

# Mond- und Dämmerungstabelle 2024

## für die visuelle Deep-Sky-Beobachtung

Meißen 51.1636° N 13.4775° 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		18:13–21:55	3h 42m	AN <sub>+</sub> bis M <sub>7</sub>		21:55	11:11	06:05	40m	06:46	41m	07:27	41m	08:09	7h 59m	16:09	41m	16:51	41m	17:32	40m	18:13	16h 00m	11h 52m						Mo, 1. Jan
Di, 2. Jan		18:14–23:04	4h 50m	AN <sub>+</sub> bis M <sub>7</sub>		23:04	11:22	06:05	40m	06:46	41m	07:27	41m	08:09	8h 00m	16:10	41m	16:52	41m	17:33	40m	18:14	15h 59m	11h 51m						Di, 2. Jan
Mi, 3. Jan		18:14–00:14*	5h 59m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	11:32	06:05	40m	06:46	41m	07:27	41m	08:09	8h 02m	16:11	41m	16:53	41m	17:34	40m	18:14	15h 57m	11h 50m						Mi, 3. Jan
Do, 4. Jan		18:15–01:25*	7h 09m	AN <sub>+</sub> bis M <sub>7</sub>	☾	00:14	11:42	06:05	40m	06:46	41m	07:27	41m	08:09	8h 03m	16:12	41m	16:54	41m	17:35	40m	18:15	15h 56m	11h 49m						Do, 4. Jan
Fr, 5. Jan		18:16–02:39*	8h 22m	AN <sub>+</sub> bis M <sub>7</sub>		01:25	11:54	06:05	40m	06:45	41m	07:27	41m	08:08	8h 04m	16:13	41m	16:55	41m	17:36	40m	18:16	15h 54m	11h 48m						Fr, 5. Jan
Sa, 6. Jan		18:17–03:58*	9h 40m	AN <sub>+</sub> bis M <sub>7</sub>		02:39	12:08	06:05	40m	06:45	41m	07:27	41m	08:08	8h 06m	16:14	41m	16:56	41m	17:37	40m	18:17	15h 53m	11h 47m						Sa, 6. Jan
So, 7. Jan		18:18–05:19*	11h 00m	AN <sub>+</sub> bis M <sub>7</sub>		03:58	12:27	06:05	40m	06:45	41m	07:26	41m	08:08	8h 07m	16:16	41m	16:57	41m	17:38	40m	18:18	15h 51m	11h 46m						So, 7. Jan
Mo, 8. Jan		18:20–06:05*	11h 45m	AN <sub>+</sub> bis AN <sub>-</sub>		05:19	12:54	06:05	39m	06:45	41m	07:26	41m	08:07	8h 09m	16:17	41m	16:58	41m	17:40	40m	18:20	15h 49m	11h 45m						Mo, 8. Jan
Di, 9. Jan		18:21–06:04*	11h 43m	AN <sub>+</sub> bis AN <sub>-</sub>		06:39	13:34	06:05	39m	06:45	41m	07:26	41m	08:07	8h 11m	16:18	41m	17:00	41m	17:41	39m	18:21	15h 48m	11h 43m						Di, 9. Jan
Mi, 10. Jan		18:22–06:04*	11h 42m	AN <sub>+</sub> bis AN <sub>-</sub>		07:50	14:32	06:04	39m	06:44	41m	07:25	41m	08:06	8h 13m	16:20	41m	17:01	41m	17:42	39m	18:22	15h 46m	11h 42m						Mi, 10. Jan
Do, 11. Jan		18:23–06:04*	11h 40m	AN <sub>+</sub> bis AN <sub>-</sub>	☉	08:45	15:50	06:04	39m	06:44	40m	07:25	40m	08:06	8h 15m	16:21	40m	17:02	40m	17:43	39m	18:23	15h 44m	11h 40m						Do, 11. Jan
Fr, 12. Jan		18:24–06:03*	11h 39m	AN <sub>+</sub> bis AN <sub>-</sub>		09:24	17:20	06:04	39m	06:43	40m	07:24	40m	08:05	8h 17m	16:23	40m	17:03	40m	17:44	39m	18:24	15h 42m	11h 39m						Fr, 12. Jan
Sa, 13. Jan		18:54–06:03*	11h 09m	M <sub>\</sub> bis AN <sub>-</sub>		09:51	18:54	06:03	39m	06:43	40m	07:24	40m	08:05	8h 19m	16:24	40m	17:05	40m	17:46	39m	18:25	15h 39m	11h 37m						Sa, 13. Jan
So, 14. Jan		20:25–06:02*	9h 37m	M <sub>\</sub> bis AN <sub>-</sub>		10:10	20:25	06:03	39m	06:43	40m	07:23	40m	08:04	8h 21m	16:25	40m	17:06	40m	17:47	39m	18:27	15h 37m	11h 35m						So, 14. Jan
Mo, 15. Jan		21:53–06:02*	8h 09m	M <sub>\</sub> bis AN <sub>-</sub>		10:25	21:53	06:02	39m	06:42	40m	07:23	40m	08:03	8h 23m	16:27	40m	17:07	40m	17:48	39m	18:28	15h 35m	11h 34m						Mo, 15. Jan
Di, 16. Jan		23:18–06:01*	6h 43m	M <sub>\</sub> bis AN <sub>-</sub>		10:39	23:18	06:02	39m	06:41	40m	07:22	40m	08:02	8h 26m	16:28	40m	17:09	40m	17:49	39m	18:29	15h 32m	11h 32m						Di, 16. Jan
Mi, 17. Jan		00:41*–06:01*	5h 19m	M <sub>\</sub> bis AN <sub>-</sub>		10:52	—:—	06:01	39m	06:41	40m	07:21	40m	08:01	8h 28m	16:30	40m	17:10	40m	17:51	39m	18:30	15h 30m	11h 30m						Mi, 17. Jan
Do, 18. Jan		02:05*–06:00*	3h 54m	M <sub>\</sub> bis AN <sub>-</sub>	☾	11:06	00:41	06:01	39m	06:40	40m	07:20	40m	08:00	8h 31m	16:32	40m	17:12	40m	17:52	39m	18:32	15h 27m	11h 28m						Do, 18. Jan
Fr, 19. Jan		03:28*–05:59*	2h 31m	M <sub>\</sub> bis AN <sub>-</sub>		11:22	02:05	06:00	39m	06:39	40m	07:20	39m	08:00	8h 33m	16:33	39m	17:13	40m	17:53	39m	18:33	15h 25m	11h 26m						Fr, 19. Jan
Sa, 20. Jan		04:49*–05:58*	1h 09m	M <sub>\</sub> bis AN <sub>-</sub>		11:44	03:28	05:59	39m	06:39	40m	07:19	39m	07:59	8h 36m	16:35	39m	17:15	40m	17:55	39m	18:34	15h 22m	11h 24m						Sa, 20. Jan
So, 21. Jan		—:—:—:—:—	–	Mond stört		12:13	04:49	05:58	39m	06:38	40m	07:18	39m	07:57	8h 39m	16:37	39m	17:16	40m	17:56	39m	18:36	15h 19m	11h 21m						So, 21. Jan
Mo, 22. Jan		—:—:—:—:—	–	Mond stört		12:53	06:02	05:58	39m	06:37	39m	07:17	39m	07:56	8h 41m	16:38	39m	17:18	40m	17:58	39m	18:37	15h 17m	11h 19m						Mo, 22. Jan
Di, 23. Jan		—:—:—:—:—	–	Mond stört		13:46	07:03	05:57	39m	06:36	39m	07:16	39m	07:55	8h 44m	16:40	39m	17:19	39m	17:59	39m	18:38	15h 14m	11h 17m						Di, 23. Jan
Mi, 24. Jan		—:—:—:—:—	–	Mond stört		14:51	07:50	05:56	39m	06:35	39m	07:15	39m	07:54	8h 47m	16:42	39m	17:21	39m	18:01	39m	18:40	15h 11m	11h 15m						Mi, 24. Jan
Do, 25. Jan		—:~ ~ ~ ~:~	–	Mond stört	☉	16:03	08:23	05:55	39m	06:34	39m	07:14	39m	07:53	8h 50m	16:43	39m	17:22	39m	18:02	39m	18:41	15h 08m	11h 12m						Do, 25. Jan
Fr, 26. Jan		—:~ ~ ~ ~:~	–	Mond stört		17:18	08:47	05:54	39m	06:33	39m	07:13	38m	07:52	8h 53m	16:45	38m	17:24	39m	18:04	39m	18:43	15h 05m	11h 10m						Fr, 26. Jan
Sa, 27. Jan		—:~ ~ ~ ~:~	–	Mond stört		18:31	09:04	05:53	38m	06:32	39m	07:11	38m	07:50	8h 56m	16:47	38m	17:26	39m	18:05	39m	18:44	15h 02m	11h 07m						Sa, 27. Jan
So, 28. Jan		18:46–19:42	56m	AN <sub>+</sub> bis M <sub>7</sub>		19:42	09:17	05:52	38m	06:31	39m	07:10	38m	07:49	8h 59m	16:48	38m	17:27	39m	18:07	38m	18:46	14h 59m	11h 05m						So, 28. Jan
Mo, 29. Jan		18:47–20:52	2h 04m	AN <sub>+</sub> bis M <sub>7</sub>		20:52	09:29	05:51	38m	06:30	39m	07:09	38m	07:48	9h 02m	16:50	38m	17:29	39m	18:08	38m	18:47	14h 55m	11h 02m						Mo, 29. Jan
Di, 30. Jan		18:49–22:00	3h 11m	AN <sub>+</sub> bis M <sub>7</sub>		22:00	09:39	05:50	38m	06:29	39m	07:08	38m	07:46	9h 05m	16:52	38m	17:30	39m	18:10	38m	18:49	14h 52m	11h 00m						Di, 30. Jan
Mi, 31. Jan		18:50–23:10	4h 19m	AN <sub>+</sub> bis M <sub>7</sub>		23:10	09:49	05:49	38m	06:27	39m	07:06	38m	07:45	9h 09m	16:54	38m	17:32	39m	18:11	38m	18:50	14h 49m	10h 57m						Mi, 31. Jan
Do, 1. Feb		18:52–00:22*	5h 30m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	10:00	05:47	38m	06:26	39m	07:05	38m	07:43	9h 12m	16:56	38m	17:34	39m	18:13	38m	18:52	14h 46m	10h 54m						Do, 1. Feb
Fr, 2. Feb		18:53–01:37*	6h 43m	AN <sub>+</sub> bis M <sub>7</sub>		00:22	10:12	05:46	38m	06:25	38m	07:04	37m	07:42	9h 15m	16:57	38m	17:35	39m	18:14	38m	18:53	14h 42m	10h 51m						Fr, 2. Feb
Sa, 3. Feb		18:55–02:55*	8h 00m	AN <sub>+</sub> bis M <sub>7</sub>	☾	01:37	10:28	05:45	38m	06:23	38m	07:02	37m	07:40	9h 18m	16:59	37m	17:37	38m	18:16	38m	18:55	14h 39m	10h 48m						Sa, 3. Feb
So, 4. Feb		18:56–04:14*	9h 18m	AN <sub>+</sub> bis M <sub>7</sub>		02:55	10:50	05:44	38m	06:22	38m	07:01	37m	07:39	9h 22m	17:01	37m	17:39	38m	18:17	38m	18:56	14h 36m	10h 46m						So, 4. Feb
Mo, 5. Feb		18:58–05:29*	10h 31m	AN <sub>+</sub> bis M <sub>7</sub>		04:14	11:22	05:42	38m	06:21	38m	06:59	37m	07:37	9h 25m	17:03	37m	17:40	38m	18:19	38m	18:58	14h 32m	10h 43m						Mo, 5. Feb
Di, 6. Feb		18:59–05:39*	10h 40m	AN <sub>+</sub> bis AN <sub>-</sub>		05:29	12:10	05:41	38m	06:19	38m	06:58	37m	07:35	9h 29m	17:04	37m	17:42	38m	18:21	38m	18:59	14h 29m	10h 40m						Di, 6. Feb
Mi, 7. Feb		19:01–05:38*	10h 37m	AN <sub>+</sub> bis AN <sub>-</sub>		06:31	13:18	05:39	38m	06:18	38m	06:56	37m	07:34	9h 32m	17:06	37m	17:44	38m	18:22	38m	19:01	14h 25m	10h 37m						Mi, 7. Feb
Do, 8. Feb		19:02–05:36*	10h 34m	AN <sub>+</sub> bis AN <sub>-</sub>		07:17	14:43	05:38	38m	06:16	38m	06:55	37m	07:32	9h 36m	17:08	37m	17:45	38m	18:24	38m	19:02	14h 22m	10h 34m						Do, 8. Feb
Fr, 9. Feb		19:04–05:35*	10h 30m	AN <sub>+</sub> bis AN <sub>-</sub>	☉	07:49	16:17	05:36	38m	06:15	38m	06:53	37m	07:30	9h 39m	17:10	37m	17:47	38m	18:25	38m	19:04	14h 18m	10h 30m						Fr, 9. Feb
Sa, 10. Feb		19:06–05:33*	10h 27m	AN <sub>+</sub> bis AN <sub>-</sub>		08:12	17:52	05:35	38m	06:13	38m	06:52	36m	07:29	9h 43m	17:12	37m	17:49	38m	18:27	38m	19:06								

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

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

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



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

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

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



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