:24	06:46	109	12:32	59S	18:18	251	18:41
2024	Jan	26	(Fri)	06:24	06:46	109	12:33	59S	18:19	251	18:41
2024	Jan	27	(Sat)	06:24	06:46	109	12:33	59S	18:19	251	18:42
2024	Jan	28	(Sun)	06:24	06:46	109	12:33	60S	18:20	251	18:42
2024	Jan	29	(Mon)	06:24	06:46	108	12:33	60S	18:20	252	18:42
2024	Jan	30	(Tue)	06:24	06:46	108	12:33	60S	18:21	252	18:43
2024	Jan	31	(Wed)	06:24	06:46	108	12:33	61S	18:21	252	18:43
2024	Feb	01	(Thu)	06:24	06:46	108	12:34	61S	18:21	253	18:44
2024	Feb	02	(Fri)	06:24	06:46	107	12:34	61S	18:22	253	18:44
2024	Feb	03	(Sat)	06:24	06:46	107	12:34	61S	18:22	253	18:44
2024	Feb	04	(Sun)	06:24	06:46	107	12:34	62S	18:23	253	18:45
2024	Feb	05	(Mon)	06:23	06:45	106	12:34	62S	18:23	254	18:45
2024	Feb	06	(Tue)	06:23	06:45	106	12:34	62S	18:23	254	18:45
2024	Feb	07	(Wed)	06:23	06:45	106	12:34	63S	18:24	254	18:46
2024	Feb	08	(Thu)	06:23	06:45	105	12:34	63S	18:24	255	18:46
2024	Feb	09	(Fri)	06:23	06:44	105	12:34	63S	18:24	255	18:46
2024	Feb	10	(Sat)	06:22	06:44	105	12:34	64S	18:25	255	18:47
2024	Feb	11	(Sun)	06:22	06:44	104	12:34	64S	18:25	256	18:47
2024	Feb	12	(Mon)	06:22	06:44	104	12:34	64S	18:25	256	18:47
2024	Feb	13	(Tue)	06:22	06:43	104	12:34	65S	18:26	256	18:47
2024	Feb	14	(Wed)	06:21	06:43	103	12:34	65S	18:26	257	18:48
2024	Feb	15	(Thu)	06:21	06:43	103	12:34	65S	18:26	257	18:48
2024	Feb	16	(Fri)	06:21	06:42	103	12:34	66S	18:26	257	18:48
2024	Feb	17	(Sat)	06:20	06:42	102	12:34	66S	18:27	258	18:48
2024	Feb	18	(Sun)	06:20	06:42	102	12:34	66S	18:27	258	18:49
2024	Feb	19	(Mon)	06:20	06:41	102	12:34	67S	18:27	259	18:49
2024	Feb	20	(Tue)	06:19	06:41	101	12:34	67S	18:27	259	18:49
2024	Feb	21	(Wed)	06:19	06:40	101	12:34	67S	18:28	259	18:49
2024	Feb	22	(Thu)	06:18	06:40	101	12:34	68S	18:28	260	18:49
2024	Feb	23	(Fri)	06:18	06:39	100	12:34	68S	18:28	260	18:50
2024	Feb	24	(Sat)	06:17	06:39	100	12:33	68S	18:28	260	18:50
2024	Feb	25	(Sun)	06:17	06:38	99	12:33	69S	18:28	261	18:50
2024	Feb	26	(Mon)	06:16	06:38	99	12:33	69S	18:29	261	18:50
2024	Feb	27	(Tue)	06:16	06:37	99	12:33	70S	18:29	262	18:50
2024	Feb	28	(Wed)	06:16	06:37	98	12:33	70S	18:29	262	18:50
2024	Feb	29	(Thu)	06:15	06:36	98	12:33	70S	18:29	262	18:50
2024	Mar	01	(Fri)	06:14	06:36	97	12:32	71S	18:29	263	18:51
2024	Mar	02	(Sat)	06:14	06:35	97	12:32	71S	18:29	263	18:51
2024	Mar	03	(Sun)	06:13	06:35	97	12:32	71S	18:30	263	18:51
2024	Mar	04	(Mon)	06:13	06:34	96	12:32	72S	18:30	264	18:51
2024	Mar	05	(Tue)	06:12	06:34	96	12:32	72S	18:30	264	18:51
2024	Mar	06	(Wed)	06:12	06:33	96	12:31	73S	18:30	265	18:51
2024	Mar	07	(Thu)	06:11	06:32	95	12:31	73S	18:30	265	18:51
2024	Mar	08	(Fri)	06:11	06:32	95	12:31	73S	18:30	265	18:51
2024	Mar	09	(Sat)	06:10	06:31	94	12:31	74S	18:30	266	18:51
2024	Mar	10	(Sun)	06:09	06:31	94	12:30	74S	18:30	266	18:52
2024	Mar	11	(Mon)	06:09	06:30	94	12:30	75S	18:30	267	18:52
2024	Mar	12	(Tue)	06:08	06:29	93	12:30	75S	18:31	267	18:52
2024	Mar	13	(Wed)	06:08	06:29	93	12:30	75S	18:31	267	18:52
2024	Mar	14	(Thu)	06:07	06:28	92	12:29	76S	18:31	268	18:52
2024	Mar	15	(Fri)	06:06	06:28	92	12:29	76S	18:31	268	18:52
2024	Mar	16	(Sat)	06:06	06:27	91	12:29	77S	18:31	269	18:52
2024	Mar	17	(Sun)	06:05	06:26	91	12:28	77S	18:31	269	18:52
2024	Mar	18	(Mon)	06:04	06:26	91	12:28	77S	18:31	270	18:52

2024	Mar	19	(Tue)	06:04	06:25	90	12:28	78S	18:31	270	18:52
2024	Mar	20	(Wed)	06:03	06:24	90	12:28	78S	18:31	270	18:52
2024	Mar	21	(Thu)	06:02	06:24	89	12:27	79S	18:31	271	18:52
2024	Mar	22	(Fri)	06:02	06:23	89	12:27	79S	18:31	271	18:52
2024	Mar	23	(Sat)	06:01	06:22	89	12:27	79S	18:31	272	18:52
2024	Mar	24	(Sun)	06:01	06:22	88	12:26	80S	18:31	272	18:52
2024	Mar	25	(Mon)	06:00	06:21	88	12:26	80S	18:31	272	18:53
2024	Mar	26	(Tue)	05:59	06:20	87	12:26	80S	18:31	273	18:53
2024	Mar	27	(Wed)	05:59	06:20	87	12:25	81S	18:31	273	18:53
2024	Mar	28	(Thu)	05:58	06:19	87	12:25	81S	18:31	274	18:53
2024	Mar	29	(Fri)	05:57	06:18	86	12:25	82S	18:32	274	18:53
2024	Mar	30	(Sat)	05:57	06:18	86	12:25	82S	18:32	274	18:53
2024	Mar	31	(Sun)	05:56	06:17	85	12:24	82S	18:32	275	18:53
2024	Apr	01	(Mon)	05:55	06:16	85	12:24	83S	18:32	275	18:53
2024	Apr	02	(Tue)	05:55	06:16	85	12:24	83S	18:32	276	18:53
2024	Apr	03	(Wed)	05:54	06:15	84	12:23	84S	18:32	276	18:53
2024	Apr	04	(Thu)	05:53	06:15	84	12:23	84S	18:32	276	18:53
2024	Apr	05	(Fri)	05:53	06:14	83	12:23	84S	18:32	277	18:53
2024	Apr	06	(Sat)	05:52	06:13	83	12:23	85S	18:32	277	18:53
2024	Apr	07	(Sun)	05:51	06:13	83	12:22	85S	18:32	277	18:53
2024	Apr	08	(Mon)	05:51	06:12	82	12:22	85S	18:32	278	18:54
2024	Apr	09	(Tue)	05:50	06:11	82	12:22	86S	18:32	278	18:54
2024	Apr	10	(Wed)	05:49	06:11	82	12:21	86S	18:32	279	18:54
2024	Apr	11	(Thu)	05:49	06:10	81	12:21	87S	18:32	279	18:54
2024	Apr	12	(Fri)	05:48	06:10	81	12:21	87S	18:32	279	18:54
2024	Apr	13	(Sat)	05:48	06:09	80	12:21	87S	18:32	280	18:54
2024	Apr	14	(Sun)	05:47	06:08	80	12:20	88S	18:33	280	18:54
2024	Apr	15	(Mon)	05:46	06:08	80	12:20	88S	18:33	280	18:54
2024	Apr	16	(Tue)	05:46	06:07	79	12:20	88S	18:33	281	18:54
2024	Apr	17	(Wed)	05:45	06:07	79	12:20	89S	18:33	281	18:55
2024	Apr	18	(Thu)	05:45	06:06	79	12:19	89S	18:33	282	18:55
2024	Apr	19	(Fri)	05:44	06:06	78	12:19	89S	18:33	282	18:55
2024	Apr	20	(Sat)	05:43	06:05	78	12:19	90S	18:33	282	18:55
2024	Apr	21	(Sun)	05:43	06:05	78	12:19	90S	18:33	283	18:55
2024	Apr	22	(Mon)	05:42	06:04	77	12:19	90S	18:33	283	18:55
2024	Apr	23	(Tue)	05:42	06:04	77	12:18	91N	18:34	283	18:55
2024	Apr	24	(Wed)	05:41	06:03	77	12:18	90N	18:34	284	18:56
2024	Apr	25	(Thu)	05:41	06:03	76	12:18	90N	18:34	284	18:56
2024	Apr	26	(Fri)	05:40	06:02	76	12:18	90N	18:34	284	18:56
2024	Apr	27	(Sat)	05:40	06:02	76	12:18	89N	18:34	285	18:56
2024	Apr	28	(Sun)	05:39	06:01	75	12:18	89N	18:34	285	18:56
2024	Apr	29	(Mon)	05:39	06:01	75	12:18	89N	18:34	285	18:57
2024	Apr	30	(Tue)	05:38	06:00	75	12:17	88N	18:35	286	18:57
2024	May	01	(Wed)	05:38	06:00	74	12:17	88N	18:35	286	18:57
2024	May	02	(Thu)	05:37	05:59	74	12:17	88N	18:35	286	18:57
2024	May	03	(Fri)	05:37	05:59	74	12:17	88N	18:35	286	18:57
2024	May	04	(Sat)	05:36	05:59	73	12:17	87N	18:35	287	18:58
2024	May	05	(Sun)	05:36	05:58	73	12:17	87N	18:36	287	18:58
2024	May	06	(Mon)	05:36	05:58	73	12:17	87N	18:36	287	18:58
2024	May	07	(Tue)	05:35	05:58	72	12:17	86N	18:36	288	18:58
2024	May	08	(Wed)	05:35	05:57	72	12:17	86N	18:36	288	18:59
2024	May	09	(Thu)	05:35	05:57	72	12:17	86N	18:36	288	18:59
2024	May	10	(Fri)	05:34	05:57	72	12:17	86N	18:37	288	18:59
2024	May	11	(Sat)	05:34	05:56	71	12:17	85N	18:37	289	18:59
2024	May	12	(Sun)	05:34	05:56	71	12:17	85N	18:37	289	19:00
2024	May	13	(Mon)	05:33	05:56	71	12:17	85N	18:37	289	19:00
2024	May	14	(Tue)	05:33	05:56	71	12:17	85N	18:38	289	19:00
2024	May	15	(Wed)	05:33	05:55	70	12:17	84N	18:38	290	19:01
2024	May	16	(Thu)	05:32	05:55	70	12:17	84N	18:38	290	19:01
2024	May	17	(Fri)	05:32	05:55	70	12:17	84N	18:38	290	19:01
2024	May	18	(Sat)	05:32	05:55	70	12:17	84N	18:39	290	19:01
2024	May	19	(Sun)	05:32	05:55	69	12:17	83N	18:39	291	19:02
2024	May	20	(Mon)	05:32	05:54	69	12:17	83N	18:39	291	19:02
2024	May	21	(Tue)	05:31	05:54	69	12:17	83N	18:40	291	19:02
2024	May	22	(Wed)	05:31	05:54	69	12:17	83N	18:40	291	19:03
2024	May	23	(Thu)	05:31	05:54	69	12:17	83N	18:40	291	19:03
2024	May	24	(Fri)	05:31	05:54	68	12:17	82N	18:40	292	19:03

2024	May	25	(Sat)	05:31	05:54	68	12:17	82N	18:41	292	19:04
2024	May	26	(Sun)	05:31	05:54	68	12:17	82N	18:41	292	19:04
2024	May	27	(Mon)	05:31	05:54	68	12:17	82N	18:41	292	19:04
2024	May	28	(Tue)	05:31	05:54	68	12:18	82N	18:42	292	19:05
2024	May	29	(Wed)	05:30	05:54	68	12:18	82N	18:42	293	19:05
2024	May	30	(Thu)	05:30	05:54	67	12:18	81N	18:42	293	19:05
2024	May	31	(Fri)	05:30	05:54	67	12:18	81N	18:42	293	19:06
2024	Jun	01	(Sat)	05:30	05:54	67	12:18	81N	18:43	293	19:06
2024	Jun	02	(Sun)	05:30	05:54	67	12:18	81N	18:43	293	19:06
2024	Jun	03	(Mon)	05:30	05:54	67	12:18	81N	18:43	293	19:07
2024	Jun	04	(Tue)	05:30	05:54	67	12:19	81N	18:44	293	19:07
2024	Jun	05	(Wed)	05:30	05:54	67	12:19	81N	18:44	293	19:07
2024	Jun	06	(Thu)	05:30	05:54	67	12:19	81N	18:44	294	19:07
2024	Jun	07	(Fri)	05:31	05:54	66	12:19	81N	18:45	294	19:08
2024	Jun	08	(Sat)	05:31	05:54	66	12:19	80N	18:45	294	19:08
2024	Jun	09	(Sun)	05:31	05:54	66	12:20	80N	18:45	294	19:08
2024	Jun	10	(Mon)	05:31	05:54	66	12:20	80N	18:45	294	19:09
2024	Jun	11	(Tue)	05:31	05:54	66	12:20	80N	18:46	294	19:09
2024	Jun	12	(Wed)	05:31	05:54	66	12:20	80N	18:46	294	19:09
2024	Jun	13	(Thu)	05:31	05:55	66	12:20	80N	18:46	294	19:10
2024	Jun	14	(Fri)	05:31	05:55	66	12:21	80N	18:46	294	19:10
2024	Jun	15	(Sat)	05:31	05:55	66	12:21	80N	18:47	294	19:10
2024	Jun	16	(Sun)	05:32	05:55	66	12:21	80N	18:47	294	19:10
2024	Jun	17	(Mon)	05:32	05:55	66	12:21	80N	18:47	294	19:11
2024	Jun	18	(Tue)	05:32	05:55	66	12:21	80N	18:47	294	19:11
2024	Jun	19	(Wed)	05:32	05:56	66	12:22	80N	18:48	294	19:11
2024	Jun	20	(Thu)	05:32	05:56	66	12:22	80N	18:48	294	19:11
2024	Jun	21	(Fri)	05:33	05:56	66	12:22	80N	18:48	294	19:12
2024	Jun	22	(Sat)	05:33	05:56	66	12:22	80N	18:48	294	19:12
2024	Jun	23	(Sun)	05:33	05:56	66	12:23	80N	18:49	294	19:12
2024	Jun	24	(Mon)	05:33	05:57	66	12:23	80N	18:49	294	19:12
2024	Jun	25	(Tue)	05:34	05:57	66	12:23	80N	18:49	294	19:12
2024	Jun	26	(Wed)	05:34	05:57	66	12:23	80N	18:49	294	19:12
2024	Jun	27	(Thu)	05:34	05:57	66	12:23	80N	18:49	294	19:13
2024	Jun	28	(Fri)	05:34	05:58	66	12:24	80N	18:49	294	19:13
2024	Jun	29	(Sat)	05:35	05:58	66	12:24	80N	18:50	294	19:13
2024	Jun	30	(Sun)	05:35	05:58	66	12:24	80N	18:50	294	19:13
2024	Jul	01	(Mon)	05:35	05:58	66	12:24	80N	18:50	294	19:13
2024	Jul	02	(Tue)	05:35	05:59	66	12:24	80N	18:50	294	19:13
2024	Jul	03	(Wed)	05:36	05:59	66	12:25	80N	18:50	294	19:13
2024	Jul	04	(Thu)	05:36	05:59	66	12:25	81N	18:50	294	19:13
2024	Jul	05	(Fri)	05:36	06:00	66	12:25	81N	18:50	294	19:13
2024	Jul	06	(Sat)	05:37	06:00	67	12:25	81N	18:50	293	19:13
2024	Jul	07	(Sun)	05:37	06:00	67	12:25	81N	18:50	293	19:13
2024	Jul	08	(Mon)	05:37	06:00	67	12:25	81N	18:50	293	19:13
2024	Jul	09	(Tue)	05:37	06:01	67	12:26	81N	18:50	293	19:13
2024	Jul	10	(Wed)	05:38	06:01	67	12:26	81N	18:50	293	19:13
2024	Jul	11	(Thu)	05:38	06:01	67	12:26	81N	18:50	293	19:13
2024	Jul	12	(Fri)	05:38	06:02	67	12:26	81N	18:50	293	19:13
2024	Jul	13	(Sat)	05:39	06:02	67	12:26	82N	18:50	292	19:13
2024	Jul	14	(Sun)	05:39	06:02	68	12:26	82N	18:50	292	19:13
2024	Jul	15	(Mon)	05:39	06:02	68	12:26	82N	18:50	292	19:13
2024	Jul	16	(Tue)	05:40	06:03	68	12:26	82N	18:50	292	19:13
2024	Jul	17	(Wed)	05:40	06:03	68	12:26	82N	18:50	292	19:13
2024	Jul	18	(Thu)	05:40	06:03	68	12:26	82N	18:50	292	19:13
2024	Jul	19	(Fri)	05:40	06:03	68	12:27	83N	18:50	291	19:13
2024	Jul	20	(Sat)	05:41	06:04	69	12:27	83N	18:50	291	19:12
2024	Jul	21	(Sun)	05:41	06:04	69	12:27	83N	18:49	291	19:12
2024	Jul	22	(Mon)	05:41	06:04	69	12:27	83N	18:49	291	19:12
2024	Jul	23	(Tue)	05:42	06:04	69	12:27	83N	18:49	291	19:12
2024	Jul	24	(Wed)	05:42	06:05	69	12:27	84N	18:49	290	19:11
2024	Jul	25	(Thu)	05:42	06:05	70	12:27	84N	18:49	290	19:11
2024	Jul	26	(Fri)	05:42	06:05	70	12:27	84N	18:48	290	19:11
2024	Jul	27	(Sat)	05:43	06:05	70	12:27	84N	18:48	290	19:11
2024	Jul	28	(Sun)	05:43	06:06	70	12:27	84N	18:48	289	19:10
2024	Jul	29	(Mon)	05:43	06:06	71	12:27	85N	18:48	289	19:10
2024	Jul	30	(Tue)	05:43	06:06	71	12:27	85N	18:47	289	19:10

2024	Jul	31	(Wed)	05:44	06:06	71	12:27	85N	18:47	289	19:09
2024	Aug	01	(Thu)	05:44	06:06	71	12:27	85N	18:47	288	19:09
2024	Aug	02	(Fri)	05:44	06:07	72	12:26	86N	18:46	288	19:09
2024	Aug	03	(Sat)	05:44	06:07	72	12:26	86N	18:46	288	19:08
2024	Aug	04	(Sun)	05:45	06:07	72	12:26	86N	18:46	288	19:08
2024	Aug	05	(Mon)	05:45	06:07	72	12:26	87N	18:45	287	19:07
2024	Aug	06	(Tue)	05:45	06:07	73	12:26	87N	18:45	287	19:07
2024	Aug	07	(Wed)	05:45	06:07	73	12:26	87N	18:44	287	19:07
2024	Aug	08	(Thu)	05:45	06:08	73	12:26	87N	18:44	287	19:06
2024	Aug	09	(Fri)	05:46	06:08	74	12:26	88N	18:44	286	19:06
2024	Aug	10	(Sat)	05:46	06:08	74	12:26	88N	18:43	286	19:05
2024	Aug	11	(Sun)	05:46	06:08	74	12:25	88N	18:43	286	19:05
2024	Aug	12	(Mon)	05:46	06:08	75	12:25	89N	18:42	285	19:04
2024	Aug	13	(Tue)	05:46	06:08	75	12:25	89N	18:42	285	19:04
2024	Aug	14	(Wed)	05:46	06:08	75	12:25	89N	18:41	285	19:03
2024	Aug	15	(Thu)	05:46	06:08	75	12:25	89N	18:41	284	19:03
2024	Aug	16	(Fri)	05:47	06:09	76	12:24	90N	18:40	284	19:02
2024	Aug	17	(Sat)	05:47	06:09	76	12:24	90N	18:40	284	19:02
2024	Aug	18	(Sun)	05:47	06:09	76	12:24	90N	18:39	283	19:01
2024	Aug	19	(Mon)	05:47	06:09	77	12:24	91S	18:39	283	19:00
2024	Aug	20	(Tue)	05:47	06:09	77	12:24	90S	18:38	283	19:00
2024	Aug	21	(Wed)	05:47	06:09	77	12:23	90S	18:37	282	18:59
2024	Aug	22	(Thu)	05:47	06:09	78	12:23	90S	18:37	282	18:59
2024	Aug	23	(Fri)	05:47	06:09	78	12:23	89S	18:36	282	18:58
2024	Aug	24	(Sat)	05:47	06:09	79	12:23	89S	18:36	281	18:57
2024	Aug	25	(Sun)	05:48	06:09	79	12:22	89S	18:35	281	18:57
2024	Aug	26	(Mon)	05:48	06:09	79	12:22	88S	18:35	281	18:56
2024	Aug	27	(Tue)	05:48	06:09	80	12:22	88S	18:34	280	18:55
2024	Aug	28	(Wed)	05:48	06:09	80	12:21	88S	18:33	280	18:55
2024	Aug	29	(Thu)	05:48	06:09	80	12:21	87S	18:33	279	18:54
2024	Aug	30	(Fri)	05:48	06:09	81	12:21	87S	18:32	279	18:53
2024	Aug	31	(Sat)	05:48	06:09	81	12:20	87S	18:31	279	18:53
2024	Sep	01	(Sun)	05:48	06:09	81	12:20	86S	18:31	278	18:52
2024	Sep	02	(Mon)	05:48	06:09	82	12:20	86S	18:30	278	18:51
2024	Sep	03	(Tue)	05:48	06:09	82	12:19	85S	18:29	278	18:51
2024	Sep	04	(Wed)	05:48	06:09	83	12:19	85S	18:29	277	18:50
2024	Sep	05	(Thu)	05:48	06:09	83	12:19	85S	18:28	277	18:49
2024	Sep	06	(Fri)	05:48	06:09	83	12:18	84S	18:27	276	18:49
2024	Sep	07	(Sat)	05:48	06:09	84	12:18	84S	18:27	276	18:48
2024	Sep	08	(Sun)	05:48	06:09	84	12:18	84S	18:26	276	18:47
2024	Sep	09	(Mon)	05:48	06:09	84	12:17	83S	18:25	275	18:47
2024	Sep	10	(Tue)	05:48	06:09	85	12:17	83S	18:25	275	18:46
2024	Sep	11	(Wed)	05:48	06:09	85	12:17	82S	18:24	275	18:45
2024	Sep	12	(Thu)	05:48	06:09	86	12:16	82S	18:23	274	18:44
2024	Sep	13	(Fri)	05:48	06:09	86	12:16	82S	18:23	274	18:44
2024	Sep	14	(Sat)	05:48	06:09	86	12:16	81S	18:22	273	18:43
2024	Sep	15	(Sun)	05:48	06:09	87	12:15	81S	18:21	273	18:42
2024	Sep	16	(Mon)	05:48	06:09	87	12:15	81S	18:20	273	18:42
2024	Sep	17	(Tue)	05:48	06:09	88	12:15	80S	18:20	272	18:41
2024	Sep	18	(Wed)	05:48	06:09	88	12:14	80S	18:19	272	18:40
2024	Sep	19	(Thu)	05:48	06:09	88	12:14	79S	18:18	271	18:39
2024	Sep	20	(Fri)	05:48	06:09	89	12:14	79S	18:18	271	18:39
2024	Sep	21	(Sat)	05:48	06:09	89	12:13	79S	18:17	271	18:38
2024	Sep	22	(Sun)	05:48	06:09	90	12:13	78S	18:16	270	18:37
2024	Sep	23	(Mon)	05:48	06:09	90	12:12	78S	18:15	270	18:37
2024	Sep	24	(Tue)	05:48	06:09	90	12:12	77S	18:15	269	18:36
2024	Sep	25	(Wed)	05:48	06:09	91	12:12	77S	18:14	269	18:35
2024	Sep	26	(Thu)	05:48	06:09	91	12:11	77S	18:13	269	18:35
2024	Sep	27	(Fri)	05:48	06:09	92	12:11	76S	18:13	268	18:34
2024	Sep	28	(Sat)	05:48	06:09	92	12:11	76S	18:12	268	18:33
2024	Sep	29	(Sun)	05:48	06:09	92	12:10	75S	18:11	267	18:33
2024	Sep	30	(Mon)	05:48	06:09	93	12:10	75S	18:11	267	18:32
2024	Oct	01	(Tue)	05:48	06:09	93	12:10	75S	18:10	267	18:31
2024	Oct	02	(Wed)	05:48	06:09	94	12:09	74S	18:09	266	18:31
2024	Oct	03	(Thu)	05:48	06:09	94	12:09	74S	18:09	266	18:30
2024	Oct	04	(Fri)	05:48	06:10	94	12:09	74S	18:08	265	18:29
2024	Oct	05	(Sat)	05:48	06:10	95	12:09	73S	18:07	265	18:29

2024	Oct	06	(Sun)	05:48	06:10	95	12:08	73S	18:07	265	18:28
2024	Oct	07	(Mon)	05:48	06:10	96	12:08	72S	18:06	264	18:27
2024	Oct	08	(Tue)	05:48	06:10	96	12:08	72S	18:05	264	18:27
2024	Oct	09	(Wed)	05:48	06:10	96	12:07	72S	18:05	263	18:26
2024	Oct	10	(Thu)	05:49	06:10	97	12:07	71S	18:04	263	18:26
2024	Oct	11	(Fri)	05:49	06:10	97	12:07	71S	18:04	263	18:25
2024	Oct	12	(Sat)	05:49	06:10	97	12:07	70S	18:03	262	18:24
2024	Oct	13	(Sun)	05:49	06:10	98	12:06	70S	18:03	262	18:24
2024	Oct	14	(Mon)	05:49	06:10	98	12:06	70S	18:02	262	18:23
2024	Oct	15	(Tue)	05:49	06:10	99	12:06	69S	18:01	261	18:23
2024	Oct	16	(Wed)	05:49	06:10	99	12:06	69S	18:01	261	18:22
2024	Oct	17	(Thu)	05:49	06:11	99	12:06	69S	18:00	260	18:22
2024	Oct	18	(Fri)	05:49	06:11	100	12:05	68S	18:00	260	18:21
2024	Oct	19	(Sat)	05:49	06:11	100	12:05	68S	17:59	260	18:21
2024	Oct	20	(Sun)	05:49	06:11	100	12:05	68S	17:59	259	18:20
2024	Oct	21	(Mon)	05:50	06:11	101	12:05	67S	17:58	259	18:20
2024	Oct	22	(Tue)	05:50	06:11	101	12:05	67S	17:58	259	18:19
2024	Oct	23	(Wed)	05:50	06:11	102	12:04	67S	17:57	258	18:19
2024	Oct	24	(Thu)	05:50	06:12	102	12:04	66S	17:57	258	18:18
2024	Oct	25	(Fri)	05:50	06:12	102	12:04	66S	17:56	258	18:18
2024	Oct	26	(Sat)	05:50	06:12	103	12:04	65S	17:56	257	18:18
2024	Oct	27	(Sun)	05:51	06:12	103	12:04	65S	17:56	257	18:17
2024	Oct	28	(Mon)	05:51	06:13	103	12:04	65S	17:55	256	18:17
2024	Oct	29	(Tue)	05:51	06:13	104	12:04	64S	17:55	256	18:17
2024	Oct	30	(Wed)	05:51	06:13	104	12:04	64S	17:55	256	18:16
2024	Oct	31	(Thu)	05:51	06:13	104	12:04	64S	17:54	255	18:16
2024	Nov	01	(Fri)	05:52	06:14	105	12:04	63S	17:54	255	18:16
2024	Nov	02	(Sat)	05:52	06:14	105	12:04	63S	17:54	255	18:15
2024	Nov	03	(Sun)	05:52	06:14	105	12:04	63S	17:53	255	18:15
2024	Nov	04	(Mon)	05:52	06:14	106	12:04	63S	17:53	254	18:15
2024	Nov	05	(Tue)	05:53	06:15	106	12:04	62S	17:53	254	18:15
2024	Nov	06	(Wed)	05:53	06:15	106	12:04	62S	17:52	254	18:14
2024	Nov	07	(Thu)	05:53	06:15	107	12:04	62S	17:52	253	18:14
2024	Nov	08	(Fri)	05:54	06:16	107	12:04	61S	17:52	253	18:14
2024	Nov	09	(Sat)	05:54	06:16	107	12:04	61S	17:52	253	18:14
2024	Nov	10	(Sun)	05:54	06:16	107	12:04	61S	17:52	252	18:14
2024	Nov	11	(Mon)	05:55	06:17	108	12:04	61S	17:52	252	18:14
2024	Nov	12	(Tue)	05:55	06:17	108	12:04	60S	17:51	252	18:14
2024	Nov	13	(Wed)	05:55	06:18	108	12:05	60S	17:51	252	18:14
2024	Nov	14	(Thu)	05:56	06:18	109	12:05	60S	17:51	251	18:13
2024	Nov	15	(Fri)	05:56	06:18	109	12:05	59S	17:51	251	18:13
2024	Nov	16	(Sat)	05:57	06:19	109	12:05	59S	17:51	251	18:13
2024	Nov	17	(Sun)	05:57	06:19	109	12:05	59S	17:51	251	18:13
2024	Nov	18	(Mon)	05:57	06:20	110	12:05	59S	17:51	250	18:13
2024	Nov	19	(Tue)	05:58	06:20	110	12:06	59S	17:51	250	18:13
2024	Nov	20	(Wed)	05:58	06:21	110	12:06	58S	17:51	250	18:13
2024	Nov	21	(Thu)	05:59	06:21	110	12:06	58S	17:51	250	18:14
2024	Nov	22	(Fri)	05:59	06:22	111	12:06	58S	17:51	249	18:14
2024	Nov	23	(Sat)	05:59	06:22	111	12:07	58S	17:51	249	18:14
2024	Nov	24	(Sun)	06:00	06:23	111	12:07	57S	17:51	249	18:14
2024	Nov	25	(Mon)	06:00	06:23	111	12:07	57S	17:51	249	18:14
2024	Nov	26	(Tue)	06:01	06:24	111	12:08	57S	17:51	249	18:14
2024	Nov	27	(Wed)	06:01	06:24	112	12:08	57S	17:52	248	18:14
2024	Nov	28	(Thu)	06:02	06:25	112	12:08	57S	17:52	248	18:14
2024	Nov	29	(Fri)	06:02	06:25	112	12:09	57S	17:52	248	18:15
2024	Nov	30	(Sat)	06:03	06:26	112	12:09	56S	17:52	248	18:15
2024	Dec	01	(Sun)	06:03	06:26	112	12:09	56S	17:52	248	18:15
2024	Dec	02	(Mon)	06:04	06:27	112	12:10	56S	17:53	248	18:15
2024	Dec	03	(Tue)	06:04	06:27	113	12:10	56S	17:53	247	18:16
2024	Dec	04	(Wed)	06:05	06:28	113	12:10	56S	17:53	247	18:16
2024	Dec	05	(Thu)	06:05	06:28	113	12:11	56S	17:53	247	18:16
2024	Dec	06	(Fri)	06:06	06:29	113	12:11	56S	17:54	247	18:17
2024	Dec	07	(Sat)	06:06	06:29	113	12:12	55S	17:54	247	18:17
2024	Dec	08	(Sun)	06:07	06:30	113	12:12	55S	17:54	247	18:17
2024	Dec	09	(Mon)	06:08	06:30	113	12:13	55S	17:55	247	18:18
2024	Dec	10	(Tue)	06:08	06:31	113	12:13	55S	17:55	247	18:18
2024	Dec	11	(Wed)	06:09	06:32	113	12:14	55S	17:55	247	18:18

2024	Dec 12	(Thu)	06:09	06:32	113	12:14	55S	17:56	246	18:19
2024	Dec 13	(Fri)	06:10	06:33	114	12:14	55S	17:56	246	18:19
2024	Dec 14	(Sat)	06:10	06:33	114	12:15	55S	17:57	246	18:20
2024	Dec 15	(Sun)	06:11	06:34	114	12:15	55S	17:57	246	18:20
2024	Dec 16	(Mon)	06:11	06:34	114	12:16	55S	17:58	246	18:21
2024	Dec 17	(Tue)	06:12	06:35	114	12:16	55S	17:58	246	18:21
2024	Dec 18	(Wed)	06:12	06:35	114	12:17	55S	17:58	246	18:22
2024	Dec 19	(Thu)	06:13	06:36	114	12:17	55S	17:59	246	18:22
2024	Dec 20	(Fri)	06:13	06:36	114	12:18	55S	17:59	246	18:22
2024	Dec 21	(Sat)	06:14	06:37	114	12:18	55S	18:00	246	18:23
2024	Dec 22	(Sun)	06:14	06:37	114	12:19	55S	18:00	246	18:23
2024	Dec 23	(Mon)	06:15	06:38	114	12:19	55S	18:01	246	18:24
2024	Dec 24	(Tue)	06:15	06:38	114	12:20	55S	18:01	246	18:24
2024	Dec 25	(Wed)	06:16	06:39	114	12:20	55S	18:02	246	18:25
2024	Dec 26	(Thu)	06:16	06:39	114	12:21	55S	18:03	246	18:26
2024	Dec 27	(Fri)	06:17	06:40	114	12:21	55S	18:03	246	18:26
2024	Dec 28	(Sat)	06:17	06:40	114	12:22	55S	18:04	246	18:27
2024	Dec 29	(Sun)	06:18	06:41	114	12:22	55S	18:04	246	18:27
2024	Dec 30	(Mon)	06:18	06:41	114	12:23	55S	18:05	246	18:28
2024	Dec 31	(Tue)	06:18	06:41	113	12:23	55S	18:05	247	18:28

Moon

VTPH

Location: E 99°57'00.0", N12°38'00.0", 62m
(Longitude referred to Greenwich meridian)

Time Zone: 7h 00m east of Greenwich

Date (Zone)			Rise Az.			Transit Alt.			Set Az.		
			h	m	°	h	m	°	h	m	°
2024	Jan 01	(Mon)	22:34	81		04:11	90N		10:32	282	
2024	Jan 02	(Tue)	23:18	86		04:52	86S		11:07	277	
2024	Jan 03	(Wed)				05:31	80S		11:41	271	
2024	Jan 04	(Thu)	00:03	92		06:10	74S		12:15	265	
2024	Jan 05	(Fri)	00:48	98		06:50	68S		12:50	259	
2024	Jan 06	(Sat)	01:35	104		07:33	63S		13:29	253	
2024	Jan 07	(Sun)	02:26	109		08:20	58S		14:12	249	
2024	Jan 08	(Mon)	03:22	114		09:12	53S		15:00	244	
2024	Jan 09	(Tue)	04:21	117		10:09	51S		15:55	242	
2024	Jan 10	(Wed)	05:24	119		11:10	49S		16:57	241	
2024	Jan 11	(Thu)	06:27	119		12:14	50S		18:02	242	
2024	Jan 12	(Fri)	07:28	116		13:17	53S		19:08	246	
2024	Jan 13	(Sat)	08:23	112		14:17	58S		20:12	251	
2024	Jan 14	(Sun)	09:14	106		15:12	64S		21:13	257	
2024	Jan 15	(Mon)	10:00	99		16:03	71S		22:10	264	
2024	Jan 16	(Tue)	10:43	92		16:52	78S		23:05	272	
2024	Jan 17	(Wed)	11:24	85		17:40	85S		23:59	279	
2024	Jan 18	(Thu)	12:06	78		18:28	90N				
2024	Jan 19	(Fri)	12:49	72		19:17	85N		00:53	285	
2024	Jan 20	(Sat)	13:35	67		20:09	80N		01:49	291	
2024	Jan 21	(Sun)	14:24	64		21:03	77N		02:46	295	
2024	Jan 22	(Mon)	15:16	62		21:58	75N		03:43	298	
2024	Jan 23	(Tue)	16:11	61		22:53	75N		04:40	299	
2024	Jan 24	(Wed)	17:07	62		23:47	77N		05:34	298	
2024	Jan 25	(Thu)	18:01	65					06:25	297	
2024	Jan 26	(Fri)	18:53	69		00:37	80N		07:11	293	
2024	Jan 27	(Sat)	19:42	73		01:24	84N		07:53	289	
2024	Jan 28	(Sun)	20:29	79		02:08	88N		08:31	284	
2024	Jan 29	(Mon)	21:14	84		02:49	88S		09:06	279	
2024	Jan 30	(Tue)	21:58	90		03:28	82S		09:40	273	
2024	Jan 31	(Wed)	22:42	96		04:07	76S		10:13	267	
2024	Feb 01	(Thu)	23:28	102		04:46	70S		10:48	261	
2024	Feb 02	(Fri)				05:27	65S		11:24	255	
2024	Feb 03	(Sat)	00:16	107		06:11	60S		12:04	250	
2024	Feb 04	(Sun)	01:08	112		06:59	55S		12:48	246	

2024 Feb 05 (Mon)	02:04 116	07:52 52S	13:39 243
2024 Feb 06 (Tue)	03:04 118	08:51 49S	14:36 241
2024 Feb 07 (Wed)	04:06 119	09:52 49S	15:39 241
2024 Feb 08 (Thu)	05:08 118	10:56 51S	16:45 244
2024 Feb 09 (Fri)	06:06 114	11:57 55S	17:51 248
2024 Feb 10 (Sat)	07:00 109	12:56 61S	18:54 254
2024 Feb 11 (Sun)	07:49 102	13:51 67S	19:55 261
2024 Feb 12 (Mon)	08:35 95	14:43 75S	20:53 269
2024 Feb 13 (Tue)	09:19 88	15:33 82S	21:50 276
2024 Feb 14 (Wed)	10:02 80	16:22 89S	22:46 283
2024 Feb 15 (Thu)	10:46 74	17:13 86N	23:43 289
2024 Feb 16 (Fri)	11:32 69	18:05 81N	
2024 Feb 17 (Sat)	12:21 64	18:59 77N	00:40 294
2024 Feb 18 (Sun)	13:13 62	19:54 75N	01:38 297
2024 Feb 19 (Mon)	14:07 61	20:49 75N	02:36 299
2024 Feb 20 (Tue)	15:02 62	21:42 76N	03:31 299
2024 Feb 21 (Wed)	15:56 64	22:33 78N	04:22 297
2024 Feb 22 (Thu)	16:48 67	23:21 82N	05:09 295
2024 Feb 23 (Fri)	17:38 72		05:51 291
2024 Feb 24 (Sat)	18:25 77	00:06 87N	06:30 286
2024 Feb 25 (Sun)	19:11 82	00:47 90S	07:06 280
2024 Feb 26 (Mon)	19:55 88	01:27 84S	07:41 275
2024 Feb 27 (Tue)	20:39 94	02:06 78S	08:14 269
2024 Feb 28 (Wed)	21:24 100	02:45 72S	08:48 263
2024 Feb 29 (Thu)	22:11 106	03:25 67S	09:23 257
2024 Mar 01 (Fri)	23:01 111	04:07 61S	10:01 252
2024 Mar 02 (Sat)	23:54 115	04:53 56S	10:43 247
2024 Mar 03 (Sun)		05:43 53S	11:30 244
2024 Mar 04 (Mon)	00:51 118	06:37 50S	12:23 241
2024 Mar 05 (Tue)	01:50 119	07:36 49S	13:21 241
2024 Mar 06 (Wed)	02:51 119	08:37 50S	14:24 242
2024 Mar 07 (Thu)	03:49 116	09:38 53S	15:28 245
2024 Mar 08 (Fri)	04:44 112	10:37 57S	16:32 251
2024 Mar 09 (Sat)	05:35 106	11:33 64S	17:34 257
2024 Mar 10 (Sun)	06:22 99	12:26 71S	18:34 265
2024 Mar 11 (Mon)	07:07 91	13:18 78S	19:32 272
2024 Mar 12 (Tue)	07:52 84	14:09 86S	20:31 280
2024 Mar 13 (Wed)	08:37 77	15:01 89N	21:29 287
2024 Mar 14 (Thu)	09:23 71	15:55 83N	22:29 292
2024 Mar 15 (Fri)	10:13 66	16:50 78N	23:29 296
2024 Mar 16 (Sat)	11:06 62	17:46 76N	
2024 Mar 17 (Sun)	12:01 61	18:43 75N	00:28 299
2024 Mar 18 (Mon)	12:56 61	19:38 75N	01:25 299
2024 Mar 19 (Tue)	13:51 63	20:30 77N	02:19 298
2024 Mar 20 (Wed)	14:44 66	21:19 81N	03:07 296
2024 Mar 21 (Thu)	15:35 70	22:04 85N	03:51 292
2024 Mar 22 (Fri)	16:23 75	22:46 90N	04:31 287
2024 Mar 23 (Sat)	17:08 80	23:27 86S	05:07 282
2024 Mar 24 (Sun)	17:53 86		05:42 277
2024 Mar 25 (Mon)	18:37 92	00:06 80S	06:16 271
2024 Mar 26 (Tue)	19:22 98	00:45 74S	06:49 265
2024 Mar 27 (Wed)	20:09 104	01:24 68S	07:24 259
2024 Mar 28 (Thu)	20:58 109	02:06 63S	08:01 253
2024 Mar 29 (Fri)	21:49 114	02:51 58S	08:42 249
2024 Mar 30 (Sat)	22:45 117	03:39 54S	09:26 245
2024 Mar 31 (Sun)	23:42 119	04:31 51S	10:17 242
2024 Apr 01 (Mon)		05:27 49S	11:12 241
2024 Apr 02 (Tue)	00:41 119	06:26 49S	12:11 241
2024 Apr 03 (Wed)	01:38 118	07:25 51S	13:13 244
2024 Apr 04 (Thu)	02:32 114	08:22 55S	14:15 248
2024 Apr 05 (Fri)	03:23 109	09:18 60S	15:16 254
2024 Apr 06 (Sat)	04:10 103	10:11 67S	16:15 261
2024 Apr 07 (Sun)	04:55 96	11:02 74S	17:13 268
2024 Apr 08 (Mon)	05:39 88	11:53 82S	18:11 276
2024 Apr 09 (Tue)	06:24 80	12:45 89S	19:10 283
2024 Apr 10 (Wed)	07:11 74	13:39 86N	20:10 290
2024 Apr 11 (Thu)	08:00 68	14:35 80N	21:12 295

2024 Apr 12 (Fri)	08:53 64	15:33 77N	22:14 298
2024 Apr 13 (Sat)	09:49 61	16:31 75N	23:14 299
2024 Apr 14 (Sun)	10:46 61	17:29 75N	
2024 Apr 15 (Mon)	11:43 62	18:24 76N	00:11 299
2024 Apr 16 (Tue)	12:38 65	19:14 79N	01:02 297
2024 Apr 17 (Wed)	13:30 68	20:01 83N	01:48 293
2024 Apr 18 (Thu)	14:19 73	20:45 88N	02:30 289
2024 Apr 19 (Fri)	15:05 79	21:25 88S	03:08 284
2024 Apr 20 (Sat)	15:50 84	22:05 82S	03:43 279
2024 Apr 21 (Sun)	16:34 90	22:44 76S	04:17 273
2024 Apr 22 (Mon)	17:19 96	23:23 70S	04:50 267
2024 Apr 23 (Tue)	18:05 102		05:25 261
2024 Apr 24 (Wed)	18:54 108	00:04 65S	06:01 255
2024 Apr 25 (Thu)	19:45 112	00:48 59S	06:41 250
2024 Apr 26 (Fri)	20:40 116	01:36 55S	07:24 246
2024 Apr 27 (Sat)	21:37 119	02:27 51S	08:13 243
2024 Apr 28 (Sun)	22:35 119	03:22 49S	09:07 241
2024 Apr 29 (Mon)	23:32 118	04:20 49S	10:05 241
2024 Apr 30 (Tue)		05:18 50S	11:05 243
2024 May 01 (Wed)	00:27 115	06:15 54S	12:06 246
2024 May 02 (Thu)	01:17 111	07:10 58S	13:05 252
2024 May 03 (Fri)	02:04 105	08:02 64S	14:03 258
2024 May 04 (Sat)	02:48 99	08:52 71S	14:59 265
2024 May 05 (Sun)	03:31 91	09:42 78S	15:55 272
2024 May 06 (Mon)	04:14 84	10:31 86S	16:52 280
2024 May 07 (Tue)	04:59 77	11:23 89N	17:51 286
2024 May 08 (Wed)	05:46 71	12:18 83N	18:52 292
2024 May 09 (Thu)	06:38 66	13:15 78N	19:55 296
2024 May 10 (Fri)	07:33 62	14:15 76N	20:58 299
2024 May 11 (Sat)	08:31 61	15:15 75N	21:58 299
2024 May 12 (Sun)	09:30 61	16:12 76N	22:53 298
2024 May 13 (Mon)	10:27 63	17:06 78N	23:42 295
2024 May 14 (Tue)	11:22 67	17:55 82N	
2024 May 15 (Wed)	12:12 71	18:40 86N	00:26 291
2024 May 16 (Thu)	13:00 77	19:22 90S	01:06 286
2024 May 17 (Fri)	13:46 82	20:02 84S	01:42 281
2024 May 18 (Sat)	14:30 88	20:41 78S	02:16 275
2024 May 19 (Sun)	15:14 94	21:20 72S	02:50 269
2024 May 20 (Mon)	16:00 100	22:01 67S	03:24 263
2024 May 21 (Tue)	16:48 106	22:44 61S	03:59 257
2024 May 22 (Wed)	17:38 111	23:30 56S	04:38 252
2024 May 23 (Thu)	18:32 115		05:20 247
2024 May 24 (Fri)	19:30 118	00:21 53S	06:08 244
2024 May 25 (Sat)	20:29 119	01:16 50S	07:01 241
2024 May 26 (Sun)	21:27 119	02:14 49S	07:59 241
2024 May 27 (Mon)	22:23 116	03:13 50S	09:00 242
2024 May 28 (Tue)	23:15 112	04:11 53S	10:01 245
2024 May 29 (Wed)		05:06 57S	11:00 250
2024 May 30 (Thu)	00:02 107	05:58 62S	11:57 256
2024 May 31 (Fri)	00:46 101	06:48 69S	12:53 263
2024 Jun 01 (Sat)	01:28 94	07:36 76S	13:47 270
2024 Jun 02 (Sun)	02:10 87	08:24 83S	14:42 277
2024 Jun 03 (Mon)	02:52 80	09:14 90S	15:38 284
2024 Jun 04 (Tue)	03:37 73	10:05 85N	16:37 290
2024 Jun 05 (Wed)	04:26 68	11:01 80N	17:38 295
2024 Jun 06 (Thu)	05:19 64	11:59 77N	18:40 298
2024 Jun 07 (Fri)	06:16 61	12:59 75N	19:42 299
2024 Jun 08 (Sat)	07:15 61	13:58 75N	20:40 298
2024 Jun 09 (Sun)	08:14 62	14:54 77N	21:32 296
2024 Jun 10 (Mon)	09:10 65	15:46 80N	22:19 292
2024 Jun 11 (Tue)	10:03 70	16:34 85N	23:01 288
2024 Jun 12 (Wed)	10:53 75	17:17 90N	23:39 283
2024 Jun 13 (Thu)	11:40 80	17:58 86S	
2024 Jun 14 (Fri)	12:24 86	18:38 80S	00:14 277
2024 Jun 15 (Sat)	13:09 92	19:16 75S	00:48 271
2024 Jun 16 (Sun)	13:53 98	19:56 69S	01:21 265
2024 Jun 17 (Mon)	14:40 103	20:38 63S	01:56 259

2024 Jun 18 (Tue)	15:29 109	21:23 58S	02:33 254
2024 Jun 19 (Wed)	16:22 113	22:12 54S	03:14 249
2024 Jun 20 (Thu)	17:18 117	23:05 51S	04:00 245
2024 Jun 21 (Fri)	18:18 119		04:51 242
2024 Jun 22 (Sat)	19:18 119	00:03 49S	05:48 241
2024 Jun 23 (Sun)	20:16 117	01:03 49S	06:49 242
2024 Jun 24 (Mon)	21:10 114	02:03 52S	07:52 244
2024 Jun 25 (Tue)	22:00 109	03:01 55S	08:53 248
2024 Jun 26 (Wed)	22:45 103	03:55 61S	09:52 254
2024 Jun 27 (Thu)	23:28 96	04:46 67S	10:49 261
2024 Jun 28 (Fri)		05:34 74S	11:44 268
2024 Jun 29 (Sat)	00:09 89	06:22 81S	12:38 275
2024 Jun 30 (Sun)	00:51 82	07:10 88S	13:32 282
2024 Jul 01 (Mon)	01:34 75	08:00 87N	14:29 288
2024 Jul 02 (Tue)	02:20 69	08:52 82N	15:28 293
2024 Jul 03 (Wed)	03:10 65	09:48 78N	16:28 297
2024 Jul 04 (Thu)	04:05 62	10:46 75N	17:29 299
2024 Jul 05 (Fri)	05:02 61	11:45 75N	18:28 299
2024 Jul 06 (Sat)	06:01 62	12:43 76N	19:23 297
2024 Jul 07 (Sun)	06:59 64	13:36 79N	20:12 294
2024 Jul 08 (Mon)	07:53 68	14:26 83N	20:56 290
2024 Jul 09 (Tue)	08:45 73	15:12 88N	21:35 285
2024 Jul 10 (Wed)	09:33 78	15:54 88S	22:12 279
2024 Jul 11 (Thu)	10:18 84	16:34 83S	22:46 273
2024 Jul 12 (Fri)	11:03 90	17:12 77S	23:19 267
2024 Jul 13 (Sat)	11:47 96	17:51 71S	23:53 262
2024 Jul 14 (Sun)	12:32 101	18:32 65S	
2024 Jul 15 (Mon)	13:20 107	19:15 60S	00:29 256
2024 Jul 16 (Tue)	14:10 112	20:01 56S	01:08 251
2024 Jul 17 (Wed)	15:05 116	20:53 52S	01:51 246
2024 Jul 18 (Thu)	16:03 118	21:49 50S	02:39 243
2024 Jul 19 (Fri)	17:03 119	22:48 49S	03:34 241
2024 Jul 20 (Sat)	18:02 118	23:49 50S	04:34 241
2024 Jul 21 (Sun)	18:59 115		05:37 243
2024 Jul 22 (Mon)	19:52 111	00:49 54S	06:40 247
2024 Jul 23 (Tue)	20:41 105	01:46 59S	07:42 252
2024 Jul 24 (Wed)	21:25 98	02:39 65S	08:41 258
2024 Jul 25 (Thu)	22:08 91	03:30 72S	09:38 266
2024 Jul 26 (Fri)	22:50 83	04:19 79S	10:33 273
2024 Jul 27 (Sat)	23:33 77	05:07 86S	11:28 280
2024 Jul 28 (Sun)		05:57 89N	12:24 287
2024 Jul 29 (Mon)	00:18 71	06:49 83N	13:22 292
2024 Jul 30 (Tue)	01:07 66	07:43 79N	14:22 296
2024 Jul 31 (Wed)	01:59 63	08:40 76N	15:22 299
2024 Aug 01 (Thu)	02:55 61	09:38 75N	16:21 299
2024 Aug 02 (Fri)	03:53 61	10:35 75N	17:16 298
2024 Aug 03 (Sat)	04:50 63	11:29 78N	18:06 295
2024 Aug 04 (Sun)	05:45 66	12:20 81N	18:52 291
2024 Aug 05 (Mon)	06:38 71	13:07 86N	19:33 287
2024 Aug 06 (Tue)	07:27 76	13:50 90S	20:10 281
2024 Aug 07 (Wed)	08:13 82	14:30 85S	20:45 275
2024 Aug 08 (Thu)	08:58 88	15:10 79S	21:18 269
2024 Aug 09 (Fri)	09:42 94	15:48 73S	21:52 264
2024 Aug 10 (Sat)	10:27 99	16:28 67S	22:27 258
2024 Aug 11 (Sun)	11:13 105	17:09 62S	23:03 253
2024 Aug 12 (Mon)	12:01 110	17:53 57S	23:44 248
2024 Aug 13 (Tue)	12:53 114	18:42 53S	
2024 Aug 14 (Wed)	13:48 117	19:35 50S	00:29 244
2024 Aug 15 (Thu)	14:46 119	20:31 49S	01:20 242
2024 Aug 16 (Fri)	15:46 119	21:31 49S	02:16 241
2024 Aug 17 (Sat)	16:44 117	22:32 52S	03:18 242
2024 Aug 18 (Sun)	17:39 113	23:30 56S	04:21 244
2024 Aug 19 (Mon)	18:30 108		05:24 249
2024 Aug 20 (Tue)	19:17 101	00:26 62S	06:25 255
2024 Aug 21 (Wed)	20:02 94	01:19 69S	07:25 262
2024 Aug 22 (Thu)	20:45 86	02:10 76S	08:22 270
2024 Aug 23 (Fri)	21:29 79	03:01 84S	09:19 278

2024 Aug 24 (Sat)	22:15	72	03:51	91S	10:17	285
2024 Aug 25 (Sun)	23:03	67	04:44	85N	11:16	291
2024 Aug 26 (Mon)	23:55	63	05:38	80N	12:16	295
2024 Aug 27 (Tue)			06:35	76N	13:17	298
2024 Aug 28 (Wed)	00:50	61	07:33	75N	14:16	299
2024 Aug 29 (Thu)	01:47	61	08:30	75N	15:12	299
2024 Aug 30 (Fri)	02:45	62	09:25	77N	16:03	297
2024 Aug 31 (Sat)	03:40	65	10:16	80N	16:50	293
2024 Sep 01 (Sun)	04:33	69	11:04	84N	17:32	288
2024 Sep 02 (Mon)	05:23	74	11:48	89N	18:10	283
2024 Sep 03 (Tue)	06:10	80	12:29	87S	18:45	277
2024 Sep 04 (Wed)	06:55	86	13:08	81S	19:19	271
2024 Sep 05 (Thu)	07:39	91	13:47	75S	19:52	266
2024 Sep 06 (Fri)	08:23	97	14:26	69S	20:26	260
2024 Sep 07 (Sat)	09:08	103	15:06	64S	21:02	254
2024 Sep 08 (Sun)	09:56	108	15:49	59S	21:41	249
2024 Sep 09 (Mon)	10:46	113	16:35	54S	22:23	245
2024 Sep 10 (Tue)	11:38	116	17:25	51S	23:11	242
2024 Sep 11 (Wed)	12:34	119	18:19	49S		
2024 Sep 12 (Thu)	13:32	119	19:16	49S	00:03	241
2024 Sep 13 (Fri)	14:29	118	20:15	50S	01:01	241
2024 Sep 14 (Sat)	15:24	116	21:13	54S	02:02	243
2024 Sep 15 (Sun)	16:16	111	22:09	59S	03:04	246
2024 Sep 16 (Mon)	17:05	105	23:04	65S	04:05	252
2024 Sep 17 (Tue)	17:51	98	23:56	72S	05:06	259
2024 Sep 18 (Wed)	18:35	90			06:05	266
2024 Sep 19 (Thu)	19:20	82	00:47	80S	07:03	274
2024 Sep 20 (Fri)	20:06	75	01:39	87S	08:02	281
2024 Sep 21 (Sat)	20:55	69	02:33	87N	09:03	288
2024 Sep 22 (Sun)	21:47	64	03:28	81N	10:05	294
2024 Sep 23 (Mon)	22:43	62	04:26	77N	11:07	297
2024 Sep 24 (Tue)	23:41	61	05:26	75N	12:09	299
2024 Sep 25 (Wed)			06:25	74N	13:07	299
2024 Sep 26 (Thu)	00:39	61	07:21	76N	14:01	297
2024 Sep 27 (Fri)	01:36	64	08:14	79N	14:49	294
2024 Sep 28 (Sat)	02:30	68	09:02	83N	15:32	290
2024 Sep 29 (Sun)	03:20	72	09:47	87N	16:11	285
2024 Sep 30 (Mon)	04:07	78	10:28	89S	16:46	279
2024 Oct 01 (Tue)	04:53	84	11:08	83S	17:21	273
2024 Oct 02 (Wed)	05:37	90	11:47	77S	17:54	268
2024 Oct 03 (Thu)	06:21	95	12:26	71S	18:27	262
2024 Oct 04 (Fri)	07:06	101	13:05	65S	19:03	256
2024 Oct 05 (Sat)	07:53	107	13:47	60S	19:40	251
2024 Oct 06 (Sun)	08:41	111	14:32	56S	20:21	247
2024 Oct 07 (Mon)	09:33	115	15:21	52S	21:07	243
2024 Oct 08 (Tue)	10:27	118	16:12	50S	21:57	241
2024 Oct 09 (Wed)	11:23	119	17:07	49S	22:52	241
2024 Oct 10 (Thu)	12:19	119	18:04	49S	23:49	242
2024 Oct 11 (Fri)	13:13	117	19:00	52S		
2024 Oct 12 (Sat)	14:05	113	19:56	56S	00:49	245
2024 Oct 13 (Sun)	14:53	108	20:49	62S	01:49	249
2024 Oct 14 (Mon)	15:39	101	21:41	68S	02:47	255
2024 Oct 15 (Tue)	16:23	94	22:31	76S	03:45	262
2024 Oct 16 (Wed)	17:07	86	23:23	83S	04:43	270
2024 Oct 17 (Thu)	17:53	79			05:42	277
2024 Oct 18 (Fri)	18:41	72	00:16	91N	06:42	285
2024 Oct 19 (Sat)	19:33	66	01:11	84N	07:45	291
2024 Oct 20 (Sun)	20:30	63	02:10	79N	08:50	296
2024 Oct 21 (Mon)	21:29	61	03:11	76N	09:54	299
2024 Oct 22 (Tue)	22:29	61	04:13	74N	10:57	299
2024 Oct 23 (Wed)	23:28	63	05:12	75N	11:54	298
2024 Oct 24 (Thu)			06:08	77N	12:45	295
2024 Oct 25 (Fri)	00:24	66	06:58	81N	13:30	291
2024 Oct 26 (Sat)	01:16	71	07:45	86N	14:11	287
2024 Oct 27 (Sun)	02:05	76	08:27	90S	14:47	281
2024 Oct 28 (Mon)	02:51	82	09:08	85S	15:22	275
2024 Oct 29 (Tue)	03:35	88	09:46	79S	15:55	269

2024 Oct 30 (Wed)	04:19 94	10:25 73S	16:29 264
2024 Oct 31 (Thu)	05:03 99	11:05 67S	17:03 258
2024 Nov 01 (Fri)	05:50 105	11:46 62S	17:40 253
2024 Nov 02 (Sat)	06:38 110	12:30 57S	18:20 248
2024 Nov 03 (Sun)	07:29 114	13:18 53S	19:05 244
2024 Nov 04 (Mon)	08:23 117	14:09 50S	19:54 242
2024 Nov 05 (Tue)	09:18 119	15:03 49S	20:47 241
2024 Nov 06 (Wed)	10:14 119	15:58 49S	21:43 241
2024 Nov 07 (Thu)	11:08 118	16:54 51S	22:42 244
2024 Nov 08 (Fri)	11:59 115	17:48 55S	23:40 247
2024 Nov 09 (Sat)	12:47 110	18:41 59S	
2024 Nov 10 (Sun)	13:32 104	19:31 65S	00:37 253
2024 Nov 11 (Mon)	14:15 97	20:20 72S	01:32 259
2024 Nov 12 (Tue)	14:57 90	21:09 80S	02:28 266
2024 Nov 13 (Wed)	15:41 83	21:59 87S	03:24 274
2024 Nov 14 (Thu)	16:26 76	22:53 87N	04:22 281
2024 Nov 15 (Fri)	17:16 69	23:50 82N	05:23 288
2024 Nov 16 (Sat)	18:11 65		06:26 293
2024 Nov 17 (Sun)	19:10 62	00:51 77N	07:32 297
2024 Nov 18 (Mon)	20:12 61	01:54 75N	08:38 299
2024 Nov 19 (Tue)	21:14 62	02:56 75N	09:39 299
2024 Nov 20 (Wed)	22:13 65	03:55 76N	10:35 297
2024 Nov 21 (Thu)	23:08 69	04:50 80N	11:24 293
2024 Nov 22 (Fri)	23:59 74	05:39 84N	12:07 288
2024 Nov 23 (Sat)		06:24 89N	12:46 283
2024 Nov 24 (Sun)	00:46 80	07:05 87S	13:22 277
2024 Nov 25 (Mon)	01:31 86	07:45 81S	13:55 271
2024 Nov 26 (Tue)	02:15 92	08:23 75S	14:29 266
2024 Nov 27 (Wed)	03:00 97	09:02 69S	15:03 260
2024 Nov 28 (Thu)	03:45 103	09:43 64S	15:39 254
2024 Nov 29 (Fri)	04:33 108	10:26 59S	16:18 249
2024 Nov 30 (Sat)	05:23 113	11:13 54S	17:01 245
2024 Dec 01 (Sun)	06:17 116	12:04 51S	17:49 242
2024 Dec 02 (Mon)	07:12 119	12:57 49S	18:42 241
2024 Dec 03 (Tue)	08:09 119	13:53 49S	19:38 241
2024 Dec 04 (Wed)	09:04 118	14:50 51S	20:37 243
2024 Dec 05 (Thu)	09:57 115	15:45 54S	21:35 246
2024 Dec 06 (Fri)	10:45 111	16:37 58S	22:32 251
2024 Dec 07 (Sat)	11:30 106	17:27 64S	23:27 257
2024 Dec 08 (Sun)	12:13 99	18:15 70S	
2024 Dec 09 (Mon)	12:54 93	19:03 77S	00:21 264
2024 Dec 10 (Tue)	13:35 85	19:50 84S	01:15 271
2024 Dec 11 (Wed)	14:18 78	20:41 90N	02:10 278
2024 Dec 12 (Thu)	15:04 72	21:34 84N	03:07 285
2024 Dec 13 (Fri)	15:55 67	22:32 79N	04:07 291
2024 Dec 14 (Sat)	16:51 63	23:33 76N	05:11 296
2024 Dec 15 (Sun)	17:52 61		06:16 298
2024 Dec 16 (Mon)	18:55 61	00:36 75N	07:20 299
2024 Dec 17 (Tue)	19:56 63	01:38 75N	08:20 298
2024 Dec 18 (Wed)	20:55 67	02:36 78N	09:13 295
2024 Dec 19 (Thu)	21:48 72	03:29 82N	10:00 290
2024 Dec 20 (Fri)	22:38 78	04:16 87N	10:41 285
2024 Dec 21 (Sat)	23:25 83	05:00 89S	11:18 280
2024 Dec 22 (Sun)		05:41 83S	11:53 274
2024 Dec 23 (Mon)	00:10 89	06:20 77S	12:27 268
2024 Dec 24 (Tue)	00:54 95	06:59 71S	13:01 262
2024 Dec 25 (Wed)	01:39 101	07:39 66S	13:36 256
2024 Dec 26 (Thu)	02:26 106	08:21 60S	14:14 251
2024 Dec 27 (Fri)	03:15 111	09:06 56S	14:55 247
2024 Dec 28 (Sat)	04:07 115	09:55 52S	15:41 243
2024 Dec 29 (Sun)	05:02 118	10:48 50S	16:33 241
2024 Dec 30 (Mon)	05:59 119	11:44 49S	17:29 241
2024 Dec 31 (Tue)	06:56 119	12:41 50S	18:28 242