

Sun

Tak
Location: E 99°04'30.0", N16°51'57.5", 0m
(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)	06:02	06:53	114	12:27 51S	18:01 246		18:52
2024	Jan	02 (Tue)	06:03	06:53	114	12:27 51S	18:02 246		18:52
2024	Jan	03 (Wed)	06:03	06:53	114	12:28 51S	18:02 246		18:53
2024	Jan	04 (Thu)	06:03	06:54	114	12:28 51S	18:03 246		18:53
2024	Jan	05 (Fri)	06:04	06:54	113	12:29 51S	18:04 247		18:54
2024	Jan	06 (Sat)	06:04	06:54	113	12:29 51S	18:04 247		18:54
2024	Jan	07 (Sun)	06:04	06:55	113	12:30 51S	18:05 247		18:55
2024	Jan	08 (Mon)	06:05	06:55	113	12:30 52S	18:05 247		18:56
2024	Jan	09 (Tue)	06:05	06:55	113	12:30 52S	18:06 247		18:56
2024	Jan	10 (Wed)	06:05	06:55	113	12:31 52S	18:07 247		18:57
2024	Jan	11 (Thu)	06:05	06:55	113	12:31 52S	18:07 247		18:57
2024	Jan	12 (Fri)	06:06	06:56	113	12:32 52S	18:08 248		18:58
2024	Jan	13 (Sat)	06:06	06:56	112	12:32 52S	18:08 248		18:58
2024	Jan	14 (Sun)	06:06	06:56	112	12:32 52S	18:09 248		18:59
2024	Jan	15 (Mon)	06:06	06:56	112	12:33 53S	18:10 248		18:59
2024	Jan	16 (Tue)	06:06	06:56	112	12:33 53S	18:10 248		19:00
2024	Jan	17 (Wed)	06:07	06:56	112	12:34 53S	18:11 248		19:01
2024	Jan	18 (Thu)	06:07	06:56	111	12:34 53S	18:12 249		19:01
2024	Jan	19 (Fri)	06:07	06:56	111	12:34 53S	18:12 249		19:02
2024	Jan	20 (Sat)	06:07	06:56	111	12:34 54S	18:13 249		19:02
2024	Jan	21 (Sun)	06:07	06:56	111	12:35 54S	18:13 249		19:03
2024	Jan	22 (Mon)	06:07	06:56	111	12:35 54S	18:14 250		19:03
2024	Jan	23 (Tue)	06:07	06:56	110	12:35 54S	18:14 250		19:04
2024	Jan	24 (Wed)	06:07	06:56	110	12:36 55S	18:15 250		19:04
2024	Jan	25 (Thu)	06:07	06:56	110	12:36 55S	18:16 250		19:05
2024	Jan	26 (Fri)	06:07	06:56	110	12:36 55S	18:16 251		19:05
2024	Jan	27 (Sat)	06:07	06:56	109	12:36 55S	18:17 251		19:06
2024	Jan	28 (Sun)	06:07	06:56	109	12:36 56S	18:17 251		19:06
2024	Jan	29 (Mon)	06:07	06:56	109	12:37 56S	18:18 251		19:07
2024	Jan	30 (Tue)	06:07	06:56	108	12:37 56S	18:18 252		19:07
2024	Jan	31 (Wed)	06:07	06:55	108	12:37 56S	18:19 252		19:07
2024	Feb	01 (Thu)	06:07	06:55	108	12:37 57S	18:19 252		19:08
2024	Feb	02 (Fri)	06:06	06:55	108	12:37 57S	18:20 253		19:08
2024	Feb	03 (Sat)	06:06	06:55	107	12:37 57S	18:20 253		19:09
2024	Feb	04 (Sun)	06:06	06:54	107	12:38 57S	18:21 253		19:09
2024	Feb	05 (Mon)	06:06	06:54	107	12:38 58S	18:21 254		19:10
2024	Feb	06 (Tue)	06:06	06:54	106	12:38 58S	18:22 254		19:10
2024	Feb	07 (Wed)	06:05	06:53	106	12:38 58S	18:22 254		19:10
2024	Feb	08 (Thu)	06:05	06:53	106	12:38 59S	18:23 254		19:11
2024	Feb	09 (Fri)	06:05	06:53	105	12:38 59S	18:23 255		19:11
2024	Feb	10 (Sat)	06:04	06:52	105	12:38 59S	18:24 255		19:12
2024	Feb	11 (Sun)	06:04	06:52	105	12:38 60S	18:24 256		19:12
2024	Feb	12 (Mon)	06:04	06:52	104	12:38 60S	18:24 256		19:12
2024	Feb	13 (Tue)	06:03	06:51	104	12:38 60S	18:25 256		19:13
2024	Feb	14 (Wed)	06:03	06:51	104	12:38 61S	18:25 257		19:13
2024	Feb	15 (Thu)	06:03	06:50	103	12:38 61S	18:26 257		19:13
2024	Feb	16 (Fri)	06:02	06:50	103	12:38 61S	18:26 257		19:14
2024	Feb	17 (Sat)	06:02	06:49	103	12:38 62S	18:26 258		19:14
2024	Feb	18 (Sun)	06:01	06:49	102	12:38 62S	18:27 258		19:14
2024	Feb	19 (Mon)	06:01	06:48	102	12:38 62S	18:27 258		19:15
2024	Feb	20 (Tue)	06:00	06:48	101	12:37 63S	18:27 259		19:15
2024	Feb	21 (Wed)	06:00	06:47	101	12:37 63S	18:28 259		19:15
2024	Feb	22 (Thu)	05:59	06:47	101	12:37 63S	18:28 260		19:15
2024	Feb	23 (Fri)	05:59	06:46	100	12:37 64S	18:28 260		19:16
2024	Feb	24 (Sat)	05:58	06:45	100	12:37 64S	18:29 260		19:16
2024	Feb	25 (Sun)	05:58	06:45	100	12:37 65S	18:29 261		19:16
2024	Feb	26 (Mon)	05:57	06:44	99	12:37 65S	18:29 261		19:16
2024	Feb	27 (Tue)	05:57	06:44	99	12:37 65S	18:30 261		19:17
2024	Feb	28 (Wed)	05:56	06:43	98	12:36 66S	18:30 262		19:17
2024	Feb	29 (Thu)	05:55	06:42	98	12:36 66S	18:30 262		19:17

2024	Mar	01	(Fri)	05:55	06:42	98	12:36	66S	18:31	263	19:17
2024	Mar	02	(Sat)	05:54	06:41	97	12:36	67S	18:31	263	19:18
2024	Mar	03	(Sun)	05:53	06:40	97	12:36	67S	18:31	263	19:18
2024	Mar	04	(Mon)	05:53	06:40	96	12:35	68S	18:31	264	19:18
2024	Mar	05	(Tue)	05:52	06:39	96	12:35	68S	18:32	264	19:18
2024	Mar	06	(Wed)	05:51	06:38	96	12:35	68S	18:32	265	19:19
2024	Mar	07	(Thu)	05:51	06:38	95	12:35	69S	18:32	265	19:19
2024	Mar	08	(Fri)	05:50	06:37	95	12:34	69S	18:32	265	19:19
2024	Mar	09	(Sat)	05:49	06:36	94	12:34	70S	18:32	266	19:19
2024	Mar	10	(Sun)	05:49	06:35	94	12:34	70S	18:33	266	19:19
2024	Mar	11	(Mon)	05:48	06:35	94	12:34	70S	18:33	267	19:20
2024	Mar	12	(Tue)	05:47	06:34	93	12:33	71S	18:33	267	19:20
2024	Mar	13	(Wed)	05:46	06:33	93	12:33	71S	18:33	268	19:20
2024	Mar	14	(Thu)	05:46	06:32	92	12:33	72S	18:34	268	19:20
2024	Mar	15	(Fri)	05:45	06:32	92	12:33	72S	18:34	268	19:20
2024	Mar	16	(Sat)	05:44	06:31	91	12:32	72S	18:34	269	19:21
2024	Mar	17	(Sun)	05:43	06:30	91	12:32	73S	18:34	269	19:21
2024	Mar	18	(Mon)	05:43	06:29	91	12:32	73S	18:34	270	19:21
2024	Mar	19	(Tue)	05:42	06:29	90	12:31	73S	18:34	270	19:21
2024	Mar	20	(Wed)	05:41	06:28	90	12:31	74S	18:35	270	19:21
2024	Mar	21	(Thu)	05:40	06:27	89	12:31	74S	18:35	271	19:22
2024	Mar	22	(Fri)	05:40	06:26	89	12:31	75S	18:35	271	19:22
2024	Mar	23	(Sat)	05:39	06:25	89	12:30	75S	18:35	272	19:22
2024	Mar	24	(Sun)	05:38	06:25	88	12:30	75S	18:35	272	19:22
2024	Mar	25	(Mon)	05:37	06:24	88	12:30	76S	18:36	272	19:22
2024	Mar	26	(Tue)	05:36	06:23	87	12:29	76S	18:36	273	19:23
2024	Mar	27	(Wed)	05:36	06:22	87	12:29	77S	18:36	273	19:23
2024	Mar	28	(Thu)	05:35	06:22	87	12:29	77S	18:36	274	19:23
2024	Mar	29	(Fri)	05:34	06:21	86	12:28	77S	18:36	274	19:23
2024	Mar	30	(Sat)	05:33	06:20	86	12:28	78S	18:36	274	19:23
2024	Mar	31	(Sun)	05:32	06:19	85	12:28	78S	18:37	275	19:24
2024	Apr	01	(Mon)	05:31	06:18	85	12:27	79S	18:37	275	19:24
2024	Apr	02	(Tue)	05:31	06:18	84	12:27	79S	18:37	276	19:24
2024	Apr	03	(Wed)	05:30	06:17	84	12:27	79S	18:37	276	19:24
2024	Apr	04	(Thu)	05:29	06:16	84	12:27	80S	18:37	277	19:24
2024	Apr	05	(Fri)	05:28	06:15	83	12:26	80S	18:37	277	19:25
2024	Apr	06	(Sat)	05:27	06:15	83	12:26	80S	18:38	277	19:25
2024	Apr	07	(Sun)	05:27	06:14	83	12:26	81S	18:38	278	19:25
2024	Apr	08	(Mon)	05:26	06:13	82	12:25	81S	18:38	278	19:25
2024	Apr	09	(Tue)	05:25	06:12	82	12:25	82S	18:38	278	19:26
2024	Apr	10	(Wed)	05:24	06:12	81	12:25	82S	18:38	279	19:26
2024	Apr	11	(Thu)	05:23	06:11	81	12:25	82S	18:39	279	19:26
2024	Apr	12	(Fri)	05:23	06:10	81	12:24	83S	18:39	280	19:26
2024	Apr	13	(Sat)	05:22	06:10	80	12:24	83S	18:39	280	19:27
2024	Apr	14	(Sun)	05:21	06:09	80	12:24	83S	18:39	280	19:27
2024	Apr	15	(Mon)	05:20	06:08	79	12:24	84S	18:39	281	19:27
2024	Apr	16	(Tue)	05:20	06:07	79	12:23	84S	18:40	281	19:28
2024	Apr	17	(Wed)	05:19	06:07	79	12:23	84S	18:40	281	19:28
2024	Apr	18	(Thu)	05:18	06:06	78	12:23	85S	18:40	282	19:28
2024	Apr	19	(Fri)	05:17	06:05	78	12:23	85S	18:40	282	19:28
2024	Apr	20	(Sat)	05:17	06:05	78	12:23	86S	18:41	283	19:29
2024	Apr	21	(Sun)	05:16	06:04	77	12:22	86S	18:41	283	19:29
2024	Apr	22	(Mon)	05:15	06:04	77	12:22	86S	18:41	283	19:29
2024	Apr	23	(Tue)	05:15	06:03	77	12:22	87S	18:41	284	19:30
2024	Apr	24	(Wed)	05:14	06:02	76	12:22	87S	18:42	284	19:30
2024	Apr	25	(Thu)	05:13	06:02	76	12:22	87S	18:42	284	19:30
2024	Apr	26	(Fri)	05:12	06:01	76	12:21	88S	18:42	285	19:31
2024	Apr	27	(Sat)	05:12	06:01	75	12:21	88S	18:42	285	19:31
2024	Apr	28	(Sun)	05:11	06:00	75	12:21	88S	18:43	285	19:31
2024	Apr	29	(Mon)	05:11	05:59	75	12:21	88S	18:43	286	19:32
2024	Apr	30	(Tue)	05:10	05:59	74	12:21	89S	18:43	286	19:32
2024	May	01	(Wed)	05:09	05:58	74	12:21	89S	18:43	286	19:33
2024	May	02	(Thu)	05:09	05:58	74	12:21	89S	18:44	287	19:33
2024	May	03	(Fri)	05:08	05:57	73	12:21	90S	18:44	287	19:33
2024	May	04	(Sat)	05:08	05:57	73	12:20	90S	18:44	287	19:34
2024	May	05	(Sun)	05:07	05:56	73	12:20	90S	18:45	288	19:34
2024	May	06	(Mon)	05:06	05:56	72	12:20	91S	18:45	288	19:34
2024	May	07	(Tue)	05:06	05:56	72	12:20	91N	18:45	288	19:35
2024	May	08	(Wed)	05:05	05:55	72	12:20	90N	18:45	288	19:35
2024	May	09	(Thu)	05:05	05:55	72	12:20	90N	18:46	289	19:36
2024	May	10	(Fri)	05:04	05:54	71	12:20	90N	18:46	289	19:36
2024	May	11	(Sat)	05:04	05:54	71	12:20	90N	18:46	289	19:37

2024	May	12	(Sun)	05:03	05:54	71	12:20	89N	18:47	289	19:37
2024	May	13	(Mon)	05:03	05:53	70	12:20	89N	18:47	290	19:37
2024	May	14	(Tue)	05:03	05:53	70	12:20	89N	18:47	290	19:38
2024	May	15	(Wed)	05:02	05:53	70	12:20	89N	18:48	290	19:38
2024	May	16	(Thu)	05:02	05:52	70	12:20	88N	18:48	290	19:39
2024	May	17	(Fri)	05:01	05:52	69	12:20	88N	18:48	291	19:39
2024	May	18	(Sat)	05:01	05:52	69	12:20	88N	18:49	291	19:40
2024	May	19	(Sun)	05:01	05:51	69	12:20	88N	18:49	291	19:40
2024	May	20	(Mon)	05:00	05:51	69	12:20	87N	18:50	291	19:40
2024	May	21	(Tue)	05:00	05:51	69	12:20	87N	18:50	292	19:41
2024	May	22	(Wed)	05:00	05:51	68	12:20	87N	18:50	292	19:41
2024	May	23	(Thu)	04:59	05:51	68	12:20	87N	18:51	292	19:42
2024	May	24	(Fri)	04:59	05:50	68	12:21	87N	18:51	292	19:42
2024	May	25	(Sat)	04:59	05:50	68	12:21	87N	18:51	292	19:43
2024	May	26	(Sun)	04:59	05:50	68	12:21	86N	18:52	293	19:43
2024	May	27	(Mon)	04:59	05:50	67	12:21	86N	18:52	293	19:43
2024	May	28	(Tue)	04:58	05:50	67	12:21	86N	18:52	293	19:44
2024	May	29	(Wed)	04:58	05:50	67	12:21	86N	18:53	293	19:44
2024	May	30	(Thu)	04:58	05:50	67	12:21	86N	18:53	293	19:45
2024	May	31	(Fri)	04:58	05:50	67	12:21	86N	18:53	293	19:45
2024	Jun	01	(Sat)	04:58	05:50	67	12:22	85N	18:54	293	19:46
2024	Jun	02	(Sun)	04:58	05:49	66	12:22	85N	18:54	294	19:46
2024	Jun	03	(Mon)	04:58	05:49	66	12:22	85N	18:54	294	19:46
2024	Jun	04	(Tue)	04:58	05:49	66	12:22	85N	18:55	294	19:47
2024	Jun	05	(Wed)	04:58	05:49	66	12:22	85N	18:55	294	19:47
2024	Jun	06	(Thu)	04:57	05:50	66	12:22	85N	18:55	294	19:48
2024	Jun	07	(Fri)	04:57	05:50	66	12:23	85N	18:56	294	19:48
2024	Jun	08	(Sat)	04:57	05:50	66	12:23	85N	18:56	294	19:48
2024	Jun	09	(Sun)	04:58	05:50	66	12:23	85N	18:56	294	19:49
2024	Jun	10	(Mon)	04:58	05:50	66	12:23	85N	18:57	294	19:49
2024	Jun	11	(Tue)	04:58	05:50	66	12:23	84N	18:57	295	19:49
2024	Jun	12	(Wed)	04:58	05:50	65	12:24	84N	18:57	295	19:50
2024	Jun	13	(Thu)	04:58	05:50	65	12:24	84N	18:58	295	19:50
2024	Jun	14	(Fri)	04:58	05:50	65	12:24	84N	18:58	295	19:50
2024	Jun	15	(Sat)	04:58	05:50	65	12:24	84N	18:58	295	19:51
2024	Jun	16	(Sun)	04:58	05:51	65	12:24	84N	18:58	295	19:51
2024	Jun	17	(Mon)	04:58	05:51	65	12:25	84N	18:59	295	19:51
2024	Jun	18	(Tue)	04:59	05:51	65	12:25	84N	18:59	295	19:51
2024	Jun	19	(Wed)	04:59	05:51	65	12:25	84N	18:59	295	19:52
2024	Jun	20	(Thu)	04:59	05:51	65	12:25	84N	18:59	295	19:52
2024	Jun	21	(Fri)	04:59	05:52	65	12:26	84N	19:00	295	19:52
2024	Jun	22	(Sat)	04:59	05:52	65	12:26	84N	19:00	295	19:52
2024	Jun	23	(Sun)	05:00	05:52	65	12:26	84N	19:00	295	19:52
2024	Jun	24	(Mon)	05:00	05:52	65	12:26	84N	19:00	295	19:53
2024	Jun	25	(Tue)	05:00	05:52	65	12:26	84N	19:00	295	19:53
2024	Jun	26	(Wed)	05:00	05:53	65	12:27	84N	19:01	295	19:53
2024	Jun	27	(Thu)	05:01	05:53	65	12:27	84N	19:01	295	19:53
2024	Jun	28	(Fri)	05:01	05:53	65	12:27	84N	19:01	295	19:53
2024	Jun	29	(Sat)	05:01	05:54	65	12:27	84N	19:01	295	19:53
2024	Jun	30	(Sun)	05:02	05:54	65	12:27	84N	19:01	295	19:53
2024	Jul	01	(Mon)	05:02	05:54	66	12:28	85N	19:01	294	19:53
2024	Jul	02	(Tue)	05:02	05:54	66	12:28	85N	19:01	294	19:53
2024	Jul	03	(Wed)	05:03	05:55	66	12:28	85N	19:01	294	19:53
2024	Jul	04	(Thu)	05:03	05:55	66	12:28	85N	19:01	294	19:53
2024	Jul	05	(Fri)	05:03	05:55	66	12:28	85N	19:01	294	19:53
2024	Jul	06	(Sat)	05:04	05:56	66	12:29	85N	19:01	294	19:53
2024	Jul	07	(Sun)	05:04	05:56	66	12:29	85N	19:01	294	19:53
2024	Jul	08	(Mon)	05:04	05:56	66	12:29	85N	19:01	294	19:53
2024	Jul	09	(Tue)	05:05	05:57	66	12:29	85N	19:01	294	19:53
2024	Jul	10	(Wed)	05:05	05:57	66	12:29	85N	19:01	293	19:53
2024	Jul	11	(Thu)	05:05	05:57	67	12:29	86N	19:01	293	19:53
2024	Jul	12	(Fri)	05:06	05:58	67	12:29	86N	19:01	293	19:53
2024	Jul	13	(Sat)	05:06	05:58	67	12:30	86N	19:01	293	19:53
2024	Jul	14	(Sun)	05:07	05:58	67	12:30	86N	19:01	293	19:52
2024	Jul	15	(Mon)	05:07	05:59	67	12:30	86N	19:01	293	19:52
2024	Jul	16	(Tue)	05:07	05:59	67	12:30	86N	19:01	293	19:52
2024	Jul	17	(Wed)	05:08	05:59	68	12:30	86N	19:00	292	19:52
2024	Jul	18	(Thu)	05:08	06:00	68	12:30	87N	19:00	292	19:52
2024	Jul	19	(Fri)	05:09	06:00	68	12:30	87N	19:00	292	19:51
2024	Jul	20	(Sat)	05:09	06:00	68	12:30	87N	19:00	292	19:51
2024	Jul	21	(Sun)	05:09	06:01	68	12:30	87N	19:00	292	19:51
2024	Jul	22	(Mon)	05:10	06:01	69	12:30	87N	18:59	291	19:50

2024	Jul	23	(Tue)	05:10	06:01	69	12:30	88N	18:59	291	19:50
2024	Jul	24	(Wed)	05:11	06:01	69	12:30	88N	18:59	291	19:50
2024	Jul	25	(Thu)	05:11	06:02	69	12:30	88N	18:59	291	19:49
2024	Jul	26	(Fri)	05:11	06:02	69	12:30	88N	18:58	290	19:49
2024	Jul	27	(Sat)	05:12	06:02	70	12:30	88N	18:58	290	19:48
2024	Jul	28	(Sun)	05:12	06:03	70	12:30	89N	18:58	290	19:48
2024	Jul	29	(Mon)	05:13	06:03	70	12:30	89N	18:57	290	19:47
2024	Jul	30	(Tue)	05:13	06:03	70	12:30	89N	18:57	289	19:47
2024	Jul	31	(Wed)	05:13	06:04	71	12:30	89N	18:56	289	19:47
2024	Aug	01	(Thu)	05:14	06:04	71	12:30	90N	18:56	289	19:46
2024	Aug	02	(Fri)	05:14	06:04	71	12:30	90N	18:56	289	19:46
2024	Aug	03	(Sat)	05:15	06:04	71	12:30	90N	18:55	288	19:45
2024	Aug	04	(Sun)	05:15	06:05	72	12:30	90N	18:55	288	19:44
2024	Aug	05	(Mon)	05:15	06:05	72	12:30	91S	18:54	288	19:44
2024	Aug	06	(Tue)	05:16	06:05	72	12:30	90S	18:54	288	19:43
2024	Aug	07	(Wed)	05:16	06:05	73	12:29	90S	18:53	287	19:43
2024	Aug	08	(Thu)	05:16	06:06	73	12:29	90S	18:53	287	19:42
2024	Aug	09	(Fri)	05:17	06:06	73	12:29	90S	18:52	287	19:41
2024	Aug	10	(Sat)	05:17	06:06	74	12:29	89S	18:52	286	19:41
2024	Aug	11	(Sun)	05:17	06:06	74	12:29	89S	18:51	286	19:40
2024	Aug	12	(Mon)	05:18	06:07	74	12:29	89S	18:51	286	19:40
2024	Aug	13	(Tue)	05:18	06:07	74	12:29	88S	18:50	285	19:39
2024	Aug	14	(Wed)	05:18	06:07	75	12:28	88S	18:49	285	19:38
2024	Aug	15	(Thu)	05:19	06:07	75	12:28	88S	18:49	285	19:37
2024	Aug	16	(Fri)	05:19	06:08	75	12:28	87S	18:48	284	19:37
2024	Aug	17	(Sat)	05:19	06:08	76	12:28	87S	18:48	284	19:36
2024	Aug	18	(Sun)	05:19	06:08	76	12:28	87S	18:47	284	19:35
2024	Aug	19	(Mon)	05:20	06:08	76	12:27	86S	18:46	283	19:35
2024	Aug	20	(Tue)	05:20	06:08	77	12:27	86S	18:46	283	19:34
2024	Aug	21	(Wed)	05:20	06:09	77	12:27	86S	18:45	283	19:33
2024	Aug	22	(Thu)	05:20	06:09	78	12:27	85S	18:44	282	19:32
2024	Aug	23	(Fri)	05:21	06:09	78	12:26	85S	18:43	282	19:32
2024	Aug	24	(Sat)	05:21	06:09	78	12:26	85S	18:43	282	19:31
2024	Aug	25	(Sun)	05:21	06:09	79	12:26	84S	18:42	281	19:30
2024	Aug	26	(Mon)	05:21	06:09	79	12:25	84S	18:41	281	19:29
2024	Aug	27	(Tue)	05:22	06:09	79	12:25	84S	18:41	280	19:28
2024	Aug	28	(Wed)	05:22	06:10	80	12:25	83S	18:40	280	19:28
2024	Aug	29	(Thu)	05:22	06:10	80	12:25	83S	18:39	280	19:27
2024	Aug	30	(Fri)	05:22	06:10	80	12:24	83S	18:38	279	19:26
2024	Aug	31	(Sat)	05:23	06:10	81	12:24	82S	18:38	279	19:25
2024	Sep	01	(Sun)	05:23	06:10	81	12:24	82S	18:37	279	19:24
2024	Sep	02	(Mon)	05:23	06:10	82	12:23	82S	18:36	278	19:23
2024	Sep	03	(Tue)	05:23	06:10	82	12:23	81S	18:35	278	19:23
2024	Sep	04	(Wed)	05:23	06:11	82	12:23	81S	18:34	277	19:22
2024	Sep	05	(Thu)	05:23	06:11	83	12:22	80S	18:34	277	19:21
2024	Sep	06	(Fri)	05:24	06:11	83	12:22	80S	18:33	277	19:20
2024	Sep	07	(Sat)	05:24	06:11	84	12:22	80S	18:32	276	19:19
2024	Sep	08	(Sun)	05:24	06:11	84	12:21	79S	18:31	276	19:18
2024	Sep	09	(Mon)	05:24	06:11	84	12:21	79S	18:30	276	19:17
2024	Sep	10	(Tue)	05:24	06:11	85	12:21	79S	18:30	275	19:17
2024	Sep	11	(Wed)	05:24	06:11	85	12:20	78S	18:29	275	19:16
2024	Sep	12	(Thu)	05:25	06:12	85	12:20	78S	18:28	274	19:15
2024	Sep	13	(Fri)	05:25	06:12	86	12:20	77S	18:27	274	19:14
2024	Sep	14	(Sat)	05:25	06:12	86	12:19	77S	18:26	274	19:13
2024	Sep	15	(Sun)	05:25	06:12	87	12:19	77S	18:26	273	19:12
2024	Sep	16	(Mon)	05:25	06:12	87	12:18	76S	18:25	273	19:12
2024	Sep	17	(Tue)	05:25	06:12	87	12:18	76S	18:24	272	19:11
2024	Sep	18	(Wed)	05:25	06:12	88	12:18	76S	18:23	272	19:10
2024	Sep	19	(Thu)	05:26	06:12	88	12:17	75S	18:22	271	19:09
2024	Sep	20	(Fri)	05:26	06:12	89	12:17	75S	18:21	271	19:08
2024	Sep	21	(Sat)	05:26	06:13	89	12:17	74S	18:21	271	19:07
2024	Sep	22	(Sun)	05:26	06:13	90	12:16	74S	18:20	270	19:06
2024	Sep	23	(Mon)	05:26	06:13	90	12:16	74S	18:19	270	19:06
2024	Sep	24	(Tue)	05:26	06:13	90	12:16	73S	18:18	269	19:05
2024	Sep	25	(Wed)	05:26	06:13	91	12:15	73S	18:17	269	19:04
2024	Sep	26	(Thu)	05:26	06:13	91	12:15	72S	18:16	269	19:03
2024	Sep	27	(Fri)	05:27	06:13	92	12:15	72S	18:16	268	19:02
2024	Sep	28	(Sat)	05:27	06:13	92	12:14	72S	18:15	268	19:02
2024	Sep	29	(Sun)	05:27	06:14	92	12:14	71S	18:14	267	19:01
2024	Sep	30	(Mon)	05:27	06:14	93	12:14	71S	18:13	267	19:00
2024	Oct	01	(Tue)	05:27	06:14	93	12:13	70S	18:12	267	18:59
2024	Oct	02	(Wed)	05:27	06:14	94	12:13	70S	18:12	266	18:58

2024	Oct	03	(Thu)	05:27	06:14	94	12:13	70S	18:11	266	18:58
2024	Oct	04	(Fri)	05:28	06:14	94	12:12	69S	18:10	265	18:57
2024	Oct	05	(Sat)	05:28	06:15	95	12:12	69S	18:09	265	18:56
2024	Oct	06	(Sun)	05:28	06:15	95	12:12	69S	18:09	265	18:55
2024	Oct	07	(Mon)	05:28	06:15	96	12:11	68S	18:08	264	18:55
2024	Oct	08	(Tue)	05:28	06:15	96	12:11	68S	18:07	264	18:54
2024	Oct	09	(Wed)	05:28	06:15	96	12:11	67S	18:06	263	18:53
2024	Oct	10	(Thu)	05:29	06:15	97	12:11	67S	18:06	263	18:53
2024	Oct	11	(Fri)	05:29	06:16	97	12:10	67S	18:05	263	18:52
2024	Oct	12	(Sat)	05:29	06:16	98	12:10	66S	18:04	262	18:51
2024	Oct	13	(Sun)	05:29	06:16	98	12:10	66S	18:04	262	18:50
2024	Oct	14	(Mon)	05:29	06:16	98	12:10	66S	18:03	261	18:50
2024	Oct	15	(Tue)	05:29	06:16	99	12:09	65S	18:02	261	18:49
2024	Oct	16	(Wed)	05:30	06:17	99	12:09	65S	18:01	261	18:49
2024	Oct	17	(Thu)	05:30	06:17	100	12:09	64S	18:01	260	18:48
2024	Oct	18	(Fri)	05:30	06:17	100	12:09	64S	18:00	260	18:47
2024	Oct	19	(Sat)	05:30	06:17	100	12:09	64S	18:00	260	18:47
2024	Oct	20	(Sun)	05:30	06:18	101	12:08	63S	17:59	259	18:46
2024	Oct	21	(Mon)	05:31	06:18	101	12:08	63S	17:58	259	18:46
2024	Oct	22	(Tue)	05:31	06:18	101	12:08	63S	17:58	258	18:45
2024	Oct	23	(Wed)	05:31	06:19	102	12:08	62S	17:57	258	18:45
2024	Oct	24	(Thu)	05:31	06:19	102	12:08	62S	17:57	258	18:44
2024	Oct	25	(Fri)	05:32	06:19	102	12:08	62S	17:56	257	18:44
2024	Oct	26	(Sat)	05:32	06:20	103	12:08	61S	17:56	257	18:43
2024	Oct	27	(Sun)	05:32	06:20	103	12:08	61S	17:55	257	18:43
2024	Oct	28	(Mon)	05:32	06:20	104	12:07	61S	17:55	256	18:42
2024	Oct	29	(Tue)	05:33	06:21	104	12:07	60S	17:54	256	18:42
2024	Oct	30	(Wed)	05:33	06:21	104	12:07	60S	17:54	256	18:41
2024	Oct	31	(Thu)	05:33	06:21	105	12:07	60S	17:53	255	18:41
2024	Nov	01	(Fri)	05:34	06:22	105	12:07	59S	17:53	255	18:41
2024	Nov	02	(Sat)	05:34	06:22	105	12:07	59S	17:52	255	18:40
2024	Nov	03	(Sun)	05:34	06:22	106	12:07	59S	17:52	254	18:40
2024	Nov	04	(Mon)	05:35	06:23	106	12:07	58S	17:51	254	18:40
2024	Nov	05	(Tue)	05:35	06:23	106	12:07	58S	17:51	254	18:39
2024	Nov	06	(Wed)	05:35	06:24	107	12:07	58S	17:51	253	18:39
2024	Nov	07	(Thu)	05:36	06:24	107	12:07	57S	17:50	253	18:39
2024	Nov	08	(Fri)	05:36	06:25	107	12:07	57S	17:50	253	18:39
2024	Nov	09	(Sat)	05:37	06:25	107	12:08	57S	17:50	252	18:38
2024	Nov	10	(Sun)	05:37	06:26	108	12:08	57S	17:50	252	18:38
2024	Nov	11	(Mon)	05:37	06:26	108	12:08	56S	17:49	252	18:38
2024	Nov	12	(Tue)	05:38	06:26	108	12:08	56S	17:49	252	18:38
2024	Nov	13	(Wed)	05:38	06:27	109	12:08	56S	17:49	251	18:38
2024	Nov	14	(Thu)	05:39	06:27	109	12:08	55S	17:49	251	18:38
2024	Nov	15	(Fri)	05:39	06:28	109	12:08	55S	17:49	251	18:38
2024	Nov	16	(Sat)	05:39	06:28	109	12:08	55S	17:48	250	18:37
2024	Nov	17	(Sun)	05:40	06:29	110	12:09	55S	17:48	250	18:37
2024	Nov	18	(Mon)	05:40	06:29	110	12:09	55S	17:48	250	18:37
2024	Nov	19	(Tue)	05:41	06:30	110	12:09	54S	17:48	250	18:37
2024	Nov	20	(Wed)	05:41	06:31	110	12:09	54S	17:48	249	18:37
2024	Nov	21	(Thu)	05:42	06:31	111	12:10	54S	17:48	249	18:37
2024	Nov	22	(Fri)	05:42	06:32	111	12:10	54S	17:48	249	18:37
2024	Nov	23	(Sat)	05:43	06:32	111	12:10	53S	17:48	249	18:37
2024	Nov	24	(Sun)	05:43	06:33	111	12:10	53S	17:48	249	18:38
2024	Nov	25	(Mon)	05:44	06:33	112	12:11	53S	17:48	248	18:38
2024	Nov	26	(Tue)	05:44	06:34	112	12:11	53S	17:48	248	18:38
2024	Nov	27	(Wed)	05:45	06:35	112	12:11	53S	17:48	248	18:38
2024	Nov	28	(Thu)	05:45	06:35	112	12:12	52S	17:48	248	18:38
2024	Nov	29	(Fri)	05:46	06:36	112	12:12	52S	17:48	248	18:38
2024	Nov	30	(Sat)	05:46	06:36	112	12:12	52S	17:48	247	18:38
2024	Dec	01	(Sun)	05:47	06:37	113	12:13	52S	17:49	247	18:39
2024	Dec	02	(Mon)	05:47	06:37	113	12:13	52S	17:49	247	18:39
2024	Dec	03	(Tue)	05:48	06:38	113	12:14	52S	17:49	247	18:39
2024	Dec	04	(Wed)	05:48	06:39	113	12:14	52S	17:49	247	18:39
2024	Dec	05	(Thu)	05:49	06:39	113	12:14	51S	17:49	247	18:40
2024	Dec	06	(Fri)	05:50	06:40	113	12:15	51S	17:50	247	18:40
2024	Dec	07	(Sat)	05:50	06:40	113	12:15	51S	17:50	247	18:40
2024	Dec	08	(Sun)	05:51	06:41	114	12:16	51S	17:50	246	18:41
2024	Dec	09	(Mon)	05:51	06:42	114	12:16	51S	17:51	246	18:41
2024	Dec	10	(Tue)	05:52	06:42	114	12:17	51S	17:51	246	18:41
2024	Dec	11	(Wed)	05:52	06:43	114	12:17	51S	17:51	246	18:42
2024	Dec	12	(Thu)	05:53	06:43	114	12:17	51S	17:52	246	18:42
2024	Dec	13	(Fri)	05:53	06:44	114	12:18	51S	17:52	246	18:43

2024	Dec	14	(Sat)	05:54	06:44	114	12:18	51S	17:52	246	18:43
2024	Dec	15	(Sun)	05:54	06:45	114	12:19	51S	17:53	246	18:43
2024	Dec	16	(Mon)	05:55	06:46	114	12:19	51S	17:53	246	18:44
2024	Dec	17	(Tue)	05:56	06:46	114	12:20	50S	17:54	246	18:44
2024	Dec	18	(Wed)	05:56	06:47	114	12:20	50S	17:54	246	18:45
2024	Dec	19	(Thu)	05:57	06:47	114	12:21	50S	17:55	246	18:45
2024	Dec	20	(Fri)	05:57	06:48	114	12:21	50S	17:55	246	18:46
2024	Dec	21	(Sat)	05:58	06:48	114	12:22	50S	17:56	246	18:46
2024	Dec	22	(Sun)	05:58	06:49	114	12:22	50S	17:56	246	18:47
2024	Dec	23	(Mon)	05:59	06:49	114	12:23	50S	17:57	246	18:47
2024	Dec	24	(Tue)	05:59	06:50	114	12:23	50S	17:57	246	18:48
2024	Dec	25	(Wed)	05:59	06:50	114	12:24	50S	17:58	246	18:48
2024	Dec	26	(Thu)	06:00	06:51	114	12:24	50S	17:58	246	18:49
2024	Dec	27	(Fri)	06:00	06:51	114	12:25	51S	17:59	246	18:49
2024	Dec	28	(Sat)	06:01	06:51	114	12:25	51S	17:59	246	18:50
2024	Dec	29	(Sun)	06:01	06:52	114	12:26	51S	18:00	246	18:50
2024	Dec	30	(Mon)	06:02	06:52	114	12:26	51S	18:00	246	18:51
2024	Dec	31	(Tue)	06:02	06:53	114	12:27	51S	18:01	246	18:52

Sun

Tak

Location: E 99°04'30.0", N16°51'57.5", 0m
(Longitude referred to Greenwich meridian)

Time Zone: 7h 00m east of Greenwich

Date (Zone)				Begin Civil Twilight	Rise	Az.	Transit	Alt.	Set	Az.	End Civil Twilight
				h m	h m	°	h m	°	h m	°	h m
2024	Jan	01	(Mon)	06:29	06:53	114	12:27	51S	18:01	246	18:25
2024	Jan	02	(Tue)	06:30	06:53	114	12:27	51S	18:02	246	18:25
2024	Jan	03	(Wed)	06:30	06:53	114	12:28	51S	18:02	246	18:26
2024	Jan	04	(Thu)	06:30	06:54	114	12:28	51S	18:03	246	18:26
2024	Jan	05	(Fri)	06:31	06:54	113	12:29	51S	18:04	247	18:27
2024	Jan	06	(Sat)	06:31	06:54	113	12:29	51S	18:04	247	18:28
2024	Jan	07	(Sun)	06:31	06:55	113	12:30	51S	18:05	247	18:28
2024	Jan	08	(Mon)	06:31	06:55	113	12:30	52S	18:05	247	18:29
2024	Jan	09	(Tue)	06:32	06:55	113	12:30	52S	18:06	247	18:29
2024	Jan	10	(Wed)	06:32	06:55	113	12:31	52S	18:07	247	18:30
2024	Jan	11	(Thu)	06:32	06:55	113	12:31	52S	18:07	247	18:31
2024	Jan	12	(Fri)	06:32	06:56	113	12:32	52S	18:08	248	18:31
2024	Jan	13	(Sat)	06:33	06:56	112	12:32	52S	18:08	248	18:32
2024	Jan	14	(Sun)	06:33	06:56	112	12:32	52S	18:09	248	18:32
2024	Jan	15	(Mon)	06:33	06:56	112	12:33	53S	18:10	248	18:33
2024	Jan	16	(Tue)	06:33	06:56	112	12:33	53S	18:10	248	18:33
2024	Jan	17	(Wed)	06:33	06:56	112	12:34	53S	18:11	248	18:34
2024	Jan	18	(Thu)	06:33	06:56	111	12:34	53S	18:12	249	18:35
2024	Jan	19	(Fri)	06:33	06:56	111	12:34	53S	18:12	249	18:35
2024	Jan	20	(Sat)	06:33	06:56	111	12:34	54S	18:13	249	18:36
2024	Jan	21	(Sun)	06:33	06:56	111	12:35	54S	18:13	249	18:36
2024	Jan	22	(Mon)	06:33	06:56	111	12:35	54S	18:14	250	18:37
2024	Jan	23	(Tue)	06:33	06:56	110	12:35	54S	18:14	250	18:37
2024	Jan	24	(Wed)	06:33	06:56	110	12:36	55S	18:15	250	18:38
2024	Jan	25	(Thu)	06:33	06:56	110	12:36	55S	18:16	250	18:38
2024	Jan	26	(Fri)	06:33	06:56	110	12:36	55S	18:16	251	18:39
2024	Jan	27	(Sat)	06:33	06:56	109	12:36	55S	18:17	251	18:39
2024	Jan	28	(Sun)	06:33	06:56	109	12:36	56S	18:17	251	18:40
2024	Jan	29	(Mon)	06:33	06:56	109	12:37	56S	18:18	251	18:40
2024	Jan	30	(Tue)	06:33	06:56	108	12:37	56S	18:18	252	18:41
2024	Jan	31	(Wed)	06:33	06:55	108	12:37	56S	18:19	252	18:41
2024	Feb	01	(Thu)	06:33	06:55	108	12:37	57S	18:19	252	18:42
2024	Feb	02	(Fri)	06:32	06:55	108	12:37	57S	18:20	253	18:42
2024	Feb	03	(Sat)	06:32	06:55	107	12:37	57S	18:20	253	18:43
2024	Feb	04	(Sun)	06:32	06:54	107	12:38	57S	18:21	253	18:43
2024	Feb	05	(Mon)	06:32	06:54	107	12:38	58S	18:21	254	18:44
2024	Feb	06	(Tue)	06:31	06:54	106	12:38	58S	18:22	254	18:44
2024	Feb	07	(Wed)	06:31	06:53	106	12:38	58S	18:22	254	18:45
2024	Feb	08	(Thu)	06:31	06:53	106	12:38	59S	18:23	254	18:45
2024	Feb	09	(Fri)	06:30	06:53	105	12:38	59S	18:23	255	18:45
2024	Feb	10	(Sat)	06:30	06:52	105	12:38	59S	18:24	255	18:46

2024	Feb	11	(Sun)	06:30	06:52	105	12:38	60S	18:24	256	18:46
2024	Feb	12	(Mon)	06:29	06:52	104	12:38	60S	18:24	256	18:47
2024	Feb	13	(Tue)	06:29	06:51	104	12:38	60S	18:25	256	18:47
2024	Feb	14	(Wed)	06:29	06:51	104	12:38	61S	18:25	257	18:47
2024	Feb	15	(Thu)	06:28	06:50	103	12:38	61S	18:26	257	18:48
2024	Feb	16	(Fri)	06:28	06:50	103	12:38	61S	18:26	257	18:48
2024	Feb	17	(Sat)	06:27	06:49	103	12:38	62S	18:26	258	18:48
2024	Feb	18	(Sun)	06:27	06:49	102	12:38	62S	18:27	258	18:49
2024	Feb	19	(Mon)	06:26	06:48	102	12:38	62S	18:27	258	18:49
2024	Feb	20	(Tue)	06:26	06:48	101	12:37	63S	18:27	259	18:49
2024	Feb	21	(Wed)	06:25	06:47	101	12:37	63S	18:28	259	18:50
2024	Feb	22	(Thu)	06:25	06:47	101	12:37	63S	18:28	260	18:50
2024	Feb	23	(Fri)	06:24	06:46	100	12:37	64S	18:28	260	18:50
2024	Feb	24	(Sat)	06:24	06:45	100	12:37	64S	18:29	260	18:51
2024	Feb	25	(Sun)	06:23	06:45	100	12:37	65S	18:29	261	18:51
2024	Feb	26	(Mon)	06:22	06:44	99	12:37	65S	18:29	261	18:51
2024	Feb	27	(Tue)	06:22	06:44	99	12:37	65S	18:30	261	18:51
2024	Feb	28	(Wed)	06:21	06:43	98	12:36	66S	18:30	262	18:52
2024	Feb	29	(Thu)	06:21	06:42	98	12:36	66S	18:30	262	18:52
2024	Mar	01	(Fri)	06:20	06:42	98	12:36	66S	18:31	263	18:52
2024	Mar	02	(Sat)	06:19	06:41	97	12:36	67S	18:31	263	18:53
2024	Mar	03	(Sun)	06:19	06:40	97	12:36	67S	18:31	263	18:53
2024	Mar	04	(Mon)	06:18	06:40	96	12:35	68S	18:31	264	18:53
2024	Mar	05	(Tue)	06:17	06:39	96	12:35	68S	18:32	264	18:53
2024	Mar	06	(Wed)	06:17	06:38	96	12:35	68S	18:32	265	18:53
2024	Mar	07	(Thu)	06:16	06:38	95	12:35	69S	18:32	265	18:54
2024	Mar	08	(Fri)	06:15	06:37	95	12:34	69S	18:32	265	18:54
2024	Mar	09	(Sat)	06:14	06:36	94	12:34	70S	18:32	266	18:54
2024	Mar	10	(Sun)	06:14	06:35	94	12:34	70S	18:33	266	18:54
2024	Mar	11	(Mon)	06:13	06:35	94	12:34	70S	18:33	267	18:55
2024	Mar	12	(Tue)	06:12	06:34	93	12:33	71S	18:33	267	18:55
2024	Mar	13	(Wed)	06:12	06:33	93	12:33	71S	18:33	268	18:55
2024	Mar	14	(Thu)	06:11	06:32	92	12:33	72S	18:34	268	18:55
2024	Mar	15	(Fri)	06:10	06:32	92	12:33	72S	18:34	268	18:55
2024	Mar	16	(Sat)	06:09	06:31	91	12:32	72S	18:34	269	18:56
2024	Mar	17	(Sun)	06:08	06:30	91	12:32	73S	18:34	269	18:56
2024	Mar	18	(Mon)	06:08	06:29	91	12:32	73S	18:34	270	18:56
2024	Mar	19	(Tue)	06:07	06:29	90	12:31	73S	18:34	270	18:56
2024	Mar	20	(Wed)	06:06	06:28	90	12:31	74S	18:35	270	18:56
2024	Mar	21	(Thu)	06:05	06:27	89	12:31	74S	18:35	271	18:56
2024	Mar	22	(Fri)	06:05	06:26	89	12:31	75S	18:35	271	18:57
2024	Mar	23	(Sat)	06:04	06:25	89	12:30	75S	18:35	272	18:57
2024	Mar	24	(Sun)	06:03	06:25	88	12:30	75S	18:35	272	18:57
2024	Mar	25	(Mon)	06:02	06:24	88	12:30	76S	18:36	272	18:57
2024	Mar	26	(Tue)	06:01	06:23	87	12:29	76S	18:36	273	18:57
2024	Mar	27	(Wed)	06:01	06:22	87	12:29	77S	18:36	273	18:58
2024	Mar	28	(Thu)	06:00	06:22	87	12:29	77S	18:36	274	18:58
2024	Mar	29	(Fri)	05:59	06:21	86	12:28	77S	18:36	274	18:58
2024	Mar	30	(Sat)	05:58	06:20	86	12:28	78S	18:36	274	18:58
2024	Mar	31	(Sun)	05:58	06:19	85	12:28	78S	18:37	275	18:58
2024	Apr	01	(Mon)	05:57	06:18	85	12:27	79S	18:37	275	18:58
2024	Apr	02	(Tue)	05:56	06:18	84	12:27	79S	18:37	276	18:59
2024	Apr	03	(Wed)	05:55	06:17	84	12:27	79S	18:37	276	18:59
2024	Apr	04	(Thu)	05:54	06:16	84	12:27	80S	18:37	277	18:59
2024	Apr	05	(Fri)	05:54	06:15	83	12:26	80S	18:37	277	18:59
2024	Apr	06	(Sat)	05:53	06:15	83	12:26	80S	18:38	277	18:59
2024	Apr	07	(Sun)	05:52	06:14	83	12:26	81S	18:38	278	19:00
2024	Apr	08	(Mon)	05:51	06:13	82	12:25	81S	18:38	278	19:00
2024	Apr	09	(Tue)	05:51	06:12	82	12:25	82S	18:38	278	19:00
2024	Apr	10	(Wed)	05:50	06:12	81	12:25	82S	18:38	279	19:00
2024	Apr	11	(Thu)	05:49	06:11	81	12:25	82S	18:39	279	19:01
2024	Apr	12	(Fri)	05:48	06:10	81	12:24	83S	18:39	280	19:01
2024	Apr	13	(Sat)	05:48	06:10	80	12:24	83S	18:39	280	19:01
2024	Apr	14	(Sun)	05:47	06:09	80	12:24	83S	18:39	280	19:01
2024	Apr	15	(Mon)	05:46	06:08	79	12:24	84S	18:39	281	19:02
2024	Apr	16	(Tue)	05:45	06:07	79	12:23	84S	18:40	281	19:02
2024	Apr	17	(Wed)	05:45	06:07	79	12:23	84S	18:40	281	19:02
2024	Apr	18	(Thu)	05:44	06:06	78	12:23	85S	18:40	282	19:02
2024	Apr	19	(Fri)	05:43	06:05	78	12:23	85S	18:40	282	19:03
2024	Apr	20	(Sat)	05:43	06:05	78	12:23	86S	18:41	283	19:03
2024	Apr	21	(Sun)	05:42	06:04	77	12:22	86S	18:41	283	19:03
2024	Apr	22	(Mon)	05:41	06:04	77	12:22	86S	18:41	283	19:03

2024	Apr	23	(Tue)	05:41	06:03	77	12:22	87S	18:41	284	19:04
2024	Apr	24	(Wed)	05:40	06:02	76	12:22	87S	18:42	284	19:04
2024	Apr	25	(Thu)	05:39	06:02	76	12:22	87S	18:42	284	19:04
2024	Apr	26	(Fri)	05:39	06:01	76	12:21	88S	18:42	285	19:04
2024	Apr	27	(Sat)	05:38	06:01	75	12:21	88S	18:42	285	19:05
2024	Apr	28	(Sun)	05:38	06:00	75	12:21	88S	18:43	285	19:05
2024	Apr	29	(Mon)	05:37	05:59	75	12:21	88S	18:43	286	19:05
2024	Apr	30	(Tue)	05:36	05:59	74	12:21	89S	18:43	286	19:06
2024	May	01	(Wed)	05:36	05:58	74	12:21	89S	18:43	286	19:06
2024	May	02	(Thu)	05:35	05:58	74	12:21	89S	18:44	287	19:06
2024	May	03	(Fri)	05:35	05:57	73	12:21	90S	18:44	287	19:07
2024	May	04	(Sat)	05:34	05:57	73	12:20	90S	18:44	287	19:07
2024	May	05	(Sun)	05:34	05:56	73	12:20	90S	18:45	288	19:07
2024	May	06	(Mon)	05:33	05:56	72	12:20	91S	18:45	288	19:08
2024	May	07	(Tue)	05:33	05:56	72	12:20	91N	18:45	288	19:08
2024	May	08	(Wed)	05:32	05:55	72	12:20	90N	18:45	288	19:08
2024	May	09	(Thu)	05:32	05:55	72	12:20	90N	18:46	289	19:09
2024	May	10	(Fri)	05:31	05:54	71	12:20	90N	18:46	289	19:09
2024	May	11	(Sat)	05:31	05:54	71	12:20	90N	18:46	289	19:09
2024	May	12	(Sun)	05:31	05:54	71	12:20	89N	18:47	289	19:10
2024	May	13	(Mon)	05:30	05:53	70	12:20	89N	18:47	290	19:10
2024	May	14	(Tue)	05:30	05:53	70	12:20	89N	18:47	290	19:11
2024	May	15	(Wed)	05:29	05:53	70	12:20	89N	18:48	290	19:11
2024	May	16	(Thu)	05:29	05:52	70	12:20	88N	18:48	290	19:11
2024	May	17	(Fri)	05:29	05:52	69	12:20	88N	18:48	291	19:12
2024	May	18	(Sat)	05:28	05:52	69	12:20	88N	18:49	291	19:12
2024	May	19	(Sun)	05:28	05:51	69	12:20	88N	18:49	291	19:12
2024	May	20	(Mon)	05:28	05:51	69	12:20	87N	18:50	291	19:13
2024	May	21	(Tue)	05:28	05:51	69	12:20	87N	18:50	292	19:13
2024	May	22	(Wed)	05:27	05:51	68	12:20	87N	18:50	292	19:14
2024	May	23	(Thu)	05:27	05:51	68	12:20	87N	18:51	292	19:14
2024	May	24	(Fri)	05:27	05:50	68	12:21	87N	18:51	292	19:14
2024	May	25	(Sat)	05:27	05:50	68	12:21	87N	18:51	292	19:15
2024	May	26	(Sun)	05:27	05:50	68	12:21	86N	18:52	293	19:15
2024	May	27	(Mon)	05:26	05:50	67	12:21	86N	18:52	293	19:16
2024	May	28	(Tue)	05:26	05:50	67	12:21	86N	18:52	293	19:16
2024	May	29	(Wed)	05:26	05:50	67	12:21	86N	18:53	293	19:16
2024	May	30	(Thu)	05:26	05:50	67	12:21	86N	18:53	293	19:17
2024	May	31	(Fri)	05:26	05:50	67	12:21	86N	18:53	293	19:17
2024	Jun	01	(Sat)	05:26	05:50	67	12:22	85N	18:54	293	19:17
2024	Jun	02	(Sun)	05:26	05:49	66	12:22	85N	18:54	294	19:18
2024	Jun	03	(Mon)	05:26	05:49	66	12:22	85N	18:54	294	19:18
2024	Jun	04	(Tue)	05:26	05:49	66	12:22	85N	18:55	294	19:19
2024	Jun	05	(Wed)	05:26	05:49	66	12:22	85N	18:55	294	19:19
2024	Jun	06	(Thu)	05:26	05:50	66	12:22	85N	18:55	294	19:19
2024	Jun	07	(Fri)	05:26	05:50	66	12:23	85N	18:56	294	19:20
2024	Jun	08	(Sat)	05:26	05:50	66	12:23	85N	18:56	294	19:20
2024	Jun	09	(Sun)	05:26	05:50	66	12:23	85N	18:56	294	19:20
2024	Jun	10	(Mon)	05:26	05:50	66	12:23	85N	18:57	294	19:21
2024	Jun	11	(Tue)	05:26	05:50	66	12:23	84N	18:57	295	19:21
2024	Jun	12	(Wed)	05:26	05:50	65	12:24	84N	18:57	295	19:21
2024	Jun	13	(Thu)	05:26	05:50	65	12:24	84N	18:58	295	19:22
2024	Jun	14	(Fri)	05:26	05:50	65	12:24	84N	18:58	295	19:22
2024	Jun	15	(Sat)	05:26	05:50	65	12:24	84N	18:58	295	19:22
2024	Jun	16	(Sun)	05:27	05:51	65	12:24	84N	18:58	295	19:22
2024	Jun	17	(Mon)	05:27	05:51	65	12:25	84N	18:59	295	19:23
2024	Jun	18	(Tue)	05:27	05:51	65	12:25	84N	18:59	295	19:23
2024	Jun	19	(Wed)	05:27	05:51	65	12:25	84N	18:59	295	19:23
2024	Jun	20	(Thu)	05:27	05:51	65	12:25	84N	18:59	295	19:23
2024	Jun	21	(Fri)	05:27	05:52	65	12:26	84N	19:00	295	19:24
2024	Jun	22	(Sat)	05:28	05:52	65	12:26	84N	19:00	295	19:24
2024	Jun	23	(Sun)	05:28	05:52	65	12:26	84N	19:00	295	19:24
2024	Jun	24	(Mon)	05:28	05:52	65	12:26	84N	19:00	295	19:24
2024	Jun	25	(Tue)	05:28	05:52	65	12:26	84N	19:00	295	19:24
2024	Jun	26	(Wed)	05:29	05:53	65	12:27	84N	19:01	295	19:25
2024	Jun	27	(Thu)	05:29	05:53	65	12:27	84N	19:01	295	19:25
2024	Jun	28	(Fri)	05:29	05:53	65	12:27	84N	19:01	295	19:25
2024	Jun	29	(Sat)	05:30	05:54	65	12:27	84N	19:01	295	19:25
2024	Jun	30	(Sun)	05:30	05:54	65	12:27	84N	19:01	295	19:25
2024	Jul	01	(Mon)	05:30	05:54	66	12:28	85N	19:01	294	19:25
2024	Jul	02	(Tue)	05:30	05:54	66	12:28	85N	19:01	294	19:25
2024	Jul	03	(Wed)	05:31	05:55	66	12:28	85N	19:01	294	19:25

2024	Jul	04	(Thu)	05:31	05:55	66	12:28	85N	19:01	294	19:25
2024	Jul	05	(Fri)	05:31	05:55	66	12:28	85N	19:01	294	19:25
2024	Jul	06	(Sat)	05:32	05:56	66	12:29	85N	19:01	294	19:25
2024	Jul	07	(Sun)	05:32	05:56	66	12:29	85N	19:01	294	19:25
2024	Jul	08	(Mon)	05:32	05:56	66	12:29	85N	19:01	294	19:25
2024	Jul	09	(Tue)	05:33	05:57	66	12:29	85N	19:01	294	19:25
2024	Jul	10	(Wed)	05:33	05:57	66	12:29	85N	19:01	293	19:25
2024	Jul	11	(Thu)	05:34	05:57	67	12:29	86N	19:01	293	19:25
2024	Jul	12	(Fri)	05:34	05:58	67	12:29	86N	19:01	293	19:25
2024	Jul	13	(Sat)	05:34	05:58	67	12:30	86N	19:01	293	19:25
2024	Jul	14	(Sun)	05:35	05:58	67	12:30	86N	19:01	293	19:25
2024	Jul	15	(Mon)	05:35	05:59	67	12:30	86N	19:01	293	19:24
2024	Jul	16	(Tue)	05:35	05:59	67	12:30	86N	19:01	293	19:24
2024	Jul	17	(Wed)	05:36	05:59	68	12:30	86N	19:00	292	19:24
2024	Jul	18	(Thu)	05:36	06:00	68	12:30	87N	19:00	292	19:24
2024	Jul	19	(Fri)	05:36	06:00	68	12:30	87N	19:00	292	19:24
2024	Jul	20	(Sat)	05:37	06:00	68	12:30	87N	19:00	292	19:23
2024	Jul	21	(Sun)	05:37	06:01	68	12:30	87N	19:00	292	19:23
2024	Jul	22	(Mon)	05:37	06:01	69	12:30	87N	18:59	291	19:23
2024	Jul	23	(Tue)	05:38	06:01	69	12:30	88N	18:59	291	19:22
2024	Jul	24	(Wed)	05:38	06:01	69	12:30	88N	18:59	291	19:22
2024	Jul	25	(Thu)	05:39	06:02	69	12:30	88N	18:59	291	19:22
2024	Jul	26	(Fri)	05:39	06:02	69	12:30	88N	18:58	290	19:21
2024	Jul	27	(Sat)	05:39	06:02	70	12:30	88N	18:58	290	19:21
2024	Jul	28	(Sun)	05:40	06:03	70	12:30	89N	18:58	290	19:21
2024	Jul	29	(Mon)	05:40	06:03	70	12:30	89N	18:57	290	19:20
2024	Jul	30	(Tue)	05:40	06:03	70	12:30	89N	18:57	289	19:20
2024	Jul	31	(Wed)	05:41	06:04	71	12:30	89N	18:56	289	19:19
2024	Aug	01	(Thu)	05:41	06:04	71	12:30	90N	18:56	289	19:19
2024	Aug	02	(Fri)	05:41	06:04	71	12:30	90N	18:56	289	19:19
2024	Aug	03	(Sat)	05:42	06:04	71	12:30	90N	18:55	288	19:18
2024	Aug	04	(Sun)	05:42	06:05	72	12:30	90N	18:55	288	19:18
2024	Aug	05	(Mon)	05:42	06:05	72	12:30	91S	18:54	288	19:17
2024	Aug	06	(Tue)	05:42	06:05	72	12:30	90S	18:54	288	19:17
2024	Aug	07	(Wed)	05:43	06:05	73	12:29	90S	18:53	287	19:16
2024	Aug	08	(Thu)	05:43	06:06	73	12:29	90S	18:53	287	19:15
2024	Aug	09	(Fri)	05:43	06:06	73	12:29	90S	18:52	287	19:15
2024	Aug	10	(Sat)	05:44	06:06	74	12:29	89S	18:52	286	19:14
2024	Aug	11	(Sun)	05:44	06:06	74	12:29	89S	18:51	286	19:14
2024	Aug	12	(Mon)	05:44	06:07	74	12:29	89S	18:51	286	19:13
2024	Aug	13	(Tue)	05:44	06:07	74	12:29	88S	18:50	285	19:12
2024	Aug	14	(Wed)	05:45	06:07	75	12:28	88S	18:49	285	19:12
2024	Aug	15	(Thu)	05:45	06:07	75	12:28	88S	18:49	285	19:11
2024	Aug	16	(Fri)	05:45	06:08	75	12:28	87S	18:48	284	19:11
2024	Aug	17	(Sat)	05:45	06:08	76	12:28	87S	18:48	284	19:10
2024	Aug	18	(Sun)	05:46	06:08	76	12:28	87S	18:47	284	19:09
2024	Aug	19	(Mon)	05:46	06:08	76	12:27	86S	18:46	283	19:08
2024	Aug	20	(Tue)	05:46	06:08	77	12:27	86S	18:46	283	19:08
2024	Aug	21	(Wed)	05:46	06:09	77	12:27	86S	18:45	283	19:07
2024	Aug	22	(Thu)	05:46	06:09	78	12:27	85S	18:44	282	19:06
2024	Aug	23	(Fri)	05:47	06:09	78	12:26	85S	18:43	282	19:06
2024	Aug	24	(Sat)	05:47	06:09	78	12:26	85S	18:43	282	19:05
2024	Aug	25	(Sun)	05:47	06:09	79	12:26	84S	18:42	281	19:04
2024	Aug	26	(Mon)	05:47	06:09	79	12:25	84S	18:41	281	19:03
2024	Aug	27	(Tue)	05:47	06:09	79	12:25	84S	18:41	280	19:03
2024	Aug	28	(Wed)	05:48	06:10	80	12:25	83S	18:40	280	19:02
2024	Aug	29	(Thu)	05:48	06:10	80	12:25	83S	18:39	280	19:01
2024	Aug	30	(Fri)	05:48	06:10	80	12:24	83S	18:38	279	19:00
2024	Aug	31	(Sat)	05:48	06:10	81	12:24	82S	18:38	279	19:00
2024	Sep	01	(Sun)	05:48	06:10	81	12:24	82S	18:37	279	18:59
2024	Sep	02	(Mon)	05:48	06:10	82	12:23	82S	18:36	278	18:58
2024	Sep	03	(Tue)	05:49	06:10	82	12:23	81S	18:35	278	18:57
2024	Sep	04	(Wed)	05:49	06:11	82	12:23	81S	18:34	277	18:56
2024	Sep	05	(Thu)	05:49	06:11	83	12:22	80S	18:34	277	18:55
2024	Sep	06	(Fri)	05:49	06:11	83	12:22	80S	18:33	277	18:55
2024	Sep	07	(Sat)	05:49	06:11	84	12:22	80S	18:32	276	18:54
2024	Sep	08	(Sun)	05:49	06:11	84	12:21	79S	18:31	276	18:53
2024	Sep	09	(Mon)	05:49	06:11	84	12:21	79S	18:30	276	18:52
2024	Sep	10	(Tue)	05:50	06:11	85	12:21	79S	18:30	275	18:51
2024	Sep	11	(Wed)	05:50	06:11	85	12:20	78S	18:29	275	18:51
2024	Sep	12	(Thu)	05:50	06:12	85	12:20	78S	18:28	274	18:50
2024	Sep	13	(Fri)	05:50	06:12	86	12:20	77S	18:27	274	18:49

2024	Sep	14	(Sat)	05:50	06:12	86	12:19	77S	18:26	274	18:48
2024	Sep	15	(Sun)	05:50	06:12	87	12:19	77S	18:26	273	18:47
2024	Sep	16	(Mon)	05:50	06:12	87	12:18	76S	18:25	273	18:46
2024	Sep	17	(Tue)	05:50	06:12	87	12:18	76S	18:24	272	18:46
2024	Sep	18	(Wed)	05:51	06:12	88	12:18	76S	18:23	272	18:45
2024	Sep	19	(Thu)	05:51	06:12	88	12:17	75S	18:22	271	18:44
2024	Sep	20	(Fri)	05:51	06:12	89	12:17	75S	18:21	271	18:43
2024	Sep	21	(Sat)	05:51	06:13	89	12:17	74S	18:21	271	18:42
2024	Sep	22	(Sun)	05:51	06:13	90	12:16	74S	18:20	270	18:41
2024	Sep	23	(Mon)	05:51	06:13	90	12:16	74S	18:19	270	18:41
2024	Sep	24	(Tue)	05:51	06:13	90	12:16	73S	18:18	269	18:40
2024	Sep	25	(Wed)	05:51	06:13	91	12:15	73S	18:17	269	18:39
2024	Sep	26	(Thu)	05:52	06:13	91	12:15	72S	18:16	269	18:38
2024	Sep	27	(Fri)	05:52	06:13	92	12:15	72S	18:16	268	18:37
2024	Sep	28	(Sat)	05:52	06:13	92	12:14	72S	18:15	268	18:36
2024	Sep	29	(Sun)	05:52	06:14	92	12:14	71S	18:14	267	18:36
2024	Sep	30	(Mon)	05:52	06:14	93	12:14	71S	18:13	267	18:35
2024	Oct	01	(Tue)	05:52	06:14	93	12:13	70S	18:12	267	18:34
2024	Oct	02	(Wed)	05:52	06:14	94	12:13	70S	18:12	266	18:33
2024	Oct	03	(Thu)	05:53	06:14	94	12:13	70S	18:11	266	18:33
2024	Oct	04	(Fri)	05:53	06:14	94	12:12	69S	18:10	265	18:32
2024	Oct	05	(Sat)	05:53	06:15	95	12:12	69S	18:09	265	18:31
2024	Oct	06	(Sun)	05:53	06:15	95	12:12	69S	18:09	265	18:30
2024	Oct	07	(Mon)	05:53	06:15	96	12:11	68S	18:08	264	18:30
2024	Oct	08	(Tue)	05:53	06:15	96	12:11	68S	18:07	264	18:29
2024	Oct	09	(Wed)	05:54	06:15	96	12:11	67S	18:06	263	18:28
2024	Oct	10	(Thu)	05:54	06:15	97	12:11	67S	18:06	263	18:27
2024	Oct	11	(Fri)	05:54	06:16	97	12:10	67S	18:05	263	18:27
2024	Oct	12	(Sat)	05:54	06:16	98	12:10	66S	18:04	262	18:26
2024	Oct	13	(Sun)	05:54	06:16	98	12:10	66S	18:04	262	18:25
2024	Oct	14	(Mon)	05:54	06:16	98	12:10	66S	18:03	261	18:25
2024	Oct	15	(Tue)	05:55	06:16	99	12:09	65S	18:02	261	18:24
2024	Oct	16	(Wed)	05:55	06:17	99	12:09	65S	18:01	261	18:23
2024	Oct	17	(Thu)	05:55	06:17	100	12:09	64S	18:01	260	18:23
2024	Oct	18	(Fri)	05:55	06:17	100	12:09	64S	18:00	260	18:22
2024	Oct	19	(Sat)	05:56	06:17	100	12:09	64S	18:00	260	18:21
2024	Oct	20	(Sun)	05:56	06:18	101	12:08	63S	17:59	259	18:21
2024	Oct	21	(Mon)	05:56	06:18	101	12:08	63S	17:58	259	18:20
2024	Oct	22	(Tue)	05:56	06:18	101	12:08	63S	17:58	258	18:20
2024	Oct	23	(Wed)	05:57	06:19	102	12:08	62S	17:57	258	18:19
2024	Oct	24	(Thu)	05:57	06:19	102	12:08	62S	17:57	258	18:19
2024	Oct	25	(Fri)	05:57	06:19	102	12:08	62S	17:56	257	18:18
2024	Oct	26	(Sat)	05:57	06:20	103	12:08	61S	17:56	257	18:18
2024	Oct	27	(Sun)	05:58	06:20	103	12:08	61S	17:55	257	18:17
2024	Oct	28	(Mon)	05:58	06:20	104	12:07	61S	17:55	256	18:17
2024	Oct	29	(Tue)	05:58	06:21	104	12:07	60S	17:54	256	18:16
2024	Oct	30	(Wed)	05:59	06:21	104	12:07	60S	17:54	256	18:16
2024	Oct	31	(Thu)	05:59	06:21	105	12:07	60S	17:53	255	18:15
2024	Nov	01	(Fri)	05:59	06:22	105	12:07	59S	17:53	255	18:15
2024	Nov	02	(Sat)	06:00	06:22	105	12:07	59S	17:52	255	18:15
2024	Nov	03	(Sun)	06:00	06:22	106	12:07	59S	17:52	254	18:14
2024	Nov	04	(Mon)	06:00	06:23	106	12:07	58S	17:51	254	18:14
2024	Nov	05	(Tue)	06:01	06:23	106	12:07	58S	17:51	254	18:14
2024	Nov	06	(Wed)	06:01	06:24	107	12:07	58S	17:51	253	18:13
2024	Nov	07	(Thu)	06:02	06:24	107	12:07	57S	17:50	253	18:13
2024	Nov	08	(Fri)	06:02	06:25	107	12:07	57S	17:50	253	18:13
2024	Nov	09	(Sat)	06:03	06:25	107	12:08	57S	17:50	252	18:12
2024	Nov	10	(Sun)	06:03	06:26	108	12:08	57S	17:50	252	18:12
2024	Nov	11	(Mon)	06:03	06:26	108	12:08	56S	17:49	252	18:12
2024	Nov	12	(Tue)	06:04	06:26	108	12:08	56S	17:49	252	18:12
2024	Nov	13	(Wed)	06:04	06:27	109	12:08	56S	17:49	251	18:12
2024	Nov	14	(Thu)	06:05	06:27	109	12:08	55S	17:49	251	18:11
2024	Nov	15	(Fri)	06:05	06:28	109	12:08	55S	17:49	251	18:11
2024	Nov	16	(Sat)	06:06	06:28	109	12:08	55S	17:48	250	18:11
2024	Nov	17	(Sun)	06:06	06:29	110	12:09	55S	17:48	250	18:11
2024	Nov	18	(Mon)	06:07	06:29	110	12:09	55S	17:48	250	18:11
2024	Nov	19	(Tue)	06:07	06:30	110	12:09	54S	17:48	250	18:11
2024	Nov	20	(Wed)	06:08	06:31	110	12:09	54S	17:48	249	18:11
2024	Nov	21	(Thu)	06:08	06:31	111	12:10	54S	17:48	249	18:11
2024	Nov	22	(Fri)	06:09	06:32	111	12:10	54S	17:48	249	18:11
2024	Nov	23	(Sat)	06:09	06:32	111	12:10	53S	17:48	249	18:11
2024	Nov	24	(Sun)	06:10	06:33	111	12:10	53S	17:48	249	18:11

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

Moon

Tak

Location: E 99°04'30.0", N16°51'57.5", 0m
(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	80		04:15	87S	10:40	282
2024 Jan 02 (Tue)	23:21	86		04:55	82S	11:13	277
2024 Jan 03 (Wed)				05:34	76S	11:45	271
2024 Jan 04 (Thu)	00:07	92		06:14	70S	12:17	265
2024 Jan 05 (Fri)	00:54	98		06:54	64S	12:50	259
2024 Jan 06 (Sat)	01:44	104		07:37	59S	13:27	253
2024 Jan 07 (Sun)	02:36	110		08:24	53S	14:08	248
2024 Jan 08 (Mon)	03:33	114		09:15	49S	14:55	244
2024 Jan 09 (Tue)	04:34	118		10:12	46S	15:49	241
2024 Jan 10 (Wed)	05:38	119		11:14	45S	16:50	240
2024 Jan 11 (Thu)	06:41	119		12:18	46S	17:56	242
2024 Jan 12 (Fri)	07:40	117		13:21	49S	19:04	245
2024 Jan 13 (Sat)	08:34	112		14:20	53S	20:09	251
2024 Jan 14 (Sun)	09:23	106		15:15	59S	21:12	257
2024 Jan 15 (Mon)	10:06	99		16:07	66S	22:12	264
2024 Jan 16 (Tue)	10:47	92		16:56	73S	23:09	272
2024 Jan 17 (Wed)	11:26	85		17:44	80S		
2024 Jan 18 (Thu)	12:05	78		18:32	87S	00:06	279
2024 Jan 19 (Fri)	12:47	72		19:21	89N	01:02	285
2024 Jan 20 (Sat)	13:31	67		20:13	84N	01:59	291
2024 Jan 21 (Sun)	14:19	63		21:06	81N	02:58	295
2024 Jan 22 (Mon)	15:10	61		22:02	79N	03:56	298
2024 Jan 23 (Tue)	16:05	60		22:57	79N	04:54	300

2024	Jan	24	(Wed)	17:01	62	23:50	81N	05:48	299
2024	Jan	25	(Thu)	17:56	64			06:38	297
2024	Jan	26	(Fri)	18:49	68	00:41	84N	07:22	294
2024	Jan	27	(Sat)	19:40	73	01:28	88N	08:02	289
2024	Jan	28	(Sun)	20:29	78	02:11	89S	08:39	284
2024	Jan	29	(Mon)	21:15	84	02:52	83S	09:12	279
2024	Jan	30	(Tue)	22:01	90	03:32	78S	09:44	273
2024	Jan	31	(Wed)	22:48	96	04:11	72S	10:16	267
2024	Feb	01	(Thu)	23:35	102	04:50	66S	10:48	261
2024	Feb	02	(Fri)			05:31	60S	11:23	255
2024	Feb	03	(Sat)	00:26	108	06:15	55S	12:01	250
2024	Feb	04	(Sun)	01:19	113	07:03	51S	12:44	245
2024	Feb	05	(Mon)	02:17	117	07:56	47S	13:33	242
2024	Feb	06	(Tue)	03:18	119	08:54	45S	14:30	240
2024	Feb	07	(Wed)	04:20	120	09:56	45S	15:33	241
2024	Feb	08	(Thu)	05:21	118	10:59	47S	16:39	243
2024	Feb	09	(Fri)	06:18	115	12:01	51S	17:47	248
2024	Feb	10	(Sat)	07:10	109	13:00	56S	18:53	254
2024	Feb	11	(Sun)	07:57	103	13:54	63S	19:56	261
2024	Feb	12	(Mon)	08:40	95	14:46	70S	20:57	269
2024	Feb	13	(Tue)	09:21	88	15:36	78S	21:56	276
2024	Feb	14	(Wed)	10:02	80	16:26	85S	22:54	283
2024	Feb	15	(Thu)	10:44	74	17:16	90N	23:53	289
2024	Feb	16	(Fri)	11:28	68	18:08	85N		
2024	Feb	17	(Sat)	12:15	64	19:02	82N	00:52	294
2024	Feb	18	(Sun)	13:06	61	19:57	80N	01:51	298
2024	Feb	19	(Mon)	14:00	60	20:52	79N	02:49	300
2024	Feb	20	(Tue)	14:55	61	21:46	80N	03:44	300
2024	Feb	21	(Wed)	15:51	63	22:37	83N	04:35	298
2024	Feb	22	(Thu)	16:44	67	23:25	86N	05:21	295
2024	Feb	23	(Fri)	17:36	71			06:02	291
2024	Feb	24	(Sat)	18:25	77	00:09	90S	06:39	286
2024	Feb	25	(Sun)	19:12	82	00:51	85S	07:13	281
2024	Feb	26	(Mon)	19:58	88	01:31	80S	07:46	275
2024	Feb	27	(Tue)	20:44	94	02:10	74S	08:17	269
2024	Feb	28	(Wed)	21:31	100	02:49	68S	08:49	263
2024	Feb	29	(Thu)	22:20	106	03:29	62S	09:23	257
2024	Mar	01	(Fri)	23:12	111	04:11	57S	09:59	252
2024	Mar	02	(Sat)			04:57	52S	10:39	247
2024	Mar	03	(Sun)	00:06	115	05:46	48S	11:24	243
2024	Mar	04	(Mon)	01:04	118	06:41	46S	12:16	241
2024	Mar	05	(Tue)	02:04	120	07:39	45S	13:14	240
2024	Mar	06	(Wed)	03:04	119	08:40	46S	14:17	241
2024	Mar	07	(Thu)	04:02	117	09:41	48S	15:23	245
2024	Mar	08	(Fri)	04:55	112	10:40	53S	16:29	250
2024	Mar	09	(Sat)	05:44	106	11:36	59S	17:33	257
2024	Mar	10	(Sun)	06:29	99	12:30	66S	18:36	265
2024	Mar	11	(Mon)	07:11	91	13:22	74S	19:37	272
2024	Mar	12	(Tue)	07:53	84	14:13	82S	20:38	280
2024	Mar	13	(Wed)	08:36	76	15:05	88S	21:38	287
2024	Mar	14	(Thu)	09:21	70	15:58	87N	22:40	293
2024	Mar	15	(Fri)	10:08	65	16:54	83N	23:42	297
2024	Mar	16	(Sat)	11:00	62	17:50	80N		
2024	Mar	17	(Sun)	11:54	60	18:47	79N	00:42	299
2024	Mar	18	(Mon)	12:50	60	19:42	79N	01:39	300
2024	Mar	19	(Tue)	13:46	62	20:34	82N	02:32	299
2024	Mar	20	(Wed)	14:40	65	21:22	85N	03:20	296
2024	Mar	21	(Thu)	15:32	70	22:08	89N	04:02	292
2024	Mar	22	(Fri)	16:21	75	22:50	87S	04:40	288
2024	Mar	23	(Sat)	17:09	80	23:30	82S	05:15	282
2024	Mar	24	(Sun)	17:55	86			05:48	277
2024	Mar	25	(Mon)	18:42	92	00:09	76S	06:19	271
2024	Mar	26	(Tue)	19:28	98	00:48	70S	06:51	265
2024	Mar	27	(Wed)	20:17	104	01:28	64S	07:24	259
2024	Mar	28	(Thu)	21:08	110	02:10	58S	07:59	253
2024	Mar	29	(Fri)	22:01	114	02:54	53S	08:38	248
2024	Mar	30	(Sat)	22:58	118	03:42	49S	09:21	244
2024	Mar	31	(Sun)	23:56	120	04:35	46S	10:10	241
2024	Apr	01	(Mon)			05:31	45S	11:05	240
2024	Apr	02	(Tue)	00:55	120	06:29	45S	12:05	241
2024	Apr	03	(Wed)	01:51	118	07:28	47S	13:07	243
2024	Apr	04	(Thu)	02:44	115	08:26	51S	14:11	248

2024 Apr 05 (Fri)	03:33 109	09:21 56S	15:14 253
2024 Apr 06 (Sat)	04:18 103	10:15 63S	16:15 261
2024 Apr 07 (Sun)	05:01 96	11:06 70S	17:16 268
2024 Apr 08 (Mon)	05:42 88	11:57 78S	18:17 276
2024 Apr 09 (Tue)	06:25 80	12:49 85S	19:18 283
2024 Apr 10 (Wed)	07:09 73	13:42 90N	20:21 290
2024 Apr 11 (Thu)	07:56 67	14:38 85N	21:24 295
2024 Apr 12 (Fri)	08:48 63	15:36 81N	22:28 298
2024 Apr 13 (Sat)	09:42 61	16:35 79N	23:28 300
2024 Apr 14 (Sun)	10:40 60	17:33 79N	
2024 Apr 15 (Mon)	11:37 61	18:27 81N	00:25 299
2024 Apr 16 (Tue)	12:33 64	19:18 84N	01:15 297
2024 Apr 17 (Wed)	13:26 68	20:05 88N	02:00 294
2024 Apr 18 (Thu)	14:17 73	20:48 89S	02:40 289
2024 Apr 19 (Fri)	15:05 78	21:29 84S	03:16 284
2024 Apr 20 (Sat)	15:52 84	22:08 78S	03:49 279
2024 Apr 21 (Sun)	16:38 90	22:47 72S	04:21 273
2024 Apr 22 (Mon)	17:25 96	23:27 66S	04:53 267
2024 Apr 23 (Tue)	18:13 102		05:25 261
2024 Apr 24 (Wed)	19:03 108	00:08 60S	06:00 255
2024 Apr 25 (Thu)	19:56 113	00:52 55S	06:38 250
2024 Apr 26 (Fri)	20:52 117	01:39 51S	07:20 245
2024 Apr 27 (Sat)	21:51 119	02:31 47S	08:07 242
2024 Apr 28 (Sun)	22:49 120	03:26 45S	09:01 240
2024 Apr 29 (Mon)	23:46 119	04:24 45S	09:59 240
2024 Apr 30 (Tue)		05:22 46S	11:00 242
2024 May 01 (Wed)	00:39 116	06:19 49S	12:02 246
2024 May 02 (Thu)	01:28 111	07:14 54S	13:03 251
2024 May 03 (Fri)	02:13 106	08:06 60S	14:03 258
2024 May 04 (Sat)	02:55 99	08:56 67S	15:01 265
2024 May 05 (Sun)	03:35 91	09:45 74S	16:00 272
2024 May 06 (Mon)	04:16 84	10:35 81S	16:59 280
2024 May 07 (Tue)	04:58 77	11:27 88S	18:00 287
2024 May 08 (Wed)	05:43 70	12:21 87N	19:03 293
2024 May 09 (Thu)	06:33 65	13:19 83N	20:08 297
2024 May 10 (Fri)	07:27 62	14:18 80N	21:11 299
2024 May 11 (Sat)	08:25 60	15:18 79N	22:11 300
2024 May 12 (Sun)	09:24 61	16:16 80N	23:06 298
2024 May 13 (Mon)	10:22 63	17:09 82N	23:54 295
2024 May 14 (Tue)	11:18 66	17:59 86N	
2024 May 15 (Wed)	12:10 71	18:44 91N	00:37 291
2024 May 16 (Thu)	12:59 76	19:26 85S	01:14 286
2024 May 17 (Fri)	13:47 82	20:06 80S	01:49 281
2024 May 18 (Sat)	14:33 88	20:45 74S	02:21 275
2024 May 19 (Sun)	15:19 94	21:24 68S	02:53 269
2024 May 20 (Mon)	16:07 100	22:04 62S	03:25 263
2024 May 21 (Tue)	16:56 106	22:47 57S	03:59 257
2024 May 22 (Wed)	17:49 111	23:34 52S	04:35 252
2024 May 23 (Thu)	18:45 115		05:16 247
2024 May 24 (Fri)	19:43 118	00:25 48S	06:03 243
2024 May 25 (Sat)	20:43 120	01:20 46S	06:55 241
2024 May 26 (Sun)	21:41 119	02:18 45S	07:52 240
2024 May 27 (Mon)	22:36 117	03:17 46S	08:54 242
2024 May 28 (Tue)	23:26 113	04:15 48S	09:56 245
2024 May 29 (Wed)		05:10 53S	10:57 250
2024 May 30 (Thu)	00:11 107	06:02 58S	11:56 256
2024 May 31 (Fri)	00:53 101	06:52 65S	12:54 262
2024 Jun 01 (Sat)	01:33 94	07:40 72S	13:51 270
2024 Jun 02 (Sun)	02:12 87	08:28 79S	14:48 277
2024 Jun 03 (Mon)	02:52 79	09:17 86S	15:46 284
2024 Jun 04 (Tue)	03:35 73	10:09 90N	16:47 290
2024 Jun 05 (Wed)	04:22 67	11:04 85N	17:50 295
2024 Jun 06 (Thu)	05:13 63	12:02 81N	18:54 298
2024 Jun 07 (Fri)	06:09 61	13:02 79N	19:56 300
2024 Jun 08 (Sat)	07:08 60	14:01 79N	20:53 299
2024 Jun 09 (Sun)	08:08 62	14:58 81N	21:45 297
2024 Jun 10 (Mon)	09:06 65	15:50 84N	22:30 293
2024 Jun 11 (Tue)	10:00 69	16:37 89N	23:11 288
2024 Jun 12 (Wed)	10:52 74	17:21 88S	23:47 283
2024 Jun 13 (Thu)	11:40 80	18:02 82S	
2024 Jun 14 (Fri)	12:27 86	18:41 76S	00:20 277
2024 Jun 15 (Sat)	13:13 92	19:20 70S	00:52 271

2024	Jun	16	(Sun)	13:59	98	20:00	65S	01:24	265
2024	Jun	17	(Mon)	14:48	104	20:41	59S	01:56	259
2024	Jun	18	(Tue)	15:39	109	21:26	54S	02:32	254
2024	Jun	19	(Wed)	16:33	114	22:15	50S	03:11	249
2024	Jun	20	(Thu)	17:31	117	23:09	47S	03:55	244
2024	Jun	21	(Fri)	18:31	119			04:45	241
2024	Jun	22	(Sat)	19:31	120	00:07	45S	05:42	240
2024	Jun	23	(Sun)	20:29	118	01:07	45S	06:43	241
2024	Jun	24	(Mon)	21:22	114	02:07	47S	07:47	244
2024	Jun	25	(Tue)	22:10	109	03:04	51S	08:50	248
2024	Jun	26	(Wed)	22:53	103	03:58	56S	09:51	254
2024	Jun	27	(Thu)	23:33	96	04:49	63S	10:50	261
2024	Jun	28	(Fri)			05:38	70S	11:47	268
2024	Jun	29	(Sat)	00:12	89	06:25	77S	12:43	275
2024	Jun	30	(Sun)	00:52	81	07:13	84S	13:40	282
2024	Jul	01	(Mon)	01:33	75	08:03	90S	14:39	288
2024	Jul	02	(Tue)	02:17	69	08:56	86N	15:39	294
2024	Jul	03	(Wed)	03:05	64	09:52	82N	16:41	297
2024	Jul	04	(Thu)	03:59	61	10:50	80N	17:43	299
2024	Jul	05	(Fri)	04:56	60	11:49	79N	18:42	300
2024	Jul	06	(Sat)	05:55	61	12:46	80N	19:36	298
2024	Jul	07	(Sun)	06:53	64	13:40	83N	20:24	295
2024	Jul	08	(Mon)	07:50	67	14:30	87N	21:06	290
2024	Jul	09	(Tue)	08:43	72	15:15	89S	21:44	285
2024	Jul	10	(Wed)	09:33	78	15:57	84S	22:18	279
2024	Jul	11	(Thu)	10:20	84	16:37	78S	22:51	273
2024	Jul	12	(Fri)	11:06	90	17:16	72S	23:22	267
2024	Jul	13	(Sat)	11:52	96	17:55	67S	23:54	261
2024	Jul	14	(Sun)	12:40	102	18:35	61S		
2024	Jul	15	(Mon)	13:29	107	19:18	56S	00:28	256
2024	Jul	16	(Tue)	14:21	112	20:05	51S	01:05	250
2024	Jul	17	(Wed)	15:17	116	20:56	48S	01:46	246
2024	Jul	18	(Thu)	16:16	119	21:52	45S	02:34	242
2024	Jul	19	(Fri)	17:17	120	22:52	45S	03:27	240
2024	Jul	20	(Sat)	18:16	119	23:53	46S	04:27	240
2024	Jul	21	(Sun)	19:12	116			05:31	242
2024	Jul	22	(Mon)	20:03	111	00:52	49S	06:36	246
2024	Jul	23	(Tue)	20:49	105	01:49	54S	07:39	252
2024	Jul	24	(Wed)	21:31	98	02:43	61S	08:41	258
2024	Jul	25	(Thu)	22:12	91	03:34	67S	09:40	266
2024	Jul	26	(Fri)	22:51	83	04:22	75S	10:38	273
2024	Jul	27	(Sat)	23:32	76	05:11	82S	11:35	280
2024	Jul	28	(Sun)			06:01	88S	12:33	287
2024	Jul	29	(Mon)	00:15	70	06:52	87N	13:33	292
2024	Jul	30	(Tue)	01:02	65	07:47	83N	14:34	297
2024	Jul	31	(Wed)	01:53	62	08:43	80N	15:36	299
2024	Aug	01	(Thu)	02:48	60	09:41	79N	16:34	300
2024	Aug	02	(Fri)	03:46	60	10:38	80N	17:29	299
2024	Aug	03	(Sat)	04:44	62	11:33	82N	18:19	296
2024	Aug	04	(Sun)	05:41	66	12:24	85N	19:03	292
2024	Aug	05	(Mon)	06:35	70	13:10	90N	19:42	287
2024	Aug	06	(Tue)	07:26	76	13:53	86S	20:17	281
2024	Aug	07	(Wed)	08:14	81	14:34	80S	20:50	275
2024	Aug	08	(Thu)	09:01	88	15:13	75S	21:22	269
2024	Aug	09	(Fri)	09:47	94	15:52	69S	21:54	263
2024	Aug	10	(Sat)	10:33	100	16:31	63S	22:26	258
2024	Aug	11	(Sun)	11:21	105	17:13	58S	23:01	252
2024	Aug	12	(Mon)	12:11	110	17:57	53S	23:40	247
2024	Aug	13	(Tue)	13:05	115	18:45	49S		
2024	Aug	14	(Wed)	14:01	118	19:38	46S	00:24	244
2024	Aug	15	(Thu)	15:00	120	20:35	45S	01:14	241
2024	Aug	16	(Fri)	16:00	120	21:35	45S	02:10	240
2024	Aug	17	(Sat)	16:57	118	22:35	47S	03:11	241
2024	Aug	18	(Sun)	17:50	114	23:34	52S	04:16	244
2024	Aug	19	(Mon)	18:39	108			05:21	249
2024	Aug	20	(Tue)	19:24	101	00:30	58S	06:24	255
2024	Aug	21	(Wed)	20:07	94	01:23	64S	07:26	262
2024	Aug	22	(Thu)	20:48	86	02:14	72S	08:26	270
2024	Aug	23	(Fri)	21:29	79	03:04	79S	09:26	278
2024	Aug	24	(Sat)	22:12	72	03:55	86S	10:25	285
2024	Aug	25	(Sun)	22:59	67	04:47	89N	11:26	291
2024	Aug	26	(Mon)	23:49	63	05:42	84N	12:28	296

2024 Aug 27 (Tue)		06:39 81N	13:30 299
2024 Aug 28 (Wed)	00:44 60	07:37 79N	14:30 300
2024 Aug 29 (Thu)	01:41 60	08:34 79N	15:26 299
2024 Aug 30 (Fri)	02:39 62	09:29 81N	16:16 297
2024 Aug 31 (Sat)	03:35 64	10:20 84N	17:01 293
2024 Sep 01 (Sun)	04:30 69	11:07 88N	17:41 289
2024 Sep 02 (Mon)	05:21 74	11:51 88S	18:18 283
2024 Sep 03 (Tue)	06:10 79	12:32 82S	18:51 278
2024 Sep 04 (Wed)	06:57 85	13:12 77S	19:23 272
2024 Sep 05 (Thu)	07:43 92	13:51 71S	19:54 265
2024 Sep 06 (Fri)	08:29 98	14:30 65S	20:27 260
2024 Sep 07 (Sat)	09:16 103	15:10 59S	21:00 254
2024 Sep 08 (Sun)	10:05 109	15:53 54S	21:37 249
2024 Sep 09 (Mon)	10:57 113	16:39 50S	22:18 245
2024 Sep 10 (Tue)	11:51 117	17:29 47S	23:05 242
2024 Sep 11 (Wed)	12:48 119	18:23 45S	23:57 240
2024 Sep 12 (Thu)	13:46 120	19:20 45S	
2024 Sep 13 (Fri)	14:42 119	20:18 46S	00:54 240
2024 Sep 14 (Sat)	15:36 116	21:17 49S	01:56 242
2024 Sep 15 (Sun)	16:27 111	22:13 54S	03:00 246
2024 Sep 16 (Mon)	17:13 105	23:07 61S	04:03 252
2024 Sep 17 (Tue)	17:57 98	24:00 68S	05:06 258
2024 Sep 18 (Wed)	18:39 90		06:07 266
2024 Sep 19 (Thu)	19:21 82	00:51 76S	07:08 274
2024 Sep 20 (Fri)	20:05 75	01:43 83S	08:10 282
2024 Sep 21 (Sat)	20:52 69	02:36 90S	09:12 289
2024 Sep 22 (Sun)	21:42 64	03:32 86N	10:16 294
2024 Sep 23 (Mon)	22:37 61	04:30 82N	11:21 298
2024 Sep 24 (Tue)	23:34 60	05:29 79N	12:23 300
2024 Sep 25 (Wed)		06:28 79N	13:21 300
2024 Sep 26 (Thu)	00:33 61	07:25 80N	14:14 298
2024 Sep 27 (Fri)	01:31 63	08:17 83N	15:01 295
2024 Sep 28 (Sat)	02:26 67	09:06 87N	15:42 290
2024 Sep 29 (Sun)	03:18 72	09:50 90S	16:19 285
2024 Sep 30 (Mon)	04:07 78	10:32 84S	16:53 279
2024 Oct 01 (Tue)	04:54 83	11:12 79S	17:25 274
2024 Oct 02 (Wed)	05:40 90	11:50 73S	17:57 267
2024 Oct 03 (Thu)	06:26 96	12:29 67S	18:28 261
2024 Oct 04 (Fri)	07:13 102	13:09 61S	19:02 256
2024 Oct 05 (Sat)	08:02 107	13:51 56S	19:37 251
2024 Oct 06 (Sun)	08:52 112	14:36 51S	20:17 246
2024 Oct 07 (Mon)	09:45 116	15:24 48S	21:01 243
2024 Oct 08 (Tue)	10:41 119	16:16 45S	21:50 240
2024 Oct 09 (Wed)	11:37 120	17:11 44S	22:45 240
2024 Oct 10 (Thu)	12:33 120	18:07 45S	23:43 241
2024 Oct 11 (Fri)	13:26 118	19:04 48S	
2024 Oct 12 (Sat)	14:16 114	19:59 52S	00:44 244
2024 Oct 13 (Sun)	15:03 108	20:53 57S	01:45 249
2024 Oct 14 (Mon)	15:46 102	21:44 64S	02:46 255
2024 Oct 15 (Tue)	16:28 94	22:35 71S	03:47 262
2024 Oct 16 (Wed)	17:10 86	23:26 79S	04:47 270
2024 Oct 17 (Thu)	17:53 79		05:48 278
2024 Oct 18 (Fri)	18:39 72	00:19 86S	06:51 285
2024 Oct 19 (Sat)	19:29 66	01:15 88N	07:56 292
2024 Oct 20 (Sun)	20:24 62	02:14 83N	09:02 296
2024 Oct 21 (Mon)	21:22 60	03:15 80N	10:08 299
2024 Oct 22 (Tue)	22:23 60	04:16 79N	11:11 300
2024 Oct 23 (Wed)	23:23 62	05:16 79N	12:07 299
2024 Oct 24 (Thu)		06:11 82N	12:57 296
2024 Oct 25 (Fri)	00:20 66	07:02 85N	13:41 292
2024 Oct 26 (Sat)	01:13 70	07:48 90N	14:20 287
2024 Oct 27 (Sun)	02:04 76	08:31 86S	14:55 281
2024 Oct 28 (Mon)	02:51 81	09:11 80S	15:27 275
2024 Oct 29 (Tue)	03:38 88	09:50 75S	15:59 269
2024 Oct 30 (Wed)	04:24 94	10:29 69S	16:30 263
2024 Oct 31 (Thu)	05:10 100	11:08 63S	17:03 258
2024 Nov 01 (Fri)	05:58 105	11:50 58S	17:38 252
2024 Nov 02 (Sat)	06:48 110	12:34 53S	18:17 247
2024 Nov 03 (Sun)	07:41 115	13:21 49S	18:59 244
2024 Nov 04 (Mon)	08:36 118	14:12 46S	19:47 241
2024 Nov 05 (Tue)	09:32 120	15:06 45S	20:40 240
2024 Nov 06 (Wed)	10:28 120	16:02 45S	21:37 241

2024 Nov 07 (Thu)	11:21 118	16:58 47S	22:36 243
2024 Nov 08 (Fri)	12:11 115	17:52 50S	23:36 247
2024 Nov 09 (Sat)	12:57 110	18:44 55S	
2024 Nov 10 (Sun)	13:40 104	19:34 61S	00:35 252
2024 Nov 11 (Mon)	14:21 97	20:23 68S	01:33 259
2024 Nov 12 (Tue)	15:01 90	21:13 75S	02:30 266
2024 Nov 13 (Wed)	15:42 83	22:03 83S	03:29 274
2024 Nov 14 (Thu)	16:25 75	22:56 90S	04:29 281
2024 Nov 15 (Fri)	17:13 69	23:53 86N	05:32 288
2024 Nov 16 (Sat)	18:06 64		06:38 294
2024 Nov 17 (Sun)	19:04 61	00:54 82N	07:46 298
2024 Nov 18 (Mon)	20:06 60	01:57 79N	08:52 300
2024 Nov 19 (Tue)	21:08 61	03:00 79N	09:53 299
2024 Nov 20 (Wed)	22:08 64	03:59 81N	10:48 297
2024 Nov 21 (Thu)	23:05 69	04:53 84N	11:35 293
2024 Nov 22 (Fri)	23:57 74	05:43 88N	12:17 289
2024 Nov 23 (Sat)		06:27 88S	12:54 283
2024 Nov 24 (Sun)	00:46 79	07:09 82S	13:27 277
2024 Nov 25 (Mon)	01:34 85	07:48 77S	13:59 271
2024 Nov 26 (Tue)	02:20 92	08:27 71S	14:31 265
2024 Nov 27 (Wed)	03:06 98	09:06 65S	15:03 260
2024 Nov 28 (Thu)	03:53 103	09:47 59S	15:37 254
2024 Nov 29 (Fri)	04:42 109	10:30 54S	16:15 249
2024 Nov 30 (Sat)	05:35 113	11:17 50S	16:56 245
2024 Dec 01 (Sun)	06:29 117	12:07 47S	17:43 242
2024 Dec 02 (Mon)	07:26 119	13:01 45S	18:35 240
2024 Dec 03 (Tue)	08:23 120	13:57 45S	19:32 240
2024 Dec 04 (Wed)	09:18 119	14:53 46S	20:31 242
2024 Dec 05 (Thu)	10:09 116	15:48 49S	21:31 246
2024 Dec 06 (Fri)	10:56 112	16:41 54S	22:29 251
2024 Dec 07 (Sat)	11:39 106	17:31 59S	23:26 257
2024 Dec 08 (Sun)	12:19 100	18:19 66S	
2024 Dec 09 (Mon)	12:58 93	19:06 73S	00:23 264
2024 Dec 10 (Tue)	13:37 85	19:54 80S	01:19 271
2024 Dec 11 (Wed)	14:18 78	20:44 87S	02:16 278
2024 Dec 12 (Thu)	15:02 72	21:38 88N	03:15 285
2024 Dec 13 (Fri)	15:51 66	22:35 83N	04:18 291
2024 Dec 14 (Sat)	16:46 62	23:37 80N	05:23 296
2024 Dec 15 (Sun)	17:45 60		06:30 299
2024 Dec 16 (Mon)	18:48 61	00:40 79N	07:34 300
2024 Dec 17 (Tue)	19:51 63	01:42 80N	08:33 298
2024 Dec 18 (Wed)	20:51 67	02:39 82N	09:25 295
2024 Dec 19 (Thu)	21:46 72	03:32 86N	10:10 291
2024 Dec 20 (Fri)	22:38 77	04:20 90S	10:50 285
2024 Dec 21 (Sat)	23:27 83	05:03 84S	11:25 280
2024 Dec 22 (Sun)		05:44 79S	11:58 274
2024 Dec 23 (Mon)	00:13 89	06:23 73S	12:30 268
2024 Dec 24 (Tue)	00:59 95	07:02 67S	13:02 262
2024 Dec 25 (Wed)	01:46 101	07:42 61S	13:35 256
2024 Dec 26 (Thu)	02:35 107	08:24 56S	14:11 251
2024 Dec 27 (Fri)	03:25 112	09:09 52S	14:51 246
2024 Dec 28 (Sat)	04:19 116	09:59 48S	15:36 243
2024 Dec 29 (Sun)	05:16 119	10:52 46S	16:26 241
2024 Dec 30 (Mon)	06:13 120	11:48 45S	17:22 240
2024 Dec 31 (Tue)	07:10 119	12:45 46S	18:22 241