

# Sun

Nakhon Pathom  
Location: E100°02'59.9", N13°49'08.4", 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) | 05:53                         | 06:43 | 114 | 12:23 54S    | 18:03 246 |     | 18:53                       |
| 2024           | Jan | 02 (Tue) | 05:54                         | 06:44 | 113 | 12:23 54S    | 18:03 247 |     | 18:53                       |
| 2024           | Jan | 03 (Wed) | 05:54                         | 06:44 | 113 | 12:24 54S    | 18:04 247 |     | 18:54                       |
| 2024           | Jan | 04 (Thu) | 05:55                         | 06:44 | 113 | 12:24 54S    | 18:05 247 |     | 18:54                       |
| 2024           | Jan | 05 (Fri) | 05:55                         | 06:45 | 113 | 12:25 54S    | 18:05 247 |     | 18:55                       |
| 2024           | Jan | 06 (Sat) | 05:55                         | 06:45 | 113 | 12:25 54S    | 18:06 247 |     | 18:55                       |
| 2024           | Jan | 07 (Sun) | 05:56                         | 06:45 | 113 | 12:26 54S    | 18:06 247 |     | 18:56                       |
| 2024           | Jan | 08 (Mon) | 05:56                         | 06:46 | 113 | 12:26 55S    | 18:07 247 |     | 18:56                       |
| 2024           | Jan | 09 (Tue) | 05:56                         | 06:46 | 113 | 12:27 55S    | 18:07 247 |     | 18:57                       |
| 2024           | Jan | 10 (Wed) | 05:57                         | 06:46 | 113 | 12:27 55S    | 18:08 248 |     | 18:57                       |
| 2024           | Jan | 11 (Thu) | 05:57                         | 06:46 | 112 | 12:27 55S    | 18:09 248 |     | 18:58                       |
| 2024           | Jan | 12 (Fri) | 05:57                         | 06:47 | 112 | 12:28 55S    | 18:09 248 |     | 18:58                       |
| 2024           | Jan | 13 (Sat) | 05:58                         | 06:47 | 112 | 12:28 55S    | 18:10 248 |     | 18:59                       |
| 2024           | Jan | 14 (Sun) | 05:58                         | 06:47 | 112 | 12:29 55S    | 18:10 248 |     | 18:59                       |
| 2024           | Jan | 15 (Mon) | 05:58                         | 06:47 | 112 | 12:29 56S    | 18:11 248 |     | 19:00                       |
| 2024           | Jan | 16 (Tue) | 05:58                         | 06:47 | 112 | 12:29 56S    | 18:11 249 |     | 19:00                       |
| 2024           | Jan | 17 (Wed) | 05:58                         | 06:47 | 111 | 12:30 56S    | 18:12 249 |     | 19:01                       |
| 2024           | Jan | 18 (Thu) | 05:59                         | 06:48 | 111 | 12:30 56S    | 18:13 249 |     | 19:01                       |
| 2024           | Jan | 19 (Fri) | 05:59                         | 06:48 | 111 | 12:30 56S    | 18:13 249 |     | 19:02                       |
| 2024           | Jan | 20 (Sat) | 05:59                         | 06:48 | 111 | 12:31 57S    | 18:14 249 |     | 19:02                       |
| 2024           | Jan | 21 (Sun) | 05:59                         | 06:48 | 110 | 12:31 57S    | 18:14 250 |     | 19:03                       |
| 2024           | Jan | 22 (Mon) | 05:59                         | 06:48 | 110 | 12:31 57S    | 18:15 250 |     | 19:03                       |
| 2024           | Jan | 23 (Tue) | 05:59                         | 06:48 | 110 | 12:31 57S    | 18:15 250 |     | 19:04                       |
| 2024           | Jan | 24 (Wed) | 05:59                         | 06:48 | 110 | 12:32 58S    | 18:16 250 |     | 19:04                       |
| 2024           | Jan | 25 (Thu) | 05:59                         | 06:48 | 110 | 12:32 58S    | 18:16 251 |     | 19:05                       |
| 2024           | Jan | 26 (Fri) | 05:59                         | 06:48 | 109 | 12:32 58S    | 18:17 251 |     | 19:05                       |
| 2024           | Jan | 27 (Sat) | 05:59                         | 06:48 | 109 | 12:32 58S    | 18:17 251 |     | 19:05                       |
| 2024           | Jan | 28 (Sun) | 05:59                         | 06:48 | 109 | 12:33 59S    | 18:18 251 |     | 19:06                       |
| 2024           | Jan | 29 (Mon) | 05:59                         | 06:48 | 108 | 12:33 59S    | 18:18 252 |     | 19:06                       |
| 2024           | Jan | 30 (Tue) | 05:59                         | 06:47 | 108 | 12:33 59S    | 18:19 252 |     | 19:07                       |
| 2024           | Jan | 31 (Wed) | 05:59                         | 06:47 | 108 | 12:33 59S    | 18:19 252 |     | 19:07                       |
| 2024           | Feb | 01 (Thu) | 05:59                         | 06:47 | 108 | 12:33 60S    | 18:19 253 |     | 19:07                       |
| 2024           | Feb | 02 (Fri) | 05:59                         | 06:47 | 107 | 12:33 60S    | 18:20 253 |     | 19:08                       |
| 2024           | Feb | 03 (Sat) | 05:59                         | 06:47 | 107 | 12:34 60S    | 18:20 253 |     | 19:08                       |
| 2024           | Feb | 04 (Sun) | 05:59                         | 06:47 | 107 | 12:34 61S    | 18:21 253 |     | 19:08                       |
| 2024           | Feb | 05 (Mon) | 05:59                         | 06:46 | 106 | 12:34 61S    | 18:21 254 |     | 19:09                       |
| 2024           | Feb | 06 (Tue) | 05:59                         | 06:46 | 106 | 12:34 61S    | 18:22 254 |     | 19:09                       |
| 2024           | Feb | 07 (Wed) | 05:58                         | 06:46 | 106 | 12:34 61S    | 18:22 254 |     | 19:09                       |
| 2024           | Feb | 08 (Thu) | 05:58                         | 06:46 | 105 | 12:34 62S    | 18:22 255 |     | 19:10                       |
| 2024           | Feb | 09 (Fri) | 05:58                         | 06:45 | 105 | 12:34 62S    | 18:23 255 |     | 19:10                       |
| 2024           | Feb | 10 (Sat) | 05:58                         | 06:45 | 105 | 12:34 62S    | 18:23 255 |     | 19:10                       |
| 2024           | Feb | 11 (Sun) | 05:58                         | 06:45 | 104 | 12:34 63S    | 18:23 256 |     | 19:11                       |
| 2024           | Feb | 12 (Mon) | 05:57                         | 06:44 | 104 | 12:34 63S    | 18:24 256 |     | 19:11                       |
| 2024           | Feb | 13 (Tue) | 05:57                         | 06:44 | 104 | 12:34 63S    | 18:24 256 |     | 19:11                       |
| 2024           | Feb | 14 (Wed) | 05:57                         | 06:44 | 103 | 12:34 64S    | 18:24 257 |     | 19:11                       |
| 2024           | Feb | 15 (Thu) | 05:56                         | 06:43 | 103 | 12:34 64S    | 18:25 257 |     | 19:12                       |
| 2024           | Feb | 16 (Fri) | 05:56                         | 06:43 | 103 | 12:34 64S    | 18:25 257 |     | 19:12                       |
| 2024           | Feb | 17 (Sat) | 05:56                         | 06:43 | 102 | 12:34 65S    | 18:25 258 |     | 19:12                       |
| 2024           | Feb | 18 (Sun) | 05:55                         | 06:42 | 102 | 12:34 65S    | 18:26 258 |     | 19:12                       |
| 2024           | Feb | 19 (Mon) | 05:55                         | 06:42 | 102 | 12:34 65S    | 18:26 258 |     | 19:13                       |
| 2024           | Feb | 20 (Tue) | 05:55                         | 06:41 | 101 | 12:34 66S    | 18:26 259 |     | 19:13                       |
| 2024           | Feb | 21 (Wed) | 05:54                         | 06:41 | 101 | 12:33 66S    | 18:26 259 |     | 19:13                       |
| 2024           | Feb | 22 (Thu) | 05:54                         | 06:40 | 101 | 12:33 67S    | 18:27 260 |     | 19:13                       |
| 2024           | Feb | 23 (Fri) | 05:53                         | 06:40 | 100 | 12:33 67S    | 18:27 260 |     | 19:13                       |
| 2024           | Feb | 24 (Sat) | 05:53                         | 06:39 | 100 | 12:33 67S    | 18:27 260 |     | 19:14                       |
| 2024           | Feb | 25 (Sun) | 05:52                         | 06:39 | 99  | 12:33 68S    | 18:27 261 |     | 19:14                       |
| 2024           | Feb | 26 (Mon) | 05:52                         | 06:38 | 99  | 12:33 68S    | 18:27 261 |     | 19:14                       |
| 2024           | Feb | 27 (Tue) | 05:51                         | 06:38 | 99  | 12:33 68S    | 18:28 262 |     | 19:14                       |
| 2024           | Feb | 28 (Wed) | 05:51                         | 06:37 | 98  | 12:32 69S    | 18:28 262 |     | 19:14                       |
| 2024           | Feb | 29 (Thu) | 05:50                         | 06:37 | 98  | 12:32 69S    | 18:28 262 |     | 19:14                       |

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

|      |     |    |       |       |       |    |       |     |       |     |       |
|------|-----|----|-------|-------|-------|----|-------|-----|-------|-----|-------|
| 2024 | May | 12 | (Sun) | 05:05 | 05:54 | 71 | 12:16 | 86N | 18:38 | 289 | 19:28 |
| 2024 | May | 13 | (Mon) | 05:04 | 05:54 | 71 | 12:16 | 86N | 18:39 | 289 | 19:28 |
| 2024 | May | 14 | (Tue) | 05:04 | 05:53 | 71 | 12:16 | 86N | 18:39 | 290 | 19:28 |
| 2024 | May | 15 | (Wed) | 05:04 | 05:53 | 70 | 12:16 | 86N | 18:39 | 290 | 19:29 |
| 2024 | May | 16 | (Thu) | 05:03 | 05:53 | 70 | 12:16 | 85N | 18:40 | 290 | 19:29 |
| 2024 | May | 17 | (Fri) | 05:03 | 05:53 | 70 | 12:16 | 85N | 18:40 | 290 | 19:29 |
| 2024 | May | 18 | (Sat) | 05:03 | 05:53 | 70 | 12:16 | 85N | 18:40 | 291 | 19:30 |
| 2024 | May | 19 | (Sun) | 05:03 | 05:52 | 69 | 12:16 | 85N | 18:40 | 291 | 19:30 |
| 2024 | May | 20 | (Mon) | 05:02 | 05:52 | 69 | 12:16 | 84N | 18:41 | 291 | 19:31 |
| 2024 | May | 21 | (Tue) | 05:02 | 05:52 | 69 | 12:16 | 84N | 18:41 | 291 | 19:31 |
| 2024 | May | 22 | (Wed) | 05:02 | 05:52 | 69 | 12:17 | 84N | 18:41 | 291 | 19:31 |
| 2024 | May | 23 | (Thu) | 05:02 | 05:52 | 69 | 12:17 | 84N | 18:42 | 292 | 19:32 |
| 2024 | May | 24 | (Fri) | 05:01 | 05:52 | 68 | 12:17 | 84N | 18:42 | 292 | 19:32 |
| 2024 | May | 25 | (Sat) | 05:01 | 05:51 | 68 | 12:17 | 83N | 18:42 | 292 | 19:33 |
| 2024 | May | 26 | (Sun) | 05:01 | 05:51 | 68 | 12:17 | 83N | 18:43 | 292 | 19:33 |
| 2024 | May | 27 | (Mon) | 05:01 | 05:51 | 68 | 12:17 | 83N | 18:43 | 292 | 19:33 |
| 2024 | May | 28 | (Tue) | 05:01 | 05:51 | 68 | 12:17 | 83N | 18:43 | 292 | 19:34 |
| 2024 | May | 29 | (Wed) | 05:01 | 05:51 | 67 | 12:17 | 83N | 18:43 | 293 | 19:34 |
| 2024 | May | 30 | (Thu) | 05:01 | 05:51 | 67 | 12:17 | 83N | 18:44 | 293 | 19:34 |
| 2024 | May | 31 | (Fri) | 05:00 | 05:51 | 67 | 12:18 | 83N | 18:44 | 293 | 19:35 |
| 2024 | Jun | 01 | (Sat) | 05:00 | 05:51 | 67 | 12:18 | 82N | 18:44 | 293 | 19:35 |
| 2024 | Jun | 02 | (Sun) | 05:00 | 05:51 | 67 | 12:18 | 82N | 18:45 | 293 | 19:36 |
| 2024 | Jun | 03 | (Mon) | 05:00 | 05:51 | 67 | 12:18 | 82N | 18:45 | 293 | 19:36 |
| 2024 | Jun | 04 | (Tue) | 05:00 | 05:51 | 67 | 12:18 | 82N | 18:45 | 293 | 19:36 |
| 2024 | Jun | 05 | (Wed) | 05:00 | 05:51 | 66 | 12:18 | 82N | 18:46 | 294 | 19:37 |
| 2024 | Jun | 06 | (Thu) | 05:00 | 05:51 | 66 | 12:19 | 82N | 18:46 | 294 | 19:37 |
| 2024 | Jun | 07 | (Fri) | 05:00 | 05:51 | 66 | 12:19 | 82N | 18:46 | 294 | 19:37 |
| 2024 | Jun | 08 | (Sat) | 05:00 | 05:51 | 66 | 12:19 | 82N | 18:47 | 294 | 19:38 |
| 2024 | Jun | 09 | (Sun) | 05:00 | 05:51 | 66 | 12:19 | 82N | 18:47 | 294 | 19:38 |
| 2024 | Jun | 10 | (Mon) | 05:00 | 05:52 | 66 | 12:19 | 81N | 18:47 | 294 | 19:38 |
| 2024 | Jun | 11 | (Tue) | 05:01 | 05:52 | 66 | 12:20 | 81N | 18:47 | 294 | 19:39 |
| 2024 | Jun | 12 | (Wed) | 05:01 | 05:52 | 66 | 12:20 | 81N | 18:48 | 294 | 19:39 |
| 2024 | Jun | 13 | (Thu) | 05:01 | 05:52 | 66 | 12:20 | 81N | 18:48 | 294 | 19:39 |
| 2024 | Jun | 14 | (Fri) | 05:01 | 05:52 | 66 | 12:20 | 81N | 18:48 | 294 | 19:39 |
| 2024 | Jun | 15 | (Sat) | 05:01 | 05:52 | 66 | 12:20 | 81N | 18:49 | 294 | 19:40 |
| 2024 | Jun | 16 | (Sun) | 05:01 | 05:52 | 66 | 12:21 | 81N | 18:49 | 294 | 19:40 |
| 2024 | Jun | 17 | (Mon) | 05:01 | 05:53 | 66 | 12:21 | 81N | 18:49 | 294 | 19:40 |
| 2024 | Jun | 18 | (Tue) | 05:02 | 05:53 | 66 | 12:21 | 81N | 18:49 | 294 | 19:41 |
| 2024 | Jun | 19 | (Wed) | 05:02 | 05:53 | 66 | 12:21 | 81N | 18:50 | 294 | 19:41 |
| 2024 | Jun | 20 | (Thu) | 05:02 | 05:53 | 66 | 12:21 | 81N | 18:50 | 294 | 19:41 |
| 2024 | Jun | 21 | (Fri) | 05:02 | 05:53 | 66 | 12:22 | 81N | 18:50 | 294 | 19:41 |
| 2024 | Jun | 22 | (Sat) | 05:02 | 05:54 | 66 | 12:22 | 81N | 18:50 | 294 | 19:41 |
| 2024 | Jun | 23 | (Sun) | 05:03 | 05:54 | 66 | 12:22 | 81N | 18:50 | 294 | 19:42 |
| 2024 | Jun | 24 | (Mon) | 05:03 | 05:54 | 66 | 12:22 | 81N | 18:51 | 294 | 19:42 |
| 2024 | Jun | 25 | (Tue) | 05:03 | 05:54 | 66 | 12:23 | 81N | 18:51 | 294 | 19:42 |
| 2024 | Jun | 26 | (Wed) | 05:03 | 05:55 | 66 | 12:23 | 81N | 18:51 | 294 | 19:42 |
| 2024 | Jun | 27 | (Thu) | 05:04 | 05:55 | 66 | 12:23 | 81N | 18:51 | 294 | 19:42 |
| 2024 | Jun | 28 | (Fri) | 05:04 | 05:55 | 66 | 12:23 | 81N | 18:51 | 294 | 19:42 |
| 2024 | Jun | 29 | (Sat) | 05:04 | 05:55 | 66 | 12:23 | 81N | 18:51 | 294 | 19:42 |
| 2024 | Jun | 30 | (Sun) | 05:04 | 05:56 | 66 | 12:24 | 81N | 18:51 | 294 | 19:43 |
| 2024 | Jul | 01 | (Mon) | 05:05 | 05:56 | 66 | 12:24 | 81N | 18:52 | 294 | 19:43 |
| 2024 | Jul | 02 | (Tue) | 05:05 | 05:56 | 66 | 12:24 | 82N | 18:52 | 294 | 19:43 |
| 2024 | Jul | 03 | (Wed) | 05:05 | 05:56 | 66 | 12:24 | 82N | 18:52 | 294 | 19:43 |
| 2024 | Jul | 04 | (Thu) | 05:06 | 05:57 | 66 | 12:24 | 82N | 18:52 | 294 | 19:43 |
| 2024 | Jul | 05 | (Fri) | 05:06 | 05:57 | 66 | 12:24 | 82N | 18:52 | 294 | 19:43 |
| 2024 | Jul | 06 | (Sat) | 05:06 | 05:57 | 66 | 12:25 | 82N | 18:52 | 294 | 19:43 |
| 2024 | Jul | 07 | (Sun) | 05:07 | 05:58 | 67 | 12:25 | 82N | 18:52 | 293 | 19:43 |
| 2024 | Jul | 08 | (Mon) | 05:07 | 05:58 | 67 | 12:25 | 82N | 18:52 | 293 | 19:43 |
| 2024 | Jul | 09 | (Tue) | 05:07 | 05:58 | 67 | 12:25 | 82N | 18:52 | 293 | 19:43 |
| 2024 | Jul | 10 | (Wed) | 05:08 | 05:58 | 67 | 12:25 | 82N | 18:52 | 293 | 19:43 |
| 2024 | Jul | 11 | (Thu) | 05:08 | 05:59 | 67 | 12:25 | 82N | 18:52 | 293 | 19:43 |
| 2024 | Jul | 12 | (Fri) | 05:08 | 05:59 | 67 | 12:26 | 83N | 18:52 | 293 | 19:42 |
| 2024 | Jul | 13 | (Sat) | 05:09 | 05:59 | 67 | 12:26 | 83N | 18:52 | 293 | 19:42 |
| 2024 | Jul | 14 | (Sun) | 05:09 | 06:00 | 67 | 12:26 | 83N | 18:52 | 292 | 19:42 |
| 2024 | Jul | 15 | (Mon) | 05:09 | 06:00 | 68 | 12:26 | 83N | 18:52 | 292 | 19:42 |
| 2024 | Jul | 16 | (Tue) | 05:10 | 06:00 | 68 | 12:26 | 83N | 18:52 | 292 | 19:42 |
| 2024 | Jul | 17 | (Wed) | 05:10 | 06:00 | 68 | 12:26 | 83N | 18:51 | 292 | 19:42 |
| 2024 | Jul | 18 | (Thu) | 05:11 | 06:01 | 68 | 12:26 | 84N | 18:51 | 292 | 19:41 |
| 2024 | Jul | 19 | (Fri) | 05:11 | 06:01 | 68 | 12:26 | 84N | 18:51 | 292 | 19:41 |
| 2024 | Jul | 20 | (Sat) | 05:11 | 06:01 | 69 | 12:26 | 84N | 18:51 | 291 | 19:41 |
| 2024 | Jul | 21 | (Sun) | 05:12 | 06:02 | 69 | 12:26 | 84N | 18:51 | 291 | 19:41 |
| 2024 | Jul | 22 | (Mon) | 05:12 | 06:02 | 69 | 12:26 | 84N | 18:51 | 291 | 19:40 |

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

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

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

Sun

Nakhon Pathom  
Location: E100°02'59.9", N13°49'08.4", 0m  
(Longitude referred to Greenwich meridian)

Time Zone: 7h 00m east of Greenwich

| Date<br>(Zone) |     |    |       | Begin             | Rise  | Az. | Transit | Alt. | Set   | Az.               | End   |
|----------------|-----|----|-------|-------------------|-------|-----|---------|------|-------|-------------------|-------|
|                |     |    |       | Civil<br>Twilight |       |     |         |      |       | Civil<br>Twilight |       |
|                |     |    |       | h m               | h m   | °   | h m     | °    | h m   | °                 | h m   |
| 2024           | Jan | 01 | (Mon) | 06:20             | 06:43 | 114 | 12:23   | 54S  | 18:03 | 246               | 18:26 |
| 2024           | Jan | 02 | (Tue) | 06:20             | 06:44 | 113 | 12:23   | 54S  | 18:03 | 247               | 18:27 |
| 2024           | Jan | 03 | (Wed) | 06:21             | 06:44 | 113 | 12:24   | 54S  | 18:04 | 247               | 18:27 |
| 2024           | Jan | 04 | (Thu) | 06:21             | 06:44 | 113 | 12:24   | 54S  | 18:05 | 247               | 18:28 |
| 2024           | Jan | 05 | (Fri) | 06:22             | 06:45 | 113 | 12:25   | 54S  | 18:05 | 247               | 18:28 |
| 2024           | Jan | 06 | (Sat) | 06:22             | 06:45 | 113 | 12:25   | 54S  | 18:06 | 247               | 18:29 |
| 2024           | Jan | 07 | (Sun) | 06:22             | 06:45 | 113 | 12:26   | 54S  | 18:06 | 247               | 18:29 |
| 2024           | Jan | 08 | (Mon) | 06:23             | 06:46 | 113 | 12:26   | 55S  | 18:07 | 247               | 18:30 |
| 2024           | Jan | 09 | (Tue) | 06:23             | 06:46 | 113 | 12:27   | 55S  | 18:07 | 247               | 18:30 |
| 2024           | Jan | 10 | (Wed) | 06:23             | 06:46 | 113 | 12:27   | 55S  | 18:08 | 248               | 18:31 |
| 2024           | Jan | 11 | (Thu) | 06:23             | 06:46 | 112 | 12:27   | 55S  | 18:09 | 248               | 18:31 |
| 2024           | Jan | 12 | (Fri) | 06:24             | 06:47 | 112 | 12:28   | 55S  | 18:09 | 248               | 18:32 |
| 2024           | Jan | 13 | (Sat) | 06:24             | 06:47 | 112 | 12:28   | 55S  | 18:10 | 248               | 18:33 |
| 2024           | Jan | 14 | (Sun) | 06:24             | 06:47 | 112 | 12:29   | 55S  | 18:10 | 248               | 18:33 |
| 2024           | Jan | 15 | (Mon) | 06:24             | 06:47 | 112 | 12:29   | 56S  | 18:11 | 248               | 18:34 |
| 2024           | Jan | 16 | (Tue) | 06:25             | 06:47 | 112 | 12:29   | 56S  | 18:11 | 249               | 18:34 |
| 2024           | Jan | 17 | (Wed) | 06:25             | 06:47 | 111 | 12:30   | 56S  | 18:12 | 249               | 18:35 |
| 2024           | Jan | 18 | (Thu) | 06:25             | 06:48 | 111 | 12:30   | 56S  | 18:13 | 249               | 18:35 |
| 2024           | Jan | 19 | (Fri) | 06:25             | 06:48 | 111 | 12:30   | 56S  | 18:13 | 249               | 18:36 |
| 2024           | Jan | 20 | (Sat) | 06:25             | 06:48 | 111 | 12:31   | 57S  | 18:14 | 249               | 18:36 |
| 2024           | Jan | 21 | (Sun) | 06:25             | 06:48 | 110 | 12:31   | 57S  | 18:14 | 250               | 18:37 |
| 2024           | Jan | 22 | (Mon) | 06:25             | 06:48 | 110 | 12:31   | 57S  | 18:15 | 250               | 18:37 |
| 2024           | Jan | 23 | (Tue) | 06:25             | 06:48 | 110 | 12:31   | 57S  | 18:15 | 250               | 18:38 |
| 2024           | Jan | 24 | (Wed) | 06:25             | 06:48 | 110 | 12:32   | 58S  | 18:16 | 250               | 18:38 |
| 2024           | Jan | 25 | (Thu) | 06:25             | 06:48 | 110 | 12:32   | 58S  | 18:16 | 251               | 18:39 |
| 2024           | Jan | 26 | (Fri) | 06:25             | 06:48 | 109 | 12:32   | 58S  | 18:17 | 251               | 18:39 |
| 2024           | Jan | 27 | (Sat) | 06:25             | 06:48 | 109 | 12:32   | 58S  | 18:17 | 251               | 18:40 |
| 2024           | Jan | 28 | (Sun) | 06:25             | 06:48 | 109 | 12:33   | 59S  | 18:18 | 251               | 18:40 |
| 2024           | Jan | 29 | (Mon) | 06:25             | 06:48 | 108 | 12:33   | 59S  | 18:18 | 252               | 18:40 |
| 2024           | Jan | 30 | (Tue) | 06:25             | 06:47 | 108 | 12:33   | 59S  | 18:19 | 252               | 18:41 |
| 2024           | Jan | 31 | (Wed) | 06:25             | 06:47 | 108 | 12:33   | 59S  | 18:19 | 252               | 18:41 |
| 2024           | Feb | 01 | (Thu) | 06:25             | 06:47 | 108 | 12:33   | 60S  | 18:19 | 253               | 18:42 |
| 2024           | Feb | 02 | (Fri) | 06:25             | 06:47 | 107 | 12:33   | 60S  | 18:20 | 253               | 18:42 |
| 2024           | Feb | 03 | (Sat) | 06:25             | 06:47 | 107 | 12:34   | 60S  | 18:20 | 253               | 18:42 |
| 2024           | Feb | 04 | (Sun) | 06:25             | 06:47 | 107 | 12:34   | 61S  | 18:21 | 253               | 18:43 |
| 2024           | Feb | 05 | (Mon) | 06:24             | 06:46 | 106 | 12:34   | 61S  | 18:21 | 254               | 18:43 |
| 2024           | Feb | 06 | (Tue) | 06:24             | 06:46 | 106 | 12:34   | 61S  | 18:22 | 254               | 18:44 |
| 2024           | Feb | 07 | (Wed) | 06:24             | 06:46 | 106 | 12:34   | 61S  | 18:22 | 254               | 18:44 |
| 2024           | Feb | 08 | (Thu) | 06:24             | 06:46 | 105 | 12:34   | 62S  | 18:22 | 255               | 18:44 |
| 2024           | Feb | 09 | (Fri) | 06:23             | 06:45 | 105 | 12:34   | 62S  | 18:23 | 255               | 18:45 |
| 2024           | Feb | 10 | (Sat) | 06:23             | 06:45 | 105 | 12:34   | 62S  | 18:23 | 255               | 18:45 |

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

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

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

|      |     |    |       |       |       |     |       |     |       |     |       |
|------|-----|----|-------|-------|-------|-----|-------|-----|-------|-----|-------|
| 2024 | Sep | 14 | (Sat) | 05:47 | 06:09 | 86  | 12:15 | 80S | 18:22 | 273 | 18:43 |
| 2024 | Sep | 15 | (Sun) | 05:47 | 06:09 | 87  | 12:15 | 80S | 18:21 | 273 | 18:42 |
| 2024 | Sep | 16 | (Mon) | 05:47 | 06:09 | 87  | 12:15 | 79S | 18:20 | 273 | 18:42 |
| 2024 | Sep | 17 | (Tue) | 05:47 | 06:09 | 88  | 12:14 | 79S | 18:19 | 272 | 18:41 |
| 2024 | Sep | 18 | (Wed) | 05:47 | 06:09 | 88  | 12:14 | 79S | 18:19 | 272 | 18:40 |
| 2024 | Sep | 19 | (Thu) | 05:48 | 06:09 | 88  | 12:14 | 78S | 18:18 | 271 | 18:39 |
| 2024 | Sep | 20 | (Fri) | 05:48 | 06:09 | 89  | 12:13 | 78S | 18:17 | 271 | 18:39 |
| 2024 | Sep | 21 | (Sat) | 05:48 | 06:09 | 89  | 12:13 | 77S | 18:17 | 271 | 18:38 |
| 2024 | Sep | 22 | (Sun) | 05:48 | 06:09 | 90  | 12:12 | 77S | 18:16 | 270 | 18:37 |
| 2024 | Sep | 23 | (Mon) | 05:48 | 06:09 | 90  | 12:12 | 77S | 18:15 | 270 | 18:36 |
| 2024 | Sep | 24 | (Tue) | 05:48 | 06:09 | 90  | 12:12 | 76S | 18:14 | 269 | 18:36 |
| 2024 | Sep | 25 | (Wed) | 05:48 | 06:09 | 91  | 12:11 | 76S | 18:14 | 269 | 18:35 |
| 2024 | Sep | 26 | (Thu) | 05:48 | 06:09 | 91  | 12:11 | 75S | 18:13 | 269 | 18:34 |
| 2024 | Sep | 27 | (Fri) | 05:48 | 06:09 | 92  | 12:11 | 75S | 18:12 | 268 | 18:33 |
| 2024 | Sep | 28 | (Sat) | 05:48 | 06:09 | 92  | 12:10 | 75S | 18:11 | 268 | 18:33 |
| 2024 | Sep | 29 | (Sun) | 05:48 | 06:09 | 92  | 12:10 | 74S | 18:11 | 267 | 18:32 |
| 2024 | Sep | 30 | (Mon) | 05:48 | 06:09 | 93  | 12:10 | 74S | 18:10 | 267 | 18:31 |
| 2024 | Oct | 01 | (Tue) | 05:48 | 06:09 | 93  | 12:09 | 74S | 18:09 | 267 | 18:31 |
| 2024 | Oct | 02 | (Wed) | 05:48 | 06:09 | 94  | 12:09 | 73S | 18:09 | 266 | 18:30 |
| 2024 | Oct | 03 | (Thu) | 05:48 | 06:09 | 94  | 12:09 | 73S | 18:08 | 266 | 18:29 |
| 2024 | Oct | 04 | (Fri) | 05:48 | 06:09 | 94  | 12:08 | 72S | 18:07 | 265 | 18:29 |
| 2024 | Oct | 05 | (Sat) | 05:48 | 06:10 | 95  | 12:08 | 72S | 18:07 | 265 | 18:28 |
| 2024 | Oct | 06 | (Sun) | 05:48 | 06:10 | 95  | 12:08 | 72S | 18:06 | 265 | 18:27 |
| 2024 | Oct | 07 | (Mon) | 05:48 | 06:10 | 96  | 12:08 | 71S | 18:05 | 264 | 18:27 |
| 2024 | Oct | 08 | (Tue) | 05:48 | 06:10 | 96  | 12:07 | 71S | 18:05 | 264 | 18:26 |
| 2024 | Oct | 09 | (Wed) | 05:49 | 06:10 | 96  | 12:07 | 70S | 18:04 | 263 | 18:25 |
| 2024 | Oct | 10 | (Thu) | 05:49 | 06:10 | 97  | 12:07 | 70S | 18:03 | 263 | 18:25 |
| 2024 | Oct | 11 | (Fri) | 05:49 | 06:10 | 97  | 12:06 | 70S | 18:03 | 263 | 18:24 |
| 2024 | Oct | 12 | (Sat) | 05:49 | 06:10 | 98  | 12:06 | 69S | 18:02 | 262 | 18:23 |
| 2024 | Oct | 13 | (Sun) | 05:49 | 06:10 | 98  | 12:06 | 69S | 18:01 | 262 | 18:23 |
| 2024 | Oct | 14 | (Mon) | 05:49 | 06:11 | 98  | 12:06 | 69S | 18:01 | 262 | 18:22 |
| 2024 | Oct | 15 | (Tue) | 05:49 | 06:11 | 99  | 12:06 | 68S | 18:00 | 261 | 18:22 |
| 2024 | Oct | 16 | (Wed) | 05:49 | 06:11 | 99  | 12:05 | 68S | 18:00 | 261 | 18:21 |
| 2024 | Oct | 17 | (Thu) | 05:49 | 06:11 | 99  | 12:05 | 67S | 17:59 | 260 | 18:21 |
| 2024 | Oct | 18 | (Fri) | 05:50 | 06:11 | 100 | 12:05 | 67S | 17:59 | 260 | 18:20 |
| 2024 | Oct | 19 | (Sat) | 05:50 | 06:11 | 100 | 12:05 | 67S | 17:58 | 260 | 18:20 |
| 2024 | Oct | 20 | (Sun) | 05:50 | 06:11 | 101 | 12:05 | 66S | 17:57 | 259 | 18:19 |
| 2024 | Oct | 21 | (Mon) | 05:50 | 06:12 | 101 | 12:04 | 66S | 17:57 | 259 | 18:19 |
| 2024 | Oct | 22 | (Tue) | 05:50 | 06:12 | 101 | 12:04 | 66S | 17:56 | 259 | 18:18 |
| 2024 | Oct | 23 | (Wed) | 05:50 | 06:12 | 102 | 12:04 | 65S | 17:56 | 258 | 18:18 |
| 2024 | Oct | 24 | (Thu) | 05:51 | 06:12 | 102 | 12:04 | 65S | 17:55 | 258 | 18:17 |
| 2024 | Oct | 25 | (Fri) | 05:51 | 06:13 | 102 | 12:04 | 65S | 17:55 | 257 | 18:17 |
| 2024 | Oct | 26 | (Sat) | 05:51 | 06:13 | 103 | 12:04 | 64S | 17:55 | 257 | 18:16 |
| 2024 | Oct | 27 | (Sun) | 05:51 | 06:13 | 103 | 12:04 | 64S | 17:54 | 257 | 18:16 |
| 2024 | Oct | 28 | (Mon) | 05:51 | 06:13 | 103 | 12:04 | 64S | 17:54 | 256 | 18:15 |
| 2024 | Oct | 29 | (Tue) | 05:52 | 06:14 | 104 | 12:03 | 63S | 17:53 | 256 | 18:15 |
| 2024 | Oct | 30 | (Wed) | 05:52 | 06:14 | 104 | 12:03 | 63S | 17:53 | 256 | 18:15 |
| 2024 | Oct | 31 | (Thu) | 05:52 | 06:14 | 104 | 12:03 | 63S | 17:53 | 255 | 18:14 |
| 2024 | Nov | 01 | (Fri) | 05:52 | 06:14 | 105 | 12:03 | 62S | 17:52 | 255 | 18:14 |
| 2024 | Nov | 02 | (Sat) | 05:53 | 06:15 | 105 | 12:03 | 62S | 17:52 | 255 | 18:14 |
| 2024 | Nov | 03 | (Sun) | 05:53 | 06:15 | 105 | 12:03 | 62S | 17:52 | 254 | 18:14 |
| 2024 | Nov | 04 | (Mon) | 05:53 | 06:15 | 106 | 12:03 | 61S | 17:51 | 254 | 18:13 |
| 2024 | Nov | 05 | (Tue) | 05:54 | 06:16 | 106 | 12:03 | 61S | 17:51 | 254 | 18:13 |
| 2024 | Nov | 06 | (Wed) | 05:54 | 06:16 | 106 | 12:03 | 61S | 17:51 | 254 | 18:13 |
| 2024 | Nov | 07 | (Thu) | 05:54 | 06:16 | 107 | 12:03 | 60S | 17:50 | 253 | 18:13 |
| 2024 | Nov | 08 | (Fri) | 05:55 | 06:17 | 107 | 12:04 | 60S | 17:50 | 253 | 18:12 |
| 2024 | Nov | 09 | (Sat) | 05:55 | 06:17 | 107 | 12:04 | 60S | 17:50 | 253 | 18:12 |
| 2024 | Nov | 10 | (Sun) | 05:55 | 06:18 | 108 | 12:04 | 60S | 17:50 | 252 | 18:12 |
| 2024 | Nov | 11 | (Mon) | 05:56 | 06:18 | 108 | 12:04 | 59S | 17:50 | 252 | 18:12 |
| 2024 | Nov | 12 | (Tue) | 05:56 | 06:18 | 108 | 12:04 | 59S | 17:49 | 252 | 18:12 |
| 2024 | Nov | 13 | (Wed) | 05:56 | 06:19 | 108 | 12:04 | 59S | 17:49 | 252 | 18:12 |
| 2024 | Nov | 14 | (Thu) | 05:57 | 06:19 | 109 | 12:04 | 59S | 17:49 | 251 | 18:12 |
| 2024 | Nov | 15 | (Fri) | 05:57 | 06:20 | 109 | 12:04 | 58S | 17:49 | 251 | 18:11 |
| 2024 | Nov | 16 | (Sat) | 05:58 | 06:20 | 109 | 12:05 | 58S | 17:49 | 251 | 18:11 |
| 2024 | Nov | 17 | (Sun) | 05:58 | 06:21 | 109 | 12:05 | 58S | 17:49 | 250 | 18:11 |
| 2024 | Nov | 18 | (Mon) | 05:59 | 06:21 | 110 | 12:05 | 58S | 17:49 | 250 | 18:11 |
| 2024 | Nov | 19 | (Tue) | 05:59 | 06:22 | 110 | 12:05 | 57S | 17:49 | 250 | 18:11 |
| 2024 | Nov | 20 | (Wed) | 05:59 | 06:22 | 110 | 12:05 | 57S | 17:49 | 250 | 18:11 |
| 2024 | Nov | 21 | (Thu) | 06:00 | 06:22 | 110 | 12:06 | 57S | 17:49 | 250 | 18:11 |
| 2024 | Nov | 22 | (Fri) | 06:00 | 06:23 | 111 | 12:06 | 57S | 17:49 | 249 | 18:11 |
| 2024 | Nov | 23 | (Sat) | 06:01 | 06:23 | 111 | 12:06 | 56S | 17:49 | 249 | 18:12 |
| 2024 | Nov | 24 | (Sun) | 06:01 | 06:24 | 111 | 12:07 | 56S | 17:49 | 249 | 18:12 |

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

# Moon

## Nakhon Pathom

Location: E100°02'59.9", N13°49'08.4", 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) | 22:32    | 80  | 04:11        | 90S | 10:33   | 282 |
| 2024           | Jan | 02 (Tue) | 23:17    | 86  | 04:51        | 85S | 11:07   | 277 |
| 2024           | Jan | 03 (Wed) |          |     | 05:30        | 79S | 11:41   | 271 |
| 2024           | Jan | 04 (Thu) | 00:02    | 92  | 06:10        | 73S | 12:14   | 265 |
| 2024           | Jan | 05 (Fri) | 00:48    | 98  | 06:50        | 67S | 12:49   | 259 |
| 2024           | Jan | 06 (Sat) | 01:36    | 104 | 07:33        | 62S | 13:27   | 253 |
| 2024           | Jan | 07 (Sun) | 02:28    | 109 | 08:20        | 57S | 14:09   | 248 |
| 2024           | Jan | 08 (Mon) | 03:24    | 114 | 09:11        | 52S | 14:57   | 244 |
| 2024           | Jan | 09 (Tue) | 04:24    | 117 | 10:08        | 49S | 15:52   | 242 |
| 2024           | Jan | 10 (Wed) | 05:26    | 119 | 11:10        | 48S | 16:54   | 241 |
| 2024           | Jan | 11 (Thu) | 06:30    | 119 | 12:14        | 49S | 17:59   | 242 |
| 2024           | Jan | 12 (Fri) | 07:30    | 116 | 13:17        | 52S | 19:06   | 246 |
| 2024           | Jan | 13 (Sat) | 08:25    | 112 | 14:16        | 57S | 20:10   | 251 |
| 2024           | Jan | 14 (Sun) | 09:15    | 106 | 15:11        | 63S | 21:11   | 257 |
| 2024           | Jan | 15 (Mon) | 10:00    | 99  | 16:03        | 69S | 22:09   | 264 |
| 2024           | Jan | 16 (Tue) | 10:42    | 92  | 16:52        | 77S | 23:05   | 272 |
| 2024           | Jan | 17 (Wed) | 11:23    | 85  | 17:40        | 84S | 23:59   | 279 |
| 2024           | Jan | 18 (Thu) | 12:04    | 78  | 18:28        | 90S |         |     |
| 2024           | Jan | 19 (Fri) | 12:47    | 72  | 19:17        | 86N | 00:54   | 285 |
| 2024           | Jan | 20 (Sat) | 13:32    | 67  | 20:09        | 81N | 01:50   | 291 |
| 2024           | Jan | 21 (Sun) | 14:21    | 64  | 21:02        | 78N | 02:48   | 295 |
| 2024           | Jan | 22 (Mon) | 15:13    | 61  | 21:57        | 76N | 03:45   | 298 |
| 2024           | Jan | 23 (Tue) | 16:08    | 61  | 22:53        | 76N | 04:42   | 299 |

|      |     |    |       |       |     |       |     |       |     |
|------|-----|----|-------|-------|-----|-------|-----|-------|-----|
| 2024 | Jan | 24 | (Wed) | 17:04 | 62  | 23:46 | 78N | 05:37 | 299 |
| 2024 | Jan | 25 | (Thu) | 17:58 | 65  |       |     | 06:27 | 297 |
| 2024 | Jan | 26 | (Fri) | 18:50 | 69  | 00:37 | 81N | 07:13 | 293 |
| 2024 | Jan | 27 | (Sat) | 19:40 | 73  | 01:24 | 85N | 07:54 | 289 |
| 2024 | Jan | 28 | (Sun) | 20:27 | 79  | 02:07 | 90N | 08:31 | 284 |
| 2024 | Jan | 29 | (Mon) | 21:13 | 84  | 02:48 | 87S | 09:06 | 279 |
| 2024 | Jan | 30 | (Tue) | 21:57 | 90  | 03:28 | 81S | 09:40 | 273 |
| 2024 | Jan | 31 | (Wed) | 22:42 | 96  | 04:07 | 75S | 10:13 | 267 |
| 2024 | Feb | 01 | (Thu) | 23:29 | 102 | 04:46 | 69S | 10:47 | 261 |
| 2024 | Feb | 02 | (Fri) |       |     | 05:27 | 64S | 11:22 | 255 |
| 2024 | Feb | 03 | (Sat) | 00:18 | 107 | 06:11 | 58S | 12:02 | 250 |
| 2024 | Feb | 04 | (Sun) | 01:10 | 112 | 06:59 | 54S | 12:46 | 246 |
| 2024 | Feb | 05 | (Mon) | 02:06 | 116 | 07:52 | 50S | 13:36 | 243 |
| 2024 | Feb | 06 | (Tue) | 03:07 | 119 | 08:50 | 48S | 14:33 | 241 |
| 2024 | Feb | 07 | (Wed) | 04:09 | 119 | 09:52 | 48S | 15:36 | 241 |
| 2024 | Feb | 08 | (Thu) | 05:10 | 118 | 10:55 | 50S | 16:42 | 244 |
| 2024 | Feb | 09 | (Fri) | 06:08 | 114 | 11:57 | 54S | 17:48 | 248 |
| 2024 | Feb | 10 | (Sat) | 07:02 | 109 | 12:56 | 59S | 18:53 | 254 |
| 2024 | Feb | 11 | (Sun) | 07:50 | 102 | 13:50 | 66S | 19:54 | 261 |
| 2024 | Feb | 12 | (Mon) | 08:35 | 95  | 14:42 | 74S | 20:53 | 269 |
| 2024 | Feb | 13 | (Tue) | 09:18 | 88  | 15:32 | 81S | 21:50 | 276 |
| 2024 | Feb | 14 | (Wed) | 10:00 | 80  | 16:22 | 88S | 22:47 | 283 |
| 2024 | Feb | 15 | (Thu) | 10:44 | 74  | 17:12 | 87N | 23:44 | 289 |
| 2024 | Feb | 16 | (Fri) | 11:29 | 68  | 18:04 | 82N |       |     |
| 2024 | Feb | 17 | (Sat) | 12:18 | 64  | 18:58 | 79N | 00:42 | 294 |
| 2024 | Feb | 18 | (Sun) | 13:09 | 62  | 19:53 | 76N | 01:40 | 297 |
| 2024 | Feb | 19 | (Mon) | 14:03 | 61  | 20:48 | 76N | 02:38 | 299 |
| 2024 | Feb | 20 | (Tue) | 14:59 | 61  | 21:42 | 77N | 03:33 | 299 |
| 2024 | Feb | 21 | (Wed) | 15:53 | 64  | 22:33 | 80N | 04:24 | 298 |
| 2024 | Feb | 22 | (Thu) | 16:46 | 67  | 23:21 | 83N | 05:11 | 295 |
| 2024 | Feb | 23 | (Fri) | 17:36 | 72  |       |     | 05:53 | 291 |
| 2024 | Feb | 24 | (Sat) | 18:24 | 77  | 00:05 | 88N | 06:31 | 286 |
| 2024 | Feb | 25 | (Sun) | 19:10 | 82  | 00:47 | 88S | 07:07 | 280 |
| 2024 | Feb | 26 | (Mon) | 19:55 | 88  | 01:27 | 83S | 07:41 | 275 |
| 2024 | Feb | 27 | (Tue) | 20:39 | 94  | 02:06 | 77S | 08:14 | 269 |
| 2024 | Feb | 28 | (Wed) | 21:25 | 100 | 02:45 | 71S | 08:47 | 263 |
| 2024 | Feb | 29 | (Thu) | 22:12 | 106 | 03:25 | 65S | 09:22 | 257 |
| 2024 | Mar | 01 | (Fri) | 23:03 | 111 | 04:07 | 60S | 09:59 | 252 |
| 2024 | Mar | 02 | (Sat) | 23:56 | 115 | 04:53 | 55S | 10:40 | 247 |
| 2024 | Mar | 03 | (Sun) |       |     | 05:42 | 51S | 11:27 | 244 |
| 2024 | Mar | 04 | (Mon) | 00:53 | 118 | 06:37 | 49S | 12:19 | 241 |
| 2024 | Mar | 05 | (Tue) | 01:53 | 119 | 07:35 | 48S | 13:18 | 241 |
| 2024 | Mar | 06 | (Wed) | 02:53 | 119 | 08:36 | 49S | 14:21 | 242 |
| 2024 | Mar | 07 | (Thu) | 03:51 | 116 | 09:37 | 51S | 15:25 | 245 |
| 2024 | Mar | 08 | (Fri) | 04:45 | 112 | 10:36 | 56S | 16:30 | 251 |
| 2024 | Mar | 09 | (Sat) | 05:36 | 106 | 11:32 | 62S | 17:32 | 257 |
| 2024 | Mar | 10 | (Sun) | 06:23 | 99  | 12:26 | 70S | 18:33 | 265 |
| 2024 | Mar | 11 | (Mon) | 07:07 | 91  | 13:18 | 77S | 19:32 | 272 |
| 2024 | Mar | 12 | (Tue) | 07:51 | 84  | 14:09 | 85S | 20:31 | 280 |
| 2024 | Mar | 13 | (Wed) | 08:35 | 77  | 15:01 | 90N | 21:30 | 287 |
| 2024 | Mar | 14 | (Thu) | 09:21 | 70  | 15:54 | 84N | 22:31 | 292 |
| 2024 | Mar | 15 | (Fri) | 10:10 | 66  | 16:49 | 80N | 23:31 | 296 |
| 2024 | Mar | 16 | (Sat) | 11:03 | 62  | 17:46 | 77N |       |     |
| 2024 | Mar | 17 | (Sun) | 11:57 | 61  | 18:43 | 76N | 00:31 | 299 |
| 2024 | Mar | 18 | (Mon) | 12:53 | 61  | 19:38 | 76N | 01:28 | 299 |
| 2024 | Mar | 19 | (Tue) | 13:48 | 63  | 20:30 | 78N | 02:21 | 298 |
| 2024 | Mar | 20 | (Wed) | 14:42 | 66  | 21:18 | 82N | 03:09 | 296 |
| 2024 | Mar | 21 | (Thu) | 15:33 | 70  | 22:04 | 86N | 03:53 | 292 |
| 2024 | Mar | 22 | (Fri) | 16:21 | 75  | 22:46 | 90S | 04:32 | 288 |
| 2024 | Mar | 23 | (Sat) | 17:07 | 80  | 23:26 | 85S | 05:08 | 282 |
| 2024 | Mar | 24 | (Sun) | 17:52 | 86  |       |     | 05:42 | 277 |
| 2024 | Mar | 25 | (Mon) | 18:37 | 92  | 00:05 | 79S | 06:15 | 271 |
| 2024 | Mar | 26 | (Tue) | 19:22 | 98  | 00:44 | 73S | 06:48 | 265 |
| 2024 | Mar | 27 | (Wed) | 20:09 | 104 | 01:24 | 67S | 07:23 | 259 |
| 2024 | Mar | 28 | (Thu) | 20:59 | 109 | 02:06 | 62S | 07:59 | 253 |
| 2024 | Mar | 29 | (Fri) | 21:51 | 114 | 02:50 | 57S | 08:39 | 248 |
| 2024 | Mar | 30 | (Sat) | 22:47 | 117 | 03:38 | 52S | 09:24 | 244 |
| 2024 | Mar | 31 | (Sun) | 23:45 | 119 | 04:31 | 49S | 10:13 | 242 |
| 2024 | Apr | 01 | (Mon) |       |     | 05:27 | 48S | 11:09 | 240 |
| 2024 | Apr | 02 | (Tue) | 00:43 | 119 | 06:25 | 48S | 12:08 | 241 |
| 2024 | Apr | 03 | (Wed) | 01:40 | 118 | 07:24 | 50S | 13:10 | 244 |
| 2024 | Apr | 04 | (Thu) | 02:34 | 114 | 08:22 | 54S | 14:12 | 248 |

|      |     |    |       |       |     |       |     |       |     |
|------|-----|----|-------|-------|-----|-------|-----|-------|-----|
| 2024 | Apr | 05 | (Fri) | 03:24 | 109 | 09:17 | 59S | 15:14 | 254 |
| 2024 | Apr | 06 | (Sat) | 04:11 | 103 | 10:11 | 66S | 16:13 | 261 |
| 2024 | Apr | 07 | (Sun) | 04:55 | 96  | 11:02 | 73S | 17:12 | 268 |
| 2024 | Apr | 08 | (Mon) | 05:39 | 88  | 11:53 | 81S | 18:11 | 276 |
| 2024 | Apr | 09 | (Tue) | 06:23 | 80  | 12:45 | 88S | 19:11 | 283 |
| 2024 | Apr | 10 | (Wed) | 07:09 | 74  | 13:38 | 87N | 20:12 | 290 |
| 2024 | Apr | 11 | (Thu) | 07:58 | 68  | 14:34 | 82N | 21:14 | 295 |
| 2024 | Apr | 12 | (Fri) | 08:50 | 64  | 15:32 | 78N | 22:16 | 298 |
| 2024 | Apr | 13 | (Sat) | 09:46 | 61  | 16:31 | 76N | 23:17 | 299 |
| 2024 | Apr | 14 | (Sun) | 10:43 | 61  | 17:29 | 76N |       |     |
| 2024 | Apr | 15 | (Mon) | 11:40 | 62  | 18:23 | 78N | 00:13 | 299 |
| 2024 | Apr | 16 | (Tue) | 12:35 | 64  | 19:14 | 81N | 01:05 | 297 |
| 2024 | Apr | 17 | (Wed) | 13:28 | 68  | 20:01 | 85N | 01:50 | 294 |
| 2024 | Apr | 18 | (Thu) | 14:17 | 73  | 20:44 | 89N | 02:31 | 289 |
| 2024 | Apr | 19 | (Fri) | 15:04 | 78  | 21:25 | 87S | 03:08 | 284 |
| 2024 | Apr | 20 | (Sat) | 15:49 | 84  | 22:04 | 81S | 03:43 | 279 |
| 2024 | Apr | 21 | (Sun) | 16:34 | 90  | 22:43 | 75S | 04:16 | 273 |
| 2024 | Apr | 22 | (Mon) | 17:19 | 96  | 23:23 | 69S | 04:49 | 267 |
| 2024 | Apr | 23 | (Tue) | 18:06 | 102 |       |     | 05:23 | 261 |
| 2024 | Apr | 24 | (Wed) | 18:55 | 108 | 00:04 | 63S | 05:59 | 255 |
| 2024 | Apr | 25 | (Thu) | 19:47 | 112 | 00:48 | 58S | 06:38 | 250 |
| 2024 | Apr | 26 | (Fri) | 20:42 | 116 | 01:35 | 54S | 07:22 | 246 |
| 2024 | Apr | 27 | (Sat) | 21:39 | 119 | 02:27 | 50S | 08:10 | 242 |
| 2024 | Apr | 28 | (Sun) | 22:38 | 119 | 03:22 | 48S | 09:04 | 241 |
| 2024 | Apr | 29 | (Mon) | 23:35 | 118 | 04:20 | 48S | 10:02 | 241 |
| 2024 | Apr | 30 | (Tue) |       |     | 05:18 | 49S | 11:02 | 243 |
| 2024 | May | 01 | (Wed) | 00:29 | 116 | 06:15 | 52S | 12:03 | 246 |
| 2024 | May | 02 | (Thu) | 01:19 | 111 | 07:10 | 57S | 13:03 | 251 |
| 2024 | May | 03 | (Fri) | 02:05 | 105 | 08:02 | 63S | 14:01 | 258 |
| 2024 | May | 04 | (Sat) | 02:49 | 99  | 08:52 | 70S | 14:58 | 265 |
| 2024 | May | 05 | (Sun) | 03:31 | 91  | 09:41 | 77S | 15:55 | 272 |
| 2024 | May | 06 | (Mon) | 04:13 | 84  | 10:31 | 84S | 16:53 | 280 |
| 2024 | May | 07 | (Tue) | 04:57 | 77  | 11:23 | 90N | 17:52 | 287 |
| 2024 | May | 08 | (Wed) | 05:44 | 71  | 12:17 | 84N | 18:54 | 292 |
| 2024 | May | 09 | (Thu) | 06:35 | 66  | 13:15 | 80N | 19:57 | 297 |
| 2024 | May | 10 | (Fri) | 07:30 | 62  | 14:14 | 77N | 21:00 | 299 |
| 2024 | May | 11 | (Sat) | 08:28 | 61  | 15:14 | 76N | 22:00 | 299 |
| 2024 | May | 12 | (Sun) | 09:27 | 61  | 16:12 | 77N | 22:55 | 298 |
| 2024 | May | 13 | (Mon) | 10:25 | 63  | 17:05 | 79N | 23:44 | 295 |
| 2024 | May | 14 | (Tue) | 11:19 | 67  | 17:55 | 83N |       |     |
| 2024 | May | 15 | (Wed) | 12:10 | 71  | 18:40 | 88N | 00:28 | 291 |
| 2024 | May | 16 | (Thu) | 12:59 | 76  | 19:22 | 89S | 01:07 | 286 |
| 2024 | May | 17 | (Fri) | 13:45 | 82  | 20:02 | 83S | 01:42 | 281 |
| 2024 | May | 18 | (Sat) | 14:30 | 88  | 20:41 | 77S | 02:16 | 275 |
| 2024 | May | 19 | (Sun) | 15:14 | 94  | 21:20 | 71S | 02:49 | 269 |
| 2024 | May | 20 | (Mon) | 16:00 | 100 | 22:00 | 65S | 03:23 | 263 |
| 2024 | May | 21 | (Tue) | 16:49 | 106 | 22:43 | 60S | 03:58 | 257 |
| 2024 | May | 22 | (Wed) | 17:40 | 111 | 23:30 | 55S | 04:36 | 252 |
| 2024 | May | 23 | (Thu) | 18:34 | 115 |       |     | 05:18 | 247 |
| 2024 | May | 24 | (Fri) | 19:32 | 118 | 00:21 | 51S | 06:05 | 243 |
| 2024 | May | 25 | (Sat) | 20:31 | 119 | 01:16 | 49S | 06:58 | 241 |
| 2024 | May | 26 | (Sun) | 21:30 | 119 | 02:14 | 48S | 07:56 | 241 |
| 2024 | May | 27 | (Mon) | 22:25 | 117 | 03:13 | 49S | 08:57 | 242 |
| 2024 | May | 28 | (Tue) | 23:16 | 112 | 04:11 | 51S | 09:58 | 245 |
| 2024 | May | 29 | (Wed) |       |     | 05:06 | 56S | 10:58 | 250 |
| 2024 | May | 30 | (Thu) | 00:03 | 107 | 05:58 | 61S | 11:56 | 256 |
| 2024 | May | 31 | (Fri) | 00:47 | 101 | 06:48 | 68S | 12:52 | 263 |
| 2024 | Jun | 01 | (Sat) | 01:28 | 94  | 07:36 | 75S | 13:47 | 270 |
| 2024 | Jun | 02 | (Sun) | 02:09 | 87  | 08:24 | 82S | 14:42 | 277 |
| 2024 | Jun | 03 | (Mon) | 02:51 | 80  | 09:13 | 89S | 15:39 | 284 |
| 2024 | Jun | 04 | (Tue) | 03:35 | 73  | 10:05 | 87N | 16:38 | 290 |
| 2024 | Jun | 05 | (Wed) | 04:23 | 68  | 11:00 | 81N | 17:40 | 295 |
| 2024 | Jun | 06 | (Thu) | 05:16 | 64  | 11:58 | 78N | 18:43 | 298 |
| 2024 | Jun | 07 | (Fri) | 06:13 | 61  | 12:58 | 76N | 19:44 | 299 |
| 2024 | Jun | 08 | (Sat) | 07:12 | 61  | 13:57 | 76N | 20:42 | 299 |
| 2024 | Jun | 09 | (Sun) | 08:11 | 62  | 14:54 | 78N | 21:34 | 296 |
| 2024 | Jun | 10 | (Mon) | 09:08 | 65  | 15:46 | 81N | 22:21 | 293 |
| 2024 | Jun | 11 | (Tue) | 10:01 | 69  | 16:33 | 86N | 23:02 | 288 |
| 2024 | Jun | 12 | (Wed) | 10:51 | 74  | 17:17 | 91S | 23:40 | 283 |
| 2024 | Jun | 13 | (Thu) | 11:38 | 80  | 17:58 | 85S |       |     |
| 2024 | Jun | 14 | (Fri) | 12:24 | 86  | 18:37 | 79S | 00:14 | 277 |
| 2024 | Jun | 15 | (Sat) | 13:08 | 92  | 19:16 | 73S | 00:48 | 271 |

|      |     |    |       |       |     |       |     |       |     |
|------|-----|----|-------|-------|-----|-------|-----|-------|-----|
| 2024 | Jun | 16 | (Sun) | 13:54 | 98  | 19:56 | 68S | 01:21 | 265 |
| 2024 | Jun | 17 | (Mon) | 14:41 | 104 | 20:37 | 62S | 01:55 | 259 |
| 2024 | Jun | 18 | (Tue) | 15:30 | 109 | 21:22 | 57S | 02:31 | 254 |
| 2024 | Jun | 19 | (Wed) | 16:24 | 113 | 22:11 | 53S | 03:12 | 249 |
| 2024 | Jun | 20 | (Thu) | 17:20 | 117 | 23:05 | 50S | 03:57 | 245 |
| 2024 | Jun | 21 | (Fri) | 18:20 | 119 |       |     | 04:48 | 242 |
| 2024 | Jun | 22 | (Sat) | 19:20 | 119 | 00:03 | 48S | 05:45 | 241 |
| 2024 | Jun | 23 | (Sun) | 20:18 | 117 | 01:03 | 48S | 06:46 | 241 |
| 2024 | Jun | 24 | (Mon) | 21:12 | 114 | 02:03 | 50S | 07:49 | 244 |
| 2024 | Jun | 25 | (Tue) | 22:01 | 109 | 03:00 | 54S | 08:51 | 248 |
| 2024 | Jun | 26 | (Wed) | 22:46 | 103 | 03:54 | 60S | 09:51 | 254 |
| 2024 | Jun | 27 | (Thu) | 23:28 | 96  | 04:45 | 66S | 10:48 | 261 |
| 2024 | Jun | 28 | (Fri) |       |     | 05:34 | 73S | 11:43 | 268 |
| 2024 | Jun | 29 | (Sat) | 00:09 | 89  | 06:21 | 80S | 12:38 | 275 |
| 2024 | Jun | 30 | (Sun) | 00:50 | 82  | 07:09 | 87S | 13:33 | 282 |
| 2024 | Jul | 01 | (Mon) | 01:32 | 75  | 07:59 | 88N | 14:30 | 288 |
| 2024 | Jul | 02 | (Tue) | 02:18 | 69  | 08:52 | 83N | 15:29 | 293 |
| 2024 | Jul | 03 | (Wed) | 03:07 | 65  | 09:48 | 79N | 16:30 | 297 |
| 2024 | Jul | 04 | (Thu) | 04:02 | 62  | 10:46 | 77N | 17:32 | 299 |
| 2024 | Jul | 05 | (Fri) | 04:59 | 61  | 11:45 | 76N | 18:30 | 299 |
| 2024 | Jul | 06 | (Sat) | 05:58 | 62  | 12:42 | 77N | 19:25 | 297 |
| 2024 | Jul | 07 | (Sun) | 06:56 | 64  | 13:36 | 80N | 20:14 | 294 |
| 2024 | Jul | 08 | (Mon) | 07:51 | 68  | 14:26 | 84N | 20:57 | 290 |
| 2024 | Jul | 09 | (Tue) | 08:43 | 73  | 15:11 | 89N | 21:36 | 285 |
| 2024 | Jul | 10 | (Wed) | 09:31 | 78  | 15:53 | 87S | 22:12 | 279 |
| 2024 | Jul | 11 | (Thu) | 10:18 | 84  | 16:33 | 81S | 22:46 | 273 |
| 2024 | Jul | 12 | (Fri) | 11:02 | 90  | 17:12 | 76S | 23:19 | 267 |
| 2024 | Jul | 13 | (Sat) | 11:47 | 96  | 17:51 | 70S | 23:52 | 262 |
| 2024 | Jul | 14 | (Sun) | 12:33 | 101 | 18:31 | 64S |       |     |
| 2024 | Jul | 15 | (Mon) | 13:21 | 107 | 19:14 | 59S | 00:27 | 256 |
| 2024 | Jul | 16 | (Tue) | 14:12 | 112 | 20:01 | 54S | 01:06 | 251 |
| 2024 | Jul | 17 | (Wed) | 15:07 | 116 | 20:52 | 51S | 01:48 | 246 |
| 2024 | Jul | 18 | (Thu) | 16:05 | 118 | 21:48 | 48S | 02:36 | 243 |
| 2024 | Jul | 19 | (Fri) | 17:05 | 119 | 22:48 | 48S | 03:31 | 241 |
| 2024 | Jul | 20 | (Sat) | 18:05 | 118 | 23:49 | 49S | 04:30 | 241 |
| 2024 | Jul | 21 | (Sun) | 19:01 | 116 |       |     | 05:34 | 243 |
| 2024 | Jul | 22 | (Mon) | 19:54 | 111 | 00:48 | 52S | 06:38 | 246 |
| 2024 | Jul | 23 | (Tue) | 20:41 | 105 | 01:45 | 57S | 07:40 | 252 |
| 2024 | Jul | 24 | (Wed) | 21:26 | 98  | 02:39 | 64S | 08:39 | 258 |
| 2024 | Jul | 25 | (Thu) | 22:08 | 91  | 03:30 | 71S | 09:37 | 266 |
| 2024 | Jul | 26 | (Fri) | 22:49 | 83  | 04:18 | 78S | 10:33 | 273 |
| 2024 | Jul | 27 | (Sat) | 23:31 | 77  | 05:07 | 85S | 11:29 | 280 |
| 2024 | Jul | 28 | (Sun) |       |     | 05:57 | 90N | 12:25 | 287 |
| 2024 | Jul | 29 | (Mon) | 00:16 | 71  | 06:48 | 84N | 13:24 | 292 |
| 2024 | Jul | 30 | (Tue) | 01:04 | 66  | 07:43 | 80N | 14:24 | 296 |
| 2024 | Jul | 31 | (Wed) | 01:56 | 62  | 08:39 | 77N | 15:24 | 299 |
| 2024 | Aug | 01 | (Thu) | 02:52 | 61  | 09:37 | 76N | 16:23 | 299 |
| 2024 | Aug | 02 | (Fri) | 03:49 | 61  | 10:34 | 76N | 17:18 | 298 |
| 2024 | Aug | 03 | (Sat) | 04:47 | 63  | 11:29 | 79N | 18:08 | 296 |
| 2024 | Aug | 04 | (Sun) | 05:43 | 66  | 12:19 | 82N | 18:53 | 292 |
| 2024 | Aug | 05 | (Mon) | 06:36 | 71  | 13:06 | 87N | 19:34 | 287 |
| 2024 | Aug | 06 | (Tue) | 07:25 | 76  | 13:49 | 89S | 20:11 | 281 |
| 2024 | Aug | 07 | (Wed) | 08:12 | 82  | 14:30 | 84S | 20:45 | 275 |
| 2024 | Aug | 08 | (Thu) | 08:57 | 88  | 15:09 | 78S | 21:18 | 269 |
| 2024 | Aug | 09 | (Fri) | 09:42 | 94  | 15:48 | 72S | 21:51 | 264 |
| 2024 | Aug | 10 | (Sat) | 10:27 | 99  | 16:27 | 66S | 22:25 | 258 |
| 2024 | Aug | 11 | (Sun) | 11:14 | 105 | 17:09 | 61S | 23:01 | 253 |
| 2024 | Aug | 12 | (Mon) | 12:03 | 110 | 17:53 | 56S | 23:41 | 248 |
| 2024 | Aug | 13 | (Tue) | 12:55 | 114 | 18:41 | 52S |       |     |
| 2024 | Aug | 14 | (Wed) | 13:51 | 118 | 19:34 | 49S | 00:26 | 244 |
| 2024 | Aug | 15 | (Thu) | 14:49 | 119 | 20:31 | 48S | 01:17 | 241 |
| 2024 | Aug | 16 | (Fri) | 15:48 | 119 | 21:31 | 48S | 02:13 | 240 |
| 2024 | Aug | 17 | (Sat) | 16:46 | 117 | 22:31 | 51S | 03:14 | 241 |
| 2024 | Aug | 18 | (Sun) | 17:41 | 113 | 23:30 | 55S | 04:18 | 244 |
| 2024 | Aug | 19 | (Mon) | 18:31 | 108 |       |     | 05:22 | 249 |
| 2024 | Aug | 20 | (Tue) | 19:18 | 101 | 00:26 | 61S | 06:24 | 255 |
| 2024 | Aug | 21 | (Wed) | 20:02 | 94  | 01:19 | 67S | 07:24 | 262 |
| 2024 | Aug | 22 | (Thu) | 20:45 | 86  | 02:10 | 75S | 08:22 | 270 |
| 2024 | Aug | 23 | (Fri) | 21:28 | 79  | 03:00 | 82S | 09:20 | 278 |
| 2024 | Aug | 24 | (Sat) | 22:13 | 72  | 03:51 | 89S | 10:18 | 285 |
| 2024 | Aug | 25 | (Sun) | 23:01 | 67  | 04:43 | 86N | 11:17 | 291 |
| 2024 | Aug | 26 | (Mon) | 23:52 | 63  | 05:38 | 81N | 12:18 | 295 |

|                   |           |           |           |
|-------------------|-----------|-----------|-----------|
| 2024 Aug 27 (Tue) |           | 06:35 77N | 13:19 298 |
| 2024 Aug 28 (Wed) | 00:47 61  | 07:32 76N | 14:18 300 |
| 2024 Aug 29 (Thu) | 01:44 61  | 08:30 76N | 15:14 299 |
| 2024 Aug 30 (Fri) | 02:42 62  | 09:25 78N | 16:06 297 |
| 2024 Aug 31 (Sat) | 03:37 65  | 10:16 81N | 16:52 293 |
| 2024 Sep 01 (Sun) | 04:31 69  | 11:03 85N | 17:33 288 |
| 2024 Sep 02 (Mon) | 05:21 74  | 11:47 90N | 18:11 283 |
| 2024 Sep 03 (Tue) | 06:08 80  | 12:28 86S | 18:45 277 |
| 2024 Sep 04 (Wed) | 06:54 85  | 13:08 80S | 19:19 272 |
| 2024 Sep 05 (Thu) | 07:39 92  | 13:47 74S | 19:52 266 |
| 2024 Sep 06 (Fri) | 08:23 97  | 14:26 68S | 20:25 260 |
| 2024 Sep 07 (Sat) | 09:09 103 | 15:06 62S | 21:00 254 |
| 2024 Sep 08 (Sun) | 09:57 108 | 15:49 57S | 21:38 249 |
| 2024 Sep 09 (Mon) | 10:47 113 | 16:35 53S | 22:20 245 |
| 2024 Sep 10 (Tue) | 11:41 117 | 17:25 50S | 23:08 242 |
| 2024 Sep 11 (Wed) | 12:37 119 | 18:19 48S |           |
| 2024 Sep 12 (Thu) | 13:34 120 | 19:16 48S | 00:00 241 |
| 2024 Sep 13 (Fri) | 14:31 119 | 20:14 49S | 00:58 241 |
| 2024 Sep 14 (Sat) | 15:26 116 | 21:13 52S | 01:59 243 |
| 2024 Sep 15 (Sun) | 16:17 111 | 22:09 57S | 03:01 246 |
| 2024 Sep 16 (Mon) | 17:05 105 | 23:03 64S | 04:03 252 |
| 2024 Sep 17 (Tue) | 17:51 98  | 23:55 71S | 05:04 259 |
| 2024 Sep 18 (Wed) | 18:35 90  |           | 06:04 266 |
| 2024 Sep 19 (Thu) | 19:19 82  | 00:47 79S | 07:03 274 |
| 2024 Sep 20 (Fri) | 20:04 75  | 01:39 86S | 08:03 282 |
| 2024 Sep 21 (Sat) | 20:53 69  | 02:32 88N | 09:04 288 |
| 2024 Sep 22 (Sun) | 21:45 64  | 03:28 83N | 10:06 294 |
| 2024 Sep 23 (Mon) | 22:40 61  | 04:26 78N | 11:10 298 |
| 2024 Sep 24 (Tue) | 23:38 60  | 05:25 76N | 12:11 299 |
| 2024 Sep 25 (Wed) |           | 06:24 76N | 13:10 299 |
| 2024 Sep 26 (Thu) | 00:36 61  | 07:21 77N | 14:03 298 |
| 2024 Sep 27 (Fri) | 01:33 64  | 08:13 80N | 14:51 294 |
| 2024 Sep 28 (Sat) | 02:27 68  | 09:02 84N | 15:33 290 |
| 2024 Sep 29 (Sun) | 03:18 72  | 09:46 89N | 16:12 285 |
| 2024 Sep 30 (Mon) | 04:06 78  | 10:28 87S | 16:47 279 |
| 2024 Oct 01 (Tue) | 04:52 84  | 11:08 82S | 17:20 273 |
| 2024 Oct 02 (Wed) | 05:37 90  | 11:46 76S | 17:53 267 |
| 2024 Oct 03 (Thu) | 06:21 96  | 12:25 70S | 18:26 262 |
| 2024 Oct 04 (Fri) | 07:07 101 | 13:05 64S | 19:01 256 |
| 2024 Oct 05 (Sat) | 07:54 107 | 13:47 59S | 19:38 251 |
| 2024 Oct 06 (Sun) | 08:43 112 | 14:32 54S | 20:19 246 |
| 2024 Oct 07 (Mon) | 09:35 116 | 15:20 51S | 21:04 243 |
| 2024 Oct 08 (Tue) | 10:30 118 | 16:12 48S | 21:54 241 |
| 2024 Oct 09 (Wed) | 11:26 120 | 17:07 48S | 22:48 240 |
| 2024 Oct 10 (Thu) | 12:21 119 | 18:03 48S | 23:46 242 |
| 2024 Oct 11 (Fri) | 13:15 117 | 19:00 51S |           |
| 2024 Oct 12 (Sat) | 14:06 113 | 19:55 55S | 00:46 244 |
| 2024 Oct 13 (Sun) | 14:54 108 | 20:48 60S | 01:46 249 |
| 2024 Oct 14 (Mon) | 15:39 101 | 21:40 67S | 02:46 255 |
| 2024 Oct 15 (Tue) | 16:23 94  | 22:31 75S | 03:44 262 |
| 2024 Oct 16 (Wed) | 17:06 86  | 23:22 82S | 04:43 270 |
| 2024 Oct 17 (Thu) | 17:51 79  |           | 05:42 278 |
| 2024 Oct 18 (Fri) | 18:39 72  | 00:15 90S | 06:43 285 |
| 2024 Oct 19 (Sat) | 19:31 66  | 01:11 85N | 07:47 291 |
| 2024 Oct 20 (Sun) | 20:27 62  | 02:10 80N | 08:52 296 |
| 2024 Oct 21 (Mon) | 21:26 61  | 03:11 77N | 09:57 299 |
| 2024 Oct 22 (Tue) | 22:26 61  | 04:12 76N | 10:59 300 |
| 2024 Oct 23 (Wed) | 23:25 63  | 05:12 76N | 11:56 298 |
| 2024 Oct 24 (Thu) |           | 06:07 79N | 12:47 296 |
| 2024 Oct 25 (Fri) | 00:21 66  | 06:58 82N | 13:32 292 |
| 2024 Oct 26 (Sat) | 01:14 71  | 07:44 87N | 14:12 287 |
| 2024 Oct 27 (Sun) | 02:03 76  | 08:27 89S | 14:48 281 |
| 2024 Oct 28 (Mon) | 02:49 82  | 09:07 84S | 15:22 275 |
| 2024 Oct 29 (Tue) | 03:34 88  | 09:46 78S | 15:55 269 |
| 2024 Oct 30 (Wed) | 04:19 94  | 10:25 72S | 16:28 264 |
| 2024 Oct 31 (Thu) | 05:04 99  | 11:04 66S | 17:02 258 |
| 2024 Nov 01 (Fri) | 05:50 105 | 11:46 61S | 17:38 252 |
| 2024 Nov 02 (Sat) | 06:39 110 | 12:30 56S | 18:18 248 |
| 2024 Nov 03 (Sun) | 07:31 114 | 13:17 52S | 19:02 244 |
| 2024 Nov 04 (Mon) | 08:25 117 | 14:08 49S | 19:50 242 |
| 2024 Nov 05 (Tue) | 09:21 119 | 15:02 48S | 20:44 240 |
| 2024 Nov 06 (Wed) | 10:16 119 | 15:58 48S | 21:40 241 |

|                   |           |           |           |
|-------------------|-----------|-----------|-----------|
| 2024 Nov 07 (Thu) | 11:10 118 | 16:54 50S | 22:39 243 |
| 2024 Nov 08 (Fri) | 12:01 115 | 17:48 53S | 23:37 247 |
| 2024 Nov 09 (Sat) | 12:48 110 | 18:40 58S |           |
| 2024 Nov 10 (Sun) | 13:33 104 | 19:30 64S | 00:35 253 |
| 2024 Nov 11 (Mon) | 14:15 97  | 20:19 71S | 01:31 259 |
| 2024 Nov 12 (Tue) | 14:57 90  | 21:08 78S | 02:27 266 |
| 2024 Nov 13 (Wed) | 15:40 83  | 21:59 86S | 03:24 274 |
| 2024 Nov 14 (Thu) | 16:25 76  | 22:52 89N | 04:22 281 |
| 2024 Nov 15 (Fri) | 17:14 69  | 23:49 83N | 05:24 288 |
| 2024 Nov 16 (Sat) | 18:08 64  |           | 06:28 294 |
| 2024 Nov 17 (Sun) | 19:07 61  | 00:50 78N | 07:35 297 |
| 2024 Nov 18 (Mon) | 20:09 61  | 01:53 76N | 08:40 299 |
| 2024 Nov 19 (Tue) | 21:11 62  | 02:56 76N | 09:42 299 |
| 2024 Nov 20 (Wed) | 22:10 65  | 03:55 78N | 10:37 297 |
| 2024 Nov 21 (Thu) | 23:06 69  | 04:49 81N | 11:26 293 |
| 2024 Nov 22 (Fri) | 23:57 74  | 05:39 85N | 12:09 288 |
| 2024 Nov 23 (Sat) |           | 06:23 90N | 12:47 283 |
| 2024 Nov 24 (Sun) | 00:45 80  | 07:05 85S | 13:22 277 |
| 2024 Nov 25 (Mon) | 01:31 86  | 07:44 80S | 13:55 271 |
| 2024 Nov 26 (Tue) | 02:15 92  | 08:23 74S | 14:28 266 |
| 2024 Nov 27 (Wed) | 03:00 97  | 09:02 68S | 15:02 260 |
| 2024 Nov 28 (Thu) | 03:46 103 | 09:43 62S | 15:37 254 |
| 2024 Nov 29 (Fri) | 04:34 108 | 10:26 57S | 16:16 249 |
| 2024 Nov 30 (Sat) | 05:25 113 | 11:13 53S | 16:58 245 |
| 2024 Dec 01 (Sun) | 06:19 117 | 12:03 50S | 17:46 242 |
| 2024 Dec 02 (Mon) | 07:15 119 | 12:57 48S | 18:39 241 |
| 2024 Dec 03 (Tue) | 08:11 119 | 13:53 48S | 19:35 241 |
| 2024 Dec 04 (Wed) | 09:06 118 | 14:49 49S | 20:34 243 |
| 2024 Dec 05 (Thu) | 09:59 116 | 15:44 52S | 21:32 246 |
| 2024 Dec 06 (Fri) | 10:47 111 | 16:37 57S | 22:30 251 |
| 2024 Dec 07 (Sat) | 11:31 106 | 17:27 62S | 23:25 257 |
| 2024 Dec 08 (Sun) | 12:13 99  | 18:15 69S |           |
| 2024 Dec 09 (Mon) | 12:53 93  | 19:02 76S | 00:20 264 |
| 2024 Dec 10 (Tue) | 13:34 85  | 19:50 83S | 01:14 271 |
| 2024 Dec 11 (Wed) | 14:16 78  | 20:40 90S | 02:10 278 |
| 2024 Dec 12 (Thu) | 15:02 72  | 21:34 85N | 03:08 285 |
| 2024 Dec 13 (Fri) | 15:52 67  | 22:31 80N | 04:09 291 |
| 2024 Dec 14 (Sat) | 16:48 63  | 23:33 77N | 05:13 296 |
| 2024 Dec 15 (Sun) | 17:49 61  |           | 06:19 299 |
| 2024 Dec 16 (Mon) | 18:52 61  | 00:36 76N | 07:23 299 |
| 2024 Dec 17 (Tue) | 19:53 63  | 01:37 77N | 08:22 298 |
| 2024 Dec 18 (Wed) | 20:52 67  | 02:35 79N | 09:15 295 |
| 2024 Dec 19 (Thu) | 21:46 72  | 03:28 83N | 10:01 290 |
| 2024 Dec 20 (Fri) | 22:37 77  | 04:16 88N | 10:42 285 |
| 2024 Dec 21 (Sat) | 23:24 83  | 04:59 88S | 11:19 280 |
| 2024 Dec 22 (Sun) |           | 05:40 82S | 11:53 274 |
| 2024 Dec 23 (Mon) | 00:09 89  | 06:19 76S | 12:26 268 |
| 2024 Dec 24 (Tue) | 00:54 95  | 06:58 70S | 13:00 262 |
| 2024 Dec 25 (Wed) | 01:40 101 | 07:38 64S | 13:34 256 |
| 2024 Dec 26 (Thu) | 02:27 107 | 08:20 59S | 14:12 251 |
| 2024 Dec 27 (Fri) | 03:16 111 | 09:05 55S | 14:53 247 |
| 2024 Dec 28 (Sat) | 04:09 115 | 09:54 51S | 15:38 243 |
| 2024 Dec 29 (Sun) | 05:05 118 | 10:47 49S | 16:30 241 |
| 2024 Dec 30 (Mon) | 06:02 119 | 11:44 48S | 17:26 241 |
| 2024 Dec 31 (Tue) | 06:58 119 | 12:41 49S | 18:25 242 |