

# Mond- und Dämmerungstabelle 2024

## für die visuelle Deep-Sky-Beobachtung

Linz 48.3031° N 14.2906° 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>l</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>l</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		18:14–21:56	3h 42m	AN <sub>+</sub> bis M <sub>7</sub>		21:56	11:02	05:58	37m	06:35	38m	07:14	38m	07:53	8h 25m	16:18	38m	16:57	38m	17:36	37m	18:14	15h 34m	11h 43m					Mo, 1. Jan
Di, 2. Jan		18:15–23:02	4h 47m	AN <sub>+</sub> bis M <sub>7</sub>		23:02	11:16	05:58	37m	06:36	38m	07:14	38m	07:53	8h 26m	16:19	38m	16:58	38m	17:37	37m	18:15	15h 33m	11h 43m					Di, 2. Jan
Mi, 3. Jan		18:16–00:09*	5h 52m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	11:29	05:58	37m	06:36	38m	07:14	38m	07:53	8h 27m	16:20	38m	16:59	38m	17:38	37m	18:16	15h 32m	11h 42m					Mi, 3. Jan
Do, 4. Jan		18:17–01:17*	6h 59m	AN <sub>+</sub> bis M <sub>7</sub>	☾	00:09	11:42	05:58	37m	06:36	38m	07:14	38m	07:53	8h 28m	16:21	38m	17:00	38m	17:39	37m	18:17	15h 31m	11h 41m					Do, 4. Jan
Fr, 5. Jan		18:17–02:28*	8h 10m	AN <sub>+</sub> bis M <sub>7</sub>		01:17	11:57	05:58	37m	06:36	38m	07:14	38m	07:53	8h 29m	16:23	38m	17:01	38m	17:40	37m	18:17	15h 29m	11h 40m					Fr, 5. Jan
Sa, 6. Jan		18:18–03:42*	9h 23m	AN <sub>+</sub> bis M <sub>7</sub>		02:28	12:14	05:58	37m	06:35	38m	07:14	38m	07:52	8h 31m	16:24	38m	17:02	38m	17:41	37m	18:18	15h 28m	11h 39m					Sa, 6. Jan
So, 7. Jan		18:19–05:00*	10h 40m	AN <sub>+</sub> bis M <sub>7</sub>		03:42	12:36	05:58	37m	06:35	38m	07:14	38m	07:52	8h 32m	16:25	38m	17:03	38m	17:42	37m	18:19	15h 27m	11h 38m					So, 7. Jan
Mo, 8. Jan		18:20–05:57*	11h 36m	AN <sub>+</sub> bis AN <sub>-</sub>		05:00	13:07	05:57	37m	06:35	38m	07:14	38m	07:52	8h 34m	16:26	38m	17:04	38m	17:43	37m	18:20	15h 25m	11h 36m					Mo, 8. Jan
Di, 9. Jan		18:21–05:57*	11h 35m	AN <sub>+</sub> bis AN <sub>-</sub>		06:17	13:50	05:57	37m	06:35	38m	07:13	38m	07:52	8h 35m	16:27	38m	17:05	38m	17:44	37m	18:21	15h 23m	11h 35m					Di, 9. Jan
Mi, 10. Jan		18:22–05:57*	11h 34m	AN <sub>+</sub> bis AN <sub>-</sub>		07:27	14:49	05:57	37m	06:35	38m	07:13	38m	07:51	8h 37m	16:28	38m	17:06	38m	17:45	37m	18:22	15h 22m	11h 34m					Mi, 10. Jan
Do, 11. Jan		18:24–05:57*	11h 33m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	08:24	16:05	05:57	37m	06:34	38m	07:13	37m	07:51	8h 39m	16:30	37m	17:08	38m	17:46	37m	18:24	15h 20m	11h 33m					Do, 11. Jan
Fr, 12. Jan		18:25–05:56*	11h 31m	AN <sub>+</sub> bis AN <sub>-</sub>		09:06	17:31	05:57	37m	06:34	38m	07:12	37m	07:50	8h 40m	16:31	37m	17:09	38m	17:47	37m	18:25	15h 18m	11h 31m					Fr, 12. Jan
Sa, 13. Jan		19:00–05:56*	10h 55m	M <sub>\</sub> bis AN <sub>-</sub>		09:36	19:00	05:56	37m	06:34	38m	07:12	37m	07:50	8h 42m	16:32	37m	17:10	38m	17:48	37m	18:26	15h 16m	11h 30m					Sa, 13. Jan
So, 14. Jan		20:27–05:55*	9h 28m	M <sub>\</sub> bis AN <sub>-</sub>		10:00	20:27	05:56	37m	06:33	38m	07:11	37m	07:49	8h 44m	16:34	37m	17:11	38m	17:49	37m	18:27	15h 14m	11h 28m					So, 14. Jan
Mo, 15. Jan		21:51–05:55*	8h 03m	M <sub>\</sub> bis AN <sub>-</sub>		10:19	21:51	05:55	37m	06:33	38m	07:11	37m	07:48	8h 46m	16:35	37m	17:13	38m	17:51	37m	18:28	15h 12m	11h 26m					Mo, 15. Jan
Di, 16. Jan		23:13–05:55*	6h 41m	M <sub>\</sub> bis AN <sub>-</sub>		10:35	23:13	05:55	37m	06:32	37m	07:10	37m	07:48	8h 48m	16:36	37m	17:14	38m	17:52	37m	18:29	15h 10m	11h 25m					Di, 16. Jan
Mi, 17. Jan		00:33*–05:54*	5h 21m	M <sub>\</sub> bis AN <sub>-</sub>		10:52	—:—	05:55	37m	06:32	37m	07:10	37m	07:47	8h 50m	16:38	37m	17:15	37m	17:53	37m	18:30	15h 08m	11h 23m					Mi, 17. Jan
Do, 18. Jan		01:52*–05:53*	4h 00m	M <sub>\</sub> bis AN <sub>-</sub>	☾	11:09	00:33	05:54	37m	06:31	37m	07:09	37m	07:46	8h 53m	16:39	37m	17:17	37m	17:54	37m	18:32	15h 06m	11h 21m					Do, 18. Jan
Fr, 19. Jan		03:12*–05:53*	2h 40m	M <sub>\</sub> bis AN <sub>-</sub>		11:29	01:52	05:53	37m	06:31	37m	07:08	37m	07:45	8h 55m	16:41	37m	17:18	37m	17:56	37m	18:33	15h 03m	11h 19m					Fr, 19. Jan
Sa, 20. Jan		04:29*–05:52*	1h 23m	M <sub>\</sub> bis AN <sub>-</sub>		11:54	03:12	05:53	37m	06:30	37m	07:08	36m	07:45	8h 57m	16:42	36m	17:19	37m	17:57	37m	18:34	15h 01m	11h 18m					Sa, 20. Jan
So, 21. Jan		05:40*–05:51*	11m	M <sub>\</sub> bis AN <sub>-</sub>		12:26	04:29	05:52	37m	06:29	37m	07:07	36m	07:44	9h 00m	16:44	36m	17:21	37m	17:58	37m	18:35	14h 58m	11h 16m					So, 21. Jan
Mo, 22. Jan		—:—:—:—	–	Mond stört		13:08	05:40	05:51	37m	06:28	37m	07:06	36m	07:43	9h 02m	16:45	36m	17:22	37m	18:00	37m	18:37	14h 56m	11h 14m					Mo, 22. Jan
Di, 23. Jan		—:—:—:—	–	Mond stört		14:02	06:40	05:51	36m	06:28	37m	07:05	36m	07:42	9h 04m	16:47	36m	17:23	37m	18:01	36m	18:38	14h 53m	11h 12m					Di, 23. Jan
Mi, 24. Jan		—:—:—:—	–	Mond stört		15:06	07:28	05:50	36m	06:27	37m	07:04	36m	07:41	9h 07m	16:48	36m	17:25	37m	18:02	36m	18:39	14h 51m	11h 09m					Mi, 24. Jan
Do, 25. Jan		—:~:~:~:~	–	Mond stört	☾	16:15	08:04	05:49	36m	06:26	37m	07:03	36m	07:40	9h 10m	16:50	36m	17:26	37m	18:04	36m	18:40	14h 48m	11h 07m					Do, 25. Jan
Fr, 26. Jan		—:~:~:~:~	–	Mond stört		17:26	08:31	05:48	36m	06:25	37m	07:02	36m	07:39	9h 12m	16:51	36m	17:28	37m	18:05	36m	18:42	14h 46m	11h 05m					Fr, 26. Jan
Sa, 27. Jan		—:~:~:~:~	–	Mond stört		18:36	08:51	05:47	36m	06:24	37m	07:01	36m	07:37	9h 15m	16:53	36m	17:29	37m	18:06	36m	18:43	14h 43m	11h 03m					Sa, 27. Jan
So, 28. Jan		18:44–19:44	59m	AN <sub>+</sub> bis M <sub>7</sub>		19:44	09:08	05:46	36m	06:23	37m	07:00	36m	07:36	9h 18m	16:55	36m	17:31	37m	18:08	36m	18:44	14h 40m	11h 01m					So, 28. Jan
Mo, 29. Jan		18:46–20:50	2h 04m	AN <sub>+</sub> bis M <sub>7</sub>		20:50	09:22	05:46	36m	06:22	36m	06:59	35m	07:35	9h 20m	16:56	35m	17:32	36m	18:09	36m	18:46	14h 37m	10h 58m					Mo, 29. Jan
Di, 30. Jan		18:47–21:56	3h 09m	AN <sub>+</sub> bis M <sub>7</sub>		21:56	09:35	05:45	36m	06:21	36m	06:58	35m	07:34	9h 23m	16:58	35m	17:34	36m	18:10	36m	18:47	14h 34m	10h 56m					Di, 30. Jan
Mi, 31. Jan		18:48–23:03	4h 14m	AN <sub>+</sub> bis M <sub>7</sub>		23:03	09:48	05:44	36m	06:20	36m	06:57	35m	07:33	9h 26m	16:59	35m	17:35	36m	18:12	36m	18:48	14h 32m	10h 53m					Mi, 31. Jan
Do, 1. Feb		18:50–00:11*	5h 21m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	10:01	05:42	36m	06:19	36m	06:56	35m	07:31	9h 29m	17:01	35m	17:37	36m	18:13	36m	18:50	14h 29m	10h 51m					Do, 1. Feb
Fr, 2. Feb		18:51–01:23*	6h 31m	AN <sub>+</sub> bis M <sub>7</sub>		00:11	10:17	05:41	36m	06:18	36m	06:54	35m	07:30	9h 32m	17:02	35m	17:38	36m	18:15	36m	18:51	14h 26m	10h 48m					Fr, 2. Feb
Sa, 3. Feb		18:53–02:38*	7h 44m	AN <sub>+</sub> bis M <sub>7</sub>	☾	01:23	10:36	05:40	36m	06:17	36m	06:53	35m	07:29	9h 35m	17:04	35m	17:40	36m	18:16	36m	18:53	14h 23m	10h 46m					Sa, 3. Feb
So, 4. Feb		18:54–03:53*	8h 59m	AN <sub>+</sub> bis M <sub>7</sub>		02:38	11:02	05:39	36m	06:15	36m	06:52	35m	07:27	9h 38m	17:06	35m	17:41	36m	18:18	36m	18:54	14h 20m	10h 43m					So, 4. Feb
Mo, 5. Feb		18:55–05:06*	10h 10m	AN <sub>+</sub> bis M <sub>7</sub>		03:53	11:37	05:38	36m	06:14	36m	06:51	35m	07:26	9h 41m	17:07	35m	17:43	36m	18:19	36m	18:55	14h 17m	10h 41m					Mo, 5. Feb
Di, 6. Feb		18:57–05:35*	10h 38m	AN <sub>+</sub> bis AN <sub>-</sub>		05:06	12:27	05:37	36m	06:13	36m	06:49	35m	07:24	9h 44m	17:09	35m	17:44	36m	18:20	36m	18:57	14h 13m	10h 38m					Di, 6. Feb
Mi, 7. Feb		18:58–05:34*	10h 35m	AN <sub>+</sub> bis AN <sub>-</sub>		06:08	13:34	05:35	36m	06:12	36m	06:48	34m	07:23	9h 47m	17:11	35m	17:46	36m	18:22	36m	18:58	14h 10m	10h 35m					Mi, 7. Feb
Do, 8. Feb		19:00–05:33*	10h 33m	AN <sub>+</sub> bis AN <sub>-</sub>		06:57	14:56	05:34	36m	06:10	36m	06:46	34m	07:21	9h 50m	17:12	34m	17:47	36m	18:23	36m	19:00	14h 07m	10h 33m					Do, 8. Feb
Fr, 9. Feb		19:01–05:31*	10h 30m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	07:33	16:26	05:33	36m	06:09	36m	06:45	34m	07:20	9h 53m	17:14	34m	17:49	36m	18:25	36m	19:01	14h 04m	10h 30m					Fr, 9. Feb
Sa, 10. Feb		19:03–05:30*	10h 27m	AN <sub>+</sub> bis AN <sub>-</sub>		08:00	17:56	05:31	36m	06:07	36m	06:44	34m	07:18	9h 57m	17:15	34m	17:50	36m	18:26	36m	19:03	14h 01m	10h 27m					Sa, 10. Feb
So, 11. Feb		19:25–05:28*	10h 03m	M <sub>\</sub> bis AN <sub>-</sub>		08:21	19:25	05:30	36m	06:06	36m	06:42	34m	07:17	10h 00m														

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

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

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



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

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

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



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