

# Mond- und Dämmerungstabelle 2024

## für die visuelle Deep-Sky-Beobachtung

Apolda 51.0228° N 11.5128° 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	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.	$\Delta t$	$\Delta t$		$\Delta t$		
Mo, 1. Jan		18:21 – 22:04	3h 43m	AN <sub>+</sub> bis M <sub>7</sub>		22:04	11:19	06:13	40m	06:53	41m	07:35	41m	08:16	8h 01m	16:17	41m	16:59	41m	17:41	40m	18:21	15h 58m	11h 52m				Mo, 1. Jan
Di, 2. Jan		18:22 – 23:13	4h 51m	AN <sub>+</sub> bis M <sub>7</sub>		23:13	11:30	06:13	40m	06:53	41m	07:35	41m	08:16	8h 02m	16:18	41m	17:00	41m	17:41	40m	18:22	15h 57m	11h 51m				Di, 2. Jan
Mi, 3. Jan		18:23 – 00:22*	5h 59m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	11:40	06:13	40m	06:53	41m	07:35	41m	08:16	8h 03m	16:19	41m	17:01	41m	17:42	40m	18:23	15h 56m	11h 50m				Mi, 3. Jan
Do, 4. Jan		18:23 – 01:33*	7h 09m	AN <sub>+</sub> bis M <sub>7</sub>	☾	00:22	11:50	06:13	40m	06:53	41m	07:34	41m	08:16	8h 04m	16:21	41m	17:02	41m	17:43	40m	18:23	15h 55m	11h 49m				Do, 4. Jan
Fr, 5. Jan		18:24 – 02:47*	8h 22m	AN <sub>+</sub> bis M <sub>7</sub>		01:33	12:02	06:13	39m	06:53	41m	07:34	41m	08:16	8h 06m	16:22	41m	17:03	41m	17:44	40m	18:24	15h 53m	11h 48m				Fr, 5. Jan
Sa, 6. Jan		18:25 – 04:05*	9h 39m	AN <sub>+</sub> bis M <sub>7</sub>		02:47	12:17	06:13	39m	06:53	41m	07:34	41m	08:15	8h 07m	16:23	41m	17:04	41m	17:46	39m	18:25	15h 52m	11h 47m				Sa, 6. Jan
So, 7. Jan		18:27 – 05:27*	11h 00m	AN <sub>+</sub> bis M <sub>7</sub>		04:05	12:36	06:13	39m	06:53	41m	07:34	41m	08:15	8h 09m	16:24	41m	17:05	41m	17:47	39m	18:27	15h 50m	11h 46m				So, 7. Jan
Mo, 8. Jan		18:28 – 06:12*	11h 44m	AN <sub>+</sub> bis AN <sub>-</sub>		05:27	13:03	06:13	39m	06:52	41m	07:33	41m	08:15	8h 10m	16:26	41m	17:07	41m	17:48	39m	18:28	15h 48m	11h 44m				Mo, 8. Jan
Di, 9. Jan		18:29 – 06:12*	11h 43m	AN <sub>+</sub> bis AN <sub>-</sub>		06:47	13:43	06:12	39m	06:52	40m	07:33	41m	08:14	8h 12m	16:27	41m	17:08	40m	17:49	39m	18:29	15h 46m	11h 43m				Di, 9. Jan
Mi, 10. Jan		18:30 – 06:12*	11h 41m	AN <sub>+</sub> bis AN <sub>-</sub>		07:57	14:42	06:12	39m	06:52	40m	07:33	40m	08:14	8h 14m	16:28	40m	17:09	40m	17:50	39m	18:30	15h 44m	11h 41m				Mi, 10. Jan
Do, 11. Jan		18:31 – 06:11*	11h 40m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	08:52	15:59	06:12	39m	06:51	40m	07:32	40m	08:13	8h 16m	16:30	40m	17:10	40m	17:51	39m	18:31	15h 42m	11h 40m				Do, 11. Jan
Fr, 12. Jan		18:32 – 06:11*	11h 38m	AN <sub>+</sub> bis AN <sub>-</sub>		09:31	17:29	06:11	39m	06:51	40m	07:32	40m	08:12	8h 18m	16:31	40m	17:12	40m	17:52	39m	18:32	15h 40m	11h 38m				Fr, 12. Jan
Sa, 13. Jan		19:03 – 06:10*	11h 07m	M <sub>7</sub> bis AN <sub>-</sub>		09:58	19:03	06:11	39m	06:51	40m	07:31	40m	08:12	8h 20m	16:32	40m	17:13	40m	17:54	39m	18:33	15h 38m	11h 37m				Sa, 13. Jan
So, 14. Jan		20:34 – 06:10*	9h 36m	M <sub>7</sub> bis AN <sub>-</sub>		10:18	20:34	06:10	39m	06:50	40m	07:31	40m	08:11	8h 22m	16:34	40m	17:14	40m	17:55	39m	18:35	15h 36m	11h 35m				So, 14. Jan
Mo, 15. Jan		22:01 – 06:09*	8h 08m	M <sub>7</sub> bis AN <sub>-</sub>		10:33	22:01	06:10	39m	06:50	40m	07:30	40m	08:10	8h 25m	16:35	40m	17:16	40m	17:56	39m	18:36	15h 34m	11h 33m				Mo, 15. Jan
Di, 16. Jan		23:26 – 06:09*	6h 42m	M <sub>7</sub> bis AN <sub>-</sub>		10:47	23:26	06:09	39m	06:49	40m	07:29	40m	08:10	8h 27m	16:37	40m	17:17	40m	17:58	39m	18:37	15h 31m	11h 31m				Di, 16. Jan
Mi, 17. Jan		00:49* – 06:08*	5h 18m	M <sub>7</sub> bis AN <sub>-</sub>		11:00	—:—	06:09	39m	06:48	40m	07:29	40m	08:09	8h 29m	16:39	40m	17:19	40m	17:59	39m	18:38	15h 29m	11h 29m				Mi, 17. Jan
Do, 18. Jan		02:13* – 06:08*	3h 54m	M <sub>7</sub> bis AN <sub>-</sub>	☾	11:14	00:49	06:08	39m	06:48	40m	07:28	39m	08:08	8h 32m	16:40	39m	17:20	40m	18:00	39m	18:40	15h 26m	11h 27m				Do, 18. Jan
Fr, 19. Jan		03:36* – 06:07*	2h 31m	M <sub>7</sub> bis AN <sub>-</sub>		11:31	02:13	06:08	39m	06:47	40m	07:27	39m	08:07	8h 34m	16:42	39m	17:21	40m	18:02	39m	18:41	15h 24m	11h 25m				Fr, 19. Jan
Sa, 20. Jan		04:56* – 06:06*	1h 10m	M <sub>7</sub> bis AN <sub>-</sub>		11:52	03:36	06:07	39m	06:46	40m	07:26	39m	08:06	8h 37m	16:43	39m	17:23	40m	18:03	39m	18:42	15h 21m	11h 23m				Sa, 20. Jan
So, 21. Jan		—:— —:— —:—	—	Mond stört		12:22	04:56	06:06	39m	06:45	39m	07:25	39m	08:05	8h 40m	16:45	39m	17:24	39m	18:04	39m	18:44	15h 18m	11h 21m				So, 21. Jan
Mo, 22. Jan		—:— —:— —:—	—	Mond stört		13:02	06:09	06:05	39m	06:44	39m	07:24	39m	08:04	8h 42m	16:47	39m	17:26	39m	18:06	39m	18:45	15h 15m	11h 19m				Mo, 22. Jan
Di, 23. Jan		—:— —:~ —:~	—	Mond stört		13:55	07:11	06:04	39m	06:44	39m	07:23	39m	08:03	8h 45m	16:48	39m	17:27	39m	18:07	39m	18:46	15h 13m	11h 17m				Di, 23. Jan
Mi, 24. Jan		—:~ —:~ —:~	—	Mond stört		15:00	07:57	06:04	39m	06:43	39m	07:22	39m	08:01	8h 48m	16:50	39m	17:29	39m	18:09	39m	18:48	15h 10m	11h 14m				Mi, 24. Jan
Do, 25. Jan		—:~ —:~ —:~	—	Mond stört	☾	16:12	08:30	06:03	38m	06:42	39m	07:21	38m	08:00	8h 51m	16:52	38m	17:31	39m	18:10	38m	18:49	15h 07m	11h 12m				Do, 25. Jan
Fr, 26. Jan		—:~ —:~ —:~	—	Mond stört		17:27	08:54	06:02	38m	06:41	39m	07:20	38m	07:59	8h 54m	16:53	38m	17:32	39m	18:12	38m	18:51	15h 04m	11h 10m				Fr, 26. Jan
Sa, 27. Jan		—:~ —:~ —:~	—	Mond stört		18:40	09:11	06:01	38m	06:40	39m	07:19	38m	07:58	8h 57m	16:55	38m	17:34	39m	18:13	38m	18:52	15h 01m	11h 07m				Sa, 27. Jan
So, 28. Jan		18:54 – 19:51	57m	AN <sub>+</sub> bis M <sub>7</sub>		19:51	09:25	06:00	38m	06:38	39m	07:18	38m	07:56	9h 00m	16:57	38m	17:35	39m	18:15	38m	18:54	14h 58m	11h 05m				So, 28. Jan
Mo, 29. Jan		18:55 – 21:00	2h 04m	AN <sub>+</sub> bis M <sub>7</sub>		21:00	09:36	05:59	38m	06:37	39m	07:17	38m	07:55	9h 03m	16:59	38m	17:37	39m	18:16	38m	18:55	14h 54m	11h 02m				Mo, 29. Jan
Di, 30. Jan		18:56 – 22:09	3h 12m	AN <sub>+</sub> bis M <sub>7</sub>		22:09	09:47	05:57	38m	06:36	39m	07:15	38m	07:54	9h 06m	17:00	38m	17:39	39m	18:18	38m	18:56	14h 51m	10h 59m				Di, 30. Jan
Mi, 31. Jan		18:58 – 23:18	4h 19m	AN <sub>+</sub> bis M <sub>7</sub>		23:18	09:57	05:56	38m	06:35	39m	07:14	38m	07:52	9h 09m	17:02	38m	17:40	39m	18:19	38m	18:58	14h 48m	10h 57m				Mi, 31. Jan
Do, 1. Feb		18:59 – 00:29*	5h 30m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	10:08	05:55	38m	06:34	38m	07:13	37m	07:51	9h 13m	17:04	38m	17:42	38m	18:21	38m	18:59	14h 45m	10h 54m				Do, 1. Feb
Fr, 2. Feb		19:01 – 01:44*	6h 43m	AN <sub>+</sub> bis M <sub>7</sub>		00:29	10:21	05:54	38m	06:32	38m	07:11	37m	07:49	9h 16m	17:06	37m	17:43	38m	18:22	38m	19:01	14h 41m	10h 51m				Fr, 2. Feb
Sa, 3. Feb		19:02 – 03:02*	8h 00m	AN <sub>+</sub> bis M <sub>7</sub>	☾	01:44	10:37	05:53	38m	06:31	38m	07:10	37m	07:48	9h 19m	17:07	37m	17:45	38m	18:24	38m	19:02	14h 38m	10h 48m				Sa, 3. Feb
So, 4. Feb		19:04 – 04:22*	9h 17m	AN <sub>+</sub> bis M <sub>7</sub>		03:02	10:59	05:51	38m	06:30	38m	07:08	37m	07:46	9h 23m	17:09	37m	17:47	38m	18:26	38m	19:04	14h 35m	10h 45m				So, 4. Feb
Mo, 5. Feb		19:06 – 05:36*	10h 30m	AN <sub>+</sub> bis M <sub>7</sub>		04:22	11:31	05:50	38m	06:28	38m	07:07	37m	07:44	9h 26m	17:11	37m	17:48	38m	18:27	38m	19:06	14h 31m	10h 43m				Mo, 5. Feb
Di, 6. Feb		19:07 – 05:47*	10h 40m	AN <sub>+</sub> bis AN <sub>-</sub>		05:36	12:19	05:49	38m	06:27	38m	07:05	37m	07:43	9h 29m	17:13	37m	17:50	38m	18:29	38m	19:07	14h 28m	10h 40m				Di, 6. Feb
Mi, 7. Feb		19:09 – 05:46*	10h 37m	AN <sub>+</sub> bis AN <sub>-</sub>		06:38	13:27	05:47	38m	06:26	38m	07:04	37m	07:41	9h 33m	17:15	37m	17:52	38m	18:30	38m	19:09	14h 24m	10h 37m				Mi, 7. Feb
Do, 8. Feb		19:10 – 05:44*	10h 33m	AN <sub>+</sub> bis AN <sub>-</sub>		07:25	14:52	05:46	38m	06:24	38m	07:02	37m	07:39	9h 36m	17:16	37m	17:53	38m	18:32	38m	19:10	14h 21m	10h 33m				Do, 8. Feb
Fr, 9. Feb		19:12 – 05:43*	10h 30m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	07:57	16:26	05:44	38m	06:23	38m	07:01	36m	07:38	9h 40m	17:18	37m	17:55	38m	18:33	38m	19:12	14h 17m	10h 30m				Fr, 9. Feb
Sa, 10. Feb		19:13 – 05:41*	10h 27m	AN <sub>+</sub> bis AN <sub>-</sub>		08:20	18:01	05:43	38m	06:21	38m	06:59	36m	07:36	9h 43m	17:20	36m	17:57	38m	18:35	38m	19:13	14h 14m	10h 27m				Sa, 10. Feb
So, 11. Feb		19:33 – 05:40*	10h 06m	M <sub>7</sub> bis AN <sub>-</sub>		08:37	19:33	05:41	38m	06:19	38m	06:58	36m	07:34	9h 47m	17:22	36m	17:59	38m	18:37	38m	19:15	14h 10m	10h 24m				So, 11. Feb
Mo, 12. Feb		21																										

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

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



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

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

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



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