

## Sun

Kamphaeng Phet  
Location: E 99°31'40.8", N16°28'22.8", 0m  
(Longitude referred to Greenwich meridian)

Time Zone: 7h 00m east of Greenwich

| Date<br>(Zone) |     |          | Begin<br>Nautical<br>Twilight | Rise  | Az. | Transit Alt. | Set   | Az. | End<br>Nautical<br>Twilight |
|----------------|-----|----------|-------------------------------|-------|-----|--------------|-------|-----|-----------------------------|
|                |     |          | h m                           | h m   | °   | h m °        | h m ° |     | h m                         |
| 2024           | Jan | 01 (Mon) | 06:00                         | 06:50 | 114 | 12:25 51S    | 18:00 | 246 | 18:50                       |
| 2024           | Jan | 02 (Tue) | 06:00                         | 06:50 | 114 | 12:26 51S    | 18:01 | 246 | 18:51                       |
| 2024           | Jan | 03 (Wed) | 06:01                         | 06:51 | 114 | 12:26 51S    | 18:01 | 246 | 18:52                       |
| 2024           | Jan | 04 (Thu) | 06:01                         | 06:51 | 114 | 12:26 51S    | 18:02 | 246 | 18:52                       |
| 2024           | Jan | 05 (Fri) | 06:01                         | 06:51 | 113 | 12:27 52S    | 18:02 | 247 | 18:53                       |
| 2024           | Jan | 06 (Sat) | 06:02                         | 06:52 | 113 | 12:27 52S    | 18:03 | 247 | 18:53                       |
| 2024           | Jan | 07 (Sun) | 06:02                         | 06:52 | 113 | 12:28 52S    | 18:04 | 247 | 18:54                       |
| 2024           | Jan | 08 (Mon) | 06:02                         | 06:52 | 113 | 12:28 52S    | 18:04 | 247 | 18:54                       |
| 2024           | Jan | 09 (Tue) | 06:03                         | 06:53 | 113 | 12:29 52S    | 18:05 | 247 | 18:55                       |
| 2024           | Jan | 10 (Wed) | 06:03                         | 06:53 | 113 | 12:29 52S    | 18:06 | 247 | 18:55                       |
| 2024           | Jan | 11 (Thu) | 06:03                         | 06:53 | 113 | 12:30 52S    | 18:06 | 247 | 18:56                       |
| 2024           | Jan | 12 (Fri) | 06:03                         | 06:53 | 112 | 12:30 53S    | 18:07 | 248 | 18:57                       |
| 2024           | Jan | 13 (Sat) | 06:04                         | 06:53 | 112 | 12:30 53S    | 18:07 | 248 | 18:57                       |
| 2024           | Jan | 14 (Sun) | 06:04                         | 06:53 | 112 | 12:31 53S    | 18:08 | 248 | 18:58                       |
| 2024           | Jan | 15 (Mon) | 06:04                         | 06:54 | 112 | 12:31 53S    | 18:09 | 248 | 18:58                       |
| 2024           | Jan | 16 (Tue) | 06:04                         | 06:54 | 112 | 12:31 53S    | 18:09 | 248 | 18:59                       |
| 2024           | Jan | 17 (Wed) | 06:04                         | 06:54 | 112 | 12:32 53S    | 18:10 | 249 | 18:59                       |
| 2024           | Jan | 18 (Thu) | 06:04                         | 06:54 | 111 | 12:32 54S    | 18:10 | 249 | 19:00                       |
| 2024           | Jan | 19 (Fri) | 06:05                         | 06:54 | 111 | 12:32 54S    | 18:11 | 249 | 19:00                       |
| 2024           | Jan | 20 (Sat) | 06:05                         | 06:54 | 111 | 12:33 54S    | 18:12 | 249 | 19:01                       |
| 2024           | Jan | 21 (Sun) | 06:05                         | 06:54 | 111 | 12:33 54S    | 18:12 | 249 | 19:01                       |
| 2024           | Jan | 22 (Mon) | 06:05                         | 06:54 | 110 | 12:33 54S    | 18:13 | 250 | 19:02                       |
| 2024           | Jan | 23 (Tue) | 06:05                         | 06:54 | 110 | 12:34 55S    | 18:13 | 250 | 19:02                       |
| 2024           | Jan | 24 (Wed) | 06:05                         | 06:54 | 110 | 12:34 55S    | 18:14 | 250 | 19:03                       |
| 2024           | Jan | 25 (Thu) | 06:05                         | 06:54 | 110 | 12:34 55S    | 18:14 | 250 | 19:03                       |
| 2024           | Jan | 26 (Fri) | 06:05                         | 06:54 | 109 | 12:34 55S    | 18:15 | 251 | 19:04                       |
| 2024           | Jan | 27 (Sat) | 06:05                         | 06:54 | 109 | 12:34 56S    | 18:15 | 251 | 19:04                       |
| 2024           | Jan | 28 (Sun) | 06:05                         | 06:54 | 109 | 12:35 56S    | 18:16 | 251 | 19:05                       |
| 2024           | Jan | 29 (Mon) | 06:05                         | 06:53 | 109 | 12:35 56S    | 18:17 | 251 | 19:05                       |
| 2024           | Jan | 30 (Tue) | 06:05                         | 06:53 | 108 | 12:35 56S    | 18:17 | 252 | 19:06                       |
| 2024           | Jan | 31 (Wed) | 06:04                         | 06:53 | 108 | 12:35 57S    | 18:18 | 252 | 19:06                       |
| 2024           | Feb | 01 (Thu) | 06:04                         | 06:53 | 108 | 12:35 57S    | 18:18 | 252 | 19:07                       |
| 2024           | Feb | 02 (Fri) | 06:04                         | 06:53 | 108 | 12:35 57S    | 18:19 | 253 | 19:07                       |
| 2024           | Feb | 03 (Sat) | 06:04                         | 06:52 | 107 | 12:36 58S    | 18:19 | 253 | 19:07                       |
| 2024           | Feb | 04 (Sun) | 06:04                         | 06:52 | 107 | 12:36 58S    | 18:20 | 253 | 19:08                       |
| 2024           | Feb | 05 (Mon) | 06:04                         | 06:52 | 107 | 12:36 58S    | 18:20 | 254 | 19:08                       |
| 2024           | Feb | 06 (Tue) | 06:03                         | 06:51 | 106 | 12:36 58S    | 18:20 | 254 | 19:09                       |
| 2024           | Feb | 07 (Wed) | 06:03                         | 06:51 | 106 | 12:36 59S    | 18:21 | 254 | 19:09                       |
| 2024           | Feb | 08 (Thu) | 06:03                         | 06:51 | 106 | 12:36 59S    | 18:21 | 255 | 19:09                       |
| 2024           | Feb | 09 (Fri) | 06:03                         | 06:50 | 105 | 12:36 59S    | 18:22 | 255 | 19:10                       |
| 2024           | Feb | 10 (Sat) | 06:02                         | 06:50 | 105 | 12:36 60S    | 18:22 | 255 | 19:10                       |
| 2024           | Feb | 11 (Sun) | 06:02                         | 06:50 | 105 | 12:36 60S    | 18:23 | 256 | 19:10                       |
| 2024           | Feb | 12 (Mon) | 06:02                         | 06:49 | 104 | 12:36 60S    | 18:23 | 256 | 19:11                       |
| 2024           | Feb | 13 (Tue) | 06:01                         | 06:49 | 104 | 12:36 61S    | 18:23 | 256 | 19:11                       |
| 2024           | Feb | 14 (Wed) | 06:01                         | 06:48 | 104 | 12:36 61S    | 18:24 | 257 | 19:11                       |
| 2024           | Feb | 15 (Thu) | 06:00                         | 06:48 | 103 | 12:36 61S    | 18:24 | 257 | 19:12                       |
| 2024           | Feb | 16 (Fri) | 06:00                         | 06:48 | 103 | 12:36 62S    | 18:25 | 257 | 19:12                       |
| 2024           | Feb | 17 (Sat) | 06:00                         | 06:47 | 103 | 12:36 62S    | 18:25 | 258 | 19:12                       |
| 2024           | Feb | 18 (Sun) | 05:59                         | 06:47 | 102 | 12:36 62S    | 18:25 | 258 | 19:13                       |
| 2024           | Feb | 19 (Mon) | 05:59                         | 06:46 | 102 | 12:36 63S    | 18:26 | 258 | 19:13                       |
| 2024           | Feb | 20 (Tue) | 05:58                         | 06:46 | 101 | 12:36 63S    | 18:26 | 259 | 19:13                       |
| 2024           | Feb | 21 (Wed) | 05:58                         | 06:45 | 101 | 12:36 63S    | 18:26 | 259 | 19:14                       |
| 2024           | Feb | 22 (Thu) | 05:57                         | 06:44 | 101 | 12:35 64S    | 18:27 | 260 | 19:14                       |
| 2024           | Feb | 23 (Fri) | 05:57                         | 06:44 | 100 | 12:35 64S    | 18:27 | 260 | 19:14                       |
| 2024           | Feb | 24 (Sat) | 05:56                         | 06:43 | 100 | 12:35 65S    | 18:27 | 260 | 19:14                       |
| 2024           | Feb | 25 (Sun) | 05:56                         | 06:43 | 100 | 12:35 65S    | 18:28 | 261 | 19:15                       |
| 2024           | Feb | 26 (Mon) | 05:55                         | 06:42 | 99  | 12:35 65S    | 18:28 | 261 | 19:15                       |
| 2024           | Feb | 27 (Tue) | 05:55                         | 06:42 | 99  | 12:35 66S    | 18:28 | 261 | 19:15                       |
| 2024           | Feb | 28 (Wed) | 05:54                         | 06:41 | 98  | 12:35 66S    | 18:28 | 262 | 19:15                       |
| 2024           | Feb | 29 (Thu) | 05:53                         | 06:40 | 98  | 12:34 66S    | 18:29 | 262 | 19:16                       |

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

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

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

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

|      |     |    |       |       |       |     |       |     |       |     |       |
|------|-----|----|-------|-------|-------|-----|-------|-----|-------|-----|-------|
| 2024 | Dec | 14 | (Sat) | 05:51 | 06:42 | 114 | 12:17 | 51S | 17:51 | 246 | 18:42 |
| 2024 | Dec | 15 | (Sun) | 05:52 | 06:42 | 114 | 12:17 | 51S | 17:52 | 246 | 18:42 |
| 2024 | Dec | 16 | (Mon) | 05:53 | 06:43 | 114 | 12:18 | 51S | 17:52 | 246 | 18:43 |
| 2024 | Dec | 17 | (Tue) | 05:53 | 06:44 | 114 | 12:18 | 51S | 17:53 | 246 | 18:43 |
| 2024 | Dec | 18 | (Wed) | 05:54 | 06:44 | 114 | 12:19 | 51S | 17:53 | 246 | 18:44 |
| 2024 | Dec | 19 | (Thu) | 05:54 | 06:45 | 114 | 12:19 | 51S | 17:54 | 246 | 18:44 |
| 2024 | Dec | 20 | (Fri) | 05:55 | 06:45 | 114 | 12:20 | 51S | 17:54 | 246 | 18:45 |
| 2024 | Dec | 21 | (Sat) | 05:55 | 06:46 | 114 | 12:20 | 51S | 17:55 | 246 | 18:45 |
| 2024 | Dec | 22 | (Sun) | 05:56 | 06:46 | 114 | 12:21 | 51S | 17:55 | 246 | 18:46 |
| 2024 | Dec | 23 | (Mon) | 05:56 | 06:47 | 114 | 12:21 | 51S | 17:56 | 246 | 18:46 |
| 2024 | Dec | 24 | (Tue) | 05:57 | 06:47 | 114 | 12:22 | 51S | 17:56 | 246 | 18:47 |
| 2024 | Dec | 25 | (Wed) | 05:57 | 06:47 | 114 | 12:22 | 51S | 17:57 | 246 | 18:47 |
| 2024 | Dec | 26 | (Thu) | 05:58 | 06:48 | 114 | 12:23 | 51S | 17:57 | 246 | 18:48 |
| 2024 | Dec | 27 | (Fri) | 05:58 | 06:48 | 114 | 12:23 | 51S | 17:58 | 246 | 18:48 |
| 2024 | Dec | 28 | (Sat) | 05:58 | 06:49 | 114 | 12:24 | 51S | 17:58 | 246 | 18:49 |
| 2024 | Dec | 29 | (Sun) | 05:59 | 06:49 | 114 | 12:24 | 51S | 17:59 | 246 | 18:49 |
| 2024 | Dec | 30 | (Mon) | 05:59 | 06:50 | 114 | 12:24 | 51S | 17:59 | 246 | 18:50 |
| 2024 | Dec | 31 | (Tue) | 06:00 | 06:50 | 114 | 12:25 | 51S | 18:00 | 246 | 18:50 |

Sun

Kamphaeng Phet  
Location: E 99°31'40.8", N16°28'22.8", 0m  
(Longitude referred to Greenwich meridian)

Time Zone: 7h 00m east of Greenwich

| Date<br>(Zone) | Begin<br>Civil<br>Twilight |    |       | Rise Az. |       |     | Transit Alt. |     |  | Set Az. |     |  | End<br>Civil<br>Twilight |  |  |
|----------------|----------------------------|----|-------|----------|-------|-----|--------------|-----|--|---------|-----|--|--------------------------|--|--|
|                | h m                        |    |       | h m °    |       |     | h m °        |     |  | h m °   |     |  | h m                      |  |  |
| 2024           | Jan                        | 01 | (Mon) | 06:27    | 06:50 | 114 | 12:25        | 51S |  | 18:00   | 246 |  | 18:24                    |  |  |
| 2024           | Jan                        | 02 | (Tue) | 06:27    | 06:50 | 114 | 12:26        | 51S |  | 18:01   | 246 |  | 18:24                    |  |  |
| 2024           | Jan                        | 03 | (Wed) | 06:27    | 06:51 | 114 | 12:26        | 51S |  | 18:01   | 246 |  | 18:25                    |  |  |
| 2024           | Jan                        | 04 | (Thu) | 06:28    | 06:51 | 114 | 12:26        | 51S |  | 18:02   | 246 |  | 18:25                    |  |  |
| 2024           | Jan                        | 05 | (Fri) | 06:28    | 06:51 | 113 | 12:27        | 52S |  | 18:02   | 247 |  | 18:26                    |  |  |
| 2024           | Jan                        | 06 | (Sat) | 06:28    | 06:52 | 113 | 12:27        | 52S |  | 18:03   | 247 |  | 18:26                    |  |  |
| 2024           | Jan                        | 07 | (Sun) | 06:29    | 06:52 | 113 | 12:28        | 52S |  | 18:04   | 247 |  | 18:27                    |  |  |
| 2024           | Jan                        | 08 | (Mon) | 06:29    | 06:52 | 113 | 12:28        | 52S |  | 18:04   | 247 |  | 18:28                    |  |  |
| 2024           | Jan                        | 09 | (Tue) | 06:29    | 06:53 | 113 | 12:29        | 52S |  | 18:05   | 247 |  | 18:28                    |  |  |
| 2024           | Jan                        | 10 | (Wed) | 06:30    | 06:53 | 113 | 12:29        | 52S |  | 18:06   | 247 |  | 18:29                    |  |  |
| 2024           | Jan                        | 11 | (Thu) | 06:30    | 06:53 | 113 | 12:30        | 52S |  | 18:06   | 247 |  | 18:29                    |  |  |
| 2024           | Jan                        | 12 | (Fri) | 06:30    | 06:53 | 112 | 12:30        | 53S |  | 18:07   | 248 |  | 18:30                    |  |  |
| 2024           | Jan                        | 13 | (Sat) | 06:30    | 06:53 | 112 | 12:30        | 53S |  | 18:07   | 248 |  | 18:31                    |  |  |
| 2024           | Jan                        | 14 | (Sun) | 06:30    | 06:53 | 112 | 12:31        | 53S |  | 18:08   | 248 |  | 18:31                    |  |  |
| 2024           | Jan                        | 15 | (Mon) | 06:31    | 06:54 | 112 | 12:31        | 53S |  | 18:09   | 248 |  | 18:32                    |  |  |
| 2024           | Jan                        | 16 | (Tue) | 06:31    | 06:54 | 112 | 12:31        | 53S |  | 18:09   | 248 |  | 18:32                    |  |  |
| 2024           | Jan                        | 17 | (Wed) | 06:31    | 06:54 | 112 | 12:32        | 53S |  | 18:10   | 249 |  | 18:33                    |  |  |
| 2024           | Jan                        | 18 | (Thu) | 06:31    | 06:54 | 111 | 12:32        | 54S |  | 18:10   | 249 |  | 18:33                    |  |  |
| 2024           | Jan                        | 19 | (Fri) | 06:31    | 06:54 | 111 | 12:32        | 54S |  | 18:11   | 249 |  | 18:34                    |  |  |
| 2024           | Jan                        | 20 | (Sat) | 06:31    | 06:54 | 111 | 12:33        | 54S |  | 18:12   | 249 |  | 18:34                    |  |  |
| 2024           | Jan                        | 21 | (Sun) | 06:31    | 06:54 | 111 | 12:33        | 54S |  | 18:12   | 249 |  | 18:35                    |  |  |
| 2024           | Jan                        | 22 | (Mon) | 06:31    | 06:54 | 110 | 12:33        | 54S |  | 18:13   | 250 |  | 18:36                    |  |  |
| 2024           | Jan                        | 23 | (Tue) | 06:31    | 06:54 | 110 | 12:34        | 55S |  | 18:13   | 250 |  | 18:36                    |  |  |
| 2024           | Jan                        | 24 | (Wed) | 06:31    | 06:54 | 110 | 12:34        | 55S |  | 18:14   | 250 |  | 18:37                    |  |  |
| 2024           | Jan                        | 25 | (Thu) | 06:31    | 06:54 | 110 | 12:34        | 55S |  | 18:14   | 250 |  | 18:37                    |  |  |
| 2024           | Jan                        | 26 | (Fri) | 06:31    | 06:54 | 109 | 12:34        | 55S |  | 18:15   | 251 |  | 18:38                    |  |  |
| 2024           | Jan                        | 27 | (Sat) | 06:31    | 06:54 | 109 | 12:34        | 56S |  | 18:15   | 251 |  | 18:38                    |  |  |
| 2024           | Jan                        | 28 | (Sun) | 06:31    | 06:54 | 109 | 12:35        | 56S |  | 18:16   | 251 |  | 18:39                    |  |  |
| 2024           | Jan                        | 29 | (Mon) | 06:31    | 06:53 | 109 | 12:35        | 56S |  | 18:17   | 251 |  | 18:39                    |  |  |
| 2024           | Jan                        | 30 | (Tue) | 06:31    | 06:53 | 108 | 12:35        | 56S |  | 18:17   | 252 |  | 18:40                    |  |  |
| 2024           | Jan                        | 31 | (Wed) | 06:30    | 06:53 | 108 | 12:35        | 57S |  | 18:18   | 252 |  | 18:40                    |  |  |
| 2024           | Feb                        | 01 | (Thu) | 06:30    | 06:53 | 108 | 12:35        | 57S |  | 18:18   | 252 |  | 18:41                    |  |  |
| 2024           | Feb                        | 02 | (Fri) | 06:30    | 06:53 | 108 | 12:35        | 57S |  | 18:19   | 253 |  | 18:41                    |  |  |
| 2024           | Feb                        | 03 | (Sat) | 06:30    | 06:52 | 107 | 12:36        | 58S |  | 18:19   | 253 |  | 18:41                    |  |  |
| 2024           | Feb                        | 04 | (Sun) | 06:30    | 06:52 | 107 | 12:36        | 58S |  | 18:20   | 253 |  | 18:42                    |  |  |
| 2024           | Feb                        | 05 | (Mon) | 06:29    | 06:52 | 107 | 12:36        | 58S |  | 18:20   | 254 |  | 18:42                    |  |  |
| 2024           | Feb                        | 06 | (Tue) | 06:29    | 06:51 | 106 | 12:36        | 58S |  | 18:20   | 254 |  | 18:43                    |  |  |
| 2024           | Feb                        | 07 | (Wed) | 06:29    | 06:51 | 106 | 12:36        | 59S |  | 18:21   | 254 |  | 18:43                    |  |  |
| 2024           | Feb                        | 08 | (Thu) | 06:29    | 06:51 | 106 | 12:36        | 59S |  | 18:21   | 255 |  | 18:44                    |  |  |
| 2024           | Feb                        | 09 | (Fri) | 06:28    | 06:50 | 105 | 12:36        | 59S |  | 18:22   | 255 |  | 18:44                    |  |  |
| 2024           | Feb                        | 10 | (Sat) | 06:28    | 06:50 | 105 | 12:36        | 60S |  | 18:22   | 255 |  | 18:44                    |  |  |

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

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

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

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

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

# Moon

Kamphaeng Phet  
Location: E 99°31'40.8", N16°28'22.8", 0m  
(Longitude referred to Greenwich meridian)

Time Zone: 7h 00m east of Greenwich

| Date<br>(Zone)    | Rise Az. |     |   | Transit Alt. |     |   | Set Az. |     |   |
|-------------------|----------|-----|---|--------------|-----|---|---------|-----|---|
|                   | h        | m   | ° | h            | m   | ° | h       | m   | ° |
| 2024 Jan 01 (Mon) | 22:33    | 80  |   | 04:13        | 87S |   | 10:38   | 282 |   |
| 2024 Jan 02 (Tue) | 23:19    | 86  |   | 04:53        | 82S |   | 11:11   | 277 |   |
| 2024 Jan 03 (Wed) |          |     |   | 05:33        | 76S |   | 11:43   | 271 |   |
| 2024 Jan 04 (Thu) | 00:05    | 92  |   | 06:12        | 70S |   | 12:15   | 265 |   |
| 2024 Jan 05 (Fri) | 00:52    | 98  |   | 06:52        | 65S |   | 12:49   | 259 |   |
| 2024 Jan 06 (Sat) | 01:41    | 104 |   | 07:35        | 59S |   | 13:26   | 253 |   |
| 2024 Jan 07 (Sun) | 02:34    | 110 |   | 08:22        | 54S |   | 14:07   | 248 |   |
| 2024 Jan 08 (Mon) | 03:31    | 114 |   | 09:14        | 50S |   | 14:54   | 244 |   |
| 2024 Jan 09 (Tue) | 04:32    | 118 |   | 10:11        | 47S |   | 15:48   | 241 |   |
| 2024 Jan 10 (Wed) | 05:35    | 119 |   | 11:12        | 45S |   | 16:49   | 240 |   |
| 2024 Jan 11 (Thu) | 06:38    | 119 |   | 12:16        | 46S |   | 17:55   | 242 |   |
| 2024 Jan 12 (Fri) | 07:38    | 117 |   | 13:19        | 49S |   | 19:02   | 245 |   |
| 2024 Jan 13 (Sat) | 08:32    | 112 |   | 14:18        | 54S |   | 20:08   | 251 |   |
| 2024 Jan 14 (Sun) | 09:20    | 106 |   | 15:14        | 60S |   | 21:11   | 257 |   |
| 2024 Jan 15 (Mon) | 10:04    | 99  |   | 16:05        | 67S |   | 22:10   | 264 |   |
| 2024 Jan 16 (Tue) | 10:45    | 92  |   | 16:54        | 74S |   | 23:07   | 272 |   |
| 2024 Jan 17 (Wed) | 11:24    | 85  |   | 17:42        | 81S |   |         |     |   |
| 2024 Jan 18 (Thu) | 12:04    | 78  |   | 18:30        | 87S |   | 00:03   | 279 |   |
| 2024 Jan 19 (Fri) | 12:45    | 72  |   | 19:19        | 88N |   | 01:00   | 285 |   |
| 2024 Jan 20 (Sat) | 13:30    | 67  |   | 20:11        | 84N |   | 01:57   | 291 |   |
| 2024 Jan 21 (Sun) | 14:18    | 63  |   | 21:04        | 81N |   | 02:55   | 295 |   |
| 2024 Jan 22 (Mon) | 15:09    | 61  |   | 22:00        | 79N |   | 03:54   | 298 |   |
| 2024 Jan 23 (Tue) | 16:04    | 61  |   | 22:55        | 79N |   | 04:51   | 299 |   |

|      |     |    |       |       |     |       |     |       |     |
|------|-----|----|-------|-------|-----|-------|-----|-------|-----|
| 2024 | Jan | 24 | (Wed) | 17:00 | 62  | 23:48 | 81N | 05:45 | 299 |
| 2024 | Jan | 25 | (Thu) | 17:55 | 64  |       |     | 06:35 | 297 |
| 2024 | Jan | 26 | (Fri) | 18:48 | 68  | 00:39 | 83N | 07:20 | 294 |
| 2024 | Jan | 27 | (Sat) | 19:39 | 73  | 01:26 | 87N | 08:00 | 289 |
| 2024 | Jan | 28 | (Sun) | 20:27 | 78  | 02:09 | 89S | 08:36 | 284 |
| 2024 | Jan | 29 | (Mon) | 21:14 | 84  | 02:50 | 84S | 09:10 | 279 |
| 2024 | Jan | 30 | (Tue) | 22:00 | 90  | 03:30 | 78S | 09:42 | 273 |
| 2024 | Jan | 31 | (Wed) | 22:46 | 96  | 04:09 | 72S | 10:14 | 267 |
| 2024 | Feb | 01 | (Thu) | 23:33 | 102 | 04:48 | 67S | 10:47 | 261 |
| 2024 | Feb | 02 | (Fri) |       |     | 05:29 | 61S | 11:22 | 255 |
| 2024 | Feb | 03 | (Sat) | 00:23 | 108 | 06:13 | 56S | 12:00 | 250 |
| 2024 | Feb | 04 | (Sun) | 01:17 | 113 | 07:01 | 51S | 12:43 | 246 |
| 2024 | Feb | 05 | (Mon) | 02:14 | 116 | 07:54 | 48S | 13:32 | 242 |
| 2024 | Feb | 06 | (Tue) | 03:15 | 119 | 08:52 | 46S | 14:29 | 240 |
| 2024 | Feb | 07 | (Wed) | 04:17 | 120 | 09:54 | 45S | 15:32 | 241 |
| 2024 | Feb | 08 | (Thu) | 05:19 | 118 | 10:57 | 47S | 16:38 | 243 |
| 2024 | Feb | 09 | (Fri) | 06:16 | 115 | 11:59 | 51S | 17:46 | 248 |
| 2024 | Feb | 10 | (Sat) | 07:08 | 109 | 12:58 | 57S | 18:52 | 254 |
| 2024 | Feb | 11 | (Sun) | 07:55 | 103 | 13:53 | 63S | 19:54 | 261 |
| 2024 | Feb | 12 | (Mon) | 08:38 | 95  | 14:44 | 71S | 20:55 | 269 |
| 2024 | Feb | 13 | (Tue) | 09:20 | 88  | 15:34 | 78S | 21:53 | 276 |
| 2024 | Feb | 14 | (Wed) | 10:01 | 80  | 16:24 | 85S | 22:52 | 283 |
| 2024 | Feb | 15 | (Thu) | 10:43 | 74  | 17:14 | 90N | 23:50 | 289 |
| 2024 | Feb | 16 | (Fri) | 11:27 | 68  | 18:06 | 85N |       |     |
| 2024 | Feb | 17 | (Sat) | 12:14 | 64  | 19:00 | 81N | 00:49 | 294 |
| 2024 | Feb | 18 | (Sun) | 13:05 | 61  | 19:55 | 79N | 01:49 | 298 |
| 2024 | Feb | 19 | (Mon) | 13:59 | 60  | 20:51 | 79N | 02:47 | 299 |
| 2024 | Feb | 20 | (Tue) | 14:54 | 61  | 21:44 | 80N | 03:42 | 299 |
| 2024 | Feb | 21 | (Wed) | 15:50 | 63  | 22:35 | 82N | 04:32 | 298 |
| 2024 | Feb | 22 | (Thu) | 16:43 | 67  | 23:23 | 86N | 05:18 | 295 |
| 2024 | Feb | 23 | (Fri) | 17:34 | 71  |       |     | 05:59 | 291 |
| 2024 | Feb | 24 | (Sat) | 18:23 | 77  | 00:07 | 91N | 06:37 | 286 |
| 2024 | Feb | 25 | (Sun) | 19:10 | 82  | 00:49 | 86S | 07:11 | 281 |
| 2024 | Feb | 26 | (Mon) | 19:56 | 88  | 01:29 | 80S | 07:44 | 275 |
| 2024 | Feb | 27 | (Tue) | 20:42 | 94  | 02:08 | 74S | 08:16 | 269 |
| 2024 | Feb | 28 | (Wed) | 21:29 | 100 | 02:47 | 68S | 08:48 | 263 |
| 2024 | Feb | 29 | (Thu) | 22:18 | 106 | 03:27 | 63S | 09:21 | 257 |
| 2024 | Mar | 01 | (Fri) | 23:09 | 111 | 04:09 | 57S | 09:57 | 252 |
| 2024 | Mar | 02 | (Sat) |       |     | 04:55 | 53S | 10:38 | 247 |
| 2024 | Mar | 03 | (Sun) | 00:04 | 115 | 05:45 | 49S | 11:23 | 243 |
| 2024 | Mar | 04 | (Mon) | 01:02 | 118 | 06:39 | 46S | 12:15 | 241 |
| 2024 | Mar | 05 | (Tue) | 02:02 | 120 | 07:37 | 45S | 13:13 | 240 |
| 2024 | Mar | 06 | (Wed) | 03:01 | 119 | 08:38 | 46S | 14:17 | 242 |
| 2024 | Mar | 07 | (Thu) | 03:59 | 117 | 09:39 | 49S | 15:22 | 245 |
| 2024 | Mar | 08 | (Fri) | 04:52 | 112 | 10:38 | 53S | 16:28 | 250 |
| 2024 | Mar | 09 | (Sat) | 05:41 | 106 | 11:35 | 60S | 17:32 | 257 |
| 2024 | Mar | 10 | (Sun) | 06:27 | 99  | 12:28 | 67S | 18:34 | 265 |
| 2024 | Mar | 11 | (Mon) | 07:10 | 91  | 13:20 | 74S | 19:35 | 272 |
| 2024 | Mar | 12 | (Tue) | 07:52 | 84  | 14:11 | 82S | 20:35 | 280 |
| 2024 | Mar | 13 | (Wed) | 08:35 | 77  | 15:03 | 89S | 21:36 | 287 |
| 2024 | Mar | 14 | (Thu) | 09:19 | 70  | 15:56 | 87N | 22:37 | 293 |
| 2024 | Mar | 15 | (Fri) | 10:07 | 65  | 16:52 | 82N | 23:39 | 297 |
| 2024 | Mar | 16 | (Sat) | 10:59 | 62  | 17:48 | 80N |       |     |
| 2024 | Mar | 17 | (Sun) | 11:53 | 60  | 18:45 | 78N | 00:39 | 299 |
| 2024 | Mar | 18 | (Mon) | 12:49 | 60  | 19:40 | 79N | 01:37 | 300 |
| 2024 | Mar | 19 | (Tue) | 13:45 | 62  | 20:32 | 81N | 02:29 | 299 |
| 2024 | Mar | 20 | (Wed) | 14:39 | 65  | 21:21 | 85N | 03:17 | 296 |
| 2024 | Mar | 21 | (Thu) | 15:30 | 70  | 22:06 | 89N | 03:59 | 292 |
| 2024 | Mar | 22 | (Fri) | 16:20 | 75  | 22:48 | 87S | 04:38 | 288 |
| 2024 | Mar | 23 | (Sat) | 17:07 | 80  | 23:28 | 82S | 05:13 | 282 |
| 2024 | Mar | 24 | (Sun) | 17:54 | 86  |       |     | 05:46 | 277 |
| 2024 | Mar | 25 | (Mon) | 18:40 | 92  | 00:07 | 76S | 06:18 | 271 |
| 2024 | Mar | 26 | (Tue) | 19:26 | 98  | 00:46 | 70S | 06:50 | 265 |
| 2024 | Mar | 27 | (Wed) | 20:14 | 104 | 01:26 | 64S | 07:23 | 259 |
| 2024 | Mar | 28 | (Thu) | 21:05 | 110 | 02:08 | 59S | 07:58 | 253 |
| 2024 | Mar | 29 | (Fri) | 21:59 | 114 | 02:52 | 54S | 08:37 | 248 |
| 2024 | Mar | 30 | (Sat) | 22:55 | 118 | 03:41 | 50S | 09:20 | 244 |
| 2024 | Mar | 31 | (Sun) | 23:53 | 120 | 04:33 | 47S | 10:09 | 241 |
| 2024 | Apr | 01 | (Mon) |       |     | 05:29 | 45S | 11:04 | 240 |
| 2024 | Apr | 02 | (Tue) | 00:52 | 120 | 06:27 | 45S | 12:04 | 241 |
| 2024 | Apr | 03 | (Wed) | 01:48 | 118 | 07:26 | 47S | 13:06 | 243 |
| 2024 | Apr | 04 | (Thu) | 02:41 | 115 | 08:24 | 51S | 14:10 | 248 |

|                   |           |           |           |
|-------------------|-----------|-----------|-----------|
| 2024 Apr 05 (Fri) | 03:30 109 | 09:20 56S | 15:12 253 |
| 2024 Apr 06 (Sat) | 04:16 103 | 10:13 63S | 16:14 261 |
| 2024 Apr 07 (Sun) | 04:59 96  | 11:04 70S | 17:14 268 |
| 2024 Apr 08 (Mon) | 05:41 88  | 11:55 78S | 18:14 276 |
| 2024 Apr 09 (Tue) | 06:23 80  | 12:47 85S | 19:16 283 |
| 2024 Apr 10 (Wed) | 07:07 73  | 13:41 90N | 20:18 290 |
| 2024 Apr 11 (Thu) | 07:55 67  | 14:36 84N | 21:22 295 |
| 2024 Apr 12 (Fri) | 08:47 63  | 15:34 81N | 22:25 298 |
| 2024 Apr 13 (Sat) | 09:42 61  | 16:33 79N | 23:26 300 |
| 2024 Apr 14 (Sun) | 10:39 60  | 17:31 79N |           |
| 2024 Apr 15 (Mon) | 11:36 61  | 18:25 80N | 00:22 299 |
| 2024 Apr 16 (Tue) | 12:32 64  | 19:16 83N | 01:12 297 |
| 2024 Apr 17 (Wed) | 13:25 68  | 20:03 87N | 01:57 294 |
| 2024 Apr 18 (Thu) | 14:16 73  | 20:46 89S | 02:37 289 |
| 2024 Apr 19 (Fri) | 15:04 78  | 21:27 84S | 03:13 284 |
| 2024 Apr 20 (Sat) | 15:50 84  | 22:06 78S | 03:47 279 |
| 2024 Apr 21 (Sun) | 16:36 90  | 22:45 72S | 04:19 273 |
| 2024 Apr 22 (Mon) | 17:23 96  | 23:25 66S | 04:51 267 |
| 2024 Apr 23 (Tue) | 18:10 102 |           | 05:24 261 |
| 2024 Apr 24 (Wed) | 19:01 108 | 00:06 61S | 05:58 255 |
| 2024 Apr 25 (Thu) | 19:54 113 | 00:50 55S | 06:36 250 |
| 2024 Apr 26 (Fri) | 20:50 117 | 01:37 51S | 07:19 245 |
| 2024 Apr 27 (Sat) | 21:48 119 | 02:29 48S | 08:06 242 |
| 2024 Apr 28 (Sun) | 22:46 120 | 03:24 45S | 09:00 240 |
| 2024 Apr 29 (Mon) | 23:43 119 | 04:22 45S | 09:58 240 |
| 2024 Apr 30 (Tue) |           | 05:20 47S | 10:59 242 |
| 2024 May 01 (Wed) | 00:36 116 | 06:17 50S | 12:00 246 |
| 2024 May 02 (Thu) | 01:25 111 | 07:12 54S | 13:01 251 |
| 2024 May 03 (Fri) | 02:10 106 | 08:04 60S | 14:01 258 |
| 2024 May 04 (Sat) | 02:53 99  | 08:54 67S | 14:59 265 |
| 2024 May 05 (Sun) | 03:33 91  | 09:43 74S | 15:58 272 |
| 2024 May 06 (Mon) | 04:14 84  | 10:33 82S | 16:57 280 |
| 2024 May 07 (Tue) | 04:57 77  | 11:25 89S | 17:58 287 |
| 2024 May 08 (Wed) | 05:42 70  | 12:19 87N | 19:01 293 |
| 2024 May 09 (Thu) | 06:32 65  | 13:17 82N | 20:05 297 |
| 2024 May 10 (Fri) | 07:26 62  | 14:17 79N | 21:09 299 |
| 2024 May 11 (Sat) | 08:24 60  | 15:16 79N | 22:09 300 |
| 2024 May 12 (Sun) | 09:23 61  | 16:14 79N | 23:03 298 |
| 2024 May 13 (Mon) | 10:21 63  | 17:08 82N | 23:51 295 |
| 2024 May 14 (Tue) | 11:16 66  | 17:57 86N |           |
| 2024 May 15 (Wed) | 12:09 71  | 18:42 90N | 00:34 291 |
| 2024 May 16 (Thu) | 12:58 76  | 19:24 86S | 01:12 286 |
| 2024 May 17 (Fri) | 13:45 82  | 20:04 80S | 01:47 281 |
| 2024 May 18 (Sat) | 14:31 88  | 20:43 74S | 02:19 275 |
| 2024 May 19 (Sun) | 15:17 94  | 21:22 69S | 02:51 269 |
| 2024 May 20 (Mon) | 16:05 100 | 22:03 63S | 03:23 263 |
| 2024 May 21 (Tue) | 16:54 106 | 22:46 57S | 03:57 257 |
| 2024 May 22 (Wed) | 17:46 111 | 23:32 53S | 04:34 252 |
| 2024 May 23 (Thu) | 18:42 115 |           | 05:15 247 |
| 2024 May 24 (Fri) | 19:40 118 | 00:23 49S | 06:02 243 |
| 2024 May 25 (Sat) | 20:40 120 | 01:18 46S | 06:54 241 |
| 2024 May 26 (Sun) | 21:38 119 | 02:16 45S | 07:52 240 |
| 2024 May 27 (Mon) | 22:33 117 | 03:15 46S | 08:53 242 |
| 2024 May 28 (Tue) | 23:23 113 | 04:13 49S | 09:55 245 |
| 2024 May 29 (Wed) |           | 05:08 53S | 10:56 250 |
| 2024 May 30 (Thu) | 00:09 107 | 06:00 59S | 11:55 256 |
| 2024 May 31 (Fri) | 00:51 101 | 06:50 65S | 12:52 262 |
| 2024 Jun 01 (Sat) | 01:31 94  | 07:38 72S | 13:49 270 |
| 2024 Jun 02 (Sun) | 02:11 87  | 08:26 79S | 14:46 277 |
| 2024 Jun 03 (Mon) | 02:51 79  | 09:15 86S | 15:44 284 |
| 2024 Jun 04 (Tue) | 03:34 73  | 10:07 89N | 16:45 290 |
| 2024 Jun 05 (Wed) | 04:21 67  | 11:02 84N | 17:47 295 |
| 2024 Jun 06 (Thu) | 05:12 63  | 12:00 81N | 18:51 298 |
| 2024 Jun 07 (Fri) | 06:08 61  | 13:00 79N | 19:53 300 |
| 2024 Jun 08 (Sat) | 07:07 60  | 14:00 79N | 20:51 299 |
| 2024 Jun 09 (Sun) | 08:07 62  | 14:56 81N | 21:42 297 |
| 2024 Jun 10 (Mon) | 09:04 65  | 15:48 84N | 22:28 293 |
| 2024 Jun 11 (Tue) | 09:59 69  | 16:35 88N | 23:08 288 |
| 2024 Jun 12 (Wed) | 10:50 74  | 17:19 88S | 23:44 283 |
| 2024 Jun 13 (Thu) | 11:38 80  | 18:00 82S |           |
| 2024 Jun 14 (Fri) | 12:25 86  | 18:39 77S | 00:18 277 |
| 2024 Jun 15 (Sat) | 13:11 92  | 19:18 71S | 00:50 271 |

|      |     |    |       |       |     |       |     |       |     |
|------|-----|----|-------|-------|-----|-------|-----|-------|-----|
| 2024 | Jun | 16 | (Sun) | 13:57 | 98  | 19:58 | 65S | 01:22 | 265 |
| 2024 | Jun | 17 | (Mon) | 14:46 | 104 | 20:39 | 59S | 01:55 | 259 |
| 2024 | Jun | 18 | (Tue) | 15:36 | 109 | 21:24 | 54S | 02:30 | 254 |
| 2024 | Jun | 19 | (Wed) | 16:31 | 114 | 22:13 | 50S | 03:10 | 249 |
| 2024 | Jun | 20 | (Thu) | 17:28 | 117 | 23:07 | 47S | 03:54 | 244 |
| 2024 | Jun | 21 | (Fri) | 18:29 | 119 |       |     | 04:44 | 242 |
| 2024 | Jun | 22 | (Sat) | 19:29 | 120 | 00:05 | 45S | 05:41 | 240 |
| 2024 | Jun | 23 | (Sun) | 20:26 | 118 | 01:05 | 46S | 06:42 | 241 |
| 2024 | Jun | 24 | (Mon) | 21:19 | 114 | 02:05 | 48S | 07:46 | 244 |
| 2024 | Jun | 25 | (Tue) | 22:07 | 109 | 03:02 | 52S | 08:49 | 248 |
| 2024 | Jun | 26 | (Wed) | 22:51 | 103 | 03:57 | 57S | 09:49 | 254 |
| 2024 | Jun | 27 | (Thu) | 23:31 | 96  | 04:47 | 63S | 10:48 | 261 |
| 2024 | Jun | 28 | (Fri) |       |     | 05:36 | 70S | 11:45 | 268 |
| 2024 | Jun | 29 | (Sat) | 00:11 | 89  | 06:24 | 77S | 12:41 | 275 |
| 2024 | Jun | 30 | (Sun) | 00:50 | 81  | 07:12 | 84S | 13:38 | 282 |
| 2024 | Jul | 01 | (Mon) | 01:31 | 75  | 08:01 | 90S | 14:36 | 288 |
| 2024 | Jul | 02 | (Tue) | 02:16 | 69  | 08:54 | 86N | 15:37 | 294 |
| 2024 | Jul | 03 | (Wed) | 03:04 | 64  | 09:50 | 82N | 16:39 | 297 |
| 2024 | Jul | 04 | (Thu) | 03:58 | 61  | 10:48 | 79N | 17:40 | 299 |
| 2024 | Jul | 05 | (Fri) | 04:55 | 60  | 11:47 | 79N | 18:39 | 299 |
| 2024 | Jul | 06 | (Sat) | 05:54 | 61  | 12:44 | 80N | 19:33 | 298 |
| 2024 | Jul | 07 | (Sun) | 06:52 | 64  | 13:38 | 83N | 20:21 | 294 |
| 2024 | Jul | 08 | (Mon) | 07:48 | 67  | 14:28 | 87N | 21:04 | 290 |
| 2024 | Jul | 09 | (Tue) | 08:41 | 72  | 15:13 | 90S | 21:41 | 285 |
| 2024 | Jul | 10 | (Wed) | 09:31 | 78  | 15:55 | 84S | 22:16 | 279 |
| 2024 | Jul | 11 | (Thu) | 10:18 | 84  | 16:35 | 79S | 22:49 | 273 |
| 2024 | Jul | 12 | (Fri) | 11:04 | 90  | 17:14 | 73S | 23:20 | 267 |
| 2024 | Jul | 13 | (Sat) | 11:50 | 96  | 17:53 | 67S | 23:53 | 261 |
| 2024 | Jul | 14 | (Sun) | 12:37 | 102 | 18:34 | 61S |       |     |
| 2024 | Jul | 15 | (Mon) | 13:26 | 107 | 19:17 | 56S | 00:27 | 256 |
| 2024 | Jul | 16 | (Tue) | 14:19 | 112 | 20:03 | 52S | 01:04 | 250 |
| 2024 | Jul | 17 | (Wed) | 15:14 | 116 | 20:54 | 48S | 01:45 | 246 |
| 2024 | Jul | 18 | (Thu) | 16:13 | 119 | 21:50 | 46S | 02:33 | 243 |
| 2024 | Jul | 19 | (Fri) | 17:14 | 120 | 22:50 | 45S | 03:26 | 241 |
| 2024 | Jul | 20 | (Sat) | 18:13 | 119 | 23:51 | 47S | 04:26 | 240 |
| 2024 | Jul | 21 | (Sun) | 19:09 | 116 |       |     | 05:30 | 242 |
| 2024 | Jul | 22 | (Mon) | 20:00 | 111 | 00:51 | 50S | 06:35 | 246 |
| 2024 | Jul | 23 | (Tue) | 20:47 | 105 | 01:48 | 55S | 07:38 | 252 |
| 2024 | Jul | 24 | (Wed) | 21:29 | 98  | 02:41 | 61S | 08:39 | 258 |
| 2024 | Jul | 25 | (Thu) | 22:10 | 91  | 03:32 | 68S | 09:38 | 266 |
| 2024 | Jul | 26 | (Fri) | 22:50 | 83  | 04:21 | 75S | 10:36 | 273 |
| 2024 | Jul | 27 | (Sat) | 23:31 | 76  | 05:09 | 82S | 11:33 | 280 |
| 2024 | Jul | 28 | (Sun) |       |     | 05:59 | 89S | 12:31 | 287 |
| 2024 | Jul | 29 | (Mon) | 00:14 | 70  | 06:50 | 87N | 13:31 | 292 |
| 2024 | Jul | 30 | (Tue) | 01:01 | 65  | 07:45 | 83N | 14:32 | 297 |
| 2024 | Jul | 31 | (Wed) | 01:52 | 62  | 08:42 | 80N | 15:33 | 299 |
| 2024 | Aug | 01 | (Thu) | 02:47 | 60  | 09:39 | 79N | 16:32 | 300 |
| 2024 | Aug | 02 | (Fri) | 03:45 | 61  | 10:37 | 79N | 17:26 | 299 |
| 2024 | Aug | 03 | (Sat) | 04:43 | 62  | 11:31 | 81N | 18:16 | 296 |
| 2024 | Aug | 04 | (Sun) | 05:40 | 66  | 12:22 | 85N | 19:00 | 292 |
| 2024 | Aug | 05 | (Mon) | 06:34 | 70  | 13:08 | 90N | 19:39 | 287 |
| 2024 | Aug | 06 | (Tue) | 07:24 | 76  | 13:52 | 86S | 20:15 | 281 |
| 2024 | Aug | 07 | (Wed) | 08:13 | 81  | 14:32 | 81S | 20:48 | 275 |
| 2024 | Aug | 08 | (Thu) | 08:59 | 88  | 15:11 | 75S | 21:20 | 269 |
| 2024 | Aug | 09 | (Fri) | 09:45 | 94  | 15:50 | 69S | 21:52 | 263 |
| 2024 | Aug | 10 | (Sat) | 10:31 | 100 | 16:30 | 63S | 22:25 | 258 |
| 2024 | Aug | 11 | (Sun) | 11:19 | 105 | 17:11 | 58S | 23:00 | 252 |
| 2024 | Aug | 12 | (Mon) | 12:09 | 110 | 17:55 | 53S | 23:39 | 248 |
| 2024 | Aug | 13 | (Tue) | 13:02 | 115 | 18:44 | 49S |       |     |
| 2024 | Aug | 14 | (Wed) | 13:59 | 118 | 19:36 | 46S | 00:23 | 244 |
| 2024 | Aug | 15 | (Thu) | 14:58 | 120 | 20:33 | 45S | 01:13 | 241 |
| 2024 | Aug | 16 | (Fri) | 15:57 | 120 | 21:33 | 46S | 02:09 | 240 |
| 2024 | Aug | 17 | (Sat) | 16:54 | 118 | 22:33 | 48S | 03:10 | 241 |
| 2024 | Aug | 18 | (Sun) | 17:48 | 114 | 23:32 | 52S | 04:15 | 244 |
| 2024 | Aug | 19 | (Mon) | 18:37 | 108 |       |     | 05:19 | 249 |
| 2024 | Aug | 20 | (Tue) | 19:22 | 101 | 00:28 | 58S | 06:23 | 255 |
| 2024 | Aug | 21 | (Wed) | 20:05 | 94  | 01:21 | 65S | 07:24 | 262 |
| 2024 | Aug | 22 | (Thu) | 20:46 | 86  | 02:12 | 72S | 08:24 | 270 |
| 2024 | Aug | 23 | (Fri) | 21:28 | 79  | 03:02 | 80S | 09:23 | 278 |
| 2024 | Aug | 24 | (Sat) | 22:11 | 72  | 03:53 | 87S | 10:23 | 285 |
| 2024 | Aug | 25 | (Sun) | 22:58 | 67  | 04:45 | 89N | 11:24 | 291 |
| 2024 | Aug | 26 | (Mon) | 23:48 | 63  | 05:40 | 84N | 12:26 | 296 |

|                   |           |           |           |
|-------------------|-----------|-----------|-----------|
| 2024 Aug 27 (Tue) |           | 06:37 80N | 13:27 299 |
| 2024 Aug 28 (Wed) | 00:43 61  | 07:35 79N | 14:27 300 |
| 2024 Aug 29 (Thu) | 01:40 60  | 08:32 79N | 15:23 299 |
| 2024 Aug 30 (Fri) | 02:38 62  | 09:27 80N | 16:13 297 |
| 2024 Aug 31 (Sat) | 03:34 65  | 10:18 84N | 16:59 293 |
| 2024 Sep 01 (Sun) | 04:28 69  | 11:05 88N | 17:39 289 |
| 2024 Sep 02 (Mon) | 05:20 74  | 11:49 88S | 18:15 283 |
| 2024 Sep 03 (Tue) | 06:08 79  | 12:31 83S | 18:49 278 |
| 2024 Sep 04 (Wed) | 06:55 85  | 13:10 77S | 19:21 272 |
| 2024 Sep 05 (Thu) | 07:41 92  | 13:49 71S | 19:53 265 |
| 2024 Sep 06 (Fri) | 08:27 98  | 14:28 65S | 20:25 260 |
| 2024 Sep 07 (Sat) | 09:14 103 | 15:08 60S | 20:59 254 |
| 2024 Sep 08 (Sun) | 10:03 109 | 15:51 55S | 21:36 249 |
| 2024 Sep 09 (Mon) | 10:54 113 | 16:37 50S | 22:17 245 |
| 2024 Sep 10 (Tue) | 11:48 117 | 17:27 47S | 23:04 242 |
| 2024 Sep 11 (Wed) | 12:45 119 | 18:21 45S | 23:56 240 |
| 2024 Sep 12 (Thu) | 13:43 120 | 19:18 45S |           |
| 2024 Sep 13 (Fri) | 14:40 119 | 20:16 46S | 00:53 240 |
| 2024 Sep 14 (Sat) | 15:34 116 | 21:15 50S | 01:55 242 |
| 2024 Sep 15 (Sun) | 16:24 111 | 22:11 55S | 02:58 246 |
| 2024 Sep 16 (Mon) | 17:11 105 | 23:05 61S | 04:02 252 |
| 2024 Sep 17 (Tue) | 17:55 98  | 23:58 68S | 05:04 258 |
| 2024 Sep 18 (Wed) | 18:37 90  |           | 06:05 266 |
| 2024 Sep 19 (Thu) | 19:19 82  | 00:49 76S | 07:06 274 |
| 2024 Sep 20 (Fri) | 20:03 75  | 01:41 84S | 08:07 282 |
| 2024 Sep 21 (Sat) | 20:50 69  | 02:34 90S | 09:10 289 |
| 2024 Sep 22 (Sun) | 21:41 64  | 03:30 85N | 10:14 294 |
| 2024 Sep 23 (Mon) | 22:36 61  | 04:28 81N | 11:18 298 |
| 2024 Sep 24 (Tue) | 23:34 60  | 05:27 79N | 12:20 300 |
| 2024 Sep 25 (Wed) |           | 06:26 78N | 13:18 300 |
| 2024 Sep 26 (Thu) | 00:32 61  | 07:23 80N | 14:11 298 |
| 2024 Sep 27 (Fri) | 01:30 63  | 08:15 82N | 14:58 295 |
| 2024 Sep 28 (Sat) | 02:24 67  | 09:04 86N | 15:40 290 |
| 2024 Sep 29 (Sun) | 03:16 72  | 09:48 90S | 16:17 285 |
| 2024 Sep 30 (Mon) | 04:06 78  | 10:30 85S | 16:51 279 |
| 2024 Oct 01 (Tue) | 04:53 83  | 11:10 79S | 17:23 274 |
| 2024 Oct 02 (Wed) | 05:39 90  | 11:48 73S | 17:55 267 |
| 2024 Oct 03 (Thu) | 06:24 96  | 12:27 67S | 18:27 261 |
| 2024 Oct 04 (Fri) | 07:11 102 | 13:07 61S | 19:00 256 |
| 2024 Oct 05 (Sat) | 07:59 107 | 13:49 56S | 19:36 251 |
| 2024 Oct 06 (Sun) | 08:50 112 | 14:34 52S | 20:16 246 |
| 2024 Oct 07 (Mon) | 09:43 116 | 15:22 48S | 21:00 243 |
| 2024 Oct 08 (Tue) | 10:38 119 | 16:14 46S | 21:49 241 |
| 2024 Oct 09 (Wed) | 11:34 120 | 17:09 45S | 22:44 240 |
| 2024 Oct 10 (Thu) | 12:30 120 | 18:06 46S | 23:42 241 |
| 2024 Oct 11 (Fri) | 13:23 117 | 19:02 48S |           |
| 2024 Oct 12 (Sat) | 14:14 114 | 19:57 52S | 00:43 244 |
| 2024 Oct 13 (Sun) | 15:00 108 | 20:51 58S | 01:44 249 |
| 2024 Oct 14 (Mon) | 15:44 102 | 21:42 64S | 02:45 255 |
| 2024 Oct 15 (Tue) | 16:26 94  | 22:33 72S | 03:45 262 |
| 2024 Oct 16 (Wed) | 17:08 86  | 23:24 79S | 04:45 270 |
| 2024 Oct 17 (Thu) | 17:51 79  |           | 05:46 278 |
| 2024 Oct 18 (Fri) | 18:37 72  | 00:17 87S | 06:48 285 |
| 2024 Oct 19 (Sat) | 19:28 66  | 01:13 88N | 07:53 291 |
| 2024 Oct 20 (Sun) | 20:23 62  | 02:12 83N | 09:00 296 |
| 2024 Oct 21 (Mon) | 21:21 60  | 03:13 80N | 10:05 299 |
| 2024 Oct 22 (Tue) | 22:22 60  | 04:15 78N | 11:08 300 |
| 2024 Oct 23 (Wed) | 23:22 62  | 05:14 79N | 12:04 299 |
| 2024 Oct 24 (Thu) |           | 06:09 81N | 12:55 296 |
| 2024 Oct 25 (Fri) | 00:18 66  | 07:00 85N | 13:38 292 |
| 2024 Oct 26 (Sat) | 01:12 70  | 07:46 90N | 14:17 287 |
| 2024 Oct 27 (Sun) | 02:02 76  | 08:29 86S | 14:52 281 |
| 2024 Oct 28 (Mon) | 02:50 81  | 09:09 81S | 15:25 275 |
| 2024 Oct 29 (Tue) | 03:36 88  | 09:48 75S | 15:57 269 |
| 2024 Oct 30 (Wed) | 04:22 94  | 10:27 69S | 16:29 263 |
| 2024 Oct 31 (Thu) | 05:08 100 | 11:06 63S | 17:02 258 |
| 2024 Nov 01 (Fri) | 05:56 105 | 11:48 58S | 17:37 252 |
| 2024 Nov 02 (Sat) | 06:46 110 | 12:32 53S | 18:15 248 |
| 2024 Nov 03 (Sun) | 07:38 115 | 13:19 49S | 18:58 244 |
| 2024 Nov 04 (Mon) | 08:33 118 | 14:10 46S | 19:46 241 |
| 2024 Nov 05 (Tue) | 09:29 120 | 15:05 45S | 20:39 240 |
| 2024 Nov 06 (Wed) | 10:25 120 | 16:00 45S | 21:36 241 |

|                   |           |           |           |
|-------------------|-----------|-----------|-----------|
| 2024 Nov 07 (Thu) | 11:19 118 | 16:56 47S | 22:35 243 |
| 2024 Nov 08 (Fri) | 12:09 115 | 17:50 51S | 23:34 247 |
| 2024 Nov 09 (Sat) | 12:55 110 | 18:42 56S |           |
| 2024 Nov 10 (Sun) | 13:38 104 | 19:33 62S | 00:33 252 |
| 2024 Nov 11 (Mon) | 14:19 97  | 20:22 68S | 01:31 259 |
| 2024 Nov 12 (Tue) | 14:59 90  | 21:11 76S | 02:29 266 |
| 2024 Nov 13 (Wed) | 15:40 83  | 22:01 83S | 03:27 274 |
| 2024 Nov 14 (Thu) | 16:24 75  | 22:54 90S | 04:27 281 |
| 2024 Nov 15 (Fri) | 17:12 69  | 23:52 86N | 05:30 288 |
| 2024 Nov 16 (Sat) | 18:05 64  |           | 06:36 294 |
| 2024 Nov 17 (Sun) | 19:03 61  | 00:52 81N | 07:43 298 |
| 2024 Nov 18 (Mon) | 20:05 60  | 01:55 79N | 08:49 300 |
| 2024 Nov 19 (Tue) | 21:07 61  | 02:58 79N | 09:50 299 |
| 2024 Nov 20 (Wed) | 22:07 64  | 03:57 80N | 10:45 297 |
| 2024 Nov 21 (Thu) | 23:03 69  | 04:52 84N | 11:33 293 |
| 2024 Nov 22 (Fri) | 23:56 74  | 05:41 88N | 12:15 289 |
| 2024 Nov 23 (Sat) |           | 06:26 88S | 12:52 283 |
| 2024 Nov 24 (Sun) | 00:45 80  | 07:07 83S | 13:25 277 |
| 2024 Nov 25 (Mon) | 01:32 85  | 07:46 77S | 13:57 271 |
| 2024 Nov 26 (Tue) | 02:18 92  | 08:25 71S | 14:29 265 |
| 2024 Nov 27 (Wed) | 03:04 98  | 09:04 65S | 15:02 260 |
| 2024 Nov 28 (Thu) | 03:51 103 | 09:45 60S | 15:36 254 |
| 2024 Nov 29 (Fri) | 04:40 109 | 10:28 55S | 16:14 249 |
| 2024 Nov 30 (Sat) | 05:32 113 | 11:15 51S | 16:55 245 |
| 2024 Dec 01 (Sun) | 06:27 117 | 12:05 47S | 17:42 242 |
| 2024 Dec 02 (Mon) | 07:23 119 | 12:59 45S | 18:34 240 |
| 2024 Dec 03 (Tue) | 08:20 120 | 13:55 45S | 19:31 240 |
| 2024 Dec 04 (Wed) | 09:15 119 | 14:52 47S | 20:30 242 |
| 2024 Dec 05 (Thu) | 10:06 116 | 15:47 50S | 21:29 246 |
| 2024 Dec 06 (Fri) | 10:53 112 | 16:39 54S | 22:28 251 |
| 2024 Dec 07 (Sat) | 11:37 106 | 17:29 60S | 23:25 257 |
| 2024 Dec 08 (Sun) | 12:17 100 | 18:17 66S |           |
| 2024 Dec 09 (Mon) | 12:56 93  | 19:04 73S | 00:21 264 |
| 2024 Dec 10 (Tue) | 13:35 85  | 19:52 80S | 01:17 271 |
| 2024 Dec 11 (Wed) | 14:16 78  | 20:42 87S | 02:14 278 |
| 2024 Dec 12 (Thu) | 15:00 72  | 21:36 88N | 03:13 285 |
| 2024 Dec 13 (Fri) | 15:50 66  | 22:33 83N | 04:15 291 |
| 2024 Dec 14 (Sat) | 16:45 62  | 23:35 80N | 05:21 296 |
| 2024 Dec 15 (Sun) | 17:45 60  |           | 06:27 299 |
| 2024 Dec 16 (Mon) | 18:47 61  | 00:38 79N | 07:31 300 |
| 2024 Dec 17 (Tue) | 19:50 63  | 01:40 79N | 08:30 298 |
| 2024 Dec 18 (Wed) | 20:49 67  | 02:38 82N | 09:22 295 |
| 2024 Dec 19 (Thu) | 21:45 72  | 03:30 86N | 10:07 291 |
| 2024 Dec 20 (Fri) | 22:36 77  | 04:18 90S | 10:47 285 |
| 2024 Dec 21 (Sat) | 23:25 83  | 05:02 85S | 11:23 280 |
| 2024 Dec 22 (Sun) |           | 05:42 79S | 11:56 274 |
| 2024 Dec 23 (Mon) | 00:11 89  | 06:22 73S | 12:28 268 |
| 2024 Dec 24 (Tue) | 00:57 95  | 07:01 67S | 13:00 262 |
| 2024 Dec 25 (Wed) | 01:44 101 | 07:40 62S | 13:34 256 |
| 2024 Dec 26 (Thu) | 02:32 107 | 08:22 57S | 14:10 251 |
| 2024 Dec 27 (Fri) | 03:23 112 | 09:08 52S | 14:50 246 |
| 2024 Dec 28 (Sat) | 04:17 116 | 09:57 48S | 15:35 243 |
| 2024 Dec 29 (Sun) | 05:13 118 | 10:50 46S | 16:25 241 |
| 2024 Dec 30 (Mon) | 06:10 120 | 11:46 45S | 17:21 240 |
| 2024 Dec 31 (Tue) | 07:07 119 | 12:43 46S | 18:21 242 |