

# Mond- und Dämmerungstabelle 2024

## für die visuelle Deep-Sky-Beobachtung

Korneuburg 48.3453° N 16.3331° 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 angegebenen 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		18:06–21:47	3h 41m	AN <sub>+</sub> bis M <sub>7</sub>		21:47	10:54	05:49	37m	06:27	38m	07:06	38m	07:45	8h 25m	16:10	38m	16:49	38m	17:28	37m	18:06	15h 34m	11h 43m					Mo, 1. Jan
Di, 2. Jan		18:06–22:54	4h 47m	AN <sub>+</sub> bis M <sub>7</sub>		22:54	11:08	05:50	37m	06:27	38m	07:06	38m	07:45	8h 26m	16:11	38m	16:50	38m	17:29	37m	18:06	15h 33m	11h 43m					Di, 2. Jan
Mi, 3. Jan		18:07–00:00*	5h 52m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	11:21	05:50	37m	06:28	38m	07:06	38m	07:45	8h 27m	16:12	38m	16:51	38m	17:29	37m	18:07	15h 32m	11h 42m					Mi, 3. Jan
Do, 4. Jan		18:08–01:08*	6h 59m	AN <sub>+</sub> bis M <sub>7</sub>	☾	00:00	11:34	05:50	37m	06:28	38m	07:06	38m	07:45	8h 28m	16:13	38m	16:52	38m	17:30	37m	18:08	15h 31m	11h 41m					Do, 4. Jan
Fr, 5. Jan		18:09–02:19*	8h 09m	AN <sub>+</sub> bis M <sub>7</sub>		01:08	11:48	05:50	37m	06:27	38m	07:06	38m	07:45	8h 29m	16:14	38m	16:53	38m	17:31	37m	18:09	15h 30m	11h 40m					Fr, 5. Jan
Sa, 6. Jan		18:10–03:34*	9h 23m	AN <sub>+</sub> bis M <sub>7</sub>		02:19	12:06	05:50	37m	06:27	38m	07:06	38m	07:44	8h 30m	16:15	38m	16:54	38m	17:32	37m	18:10	15h 28m	11h 39m					Sa, 6. Jan
So, 7. Jan		18:11–04:52*	10h 40m	AN <sub>+</sub> bis M <sub>7</sub>		03:34	12:28	05:50	37m	06:27	38m	07:06	38m	07:44	8h 32m	16:16	38m	16:55	38m	17:33	37m	18:11	15h 27m	11h 38m					So, 7. Jan
Mo, 8. Jan		18:12–05:49*	11h 37m	AN <sub>+</sub> bis AN <sub>-</sub>		04:52	12:58	05:49	37m	06:27	38m	07:06	38m	07:44	8h 33m	16:18	38m	16:56	38m	17:34	37m	18:12	15h 25m	11h 37m					Mo, 8. Jan
Di, 9. Jan		18:13–05:49*	11h 35m	AN <sub>+</sub> bis AN <sub>-</sub>		06:09	13:41	05:49	37m	06:27	38m	07:05	38m	07:44	8h 35m	16:19	38m	16:57	38m	17:36	37m	18:13	15h 24m	11h 35m					Di, 9. Jan
Mi, 10. Jan		18:14–05:49*	11h 34m	AN <sub>+</sub> bis AN <sub>-</sub>		07:19	14:40	05:49	37m	06:27	38m	07:05	38m	07:43	8h 36m	16:20	38m	16:58	38m	17:37	37m	18:14	15h 22m	11h 34m					Mi, 10. Jan
Do, 11. Jan		18:15–05:48*	11h 33m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	08:15	15:56	05:49	37m	06:26	38m	07:05	37m	07:43	8h 38m	16:21	37m	16:59	38m	17:38	37m	18:15	15h 20m	11h 33m					Do, 11. Jan
Fr, 12. Jan		18:16–05:48*	11h 31m	AN <sub>+</sub> bis AN <sub>-</sub>		08:57	17:22	05:48	37m	06:26	38m	07:04	37m	07:42	8h 40m	16:23	37m	17:01	38m	17:39	37m	18:16	15h 18m	11h 31m					Fr, 12. Jan
Sa, 13. Jan		18:51–05:48*	10h 56m	M <sub>\</sub> bis AN <sub>-</sub>		09:28	18:51	05:48	37m	06:26	38m	07:04	37m	07:42	8h 42m	16:24	37m	17:02	38m	17:40	37m	18:18	15h 17m	11h 30m					Sa, 13. Jan
So, 14. Jan		20:19–05:47*	9h 28m	M <sub>\</sub> bis AN <sub>-</sub>		09:51	20:19	05:48	37m	06:25	38m	07:03	37m	07:41	8h 44m	16:25	37m	17:03	38m	17:41	37m	18:19	15h 15m	11h 28m					So, 14. Jan
Mo, 15. Jan		21:43–05:47*	8h 04m	M <sub>\</sub> bis AN <sub>-</sub>		10:10	21:43	05:47	37m	06:25	38m	07:03	37m	07:40	8h 46m	16:27	37m	17:04	38m	17:42	37m	18:20	15h 12m	11h 27m					Mo, 15. Jan
Di, 16. Jan		23:04–05:46*	6h 42m	M <sub>\</sub> bis AN <sub>-</sub>		10:27	23:04	05:47	37m	06:24	38m	07:02	37m	07:40	8h 48m	16:28	37m	17:06	38m	17:44	37m	18:21	15h 10m	11h 25m					Di, 16. Jan
Mi, 17. Jan		00:24*–05:46*	5h 21m	M <sub>\</sub> bis AN <sub>-</sub>		10:43	—:—	05:46	37m	06:24	37m	07:02	37m	07:39	8h 50m	16:30	37m	17:07	37m	17:45	37m	18:22	15h 08m	11h 23m					Mi, 17. Jan
Do, 18. Jan		01:44*–05:45*	4h 01m	M <sub>\</sub> bis AN <sub>-</sub>	☾	11:01	00:24	05:46	37m	06:23	37m	07:01	37m	07:38	8h 52m	16:31	37m	17:08	37m	17:46	37m	18:23	15h 06m	11h 21m					Do, 18. Jan
Fr, 19. Jan		03:03*–05:45*	2h 41m	M <sub>\</sub> bis AN <sub>-</sub>		11:21	01:44	05:45	37m	06:22	37m	07:00	37m	07:37	8h 55m	16:32	37m	17:10	37m	17:47	37m	18:25	15h 04m	11h 20m					Fr, 19. Jan
Sa, 20. Jan		04:21*–05:44*	1h 23m	M <sub>\</sub> bis AN <sub>-</sub>		11:45	03:03	05:45	37m	06:22	37m	07:00	37m	07:37	8h 57m	16:34	37m	17:11	37m	17:49	37m	18:26	15h 01m	11h 18m					Sa, 20. Jan
So, 21. Jan		05:32*–05:43*	11m	M <sub>\</sub> bis AN <sub>-</sub>		12:17	04:21	05:44	37m	06:21	37m	06:59	36m	07:36	8h 59m	16:35	36m	17:12	37m	17:50	37m	18:27	14h 59m	11h 16m					So, 21. Jan
Mo, 22. Jan		—:—:—:—	–	Mond stört		13:00	05:32	05:43	37m	06:20	37m	06:58	36m	07:35	9h 02m	16:37	36m	17:14	37m	17:51	37m	18:28	14h 56m	11h 14m					Mo, 22. Jan
Di, 23. Jan		—:—:—:—	–	Mond stört		13:53	06:32	05:43	36m	06:20	37m	06:57	36m	07:34	9h 04m	16:38	36m	17:15	37m	17:53	37m	18:30	14h 54m	11h 12m					Di, 23. Jan
Mi, 24. Jan		—:—:—:—	–	Mond stört		14:57	07:20	05:42	36m	06:19	37m	06:56	36m	07:33	9h 07m	16:40	36m	17:17	37m	17:54	36m	18:31	14h 51m	11h 10m					Mi, 24. Jan
Do, 25. Jan		—:~:~:~:~	–	Mond stört	☾	16:06	07:56	05:41	36m	06:18	37m	06:55	36m	07:32	9h 09m	16:42	36m	17:18	37m	17:55	36m	18:32	14h 49m	11h 07m					Do, 25. Jan
Fr, 26. Jan		—:~:~:~:~	–	Mond stört		17:17	08:23	05:40	36m	06:17	37m	06:54	36m	07:31	9h 12m	16:43	36m	17:19	37m	17:57	36m	18:34	14h 46m	11h 05m					Fr, 26. Jan
Sa, 27. Jan		—:~:~:~:~	–	Mond stört		18:27	08:43	05:39	36m	06:16	37m	06:53	36m	07:29	9h 15m	16:45	36m	17:21	37m	17:58	36m	18:35	14h 43m	11h 03m					Sa, 27. Jan
So, 28. Jan		18:36–19:35	59m	AN <sub>+</sub> bis M <sub>7</sub>		19:35	09:00	05:38	36m	06:15	37m	06:52	36m	07:28	9h 17m	16:46	36m	17:22	37m	17:59	36m	18:36	14h 40m	11h 01m					So, 28. Jan
Mo, 29. Jan		18:38–20:42	2h 04m	AN <sub>+</sub> bis M <sub>7</sub>		20:42	09:14	05:37	36m	06:14	36m	06:51	35m	07:27	9h 20m	16:48	36m	17:24	37m	18:01	36m	18:38	14h 38m	10h 58m					Mo, 29. Jan
Di, 30. Jan		18:39–21:48	3h 08m	AN <sub>+</sub> bis M <sub>7</sub>		21:48	09:27	05:36	36m	06:13	36m	06:50	35m	07:26	9h 23m	16:49	35m	17:25	36m	18:02	36m	18:39	14h 35m	10h 56m					Di, 30. Jan
Mi, 31. Jan		18:40–22:54	4h 13m	AN <sub>+</sub> bis M <sub>7</sub>		22:54	09:39	05:35	36m	06:12	36m	06:49	35m	07:25	9h 26m	16:51	35m	17:27	36m	18:04	36m	18:40	14h 32m	10h 54m					Mi, 31. Jan
Do, 1. Feb		18:42–00:03*	5h 21m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	09:53	05:34	36m	06:11	36m	06:48	35m	07:23	9h 29m	16:53	35m	17:28	36m	18:05	36m	18:42	14h 29m	10h 51m					Do, 1. Feb
Fr, 2. Feb		18:43–01:14*	6h 31m	AN <sub>+</sub> bis M <sub>7</sub>		00:03	10:09	05:33	36m	06:10	36m	06:46	35m	07:22	9h 32m	16:54	35m	17:30	36m	18:06	36m	18:43	14h 26m	10h 49m					Fr, 2. Feb
Sa, 3. Feb		18:44–02:29*	7h 44m	AN <sub>+</sub> bis M <sub>7</sub>	☾	01:14	10:28	05:32	36m	06:09	36m	06:45	35m	07:21	9h 35m	16:56	35m	17:31	36m	18:08	36m	18:44	14h 23m	10h 46m					Sa, 3. Feb
So, 4. Feb		18:46–03:45*	8h 59m	AN <sub>+</sub> bis M <sub>7</sub>		02:29	10:53	05:31	36m	06:07	36m	06:44	35m	07:19	9h 38m	16:57	35m	17:33	36m	18:09	36m	18:46	14h 20m	10h 43m					So, 4. Feb
Mo, 5. Feb		18:47–04:58*	10h 10m	AN <sub>+</sub> bis M <sub>7</sub>		03:45	11:28	05:30	36m	06:06	36m	06:43	35m	07:18	9h 41m	16:59	35m	17:34	36m	18:11	36m	18:47	14h 17m	10h 41m					Mo, 5. Feb
Di, 6. Feb		18:49–05:27*	10h 38m	AN <sub>+</sub> bis AN <sub>-</sub>		04:58	12:18	05:28	36m	06:05	36m	06:41	35m	07:16	9h 44m	17:01	35m	17:36	36m	18:12	36m	18:49	14h 14m	10h 38m					Di, 6. Feb
Mi, 7. Feb		18:50–05:26*	10h 35m	AN <sub>+</sub> bis AN <sub>-</sub>		06:00	13:25	05:27	36m	06:03	36m	06:40	35m	07:15	9h 47m	17:02	35m	17:37	36m	18:14	36m	18:50	14h 11m	10h 35m					Mi, 7. Feb
Do, 8. Feb		18:51–05:25*	10h 33m	AN <sub>+</sub> bis AN <sub>-</sub>		06:49	14:47	05:26	36m	06:02	36m	06:38	34m	07:13	9h 50m	17:04	34m	17:39	36m	18:15	36m	18:51	14h 07m	10h 33m					Do, 8. Feb
Fr, 9. Feb		18:53–05:23*	10h 30m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	07:25	16:17	05:25	36m	06:01	36m	06:37	34m	07:12	9h 53m	17:06	34m	17:40	36m	18:17	36m	18:53	14h 04m	10h 30m					Fr, 9. Feb
Sa, 10. Feb		18:54–05:22*	10h 27m	AN <sub>+</sub> bis AN <sub>-</sub>		07:52	17:48	05:23	36m	05:59	36m	06:35	34m	07:10	9h 56m	17:07	34m	17:42	36m	18:18	36m	18:54	14h 01m	10h 27m					Sa, 10. Feb
So, 11. Feb		19:16–05:20*	10h 03m	M <sub>\</sub> bis AN <sub>-</sub>		08:13	19:16	05:22	36m	05:58	36m	06:34	34m	07:09	10h 00m	17:09	34m	17:											

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

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

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