

# Mond- und Dämmerungstabelle 2024

## für die visuelle Deep-Sky-Beobachtung

Darmstadt 49.8667° N 8.6500° 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- 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		18:34–22:18	3h 43m	AN <sub>+</sub> bis M <sub>7</sub>		22:18	11:28	06:23	39m	07:02	40m	07:42	40m	08:22	8h 11m	16:34	40m	17:15	40m	17:55	39m	18:34	15h 48m	11h 48m				Mo, 1. Jan
Di, 2. Jan		18:35–23:25	4h 50m	AN <sub>+</sub> bis M <sub>7</sub>		23:25	11:40	06:23	39m	07:02	40m	07:42	40m	08:22	8h 12m	16:35	40m	17:15	40m	17:56	39m	18:35	15h 47m	11h 47m				Di, 2. Jan
Mi, 3. Jan		18:36–00:33*	5h 57m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	11:52	06:23	39m	07:02	40m	07:42	40m	08:22	8h 14m	16:36	40m	17:16	40m	17:57	39m	18:36	15h 45m	11h 46m				Mi, 3. Jan
Do, 4. Jan		18:37–01:43*	7h 06m	AN <sub>+</sub> bis M <sub>7</sub>	☾	00:33	12:03	06:23	39m	07:02	40m	07:42	40m	08:22	8h 15m	16:37	40m	17:17	40m	17:58	39m	18:37	15h 44m	11h 45m				Do, 4. Jan
Fr, 5. Jan		18:38–02:56*	8h 17m	AN <sub>+</sub> bis M <sub>7</sub>		01:43	12:16	06:23	39m	07:02	40m	07:42	40m	08:22	8h 16m	16:38	40m	17:19	40m	17:59	39m	18:38	15h 43m	11h 44m				Fr, 5. Jan
Sa, 6. Jan		18:39–04:12*	9h 33m	AN <sub>+</sub> bis M <sub>7</sub>		02:56	12:32	06:23	38m	07:02	40m	07:42	39m	08:22	8h 18m	16:40	39m	17:20	40m	18:00	38m	18:39	15h 41m	11h 43m				Sa, 6. Jan
So, 7. Jan		18:40–05:32*	10h 52m	AN <sub>+</sub> bis M <sub>7</sub>		04:12	12:53	06:22	38m	07:01	39m	07:41	39m	08:21	8h 19m	16:41	39m	17:21	40m	18:01	38m	18:40	15h 40m	11h 42m				So, 7. Jan
Mo, 8. Jan		18:41–06:22*	11h 41m	AN <sub>+</sub> bis AN <sub>-</sub>		05:32	13:21	06:22	38m	07:01	39m	07:41	39m	08:21	8h 21m	16:42	39m	17:22	39m	18:02	38m	18:41	15h 38m	11h 41m				Mo, 8. Jan
Di, 9. Jan		18:42–06:22*	11h 40m	AN <sub>+</sub> bis AN <sub>-</sub>		06:51	14:03	06:22	38m	07:01	39m	07:41	39m	08:21	8h 22m	16:43	39m	17:23	39m	18:03	38m	18:42	15h 36m	11h 40m				Di, 9. Jan
Mi, 10. Jan		18:43–06:22*	11h 38m	AN <sub>+</sub> bis AN <sub>-</sub>		08:01	15:02	06:22	38m	07:01	39m	07:40	39m	08:20	8h 24m	16:45	39m	17:24	39m	18:04	38m	18:43	15h 34m	11h 38m				Mi, 10. Jan
Do, 11. Jan		18:44–06:21*	11h 37m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	08:57	16:19	06:22	38m	07:00	39m	07:40	39m	08:20	8h 26m	16:46	39m	17:26	39m	18:05	38m	18:44	15h 32m	11h 37m				Do, 11. Jan
Fr, 12. Jan		18:45–06:21*	11h 35m	AN <sub>+</sub> bis AN <sub>-</sub>		09:37	17:47	06:21	38m	07:00	39m	07:40	39m	08:19	8h 28m	16:47	39m	17:27	39m	18:06	38m	18:45	15h 30m	11h 35m				Fr, 12. Jan
Sa, 13. Jan		19:19–06:20*	11h 01m	M <sub>\</sub> bis AN <sub>-</sub>		10:05	19:19	06:21	38m	07:00	39m	07:39	39m	08:18	8h 30m	16:49	39m	17:28	39m	18:08	38m	18:46	15h 28m	11h 34m				Sa, 13. Jan
So, 14. Jan		20:48–06:20*	9h 31m	M <sub>\</sub> bis AN <sub>-</sub>		10:26	20:48	06:20	38m	06:59	39m	07:39	39m	08:18	8h 32m	16:50	39m	17:29	39m	18:09	38m	18:48	15h 26m	11h 32m				So, 14. Jan
Mo, 15. Jan		22:14–06:19*	8h 05m	M <sub>\</sub> bis AN <sub>-</sub>		10:43	22:14	06:20	38m	06:59	39m	07:38	39m	08:17	8h 34m	16:52	39m	17:31	39m	18:10	38m	18:49	15h 24m	11h 30m				Mo, 15. Jan
Di, 16. Jan		23:37–06:19*	6h 41m	M <sub>\</sub> bis AN <sub>-</sub>		10:58	23:37	06:19	38m	06:58	39m	07:37	38m	08:16	8h 36m	16:53	38m	17:32	39m	18:11	38m	18:50	15h 22m	11h 28m				Di, 16. Jan
Mi, 17. Jan		00:59*–06:18*	5h 19m	M <sub>\</sub> bis AN <sub>-</sub>		11:13	—:—	06:19	38m	06:57	39m	07:37	38m	08:15	8h 39m	16:55	38m	17:33	39m	18:13	38m	18:51	15h 19m	11h 27m				Mi, 17. Jan
Do, 18. Jan		02:21*–06:18*	3h 56m	M <sub>\</sub> bis AN <sub>-</sub>	☾	11:28	00:59	06:18	38m	06:57	39m	07:36	38m	08:15	8h 41m	16:56	38m	17:35	39m	18:14	38m	18:52	15h 17m	11h 25m				Do, 18. Jan
Fr, 19. Jan		03:42*–06:17*	2h 34m	M <sub>\</sub> bis AN <sub>-</sub>		11:47	02:21	06:18	38m	06:56	39m	07:35	38m	08:14	8h 43m	16:58	38m	17:36	39m	18:15	38m	18:54	15h 15m	11h 23m				Fr, 19. Jan
Sa, 20. Jan		05:01*–06:16*	1h 15m	M <sub>\</sub> bis AN <sub>-</sub>		12:10	03:42	06:17	38m	06:55	38m	07:34	38m	08:13	8h 46m	16:59	38m	17:38	39m	18:17	38m	18:55	15h 12m	11h 21m				Sa, 20. Jan
So, 21. Jan		06:13*–06:16*	2m	M <sub>\</sub> bis AN <sub>-</sub>		12:40	05:01	06:16	38m	06:55	38m	07:33	38m	08:12	8h 48m	17:01	38m	17:39	38m	18:18	38m	18:56	15h 10m	11h 19m				So, 21. Jan
Mo, 22. Jan		—:—:—:—	–	Mond stört		13:22	06:13	06:16	38m	06:54	38m	07:33	38m	08:11	8h 51m	17:02	38m	17:41	38m	18:19	38m	18:58	15h 07m	11h 17m				Mo, 22. Jan
Di, 23. Jan		—:—:—:—	–	Mond stört		14:15	07:14	06:15	38m	06:53	38m	07:32	38m	08:10	8h 54m	17:04	38m	17:42	38m	18:21	38m	18:59	15h 04m	11h 15m				Di, 23. Jan
Mi, 24. Jan		—:—:—:—	–	Mond stört		15:20	08:01	06:14	38m	06:52	38m	07:31	37m	08:09	8h 56m	17:06	37m	17:44	38m	18:22	38m	19:00	15h 01m	11h 12m				Mi, 24. Jan
Do, 25. Jan		—:—:~:~	–	Mond stört	☾	16:31	08:35	06:13	38m	06:51	38m	07:30	37m	08:07	8h 59m	17:07	37m	17:45	38m	18:24	38m	19:02	14h 59m	11h 10m				Do, 25. Jan
Fr, 26. Jan		—:~:~:~	–	Mond stört		17:44	09:00	06:12	37m	06:50	38m	07:29	37m	08:06	9h 02m	17:09	37m	17:47	38m	18:25	38m	19:03	14h 56m	11h 08m				Fr, 26. Jan
Sa, 27. Jan		—:~:~:~	–	Mond stört		18:55	09:19	06:11	37m	06:49	38m	07:28	37m	08:05	9h 05m	17:10	37m	17:48	38m	18:26	37m	19:04	14h 53m	11h 05m				Sa, 27. Jan
So, 28. Jan		19:06–20:05	58m	AN <sub>+</sub> bis M <sub>7</sub>		20:05	09:34	06:10	37m	06:48	38m	07:26	37m	08:04	9h 08m	17:12	37m	17:50	38m	18:28	37m	19:06	14h 50m	11h 03m				So, 28. Jan
Mo, 29. Jan		19:07–21:13	2h 05m	AN <sub>+</sub> bis M <sub>7</sub>		21:13	09:47	06:09	37m	06:47	38m	07:25	37m	08:03	9h 11m	17:14	37m	17:51	38m	18:29	37m	19:07	14h 47m	11h 00m				Mo, 29. Jan
Di, 30. Jan		19:09–22:20	3h 11m	AN <sub>+</sub> bis M <sub>7</sub>		22:20	09:58	06:08	37m	06:46	38m	07:24	37m	08:01	9h 14m	17:16	37m	17:53	38m	18:31	37m	19:09	14h 44m	10h 58m				Di, 30. Jan
Mi, 31. Jan		19:10–23:28	4h 18m	AN <sub>+</sub> bis M <sub>7</sub>		23:28	10:09	06:07	37m	06:45	38m	07:23	37m	08:00	9h 17m	17:17	37m	17:54	38m	18:32	37m	19:10	14h 41m	10h 55m				Mi, 31. Jan
Do, 1. Feb		19:12–00:39*	5h 27m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	10:21	06:06	37m	06:44	37m	07:22	36m	07:58	9h 20m	17:19	36m	17:56	37m	18:34	37m	19:12	14h 38m	10h 53m				Do, 1. Feb
Fr, 2. Feb		19:13–01:52*	6h 39m	AN <sub>+</sub> bis M <sub>7</sub>		00:39	10:35	06:05	37m	06:42	37m	07:20	36m	07:57	9h 23m	17:21	36m	17:57	37m	18:35	37m	19:13	14h 34m	10h 50m				Fr, 2. Feb
Sa, 3. Feb		19:14–03:09*	7h 54m	AN <sub>+</sub> bis M <sub>7</sub>	☾	01:52	10:53	06:04	37m	06:41	37m	07:19	36m	07:56	9h 26m	17:22	36m	17:59	37m	18:37	37m	19:14	14h 31m	10h 47m				Sa, 3. Feb
So, 4. Feb		19:16–04:26*	9h 10m	AN <sub>+</sub> bis M <sub>7</sub>		03:09	11:17	06:02	37m	06:40	37m	07:18	36m	07:54	9h 29m	17:24	36m	18:01	37m	18:38	37m	19:16	14h 28m	10h 45m				So, 4. Feb
Mo, 5. Feb		19:17–05:40*	10h 22m	AN <sub>+</sub> bis M <sub>7</sub>		04:26	11:51	06:01	37m	06:38	37m	07:16	36m	07:53	9h 33m	17:26	36m	18:02	37m	18:40	37m	19:17	14h 25m	10h 42m				Mo, 5. Feb
Di, 6. Feb		19:19–05:58*	10h 39m	AN <sub>+</sub> bis AN <sub>-</sub>		05:40	12:40	06:00	37m	06:37	37m	07:15	36m	07:51	9h 36m	17:27	36m	18:04	37m	18:41	37m	19:19	14h 21m	10h 39m				Di, 6. Feb
Mi, 7. Feb		19:20–05:57*	10h 36m	AN <sub>+</sub> bis AN <sub>-</sub>		06:42	13:47	05:58	37m	06:36	37m	07:13	36m	07:49	9h 39m	17:29	36m	18:05	37m	18:43	37m	19:20	14h 18m	10h 36m				Mi, 7. Feb
Do, 8. Feb		19:22–05:56*	10h 33m	AN <sub>+</sub> bis AN <sub>-</sub>		07:29	15:11	05:57	37m	06:34	37m	07:12	36m	07:48	9h 43m	17:31	36m	18:07	37m	18:44	37m	19:22	14h 15m	10h 33m				Do, 8. Feb
Fr, 9. Feb		19:23–05:54*	10h 30m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	08:03	16:43	05:56	37m	06:33	37m	07:10	35m	07:46	9h 46m	17:33	36m	18:09	37m	18:46	37m	19:23	14h 11m	10h 30m				Fr, 9. Feb
Sa, 10. Feb		19:25–05:53*	10h 27m	AN <sub>+</sub> bis AN <sub>-</sub>		08:28	18:16	05:54	37m	06:31	37m	07:09	35m	07:45	9h 49m	17:34	35m	18:10	37m	18:48	37m	19:25	14h 08m	10h 27m				Sa, 10. Feb
So, 11. Feb		19:47–05:51*	10h 03m	M <sub>\</sub> bis AN <sub>-</sub>		08:47	19:47	05:53	37m	06:30	37m	07:07	35m	07:43	9h 53m	17:36	35m	18:12	37m	18:49	37m	19:26	14h 05m	10h 24m				So, 11. Feb
Mo, 12. Feb		21:15–05:49*	8h 34m	M <sub>\</sub> bis AN <sub>-</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- 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		13:10	06:01	05:38	37m	06:15	36m	06:52	34m	07:27	10h 24m	17:51	34m	18:26	36m	19:03	37m	19:41	13h 33m	9h 55m					Di, 20. Feb
Mi, 21. Feb		—:—:—:—	—	Mond stört		14:19	06:39	05:36	37m	06:13	36m	06:50	34m	07:25	10h 28m	17:53	34m	18:28	36m	19:05	37m	19:42	13h 29m	9h 52m					Mi, 21. Feb
Do, 22. Feb		—:—:~:~	—	Mond stört		15:31	07:06	05:34	37m	06:11	36m	06:48	34m	07:23	10h 31m	17:55	34m	18:30	36m	19:06	37m	19:44	13h 26m	9h 48m					Do, 22. Feb
Fr, 23. Feb		—:~:~:~	—	Mond stört		16:43	07:26	05:32	37m	06:10	36m	06:46	34m	07:21	10h 35m	17:56	34m	18:31	36m	19:08	37m	19:45	13h 22m	9h 45m					Fr, 23. Feb
Sa, 24. Feb		—:~:~:~	—	Mond stört	○	17:54	07:42	05:30	37m	06:08	36m	06:44	34m	07:19	10h 39m	17:58	34m	18:33	36m	19:10	37m	19:47	13h 18m	9h 41m					Sa, 24. Feb
So, 25. Feb		—:~:~:~	—	Mond stört		19:02	07:54	05:29	37m	06:06	36m	06:42	34m	07:17	10h 42m	18:00	34m	18:34	36m	19:11	37m	19:49	13h 15m	9h 38m					So, 25. Feb
Mo, 26. Feb		19:50–20:10	19m	AN <sub>+</sub> bis M <sub>J</sub>		20:10	08:06	05:27	37m	06:04	36m	06:40	34m	07:15	10h 46m	18:02	34m	18:36	36m	19:13	37m	19:50	13h 11m	9h 34m					Mo, 26. Feb
Di, 27. Feb		19:52–21:18	1h 26m	AN <sub>+</sub> bis M <sub>J</sub>		21:18	08:17	05:25	37m	06:02	36m	06:39	34m	07:13	10h 50m	18:03	34m	18:38	36m	19:14	37m	19:52	13h 07m	9h 30m					Di, 27. Feb
Mi, 28. Feb		19:53–22:27	2h 33m	AN <sub>+</sub> bis M <sub>J</sub>		22:27	08:29	05:23	37m	06:00	36m	06:37	34m	07:11	10h 53m	18:05	34m	18:39	36m	19:16	37m	19:53	13h 04m	9h 27m					Mi, 28. Feb
Do, 29. Feb		19:55–23:39	3h 43m	AN <sub>+</sub> bis M <sub>J</sub>		23:39	08:41	05:21	37m	05:58	36m	06:35	34m	07:09	10h 57m	18:06	34m	18:41	36m	19:18	37m	19:55	13h 00m	9h 23m					Do, 29. Feb
Fr, 1. Mär		19:57–00:53*	4h 56m	AN <sub>+</sub> bis M <sub>J</sub>		—:—	08:57	05:19	37m	05:56	36m	06:33	34m	07:07	11h 01m	18:08	34m	18:43	36m	19:19	37m	19:57	12h 56m	9h 19m					Fr, 1. Mär
Sa, 2. Mär		19:58–02:09*	6h 10m	AN <sub>+</sub> bis M <sub>J</sub>		00:53	09:18	05:17	37m	05:54	36m	06:31	34m	07:05	11h 04m	18:10	34m	18:44	36m	19:21	37m	19:58	12h 53m	9h 16m					Sa, 2. Mär
So, 3. Mär		20:00–03:23*	7h 22m	AN <sub>+</sub> bis M <sub>J</sub>	●	02:09	09:46	05:14	37m	05:52	36m	06:29	34m	07:03	11h 08m	18:11	34m	18:46	36m	19:22	37m	20:00	12h 49m	9h 12m					So, 3. Mär
Mo, 4. Mär		20:02–04:28*	8h 26m	AN <sub>+</sub> bis M <sub>J</sub>		03:23	10:27	05:12	37m	05:50	36m	06:27	34m	07:01	11h 12m	18:13	34m	18:47	36m	19:24	37m	20:02	12h 45m	9h 08m					Mo, 4. Mär
Di, 5. Mär		20:03–05:08*	9h 04m	AN <sub>+</sub> bis AN <sub>-</sub>		04:28	11:24	05:10	37m	05:48	36m	06:24	34m	06:59	11h 16m	18:15	34m	18:49	36m	19:26	37m	20:03	12h 41m	9h 04m					Di, 5. Mär
Mi, 6. Mär		20:05–05:06*	9h 00m	AN <sub>+</sub> bis AN <sub>-</sub>		05:21	12:38	05:08	37m	05:46	36m	06:22	34m	06:57	11h 19m	18:16	34m	18:51	36m	19:27	37m	20:05	12h 38m	9h 00m					Mi, 6. Mär
Do, 7. Mär		20:07–05:04*	8h 56m	AN <sub>+</sub> bis AN <sub>-</sub>		05:59	14:05	05:06	37m	05:44	36m	06:20	34m	06:54	11h 23m	18:18	34m	18:52	36m	19:29	37m	20:07	12h 34m	8h 56m					Do, 7. Mär
Fr, 8. Mär		20:09–05:02*	8h 53m	AN <sub>+</sub> bis AN <sub>-</sub>		06:27	15:37	05:04	37m	05:42	36m	06:18	34m	06:52	11h 27m	18:20	34m	18:54	36m	19:30	38m	20:09	12h 30m	8h 53m					Fr, 8. Mär
Sa, 9. Mär		20:10–04:59*	8h 49m	AN <sub>+</sub> bis AN <sub>-</sub>		06:48	17:10	05:02	37m	05:40	36m	06:16	34m	06:50	11h 30m	18:21	34m	18:55	36m	19:32	38m	20:10	12h 26m	8h 49m					Sa, 9. Mär
So, 10. Mär		20:12–04:57*	8h 45m	AN <sub>+</sub> bis AN <sub>-</sub>	●	07:06	18:40	04:59	38m	05:37	36m	06:14	34m	06:48	11h 34m	18:23	34m	18:57	36m	19:34	38m	20:12	12h 23m	8h 45m					So, 10. Mär
Mo, 11. Mär		20:14–04:55*	8h 41m	AN <sub>+</sub> bis AN <sub>-</sub>		07:21	20:09	04:57	38m	05:35	36m	06:12	34m	06:46	11h 38m	18:24	34m	18:59	36m	19:35	38m	20:14	12h 19m	8h 41m					Mo, 11. Mär
Di, 12. Mär		21:38–04:52*	7h 14m	M <sub>\</sub> bis AN <sub>-</sub>		07:37	21:38	04:55	38m	05:33	36m	06:10	34m	06:44	11h 42m	18:26	34m	19:00	36m	19:37	38m	20:15	12h 15m	8h 37m					Di, 12. Mär
Mi, 13. Mär		23:06–04:50*	5h 43m	M <sub>\</sub> bis AN <sub>-</sub>		07:54	23:06	04:53	38m	05:31	36m	06:08	34m	06:42	11h 45m	18:28	34m	19:02	36m	19:39	38m	20:17	12h 11m	8h 32m					Mi, 13. Mär
Do, 14. Mär		00:33*–04:48*	4h 15m	M <sub>\</sub> bis AN <sub>-</sub>		08:14	—:—	04:50	38m	05:29	36m	06:06	34m	06:40	11h 49m	18:29	34m	19:03	36m	19:40	38m	20:19	12h 08m	8h 28m					Do, 14. Mär
Fr, 15. Mär		01:54*–04:45*	2h 51m	M <sub>\</sub> bis AN <sub>-</sub>		08:40	00:33	04:48	38m	05:26	36m	06:03	34m	06:37	11h 53m	18:31	34m	19:05	37m	19:42	38m	20:21	12h 04m	8h 24m					Fr, 15. Mär
Sa, 16. Mär		03:04*–04:43*	1h 38m	M <sub>\</sub> bis AN <sub>-</sub>		09:15	01:54	04:45	38m	05:24	36m	06:01	34m	06:35	11h 57m	18:32	34m	19:07	37m	19:44	38m	20:23	12h 00m	8h 20m					Sa, 16. Mär
So, 17. Mär		04:00*–04:41*	40m	M <sub>\</sub> bis AN <sub>-</sub>	●	10:02	03:04	04:43	38m	05:22	36m	05:59	34m	06:33	12h 00m	18:34	34m	19:08	37m	19:45	39m	20:24	11h 56m	8h 16m					So, 17. Mär
Mo, 18. Mär		—:~:~:~	—	Mond stört		11:01	04:00	04:41	39m	05:20	37m	05:57	34m	06:31	12h 04m	18:36	34m	19:10	37m	19:47	39m	20:26	11h 53m	8h 12m					Mo, 18. Mär
Di, 19. Mär		—:~:~:~	—	Mond stört		12:08	04:42	04:38	39m	05:18	37m	05:55	34m	06:29	12h 08m	18:37	34m	19:11	37m	19:49	39m	20:28	11h 49m	8h 07m					Di, 19. Mär
Mi, 20. Mär		—:~:~:~	—	Mond stört		13:20	05:11	04:36	39m	05:15	37m	05:52	34m	06:27	12h 12m	18:39	34m	19:13	37m	19:50	39m	20:30	11h 45m	8h 03m					Mi, 20. Mär
Do, 21. Mär		—:~:~:~	—	Mond stört		14:33	05:33	04:33	39m	05:13	37m	05:50	34m	06:24	12h 15m	18:40	34m	19:15	37m	19:52	39m	20:32	11h 41m	7h 59m					Do, 21. Mär
Fr, 22. Mär		—:~:~:~	—	Mond stört		15:43	05:50	04:31	39m	05:11	37m	05:48	34m	06:22	12h 19m	18:42	34m	19:16	37m	19:54	39m	20:34	11h 38m	7h 54m					Fr, 22. Mär
Sa, 23. Mär		—:~:~:~	—	Mond stört		16:52	06:03	04:28	39m	05:08	37m	05:46	34m	06:20	12h 23m	18:43	34m	19:18	37m	19:56	40m	20:36	11h 34m	7h 50m					Sa, 23. Mär
So, 24. Mär		—:~:~:~	—	Mond stört		18:00	06:15	04:26	40m	05:06	37m	05:44	34m	06:18	12h 27m	18:45	34m	19:19	37m	19:57	40m	20:38	11h 30m	7h 45m					So, 24. Mär
Mo, 25. Mär		—:~:~:~	—	Mond stört	○	19:08	06:26	04:23	40m	05:04	37m	05:41	34m	06:16	12h 30m	18:47	34m	19:21	37m	19:59	40m	20:39	11h 26m	7h 41m					Mo, 25. Mär
Di, 26. Mär		—:~:~:~	—	Mond stört		20:17	06:37	04:21	40m	05:01	37m	05:39	34m	06:14	12h 34m	18:48	34m	19:23	37m	20:01	40m	20:41	11h 23m	7h 37m					Di, 26. Mär
Mi, 27. Mär		20:43–21:28	45m	AN <sub>+</sub> bis M <sub>J</sub>		21:28	06:49	04:18	40m	04:59	37m	05:37	34m	06:11	12h 38m	18:50	34m	19:24	38m	20:02	40m	20:43	11h 19m	7h 32m					Mi, 27. Mär
Do, 28. Mär		20:45–22:42	1h 56m	AN <sub>+</sub> bis M <sub>J</sub>		22:42	07:04	04:16	40m	04:57	38m	05:35	34m	06:09	12h 42m	18:51	34m	19:26	38m	20:04	41m	20:45	11h 15m	7h 27m					Do, 28. Mär
Fr, 29. Mär		20:47–23:58	3h 10m	AN <sub>+</sub> bis M <sub>J</sub>		23:58	07:23	04:13	41m	04:54	38m	05:33	34m	06:07	12h 45m	18:53	34m	19:28	38m	20:06	41m	20:47	11h 12m	7h 23m					Fr, 29. Mär
Sa, 30. Mär		20:49–01:12*	4h 22m	AN <sub>+</sub> bis M <sub>J</sub>		—:—	07:48	04:11	41m	04:52	38m	05:30	34m	06:05	12h 49m	18:54	34m	19:29	38m	20:08	41m	20:49	11h 08m	7h 18m					Sa, 30. Mär
So, 31. Mär	MESZ	21:51–03:19*	5h 28m	AN <sub>+</sub> bis M <sub>J</sub>		02:12	09:23	05:08	41m	05:50	38m	06:28	34m	07:03	12h 53m	19:56	34m	20:31	38m	21:10	41m	21:51	11h 04m	7h 14m					So, 31. Mär
Mo, 1. Apr	MESZ	21:53–04:15*	6h 21m	AN <sub>+</sub> bis M <sub>J</sub>		03:19	10:13	05:05	41m	05:47	38m	06:26	34m	07:01	12h 56m	19:58	34m	20:33	38m	21:11	42m	21:53	11h 00m	7h 09m					Mo, 1. Apr
Di, 2. Apr	MESZ	21:56–04:57*	7h 01m	AN <sub>+</sub> bis M <sub>J</sub>	●	04:15																							

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

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	Zeitzone	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			Astr. MD	☾	02:20	12:26	01:36	2h 02m	03:38	58m	04:37	45m	05:22	16h 01m	21:23	45m	22:09	59m	23:08		—:—	7h 58m		23:08 – 02:36*	3h 28m	ND <sub>+</sub> bis M <sub>7</sub>	Do, 30. Mai
Fr, 31. Mai	MESZ			Astr. MD		02:36	13:49	—:—		03:37	59m	04:36	45m	05:21	16h 02m	21:24	45m	22:10	59m	23:10		—:—	7h 56m		23:10 – 02:51*	3h 41m	ND <sub>+</sub> bis M <sub>7</sub>	Fr, 31. Mai
Sa, 1. Jun	MESZ			Astr. MD		02:51	15:12	—:—		03:35	59m	04:35	45m	05:21	16h 04m	21:25	45m	22:11	1h 00m	23:11		—:—	7h 54m		23:11 – 03:05*	3h 53m	ND <sub>+</sub> bis M <sub>7</sub>	Sa, 1. Jun
So, 2. Jun	MESZ			Astr. MD		03:05	16:36	—:—		03:34	1h 00m	04:34	45m	05:20	16h 06m	21:26	45m	22:12	1h 00m	23:13		—:—	7h 52m		23:13 – 03:21*	4h 07m	ND <sub>+</sub> bis M <sub>7</sub>	So, 2. Jun
Mo, 3. Jun	MESZ			Astr. MD		03:21	18:02	—:—		03:33	1h 00m	04:34	45m	05:19	16h 07m	21:27	46m	22:13	1h 01m	23:15		—:—	7h 51m		23:15 – 03:32*	4h 17m	ND <sub>+</sub> bis ND <sub>-</sub>	Mo, 3. Jun
Di, 4. Jun	MESZ			Astr. MD		03:39	19:29	—:—		03:32	1h 01m	04:33	46m	05:19	16h 09m	21:28	46m	22:15	1h 01m	23:16		—:—	7h 49m		23:16 – 03:31*	4h 14m	ND <sub>+</sub> bis ND <sub>-</sub>	Di, 4. Jun
Mi, 5. Jun	MESZ			Astr. MD		04:03	20:55	—:—		03:31	1h 01m	04:32	46m	05:18	16h 10m	21:29	46m	22:16	1h 01m	23:17		—:—	7h 48m		23:17 – 03:29*	4h 11m	ND <sub>+</sub> bis ND <sub>-</sub>	Mi, 5. Jun
Do, 6. Jun	MESZ			Astr. MD	☀	04:36	22:14	—:—		03:29	1h 01m	04:31	46m	05:18	16h 12m	21:30	46m	22:17	1h 02m	23:19		—:—	7h 47m		23:19 – 03:29*	4h 09m	ND <sub>+</sub> bis ND <sub>-</sub>	Do, 6. Jun
Fr, 7. Jun	MESZ			Astr. MD		05:20	23:18	—:—		03:29	1h 02m	04:31	46m	05:17	16h 13m	21:31	46m	22:17	1h 02m	23:20		—:—	7h 46m		23:20 – 03:28*	4h 07m	ND <sub>+</sub> bis ND <sub>-</sub>	Fr, 7. Jun
Sa, 8. Jun	MESZ			Astr. MD		06:19	—:—	—:—		03:28	1h 02m	04:30	46m	05:17	16h 14m	21:32	46m	22:18	1h 02m	23:21		—:—	7h 44m		00:06* – 03:27*	3h 20m	M <sub>\</sub> bis ND <sub>-</sub>	Sa, 8. Jun
So, 9. Jun	MESZ			Astr. MD		07:29	00:06	—:—		03:27	1h 02m	04:30	46m	05:17	16h 15m	21:32	46m	22:19	1h 03m	23:23		—:—	7h 43m		00:40* – 03:26*	2h 45m	M <sub>\</sub> bis ND <sub>-</sub>	So, 9. Jun
Mo, 10. Jun	MESZ			Astr. MD		08:44	00:40	—:—		03:26	1h 03m	04:29	46m	05:16	16h 16m	21:33	47m	22:20	1h 03m	23:24		—:—	7h 43m		01:04* – 03:25*	2h 20m	M <sub>\</sub> bis ND <sub>-</sub>	Mo, 10. Jun
Di, 11. Jun	MESZ			Astr. MD		09:59	01:04	—:—		03:25	1h 03m	04:29	47m	05:16	16h 17m	21:34	47m	22:21	1h 03m	23:25		—:—	7h 42m		01:22* – 03:25*	2h 02m	M <sub>\</sub> bis ND <sub>-</sub>	Di, 11. Jun
Mi, 12. Jun	MESZ			Astr. MD		11:12	01:22	—:—		03:25	1h 03m	04:29	47m	05:16	16h 18m	21:34	47m	22:21	1h 04m	23:26		—:—	7h 41m		01:37* – 03:24*	1h 47m	M <sub>\</sub> bis ND <sub>-</sub>	Mi, 12. Jun
Do, 13. Jun	MESZ			Astr. MD		12:22	01:37	—:—		03:24	1h 04m	04:28	47m	05:16	16h 19m	21:35	47m	22:22	1h 04m	23:26		—:—	7h 40m		01:49* – 03:24*	1h 35m	M <sub>\</sub> bis ND <sub>-</sub>	Do, 13. Jun
Fr, 14. Jun	MESZ			Astr. MD	☾	13:30	01:49	—:—		03:24	1h 04m	04:28	47m	05:15	16h 19m	21:35	47m	22:23	1h 04m	23:27		—:—	7h 40m		02:00* – 03:24*	1h 23m	M <sub>\</sub> bis ND <sub>-</sub>	Fr, 14. Jun
Sa, 15. Jun	MESZ			Astr. MD		14:38	02:00	—:—		03:24	1h 04m	04:28	47m	05:15	16h 20m	21:36	47m	22:23	1h 04m	23:28		—:—	7h 39m		02:11* – 03:23*	1h 12m	M <sub>\</sub> bis ND <sub>-</sub>	Sa, 15. Jun
So, 16. Jun	MESZ			Astr. MD		15:46	02:11	—:—		03:23	1h 04m	04:28	47m	05:15	16h 20m	21:36	47m	22:24	1h 04m	23:29		—:—	7h 39m		02:24* – 03:23*	59m	M <sub>\</sub> bis ND <sub>-</sub>	So, 16. Jun
Mo, 17. Jun	MESZ			Astr. MD		16:57	02:24	—:—		03:23	1h 04m	04:28	47m	05:15	16h 21m	21:37	47m	22:24	1h 04m	23:29		—:—	7h 38m		02:38* – 03:23*	44m	M <sub>\</sub> bis ND <sub>-</sub>	Mo, 17. Jun
Di, 18. Jun	MESZ			Astr. MD		18:12	02:38	—:—		03:23	1h 04m	04:28	47m	05:15	16h 21m	21:37	47m	22:24	1h 04m	23:29		—:—	7h 38m		02:57* – 03:23*	25m	M <sub>\</sub> bis ND <sub>-</sub>	Di, 18. Jun
Mi, 19. Jun	MESZ			Astr. MD		19:29	02:57	—:—		03:23	1h 04m	04:28	47m	05:16	16h 21m	21:37	47m	22:25	1h 05m	23:30		—:—	7h 38m		03:23* – 03:23*	0m	M <sub>\</sub> bis ND <sub>-</sub>	Mi, 19. Jun
Do, 20. Jun	MESZ			Astr. MD		20:45	03:23	—:—		03:23	1h 05m	04:28	47m	05:16	16h 21m	21:37	47m	22:25	1h 05m	23:30		—:—	7h 38m		—:—:—:—:—	–	Mond stört	Do, 20. Jun
Fr, 21. Jun	MESZ			Astr. MD		21:54	04:00	—:—		03:23	1h 05m	04:28	47m	05:16	16h 21m	21:38	47m	22:25	1h 05m	23:30		—:—	7h 38m		—:—:—:—:—	–	Mond stört	Fr, 21. Jun
Sa, 22. Jun	MESZ			Astr. MD	☽	22:51	04:51	—:—		03:24	1h 05m	04:29	47m	05:16	16h 21m	21:38	47m	22:25	1h 04m	23:30		—:—	7h 38m		—:—:—:—:—	–	Mond stört	Sa, 22. Jun
So, 23. Jun	MESZ			Astr. MD		23:33	06:00	—:—		03:24	1h 04m	04:29	47m	05:17	16h 21m	21:38	47m	22:25	1h 04m	23:30		—:—	7h 38m		23:30 – 23:33	2m	ND <sub>+</sub> bis M <sub>7</sub>	So, 23. Jun
Mo, 24. Jun	MESZ			Astr. MD		—:—	07:20	—:—		03:24	1h 04m	04:29	47m	05:17	16h 21m	21:38	47m	22:25	1h 04m	23:30		—:—	7h 39m		23:30 – 00:03*	32m	ND <sub>+</sub> bis M <sub>7</sub>	Mo, 24. Jun
Di, 25. Jun	MESZ			Astr. MD		00:03	08:47	—:—		03:25	1h 04m	04:30	47m	05:17	16h 20m	21:38	47m	22:25	1h 04m	23:30		—:—	7h 39m		23:30 – 00:25*	55m	ND <sub>+</sub> bis M <sub>7</sub>	Di, 25. Jun
Mi, 26. Jun	MESZ			Astr. MD		00:25	10:13	—:—		03:26	1h 04m	04:30	47m	05:18	16h 20m	21:38	47m	22:25	1h 04m	23:30		—:—	7h 40m		23:30 – 00:43*	1h 13m	ND <sub>+</sub> bis M <sub>7</sub>	Mi, 26. Jun
Do, 27. Jun	MESZ			Astr. MD		00:43	11:38	—:—		03:26	1h 04m	04:31	47m	05:18	16h 19m	21:38	47m	22:25	1h 04m	23:29		—:—	7h 40m		23:29 – 00:58*	1h 28m	ND <sub>+</sub> bis M <sub>7</sub>	Do, 27. Jun
Fr, 28. Jun	MESZ			Astr. MD	☾	00:58	13:01	—:—		03:27	1h 04m	04:31	47m	05:19	16h 19m	21:38	47m	22:25	1h 04m	23:29		—:—	7h 41m		23:29 – 01:12*	1h 43m	ND <sub>+</sub> bis M <sub>7</sub>	Fr, 28. Jun
Sa, 29. Jun	MESZ			Astr. MD		01:12	14:23	—:—		03:28	1h 04m	04:32	47m	05:19	16h 18m	21:37	47m	22:25	1h 03m	23:28		—:—	7h 42m		23:28 – 01:27*	1h 58m	ND <sub>+</sub> bis M <sub>7</sub>	Sa, 29. Jun
So, 30. Jun	MESZ			Astr. MD		01:27	15:47	—:—		03:29	1h 03m	04:33	47m	05:20	16h 17m	21:37	47m	22:24	1h 03m	23:28		—:—	7h 43m		23:28 – 01:44*	2h 16m	ND <sub>+</sub> bis M <sub>7</sub>	So, 30. Jun
Mo, 1. Jul	MESZ			Astr. MD		01:44	17:12	—:—		03:30	1h 03m	04:33	47m	05:20	16h 16m	21:37	46m	22:24	1h 03m	23:27		—:—	7h 44m		23:27 – 02:05*	2h 37m	ND <sub>+</sub> bis M <sub>7</sub>	Mo, 1. Jul
Di, 2. Jul	MESZ			Astr. MD		02:05	18:36	—:—		03:31	1h 03m	04:34	46m	05:21	16h 15m	21:37	46m	22:23	1h 02m	23:26		—:—	7h 45m		23:26 – 02:33*	3h 07m	ND <sub>+</sub> bis M <sub>7</sub>	Di, 2. Jul
Mi, 3. Jul	MESZ			Astr. MD		02:33	19:56	—:—		03:32	1h 02m	04:35	46m	05:22	16h 14m	21:36	46m	22:23	1h 02m	23:25		—:—	7h 46m		23:25 – 03:12*	3h 46m	ND <sub>+</sub> bis M <sub>7</sub>	Mi, 3. Jul
Do, 4. Jul	MESZ			Astr. MD		03:12	21:06	—:—		03:33	1h 02m	04:36	46m	05:23	16h 13m	21:36	46m	22:22	1h 02m	23:25		—:—	7h 47m		23:25 – 03:35*	4h 10m	ND <sub>+</sub> bis ND <sub>-</sub>	Do, 4. Jul
Fr, 5. Jul	MESZ			Astr. MD		04:05	22:00	—:—		03:35	1h 02m	04:37	46m	05:23	16h 11m	21:35	46m	22:22	1h 01m	23:24		—:—	7h 48m		23:24 – 03:36*	4h 12m	ND <sub>+</sub> bis ND <sub>-</sub>	Fr, 5. Jul
Sa, 6. Jul	MESZ			Astr. MD	☀	05:11	22:39	—:—		03:36	1h 01m	04:38	46m	05:24	16h 10m	21:35	46m	22:21	1h 01m	23:23		—:—	7h 50m		23:23 – 03:37*	4h 14m	ND <sub>+</sub> bis ND <sub>-</sub>	Sa, 6. Jul
So, 7. Jul	MESZ			Astr. MD		06:25	23:06	—:—		03:37	1h 01m	04:39	46m	05:25	16h 09m	21:34	46m	22:20	1h 01m	23:21		—:—	7h 51m		23:21 – 03:39*	4h 17m	ND <sub>+</sub> bis ND <sub>-</sub>	So, 7. Jul
Mo, 8. Jul	MESZ			Astr. MD		07:41	23:26	—:—		03:39	1h 01m	04:40	46m	05:26	16h 07m	21:34	45m	22:20	1h 00m	23:20		—:—	7h 53m		23:26 – 03:40*	4h 14m	M <sub>\</sub> bis ND <sub>-</sub>	Mo, 8. Jul
Di, 9. Jul	MESZ			Astr. MD		08:55	23:42	—:—		03:40	1h 00m	04:41	45m	05:27	16h 06m	21:33	45m	22:19	1h 00m	23:19		—:—	7h 54m		23:42 – 03:42*	4h 00m	M <sub>\</sub> bis ND <sub>-</sub>	Di, 9. Jul
Mi, 10. Jul	MESZ			Astr. MD		10:06	23:55	—:—		03:42	1h 00m	04:42	45m	05:28	16h 04m	21:32	45m	22:18	59m	23:18		—:—	7h 56m		23:55 – 03:44*	3h 48m	M <sub>\</sub> bis ND <sub>-</sub>	Mi, 10. Jul
Do, 11. Jul	MESZ			Astr. MD		11:15	—:—	—:—		03:44	59m	04:43	45m	05:29	16h 02m	21:32	45m	22:17	59m	23:16		—:—	7h 58m		00:06* – 03:45*	3h 39m	M <sub>\</sub> bis ND <sub>-</sub>	Do, 11. Jul
Fr, 12. Jul	MESZ	01:15* – 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	02:37	02:27	1h 30m	03:58	56m	04:54	43m	05:38	15h 46m	21:24	43m	22:08	55m	23:03	1h 27m	00:31*	8h 14m	2h 01m				Fr, 19. Jul
Sa, 20. Jul	MESZ	—:—:—:—	—	Mond stört		21:28	03:39	02:32	1h 27m	04:00	55m	04:55	43m	05:39	15h 43m	21:23	43m	22:06	55m	23:01	1h 25m	00:27*	8h 17m	2h 09m				Sa, 20. Jul
So, 21. Jul	MESZ	—:—:~:~	—	Mond stört	☉	22:03	04:56	02:36	1h 25m	04:02	55m	04:57	43m	05:40	15h 41m	21:22	43m	22:05	54m	23:00	1h 22m	00:22*	8h 19m	2h 18m				So, 21. Jul
Mo, 22. Jul	MESZ	—:~:~:~	—	Mond stört		22:29	06:23	02:41	1h 22m	04:04	54m	04:58	43m	05:41	15h 39m	21:21	43m	22:04	54m	22:58	1h 20m	00:18*	8h 22m	2h 26m				Mo, 22. Jul
Di, 23. Jul	MESZ	—:~:~:~	—	Mond stört		22:48	07:53	02:45	1h 20m	04:06	54m	05:00	43m	05:43	15h 36m	21:19	42m	22:02	53m	22:56	1h 18m	00:14*	8h 24m	2h 34m				Di, 23. Jul
Mi, 24. Jul	MESZ	—:~:~:~	—	Mond stört		23:04	09:21	02:49	1h 18m	04:08	53m	05:01	42m	05:44	15h 33m	21:18	42m	22:01	53m	22:54	1h 16m	00:11*	8h 27m	2h 42m				Mi, 24. Jul
Do, 25. Jul	MESZ	—:~:~:~	—	Mond stört		23:19	10:47	02:53	1h 16m	04:10	53m	05:03	42m	05:45	15h 31m	21:17	42m	21:59	52m	22:52	1h 15m	00:07*	8h 29m	2h 49m				Do, 25. Jul
Fr, 26. Jul	MESZ	—:~:~:~	—	Mond stört		23:33	12:11	02:56	1h 15m	04:12	52m	05:04	42m	05:47	15h 28m	21:15	42m	21:57	52m	22:50	1h 13m	00:03*	8h 32m	2h 56m				Fr, 26. Jul
Sa, 27. Jul	MESZ	—:~:~:~	—	Mond stört		23:50	13:35	03:00	1h 13m	04:14	52m	05:06	42m	05:48	15h 25m	21:14	41m	21:56	51m	22:48	1h 11m	00:00*	8h 35m	3h 04m				Sa, 27. Jul
So, 28. Jul	MESZ	23:56–00:09*	13m	AN <sub>+</sub> bis M <sub>7</sub>	☾	—:—	15:00	03:04	1h 11m	04:16	51m	05:07	41m	05:49	15h 23m	21:13	41m	21:54	51m	22:46	1h 10m	23:56	8h 38m	3h 11m				So, 28. Jul
Mo, 29. Jul	MESZ	23:53–00:35*	42m	AN <sub>+</sub> bis M <sub>7</sub>		00:09	16:24	03:07	1h 10m	04:18	51m	05:09	41m	05:51	15h 20m	21:11	41m	21:53	50m	22:43	1h 09m	23:53	8h 40m	3h 18m				Mo, 29. Jul
Di, 30. Jul	MESZ	23:49–01:10*	1h 20m	AN <sub>+</sub> bis M <sub>7</sub>		00:35	17:45	03:11	1h 09m	04:20	50m	05:11	41m	05:52	15h 17m	21:10	41m	21:51	50m	22:41	1h 07m	23:49	8h 43m	3h 25m				Di, 30. Jul
Mi, 31. Jul	MESZ	23:46–01:57*	2h 11m	AN <sub>+</sub> bis M <sub>7</sub>		01:10	18:58	03:14	1h 07m	04:22	50m	05:12	41m	05:53	15h 14m	21:08	41m	21:49	50m	22:39	1h 06m	23:46	8h 46m	3h 31m				Mi, 31. Jul
Do, 1. Aug	MESZ	23:42–02:58*	3h 15m	AN <sub>+</sub> bis M <sub>7</sub>		01:57	19:56	03:17	1h 06m	04:24	50m	05:14	41m	05:55	15h 11m	21:07	40m	21:47	49m	22:37	1h 05m	23:42	8h 49m	3h 38m				Do, 1. Aug
Fr, 2. Aug	MESZ	23:39–03:24*	3h 44m	AN <sub>+</sub> bis AN <sub>-</sub>		02:58	20:38	03:21	1h 05m	04:26	49m	05:15	40m	05:56	15h 08m	21:05	40m	21:46	49m	22:35	1h 04m	23:39	8h 52m	3h 44m				Fr, 2. Aug
Sa, 3. Aug	MESZ	23:36–03:27*	3h 51m	AN <sub>+</sub> bis AN <sub>-</sub>		04:09	21:09	03:24	1h 04m	04:28	49m	05:17	40m	05:58	15h 05m	21:03	40m	21:44	48m	22:33	1h 02m	23:36	8h 55m	3h 51m				Sa, 3. Aug
So, 4. Aug	MESZ	23:32–03:30*	3h 57m	AN <sub>+</sub> bis AN <sub>-</sub>	☀	05:24	21:31	03:27	1h 02m	04:30	48m	05:19	40m	05:59	15h 02m	21:02	40m	21:42	48m	22:30	1h 01m	23:32	8h 58m	3h 57m				So, 4. Aug
Mo, 5. Aug	MESZ	23:29–03:33*	4h 04m	AN <sub>+</sub> bis AN <sub>-</sub>		06:39	21:48	03:30	1h 01m	04:32	48m	05:20	40m	06:01	14h 59m	21:00	39m	21:40	47m	22:28	1h 00m	23:29	9h 01m	4h 04m				Mo, 5. Aug
Di, 6. Aug	MESZ	23:26–03:36*	4h 10m	AN <sub>+</sub> bis AN <sub>-</sub>		07:52	22:01	03:33	1h 00m	04:34	47m	05:22	39m	06:02	14h 56m	20:59	39m	21:38	47m	22:26	59m	23:26	9h 04m	4h 10m				Di, 6. Aug
Mi, 7. Aug	MESZ	23:23–03:39*	4h 16m	AN <sub>+</sub> bis AN <sub>-</sub>		09:02	22:13	03:36	59m	04:36	47m	05:24	39m	06:03	14h 53m	20:57	39m	21:36	47m	22:24	58m	23:23	9h 08m	4h 16m				Mi, 7. Aug
Do, 8. Aug	MESZ	23:19–03:42*	4h 22m	AN <sub>+</sub> bis AN <sub>-</sub>		10:10	22:24	03:39	58m	04:38	47m	05:25	39m	06:05	14h 50m	20:55	39m	21:34	46m	22:21	58m	23:19	9h 11m	4h 22m				Do, 8. Aug
Fr, 9. Aug	MESZ	23:16–03:45*	4h 28m	AN <sub>+</sub> bis AN <sub>-</sub>		11:18	22:35	03:42	58m	04:40	46m	05:27	39m	06:06	14h 47m	20:53	39m	21:33	46m	22:19	57m	23:16	9h 14m	4h 28m				Fr, 9. Aug
Sa, 10. Aug	MESZ	23:13–03:48*	4h 34m	AN <sub>+</sub> bis AN <sub>-</sub>		12:26	22:48	03:45	57m	04:42	46m	05:29	39m	06:08	14h 43m	20:52	38m	21:31	46m	22:17	56m	23:13	9h 17m	4h 34m				Sa, 10. Aug
So, 11. Aug	MESZ	23:10–03:51*	4h 40m	AN <sub>+</sub> bis AN <sub>-</sub>		13:36	23:03	03:48	56m	04:44	46m	05:30	38m	06:09	14h 40m	20:50	38m	21:29	45m	22:14	55m	23:10	9h 20m	4h 40m				So, 11. Aug
Mo, 12. Aug	MESZ	23:22–03:53*	4h 31m	M <sub>7</sub> bis AN <sub>-</sub>	☾	14:49	23:22	03:51	55m	04:46	45m	05:32	38m	06:11	14h 37m	20:48	38m	21:27	45m	22:12	54m	23:07	9h 24m	4h 46m				Mo, 12. Aug
Di, 13. Aug	MESZ	23:48–03:56*	4h 08m	M <sub>7</sub> bis AN <sub>-</sub>		16:04	23:48	03:53	54m	04:48	45m	05:34	38m	06:12	14h 33m	20:46	38m	21:25	45m	22:10	54m	23:04	9h 27m	4h 52m				Di, 13. Aug
Mi, 14. Aug	MESZ	00:25*–03:59*	3h 33m	M <sub>7</sub> bis AN <sub>-</sub>		17:18	—:—	03:56	54m	04:50	45m	05:35	38m	06:14	14h 30m	20:44	38m	21:23	44m	22:07	53m	23:01	9h 30m	4h 58m				Mi, 14. Aug
Do, 15. Aug	MESZ	01:18*–04:01*	2h 43m	M <sub>7</sub> bis AN <sub>-</sub>		18:24	00:25	03:59	53m	04:52	44m	05:37	38m	06:15	14h 27m	20:42	38m	21:20	44m	22:05	52m	22:58	9h 34m	5h 03m				Do, 15. Aug
Fr, 16. Aug	MESZ	02:28*–04:04*	1h 36m	M <sub>7</sub> bis AN <sub>-</sub>		19:19	01:18	04:01	52m	04:54	44m	05:39	38m	06:17	14h 23m	20:41	37m	21:18	44m	22:02	52m	22:55	9h 37m	5h 09m				Fr, 16. Aug
Sa, 17. Aug	MESZ	03:51*–04:07*	15m	M <sub>7</sub> bis AN <sub>-</sub>		20:00	02:28	04:04	52m	04:56	44m	05:40	37m	06:18	14h 20m	20:39	37m	21:16	43m	22:00	51m	22:52	9h 40m	5h 14m				Sa, 17. Aug
So, 18. Aug	MESZ	—:~:~:~	—	Mond stört		20:29	03:51	04:07	51m	04:58	43m	05:42	37m	06:20	14h 17m	20:37	37m	21:14	43m	21:58	50m	22:49	9h 44m	5h 20m				So, 18. Aug
Mo, 19. Aug	MESZ	—:~:~:~	—	Mond stört	☉	20:51	05:21	04:09	50m	05:00	43m	05:44	37m	06:21	14h 13m	20:35	37m	21:12	43m	21:55	50m	22:46	9h 47m	5h 25m				Mo, 19. Aug
Di, 20. Aug	MESZ	—:~:~:~	—	Mond stört		21:09	06:52	04:12	50m	05:02	43m	05:45	37m	06:23	14h 10m	20:33	37m	21:10	42m	21:53	49m	22:43	9h 51m	5h 31m				Di, 20. Aug
Mi, 21. Aug	MESZ	—:~:~:~	—	Mond stört		21:24	08:22	04:14	49m	05:04	42m	05:47	37m	06:24	14h 06m	20:31	37m	21:08	42m	21:50	49m	22:40	9h 54m	5h 36m				Mi, 21. Aug
Do, 22. Aug	MESZ	—:~:~:~	—	Mond stört		21:39	09:50	04:17	49m	05:06	42m	05:48	37m	06:26	14h 03m	20:29	36m	21:06	42m	21:48	48m	22:37	9h 58m	5h 42m				Do, 22. Aug
Fr, 23. Aug	MESZ	—:~:~:~	—	Mond stört		21:55	11:17	04:19	48m	05:08	42m	05:50	36m	06:27	13h 59m	20:27	36m	21:04	42m	21:46	48m	22:34	10h 01m	5h 47m				Fr, 23. Aug
Sa, 24. Aug	MESZ	—:~:~:~	—	Mond stört		22:13	12:44	04:21	48m	05:10	42m	05:52	36m	06:28	13h 56m	20:25	36m	21:01	41m	21:43	47m	22:31	10h 05m	5h 52m				Sa, 24. Aug
So, 25. Aug	MESZ	22:28–22:37	9m	AN <sub>+</sub> bis M <sub>7</sub>		22:37	14:11	04:24	47m	05:11	41m	05:53	36m	06:30	13h 52m	20:23	36m	20:59	41m	21:41	47m	22:28	10h 08m	5h 57m				So, 25. Aug
Mo, 26. Aug	MESZ	22:25–23:09	43m	AN <sub>+</sub> bis M <sub>7</sub>	☾	23:09	15:35	04:26	47m	05:13	41m	05:55	36m	06:31	13h 49m	20:21	36m	20:57	41m	21:38	46m	22:25	10h 12m	6h 03m				Mo, 26. Aug
Di, 27. Aug	MESZ	22:22–23:53	1h 30m	AN <sub>+</sub> bis M <sub>7</sub>		23:53	16:51	04:28	46m	05:15	41m	05:57	36m	06:33	13h 45m	20:19	36m	20:55	41m	21:36	46m	22:22	10h 15m	6h 08m				Di, 27. Aug
Mi, 28. Aug	MESZ	22:19–00:50*	2h 30m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	17:53	04:31	46m	05:17	41m	05:58	36m	06:34	13h 42m	20:17	36m	20:53	40m	21:34	45m	22:19	10h 19m	6h 13m				Mi, 28. Aug
Do, 29. Aug	MESZ	22:17–01:58*	3h 41m	AN <sub>+</sub> bis M <sub>7</sub>		00:50	18:40	04:33	45m	05:19	40m	06:00	36m	06:36	13h 38m	20:14	35m	20:50	40m	21:31	45m	22:17	10h 22m	6h 18m				Do, 29. Aug
Fr, 30. Aug	MESZ	22:14–03:12*	4h 57m	AN <sub>+</sub> bis M <sub>7</sub>		01:58	19:13</																					

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

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- 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		19:00–02:39*	7h 38m	AN <sub>+</sub> bis M <sub>J</sub>		01:30	15:39	05:16	37m	05:54	37m	06:31	35m	07:06	10h 04m	17:10	35m	17:46	37m	18:23	37m	19:00	13h 57m	10h 17m				So, 27. Okt
Mo, 28. Okt		18:59–03:47*	8h 48m	AN <sub>+</sub> bis M <sub>J</sub>		02:39	15:50	05:18	37m	05:55	37m	06:32	35m	07:08	10h 00m	17:09	35m	17:44	37m	18:21	37m	18:59	14h 00m	10h 20m				Mo, 28. Okt
Di, 29. Okt		18:57–04:54*	9h 57m	AN <sub>+</sub> bis M <sub>J</sub>		03:47	16:01	05:19	37m	05:57	37m	06:34	35m	07:10	9h 57m	17:07	35m	17:43	37m	18:20	37m	18:57	14h 04m	10h 23m				Di, 29. Okt
Mi, 30. Okt		18:55–05:22*	10h 26m	AN <sub>+</sub> bis AN <sub>-</sub>		04:54	16:12	05:21	37m	05:58	37m	06:35	35m	07:11	9h 53m	17:05	35m	17:41	37m	18:18	37m	18:55	14h 07m	10h 26m				Mi, 30. Okt
Do, 31. Okt		18:54–05:24*	10h 29m	AN <sub>+</sub> bis AN <sub>-</sub>		06:03	16:24	05:22	37m	06:00	37m	06:37	35m	07:13	9h 50m	17:03	35m	17:39	37m	18:17	37m	18:54	14h 11m	10h 29m				Do, 31. Okt
Fr, 1. Nov		18:52–05:25*	10h 32m	AN <sub>+</sub> bis AN <sub>-</sub>	●	07:13	16:39	05:24	37m	06:01	37m	06:38	35m	07:14	9h 47m	17:02	35m	17:38	37m	18:15	37m	18:52	14h 14m	10h 32m				Fr, 1. Nov
Sa, 2. Nov		18:51–05:27*	10h 35m	AN <sub>+</sub> bis AN <sub>-</sub>		08:26	16:58	05:25	37m	06:03	37m	06:40	36m	07:16	9h 43m	17:00	36m	17:36	37m	18:14	37m	18:51	14h 17m	10h 35m				Sa, 2. Nov
So, 3. Nov		18:50–05:28*	10h 38m	AN <sub>+</sub> bis AN <sub>-</sub>		09:40	17:24	05:27	37m	06:04	37m	06:42	36m	07:18	9h 40m	16:58	36m	17:35	37m	18:12	37m	18:50	14h 20m	10h 38m				So, 3. Nov
Mo, 4. Nov		18:48–05:29*	10h 41m	AN <sub>+</sub> bis AN <sub>-</sub>		10:51	17:59	05:28	37m	06:06	37m	06:43	36m	07:19	9h 37m	16:57	36m	17:33	37m	18:11	37m	18:48	14h 24m	10h 41m				Mo, 4. Nov
Di, 5. Nov		18:48–05:31*	10h 43m	M <sub>\</sub> bis AN <sub>-</sub>		11:55	18:48	05:29	37m	06:07	37m	06:45	36m	07:21	9h 34m	16:55	36m	17:32	37m	18:09	37m	18:47	14h 27m	10h 44m				Di, 5. Nov
Mi, 6. Nov		19:51–05:32*	9h 41m	M <sub>\</sub> bis AN <sub>-</sub>		12:47	19:51	05:31	37m	06:08	37m	06:46	36m	07:23	9h 30m	16:54	36m	17:30	37m	18:08	37m	18:45	14h 30m	10h 46m				Mi, 6. Nov
Do, 7. Nov		21:05–05:34*	8h 28m	M <sub>\</sub> bis AN <sub>-</sub>		13:27	21:05	05:32	37m	06:10	37m	06:48	36m	07:24	9h 27m	16:52	36m	17:29	37m	18:07	37m	18:44	14h 33m	10h 49m				Do, 7. Nov
Fr, 8. Nov		22:27–05:35*	7h 08m	M <sub>\</sub> bis AN <sub>-</sub>		13:56	22:27	05:34	37m	06:11	37m	06:49	36m	07:26	9h 24m	16:51	36m	17:27	37m	18:05	37m	18:43	14h 37m	10h 52m				Fr, 8. Nov
Sa, 9. Nov		23:50–05:37*	5h 46m	M <sub>\</sub> bis AN <sub>-</sub>	◐	14:18	23:50	05:35	37m	06:13	37m	06:51	36m	07:28	9h 21m	16:49	36m	17:26	37m	18:04	37m	18:42	14h 40m	10h 54m				Sa, 9. Nov
So, 10. Nov		01:15*–05:38*	4h 23m	M <sub>\</sub> bis AN <sub>-</sub>		14:36	—:—	05:37	37m	06:14	38m	06:52	37m	07:29	9h 18m	16:48	37m	17:25	38m	18:03	37m	18:40	14h 43m	10h 57m				So, 10. Nov
Mo, 11. Nov		02:39*–05:39*	3h 00m	M <sub>\</sub> bis AN <sub>-</sub>		14:51	01:15	05:38	37m	06:16	38m	06:54	37m	07:31	9h 15m	16:46	37m	17:24	38m	18:02	37m	18:39	14h 46m	10h 59m				Mo, 11. Nov
Di, 12. Nov		04:06*–05:41*	1h 35m	M <sub>\</sub> bis AN <sub>-</sub>		15:06	02:39	05:39	37m	06:17	38m	06:55	37m	07:33	9h 12m	16:45	37m	17:22	38m	18:00	37m	18:38	14h 49m	11h 02m				Di, 12. Nov
Mi, 13. Nov		05:35*–05:42*	7m	M <sub>\</sub> bis AN <sub>-</sub>		15:21	04:06	05:41	37m	06:19	38m	06:57	37m	07:34	9h 09m	16:44	37m	17:21	38m	17:59	37m	18:37	14h 52m	11h 04m				Mi, 13. Nov
Do, 14. Nov		—:—:—:—	–	Mond stört		15:39	05:35	05:42	37m	06:20	38m	06:58	37m	07:36	9h 06m	16:42	37m	17:20	38m	17:58	37m	18:36	14h 55m	11h 07m				Do, 14. Nov
Fr, 15. Nov		—:—:—:—	–	Mond stört	◑	16:02	07:07	05:43	37m	06:21	38m	07:00	37m	07:37	9h 03m	16:41	37m	17:19	38m	17:57	37m	18:35	14h 57m	11h 09m				Fr, 15. Nov
Sa, 16. Nov		—:—:—:—	–	Mond stört		16:33	08:39	05:45	38m	06:23	38m	07:01	37m	07:39	9h 00m	16:40	37m	17:18	38m	17:56	37m	18:34	15h 00m	11h 11m				Sa, 16. Nov
So, 17. Nov		—:~:~:~:~	–	Mond stört		17:16	10:05	05:46	38m	06:24	38m	07:03	37m	07:41	8h 58m	16:39	37m	17:17	38m	17:55	38m	18:33	15h 03m	11h 14m				So, 17. Nov
Mo, 18. Nov		—:~:~:~:~	–	Mond stört		18:15	11:17	05:47	38m	06:25	38m	07:04	38m	07:42	8h 55m	16:38	38m	17:16	38m	17:54	38m	18:32	15h 06m	11h 16m				Mo, 18. Nov
Di, 19. Nov		18:32–19:27	55m	AN <sub>+</sub> bis M <sub>J</sub>		19:27	12:10	05:49	38m	06:27	38m	07:06	38m	07:44	8h 52m	16:36	38m	17:15	38m	17:53	38m	18:32	15h 08m	11h 18m				Di, 19. Nov
Mi, 20. Nov		18:31–20:44	2h 13m	AN <sub>+</sub> bis M <sub>J</sub>		20:44	12:47	05:50	38m	06:28	38m	07:07	38m	07:45	8h 50m	16:35	38m	17:14	38m	17:53	38m	18:31	15h 11m	11h 20m				Mi, 20. Nov
Do, 21. Nov		18:30–22:02	3h 31m	AN <sub>+</sub> bis M <sub>J</sub>		22:02	13:12	05:51	38m	06:29	38m	07:08	38m	07:47	8h 47m	16:34	38m	17:13	38m	17:52	38m	18:30	15h 13m	11h 22m				Do, 21. Nov
Fr, 22. Nov		18:29–23:16	4h 46m	AN <sub>+</sub> bis M <sub>J</sub>		23:16	13:31	05:52	38m	06:31	39m	07:10	38m	07:48	8h 45m	16:33	38m	17:12	39m	17:51	38m	18:29	15h 16m	11h 24m				Fr, 22. Nov
Sa, 23. Nov		18:29–00:27*	5h 58m	AN <sub>+</sub> bis M <sub>J</sub>	◒	—:—	13:45	05:54	38m	06:32	39m	07:11	38m	07:50	8h 42m	16:33	38m	17:11	39m	17:50	38m	18:29	15h 18m	11h 26m				Sa, 23. Nov
So, 24. Nov		18:28–01:35*	7h 07m	AN <sub>+</sub> bis M <sub>J</sub>		00:27	13:57	05:55	38m	06:33	39m	07:13	38m	07:51	8h 40m	16:32	38m	17:10	39m	17:50	38m	18:28	15h 21m	11h 28m				So, 24. Nov
Mo, 25. Nov		18:27–02:43*	8h 15m	AN <sub>+</sub> bis M <sub>J</sub>		01:35	14:09	05:56	38m	06:35	39m	07:14	38m	07:53	8h 37m	16:31	38m	17:10	39m	17:49	38m	18:27	15h 23m	11h 29m				Mo, 25. Nov
Di, 26. Nov		18:27–03:51*	9h 24m	AN <sub>+</sub> bis M <sub>J</sub>		02:43	14:20	05:57	38m	06:36	39m	07:15	39m	07:54	8h 35m	16:30	38m	17:09	39m	17:48	38m	18:27	15h 25m	11h 31m				Di, 26. Nov
Mi, 27. Nov		18:26–05:01*	10h 34m	AN <sub>+</sub> bis M <sub>J</sub>		03:51	14:32	05:58	38m	06:37	39m	07:17	39m	07:56	8h 33m	16:29	39m	17:08	39m	17:48	38m	18:26	15h 27m	11h 33m				Mi, 27. Nov
Do, 28. Nov		18:26–06:01*	11h 34m	AN <sub>+</sub> bis AN <sub>-</sub>		05:01	14:45	06:00	38m	06:38	39m	07:18	39m	07:57	8h 31m	16:29	39m	17:08	39m	17:47	38m	18:26	15h 29m	11h 34m				Do, 28. Nov
Fr, 29. Nov		18:25–06:02*	11h 36m	AN <sub>+</sub> bis AN <sub>-</sub>		06:13	15:03	06:01	38m	06:39	39m	07:19	39m	07:58	8h 29m	16:28	39m	17:07	39m	17:47	38m	18:25	15h 31m	11h 36m				Fr, 29. Nov
Sa, 30. Nov		18:25–06:03*	11h 37m	AN <sub>+</sub> bis AN <sub>-</sub>		07:26	15:26	06:02	38m	06:41	39m	07:20	39m	08:00	8h 27m	16:27	39m	17:07	39m	17:46	38m	18:25	15h 33m	11h 37m				Sa, 30. Nov
So, 1. Dez		18:25–06:04*	11h 39m	AN <sub>+</sub> bis AN <sub>-</sub>	●	08:39	15:59	06:03	38m	06:42	39m	07:22	39m	08:01	8h 25m	16:27	39m	17:06	39m	17:46	38m	18:25	15h 35m	11h 39m				So, 1. Dez
Mo, 2. Dez		18:24–06:05*	11h 40m	AN <sub>+</sub> bis AN <sub>-</sub>		09:47	16:44	06:04	38m	06:43	39m	07:23	39m	08:02	8h 23m	16:26	39m	17:06	39m	17:46	38m	18:24	15h 37m	11h 40m				Mo, 2. Dez
Di, 3. Dez		18:24–06:06*	11h 41m	AN <sub>+</sub> bis AN <sub>-</sub>		10:44	17:43	06:05	38m	06:44	39m	07:24	39m	08:04	8h 22m	16:26	39m	17:05	39m	17:45	38m	18:24	15h 39m	11h 41m				Di, 3. Dez
Mi, 4. Dez		18:56–06:07*	11h 11m	M <sub>\</sub> bis AN <sub>-</sub>		11:28	18:56	06:06	38m	06:45	39m	07:25	39m	08:05	8h 20m	16:25	39m	17:05	39m	17:45	38m	18:24	15h 40m	11h 43m				Mi, 4. Dez
Do, 5. Dez		20:16–06:08*	9h 52m	M <sub>\</sub> bis AN <sub>-</sub>		12:00	20:16	06:07	38m	06:46	40m	07:26	39m	08:06	8h 18m	16:25	39m	17:05	40m	17:45	38m	18:24	15h 42m	11h 44m				Do, 5. Dez
Fr, 6. Dez		21:38–06:09*	8h 31m	M <sub>\</sub> bis AN <sub>-</sub>		12:23	21:38	06:08	38m	06:47	40m	07:27	40m	08:07	8h 17m	16:25	40m	17:05	40m	17:45	38m	18:24	15h 43m	11h 45m				Fr, 6. Dez
Sa, 7. Dez		23:00–06:10*	7h 09m	M <sub>\</sub> bis AN <sub>-</sub>		12:42	23:00	06:09	39m	06:48	40m	07:28	40m	08:08	8h 16m	16:24	40m	17:05	40m	17:45	39m	18:24	15h 45m	11h 46m				Sa, 7. Dez
So, 8. Dez		00:22*–06:11*	5h 48m	M <sub>\</sub> bis 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
2024/25	Zeitzone	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		17:02	09:56	06:16	39m	06:56	40m	07:36	40m	08:17	8h 07m	16:25	40m	17:05	40m	17:46	39m	18:25	15h 52m	11h 52m				Mo, 16. Dez
Di, 17. Dez		—:—:—:—	—	Mond stört		18:19	10:41	06:17	39m	06:56	40m	07:37	40m	08:18	8h 07m	16:25	40m	17:05	40m	17:46	39m	18:25	15h 53m	11h 52m				Di, 17. Dez
Mi, 18. Dez		18:26–19:39	1h 13m	AN <sub>+</sub> bis M <sub>7</sub>		19:39	11:12	06:18	39m	06:57	40m	07:38	40m	08:18	8h 06m	16:25	40m	17:06	40m	17:46	39m	18:26	15h 53m	11h 52m				Mi, 18. Dez
Do, 19. Dez		18:26–20:57	2h 30m	AN <sub>+</sub> bis M <sub>7</sub>		20:57	11:34	06:18	39m	06:58	40m	07:38	40m	08:19	8h 06m	16:26	40m	17:06	40m	17:47	39m	18:26	15h 53m	11h 52m				Do, 19. Dez
Fr, 20. Dez		18:26–22:10	3h 44m	AN <sub>+</sub> bis M <sub>7</sub>		22:10	11:50	06:19	39m	06:58	40m	07:39	40m	08:19	8h 06m	16:26	40m	17:07	40m	17:47	39m	18:26	15h 53m	11h 52m				Fr, 20. Dez
Sa, 21. Dez		18:27–23:21	4h 53m	AN <sub>+</sub> bis M <sub>7</sub>		23:21	12:03	06:19	39m	06:59	40m	07:39	40m	08:20	8h 06m	16:26	40m	17:07	40m	17:48	39m	18:27	15h 53m	11h 52m				Sa, 21. Dez
So, 22. Dez		18:27–00:29*	6h 01m	AN <sub>+</sub> bis M <sub>7</sub>	☾	—:—	12:15	06:20	39m	06:59	40m	07:40	40m	08:20	8h 06m	16:27	40m	17:08	40m	17:48	39m	18:27	15h 53m	11h 52m				So, 22. Dez
Mo, 23. Dez		18:28–01:37*	7h 08m	AN <sub>+</sub> bis M <sub>7</sub>		00:29	12:26	06:20	39m	07:00	40m	07:40	40m	08:21	8h 06m	16:28	40m	17:08	40m	17:49	39m	18:28	15h 53m	11h 52m				Mo, 23. Dez
Di, 24. Dez		18:29–02:46*	8h 16m	AN <sub>+</sub> bis M <sub>7</sub>		01:37	12:37	06:21	39m	07:00	40m	07:41	40m	08:21	8h 06m	16:28	40m	17:09	40m	17:49	39m	18:29	15h 53m	11h 52m				Di, 24. Dez
Mi, 25. Dez		18:29–03:56*	9h 27m	AN <sub>+</sub> bis M <sub>7</sub>		02:46	12:51	06:21	39m	07:00	40m	07:41	40m	08:22	8h 07m	16:29	40m	17:09	40m	17:50	39m	18:29	15h 52m	11h 52m				Mi, 25. Dez
Do, 26. Dez		18:30–05:09*	10h 39m	AN <sub>+</sub> bis M <sub>7</sub>		03:56	13:07	06:21	39m	07:01	40m	07:41	40m	08:22	8h 07m	16:30	40m	17:10	40m	17:51	39m	18:30	15h 52m	11h 51m				Do, 26. Dez
Fr, 27. Dez		18:31–06:22*	11h 51m	AN <sub>+</sub> bis AN <sub>-</sub>		05:09	13:27	06:22	39m	07:01	40m	07:41	40m	08:22	8h 08m	16:30	40m	17:11	40m	17:51	39m	18:31	15h 51m	11h 51m				Fr, 27. Dez
Sa, 28. Dez		18:31–06:22*	11h 50m	AN <sub>+</sub> bis AN <sub>-</sub>		06:23	13:56	06:22	39m	07:01	40m	07:42	40m	08:22	8h 09m	16:31	40m	17:12	40m	17:52	39m	18:31	15h 51m	11h 50m				Sa, 28. Dez
So, 29. Dez		18:32–06:22*	11h 50m	AN <sub>+</sub> bis AN <sub>-</sub>		07:34	14:37	06:22	39m	07:01	40m	07:42	40m	08:22	8h 09m	16:32	40m	17:13	40m	17:53	39m	18:32	15h 50m	11h 50m				So, 29. Dez
Mo, 30. Dez		18:33–06:23*	11h 49m	AN <sub>+</sub> bis AN <sub>-</sub>	☉	08:36	15:32	06:22	39m	07:02	40m	07:42	40m	08:22	8h 10m	16:33	40m	17:13	40m	17:54	39m	18:33	15h 49m	11h 49m				Mo, 30. Dez
Di, 31. Dez		18:34–06:23*	11h 48m	AN <sub>+</sub> bis AN <sub>-</sub>		09:25	16:42	06:23	39m	07:02	40m	07:42	40m	08:22	8h 11m	16:34	40m	17:14	40m	17:55	39m	18:34	15h 48m	11h 48m				Di, 31. Dez
Mi, 1. Jan		18:35–06:23*	11h 48m	AN <sub>+</sub> bis AN <sub>-</sub>		10:01	18:01	06:23	39m	07:02	40m	07:42	40m	08:22	8h 12m	16:35	40m	17:15	40m	17:56	39m	18:35	15h 47m	11h 48m				Mi, 1. Jan
Do, 2. Jan		19:25–06:23*	10h 57m	M <sub>\</sub> bis AN <sub>-</sub>		10:28	19:25	06:23	39m	07:02	40m	07:42	40m	08:22	8h 13m	16:36	40m	17:16	40m	17:56	39m	18:36	15h 46m	11h 47m				Do, 2. Jan
Fr, 3. Jan		20:49–06:23*	9h 33m	M <sub>\</sub> bis AN <sub>-</sub>		10:48	20:49	06:23	39m	07:02	40m	07:42	40m	08:22	8h 14m	16:37	40m	17:17	40m	17:57	39m	18:37	15h 44m	11h 46m				Fr, 3. Jan
Sa, 4. Jan		22:11–06:23*	8h 11m	M <sub>\</sub> bis AN <sub>-</sub>		11:04	22:11	06:23	39m	07:02	40m	07:42	40m	08:22	8h 16m	16:38	40m	17:18	40m	17:58	39m	18:37	15h 43m	11h 45m				Sa, 4. Jan
So, 5. Jan		23:33–06:23*	6h 49m	M <sub>\</sub> bis AN <sub>-</sub>		11:18	23:33	06:23	38m	07:02	40m	07:42	39m	08:22	8h 17m	16:39	40m	17:19	40m	17:59	38m	18:38	15h 41m	11h 44m				So, 5. Jan
Mo, 6. Jan		00:56*–06:22*	5h 26m	M <sub>\</sub> bis AN <sub>-</sub>		11:32	—:—	06:23	38m	07:01	40m	07:41	39m	08:21	8h 19m	16:41	39m	17:20	40m	18:01	38m	18:39	15h 40m	11h 42m				Mo, 6. Jan
Di, 7. Jan		02:20*–06:22*	4h 02m	M <sub>\</sub> bis AN <sub>-</sub>	☾	11:47	00:56	06:22	38m	07:01	39m	07:41	39m	08:21	8h 20m	16:42	39m	17:22	39m	18:02	38m	18:41	15h 38m	11h 41m				Di, 7. Jan
Mi, 8. Jan		03:46*–06:22*	2h 35m	M <sub>\</sub> bis AN <sub>-</sub>		12:05	02:20	06:22	38m	07:01	39m	07:41	39m	08:21	8h 22m	16:43	39m	17:23	39m	18:03	38m	18:42	15h 37m	11h 40m				Mi, 8. Jan
Do, 9. Jan		05:13*–06:22*	1h 08m	M <sub>\</sub> bis AN <sub>-</sub>		12:27	03:46	06:22	38m	07:01	39m	07:41	39m	08:20	8h 24m	16:44	39m	17:24	39m	18:04	38m	18:43	15h 35m	11h 38m				Do, 9. Jan
Fr, 10. Jan		—:—:—:—	—	Mond stört		12:58	05:13	06:22	38m	07:00	39m	07:40	39m	08:20	8h 26m	16:46	39m	17:25	39m	18:05	38m	18:44	15h 33m	11h 37m				Fr, 10. Jan
Sa, 11. Jan		—:~:~:~:~	—	Mond stört		13:42	06:34	06:21	38m	07:00	39m	07:40	39m	08:19	8h 27m	16:47	39m	17:26	39m	18:06	38m	18:45	15h 31m	11h 36m				Sa, 11. Jan
So, 12. Jan		—:~:~:~:~	—	Mond stört		14:42	07:42	06:21	38m	07:00	39m	07:39	39m	08:19	8h 29m	16:48	39m	17:28	39m	18:07	38m	18:46	15h 29m	11h 34m				So, 12. Jan
Mo, 13. Jan		—:~:~:~:~	—	Mond stört	☉	15:55	08:34	06:21	38m	06:59	39m	07:39	39m	08:18	8h 31m	16:50	39m	17:29	39m	18:09	38m	18:47	15h 27m	11h 32m				Mo, 13. Jan
Di, 14. Jan		—:~:~:~:~	—	Mond stört		17:14	09:10	06:20	38m	06:59	39m	07:38	39m	08:17	8h 34m	16:51	39m	17:30	39m	18:10	38m	18:48	15h 25m	11h 31m				Di, 14. Jan
Mi, 15. Jan		—:~:~:~:~	—	Mond stört		18:34	09:35	06:20	38m	06:58	39m	07:37	38m	08:16	8h 36m	16:53	38m	17:32	39m	18:11	38m	18:50	15h 22m	11h 29m				Mi, 15. Jan
Do, 16. Jan		18:51–19:50	59m	AN <sub>+</sub> bis M <sub>7</sub>		19:50	09:54	06:19	38m	06:58	39m	07:37	38m	08:16	8h 38m	16:54	38m	17:33	39m	18:12	38m	18:51	15h 20m	11h 27m				Do, 16. Jan
Fr, 17. Jan		18:52–21:03	2h 10m	AN <sub>+</sub> bis M <sub>7</sub>		21:03	10:08	06:18	38m	06:57	39m	07:36	38m	08:15	8h 40m	16:56	38m	17:34	39m	18:14	38m	18:52	15h 18m	11h 25m				Fr, 17. Jan
Sa, 18. Jan		18:53–22:13	3h 19m	AN <sub>+</sub> bis M <sub>7</sub>		22:13	10:20	06:18	38m	06:56	39m	07:35	38m	08:14	8h 43m	16:57	38m	17:36	39m	18:15	38m	18:53	15h 15m	11h 23m				Sa, 18. Jan
So, 19. Jan		18:55–23:21	4h 26m	AN <sub>+</sub> bis M <sub>7</sub>		23:21	10:32	06:17	38m	06:56	39m	07:35	38m	08:13	8h 45m	16:59	38m	17:37	39m	18:16	38m	18:55	15h 13m	11h 21m				So, 19. Jan
Mo, 20. Jan		18:56–00:30*	5h 33m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	10:43	06:16	38m	06:55	38m	07:34	38m	08:12	8h 48m	17:00	38m	17:39	38m	18:18	38m	18:56	15h 10m	11h 19m				Mo, 20. Jan
Di, 21. Jan		18:57–01:40*	6h 42m	AN <sub>+</sub> bis M <sub>7</sub>	☾	00:30	10:55	06:16	38m	06:54	38m	07:33	38m	08:11	8h 50m	17:02	38m	17:40	38m	18:19	38m	18:57	15h 08m	11h 17m				Di, 21. Jan
Mi, 22. Jan		18:59–02:51*	7h 52m	AN <sub>+</sub> bis M <sub>7</sub>		01:40	11:10	06:15	38m	06:53	38m	07:32	38m	08:10	8h 53m	17:04	38m	17:42	38m	18:20	38m	18:59	15h 05m	11h 15m				Mi, 22. Jan
Do, 23. Jan		19:00–04:04*	9h 04m	AN <sub>+</sub> bis M <sub>7</sub>		02:51	11:28	06:14	38m	06:52	38m	07:31	37m	08:09	8h 56m	17:05	37m	17:43	38m	18:22	38m	19:00	15h 02m	11h 13m				Do, 23. Jan
Fr, 24. Jan		19:01–05:16*	10h 14m	AN <sub>+</sub> bis M <sub>7</sub>		04:04	11:53	06:13	38m	06:51	38m	07:30	37m	08:08	8h 59m	17:07	37m	17:45	38m	18:23	38m	19:01	14h 59m	11h 11m				Fr, 24. Jan
Sa, 25. Jan		19:03–06:11*	11h 08m	AN <sub>+</sub> bis AN <sub>-</sub>		05:16	12:27	06:12	37m	06:50	38m	07:29	37m	08:07	9h 01m	17:08	37m	17:46	38m	18:25	38m	19:03	14h 56m	11h 08m				Sa, 25. Jan
So, 26. Jan		19:04–06:10*	11h 06m	AN <sub>+</sub> bis AN <sub>-</sub>		06:22	13:16	06:11	37m	06:49	38m	07:28	37m	08:05	9h 04m	17:10	37m	17:48	38m	18:26	37m	19:04	14h 54m	11h 06m				So, 26. Jan
Mo, 27. Jan		19:05–06:09*	11h 03m	AN <sub>+</sub> bis AN <sub>-</sub>																								