

Sun

Phuphan

Location: E104°02'31.2", N16°58'08.4", 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)	05:42	06:33	114	12:07 51S	17:41 246		18:32
2024	Jan	02 (Tue)	05:43	06:33	114	12:07 51S	17:42 246		18:32
2024	Jan	03 (Wed)	05:43	06:34	114	12:08 51S	17:42 246		18:33
2024	Jan	04 (Thu)	05:44	06:34	114	12:08 51S	17:43 246		18:33
2024	Jan	05 (Fri)	05:44	06:34	114	12:09 51S	17:44 247		18:34
2024	Jan	06 (Sat)	05:44	06:35	113	12:09 51S	17:44 247		18:34
2024	Jan	07 (Sun)	05:45	06:35	113	12:10 51S	17:45 247		18:35
2024	Jan	08 (Mon)	05:45	06:35	113	12:10 51S	17:45 247		18:36
2024	Jan	09 (Tue)	05:45	06:35	113	12:11 52S	17:46 247		18:36
2024	Jan	10 (Wed)	05:45	06:36	113	12:11 52S	17:47 247		18:37
2024	Jan	11 (Thu)	05:46	06:36	113	12:11 52S	17:47 247		18:37
2024	Jan	12 (Fri)	05:46	06:36	113	12:12 52S	17:48 248		18:38
2024	Jan	13 (Sat)	05:46	06:36	112	12:12 52S	17:48 248		18:38
2024	Jan	14 (Sun)	05:46	06:36	112	12:13 52S	17:49 248		18:39
2024	Jan	15 (Mon)	05:47	06:36	112	12:13 53S	17:50 248		18:39
2024	Jan	16 (Tue)	05:47	06:36	112	12:13 53S	17:50 248		18:40
2024	Jan	17 (Wed)	05:47	06:37	112	12:14 53S	17:51 248		18:41
2024	Jan	18 (Thu)	05:47	06:37	111	12:14 53S	17:51 249		18:41
2024	Jan	19 (Fri)	05:47	06:37	111	12:14 53S	17:52 249		18:42
2024	Jan	20 (Sat)	05:47	06:37	111	12:15 54S	17:53 249		18:42
2024	Jan	21 (Sun)	05:47	06:37	111	12:15 54S	17:53 249		18:43
2024	Jan	22 (Mon)	05:47	06:37	111	12:15 54S	17:54 250		18:43
2024	Jan	23 (Tue)	05:47	06:37	110	12:15 54S	17:54 250		18:44
2024	Jan	24 (Wed)	05:47	06:37	110	12:16 54S	17:55 250		18:44
2024	Jan	25 (Thu)	05:47	06:37	110	12:16 55S	17:56 250		18:45
2024	Jan	26 (Fri)	05:47	06:36	110	12:16 55S	17:56 251		18:45
2024	Jan	27 (Sat)	05:47	06:36	109	12:16 55S	17:57 251		18:46
2024	Jan	28 (Sun)	05:47	06:36	109	12:17 55S	17:57 251		18:46
2024	Jan	29 (Mon)	05:47	06:36	109	12:17 56S	17:58 251		18:47
2024	Jan	30 (Tue)	05:47	06:36	108	12:17 56S	17:58 252		18:47
2024	Jan	31 (Wed)	05:47	06:36	108	12:17 56S	17:59 252		18:47
2024	Feb	01 (Thu)	05:47	06:35	108	12:17 56S	17:59 252		18:48
2024	Feb	02 (Fri)	05:47	06:35	108	12:17 57S	18:00 253		18:48
2024	Feb	03 (Sat)	05:46	06:35	107	12:18 57S	18:00 253		18:49
2024	Feb	04 (Sun)	05:46	06:35	107	12:18 57S	18:01 253		18:49
2024	Feb	05 (Mon)	05:46	06:34	107	12:18 58S	18:01 254		18:50
2024	Feb	06 (Tue)	05:46	06:34	106	12:18 58S	18:02 254		18:50
2024	Feb	07 (Wed)	05:46	06:34	106	12:18 58S	18:02 254		18:50
2024	Feb	08 (Thu)	05:45	06:33	106	12:18 59S	18:03 254		18:51
2024	Feb	09 (Fri)	05:45	06:33	105	12:18 59S	18:03 255		18:51
2024	Feb	10 (Sat)	05:45	06:33	105	12:18 59S	18:04 255		18:52
2024	Feb	11 (Sun)	05:44	06:32	105	12:18 60S	18:04 255		18:52
2024	Feb	12 (Mon)	05:44	06:32	104	12:18 60S	18:04 256		18:52
2024	Feb	13 (Tue)	05:44	06:31	104	12:18 60S	18:05 256		18:53
2024	Feb	14 (Wed)	05:43	06:31	104	12:18 61S	18:05 257		18:53
2024	Feb	15 (Thu)	05:43	06:30	103	12:18 61S	18:06 257		18:53
2024	Feb	16 (Fri)	05:42	06:30	103	12:18 61S	18:06 257		18:54
2024	Feb	17 (Sat)	05:42	06:29	103	12:18 62S	18:06 258		18:54
2024	Feb	18 (Sun)	05:42	06:29	102	12:18 62S	18:07 258		18:54
2024	Feb	19 (Mon)	05:41	06:28	102	12:18 62S	18:07 258		18:55
2024	Feb	20 (Tue)	05:41	06:28	101	12:18 63S	18:08 259		18:55
2024	Feb	21 (Wed)	05:40	06:27	101	12:18 63S	18:08 259		18:55
2024	Feb	22 (Thu)	05:40	06:27	101	12:17 63S	18:08 259		18:55
2024	Feb	23 (Fri)	05:39	06:26	100	12:17 64S	18:09 260		18:56
2024	Feb	24 (Sat)	05:38	06:26	100	12:17 64S	18:09 260		18:56

2024	Feb	25	(Sun)	05:38	06:25	100	12:17	64S	18:09	261	18:56
2024	Feb	26	(Mon)	05:37	06:24	99	12:17	65S	18:09	261	18:57
2024	Feb	27	(Tue)	05:37	06:24	99	12:17	65S	18:10	261	18:57
2024	Feb	28	(Wed)	05:36	06:23	98	12:16	66S	18:10	262	18:57
2024	Feb	29	(Thu)	05:36	06:22	98	12:16	66S	18:10	262	18:57
2024	Mar	01	(Fri)	05:35	06:22	98	12:16	66S	18:11	263	18:58
2024	Mar	02	(Sat)	05:34	06:21	97	12:16	67S	18:11	263	18:58
2024	Mar	03	(Sun)	05:34	06:20	97	12:16	67S	18:11	263	18:58
2024	Mar	04	(Mon)	05:33	06:20	96	12:15	67S	18:11	264	18:58
2024	Mar	05	(Tue)	05:32	06:19	96	12:15	68S	18:12	264	18:58
2024	Mar	06	(Wed)	05:32	06:18	96	12:15	68S	18:12	265	18:59
2024	Mar	07	(Thu)	05:31	06:18	95	12:15	69S	18:12	265	18:59
2024	Mar	08	(Fri)	05:30	06:17	95	12:15	69S	18:12	265	18:59
2024	Mar	09	(Sat)	05:30	06:16	94	12:14	69S	18:13	266	18:59
2024	Mar	10	(Sun)	05:29	06:16	94	12:14	70S	18:13	266	19:00
2024	Mar	11	(Mon)	05:28	06:15	94	12:14	70S	18:13	267	19:00
2024	Mar	12	(Tue)	05:27	06:14	93	12:14	71S	18:13	267	19:00
2024	Mar	13	(Wed)	05:27	06:13	93	12:13	71S	18:13	268	19:00
2024	Mar	14	(Thu)	05:26	06:13	92	12:13	71S	18:14	268	19:00
2024	Mar	15	(Fri)	05:25	06:12	92	12:13	72S	18:14	268	19:01
2024	Mar	16	(Sat)	05:24	06:11	91	12:12	72S	18:14	269	19:01
2024	Mar	17	(Sun)	05:24	06:10	91	12:12	73S	18:14	269	19:01
2024	Mar	18	(Mon)	05:23	06:09	91	12:12	73S	18:14	270	19:01
2024	Mar	19	(Tue)	05:22	06:09	90	12:12	73S	18:15	270	19:01
2024	Mar	20	(Wed)	05:21	06:08	90	12:11	74S	18:15	270	19:02
2024	Mar	21	(Thu)	05:20	06:07	89	12:11	74S	18:15	271	19:02
2024	Mar	22	(Fri)	05:20	06:06	89	12:11	75S	18:15	271	19:02
2024	Mar	23	(Sat)	05:19	06:06	89	12:10	75S	18:15	272	19:02
2024	Mar	24	(Sun)	05:18	06:05	88	12:10	75S	18:16	272	19:02
2024	Mar	25	(Mon)	05:17	06:04	88	12:10	76S	18:16	272	19:03
2024	Mar	26	(Tue)	05:16	06:03	87	12:09	76S	18:16	273	19:03
2024	Mar	27	(Wed)	05:16	06:02	87	12:09	77S	18:16	273	19:03
2024	Mar	28	(Thu)	05:15	06:02	87	12:09	77S	18:16	274	19:03
2024	Mar	29	(Fri)	05:14	06:01	86	12:09	77S	18:16	274	19:03
2024	Mar	30	(Sat)	05:13	06:00	86	12:08	78S	18:17	274	19:04
2024	Mar	31	(Sun)	05:12	05:59	85	12:08	78S	18:17	275	19:04
2024	Apr	01	(Mon)	05:12	05:59	85	12:08	78S	18:17	275	19:04
2024	Apr	02	(Tue)	05:11	05:58	85	12:07	79S	18:17	276	19:04
2024	Apr	03	(Wed)	05:10	05:57	84	12:07	79S	18:17	276	19:04
2024	Apr	04	(Thu)	05:09	05:56	84	12:07	80S	18:17	277	19:05
2024	Apr	05	(Fri)	05:08	05:55	83	12:06	80S	18:18	277	19:05
2024	Apr	06	(Sat)	05:07	05:55	83	12:06	80S	18:18	277	19:05
2024	Apr	07	(Sun)	05:07	05:54	83	12:06	81S	18:18	278	19:05
2024	Apr	08	(Mon)	05:06	05:53	82	12:06	81S	18:18	278	19:06
2024	Apr	09	(Tue)	05:05	05:53	82	12:05	81S	18:18	278	19:06
2024	Apr	10	(Wed)	05:04	05:52	81	12:05	82S	18:19	279	19:06
2024	Apr	11	(Thu)	05:04	05:51	81	12:05	82S	18:19	279	19:06
2024	Apr	12	(Fri)	05:03	05:50	81	12:05	83S	18:19	280	19:07
2024	Apr	13	(Sat)	05:02	05:50	80	12:04	83S	18:19	280	19:07
2024	Apr	14	(Sun)	05:01	05:49	80	12:04	83S	18:19	280	19:07
2024	Apr	15	(Mon)	05:00	05:48	79	12:04	84S	18:20	281	19:08
2024	Apr	16	(Tue)	05:00	05:48	79	12:04	84S	18:20	281	19:08
2024	Apr	17	(Wed)	04:59	05:47	79	12:03	84S	18:20	281	19:08
2024	Apr	18	(Thu)	04:58	05:46	78	12:03	85S	18:20	282	19:08
2024	Apr	19	(Fri)	04:57	05:46	78	12:03	85S	18:21	282	19:09
2024	Apr	20	(Sat)	04:57	05:45	78	12:03	85S	18:21	283	19:09
2024	Apr	21	(Sun)	04:56	05:44	77	12:03	86S	18:21	283	19:09
2024	Apr	22	(Mon)	04:55	05:44	77	12:02	86S	18:21	283	19:10
2024	Apr	23	(Tue)	04:55	05:43	77	12:02	86S	18:22	284	19:10
2024	Apr	24	(Wed)	04:54	05:42	76	12:02	87S	18:22	284	19:10
2024	Apr	25	(Thu)	04:53	05:42	76	12:02	87S	18:22	284	19:11
2024	Apr	26	(Fri)	04:52	05:41	76	12:02	87S	18:22	285	19:11
2024	Apr	27	(Sat)	04:52	05:41	75	12:01	88S	18:23	285	19:11
2024	Apr	28	(Sun)	04:51	05:40	75	12:01	88S	18:23	285	19:12
2024	Apr	29	(Mon)	04:51	05:39	75	12:01	88S	18:23	286	19:12
2024	Apr	30	(Tue)	04:50	05:39	74	12:01	89S	18:23	286	19:12
2024	May	01	(Wed)	04:49	05:38	74	12:01	89S	18:24	286	19:13

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

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

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

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

Sun

Phuphan

Location: E104°02'31.2", N16°58'08.4", 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)	06:09	06:33	114	12:07	51S	17:41 246 18:05
2024	Jan 02 (Tue)	06:10	06:33	114	12:07	51S	17:42 246 18:05
2024	Jan 03 (Wed)	06:10	06:34	114	12:08	51S	17:42 246 18:06
2024	Jan 04 (Thu)	06:11	06:34	114	12:08	51S	17:43 246 18:06
2024	Jan 05 (Fri)	06:11	06:34	114	12:09	51S	17:44 247 18:07
2024	Jan 06 (Sat)	06:11	06:35	113	12:09	51S	17:44 247 18:08
2024	Jan 07 (Sun)	06:11	06:35	113	12:10	51S	17:45 247 18:08
2024	Jan 08 (Mon)	06:12	06:35	113	12:10	51S	17:45 247 18:09
2024	Jan 09 (Tue)	06:12	06:35	113	12:11	52S	17:46 247 18:09
2024	Jan 10 (Wed)	06:12	06:36	113	12:11	52S	17:47 247 18:10
2024	Jan 11 (Thu)	06:12	06:36	113	12:11	52S	17:47 247 18:10

2024	Jan	12	(Fri)	06:13	06:36	113	12:12	52S	17:48	248	18:11
2024	Jan	13	(Sat)	06:13	06:36	112	12:12	52S	17:48	248	18:12
2024	Jan	14	(Sun)	06:13	06:36	112	12:13	52S	17:49	248	18:12
2024	Jan	15	(Mon)	06:13	06:36	112	12:13	53S	17:50	248	18:13
2024	Jan	16	(Tue)	06:13	06:36	112	12:13	53S	17:50	248	18:13
2024	Jan	17	(Wed)	06:13	06:37	112	12:14	53S	17:51	248	18:14
2024	Jan	18	(Thu)	06:14	06:37	111	12:14	53S	17:51	249	18:15
2024	Jan	19	(Fri)	06:14	06:37	111	12:14	53S	17:52	249	18:15
2024	Jan	20	(Sat)	06:14	06:37	111	12:15	54S	17:53	249	18:16
2024	Jan	21	(Sun)	06:14	06:37	111	12:15	54S	17:53	249	18:16
2024	Jan	22	(Mon)	06:14	06:37	111	12:15	54S	17:54	250	18:17
2024	Jan	23	(Tue)	06:14	06:37	110	12:15	54S	17:54	250	18:17
2024	Jan	24	(Wed)	06:14	06:37	110	12:16	54S	17:55	250	18:18
2024	Jan	25	(Thu)	06:14	06:37	110	12:16	55S	17:56	250	18:18
2024	Jan	26	(Fri)	06:14	06:36	110	12:16	55S	17:56	251	18:19
2024	Jan	27	(Sat)	06:14	06:36	109	12:16	55S	17:57	251	18:19
2024	Jan	28	(Sun)	06:13	06:36	109	12:17	55S	17:57	251	18:20
2024	Jan	29	(Mon)	06:13	06:36	109	12:17	56S	17:58	251	18:20
2024	Jan	30	(Tue)	06:13	06:36	108	12:17	56S	17:58	252	18:21
2024	Jan	31	(Wed)	06:13	06:36	108	12:17	56S	17:59	252	18:21
2024	Feb	01	(Thu)	06:13	06:35	108	12:17	56S	17:59	252	18:22
2024	Feb	02	(Fri)	06:13	06:35	108	12:17	57S	18:00	253	18:22
2024	Feb	03	(Sat)	06:12	06:35	107	12:18	57S	18:00	253	18:23
2024	Feb	04	(Sun)	06:12	06:35	107	12:18	57S	18:01	253	18:23
2024	Feb	05	(Mon)	06:12	06:34	107	12:18	58S	18:01	254	18:24
2024	Feb	06	(Tue)	06:12	06:34	106	12:18	58S	18:02	254	18:24
2024	Feb	07	(Wed)	06:11	06:34	106	12:18	58S	18:02	254	18:25
2024	Feb	08	(Thu)	06:11	06:33	106	12:18	59S	18:03	254	18:25
2024	Feb	09	(Fri)	06:11	06:33	105	12:18	59S	18:03	255	18:25
2024	Feb	10	(Sat)	06:10	06:33	105	12:18	59S	18:04	255	18:26
2024	Feb	11	(Sun)	06:10	06:32	105	12:18	60S	18:04	255	18:26
2024	Feb	12	(Mon)	06:10	06:32	104	12:18	60S	18:04	256	18:27
2024	Feb	13	(Tue)	06:09	06:31	104	12:18	60S	18:05	256	18:27
2024	Feb	14	(Wed)	06:09	06:31	104	12:18	61S	18:05	257	18:27
2024	Feb	15	(Thu)	06:08	06:30	103	12:18	61S	18:06	257	18:28
2024	Feb	16	(Fri)	06:08	06:30	103	12:18	61S	18:06	257	18:28
2024	Feb	17	(Sat)	06:07	06:29	103	12:18	62S	18:06	258	18:28
2024	Feb	18	(Sun)	06:07	06:29	102	12:18	62S	18:07	258	18:29
2024	Feb	19	(Mon)	06:06	06:28	102	12:18	62S	18:07	258	18:29
2024	Feb	20	(Tue)	06:06	06:28	101	12:18	63S	18:08	259	18:29
2024	Feb	21	(Wed)	06:05	06:27	101	12:18	63S	18:08	259	18:30
2024	Feb	22	(Thu)	06:05	06:27	101	12:17	63S	18:08	259	18:30
2024	Feb	23	(Fri)	06:04	06:26	100	12:17	64S	18:09	260	18:30
2024	Feb	24	(Sat)	06:04	06:26	100	12:17	64S	18:09	260	18:31
2024	Feb	25	(Sun)	06:03	06:25	100	12:17	64S	18:09	261	18:31
2024	Feb	26	(Mon)	06:03	06:24	99	12:17	65S	18:09	261	18:31
2024	Feb	27	(Tue)	06:02	06:24	99	12:17	65S	18:10	261	18:32
2024	Feb	28	(Wed)	06:01	06:23	98	12:16	66S	18:10	262	18:32
2024	Feb	29	(Thu)	06:01	06:22	98	12:16	66S	18:10	262	18:32
2024	Mar	01	(Fri)	06:00	06:22	98	12:16	66S	18:11	263	18:32
2024	Mar	02	(Sat)	05:59	06:21	97	12:16	67S	18:11	263	18:33
2024	Mar	03	(Sun)	05:59	06:20	97	12:16	67S	18:11	263	18:33
2024	Mar	04	(Mon)	05:58	06:20	96	12:15	67S	18:11	264	18:33
2024	Mar	05	(Tue)	05:57	06:19	96	12:15	68S	18:12	264	18:33
2024	Mar	06	(Wed)	05:57	06:18	96	12:15	68S	18:12	265	18:34
2024	Mar	07	(Thu)	05:56	06:18	95	12:15	69S	18:12	265	18:34
2024	Mar	08	(Fri)	05:55	06:17	95	12:15	69S	18:12	265	18:34
2024	Mar	09	(Sat)	05:55	06:16	94	12:14	69S	18:13	266	18:34
2024	Mar	10	(Sun)	05:54	06:16	94	12:14	70S	18:13	266	18:34
2024	Mar	11	(Mon)	05:53	06:15	94	12:14	70S	18:13	267	18:35
2024	Mar	12	(Tue)	05:52	06:14	93	12:14	71S	18:13	267	18:35
2024	Mar	13	(Wed)	05:52	06:13	93	12:13	71S	18:13	268	18:35
2024	Mar	14	(Thu)	05:51	06:13	92	12:13	71S	18:14	268	18:35
2024	Mar	15	(Fri)	05:50	06:12	92	12:13	72S	18:14	268	18:35
2024	Mar	16	(Sat)	05:49	06:11	91	12:12	72S	18:14	269	18:36
2024	Mar	17	(Sun)	05:49	06:10	91	12:12	73S	18:14	269	18:36
2024	Mar	18	(Mon)	05:48	06:09	91	12:12	73S	18:14	270	18:36

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

2024	May	25	(Sat)	05:07	05:30	68	12:01	87N	18:32	292	18:55
2024	May	26	(Sun)	05:06	05:30	68	12:01	86N	18:32	293	18:56
2024	May	27	(Mon)	05:06	05:30	67	12:01	86N	18:32	293	18:56
2024	May	28	(Tue)	05:06	05:30	67	12:01	86N	18:33	293	18:56
2024	May	29	(Wed)	05:06	05:30	67	12:01	86N	18:33	293	18:57
2024	May	30	(Thu)	05:06	05:30	67	12:01	86N	18:33	293	18:57
2024	May	31	(Fri)	05:06	05:30	67	12:02	86N	18:34	293	18:57
2024	Jun	01	(Sat)	05:06	05:29	67	12:02	86N	18:34	293	18:58
2024	Jun	02	(Sun)	05:06	05:29	66	12:02	85N	18:34	294	18:58
2024	Jun	03	(Mon)	05:06	05:29	66	12:02	85N	18:35	294	18:59
2024	Jun	04	(Tue)	05:06	05:29	66	12:02	85N	18:35	294	18:59
2024	Jun	05	(Wed)	05:06	05:29	66	12:02	85N	18:35	294	18:59
2024	Jun	06	(Thu)	05:06	05:29	66	12:03	85N	18:36	294	19:00
2024	Jun	07	(Fri)	05:06	05:29	66	12:03	85N	18:36	294	19:00
2024	Jun	08	(Sat)	05:06	05:30	66	12:03	85N	18:36	294	19:00
2024	Jun	09	(Sun)	05:06	05:30	66	12:03	85N	18:37	294	19:01
2024	Jun	10	(Mon)	05:06	05:30	66	12:03	85N	18:37	294	19:01
2024	Jun	11	(Tue)	05:06	05:30	66	12:04	85N	18:37	295	19:01
2024	Jun	12	(Wed)	05:06	05:30	65	12:04	84N	18:38	295	19:02
2024	Jun	13	(Thu)	05:06	05:30	65	12:04	84N	18:38	295	19:02
2024	Jun	14	(Fri)	05:06	05:30	65	12:04	84N	18:38	295	19:02
2024	Jun	15	(Sat)	05:06	05:30	65	12:04	84N	18:39	295	19:03
2024	Jun	16	(Sun)	05:06	05:30	65	12:05	84N	18:39	295	19:03
2024	Jun	17	(Mon)	05:07	05:31	65	12:05	84N	18:39	295	19:03
2024	Jun	18	(Tue)	05:07	05:31	65	12:05	84N	18:39	295	19:03
2024	Jun	19	(Wed)	05:07	05:31	65	12:05	84N	18:40	295	19:04
2024	Jun	20	(Thu)	05:07	05:31	65	12:05	84N	18:40	295	19:04
2024	Jun	21	(Fri)	05:07	05:31	65	12:06	84N	18:40	295	19:04
2024	Jun	22	(Sat)	05:08	05:32	65	12:06	84N	18:40	295	19:04
2024	Jun	23	(Sun)	05:08	05:32	65	12:06	84N	18:40	295	19:04
2024	Jun	24	(Mon)	05:08	05:32	65	12:06	84N	18:41	295	19:05
2024	Jun	25	(Tue)	05:08	05:32	65	12:07	84N	18:41	295	19:05
2024	Jun	26	(Wed)	05:09	05:33	65	12:07	84N	18:41	295	19:05
2024	Jun	27	(Thu)	05:09	05:33	65	12:07	84N	18:41	295	19:05
2024	Jun	28	(Fri)	05:09	05:33	65	12:07	84N	18:41	295	19:05
2024	Jun	29	(Sat)	05:09	05:33	65	12:07	84N	18:41	295	19:05
2024	Jun	30	(Sun)	05:10	05:34	65	12:08	85N	18:41	295	19:05
2024	Jul	01	(Mon)	05:10	05:34	66	12:08	85N	18:41	294	19:05
2024	Jul	02	(Tue)	05:10	05:34	66	12:08	85N	18:42	294	19:05
2024	Jul	03	(Wed)	05:11	05:35	66	12:08	85N	18:42	294	19:05
2024	Jul	04	(Thu)	05:11	05:35	66	12:08	85N	18:42	294	19:06
2024	Jul	05	(Fri)	05:11	05:35	66	12:09	85N	18:42	294	19:06
2024	Jul	06	(Sat)	05:12	05:36	66	12:09	85N	18:42	294	19:06
2024	Jul	07	(Sun)	05:12	05:36	66	12:09	85N	18:42	294	19:06
2024	Jul	08	(Mon)	05:12	05:36	66	12:09	85N	18:42	294	19:05
2024	Jul	09	(Tue)	05:13	05:37	66	12:09	85N	18:42	294	19:05
2024	Jul	10	(Wed)	05:13	05:37	66	12:09	86N	18:42	293	19:05
2024	Jul	11	(Thu)	05:13	05:37	67	12:09	86N	18:42	293	19:05
2024	Jul	12	(Fri)	05:14	05:38	67	12:10	86N	18:41	293	19:05
2024	Jul	13	(Sat)	05:14	05:38	67	12:10	86N	18:41	293	19:05
2024	Jul	14	(Sun)	05:15	05:38	67	12:10	86N	18:41	293	19:05
2024	Jul	15	(Mon)	05:15	05:39	67	12:10	86N	18:41	293	19:05
2024	Jul	16	(Tue)	05:15	05:39	67	12:10	86N	18:41	293	19:05
2024	Jul	17	(Wed)	05:16	05:39	68	12:10	87N	18:41	292	19:04
2024	Jul	18	(Thu)	05:16	05:40	68	12:10	87N	18:41	292	19:04
2024	Jul	19	(Fri)	05:16	05:40	68	12:10	87N	18:40	292	19:04
2024	Jul	20	(Sat)	05:17	05:40	68	12:10	87N	18:40	292	19:04
2024	Jul	21	(Sun)	05:17	05:40	68	12:10	87N	18:40	292	19:03
2024	Jul	22	(Mon)	05:17	05:41	69	12:10	88N	18:40	291	19:03
2024	Jul	23	(Tue)	05:18	05:41	69	12:10	88N	18:39	291	19:03
2024	Jul	24	(Wed)	05:18	05:41	69	12:10	88N	18:39	291	19:02
2024	Jul	25	(Thu)	05:18	05:42	69	12:10	88N	18:39	291	19:02
2024	Jul	26	(Fri)	05:19	05:42	69	12:10	88N	18:39	290	19:02
2024	Jul	27	(Sat)	05:19	05:42	70	12:10	89N	18:38	290	19:01
2024	Jul	28	(Sun)	05:19	05:43	70	12:10	89N	18:38	290	19:01
2024	Jul	29	(Mon)	05:20	05:43	70	12:10	89N	18:38	290	19:01
2024	Jul	30	(Tue)	05:20	05:43	70	12:10	89N	18:37	289	19:00

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

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

2024	Dec	12	(Thu)	06:00	06:24	114	11:58	51S	17:32	246	17:55
2024	Dec	13	(Fri)	06:01	06:24	114	11:58	51S	17:32	246	17:55
2024	Dec	14	(Sat)	06:01	06:25	114	11:59	51S	17:32	246	17:56
2024	Dec	15	(Sun)	06:02	06:25	114	11:59	50S	17:33	246	17:56
2024	Dec	16	(Mon)	06:02	06:26	114	12:00	50S	17:33	246	17:57
2024	Dec	17	(Tue)	06:03	06:26	114	12:00	50S	17:34	246	17:57
2024	Dec	18	(Wed)	06:03	06:27	114	12:01	50S	17:34	246	17:58
2024	Dec	19	(Thu)	06:04	06:27	114	12:01	50S	17:35	246	17:58
2024	Dec	20	(Fri)	06:04	06:28	114	12:01	50S	17:35	246	17:59
2024	Dec	21	(Sat)	06:05	06:28	114	12:02	50S	17:36	246	17:59
2024	Dec	22	(Sun)	06:05	06:29	114	12:02	50S	17:36	246	18:00
2024	Dec	23	(Mon)	06:06	06:29	114	12:03	50S	17:37	246	18:00
2024	Dec	24	(Tue)	06:06	06:30	114	12:03	50S	17:37	246	18:01
2024	Dec	25	(Wed)	06:07	06:30	114	12:04	50S	17:38	246	18:01
2024	Dec	26	(Thu)	06:07	06:31	114	12:04	50S	17:38	246	18:02
2024	Dec	27	(Fri)	06:08	06:31	114	12:05	50S	17:39	246	18:02
2024	Dec	28	(Sat)	06:08	06:32	114	12:05	50S	17:39	246	18:03
2024	Dec	29	(Sun)	06:09	06:32	114	12:06	51S	17:40	246	18:03
2024	Dec	30	(Mon)	06:09	06:32	114	12:06	51S	17:40	246	18:04
2024	Dec	31	(Tue)	06:09	06:33	114	12:07	51S	17:41	246	18:04

Moon

Phuphan

Location: E104°02'31.2", N16°58'08.4", 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)	22:14	80		03:55	87S		10:20	282	
2024	Jan	02 (Tue)	23:00	86		04:35	82S		10:53	277	
2024	Jan	03 (Wed)	23:46	92		05:14	76S		11:24	271	
2024	Jan	04 (Thu)				05:53	70S		11:57	265	
2024	Jan	05 (Fri)	00:34	98		06:34	64S		12:30	259	
2024	Jan	06 (Sat)	01:23	104		07:16	58S		13:06	253	
2024	Jan	07 (Sun)	02:16	110		08:03	53S		13:47	248	
2024	Jan	08 (Mon)	03:13	114		08:55	49S		14:34	244	
2024	Jan	09 (Tue)	04:14	118		09:52	46S		15:28	241	
2024	Jan	10 (Wed)	05:17	119		10:53	45S		16:29	240	
2024	Jan	11 (Thu)	06:21	119		11:57	46S		17:35	242	
2024	Jan	12 (Fri)	07:20	117		13:00	49S		18:43	245	
2024	Jan	13 (Sat)	08:14	112		14:00	53S		19:49	250	
2024	Jan	14 (Sun)	09:02	106		14:55	59S		20:51	257	
2024	Jan	15 (Mon)	09:46	99		15:46	66S		21:51	264	
2024	Jan	16 (Tue)	10:26	92		16:35	73S		22:49	272	
2024	Jan	17 (Wed)	11:06	85		17:23	80S		23:45	279	
2024	Jan	18 (Thu)	11:45	78		18:11	87S				
2024	Jan	19 (Fri)	12:26	72		19:00	89N		00:41	285	
2024	Jan	20 (Sat)	13:10	67		19:52	84N		01:39	291	
2024	Jan	21 (Sun)	13:58	63		20:46	81N		02:37	295	
2024	Jan	22 (Mon)	14:49	61		21:41	79N		03:36	298	
2024	Jan	23 (Tue)	15:44	60		22:36	79N		04:33	300	
2024	Jan	24 (Wed)	16:40	62		23:30	81N		05:28	299	
2024	Jan	25 (Thu)	17:35	64					06:17	297	
2024	Jan	26 (Fri)	18:28	68		00:20	84N		07:02	294	
2024	Jan	27 (Sat)	19:19	73		01:07	88N		07:42	289	
2024	Jan	28 (Sun)	20:08	78		01:51	89S		08:18	284	
2024	Jan	29 (Mon)	20:55	84		02:32	83S		08:52	279	
2024	Jan	30 (Tue)	21:41	90		03:11	78S		09:24	273	
2024	Jan	31 (Wed)	22:27	96		03:50	72S		09:56	267	
2024	Feb	01 (Thu)	23:15	102		04:29	66S		10:28	261	
2024	Feb	02 (Fri)				05:10	60S		11:03	255	
2024	Feb	03 (Sat)	00:05	108		05:54	55S		11:40	250	
2024	Feb	04 (Sun)	00:59	113		06:42	51S		12:23	246	

2024 Feb 05 (Mon)	01:57 116	07:35 47S	13:12 242
2024 Feb 06 (Tue)	02:57 119	08:33 45S	14:09 240
2024 Feb 07 (Wed)	04:00 120	09:35 45S	15:11 241
2024 Feb 08 (Thu)	05:01 118	10:39 47S	16:18 243
2024 Feb 09 (Fri)	05:58 115	11:40 51S	17:26 248
2024 Feb 10 (Sat)	06:50 109	12:39 56S	18:32 254
2024 Feb 11 (Sun)	07:37 103	13:34 63S	19:35 261
2024 Feb 12 (Mon)	08:20 95	14:26 70S	20:36 269
2024 Feb 13 (Tue)	09:01 88	15:16 78S	21:35 276
2024 Feb 14 (Wed)	09:42 80	16:05 85S	22:33 283
2024 Feb 15 (Thu)	10:23 74	16:56 91N	23:32 289
2024 Feb 16 (Fri)	11:07 68	17:48 85N	
2024 Feb 17 (Sat)	11:55 64	18:42 82N	00:32 294
2024 Feb 18 (Sun)	12:46 61	19:37 80N	01:31 298
2024 Feb 19 (Mon)	13:39 60	20:32 79N	02:29 300
2024 Feb 20 (Tue)	14:35 61	21:25 80N	03:24 300
2024 Feb 21 (Wed)	15:30 63	22:17 83N	04:15 298
2024 Feb 22 (Thu)	16:23 67	23:04 86N	05:01 295
2024 Feb 23 (Fri)	17:15 71	23:49 90S	05:42 291
2024 Feb 24 (Sat)	18:04 76		06:19 286
2024 Feb 25 (Sun)	18:51 82	00:30 85S	06:53 281
2024 Feb 26 (Mon)	19:38 88	01:10 80S	07:25 275
2024 Feb 27 (Tue)	20:24 94	01:49 74S	07:57 269
2024 Feb 28 (Wed)	21:11 100	02:28 68S	08:29 263
2024 Feb 29 (Thu)	22:00 106	03:08 62S	09:02 257
2024 Mar 01 (Fri)	22:51 111	03:50 57S	09:38 252
2024 Mar 02 (Sat)	23:46 115	04:36 52S	10:18 247
2024 Mar 03 (Sun)		05:26 48S	11:04 243
2024 Mar 04 (Mon)	00:44 118	06:20 46S	11:55 241
2024 Mar 05 (Tue)	01:44 120	07:19 45S	12:53 240
2024 Mar 06 (Wed)	02:44 119	08:20 45S	13:56 241
2024 Mar 07 (Thu)	03:41 117	09:20 48S	15:02 245
2024 Mar 08 (Fri)	04:34 113	10:20 53S	16:08 250
2024 Mar 09 (Sat)	05:23 106	11:16 59S	17:13 257
2024 Mar 10 (Sun)	06:08 99	12:09 66S	18:15 264
2024 Mar 11 (Mon)	06:51 92	13:01 74S	19:16 272
2024 Mar 12 (Tue)	07:33 84	13:52 81S	20:17 280
2024 Mar 13 (Wed)	08:15 77	14:44 88S	21:18 287
2024 Mar 14 (Thu)	09:00 70	15:38 87N	22:20 293
2024 Mar 15 (Fri)	09:48 65	16:33 83N	23:21 297
2024 Mar 16 (Sat)	10:39 62	17:29 80N	
2024 Mar 17 (Sun)	11:33 60	18:26 79N	00:22 299
2024 Mar 18 (Mon)	12:29 60	19:21 80N	01:19 300
2024 Mar 19 (Tue)	13:25 62	20:13 82N	02:12 299
2024 Mar 20 (Wed)	14:19 65	21:02 85N	02:59 296
2024 Mar 21 (Thu)	15:11 70	21:47 89N	03:42 293
2024 Mar 22 (Fri)	16:01 75	22:30 87S	04:20 288
2024 Mar 23 (Sat)	16:48 80	23:10 82S	04:55 283
2024 Mar 24 (Sun)	17:35 86	23:49 76S	05:27 277
2024 Mar 25 (Mon)	18:21 92		05:59 271
2024 Mar 26 (Tue)	19:08 98	00:28 70S	06:31 265
2024 Mar 27 (Wed)	19:56 104	01:08 64S	07:04 259
2024 Mar 28 (Thu)	20:47 110	01:49 58S	07:39 253
2024 Mar 29 (Fri)	21:41 114	02:34 53S	08:17 248
2024 Mar 30 (Sat)	22:37 118	03:22 49S	09:01 244
2024 Mar 31 (Sun)	23:36 120	04:14 46S	09:50 241
2024 Apr 01 (Mon)		05:10 45S	10:44 240
2024 Apr 02 (Tue)	00:34 120	06:09 45S	11:44 241
2024 Apr 03 (Wed)	01:31 118	07:08 47S	12:46 243
2024 Apr 04 (Thu)	02:24 115	08:05 51S	13:50 247
2024 Apr 05 (Fri)	03:12 110	09:01 56S	14:53 253
2024 Apr 06 (Sat)	03:58 103	09:54 62S	15:55 260
2024 Apr 07 (Sun)	04:40 96	10:46 70S	16:55 268
2024 Apr 08 (Mon)	05:22 88	11:37 77S	17:56 276
2024 Apr 09 (Tue)	06:04 80	12:28 85S	18:57 283
2024 Apr 10 (Wed)	06:48 73	13:22 90N	20:00 290
2024 Apr 11 (Thu)	07:36 67	14:18 85N	21:04 295

2024 Apr 12 (Fri)	08:27 63	15:16 81N	22:07 298
2024 Apr 13 (Sat)	09:22 61	16:14 79N	23:08 300
2024 Apr 14 (Sun)	10:19 60	17:12 79N	
2024 Apr 15 (Mon)	11:16 61	18:07 81N	00:04 299
2024 Apr 16 (Tue)	12:12 64	18:58 84N	00:55 297
2024 Apr 17 (Wed)	13:06 68	19:44 88N	01:40 294
2024 Apr 18 (Thu)	13:56 73	20:28 89S	02:20 290
2024 Apr 19 (Fri)	14:45 78	21:09 83S	02:55 284
2024 Apr 20 (Sat)	15:31 84	21:48 78S	03:29 279
2024 Apr 21 (Sun)	16:18 90	22:27 72S	04:01 273
2024 Apr 22 (Mon)	17:04 96	23:06 66S	04:32 267
2024 Apr 23 (Tue)	17:52 102	23:47 60S	05:05 261
2024 Apr 24 (Wed)	18:43 108		05:39 255
2024 Apr 25 (Thu)	19:36 113	00:31 55S	06:17 250
2024 Apr 26 (Fri)	20:32 117	01:19 51S	06:59 245
2024 Apr 27 (Sat)	21:30 119	02:10 47S	07:47 242
2024 Apr 28 (Sun)	22:29 120	03:05 45S	08:40 240
2024 Apr 29 (Mon)	23:26 119	04:03 45S	09:38 240
2024 Apr 30 (Tue)		05:01 46S	10:39 242
2024 May 01 (Wed)	00:19 116	05:58 49S	11:41 246
2024 May 02 (Thu)	01:07 112	06:53 54S	12:42 251
2024 May 03 (Fri)	01:52 106	07:45 60S	13:42 257
2024 May 04 (Sat)	02:34 99	08:35 67S	14:40 265
2024 May 05 (Sun)	03:15 92	09:25 74S	15:39 272
2024 May 06 (Mon)	03:55 84	10:14 81S	16:38 280
2024 May 07 (Tue)	04:37 77	11:06 88S	17:40 287
2024 May 08 (Wed)	05:23 70	12:01 87N	18:43 293
2024 May 09 (Thu)	06:12 65	12:58 83N	19:47 297
2024 May 10 (Fri)	07:06 62	13:58 80N	20:51 299
2024 May 11 (Sat)	08:04 60	14:57 79N	21:51 300
2024 May 12 (Sun)	09:03 61	15:55 80N	22:46 298
2024 May 13 (Mon)	10:01 63	16:49 82N	23:34 295
2024 May 14 (Tue)	10:57 66	17:38 86N	
2024 May 15 (Wed)	11:49 71	18:24 91S	00:16 291
2024 May 16 (Thu)	12:39 76	19:06 85S	00:54 286
2024 May 17 (Fri)	13:26 82	19:45 80S	01:28 281
2024 May 18 (Sat)	14:13 88	20:24 74S	02:01 275
2024 May 19 (Sun)	14:59 94	21:03 68S	02:33 269
2024 May 20 (Mon)	15:46 100	21:44 62S	03:05 263
2024 May 21 (Tue)	16:36 106	22:27 57S	03:38 257
2024 May 22 (Wed)	17:28 111	23:13 52S	04:15 252
2024 May 23 (Thu)	18:24 115		04:56 247
2024 May 24 (Fri)	19:23 118	00:04 48S	05:42 243
2024 May 25 (Sat)	20:22 120	00:59 46S	06:34 241
2024 May 26 (Sun)	21:21 119	01:57 45S	07:31 240
2024 May 27 (Mon)	22:15 117	02:56 45S	08:33 241
2024 May 28 (Tue)	23:06 113	03:54 48S	09:35 245
2024 May 29 (Wed)	23:51 107	04:49 52S	10:36 249
2024 May 30 (Thu)		05:42 58S	11:36 256
2024 May 31 (Fri)	00:33 101	06:31 64S	12:33 262
2024 Jun 01 (Sat)	01:13 94	07:19 71S	13:30 270
2024 Jun 02 (Sun)	01:52 87	08:07 79S	14:27 277
2024 Jun 03 (Mon)	02:32 80	08:57 85S	15:26 284
2024 Jun 04 (Tue)	03:15 73	09:48 90N	16:27 290
2024 Jun 05 (Wed)	04:01 67	10:44 85N	17:30 295
2024 Jun 06 (Thu)	04:53 63	11:42 81N	18:33 298
2024 Jun 07 (Fri)	05:48 61	12:41 79N	19:35 300
2024 Jun 08 (Sat)	06:47 60	13:41 79N	20:33 299
2024 Jun 09 (Sun)	07:47 62	14:37 81N	21:25 297
2024 Jun 10 (Mon)	08:45 65	15:29 85N	22:10 293
2024 Jun 11 (Tue)	09:39 69	16:17 89N	22:50 288
2024 Jun 12 (Wed)	10:31 74	17:01 87S	23:26 283
2024 Jun 13 (Thu)	11:19 80	17:41 82S	24:00 277
2024 Jun 14 (Fri)	12:06 86	18:21 76S	
2024 Jun 15 (Sat)	12:52 92	19:00 70S	00:32 271
2024 Jun 16 (Sun)	13:39 98	19:39 64S	01:03 265
2024 Jun 17 (Mon)	14:27 104	20:21 59S	01:36 259

2024 Jun 18 (Tue)	15:18 109	21:06 54S	02:11 254
2024 Jun 19 (Wed)	16:13 114	21:55 50S	02:50 249
2024 Jun 20 (Thu)	17:11 117	22:48 46S	03:34 244
2024 Jun 21 (Fri)	18:11 119	23:46 45S	04:25 241
2024 Jun 22 (Sat)	19:11 120		05:21 240
2024 Jun 23 (Sun)	20:08 118	00:46 45S	06:22 241
2024 Jun 24 (Mon)	21:01 114	01:46 47S	07:26 244
2024 Jun 25 (Tue)	21:49 109	02:44 51S	08:29 248
2024 Jun 26 (Wed)	22:33 103	03:38 56S	09:30 254
2024 Jun 27 (Thu)	23:13 96	04:29 63S	10:29 260
2024 Jun 28 (Fri)	23:52 89	05:17 69S	11:26 268
2024 Jun 29 (Sat)		06:05 77S	12:22 275
2024 Jun 30 (Sun)	00:31 82	06:53 83S	13:19 282
2024 Jul 01 (Mon)	01:12 75	07:43 90S	14:18 288
2024 Jul 02 (Tue)	01:56 69	08:35 86N	15:19 294
2024 Jul 03 (Wed)	02:45 64	09:31 82N	16:21 297
2024 Jul 04 (Thu)	03:38 61	10:29 80N	17:23 299
2024 Jul 05 (Fri)	04:35 60	11:28 79N	18:21 300
2024 Jul 06 (Sat)	05:34 61	12:26 80N	19:15 298
2024 Jul 07 (Sun)	06:33 63	13:20 83N	20:03 295
2024 Jul 08 (Mon)	07:29 67	14:09 87N	20:46 290
2024 Jul 09 (Tue)	08:22 72	14:55 89S	21:24 285
2024 Jul 10 (Wed)	09:12 78	15:37 84S	21:58 279
2024 Jul 11 (Thu)	10:00 84	16:17 78S	22:30 273
2024 Jul 12 (Fri)	10:46 90	16:56 72S	23:02 267
2024 Jul 13 (Sat)	11:32 96	17:35 67S	23:34 261
2024 Jul 14 (Sun)	12:19 102	18:15 61S	
2024 Jul 15 (Mon)	13:08 107	18:58 56S	00:08 256
2024 Jul 16 (Tue)	14:01 112	19:45 51S	00:44 251
2024 Jul 17 (Wed)	14:57 116	20:36 48S	01:26 246
2024 Jul 18 (Thu)	15:56 119	21:32 45S	02:13 242
2024 Jul 19 (Fri)	16:56 120	22:31 45S	03:06 240
2024 Jul 20 (Sat)	17:56 119	23:32 46S	04:06 240
2024 Jul 21 (Sun)	18:51 116		05:10 242
2024 Jul 22 (Mon)	19:42 111	00:32 49S	06:15 246
2024 Jul 23 (Tue)	20:29 105	01:29 54S	07:19 251
2024 Jul 24 (Wed)	21:11 98	02:22 60S	08:20 258
2024 Jul 25 (Thu)	21:51 91	03:13 67S	09:19 265
2024 Jul 26 (Fri)	22:31 83	04:02 75S	10:17 273
2024 Jul 27 (Sat)	23:12 77	04:50 82S	11:14 280
2024 Jul 28 (Sun)	23:55 70	05:40 88S	12:13 287
2024 Jul 29 (Mon)		06:32 88N	13:13 292
2024 Jul 30 (Tue)	00:41 65	07:26 83N	14:14 297
2024 Jul 31 (Wed)	01:32 62	08:23 80N	15:15 299
2024 Aug 01 (Thu)	02:27 60	09:21 79N	16:14 300
2024 Aug 02 (Fri)	03:25 60	10:18 80N	17:09 299
2024 Aug 03 (Sat)	04:23 62	11:12 82N	17:58 296
2024 Aug 04 (Sun)	05:20 66	12:03 85N	18:42 292
2024 Aug 05 (Mon)	06:14 70	12:50 90N	19:21 287
2024 Aug 06 (Tue)	07:05 76	13:33 86S	19:57 281
2024 Aug 07 (Wed)	07:54 81	14:14 80S	20:30 276
2024 Aug 08 (Thu)	08:40 87	14:53 75S	21:02 270
2024 Aug 09 (Fri)	09:26 94	15:32 69S	21:33 264
2024 Aug 10 (Sat)	10:13 99	16:11 63S	22:06 258
2024 Aug 11 (Sun)	11:01 105	16:52 58S	22:41 252
2024 Aug 12 (Mon)	11:51 110	17:37 53S	23:19 248
2024 Aug 13 (Tue)	12:44 115	18:25 49S	
2024 Aug 14 (Wed)	13:41 118	19:18 46S	00:03 244
2024 Aug 15 (Thu)	14:40 120	20:14 45S	00:53 241
2024 Aug 16 (Fri)	15:39 120	21:14 45S	01:49 240
2024 Aug 17 (Sat)	16:37 118	22:14 47S	02:50 241
2024 Aug 18 (Sun)	17:30 114	23:13 52S	03:55 244
2024 Aug 19 (Mon)	18:19 108		05:00 249
2024 Aug 20 (Tue)	19:04 101	00:09 57S	06:03 255
2024 Aug 21 (Wed)	19:46 94	01:02 64S	07:05 262
2024 Aug 22 (Thu)	20:27 86	01:53 72S	08:05 270
2024 Aug 23 (Fri)	21:09 79	02:44 79S	09:05 278

2024 Aug 24 (Sat)	21:52	72	03:34	86S	10:05	285
2024 Aug 25 (Sun)	22:38	67	04:27	89N	11:06	291
2024 Aug 26 (Mon)	23:29	63	05:21	84N	12:08	296
2024 Aug 27 (Tue)			06:18	81N	13:10	299
2024 Aug 28 (Wed)	00:23	60	07:16	79N	14:09	300
2024 Aug 29 (Thu)	01:20	60	08:13	79N	15:05	299
2024 Aug 30 (Fri)	02:18	61	09:08	81N	15:56	297
2024 Aug 31 (Sat)	03:14	64	09:59	84N	16:41	293
2024 Sep 01 (Sun)	04:09	69	10:47	88N	17:21	289
2024 Sep 02 (Mon)	05:00	74	11:31	88S	17:57	283
2024 Sep 03 (Tue)	05:49	79	12:12	82S	18:31	278
2024 Sep 04 (Wed)	06:36	85	12:51	77S	19:03	272
2024 Sep 05 (Thu)	07:23	91	13:30	71S	19:34	266
2024 Sep 06 (Fri)	08:09	98	14:09	65S	20:06	260
2024 Sep 07 (Sat)	08:56	103	14:50	59S	20:40	254
2024 Sep 08 (Sun)	09:45	109	15:32	54S	21:17	249
2024 Sep 09 (Mon)	10:36	113	16:18	50S	21:58	245
2024 Sep 10 (Tue)	11:31	117	17:08	47S	22:44	242
2024 Sep 11 (Wed)	12:28	119	18:02	45S	23:36	240
2024 Sep 12 (Thu)	13:25	120	18:59	44S		
2024 Sep 13 (Fri)	14:22	119	19:58	46S	00:33	240
2024 Sep 14 (Sat)	15:16	116	20:56	49S	01:35	242
2024 Sep 15 (Sun)	16:06	111	21:52	54S	02:39	246
2024 Sep 16 (Mon)	16:53	105	22:47	60S	03:42	251
2024 Sep 17 (Tue)	17:36	98	23:39	68S	04:45	258
2024 Sep 18 (Wed)	18:18	90			05:46	266
2024 Sep 19 (Thu)	19:00	82	00:30	75S	06:47	274
2024 Sep 20 (Fri)	19:44	75	01:22	83S	07:49	282
2024 Sep 21 (Sat)	20:31	69	02:16	90S	08:52	289
2024 Sep 22 (Sun)	21:21	64	03:11	86N	09:56	294
2024 Sep 23 (Mon)	22:16	61	04:09	82N	11:00	298
2024 Sep 24 (Tue)	23:14	60	05:09	79N	12:03	300
2024 Sep 25 (Wed)			06:07	79N	13:01	300
2024 Sep 26 (Thu)	00:12	61	07:04	80N	13:54	298
2024 Sep 27 (Fri)	01:10	63	07:57	83N	14:40	295
2024 Sep 28 (Sat)	02:05	67	08:45	87N	15:22	290
2024 Sep 29 (Sun)	02:57	72	09:30	90S	15:59	285
2024 Sep 30 (Mon)	03:46	77	10:12	84S	16:33	280
2024 Oct 01 (Tue)	04:34	83	10:51	78S	17:05	274
2024 Oct 02 (Wed)	05:20	89	11:30	73S	17:36	268
2024 Oct 03 (Thu)	06:06	96	12:09	67S	18:08	262
2024 Oct 04 (Fri)	06:53	101	12:49	61S	18:41	256
2024 Oct 05 (Sat)	07:41	107	13:31	56S	19:17	251
2024 Oct 06 (Sun)	08:32	112	14:15	51S	19:56	246
2024 Oct 07 (Mon)	09:25	116	15:04	48S	20:40	243
2024 Oct 08 (Tue)	10:20	119	15:55	45S	21:29	240
2024 Oct 09 (Wed)	11:17	120	16:50	44S	22:24	240
2024 Oct 10 (Thu)	12:12	120	17:47	45S	23:22	241
2024 Oct 11 (Fri)	13:06	118	18:43	48S		
2024 Oct 12 (Sat)	13:56	114	19:39	52S	00:23	244
2024 Oct 13 (Sun)	14:42	108	20:32	57S	01:24	249
2024 Oct 14 (Mon)	15:26	102	21:24	64S	02:25	255
2024 Oct 15 (Tue)	16:08	94	22:14	71S	03:26	262
2024 Oct 16 (Wed)	16:49	86	23:06	79S	04:26	270
2024 Oct 17 (Thu)	17:32	79	23:59	86S	05:27	278
2024 Oct 18 (Fri)	18:18	72			06:30	285
2024 Oct 19 (Sat)	19:08	66	00:54	89N	07:35	291
2024 Oct 20 (Sun)	20:03	62	01:53	83N	08:42	296
2024 Oct 21 (Mon)	21:01	60	02:54	80N	09:48	299
2024 Oct 22 (Tue)	22:02	60	03:56	79N	10:50	300
2024 Oct 23 (Wed)	23:02	62	04:55	79N	11:47	299
2024 Oct 24 (Thu)	23:59	66	05:51	82N	12:37	296
2024 Oct 25 (Fri)			06:42	86N	13:21	292
2024 Oct 26 (Sat)	00:53	70	07:28	90N	13:59	287
2024 Oct 27 (Sun)	01:43	76	08:11	86S	14:34	281
2024 Oct 28 (Mon)	02:31	81	08:51	80S	15:07	276
2024 Oct 29 (Tue)	03:17	87	09:30	75S	15:38	270

2024	Oct	30	(Wed)	04:03	94	10:08	69S	16:10	264
2024	Oct	31	(Thu)	04:50	100	10:48	63S	16:43	258
2024	Nov	01	(Fri)	05:38	105	11:29	58S	17:18	252
2024	Nov	02	(Sat)	06:28	110	12:13	53S	17:56	248
2024	Nov	03	(Sun)	07:21	115	13:01	49S	18:39	244
2024	Nov	04	(Mon)	08:16	118	13:52	46S	19:27	241
2024	Nov	05	(Tue)	09:12	120	14:46	45S	20:19	240
2024	Nov	06	(Wed)	10:08	120	15:41	45S	21:16	241
2024	Nov	07	(Thu)	11:01	118	16:37	47S	22:15	243
2024	Nov	08	(Fri)	11:51	115	17:31	50S	23:15	247
2024	Nov	09	(Sat)	12:37	110	18:24	55S		
2024	Nov	10	(Sun)	13:20	104	19:14	61S	00:14	252
2024	Nov	11	(Mon)	14:00	98	20:03	68S	01:12	259
2024	Nov	12	(Tue)	14:40	90	20:52	75S	02:10	266
2024	Nov	13	(Wed)	15:21	83	21:42	83S	03:08	274
2024	Nov	14	(Thu)	16:05	75	22:36	89S	04:08	281
2024	Nov	15	(Fri)	16:52	69	23:33	86N	05:12	288
2024	Nov	16	(Sat)	17:45	64			06:18	294
2024	Nov	17	(Sun)	18:43	61	00:34	82N	07:25	298
2024	Nov	18	(Mon)	19:45	60	01:36	79N	08:31	300
2024	Nov	19	(Tue)	20:47	61	02:39	79N	09:33	299
2024	Nov	20	(Wed)	21:47	64	03:38	81N	10:28	297
2024	Nov	21	(Thu)	22:44	69	04:33	84N	11:15	294
2024	Nov	22	(Fri)	23:36	74	05:22	88N	11:57	289
2024	Nov	23	(Sat)			06:07	88S	12:34	283
2024	Nov	24	(Sun)	00:26	79	06:48	82S	13:07	278
2024	Nov	25	(Mon)	01:13	85	07:28	76S	13:39	272
2024	Nov	26	(Tue)	01:59	91	08:07	71S	14:11	266
2024	Nov	27	(Wed)	02:45	98	08:46	65S	14:43	260
2024	Nov	28	(Thu)	03:33	103	09:26	59S	15:17	254
2024	Nov	29	(Fri)	04:22	109	10:10	54S	15:54	249
2024	Nov	30	(Sat)	05:14	113	10:56	50S	16:36	245
2024	Dec	01	(Sun)	06:09	117	11:47	47S	17:22	242
2024	Dec	02	(Mon)	07:06	119	12:40	45S	18:14	240
2024	Dec	03	(Tue)	08:02	120	13:36	45S	19:11	240
2024	Dec	04	(Wed)	08:57	119	14:33	46S	20:10	242
2024	Dec	05	(Thu)	09:49	116	15:28	49S	21:10	246
2024	Dec	06	(Fri)	10:36	112	16:20	54S	22:08	251
2024	Dec	07	(Sat)	11:19	106	17:10	59S	23:06	257
2024	Dec	08	(Sun)	11:59	100	17:58	66S		
2024	Dec	09	(Mon)	12:38	93	18:46	73S	00:02	264
2024	Dec	10	(Tue)	13:17	85	19:34	80S	00:58	271
2024	Dec	11	(Wed)	13:57	78	20:24	87S	01:55	278
2024	Dec	12	(Thu)	14:41	72	21:17	89N	02:55	285
2024	Dec	13	(Fri)	15:30	66	22:15	84N	03:57	291
2024	Dec	14	(Sat)	16:25	62	23:16	80N	05:03	296
2024	Dec	15	(Sun)	17:24	60			06:09	299
2024	Dec	16	(Mon)	18:27	61	00:19	79N	07:14	300
2024	Dec	17	(Tue)	19:30	63	01:21	80N	08:12	298
2024	Dec	18	(Wed)	20:30	67	02:19	82N	09:04	295
2024	Dec	19	(Thu)	21:25	72	03:12	86N	09:50	291
2024	Dec	20	(Fri)	22:17	77	03:59	90S	10:29	286
2024	Dec	21	(Sat)	23:06	83	04:43	84S	11:05	280
2024	Dec	22	(Sun)	23:53	89	05:24	79S	11:38	274
2024	Dec	23	(Mon)			06:03	73S	12:10	268
2024	Dec	24	(Tue)	00:39	95	06:42	67S	12:41	262
2024	Dec	25	(Wed)	01:26	101	07:22	61S	13:15	256
2024	Dec	26	(Thu)	02:14	107	08:04	56S	13:51	251
2024	Dec	27	(Fri)	03:05	112	08:49	52S	14:30	246
2024	Dec	28	(Sat)	03:59	116	09:38	48S	15:15	243
2024	Dec	29	(Sun)	04:55	119	10:31	46S	16:05	241
2024	Dec	30	(Mon)	05:53	120	11:27	45S	17:01	240
2024	Dec	31	(Tue)	06:49	119	12:24	45S	18:01	241