

# Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Kitzingen 49.7369° N 10.1611° 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		04:02*–06:16*	2h 14m	M <sub>\</sub> bis AN <sub>\</sub>		12:54	02:47	06:16	39m	06:55	40m	07:36	40m	08:16	8h 13m	16:29	40m	17:09	40m	17:49	39m	18:28	15h 46m	11h 48m					So, 1. Jan
Mo, 2. Jan		05:15*–06:16*	1h 01m	M <sub>\</sub> bis AN <sub>\</sub>		13:13	04:02	06:16	38m	06:55	40m	07:36	40m	08:16	8h 14m	16:30	40m	17:10	40m	17:50	39m	18:29	15h 45m	11h 47m					Mo, 2. Jan
Di, 3. Jan		—:—:—:—	–	Mond stört		13:37	05:15	06:16	38m	06:55	40m	07:36	40m	08:16	8h 15m	16:31	40m	17:11	40m	17:51	38m	18:30	15h 44m	11h 46m					Di, 3. Jan
Mi, 4. Jan		—:—:—:—	–	Mond stört		14:09	06:26	06:16	38m	06:55	40m	07:35	39m	08:15	8h 16m	16:32	39m	17:12	40m	17:52	38m	18:31	15h 43m	11h 45m					Mi, 4. Jan
Do, 5. Jan		—:—:—:—	–	Mond stört		14:49	07:30	06:16	38m	06:55	39m	07:35	39m	08:15	8h 18m	16:33	39m	17:13	39m	17:53	38m	18:32	15h 41m	11h 44m					Do, 5. Jan
Fr, 6. Jan		—:~:~:~:~	–	Mond stört		15:40	08:25	06:16	38m	06:55	39m	07:35	39m	08:15	8h 19m	16:34	39m	17:14	39m	17:54	38m	18:33	15h 40m	11h 43m					Fr, 6. Jan
Sa, 7. Jan		—:~:~:~:~	–	Mond stört	○	16:41	09:09	06:16	38m	06:55	39m	07:35	39m	08:15	8h 21m	16:36	39m	17:15	39m	17:55	38m	18:34	15h 38m	11h 41m					Sa, 7. Jan
So, 8. Jan		—:~:~:~:~	–	Mond stört		17:48	09:43	06:16	38m	06:55	39m	07:35	39m	08:14	8h 22m	16:37	39m	17:17	39m	17:56	38m	18:35	15h 36m	11h 40m					So, 8. Jan
Mo, 9. Jan		18:36–18:57	20m	AN <sub>+</sub> bis M <sub>7</sub>		18:57	10:09	06:16	38m	06:55	39m	07:34	39m	08:14	8h 24m	16:38	39m	17:18	39m	17:57	38m	18:36	15h 35m	11h 39m					Mo, 9. Jan
Di, 10. Jan		18:37–20:07	1h 29m	AN <sub>+</sub> bis M <sub>7</sub>		20:07	10:29	06:16	38m	06:54	39m	07:34	39m	08:13	8h 26m	16:39	39m	17:19	39m	17:59	38m	18:37	15h 33m	11h 37m					Di, 10. Jan
Mi, 11. Jan		18:38–21:16	2h 37m	AN <sub>+</sub> bis M <sub>7</sub>		21:16	10:45	06:15	38m	06:54	39m	07:33	39m	08:13	8h 28m	16:41	39m	17:20	39m	18:00	38m	18:38	15h 31m	11h 36m					Mi, 11. Jan
Do, 12. Jan		18:40–22:26	3h 46m	AN <sub>+</sub> bis M <sub>7</sub>		22:26	10:59	06:15	38m	06:53	39m	07:33	39m	08:12	8h 29m	16:42	39m	17:21	39m	18:01	38m	18:40	15h 29m	11h 34m					Do, 12. Jan
Fr, 13. Jan		18:41–23:36	4h 55m	AN <sub>+</sub> bis M <sub>7</sub>		23:36	11:12	06:15	38m	06:53	39m	07:32	39m	08:12	8h 31m	16:44	39m	17:23	39m	18:02	38m	18:41	15h 27m	11h 33m					Fr, 13. Jan
Sa, 14. Jan		18:42–00:48*	6h 06m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	11:26	06:14	38m	06:53	39m	07:32	39m	08:11	8h 34m	16:45	39m	17:24	39m	18:03	38m	18:42	15h 25m	11h 31m					Sa, 14. Jan
So, 15. Jan		18:43–02:04*	7h 21m	AN <sub>+</sub> bis M <sub>7</sub>	●	00:48	11:40	06:14	38m	06:52	39m	07:31	38m	08:10	8h 36m	16:46	38m	17:25	39m	18:05	38m	18:43	15h 23m	11h 30m					So, 15. Jan
Mo, 16. Jan		18:44–03:25*	8h 40m	AN <sub>+</sub> bis M <sub>7</sub>		02:04	11:58	06:13	38m	06:52	39m	07:31	38m	08:09	8h 38m	16:48	38m	17:27	39m	18:06	38m	18:44	15h 20m	11h 28m					Mo, 16. Jan
Di, 17. Jan		18:46–04:49*	10h 03m	AN <sub>+</sub> bis M <sub>7</sub>		03:25	12:20	06:13	38m	06:51	39m	07:30	38m	08:09	8h 40m	16:49	38m	17:28	39m	18:07	38m	18:46	15h 18m	11h 26m					Di, 17. Jan
Mi, 18. Jan		18:47–06:11*	11h 24m	AN <sub>+</sub> bis AN <sub>\</sub>		04:49	12:52	06:12	38m	06:50	39m	07:29	38m	08:08	8h 43m	16:51	38m	17:29	39m	18:08	38m	18:47	15h 16m	11h 24m					Mi, 18. Jan
Do, 19. Jan		18:48–06:11*	11h 22m	AN <sub>+</sub> bis AN <sub>\</sub>		06:12	13:37	06:11	38m	06:50	38m	07:29	38m	08:07	8h 45m	16:52	38m	17:31	38m	18:10	38m	18:48	15h 13m	11h 22m					Do, 19. Jan
Fr, 20. Jan		18:49–06:10*	11h 20m	AN <sub>+</sub> bis AN <sub>\</sub>		07:25	14:41	06:11	38m	06:49	38m	07:28	38m	08:06	8h 47m	16:54	38m	17:32	38m	18:11	38m	18:49	15h 11m	11h 20m					Fr, 20. Jan
Sa, 21. Jan		18:51–06:09*	11h 18m	AN <sub>+</sub> bis AN <sub>\</sub>	●	08:23	16:02	06:10	38m	06:48	38m	07:27	38m	08:05	8h 50m	16:56	38m	17:34	38m	18:13	38m	18:51	15h 08m	11h 18m					Sa, 21. Jan
So, 22. Jan		18:52–06:08*	11h 16m	AN <sub>+</sub> bis AN <sub>\</sub>		09:04	17:34	06:09	38m	06:47	38m	07:26	38m	08:04	8h 53m	16:57	38m	17:35	38m	18:14	38m	18:52	15h 05m	11h 16m					So, 22. Jan
Mo, 23. Jan		19:06–06:08*	11h 02m	M <sub>\</sub> bis AN <sub>\</sub>		09:33	19:06	06:08	38m	06:46	38m	07:25	37m	08:03	8h 55m	16:59	37m	17:37	38m	18:15	38m	18:53	15h 03m	11h 14m					Mo, 23. Jan
Di, 24. Jan		20:34–06:07*	9h 32m	M <sub>\</sub> bis AN <sub>\</sub>		09:55	20:34	06:08	37m	06:46	38m	07:24	37m	08:02	8h 58m	17:00	37m	17:38	38m	18:17	37m	18:55	15h 00m	11h 12m					Di, 24. Jan
Mi, 25. Jan		21:57–06:06*	8h 08m	M <sub>\</sub> bis AN <sub>\</sub>		10:13	21:57	06:07	37m	06:45	38m	07:23	37m	08:01	9h 01m	17:02	37m	17:40	38m	18:18	37m	18:56	14h 57m	11h 09m					Mi, 25. Jan
Do, 26. Jan		23:17–06:05*	6h 47m	M <sub>\</sub> bis AN <sub>\</sub>		10:28	23:17	06:06	37m	06:44	38m	07:22	37m	08:00	9h 04m	17:04	37m	17:41	38m	18:20	37m	18:57	14h 54m	11h 07m					Do, 26. Jan
Fr, 27. Jan		00:35*–06:04*	5h 29m	M <sub>\</sub> bis AN <sub>\</sub>		10:43	—:—	06:05	37m	06:43	38m	07:21	37m	07:58	9h 06m	17:05	37m	17:43	38m	18:21	37m	18:59	14h 51m	11h 05m					Fr, 27. Jan
Sa, 28. Jan		01:51*–06:03*	4h 12m	M <sub>\</sub> bis AN <sub>\</sub>	●	10:59	00:35	06:04	37m	06:42	38m	07:20	37m	07:57	9h 09m	17:07	37m	17:44	38m	18:22	37m	19:00	14h 48m	11h 02m					Sa, 28. Jan
So, 29. Jan		03:05*–06:02*	2h 56m	M <sub>\</sub> bis AN <sub>\</sub>		11:18	01:51	06:03	37m	06:41	38m	07:19	37m	07:56	9h 12m	17:09	37m	17:46	38m	18:24	37m	19:02	14h 45m	11h 00m					So, 29. Jan
Mo, 30. Jan		04:18*–06:01*	1h 43m	M <sub>\</sub> bis AN <sub>\</sub>		11:40	03:05	06:02	37m	06:39	37m	07:17	37m	07:54	9h 15m	17:10	37m	17:47	38m	18:25	37m	19:03	14h 42m	10h 57m					Mo, 30. Jan
Di, 31. Jan		05:24*–06:00*	35m	M <sub>\</sub> bis AN <sub>\</sub>		12:09	04:18	06:01	37m	06:38	37m	07:16	36m	07:53	9h 18m	17:12	36m	17:49	37m	18:27	37m	19:04	14h 39m	10h 55m					Di, 31. Jan
Mi, 1. Feb		—:~:~:~:~	–	Mond stört		12:46	05:24	06:00	37m	06:37	37m	07:15	36m	07:52	9h 21m	17:14	36m	17:50	37m	18:28	37m	19:06	14h 36m	10h 52m					Mi, 1. Feb
Do, 2. Feb		—:~:~:~:~	–	Mond stört		13:34	06:22	05:58	37m	06:36	37m	07:14	36m	07:50	9h 25m	17:15	36m	17:52	37m	18:30	37m	19:07	14h 33m	10h 49m					Do, 2. Feb
Fr, 3. Feb		—:~:~:~:~	–	Mond stört		14:32	07:09	05:57	37m	06:35	37m	07:12	36m	07:49	9h 28m	17:17	36m	17:54	37m	18:31	37m	19:09	14h 30m	10h 47m					Fr, 3. Feb
Sa, 4. Feb		—:~:~:~:~	–	Mond stört		15:38	07:46	05:56	37m	06:33	37m	07:11	36m	07:47	9h 31m	17:19	36m	17:55	37m	18:33	37m	19:10	14h 27m	10h 44m					Sa, 4. Feb
So, 5. Feb		—:~:~:~:~	–	Mond stört	○	16:47	08:13	05:55	37m	06:32	37m	07:09	36m	07:46	9h 34m	17:20	36m	17:57	37m	18:34	37m	19:12	14h 23m	10h 41m					So, 5. Feb
Mo, 6. Feb		—:~:~:~:~	–	Mond stört		17:57	08:35	05:53	37m	06:31	37m	07:08	36m	07:44	9h 37m	17:22	36m	17:58	37m	18:36	37m	19:13	14h 20m	10h 38m					Mo, 6. Feb
Di, 7. Feb		—:~:~:~:~	–	Mond stört		19:07	08:52	05:52	37m	06:29	37m	07:07	36m	07:43	9h 41m	17:24	36m	18:00	37m	18:37	37m	19:15	14h 17m	10h 35m					Di, 7. Feb
Mi, 8. Feb		19:16–20:17	1h 00m	AN <sub>+</sub> bis M <sub>7</sub>		20:17	09:06	05:51	37m	06:28	37m	07:05	35m	07:41	9h 44m	17:26	36m	18:02	37m	18:39	37m	19:16	14h 13m	10h 32m					Mi, 8. Feb
Do, 9. Feb		19:18–21:26	2h 08m	AN <sub>+</sub> bis M <sub>7</sub>		21:26	09:20	05:49	37m	06:26	37m	07:04	35m	07:39	9h 47m	17:27	35m	18:03	37m	18:40	37m	19:18	14h 10m	10h 29m					Do, 9. Feb
Fr, 10. Feb		19:19–22:37	3h 18m	AN <sub>+</sub> bis M <sub>7</sub>		22:37	09:32	05:48	37m	06:25	37m	07:02	35m	07:38	9h 51m	17:29	35m	18:05	37m	18:42	37m	19:19	14h 07m	10h 26m					Fr, 10. Feb
Sa, 11. Feb		19:21–23:51	4h 30m	AN <sub>+</sub> bis M <sub>7</sub>		23:51	09:46	05:46	37m	06:23	37m	07:00	35m	07:36	9h 54m	17:31	35m	18:06	37m	18:43	37m	19:21	14h 03m	10h 23m					Sa, 11. Feb
So, 12. Feb		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.	$\Delta t$	$\Delta t$		$\Delta t$		
Mo, 20. Feb		19:35 – 05:30*	9h 54m	AN <sub>+</sub> bis AN <sub>-</sub>	●	07:55	17:59	05:31	37m	06:08	36m	06:45	34m	07:20	10h 26m	17:46	34m	18:21	36m	18:58	37m	19:35	13h 32m	9h 54m				Mo, 20. Feb
Di, 21. Feb		19:36 – 05:28*	9h 51m	AN <sub>+</sub> bis AN <sub>-</sub>		08:15	19:26	05:30	37m	06:07	36m	06:43	34m	07:18	10h 29m	17:48	34m	18:22	36m	18:59	37m	19:36	13h 28m	9h 51m				Di, 21. Feb
Mi, 22. Feb		20:51 – 05:26*	8h 35m	M <sub>\</sub> bis AN <sub>-</sub>		08:31	20:51	05:28	37m	06:05	36m	06:41	34m	07:16	10h 33m	17:49	34m	18:24	36m	19:01	37m	19:38	13h 24m	9h 47m				Mi, 22. Feb
Do, 23. Feb		22:12 – 05:24*	7h 11m	M <sub>\</sub> bis AN <sub>-</sub>		08:47	22:12	05:26	37m	06:03	36m	06:40	34m	07:14	10h 36m	17:51	34m	18:26	36m	19:02	37m	19:40	13h 21m	9h 44m				Do, 23. Feb
Fr, 24. Feb		23:32 – 05:22*	5h 50m	M <sub>\</sub> bis AN <sub>-</sub>		09:03	23:32	05:24	37m	06:01	36m	06:38	34m	07:12	10h 40m	17:53	34m	18:27	36m	19:04	37m	19:41	13h 17m	9h 40m				Fr, 24. Feb
Sa, 25. Feb		00:50* – 05:20*	4h 30m	M <sub>\</sub> bis AN <sub>-</sub>		09:20	—:—	05:22	37m	05:59	36m	06:36	34m	07:10	10h 44m	17:54	34m	18:29	36m	19:05	37m	19:43	13h 13m	9h 37m				Sa, 25. Feb
So, 26. Feb		02:05* – 05:18*	3h 12m	M <sub>\</sub> bis AN <sub>-</sub>		09:41	00:50	05:20	37m	05:57	36m	06:34	34m	07:08	10h 47m	17:56	34m	18:31	36m	19:07	37m	19:44	13h 10m	9h 33m				So, 26. Feb
Mo, 27. Feb		03:16* – 05:16*	2h 00m	M <sub>\</sub> bis AN <sub>-</sub>	◐	10:08	02:05	05:18	37m	05:55	36m	06:32	34m	07:06	10h 51m	17:58	34m	18:32	36m	19:09	37m	19:46	13h 06m	9h 30m				Mo, 27. Feb
Di, 28. Feb		04:18* – 05:14*	56m	M <sub>\</sub> bis AN <sub>-</sub>		10:43	03:16	05:16	37m	05:54	36m	06:30	34m	07:04	10h 55m	17:59	34m	18:34	36m	19:10	37m	19:48	13h 02m	9h 26m				Di, 28. Feb
Mi, 1. Mär		05:08* – 05:12*	3m	M <sub>\</sub> bis AN <sub>-</sub>		11:28	04:18	05:14	37m	05:52	36m	06:28	34m	07:02	10h 58m	18:01	34m	18:35	36m	19:12	37m	19:49	12h 59m	9h 22m				Mi, 1. Mär
Do, 2. Mär		—:—:—:—	–	Mond stört		12:23	05:08	05:12	37m	05:50	36m	06:26	34m	07:00	11h 02m	18:03	34m	18:37	36m	19:13	37m	19:51	12h 55m	9h 19m				Do, 2. Mär
Fr, 3. Mär		—:—:—:—	–	Mond stört		13:26	05:48	05:10	37m	05:48	36m	06:24	34m	06:58	11h 06m	18:04	34m	18:39	36m	19:15	37m	19:53	12h 51m	9h 15m				Fr, 3. Mär
Sa, 4. Mär		—:—:~:~	–	Mond stört		14:35	06:18	05:08	37m	05:46	36m	06:22	34m	06:56	11h 09m	18:06	34m	18:40	36m	19:17	37m	19:54	12h 48m	9h 11m				Sa, 4. Mär
So, 5. Mär		—:~:~:~	–	Mond stört		15:46	06:41	05:06	37m	05:44	36m	06:20	34m	06:54	11h 13m	18:08	34m	18:42	36m	19:18	37m	19:56	12h 44m	9h 08m				So, 5. Mär
Mo, 6. Mär		—:~:~:~	–	Mond stört		16:56	06:59	05:04	37m	05:42	36m	06:18	34m	06:52	11h 17m	18:09	34m	18:43	36m	19:20	37m	19:58	12h 40m	9h 04m				Mo, 6. Mär
Di, 7. Mär		—:~:~:~	–	Mond stört	◑	18:07	07:14	05:02	37m	05:39	36m	06:16	34m	06:50	11h 20m	18:11	34m	18:45	36m	19:21	37m	19:59	12h 37m	9h 00m				Di, 7. Mär
Mi, 8. Mär		—:~:~:~	–	Mond stört		19:17	07:27	05:00	37m	05:37	36m	06:14	34m	06:48	11h 24m	18:12	34m	18:46	36m	19:23	37m	20:01	12h 33m	8h 56m				Mi, 8. Mär
Do, 9. Mär		20:03 – 20:28	25m	AN <sub>+</sub> bis M <sub>7</sub>		20:28	07:40	04:57	37m	05:35	36m	06:12	34m	06:46	11h 28m	18:14	34m	18:48	36m	19:25	37m	20:03	12h 29m	8h 52m				Do, 9. Mär
Fr, 10. Mär		20:04 – 21:41	1h 36m	AN <sub>+</sub> bis M <sub>7</sub>		21:41	07:53	04:55	37m	05:33	36m	06:10	33m	06:44	11h 31m	18:16	34m	18:50	36m	19:26	38m	20:04	12h 25m	8h 48m				Fr, 10. Mär
Sa, 11. Mär		20:06 – 22:57	2h 51m	AN <sub>+</sub> bis M <sub>7</sub>		22:57	08:08	04:53	38m	05:31	36m	06:08	33m	06:41	11h 35m	18:17	34m	18:51	36m	19:28	38m	20:06	12h 22m	8h 44m				Sa, 11. Mär
So, 12. Mär		20:08 – 00:16*	4h 08m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	08:26	04:51	38m	05:29	36m	06:05	33m	06:39	11h 39m	18:19	34m	18:53	36m	19:30	38m	20:08	12h 18m	8h 40m				So, 12. Mär
Mo, 13. Mär		20:10 – 01:37*	5h 26m	AN <sub>+</sub> bis M <sub>7</sub>		00:16	08:49	04:48	38m	05:27	36m	06:03	33m	06:37	11h 43m	18:20	34m	18:54	36m	19:31	38m	20:10	12h 14m	8h 36m				Mo, 13. Mär
Di, 14. Mär		20:11 – 02:53*	6h 41m	AN <sub>+</sub> bis M <sub>7</sub>		01:37	09:22	04:46	38m	05:24	36m	06:01	33m	06:35	11h 46m	18:22	34m	18:56	36m	19:33	38m	20:11	12h 10m	8h 32m				Di, 14. Mär
Mi, 15. Mär		20:13 – 03:59*	7h 46m	AN <sub>+</sub> bis M <sub>7</sub>	◒	02:53	10:07	04:44	38m	05:22	36m	05:59	33m	06:33	11h 50m	18:24	34m	18:58	36m	19:34	38m	20:13	12h 07m	8h 28m				Mi, 15. Mär
Do, 16. Mär		20:15 – 04:39*	8h 24m	AN <sub>+</sub> bis AN <sub>-</sub>		03:59	11:09	04:42	38m	05:20	36m	05:57	33m	06:31	11h 54m	18:25	34m	18:59	36m	19:36	38m	20:15	12h 03m	8h 24m				Do, 16. Mär
Fr, 17. Mär		20:17 – 04:37*	8h 20m	AN <sub>+</sub> bis AN <sub>-</sub>		04:51	12:27	04:39	38m	05:18	36m	05:55	33m	06:29	11h 58m	18:27	34m	19:01	36m	19:38	38m	20:17	11h 59m	8h 20m				Fr, 17. Mär
Sa, 18. Mär		20:18 – 04:34*	8h 15m	AN <sub>+</sub> bis AN <sub>-</sub>		05:29	13:55	04:37	38m	05:16	36m	05:53	33m	06:27	12h 01m	18:28	34m	19:02	37m	19:39	39m	20:18	11h 56m	8h 15m				Sa, 18. Mär
So, 19. Mär		20:20 – 04:32*	8h 11m	AN <sub>+</sub> bis AN <sub>-</sub>		05:56	15:25	04:34	38m	05:13	36m	05:50	34m	06:24	12h 05m	18:30	34m	19:04	37m	19:41	39m	20:20	11h 52m	8h 11m				So, 19. Mär
Mo, 20. Mär		20:22 – 04:30*	8h 07m	AN <sub>+</sub> bis AN <sub>-</sub>		06:17	16:53	04:32	39m	05:11	37m	05:48	34m	06:22	12h 09m	18:31	34m	19:06	37m	19:43	39m	20:22	11h 48m	8h 07m				Mo, 20. Mär
Di, 21. Mär		20:24 – 04:27*	8h 03m	AN <sub>+</sub> bis AN <sub>-</sub>	●	06:34	18:19	04:30	39m	05:09	37m	05:46	34m	06:20	12h 13m	18:33	34m	19:07	37m	19:45	39m	20:24	11h 44m	8h 03m				Di, 21. Mär
Mi, 22. Mär		20:26 – 04:25*	7h 58m	AN <sub>+</sub> bis AN <sub>-</sub>		06:50	19:42	04:27	39m	05:07	37m	05:44	34m	06:18	12h 16m	18:35	34m	19:09	37m	19:46	39m	20:26	11h 41m	7h 58m				Mi, 22. Mär
Do, 23. Mär		21:05 – 04:22*	7h 17m	M <sub>\</sub> bis AN <sub>-</sub>		07:06	21:05	04:25	39m	05:04	37m	05:42	34m	06:16	12h 20m	18:36	34m	19:10	37m	19:48	39m	20:28	11h 37m	7h 54m				Do, 23. Mär
Fr, 24. Mär		22:26 – 04:20*	5h 54m	M <sub>\</sub> bis AN <sub>-</sub>		07:22	22:26	04:22	39m	05:02	37m	05:39	34m	06:14	12h 24m	18:38	34m	19:12	37m	19:50	40m	20:30	11h 33m	7h 50m				Fr, 24. Mär
Sa, 25. Mär		23:45 – 04:17*	4h 32m	M <sub>\</sub> bis AN <sub>-</sub>		07:42	23:45	04:20	39m	05:00	37m	05:37	34m	06:11	12h 27m	18:39	34m	19:14	37m	19:51	40m	20:32	11h 29m	7h 45m				Sa, 25. Mär
So, 26. Mär	MESZ	02:00* – 05:15*	3h 14m	M <sub>\</sub> bis AN <sub>-</sub>		09:06	00:45	05:17	40m	05:57	37m	06:35	34m	07:09	12h 31m	19:41	34m	20:15	37m	20:53	40m	21:33	11h 26m	7h 41m				So, 26. Mär
Mo, 27. Mär	MESZ	03:08* – 05:12*	2h 04m	M <sub>\</sub> bis AN <sub>-</sub>		09:38	02:00	05:15	40m	05:55	37m	06:33	34m	07:07	12h 35m	19:42	34m	20:17	37m	20:55	40m	21:35	11h 22m	7h 36m				Mo, 27. Mär
Di, 28. Mär	MESZ	04:04* – 05:10*	1h 05m	M <sub>\</sub> bis AN <sub>-</sub>		10:19	03:08	05:12	40m	05:53	37m	06:31	34m	07:05	12h 39m	19:44	34m	20:19	38m	20:57	40m	21:37	11h 18m	7h 32m				Di, 28. Mär
Mi, 29. Mär	MESZ	04:48* – 05:07*	19m	M <sub>\</sub> bis AN <sub>-</sub>	◑	11:11	04:04	05:10	40m	05:50	37m	06:28	34m	07:03	12h 42m	19:46	34m	20:20	38m	20:58	41m	21:39	11h 15m	7h 27m				Mi, 29. Mär
Do, 30. Mär	MESZ	—:~:~:~	–	Mond stört		12:13	04:48	05:07	41m	05:48	38m	06:26	34m	07:01	12h 46m	19:47	34m	20:22	38m	21:00	41m	21:41	11h 11m	7h 23m				Do, 30. Mär
Fr, 31. Mär	MESZ	—:~:~:~	–	Mond stört		13:20	05:21	05:04	41m	05:46	38m	06:24	34m	06:58	12h 50m	19:49	34m	20:23	38m	21:02	41m	21:43	11h 07m	7h 18m				Fr, 31. Mär
Sa, 1. Apr	MESZ	—:~:~:~	–	Mond stört		14:31	05:46	05:02	41m	05:43	38m	06:22	34m	06:56	12h 53m	19:50	34m	20:25	38m	21:04	41m	21:45	11h 03m	7h 13m				Sa, 1. Apr
So, 2. Apr	MESZ	—:~:~:~	–	Mond stört		15:41	06:05	04:59	41m	05:41	38m	06:19	34m	06:54	12h 57m	19:52	34m	20:27	38m	21:05	42m	21:47	11h 00m	7h 09m				So, 2. Apr
Mo, 3. Apr	MESZ	—:~:~:~	–	Mond stört		16:52	06:21	04:57	42m	05:39	38m	06:17	34															

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

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

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

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



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