

# Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Coburg 50.2667° N 10.9667° 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		18:24–22:07	3h 43m	AN <sub>+</sub> bis M <sub>7</sub>		22:07	11:19	06:14	39m	06:53	40m	07:34	40m	08:15	8h 08m	16:23	40m	17:04	40m	17:45	39m	18:24	15h 51m	11h 49m					Mo, 1. Jan
Di, 2. Jan		18:25–23:15	4h 50m	AN <sub>+</sub> bis M <sub>7</sub>		23:15	11:31	06:14	39m	06:53	40m	07:34	40m	08:15	8h 09m	16:24	40m	17:05	40m	17:46	39m	18:25	15h 50m	11h 49m					Di, 2. Jan
Mi, 3. Jan		18:26–00:24*	5h 57m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	11:42	06:14	39m	06:53	40m	07:34	40m	08:15	8h 10m	16:25	40m	17:06	40m	17:46	39m	18:26	15h 49m	11h 48m					Mi, 3. Jan
Do, 4. Jan		18:27–01:34*	7h 06m	AN <sub>+</sub> bis M <sub>7</sub>	☾	00:24	11:53	06:14	39m	06:53	40m	07:34	40m	08:15	8h 11m	16:26	40m	17:07	40m	17:47	39m	18:27	15h 48m	11h 47m					Do, 4. Jan
Fr, 5. Jan		18:28–02:47*	8h 19m	AN <sub>+</sub> bis M <sub>7</sub>		01:34	12:06	06:14	39m	06:53	40m	07:34	40m	08:14	8h 13m	16:27	40m	17:08	40m	17:48	39m	18:28	15h 46m	11h 46m					Fr, 5. Jan
Sa, 6. Jan		18:29–04:04*	9h 35m	AN <sub>+</sub> bis M <sub>7</sub>		02:47	12:21	06:14	39m	06:53	40m	07:34	40m	08:14	8h 14m	16:29	40m	17:09	40m	17:49	39m	18:29	15h 45m	11h 44m					Sa, 6. Jan
So, 7. Jan		18:30–05:25*	10h 54m	AN <sub>+</sub> bis M <sub>7</sub>		04:04	12:41	06:14	39m	06:53	40m	07:33	40m	08:14	8h 16m	16:30	40m	17:10	40m	17:51	39m	18:30	15h 43m	11h 43m					So, 7. Jan
Mo, 8. Jan		18:31–06:13*	11h 42m	AN <sub>+</sub> bis AN <sub>-</sub>		05:25	13:10	06:14	39m	06:53	40m	07:33	40m	08:13	8h 17m	16:31	40m	17:11	40m	17:52	39m	18:31	15h 41m	11h 42m					Mo, 8. Jan
Di, 9. Jan		18:32–06:13*	11h 41m	AN <sub>+</sub> bis AN <sub>-</sub>		06:44	13:51	06:13	39m	06:53	40m	07:33	40m	08:13	8h 19m	16:32	40m	17:13	40m	17:53	39m	18:32	15h 40m	11h 41m					Di, 9. Jan
Mi, 10. Jan		18:33–06:13*	11h 39m	AN <sub>+</sub> bis AN <sub>-</sub>		07:54	14:50	06:13	39m	06:52	40m	07:32	40m	08:12	8h 21m	16:34	40m	17:14	40m	17:54	39m	18:33	15h 38m	11h 39m					Mi, 10. Jan
Do, 11. Jan		18:34–06:13*	11h 38m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	08:50	16:07	06:13	39m	06:52	40m	07:32	39m	08:12	8h 23m	16:35	39m	17:15	40m	17:55	39m	18:34	15h 36m	11h 38m					Do, 11. Jan
Fr, 12. Jan		18:35–06:12*	11h 36m	AN <sub>+</sub> bis AN <sub>-</sub>		09:29	17:36	06:13	39m	06:52	40m	07:32	39m	08:11	8h 25m	16:36	39m	17:16	40m	17:56	39m	18:35	15h 34m	11h 36m					Fr, 12. Jan
Sa, 13. Jan		19:08–06:12*	11h 04m	M <sub>7</sub> bis AN <sub>-</sub>		09:57	19:08	06:12	38m	06:51	39m	07:31	39m	08:11	8h 27m	16:38	39m	17:18	39m	17:58	39m	18:37	15h 32m	11h 35m					Sa, 13. Jan
So, 14. Jan		20:37–06:11*	9h 33m	M <sub>7</sub> bis AN <sub>-</sub>		10:18	20:37	06:12	38m	06:51	39m	07:30	39m	08:10	8h 29m	16:39	39m	17:19	39m	17:59	38m	18:38	15h 30m	11h 33m					So, 14. Jan
Mo, 15. Jan		22:04–06:11*	8h 06m	M <sub>7</sub> bis AN <sub>-</sub>		10:34	22:04	06:11	38m	06:50	39m	07:30	39m	08:09	8h 31m	16:41	39m	17:20	39m	18:00	38m	18:39	15h 27m	11h 31m					Mo, 15. Jan
Di, 16. Jan		23:28–06:10*	6h 42m	M <sub>7</sub> bis AN <sub>-</sub>		10:49	23:28	06:11	38m	06:50	39m	07:29	39m	08:09	8h 33m	16:42	39m	17:22	39m	18:01	38m	18:40	15h 25m	11h 29m					Di, 16. Jan
Mi, 17. Jan		00:50*–06:10*	5h 19m	M <sub>7</sub> bis AN <sub>-</sub>		11:03	—:—	06:10	38m	06:49	39m	07:29	39m	08:08	8h 35m	16:44	39m	17:23	39m	18:03	38m	18:41	15h 23m	11h 28m					Mi, 17. Jan
Do, 18. Jan		02:13*–06:09*	3h 56m	M <sub>7</sub> bis AN <sub>-</sub>	☾	11:18	00:50	06:10	38m	06:48	39m	07:28	39m	08:07	8h 38m	16:45	39m	17:24	39m	18:04	38m	18:43	15h 20m	11h 26m					Do, 18. Jan
Fr, 19. Jan		03:34*–06:08*	2h 33m	M <sub>7</sub> bis AN <sub>-</sub>		11:36	02:13	06:09	38m	06:48	39m	07:27	38m	08:06	8h 40m	16:47	38m	17:26	39m	18:05	38m	18:44	15h 18m	11h 24m					Fr, 19. Jan
Sa, 20. Jan		04:54*–06:07*	1h 13m	M <sub>7</sub> bis AN <sub>-</sub>		11:58	03:34	06:08	38m	06:47	39m	07:26	38m	08:05	8h 43m	16:48	38m	17:27	39m	18:07	38m	18:45	15h 15m	11h 22m					Sa, 20. Jan
So, 21. Jan		06:06*–06:07*	0m	M <sub>7</sub> bis AN <sub>-</sub>		12:28	04:54	06:07	38m	06:46	39m	07:25	38m	08:04	8h 45m	16:50	38m	17:29	39m	18:08	38m	18:47	15h 12m	11h 20m					So, 21. Jan
Mo, 22. Jan		—:—:—:—:—	–	Mond stört		13:09	06:06	06:07	38m	06:45	39m	07:24	38m	08:03	8h 48m	16:52	38m	17:30	39m	18:09	38m	18:48	15h 10m	11h 17m					Mo, 22. Jan
Di, 23. Jan		—:—:—:—:—	–	Mond stört		14:03	07:07	06:06	38m	06:44	39m	07:23	38m	08:02	8h 51m	16:53	38m	17:32	39m	18:11	38m	18:49	15h 07m	11h 15m					Di, 23. Jan
Mi, 24. Jan		—:—:—:—:—	–	Mond stört		15:08	07:54	06:05	38m	06:43	38m	07:22	38m	08:01	8h 54m	16:55	38m	17:33	39m	18:12	38m	18:51	15h 04m	11h 13m					Mi, 24. Jan
Do, 25. Jan		—:—:~:~:~	–	Mond stört	☾	16:19	08:28	06:04	38m	06:43	38m	07:21	38m	08:00	8h 56m	16:57	38m	17:35	38m	18:14	38m	18:52	15h 01m	11h 11m					Do, 25. Jan
Fr, 26. Jan		—:~:~:~:~	–	Mond stört		17:32	08:53	06:03	38m	06:42	38m	07:20	38m	07:58	8h 59m	16:58	38m	17:36	38m	18:15	38m	18:53	14h 58m	11h 08m					Fr, 26. Jan
Sa, 27. Jan		—:~:~:~:~	–	Mond stört		18:44	09:11	06:02	38m	06:41	38m	07:19	37m	07:57	9h 02m	17:00	37m	17:38	38m	18:17	38m	18:55	14h 56m	11h 06m					Sa, 27. Jan
So, 28. Jan		18:56–19:54	58m	AN <sub>+</sub> bis M <sub>7</sub>		19:54	09:26	06:01	38m	06:39	38m	07:18	37m	07:56	9h 05m	17:02	37m	17:39	38m	18:18	38m	18:56	14h 53m	11h 03m					So, 28. Jan
Mo, 29. Jan		18:58–21:03	2h 05m	AN <sub>+</sub> bis M <sub>7</sub>		21:03	09:38	06:00	38m	06:38	38m	07:17	37m	07:55	9h 08m	17:03	37m	17:41	38m	18:20	38m	18:58	14h 49m	11h 01m					Mo, 29. Jan
Di, 30. Jan		18:59–22:11	3h 11m	AN <sub>+</sub> bis M <sub>7</sub>		22:11	09:49	05:59	38m	06:37	38m	07:16	37m	07:53	9h 11m	17:05	37m	17:43	38m	18:21	38m	18:59	14h 46m	10h 58m					Di, 30. Jan
Mi, 31. Jan		19:01–23:19	4h 18m	AN <sub>+</sub> bis M <sub>7</sub>		23:19	10:00	05:58	38m	06:36	38m	07:14	37m	07:52	9h 14m	17:07	37m	17:44	38m	18:23	38m	19:01	14h 43m	10h 56m					Mi, 31. Jan
Do, 1. Feb		19:02–00:30*	5h 27m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	10:11	05:57	37m	06:35	38m	07:13	37m	07:50	9h 17m	17:08	37m	17:46	38m	18:24	38m	19:02	14h 40m	10h 53m					Do, 1. Feb
Fr, 2. Feb		19:04–01:44*	6h 40m	AN <sub>+</sub> bis M <sub>7</sub>		00:30	10:25	05:56	37m	06:34	38m	07:12	37m	07:49	9h 21m	17:10	37m	17:47	38m	18:26	37m	19:04	14h 37m	10h 50m					Fr, 2. Feb
Sa, 3. Feb		19:05–03:01*	7h 55m	AN <sub>+</sub> bis M <sub>7</sub>	☾	01:44	10:42	05:54	37m	06:32	38m	07:10	37m	07:47	9h 24m	17:12	37m	17:49	38m	18:27	37m	19:05	14h 34m	10h 48m					Sa, 3. Feb
So, 4. Feb		19:07–04:19*	9h 12m	AN <sub>+</sub> bis M <sub>7</sub>		03:01	11:05	05:53	37m	06:31	38m	07:09	36m	07:46	9h 27m	17:14	36m	17:51	38m	18:29	37m	19:07	14h 30m	10h 45m					So, 4. Feb
Mo, 5. Feb		19:08–05:33*	10h 24m	AN <sub>+</sub> bis M <sub>7</sub>		04:19	11:39	05:52	37m	06:30	37m	07:08	36m	07:44	9h 30m	17:15	36m	17:52	37m	18:30	37m	19:08	14h 27m	10h 42m					Mo, 5. Feb
Di, 6. Feb		19:10–05:49*	10h 39m	AN <sub>+</sub> bis AN <sub>-</sub>		05:33	12:27	05:51	37m	06:28	37m	07:06	36m	07:43	9h 34m	17:17	36m	17:54	37m	18:32	37m	19:10	14h 24m	10h 39m					Di, 6. Feb
Mi, 7. Feb		19:11–05:48*	10h 36m	AN <sub>+</sub> bis AN <sub>-</sub>		06:35	13:35	05:49	37m	06:27	37m	07:05	36m	07:41	9h 37m	17:19	36m	17:55	37m	18:33	37m	19:11	14h 20m	10h 36m					Mi, 7. Feb
Do, 8. Feb		19:13–05:46*	10h 33m	AN <sub>+</sub> bis AN <sub>-</sub>		07:22	14:59	05:48	37m	06:25	37m	07:03	36m	07:40	9h 40m	17:21	36m	17:57	37m	18:35	37m	19:13	14h 17m	10h 33m					Do, 8. Feb
Fr, 9. Feb		19:14–05:45*	10h 30m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	07:55	16:32	05:46	37m	06:24	37m	07:02	36m	07:38	9h 44m	17:22	36m	17:59	37m	18:36	37m	19:14	14h 13m	10h 30m					Fr, 9. Feb
Sa, 10. Feb		19:16–05:43*	10h 27m	AN <sub>+</sub> bis AN <sub>-</sub>		08:19	18:05	05:45	37m	06:22	37m	07:00	36m	07:36	9h 47m	17:24	36m	18:00	37m	18:38	37m	19:16	14h 10m	10h 27m					Sa, 10. Feb
So, 11. Feb		19:37–05:42*	10h 05m	M <sub>7</sub> bis AN <sub>-</sub>		08:38	19:37	05:43	37m	06:21	37m	06:58	36m	07:35	9h 51m	17:26													

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

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

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



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

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



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