

# Mond- und Dämmerungstabelle 2024

## für die visuelle Deep-Sky-Beobachtung

Bad Dürkheim 49.4594° N 8.1681° E

Berechnung: pyEphem  
Textsatz: L<sup>A</sup>T<sub>E</sub>X

### Atmosphären-Einstellungen in pyEphem

Standort.pressure = 1010.0  
Standort.horizon = '0:00:00.0'

Alle Zeitangaben beziehen sich auf den in der jeweiligen Zeile angegeben Kalendertag. Liegt ein Ereignis bereits nach Mitternacht, also schon am Folgetag, ist die Zeitangabe mit einem \* gekennzeichnet, z.B.: 00:20\*.

**Spalte 1** Kalendertag.

**Spalte 2** Bei »MESZ« sind alle Zeitangaben in dieser Zeile in Mitteleuropäischer Sommerzeit, ansonsten standardmäßig in MEZ.

**Spalte 3** Die für Deep-Sky-Beobachtungen nutzbare Zeitspanne: Es ist astronomisch dunkel (Sonne steht tiefer als  $-18^\circ$ ) und kein Mond stört.

**Spalte 4** Dauer der für Deep-Sky-Beobachtungen nutzbaren Zeitspanne.

**Spalte 5** Ereignisse, die die für Deep-Sky-Beobachtungen nutzbare Zeitspanne begrenzen: AN<sub>+</sub> (Einbruch der astronomischen Nacht = Ende der astr. Abenddämmerung), M<sub>v</sub> (Monduntergang), AN<sub>-</sub> (Ende der astronomischen Nacht = Beginn der astr. Morgendämmerung), M<sub>7</sub>

(Mondaufgang), Astr. MD (Astronomische Mitternachtsdämmerung), Naut. MD (Nautische Mitternachtsdämmerung).

**Spalte 6** Mondphase.

**Spalte 7** Mondaufgang.

**Spalte 8** Monduntergang.

**Spalte 9** Beginn der astr. Morgendämmerung (Sonnenhöhe =  $-18^\circ$ ).

**Spalte 10** Dauer der astr. Morgendämmerung.

**Spalte 11** Beginn der naut. Morgendämmerung (Sonnenhöhe =  $-12^\circ$ ).

**Spalte 12** Dauer der naut. Morgendämmerung.

**Spalte 13** Beginn der bürg. Morgendämmerung (Sonnenhöhe =  $-6^\circ$ ).

**Spalte 14** Dauer der bürg. Morgendämmerung.

**Spalte 15** Sonnenaufgang.

**Spalte 16** Taglänge.

**Spalte 17** Sonnenuntergang.

**Spalte 18** Dauer der bürg. Abenddämmerung.

**Spalte 19** Ende der bürg. Abenddämmerung (Sonnenhöhe =  $-6^\circ$ ).

**Spalte 20** Dauer der naut. Abenddämmerung.

**Spalte 21** Ende der naut. Abenddämmerung (Sonnenhöhe =  $-12^\circ$ ).

**Spalte 22** Dauer der astr. Abenddämmerung.

**Spalte 23** Ende der astr. Abenddämmerung (Sonnenhöhe =  $-18^\circ$ ).

**Spalte 24** Länge der Nacht.

**Spalte 25** Länge der astr. Nacht.

**Für Beobachter, die zu Zeiten der Mitternachtsdämmerung während der astr. Dämmerung beobachten möchten:**

**Spalte 26** Nutzbare Zeitspanne: Es ist »nautisch dunkel« (Sonne steht tiefer als  $-12^\circ$ ) und kein Mond stört.

**Spalte 27** Dauer der in Spalte 26 angegebenen Zeitspanne.

**Spalte 28** Ereignisse, die die nutzbare Zeitspanne begrenzen: ND<sub>+</sub> (Beginn der »naut. Dunkelheit« = Ende der naut. Abenddämmerung), M<sub>v</sub> (Monduntergang), ND<sub>-</sub> (Ende der »naut. Dunkelheit« = Beginn der naut. Morgendämmerung), M<sub>7</sub> (Mondaufgang), Naut. MD (Nautische Mitternachtsdämmerung).

**Spalte 29** Identisch zu Spalte 1.

| 1           | 2             | 3                          | 4          | 5                                   | 6    | 7          | 8          | 9                          | 10         | 11    | 12         | 13    | 14         | 15         | 16         | 17         | 18         | 19                      | 20         | 21    | 22         | 23    | 24         | 25         | 26                         | 27         | 28 | 29   |             |
|-------------|---------------|----------------------------|------------|-------------------------------------|------|------------|------------|----------------------------|------------|-------|------------|-------|------------|------------|------------|------------|------------|-------------------------|------------|-------|------------|-------|------------|------------|----------------------------|------------|----|------|-------------|
| 2024        | Zeit-<br>zone | Astr. dunkel und kein Mond |            |                                     | Mond |            |            | Beginn der Morgendämmerung |            |       |            |       | Sonne      |            |            |            |            | Ende der Abenddämmerung |            |       |            |       | Nacht      | Astr. N.   | Naut. dunkel und kein Mond |            |    | 2024 |             |
|             |               |                            | $\Delta t$ |                                     | Ph.  | $\nearrow$ | $\searrow$ | Astr.                      | $\Delta t$ | Naut. | $\Delta t$ | Bürg. | $\Delta t$ | $\nearrow$ | $\Delta t$ | $\searrow$ | $\Delta t$ | Bürg.                   | $\Delta t$ | Naut. | $\Delta t$ | Astr. | $\Delta t$ | $\Delta t$ |                            | $\Delta t$ |    |      |             |
| Mo, 1. Jan  |               | 18:37 – 22:20              | 3h 43m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 22:20      | 11:29      | 06:24                      | 38m        | 07:03 | 39m        | 07:43 | 39m        | 08:22      | 8h 15m     | 16:38      | 39m        | 17:18                   | 39m        | 17:58 | 38m        | 18:37 | 15h 44m    | 11h 47m    |                            |            |    |      | Mo, 1. Jan  |
| Di, 2. Jan  |               | 18:37 – 23:27              | 4h 49m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 23:27      | 11:42      | 06:24                      | 38m        | 07:03 | 39m        | 07:43 | 39m        | 08:22      | 8h 16m     | 16:39      | 39m        | 17:19                   | 39m        | 17:59 | 38m        | 18:37 | 15h 43m    | 11h 46m    |                            |            |    |      | Di, 2. Jan  |
| Mi, 3. Jan  |               | 18:38 – 00:35*             | 5h 56m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | —:—        | 11:54      | 06:24                      | 38m        | 07:03 | 39m        | 07:43 | 39m        | 08:22      | 8h 17m     | 16:40      | 39m        | 17:20                   | 39m        | 18:00 | 38m        | 18:38 | 15h 42m    | 11h 45m    |                            |            |    |      | Mi, 3. Jan  |
| Do, 4. Jan  |               | 18:39 – 01:44*             | 7h 04m     | AN <sub>+</sub> bis M <sub>7</sub>  | ☾    | 00:35      | 12:06      | 06:24                      | 38m        | 07:03 | 39m        | 07:43 | 39m        | 08:22      | 8h 18m     | 16:41      | 39m        | 17:21                   | 39m        | 18:01 | 38m        | 18:39 | 15h 40m    | 11h 44m    |                            |            |    |      | Do, 4. Jan  |
| Fr, 5. Jan  |               | 18:40 – 02:56*             | 8h 16m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 01:44      | 12:19      | 06:24                      | 38m        | 07:03 | 39m        | 07:42 | 39m        | 08:22      | 8h 20m     | 16:42      | 39m        | 17:22                   | 39m        | 18:02 | 38m        | 18:40 | 15h 39m    | 11h 43m    |                            |            |    |      | Fr, 5. Jan  |
| Sa, 6. Jan  |               | 18:41 – 04:13*             | 9h 31m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 02:56      | 12:35      | 06:24                      | 38m        | 07:03 | 39m        | 07:42 | 39m        | 08:22      | 8h 21m     | 16:43      | 39m        | 17:23                   | 39m        | 18:03 | 38m        | 18:41 | 15h 38m    | 11h 42m    |                            |            |    |      | Sa, 6. Jan  |
| So, 7. Jan  |               | 18:42 – 05:32*             | 10h 49m    | AN <sub>+</sub> bis M <sub>7</sub>  |      | 04:13      | 12:56      | 06:24                      | 38m        | 07:02 | 39m        | 07:42 | 39m        | 08:21      | 8h 23m     | 16:45      | 39m        | 17:24                   | 39m        | 18:04 | 38m        | 18:42 | 15h 36m    | 11h 41m    |                            |            |    |      | So, 7. Jan  |
| Mo, 8. Jan  |               | 18:43 – 06:23*             | 11h 40m    | AN <sub>+</sub> bis AN <sub>-</sub> |      | 05:32      | 13:26      | 06:24                      | 38m        | 07:02 | 39m        | 07:42 | 39m        | 08:21      | 8h 24m     | 16:46      | 39m        | 17:25                   | 39m        | 18:05 | 38m        | 18:43 | 15h 34m    | 11h 40m    |                            |            |    |      | Mo, 8. Jan  |
| Di, 9. Jan  |               | 18:44 – 06:23*             | 11h 38m    | AN <sub>+</sub> bis AN <sub>-</sub> |      | 06:50      | 14:08      | 06:23                      | 38m        | 07:02 | 39m        | 07:41 | 39m        | 08:21      | 8h 26m     | 16:47      | 39m        | 17:26                   | 39m        | 18:06 | 38m        | 18:44 | 15h 33m    | 11h 38m    |                            |            |    |      | Di, 9. Jan  |
| Mi, 10. Jan |               | 18:45 – 06:23*             | 11h 37m    | AN <sub>+</sub> bis AN <sub>-</sub> |      | 08:00      | 15:07      | 06:23                      | 38m        | 07:02 | 39m        | 07:41 | 39m        | 08:20      | 8h 28m     | 16:48      | 39m        | 17:27                   | 39m        | 18:07 | 38m        | 18:45 | 15h 31m    | 11h 37m    |                            |            |    |      | Mi, 10. Jan |
| Do, 11. Jan |               | 18:47 – 06:23*             | 11h 36m    | AN <sub>+</sub> bis AN <sub>-</sub> | ☾    | 08:56      | 16:24      | 06:23                      | 38m        | 07:01 | 39m        | 07:41 | 39m        | 08:20      | 8h 29m     | 16:50      | 39m        | 17:29                   | 39m        | 18:08 | 38m        | 18:47 | 15h 29m    | 11h 36m    |                            |            |    |      | Do, 11. Jan |
| Fr, 12. Jan |               | 18:48 – 06:22*             | 11h 34m    | AN <sub>+</sub> bis AN <sub>-</sub> |      | 09:36      | 17:51      | 06:23                      | 38m        | 07:01 | 39m        | 07:40 | 38m        | 08:19      | 8h 31m     | 16:51      | 38m        | 17:30                   | 39m        | 18:09 | 38m        | 18:48 | 15h 27m    | 11h 34m    |                            |            |    |      | Fr, 12. Jan |
| Sa, 13. Jan |               | 19:22 – 06:22*             | 10h 59m    | M <sub>7</sub> bis AN <sub>-</sub>  |      | 10:06      | 19:22      | 06:22                      | 38m        | 07:01 | 39m        | 07:40 | 38m        | 08:19      | 8h 33m     | 16:52      | 38m        | 17:31                   | 39m        | 18:10 | 38m        | 18:49 | 15h 25m    | 11h 33m    |                            |            |    |      | Sa, 13. Jan |
| So, 14. Jan |               | 20:51 – 06:21*             | 9h 30m     | M <sub>7</sub> bis AN <sub>-</sub>  |      | 10:27      | 20:51      | 06:22                      | 38m        | 07:00 | 39m        | 07:39 | 38m        | 08:18      | 8h 35m     | 16:54      | 38m        | 17:33                   | 39m        | 18:12 | 38m        | 18:50 | 15h 23m    | 11h 31m    |                            |            |    |      | So, 14. Jan |
| Mo, 15. Jan |               | 22:16 – 06:21*             | 8h 04m     | M <sub>7</sub> bis AN <sub>-</sub>  |      | 10:45      | 22:16      | 06:21                      | 38m        | 07:00 | 39m        | 07:39 | 38m        | 08:17      | 8h 37m     | 16:55      | 38m        | 17:34                   | 39m        | 18:13 | 38m        | 18:51 | 15h 21m    | 11h 29m    |                            |            |    |      | Mo, 15. Jan |
| Di, 16. Jan |               | 23:39 – 06:20*             | 6h 41m     | M <sub>7</sub> bis AN <sub>-</sub>  |      | 11:00      | 23:39      | 06:21                      | 38m        | 06:59 | 38m        | 07:38 | 38m        | 08:17      | 8h 40m     | 16:57      | 38m        | 17:35                   | 38m        | 18:14 | 38m        | 18:52 | 15h 19m    | 11h 28m    |                            |            |    |      | Di, 16. Jan |
| Mi, 17. Jan |               | 01:01* – 06:20*            | 5h 19m     | M <sub>7</sub> bis AN <sub>-</sub>  |      | 11:15      | —:—        | 06:20                      | 38m        | 06:58 | 38m        | 07:37 | 38m        | 08:16      | 8h 42m     | 16:58      | 38m        | 17:37                   | 38m        | 18:15 | 38m        | 18:54 | 15h 16m    | 11h 26m    |                            |            |    |      | Mi, 17. Jan |
| Do, 18. Jan |               | 02:22* – 06:19*            | 3h 57m     | M <sub>7</sub> bis AN <sub>-</sub>  | ☾    | 11:31      | 01:01      | 06:20                      | 38m        | 06:58 | 38m        | 07:37 | 38m        | 08:15      | 8h 44m     | 17:00      | 38m        | 17:38                   | 38m        | 18:17 | 38m        | 18:55 | 15h 14m    | 11h 24m    |                            |            |    |      | Do, 18. Jan |
| Fr, 19. Jan |               | 03:43* – 06:19*            | 2h 35m     | M <sub>7</sub> bis AN <sub>-</sub>  |      | 11:50      | 02:22      | 06:19                      | 38m        | 06:57 | 38m        | 07:36 | 38m        | 08:14      | 8h 47m     | 17:01      | 38m        | 17:39                   | 38m        | 18:18 | 38m        | 18:56 | 15h 12m    | 11h 22m    |                            |            |    |      | Fr, 19. Jan |
| Sa, 20. Jan |               | 05:01* – 06:18*            | 1h 16m     | M <sub>7</sub> bis AN <sub>-</sub>  |      | 12:14      | 03:43      | 06:19                      | 37m        | 06:56 | 38m        | 07:35 | 38m        | 08:13      | 8h 49m     | 17:03      | 38m        | 17:41                   | 38m        | 18:19 | 37m        | 18:57 | 15h 09m    | 11h 20m    |                            |            |    |      | Sa, 20. Jan |
| So, 21. Jan |               | 06:13* – 06:17*            | 4m         | M <sub>7</sub> bis AN <sub>-</sub>  |      | 12:45      | 05:01      | 06:18                      | 37m        | 06:56 | 38m        | 07:34 | 37m        | 08:12      | 8h 51m     | 17:04      | 37m        | 17:42                   | 38m        | 18:21 | 37m        | 18:59 | 15h 07m    | 11h 18m    |                            |            |    |      | So, 21. Jan |
| Mo, 22. Jan |               | —:—:—:—:—                  | –          | Mond stört                          |      | 13:26      | 06:13      | 06:17                      | 37m        | 06:55 | 38m        | 07:33 | 37m        | 08:11      | 8h 54m     | 17:06      | 37m        | 17:44                   | 38m        | 18:22 | 37m        | 19:00 | 15h 04m    | 11h 16m    |                            |            |    |      | Mo, 22. Jan |
| Di, 23. Jan |               | —:—:—:—:—                  | –          | Mond stört                          |      | 14:20      | 07:13      | 06:16                      | 37m        | 06:54 | 38m        | 07:33 | 37m        | 08:10      | 8h 57m     | 17:07      | 37m        | 17:45                   | 38m        | 18:23 | 37m        | 19:01 | 15h 01m    | 11h 14m    |                            |            |    |      | Di, 23. Jan |
| Mi, 24. Jan |               | —:—:—:—:—                  | –          | Mond stört                          |      | 15:24      | 08:00      | 06:16                      | 37m        | 06:53 | 38m        | 07:32 | 37m        | 08:09      | 8h 59m     | 17:09      | 37m        | 17:46                   | 38m        | 18:25 | 37m        | 19:03 | 14h 59m    | 11h 12m    |                            |            |    |      | Mi, 24. Jan |
| Do, 25. Jan |               | —:—:~:~:~                  | –          | Mond stört                          | ☾    | 16:35      | 08:35      | 06:15                      | 37m        | 06:52 | 38m        | 07:31 | 37m        | 08:08      | 9h 02m     | 17:11      | 37m        | 17:48                   | 38m        | 18:26 | 37m        | 19:04 | 14h 56m    | 11h 09m    |                            |            |    |      | Do, 25. Jan |
| Fr, 26. Jan |               | —:~:~:~:~                  | –          | Mond stört                          |      | 17:47      | 09:01      | 06:14                      | 37m        | 06:51 | 38m        | 07:30 | 37m        | 08:07      | 9h 05m     | 17:12      | 37m        | 17:49                   | 38m        | 18:28 | 37m        | 19:05 | 14h 53m    | 11h 07m    |                            |            |    |      | Fr, 26. Jan |
| Sa, 27. Jan |               | —:~:~:~:~                  | –          | Mond stört                          |      | 18:58      | 09:20      | 06:13                      | 37m        | 06:50 | 38m        | 07:28 | 37m        | 08:06      | 9h 08m     | 17:14      | 37m        | 17:51                   | 38m        | 18:29 | 37m        | 19:07 | 14h 50m    | 11h 05m    |                            |            |    |      | Sa, 27. Jan |
| So, 28. Jan |               | 19:08 – 20:08              | 59m        | AN <sub>+</sub> bis M <sub>7</sub>  |      | 20:08      | 09:35      | 06:12                      | 37m        | 06:49 | 37m        | 07:27 | 37m        | 08:04      | 9h 10m     | 17:15      | 37m        | 17:52                   | 37m        | 18:30 | 37m        | 19:08 | 14h 47m    | 11h 02m    |                            |            |    |      | So, 28. Jan |
| Mo, 29. Jan |               | 19:09 – 21:15              | 2h 05m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 21:15      | 09:48      | 06:11                      | 37m        | 06:48 | 37m        | 07:26 | 36m        | 08:03      | 9h 13m     | 17:17      | 36m        | 17:54                   | 37m        | 18:32 | 37m        | 19:09 | 14h 44m    | 11h 00m    |                            |            |    |      | Mo, 29. Jan |
| Di, 30. Jan |               | 19:11 – 22:22              | 3h 11m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 22:22      | 10:00      | 06:10                      | 37m        | 06:47 | 37m        | 07:25 | 36m        | 08:02      | 9h 16m     | 17:19      | 36m        | 17:56                   | 37m        | 18:33 | 37m        | 19:11 | 14h 41m    | 10h 57m    |                            |            |    |      | Di, 30. Jan |
| Mi, 31. Jan |               | 19:12 – 23:30              | 4h 17m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 23:30      | 10:12      | 06:09                      | 37m        | 06:46 | 37m        | 07:24 | 36m        | 08:01      | 9h 19m     | 17:20      | 36m        | 17:57                   | 37m        | 18:35 | 37m        | 19:12 | 14h 38m    | 10h 55m    |                            |            |    |      | Mi, 31. Jan |
| Do, 1. Feb  |               | 19:14 – 00:40*             | 5h 25m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | —:—        | 10:24      | 06:08                      | 37m        | 06:45 | 37m        | 07:23 | 36m        | 07:59      | 9h 22m     | 17:22      | 36m        | 17:59                   | 37m        | 18:36 | 37m        | 19:14 | 14h 35m    | 10h 52m    |                            |            |    |      | Do, 1. Feb  |
| Fr, 2. Feb  |               | 19:15 – 01:53*             | 6h 37m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 00:40      | 10:39      | 06:06                      | 37m        | 06:44 | 37m        | 07:21 | 36m        | 07:58      | 9h 25m     | 17:24      | 36m        | 18:00                   | 37m        | 18:38 | 37m        | 19:15 | 14h 32m    | 10h 50m    |                            |            |    |      | Fr, 2. Feb  |
| Sa, 3. Feb  |               | 19:17 – 03:09*             | 7h 52m     | AN <sub>+</sub> bis M <sub>7</sub>  | ☾    | 01:53      | 10:57      | 06:05                      | 37m        | 06:43 | 37m        | 07:20 | 36m        | 07:56      | 9h 29m     | 17:25      | 36m        | 18:02                   | 37m        | 18:39 | 37m        | 19:17 | 14h 29m    | 10h 47m    |                            |            |    |      | Sa, 3. Feb  |
| So, 4. Feb  |               | 19:18 – 04:26*             | 9h 07m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 03:09      | 11:21      | 06:04                      | 37m        | 06:41 | 37m        | 07:19 | 36m        | 07:55      | 9h 32m     | 17:27      | 36m        | 18:03                   | 37m        | 18:41 | 37m        | 19:18 | 14h 26m    | 10h 44m    |                            |            |    |      | So, 4. Feb  |
| Mo, 5. Feb  |               | 19:19 – 05:39*             | 10h 19m    | AN <sub>+</sub> bis M <sub>7</sub>  |      | 04:26      | 11:55      | 06:03                      | 37m        | 06:40 | 37m        | 07:17 | 36m        | 07:53      | 9h 35m     | 17:29      | 36m        | 18:05                   | 37m        | 18:42 | 37m        | 19:19 | 14h 23m    | 10h 41m    |                            |            |    |      | Mo, 5. Feb  |
| Di, 6. Feb  |               | 19:21 – 06:00*             | 10h 39m    | AN <sub>+</sub> bis AN <sub>-</sub> |      | 05:39      | 12:45      | 06:01                      | 37m        | 06:39 | 37m        | 07:16 | 35m        | 07:52      | 9h 38m     | 17:30      | 36m        | 18:06                   | 37m        | 18:44 | 37m        | 19:21 | 14h 19m    | 10h 39m    |                            |            |    |      | Di, 6. Feb  |
| Mi, 7. Feb  |               | 19:22 – 05:59*             | 10h 36m    | AN <sub>+</sub> bis AN <sub>-</sub> |      | 06:41      | 13:52      | 06:00                      | 37m        | 06:37 | 37m        | 07:14 | 35m        | 07:50      | 9h 41m     | 17:32      | 35m        | 18:08                   | 37m        | 18:45 | 37m        | 19:22 | 14h 16m    | 10h 36m    |                            |            |    |      | Mi, 7. Feb  |
| Do, 8. Feb  |               | 19:24 – 05:57*             | 10h 33m    | AN <sub>+</sub> bis AN <sub>-</sub> |      | 07:29      | 15:15      | 05:59                      | 37m        | 06:36 | 37m        | 07:13 | 35m        | 07:49      | 9h 45m     | 17:34      | 35m        | 18:10                   | 37m        | 18:47 | 37m        | 19:24 | 14h 13m    | 10h 33m    |                            |            |    |      | Do, 8. Feb  |
| Fr, 9. Feb  |               | 19:25 – 05:56*             | 10h 30m    | AN <sub>+</sub> bis AN <sub>-</sub> | ☾    | 08:03      | 16:47      | 05:57                      | 37m        | 06:34 | 37m        | 07:11 | 35m        | 07:47      | 9h 48m     | 17:36      | 35m        | 18:11                   | 37m        | 18:48 | 37m        | 19:25 | 14h 09m    | 10h 30m    |                            |            |    |      | Fr, 9. Feb  |
| Sa, 10. Feb |               | 19:27 – 05:54*             | 10h 27m    | AN <sub>+</sub> bis AN <sub>-</sub> |      | 08:28      | 18:19      | 05:56                      | 37m        | 06:33 | 36m        | 07:10 | 35m        | 07:45      | 9h 51m     | 17:37      | 35m        | 18:13                   | 36m        | 18:50 | 37m        | 19:27 | 14h 06m    | 10h 27m    |                            |            |    |      | Sa, 10. Feb |
| So, 11. Feb |               | 19:50 – 05:53*             | 10h 03m    | M <sub>7</sub> bis AN <sub>-</sub>  |      | 08:48      | 19:50      | 05:54                      | 37m        | 06:31 | 36m        | 07:08 | 3          |            |            |            |            |                         |            |       |            |       |            |            |                            |            |    |      |             |

| 1           | 2             | 3                          | 4          | 5                                   | 6    | 7          | 8          | 9                          | 10         | 11    | 12         | 13    | 14         | 15         | 16         | 17         | 18         | 19                      | 20         | 21    | 22         | 23    | 24         | 25         | 26                         | 27         | 28 | 29   |             |
|-------------|---------------|----------------------------|------------|-------------------------------------|------|------------|------------|----------------------------|------------|-------|------------|-------|------------|------------|------------|------------|------------|-------------------------|------------|-------|------------|-------|------------|------------|----------------------------|------------|----|------|-------------|
| 2024        | Zeit-<br>zone | Astr. dunkel und kein Mond |            |                                     | Mond |            |            | Beginn der Morgendämmerung |            |       |            |       | Sonne      |            |            |            |            | Ende der Abenddämmerung |            |       |            |       | Nacht      | Astr. N.   | Naut. dunkel und kein Mond |            |    | 2024 |             |
|             |               |                            | $\Delta t$ |                                     | Ph.  | $\nearrow$ | $\searrow$ | Astr.                      | $\Delta t$ | Naut. | $\Delta t$ | Bürg. | $\Delta t$ | $\nearrow$ | $\Delta t$ | $\searrow$ | $\Delta t$ | Bürg.                   | $\Delta t$ | Naut. | $\Delta t$ | Astr. | $\Delta t$ | $\Delta t$ |                            | $\Delta t$ |    |      |             |
| Di, 20. Feb |               | —:—:—:—                    | —          | Mond stört                          |      | 13:15      | 06:01      | 05:40                      | 36m        | 06:17 | 36m        | 06:53 | 34m        | 07:28      | 10h 26m    | 17:54      | 34m        | 18:29                   | 36m        | 19:05 | 36m        | 19:42 | 13h 31m    | 9h 55m     |                            |            |    |      | Di, 20. Feb |
| Mi, 21. Feb |               | —:—:—:—                    | —          | Mond stört                          |      | 14:24      | 06:38      | 05:38                      | 36m        | 06:15 | 36m        | 06:51 | 34m        | 07:26      | 10h 29m    | 17:56      | 34m        | 18:30                   | 36m        | 19:07 | 37m        | 19:44 | 13h 28m    | 9h 52m     |                            |            |    |      | Mi, 21. Feb |
| Do, 22. Feb |               | —:—:~:~:~                  | —          | Mond stört                          |      | 15:35      | 07:06      | 05:36                      | 36m        | 06:13 | 36m        | 06:50 | 34m        | 07:24      | 10h 33m    | 17:57      | 34m        | 18:32                   | 36m        | 19:08 | 37m        | 19:45 | 13h 24m    | 9h 49m     |                            |            |    |      | Do, 22. Feb |
| Fr, 23. Feb |               | —:~:~:~:~                  | —          | Mond stört                          |      | 16:47      | 07:26      | 05:34                      | 36m        | 06:11 | 36m        | 06:48 | 34m        | 07:22      | 10h 36m    | 17:59      | 34m        | 18:34                   | 36m        | 19:10 | 37m        | 19:47 | 13h 21m    | 9h 45m     |                            |            |    |      | Fr, 23. Feb |
| Sa, 24. Feb |               | —:~:~:~:~                  | —          | Mond stört                          | ○    | 17:57      | 07:42      | 05:33                      | 36m        | 06:10 | 36m        | 06:46 | 34m        | 07:20      | 10h 40m    | 18:01      | 34m        | 18:35                   | 36m        | 19:11 | 37m        | 19:49 | 13h 17m    | 9h 42m     |                            |            |    |      | Sa, 24. Feb |
| So, 25. Feb |               | —:~:~:~:~                  | —          | Mond stört                          |      | 19:05      | 07:56      | 05:31                      | 36m        | 06:08 | 36m        | 06:44 | 34m        | 07:18      | 10h 44m    | 18:02      | 34m        | 18:37                   | 36m        | 19:13 | 37m        | 19:50 | 13h 13m    | 9h 38m     |                            |            |    |      | So, 25. Feb |
| Mo, 26. Feb |               | 19:52–20:12                | 20m        | AN <sub>+</sub> bis M <sub>7</sub>  |      | 20:12      | 08:08      | 05:29                      | 36m        | 06:06 | 36m        | 06:42 | 34m        | 07:16      | 10h 47m    | 18:04      | 34m        | 18:38                   | 36m        | 19:15 | 37m        | 19:52 | 13h 10m    | 9h 35m     |                            |            |    |      | Mo, 26. Feb |
| Di, 27. Feb |               | 19:53–21:19                | 1h 26m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 21:19      | 08:19      | 05:27                      | 37m        | 06:04 | 36m        | 06:40 | 34m        | 07:14      | 10h 51m    | 18:06      | 34m        | 18:40                   | 36m        | 19:16 | 37m        | 19:53 | 13h 06m    | 9h 31m     |                            |            |    |      | Di, 27. Feb |
| Mi, 28. Feb |               | 19:55–22:28                | 2h 33m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 22:28      | 08:31      | 05:25                      | 37m        | 06:02 | 36m        | 06:38 | 34m        | 07:12      | 10h 54m    | 18:07      | 34m        | 18:41                   | 36m        | 19:18 | 37m        | 19:55 | 13h 03m    | 9h 28m     |                            |            |    |      | Mi, 28. Feb |
| Do, 29. Feb |               | 19:57–23:39                | 3h 42m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 23:39      | 08:44      | 05:23                      | 37m        | 06:00 | 36m        | 06:36 | 34m        | 07:10      | 10h 58m    | 18:09      | 34m        | 18:43                   | 36m        | 19:19 | 37m        | 19:57 | 12h 59m    | 9h 24m     |                            |            |    |      | Do, 29. Feb |
| Fr, 1. Mär  |               | 19:58–00:53*               | 4h 55m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | —:—        | 09:01      | 05:21                      | 37m        | 05:58 | 36m        | 06:34 | 34m        | 07:08      | 11h 02m    | 18:11      | 34m        | 18:45                   | 36m        | 19:21 | 37m        | 19:58 | 12h 55m    | 9h 20m     |                            |            |    |      | Fr, 1. Mär  |
| Sa, 2. Mär  |               | 20:00–02:09*               | 6h 09m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 00:53      | 09:22      | 05:19                      | 37m        | 05:56 | 36m        | 06:32 | 33m        | 07:06      | 11h 05m    | 18:12      | 34m        | 18:46                   | 36m        | 19:22 | 37m        | 20:00 | 12h 52m    | 9h 17m     |                            |            |    |      | Sa, 2. Mär  |
| So, 3. Mär  |               | 20:01–03:22*               | 7h 20m     | AN <sub>+</sub> bis M <sub>7</sub>  | ●    | 02:09      | 09:51      | 05:17                      | 37m        | 05:54 | 36m        | 06:30 | 33m        | 07:04      | 11h 09m    | 18:14      | 34m        | 18:48                   | 36m        | 19:24 | 37m        | 20:01 | 12h 48m    | 9h 13m     |                            |            |    |      | So, 3. Mär  |
| Mo, 4. Mär  |               | 20:03–04:28*               | 8h 24m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 03:22      | 10:32      | 05:15                      | 37m        | 05:52 | 36m        | 06:28 | 33m        | 07:02      | 11h 13m    | 18:15      | 33m        | 18:49                   | 36m        | 19:26 | 37m        | 20:03 | 12h 44m    | 9h 09m     |                            |            |    |      | Mo, 4. Mär  |
| Di, 5. Mär  |               | 20:05–05:11*               | 9h 05m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 04:28      | 11:29      | 05:13                      | 37m        | 05:50 | 36m        | 06:26 | 33m        | 07:00      | 11h 16m    | 18:17      | 33m        | 18:51                   | 36m        | 19:27 | 37m        | 20:05 | 12h 41m    | 9h 05m     |                            |            |    |      | Di, 5. Mär  |
| Mi, 6. Mär  |               | 20:06–05:09*               | 9h 02m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 05:20      | 12:43      | 05:11                      | 37m        | 05:48 | 36m        | 06:24 | 33m        | 06:58      | 11h 20m    | 18:19      | 33m        | 18:53                   | 36m        | 19:29 | 37m        | 20:06 | 12h 37m    | 9h 02m     |                            |            |    |      | Mi, 6. Mär  |
| Do, 7. Mär  |               | 20:08–05:06*               | 8h 58m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 05:59      | 14:09      | 05:09                      | 37m        | 05:46 | 36m        | 06:22 | 33m        | 06:56      | 11h 24m    | 18:20      | 33m        | 18:54                   | 36m        | 19:30 | 37m        | 20:08 | 12h 33m    | 8h 58m     |                            |            |    |      | Do, 7. Mär  |
| Fr, 8. Mär  |               | 20:10–05:04*               | 8h 54m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 06:28      | 15:41      | 05:06                      | 37m        | 05:44 | 36m        | 06:20 | 33m        | 06:54      | 11h 27m    | 18:22      | 33m        | 18:56                   | 36m        | 19:32 | 37m        | 20:10 | 12h 30m    | 8h 54m     |                            |            |    |      | Fr, 8. Mär  |
| Sa, 9. Mär  |               | 20:11–05:02*               | 8h 50m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 06:49      | 17:12      | 05:04                      | 37m        | 05:42 | 36m        | 06:18 | 33m        | 06:52      | 11h 31m    | 18:23      | 33m        | 18:57                   | 36m        | 19:34 | 37m        | 20:11 | 12h 26m    | 8h 50m     |                            |            |    |      | Sa, 9. Mär  |
| So, 10. Mär |               | 20:13–05:00*               | 8h 46m     | AN <sub>+</sub> bis AN <sub>-</sub> | ●    | 07:07      | 18:43      | 05:02                      | 37m        | 05:40 | 36m        | 06:16 | 33m        | 06:50      | 11h 35m    | 18:25      | 33m        | 18:59                   | 36m        | 19:35 | 37m        | 20:13 | 12h 22m    | 8h 46m     |                            |            |    |      | So, 10. Mär |
| Mo, 11. Mär |               | 20:15–04:58*               | 8h 42m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 07:23      | 20:11      | 05:00                      | 37m        | 05:38 | 36m        | 06:14 | 33m        | 06:48      | 11h 38m    | 18:27      | 33m        | 19:00                   | 36m        | 19:37 | 37m        | 20:15 | 12h 19m    | 8h 42m     |                            |            |    |      | Mo, 11. Mär |
| Di, 12. Mär |               | 21:39–04:55*               | 7h 15m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 07:39      | 21:39      | 04:58                      | 37m        | 05:35 | 36m        | 06:12 | 33m        | 06:46      | 11h 42m    | 18:28      | 33m        | 19:02                   | 36m        | 19:39 | 38m        | 20:17 | 12h 15m    | 8h 38m     |                            |            |    |      | Di, 12. Mär |
| Mi, 13. Mär |               | 23:07–04:53*               | 5h 46m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 07:57      | 23:07      | 04:55                      | 38m        | 05:33 | 36m        | 06:10 | 33m        | 06:44      | 11h 46m    | 18:30      | 33m        | 19:04                   | 36m        | 19:40 | 38m        | 20:18 | 12h 11m    | 8h 34m     |                            |            |    |      | Mi, 13. Mär |
| Do, 14. Mär |               | 00:33*–04:51*              | 4h 17m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 08:17      | —:—        | 04:53                      | 38m        | 05:31 | 36m        | 06:08 | 33m        | 06:41      | 11h 49m    | 18:31      | 33m        | 19:05                   | 36m        | 19:42 | 38m        | 20:20 | 12h 07m    | 8h 30m     |                            |            |    |      | Do, 14. Mär |
| Fr, 15. Mär |               | 01:53*–04:48*              | 2h 55m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 08:44      | 00:33      | 04:51                      | 38m        | 05:29 | 36m        | 06:05 | 33m        | 06:39      | 11h 53m    | 18:33      | 33m        | 19:07                   | 36m        | 19:43 | 38m        | 20:22 | 12h 04m    | 8h 26m     |                            |            |    |      | Fr, 15. Mär |
| Sa, 16. Mär |               | 03:03*–04:46*              | 1h 42m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 09:20      | 01:53      | 04:48                      | 38m        | 05:27 | 36m        | 06:03 | 33m        | 06:37      | 11h 57m    | 18:34      | 33m        | 19:08                   | 36m        | 19:45 | 38m        | 20:24 | 12h 00m    | 8h 22m     |                            |            |    |      | Sa, 16. Mär |
| So, 17. Mär |               | 03:59*–04:44*              | 44m        | M <sub>\</sub> bis AN <sub>-</sub>  | ●    | 10:07      | 03:03      | 04:46                      | 38m        | 05:25 | 36m        | 06:01 | 33m        | 06:35      | 12h 00m    | 18:36      | 33m        | 19:10                   | 36m        | 19:47 | 38m        | 20:25 | 11h 56m    | 8h 18m     |                            |            |    |      | So, 17. Mär |
| Mo, 18. Mär |               | 04:41*–04:41*              | 0m         | M <sub>\</sub> bis AN <sub>-</sub>  |      | 11:05      | 03:59      | 04:44                      | 38m        | 05:22 | 36m        | 05:59 | 33m        | 06:33      | 12h 04m    | 18:38      | 33m        | 19:11                   | 36m        | 19:48 | 38m        | 20:27 | 11h 53m    | 8h 14m     |                            |            |    |      | Mo, 18. Mär |
| Di, 19. Mär |               | —:~:~:~:~                  | —          | Mond stört                          |      | 12:13      | 04:41      | 04:41                      | 38m        | 05:20 | 36m        | 05:57 | 33m        | 06:31      | 12h 08m    | 18:39      | 33m        | 19:13                   | 36m        | 19:50 | 39m        | 20:29 | 11h 49m    | 8h 09m     |                            |            |    |      | Di, 19. Mär |
| Mi, 20. Mär |               | —:~:~:~:~                  | —          | Mond stört                          |      | 13:24      | 05:11      | 04:39                      | 38m        | 05:18 | 36m        | 05:55 | 33m        | 06:29      | 12h 12m    | 18:41      | 33m        | 19:15                   | 37m        | 19:52 | 39m        | 20:31 | 11h 45m    | 8h 05m     |                            |            |    |      | Mi, 20. Mär |
| Do, 21. Mär |               | —:~:~:~:~                  | —          | Mond stört                          |      | 14:36      | 05:33      | 04:36                      | 39m        | 05:16 | 36m        | 05:53 | 33m        | 06:26      | 12h 15m    | 18:42      | 33m        | 19:16                   | 37m        | 19:53 | 39m        | 20:33 | 11h 42m    | 8h 01m     |                            |            |    |      | Do, 21. Mär |
| Fr, 22. Mär |               | —:~:~:~:~                  | —          | Mond stört                          |      | 15:46      | 05:50      | 04:34                      | 39m        | 05:13 | 37m        | 05:50 | 33m        | 06:24      | 12h 19m    | 18:44      | 34m        | 19:18                   | 37m        | 19:55 | 39m        | 20:34 | 11h 38m    | 7h 57m     |                            |            |    |      | Fr, 22. Mär |
| Sa, 23. Mär |               | —:~:~:~:~                  | —          | Mond stört                          |      | 16:55      | 06:04      | 04:32                      | 39m        | 05:11 | 37m        | 05:48 | 33m        | 06:22      | 12h 23m    | 18:45      | 34m        | 19:19                   | 37m        | 19:57 | 39m        | 20:36 | 11h 34m    | 7h 52m     |                            |            |    |      | Sa, 23. Mär |
| So, 24. Mär |               | —:~:~:~:~                  | —          | Mond stört                          |      | 18:02      | 06:16      | 04:29                      | 39m        | 05:09 | 37m        | 05:46 | 34m        | 06:20      | 12h 26m    | 18:47      | 34m        | 19:21                   | 37m        | 19:58 | 39m        | 20:38 | 11h 31m    | 7h 48m     |                            |            |    |      | So, 24. Mär |
| Mo, 25. Mär |               | —:~:~:~:~                  | —          | Mond stört                          | ○    | 19:10      | 06:28      | 04:27                      | 39m        | 05:06 | 37m        | 05:44 | 34m        | 06:18      | 12h 30m    | 18:48      | 34m        | 19:23                   | 37m        | 20:00 | 40m        | 20:40 | 11h 27m    | 7h 44m     |                            |            |    |      | Mo, 25. Mär |
| Di, 26. Mär |               | —:~:~:~:~                  | —          | Mond stört                          |      | 20:19      | 06:39      | 04:24                      | 40m        | 05:04 | 37m        | 05:42 | 34m        | 06:16      | 12h 34m    | 18:50      | 34m        | 19:24                   | 37m        | 20:02 | 40m        | 20:42 | 11h 23m    | 7h 39m     |                            |            |    |      | Di, 26. Mär |
| Mi, 27. Mär |               | 20:44–21:29                | 45m        | AN <sub>+</sub> bis M <sub>7</sub>  |      | 21:29      | 06:52      | 04:22                      | 40m        | 05:02 | 37m        | 05:39 | 34m        | 06:14      | 12h 37m    | 18:51      | 34m        | 19:26                   | 37m        | 20:03 | 40m        | 20:44 | 11h 19m    | 7h 35m     |                            |            |    |      | Mi, 27. Mär |
| Do, 28. Mär |               | 20:46–22:43                | 1h 56m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 22:43      | 07:07      | 04:19                      | 40m        | 05:00 | 37m        | 05:37 | 34m        | 06:11      | 12h 41m    | 18:53      | 34m        | 19:27                   | 37m        | 20:05 | 40m        | 20:46 | 11h 16m    | 7h 30m     |                            |            |    |      | Do, 28. Mär |
| Fr, 29. Mär |               | 20:48–23:58                | 3h 09m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 23:58      | 07:26      | 04:17                      | 40m        | 04:57 | 37m        | 05:35 | 34m        | 06:09      | 12h 45m    | 18:55      | 34m        | 19:29                   | 37m        | 20:07 | 40m        | 20:48 | 11h 12m    | 7h 26m     |                            |            |    |      | Fr, 29. Mär |
| Sa, 30. Mär |               | 20:50–01:11*               | 4h 21m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | —:—        | 07:52      | 04:14                      | 40m        | 04:55 | 37m        | 05:33 | 34m        | 06:07      | 12h 48m    | 18:56      | 34m        | 19:31                   | 38m        | 20:09 | 41m        | 20:50 | 11h 08m    | 7h 21m     |                            |            |    |      | Sa, 30. Mär |
| So, 31. Mär | MESZ          | 21:52–03:19*               | 5h 26m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 02:11      | 09:28      | 05:11                      | 41m        | 05:53 | 38m        | 06:31 | 34m        | 07:05      | 12h 52m    | 19:58      | 34m        | 20:32                   | 38m        | 21:10 | 41m        | 21:52 | 11h 05m    | 7h 17m     |                            |            |    |      | So, 31. Mär |
| Mo, 1. Apr  | MESZ          | 21:54–04:14*               | 6h 20m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 03:19      | 10:18      | 05:09                      | 41m        | 05:50 | 38m        | 06:28 | 34m        | 07:03      | 12h 56m    | 19:59      | 34m        | 20:34                   | 38m        | 21:12 | 41m        | 21:54 | 11h 01m    | 7h 12m     |                            |            |    |      | Mo, 1. Apr  |
| Di, 2. Apr  | MESZ          | 21:56–04:57*               | 7h 00m     | AN <sub>+&lt;/</sub>                |      |            |            |                            |            |       |            |       |            |            |            |            |            |                         |            |       |            |       |            |            |                            |            |    |      |             |

| 1           | 2             | 3                          | 4          | 5                                   | 6    | 7          | 8          | 9                          | 10         | 11    | 12         | 13    | 14         | 15         | 16         | 17                      | 18         | 19    | 20         | 21    | 22         | 23       | 24                         | 25         | 26 | 27         | 28 | 29          |
|-------------|---------------|----------------------------|------------|-------------------------------------|------|------------|------------|----------------------------|------------|-------|------------|-------|------------|------------|------------|-------------------------|------------|-------|------------|-------|------------|----------|----------------------------|------------|----|------------|----|-------------|
| 2024        | Zeit-<br>zone | Astr. dunkel und kein Mond |            |                                     | Mond |            |            | Beginn der Morgendämmerung |            |       |            |       | Sonne      |            |            | Ende der Abenddämmerung |            |       |            |       | Nacht      | Astr. N. | Naut. dunkel und kein Mond |            |    | 2024       |    |             |
|             |               |                            | $\Delta t$ |                                     | Ph.  | $\nearrow$ | $\searrow$ | Astr.                      | $\Delta t$ | Naut. | $\Delta t$ | Bürg. | $\Delta t$ | $\nearrow$ | $\Delta t$ | $\searrow$              | $\Delta t$ | Bürg. | $\Delta t$ | Naut. | $\Delta t$ | Astr.    | $\Delta t$                 | $\Delta t$ |    | $\Delta t$ |    |             |
| Mi, 10. Apr | MESZ          | 23:02–04:42*               | 5h 40m     | M <sub>\</sub> bis AN <sub>\</sub>  |      | 07:18      | 23:02      | 04:45                      | 44m        | 05:29 | 39m        | 06:09 | 35m        | 06:44      | 13h 28m    | 20:13                   | 35m        | 20:48 | 39m        | 21:28 | 44m        | 22:13    | 10h 29m                    | 6h 29m     |    |            |    | Mi, 10. Apr |
| Do, 11. Apr | MESZ          | 00:29*–04:39*              | 4h 10m     | M <sub>\</sub> bis AN <sub>\</sub>  |      | 07:42      | —:—        | 04:42                      | 44m        | 05:27 | 39m        | 06:07 | 35m        | 06:42      | 13h 32m    | 20:14                   | 35m        | 20:50 | 40m        | 21:30 | 44m        | 22:15    | 10h 25m                    | 6h 24m     |    |            |    | Do, 11. Apr |
| Fr, 12. Apr | MESZ          | 01:47*–04:37*              | 2h 49m     | M <sub>\</sub> bis AN <sub>\</sub>  |      | 08:14      | 00:29      | 04:39                      | 44m        | 05:24 | 40m        | 06:04 | 35m        | 06:40      | 13h 36m    | 20:16                   | 35m        | 20:52 | 40m        | 21:32 | 45m        | 22:17    | 10h 21m                    | 6h 19m     |    |            |    | Fr, 12. Apr |
| Sa, 13. Apr | MESZ          | 02:51*–04:34*              | 1h 42m     | M <sub>\</sub> bis AN <sub>\</sub>  |      | 08:57      | 01:47      | 04:37                      | 45m        | 05:22 | 40m        | 06:02 | 35m        | 06:38      | 13h 39m    | 20:18                   | 35m        | 20:53 | 40m        | 21:34 | 45m        | 22:20    | 10h 18m                    | 6h 14m     |    |            |    | Sa, 13. Apr |
| So, 14. Apr | MESZ          | 03:39*–04:31*              | 51m        | M <sub>\</sub> bis AN <sub>\</sub>  |      | 09:53      | 02:51      | 04:34                      | 45m        | 05:20 | 40m        | 06:00 | 35m        | 06:36      | 13h 43m    | 20:19                   | 35m        | 20:55 | 40m        | 21:36 | 45m        | 22:22    | 10h 14m                    | 6h 09m     |    |            |    | So, 14. Apr |
| Mo, 15. Apr | MESZ          | 04:14*–04:28*              | 14m        | M <sub>\</sub> bis AN <sub>\</sub>  | ☾    | 10:59      | 03:39      | 04:31                      | 45m        | 05:17 | 40m        | 05:58 | 35m        | 06:34      | 13h 46m    | 20:21                   | 36m        | 20:57 | 41m        | 21:38 | 46m        | 22:24    | 10h 11m                    | 6h 04m     |    |            |    | Mo, 15. Apr |
| Di, 16. Apr | MESZ          | —:—:—:—                    | –          | Mond stört                          |      | 12:11      | 04:14      | 04:28                      | 46m        | 05:15 | 41m        | 05:56 | 36m        | 06:32      | 13h 50m    | 20:22                   | 36m        | 20:58 | 41m        | 21:40 | 46m        | 22:27    | 10h 07m                    | 5h 59m     |    |            |    | Di, 16. Apr |
| Mi, 17. Apr | MESZ          | —:—:—:—                    | –          | Mond stört                          |      | 13:24      | 04:39      | 04:26                      | 46m        | 05:12 | 41m        | 05:54 | 36m        | 06:30      | 13h 53m    | 20:24                   | 36m        | 21:00 | 41m        | 21:42 | 47m        | 22:29    | 10h 04m                    | 5h 53m     |    |            |    | Mi, 17. Apr |
| Do, 18. Apr | MESZ          | —:—:~:~:~                  | –          | Mond stört                          |      | 14:35      | 04:58      | 04:23                      | 47m        | 05:10 | 41m        | 05:52 | 36m        | 06:28      | 13h 57m    | 20:25                   | 36m        | 21:02 | 41m        | 21:44 | 47m        | 22:31    | 10h 00m                    | 5h 48m     |    |            |    | Do, 18. Apr |
| Fr, 19. Apr | MESZ          | —:~:~:~:~                  | –          | Mond stört                          |      | 15:44      | 05:12      | 04:20                      | 47m        | 05:08 | 41m        | 05:49 | 36m        | 06:26      | 14h 00m    | 20:27                   | 36m        | 21:03 | 42m        | 21:45 | 48m        | 22:34    | 9h 57m                     | 5h 43m     |    |            |    | Fr, 19. Apr |
| Sa, 20. Apr | MESZ          | —:~:~:~:~                  | –          | Mond stört                          |      | 16:52      | 05:25      | 04:17                      | 48m        | 05:05 | 42m        | 05:47 | 36m        | 06:24      | 14h 04m    | 20:28                   | 36m        | 21:05 | 42m        | 21:47 | 48m        | 22:36    | 9h 53m                     | 5h 37m     |    |            |    | Sa, 20. Apr |
| So, 21. Apr | MESZ          | —:~:~:~:~                  | –          | Mond stört                          |      | 17:59      | 05:36      | 04:14                      | 48m        | 05:03 | 42m        | 05:45 | 36m        | 06:22      | 14h 07m    | 20:30                   | 36m        | 21:07 | 42m        | 21:49 | 49m        | 22:39    | 9h 50m                     | 5h 32m     |    |            |    | So, 21. Apr |
| Mo, 22. Apr | MESZ          | —:~:~:~:~                  | –          | Mond stört                          |      | 19:07      | 05:48      | 04:11                      | 49m        | 05:01 | 42m        | 05:43 | 36m        | 06:20      | 14h 11m    | 20:31                   | 37m        | 21:08 | 42m        | 21:51 | 49m        | 22:41    | 9h 46m                     | 5h 27m     |    |            |    | Mo, 22. Apr |
| Di, 23. Apr | MESZ          | —:~:~:~:~                  | –          | Mond stört                          |      | 20:18      | 06:00      | 04:08                      | 49m        | 04:58 | 42m        | 05:41 | 37m        | 06:18      | 14h 14m    | 20:33                   | 37m        | 21:10 | 43m        | 21:53 | 50m        | 22:44    | 9h 43m                     | 5h 21m     |    |            |    | Di, 23. Apr |
| Mi, 24. Apr | MESZ          | —:~:~:~:~                  | –          | Mond stört                          | ☾    | 21:31      | 06:15      | 04:06                      | 50m        | 04:56 | 43m        | 05:39 | 37m        | 06:16      | 14h 17m    | 20:34                   | 37m        | 21:12 | 43m        | 21:55 | 51m        | 22:46    | 9h 40m                     | 5h 16m     |    |            |    | Mi, 24. Apr |
| Do, 25. Apr | MESZ          | —:~:~:~:~                  | –          | Mond stört                          |      | 22:46      | 06:32      | 04:03                      | 51m        | 04:54 | 43m        | 05:37 | 37m        | 06:15      | 14h 21m    | 20:36                   | 37m        | 21:14 | 43m        | 21:57 | 51m        | 22:49    | 9h 36m                     | 5h 10m     |    |            |    | Do, 25. Apr |
| Fr, 26. Apr | MESZ          | 22:52–00:01*               | 1h 09m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | —:—        | 06:56      | 04:00                      | 51m        | 04:51 | 43m        | 05:35 | 37m        | 06:13      | 14h 24m    | 20:37                   | 37m        | 21:15 | 44m        | 21:59 | 52m        | 22:52    | 9h 33m                     | 5h 05m     |    |            |    | Fr, 26. Apr |
| Sa, 27. Apr | MESZ          | 22:54–01:11*               | 2h 17m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 00:01      | 07:28      | 03:57                      | 52m        | 04:49 | 44m        | 05:33 | 37m        | 06:11      | 14h 28m    | 20:39                   | 37m        | 21:17 | 44m        | 22:01 | 52m        | 22:54    | 9h 30m                     | 4h 59m     |    |            |    | Sa, 27. Apr |
| So, 28. Apr | MESZ          | 22:57–02:11*               | 3h 13m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 01:11      | 08:14      | 03:54                      | 52m        | 04:47 | 44m        | 05:31 | 37m        | 06:09      | 14h 31m    | 20:40                   | 38m        | 21:19 | 44m        | 22:03 | 53m        | 22:57    | 9h 26m                     | 4h 53m     |    |            |    | So, 28. Apr |
| Mo, 29. Apr | MESZ          | 23:00–02:57*               | 3h 56m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 02:11      | 09:15      | 03:51                      | 53m        | 04:44 | 44m        | 05:29 | 38m        | 06:07      | 14h 34m    | 20:42                   | 38m        | 21:20 | 45m        | 22:05 | 54m        | 23:00    | 9h 23m                     | 4h 48m     |    |            |    | Mo, 29. Apr |
| Di, 30. Apr | MESZ          | 23:02–03:30*               | 4h 27m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 02:57      | 10:29      | 03:48                      | 54m        | 04:42 | 45m        | 05:27 | 38m        | 06:06      | 14h 37m    | 20:43                   | 38m        | 21:22 | 45m        | 22:07 | 55m        | 23:02    | 9h 20m                     | 4h 42m     |    |            |    | Di, 30. Apr |
| Mi, 1. Mai  | MESZ          | 23:05–03:42*               | 4h 36m     | AN <sub>+</sub> bis AN <sub>\</sub> | ☾    | 03:30      | 11:51      | 03:45                      | 55m        | 04:40 | 45m        | 05:25 | 38m        | 06:04      | 14h 41m    | 20:45                   | 38m        | 21:24 | 45m        | 22:09 | 55m        | 23:05    | 9h 17m                     | 4h 36m     |    |            |    | Mi, 1. Mai  |
| Do, 2. Mai  | MESZ          | 23:08–03:39*               | 4h 30m     | AN <sub>+</sub> bis AN <sub>\</sub> |      | 03:55      | 13:17      | 03:42                      | 55m        | 04:38 | 45m        | 05:23 | 38m        | 06:02      | 14h 44m    | 20:46                   | 38m        | 21:25 | 46m        | 22:11 | 56m        | 23:08    | 9h 13m                     | 4h 30m     |    |            |    | Do, 2. Mai  |
| Fr, 3. Mai  | MESZ          | 23:11–03:36*               | 4h 24m     | AN <sub>+</sub> bis AN <sub>\</sub> |      | 04:15      | 14:42      | 03:39                      | 56m        | 04:35 | 46m        | 05:21 | 38m        | 06:00      | 14h 47m    | 20:48                   | 39m        | 21:27 | 46m        | 22:13 | 57m        | 23:11    | 9h 10m                     | 4h 24m     |    |            |    | Fr, 3. Mai  |
| Sa, 4. Mai  | MESZ          | 23:14–03:33*               | 4h 18m     | AN <sub>+</sub> bis AN <sub>\</sub> |      | 04:31      | 16:08      | 03:36                      | 57m        | 04:33 | 46m        | 05:20 | 39m        | 05:59      | 14h 50m    | 20:49                   | 39m        | 21:29 | 46m        | 22:16 | 58m        | 23:14    | 9h 07m                     | 4h 18m     |    |            |    | Sa, 4. Mai  |
| So, 5. Mai  | MESZ          | 23:17–03:30*               | 4h 12m     | AN <sub>+</sub> bis AN <sub>\</sub> |      | 04:47      | 17:33      | 03:33                      | 58m        | 04:31 | 46m        | 05:18 | 39m        | 05:57      | 14h 53m    | 20:51                   | 39m        | 21:30 | 47m        | 22:18 | 59m        | 23:17    | 9h 04m                     | 4h 12m     |    |            |    | So, 5. Mai  |
| Mo, 6. Mai  | MESZ          | 23:20–03:26*               | 4h 06m     | AN <sub>+</sub> bis AN <sub>\</sub> |      | 05:02      | 19:00      | 03:30                      | 59m        | 04:29 | 47m        | 05:16 | 39m        | 05:55      | 14h 56m    | 20:52                   | 39m        | 21:32 | 47m        | 22:20 | 1h 00m     | 23:20    | 9h 01m                     | 4h 06m     |    |            |    | Mo, 6. Mai  |
| Di, 7. Mai  | MESZ          | 23:23–03:23*               | 4h 00m     | AN <sub>+</sub> bis AN <sub>\</sub> |      | 05:19      | 20:28      | 03:26                      | 1h 00m     | 04:27 | 47m        | 05:14 | 39m        | 05:54      | 14h 59m    | 20:54                   | 39m        | 21:34 | 47m        | 22:22 | 1h 01m     | 23:23    | 8h 58m                     | 4h 00m     |    |            |    | Di, 7. Mai  |
| Mi, 8. Mai  | MESZ          | 23:26–03:20*               | 3h 54m     | AN <sub>+</sub> bis AN <sub>\</sub> | ☾    | 05:41      | 21:57      | 03:23                      | 1h 01m     | 04:24 | 47m        | 05:12 | 39m        | 05:52      | 15h 03m    | 20:55                   | 40m        | 21:35 | 48m        | 22:24 | 1h 02m     | 23:26    | 8h 55m                     | 3h 54m     |    |            |    | Mi, 8. Mai  |
| Do, 9. Mai  | MESZ          | 23:29–03:17*               | 3h 47m     | AN <sub>+</sub> bis AN <sub>\</sub> |      | 06:09      | 23:21      | 03:20                      | 1h 02m     | 04:22 | 48m        | 05:11 | 40m        | 05:51      | 15h 05m    | 20:57                   | 40m        | 21:37 | 48m        | 22:26 | 1h 03m     | 23:29    | 8h 52m                     | 3h 47m     |    |            |    | Do, 9. Mai  |
| Fr, 10. Mai | MESZ          | 00:34*–03:14*              | 2h 39m     | M <sub>\</sub> bis AN <sub>\</sub>  |      | 06:47      | —:—        | 03:17                      | 1h 03m     | 04:20 | 48m        | 05:09 | 40m        | 05:49      | 15h 08m    | 20:58                   | 40m        | 21:39 | 49m        | 22:28 | 1h 04m     | 23:32    | 8h 49m                     | 3h 41m     |    |            |    | Fr, 10. Mai |
| Sa, 11. Mai | MESZ          | 01:31*–03:10*              | 1h 39m     | M <sub>\</sub> bis AN <sub>\</sub>  |      | 07:38      | 00:34      | 03:14                      | 1h 04m     | 04:18 | 49m        | 05:07 | 40m        | 05:48      | 15h 11m    | 21:00                   | 40m        | 21:40 | 49m        | 22:30 | 1h 05m     | 23:35    | 8h 46m                     | 3h 35m     |    |            |    | Sa, 11. Mai |
| So, 12. Mai | MESZ          | 02:12*–03:07*              | 55m        | M <sub>\</sub> bis AN <sub>\</sub>  |      | 08:42      | 01:31      | 03:10                      | 1h 05m     | 04:16 | 49m        | 05:06 | 40m        | 05:46      | 15h 14m    | 21:01                   | 40m        | 21:42 | 50m        | 22:32 | 1h 06m     | 23:39    | 8h 43m                     | 3h 28m     |    |            |    | So, 12. Mai |
| Mo, 13. Mai | MESZ          | 02:41*–03:04*              | 22m        | M <sub>\</sub> bis AN <sub>\</sub>  |      | 09:54      | 02:12      | 03:07                      | 1h 06m     | 04:14 | 50m        | 05:04 | 40m        | 05:45      | 15h 17m    | 21:02                   | 41m        | 21:44 | 50m        | 22:34 | 1h 07m     | 23:42    | 8h 41m                     | 3h 21m     |    |            |    | Mo, 13. Mai |
| Di, 14. Mai | MESZ          | —:~:~:~:~                  | –          | Mond stört                          |      | 11:08      | 02:41      | 03:04                      | 1h 07m     | 04:12 | 50m        | 05:02 | 41m        | 05:43      | 15h 20m    | 21:04                   | 41m        | 21:45 | 50m        | 22:36 | 1h 09m     | 23:45    | 8h 38m                     | 3h 15m     |    |            |    | Di, 14. Mai |
| Mi, 15. Mai | MESZ          | —:~:~:~:~                  | –          | Mond stört                          | ☾    | 12:20      | 03:02      | 03:01                      | 1h 09m     | 04:10 | 50m        | 05:01 | 41m        | 05:42      | 15h 23m    | 21:05                   | 41m        | 21:47 | 51m        | 22:38 | 1h 10m     | 23:49    | 8h 35m                     | 3h 08m     |    |            |    | Mi, 15. Mai |
| Do, 16. Mai | MESZ          | —:~:~:~:~                  | –          | Mond stört                          |      | 13:31      | 03:19      | 02:57                      | 1h 10m     | 04:08 | 51m        | 04:59 | 41m        | 05:41      | 15h 25m    | 21:07                   | 41m        | 21:48 | 51m        | 22:40 | 1h 12m     | 23:52    | 8h 32m                     | 3h 01m     |    |            |    | Do, 16. Mai |
| Fr, 17. Mai | MESZ          | —:~:~:~:~                  | –          | Mond stört                          |      | 14:39      | 03:32      | 02:54                      | 1h 12m     | 04:06 | 51m        | 04:58 | 41m        | 05:39      | 15h 28m    | 21:08                   | 42m        | 21:50 | 52m        | 22:42 | 1h 13m     | 23:56    | 8h 30m                     | 2h 54m     |    |            |    | Fr, 17. Mai |
| Sa, 18. Mai | MESZ          | —:~:~:~:~                  | –          | Mond stört                          |      | 15:46      | 03:44      | 02:50                      | 1h 13m     | 04:04 | 52m        | 04:56 | 42m        | 05:38      | 15h 30m    | 21:09                   | 42m        | 21:51 | 52m        | 22:44 | 1h 15m     | 23:59    | 8h 27m                     | 2h 47m     |    |            |    | Sa, 18. Mai |
| So, 19. Mai | MESZ          | —:~:~:~:~                  | –          | Mond stört                          |      | 16:54      | 03:55      | 02:47                      | 1h 15m     | 04:02 | 52m        | 04:55 | 42m        | 05:37      | 15h 33m    | 21:10                   | 42m        | 21:53 | 53m        | 22:46 | 1h 16m     | 00:03*   | 8h 25m                     | 2h 40m     |    |            |    | So, 19. Mai |
| Mo, 20. Mai | MESZ          | —:~:~:~:~                  | –          | Mond stört                          |      | 18:03      | 04:07      | 02:43                      | 1h 16m     | 04:00 | 53m        | 04:53 | 42m        | 05:36      | 15h 35m    | 21:12                   | 42m        | 21:54 | 53m        | 22:48 | 1h 18m     | 00:07*   | 8h 22m                     | 2h 32m     |    |            |    | Mo, 20. Mai |
| Di, 21. Mai | MESZ          | —:~:~:~:~                  | –          | Mond stört                          |      | 19:16      | 04:21      | 02:40                      | 1h 18m     | 03:58 | 53m        | 04:52 | 42m        | 05:35      | 15h 38m    | 21:13                   | 42m        | 21:56 | 53m        | 22:50 | 1h 20m     | 00:11*   | 8h 20m                     | 2h 25m     |    |            |    | Di, 21. Mai |
| Mi, 22. Mai | MESZ          | —:~:~:~:~                  | –          | Mond stört                          |      | 20:31      | 04:38      | 02:36                      | 1h 20m     | 03:57 | 53m        | 04:5  |            |            |            |                         |            |       |            |       |            |          |                            |            |    |            |    |             |

| 1           | 2             | 3                          | 4          | 5                                   | 6    | 7          | 8          | 9                          | 10         | 11    | 12         | 13    | 14         | 15         | 16         | 17                      | 18         | 19    | 20         | 21    | 22         | 23       | 24                         | 25         | 26            | 27         | 28                                  | 29 |             |
|-------------|---------------|----------------------------|------------|-------------------------------------|------|------------|------------|----------------------------|------------|-------|------------|-------|------------|------------|------------|-------------------------|------------|-------|------------|-------|------------|----------|----------------------------|------------|---------------|------------|-------------------------------------|----|-------------|
| 2024        | Zeit-<br>zone | Astr. dunkel und kein Mond |            |                                     | Mond |            |            | Beginn der Morgendämmerung |            |       |            |       | Sonne      |            |            | Ende der Abenddämmerung |            |       |            |       | Nacht      | Astr. N. | Naut. dunkel und kein Mond |            |               | 2024       |                                     |    |             |
|             |               |                            | $\Delta t$ |                                     | Ph.  | $\nearrow$ | $\searrow$ | Astr.                      | $\Delta t$ | Naut. | $\Delta t$ | Bürg. | $\Delta t$ | $\nearrow$ | $\Delta t$ | $\searrow$              | $\Delta t$ | Bürg. | $\Delta t$ | Naut. | $\Delta t$ | Astr.    | $\Delta t$                 | $\Delta t$ |               | $\Delta t$ |                                     |    |             |
| Do, 30. Mai | MESZ          | 00:54*–01:55*              | 1h 01m     | AN <sub>+</sub> bis AN <sub>-</sub> | ☉    | 02:21      | 12:29      | 02:01                      | 1h 42m     | 03:44 | 57m        | 04:42 | 44m        | 05:26      | 15h 57m    | 21:23                   | 44m        | 22:08 | 57m        | 23:06 | 1h 47m     | 00:54*   | 8h 01m                     | 1h 01m     |               |            |                                     |    | Do, 30. Mai |
| Fr, 31. Mai | MESZ          | 01:01*–01:48*              | 47m        | AN <sub>+</sub> bis AN <sub>-</sub> |      | 02:38      | 13:52      | 01:55                      | 1h 47m     | 03:43 | 57m        | 04:41 | 44m        | 05:25      | 15h 59m    | 21:24                   | 44m        | 22:09 | 58m        | 23:08 | 1h 53m     | 01:01*   | 8h 00m                     | 47m        |               |            |                                     |    | Fr, 31. Mai |
| Sa, 1. Jun  | MESZ          | 01:11*–01:38*              | 26m        | AN <sub>+</sub> bis AN <sub>-</sub> |      | 02:53      | 15:14      | 01:48                      | 1h 53m     | 03:41 | 58m        | 04:40 | 44m        | 05:25      | 16h 00m    | 21:25                   | 45m        | 22:11 | 58m        | 23:09 | 2h 02m     | 01:11*   | 7h 58m                     | 26m        |               |            |                                     |    | Sa, 1. Jun  |
| So, 2. Jun  | MESZ          |                            |            | Astr. MD                            |      | 03:08      | 16:38      | 01:38                      | 2h 02m     | 03:40 | 58m        | 04:39 | 45m        | 05:24      | 16h 02m    | 21:26                   | 45m        | 22:12 | 59m        | 23:11 |            | —:—      | 7h 56m                     |            | 23:11–03:24*  | 4h 12m     | ND <sub>+</sub> bis M <sub>7</sub>  |    | So, 2. Jun  |
| Mo, 3. Jun  | MESZ          |                            |            | Astr. MD                            |      | 03:24      | 18:03      | —:—                        |            | 03:39 | 59m        | 04:38 | 45m        | 05:23      | 16h 04m    | 21:27                   | 45m        | 22:13 | 59m        | 23:12 |            | —:—      | 7h 55m                     |            | 23:12–03:38*  | 4h 25m     | ND <sub>+</sub> bis ND <sub>-</sub> |    | Mo, 3. Jun  |
| Di, 4. Jun  | MESZ          |                            |            | Astr. MD                            |      | 03:43      | 19:29      | —:—                        |            | 03:38 | 59m        | 04:37 | 45m        | 05:23      | 16h 05m    | 21:28                   | 45m        | 22:14 | 59m        | 23:14 |            | —:—      | 7h 53m                     |            | 23:14–03:37*  | 4h 23m     | ND <sub>+</sub> bis ND <sub>-</sub> |    | Di, 4. Jun  |
| Mi, 5. Jun  | MESZ          |                            |            | Astr. MD                            |      | 04:07      | 20:55      | —:—                        |            | 03:37 | 59m        | 04:37 | 45m        | 05:22      | 16h 06m    | 21:29                   | 45m        | 22:15 | 1h 00m     | 23:15 |            | —:—      | 7h 52m                     |            | 23:15–03:36*  | 4h 20m     | ND <sub>+</sub> bis ND <sub>-</sub> |    | Mi, 5. Jun  |
| Do, 6. Jun  | MESZ          |                            |            | Astr. MD                            | ●    | 04:40      | 22:13      | —:—                        |            | 03:36 | 1h 00m     | 04:36 | 45m        | 05:22      | 16h 08m    | 21:30                   | 45m        | 22:16 | 1h 00m     | 23:16 |            | —:—      | 7h 51m                     |            | 23:16–03:35*  | 4h 18m     | ND <sub>+</sub> bis ND <sub>-</sub> |    | Do, 6. Jun  |
| Fr, 7. Jun  | MESZ          |                            |            | Astr. MD                            |      | 05:25      | 23:17      | —:—                        |            | 03:35 | 1h 00m     | 04:35 | 45m        | 05:21      | 16h 09m    | 21:31                   | 45m        | 22:17 | 1h 00m     | 23:18 |            | —:—      | 7h 50m                     |            | 23:18–03:34*  | 4h 16m     | ND <sub>+</sub> bis ND <sub>-</sub> |    | Fr, 7. Jun  |
| Sa, 8. Jun  | MESZ          |                            |            | Astr. MD                            |      | 06:24      | —:—        | —:—                        |            | 03:34 | 1h 00m     | 04:35 | 45m        | 05:21      | 16h 10m    | 21:32                   | 46m        | 22:18 | 1h 01m     | 23:19 |            | —:—      | 7h 48m                     |            | 00:06*–03:33* | 3h 27m     | M <sub>\</sub> bis ND <sub>-</sub>  |    | Sa, 8. Jun  |
| So, 9. Jun  | MESZ          |                            |            | Astr. MD                            |      | 07:34      | 00:06      | —:—                        |            | 03:33 | 1h 01m     | 04:34 | 46m        | 05:20      | 16h 11m    | 21:32                   | 46m        | 22:18 | 1h 01m     | 23:20 |            | —:—      | 7h 47m                     |            | 00:40*–03:33* | 2h 52m     | M <sub>\</sub> bis ND <sub>-</sub>  |    | So, 9. Jun  |
| Mo, 10. Jun | MESZ          |                            |            | Astr. MD                            |      | 08:48      | 00:40      | —:—                        |            | 03:33 | 1h 01m     | 04:34 | 46m        | 05:20      | 16h 12m    | 21:33                   | 46m        | 22:19 | 1h 01m     | 23:21 |            | —:—      | 7h 47m                     |            | 01:05*–03:32* | 2h 27m     | M <sub>\</sub> bis ND <sub>-</sub>  |    | Mo, 10. Jun |
| Di, 11. Jun | MESZ          |                            |            | Astr. MD                            |      | 10:03      | 01:05      | —:—                        |            | 03:32 | 1h 01m     | 04:34 | 46m        | 05:20      | 16h 13m    | 21:34                   | 46m        | 22:20 | 1h 02m     | 23:22 |            | —:—      | 7h 46m                     |            | 01:23*–03:31* | 2h 08m     | M <sub>\</sub> bis ND <sub>-</sub>  |    | Di, 11. Jun |
| Mi, 12. Jun | MESZ          |                            |            | Astr. MD                            |      | 11:15      | 01:23      | —:—                        |            | 03:31 | 1h 02m     | 04:33 | 46m        | 05:20      | 16h 14m    | 21:34                   | 46m        | 22:21 | 1h 02m     | 23:23 |            | —:—      | 7h 45m                     |            | 01:38*–03:31* | 1h 53m     | M <sub>\</sub> bis ND <sub>-</sub>  |    | Mi, 12. Jun |
| Do, 13. Jun | MESZ          |                            |            | Astr. MD                            |      | 12:24      | 01:38      | —:—                        |            | 03:31 | 1h 02m     | 04:33 | 46m        | 05:20      | 16h 15m    | 21:35                   | 46m        | 22:21 | 1h 02m     | 23:24 |            | —:—      | 7h 44m                     |            | 01:50*–03:30* | 1h 40m     | M <sub>\</sub> bis ND <sub>-</sub>  |    | Do, 13. Jun |
| Fr, 14. Jun | MESZ          |                            |            | Astr. MD                            | ☾    | 13:32      | 01:50      | —:—                        |            | 03:30 | 1h 02m     | 04:33 | 46m        | 05:19      | 16h 15m    | 21:35                   | 46m        | 22:22 | 1h 02m     | 23:24 |            | —:—      | 7h 44m                     |            | 02:02*–03:30* | 1h 28m     | M <sub>\</sub> bis ND <sub>-</sub>  |    | Fr, 14. Jun |
| Sa, 15. Jun | MESZ          |                            |            | Astr. MD                            |      | 14:39      | 02:02      | —:—                        |            | 03:30 | 1h 02m     | 04:33 | 46m        | 05:19      | 16h 16m    | 21:36                   | 46m        | 22:22 | 1h 02m     | 23:25 |            | —:—      | 7h 43m                     |            | 02:14*–03:30* | 1h 16m     | M <sub>\</sub> bis ND <sub>-</sub>  |    | Sa, 15. Jun |
| So, 16. Jun | MESZ          |                            |            | Astr. MD                            |      | 15:48      | 02:14      | —:—                        |            | 03:30 | 1h 02m     | 04:33 | 46m        | 05:19      | 16h 16m    | 21:36                   | 46m        | 22:23 | 1h 02m     | 23:26 |            | —:—      | 7h 43m                     |            | 02:26*–03:30* | 1h 03m     | M <sub>\</sub> bis ND <sub>-</sub>  |    | So, 16. Jun |
| Mo, 17. Jun | MESZ          |                            |            | Astr. MD                            |      | 16:58      | 02:26      | —:—                        |            | 03:30 | 1h 02m     | 04:33 | 46m        | 05:19      | 16h 17m    | 21:36                   | 46m        | 22:23 | 1h 03m     | 23:26 |            | —:—      | 7h 42m                     |            | 02:42*–03:30* | 48m        | M <sub>\</sub> bis ND <sub>-</sub>  |    | Mo, 17. Jun |
| Di, 18. Jun | MESZ          |                            |            | Astr. MD                            |      | 18:12      | 02:42      | —:—                        |            | 03:30 | 1h 03m     | 04:33 | 46m        | 05:19      | 16h 17m    | 21:37                   | 46m        | 22:24 | 1h 03m     | 23:27 |            | —:—      | 7h 42m                     |            | 03:01*–03:30* | 28m        | M <sub>\</sub> bis ND <sub>-</sub>  |    | Di, 18. Jun |
| Mi, 19. Jun | MESZ          |                            |            | Astr. MD                            |      | 19:28      | 03:01      | —:—                        |            | 03:30 | 1h 03m     | 04:33 | 46m        | 05:20      | 16h 17m    | 21:37                   | 46m        | 22:24 | 1h 03m     | 23:27 |            | —:—      | 7h 42m                     |            | 03:27*–03:30* | 2m         | M <sub>\</sub> bis ND <sub>-</sub>  |    | Mi, 19. Jun |
| Do, 20. Jun | MESZ          |                            |            | Astr. MD                            |      | 20:44      | 03:27      | —:—                        |            | 03:30 | 1h 03m     | 04:33 | 46m        | 05:20      | 16h 17m    | 21:37                   | 46m        | 22:24 | 1h 03m     | 23:27 |            | —:—      | 7h 42m                     |            | —:—:—:—:—     | –          | Mond stört                          |    | Do, 20. Jun |
| Fr, 21. Jun | MESZ          |                            |            | Astr. MD                            |      | 21:53      | 04:04      | —:—                        |            | 03:30 | 1h 03m     | 04:33 | 46m        | 05:20      | 16h 17m    | 21:38                   | 46m        | 22:24 | 1h 03m     | 23:27 |            | —:—      | 7h 42m                     |            | —:—:—:—:—     | –          | Mond stört                          |    | Fr, 21. Jun |
| Sa, 22. Jun | MESZ          |                            |            | Astr. MD                            | ○    | 22:50      | 04:56      | —:—                        |            | 03:30 | 1h 03m     | 04:33 | 46m        | 05:20      | 16h 17m    | 21:38                   | 46m        | 22:24 | 1h 03m     | 23:27 |            | —:—      | 7h 42m                     |            | —:—:—:—:—     | –          | Mond stört                          |    | Sa, 22. Jun |
| So, 23. Jun | MESZ          |                            |            | Astr. MD                            |      | 23:32      | 06:04      | —:—                        |            | 03:31 | 1h 03m     | 04:34 | 46m        | 05:20      | 16h 17m    | 21:38                   | 46m        | 22:24 | 1h 02m     | 23:27 |            | —:—      | 7h 43m                     |            | 23:27–23:32   | 4m         | ND <sub>+</sub> bis M <sub>7</sub>  |    | So, 23. Jun |
| Mo, 24. Jun | MESZ          |                            |            | Astr. MD                            |      | —:—        | 07:25      | —:—                        |            | 03:31 | 1h 02m     | 04:34 | 46m        | 05:21      | 16h 16m    | 21:38                   | 46m        | 22:25 | 1h 02m     | 23:27 |            | —:—      | 7h 43m                     |            | 23:27–00:03*  | 35m        | ND <sub>+</sub> bis M <sub>7</sub>  |    | Mo, 24. Jun |
| Di, 25. Jun | MESZ          |                            |            | Astr. MD                            |      | 00:03      | 08:50      | —:—                        |            | 03:32 | 1h 02m     | 04:35 | 46m        | 05:21      | 16h 16m    | 21:38                   | 46m        | 22:24 | 1h 02m     | 23:27 |            | —:—      | 7h 43m                     |            | 23:27–00:26*  | 58m        | ND <sub>+</sub> bis M <sub>7</sub>  |    | Di, 25. Jun |
| Mi, 26. Jun | MESZ          |                            |            | Astr. MD                            |      | 00:26      | 10:16      | —:—                        |            | 03:32 | 1h 02m     | 04:35 | 46m        | 05:22      | 16h 16m    | 21:38                   | 46m        | 22:24 | 1h 02m     | 23:27 |            | —:—      | 7h 44m                     |            | 23:27–00:44*  | 1h 17m     | ND <sub>+</sub> bis M <sub>7</sub>  |    | Mi, 26. Jun |
| Do, 27. Jun | MESZ          |                            |            | Astr. MD                            |      | 00:44      | 11:40      | —:—                        |            | 03:33 | 1h 02m     | 04:36 | 46m        | 05:22      | 16h 15m    | 21:38                   | 46m        | 22:24 | 1h 02m     | 23:27 |            | —:—      | 7h 44m                     |            | 23:27–01:00*  | 1h 32m     | ND <sub>+</sub> bis M <sub>7</sub>  |    | Do, 27. Jun |
| Fr, 28. Jun | MESZ          |                            |            | Astr. MD                            | ☾    | 01:00      | 13:03      | —:—                        |            | 03:34 | 1h 02m     | 04:36 | 46m        | 05:23      | 16h 14m    | 21:38                   | 46m        | 22:24 | 1h 02m     | 23:26 |            | —:—      | 7h 45m                     |            | 23:26–01:14*  | 1h 47m     | ND <sub>+</sub> bis M <sub>7</sub>  |    | Fr, 28. Jun |
| Sa, 29. Jun | MESZ          |                            |            | Astr. MD                            |      | 01:14      | 14:25      | —:—                        |            | 03:35 | 1h 02m     | 04:37 | 46m        | 05:23      | 16h 14m    | 21:37                   | 46m        | 22:24 | 1h 02m     | 23:26 |            | —:—      | 7h 46m                     |            | 23:26–01:29*  | 2h 03m     | ND <sub>+</sub> bis M <sub>7</sub>  |    | Sa, 29. Jun |
| So, 30. Jun | MESZ          |                            |            | Astr. MD                            |      | 01:29      | 15:48      | —:—                        |            | 03:35 | 1h 02m     | 04:37 | 46m        | 05:24      | 16h 13m    | 21:37                   | 46m        | 22:23 | 1h 01m     | 23:25 |            | —:—      | 7h 47m                     |            | 23:25–01:47*  | 2h 21m     | ND <sub>+</sub> bis M <sub>7</sub>  |    | So, 30. Jun |
| Mo, 1. Jul  | MESZ          |                            |            | Astr. MD                            |      | 01:47      | 17:12      | —:—                        |            | 03:36 | 1h 01m     | 04:38 | 46m        | 05:24      | 16h 12m    | 21:37                   | 46m        | 22:23 | 1h 01m     | 23:25 |            | —:—      | 7h 48m                     |            | 23:25–02:09*  | 2h 44m     | ND <sub>+</sub> bis M <sub>7</sub>  |    | Mo, 1. Jul  |
| Di, 2. Jul  | MESZ          |                            |            | Astr. MD                            |      | 02:09      | 18:36      | —:—                        |            | 03:37 | 1h 01m     | 04:39 | 46m        | 05:25      | 16h 11m    | 21:37                   | 46m        | 22:23 | 1h 01m     | 23:24 |            | —:—      | 7h 49m                     |            | 23:24–02:38*  | 3h 13m     | ND <sub>+</sub> bis M <sub>7</sub>  |    | Di, 2. Jul  |
| Mi, 3. Jul  | MESZ          |                            |            | Astr. MD                            |      | 02:38      | 19:56      | —:—                        |            | 03:39 | 1h 01m     | 04:40 | 46m        | 05:26      | 16h 10m    | 21:36                   | 45m        | 22:22 | 1h 00m     | 23:23 |            | —:—      | 7h 50m                     |            | 23:23–03:17*  | 3h 54m     | ND <sub>+</sub> bis M <sub>7</sub>  |    | Mi, 3. Jul  |
| Do, 4. Jul  | MESZ          |                            |            | Astr. MD                            |      | 03:17      | 21:05      | —:—                        |            | 03:40 | 1h 00m     | 04:41 | 45m        | 05:27      | 16h 09m    | 21:36                   | 45m        | 22:22 | 1h 00m     | 23:22 |            | —:—      | 7h 51m                     |            | 23:22–03:41*  | 4h 18m     | ND <sub>+</sub> bis ND <sub>-</sub> |    | Do, 4. Jul  |
| Fr, 5. Jul  | MESZ          |                            |            | Astr. MD                            |      | 04:10      | 21:59      | —:—                        |            | 03:41 | 1h 00m     | 04:42 | 45m        | 05:27      | 16h 08m    | 21:35                   | 45m        | 22:21 | 1h 00m     | 23:21 |            | —:—      | 7h 52m                     |            | 23:21–03:42*  | 4h 21m     | ND <sub>+</sub> bis ND <sub>-</sub> |    | Fr, 5. Jul  |
| Sa, 6. Jul  | MESZ          |                            |            | Astr. MD                            | ●    | 05:16      | 22:38      | —:—                        |            | 03:42 | 1h 00m     | 04:42 | 45m        | 05:28      | 16h 06m    | 21:35                   | 45m        | 22:20 | 59m        | 23:20 |            | —:—      | 7h 54m                     |            | 23:20–03:44*  | 4h 23m     | ND <sub>+</sub> bis ND <sub>-</sub> |    | Sa, 6. Jul  |
| So, 7. Jul  | MESZ          |                            |            | Astr. MD                            |      | 06:29      | 23:06      | —:—                        |            | 03:44 | 59m        | 04:43 | 45m        | 05:29      | 16h 05m    | 21:34                   | 45m        | 22:20 | 59m        | 23:19 |            | —:—      | 7h 55m                     |            | 23:19–03:45*  | 4h 25m     | ND <sub>+</sub> bis ND <sub>-</sub> |    | So, 7. Jul  |
| Mo, 8. Jul  | MESZ          |                            |            | Astr. MD                            |      | 07:45      | 23:27      | —:—                        |            | 03:45 | 59m        | 04:45 | 45m        | 05:30      | 16h 03m    | 21:34                   | 45m        | 22:19 | 59m        | 23:18 |            | —:—      | 7h 57m                     |            | 23:27–03:47*  | 4h 19m     | M <sub>\</sub> bis ND <sub>-</sub>  |    | Mo, 8. Jul  |
| Di, 9. Jul  | MESZ          | 01:17*–01:48*              | 30m        | AN <sub>+</sub> bis AN <sub>-</sub> |      | 08:58      | 23:43      | —:—                        |            | 03:47 | 59m        | 04:46 | 45m        | 05:31      | 16h 02m    | 21:33                   | 44m        | 22:18 | 58m        | 23:17 | 2h 00m     | 01:17*   | 7h 58m                     | 30m        |               |            |                                     |    | Di, 9. Jul  |
| Mi, 10. Jul | MESZ          | 01:08*–01:57*              | 49m        | AN <sub>+</sub> bis AN <sub>-</sub> |      | 10:09      | 23:56      | 01:48                      | 2h 00m     | 03:48 | 58m        | 04:47 | 44m        | 05:32      | 16h 00m    | 21:32                   | 44m        | 22:17 | 58m        | 23:15 | 1h 52m     | 01:08*   | 8h 00m                     | 49m        |               |            |                                     |    | Mi, 10. Jul |
| Do, 11. Jul | MESZ          | 01:01*–02:05*              | 1h 03m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 11:18      | —:—        | 01:57                      | 1h 52m     | 03:50 | 58m        | 04:48 | 44m        | 0          |            |                         |            |       |            |       |            |          |                            |            |               |            |                                     |    |             |

| 1           | 2     | 3                          | 4          | 5                                   | 6    | 7          | 8          | 9                          | 10         | 11    | 12         | 13    | 14         | 15         | 16         | 17                      | 18         | 19    | 20         | 21    | 22         | 23       | 24                         | 25         | 26 | 27         | 28 | 29          |
|-------------|-------|----------------------------|------------|-------------------------------------|------|------------|------------|----------------------------|------------|-------|------------|-------|------------|------------|------------|-------------------------|------------|-------|------------|-------|------------|----------|----------------------------|------------|----|------------|----|-------------|
| 2024        | Zeit- | Astr. dunkel und kein Mond |            |                                     | Mond |            |            | Beginn der Morgendämmerung |            |       |            |       | Sonne      |            |            | Ende der Abenddämmerung |            |       |            |       | Nacht      | Astr. N. | Naut. dunkel und kein Mond |            |    | 2024       |    |             |
|             | zone  |                            | $\Delta t$ |                                     | Ph.  | $\nearrow$ | $\searrow$ | Astr.                      | $\Delta t$ | Naut. | $\Delta t$ | Bürg. | $\Delta t$ | $\nearrow$ | $\Delta t$ | $\searrow$              | $\Delta t$ | Bürg. | $\Delta t$ | Naut. | $\Delta t$ | Astr.    | $\Delta t$                 | $\Delta t$ |    | $\Delta t$ |    |             |
| Fr, 19. Jul | MESZ  | —:—:—:—                    | —          | Mond stört                          |      | 20:39      | 02:42      | 02:39                      | 1h 24m     | 04:03 | 54m        | 04:58 | 43m        | 05:41      | 15h 42m    | 21:24                   | 43m        | 22:07 | 54m        | 23:02 | 1h 22m     | 00:24*   | 8h 18m                     | 2h 18m     |    |            |    | Fr, 19. Jul |
| Sa, 20. Jul | MESZ  | —:—:—:—                    | —          | Mond stört                          |      | 21:27      | 03:44      | 02:43                      | 1h 22m     | 04:05 | 54m        | 05:00 | 43m        | 05:43      | 15h 40m    | 21:23                   | 42m        | 22:06 | 53m        | 23:00 | 1h 20m     | 00:20*   | 8h 20m                     | 2h 26m     |    |            |    | Sa, 20. Jul |
| So, 21. Jul | MESZ  | —:—:~:~:~                  | —          | Mond stört                          | ○    | 22:03      | 05:01      | 02:47                      | 1h 20m     | 04:07 | 53m        | 05:01 | 42m        | 05:44      | 15h 38m    | 21:22                   | 42m        | 22:05 | 53m        | 22:58 | 1h 18m     | 00:17*   | 8h 23m                     | 2h 33m     |    |            |    | So, 21. Jul |
| Mo, 22. Jul | MESZ  | —:~:~:~:~                  | —          | Mond stört                          |      | 22:29      | 06:27      | 02:50                      | 1h 18m     | 04:09 | 53m        | 05:02 | 42m        | 05:45      | 15h 35m    | 21:21                   | 42m        | 22:03 | 53m        | 22:56 | 1h 16m     | 00:13*   | 8h 25m                     | 2h 41m     |    |            |    | Mo, 22. Jul |
| Di, 23. Jul | MESZ  | —:~:~:~:~                  | —          | Mond stört                          |      | 22:49      | 07:56      | 02:54                      | 1h 16m     | 04:11 | 53m        | 05:04 | 42m        | 05:46      | 15h 33m    | 21:20                   | 42m        | 22:02 | 52m        | 22:54 | 1h 15m     | 00:09*   | 8h 28m                     | 2h 48m     |    |            |    | Di, 23. Jul |
| Mi, 24. Jul | MESZ  | —:~:~:~:~                  | —          | Mond stört                          |      | 23:06      | 09:24      | 02:58                      | 1h 15m     | 04:13 | 52m        | 05:05 | 42m        | 05:48      | 15h 30m    | 21:18                   | 42m        | 22:00 | 52m        | 22:52 | 1h 13m     | 00:06*   | 8h 30m                     | 2h 55m     |    |            |    | Mi, 24. Jul |
| Do, 25. Jul | MESZ  | —:~:~:~:~                  | —          | Mond stört                          |      | 23:21      | 10:49      | 03:01                      | 1h 13m     | 04:15 | 52m        | 05:07 | 42m        | 05:49      | 15h 28m    | 21:17                   | 41m        | 21:59 | 51m        | 22:51 | 1h 11m     | 00:03*   | 8h 33m                     | 3h 02m     |    |            |    | Do, 25. Jul |
| Fr, 26. Jul | MESZ  | —:~:~:~:~                  | —          | Mond stört                          |      | 23:36      | 12:13      | 03:05                      | 1h 11m     | 04:17 | 51m        | 05:08 | 41m        | 05:50      | 15h 25m    | 21:16                   | 41m        | 21:57 | 51m        | 22:49 | 1h 10m     | 23:59    | 8h 35m                     | 3h 08m     |    |            |    | Fr, 26. Jul |
| Sa, 27. Jul | MESZ  | —:~:~:~:~                  | —          | Mond stört                          |      | 23:53      | 13:36      | 03:08                      | 1h 10m     | 04:19 | 51m        | 05:10 | 41m        | 05:51      | 15h 22m    | 21:14                   | 41m        | 21:56 | 50m        | 22:47 | 1h 09m     | 23:56    | 8h 38m                     | 3h 15m     |    |            |    | Sa, 27. Jul |
| So, 28. Jul | MESZ  | 23:52–00:13*               | 20m        | AN <sub>+</sub> bis M <sub>7</sub>  | ◐    | —:—        | 15:00      | 03:11                      | 1h 09m     | 04:21 | 50m        | 05:11 | 41m        | 05:53      | 15h 20m    | 21:13                   | 41m        | 21:54 | 50m        | 22:45 | 1h 07m     | 23:52    | 8h 41m                     | 3h 22m     |    |            |    | So, 28. Jul |
| Mo, 29. Jul | MESZ  | 23:49–00:39*               | 49m        | AN <sub>+</sub> bis M <sub>7</sub>  |      | 00:13      | 16:24      | 03:15                      | 1h 07m     | 04:23 | 50m        | 05:13 | 41m        | 05:54      | 15h 17m    | 21:12                   | 40m        | 21:53 | 49m        | 22:43 | 1h 06m     | 23:49    | 8h 43m                     | 3h 28m     |    |            |    | Mo, 29. Jul |
| Di, 30. Jul | MESZ  | 23:46–01:14*               | 1h 28m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 00:39      | 17:45      | 03:18                      | 1h 06m     | 04:25 | 50m        | 05:15 | 40m        | 05:56      | 15h 14m    | 21:10                   | 40m        | 21:51 | 49m        | 22:40 | 1h 05m     | 23:46    | 8h 46m                     | 3h 35m     |    |            |    | Di, 30. Jul |
| Mi, 31. Jul | MESZ  | 23:43–02:02*               | 2h 19m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 01:14      | 18:57      | 03:21                      | 1h 05m     | 04:27 | 49m        | 05:16 | 40m        | 05:57      | 15h 11m    | 21:09                   | 40m        | 21:49 | 49m        | 22:38 | 1h 04m     | 23:43    | 8h 49m                     | 3h 41m     |    |            |    | Mi, 31. Jul |
| Do, 1. Aug  | MESZ  | 23:39–03:03*               | 3h 23m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 02:02      | 19:55      | 03:24                      | 1h 04m     | 04:29 | 49m        | 05:18 | 40m        | 05:58      | 15h 08m    | 21:07                   | 40m        | 21:47 | 48m        | 22:36 | 1h 03m     | 23:39    | 8h 52m                     | 3h 47m     |    |            |    | Do, 1. Aug  |
| Fr, 2. Aug  | MESZ  | 23:36–03:30*               | 3h 54m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 03:03      | 20:38      | 03:27                      | 1h 03m     | 04:31 | 48m        | 05:19 | 40m        | 06:00      | 15h 05m    | 21:06                   | 40m        | 21:46 | 48m        | 22:34 | 1h 02m     | 23:36    | 8h 55m                     | 3h 54m     |    |            |    | Fr, 2. Aug  |
| Sa, 3. Aug  | MESZ  | 23:33–03:33*               | 4h 00m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 04:14      | 21:09      | 03:30                      | 1h 02m     | 04:33 | 48m        | 05:21 | 40m        | 06:01      | 15h 03m    | 21:04                   | 39m        | 21:44 | 47m        | 22:32 | 1h 01m     | 23:33    | 8h 58m                     | 4h 00m     |    |            |    | Sa, 3. Aug  |
| So, 4. Aug  | MESZ  | 23:30–03:36*               | 4h 06m     | AN <sub>+</sub> bis AN <sub>-</sub> | ●    | 05:28      | 21:32      | 03:33                      | 1h 01m     | 04:35 | 47m        | 05:22 | 39m        | 06:02      | 15h 00m    | 21:02                   | 39m        | 21:42 | 47m        | 22:30 | 1h 00m     | 23:30    | 9h 01m                     | 4h 06m     |    |            |    | So, 4. Aug  |
| Mo, 5. Aug  | MESZ  | 23:27–03:39*               | 4h 12m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 06:43      | 21:49      | 03:36                      | 1h 00m     | 04:36 | 47m        | 05:24 | 39m        | 06:04      | 14h 56m    | 21:01                   | 39m        | 21:40 | 47m        | 22:28 | 59m        | 23:27    | 9h 04m                     | 4h 12m     |    |            |    | Mo, 5. Aug  |
| Di, 6. Aug  | MESZ  | 23:24–03:42*               | 4h 18m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 07:55      | 22:03      | 03:39                      | 59m        | 04:38 | 47m        | 05:26 | 39m        | 06:05      | 14h 53m    | 20:59                   | 39m        | 21:38 | 46m        | 22:25 | 58m        | 23:24    | 9h 07m                     | 4h 18m     |    |            |    | Di, 6. Aug  |
| Mi, 7. Aug  | MESZ  | 23:21–03:45*               | 4h 24m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 09:04      | 22:15      | 03:42                      | 58m        | 04:40 | 46m        | 05:27 | 39m        | 06:07      | 14h 50m    | 20:58                   | 39m        | 21:37 | 46m        | 22:23 | 57m        | 23:21    | 9h 10m                     | 4h 24m     |    |            |    | Mi, 7. Aug  |
| Do, 8. Aug  | MESZ  | 23:18–03:48*               | 4h 30m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 10:12      | 22:26      | 03:45                      | 57m        | 04:42 | 46m        | 05:29 | 39m        | 06:08      | 14h 47m    | 20:56                   | 38m        | 21:35 | 46m        | 22:21 | 56m        | 23:18    | 9h 13m                     | 4h 30m     |    |            |    | Do, 8. Aug  |
| Fr, 9. Aug  | MESZ  | 23:14–03:51*               | 4h 36m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 11:19      | 22:38      | 03:48                      | 56m        | 04:44 | 46m        | 05:31 | 38m        | 06:10      | 14h 44m    | 20:54                   | 38m        | 21:33 | 45m        | 22:19 | 55m        | 23:14    | 9h 16m                     | 4h 36m     |    |            |    | Fr, 9. Aug  |
| Sa, 10. Aug | MESZ  | 23:11–03:53*               | 4h 41m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 12:27      | 22:51      | 03:51                      | 55m        | 04:46 | 45m        | 05:32 | 38m        | 06:11      | 14h 41m    | 20:52                   | 38m        | 21:31 | 45m        | 22:16 | 55m        | 23:11    | 9h 20m                     | 4h 41m     |    |            |    | Sa, 10. Aug |
| So, 11. Aug | MESZ  | 23:08–03:56*               | 4h 47m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 13:37      | 23:06      | 03:53                      | 55m        | 04:48 | 45m        | 05:34 | 38m        | 06:12      | 14h 38m    | 20:51                   | 38m        | 21:29 | 45m        | 22:14 | 54m        | 23:08    | 9h 23m                     | 4h 47m     |    |            |    | So, 11. Aug |
| Mo, 12. Aug | MESZ  | 23:25–03:59*               | 4h 33m     | M <sub>7</sub> bis AN <sub>-</sub>  | ◑    | 14:50      | 23:25      | 03:56                      | 54m        | 04:50 | 45m        | 05:35 | 38m        | 06:14      | 14h 34m    | 20:49                   | 38m        | 21:27 | 44m        | 22:12 | 53m        | 23:05    | 9h 26m                     | 4h 53m     |    |            |    | Mo, 12. Aug |
| Di, 13. Aug | MESZ  | 23:52–04:01*               | 4h 09m     | M <sub>7</sub> bis AN <sub>-</sub>  |      | 16:04      | 23:52      | 03:59                      | 53m        | 04:52 | 44m        | 05:37 | 38m        | 06:15      | 14h 31m    | 20:47                   | 37m        | 21:25 | 44m        | 22:09 | 53m        | 23:02    | 9h 29m                     | 4h 58m     |    |            |    | Di, 13. Aug |
| Mi, 14. Aug | MESZ  | 00:30*–04:04*              | 3h 33m     | M <sub>7</sub> bis AN <sub>-</sub>  |      | 17:17      | —:—        | 04:01                      | 53m        | 04:54 | 44m        | 05:39 | 38m        | 06:17      | 14h 28m    | 20:45                   | 37m        | 21:23 | 44m        | 22:07 | 52m        | 22:59    | 9h 32m                     | 5h 04m     |    |            |    | Mi, 14. Aug |
| Do, 15. Aug | MESZ  | 01:23*–04:06*              | 2h 43m     | M <sub>7</sub> bis AN <sub>-</sub>  |      | 18:24      | 00:30      | 04:04                      | 52m        | 04:56 | 44m        | 05:40 | 37m        | 06:18      | 14h 25m    | 20:43                   | 37m        | 21:21 | 43m        | 22:05 | 51m        | 22:56    | 9h 36m                     | 5h 09m     |    |            |    | Do, 15. Aug |
| Fr, 16. Aug | MESZ  | 02:33*–04:09*              | 1h 36m     | M <sub>7</sub> bis AN <sub>-</sub>  |      | 19:18      | 01:23      | 04:06                      | 51m        | 04:58 | 43m        | 05:42 | 37m        | 06:20      | 14h 21m    | 20:41                   | 37m        | 21:19 | 43m        | 22:02 | 51m        | 22:54    | 9h 39m                     | 5h 15m     |    |            |    | Fr, 16. Aug |
| Sa, 17. Aug | MESZ  | 03:56*–04:11*              | 15m        | M <sub>7</sub> bis AN <sub>-</sub>  |      | 19:59      | 02:33      | 04:09                      | 51m        | 05:00 | 43m        | 05:44 | 37m        | 06:21      | 14h 18m    | 20:40                   | 37m        | 21:17 | 43m        | 22:00 | 50m        | 22:51    | 9h 42m                     | 5h 20m     |    |            |    | Sa, 17. Aug |
| So, 18. Aug | MESZ  | —:~:~:~:~                  | —          | Mond stört                          |      | 20:29      | 03:56      | 04:11                      | 50m        | 05:02 | 43m        | 05:45 | 37m        | 06:23      | 14h 15m    | 20:38                   | 37m        | 21:15 | 42m        | 21:58 | 49m        | 22:48    | 9h 46m                     | 5h 26m     |    |            |    | So, 18. Aug |
| Mo, 19. Aug | MESZ  | —:~:~:~:~                  | —          | Mond stört                          | ○    | 20:52      | 05:25      | 04:14                      | 49m        | 05:04 | 42m        | 05:47 | 37m        | 06:24      | 14h 11m    | 20:36                   | 36m        | 21:13 | 42m        | 21:55 | 49m        | 22:45    | 9h 49m                     | 5h 31m     |    |            |    | Mo, 19. Aug |
| Di, 20. Aug | MESZ  | —:~:~:~:~                  | —          | Mond stört                          |      | 21:10      | 06:55      | 04:16                      | 49m        | 05:06 | 42m        | 05:48 | 37m        | 06:25      | 14h 08m    | 20:34                   | 36m        | 21:11 | 42m        | 21:53 | 48m        | 22:42    | 9h 53m                     | 5h 36m     |    |            |    | Di, 20. Aug |
| Mi, 21. Aug | MESZ  | —:~:~:~:~                  | —          | Mond stört                          |      | 21:26      | 08:24      | 04:19                      | 48m        | 05:08 | 42m        | 05:50 | 36m        | 06:27      | 14h 04m    | 20:32                   | 36m        | 21:09 | 42m        | 21:51 | 48m        | 22:39    | 9h 56m                     | 5h 42m     |    |            |    | Mi, 21. Aug |
| Do, 22. Aug | MESZ  | —:~:~:~:~                  | —          | Mond stört                          |      | 21:41      | 09:52      | 04:21                      | 48m        | 05:09 | 42m        | 05:52 | 36m        | 06:28      | 14h 01m    | 20:30                   | 36m        | 21:06 | 41m        | 21:48 | 47m        | 22:36    | 9h 59m                     | 5h 47m     |    |            |    | Do, 22. Aug |
| Fr, 23. Aug | MESZ  | —:~:~:~:~                  | —          | Mond stört                          |      | 21:58      | 11:18      | 04:23                      | 47m        | 05:11 | 41m        | 05:53 | 36m        | 06:30      | 13h 58m    | 20:28                   | 36m        | 21:04 | 41m        | 21:46 | 47m        | 22:33    | 10h 03m                    | 5h 52m     |    |            |    | Fr, 23. Aug |
| Sa, 24. Aug | MESZ  | —:~:~:~:~                  | —          | Mond stört                          |      | 22:17      | 12:45      | 04:26                      | 47m        | 05:13 | 41m        | 05:55 | 36m        | 06:31      | 13h 54m    | 20:26                   | 36m        | 21:02 | 41m        | 21:43 | 46m        | 22:30    | 10h 06m                    | 5h 57m     |    |            |    | Sa, 24. Aug |
| So, 25. Aug | MESZ  | 22:28–22:41                | 13m        | AN <sub>+</sub> bis M <sub>7</sub>  |      | 22:41      | 14:12      | 04:28                      | 46m        | 05:15 | 41m        | 05:56 | 36m        | 06:33      | 13h 51m    | 20:24                   | 36m        | 21:00 | 41m        | 21:41 | 46m        | 22:28    | 10h 10m                    | 6h 02m     |    |            |    | So, 25. Aug |
| Mo, 26. Aug | MESZ  | 22:25–23:14                | 48m        | AN <sub>+</sub> bis M <sub>7</sub>  | ◑    | 23:14      | 15:35      | 04:30                      | 46m        | 05:17 | 41m        | 05:58 | 36m        | 06:34      | 13h 47m    | 20:22                   | 35m        | 20:58 | 40m        | 21:39 | 46m        | 22:25    | 10h 13m                    | 6h 07m     |    |            |    | Mo, 26. Aug |
| Di, 27. Aug | MESZ  | 22:22–23:57                | 1h 35m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 23:57      | 16:50      | 04:33                      | 46m        | 05:19 | 40m        | 06:00 | 36m        | 06:36      | 13h 44m    | 20:20                   | 35m        | 20:56 | 40m        | 21:36 | 45m        | 22:22    | 10h 17m                    | 6h 12m     |    |            |    | Di, 27. Aug |
| Mi, 28. Aug | MESZ  | 22:19–00:54*               | 2h 35m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | —:—        | 17:53      | 04:35                      | 45m        | 05:20 | 40m        | 06:01 | 35m        | 06:37      | 13h 40m    | 20:18                   | 35m        | 20:54 | 40m        | 21:34 | 45m        | 22:19    | 10h 20m                    | 6h 17m     |    |            |    | Mi, 28. Aug |
| Do, 29. Aug | MESZ  | 22:16–02:02*               | 3h 45m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 00:54      | 18:39      | 04:37                      | 45m        | 05:22 | 40m        | 06:03 | 35m        | 06:38      | 13h 37m    | 20:16                   | 35m        | 20:51 | 40m        | 21:32 | 44m        | 22:16    | 10h 24m                    | 6h 22m     |    |            |    | Do, 29. Aug |
| Fr, 30. Aug | MESZ  | 22:14–03:16*               | 5h 02m     | AN <sub>+</sub> bis M <sub>7</sub>  |      |            |            |                            |            |       |            |       |            |            |            |                         |            |       |            |       |            |          |                            |            |    |            |    |             |

| 1           | 2             | 3                          | 4          | 5                                   | 6    | 7          | 8          | 9                          | 10         | 11    | 12         | 13    | 14         | 15         | 16         | 17                      | 18         | 19    | 20         | 21    | 22         | 23       | 24                         | 25         | 26 | 27         | 28 | 29          |
|-------------|---------------|----------------------------|------------|-------------------------------------|------|------------|------------|----------------------------|------------|-------|------------|-------|------------|------------|------------|-------------------------|------------|-------|------------|-------|------------|----------|----------------------------|------------|----|------------|----|-------------|
| 2024        | Zeit-<br>zone | Astr. dunkel und kein Mond |            |                                     | Mond |            |            | Beginn der Morgendämmerung |            |       |            |       | Sonne      |            |            | Ende der Abenddämmerung |            |       |            |       | Nacht      | Astr. N. | Naut. dunkel und kein Mond |            |    | 2024       |    |             |
|             |               |                            | $\Delta t$ |                                     | Ph.  | $\nearrow$ | $\searrow$ | Astr.                      | $\Delta t$ | Naut. | $\Delta t$ | Bürg. | $\Delta t$ | $\nearrow$ | $\Delta t$ | $\searrow$              | $\Delta t$ | Bürg. | $\Delta t$ | Naut. | $\Delta t$ | Astr.    | $\Delta t$                 | $\Delta t$ |    | $\Delta t$ |    |             |
| Sa, 7. Sep  | MESZ          | 21:52 – 04:58*             | 7h 05m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 11:25      | 21:12      | 04:56                      | 42m        | 05:38 | 38m        | 06:17 | 34m        | 06:52      | 13h 05m    | 19:57                   | 34m        | 20:31 | 38m        | 21:10 | 42m        | 21:52    | 10h 56m                    | 7h 05m     |    |            |    | Sa, 7. Sep  |
| So, 8. Sep  | MESZ          | 21:49 – 05:00*             | 7h 10m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 12:36      | 21:29      | 04:58                      | 42m        | 05:40 | 38m        | 06:18 | 34m        | 06:53      | 13h 01m    | 19:55                   | 34m        | 20:29 | 38m        | 21:08 | 41m        | 21:49    | 10h 59m                    | 7h 10m     |    |            |    | So, 8. Sep  |
| Mo, 9. Sep  | MESZ          | 21:52 – 05:02*             | 7h 09m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 13:49      | 21:52      | 05:00                      | 41m        | 05:41 | 38m        | 06:20 | 34m        | 06:55      | 12h 58m    | 19:53                   | 34m        | 20:27 | 38m        | 21:05 | 41m        | 21:47    | 11h 03m                    | 7h 14m     |    |            |    | Mo, 9. Sep  |
| Di, 10. Sep | MESZ          | 22:24 – 05:03*             | 6h 39m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 15:01      | 22:24      | 05:02                      | 41m        | 05:43 | 38m        | 06:21 | 34m        | 06:56      | 12h 54m    | 19:50                   | 34m        | 20:25 | 38m        | 21:03 | 41m        | 21:44    | 11h 07m                    | 7h 19m     |    |            |    | Di, 10. Sep |
| Mi, 11. Sep | MESZ          | 23:09 – 05:05*             | 5h 56m     | M <sub>\</sub> bis AN <sub>-</sub>  | ☾    | 16:09      | 23:09      | 05:03                      | 41m        | 05:45 | 38m        | 06:23 | 34m        | 06:57      | 12h 50m    | 19:48                   | 34m        | 20:23 | 38m        | 21:01 | 40m        | 21:42    | 11h 10m                    | 7h 23m     |    |            |    | Mi, 11. Sep |
| Do, 12. Sep | MESZ          | 00:10* – 05:07*            | 4h 57m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 17:08      | —:—        | 05:05                      | 41m        | 05:46 | 38m        | 06:24 | 34m        | 06:59      | 12h 47m    | 19:46                   | 34m        | 20:20 | 37m        | 20:58 | 40m        | 21:39    | 11h 14m                    | 7h 28m     |    |            |    | Do, 12. Sep |
| Fr, 13. Sep | MESZ          | 01:25* – 05:09*            | 3h 43m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 17:54      | 00:10      | 05:07                      | 40m        | 05:48 | 37m        | 06:26 | 34m        | 07:00      | 12h 43m    | 19:44                   | 34m        | 20:18 | 37m        | 20:56 | 40m        | 21:36    | 11h 17m                    | 7h 32m     |    |            |    | Fr, 13. Sep |
| Sa, 14. Sep | MESZ          | 02:51* – 05:11*            | 2h 20m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 18:28      | 01:25      | 05:09                      | 40m        | 05:50 | 37m        | 06:27 | 34m        | 07:02      | 12h 39m    | 19:42                   | 34m        | 20:16 | 37m        | 20:54 | 40m        | 21:34    | 11h 21m                    | 7h 37m     |    |            |    | Sa, 14. Sep |
| So, 15. Sep | MESZ          | 04:20* – 05:13*            | 52m        | M <sub>\</sub> bis AN <sub>-</sub>  |      | 18:53      | 02:51      | 05:11                      | 40m        | 05:51 | 37m        | 06:29 | 34m        | 07:03      | 12h 36m    | 19:40                   | 34m        | 20:14 | 37m        | 20:51 | 40m        | 21:31    | 11h 25m                    | 7h 41m     |    |            |    | So, 15. Sep |
| Mo, 16. Sep | MESZ          | —:—:—:—                    | –          | Mond stört                          |      | 19:13      | 04:20      | 05:13                      | 40m        | 05:53 | 37m        | 06:30 | 34m        | 07:05      | 12h 32m    | 19:37                   | 34m        | 20:11 | 37m        | 20:49 | 39m        | 21:29    | 11h 28m                    | 7h 45m     |    |            |    | Mo, 16. Sep |
| Di, 17. Sep | MESZ          | —:—:—:—                    | –          | Mond stört                          |      | 19:30      | 05:50      | 05:15                      | 39m        | 05:55 | 37m        | 06:32 | 34m        | 07:06      | 12h 29m    | 19:35                   | 34m        | 20:09 | 37m        | 20:47 | 39m        | 21:26    | 11h 32m                    | 7h 50m     |    |            |    | Di, 17. Sep |
| Mi, 18. Sep | MESZ          | —:—:—:—                    | –          | Mond stört                          | ☾    | 19:45      | 07:19      | 05:16                      | 39m        | 05:56 | 37m        | 06:33 | 34m        | 07:08      | 12h 25m    | 19:33                   | 33m        | 20:07 | 37m        | 20:44 | 39m        | 21:24    | 11h 36m                    | 7h 54m     |    |            |    | Mi, 18. Sep |
| Do, 19. Sep | MESZ          | —:—:~:~                    | –          | Mond stört                          |      | 20:01      | 08:48      | 05:18                      | 39m        | 05:58 | 37m        | 06:35 | 34m        | 07:09      | 12h 21m    | 19:31                   | 33m        | 20:05 | 37m        | 20:42 | 39m        | 21:21    | 11h 39m                    | 7h 58m     |    |            |    | Do, 19. Sep |
| Fr, 20. Sep | MESZ          | —:~:~:~                    | –          | Mond stört                          |      | 20:20      | 10:18      | 05:20                      | 39m        | 05:59 | 37m        | 06:36 | 34m        | 07:11      | 12h 18m    | 19:29                   | 33m        | 20:03 | 37m        | 20:40 | 39m        | 21:19    | 11h 43m                    | 8h 02m     |    |            |    | Fr, 20. Sep |
| Sa, 21. Sep | MESZ          | —:~:~:~                    | –          | Mond stört                          |      | 20:42      | 11:48      | 05:22                      | 39m        | 06:01 | 37m        | 06:38 | 33m        | 07:12      | 12h 14m    | 19:27                   | 33m        | 20:00 | 36m        | 20:37 | 39m        | 21:16    | 11h 46m                    | 8h 06m     |    |            |    | Sa, 21. Sep |
| So, 22. Sep | MESZ          | —:~:~:~                    | –          | Mond stört                          |      | 21:12      | 13:17      | 05:23                      | 39m        | 06:02 | 37m        | 06:39 | 33m        | 07:13      | 12h 10m    | 19:24                   | 33m        | 19:58 | 36m        | 20:35 | 38m        | 21:14    | 11h 50m                    | 8h 11m     |    |            |    | So, 22. Sep |
| Mo, 23. Sep | MESZ          | 21:12 – 21:53              | 41m        | AN <sub>+</sub> bis M <sub>7</sub>  |      | 21:53      | 14:38      | 05:25                      | 38m        | 06:04 | 36m        | 06:41 | 33m        | 07:15      | 12h 07m    | 19:22                   | 33m        | 19:56 | 36m        | 20:33 | 38m        | 21:12    | 11h 54m                    | 8h 15m     |    |            |    | Mo, 23. Sep |
| Di, 24. Sep | MESZ          | 21:09 – 22:47              | 1h 37m     | AN <sub>+</sub> bis M <sub>7</sub>  | ☾    | 22:47      | 15:47      | 05:27                      | 38m        | 06:06 | 36m        | 06:42 | 33m        | 07:16      | 12h 03m    | 19:20                   | 33m        | 19:54 | 36m        | 20:31 | 38m        | 21:09    | 11h 57m                    | 8h 19m     |    |            |    | Di, 24. Sep |
| Mi, 25. Sep | MESZ          | 21:07 – 23:52              | 2h 45m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 23:52      | 16:40      | 05:29                      | 38m        | 06:07 | 36m        | 06:44 | 33m        | 07:18      | 11h 59m    | 19:18                   | 33m        | 19:52 | 36m        | 20:28 | 38m        | 21:07    | 12h 01m                    | 8h 23m     |    |            |    | Mi, 25. Sep |
| Do, 26. Sep | MESZ          | 21:04 – 01:05*             | 4h 00m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | —:—        | 17:17      | 05:30                      | 38m        | 06:09 | 36m        | 06:45 | 33m        | 07:19      | 11h 56m    | 19:16                   | 33m        | 19:49 | 36m        | 20:26 | 38m        | 21:04    | 12h 05m                    | 8h 27m     |    |            |    | Do, 26. Sep |
| Fr, 27. Sep | MESZ          | 21:02 – 02:19*             | 5h 17m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 01:05      | 17:44      | 05:32                      | 38m        | 06:10 | 36m        | 06:47 | 33m        | 07:21      | 11h 52m    | 19:14                   | 33m        | 19:47 | 36m        | 20:24 | 38m        | 21:02    | 12h 08m                    | 8h 31m     |    |            |    | Fr, 27. Sep |
| Sa, 28. Sep | MESZ          | 21:00 – 03:32*             | 6h 32m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 02:19      | 18:04      | 05:34                      | 38m        | 06:12 | 36m        | 06:48 | 33m        | 07:22      | 11h 49m    | 19:11                   | 33m        | 19:45 | 36m        | 20:22 | 38m        | 21:00    | 12h 12m                    | 8h 35m     |    |            |    | Sa, 28. Sep |
| So, 29. Sep | MESZ          | 20:57 – 04:43*             | 7h 45m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 03:32      | 18:19      | 05:35                      | 38m        | 06:13 | 36m        | 06:50 | 33m        | 07:24      | 11h 45m    | 19:09                   | 33m        | 19:43 | 36m        | 20:19 | 38m        | 20:57    | 12h 16m                    | 8h 39m     |    |            |    | So, 29. Sep |
| Mo, 30. Sep | MESZ          | 20:55 – 05:38*             | 8h 43m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 04:43      | 18:32      | 05:37                      | 38m        | 06:15 | 36m        | 06:51 | 33m        | 07:25      | 11h 41m    | 19:07                   | 33m        | 19:41 | 36m        | 20:17 | 37m        | 20:55    | 12h 19m                    | 8h 43m     |    |            |    | Mo, 30. Sep |
| Di, 1. Okt  | MESZ          | 20:53 – 05:40*             | 8h 47m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 05:51      | 18:43      | 05:38                      | 37m        | 06:16 | 36m        | 06:53 | 33m        | 07:27      | 11h 38m    | 19:05                   | 33m        | 19:39 | 36m        | 20:15 | 37m        | 20:53    | 12h 23m                    | 8h 47m     |    |            |    | Di, 1. Okt  |
| Mi, 2. Okt  | MESZ          | 20:51 – 05:42*             | 8h 51m     | AN <sub>+</sub> bis AN <sub>-</sub> | ☾    | 06:59      | 18:54      | 05:40                      | 37m        | 06:18 | 36m        | 06:54 | 33m        | 07:28      | 11h 34m    | 19:03                   | 33m        | 19:37 | 36m        | 20:13 | 37m        | 20:51    | 12h 26m                    | 8h 51m     |    |            |    | Mi, 2. Okt  |
| Do, 3. Okt  | MESZ          | 20:48 – 05:43*             | 8h 54m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 08:06      | 19:06      | 05:42                      | 37m        | 06:20 | 36m        | 06:56 | 33m        | 07:30      | 11h 30m    | 19:01                   | 33m        | 19:35 | 36m        | 20:11 | 37m        | 20:48    | 12h 30m                    | 8h 54m     |    |            |    | Do, 3. Okt  |
| Fr, 4. Okt  | MESZ          | 20:46 – 05:45*             | 8h 58m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 09:15      | 19:19      | 05:43                      | 37m        | 06:21 | 36m        | 06:57 | 33m        | 07:31      | 11h 27m    | 18:59                   | 33m        | 19:32 | 36m        | 20:09 | 37m        | 20:46    | 12h 34m                    | 8h 58m     |    |            |    | Fr, 4. Okt  |
| Sa, 5. Okt  | MESZ          | 20:44 – 05:47*             | 9h 02m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 10:25      | 19:35      | 05:45                      | 37m        | 06:23 | 36m        | 06:59 | 33m        | 07:33      | 11h 23m    | 18:56                   | 33m        | 19:30 | 36m        | 20:07 | 37m        | 20:44    | 12h 37m                    | 9h 02m     |    |            |    | Sa, 5. Okt  |
| So, 6. Okt  | MESZ          | 20:42 – 05:48*             | 9h 06m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 11:37      | 19:56      | 05:47                      | 37m        | 06:24 | 36m        | 07:00 | 33m        | 07:34      | 11h 20m    | 18:54                   | 33m        | 19:28 | 36m        | 20:04 | 37m        | 20:42    | 12h 41m                    | 9h 06m     |    |            |    | So, 6. Okt  |
| Mo, 7. Okt  | MESZ          | 20:40 – 05:50*             | 9h 09m     | AN <sub>+</sub> bis AN <sub>-</sub> |      | 12:50      | 20:24      | 05:48                      | 37m        | 06:26 | 36m        | 07:02 | 33m        | 07:36      | 11h 16m    | 18:52                   | 33m        | 19:26 | 36m        | 20:02 | 37m        | 20:40    | 12h 45m                    | 9h 09m     |    |            |    | Mo, 7. Okt  |
| Di, 8. Okt  | MESZ          | 21:04 – 05:51*             | 8h 47m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 13:59      | 21:04      | 05:50                      | 37m        | 06:27 | 36m        | 07:03 | 33m        | 07:37      | 11h 12m    | 18:50                   | 33m        | 19:24 | 36m        | 20:00 | 37m        | 20:38    | 12h 48m                    | 9h 13m     |    |            |    | Di, 8. Okt  |
| Mi, 9. Okt  | MESZ          | 21:57 – 05:53*             | 7h 55m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 15:00      | 21:57      | 05:51                      | 37m        | 06:29 | 36m        | 07:05 | 34m        | 07:39      | 11h 09m    | 18:48                   | 33m        | 19:22 | 36m        | 19:58 | 37m        | 20:36    | 12h 52m                    | 9h 17m     |    |            |    | Mi, 9. Okt  |
| Do, 10. Okt | MESZ          | 23:05 – 05:54*             | 6h 49m     | M <sub>\</sub> bis AN <sub>-</sub>  | ☾    | 15:49      | 23:05      | 05:53                      | 37m        | 06:30 | 36m        | 07:06 | 34m        | 07:40      | 11h 05m    | 18:46                   | 33m        | 19:20 | 36m        | 19:56 | 37m        | 20:33    | 12h 55m                    | 9h 20m     |    |            |    | Do, 10. Okt |
| Fr, 11. Okt | MESZ          | 00:24* – 05:56*            | 5h 31m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 16:26      | —:—        | 05:54                      | 37m        | 06:32 | 36m        | 07:08 | 34m        | 07:42      | 11h 02m    | 18:44                   | 34m        | 19:18 | 36m        | 19:54 | 37m        | 20:31    | 12h 59m                    | 9h 24m     |    |            |    | Fr, 11. Okt |
| Sa, 12. Okt | MESZ          | 01:49* – 05:57*            | 4h 08m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 16:54      | 00:24      | 05:56                      | 37m        | 06:33 | 36m        | 07:09 | 34m        | 07:44      | 10h 58m    | 18:42                   | 34m        | 19:16 | 36m        | 19:52 | 37m        | 20:29    | 13h 03m                    | 9h 28m     |    |            |    | Sa, 12. Okt |
| So, 13. Okt | MESZ          | 03:16* – 05:59*            | 2h 42m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 17:15      | 01:49      | 05:57                      | 37m        | 06:35 | 36m        | 07:11 | 34m        | 07:45      | 10h 54m    | 18:40                   | 34m        | 19:14 | 36m        | 19:50 | 37m        | 20:27    | 13h 06m                    | 9h 31m     |    |            |    | So, 13. Okt |
| Mo, 14. Okt | MESZ          | 04:43* – 06:00*            | 1h 17m     | M <sub>\</sub> bis AN <sub>-</sub>  |      | 17:33      | 03:16      | 05:59                      | 37m        | 06:36 | 36m        | 07:12 | 34m        | 07:47      | 10h 51m    | 18:38                   | 34m        | 19:12 | 36m        | 19:48 | 37m        | 20:25    | 13h 10m                    | 9h 35m     |    |            |    | Mo, 14. Okt |
| Di, 15. Okt | MESZ          | —:~:~:~                    | –          | Mond stört                          |      | 17:49      | 04:43      | 06:00                      | 37m        | 06:38 | 36m        | 07:14 | 34m        | 07:48      | 10h 47m    | 18:36                   | 34m        | 19:10 | 36m        | 19:46 | 36m        | 20:23    | 13h 13m                    | 9h 38m     |    |            |    | Di, 15. Okt |
| Mi, 16. Okt | MESZ          | —:~:~:~                    | –          | Mond stört                          |      | 18:04      | 06:12      | 06:02                      | 37m        | 06:39 | 36m        | 07:15 | 34m        | 07:50      | 10h 44m    | 18:34                   | 34m        | 19:08 | 36m        | 19:45 | 36m        | 20:22    | 13h 17m                    | 9h 41m     |    |            |    | Mi, 16. Okt |
| Do, 17. Okt | MESZ          | —:~:~:~                    | –          | Mond stört                          | ☾    | 18:21      | 07:41      | 06:04                      | 37m        | 06:41 | 36m        | 07:17 | 34m        | 07:51      | 10h 40m    | 18:32                   | 34m        | 19:06 | 36m        | 19:43 | 36m        | 20:20    | 13h 20m                    | 9h 45m     |    |            |    | Do, 17. Okt |
| Fr, 18. Okt | MESZ          | —:~:~:~                    | –          | Mond stört                          |      | 18:42      | 09:13      | 06:05                      | 37m        | 06:42 | 36m        | 07:18 | 34m        | 07:53      | 10h 37m    | 18:30                   | 34m        | 19:04 | 36m        | 19:41 | 36m        | 20:18    | 13h 24m                    | 9h 48m     |    |            |    | Fr, 18. Okt |
| Sa, 19. Okt | MESZ          | —:~:~:~                    | –          |                                     |      |            |            |                            |            |       |            |       |            |            |            |                         |            |       |            |       |            |          |                            |            |    |            |    |             |

| 1           | 2             | 3                          | 4       | 5                                   | 6    | 7          | 8          | 9                          | 10         | 11    | 12         | 13    | 14         | 15         | 16         | 17                      | 18         | 19    | 20         | 21    | 22         | 23       | 24                         | 25         | 26 | 27         | 28 | 29          |
|-------------|---------------|----------------------------|---------|-------------------------------------|------|------------|------------|----------------------------|------------|-------|------------|-------|------------|------------|------------|-------------------------|------------|-------|------------|-------|------------|----------|----------------------------|------------|----|------------|----|-------------|
| 2024        | Zeit-<br>zone | Astr. dunkel und kein Mond |         |                                     | Mond |            |            | Beginn der Morgendämmerung |            |       |            |       | Sonne      |            |            | Ende der Abenddämmerung |            |       |            |       | Nacht      | Astr. N. | Naut. dunkel und kein Mond |            |    | 2024       |    |             |
|             |               | $\Delta t$                 |         |                                     | Ph.  | $\nearrow$ | $\searrow$ | Astr.                      | $\Delta t$ | Naut. | $\Delta t$ | Bürg. | $\Delta t$ | $\nearrow$ | $\Delta t$ | $\searrow$              | $\Delta t$ | Bürg. | $\Delta t$ | Naut. | $\Delta t$ | Astr.    | $\Delta t$                 | $\Delta t$ |    | $\Delta t$ |    |             |
| So, 27. Okt |               | 19:02–02:42*               | 7h 39m  | AN <sub>+</sub> bis M <sub>J</sub>  |      | 01:33      | 15:40      | 05:18                      | 37m        | 05:55 | 36m        | 06:32 | 35m        | 07:07      | 10h 05m    | 17:13                   | 35m        | 17:48 | 36m        | 18:25 | 36m        | 19:02    | 13h 55m                    | 10h 17m    |    |            |    | So, 27. Okt |
| Mo, 28. Okt |               | 19:00–03:49*               | 8h 48m  | AN <sub>+</sub> bis M <sub>J</sub>  |      | 02:42      | 15:52      | 05:20                      | 37m        | 05:57 | 36m        | 06:34 | 35m        | 07:09      | 10h 02m    | 17:12                   | 35m        | 17:47 | 36m        | 18:23 | 36m        | 19:00    | 13h 59m                    | 10h 20m    |    |            |    | Mo, 28. Okt |
| Di, 29. Okt |               | 18:59–04:56*               | 9h 57m  | AN <sub>+</sub> bis M <sub>J</sub>  |      | 03:49      | 16:03      | 05:21                      | 37m        | 05:58 | 36m        | 06:35 | 35m        | 07:11      | 9h 59m     | 17:10                   | 35m        | 17:45 | 36m        | 18:22 | 36m        | 18:59    | 14h 02m                    | 10h 23m    |    |            |    | Di, 29. Okt |
| Mi, 30. Okt |               | 18:57–05:24*               | 10h 26m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 04:56      | 16:14      | 05:23                      | 37m        | 06:00 | 36m        | 06:37 | 35m        | 07:12      | 9h 55m     | 17:08                   | 35m        | 17:43 | 36m        | 18:20 | 36m        | 18:57    | 14h 05m                    | 10h 26m    |    |            |    | Mi, 30. Okt |
| Do, 31. Okt |               | 18:56–05:26*               | 10h 29m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 06:04      | 16:27      | 05:24                      | 37m        | 06:01 | 36m        | 06:38 | 35m        | 07:14      | 9h 52m     | 17:06                   | 35m        | 17:42 | 36m        | 18:19 | 37m        | 18:56    | 14h 09m                    | 10h 29m    |    |            |    | Do, 31. Okt |
| Fr, 1. Nov  |               | 18:54–05:27*               | 10h 32m | AN <sub>+</sub> bis AN <sub>-</sub> | ●    | 07:14      | 16:42      | 05:26                      | 37m        | 06:03 | 37m        | 06:40 | 35m        | 07:15      | 9h 49m     | 17:05                   | 35m        | 17:40 | 36m        | 18:17 | 37m        | 18:54    | 14h 12m                    | 10h 32m    |    |            |    | Fr, 1. Nov  |
| Sa, 2. Nov  |               | 18:53–05:28*               | 10h 35m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 08:26      | 17:02      | 05:27                      | 37m        | 06:04 | 37m        | 06:41 | 35m        | 07:17      | 9h 46m     | 17:03                   | 35m        | 17:39 | 37m        | 18:16 | 37m        | 18:53    | 14h 15m                    | 10h 35m    |    |            |    | Sa, 2. Nov  |
| So, 3. Nov  |               | 18:52–05:30*               | 10h 38m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 09:39      | 17:28      | 05:28                      | 37m        | 06:06 | 37m        | 06:43 | 35m        | 07:19      | 9h 42m     | 17:01                   | 35m        | 17:37 | 37m        | 18:14 | 37m        | 18:52    | 14h 18m                    | 10h 38m    |    |            |    | So, 3. Nov  |
| Mo, 4. Nov  |               | 18:50–05:31*               | 10h 41m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 10:50      | 18:04      | 05:30                      | 37m        | 06:07 | 37m        | 06:44 | 35m        | 07:20      | 9h 39m     | 17:00                   | 35m        | 17:36 | 37m        | 18:13 | 37m        | 18:50    | 14h 22m                    | 10h 41m    |    |            |    | Mo, 4. Nov  |
| Di, 5. Nov  |               | 18:52–05:33*               | 10h 40m | M <sub>\</sub> bis AN <sub>-</sub>  |      | 11:54      | 18:52      | 05:31                      | 37m        | 06:08 | 37m        | 06:46 | 36m        | 07:22      | 9h 36m     | 16:58                   | 36m        | 17:34 | 37m        | 18:12 | 37m        | 18:49    | 14h 25m                    | 10h 43m    |    |            |    | Di, 5. Nov  |
| Mi, 6. Nov  |               | 19:55–05:34*               | 9h 38m  | M <sub>\</sub> bis AN <sub>-</sub>  |      | 12:47      | 19:55      | 05:33                      | 37m        | 06:10 | 37m        | 06:47 | 36m        | 07:24      | 9h 33m     | 16:57                   | 36m        | 17:33 | 37m        | 18:10 | 37m        | 18:48    | 14h 28m                    | 10h 46m    |    |            |    | Mi, 6. Nov  |
| Do, 7. Nov  |               | 21:10–05:35*               | 8h 25m  | M <sub>\</sub> bis AN <sub>-</sub>  |      | 13:27      | 21:10      | 05:34                      | 37m        | 06:11 | 37m        | 06:49 | 36m        | 07:25      | 9h 30m     | 16:55                   | 36m        | 17:32 | 37m        | 18:09 | 37m        | 18:46    | 14h 31m                    | 10h 49m    |    |            |    | Do, 7. Nov  |
| Fr, 8. Nov  |               | 22:30–05:37*               | 7h 06m  | M <sub>\</sub> bis AN <sub>-</sub>  |      | 13:56      | 22:30      | 05:35                      | 37m        | 06:13 | 37m        | 06:50 | 36m        | 07:27      | 9h 27m     | 16:54                   | 36m        | 17:30 | 37m        | 18:08 | 37m        | 18:45    | 14h 34m                    | 10h 51m    |    |            |    | Fr, 8. Nov  |
| Sa, 9. Nov  |               | 23:54–05:38*               | 5h 44m  | M <sub>\</sub> bis AN <sub>-</sub>  | ◐    | 14:19      | 23:54      | 05:37                      | 37m        | 06:14 | 37m        | 06:52 | 36m        | 07:28      | 9h 23m     | 16:52                   | 36m        | 17:29 | 37m        | 18:06 | 37m        | 18:44    | 14h 37m                    | 10h 54m    |    |            |    | Sa, 9. Nov  |
| So, 10. Nov |               | 01:17*–05:40*              | 4h 22m  | M <sub>\</sub> bis AN <sub>-</sub>  |      | 14:37      | —:—        | 05:38                      | 37m        | 06:16 | 37m        | 06:53 | 36m        | 07:30      | 9h 20m     | 16:51                   | 36m        | 17:28 | 37m        | 18:05 | 37m        | 18:43    | 14h 40m                    | 10h 56m    |    |            |    | So, 10. Nov |
| Mo, 11. Nov |               | 02:41*–05:41*              | 2h 59m  | M <sub>\</sub> bis AN <sub>-</sub>  |      | 14:53      | 01:17      | 05:40                      | 37m        | 06:17 | 37m        | 06:55 | 36m        | 07:32      | 9h 17m     | 16:50                   | 36m        | 17:26 | 37m        | 18:04 | 37m        | 18:42    | 14h 43m                    | 10h 59m    |    |            |    | Mo, 11. Nov |
| Di, 12. Nov |               | 04:07*–05:42*              | 1h 35m  | M <sub>\</sub> bis AN <sub>-</sub>  |      | 15:08      | 02:41      | 05:41                      | 37m        | 06:18 | 37m        | 06:56 | 36m        | 07:33      | 9h 14m     | 16:48                   | 36m        | 17:25 | 37m        | 18:03 | 37m        | 18:40    | 14h 46m                    | 11h 01m    |    |            |    | Di, 12. Nov |
| Mi, 13. Nov |               | 05:36*–05:44*              | 7m      | M <sub>\</sub> bis AN <sub>-</sub>  |      | 15:24      | 04:07      | 05:42                      | 37m        | 06:20 | 37m        | 06:58 | 37m        | 07:35      | 9h 12m     | 16:47                   | 37m        | 17:24 | 37m        | 18:02 | 37m        | 18:39    | 14h 49m                    | 11h 04m    |    |            |    | Mi, 13. Nov |
| Do, 14. Nov |               | —:—:—:—                    | –       | Mond stört                          |      | 15:42      | 05:36      | 05:44                      | 37m        | 06:21 | 38m        | 06:59 | 37m        | 07:36      | 9h 09m     | 16:46                   | 37m        | 17:23 | 38m        | 18:01 | 37m        | 18:38    | 14h 52m                    | 11h 06m    |    |            |    | Do, 14. Nov |
| Fr, 15. Nov |               | —:—:—:—                    | –       | Mond stört                          | ◑    | 16:05      | 07:07      | 05:45                      | 37m        | 06:23 | 38m        | 07:01 | 37m        | 07:38      | 9h 06m     | 16:44                   | 37m        | 17:22 | 38m        | 18:00 | 37m        | 18:37    | 14h 55m                    | 11h 08m    |    |            |    | Fr, 15. Nov |
| Sa, 16. Nov |               | —:—:—:—                    | –       | Mond stört                          |      | 16:37      | 08:39      | 05:46                      | 37m        | 06:24 | 38m        | 07:02 | 37m        | 07:40      | 9h 03m     | 16:43                   | 37m        | 17:21 | 38m        | 17:59 | 37m        | 18:36    | 14h 57m                    | 11h 11m    |    |            |    | Sa, 16. Nov |
| So, 17. Nov |               | —:~:~:~:~                  | –       | Mond stört                          |      | 17:21      | 10:04      | 05:48                      | 37m        | 06:25 | 38m        | 07:04 | 37m        | 07:41      | 9h 00m     | 16:42                   | 37m        | 17:20 | 38m        | 17:58 | 37m        | 18:36    | 15h 00m                    | 11h 13m    |    |            |    | So, 17. Nov |
| Mo, 18. Nov |               | —:~:~:~:~                  | –       | Mond stört                          |      | 18:20      | 11:16      | 05:49                      | 37m        | 06:27 | 38m        | 07:05 | 37m        | 07:43      | 8h 58m     | 16:41                   | 37m        | 17:19 | 38m        | 17:57 | 37m        | 18:35    | 15h 03m                    | 11h 15m    |    |            |    | Mo, 18. Nov |
| Di, 19. Nov |               | 18:34–19:31                | 57m     | AN <sub>+</sub> bis M <sub>J</sub>  |      | 19:31      | 12:09      | 05:50                      | 37m        | 06:28 | 38m        | 07:06 | 37m        | 07:44      | 8h 55m     | 16:40                   | 37m        | 17:18 | 38m        | 17:56 | 37m        | 18:34    | 15h 05m                    | 11h 17m    |    |            |    | Di, 19. Nov |
| Mi, 20. Nov |               | 18:33–20:48                | 2h 15m  | AN <sub>+</sub> bis M <sub>J</sub>  |      | 20:48      | 12:47      | 05:51                      | 37m        | 06:29 | 38m        | 07:08 | 37m        | 07:46      | 8h 53m     | 16:39                   | 37m        | 17:17 | 38m        | 17:55 | 37m        | 18:33    | 15h 08m                    | 11h 19m    |    |            |    | Mi, 20. Nov |
| Do, 21. Nov |               | 18:32–22:05                | 3h 32m  | AN <sub>+</sub> bis M <sub>J</sub>  |      | 22:05      | 13:13      | 05:53                      | 37m        | 06:31 | 38m        | 07:09 | 38m        | 07:47      | 8h 50m     | 16:38                   | 37m        | 17:16 | 38m        | 17:54 | 37m        | 18:32    | 15h 10m                    | 11h 21m    |    |            |    | Do, 21. Nov |
| Fr, 22. Nov |               | 18:32–23:19                | 4h 47m  | AN <sub>+</sub> bis M <sub>J</sub>  |      | 23:19      | 13:32      | 05:54                      | 38m        | 06:32 | 38m        | 07:11 | 38m        | 07:49      | 8h 48m     | 16:37                   | 38m        | 17:15 | 38m        | 17:54 | 37m        | 18:32    | 15h 13m                    | 11h 23m    |    |            |    | Fr, 22. Nov |
| Sa, 23. Nov |               | 18:31–00:30*               | 5h 58m  | AN <sub>+</sub> bis M <sub>J</sub>  | ◒    | —:—        | 13:46      | 05:55                      | 38m        | 06:33 | 38m        | 07:12 | 38m        | 07:50      | 8h 45m     | 16:36                   | 38m        | 17:14 | 38m        | 17:53 | 38m        | 18:31    | 15h 15m                    | 11h 25m    |    |            |    | Sa, 23. Nov |
| So, 24. Nov |               | 18:30–01:38*               | 7h 07m  | AN <sub>+</sub> bis M <sub>J</sub>  |      | 00:30      | 13:59      | 05:56                      | 38m        | 06:34 | 38m        | 07:13 | 38m        | 07:52      | 8h 43m     | 16:35                   | 38m        | 17:13 | 38m        | 17:52 | 38m        | 18:30    | 15h 18m                    | 11h 27m    |    |            |    | So, 24. Nov |
| Mo, 25. Nov |               | 18:30–02:45*               | 8h 14m  | AN <sub>+</sub> bis M <sub>J</sub>  |      | 01:38      | 14:11      | 05:58                      | 38m        | 06:36 | 38m        | 07:15 | 38m        | 07:53      | 8h 41m     | 16:34                   | 38m        | 17:13 | 38m        | 17:52 | 38m        | 18:30    | 15h 20m                    | 11h 28m    |    |            |    | Mo, 25. Nov |
| Di, 26. Nov |               | 18:29–03:52*               | 9h 22m  | AN <sub>+</sub> bis M <sub>J</sub>  |      | 02:45      | 14:22      | 05:59                      | 38m        | 06:37 | 39m        | 07:16 | 38m        | 07:55      | 8h 38m     | 16:34                   | 38m        | 17:12 | 39m        | 17:51 | 38m        | 18:29    | 15h 22m                    | 11h 30m    |    |            |    | Di, 26. Nov |
| Mi, 27. Nov |               | 18:29–05:01*               | 10h 32m | AN <sub>+</sub> bis M <sub>J</sub>  |      | 03:52      | 14:34      | 06:00                      | 38m        | 06:38 | 39m        | 07:17 | 38m        | 07:56      | 8h 36m     | 16:33                   | 38m        | 17:11 | 39m        | 17:51 | 38m        | 18:29    | 15h 24m                    | 11h 32m    |    |            |    | Mi, 27. Nov |
| Do, 28. Nov |               | 18:28–06:02*               | 11h 33m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 05:01      | 14:49      | 06:01                      | 38m        | 06:39 | 39m        | 07:19 | 38m        | 07:57      | 8h 34m     | 16:32                   | 38m        | 17:11 | 39m        | 17:50 | 38m        | 18:28    | 15h 26m                    | 11h 33m    |    |            |    | Do, 28. Nov |
| Fr, 29. Nov |               | 18:28–06:03*               | 11h 35m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 06:13      | 15:07      | 06:02                      | 38m        | 06:41 | 39m        | 07:20 | 38m        | 07:59      | 8h 32m     | 16:31                   | 38m        | 17:10 | 39m        | 17:50 | 38m        | 18:28    | 15h 28m                    | 11h 35m    |    |            |    | Fr, 29. Nov |
| Sa, 30. Nov |               | 18:28–06:04*               | 11h 36m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 07:26      | 15:31      | 06:03                      | 38m        | 06:42 | 39m        | 07:21 | 39m        | 08:00      | 8h 30m     | 16:31                   | 39m        | 17:10 | 39m        | 17:49 | 38m        | 18:28    | 15h 30m                    | 11h 36m    |    |            |    | Sa, 30. Nov |
| So, 1. Dez  |               | 18:27–06:05*               | 11h 38m | AN <sub>+</sub> bis AN <sub>-</sub> | ●    | 08:39      | 16:03      | 06:04                      | 38m        | 06:43 | 39m        | 07:22 | 39m        | 08:01      | 8h 28m     | 16:30                   | 39m        | 17:09 | 39m        | 17:49 | 38m        | 18:27    | 15h 32m                    | 11h 38m    |    |            |    | So, 1. Dez  |
| Mo, 2. Dez  |               | 18:27–06:06*               | 11h 39m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 09:46      | 16:49      | 06:05                      | 38m        | 06:44 | 39m        | 07:23 | 39m        | 08:03      | 8h 27m     | 16:30                   | 39m        | 17:09 | 39m        | 17:49 | 38m        | 18:27    | 15h 34m                    | 11h 39m    |    |            |    | Mo, 2. Dez  |
| Di, 3. Dez  |               | 18:27–06:08*               | 11h 40m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 10:43      | 17:48      | 06:06                      | 38m        | 06:45 | 39m        | 07:25 | 39m        | 08:04      | 8h 25m     | 16:29                   | 39m        | 17:09 | 39m        | 17:48 | 38m        | 18:27    | 15h 35m                    | 11h 40m    |    |            |    | Di, 3. Dez  |
| Mi, 4. Dez  |               | 19:00–06:09*               | 11h 08m | M <sub>\</sub> bis AN <sub>-</sub>  |      | 11:27      | 19:00      | 06:08                      | 38m        | 06:46 | 39m        | 07:26 | 39m        | 08:05      | 8h 23m     | 16:29                   | 39m        | 17:08 | 39m        | 17:48 | 38m        | 18:27    | 15h 37m                    | 11h 41m    |    |            |    | Mi, 4. Dez  |
| Do, 5. Dez  |               | 20:20–06:09*               | 9h 49m  | M <sub>\</sub> bis AN <sub>-</sub>  |      | 12:00      | 20:20      | 06:09                      | 38m        | 06:47 | 39m        | 07:27 | 39m        | 08:06      | 8h 22m     | 16:29                   | 39m        | 17:08 | 39m        | 17:48 | 38m        | 18:26    | 15h 38m                    | 11h 43m    |    |            |    | Do, 5. Dez  |
| Fr, 6. Dez  |               | 21:41–06:10*               | 8h 29m  | M <sub>\</sub> bis AN <sub>-</sub>  |      | 12:24      | 21:41      | 06:09                      | 38m        | 06:48 | 39m        | 07:28 | 39m        | 08:07      | 8h 20m     | 16:28                   | 39m        | 17:08 | 39m        | 17:48 | 38m        | 18:26    | 15h 40m                    | 11h 44m    |    |            |    | Fr, 6. Dez  |
| Sa, 7. Dez  |               | 23:03–06:11*               | 7h 08m  | M <sub>\</sub> bis AN <sub>-</sub>  |      | 12:43      | 23:03      | 06:10                      | 38m        | 06:49 | 39m        | 07:29 | 39m        | 08:09      | 8h 19m     | 16:28                   | 39m        | 17:08 | 39m        | 17:48 | 38m        | 18:26    | 15h 41m                    | 11h 45m    |    |            |    | Sa, 7. Dez  |
| So, 8. Dez  |               | 00:25*–06:12*              | 5h 47m  | M <sub>\</sub> bis AN <sub>-</sub>  | ◑    | 12:59</    |            |                            |            |       |            |       |            |            |            |                         |            |       |            |       |            |          |                            |            |    |            |    |             |



| 1           | 2             | 3                          | 4       | 5                                   | 6    | 7          | 8          | 9                          | 10         | 11    | 12         | 13    | 14         | 15         | 16         | 17                      | 18         | 19    | 20         | 21    | 22         | 23       | 24                         | 25         | 26 | 27         | 28 | 29          |
|-------------|---------------|----------------------------|---------|-------------------------------------|------|------------|------------|----------------------------|------------|-------|------------|-------|------------|------------|------------|-------------------------|------------|-------|------------|-------|------------|----------|----------------------------|------------|----|------------|----|-------------|
| 2024/25     | Zeit-<br>zone | Astr. dunkel und kein Mond |         |                                     | Mond |            |            | Beginn der Morgendämmerung |            |       |            |       | Sonne      |            |            | Ende der Abenddämmerung |            |       |            |       | Nacht      | Astr. N. | Naut. dunkel und kein Mond |            |    | 2024/25    |    |             |
|             |               | $\Delta t$                 |         |                                     | Ph.  | $\nearrow$ | $\searrow$ | Astr.                      | $\Delta t$ | Naut. | $\Delta t$ | Bürg. | $\Delta t$ | $\nearrow$ | $\Delta t$ | $\searrow$              | $\Delta t$ | Bürg. | $\Delta t$ | Naut. | $\Delta t$ | Astr.    | $\Delta t$                 | $\Delta t$ |    | $\Delta t$ |    |             |
| Mo, 16. Dez |               | —:—:—:—                    | —       | Mond stört                          |      | 17:07      | 09:55      | 06:18                      | 38m        | 06:57 | 40m        | 07:37 | 40m        | 08:17      | 8h 11m     | 16:28                   | 40m        | 17:08 | 40m        | 17:49 | 38m        | 18:27    | 15h 49m                    | 11h 50m    |    |            |    | Mo, 16. Dez |
| Di, 17. Dez |               | —:—:—:—                    | —       | Mond stört                          |      | 18:24      | 10:40      | 06:18                      | 38m        | 06:57 | 40m        | 07:37 | 40m        | 08:18      | 8h 11m     | 16:29                   | 40m        | 17:09 | 40m        | 17:49 | 38m        | 18:28    | 15h 49m                    | 11h 51m    |    |            |    | Di, 17. Dez |
| Mi, 18. Dez |               | 18:28–19:43                | 1h 14m  | AN <sub>+</sub> bis M <sub>7</sub>  |      | 19:43      | 11:12      | 06:19                      | 38m        | 06:58 | 40m        | 07:38 | 40m        | 08:18      | 8h 10m     | 16:29                   | 40m        | 17:09 | 40m        | 17:49 | 38m        | 18:28    | 15h 49m                    | 11h 51m    |    |            |    | Mi, 18. Dez |
| Do, 19. Dez |               | 18:29–21:00                | 2h 31m  | AN <sub>+</sub> bis M <sub>7</sub>  |      | 21:00      | 11:34      | 06:20                      | 38m        | 06:59 | 40m        | 07:39 | 40m        | 08:19      | 8h 10m     | 16:29                   | 40m        | 17:10 | 40m        | 17:50 | 38m        | 18:29    | 15h 50m                    | 11h 51m    |    |            |    | Do, 19. Dez |
| Fr, 20. Dez |               | 18:29–22:13                | 3h 44m  | AN <sub>+</sub> bis M <sub>7</sub>  |      | 22:13      | 11:51      | 06:20                      | 38m        | 06:59 | 40m        | 07:39 | 40m        | 08:19      | 8h 10m     | 16:30                   | 40m        | 17:10 | 40m        | 17:50 | 38m        | 18:29    | 15h 50m                    | 11h 51m    |    |            |    | Fr, 20. Dez |
| Sa, 21. Dez |               | 18:30–23:23                | 4h 53m  | AN <sub>+</sub> bis M <sub>7</sub>  |      | 23:23      | 12:05      | 06:21                      | 38m        | 07:00 | 40m        | 07:40 | 40m        | 08:20      | 8h 10m     | 16:30                   | 40m        | 17:10 | 40m        | 17:51 | 38m        | 18:30    | 15h 50m                    | 11h 51m    |    |            |    | Sa, 21. Dez |
| So, 22. Dez |               | 18:30–00:31*               | 6h 01m  | AN <sub>+</sub> bis M <sub>7</sub>  | ☾    | —:—        | 12:17      | 06:21                      | 38m        | 07:00 | 40m        | 07:40 | 40m        | 08:20      | 8h 10m     | 16:31                   | 40m        | 17:11 | 40m        | 17:51 | 38m        | 18:30    | 15h 50m                    | 11h 51m    |    |            |    | So, 22. Dez |
| Mo, 23. Dez |               | 18:31–01:38*               | 7h 07m  | AN <sub>+</sub> bis M <sub>7</sub>  |      | 00:31      | 12:28      | 06:22                      | 38m        | 07:01 | 40m        | 07:41 | 40m        | 08:21      | 8h 10m     | 16:31                   | 40m        | 17:12 | 40m        | 17:52 | 38m        | 18:31    | 15h 49m                    | 11h 51m    |    |            |    | Mo, 23. Dez |
| Di, 24. Dez |               | 18:31–02:47*               | 8h 15m  | AN <sub>+</sub> bis M <sub>7</sub>  |      | 01:38      | 12:40      | 06:22                      | 38m        | 07:01 | 40m        | 07:41 | 40m        | 08:21      | 8h 10m     | 16:32                   | 40m        | 17:12 | 40m        | 17:52 | 38m        | 18:31    | 15h 49m                    | 11h 51m    |    |            |    | Di, 24. Dez |
| Mi, 25. Dez |               | 18:32–03:57*               | 9h 25m  | AN <sub>+</sub> bis M <sub>7</sub>  |      | 02:47      | 12:54      | 06:22                      | 38m        | 07:01 | 40m        | 07:41 | 40m        | 08:22      | 8h 11m     | 16:33                   | 40m        | 17:13 | 40m        | 17:53 | 38m        | 18:32    | 15h 49m                    | 11h 50m    |    |            |    | Mi, 25. Dez |
| Do, 26. Dez |               | 18:33–05:10*               | 10h 36m | AN <sub>+</sub> bis M <sub>7</sub>  |      | 03:57      | 13:10      | 06:23                      | 38m        | 07:02 | 40m        | 07:42 | 40m        | 08:22      | 8h 11m     | 16:33                   | 40m        | 17:14 | 40m        | 17:54 | 38m        | 18:33    | 15h 48m                    | 11h 50m    |    |            |    | Do, 26. Dez |
| Fr, 27. Dez |               | 18:33–06:23*               | 11h 49m | AN <sub>+</sub> bis M <sub>7</sub>  |      | 05:10      | 13:31      | 06:23                      | 38m        | 07:02 | 40m        | 07:42 | 40m        | 08:22      | 8h 12m     | 16:34                   | 40m        | 17:14 | 40m        | 17:54 | 38m        | 18:33    | 15h 48m                    | 11h 50m    |    |            |    | Fr, 27. Dez |
| Sa, 28. Dez |               | 18:34–06:24*               | 11h 49m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 06:23      | 14:01      | 06:23                      | 38m        | 07:02 | 40m        | 07:42 | 40m        | 08:22      | 8h 12m     | 16:35                   | 40m        | 17:15 | 40m        | 17:55 | 38m        | 18:34    | 15h 47m                    | 11h 49m    |    |            |    | Sa, 28. Dez |
| So, 29. Dez |               | 18:35–06:24*               | 11h 48m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 07:33      | 14:41      | 06:24                      | 38m        | 07:02 | 40m        | 07:42 | 40m        | 08:22      | 8h 13m     | 16:36                   | 40m        | 17:16 | 40m        | 17:56 | 38m        | 18:35    | 15h 46m                    | 11h 48m    |    |            |    | So, 29. Dez |
| Mo, 30. Dez |               | 18:36–06:24*               | 11h 48m | AN <sub>+</sub> bis AN <sub>-</sub> | ☉    | 08:35      | 15:37      | 06:24                      | 38m        | 07:03 | 39m        | 07:43 | 39m        | 08:22      | 8h 14m     | 16:37                   | 39m        | 17:17 | 39m        | 17:57 | 38m        | 18:36    | 15h 45m                    | 11h 48m    |    |            |    | Mo, 30. Dez |
| Di, 31. Dez |               | 18:36–06:24*               | 11h 47m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 09:24      | 16:46      | 06:24                      | 38m        | 07:03 | 39m        | 07:43 | 39m        | 08:22      | 8h 15m     | 16:38                   | 39m        | 17:18 | 39m        | 17:58 | 38m        | 18:36    | 15h 44m                    | 11h 47m    |    |            |    | Di, 31. Dez |
| Mi, 1. Jan  |               | 18:37–06:24*               | 11h 46m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 10:01      | 18:06      | 06:24                      | 38m        | 07:03 | 39m        | 07:43 | 39m        | 08:22      | 8h 16m     | 16:39                   | 39m        | 17:19 | 39m        | 17:58 | 38m        | 18:37    | 15h 43m                    | 11h 46m    |    |            |    | Mi, 1. Jan  |
| Do, 2. Jan  |               | 19:29–06:24*               | 10h 55m | M <sub>\</sub> bis AN <sub>-</sub>  |      | 10:28      | 19:29      | 06:24                      | 38m        | 07:03 | 39m        | 07:43 | 39m        | 08:22      | 8h 17m     | 16:40                   | 39m        | 17:20 | 39m        | 17:59 | 38m        | 18:38    | 15h 42m                    | 11h 45m    |    |            |    | Do, 2. Jan  |
| Fr, 3. Jan  |               | 20:52–06:24*               | 9h 32m  | M <sub>\</sub> bis AN <sub>-</sub>  |      | 10:48      | 20:52      | 06:24                      | 38m        | 07:03 | 39m        | 07:43 | 39m        | 08:22      | 8h 18m     | 16:41                   | 39m        | 17:21 | 39m        | 18:00 | 38m        | 18:39    | 15h 41m                    | 11h 44m    |    |            |    | Fr, 3. Jan  |
| Sa, 4. Jan  |               | 22:14–06:24*               | 8h 10m  | M <sub>\</sub> bis AN <sub>-</sub>  |      | 11:05      | 22:14      | 06:24                      | 38m        | 07:03 | 39m        | 07:42 | 39m        | 08:22      | 8h 19m     | 16:42                   | 39m        | 17:22 | 39m        | 18:01 | 38m        | 18:40    | 15h 39m                    | 11h 43m    |    |            |    | Sa, 4. Jan  |
| So, 5. Jan  |               | 23:35–06:24*               | 6h 48m  | M <sub>\</sub> bis AN <sub>-</sub>  |      | 11:20      | 23:35      | 06:24                      | 38m        | 07:03 | 39m        | 07:42 | 39m        | 08:22      | 8h 21m     | 16:43                   | 39m        | 17:23 | 39m        | 18:02 | 38m        | 18:41    | 15h 38m                    | 11h 42m    |    |            |    | So, 5. Jan  |
| Mo, 6. Jan  |               | 00:57*–06:24*              | 5h 26m  | M <sub>\</sub> bis AN <sub>-</sub>  |      | 11:34      | —:—        | 06:24                      | 38m        | 07:02 | 39m        | 07:42 | 39m        | 08:22      | 8h 22m     | 16:44                   | 39m        | 17:24 | 39m        | 18:03 | 38m        | 18:42    | 15h 36m                    | 11h 41m    |    |            |    | Mo, 6. Jan  |
| Di, 7. Jan  |               | 02:21*–06:24*              | 4h 02m  | M <sub>\</sub> bis AN <sub>-</sub>  | ☾    | 11:50      | 00:57      | 06:24                      | 38m        | 07:02 | 39m        | 07:42 | 39m        | 08:21      | 8h 24m     | 16:45                   | 39m        | 17:25 | 39m        | 18:04 | 38m        | 18:43    | 15h 35m                    | 11h 40m    |    |            |    | Di, 7. Jan  |
| Mi, 8. Jan  |               | 03:47*–06:23*              | 2h 36m  | M <sub>\</sub> bis AN <sub>-</sub>  |      | 12:08      | 02:21      | 06:24                      | 38m        | 07:02 | 39m        | 07:42 | 39m        | 08:21      | 8h 25m     | 16:47                   | 39m        | 17:26 | 39m        | 18:06 | 38m        | 18:44    | 15h 33m                    | 11h 39m    |    |            |    | Mi, 8. Jan  |
| Do, 9. Jan  |               | 05:13*–06:23*              | 1h 10m  | M <sub>\</sub> bis AN <sub>-</sub>  |      | 12:31      | 03:47      | 06:23                      | 38m        | 07:02 | 39m        | 07:41 | 39m        | 08:20      | 8h 27m     | 16:48                   | 39m        | 17:27 | 39m        | 18:07 | 38m        | 18:45    | 15h 31m                    | 11h 37m    |    |            |    | Do, 9. Jan  |
| Fr, 10. Jan |               | —:—:—:—                    | —       | Mond stört                          |      | 13:03      | 05:13      | 06:23                      | 38m        | 07:01 | 39m        | 07:41 | 39m        | 08:20      | 8h 29m     | 16:49                   | 39m        | 17:28 | 39m        | 18:08 | 38m        | 18:46    | 15h 30m                    | 11h 36m    |    |            |    | Fr, 10. Jan |
| Sa, 11. Jan |               | —:—:—:—                    | —       | Mond stört                          |      | 13:47      | 06:33      | 06:23                      | 38m        | 07:01 | 39m        | 07:40 | 38m        | 08:19      | 8h 31m     | 16:51                   | 38m        | 17:30 | 39m        | 18:09 | 38m        | 18:47    | 15h 28m                    | 11h 34m    |    |            |    | Sa, 11. Jan |
| So, 12. Jan |               | —:~:~:~:~                  | —       | Mond stört                          |      | 14:47      | 07:41      | 06:22                      | 38m        | 07:01 | 39m        | 07:40 | 38m        | 08:19      | 8h 33m     | 16:52                   | 38m        | 17:31 | 39m        | 18:10 | 38m        | 18:49    | 15h 26m                    | 11h 33m    |    |            |    | So, 12. Jan |
| Mo, 13. Jan |               | —:~:~:~:~                  | —       | Mond stört                          | ☉    | 15:59      | 08:33      | 06:22                      | 38m        | 07:00 | 39m        | 07:39 | 38m        | 08:18      | 8h 35m     | 16:53                   | 38m        | 17:32 | 39m        | 18:11 | 38m        | 18:50    | 15h 24m                    | 11h 31m    |    |            |    | Mo, 13. Jan |
| Di, 14. Jan |               | —:~:~:~:~                  | —       | Mond stört                          |      | 17:18      | 09:10      | 06:21                      | 38m        | 07:00 | 39m        | 07:39 | 38m        | 08:17      | 8h 37m     | 16:55                   | 38m        | 17:33 | 39m        | 18:13 | 38m        | 18:51    | 15h 21m                    | 11h 30m    |    |            |    | Di, 14. Jan |
| Mi, 15. Jan |               | —:~:~:~:~                  | —       | Mond stört                          |      | 18:37      | 09:35      | 06:21                      | 38m        | 06:59 | 38m        | 07:38 | 38m        | 08:17      | 8h 39m     | 16:56                   | 38m        | 17:35 | 39m        | 18:14 | 38m        | 18:52    | 15h 19m                    | 11h 28m    |    |            |    | Mi, 15. Jan |
| Do, 16. Jan |               | 18:53–19:53                | 59m     | AN <sub>+</sub> bis M <sub>7</sub>  |      | 19:53      | 09:54      | 06:20                      | 38m        | 06:59 | 38m        | 07:38 | 38m        | 08:16      | 8h 41m     | 16:58                   | 38m        | 17:36 | 38m        | 18:15 | 38m        | 18:53    | 15h 17m                    | 11h 26m    |    |            |    | Do, 16. Jan |
| Fr, 17. Jan |               | 18:55–21:06                | 2h 11m  | AN <sub>+</sub> bis M <sub>7</sub>  |      | 21:06      | 10:09      | 06:20                      | 38m        | 06:58 | 38m        | 07:37 | 38m        | 08:15      | 8h 44m     | 16:59                   | 38m        | 17:38 | 38m        | 18:16 | 38m        | 18:55    | 15h 15m                    | 11h 24m    |    |            |    | Fr, 17. Jan |
| Sa, 18. Jan |               | 18:56–22:15                | 3h 19m  | AN <sub>+</sub> bis M <sub>7</sub>  |      | 22:15      | 10:22      | 06:19                      | 38m        | 06:57 | 38m        | 07:36 | 38m        | 08:14      | 8h 46m     | 17:01                   | 38m        | 17:39 | 38m        | 18:18 | 38m        | 18:56    | 15h 12m                    | 11h 22m    |    |            |    | Sa, 18. Jan |
| So, 19. Jan |               | 18:57–23:23                | 4h 26m  | AN <sub>+</sub> bis M <sub>7</sub>  |      | 23:23      | 10:34      | 06:19                      | 37m        | 06:57 | 38m        | 07:35 | 38m        | 08:13      | 8h 48m     | 17:02                   | 38m        | 17:40 | 38m        | 18:19 | 38m        | 18:57    | 15h 10m                    | 11h 20m    |    |            |    | So, 19. Jan |
| Mo, 20. Jan |               | 18:58–00:31*               | 5h 32m  | AN <sub>+</sub> bis M <sub>7</sub>  |      | —:—        | 10:45      | 06:18                      | 37m        | 06:56 | 38m        | 07:34 | 37m        | 08:12      | 8h 51m     | 17:04                   | 37m        | 17:42 | 38m        | 18:20 | 37m        | 18:58    | 15h 07m                    | 11h 18m    |    |            |    | Mo, 20. Jan |
| Di, 21. Jan |               | 19:00–01:40*               | 6h 40m  | AN <sub>+</sub> bis M <sub>7</sub>  | ☾    | 00:31      | 10:58      | 06:17                      | 37m        | 06:55 | 38m        | 07:34 | 37m        | 08:11      | 8h 53m     | 17:05                   | 37m        | 17:43 | 38m        | 18:22 | 37m        | 19:00    | 15h 05m                    | 11h 16m    |    |            |    | Di, 21. Jan |
| Mi, 22. Jan |               | 19:01–02:52*               | 7h 50m  | AN <sub>+</sub> bis M <sub>7</sub>  |      | 01:40      | 11:13      | 06:17                      | 37m        | 06:54 | 38m        | 07:33 | 37m        | 08:10      | 8h 56m     | 17:07                   | 37m        | 17:45 | 38m        | 18:23 | 37m        | 19:01    | 15h 02m                    | 11h 14m    |    |            |    | Mi, 22. Jan |
| Do, 23. Jan |               | 19:02–04:04*               | 9h 01m  | AN <sub>+</sub> bis M <sub>7</sub>  |      | 02:52      | 11:32      | 06:16                      | 37m        | 06:53 | 38m        | 07:32 | 37m        | 08:09      | 8h 59m     | 17:09                   | 37m        | 17:46 | 38m        | 18:24 | 37m        | 19:02    | 14h 59m                    | 11h 12m    |    |            |    | Do, 23. Jan |
| Fr, 24. Jan |               | 19:04–05:16*               | 10h 12m | AN <sub>+</sub> bis M <sub>7</sub>  |      | 04:04      | 11:57      | 06:15                      | 37m        | 06:53 | 38m        | 07:31 | 37m        | 08:08      | 9h 01m     | 17:10                   | 37m        | 17:48 | 38m        | 18:26 | 37m        | 19:04    | 14h 57m                    | 11h 10m    |    |            |    | Fr, 24. Jan |
| Sa, 25. Jan |               | 19:05–06:13*               | 11h 08m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 05:16      | 12:32      | 06:14                      | 37m        | 06:52 | 38m        | 07:30 | 37m        | 08:07      | 9h 04m     | 17:12                   | 37m        | 17:49 | 38m        | 18:27 | 37m        | 19:05    | 14h 54m                    | 11h 08m    |    |            |    | Sa, 25. Jan |
| So, 26. Jan |               | 19:06–06:12*               | 11h 05m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 06:21      | 13:21      | 06:13                      | 37m        | 06:51 | 38m        | 07:29 | 37m        | 08:06      | 9h 07m     | 17:13                   | 37m        | 17:51 | 38m        | 18:29 | 37m        | 19:06    | 14h 51m                    | 11h 05m    |    |            |    | So, 26. Jan |
| Mo, 27. Jan |               | 19:08–06:11*               | 11h 03m | AN <sub>+</sub> bis AN <sub>-</sub> |      | 07:16      | 14:25      | 0                          |            |       |            |       |            |            |            |                         |            |       |            |       |            |          |                            |            |    |            |    |             |