

Sun

Trat

Location: E102°35'20.3", N12°14'34.8", 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)	05:41	06:30	113	12:13 55S	17:56	247	18:45
2024	Jan	02 (Tue)	05:41	06:31	113	12:13 56S	17:56	247	18:45
2024	Jan	03 (Wed)	05:42	06:31	113	12:14 56S	17:57	247	18:46
2024	Jan	04 (Thu)	05:42	06:31	113	12:14 56S	17:57	247	18:46
2024	Jan	05 (Fri)	05:42	06:32	113	12:15 56S	17:58	247	18:47
2024	Jan	06 (Sat)	05:43	06:32	113	12:15 56S	17:58	247	18:48
2024	Jan	07 (Sun)	05:43	06:32	113	12:16 56S	17:59	247	18:48
2024	Jan	08 (Mon)	05:44	06:33	113	12:16 56S	17:59	247	18:49
2024	Jan	09 (Tue)	05:44	06:33	113	12:16 56S	18:00	248	18:49
2024	Jan	10 (Wed)	05:44	06:33	112	12:17 56S	18:01	248	18:50
2024	Jan	11 (Thu)	05:45	06:34	112	12:17 57S	18:01	248	18:50
2024	Jan	12 (Fri)	05:45	06:34	112	12:18 57S	18:02	248	18:51
2024	Jan	13 (Sat)	05:45	06:34	112	12:18 57S	18:02	248	18:51
2024	Jan	14 (Sun)	05:45	06:34	112	12:18 57S	18:03	248	18:52
2024	Jan	15 (Mon)	05:46	06:34	112	12:19 57S	18:03	249	18:52
2024	Jan	16 (Tue)	05:46	06:35	111	12:19 57S	18:04	249	18:52
2024	Jan	17 (Wed)	05:46	06:35	111	12:19 58S	18:04	249	18:53
2024	Jan	18 (Thu)	05:46	06:35	111	12:20 58S	18:05	249	18:53
2024	Jan	19 (Fri)	05:46	06:35	111	12:20 58S	18:05	249	18:54
2024	Jan	20 (Sat)	05:47	06:35	111	12:20 58S	18:06	250	18:54
2024	Jan	21 (Sun)	05:47	06:35	110	12:21 58S	18:06	250	18:55
2024	Jan	22 (Mon)	05:47	06:35	110	12:21 59S	18:07	250	18:55
2024	Jan	23 (Tue)	05:47	06:35	110	12:21 59S	18:07	250	18:56
2024	Jan	24 (Wed)	05:47	06:35	110	12:22 59S	18:08	250	18:56
2024	Jan	25 (Thu)	05:47	06:35	109	12:22 59S	18:08	251	18:56
2024	Jan	26 (Fri)	05:47	06:35	109	12:22 60S	18:09	251	18:57
2024	Jan	27 (Sat)	05:47	06:35	109	12:22 60S	18:09	251	18:57
2024	Jan	28 (Sun)	05:47	06:35	109	12:22 60S	18:10	251	18:58
2024	Jan	29 (Mon)	05:47	06:35	108	12:23 60S	18:10	252	18:58
2024	Jan	30 (Tue)	05:47	06:35	108	12:23 61S	18:10	252	18:58
2024	Jan	31 (Wed)	05:47	06:35	108	12:23 61S	18:11	252	18:59
2024	Feb	01 (Thu)	05:47	06:35	108	12:23 61S	18:11	253	18:59
2024	Feb	02 (Fri)	05:47	06:35	107	12:23 62S	18:12	253	18:59
2024	Feb	03 (Sat)	05:47	06:35	107	12:23 62S	18:12	253	19:00
2024	Feb	04 (Sun)	05:47	06:35	107	12:23 62S	18:12	253	19:00
2024	Feb	05 (Mon)	05:47	06:34	106	12:24 62S	18:13	254	19:00
2024	Feb	06 (Tue)	05:47	06:34	106	12:24 63S	18:13	254	19:00
2024	Feb	07 (Wed)	05:47	06:34	106	12:24 63S	18:14	254	19:01
2024	Feb	08 (Thu)	05:47	06:34	105	12:24 63S	18:14	255	19:01
2024	Feb	09 (Fri)	05:46	06:34	105	12:24 64S	18:14	255	19:01
2024	Feb	10 (Sat)	05:46	06:33	105	12:24 64S	18:15	255	19:02
2024	Feb	11 (Sun)	05:46	06:33	104	12:24 64S	18:15	256	19:02
2024	Feb	12 (Mon)	05:46	06:33	104	12:24 65S	18:15	256	19:02
2024	Feb	13 (Tue)	05:46	06:32	104	12:24 65S	18:15	256	19:02
2024	Feb	14 (Wed)	05:45	06:32	103	12:24 65S	18:16	257	19:02
2024	Feb	15 (Thu)	05:45	06:32	103	12:24 66S	18:16	257	19:03
2024	Feb	16 (Fri)	05:45	06:31	103	12:24 66S	18:16	257	19:03
2024	Feb	17 (Sat)	05:44	06:31	102	12:24 66S	18:17	258	19:03
2024	Feb	18 (Sun)	05:44	06:31	102	12:24 67S	18:17	258	19:03
2024	Feb	19 (Mon)	05:44	06:30	102	12:24 67S	18:17	259	19:03
2024	Feb	20 (Tue)	05:43	06:30	101	12:23 67S	18:17	259	19:04
2024	Feb	21 (Wed)	05:43	06:29	101	12:23 68S	18:17	259	19:04
2024	Feb	22 (Thu)	05:43	06:29	101	12:23 68S	18:18	260	19:04
2024	Feb	23 (Fri)	05:42	06:29	100	12:23 68S	18:18	260	19:04
2024	Feb	24 (Sat)	05:42	06:28	100	12:23 69S	18:18	260	19:04
2024	Feb	25 (Sun)	05:41	06:28	99	12:23 69S	18:18	261	19:04
2024	Feb	26 (Mon)	05:41	06:27	99	12:23 70S	18:18	261	19:04
2024	Feb	27 (Tue)	05:41	06:27	99	12:22 70S	18:18	262	19:05
2024	Feb	28 (Wed)	05:40	06:26	98	12:22 70S	18:19	262	19:05
2024	Feb	29 (Thu)	05:40	06:26	98	12:22 71S	18:19	262	19:05

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

2024	May	12	(Sun)	04:57	05:46	71	12:06	85N	18:26	289	19:15
2024	May	13	(Mon)	04:57	05:46	71	12:06	84N	18:26	289	19:15
2024	May	14	(Tue)	04:57	05:46	71	12:06	84N	18:27	289	19:16
2024	May	15	(Wed)	04:56	05:45	70	12:06	84N	18:27	290	19:16
2024	May	16	(Thu)	04:56	05:45	70	12:06	84N	18:27	290	19:16
2024	May	17	(Fri)	04:56	05:45	70	12:06	84N	18:27	290	19:17
2024	May	18	(Sat)	04:56	05:45	70	12:06	83N	18:28	290	19:17
2024	May	19	(Sun)	04:55	05:45	70	12:06	83N	18:28	291	19:17
2024	May	20	(Mon)	04:55	05:44	69	12:06	83N	18:28	291	19:18
2024	May	21	(Tue)	04:55	05:44	69	12:06	83N	18:28	291	19:18
2024	May	22	(Wed)	04:55	05:44	69	12:06	82N	18:29	291	19:18
2024	May	23	(Thu)	04:54	05:44	69	12:06	82N	18:29	291	19:19
2024	May	24	(Fri)	04:54	05:44	68	12:07	82N	18:29	292	19:19
2024	May	25	(Sat)	04:54	05:44	68	12:07	82N	18:29	292	19:19
2024	May	26	(Sun)	04:54	05:44	68	12:07	82N	18:30	292	19:20
2024	May	27	(Mon)	04:54	05:44	68	12:07	82N	18:30	292	19:20
2024	May	28	(Tue)	04:54	05:44	68	12:07	81N	18:30	292	19:20
2024	May	29	(Wed)	04:54	05:44	68	12:07	81N	18:31	292	19:21
2024	May	30	(Thu)	04:54	05:44	67	12:07	81N	18:31	293	19:21
2024	May	31	(Fri)	04:53	05:44	67	12:07	81N	18:31	293	19:21
2024	Jun	01	(Sat)	04:53	05:44	67	12:08	81N	18:32	293	19:22
2024	Jun	02	(Sun)	04:53	05:44	67	12:08	81N	18:32	293	19:22
2024	Jun	03	(Mon)	04:53	05:44	67	12:08	81N	18:32	293	19:22
2024	Jun	04	(Tue)	04:53	05:44	67	12:08	80N	18:32	293	19:23
2024	Jun	05	(Wed)	04:53	05:44	67	12:08	80N	18:33	293	19:23
2024	Jun	06	(Thu)	04:53	05:44	67	12:08	80N	18:33	293	19:23
2024	Jun	07	(Fri)	04:53	05:44	66	12:09	80N	18:33	294	19:24
2024	Jun	08	(Sat)	04:54	05:44	66	12:09	80N	18:34	294	19:24
2024	Jun	09	(Sun)	04:54	05:44	66	12:09	80N	18:34	294	19:24
2024	Jun	10	(Mon)	04:54	05:44	66	12:09	80N	18:34	294	19:25
2024	Jun	11	(Tue)	04:54	05:44	66	12:09	80N	18:34	294	19:25
2024	Jun	12	(Wed)	04:54	05:45	66	12:10	80N	18:35	294	19:25
2024	Jun	13	(Thu)	04:54	05:45	66	12:10	80N	18:35	294	19:26
2024	Jun	14	(Fri)	04:54	05:45	66	12:10	80N	18:35	294	19:26
2024	Jun	15	(Sat)	04:54	05:45	66	12:10	80N	18:35	294	19:26
2024	Jun	16	(Sun)	04:54	05:45	66	12:10	80N	18:36	294	19:26
2024	Jun	17	(Mon)	04:55	05:45	66	12:11	80N	18:36	294	19:27
2024	Jun	18	(Tue)	04:55	05:46	66	12:11	80N	18:36	294	19:27
2024	Jun	19	(Wed)	04:55	05:46	66	12:11	80N	18:36	294	19:27
2024	Jun	20	(Thu)	04:55	05:46	66	12:11	80N	18:37	294	19:27
2024	Jun	21	(Fri)	04:55	05:46	66	12:12	80N	18:37	294	19:28
2024	Jun	22	(Sat)	04:56	05:46	66	12:12	80N	18:37	294	19:28
2024	Jun	23	(Sun)	04:56	05:47	66	12:12	80N	18:37	294	19:28
2024	Jun	24	(Mon)	04:56	05:47	66	12:12	80N	18:37	294	19:28
2024	Jun	25	(Tue)	04:56	05:47	66	12:12	80N	18:38	294	19:28
2024	Jun	26	(Wed)	04:57	05:47	66	12:13	80N	18:38	294	19:29
2024	Jun	27	(Thu)	04:57	05:48	66	12:13	80N	18:38	294	19:29
2024	Jun	28	(Fri)	04:57	05:48	66	12:13	80N	18:38	294	19:29
2024	Jun	29	(Sat)	04:57	05:48	66	12:13	80N	18:38	294	19:29
2024	Jun	30	(Sun)	04:58	05:48	66	12:13	80N	18:38	294	19:29
2024	Jul	01	(Mon)	04:58	05:49	66	12:14	80N	18:39	294	19:29
2024	Jul	02	(Tue)	04:58	05:49	66	12:14	80N	18:39	294	19:29
2024	Jul	03	(Wed)	04:59	05:49	66	12:14	80N	18:39	294	19:29
2024	Jul	04	(Thu)	04:59	05:49	66	12:14	80N	18:39	294	19:29
2024	Jul	05	(Fri)	04:59	05:50	66	12:14	80N	18:39	293	19:29
2024	Jul	06	(Sat)	05:00	05:50	67	12:14	80N	18:39	293	19:29
2024	Jul	07	(Sun)	05:00	05:50	67	12:15	80N	18:39	293	19:29
2024	Jul	08	(Mon)	05:00	05:51	67	12:15	81N	18:39	293	19:29
2024	Jul	09	(Tue)	05:00	05:51	67	12:15	81N	18:39	293	19:29
2024	Jul	10	(Wed)	05:01	05:51	67	12:15	81N	18:39	293	19:29
2024	Jul	11	(Thu)	05:01	05:51	67	12:15	81N	18:39	293	19:29
2024	Jul	12	(Fri)	05:01	05:52	67	12:15	81N	18:39	293	19:29
2024	Jul	13	(Sat)	05:02	05:52	67	12:15	81N	18:39	292	19:29
2024	Jul	14	(Sun)	05:02	05:52	68	12:16	81N	18:39	292	19:29
2024	Jul	15	(Mon)	05:02	05:52	68	12:16	82N	18:39	292	19:29
2024	Jul	16	(Tue)	05:03	05:53	68	12:16	82N	18:39	292	19:29
2024	Jul	17	(Wed)	05:03	05:53	68	12:16	82N	18:39	292	19:28
2024	Jul	18	(Thu)	05:03	05:53	68	12:16	82N	18:39	292	19:28
2024	Jul	19	(Fri)	05:04	05:53	68	12:16	82N	18:38	291	19:28
2024	Jul	20	(Sat)	05:04	05:54	69	12:16	82N	18:38	291	19:28
2024	Jul	21	(Sun)	05:04	05:54	69	12:16	83N	18:38	291	19:28
2024	Jul	22	(Mon)	05:05	05:54	69	12:16	83N	18:38	291	19:27

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

2024	Oct	03	(Thu)	05:13	05:59	94	11:59	74S	17:58	266	18:44
2024	Oct	04	(Fri)	05:13	05:59	94	11:58	74S	17:58	265	18:43
2024	Oct	05	(Sat)	05:13	05:59	95	11:58	74S	17:57	265	18:43
2024	Oct	06	(Sun)	05:13	05:59	95	11:58	73S	17:56	265	18:42
2024	Oct	07	(Mon)	05:13	05:59	96	11:57	73S	17:56	264	18:42
2024	Oct	08	(Tue)	05:13	05:59	96	11:57	72S	17:55	264	18:41
2024	Oct	09	(Wed)	05:13	05:59	96	11:57	72S	17:55	263	18:40
2024	Oct	10	(Thu)	05:13	05:59	97	11:57	72S	17:54	263	18:40
2024	Oct	11	(Fri)	05:13	05:59	97	11:56	71S	17:53	263	18:39
2024	Oct	12	(Sat)	05:13	05:59	97	11:56	71S	17:53	262	18:39
2024	Oct	13	(Sun)	05:13	05:59	98	11:56	71S	17:52	262	18:38
2024	Oct	14	(Mon)	05:13	05:59	98	11:56	70S	17:52	262	18:38
2024	Oct	15	(Tue)	05:13	06:00	99	11:55	70S	17:51	261	18:37
2024	Oct	16	(Wed)	05:13	06:00	99	11:55	69S	17:51	261	18:37
2024	Oct	17	(Thu)	05:14	06:00	99	11:55	69S	17:50	260	18:36
2024	Oct	18	(Fri)	05:14	06:00	100	11:55	69S	17:50	260	18:36
2024	Oct	19	(Sat)	05:14	06:00	100	11:55	68S	17:49	260	18:35
2024	Oct	20	(Sun)	05:14	06:00	100	11:54	68S	17:49	259	18:35
2024	Oct	21	(Mon)	05:14	06:00	101	11:54	68S	17:48	259	18:34
2024	Oct	22	(Tue)	05:14	06:00	101	11:54	67S	17:48	259	18:34
2024	Oct	23	(Wed)	05:14	06:01	102	11:54	67S	17:47	258	18:34
2024	Oct	24	(Thu)	05:14	06:01	102	11:54	67S	17:47	258	18:33
2024	Oct	25	(Fri)	05:14	06:01	102	11:54	66S	17:46	258	18:33
2024	Oct	26	(Sat)	05:15	06:01	103	11:54	66S	17:46	257	18:33
2024	Oct	27	(Sun)	05:15	06:01	103	11:53	66S	17:45	257	18:32
2024	Oct	28	(Mon)	05:15	06:02	103	11:53	65S	17:45	257	18:32
2024	Oct	29	(Tue)	05:15	06:02	104	11:53	65S	17:45	256	18:32
2024	Oct	30	(Wed)	05:15	06:02	104	11:53	65S	17:44	256	18:31
2024	Oct	31	(Thu)	05:15	06:02	104	11:53	64S	17:44	256	18:31
2024	Nov	01	(Fri)	05:16	06:03	105	11:53	64S	17:44	255	18:31
2024	Nov	02	(Sat)	05:16	06:03	105	11:53	64S	17:43	255	18:31
2024	Nov	03	(Sun)	05:16	06:03	105	11:53	63S	17:43	255	18:30
2024	Nov	04	(Mon)	05:16	06:03	106	11:53	63S	17:43	254	18:30
2024	Nov	05	(Tue)	05:16	06:04	106	11:53	63S	17:43	254	18:30
2024	Nov	06	(Wed)	05:17	06:04	106	11:53	62S	17:42	254	18:30
2024	Nov	07	(Thu)	05:17	06:04	107	11:53	62S	17:42	253	18:30
2024	Nov	08	(Fri)	05:17	06:05	107	11:53	62S	17:42	253	18:29
2024	Nov	09	(Sat)	05:17	06:05	107	11:53	61S	17:42	253	18:29
2024	Nov	10	(Sun)	05:18	06:05	107	11:54	61S	17:42	252	18:29
2024	Nov	11	(Mon)	05:18	06:06	108	11:54	61S	17:41	252	18:29
2024	Nov	12	(Tue)	05:18	06:06	108	11:54	61S	17:41	252	18:29
2024	Nov	13	(Wed)	05:19	06:07	108	11:54	60S	17:41	252	18:29
2024	Nov	14	(Thu)	05:19	06:07	109	11:54	60S	17:41	251	18:29
2024	Nov	15	(Fri)	05:19	06:07	109	11:54	60S	17:41	251	18:29
2024	Nov	16	(Sat)	05:20	06:08	109	11:54	60S	17:41	251	18:29
2024	Nov	17	(Sun)	05:20	06:08	109	11:55	59S	17:41	251	18:29
2024	Nov	18	(Mon)	05:20	06:09	110	11:55	59S	17:41	250	18:29
2024	Nov	19	(Tue)	05:21	06:09	110	11:55	59S	17:41	250	18:29
2024	Nov	20	(Wed)	05:21	06:09	110	11:55	59S	17:41	250	18:29
2024	Nov	21	(Thu)	05:22	06:10	110	11:56	58S	17:41	250	18:29
2024	Nov	22	(Fri)	05:22	06:10	110	11:56	58S	17:41	249	18:30
2024	Nov	23	(Sat)	05:22	06:11	111	11:56	58S	17:41	249	18:30
2024	Nov	24	(Sun)	05:23	06:11	111	11:56	58S	17:41	249	18:30
2024	Nov	25	(Mon)	05:23	06:12	111	11:57	58S	17:41	249	18:30
2024	Nov	26	(Tue)	05:24	06:12	111	11:57	57S	17:42	249	18:30
2024	Nov	27	(Wed)	05:24	06:13	111	11:57	57S	17:42	248	18:30
2024	Nov	28	(Thu)	05:25	06:13	112	11:58	57S	17:42	248	18:31
2024	Nov	29	(Fri)	05:25	06:14	112	11:58	57S	17:42	248	18:31
2024	Nov	30	(Sat)	05:25	06:14	112	11:58	57S	17:42	248	18:31
2024	Dec	01	(Sun)	05:26	06:15	112	11:59	57S	17:42	248	18:31
2024	Dec	02	(Mon)	05:26	06:15	112	11:59	56S	17:43	248	18:32
2024	Dec	03	(Tue)	05:27	06:16	112	12:00	56S	17:43	247	18:32
2024	Dec	04	(Wed)	05:27	06:16	113	12:00	56S	17:43	247	18:32
2024	Dec	05	(Thu)	05:28	06:17	113	12:00	56S	17:44	247	18:33
2024	Dec	06	(Fri)	05:28	06:18	113	12:01	56S	17:44	247	18:33
2024	Dec	07	(Sat)	05:29	06:18	113	12:01	56S	17:44	247	18:33
2024	Dec	08	(Sun)	05:29	06:19	113	12:02	56S	17:45	247	18:34
2024	Dec	09	(Mon)	05:30	06:19	113	12:02	56S	17:45	247	18:34
2024	Dec	10	(Tue)	05:30	06:20	113	12:03	56S	17:45	247	18:35
2024	Dec	11	(Wed)	05:31	06:20	113	12:03	55S	17:46	247	18:35
2024	Dec	12	(Thu)	05:31	06:21	113	12:03	55S	17:46	246	18:35
2024	Dec	13	(Fri)	05:32	06:21	114	12:04	55S	17:46	246	18:36

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

Sun

Trat

Location: E102°35'20.3", N12°14'34.8", 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
2024	Jan 01	(Mon)	06:07	06:30	113	12:13	55S	17:56	247	18:18
2024	Jan 02	(Tue)	06:08	06:31	113	12:13	56S	17:56	247	18:19
2024	Jan 03	(Wed)	06:08	06:31	113	12:14	56S	17:57	247	18:20
2024	Jan 04	(Thu)	06:08	06:31	113	12:14	56S	17:57	247	18:20
2024	Jan 05	(Fri)	06:09	06:32	113	12:15	56S	17:58	247	18:21
2024	Jan 06	(Sat)	06:09	06:32	113	12:15	56S	17:58	247	18:21
2024	Jan 07	(Sun)	06:10	06:32	113	12:16	56S	17:59	247	18:22
2024	Jan 08	(Mon)	06:10	06:33	113	12:16	56S	17:59	247	18:22
2024	Jan 09	(Tue)	06:10	06:33	113	12:16	56S	18:00	248	18:23
2024	Jan 10	(Wed)	06:10	06:33	112	12:17	56S	18:01	248	18:23
2024	Jan 11	(Thu)	06:11	06:34	112	12:17	57S	18:01	248	18:24
2024	Jan 12	(Fri)	06:11	06:34	112	12:18	57S	18:02	248	18:24
2024	Jan 13	(Sat)	06:11	06:34	112	12:18	57S	18:02	248	18:25
2024	Jan 14	(Sun)	06:12	06:34	112	12:18	57S	18:03	248	18:25
2024	Jan 15	(Mon)	06:12	06:34	112	12:19	57S	18:03	249	18:26
2024	Jan 16	(Tue)	06:12	06:35	111	12:19	57S	18:04	249	18:26
2024	Jan 17	(Wed)	06:12	06:35	111	12:19	58S	18:04	249	18:27
2024	Jan 18	(Thu)	06:12	06:35	111	12:20	58S	18:05	249	18:27
2024	Jan 19	(Fri)	06:12	06:35	111	12:20	58S	18:05	249	18:28
2024	Jan 20	(Sat)	06:13	06:35	111	12:20	58S	18:06	250	18:28
2024	Jan 21	(Sun)	06:13	06:35	110	12:21	58S	18:06	250	18:29
2024	Jan 22	(Mon)	06:13	06:35	110	12:21	59S	18:07	250	18:29
2024	Jan 23	(Tue)	06:13	06:35	110	12:21	59S	18:07	250	18:30
2024	Jan 24	(Wed)	06:13	06:35	110	12:22	59S	18:08	250	18:30
2024	Jan 25	(Thu)	06:13	06:35	109	12:22	59S	18:08	251	18:31
2024	Jan 26	(Fri)	06:13	06:35	109	12:22	60S	18:09	251	18:31
2024	Jan 27	(Sat)	06:13	06:35	109	12:22	60S	18:09	251	18:31
2024	Jan 28	(Sun)	06:13	06:35	109	12:22	60S	18:10	251	18:32
2024	Jan 29	(Mon)	06:13	06:35	108	12:23	60S	18:10	252	18:32
2024	Jan 30	(Tue)	06:13	06:35	108	12:23	61S	18:10	252	18:33
2024	Jan 31	(Wed)	06:13	06:35	108	12:23	61S	18:11	252	18:33
2024	Feb 01	(Thu)	06:13	06:35	108	12:23	61S	18:11	253	18:33
2024	Feb 02	(Fri)	06:13	06:35	107	12:23	62S	18:12	253	18:34
2024	Feb 03	(Sat)	06:13	06:35	107	12:23	62S	18:12	253	18:34
2024	Feb 04	(Sun)	06:13	06:35	107	12:23	62S	18:12	253	18:34
2024	Feb 05	(Mon)	06:12	06:34	106	12:24	62S	18:13	254	18:35
2024	Feb 06	(Tue)	06:12	06:34	106	12:24	63S	18:13	254	18:35
2024	Feb 07	(Wed)	06:12	06:34	106	12:24	63S	18:14	254	18:35
2024	Feb 08	(Thu)	06:12	06:34	105	12:24	63S	18:14	255	18:36
2024	Feb 09	(Fri)	06:12	06:34	105	12:24	64S	18:14	255	18:36
2024	Feb 10	(Sat)	06:11	06:33	105	12:24	64S	18:15	255	18:36

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

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

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

2024	Sep	14	(Sat)	05:38	05:59	86	12:05	82S	18:11	273	18:32
2024	Sep	15	(Sun)	05:38	05:59	87	12:05	81S	18:10	273	18:32
2024	Sep	16	(Mon)	05:38	05:59	87	12:04	81S	18:10	273	18:31
2024	Sep	17	(Tue)	05:38	05:59	88	12:04	81S	18:09	272	18:30
2024	Sep	18	(Wed)	05:38	05:59	88	12:04	80S	18:08	272	18:30
2024	Sep	19	(Thu)	05:38	05:59	88	12:03	80S	18:08	271	18:29
2024	Sep	20	(Fri)	05:38	05:59	89	12:03	79S	18:07	271	18:28
2024	Sep	21	(Sat)	05:38	05:59	89	12:03	79S	18:06	271	18:27
2024	Sep	22	(Sun)	05:38	05:59	90	12:02	79S	18:06	270	18:27
2024	Sep	23	(Mon)	05:38	05:59	90	12:02	78S	18:05	270	18:26
2024	Sep	24	(Tue)	05:38	05:59	90	12:02	78S	18:04	269	18:25
2024	Sep	25	(Wed)	05:38	05:59	91	12:01	77S	18:04	269	18:25
2024	Sep	26	(Thu)	05:38	05:59	91	12:01	77S	18:03	269	18:24
2024	Sep	27	(Fri)	05:38	05:59	92	12:01	77S	18:02	268	18:23
2024	Sep	28	(Sat)	05:38	05:59	92	12:00	76S	18:02	268	18:23
2024	Sep	29	(Sun)	05:38	05:59	92	12:00	76S	18:01	267	18:22
2024	Sep	30	(Mon)	05:38	05:59	93	12:00	75S	18:00	267	18:21
2024	Oct	01	(Tue)	05:38	05:59	93	11:59	75S	18:00	267	18:21
2024	Oct	02	(Wed)	05:38	05:59	94	11:59	75S	17:59	266	18:20
2024	Oct	03	(Thu)	05:38	05:59	94	11:59	74S	17:58	266	18:19
2024	Oct	04	(Fri)	05:38	05:59	94	11:58	74S	17:58	265	18:19
2024	Oct	05	(Sat)	05:38	05:59	95	11:58	74S	17:57	265	18:18
2024	Oct	06	(Sun)	05:38	05:59	95	11:58	73S	17:56	265	18:18
2024	Oct	07	(Mon)	05:38	05:59	96	11:57	73S	17:56	264	18:17
2024	Oct	08	(Tue)	05:38	05:59	96	11:57	72S	17:55	264	18:16
2024	Oct	09	(Wed)	05:38	05:59	96	11:57	72S	17:55	263	18:16
2024	Oct	10	(Thu)	05:38	05:59	97	11:57	72S	17:54	263	18:15
2024	Oct	11	(Fri)	05:38	05:59	97	11:56	71S	17:53	263	18:15
2024	Oct	12	(Sat)	05:38	05:59	97	11:56	71S	17:53	262	18:14
2024	Oct	13	(Sun)	05:38	05:59	98	11:56	71S	17:52	262	18:14
2024	Oct	14	(Mon)	05:38	05:59	98	11:56	70S	17:52	262	18:13
2024	Oct	15	(Tue)	05:38	06:00	99	11:55	70S	17:51	261	18:12
2024	Oct	16	(Wed)	05:38	06:00	99	11:55	69S	17:51	261	18:12
2024	Oct	17	(Thu)	05:38	06:00	99	11:55	69S	17:50	260	18:11
2024	Oct	18	(Fri)	05:38	06:00	100	11:55	69S	17:50	260	18:11
2024	Oct	19	(Sat)	05:39	06:00	100	11:55	68S	17:49	260	18:10
2024	Oct	20	(Sun)	05:39	06:00	100	11:54	68S	17:49	259	18:10
2024	Oct	21	(Mon)	05:39	06:00	101	11:54	68S	17:48	259	18:10
2024	Oct	22	(Tue)	05:39	06:00	101	11:54	67S	17:48	259	18:09
2024	Oct	23	(Wed)	05:39	06:01	102	11:54	67S	17:47	258	18:09
2024	Oct	24	(Thu)	05:39	06:01	102	11:54	67S	17:47	258	18:08
2024	Oct	25	(Fri)	05:39	06:01	102	11:54	66S	17:46	258	18:08
2024	Oct	26	(Sat)	05:40	06:01	103	11:54	66S	17:46	257	18:07
2024	Oct	27	(Sun)	05:40	06:01	103	11:53	66S	17:45	257	18:07
2024	Oct	28	(Mon)	05:40	06:02	103	11:53	65S	17:45	257	18:07
2024	Oct	29	(Tue)	05:40	06:02	104	11:53	65S	17:45	256	18:06
2024	Oct	30	(Wed)	05:40	06:02	104	11:53	65S	17:44	256	18:06
2024	Oct	31	(Thu)	05:41	06:02	104	11:53	64S	17:44	256	18:06
2024	Nov	01	(Fri)	05:41	06:03	105	11:53	64S	17:44	255	18:06
2024	Nov	02	(Sat)	05:41	06:03	105	11:53	64S	17:43	255	18:05
2024	Nov	03	(Sun)	05:41	06:03	105	11:53	63S	17:43	255	18:05
2024	Nov	04	(Mon)	05:42	06:03	106	11:53	63S	17:43	254	18:05
2024	Nov	05	(Tue)	05:42	06:04	106	11:53	63S	17:43	254	18:05
2024	Nov	06	(Wed)	05:42	06:04	106	11:53	62S	17:42	254	18:04
2024	Nov	07	(Thu)	05:42	06:04	107	11:53	62S	17:42	253	18:04
2024	Nov	08	(Fri)	05:43	06:05	107	11:53	62S	17:42	253	18:04
2024	Nov	09	(Sat)	05:43	06:05	107	11:53	61S	17:42	253	18:04
2024	Nov	10	(Sun)	05:43	06:05	107	11:54	61S	17:42	252	18:04
2024	Nov	11	(Mon)	05:44	06:06	108	11:54	61S	17:41	252	18:04
2024	Nov	12	(Tue)	05:44	06:06	108	11:54	61S	17:41	252	18:04
2024	Nov	13	(Wed)	05:44	06:07	108	11:54	60S	17:41	252	18:03
2024	Nov	14	(Thu)	05:45	06:07	109	11:54	60S	17:41	251	18:03
2024	Nov	15	(Fri)	05:45	06:07	109	11:54	60S	17:41	251	18:03
2024	Nov	16	(Sat)	05:45	06:08	109	11:54	60S	17:41	251	18:03
2024	Nov	17	(Sun)	05:46	06:08	109	11:55	59S	17:41	251	18:03
2024	Nov	18	(Mon)	05:46	06:09	110	11:55	59S	17:41	250	18:03
2024	Nov	19	(Tue)	05:47	06:09	110	11:55	59S	17:41	250	18:03
2024	Nov	20	(Wed)	05:47	06:09	110	11:55	59S	17:41	250	18:03
2024	Nov	21	(Thu)	05:47	06:10	110	11:56	58S	17:41	250	18:04
2024	Nov	22	(Fri)	05:48	06:10	110	11:56	58S	17:41	249	18:04
2024	Nov	23	(Sat)	05:48	06:11	111	11:56	58S	17:41	249	18:04
2024	Nov	24	(Sun)	05:49	06:11	111	11:56	58S	17:41	249	18:04

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

Moon

Trat

Location: E102°35'20.3", N12°14'34.8", 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)	22:23	81		04:01	90N		10:21	282	
2024 Jan 02 (Tue)	23:07	86		04:41	86S		10:56	277	
2024 Jan 03 (Wed)	23:52	92		05:20	81S		11:30	271	
2024 Jan 04 (Thu)				05:59	75S		12:04	265	
2024 Jan 05 (Fri)	00:37	98		06:40	69S		12:40	259	
2024 Jan 06 (Sat)	01:24	104		07:22	63S		13:18	254	
2024 Jan 07 (Sun)	02:15	109		08:09	58S		14:01	249	
2024 Jan 08 (Mon)	03:10	114		09:01	54S		14:50	245	
2024 Jan 09 (Tue)	04:09	117		09:58	51S		15:45	242	
2024 Jan 10 (Wed)	05:12	119		10:59	50S		16:47	241	
2024 Jan 11 (Thu)	06:15	118		12:03	50S		17:52	242	
2024 Jan 12 (Fri)	07:16	116		13:06	53S		18:58	246	
2024 Jan 13 (Sat)	08:12	112		14:06	58S		20:02	251	
2024 Jan 14 (Sun)	09:02	106		15:01	64S		21:02	257	
2024 Jan 15 (Mon)	09:49	99		15:52	71S		21:59	264	
2024 Jan 16 (Tue)	10:32	92		16:41	78S		22:54	272	
2024 Jan 17 (Wed)	11:13	85		17:29	85S		23:48	279	
2024 Jan 18 (Thu)	11:55	78		18:17	90N				
2024 Jan 19 (Fri)	12:38	72		19:06	84N		00:42	285	
2024 Jan 20 (Sat)	13:24	67		19:58	80N		01:37	290	
2024 Jan 21 (Sun)	14:14	64		20:52	76N		02:34	295	
2024 Jan 22 (Mon)	15:06	62		21:47	75N		03:31	298	
2024 Jan 23 (Tue)	16:01	61		22:42	75N		04:28	299	

2024	Jan	24	(Wed)	16:57	62	23:36	76N	05:22	298
2024	Jan	25	(Thu)	17:51	65			06:13	297
2024	Jan	26	(Fri)	18:42	69	00:26	79N	06:59	293
2024	Jan	27	(Sat)	19:32	73	01:13	83N	07:41	289
2024	Jan	28	(Sun)	20:18	79	01:57	88N	08:19	284
2024	Jan	29	(Mon)	21:03	84	02:38	88S	08:55	279
2024	Jan	30	(Tue)	21:47	90	03:17	83S	09:29	273
2024	Jan	31	(Wed)	22:31	96	03:56	77S	10:03	267
2024	Feb	01	(Thu)	23:17	102	04:35	71S	10:37	261
2024	Feb	02	(Fri)			05:16	65S	11:14	256
2024	Feb	03	(Sat)	00:05	107	06:00	60S	11:54	250
2024	Feb	04	(Sun)	00:57	112	06:48	55S	12:38	246
2024	Feb	05	(Mon)	01:53	116	07:41	52S	13:29	243
2024	Feb	06	(Tue)	02:52	118	08:40	50S	14:26	241
2024	Feb	07	(Wed)	03:54	119	09:41	50S	15:29	241
2024	Feb	08	(Thu)	04:56	118	10:45	52S	16:35	244
2024	Feb	09	(Fri)	05:55	114	11:46	55S	17:40	248
2024	Feb	10	(Sat)	06:49	109	12:45	61S	18:44	254
2024	Feb	11	(Sun)	07:38	102	13:40	68S	19:44	261
2024	Feb	12	(Mon)	08:24	95	14:32	75S	20:42	269
2024	Feb	13	(Tue)	09:08	88	15:22	82S	21:39	276
2024	Feb	14	(Wed)	09:51	80	16:11	89S	22:35	283
2024	Feb	15	(Thu)	10:35	74	17:02	86N	23:31	289
2024	Feb	16	(Fri)	11:21	69	17:54	81N		
2024	Feb	17	(Sat)	12:10	64	18:48	77N	00:29	294
2024	Feb	18	(Sun)	13:02	62	19:43	75N	01:26	297
2024	Feb	19	(Mon)	13:57	61	20:38	74N	02:24	299
2024	Feb	20	(Tue)	14:52	62	21:32	75N	03:19	299
2024	Feb	21	(Wed)	15:46	64	22:23	78N	04:10	297
2024	Feb	22	(Thu)	16:38	67	23:10	82N	04:57	295
2024	Feb	23	(Fri)	17:28	72	23:55	86N	05:40	291
2024	Feb	24	(Sat)	18:15	77			06:19	286
2024	Feb	25	(Sun)	19:00	82	00:36	90S	06:55	280
2024	Feb	26	(Mon)	19:44	88	01:16	84S	07:30	275
2024	Feb	27	(Tue)	20:28	94	01:55	79S	08:03	269
2024	Feb	28	(Wed)	21:13	100	02:34	73S	08:37	263
2024	Feb	29	(Thu)	22:00	106	03:14	67S	09:13	257
2024	Mar	01	(Fri)	22:50	111	03:56	62S	09:51	252
2024	Mar	02	(Sat)	23:43	115	04:42	57S	10:33	247
2024	Mar	03	(Sun)			05:32	53S	11:20	244
2024	Mar	04	(Mon)	00:39	118	06:26	50S	12:13	241
2024	Mar	05	(Tue)	01:39	119	07:25	49S	13:11	241
2024	Mar	06	(Wed)	02:39	119	08:26	50S	14:14	242
2024	Mar	07	(Thu)	03:37	116	09:27	53S	15:18	245
2024	Mar	08	(Fri)	04:32	112	10:26	58S	16:22	251
2024	Mar	09	(Sat)	05:23	106	11:22	64S	17:23	257
2024	Mar	10	(Sun)	06:11	99	12:15	71S	18:23	265
2024	Mar	11	(Mon)	06:56	91	13:07	79S	19:21	272
2024	Mar	12	(Tue)	07:41	84	13:59	86S	20:19	280
2024	Mar	13	(Wed)	08:26	77	14:50	88N	21:18	287
2024	Mar	14	(Thu)	09:13	71	15:44	82N	22:17	292
2024	Mar	15	(Fri)	10:03	66	16:39	78N	23:17	296
2024	Mar	16	(Sat)	10:56	62	17:35	75N		
2024	Mar	17	(Sun)	11:51	61	18:32	74N	00:16	299
2024	Mar	18	(Mon)	12:46	61	19:27	75N	01:14	299
2024	Mar	19	(Tue)	13:41	63	20:19	77N	02:07	298
2024	Mar	20	(Wed)	14:34	66	21:08	80N	02:55	296
2024	Mar	21	(Thu)	15:24	70	21:53	85N	03:39	292
2024	Mar	22	(Fri)	16:12	75	22:36	90N	04:19	287
2024	Mar	23	(Sat)	16:58	80	23:16	86S	04:56	282
2024	Mar	24	(Sun)	17:42	86	23:55	80S	05:31	277
2024	Mar	25	(Mon)	18:26	92			06:05	271
2024	Mar	26	(Tue)	19:11	98	00:34	75S	06:39	265
2024	Mar	27	(Wed)	19:57	104	01:14	69S	07:14	259
2024	Mar	28	(Thu)	20:46	109	01:55	63S	07:51	254
2024	Mar	29	(Fri)	21:38	114	02:40	58S	08:31	249
2024	Mar	30	(Sat)	22:33	117	03:28	54S	09:16	245
2024	Mar	31	(Sun)	23:30	119	04:20	51S	10:07	242
2024	Apr	01	(Mon)			05:16	49S	11:02	241
2024	Apr	02	(Tue)	00:29	119	06:15	50S	12:01	241
2024	Apr	03	(Wed)	01:26	118	07:14	52S	13:03	244
2024	Apr	04	(Thu)	02:20	114	08:11	55S	14:04	248

2024 Apr 05 (Fri)	03:11 109	09:07 61S	15:05 254
2024 Apr 06 (Sat)	03:59 103	10:00 67S	16:04 261
2024 Apr 07 (Sun)	04:44 96	10:52 75S	17:02 268
2024 Apr 08 (Mon)	05:29 88	11:43 82S	18:00 276
2024 Apr 09 (Tue)	06:13 80	12:34 90S	18:59 283
2024 Apr 10 (Wed)	07:00 74	13:28 85N	19:59 289
2024 Apr 11 (Thu)	07:50 68	14:24 80N	21:00 294
2024 Apr 12 (Fri)	08:43 64	15:22 76N	22:02 298
2024 Apr 13 (Sat)	09:39 61	16:20 74N	23:03 299
2024 Apr 14 (Sun)	10:36 61	17:18 74N	23:59 299
2024 Apr 15 (Mon)	11:33 62	18:13 76N	
2024 Apr 16 (Tue)	12:28 65	19:04 79N	00:51 297
2024 Apr 17 (Wed)	13:20 68	19:50 83N	01:37 293
2024 Apr 18 (Thu)	14:08 73	20:34 88N	02:18 289
2024 Apr 19 (Fri)	14:55 79	21:15 88S	02:56 284
2024 Apr 20 (Sat)	15:39 84	21:54 83S	03:32 279
2024 Apr 21 (Sun)	16:24 90	22:33 77S	04:06 273
2024 Apr 22 (Mon)	17:08 96	23:12 71S	04:39 267
2024 Apr 23 (Tue)	17:54 102	23:53 65S	05:14 261
2024 Apr 24 (Wed)	18:42 107		05:51 255
2024 Apr 25 (Thu)	19:34 112	00:37 60S	06:30 250
2024 Apr 26 (Fri)	20:28 116	01:25 55S	07:14 246
2024 Apr 27 (Sat)	21:25 118	02:16 52S	08:03 243
2024 Apr 28 (Sun)	22:23 119	03:11 50S	08:57 241
2024 Apr 29 (Mon)	23:21 118	04:09 49S	09:55 241
2024 Apr 30 (Tue)		05:07 51S	10:55 243
2024 May 01 (Wed)	00:15 115	06:04 54S	11:56 246
2024 May 02 (Thu)	01:06 111	06:59 59S	12:55 252
2024 May 03 (Fri)	01:53 105	07:51 65S	13:52 258
2024 May 04 (Sat)	02:37 99	08:41 71S	14:48 265
2024 May 05 (Sun)	03:20 91	09:31 79S	15:44 272
2024 May 06 (Mon)	04:03 84	10:20 86S	16:41 280
2024 May 07 (Tue)	04:48 77	11:12 89N	17:40 286
2024 May 08 (Wed)	05:36 71	12:07 83N	18:41 292
2024 May 09 (Thu)	06:28 66	13:04 78N	19:43 296
2024 May 10 (Fri)	07:23 62	14:04 75N	20:46 299
2024 May 11 (Sat)	08:21 61	15:04 74N	21:46 299
2024 May 12 (Sun)	09:20 61	16:01 75N	22:41 298
2024 May 13 (Mon)	10:17 63	16:55 78N	23:30 295
2024 May 14 (Tue)	11:11 67	17:44 81N	
2024 May 15 (Wed)	12:02 71	18:30 86N	00:15 291
2024 May 16 (Thu)	12:50 77	19:12 90S	00:54 286
2024 May 17 (Fri)	13:35 82	19:51 85S	01:31 281
2024 May 18 (Sat)	14:19 88	20:30 79S	02:05 275
2024 May 19 (Sun)	15:03 94	21:09 73S	02:39 269
2024 May 20 (Mon)	15:49 100	21:50 67S	03:13 263
2024 May 21 (Tue)	16:36 105	22:33 62S	03:49 257
2024 May 22 (Wed)	17:27 111	23:19 57S	04:27 252
2024 May 23 (Thu)	18:21 115		05:10 247
2024 May 24 (Fri)	19:18 118	00:10 53S	05:58 244
2024 May 25 (Sat)	20:17 119	01:05 50S	06:51 241
2024 May 26 (Sun)	21:15 119	02:03 49S	07:49 241
2024 May 27 (Mon)	22:11 116	03:02 50S	08:49 242
2024 May 28 (Tue)	23:03 112	04:00 53S	09:50 245
2024 May 29 (Wed)	23:51 107	04:55 57S	10:50 250
2024 May 30 (Thu)		05:48 63S	11:47 256
2024 May 31 (Fri)	00:35 101	06:37 69S	12:42 263
2024 Jun 01 (Sat)	01:17 94	07:25 76S	13:36 270
2024 Jun 02 (Sun)	01:59 87	08:13 83S	14:31 277
2024 Jun 03 (Mon)	02:42 80	09:03 90S	15:27 284
2024 Jun 04 (Tue)	03:27 73	09:54 85N	16:25 290
2024 Jun 05 (Wed)	04:16 68	10:50 80N	17:26 295
2024 Jun 06 (Thu)	05:09 64	11:48 76N	18:28 298
2024 Jun 07 (Fri)	06:06 61	12:48 74N	19:30 299
2024 Jun 08 (Sat)	07:05 61	13:47 75N	20:28 298
2024 Jun 09 (Sun)	08:04 62	14:43 76N	21:21 296
2024 Jun 10 (Mon)	09:00 65	15:35 80N	22:08 292
2024 Jun 11 (Tue)	09:53 70	16:23 84N	22:50 288
2024 Jun 12 (Wed)	10:42 75	17:07 89N	23:28 283
2024 Jun 13 (Thu)	11:29 80	17:47 87S	
2024 Jun 14 (Fri)	12:14 86	18:27 81S	00:03 277
2024 Jun 15 (Sat)	12:58 92	19:06 75S	00:37 271

2024 Jun 16 (Sun)	13:42 98	19:45 69S	01:11 265
2024 Jun 17 (Mon)	14:28 103	20:27 64S	01:46 259
2024 Jun 18 (Tue)	15:18 109	21:12 59S	02:23 254
2024 Jun 19 (Wed)	16:10 113	22:01 54S	03:04 249
2024 Jun 20 (Thu)	17:06 117	22:54 51S	03:50 245
2024 Jun 21 (Fri)	18:06 119	23:52 50S	04:41 242
2024 Jun 22 (Sat)	19:06 119		05:38 241
2024 Jun 23 (Sun)	20:04 117	00:52 50S	06:39 242
2024 Jun 24 (Mon)	20:58 114	01:52 52S	07:42 244
2024 Jun 25 (Tue)	21:48 109	02:50 56S	08:43 248
2024 Jun 26 (Wed)	22:34 103	03:44 61S	09:42 254
2024 Jun 27 (Thu)	23:17 96	04:35 67S	10:38 261
2024 Jun 28 (Fri)	23:58 89	05:23 74S	11:33 268
2024 Jun 29 (Sat)		06:11 81S	12:27 275
2024 Jun 30 (Sun)	00:40 82	06:59 88S	13:21 282
2024 Jul 01 (Mon)	01:23 75	07:49 87N	14:17 288
2024 Jul 02 (Tue)	02:10 69	08:41 81N	15:16 293
2024 Jul 03 (Wed)	03:00 65	09:37 77N	16:16 297
2024 Jul 04 (Thu)	03:55 62	10:35 75N	17:17 299
2024 Jul 05 (Fri)	04:52 61	11:34 74N	18:16 299
2024 Jul 06 (Sat)	05:51 62	12:32 76N	19:11 297
2024 Jul 07 (Sun)	06:49 64	13:26 78N	20:00 294
2024 Jul 08 (Mon)	07:43 68	14:15 82N	20:44 290
2024 Jul 09 (Tue)	08:34 73	15:01 87N	21:24 285
2024 Jul 10 (Wed)	09:22 78	15:43 89S	22:01 279
2024 Jul 11 (Thu)	10:08 84	16:23 83S	22:35 273
2024 Jul 12 (Fri)	10:52 90	17:02 77S	23:09 267
2024 Jul 13 (Sat)	11:36 96	17:41 71S	23:43 262
2024 Jul 14 (Sun)	12:21 101	18:21 66S	
2024 Jul 15 (Mon)	13:08 107	19:04 61S	00:19 256
2024 Jul 16 (Tue)	13:59 112	19:51 56S	00:57 251
2024 Jul 17 (Wed)	14:53 115	20:42 52S	01:41 246
2024 Jul 18 (Thu)	15:51 118	21:38 50S	02:29 243
2024 Jul 19 (Fri)	16:51 119	22:37 49S	03:24 241
2024 Jul 20 (Sat)	17:51 118	23:38 51S	04:24 241
2024 Jul 21 (Sun)	18:48 115		05:27 243
2024 Jul 22 (Mon)	19:41 111	00:38 54S	06:30 247
2024 Jul 23 (Tue)	20:29 105	01:35 59S	07:31 252
2024 Jul 24 (Wed)	21:14 98	02:28 65S	08:30 258
2024 Jul 25 (Thu)	21:57 91	03:19 72S	09:27 266
2024 Jul 26 (Fri)	22:39 84	04:08 79S	10:22 273
2024 Jul 27 (Sat)	23:22 77	04:56 86S	11:17 280
2024 Jul 28 (Sun)		05:46 88N	12:13 286
2024 Jul 29 (Mon)	00:08 71	06:38 83N	13:11 292
2024 Jul 30 (Tue)	00:56 66	07:32 78N	14:10 296
2024 Jul 31 (Wed)	01:49 63	08:29 75N	15:10 298
2024 Aug 01 (Thu)	02:45 61	09:27 74N	16:09 299
2024 Aug 02 (Fri)	03:43 61	10:24 75N	17:04 298
2024 Aug 03 (Sat)	04:40 63	11:18 77N	17:55 295
2024 Aug 04 (Sun)	05:35 66	12:09 81N	18:40 291
2024 Aug 05 (Mon)	06:27 71	12:56 85N	19:21 287
2024 Aug 06 (Tue)	07:16 76	13:39 91N	19:59 281
2024 Aug 07 (Wed)	08:03 82	14:20 85S	20:34 275
2024 Aug 08 (Thu)	08:47 88	14:59 79S	21:08 270
2024 Aug 09 (Fri)	09:31 93	15:38 73S	21:41 264
2024 Aug 10 (Sat)	10:16 99	16:17 68S	22:16 258
2024 Aug 11 (Sun)	11:01 105	16:58 62S	22:53 253
2024 Aug 12 (Mon)	11:50 110	17:43 58S	23:34 248
2024 Aug 13 (Tue)	12:41 114	18:31 54S	
2024 Aug 14 (Wed)	13:36 117	19:24 51S	00:19 244
2024 Aug 15 (Thu)	14:35 119	20:21 49S	01:10 242
2024 Aug 16 (Fri)	15:34 119	21:20 50S	02:06 241
2024 Aug 17 (Sat)	16:32 117	22:21 52S	03:07 242
2024 Aug 18 (Sun)	17:27 113	23:19 56S	04:11 244
2024 Aug 19 (Mon)	18:18 108		05:14 249
2024 Aug 20 (Tue)	19:06 101	00:15 62S	06:15 255
2024 Aug 21 (Wed)	19:51 94	01:08 69S	07:14 262
2024 Aug 22 (Thu)	20:35 86	01:59 76S	08:11 270
2024 Aug 23 (Fri)	21:19 79	02:50 84S	09:08 278
2024 Aug 24 (Sat)	22:04 73	03:40 90N	10:06 284
2024 Aug 25 (Sun)	22:53 67	04:33 84N	11:04 290
2024 Aug 26 (Mon)	23:45 63	05:27 79N	12:04 295

2024 Aug 27 (Tue)		06:24 76N	13:05 298
2024 Aug 28 (Wed)	00:40 61	07:22 74N	14:04 299
2024 Aug 29 (Thu)	01:37 61	08:19 74N	15:00 299
2024 Aug 30 (Fri)	02:35 62	09:14 76N	15:52 296
2024 Aug 31 (Sat)	03:30 65	10:05 79N	16:38 293
2024 Sep 01 (Sun)	04:23 69	10:53 84N	17:20 288
2024 Sep 02 (Mon)	05:12 74	11:37 89N	17:59 283
2024 Sep 03 (Tue)	05:59 80	12:18 87S	18:34 277
2024 Sep 04 (Wed)	06:44 85	12:57 81S	19:08 272
2024 Sep 05 (Thu)	07:28 91	13:36 75S	19:42 266
2024 Sep 06 (Fri)	08:12 97	14:15 70S	20:16 260
2024 Sep 07 (Sat)	08:57 103	14:56 64S	20:52 254
2024 Sep 08 (Sun)	09:44 108	15:38 59S	21:30 250
2024 Sep 09 (Mon)	10:34 113	16:24 55S	22:13 245
2024 Sep 10 (Tue)	11:27 116	17:14 52S	23:01 242
2024 Sep 11 (Wed)	12:22 119	18:08 50S	23:53 241
2024 Sep 12 (Thu)	13:20 119	19:05 49S	
2024 Sep 13 (Fri)	14:17 118	20:04 51S	00:51 241
2024 Sep 14 (Sat)	15:12 115	21:02 54S	01:52 243
2024 Sep 15 (Sun)	16:04 111	21:58 59S	02:54 246
2024 Sep 16 (Mon)	16:53 105	22:53 65S	03:55 252
2024 Sep 17 (Tue)	17:39 98	23:45 73S	04:55 259
2024 Sep 18 (Wed)	18:24 90		05:54 266
2024 Sep 19 (Thu)	19:09 82	00:36 80S	06:52 274
2024 Sep 20 (Fri)	19:56 75	01:28 88S	07:51 281
2024 Sep 21 (Sat)	20:45 69	02:22 87N	08:51 288
2024 Sep 22 (Sun)	21:37 64	03:17 81N	09:53 294
2024 Sep 23 (Mon)	22:33 62	04:15 77N	10:55 297
2024 Sep 24 (Tue)	23:31 61	05:15 74N	11:57 299
2024 Sep 25 (Wed)		06:14 74N	12:55 299
2024 Sep 26 (Thu)	00:29 61	07:10 75N	13:49 297
2024 Sep 27 (Fri)	01:26 64	08:03 78N	14:37 294
2024 Sep 28 (Sat)	02:19 68	08:51 82N	15:20 290
2024 Sep 29 (Sun)	03:09 72	09:36 87N	15:59 285
2024 Sep 30 (Mon)	03:57 78	10:17 89S	16:35 279
2024 Oct 01 (Tue)	04:42 84	10:57 83S	17:10 274
2024 Oct 02 (Wed)	05:26 89	11:36 77S	17:43 268
2024 Oct 03 (Thu)	06:10 95	12:15 71S	18:17 262
2024 Oct 04 (Fri)	06:55 101	12:55 66S	18:52 256
2024 Oct 05 (Sat)	07:41 107	13:37 61S	19:30 251
2024 Oct 06 (Sun)	08:30 111	14:21 56S	20:11 247
2024 Oct 07 (Mon)	09:21 115	15:10 52S	20:57 243
2024 Oct 08 (Tue)	10:15 118	16:02 50S	21:47 241
2024 Oct 09 (Wed)	11:11 119	16:56 49S	22:41 241
2024 Oct 10 (Thu)	12:07 119	17:53 50S	23:39 242
2024 Oct 11 (Fri)	13:01 117	18:49 52S	
2024 Oct 12 (Sat)	13:53 113	19:45 56S	00:39 245
2024 Oct 13 (Sun)	14:42 108	20:38 62S	01:38 249
2024 Oct 14 (Mon)	15:28 101	21:30 69S	02:37 255
2024 Oct 15 (Tue)	16:12 94	22:20 76S	03:35 262
2024 Oct 16 (Wed)	16:56 86	23:12 84S	04:32 270
2024 Oct 17 (Thu)	17:42 79		05:31 277
2024 Oct 18 (Fri)	18:31 72	00:05 90N	06:31 285
2024 Oct 19 (Sat)	19:23 67	01:00 84N	07:33 291
2024 Oct 20 (Sun)	20:19 63	01:59 79N	08:38 296
2024 Oct 21 (Mon)	21:19 61	03:00 75N	09:43 299
2024 Oct 22 (Tue)	22:19 61	04:02 74N	10:45 299
2024 Oct 23 (Wed)	23:18 63	05:01 75N	11:42 298
2024 Oct 24 (Thu)		05:57 77N	12:33 295
2024 Oct 25 (Fri)	00:14 66	06:48 81N	13:19 291
2024 Oct 26 (Sat)	01:06 71	07:34 85N	13:59 287
2024 Oct 27 (Sun)	01:54 76	08:17 91N	14:36 281
2024 Oct 28 (Mon)	02:40 82	08:57 85S	15:11 275
2024 Oct 29 (Tue)	03:24 88	09:36 79S	15:44 270
2024 Oct 30 (Wed)	04:08 93	10:14 73S	16:18 264
2024 Oct 31 (Thu)	04:52 99	10:54 68S	16:53 258
2024 Nov 01 (Fri)	05:38 105	11:35 62S	17:30 253
2024 Nov 02 (Sat)	06:26 110	12:19 58S	18:10 248
2024 Nov 03 (Sun)	07:17 114	13:07 54S	18:55 244
2024 Nov 04 (Mon)	08:11 117	13:58 51S	19:44 242
2024 Nov 05 (Tue)	09:06 119	14:52 49S	20:37 241
2024 Nov 06 (Wed)	10:02 119	15:47 50S	21:33 241

2024 Nov 07 (Thu)	10:56 118	16:43 51S	22:31 244
2024 Nov 08 (Fri)	11:48 115	17:37 55S	23:29 247
2024 Nov 09 (Sat)	12:36 110	18:30 60S	
2024 Nov 10 (Sun)	13:21 104	19:20 66S	00:26 253
2024 Nov 11 (Mon)	14:04 97	20:09 73S	01:22 259
2024 Nov 12 (Tue)	14:46 90	20:58 80S	02:17 266
2024 Nov 13 (Wed)	15:30 83	21:48 87S	03:13 274
2024 Nov 14 (Thu)	16:16 76	22:42 87N	04:11 281
2024 Nov 15 (Fri)	17:06 69	23:39 81N	05:11 288
2024 Nov 16 (Sat)	18:01 65		06:15 293
2024 Nov 17 (Sun)	19:00 62	00:40 77N	07:20 297
2024 Nov 18 (Mon)	20:02 61	01:43 75N	08:26 299
2024 Nov 19 (Tue)	21:04 62	02:45 74N	09:27 299
2024 Nov 20 (Wed)	22:03 65	03:44 76N	10:23 297
2024 Nov 21 (Thu)	22:58 69	04:39 79N	11:13 293
2024 Nov 22 (Fri)	23:48 74	05:28 84N	11:56 288
2024 Nov 23 (Sat)		06:13 89N	12:35 283
2024 Nov 24 (Sun)	00:36 80	06:54 87S	13:11 277
2024 Nov 25 (Mon)	01:21 86	07:34 81S	13:45 272
2024 Nov 26 (Tue)	02:05 91	08:13 75S	14:18 266
2024 Nov 27 (Wed)	02:49 97	08:52 70S	14:52 260
2024 Nov 28 (Thu)	03:34 103	09:32 64S	15:28 254
2024 Nov 29 (Fri)	04:21 108	10:16 59S	16:08 250
2024 Nov 30 (Sat)	05:12 113	11:02 55S	16:51 245
2024 Dec 01 (Sun)	06:05 116	11:53 52S	17:39 242
2024 Dec 02 (Mon)	07:01 119	12:46 50S	18:32 241
2024 Dec 03 (Tue)	07:57 119	13:42 49S	19:28 241
2024 Dec 04 (Wed)	08:52 118	14:39 51S	20:27 243
2024 Dec 05 (Thu)	09:45 115	15:34 54S	21:25 246
2024 Dec 06 (Fri)	10:34 111	16:26 58S	22:21 251
2024 Dec 07 (Sat)	11:19 106	17:16 64S	23:16 257
2024 Dec 08 (Sun)	12:01 99	18:04 71S	
2024 Dec 09 (Mon)	12:43 93	18:52 77S	00:10 264
2024 Dec 10 (Tue)	13:24 85	19:40 85S	01:04 271
2024 Dec 11 (Wed)	14:07 79	20:30 90N	01:58 278
2024 Dec 12 (Thu)	14:54 72	21:23 84N	02:55 285
2024 Dec 13 (Fri)	15:45 67	22:21 79N	03:56 291
2024 Dec 14 (Sat)	16:41 63	23:22 76N	04:59 296
2024 Dec 15 (Sun)	17:42 61		06:04 298
2024 Dec 16 (Mon)	18:45 61	00:25 74N	07:08 299
2024 Dec 17 (Tue)	19:46 63	01:27 75N	08:08 298
2024 Dec 18 (Wed)	20:44 67	02:25 78N	09:01 295
2024 Dec 19 (Thu)	21:38 72	03:18 82N	09:48 290
2024 Dec 20 (Fri)	22:28 77	04:05 87N	10:30 285
2024 Dec 21 (Sat)	23:14 83	04:49 89S	11:07 280
2024 Dec 22 (Sun)	23:59 89	05:30 83S	11:42 274
2024 Dec 23 (Mon)		06:09 77S	12:16 268
2024 Dec 24 (Tue)	00:43 95	06:48 72S	12:50 262
2024 Dec 25 (Wed)	01:28 101	07:28 66S	13:26 256
2024 Dec 26 (Thu)	02:14 106	08:10 61S	14:03 251
2024 Dec 27 (Fri)	03:03 111	08:55 56S	14:45 247
2024 Dec 28 (Sat)	03:55 115	09:44 53S	15:31 243
2024 Dec 29 (Sun)	04:50 118	10:37 50S	16:23 241
2024 Dec 30 (Mon)	05:47 119	11:33 49S	17:19 241
2024 Dec 31 (Tue)	06:44 119	12:31 50S	18:18 242