

# Mond- und Dämmerungstabelle 2024

## für die visuelle Deep-Sky-Beobachtung

Annaberg-Buchholz 50.5800° N 13.0022° 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		18:15–21:58	3h 42m	AN <sub>+</sub> bis M <sub>J</sub>		21:58	11:12	06:06	39m	06:46	41m	07:27	41m	08:08	8h 05m	16:14	41m	16:55	41m	17:36	39m	18:15	15h 54m	11h 50m				Mo, 1. Jan
Di, 2. Jan		18:16–23:07	4h 50m	AN <sub>+</sub> bis M <sub>J</sub>		23:07	11:23	06:06	39m	06:46	40m	07:27	41m	08:08	8h 06m	16:15	41m	16:56	40m	17:37	39m	18:16	15h 53m	11h 50m				Di, 2. Jan
Mi, 3. Jan		18:17–00:15*	5h 58m	AN <sub>+</sub> bis M <sub>J</sub>		—:—	11:34	06:06	39m	06:46	40m	07:27	41m	08:08	8h 07m	16:16	41m	16:57	40m	17:38	39m	18:17	15h 52m	11h 49m				Mi, 3. Jan
Do, 4. Jan		18:18–01:26*	7h 07m	AN <sub>+</sub> bis M <sub>J</sub>	☾	00:15	11:45	06:06	39m	06:46	40m	07:27	40m	08:08	8h 08m	16:17	40m	16:58	40m	17:39	39m	18:18	15h 50m	11h 48m				Do, 4. Jan
Fr, 5. Jan		18:19–02:39*	8h 20m	AN <sub>+</sub> bis M <sub>J</sub>		01:26	11:57	06:06	39m	06:46	40m	07:27	40m	08:08	8h 10m	16:18	40m	16:59	40m	17:40	39m	18:19	15h 49m	11h 47m				Fr, 5. Jan
Sa, 6. Jan		18:20–03:57*	9h 36m	AN <sub>+</sub> bis M <sub>J</sub>		02:39	12:12	06:06	39m	06:46	40m	07:27	40m	08:07	8h 11m	16:19	40m	17:00	40m	17:41	39m	18:20	15h 47m	11h 45m				Sa, 6. Jan
So, 7. Jan		18:21–05:18*	10h 56m	AN <sub>+</sub> bis M <sub>J</sub>		03:57	12:32	06:06	39m	06:46	40m	07:26	40m	08:07	8h 13m	16:20	40m	17:01	40m	17:42	39m	18:21	15h 46m	11h 44m				So, 7. Jan
Mo, 8. Jan		18:22–06:06*	11h 43m	AN <sub>+</sub> bis AN <sub>-</sub>		05:18	12:59	06:06	39m	06:45	40m	07:26	40m	08:07	8h 14m	16:22	40m	17:02	40m	17:43	39m	18:22	15h 44m	11h 43m				Mo, 8. Jan
Di, 9. Jan		18:23–06:05*	11h 42m	AN <sub>+</sub> bis AN <sub>-</sub>		06:37	13:40	06:06	39m	06:45	40m	07:26	40m	08:06	8h 16m	16:23	40m	17:03	40m	17:44	39m	18:23	15h 42m	11h 42m				Di, 9. Jan
Mi, 10. Jan		18:24–06:05*	11h 40m	AN <sub>+</sub> bis AN <sub>-</sub>		07:48	14:39	06:05	39m	06:45	40m	07:25	40m	08:06	8h 18m	16:24	40m	17:05	40m	17:45	39m	18:24	15h 40m	11h 40m				Mi, 10. Jan
Do, 11. Jan		18:26–06:05*	11h 39m	AN <sub>+</sub> bis AN <sub>-</sub>	☀	08:43	15:56	06:05	39m	06:44	40m	07:25	40m	08:05	8h 20m	16:26	40m	17:06	40m	17:46	39m	18:26	15h 39m	11h 39m				Do, 11. Jan
Fr, 12. Jan		18:27–06:04*	11h 37m	AN <sub>+</sub> bis AN <sub>-</sub>		09:23	17:25	06:05	39m	06:44	40m	07:24	40m	08:05	8h 22m	16:27	40m	17:07	40m	17:47	39m	18:27	15h 36m	11h 37m				Fr, 12. Jan
Sa, 13. Jan		18:58–06:04*	11h 06m	M <sub>\</sub> bis AN <sub>-</sub>		09:50	18:58	06:04	39m	06:44	40m	07:24	40m	08:04	8h 24m	16:28	40m	17:08	40m	17:49	39m	18:28	15h 34m	11h 35m				Sa, 13. Jan
So, 14. Jan		20:28–06:03*	9h 35m	M <sub>\</sub> bis AN <sub>-</sub>		10:10	20:28	06:04	39m	06:43	40m	07:23	39m	08:03	8h 26m	16:30	39m	17:10	40m	17:50	39m	18:29	15h 32m	11h 34m				So, 14. Jan
Mo, 15. Jan		21:55–06:03*	8h 07m	M <sub>\</sub> bis AN <sub>-</sub>		10:26	21:55	06:03	39m	06:43	40m	07:23	39m	08:03	8h 28m	16:31	39m	17:11	40m	17:51	39m	18:30	15h 30m	11h 32m				Mo, 15. Jan
Di, 16. Jan		23:19–06:02*	6h 43m	M <sub>\</sub> bis AN <sub>-</sub>		10:41	23:19	06:03	39m	06:42	39m	07:22	39m	08:02	8h 31m	16:33	39m	17:13	40m	17:53	39m	18:32	15h 28m	11h 30m				Di, 16. Jan
Mi, 17. Jan		00:42*–06:02*	5h 19m	M <sub>\</sub> bis AN <sub>-</sub>		10:54	—:—	06:02	39m	06:41	39m	07:21	39m	08:01	8h 33m	16:34	39m	17:14	39m	17:54	39m	18:33	15h 25m	11h 28m				Mi, 17. Jan
Do, 18. Jan		02:05*–06:01*	3h 56m	M <sub>\</sub> bis AN <sub>-</sub>	☾	11:09	00:42	06:02	38m	06:41	39m	07:21	39m	08:00	8h 35m	16:36	39m	17:15	39m	17:55	39m	18:34	15h 23m	11h 26m				Do, 18. Jan
Fr, 19. Jan		03:27*–06:00*	2h 33m	M <sub>\</sub> bis AN <sub>-</sub>		11:26	02:05	06:01	38m	06:40	39m	07:20	39m	07:59	8h 38m	16:37	39m	17:17	39m	17:57	38m	18:35	15h 20m	11h 24m				Fr, 19. Jan
Sa, 20. Jan		04:47*–06:00*	1h 12m	M <sub>\</sub> bis AN <sub>-</sub>		11:48	03:27	06:00	38m	06:39	39m	07:19	39m	07:58	8h 40m	16:39	39m	17:18	39m	17:58	38m	18:37	15h 18m	11h 22m				Sa, 20. Jan
So, 21. Jan		—:—:—:—	–	Mond stört		12:18	04:47	06:00	38m	06:39	39m	07:18	39m	07:57	8h 43m	16:41	39m	17:20	39m	17:59	38m	18:38	15h 15m	11h 20m				So, 21. Jan
Mo, 22. Jan		—:—:—:—	–	Mond stört		12:59	06:00	05:59	38m	06:38	39m	07:17	38m	07:56	8h 46m	16:42	38m	17:21	39m	18:01	38m	18:39	15h 12m	11h 18m				Mo, 22. Jan
Di, 23. Jan		—:—:—:—	–	Mond stört		13:52	07:01	05:58	38m	06:37	39m	07:16	38m	07:55	8h 49m	16:44	38m	17:23	39m	18:02	38m	18:41	15h 09m	11h 16m				Di, 23. Jan
Mi, 24. Jan		—:—:—:—	–	Mond stört		14:57	07:48	05:57	38m	06:36	39m	07:15	38m	07:54	8h 51m	16:46	38m	17:24	39m	18:04	38m	18:42	15h 07m	11h 14m				Mi, 24. Jan
Do, 25. Jan		—:—:~:~:~	–	Mond stört	☉	16:09	08:22	05:56	38m	06:35	39m	07:14	38m	07:53	8h 54m	16:47	38m	17:26	39m	18:05	38m	18:44	15h 04m	11h 11m				Do, 25. Jan
Fr, 26. Jan		—:~:~:~:~	–	Mond stört		17:22	08:46	05:55	38m	06:34	39m	07:13	38m	07:51	8h 57m	16:49	38m	17:27	39m	18:06	38m	18:45	15h 01m	11h 09m				Fr, 26. Jan
Sa, 27. Jan		—:~:~:~:~	–	Mond stört		18:35	09:04	05:54	38m	06:33	38m	07:12	38m	07:50	9h 00m	16:51	38m	17:29	39m	18:08	38m	18:46	14h 58m	11h 06m				Sa, 27. Jan
So, 28. Jan		18:48–19:45	57m	AN <sub>+</sub> bis M <sub>J</sub>		19:45	09:18	05:53	38m	06:32	38m	07:11	38m	07:49	9h 03m	16:52	38m	17:30	38m	18:09	38m	18:48	14h 55m	11h 04m				So, 28. Jan
Mo, 29. Jan		18:49–20:54	2h 04m	AN <sub>+</sub> bis M <sub>J</sub>		20:54	09:30	05:52	38m	06:31	38m	07:10	37m	07:47	9h 06m	16:54	37m	17:32	38m	18:11	38m	18:49	14h 52m	11h 01m				Mo, 29. Jan
Di, 30. Jan		18:51–22:02	3h 11m	AN <sub>+</sub> bis M <sub>J</sub>		22:02	09:41	05:51	38m	06:30	38m	07:08	37m	07:46	9h 09m	16:56	37m	17:34	38m	18:12	38m	18:51	14h 48m	10h 59m				Di, 30. Jan
Mi, 31. Jan		18:52–23:11	4h 18m	AN <sub>+</sub> bis M <sub>J</sub>		23:11	09:51	05:50	38m	06:28	38m	07:07	37m	07:45	9h 12m	16:58	37m	17:35	38m	18:14	38m	18:52	14h 45m	10h 56m				Mi, 31. Jan
Do, 1. Feb		18:54–00:22*	5h 28m	AN <sub>+</sub> bis M <sub>J</sub>		—:—	10:03	05:49	38m	06:27	38m	07:06	37m	07:43	9h 15m	16:59	37m	17:37	38m	18:15	38m	18:54	14h 42m	10h 53m				Do, 1. Feb
Fr, 2. Feb		18:55–01:36*	6h 41m	AN <sub>+</sub> bis M <sub>J</sub>		00:22	10:16	05:48	38m	06:26	38m	07:04	37m	07:42	9h 19m	17:01	37m	17:38	38m	18:17	38m	18:55	14h 39m	10h 51m				Fr, 2. Feb
Sa, 3. Feb		18:57–02:54*	7h 57m	AN <sub>+</sub> bis M <sub>J</sub>	☾	01:36	10:33	05:46	38m	06:25	38m	07:03	37m	07:40	9h 22m	17:03	37m	17:40	38m	18:19	38m	18:57	14h 35m	10h 48m				Sa, 3. Feb
So, 4. Feb		18:58–04:13*	9h 14m	AN <sub>+</sub> bis M <sub>J</sub>		02:54	10:55	05:45	38m	06:23	38m	07:02	37m	07:39	9h 25m	17:05	37m	17:42	38m	18:20	38m	18:58	14h 32m	10h 45m				So, 4. Feb
Mo, 5. Feb		19:00–05:27*	10h 26m	AN <sub>+</sub> bis M <sub>J</sub>		04:13	11:28	05:44	38m	06:22	38m	07:00	37m	07:37	9h 29m	17:06	37m	17:43	38m	18:22	38m	19:00	14h 29m	10h 42m				Mo, 5. Feb
Di, 6. Feb		19:01–05:41*	10h 39m	AN <sub>+</sub> bis AN <sub>-</sub>		05:27	12:17	05:43	38m	06:21	38m	06:59	36m	07:36	9h 32m	17:08	36m	17:45	38m	18:23	38m	19:01	14h 25m	10h 39m				Di, 6. Feb
Mi, 7. Feb		19:03–05:40*	10h 36m	AN <sub>+</sub> bis AN <sub>-</sub>		06:29	13:24	05:41	37m	06:19	38m	06:57	36m	07:34	9h 35m	17:10	36m	17:47	38m	18:25	38m	19:03	14h 22m	10h 36m				Mi, 7. Feb
Do, 8. Feb		19:04–05:38*	10h 33m	AN <sub>+</sub> bis AN <sub>-</sub>		07:16	14:48	05:40	37m	06:18	37m	06:56	36m	07:32	9h 39m	17:12	36m	17:48	38m	18:26	38m	19:04	14h 19m	10h 33m				Do, 8. Feb
Fr, 9. Feb		19:06–05:37*	10h 30m	AN <sub>+</sub> bis AN <sub>-</sub>	☀	07:49	16:22	05:38	37m	06:16	37m	06:54	36m	07:31	9h 42m	17:13	36m	17:50	37m	18:28	37m	19:06	14h 15m	10h 30m				Fr, 9. Feb
Sa, 10. Feb		19:07–05:35*	10h 27m	AN <sub>+</sub> bis AN <sub>-</sub>		08:12	17:56	05:37	37m	06:15	37m	06:52	36m	07:29	9h 46m	17:15	36m	17:52	37m	18:30	37m	19:07	14h 12m	10h 27m				Sa, 10. Feb
So, 11. Feb		19:28–05:34*	10h 05m	M <sub>\</sub> bis AN <sub>-</sub>		08:30	19:28	05:35	37m	06:13	37m	06:51	36m	07:27	9h 49m	17:17	36m	17:53	37m	18:31	37m	19:09	14h 08m	10h 24m				So, 11. Feb
Mo, 12. Feb		20:57–05:32*	8h 35m	M <sub>\</sub> bis AN <sub>-</sub>		08:45	20:57	05:34	37m	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- 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.	$\Delta t$	$\Delta t$		$\Delta t$			
Di, 20. Feb		—:—:—:—	—	Mond stört		12:47	05:48	05:20	37m	05:58	37m	06:35	35m	07:11	10h 22m	17:33	35m	18:08	37m	18:46	37m	19:23	13h 35m	9h 54m					Di, 20. Feb
Mi, 21. Feb		—:—:—:—	—	Mond stört		13:57	06:25	05:18	37m	05:56	37m	06:33	35m	07:09	10h 25m	17:34	35m	18:10	37m	18:47	37m	19:25	13h 32m	9h 51m					Mi, 21. Feb
Do, 22. Feb		—:—:~:~:~	—	Mond stört		15:10	06:52	05:16	37m	05:54	37m	06:31	35m	07:07	10h 29m	17:36	35m	18:12	37m	18:49	37m	19:27	13h 28m	9h 47m					Do, 22. Feb
Fr, 23. Feb		—:~:~:~:~	—	Mond stört		16:23	07:11	05:14	37m	05:52	37m	06:29	35m	07:05	10h 33m	17:38	35m	18:13	37m	18:50	37m	19:28	13h 24m	9h 44m					Fr, 23. Feb
Sa, 24. Feb		—:~:~:~:~	—	Mond stört	○	17:34	07:26	05:12	37m	05:50	37m	06:27	35m	07:03	10h 36m	17:40	35m	18:15	37m	18:52	37m	19:30	13h 21m	9h 40m					Sa, 24. Feb
So, 25. Feb		—:~:~:~:~	—	Mond stört		18:43	07:38	05:11	37m	05:48	37m	06:26	35m	07:01	10h 40m	17:41	35m	18:17	37m	18:54	37m	19:32	13h 17m	9h 36m					So, 25. Feb
Mo, 26. Feb		19:33 – 19:52	18m	AN <sub>+</sub> bis M <sub>7</sub>		19:52	07:49	05:09	37m	05:46	37m	06:24	35m	06:59	10h 44m	17:43	35m	18:18	37m	18:55	38m	19:33	13h 13m	9h 33m					Mo, 26. Feb
Di, 27. Feb		19:35 – 21:00	1h 25m	AN <sub>+</sub> bis M <sub>7</sub>		21:00	07:59	05:07	37m	05:44	37m	06:22	35m	06:57	10h 48m	17:45	35m	18:20	37m	18:57	38m	19:35	13h 09m	9h 29m					Di, 27. Feb
Mi, 28. Feb		19:37 – 22:10	2h 33m	AN <sub>+</sub> bis M <sub>7</sub>		22:10	08:10	05:05	37m	05:43	37m	06:20	34m	06:55	10h 51m	17:46	35m	18:22	37m	18:59	38m	19:37	13h 05m	9h 25m					Mi, 28. Feb
Do, 29. Feb		19:38 – 23:23	3h 44m	AN <sub>+</sub> bis M <sub>7</sub>		23:23	08:22	05:02	38m	05:40	37m	06:18	34m	06:52	10h 55m	17:48	34m	18:23	37m	19:00	38m	19:38	13h 02m	9h 21m					Do, 29. Feb
Fr, 1. Mär		19:40 – 00:38*	4h 57m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	08:37	05:00	38m	05:38	37m	06:16	34m	06:50	10h 59m	17:50	34m	18:25	37m	19:02	38m	19:40	12h 58m	9h 18m					Fr, 1. Mär
Sa, 2. Mär		19:42 – 01:55*	6h 13m	AN <sub>+</sub> bis M <sub>7</sub>		00:38	08:57	04:58	38m	05:36	37m	06:13	34m	06:48	11h 03m	17:52	34m	18:26	37m	19:04	38m	19:42	12h 54m	9h 14m					Sa, 2. Mär
So, 3. Mär		19:44 – 03:10*	7h 25m	AN <sub>+</sub> bis M <sub>7</sub>	●	01:55	09:24	04:56	38m	05:34	37m	06:11	34m	06:46	11h 07m	17:53	34m	18:28	37m	19:05	38m	19:44	12h 50m	9h 10m					So, 3. Mär
Mo, 4. Mär		19:45 – 04:15*	8h 30m	AN <sub>+</sub> bis M <sub>7</sub>		03:10	10:04	04:54	38m	05:32	37m	06:09	34m	06:44	11h 10m	17:55	34m	18:30	37m	19:07	38m	19:45	12h 46m	9h 06m					Mo, 4. Mär
Di, 5. Mär		19:47 – 04:50*	9h 02m	AN <sub>+</sub> bis AN <sub>-</sub>		04:15	11:01	04:52	38m	05:30	37m	06:07	34m	06:42	11h 14m	17:57	34m	18:31	37m	19:09	38m	19:47	12h 43m	9h 02m					Di, 5. Mär
Mi, 6. Mär		19:49 – 04:47*	8h 58m	AN <sub>+</sub> bis AN <sub>-</sub>		05:08	12:15	04:50	38m	05:28	37m	06:05	34m	06:40	11h 18m	17:58	34m	18:33	37m	19:10	38m	19:49	12h 39m	8h 58m					Mi, 6. Mär
Do, 7. Mär		19:51 – 04:45*	8h 54m	AN <sub>+</sub> bis AN <sub>-</sub>		05:45	13:43	04:47	38m	05:26	37m	06:03	34m	06:38	11h 22m	18:00	34m	18:35	37m	19:12	38m	19:51	12h 35m	8h 54m					Do, 7. Mär
Fr, 8. Mär		19:52 – 04:43*	8h 50m	AN <sub>+</sub> bis AN <sub>-</sub>		06:12	15:16	04:45	38m	05:24	37m	06:01	34m	06:35	11h 26m	18:02	34m	18:36	37m	19:14	38m	19:52	12h 31m	8h 50m					Fr, 8. Mär
Sa, 9. Mär		19:54 – 04:41*	8h 46m	AN <sub>+</sub> bis AN <sub>-</sub>		06:33	16:50	04:43	38m	05:22	37m	05:59	34m	06:33	11h 30m	18:03	34m	18:38	37m	19:15	38m	19:54	12h 27m	8h 46m					Sa, 9. Mär
So, 10. Mär		19:56 – 04:38*	8h 42m	AN <sub>+</sub> bis AN <sub>-</sub>	●	06:49	18:21	04:41	38m	05:19	37m	05:57	34m	06:31	11h 33m	18:05	34m	18:40	37m	19:17	38m	19:56	12h 23m	8h 42m					So, 10. Mär
Mo, 11. Mär		19:58 – 04:36*	8h 38m	AN <sub>+</sub> bis AN <sub>-</sub>		07:04	19:52	04:38	38m	05:17	37m	05:54	34m	06:29	11h 37m	18:07	34m	18:41	37m	19:19	39m	19:58	12h 20m	8h 38m					Mo, 11. Mär
Di, 12. Mär		21:21 – 04:34*	7h 12m	M <sub>7</sub> bis AN <sub>-</sub>		07:18	21:21	04:36	38m	05:15	37m	05:52	34m	06:27	11h 41m	18:08	34m	18:43	37m	19:20	39m	20:00	12h 16m	8h 34m					Di, 12. Mär
Mi, 13. Mär		22:50 – 04:31*	5h 40m	M <sub>7</sub> bis AN <sub>-</sub>		07:34	22:50	04:34	39m	05:13	37m	05:50	34m	06:25	11h 45m	18:10	34m	18:45	37m	19:22	39m	20:01	12h 12m	8h 29m					Mi, 13. Mär
Do, 14. Mär		00:18* – 04:29*	4h 10m	M <sub>7</sub> bis AN <sub>-</sub>		07:53	—:—	04:31	39m	05:10	37m	05:48	34m	06:22	11h 49m	18:12	34m	18:46	37m	19:24	39m	20:03	12h 08m	8h 25m					Do, 14. Mär
Fr, 15. Mär		01:40* – 04:26*	2h 46m	M <sub>7</sub> bis AN <sub>-</sub>		08:18	00:18	04:29	39m	05:08	37m	05:46	34m	06:20	11h 53m	18:13	34m	18:48	37m	19:26	39m	20:05	12h 04m	8h 21m					Fr, 15. Mär
Sa, 16. Mär		02:51* – 04:24*	1h 32m	M <sub>7</sub> bis AN <sub>-</sub>		08:53	01:40	04:26	39m	05:06	37m	05:43	34m	06:18	11h 56m	18:15	34m	18:50	37m	19:27	39m	20:07	12h 00m	8h 17m					Sa, 16. Mär
So, 17. Mär		03:47* – 04:22*	34m	M <sub>7</sub> bis AN <sub>-</sub>	●	09:39	02:51	04:24	39m	05:04	37m	05:41	34m	06:16	12h 00m	18:17	34m	18:51	37m	19:29	39m	20:09	11h 57m	8h 12m					So, 17. Mär
Mo, 18. Mär		—:~:~:~:~	—	Mond stört		10:37	03:47	04:22	39m	05:01	37m	05:39	34m	06:14	12h 04m	18:18	34m	18:53	37m	19:31	39m	20:11	11h 53m	8h 08m					Mo, 18. Mär
Di, 19. Mär		—:~:~:~:~	—	Mond stört		11:46	04:28	04:19	39m	04:59	37m	05:37	34m	06:11	12h 08m	18:20	34m	18:55	37m	19:32	40m	20:13	11h 49m	8h 04m					Di, 19. Mär
Mi, 20. Mär		—:~:~:~:~	—	Mond stört		12:58	04:57	04:17	40m	04:57	37m	05:34	34m	06:09	12h 12m	18:21	34m	18:56	37m	19:34	40m	20:15	11h 45m	7h 59m					Mi, 20. Mär
Do, 21. Mär		—:~:~:~:~	—	Mond stört		14:12	05:18	04:14	40m	04:54	37m	05:32	34m	06:07	12h 16m	18:23	34m	18:58	38m	19:36	40m	20:16	11h 41m	7h 55m					Do, 21. Mär
Fr, 22. Mär		—:~:~:~:~	—	Mond stört		15:23	05:34	04:12	40m	04:52	38m	05:30	34m	06:05	12h 20m	18:25	34m	19:00	38m	19:38	40m	20:18	11h 37m	7h 50m					Fr, 22. Mär
Sa, 23. Mär		—:~:~:~:~	—	Mond stört		16:33	05:47	04:09	40m	04:50	38m	05:28	34m	06:02	12h 23m	18:26	34m	19:01	38m	19:39	40m	20:20	11h 33m	7h 46m					Sa, 23. Mär
So, 24. Mär		—:~:~:~:~	—	Mond stört		17:42	05:58	04:06	40m	04:47	38m	05:25	34m	06:00	12h 27m	18:28	34m	19:03	38m	19:41	41m	20:22	11h 30m	7h 41m					So, 24. Mär
Mo, 25. Mär		—:~:~:~:~	—	Mond stört	○	18:50	06:08	04:04	41m	04:45	38m	05:23	34m	05:58	12h 31m	18:30	34m	19:05	38m	19:43	41m	20:24	11h 26m	7h 36m					Mo, 25. Mär
Di, 26. Mär		—:~:~:~:~	—	Mond stört		20:00	06:19	04:01	41m	04:42	38m	05:21	34m	05:56	12h 35m	18:31	35m	19:06	38m	19:45	41m	20:26	11h 22m	7h 32m					Di, 26. Mär
Mi, 27. Mär		20:28 – 21:12	43m	AN <sub>+</sub> bis M <sub>7</sub>		21:12	06:30	03:59	41m	04:40	38m	05:19	34m	05:54	12h 39m	18:33	35m	19:08	38m	19:47	41m	20:28	11h 18m	7h 27m					Mi, 27. Mär
Do, 28. Mär		20:30 – 22:27	1h 56m	AN <sub>+</sub> bis M <sub>7</sub>		22:27	06:44	03:56	41m	04:38	38m	05:16	35m	05:51	12h 43m	18:34	35m	19:10	38m	19:48	41m	20:30	11h 14m	7h 22m					Do, 28. Mär
Fr, 29. Mär		20:33 – 23:43	3h 10m	AN <sub>+</sub> bis M <sub>7</sub>		23:43	07:02	03:53	41m	04:35	38m	05:14	35m	05:49	12h 46m	18:36	35m	19:11	39m	19:50	42m	20:33	11h 10m	7h 18m					Fr, 29. Mär
Sa, 30. Mär		20:35 – 00:58*	4h 23m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	07:26	03:51	42m	04:33	38m	05:12	35m	05:47	12h 50m	18:38	35m	19:13	39m	19:52	42m	20:35	11h 07m	7h 13m					Sa, 30. Mär
So, 31. Mär	MESZ	21:37 – 03:06*	5h 29m	AN <sub>+</sub> bis M <sub>7</sub>		01:58	09:00	04:48	42m	05:30	39m	06:10	35m	06:45	12h 54m	19:39	35m	20:15	39m	20:54	42m	21:37	11h 03m	7h 08m					So, 31. Mär
Mo, 1. Apr	MESZ	21:39 – 04:02*	6h 23m	AN <sub>+</sub> bis M <sub>7</sub>		03:06	09:50	04:45	42m	05:28	39m	06:07	35m	06:43	12h 58m	19:41	35m	20:16	39m	20:56	43m	21:39	10h 59m	7h 03m					Mo, 1. Apr
Di, 2. Apr	MESZ	21:41 – 04:																											

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

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

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

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

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

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