

# Mond- und Dämmerungstabelle 2024

## für die visuelle Deep-Sky-Beobachtung

Hollabrunn 48.5627° N 16.0807° 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		18:06 – 21:48	3h 41m	AN <sub>+</sub> bis M <sub>7</sub>		21:48	10:56	05:51	38m	06:29	39m	07:08	38m	07:47	8h 23m	16:10	38m	16:49	39m	17:28	38m	18:06	15h 36m	11h 44m				Mo, 1. Jan
Di, 2. Jan		18:07 – 22:55	4h 47m	AN <sub>+</sub> bis M <sub>7</sub>		22:55	11:09	05:51	38m	06:29	39m	07:08	38m	07:47	8h 24m	16:11	38m	16:50	39m	17:29	38m	18:07	15h 35m	11h 43m				Di, 2. Jan
Mi, 3. Jan		18:08 – 00:01*	5h 53m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	11:22	05:51	38m	06:29	39m	07:08	38m	07:47	8h 25m	16:12	38m	16:51	39m	17:30	38m	18:08	15h 34m	11h 42m				Mi, 3. Jan
Do, 4. Jan		18:09 – 01:09*	7h 00m	AN <sub>+</sub> bis M <sub>7</sub>	☾	00:01	11:35	05:51	38m	06:29	38m	07:08	38m	07:47	8h 26m	16:13	38m	16:52	38m	17:31	38m	18:09	15h 33m	11h 42m				Do, 4. Jan
Fr, 5. Jan		18:10 – 02:21*	8h 10m	AN <sub>+</sub> bis M <sub>7</sub>		01:09	11:49	05:51	37m	06:29	38m	07:08	38m	07:47	8h 27m	16:14	38m	16:53	38m	17:32	37m	18:10	15h 32m	11h 41m				Fr, 5. Jan
Sa, 6. Jan		18:11 – 03:36*	9h 24m	AN <sub>+</sub> bis M <sub>7</sub>		02:21	12:06	05:51	37m	06:29	38m	07:08	38m	07:46	8h 29m	16:15	38m	16:54	38m	17:33	37m	18:11	15h 30m	11h 39m				Sa, 6. Jan
So, 7. Jan		18:12 – 04:54*	10h 42m	AN <sub>+</sub> bis M <sub>7</sub>		03:36	12:28	05:51	37m	06:29	38m	07:08	38m	07:46	8h 30m	16:17	38m	16:55	38m	17:34	37m	18:12	15h 29m	11h 38m				So, 7. Jan
Mo, 8. Jan		18:13 – 05:51*	11h 37m	AN <sub>+</sub> bis AN <sub>-</sub>		04:54	12:58	05:51	37m	06:29	38m	07:07	38m	07:46	8h 32m	16:18	38m	16:56	38m	17:35	37m	18:13	15h 27m	11h 37m				Mo, 8. Jan
Di, 9. Jan		18:14 – 05:50*	11h 36m	AN <sub>+</sub> bis AN <sub>-</sub>		06:11	13:41	05:51	37m	06:28	38m	07:07	38m	07:45	8h 33m	16:19	38m	16:57	38m	17:36	37m	18:14	15h 25m	11h 36m				Di, 9. Jan
Mi, 10. Jan		18:15 – 05:50*	11h 35m	AN <sub>+</sub> bis AN <sub>-</sub>		07:21	14:40	05:50	37m	06:28	38m	07:07	38m	07:45	8h 35m	16:20	38m	16:59	38m	17:37	37m	18:15	15h 24m	11h 35m				Mi, 10. Jan
Do, 11. Jan		18:16 – 05:50*	11h 33m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	08:18	15:56	05:50	37m	06:28	38m	07:06	38m	07:45	8h 37m	16:22	38m	17:00	38m	17:38	37m	18:16	15h 22m	11h 33m				Do, 11. Jan
Fr, 12. Jan		18:17 – 05:49*	11h 32m	AN <sub>+</sub> bis AN <sub>-</sub>		09:00	17:22	05:50	37m	06:27	38m	07:06	38m	07:44	8h 38m	16:23	38m	17:01	38m	17:39	37m	18:17	15h 20m	11h 32m				Fr, 12. Jan
Sa, 13. Jan		18:52 – 05:49*	10h 57m	M <sub>\</sub> bis AN <sub>-</sub>		09:30	18:52	05:49	37m	06:27	38m	07:05	37m	07:43	8h 40m	16:24	37m	17:02	38m	17:41	37m	18:18	15h 18m	11h 30m				Sa, 13. Jan
So, 14. Jan		20:19 – 05:49*	9h 29m	M <sub>\</sub> bis AN <sub>-</sub>		09:53	20:19	05:49	37m	06:27	38m	07:05	37m	07:43	8h 42m	16:26	37m	17:03	38m	17:42	37m	18:19	15h 16m	11h 29m				So, 14. Jan
Mo, 15. Jan		21:43 – 05:48*	8h 04m	M <sub>\</sub> bis AN <sub>-</sub>		10:12	21:43	05:49	37m	06:26	38m	07:04	37m	07:42	8h 44m	16:27	37m	17:05	38m	17:43	37m	18:21	15h 14m	11h 27m				Mo, 15. Jan
Di, 16. Jan		23:05 – 05:48*	6h 42m	M <sub>\</sub> bis AN <sub>-</sub>		10:28	23:05	05:48	37m	06:26	38m	07:04	37m	07:42	8h 46m	16:28	37m	17:06	38m	17:44	37m	18:22	15h 12m	11h 25m				Di, 16. Jan
Mi, 17. Jan		00:26* – 05:47*	5h 21m	M <sub>\</sub> bis AN <sub>-</sub>		10:44	—:—	05:48	37m	06:25	38m	07:03	37m	07:41	8h 48m	16:30	37m	17:07	38m	17:45	37m	18:23	15h 10m	11h 24m				Mi, 17. Jan
Do, 18. Jan		01:46* – 05:47*	4h 00m	M <sub>\</sub> bis AN <sub>-</sub>	☾	11:01	00:26	05:47	37m	06:25	38m	07:03	37m	07:40	8h 51m	16:31	37m	17:09	38m	17:47	37m	18:24	15h 07m	11h 22m				Do, 18. Jan
Fr, 19. Jan		03:05* – 05:46*	2h 40m	M <sub>\</sub> bis AN <sub>-</sub>		11:21	01:46	05:47	37m	06:24	37m	07:02	37m	07:39	8h 53m	16:33	37m	17:10	37m	17:48	37m	18:25	15h 05m	11h 20m				Fr, 19. Jan
Sa, 20. Jan		04:23* – 05:45*	1h 22m	M <sub>\</sub> bis AN <sub>-</sub>		11:45	03:05	05:46	37m	06:23	37m	07:01	37m	07:38	8h 55m	16:34	37m	17:11	37m	17:49	37m	18:27	15h 03m	11h 18m				Sa, 20. Jan
So, 21. Jan		05:34* – 05:45*	10m	M <sub>\</sub> bis AN <sub>-</sub>		12:17	04:23	05:45	37m	06:23	37m	07:00	37m	07:37	8h 58m	16:36	37m	17:13	37m	17:51	37m	18:28	15h 00m	11h 16m				So, 21. Jan
Mo, 22. Jan		—:—:—:—:—	–	Mond stört		12:59	05:34	05:45	37m	06:22	37m	06:59	36m	07:36	9h 00m	16:37	37m	17:14	37m	17:52	37m	18:29	14h 58m	11h 14m				Mo, 22. Jan
Di, 23. Jan		—:—:—:—:—	–	Mond stört		13:53	06:35	05:44	37m	06:21	37m	06:59	36m	07:35	9h 03m	16:39	36m	17:16	37m	17:53	37m	18:30	14h 55m	11h 12m				Di, 23. Jan
Mi, 24. Jan		—:—:—:—:—	–	Mond stört		14:57	07:22	05:43	37m	06:20	37m	06:58	36m	07:34	9h 05m	16:40	36m	17:17	37m	17:55	37m	18:32	14h 53m	11h 10m				Mi, 24. Jan
Do, 25. Jan		—:~:~:~:~:~	–	Mond stört	☾	16:06	07:58	05:42	37m	06:19	37m	06:57	36m	07:33	9h 08m	16:42	36m	17:18	37m	17:56	37m	18:33	14h 50m	11h 08m				Do, 25. Jan
Fr, 26. Jan		—:~:~:~:~:~	–	Mond stört		17:17	08:25	05:41	36m	06:18	37m	06:56	36m	07:32	9h 11m	16:43	36m	17:20	37m	17:57	37m	18:34	14h 47m	11h 06m				Fr, 26. Jan
Sa, 27. Jan		—:~:~:~:~:~	–	Mond stört		18:28	08:45	05:40	36m	06:17	37m	06:55	36m	07:31	9h 13m	16:45	36m	17:21	37m	17:59	36m	18:36	14h 44m	11h 03m				Sa, 27. Jan
So, 28. Jan		18:37 – 19:36	58m	AN <sub>+</sub> bis M <sub>7</sub>		19:36	09:01	05:40	36m	06:16	37m	06:54	36m	07:30	9h 16m	16:47	36m	17:23	37m	18:00	36m	18:37	14h 42m	11h 01m				So, 28. Jan
Mo, 29. Jan		18:38 – 20:43	2h 04m	AN <sub>+</sub> bis M <sub>7</sub>		20:43	09:15	05:39	36m	06:15	37m	06:53	36m	07:29	9h 19m	16:48	36m	17:24	37m	18:02	36m	18:38	14h 39m	10h 59m				Mo, 29. Jan
Di, 30. Jan		18:40 – 21:49	3h 08m	AN <sub>+</sub> bis M <sub>7</sub>		21:49	09:28	05:38	36m	06:14	37m	06:51	36m	07:27	9h 22m	16:50	36m	17:26	37m	18:03	36m	18:40	14h 36m	10h 56m				Di, 30. Jan
Mi, 31. Jan		18:41 – 22:55	4h 14m	AN <sub>+</sub> bis M <sub>7</sub>		22:55	09:40	05:37	36m	06:13	37m	06:50	35m	07:26	9h 25m	16:51	35m	17:27	37m	18:04	36m	18:41	14h 33m	10h 54m				Mi, 31. Jan
Do, 1. Feb		18:43 – 00:04*	5h 21m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	09:54	05:35	36m	06:12	36m	06:49	35m	07:25	9h 28m	16:53	35m	17:29	36m	18:06	36m	18:43	14h 30m	10h 51m				Do, 1. Feb
Fr, 2. Feb		18:44 – 01:16*	6h 32m	AN <sub>+</sub> bis M <sub>7</sub>		00:04	10:09	05:34	36m	06:11	36m	06:48	35m	07:24	9h 31m	16:55	35m	17:30	36m	18:07	36m	18:44	14h 27m	10h 49m				Fr, 2. Feb
Sa, 3. Feb		18:45 – 02:31*	7h 45m	AN <sub>+</sub> bis M <sub>7</sub>	☾	01:16	10:28	05:33	36m	06:10	36m	06:47	35m	07:22	9h 34m	16:56	35m	17:32	36m	18:09	36m	18:45	14h 24m	10h 46m				Sa, 3. Feb
So, 4. Feb		18:47 – 03:47*	9h 00m	AN <sub>+</sub> bis M <sub>7</sub>		02:31	10:53	05:32	36m	06:09	36m	06:45	35m	07:21	9h 37m	16:58	35m	17:33	36m	18:10	36m	18:47	14h 21m	10h 44m				So, 4. Feb
Mo, 5. Feb		18:48 – 05:00*	10h 11m	AN <sub>+</sub> bis M <sub>7</sub>		03:47	11:28	05:31	36m	06:07	36m	06:44	35m	07:19	9h 40m	16:59	35m	17:35	36m	18:12	36m	18:48	14h 18m	10h 41m				Mo, 5. Feb
Di, 6. Feb		18:50 – 05:28*	10h 38m	AN <sub>+</sub> bis AN <sub>-</sub>		05:00	12:18	05:30	36m	06:06	36m	06:43	35m	07:18	9h 43m	17:01	35m	17:36	36m	18:13	36m	18:50	14h 15m	10h 38m				Di, 6. Feb
Mi, 7. Feb		18:51 – 05:27*	10h 35m	AN <sub>+</sub> bis AN <sub>-</sub>		06:02	13:25	05:28	36m	06:05	36m	06:41	35m	07:16	9h 46m	17:03	35m	17:38	36m	18:14	36m	18:51	14h 12m	10h 35m				Mi, 7. Feb
Do, 8. Feb		18:52 – 05:26*	10h 33m	AN <sub>+</sub> bis AN <sub>-</sub>		06:51	14:47	05:27	36m	06:03	36m	06:40	35m	07:15	9h 49m	17:04	35m	17:39	36m	18:16	36m	18:52	14h 08m	10h 33m				Do, 8. Feb
Fr, 9. Feb		18:54 – 05:24*	10h 30m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	07:27	16:17	05:26	36m	06:02	36m	06:38	34m	07:13	9h 52m	17:06	34m	17:41	36m	18:17	36m	18:54	14h 05m	10h 30m				Fr, 9. Feb
Sa, 10. Feb		18:55 – 05:23*	10h 27m	AN <sub>+</sub> bis AN <sub>-</sub>		07:53	17:48	05:24	36m	06:01	36m	06:37	34m	07:12	9h 55m	17:08	34m	17:43	36m	18:19	36m	18:55	14h 02m	10h 27m				Sa, 10. Feb
So, 11. Feb		19:17 – 05:21*	10h 04m	M <sub>\</sub> bis AN <sub>-</sub>		08:14	19:17	05:23	36m	05:59	36m	06:35	34m	07:10	9h 59m	17:09	34m	17:44	36m	18:20	36m	18:57	13h 59m	10h 24m				So, 11. Feb

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

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

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

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

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

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

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