

# Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Krems an der Donau 48.4108° N 15.6103° E

Berechnung: pyEphem  
Textsatz: L<sup>A</sup>T<sub>E</sub>X

## Atmosphären-Einstellungen in pyEphem

Standort.pressure = 1010.0  
Standort.horizon = '0:00:00.0'

Alle Zeitangaben beziehen sich auf den in der jeweiligen Zeile angegeben Kalendertag. Liegt ein Ereignis bereits nach Mitternacht, also schon am Folgetag, ist die Zeitangabe mit einem \* gekennzeichnet, z.B.: 00:20\*.

**Spalte 1** Kalendertag.

**Spalte 2** Bei »MESZ« sind alle Zeitangaben in dieser Zeile in Mitteleuropäischer Sommerzeit, ansonsten standardmäßig in MEZ.

**Spalte 3** Die für Deep-Sky-Beobachtungen nutzbare Zeitspanne: Es ist astronomisch dunkel (Sonne steht tiefer als  $-18^\circ$ ) und kein Mond stört.

**Spalte 4** Dauer der für Deep-Sky-Beobachtungen nutzbaren Zeitspanne.

**Spalte 5** Ereignisse, die die für Deep-Sky-Beobachtungen nutzbare Zeitspanne begrenzen: AN<sub>+</sub> (Einbruch der astronomischen Nacht = Ende der astr. Abenddämmerung), M<sub>v</sub> (Monduntergang), AN<sub>-</sub> (Ende der astronomischen Nacht = Beginn der astr. Morgendämmerung), M<sub>7</sub>

(Mondaufgang), Astr. MD (Astronomische Mitternachtsdämmerung), Naut. MD (Nautische Mitternachtsdämmerung).

**Spalte 6** Mondphase.

**Spalte 7** Mondaufgang.

**Spalte 8** Monduntergang.

**Spalte 9** Beginn der astr. Morgendämmerung (Sonnenhöhe =  $-18^\circ$ ).

**Spalte 10** Dauer der astr. Morgendämmerung.

**Spalte 11** Beginn der naut. Morgendämmerung (Sonnenhöhe =  $-12^\circ$ ).

**Spalte 12** Dauer der naut. Morgendämmerung.

**Spalte 13** Beginn der bürg. Morgendämmerung (Sonnenhöhe =  $-6^\circ$ ).

**Spalte 14** Dauer der bürg. Morgendämmerung.

**Spalte 15** Sonnenaufgang.

**Spalte 16** Taglänge.

**Spalte 17** Sonnenuntergang.

**Spalte 18** Dauer der bürg. Abenddämmerung.

**Spalte 19** Ende der bürg. Abenddämmerung (Sonnenhöhe =  $-6^\circ$ ).

**Spalte 20** Dauer der naut. Abenddämmerung.

**Spalte 21** Ende der naut. Abenddämmerung (Sonnenhöhe =  $-12^\circ$ ).

**Spalte 22** Dauer der astr. Abenddämmerung.

**Spalte 23** Ende der astr. Abenddämmerung (Sonnenhöhe =  $-18^\circ$ ).

**Spalte 24** Länge der Nacht.

**Spalte 25** Länge der astr. Nacht.

**Für Beobachter, die zu Zeiten der Mitternachtsdämmerung während der astr. Dämmerung beobachten möchten:**

**Spalte 26** Nutzbare Zeitspanne: Es ist »nautisch dunkel« (Sonne steht tiefer als  $-12^\circ$ ) und kein Mond stört.

**Spalte 27** Dauer der in Spalte 26 angegebenen Zeitspanne.

**Spalte 28** Ereignisse, die die nutzbare Zeitspanne begrenzen: ND<sub>+</sub> (Beginn der »naut. Dunkelheit« = Ende der naut. Abenddämmerung), M<sub>v</sub> (Monduntergang), ND<sub>-</sub> (Ende der »naut. Dunkelheit« = Beginn der naut. Morgendämmerung), M<sub>7</sub> (Mondaufgang), Naut. MD (Nautische Mitternachtsdämmerung).

**Spalte 29** Identisch zu Spalte 1.

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

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

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

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

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



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