

# Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Forchheim 49.7197° N 11.0581° 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
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
			$\Delta t$		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, 1. Jan		03:58*–06:13*	2h 15m	M <sub>\</sub> bis AN <sub>\</sub>		12:51	02:43	06:13	39m	06:52	40m	07:32	40m	08:12	8h 13m	16:25	40m	17:06	40m	17:46	39m	18:25	15h 46m	11h 47m				So, 1. Jan
Mo, 2. Jan		05:11*–06:13*	1h 01m	M <sub>\</sub> bis AN <sub>\</sub>		13:10	03:58	06:13	38m	06:52	40m	07:32	40m	08:12	8h 14m	16:26	40m	17:07	40m	17:47	38m	18:26	15h 45m	11h 47m				Mo, 2. Jan
Di, 3. Jan		—:—:—:—	–	Mond stört		13:34	05:11	06:13	38m	06:52	40m	07:32	40m	08:12	8h 15m	16:28	40m	17:08	40m	17:48	38m	18:27	15h 44m	11h 46m				Di, 3. Jan
Mi, 4. Jan		—:—:—:—	–	Mond stört		14:05	06:22	06:13	38m	06:52	40m	07:32	39m	08:12	8h 16m	16:29	39m	17:09	40m	17:49	38m	18:28	15h 42m	11h 45m				Mi, 4. Jan
Do, 5. Jan		—:—:—:—	–	Mond stört		14:46	07:26	06:13	38m	06:52	39m	07:32	39m	08:12	8h 18m	16:30	39m	17:10	39m	17:50	38m	18:29	15h 41m	11h 44m				Do, 5. Jan
Fr, 6. Jan		—:~:~:~:~	–	Mond stört		15:37	08:22	06:13	38m	06:52	39m	07:31	39m	08:11	8h 19m	16:31	39m	17:11	39m	17:51	38m	18:29	15h 39m	11h 43m				Fr, 6. Jan
Sa, 7. Jan		—:~:~:~:~	–	Mond stört	○	16:37	09:06	06:13	38m	06:51	39m	07:31	39m	08:11	8h 21m	16:32	39m	17:12	39m	17:52	38m	18:31	15h 38m	11h 41m				Sa, 7. Jan
So, 8. Jan		—:~:~:~:~	–	Mond stört		17:44	09:39	06:12	38m	06:51	39m	07:31	39m	08:11	8h 22m	16:33	39m	17:13	39m	17:53	38m	18:32	15h 36m	11h 40m				So, 8. Jan
Mo, 9. Jan		18:33–18:53	20m	AN <sub>+</sub> bis M <sub>7</sub>		18:53	10:05	06:12	38m	06:51	39m	07:31	39m	08:10	8h 24m	16:35	39m	17:14	39m	17:54	38m	18:33	15h 35m	11h 39m				Mo, 9. Jan
Di, 10. Jan		18:34–20:03	1h 29m	AN <sub>+</sub> bis M <sub>7</sub>		20:03	10:25	06:12	38m	06:51	39m	07:30	39m	08:10	8h 26m	16:36	39m	17:15	39m	17:55	38m	18:34	15h 33m	11h 37m				Di, 10. Jan
Mi, 11. Jan		18:35–21:13	2h 37m	AN <sub>+</sub> bis M <sub>7</sub>		21:13	10:41	06:12	38m	06:50	39m	07:30	39m	08:09	8h 28m	16:37	39m	17:17	39m	17:56	38m	18:35	15h 31m	11h 36m				Mi, 11. Jan
Do, 12. Jan		18:36–22:22	3h 45m	AN <sub>+</sub> bis M <sub>7</sub>		22:22	10:56	06:11	38m	06:50	39m	07:29	39m	08:09	8h 30m	16:39	39m	17:18	39m	17:57	38m	18:36	15h 29m	11h 34m				Do, 12. Jan
Fr, 13. Jan		18:37–23:32	4h 54m	AN <sub>+</sub> bis M <sub>7</sub>		23:32	11:09	06:11	38m	06:49	39m	07:29	39m	08:08	8h 32m	16:40	39m	17:19	39m	17:59	38m	18:37	15h 27m	11h 33m				Fr, 13. Jan
Sa, 14. Jan		18:38–00:44*	6h 06m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	11:22	06:10	38m	06:49	39m	07:28	38m	08:07	8h 34m	16:41	38m	17:20	39m	18:00	38m	18:38	15h 25m	11h 31m				Sa, 14. Jan
So, 15. Jan		18:40–02:00*	7h 20m	AN <sub>+</sub> bis M <sub>7</sub>	●	00:44	11:37	06:10	38m	06:48	39m	07:28	38m	08:07	8h 36m	16:43	38m	17:22	39m	18:01	38m	18:40	15h 22m	11h 30m				So, 15. Jan
Mo, 16. Jan		18:41–03:21*	8h 40m	AN <sub>+</sub> bis M <sub>7</sub>		02:00	11:54	06:10	38m	06:48	39m	07:27	38m	08:06	8h 38m	16:44	38m	17:23	39m	18:02	38m	18:41	15h 20m	11h 28m				Mo, 16. Jan
Di, 17. Jan		18:42–04:45*	10h 03m	AN <sub>+</sub> bis M <sub>7</sub>		03:21	12:17	06:09	38m	06:47	39m	07:26	38m	08:05	8h 40m	16:46	38m	17:25	39m	18:04	38m	18:42	15h 18m	11h 26m				Di, 17. Jan
Mi, 18. Jan		18:43–06:08*	11h 24m	AN <sub>+</sub> bis AN <sub>\</sub>		04:45	12:48	06:08	38m	06:47	39m	07:26	38m	08:04	8h 43m	16:47	38m	17:26	39m	18:05	38m	18:43	15h 15m	11h 24m				Mi, 18. Jan
Do, 19. Jan		18:44–06:07*	11h 22m	AN <sub>+</sub> bis AN <sub>\</sub>		06:08	13:34	06:08	38m	06:46	38m	07:25	38m	08:03	8h 45m	16:49	38m	17:27	38m	18:06	38m	18:44	15h 13m	11h 22m				Do, 19. Jan
Fr, 20. Jan		18:46–06:06*	11h 20m	AN <sub>+</sub> bis AN <sub>\</sub>		07:22	14:37	06:07	38m	06:45	38m	07:24	38m	08:02	8h 48m	16:50	38m	17:29	38m	18:08	38m	18:46	15h 10m	11h 20m				Fr, 20. Jan
Sa, 21. Jan		18:47–06:06*	11h 18m	AN <sub>+</sub> bis AN <sub>\</sub>	●	08:19	15:59	06:06	38m	06:44	38m	07:23	38m	08:01	8h 50m	16:52	38m	17:30	38m	18:09	38m	18:47	15h 08m	11h 18m				Sa, 21. Jan
So, 22. Jan		18:48–06:05*	11h 16m	AN <sub>+</sub> bis AN <sub>\</sub>		09:00	17:30	06:06	38m	06:44	38m	07:22	38m	08:00	8h 53m	16:54	38m	17:32	38m	18:10	38m	18:48	15h 05m	11h 16m				So, 22. Jan
Mo, 23. Jan		19:02–06:04*	11h 02m	M <sub>\</sub> bis AN <sub>\</sub>		09:30	19:02	06:05	37m	06:43	38m	07:21	37m	07:59	8h 55m	16:55	37m	17:33	38m	18:12	38m	18:50	15h 02m	11h 14m				Mo, 23. Jan
Di, 24. Jan		20:30–06:03*	9h 33m	M <sub>\</sub> bis AN <sub>\</sub>		09:51	20:30	06:04	37m	06:42	38m	07:20	37m	07:58	8h 58m	16:57	37m	17:35	38m	18:13	37m	18:51	15h 00m	11h 12m				Di, 24. Jan
Mi, 25. Jan		21:54–06:02*	8h 08m	M <sub>\</sub> bis AN <sub>\</sub>		10:09	21:54	06:03	37m	06:41	38m	07:19	37m	07:57	9h 01m	16:58	37m	17:36	38m	18:15	37m	18:52	14h 57m	11h 09m				Mi, 25. Jan
Do, 26. Jan		23:13–06:01*	6h 47m	M <sub>\</sub> bis AN <sub>\</sub>		10:25	23:13	06:02	37m	06:40	38m	07:18	37m	07:56	9h 04m	17:00	37m	17:38	38m	18:16	37m	18:54	14h 54m	11h 07m				Do, 26. Jan
Fr, 27. Jan		00:31*–06:00*	5h 29m	M <sub>\</sub> bis AN <sub>\</sub>		10:40	—:—	06:01	37m	06:39	38m	07:17	37m	07:55	9h 07m	17:02	37m	17:39	38m	18:17	37m	18:55	14h 51m	11h 05m				Fr, 27. Jan
Sa, 28. Jan		01:47*–05:59*	4h 12m	M <sub>\</sub> bis AN <sub>\</sub>	●	10:56	00:31	06:00	37m	06:38	38m	07:16	37m	07:53	9h 09m	17:03	37m	17:41	38m	18:19	37m	18:57	14h 48m	11h 02m				Sa, 28. Jan
So, 29. Jan		03:02*–05:58*	2h 56m	M <sub>\</sub> bis AN <sub>\</sub>		11:14	01:47	05:59	37m	06:37	38m	07:15	37m	07:52	9h 12m	17:05	37m	17:42	38m	18:20	37m	18:58	14h 45m	11h 00m				So, 29. Jan
Mo, 30. Jan		04:14*–05:57*	1h 43m	M <sub>\</sub> bis AN <sub>\</sub>		11:37	03:02	05:58	37m	06:36	37m	07:14	37m	07:51	9h 15m	17:07	37m	17:44	38m	18:22	37m	18:59	14h 42m	10h 57m				Mo, 30. Jan
Di, 31. Jan		05:20*–05:56*	35m	M <sub>\</sub> bis AN <sub>\</sub>		12:05	04:14	05:57	37m	06:35	37m	07:13	36m	07:49	9h 18m	17:08	36m	17:45	37m	18:23	37m	19:01	14h 39m	10h 55m				Di, 31. Jan
Mi, 1. Feb		—:~:~:~:~	–	Mond stört		12:43	05:20	05:56	37m	06:33	37m	07:11	36m	07:48	9h 22m	17:10	36m	17:47	37m	18:25	37m	19:02	14h 36m	10h 52m				Mi, 1. Feb
Do, 2. Feb		—:~:~:~:~	–	Mond stört		13:31	06:18	05:55	37m	06:32	37m	07:10	36m	07:47	9h 25m	17:12	36m	17:48	37m	18:26	37m	19:04	14h 33m	10h 49m				Do, 2. Feb
Fr, 3. Feb		—:~:~:~:~	–	Mond stört		14:29	07:05	05:54	37m	06:31	37m	07:09	36m	07:45	9h 28m	17:13	36m	17:50	37m	18:28	37m	19:05	14h 30m	10h 47m				Fr, 3. Feb
Sa, 4. Feb		—:~:~:~:~	–	Mond stört		15:34	07:42	05:52	37m	06:30	37m	07:07	36m	07:44	9h 31m	17:15	36m	17:52	37m	18:29	37m	19:07	14h 26m	10h 44m				Sa, 4. Feb
So, 5. Feb		—:~:~:~:~	–	Mond stört	○	16:43	08:10	05:51	37m	06:28	37m	07:06	36m	07:42	9h 34m	17:17	36m	17:53	37m	18:31	37m	19:08	14h 23m	10h 41m				So, 5. Feb
Mo, 6. Feb		—:~:~:~:~	–	Mond stört		17:54	08:31	05:50	37m	06:27	37m	07:04	36m	07:41	9h 37m	17:19	36m	17:55	37m	18:32	37m	19:10	14h 20m	10h 38m				Mo, 6. Feb
Di, 7. Feb		—:~:~:~:~	–	Mond stört		19:04	08:48	05:48	37m	06:26	37m	07:03	36m	07:39	9h 41m	17:20	36m	17:56	37m	18:34	37m	19:11	14h 17m	10h 35m				Di, 7. Feb
Mi, 8. Feb		19:13–20:13	1h 00m	AN <sub>+</sub> bis M <sub>7</sub>		20:13	09:03	05:47	37m	06:24	37m	07:01	35m	07:37	9h 44m	17:22	35m	17:58	37m	18:35	37m	19:13	14h 13m	10h 32m				Mi, 8. Feb
Do, 9. Feb		19:14–21:23	2h 08m	AN <sub>+</sub> bis M <sub>7</sub>		21:23	09:16	05:45	37m	06:23	37m	07:00	35m	07:36	9h 47m	17:24	35m	18:00	37m	18:37	37m	19:14	14h 10m	10h 29m				Do, 9. Feb
Fr, 10. Feb		19:16–22:34	3h 17m	AN <sub>+</sub> bis M <sub>7</sub>		22:34	09:29	05:44	37m	06:21	37m	06:58	35m	07:34	9h 51m	17:25	35m	18:01	37m	18:38	37m	19:16	14h 07m	10h 26m				Fr, 10. Feb
Sa, 11. Feb		19:17–23:47	4h 29m	AN <sub>+</sub> bis M <sub>7</sub>		23:47	09:43	05:43	37m	06:20	37m	06:57	35m	07:32	9h 54m	17:27	35m	18:03	37m	18:40	37m	19:17	14h 03m	10h 23m				Sa, 11. Feb
So, 12. Feb		19:19–01:04*	5h 45m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	09:58	05:41	37m	06:18	37m	06:55	35m	07:31	9h 58m	17:29	35m	18:04	3									

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne				Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
			$\Delta t$		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, 20. Feb		19:31 – 05:26*	9h 54m	AN <sub>+</sub> bis AN <sub>-</sub>	●	07:51	17:55	05:28	37m	06:05	36m	06:41	34m	07:16	10h 26m	17:42	34m	18:17	36m	18:54	37m	19:31	13h 31m	9h 54m					Mo, 20. Feb
Di, 21. Feb		19:33 – 05:24*	9h 51m	AN <sub>+</sub> bis AN <sub>-</sub>		08:11	19:23	05:26	37m	06:03	36m	06:40	34m	07:14	10h 29m	17:44	34m	18:19	36m	18:56	37m	19:33	13h 28m	9h 51m					Di, 21. Feb
Mi, 22. Feb		20:47 – 05:22*	8h 35m	M <sub>\</sub> bis AN <sub>-</sub>		08:28	20:47	05:24	37m	06:01	36m	06:38	34m	07:12	10h 33m	17:46	34m	18:21	36m	18:57	37m	19:34	13h 24m	9h 47m					Mi, 22. Feb
Do, 23. Feb		22:08 – 05:20*	7h 12m	M <sub>\</sub> bis AN <sub>-</sub>		08:43	22:08	05:22	37m	05:59	36m	06:36	34m	07:11	10h 36m	17:47	34m	18:22	36m	18:59	37m	19:36	13h 21m	9h 44m					Do, 23. Feb
Fr, 24. Feb		23:28 – 05:19*	5h 50m	M <sub>\</sub> bis AN <sub>-</sub>		08:59	23:28	05:20	37m	05:58	36m	06:34	34m	07:09	10h 40m	17:49	34m	18:24	36m	19:00	37m	19:38	13h 17m	9h 41m					Fr, 24. Feb
Sa, 25. Feb		00:46* – 05:17*	4h 30m	M <sub>\</sub> bis AN <sub>-</sub>		09:17	—:—	05:19	37m	05:56	36m	06:32	34m	07:07	10h 44m	17:51	34m	18:25	36m	19:02	37m	19:39	13h 13m	9h 37m					Sa, 25. Feb
So, 26. Feb		02:02* – 05:15*	3h 13m	M <sub>\</sub> bis AN <sub>-</sub>		09:38	00:46	05:17	37m	05:54	36m	06:30	34m	07:05	10h 47m	17:52	34m	18:27	36m	19:03	37m	19:41	13h 10m	9h 33m					So, 26. Feb
Mo, 27. Feb		03:12* – 05:13*	2h 00m	M <sub>\</sub> bis AN <sub>-</sub>	◐	10:05	02:02	05:15	37m	05:52	36m	06:28	34m	07:03	10h 51m	17:54	34m	18:29	36m	19:05	37m	19:42	13h 06m	9h 30m					Mo, 27. Feb
Di, 28. Feb		04:14* – 05:11*	56m	M <sub>\</sub> bis AN <sub>-</sub>		10:39	03:12	05:13	37m	05:50	36m	06:26	34m	07:01	10h 55m	17:56	34m	18:30	36m	19:07	37m	19:44	13h 02m	9h 26m					Di, 28. Feb
Mi, 1. Mär		05:05* – 05:09*	4m	M <sub>\</sub> bis AN <sub>-</sub>		11:24	04:14	05:11	37m	05:48	36m	06:24	34m	06:59	10h 58m	17:57	34m	18:32	36m	19:08	37m	19:46	12h 59m	9h 23m					Mi, 1. Mär
Do, 2. Mär		—:—:—:—	–	Mond stört		12:19	05:05	05:09	37m	05:46	36m	06:22	34m	06:57	11h 02m	17:59	34m	18:33	36m	19:10	37m	19:47	12h 55m	9h 19m					Do, 2. Mär
Fr, 3. Mär		—:—:—:—	–	Mond stört		13:23	05:44	05:07	37m	05:44	36m	06:20	34m	06:55	11h 06m	18:01	34m	18:35	36m	19:11	37m	19:49	12h 51m	9h 15m					Fr, 3. Mär
Sa, 4. Mär		—:—:~:~:~	–	Mond stört		14:31	06:14	05:05	37m	05:42	36m	06:18	34m	06:53	11h 09m	18:02	34m	18:37	36m	19:13	37m	19:51	12h 48m	9h 11m					Sa, 4. Mär
So, 5. Mär		—:~:~:~:~	–	Mond stört		15:42	06:37	05:02	37m	05:40	36m	06:16	34m	06:50	11h 13m	18:04	34m	18:38	36m	19:15	37m	19:52	12h 44m	9h 08m					So, 5. Mär
Mo, 6. Mär		—:~:~:~:~	–	Mond stört		16:53	06:55	05:00	37m	05:38	36m	06:14	34m	06:48	11h 17m	18:06	34m	18:40	36m	19:16	37m	19:54	12h 40m	9h 04m					Mo, 6. Mär
Di, 7. Mär		—:~:~:~:~	–	Mond stört	◑	18:03	07:10	04:58	37m	05:36	36m	06:12	34m	06:46	11h 20m	18:07	34m	18:41	36m	19:18	37m	19:56	12h 37m	9h 00m					Di, 7. Mär
Mi, 8. Mär		—:~:~:~:~	–	Mond stört		19:13	07:24	04:56	37m	05:34	36m	06:10	34m	06:44	11h 24m	18:09	34m	18:43	36m	19:19	37m	19:57	12h 33m	8h 56m					Mi, 8. Mär
Do, 9. Mär		19:59 – 20:24	25m	AN <sub>+</sub> bis M <sub>7</sub>		20:24	07:37	04:54	37m	05:32	36m	06:08	33m	06:42	11h 28m	18:10	34m	18:44	36m	19:21	37m	19:59	12h 29m	8h 52m					Do, 9. Mär
Fr, 10. Mär		20:01 – 21:37	1h 36m	AN <sub>+</sub> bis M <sub>7</sub>		21:37	07:50	04:52	37m	05:30	36m	06:06	33m	06:40	11h 31m	18:12	34m	18:46	36m	19:23	38m	20:01	12h 25m	8h 48m					Fr, 10. Mär
Sa, 11. Mär		20:02 – 22:54	2h 51m	AN <sub>+</sub> bis M <sub>7</sub>		22:54	08:05	04:49	37m	05:27	36m	06:04	33m	06:38	11h 35m	18:14	34m	18:48	36m	19:24	38m	20:02	12h 22m	8h 44m					Sa, 11. Mär
So, 12. Mär		20:04 – 00:13*	4h 08m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	08:23	04:47	38m	05:25	36m	06:02	33m	06:36	11h 39m	18:15	34m	18:49	36m	19:26	38m	20:04	12h 18m	8h 40m					So, 12. Mär
Mo, 13. Mär		20:06 – 01:33*	5h 26m	AN <sub>+</sub> bis M <sub>7</sub>		00:13	08:46	04:45	38m	05:23	36m	06:00	33m	06:34	11h 43m	18:17	34m	18:51	36m	19:28	38m	20:06	12h 14m	8h 36m					Mo, 13. Mär
Di, 14. Mär		20:08 – 02:49*	6h 41m	AN <sub>+</sub> bis M <sub>7</sub>		01:33	09:18	04:43	38m	05:21	36m	05:58	33m	06:32	11h 46m	18:18	34m	18:52	36m	19:29	38m	20:08	12h 10m	8h 32m					Di, 14. Mär
Mi, 15. Mär		20:09 – 03:55*	7h 45m	AN <sub>+</sub> bis M <sub>7</sub>	◒	02:49	10:03	04:40	38m	05:19	36m	05:55	33m	06:29	11h 50m	18:20	34m	18:54	36m	19:31	38m	20:09	12h 07m	8h 28m					Mi, 15. Mär
Do, 16. Mär		20:11 – 04:36*	8h 24m	AN <sub>+</sub> bis AN <sub>-</sub>		03:55	11:06	04:38	38m	05:17	36m	05:53	33m	06:27	11h 54m	18:22	34m	18:56	36m	19:33	38m	20:11	12h 03m	8h 24m					Do, 16. Mär
Fr, 17. Mär		20:13 – 04:33*	8h 20m	AN <sub>+</sub> bis AN <sub>-</sub>		04:47	12:24	04:36	38m	05:14	36m	05:51	33m	06:25	11h 58m	18:23	34m	18:57	36m	19:34	38m	20:13	11h 59m	8h 20m					Fr, 17. Mär
Sa, 18. Mär		20:15 – 04:31*	8h 16m	AN <sub>+</sub> bis AN <sub>-</sub>		05:25	13:51	04:33	38m	05:12	36m	05:49	33m	06:23	12h 01m	18:25	34m	18:59	37m	19:36	38m	20:15	11h 56m	8h 16m					Sa, 18. Mär
So, 19. Mär		20:17 – 04:28*	8h 11m	AN <sub>+</sub> bis AN <sub>-</sub>		05:52	15:21	04:31	38m	05:10	36m	05:47	34m	06:21	12h 05m	18:26	34m	19:00	37m	19:38	39m	20:17	11h 52m	8h 11m					So, 19. Mär
Mo, 20. Mär		20:19 – 04:26*	8h 07m	AN <sub>+</sub> bis AN <sub>-</sub>		06:13	16:49	04:28	39m	05:08	37m	05:45	34m	06:19	12h 09m	18:28	34m	19:02	37m	19:39	39m	20:19	11h 48m	8h 07m					Mo, 20. Mär
Di, 21. Mär		20:20 – 04:24*	8h 03m	AN <sub>+</sub> bis AN <sub>-</sub>	●	06:31	18:15	04:26	39m	05:05	37m	05:42	34m	06:16	12h 12m	18:29	34m	19:04	37m	19:41	39m	20:20	11h 44m	8h 03m					Di, 21. Mär
Mi, 22. Mär		20:22 – 04:21*	7h 58m	AN <sub>+</sub> bis AN <sub>-</sub>		06:46	19:39	04:24	39m	05:03	37m	05:40	34m	06:14	12h 16m	18:31	34m	19:05	37m	19:43	39m	20:22	11h 41m	7h 58m					Mi, 22. Mär
Do, 23. Mär		21:01 – 04:19*	7h 17m	M <sub>\</sub> bis AN <sub>-</sub>		07:02	21:01	04:21	39m	05:01	37m	05:38	34m	06:12	12h 20m	18:33	34m	19:07	37m	19:44	39m	20:24	11h 37m	7h 54m					Do, 23. Mär
Fr, 24. Mär		22:22 – 04:16*	5h 54m	M <sub>\</sub> bis AN <sub>-</sub>		07:19	22:22	04:19	39m	04:58	37m	05:36	34m	06:10	12h 24m	18:34	34m	19:08	37m	19:46	39m	20:26	11h 33m	7h 50m					Fr, 24. Mär
Sa, 25. Mär		23:41 – 04:14*	4h 32m	M <sub>\</sub> bis AN <sub>-</sub>		07:38	23:41	04:16	39m	04:56	37m	05:34	34m	06:08	12h 27m	18:36	34m	19:10	37m	19:48	40m	20:28	11h 29m	7h 45m					Sa, 25. Mär
So, 26. Mär	MESZ	01:56* – 05:11*	3h 14m	M <sub>\</sub> bis AN <sub>-</sub>		09:03	00:41	05:14	40m	05:54	37m	06:31	34m	07:06	12h 31m	19:37	34m	20:12	37m	20:49	40m	21:30	11h 26m	7h 41m					So, 26. Mär
Mo, 27. Mär	MESZ	03:04* – 05:09*	2h 04m	M <sub>\</sub> bis AN <sub>-</sub>		09:35	01:56	05:11	40m	05:52	37m	06:29	34m	07:04	12h 35m	19:39	34m	20:13	37m	20:51	40m	21:32	11h 22m	7h 36m					Mo, 27. Mär
Di, 28. Mär	MESZ	04:00* – 05:06*	1h 06m	M <sub>\</sub> bis AN <sub>-</sub>		10:16	03:04	05:09	40m	05:49	37m	06:27	34m	07:01	12h 39m	19:40	34m	20:15	38m	20:53	40m	21:34	11h 18m	7h 32m					Di, 28. Mär
Mi, 29. Mär	MESZ	04:44* – 05:04*	19m	M <sub>\</sub> bis AN <sub>-</sub>	◑	11:08	04:00	05:06	40m	05:47	37m	06:25	34m	06:59	12h 42m	19:42	34m	20:17	38m	20:55	41m	21:36	11h 15m	7h 27m					Mi, 29. Mär
Do, 30. Mär	MESZ	—:~:~:~:~	–	Mond stört		12:09	04:44	05:04	40m	05:45	38m	06:23	34m	06:57	12h 46m	19:44	34m	20:18	38m	20:56	41m	21:38	11h 11m	7h 23m					Do, 30. Mär
Fr, 31. Mär	MESZ	—:~:~:~:~	–	Mond stört		13:17	05:17	05:01	41m	05:42	38m	06:20	34m	06:55	12h 50m	19:45	34m	20:20	38m	20:58	41m	21:40	11h 07m	7h 18m					Fr, 31. Mär
Sa, 1. Apr	MESZ	—:~:~:~:~	–	Mond stört		14:27	05:42	04:58	41m	05:40	38m	06:18	34m	06:53	12h 53m	19:47	34m	20:21	38m	21:00	41m	21:42	11h 03m	7h 14m					Sa, 1. Apr
So, 2. Apr	MESZ	—:~:~:~:~	–	Mond stört		15:38	06:02	04:56	41m	05:37	38m	06:16	34m	06:51	12h 57m	19:48	34m	20:23	38m	21:02									

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	
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023			
			$\Delta t$		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, 11. Apr	MESZ	22:03–02:50*	4h 47m	AN <sub>+</sub> bis M <sub>7</sub>		01:41	09:00	04:31	44m	05:16	40m	05:56	35m	06:32	13h 30m	20:02	35m	20:38	40m	21:18	44m	22:03	10h 27m	6h 25m					Di, 11. Apr
Mi, 12. Apr	MESZ	22:05–03:46*	5h 40m	AN <sub>+</sub> bis M <sub>7</sub>		02:50	09:56	04:29	44m	05:14	40m	05:54	35m	06:30	13h 34m	20:04	35m	20:40	40m	21:20	45m	22:05	10h 23m	6h 20m					Mi, 12. Apr
Do, 13. Apr	MESZ	22:08–04:23*	6h 15m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	03:46	11:09	04:26	45m	05:11	40m	05:52	35m	06:27	13h 37m	20:05	35m	20:41	40m	21:22	45m	22:08	10h 20m	6h 15m					Do, 13. Apr
Fr, 14. Apr	MESZ	22:10–04:20*	6h 10m	AN <sub>+</sub> bis AN <sub>-</sub>		04:26	12:32	04:23	45m	05:09	40m	05:50	35m	06:25	13h 41m	20:07	36m	20:43	40m	21:24	46m	22:10	10h 16m	6h 10m					Fr, 14. Apr
Sa, 15. Apr	MESZ	22:12–04:18*	6h 05m	AN <sub>+</sub> bis AN <sub>-</sub>		04:56	13:59	04:20	46m	05:06	40m	05:47	36m	06:23	13h 44m	20:08	36m	20:45	41m	21:26	46m	22:12	10h 13m	6h 05m					Sa, 15. Apr
So, 16. Apr	MESZ	22:15–04:15*	6h 00m	AN <sub>+</sub> bis AN <sub>-</sub>		05:18	15:25	04:18	46m	05:04	41m	05:45	36m	06:21	13h 48m	20:10	36m	20:46	41m	21:28	46m	22:15	10h 09m	6h 00m					So, 16. Apr
Mo, 17. Apr	MESZ	22:17–04:12*	5h 54m	AN <sub>+</sub> bis AN <sub>-</sub>		05:36	16:49	04:15	46m	05:02	41m	05:43	36m	06:19	13h 52m	20:11	36m	20:48	41m	21:30	47m	22:17	10h 05m	5h 54m					Mo, 17. Apr
Di, 18. Apr	MESZ	22:19–04:09*	5h 49m	AN <sub>+</sub> bis AN <sub>-</sub>		05:51	18:12	04:12	47m	04:59	41m	05:41	36m	06:17	13h 55m	20:13	36m	20:50	41m	21:32	47m	22:19	10h 02m	5h 49m					Di, 18. Apr
Mi, 19. Apr	MESZ	22:22–04:06*	5h 44m	AN <sub>+</sub> bis AN <sub>-</sub>		06:06	19:33	04:09	47m	04:57	41m	05:39	36m	06:15	13h 59m	20:15	36m	20:51	42m	21:34	48m	22:22	9h 58m	5h 44m					Mi, 19. Apr
Do, 20. Apr	MESZ	22:24–04:03*	5h 38m	AN <sub>+</sub> bis AN <sub>-</sub>	☀	06:22	20:55	04:06	48m	04:54	42m	05:37	36m	06:13	14h 02m	20:16	36m	20:53	42m	21:36	48m	22:24	9h 55m	5h 38m					Do, 20. Apr
Fr, 21. Apr	MESZ	22:27–04:00*	5h 33m	AN <sub>+</sub> bis AN <sub>-</sub>		06:40	22:16	04:03	48m	04:52	42m	05:35	36m	06:11	14h 06m	20:18	37m	20:55	42m	21:37	49m	22:27	9h 51m	5h 33m					Fr, 21. Apr
Sa, 22. Apr	MESZ	23:35–03:57*	4h 22m	M <sub>\</sub> bis AN <sub>-</sub>		07:02	23:35	04:00	49m	04:50	42m	05:32	37m	06:10	14h 09m	20:19	37m	20:56	43m	21:39	50m	22:29	9h 48m	5h 27m					Sa, 22. Apr
So, 23. Apr	MESZ	00:47*–03:54*	3h 07m	M <sub>\</sub> bis AN <sub>-</sub>		07:31	—:—	03:57	49m	04:47	43m	05:30	37m	06:08	14h 13m	20:21	37m	20:58	43m	21:41	50m	22:32	9h 44m	5h 22m					So, 23. Apr
Mo, 24. Apr	MESZ	01:50*–03:51*	2h 01m	M <sub>\</sub> bis AN <sub>-</sub>		08:08	00:47	03:54	50m	04:45	43m	05:28	37m	06:06	14h 16m	20:22	37m	21:00	43m	21:43	51m	22:35	9h 41m	5h 16m					Mo, 24. Apr
Di, 25. Apr	MESZ	02:40*–03:48*	1h 08m	M <sub>\</sub> bis AN <sub>-</sub>		08:56	01:50	03:51	51m	04:43	43m	05:26	37m	06:04	14h 20m	20:24	37m	21:02	43m	21:45	51m	22:37	9h 38m	5h 11m					Di, 25. Apr
Mi, 26. Apr	MESZ	03:18*–03:46*	27m	M <sub>\</sub> bis AN <sub>-</sub>		09:55	02:40	03:48	51m	04:40	43m	05:24	37m	06:02	14h 23m	20:25	37m	21:03	44m	21:48	52m	22:40	9h 34m	5h 05m					Mi, 26. Apr
Do, 27. Apr	MESZ	—:—:—:—	–	Mond stört	☾	11:01	03:18	03:46	52m	04:38	44m	05:22	37m	06:00	14h 26m	20:27	38m	21:05	44m	21:50	53m	22:43	9h 31m	4h 59m					Do, 27. Apr
Fr, 28. Apr	MESZ	—:—:—:—	–	Mond stört		12:10	03:46	03:42	53m	04:36	44m	05:20	38m	05:58	14h 30m	20:28	38m	21:07	44m	21:52	53m	22:45	9h 27m	4h 54m					Fr, 28. Apr
Sa, 29. Apr	MESZ	—:—:~:~:~	–	Mond stört		13:21	04:07	03:39	53m	04:33	44m	05:18	38m	05:56	14h 33m	20:30	38m	21:08	45m	21:54	54m	22:48	9h 24m	4h 48m					Sa, 29. Apr
So, 30. Apr	MESZ	—:~:~:~:~	–	Mond stört		14:31	04:24	03:36	54m	04:31	45m	05:16	38m	05:55	14h 36m	20:31	38m	21:10	45m	21:56	55m	22:51	9h 21m	4h 42m					So, 30. Apr
Mo, 1. Mai	MESZ	—:~:~:~:~	–	Mond stört		15:42	04:38	03:33	55m	04:29	45m	05:14	38m	05:53	14h 40m	20:33	38m	21:12	45m	21:58	56m	22:54	9h 18m	4h 36m					Mo, 1. Mai
Di, 2. Mai	MESZ	—:~:~:~:~	–	Mond stört		16:53	04:51	03:30	56m	04:26	45m	05:12	38m	05:51	14h 43m	20:35	39m	21:14	46m	22:00	56m	22:57	9h 14m	4h 30m					Di, 2. Mai
Mi, 3. Mai	MESZ	—:~:~:~:~	–	Mond stört		18:05	05:04	03:27	56m	04:24	46m	05:10	39m	05:49	14h 46m	20:36	39m	21:15	46m	22:02	57m	23:00	9h 11m	4h 24m					Mi, 3. Mai
Do, 4. Mai	MESZ	—:~:~:~:~	–	Mond stört		19:21	05:18	03:24	57m	04:22	46m	05:08	39m	05:48	14h 49m	20:38	39m	21:17	47m	22:04	58m	23:03	9h 08m	4h 18m					Do, 4. Mai
Fr, 5. Mai	MESZ	—:~:~:~:~	–	Mond stört	☉	20:41	05:33	03:21	58m	04:20	46m	05:07	39m	05:46	14h 53m	20:39	39m	21:19	47m	22:06	59m	23:06	9h 05m	4h 12m					Fr, 5. Mai
Sa, 6. Mai	MESZ	—:~:~:~:~	–	Mond stört		22:04	05:53	03:18	59m	04:17	47m	05:05	39m	05:44	14h 56m	20:41	39m	21:20	47m	22:08	1h 00m	23:09	9h 02m	4h 06m					Sa, 6. Mai
So, 7. Mai	MESZ	23:12–23:26	14m	AN <sub>+</sub> bis M <sub>7</sub>		23:26	06:20	03:15	1h 00m	04:15	47m	05:03	39m	05:43	14h 59m	20:42	40m	21:22	48m	22:10	1h 01m	23:12	8h 59m	3h 59m					So, 7. Mai
Mo, 8. Mai	MESZ	23:15–00:42*	1h 26m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	06:57	03:11	1h 01m	04:13	48m	05:01	40m	05:41	15h 02m	20:43	40m	21:24	48m	22:12	1h 02m	23:15	8h 56m	3h 53m					Mo, 8. Mai
Di, 9. Mai	MESZ	23:18–01:43*	2h 24m	AN <sub>+</sub> bis M <sub>7</sub>		00:42	07:49	03:08	1h 02m	04:11	48m	04:59	40m	05:39	15h 05m	20:45	40m	21:25	48m	22:14	1h 03m	23:18	8h 53m	3h 46m					Di, 9. Mai
Mi, 10. Mai	MESZ	23:21–02:28*	3h 06m	AN <sub>+</sub> bis M <sub>7</sub>		01:43	08:58	03:05	1h 03m	04:08	48m	04:57	40m	05:38	15h 08m	20:46	40m	21:27	49m	22:16	1h 04m	23:21	8h 50m	3h 40m					Mi, 10. Mai
Do, 11. Mai	MESZ	23:24–02:58*	3h 33m	AN <sub>+</sub> bis AN <sub>-</sub>		02:28	10:19	03:02	1h 04m	04:06	49m	04:56	40m	05:36	15h 11m	20:48	40m	21:29	49m	22:19	1h 05m	23:24	8h 47m	3h 33m					Do, 11. Mai
Fr, 12. Mai	MESZ	23:28–02:55*	3h 27m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	03:01	11:45	02:58	1h 05m	04:04	49m	04:54	40m	05:35	15h 14m	20:49	41m	21:30	50m	22:21	1h 07m	23:28	8h 44m	3h 27m					Fr, 12. Mai
Sa, 13. Mai	MESZ	23:31–02:52*	3h 20m	AN <sub>+</sub> bis AN <sub>-</sub>		03:24	13:10	02:55	1h 07m	04:02	50m	04:52	41m	05:33	15h 17m	20:51	41m	21:32	50m	22:23	1h 08m	23:31	8h 41m	3h 20m					Sa, 13. Mai
So, 14. Mai	MESZ	23:35–02:48*	3h 13m	AN <sub>+</sub> bis AN <sub>-</sub>		03:43	14:34	02:52	1h 08m	04:00	50m	04:51	41m	05:32	15h 20m	20:52	41m	21:34	51m	22:25	1h 09m	23:35	8h 38m	3h 13m					So, 14. Mai
Mo, 15. Mai	MESZ	23:38–02:45*	3h 06m	AN <sub>+</sub> bis AN <sub>-</sub>		03:58	15:54	02:48	1h 09m	03:58	51m	04:49	41m	05:31	15h 22m	20:54	41m	21:35	51m	22:27	1h 11m	23:38	8h 35m	3h 06m					Mo, 15. Mai
Di, 16. Mai	MESZ	23:42–02:41*	2h 59m	AN <sub>+</sub> bis AN <sub>-</sub>		04:13	17:14	02:45	1h 11m	03:56	51m	04:47	41m	05:29	15h 25m	20:55	42m	21:37	52m	22:29	1h 12m	23:42	8h 33m	2h 59m					Di, 16. Mai
Mi, 17. Mai	MESZ	23:45–02:37*	2h 52m	AN <sub>+</sub> bis AN <sub>-</sub>		04:28	18:34	02:41	1h 12m	03:54	52m	04:46	42m	05:28	15h 28m	20:56	42m	21:39	52m	22:31	1h 14m	23:45	8h 30m	2h 52m					Mi, 17. Mai
Do, 18. Mai	MESZ	23:49–02:34*	2h 44m	AN <sub>+</sub> bis AN <sub>-</sub>		04:44	19:54	02:37	1h 14m	03:52	52m	04:44	42m	05:27	15h 31m	20:58	42m	21:40	52m	22:33	1h 16m	23:49	8h 27m	2h 44m					Do, 18. Mai
Fr, 19. Mai	MESZ	23:53–02:30*	2h 37m	AN <sub>+</sub> bis AN <sub>-</sub>	☀	05:04	21:13	02:34	1h 16m	03:50	52m	04:43	42m	05:25	15h 33m	20:59	42m	21:42	53m	22:35	1h 17m	23:53	8h 25m	2h 37m					Fr, 19. Mai
Sa, 20. Mai	MESZ	23:57–02:26*	2h 29m	AN <sub>+</sub> bis AN <sub>-</sub>		05:30	22:29	02:30	1h 17m	03:48	53m	04:41	42m	05:24	15h 36m	21:00	42m	21:43	53m	22:37	1h 19m	23:57	8h 22m	2h 29m					Sa, 20. Mai
So, 21. Mai	MESZ	00:01*–02:22*	2h 21m	AN <sub>+</sub> bis AN <sub>-</sub>		06:03	23:36	02:26	1h 19m	03:46	53m	04:40	42m	05:23	15h 38m	21:02	43m	21:45	54m	22:39	1h 21m	00:01*	8h 20m	2h 21m					So, 21. Mai
Mo, 22. Mai	MESZ	00:32*–02:18*	1h 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
2023	Zeitzone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
			$\Delta t$		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, 31. Mai	MESZ	—:—:—:—	—	Mond stört		16:58	03:23	01:35	1h 54m	03:30	58m	04:28	44m	05:13	16h 00m	21:13	45m	21:59	58m	22:57	2h 05m	01:03*	7h 58m	20m				Mi, 31. Mai
Do, 1. Jun	MESZ			Astr. MD		18:16	03:37	01:23	2h 05m	03:28	58m	04:27	45m	05:12	16h 02m	21:14	45m	22:00	59m	22:59		—:—	7h 57m		—:—:—:—	—	Mond stört	Do, 1. Jun
Fr, 2. Jun	MESZ			Astr. MD		19:38	03:55	—:—		03:27	59m	04:26	45m	05:12	16h 03m	21:15	45m	22:01	59m	23:01		—:—	7h 55m		—:—:—:—	—	Mond stört	Fr, 2. Jun
Sa, 3. Jun	MESZ			Astr. MD		21:02	04:19	—:—		03:26	59m	04:25	45m	05:11	16h 05m	21:16	45m	22:02	1h 00m	23:02		—:—	7h 54m		—:—:—:—	—	Mond stört	Sa, 3. Jun
So, 4. Jun	MESZ			Astr. MD	○	22:23	04:51	—:—		03:24	1h 00m	04:25	45m	05:10	16h 06m	21:17	45m	22:03	1h 00m	23:04		—:—	7h 52m		—:—:—:—	—	Mond stört	So, 4. Jun
Mo, 5. Jun	MESZ			Astr. MD		23:33	05:38	—:—		03:23	1h 00m	04:24	45m	05:10	16h 08m	21:18	46m	22:04	1h 01m	23:05		—:—	7h 51m		23:05–23:33	27m	ND <sub>+</sub> bis M <sub>7</sub>	Mo, 5. Jun
Di, 6. Jun	MESZ			Astr. MD		—:—	06:43	—:—		03:22	1h 01m	04:23	45m	05:09	16h 09m	21:19	46m	22:05	1h 01m	23:07		—:—	7h 49m		23:07–00:25*	1h 18m	ND <sub>+</sub> bis M <sub>7</sub>	Di, 6. Jun
Mi, 7. Jun	MESZ			Astr. MD		00:25	08:02	—:—		03:21	1h 01m	04:23	46m	05:09	16h 11m	21:20	46m	22:06	1h 01m	23:08		—:—	7h 48m		23:08–01:03*	1h 54m	ND <sub>+</sub> bis M <sub>7</sub>	Mi, 7. Jun
Do, 8. Jun	MESZ			Astr. MD		01:03	09:30	—:—		03:20	1h 01m	04:22	46m	05:08	16h 12m	21:21	46m	22:07	1h 02m	23:09		—:—	7h 47m		23:09–01:29*	2h 20m	ND <sub>+</sub> bis M <sub>7</sub>	Do, 8. Jun
Fr, 9. Jun	MESZ			Astr. MD		01:29	10:57	—:—		03:19	1h 02m	04:22	46m	05:08	16h 13m	21:21	46m	22:08	1h 02m	23:10		—:—	7h 46m		23:10–01:49*	2h 38m	ND <sub>+</sub> bis M <sub>7</sub>	Fr, 9. Jun
Sa, 10. Jun	MESZ			Astr. MD	◐	01:49	12:22	—:—		03:19	1h 02m	04:21	46m	05:08	16h 14m	21:22	46m	22:09	1h 02m	23:11		—:—	7h 45m		23:11–02:06*	2h 54m	ND <sub>+</sub> bis M <sub>7</sub>	Sa, 10. Jun
So, 11. Jun	MESZ			Astr. MD		02:06	13:43	—:—		03:18	1h 02m	04:21	46m	05:07	16h 15m	21:23	46m	22:10	1h 03m	23:13		—:—	7h 44m		23:13–02:21*	3h 07m	ND <sub>+</sub> bis M <sub>7</sub>	So, 11. Jun
Mo, 12. Jun	MESZ			Astr. MD		02:21	15:03	—:—		03:17	1h 02m	04:20	46m	05:07	16h 16m	21:23	46m	22:10	1h 03m	23:14		—:—	7h 43m		23:14–02:35*	3h 21m	ND <sub>+</sub> bis M <sub>7</sub>	Mo, 12. Jun
Di, 13. Jun	MESZ			Astr. MD		02:35	16:21	—:—		03:17	1h 03m	04:20	46m	05:07	16h 17m	21:24	46m	22:11	1h 03m	23:14		—:—	7h 42m		23:14–02:51*	3h 36m	ND <sub>+</sub> bis M <sub>7</sub>	Di, 13. Jun
Mi, 14. Jun	MESZ			Astr. MD		02:51	17:39	—:—		03:16	1h 03m	04:20	46m	05:07	16h 17m	21:25	47m	22:12	1h 03m	23:15		—:—	7h 42m		23:15–03:09*	3h 53m	ND <sub>+</sub> bis M <sub>7</sub>	Mi, 14. Jun
Do, 15. Jun	MESZ			Astr. MD		03:09	18:57	—:—		03:16	1h 03m	04:20	47m	05:07	16h 18m	21:25	47m	22:12	1h 03m	23:16		—:—	7h 41m		23:16–03:16*	3h 59m	ND <sub>+</sub> bis ND <sub>-</sub>	Do, 15. Jun
Fr, 16. Jun	MESZ			Astr. MD		03:32	20:13	—:—		03:16	1h 03m	04:19	47m	05:07	16h 18m	21:26	47m	22:13	1h 04m	23:17		—:—	7h 40m		23:17–03:15*	3h 58m	ND <sub>+</sub> bis ND <sub>-</sub>	Fr, 16. Jun
Sa, 17. Jun	MESZ			Astr. MD		04:02	21:24	—:—		03:15	1h 04m	04:19	47m	05:07	16h 19m	21:26	47m	22:13	1h 04m	23:17		—:—	7h 40m		23:17–03:15*	3h 57m	ND <sub>+</sub> bis ND <sub>-</sub>	Sa, 17. Jun
So, 18. Jun	MESZ			Astr. MD	◑	04:41	22:24	—:—		03:15	1h 04m	04:19	47m	05:07	16h 19m	21:26	47m	22:14	1h 04m	23:18		—:—	7h 40m		23:18–03:15*	3h 57m	ND <sub>+</sub> bis ND <sub>-</sub>	So, 18. Jun
Mo, 19. Jun	MESZ			Astr. MD		05:32	23:11	—:—		03:15	1h 04m	04:19	47m	05:07	16h 20m	21:27	47m	22:14	1h 04m	23:18		—:—	7h 40m		23:18–03:15*	3h 57m	ND <sub>+</sub> bis ND <sub>-</sub>	Mo, 19. Jun
Di, 20. Jun	MESZ			Astr. MD		06:33	23:47	—:—		03:15	1h 04m	04:20	47m	05:07	16h 20m	21:27	47m	22:14	1h 04m	23:19		—:—	7h 40m		23:47–03:15*	3h 28m	M <sub>7</sub> bis ND <sub>-</sub>	Di, 20. Jun
Mi, 21. Jun	MESZ			Astr. MD		07:40	—:—	—:—		03:15	1h 04m	04:20	47m	05:07	16h 20m	21:27	47m	22:14	1h 04m	23:19		—:—	7h 40m		00:13*–03:16*	3h 02m	M <sub>7</sub> bis ND <sub>-</sub>	Mi, 21. Jun
Do, 22. Jun	MESZ			Astr. MD		08:51	00:13	—:—		03:16	1h 04m	04:20	47m	05:07	16h 20m	21:27	47m	22:15	1h 04m	23:19		—:—	7h 40m		00:33*–03:16*	2h 42m	M <sub>7</sub> bis ND <sub>-</sub>	Do, 22. Jun
Fr, 23. Jun	MESZ			Astr. MD		10:01	00:33	—:—		03:16	1h 04m	04:20	47m	05:07	16h 20m	21:27	47m	22:15	1h 04m	23:19		—:—	7h 40m		00:50*–03:16*	2h 26m	M <sub>7</sub> bis ND <sub>-</sub>	Fr, 23. Jun
Sa, 24. Jun	MESZ			Astr. MD		11:10	00:50	—:—		03:16	1h 04m	04:20	47m	05:08	16h 19m	21:28	47m	22:15	1h 04m	23:19		—:—	7h 40m		01:03*–03:17*	2h 13m	M <sub>7</sub> bis ND <sub>-</sub>	Sa, 24. Jun
So, 25. Jun	MESZ			Astr. MD		12:18	01:03	—:—		03:17	1h 04m	04:21	47m	05:08	16h 19m	21:28	47m	22:15	1h 04m	23:19		—:—	7h 40m		01:16*–03:17*	2h 01m	M <sub>7</sub> bis ND <sub>-</sub>	So, 25. Jun
Mo, 26. Jun	MESZ			Astr. MD	◒	13:27	01:16	—:—		03:17	1h 04m	04:21	47m	05:08	16h 19m	21:28	47m	22:15	1h 03m	23:19		—:—	7h 41m		01:28*–03:18*	1h 49m	M <sub>7</sub> bis ND <sub>-</sub>	Mo, 26. Jun
Di, 27. Jun	MESZ			Astr. MD		14:38	01:28	—:—		03:18	1h 03m	04:22	47m	05:09	16h 18m	21:28	47m	22:15	1h 03m	23:18		—:—	7h 41m		01:42*–03:19*	1h 36m	M <sub>7</sub> bis ND <sub>-</sub>	Di, 27. Jun
Mi, 28. Jun	MESZ			Astr. MD		15:52	01:42	—:—		03:19	1h 03m	04:22	47m	05:09	16h 18m	21:27	46m	22:14	1h 03m	23:18		—:—	7h 42m		01:57*–03:19*	1h 21m	M <sub>7</sub> bis ND <sub>-</sub>	Mi, 28. Jun
Do, 29. Jun	MESZ			Astr. MD		17:11	01:57	—:—		03:19	1h 03m	04:23	46m	05:10	16h 17m	21:27	46m	22:14	1h 03m	23:18		—:—	7h 43m		02:18*–03:20*	1h 02m	M <sub>7</sub> bis ND <sub>-</sub>	Do, 29. Jun
Fr, 30. Jun	MESZ			Astr. MD		18:34	02:18	—:—		03:20	1h 03m	04:24	46m	05:10	16h 16m	21:27	46m	22:14	1h 03m	23:17		—:—	7h 43m		02:45*–03:21*	36m	M <sub>7</sub> bis ND <sub>-</sub>	Fr, 30. Jun
Sa, 1. Jul	MESZ			Astr. MD		19:57	02:45	—:—		03:21	1h 03m	04:24	46m	05:11	16h 15m	21:27	46m	22:14	1h 02m	23:16		—:—	7h 44m		—:—:—:—	—	Mond stört	Sa, 1. Jul
So, 2. Jul	MESZ			Astr. MD		21:13	03:25	—:—		03:22	1h 02m	04:25	46m	05:12	16h 14m	21:27	46m	22:13	1h 02m	23:16		—:—	7h 45m		—:—:—:—	—	Mond stört	So, 2. Jul
Mo, 3. Jul	MESZ			Astr. MD	○	22:14	04:22	—:—		03:23	1h 02m	04:26	46m	05:12	16h 13m	21:26	46m	22:13	1h 02m	23:15		—:—	7h 46m		—:—:—:—	—	Mond stört	Mo, 3. Jul
Di, 4. Jul	MESZ			Astr. MD		22:59	05:37	—:—		03:24	1h 02m	04:27	46m	05:13	16h 12m	21:26	46m	22:12	1h 01m	23:14		—:—	7h 48m		—:—:—:—	—	Mond stört	Di, 4. Jul
Mi, 5. Jul	MESZ			Astr. MD		23:31	07:05	—:—		03:26	1h 01m	04:28	46m	05:14	16h 11m	21:25	46m	22:12	1h 01m	23:13		—:—	7h 49m		23:13–23:31	17m	ND <sub>+</sub> bis M <sub>7</sub>	Mi, 5. Jul
Do, 6. Jul	MESZ			Astr. MD		23:54	08:36	—:—		03:27	1h 01m	04:28	46m	05:15	16h 10m	21:25	46m	22:11	1h 01m	23:12		—:—	7h 50m		23:12–23:54	41m	ND <sub>+</sub> bis M <sub>7</sub>	Do, 6. Jul
Fr, 7. Jul	MESZ			Astr. MD		—:—	10:05	—:—		03:28	1h 01m	04:29	46m	05:16	16h 08m	21:24	45m	22:10	1h 00m	23:11		—:—	7h 52m		23:11–00:12*	1h 00m	ND <sub>+</sub> bis M <sub>7</sub>	Fr, 7. Jul
Sa, 8. Jul	MESZ			Astr. MD		00:12	11:30	—:—		03:30	1h 00m	04:30	45m	05:16	16h 07m	21:24	45m	22:10	1h 00m	23:10		—:—	7h 53m		23:10–00:27*	1h 17m	ND <sub>+</sub> bis M <sub>7</sub>	Sa, 8. Jul
So, 9. Jul	MESZ			Astr. MD		00:27	12:51	—:—		03:31	1h 00m	04:32	45m	05:17	16h 05m	21:23	45m	22:09	59m	23:09		—:—	7h 55m		23:09–00:42*	1h 33m	ND <sub>+</sub> bis M <sub>7</sub>	So, 9. Jul
Mo, 10. Jul	MESZ			Astr. MD	◑	00:42	14:11	—:—		03:33	59m	04:33	45m	05:18	16h 04m	21:23	45m	22:08	59m	23:07		—:—	7h 56m		23:07–00:57*	1h 49m	ND <sub>+</sub> bis M <sub>7</sub>	Mo, 10. Jul
Di, 11. Jul	MESZ			Astr. MD		00:57	15:29	—:—		03:34	59m	04:34	45m	05:19	16h 02m	21:22	45m	22:07	59m	23:06		—:—	7h 58m		23:06–01:15*	2h 08m	ND <sub>+</sub> bis M <sub>7</sub>	Di, 11. Jul
Mi, 12. Jul	MESZ	01:02*–01:36*	33m	AN <sub>+</sub> bis M <sub>7</sub>		01:15	16:47	—:—		03:36	59m	04:35	45m	05:20	16h 00m	21:21	45m	22:06	58m	23:05	1h 57m	01:02*	8h 00m	38m				Mi, 12. Jul
Do, 13. Jul	MESZ	00:53																										



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
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
			$\Delta t$		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, 20. Jul	MESZ	00:17* - 02:27*	2h 09m	AN <sub>+</sub> bis AN <sub>-</sub>		07:49	22:56	02:22	1h 27m	03:50	55m	04:45	43m	05:29	15h 44m	21:14	43m	21:57	54m	22:52	1h 25m	00:17*	8h 16m	2h 09m				Do, 20. Jul
Fr, 21. Jul	MESZ	00:13* - 02:31*	2h 17m	AN <sub>+</sub> bis AN <sub>-</sub>		08:59	23:10	02:27	1h 25m	03:52	55m	04:47	43m	05:30	15h 42m	21:12	43m	21:56	54m	22:50	1h 22m	00:13*	8h 19m	2h 17m				Fr, 21. Jul
Sa, 22. Jul	MESZ	00:09* - 02:35*	2h 25m	AN <sub>+</sub> bis AN <sub>-</sub>		10:07	23:22	02:31	1h 22m	03:54	54m	04:48	43m	05:32	15h 39m	21:11	42m	21:54	54m	22:48	1h 20m	00:09*	8h 21m	2h 25m				Sa, 22. Jul
So, 23. Jul	MESZ	00:05* - 02:39*	2h 33m	AN <sub>+</sub> bis AN <sub>-</sub>		11:15	23:34	02:35	1h 20m	03:56	54m	04:50	42m	05:33	15h 37m	21:10	42m	21:53	53m	22:46	1h 18m	00:05*	8h 24m	2h 33m				So, 23. Jul
Mo, 24. Jul	MESZ	00:01* - 02:43*	2h 41m	AN <sub>+</sub> bis AN <sub>-</sub>		12:24	23:47	02:39	1h 18m	03:58	53m	04:51	42m	05:34	15h 34m	21:09	42m	21:51	53m	22:44	1h 16m	00:01*	8h 26m	2h 41m				Mo, 24. Jul
Di, 25. Jul	MESZ	00:01* - 02:46*	2h 45m	M <sub>\</sub> bis AN <sub>-</sub>		13:35	—:—	02:43	1h 16m	04:00	53m	04:53	42m	05:35	15h 32m	21:08	42m	21:50	52m	22:43	1h 15m	23:58	8h 29m	2h 48m				Di, 25. Jul
Mi, 26. Jul	MESZ	00:19* - 02:50*	2h 31m	M <sub>\</sub> bis AN <sub>-</sub>	☾	14:50	00:01	02:46	1h 15m	04:02	52m	04:54	42m	05:37	15h 29m	21:06	42m	21:48	52m	22:41	1h 13m	23:54	8h 31m	2h 55m				Mi, 26. Jul
Do, 27. Jul	MESZ	00:42* - 02:54*	2h 11m	M <sub>\</sub> bis AN <sub>-</sub>		16:09	00:19	02:50	1h 13m	04:04	52m	04:56	42m	05:38	15h 26m	21:05	41m	21:47	51m	22:39	1h 12m	23:51	8h 34m	3h 03m				Do, 27. Jul
Fr, 28. Jul	MESZ	01:14* - 02:57*	1h 42m	M <sub>\</sub> bis AN <sub>-</sub>		17:30	00:42	02:54	1h 12m	04:06	51m	04:57	41m	05:39	15h 24m	21:03	41m	21:45	51m	22:36	1h 10m	23:47	8h 37m	3h 10m				Fr, 28. Jul
Sa, 29. Jul	MESZ	02:02* - 03:00*	58m	M <sub>\</sub> bis AN <sub>-</sub>		18:49	01:14	02:57	1h 10m	04:08	51m	04:59	41m	05:41	15h 21m	21:02	41m	21:44	50m	22:34	1h 09m	23:44	8h 39m	3h 16m				Sa, 29. Jul
So, 30. Jul	MESZ	—:—:—:—	—	Mond stört		19:57	02:02	03:00	1h 09m	04:10	50m	05:01	41m	05:42	15h 18m	21:01	41m	21:42	50m	22:32	1h 07m	23:40	8h 42m	3h 23m				So, 30. Jul
Mo, 31. Jul	MESZ	—:—:—:—	—	Mond stört		20:50	03:08	03:04	1h 07m	04:12	50m	05:02	41m	05:43	15h 15m	20:59	41m	21:40	50m	22:30	1h 06m	23:37	8h 45m	3h 30m				Mo, 31. Jul
Di, 1. Aug	MESZ	—:—:—:—	—	Mond stört	☾	21:28	04:31	03:07	1h 06m	04:14	50m	05:04	41m	05:45	15h 12m	20:58	40m	21:38	49m	22:28	1h 05m	23:33	8h 48m	3h 36m				Di, 1. Aug
Mi, 2. Aug	MESZ	—:—:~:~	—	Mond stört		21:55	06:03	03:10	1h 05m	04:16	49m	05:05	40m	05:46	15h 09m	20:56	40m	21:37	49m	22:26	1h 04m	23:30	8h 51m	3h 43m				Mi, 2. Aug
Do, 3. Aug	MESZ	—:~:~:~	—	Mond stört		22:15	07:36	03:14	1h 04m	04:18	49m	05:07	40m	05:48	15h 07m	20:55	40m	21:35	48m	22:24	1h 03m	23:27	8h 54m	3h 49m				Do, 3. Aug
Fr, 4. Aug	MESZ	—:~:~:~	—	Mond stört		22:32	09:06	03:17	1h 03m	04:20	48m	05:09	40m	05:49	15h 04m	20:53	40m	21:33	48m	22:22	1h 02m	23:24	8h 57m	3h 56m				Fr, 4. Aug
Sa, 5. Aug	MESZ	—:~:~:~	—	Mond stört		22:47	10:32	03:20	1h 02m	04:22	48m	05:10	40m	05:50	15h 01m	20:51	39m	21:31	47m	22:19	1h 01m	23:20	9h 00m	4h 02m				Sa, 5. Aug
So, 6. Aug	MESZ	—:~:~:~	—	Mond stört		23:03	11:55	03:23	1h 01m	04:24	48m	05:12	39m	05:52	14h 57m	20:50	39m	21:29	47m	22:17	1h 00m	23:17	9h 03m	4h 08m				So, 6. Aug
Mo, 7. Aug	MESZ	23:14 - 23:19	5m	AN <sub>+</sub> bis M <sub>7</sub>		23:19	13:16	03:26	1h 00m	04:26	47m	05:13	39m	05:53	14h 54m	20:48	39m	21:28	47m	22:15	59m	23:14	9h 06m	4h 14m				Mo, 7. Aug
Di, 8. Aug	MESZ	23:11 - 23:39	28m	AN <sub>+</sub> bis M <sub>7</sub>	☾	23:39	14:36	03:29	59m	04:28	47m	05:15	39m	05:55	14h 51m	20:46	39m	21:26	46m	22:13	58m	23:11	9h 09m	4h 20m				Di, 8. Aug
Mi, 9. Aug	MESZ	23:08 - 00:05*	57m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	15:54	03:32	58m	04:30	46m	05:17	39m	05:56	14h 48m	20:45	39m	21:24	46m	22:10	57m	23:08	9h 12m	4h 26m				Mi, 9. Aug
Do, 10. Aug	MESZ	23:05 - 00:38*	1h 33m	AN <sub>+</sub> bis M <sub>7</sub>		00:05	17:08	03:34	57m	04:32	46m	05:18	39m	05:58	14h 45m	20:43	38m	21:22	46m	22:08	56m	23:05	9h 16m	4h 32m				Do, 10. Aug
Fr, 11. Aug	MESZ	23:01 - 01:21*	2h 20m	AN <sub>+</sub> bis M <sub>7</sub>		00:38	18:13	03:37	56m	04:34	46m	05:20	38m	05:59	14h 42m	20:41	38m	21:20	45m	22:06	55m	23:01	9h 19m	4h 38m				Fr, 11. Aug
Sa, 12. Aug	MESZ	22:58 - 02:16*	3h 17m	AN <sub>+</sub> bis M <sub>7</sub>		01:21	19:08	03:40	55m	04:36	45m	05:22	38m	06:00	14h 38m	20:39	38m	21:18	45m	22:03	54m	22:58	9h 22m	4h 44m				Sa, 12. Aug
So, 13. Aug	MESZ	22:55 - 03:20*	4h 24m	AN <sub>+</sub> bis M <sub>7</sub>		02:16	19:50	03:43	55m	04:38	45m	05:23	38m	06:02	14h 35m	20:38	38m	21:16	45m	22:01	54m	22:55	9h 25m	4h 50m				So, 13. Aug
Mo, 14. Aug	MESZ	22:52 - 03:48*	4h 55m	AN <sub>+</sub> bis AN <sub>-</sub>		03:20	20:21	03:46	54m	04:40	45m	05:25	38m	06:03	14h 32m	20:36	38m	21:14	44m	21:59	53m	22:52	9h 29m	4h 55m				Mo, 14. Aug
Di, 15. Aug	MESZ	22:49 - 03:51*	5h 01m	AN <sub>+</sub> bis AN <sub>-</sub>		04:29	20:44	03:48	53m	04:42	44m	05:27	38m	06:05	14h 29m	20:34	38m	21:12	44m	21:56	52m	22:49	9h 32m	5h 01m				Di, 15. Aug
Mi, 16. Aug	MESZ	22:46 - 03:53*	5h 07m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	05:39	21:02	03:51	52m	04:44	44m	05:28	38m	06:06	14h 25m	20:32	37m	21:10	44m	21:54	52m	22:46	9h 35m	5h 07m				Mi, 16. Aug
Do, 17. Aug	MESZ	22:43 - 03:56*	5h 12m	AN <sub>+</sub> bis AN <sub>-</sub>		06:49	21:17	03:53	52m	04:46	44m	05:30	37m	06:08	14h 22m	20:30	37m	21:08	43m	21:52	51m	22:43	9h 39m	5h 12m				Do, 17. Aug
Fr, 18. Aug	MESZ	22:40 - 03:59*	5h 18m	AN <sub>+</sub> bis AN <sub>-</sub>		07:58	21:30	03:56	51m	04:48	43m	05:31	37m	06:09	14h 18m	20:28	37m	21:06	43m	21:49	50m	22:40	9h 42m	5h 18m				Fr, 18. Aug
Sa, 19. Aug	MESZ	22:37 - 04:01*	5h 23m	AN <sub>+</sub> bis AN <sub>-</sub>		09:06	21:42	03:59	51m	04:50	43m	05:33	37m	06:11	14h 15m	20:26	37m	21:04	43m	21:47	50m	22:37	9h 45m	5h 23m				Sa, 19. Aug
So, 20. Aug	MESZ	22:34 - 04:04*	5h 29m	AN <sub>+</sub> bis AN <sub>-</sub>		10:14	21:54	04:01	50m	04:52	43m	05:35	37m	06:12	14h 12m	20:24	37m	21:02	42m	21:44	49m	22:34	9h 49m	5h 29m				So, 20. Aug
Mo, 21. Aug	MESZ	22:31 - 04:06*	5h 34m	AN <sub>+</sub> bis AN <sub>-</sub>		11:24	22:07	04:04	49m	04:53	42m	05:36	37m	06:14	14h 08m	20:22	37m	20:59	42m	21:42	49m	22:31	9h 52m	5h 34m				Mo, 21. Aug
Di, 22. Aug	MESZ	22:28 - 04:08*	5h 40m	AN <sub>+</sub> bis AN <sub>-</sub>		12:36	22:23	04:06	49m	04:55	42m	05:38	37m	06:15	14h 05m	20:20	36m	20:57	42m	21:40	48m	22:28	9h 56m	5h 40m				Di, 22. Aug
Mi, 23. Aug	MESZ	22:43 - 04:11*	5h 28m	M <sub>\</sub> bis AN <sub>-</sub>		13:52	22:43	04:08	48m	04:57	42m	05:40	36m	06:17	14h 01m	20:18	36m	20:55	42m	21:37	48m	22:26	9h 59m	5h 45m				Mi, 23. Aug
Do, 24. Aug	MESZ	23:10 - 04:13*	5h 03m	M <sub>\</sub> bis AN <sub>-</sub>	☾	15:11	23:10	04:11	48m	04:59	42m	05:41	36m	06:18	13h 58m	20:16	36m	20:53	41m	21:35	47m	22:23	10h 03m	5h 50m				Do, 24. Aug
Fr, 25. Aug	MESZ	23:49 - 04:16*	4h 26m	M <sub>\</sub> bis AN <sub>-</sub>		16:29	23:49	04:13	47m	05:01	41m	05:43	36m	06:20	13h 54m	20:14	36m	20:51	41m	21:32	47m	22:20	10h 06m	5h 55m				Fr, 25. Aug
Sa, 26. Aug	MESZ	00:44* - 04:18*	3h 33m	M <sub>\</sub> bis AN <sub>-</sub>		17:40	—:—	04:16	47m	05:03	41m	05:45	36m	06:21	13h 51m	20:12	36m	20:49	41m	21:30	46m	22:17	10h 10m	6h 00m				Sa, 26. Aug
So, 27. Aug	MESZ	01:58* - 04:20*	2h 21m	M <sub>\</sub> bis AN <sub>-</sub>		18:39	00:44	04:18	46m	05:05	41m	05:46	36m	06:22	13h 47m	20:10	36m	20:46	41m	21:28	46m	22:14	10h 13m	6h 06m				So, 27. Aug
Mo, 28. Aug	MESZ	03:26* - 04:22*	56m	M <sub>\</sub> bis AN <sub>-</sub>		19:22	01:58	04:20	46m	05:07	41m	05:48	36m	06:24	13h 44m	20:08	36m	20:44	40m	21:25	46m	22:11	10h 17m	6h 11m				Mo, 28. Aug
Di, 29. Aug	MESZ	—:~:~:~	—	Mond stört		19:53	03:26	04:22	46m	05:08	40m	05:49	36m	06:25	13h 40m	20:06	35m	20:42	40m	21:23	45m	22:08	10h 20m	6h 16m				Di, 29. Aug
Mi, 30. Aug	MESZ	—:~:~:~	—	Mond stört		20:16	04:59	04:25	45m	05:10	40m	05:51	35m	06:27	13h 37m	20:04	35m	20:40										

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
2023	Zeitzone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
			$\Delta t$		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, 8. Sep	MESZ	21:41 – 00:08*	2h 27m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	17:05	04:43	42m	05:26	39m	06:05	35m	06:40	13h 04m	19:45	34m	20:20	38m	20:59	42m	21:41	10h 56m	7h 04m				Fr, 8. Sep
Sa, 9. Sep	MESZ	21:38 – 01:10*	3h 31m	AN <sub>+</sub> bis M <sub>7</sub>		00:08	17:51	04:45	42m	05:28	38m	06:07	34m	06:42	13h 01m	19:43	34m	20:18	38m	20:56	41m	21:38	11h 00m	7h 09m				Sa, 9. Sep
So, 10. Sep	MESZ	21:36 – 02:18*	4h 42m	AN <sub>+</sub> bis M <sub>7</sub>		01:10	18:25	04:47	42m	05:29	38m	06:08	34m	06:43	12h 57m	19:41	34m	20:15	38m	20:54	41m	21:36	11h 03m	7h 13m				So, 10. Sep
Mo, 11. Sep	MESZ	21:33 – 03:28*	5h 55m	AN <sub>+</sub> bis M <sub>7</sub>		02:18	18:51	04:49	41m	05:31	38m	06:10	34m	06:44	12h 54m	19:39	34m	20:13	38m	20:51	41m	21:33	11h 07m	7h 18m				Mo, 11. Sep
Di, 12. Sep	MESZ	21:30 – 04:39*	7h 08m	AN <sub>+</sub> bis M <sub>7</sub>		03:28	19:10	04:51	41m	05:33	38m	06:11	34m	06:46	12h 50m	19:36	34m	20:11	38m	20:49	41m	21:30	11h 11m	7h 22m				Di, 12. Sep
Mi, 13. Sep	MESZ	21:28 – 04:55*	7h 27m	AN <sub>+</sub> bis AN <sub>-</sub>		04:39	19:25	04:53	41m	05:35	38m	06:13	34m	06:47	12h 46m	19:34	34m	20:09	38m	20:47	41m	21:28	11h 14m	7h 27m				Mi, 13. Sep
Do, 14. Sep	MESZ	21:25 – 04:57*	7h 31m	AN <sub>+</sub> bis AN <sub>-</sub>		05:48	19:38	04:55	41m	05:36	38m	06:14	34m	06:49	12h 43m	19:32	34m	20:06	37m	20:44	40m	21:25	11h 18m	7h 31m				Do, 14. Sep
Fr, 15. Sep	MESZ	21:23 – 04:59*	7h 36m	AN <sub>+</sub> bis AN <sub>-</sub>	●	06:57	19:50	04:57	40m	05:38	38m	06:16	34m	06:50	12h 39m	19:30	34m	20:04	37m	20:42	40m	21:23	11h 22m	7h 36m				Fr, 15. Sep
Sa, 16. Sep	MESZ	21:20 – 05:01*	7h 40m	AN <sub>+</sub> bis AN <sub>-</sub>		08:06	20:02	04:59	40m	05:40	37m	06:17	34m	06:52	12h 35m	19:28	34m	20:02	37m	20:40	40m	21:20	11h 25m	7h 40m				Sa, 16. Sep
So, 17. Sep	MESZ	21:17 – 05:03*	7h 45m	AN <sub>+</sub> bis AN <sub>-</sub>		09:15	20:15	05:01	40m	05:41	37m	06:19	34m	06:53	12h 32m	19:25	34m	20:00	37m	20:37	40m	21:17	11h 29m	7h 45m				So, 17. Sep
Mo, 18. Sep	MESZ	21:15 – 05:04*	7h 49m	AN <sub>+</sub> bis AN <sub>-</sub>		10:27	20:29	05:03	40m	05:43	37m	06:20	34m	06:55	12h 28m	19:23	34m	19:57	37m	20:35	39m	21:15	11h 33m	7h 49m				Mo, 18. Sep
Di, 19. Sep	MESZ	21:12 – 05:06*	7h 53m	AN <sub>+</sub> bis AN <sub>-</sub>		11:41	20:47	05:04	40m	05:44	37m	06:22	34m	06:56	12h 24m	19:21	34m	19:55	37m	20:33	39m	21:12	11h 36m	7h 53m				Di, 19. Sep
Mi, 20. Sep	MESZ	21:11 – 05:08*	7h 56m	M <sub>\</sub> bis AN <sub>-</sub>		12:59	21:11	05:06	39m	05:46	37m	06:24	34m	06:58	12h 21m	19:19	34m	19:53	37m	20:30	39m	21:10	11h 40m	7h 58m				Mi, 20. Sep
Do, 21. Sep	MESZ	21:45 – 05:10*	7h 24m	M <sub>\</sub> bis AN <sub>-</sub>		14:16	21:45	05:08	39m	05:48	37m	06:25	34m	06:59	12h 17m	19:17	34m	19:51	37m	20:28	39m	21:07	11h 44m	8h 02m				Do, 21. Sep
Fr, 22. Sep	MESZ	22:32 – 05:12*	6h 39m	M <sub>\</sub> bis AN <sub>-</sub>	☾	15:29	22:32	05:10	39m	05:49	37m	06:27	34m	07:01	12h 13m	19:15	34m	19:49	37m	20:26	39m	21:05	11h 47m	8h 06m				Fr, 22. Sep
Sa, 23. Sep	MESZ	23:37 – 05:13*	5h 36m	M <sub>\</sub> bis AN <sub>-</sub>		16:31	23:37	05:12	39m	05:51	37m	06:28	34m	07:02	12h 10m	19:12	34m	19:46	37m	20:23	39m	21:03	11h 51m	8h 10m				Sa, 23. Sep
So, 24. Sep	MESZ	00:57* – 05:15*	4h 18m	M <sub>\</sub> bis AN <sub>-</sub>		17:18	—:—	05:13	39m	05:52	37m	06:30	34m	07:04	12h 06m	19:10	34m	19:44	36m	20:21	38m	21:00	11h 55m	8h 14m				So, 24. Sep
Mo, 25. Sep	MESZ	02:25* – 05:17*	2h 51m	M <sub>\</sub> bis AN <sub>-</sub>		17:53	00:57	05:15	39m	05:54	37m	06:31	34m	07:05	12h 02m	19:08	33m	19:42	36m	20:19	38m	20:58	11h 58m	8h 19m				Mo, 25. Sep
Di, 26. Sep	MESZ	03:56* – 05:18*	1h 21m	M <sub>\</sub> bis AN <sub>-</sub>		18:18	02:25	05:17	38m	05:56	36m	06:33	34m	07:07	11h 59m	19:06	33m	19:40	36m	20:17	38m	20:55	12h 02m	8h 23m				Di, 26. Sep
Mi, 27. Sep	MESZ	—:—:—:—	–	Mond stört		18:38	03:56	05:18	38m	05:57	36m	06:34	34m	07:08	11h 55m	19:04	33m	19:38	36m	20:14	38m	20:53	12h 06m	8h 27m				Mi, 27. Sep
Do, 28. Sep	MESZ	—:—:—:—	–	Mond stört		18:54	05:26	05:20	38m	05:59	36m	06:36	34m	07:10	11h 51m	19:01	33m	19:35	36m	20:12	38m	20:51	12h 09m	8h 31m				Do, 28. Sep
Fr, 29. Sep	MESZ	—:—:—:—	–	Mond stört	☾	19:10	06:54	05:22	38m	06:00	36m	06:37	34m	07:11	11h 48m	18:59	33m	19:33	36m	20:10	38m	20:48	12h 13m	8h 35m				Fr, 29. Sep
Sa, 30. Sep	MESZ	—:—:~:~:~	–	Mond stört		19:26	08:21	05:24	38m	06:02	36m	06:39	34m	07:13	11h 44m	18:57	33m	19:31	36m	20:08	38m	20:46	12h 17m	8h 39m				Sa, 30. Sep
So, 1. Okt	MESZ	—:~:~:~:~	–	Mond stört		19:43	09:47	05:25	38m	06:03	36m	06:40	34m	07:14	11h 40m	18:55	33m	19:29	36m	20:05	38m	20:44	12h 20m	8h 43m				So, 1. Okt
Mo, 2. Okt	MESZ	—:~:~:~:~	–	Mond stört		20:05	11:12	05:27	38m	06:05	36m	06:42	34m	07:16	11h 37m	18:53	33m	19:27	36m	20:03	38m	20:41	12h 24m	8h 47m				Mo, 2. Okt
Di, 3. Okt	MESZ	—:~:~:~:~	–	Mond stört		20:33	12:35	05:28	38m	06:07	36m	06:43	34m	07:17	11h 33m	18:51	33m	19:25	36m	20:01	37m	20:39	12h 28m	8h 51m				Di, 3. Okt
Mi, 4. Okt	MESZ	20:37 – 21:10	33m	AN <sub>+</sub> bis M <sub>7</sub>		21:10	13:52	05:30	37m	06:08	36m	06:45	34m	07:19	11h 29m	18:49	33m	19:22	36m	19:59	37m	20:37	12h 31m	8h 54m				Mi, 4. Okt
Do, 5. Okt	MESZ	20:35 – 21:59	1h 24m	AN <sub>+</sub> bis M <sub>7</sub>		21:59	14:57	05:32	37m	06:10	36m	06:46	34m	07:20	11h 26m	18:46	34m	19:20	36m	19:57	37m	20:35	12h 35m	8h 58m				Do, 5. Okt
Fr, 6. Okt	MESZ	20:32 – 22:58	2h 25m	AN <sub>+</sub> bis M <sub>7</sub>	☾	22:58	15:49	05:33	37m	06:11	36m	06:48	34m	07:22	11h 22m	18:44	34m	19:18	36m	19:55	37m	20:32	12h 39m	9h 02m				Fr, 6. Okt
Sa, 7. Okt	MESZ	20:30 – 00:05*	3h 34m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	16:27	05:35	37m	06:13	36m	06:49	34m	07:23	11h 18m	18:42	34m	19:16	36m	19:53	37m	20:30	12h 42m	9h 06m				Sa, 7. Okt
So, 8. Okt	MESZ	20:28 – 01:15*	4h 47m	AN <sub>+</sub> bis M <sub>7</sub>		00:05	16:56	05:37	37m	06:14	36m	06:51	34m	07:25	11h 15m	18:40	34m	19:14	36m	19:51	37m	20:28	12h 46m	9h 10m				So, 8. Okt
Mo, 9. Okt	MESZ	20:26 – 02:26*	6h 00m	AN <sub>+</sub> bis M <sub>7</sub>		01:15	17:17	05:38	37m	06:16	36m	06:52	34m	07:26	11h 11m	18:38	34m	19:12	36m	19:48	37m	20:26	12h 50m	9h 13m				Mo, 9. Okt
Di, 10. Okt	MESZ	20:24 – 03:36*	7h 12m	AN <sub>+</sub> bis M <sub>7</sub>		02:26	17:33	05:40	37m	06:17	36m	06:54	34m	07:28	11h 07m	18:36	34m	19:10	36m	19:46	37m	20:24	12h 53m	9h 17m				Di, 10. Okt
Mi, 11. Okt	MESZ	20:22 – 04:45*	8h 23m	AN <sub>+</sub> bis M <sub>7</sub>		03:36	17:47	05:41	37m	06:19	36m	06:55	34m	07:30	11h 04m	18:34	34m	19:08	36m	19:44	37m	20:22	12h 57m	9h 21m				Mi, 11. Okt
Do, 12. Okt	MESZ	20:20 – 05:44*	9h 24m	AN <sub>+</sub> bis AN <sub>-</sub>		04:45	17:59	05:43	37m	06:20	36m	06:57	34m	07:31	11h 00m	18:32	34m	19:06	36m	19:42	37m	20:20	13h 00m	9h 24m				Do, 12. Okt
Fr, 13. Okt	MESZ	20:18 – 05:46*	9h 28m	AN <sub>+</sub> bis AN <sub>-</sub>		05:54	18:11	05:44	37m	06:22	36m	06:58	34m	07:33	10h 57m	18:30	34m	19:04	36m	19:40	37m	20:18	13h 04m	9h 28m				Fr, 13. Okt
Sa, 14. Okt	MESZ	20:16 – 05:48*	9h 31m	AN <sub>+</sub> bis AN <sub>-</sub>	●	07:04	18:23	05:46	37m	06:23	36m	07:00	34m	07:34	10h 53m	18:28	34m	19:02	36m	19:38	37m	20:16	13h 08m	9h 31m				Sa, 14. Okt
So, 15. Okt	MESZ	20:14 – 05:49*	9h 35m	AN <sub>+</sub> bis AN <sub>-</sub>		08:15	18:37	05:48	37m	06:25	36m	07:01	34m	07:36	10h 49m	18:26	34m	19:00	36m	19:36	37m	20:14	13h 11m	9h 35m				So, 15. Okt
Mo, 16. Okt	MESZ	20:12 – 05:51*	9h 38m	AN <sub>+</sub> bis AN <sub>-</sub>		09:30	18:54	05:49	37m	06:26	36m	07:03	34m	07:37	10h 46m	18:24	34m	18:58	36m	19:34	37m	20:12	13h 15m	9h 38m				Mo, 16. Okt
Di, 17. Okt	MESZ	20:10 – 05:52*	9h 42m	AN <sub>+</sub> bis AN <sub>-</sub>		10:48	19:16	05:51	37m	06:28	36m	07:04	34m	07:39	10h 42m	18:22	34m	18:56	36m	19:33	37m	20:10	13h 18m	9h 42m				Di, 17. Okt
Mi, 18. Okt	MESZ	20:08 – 05:54*	9h 45m	AN <sub>+</sub> bis AN <sub>-</sub>		12:06	19:46	05:52	37m	06:29	36m	07:06	34m	07:41	10h 39m	18:20	34m	18:54	36m	19:31	37m	20:08	13h 22m	9h 45m				Mi, 18. Okt
Do, 19. Okt	MESZ	20:28 – 05:55*	9h 26m	M <sub>\</sub> bis AN <sub>-</sub>		13:21	20:28	05:54	37m	06:31	36m	07:07	34m	07:42	10h 35m	18:18	34m	18:52	36m									

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
2023	Zeitzone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
			$\Delta t$		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, 28. Okt	MESZ	—:—:—:—	—	Mond stört	○	17:46	07:15	06:07	37m	06:44	36m	07:21	35m	07:57	10h 04m	18:01	35m	18:36	36m	19:13	37m	19:50	13h 57m	10h 18m				Sa, 28. Okt
So, 29. Okt		—:—:—:—	—	Mond stört		17:05	07:41	05:09	37m	05:46	37m	06:23	35m	06:58	10h 00m	16:59	35m	17:34	36m	18:11	37m	18:49	14h 00m	10h 21m				So, 29. Okt
Mo, 30. Okt		—:—:—:—	—	Mond stört		17:30	09:06	05:10	37m	05:47	37m	06:24	35m	07:00	9h 57m	16:57	35m	17:33	37m	18:10	37m	18:47	14h 04m	10h 24m				Mo, 30. Okt
Di, 31. Okt		—:—:—:—	—	Mond stört		18:03	10:28	05:11	37m	05:49	37m	06:26	35m	07:02	9h 53m	16:55	35m	17:31	37m	18:08	37m	18:45	14h 07m	10h 27m				Di, 31. Okt
Mi, 1. Nov		18:44–18:47	3m	AN <sub>+</sub> bis M <sub>7</sub>		18:47	11:41	05:13	37m	05:50	37m	06:27	35m	07:03	9h 50m	16:54	35m	17:30	37m	18:07	37m	18:44	14h 11m	10h 30m				Mi, 1. Nov
Do, 2. Nov		18:42–19:43	1h 00m	AN <sub>+</sub> bis M <sub>7</sub>		19:43	12:40	05:14	37m	05:52	37m	06:29	35m	07:05	9h 47m	16:52	35m	17:28	37m	18:05	37m	18:42	14h 14m	10h 33m				Do, 2. Nov
Fr, 3. Nov		18:41–20:49	2h 07m	AN <sub>+</sub> bis M <sub>7</sub>		20:49	13:25	05:16	37m	05:53	37m	06:30	36m	07:07	9h 43m	16:50	35m	17:26	37m	18:04	37m	18:41	14h 17m	10h 36m				Fr, 3. Nov
Sa, 4. Nov		18:40–21:59	3h 19m	AN <sub>+</sub> bis M <sub>7</sub>		21:59	13:57	05:17	37m	05:55	37m	06:32	36m	07:08	9h 40m	16:49	36m	17:25	37m	18:02	37m	18:40	14h 20m	10h 39m				Sa, 4. Nov
So, 5. Nov		18:38–23:11	4h 32m	AN <sub>+</sub> bis M <sub>7</sub>	●	23:11	14:21	05:19	37m	05:56	37m	06:34	36m	07:10	9h 37m	16:47	36m	17:23	37m	18:01	37m	18:38	14h 24m	10h 41m				So, 5. Nov
Mo, 6. Nov		18:37–00:21*	5h 44m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	14:39	05:20	37m	05:58	37m	06:35	36m	07:11	9h 34m	16:46	36m	17:22	37m	17:59	37m	18:37	14h 27m	10h 44m				Mo, 6. Nov
Di, 7. Nov		18:36–01:30*	6h 54m	AN <sub>+</sub> bis M <sub>7</sub>		00:21	14:54	05:22	37m	05:59	37m	06:37	36m	07:13	9h 31m	16:44	36m	17:21	37m	17:58	37m	18:36	14h 30m	10h 47m				Di, 7. Nov
Mi, 8. Nov		18:34–02:39*	8h 04m	AN <sub>+</sub> bis M <sub>7</sub>		01:30	15:06	05:23	37m	06:00	37m	06:38	36m	07:15	9h 27m	16:43	36m	17:19	37m	17:57	37m	18:34	14h 33m	10h 50m				Mi, 8. Nov
Do, 9. Nov		18:33–03:48*	9h 14m	AN <sub>+</sub> bis M <sub>7</sub>		02:39	15:18	05:24	37m	06:02	37m	06:40	36m	07:16	9h 24m	16:41	36m	17:18	37m	17:56	37m	18:33	14h 36m	10h 52m				Do, 9. Nov
Fr, 10. Nov		18:32–04:59*	10h 27m	AN <sub>+</sub> bis M <sub>7</sub>		03:48	15:30	05:26	37m	06:03	37m	06:41	36m	07:18	9h 21m	16:40	36m	17:16	37m	17:54	37m	18:32	14h 39m	10h 55m				Fr, 10. Nov
Sa, 11. Nov		18:31–05:28*	10h 57m	AN <sub>+</sub> bis AN <sub>-</sub>		04:59	15:43	05:27	37m	06:05	37m	06:43	36m	07:20	9h 18m	16:38	36m	17:15	37m	17:53	37m	18:31	14h 42m	10h 57m				Sa, 11. Nov
So, 12. Nov		18:30–05:30*	11h 00m	AN <sub>+</sub> bis AN <sub>-</sub>		06:13	15:59	05:28	37m	06:06	38m	06:44	37m	07:21	9h 15m	16:37	37m	17:14	37m	17:52	37m	18:30	14h 45m	11h 00m				So, 12. Nov
Mo, 13. Nov		18:28–05:31*	11h 02m	AN <sub>+</sub> bis AN <sub>-</sub>	●	07:31	16:19	05:30	37m	06:08	38m	06:46	37m	07:23	9h 12m	16:36	37m	17:13	38m	17:51	37m	18:28	14h 48m	11h 02m				Mo, 13. Nov
Di, 14. Nov		18:27–05:33*	11h 05m	AN <sub>+</sub> bis AN <sub>-</sub>		08:51	16:47	05:31	37m	06:09	38m	06:47	37m	07:24	9h 09m	16:34	37m	17:12	38m	17:50	37m	18:27	14h 51m	11h 05m				Di, 14. Nov
Mi, 15. Nov		18:26–05:34*	11h 07m	AN <sub>+</sub> bis AN <sub>-</sub>		10:09	17:26	05:33	37m	06:10	38m	06:49	37m	07:26	9h 06m	16:33	37m	17:10	38m	17:49	37m	18:26	14h 54m	11h 07m				Mi, 15. Nov
Do, 16. Nov		18:25–05:35*	11h 09m	AN <sub>+</sub> bis AN <sub>-</sub>		11:19	18:20	05:34	37m	06:12	38m	06:50	37m	07:28	9h 04m	16:32	37m	17:09	38m	17:48	37m	18:25	14h 57m	11h 09m				Do, 16. Nov
Fr, 17. Nov		19:30–05:37*	10h 06m	M <sub>\</sub> bis AN <sub>-</sub>		12:15	19:30	05:35	37m	06:13	38m	06:52	37m	07:29	9h 01m	16:31	37m	17:08	38m	17:47	37m	18:24	15h 00m	11h 12m				Fr, 17. Nov
Sa, 18. Nov		20:52–05:38*	8h 45m	M <sub>\</sub> bis AN <sub>-</sub>		12:56	20:52	05:37	37m	06:15	38m	06:53	37m	07:31	8h 58m	16:29	37m	17:07	38m	17:46	37m	18:24	15h 03m	11h 14m				Sa, 18. Nov
So, 19. Nov		22:18–05:39*	7h 21m	M <sub>\</sub> bis AN <sub>-</sub>		13:26	22:18	05:38	38m	06:16	38m	06:55	37m	07:32	8h 55m	16:28	37m	17:06	38m	17:45	37m	18:23	15h 05m	11h 16m				So, 19. Nov
Mo, 20. Nov		23:43–05:40*	5h 57m	M <sub>\</sub> bis AN <sub>-</sub>	●	13:48	23:43	05:39	38m	06:17	38m	06:56	38m	07:34	8h 53m	16:27	38m	17:05	38m	17:44	38m	18:22	15h 08m	11h 18m				Mo, 20. Nov
Di, 21. Nov		01:07*–05:42*	4h 34m	M <sub>\</sub> bis AN <sub>-</sub>		14:05	—:—	05:40	38m	06:19	38m	06:57	38m	07:36	8h 50m	16:26	38m	17:04	38m	17:43	38m	18:21	15h 10m	11h 20m				Di, 21. Nov
Mi, 22. Nov		02:29*–05:43*	3h 13m	M <sub>\</sub> bis AN <sub>-</sub>		14:21	01:07	05:42	38m	06:20	38m	06:59	38m	07:37	8h 48m	16:25	38m	17:03	38m	17:42	38m	18:20	15h 13m	11h 22m				Mi, 22. Nov
Do, 23. Nov		03:52*–05:44*	1h 52m	M <sub>\</sub> bis AN <sub>-</sub>		14:35	02:29	05:43	38m	06:21	38m	07:00	38m	07:39	8h 45m	16:24	38m	17:03	38m	17:41	38m	18:20	15h 15m	11h 24m				Do, 23. Nov
Fr, 24. Nov		05:15*–05:45*	30m	M <sub>\</sub> bis AN <sub>-</sub>		14:50	03:52	05:44	38m	06:22	39m	07:02	38m	07:40	8h 43m	16:23	38m	17:02	39m	17:41	38m	18:19	15h 18m	11h 26m				Fr, 24. Nov
Sa, 25. Nov		—:—:—:—	—	Mond stört		15:08	05:15	05:45	38m	06:24	39m	07:03	38m	07:42	8h 40m	16:22	38m	17:01	39m	17:40	38m	18:18	15h 20m	11h 28m				Sa, 25. Nov
So, 26. Nov		—:—:—:—	—	Mond stört		15:30	06:39	05:47	38m	06:25	39m	07:04	38m	07:43	8h 38m	16:22	38m	17:00	39m	17:39	38m	18:18	15h 22m	11h 29m				So, 26. Nov
Mo, 27. Nov		—:~:~:~:~	—	Mond stört	○	15:59	08:02	05:48	38m	06:26	39m	07:06	38m	07:44	8h 36m	16:21	38m	17:00	39m	17:39	38m	18:17	15h 25m	11h 31m				Mo, 27. Nov
Di, 28. Nov		—:~:~:~:~	—	Mond stört		16:38	09:19	05:49	38m	06:27	39m	07:07	38m	07:46	8h 34m	16:20	38m	16:59	39m	17:38	38m	18:17	15h 27m	11h 33m				Di, 28. Nov
Mi, 29. Nov		—:~:~:~:~	—	Mond stört		17:29	10:26	05:50	38m	06:29	39m	07:08	39m	07:47	8h 32m	16:19	39m	16:58	39m	17:38	38m	18:16	15h 29m	11h 34m				Mi, 29. Nov
Do, 30. Nov		18:16–18:32	15m	AN <sub>+</sub> bis M <sub>7</sub>		18:32	11:17	05:51	38m	06:30	39m	07:09	39m	07:49	8h 30m	16:19	39m	16:58	39m	17:37	38m	18:16	15h 31m	11h 36m				Do, 30. Nov
Fr, 1. Dez		18:16–19:41	1h 25m	AN <sub>+</sub> bis M <sub>7</sub>		19:41	11:55	05:52	38m	06:31	39m	07:11	39m	07:50	8h 28m	16:18	39m	16:57	39m	17:37	38m	18:16	15h 33m	11h 37m				Fr, 1. Dez
Sa, 2. Dez		18:15–20:53	2h 38m	AN <sub>+</sub> bis M <sub>7</sub>		20:53	12:23	05:53	38m	06:32	39m	07:12	39m	07:51	8h 26m	16:18	39m	16:57	39m	17:37	38m	18:15	15h 34m	11h 39m				Sa, 2. Dez
So, 3. Dez		18:15–22:05	3h 49m	AN <sub>+</sub> bis M <sub>7</sub>		22:05	12:43	05:54	38m	06:33	39m	07:13	39m	07:52	8h 24m	16:17	39m	16:57	39m	17:36	38m	18:15	15h 36m	11h 40m				So, 3. Dez
Mo, 4. Dez		18:15–23:14	4h 59m	AN <sub>+</sub> bis M <sub>7</sub>		23:14	12:59	05:56	38m	06:34	39m	07:14	39m	07:54	8h 22m	16:17	39m	16:56	39m	17:36	38m	18:15	15h 38m	11h 41m				Mo, 4. Dez
Di, 5. Dez		18:15–00:23*	6h 07m	AN <sub>+</sub> bis M <sub>7</sub>	●	—:—	13:12	05:57	38m	06:35	39m	07:15	39m	07:55	8h 21m	16:16	39m	16:56	39m	17:36	38m	18:15	15h 39m	11h 42m				Di, 5. Dez
Mi, 6. Dez		18:14–01:31*	7h 16m	AN <sub>+</sub> bis M <sub>7</sub>		00:23	13:24	05:58	38m	06:36	39m	07:16	39m	07:56	8h 19m	16:16	39m	16:56	39m	17:36	38m	18:14	15h 41m	11h 44m				Mi, 6. Dez
Do, 7. Dez		18:14–02:40*	8h 25m	AN <sub>+</sub> bis M <sub>7</sub>		01:31	13:36	05:59	38m	06:37	39m	07:17	39m	07:57	8h 18m	16:16	39m	16:55	39m	17:35	38m	18:14	15h 42m	11h 45m				Do, 7. Dez
Fr, 8. Dez		18:14–03:52*	9h 37m	AN <sub>+</sub> bis M <sub>7</sub>		02:40	13:49	05:59	38m	06:38	40m	07:18	39m	07:58	8h 17m	16:15	39m	16:55	40m	17:35	38m	18:14	15h 44m	11h 46m				Fr, 8. Dez
Sa, 9. Dez		18:14–05:08*	10h 53m	AN <sub>+</sub> bis M <sub>7</sub>		03:52	14:03	06:00	38m	06:39	40m																	



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
2023/24	Zeitzone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne				Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023/24	
			$\Delta t$		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, 17. Dez		21:31 – 06:07*	8h 36m	M <sub>\</sub> bis AN <sub>\</sub>		11:53	21:31	06:07	39m	06:46	40m	07:26	40m	08:07	8h 08m	16:16	40m	16:56	40m	17:36	39m	18:16	15h 51m	11h 51m				So, 17. Dez
Mo, 18. Dez		22:56 – 06:08*	7h 12m	M <sub>\</sub> bis AN <sub>\</sub>		12:12	22:56	06:07	39m	06:47	40m	07:27	40m	08:07	8h 08m	16:16	40m	16:56	40m	17:37	39m	18:16	15h 52m	11h 52m				Mo, 18. Dez
Di, 19. Dez		00:18* – 06:09*	5h 50m	M <sub>\</sub> bis AN <sub>\</sub>	☾	12:28	—:—	06:08	39m	06:47	40m	07:28	40m	08:08	8h 08m	16:16	40m	16:57	40m	17:37	39m	18:16	15h 52m	11h 52m				Di, 19. Dez
Mi, 20. Dez		01:39* – 06:09*	4h 30m	M <sub>\</sub> bis AN <sub>\</sub>		12:42	00:18	06:09	39m	06:48	40m	07:28	40m	08:09	8h 08m	16:17	40m	16:57	40m	17:38	39m	18:17	15h 52m	11h 52m				Mi, 20. Dez
Do, 21. Dez		03:00* – 06:10*	3h 10m	M <sub>\</sub> bis AN <sub>\</sub>		12:57	01:39	06:09	39m	06:48	40m	07:29	40m	08:09	8h 07m	16:17	40m	16:58	40m	17:38	39m	18:17	15h 52m	11h 52m				Do, 21. Dez
Fr, 22. Dez		04:21* – 06:10*	1h 48m	M <sub>\</sub> bis AN <sub>\</sub>		13:13	03:00	06:10	39m	06:49	40m	07:29	40m	08:10	8h 07m	16:18	40m	16:58	40m	17:39	39m	18:18	15h 52m	11h 52m				Fr, 22. Dez
Sa, 23. Dez		05:43* – 06:11*	27m	M <sub>\</sub> bis AN <sub>\</sub>		13:33	04:21	06:10	39m	06:49	40m	07:30	40m	08:10	8h 07m	16:18	40m	16:59	40m	17:39	39m	18:18	15h 52m	11h 52m				Sa, 23. Dez
So, 24. Dez		—:—:—:—	–	Mond stört		13:58	05:43	06:11	39m	06:50	40m	07:30	40m	08:11	8h 08m	16:19	40m	16:59	40m	17:40	39m	18:19	15h 52m	11h 52m				So, 24. Dez
Mo, 25. Dez		—:—:—:—	–	Mond stört		14:32	07:01	06:11	39m	06:50	40m	07:31	40m	08:11	8h 08m	16:19	40m	17:00	40m	17:40	39m	18:19	15h 51m	11h 51m				Mo, 25. Dez
Di, 26. Dez		—:—:—:—	–	Mond stört		15:18	08:11	06:11	39m	06:51	40m	07:31	40m	08:11	8h 08m	16:20	40m	17:01	40m	17:41	39m	18:20	15h 51m	11h 51m				Di, 26. Dez
Mi, 27. Dez		—:—:~:~	–	Mond stört	☉	16:17	09:09	06:12	39m	06:51	40m	07:31	40m	08:12	8h 09m	16:21	40m	17:01	40m	17:42	39m	18:21	15h 50m	11h 51m				Mi, 27. Dez
Do, 28. Dez		—:~:~:~	–	Mond stört		17:24	09:52	06:12	39m	06:51	40m	07:31	40m	08:12	8h 09m	16:22	40m	17:02	40m	17:42	39m	18:21	15h 50m	11h 50m				Do, 28. Dez
Fr, 29. Dez		18:22 – 18:36	13m	AN <sub>+</sub> bis M <sub>7</sub>		18:36	10:23	06:12	39m	06:51	40m	07:32	40m	08:12	8h 10m	16:22	40m	17:03	40m	17:43	39m	18:22	15h 49m	11h 50m				Fr, 29. Dez
Sa, 30. Dez		18:23 – 19:48	1h 25m	AN <sub>+</sub> bis M <sub>7</sub>		19:48	10:46	06:12	39m	06:51	40m	07:32	40m	08:12	8h 11m	16:23	40m	17:04	40m	17:44	39m	18:23	15h 48m	11h 49m				Sa, 30. Dez
So, 31. Dez		18:24 – 20:59	2h 35m	AN <sub>+</sub> bis M <sub>7</sub>		20:59	11:04	06:13	39m	06:52	40m	07:32	40m	08:12	8h 12m	16:24	40m	17:05	40m	17:45	39m	18:24	15h 47m	11h 48m				So, 31. Dez
Mo, 1. Jan		18:25 – 22:08	3h 43m	AN <sub>+</sub> bis M <sub>7</sub>		22:08	11:18	06:13	39m	06:52	40m	07:32	40m	08:12	8h 13m	16:25	40m	17:05	40m	17:46	39m	18:25	15h 46m	11h 48m				Mo, 1. Jan
Di, 2. Jan		18:25 – 23:15	4h 49m	AN <sub>+</sub> bis M <sub>7</sub>		23:15	11:30	06:13	38m	06:52	40m	07:32	40m	08:12	8h 14m	16:26	40m	17:06	40m	17:46	38m	18:25	15h 45m	11h 47m				Di, 2. Jan
Mi, 3. Jan		18:26 – 00:23*	5h 56m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	11:42	06:13	38m	06:52	40m	07:32	40m	08:12	8h 15m	16:27	40m	17:07	40m	17:47	38m	18:26	15h 44m	11h 46m				Mi, 3. Jan
Do, 4. Jan		18:27 – 01:32*	7h 05m	AN <sub>+</sub> bis M <sub>7</sub>	☾	00:23	11:54	06:13	38m	06:52	40m	07:32	39m	08:12	8h 16m	16:28	39m	17:08	40m	17:48	38m	18:27	15h 43m	11h 45m				Do, 4. Jan
Fr, 5. Jan		18:28 – 02:45*	8h 16m	AN <sub>+</sub> bis M <sub>7</sub>		01:32	12:07	06:13	38m	06:52	39m	07:32	39m	08:12	8h 17m	16:29	39m	17:09	39m	17:49	38m	18:28	15h 41m	11h 44m				Fr, 5. Jan
Sa, 6. Jan		18:29 – 04:02*	9h 32m	AN <sub>+</sub> bis M <sub>7</sub>		02:45	12:23	06:13	38m	06:52	39m	07:32	39m	08:11	8h 19m	16:31	39m	17:10	39m	17:50	38m	18:29	15h 40m	11h 43m				Sa, 6. Jan
So, 7. Jan		18:30 – 05:21*	10h 50m	AN <sub>+</sub> bis M <sub>7</sub>		04:02	12:44	06:13	38m	06:51	39m	07:31	39m	08:11	8h 20m	16:32	39m	17:12	39m	17:51	38m	18:30	15h 38m	11h 42m				So, 7. Jan
Mo, 8. Jan		18:31 – 06:12*	11h 40m	AN <sub>+</sub> bis AN <sub>\</sub>		05:21	13:12	06:12	38m	06:51	39m	07:31	39m	08:11	8h 22m	16:33	39m	17:13	39m	17:53	38m	18:31	15h 37m	11h 40m				Mo, 8. Jan
Di, 9. Jan		18:32 – 06:12*	11h 39m	AN <sub>+</sub> bis AN <sub>\</sub>		06:40	13:54	06:12	38m	06:51	39m	07:31	39m	08:10	8h 24m	16:34	39m	17:14	39m	17:54	38m	18:32	15h 35m	11h 39m				Di, 9. Jan
Mi, 10. Jan		18:33 – 06:12*	11h 38m	AN <sub>+</sub> bis AN <sub>\</sub>		07:50	14:53	06:12	38m	06:51	39m	07:30	39m	08:10	8h 25m	16:36	39m	17:15	39m	17:55	38m	18:33	15h 33m	11h 38m				Mi, 10. Jan
Do, 11. Jan		18:35 – 06:11*	11h 36m	AN <sub>+</sub> bis AN <sub>\</sub>	☉	08:46	16:10	06:12	38m	06:50	39m	07:30	39m	08:09	8h 27m	16:37	39m	17:16	39m	17:56	38m	18:35	15h 31m	11h 36m				Do, 11. Jan
Fr, 12. Jan		18:36 – 06:11*	11h 35m	AN <sub>+</sub> bis AN <sub>\</sub>		09:26	17:38	06:11	38m	06:50	39m	07:30	39m	08:09	8h 29m	16:38	39m	17:18	39m	17:57	38m	18:36	15h 29m	11h 35m				Fr, 12. Jan
Sa, 13. Jan		19:09 – 06:11*	11h 01m	M <sub>\</sub> bis AN <sub>\</sub>		09:55	19:09	06:11	38m	06:50	39m	07:29	39m	08:08	8h 31m	16:40	39m	17:19	39m	17:58	38m	18:37	15h 27m	11h 33m				Sa, 13. Jan
So, 14. Jan		20:38 – 06:10*	9h 31m	M <sub>\</sub> bis AN <sub>\</sub>		10:16	20:38	06:11	38m	06:49	39m	07:28	39m	08:07	8h 33m	16:41	39m	17:20	39m	18:00	38m	18:38	15h 25m	11h 32m				So, 14. Jan
Mo, 15. Jan		22:04 – 06:10*	8h 05m	M <sub>\</sub> bis AN <sub>\</sub>		10:33	22:04	06:10	38m	06:49	39m	07:28	38m	08:07	8h 35m	16:43	38m	17:21	39m	18:01	38m	18:39	15h 23m	11h 30m				Mo, 15. Jan
Di, 16. Jan		23:27 – 06:09*	6h 42m	M <sub>\</sub> bis AN <sub>\</sub>		10:48	23:27	06:10	38m	06:48	39m	07:27	38m	08:06	8h 38m	16:44	38m	17:23	39m	18:02	38m	18:40	15h 21m	11h 28m				Di, 16. Jan
Mi, 17. Jan		00:49* – 06:09*	5h 19m	M <sub>\</sub> bis AN <sub>\</sub>		11:03	—:—	06:09	38m	06:47	39m	07:27	38m	08:05	8h 40m	16:46	38m	17:24	39m	18:03	38m	18:42	15h 18m	11h 26m				Mi, 17. Jan
Do, 18. Jan		02:10* – 06:08*	3h 57m	M <sub>\</sub> bis AN <sub>\</sub>	☾	11:19	00:49	06:09	38m	06:47	39m	07:26	38m	08:04	8h 42m	16:47	38m	17:26	39m	18:05	38m	18:43	15h 16m	11h 24m				Do, 18. Jan
Fr, 19. Jan		03:32* – 06:07*	2h 35m	M <sub>\</sub> bis AN <sub>\</sub>		11:37	02:10	06:08	38m	06:46	38m	07:25	38m	08:04	8h 45m	16:49	38m	17:27	38m	18:06	38m	18:44	15h 14m	11h 23m				Fr, 19. Jan
Sa, 20. Jan		04:50* – 06:07*	1h 16m	M <sub>\</sub> bis AN <sub>\</sub>		12:01	03:32	06:07	38m	06:45	38m	07:24	38m	08:03	8h 47m	16:50	38m	17:28	38m	18:07	38m	18:46	15h 11m	11h 21m				Sa, 20. Jan
So, 21. Jan		06:02* – 06:06*	3m	M <sub>\</sub> bis AN <sub>\</sub>		12:31	04:50	06:07	38m	06:45	38m	07:23	38m	08:02	8h 50m	16:52	38m	17:30	38m	18:09	38m	18:47	15h 08m	11h 18m				So, 21. Jan
Mo, 22. Jan		—:~:~:~	–	Mond stört		13:13	06:02	06:06	38m	06:44	38m	07:23	38m	08:01	8h 52m	16:53	38m	17:31	38m	18:10	38m	18:48	15h 06m	11h 16m				Mo, 22. Jan
Di, 23. Jan		—:~:~:~	–	Mond stört		14:06	07:03	06:05	38m	06:43	38m	07:22	37m	08:00	8h 55m	16:55	37m	17:33	38m	18:11	38m	18:49	15h 03m	11h 14m				Di, 23. Jan
Mi, 24. Jan		—:~:~:~	–	Mond stört		15:11	07:50	06:04	37m	06:42	38m	07:21	37m	07:58	8h 57m	16:56	37m	17:34	38m	18:13	37m	18:51	15h 00m	11h 12m				Mi, 24. Jan
Do, 25. Jan		—:~:~:~	–	Mond stört	☉	16:21	08:25	06:03	37m	06:41	38m	07:20	37m	07:57	9h 00m	16:58	37m	17:36	38m	18:14	37m	18:52	14h 58m	11h 10m				Do, 25. Jan
Fr, 26. Jan		—:~:~:~	–	Mond stört		17:34	08:50	06:02	37m	06:40	38m	07:19	37m	07:56	9h 03m	17:00	37m	17:37	38m	18:16	37m	18:54	14h 55m	11h 07m				Fr, 26. Jan
Sa, 27. Jan		—:~:~:~	–	Mond stört		18:45	09:09	06:01	37m	06:39	38m	07:18	37m	07:55	9h 06m	17:01	37m	17:39	38m	18:17	37m	18:55	14h 52m	11h 05m				Sa, 27. Jan
So, 28. Jan		18:56 – 19:55	58m	AN <sub>+</sub> bis M <sub>7</sub>		19:55	09:24	06:01	37m	06:38	38m	0																