

# Mond- und Dämmerungstabelle 2024

## für die visuelle Deep-Sky-Beobachtung

Meiningen 50.5678° N 10.4156° 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		18:26 – 22:09	3h 43m	AN <sub>+</sub> bis M <sub>J</sub>		22:09	11:22	06:17	39m	06:56	41m	07:37	41m	08:19	8h 05m	16:24	41m	17:05	41m	17:46	39m	18:26	15h 54m	11h 50m				Mo, 1. Jan
Di, 2. Jan		18:27 – 23:18	4h 50m	AN <sub>+</sub> bis M <sub>J</sub>		23:18	11:34	06:17	39m	06:56	40m	07:37	41m	08:18	8h 06m	16:25	41m	17:06	40m	17:47	39m	18:27	15h 53m	11h 50m				Di, 2. Jan
Mi, 3. Jan		18:28 – 00:26*	5h 58m	AN <sub>+</sub> bis M <sub>J</sub>		—:—	11:44	06:17	39m	06:56	40m	07:37	41m	08:18	8h 07m	16:26	41m	17:07	40m	17:48	39m	18:28	15h 52m	11h 49m				Mi, 3. Jan
Do, 4. Jan		18:29 – 01:37*	7h 08m	AN <sub>+</sub> bis M <sub>J</sub>	☾	00:26	11:55	06:17	39m	06:56	40m	07:37	40m	08:18	8h 08m	16:27	40m	17:08	40m	17:49	39m	18:29	15h 50m	11h 48m				Do, 4. Jan
Fr, 5. Jan		18:30 – 02:50*	8h 20m	AN <sub>+</sub> bis M <sub>J</sub>		01:37	12:08	06:17	39m	06:56	40m	07:37	40m	08:18	8h 10m	16:28	40m	17:09	40m	17:50	39m	18:30	15h 49m	11h 47m				Fr, 5. Jan
Sa, 6. Jan		18:31 – 04:08*	9h 37m	AN <sub>+</sub> bis M <sub>J</sub>		02:50	12:23	06:17	39m	06:56	40m	07:37	40m	08:18	8h 11m	16:29	40m	17:10	40m	17:51	39m	18:31	15h 47m	11h 45m				Sa, 6. Jan
So, 7. Jan		18:32 – 05:29*	10h 56m	AN <sub>+</sub> bis M <sub>J</sub>		04:08	12:42	06:16	39m	06:56	40m	07:37	40m	08:17	8h 13m	16:31	40m	17:11	40m	17:52	39m	18:32	15h 46m	11h 44m				So, 7. Jan
Mo, 8. Jan		18:33 – 06:16*	11h 43m	AN <sub>+</sub> bis AN <sub>-</sub>		05:29	13:10	06:16	39m	06:56	40m	07:36	40m	08:17	8h 15m	16:32	40m	17:13	40m	17:53	39m	18:33	15h 44m	11h 43m				Mo, 8. Jan
Di, 9. Jan		18:34 – 06:16*	11h 42m	AN <sub>+</sub> bis AN <sub>-</sub>		06:48	13:51	06:16	39m	06:55	40m	07:36	40m	08:16	8h 16m	16:33	40m	17:14	40m	17:54	39m	18:34	15h 42m	11h 42m				Di, 9. Jan
Mi, 10. Jan		18:35 – 06:15*	11h 40m	AN <sub>+</sub> bis AN <sub>-</sub>		07:59	14:50	06:16	39m	06:55	40m	07:36	40m	08:16	8h 18m	16:35	40m	17:15	40m	17:55	39m	18:35	15h 40m	11h 40m				Mi, 10. Jan
Do, 11. Jan		18:36 – 06:15*	11h 39m	AN <sub>+</sub> bis AN <sub>-</sub>	☉	08:54	16:07	06:15	39m	06:55	40m	07:35	40m	08:15	8h 20m	16:36	40m	17:16	40m	17:57	39m	18:36	15h 38m	11h 39m				Do, 11. Jan
Fr, 12. Jan		18:37 – 06:15*	11h 37m	AN <sub>+</sub> bis AN <sub>-</sub>		09:33	17:36	06:15	39m	06:54	40m	07:35	40m	08:15	8h 22m	16:37	40m	17:18	40m	17:58	39m	18:37	15h 36m	11h 37m				Fr, 12. Jan
Sa, 13. Jan		19:09 – 06:14*	11h 05m	M <sub>\</sub> bis AN <sub>-</sub>		10:01	19:09	06:15	39m	06:54	40m	07:34	40m	08:14	8h 24m	16:39	40m	17:19	40m	17:59	39m	18:38	15h 34m	11h 35m				Sa, 13. Jan
So, 14. Jan		20:39 – 06:14*	9h 34m	M <sub>\</sub> bis AN <sub>-</sub>		10:21	20:39	06:14	39m	06:53	40m	07:34	39m	08:14	8h 26m	16:40	39m	17:20	40m	18:00	39m	18:40	15h 32m	11h 34m				So, 14. Jan
Mo, 15. Jan		22:06 – 06:13*	8h 07m	M <sub>\</sub> bis AN <sub>-</sub>		10:37	22:06	06:14	39m	06:53	40m	07:33	39m	08:13	8h 28m	16:42	39m	17:22	40m	18:02	39m	18:41	15h 30m	11h 32m				Mo, 15. Jan
Di, 16. Jan		23:30 – 06:13*	6h 42m	M <sub>\</sub> bis AN <sub>-</sub>		10:51	23:30	06:13	39m	06:52	39m	07:32	39m	08:12	8h 31m	16:43	39m	17:23	39m	18:03	39m	18:42	15h 27m	11h 30m				Di, 16. Jan
Mi, 17. Jan		00:53* – 06:12*	5h 18m	M <sub>\</sub> bis AN <sub>-</sub>		11:05	—:—	06:13	39m	06:52	39m	07:32	39m	08:11	8h 33m	16:45	39m	17:24	39m	18:04	39m	18:43	15h 25m	11h 28m				Mi, 17. Jan
Do, 18. Jan		02:16* – 06:11*	3h 55m	M <sub>\</sub> bis AN <sub>-</sub>	☾	11:19	00:53	06:12	38m	06:51	39m	07:31	39m	08:10	8h 36m	16:46	39m	17:26	39m	18:06	38m	18:45	15h 23m	11h 26m				Do, 18. Jan
Fr, 19. Jan		03:38* – 06:11*	2h 32m	M <sub>\</sub> bis AN <sub>-</sub>		11:37	02:16	06:11	38m	06:50	39m	07:30	39m	08:09	8h 38m	16:48	39m	17:27	39m	18:07	38m	18:46	15h 20m	11h 24m				Fr, 19. Jan
Sa, 20. Jan		04:58* – 06:10*	1h 12m	M <sub>\</sub> bis AN <sub>-</sub>		11:59	03:38	06:11	38m	06:50	39m	07:29	39m	08:08	8h 41m	16:49	39m	17:29	39m	18:08	38m	18:47	15h 17m	11h 22m				Sa, 20. Jan
So, 21. Jan		—:— —:—	—	Mond stört		12:29	04:58	06:10	38m	06:49	39m	07:28	39m	08:07	8h 43m	16:51	39m	17:30	39m	18:10	38m	18:49	15h 15m	11h 20m				So, 21. Jan
Mo, 22. Jan		—:— —:—	—	Mond stört		13:10	06:11	06:09	38m	06:48	39m	07:27	38m	08:06	8h 46m	16:53	38m	17:32	39m	18:11	38m	18:50	15h 12m	11h 18m				Mo, 22. Jan
Di, 23. Jan		—:— —:—	—	Mond stört		14:03	07:12	06:08	38m	06:47	39m	07:26	38m	08:05	8h 49m	16:54	38m	17:33	39m	18:12	38m	18:51	15h 09m	11h 16m				Di, 23. Jan
Mi, 24. Jan		—:~ —:~	—	Mond stört		15:08	07:58	06:08	38m	06:46	39m	07:25	38m	08:04	8h 51m	16:56	38m	17:35	39m	18:14	38m	18:53	15h 06m	11h 14m				Mi, 24. Jan
Do, 25. Jan		—:~ —:~	—	Mond stört	☉	16:20	08:32	06:07	38m	06:45	39m	07:24	38m	08:03	8h 54m	16:58	38m	17:36	39m	18:15	38m	18:54	15h 04m	11h 11m				Do, 25. Jan
Fr, 26. Jan		—:~ —:~	—	Mond stört		17:33	08:56	06:06	38m	06:44	39m	07:23	38m	08:02	8h 57m	16:59	38m	17:38	39m	18:17	38m	18:55	15h 01m	11h 09m				Fr, 26. Jan
Sa, 27. Jan		—:~ —:~	—	Mond stört		18:46	09:14	06:05	38m	06:43	38m	07:22	38m	08:00	9h 00m	17:01	38m	17:39	39m	18:18	38m	18:57	14h 58m	11h 06m				Sa, 27. Jan
So, 28. Jan		18:58 – 19:56	57m	AN <sub>+</sub> bis M <sub>J</sub>		19:56	09:28	06:04	38m	06:42	38m	07:21	38m	07:59	9h 03m	17:03	38m	17:41	38m	18:20	38m	18:58	14h 55m	11h 04m				So, 28. Jan
Mo, 29. Jan		19:00 – 21:05	2h 05m	AN <sub>+</sub> bis M <sub>J</sub>		21:05	09:40	06:03	38m	06:41	38m	07:20	37m	07:58	9h 06m	17:04	37m	17:42	38m	18:21	38m	19:00	14h 51m	11h 01m				Mo, 29. Jan
Di, 30. Jan		19:01 – 22:13	3h 11m	AN <sub>+</sub> bis M <sub>J</sub>		22:13	09:51	06:02	38m	06:40	38m	07:19	37m	07:56	9h 09m	17:06	37m	17:44	38m	18:23	38m	19:01	14h 48m	10h 59m				Di, 30. Jan
Mi, 31. Jan		19:03 – 23:22	4h 19m	AN <sub>+</sub> bis M <sub>J</sub>		23:22	10:02	06:00	38m	06:39	38m	07:17	37m	07:55	9h 12m	17:08	37m	17:46	38m	18:24	38m	19:03	14h 45m	10h 56m				Mi, 31. Jan
Do, 1. Feb		19:04 – 00:33*	5h 28m	AN <sub>+</sub> bis M <sub>J</sub>		—:—	10:13	05:59	38m	06:37	38m	07:16	37m	07:54	9h 16m	17:10	37m	17:47	38m	18:26	38m	19:04	14h 42m	10h 53m				Do, 1. Feb
Fr, 2. Feb		19:06 – 01:47*	6h 41m	AN <sub>+</sub> bis M <sub>J</sub>		00:33	10:26	05:58	38m	06:36	38m	07:15	37m	07:52	9h 19m	17:11	37m	17:49	38m	18:27	38m	19:06	14h 39m	10h 51m				Fr, 2. Feb
Sa, 3. Feb		19:07 – 03:05*	7h 57m	AN <sub>+</sub> bis M <sub>J</sub>	☾	01:47	10:43	05:57	38m	06:35	38m	07:13	37m	07:51	9h 22m	17:13	37m	17:50	38m	18:29	38m	19:07	14h 35m	10h 48m				Sa, 3. Feb
So, 4. Feb		19:09 – 04:23*	9h 14m	AN <sub>+</sub> bis M <sub>J</sub>		03:05	11:06	05:56	38m	06:34	38m	07:12	37m	07:49	9h 25m	17:15	37m	17:52	38m	18:30	38m	19:09	14h 32m	10h 45m				So, 4. Feb
Mo, 5. Feb		19:10 – 05:37*	10h 27m	AN <sub>+</sub> bis M <sub>J</sub>		04:23	11:39	05:54	38m	06:32	38m	07:10	37m	07:47	9h 29m	17:17	37m	17:54	38m	18:32	38m	19:10	14h 29m	10h 42m				Mo, 5. Feb
Di, 6. Feb		19:12 – 05:51*	10h 39m	AN <sub>+</sub> bis AN <sub>-</sub>		05:37	12:27	05:53	38m	06:31	38m	07:09	36m	07:46	9h 32m	17:18	36m	17:55	38m	18:34	38m	19:12	14h 25m	10h 39m				Di, 6. Feb
Mi, 7. Feb		19:13 – 05:50*	10h 36m	AN <sub>+</sub> bis AN <sub>-</sub>		06:40	13:35	05:51	37m	06:29	38m	07:07	36m	07:44	9h 35m	17:20	36m	17:57	38m	18:35	38m	19:13	14h 22m	10h 36m				Mi, 7. Feb
Do, 8. Feb		19:15 – 05:49*	10h 33m	AN <sub>+</sub> bis AN <sub>-</sub>		07:26	14:59	05:50	37m	06:28	37m	07:06	36m	07:43	9h 39m	17:22	36m	17:59	38m	18:37	38m	19:15	14h 18m	10h 33m				Do, 8. Feb
Fr, 9. Feb		19:16 – 05:47*	10h 30m	AN <sub>+</sub> bis AN <sub>-</sub>	☉	07:59	16:33	05:49	37m	06:26	37m	07:04	36m	07:41	9h 42m	17:24	36m	18:00	37m	18:38	37m	19:16	14h 15m	10h 30m				Fr, 9. Feb
Sa, 10. Feb		19:18 – 05:46*	10h 27m	AN <sub>+</sub> bis AN <sub>-</sub>		08:23	18:07	05:47	37m	06:25	37m	07:03	36m	07:39	9h 46m	17:26	36m	18:02	37m	18:40	37m	19:18	14h 11m	10h 27m				Sa, 10. Feb
So, 11. Feb		19:39 – 05:44*	10h 05m	M <sub>\</sub> bis AN <sub>-</sub>		08:41	19:39	05:46	37m	06:23	37m	07:01	36m	07:38	9h 49m	17:27	36m	18:04	37m	18:41	37m	19:19	14h 08m	10h 24m				So, 11. Feb
Mo, 12. Feb		21:08 – 05:42*	8h 34m	M <sub>\</sub> bis AN <sub>-</sub>																								

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

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

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



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2024	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		20:37	02:25	01:58	1h 46m	03:44	58m	04:43	45m	05:28	15h 52m	21:20	44m	22:05	57m	23:03	1h 41m	00:44*	8h 08m	1h 21m				Fr, 19. Jul
Sa, 20. Jul	MESZ	—:—:—:—	—	Mond stört		21:25	03:26	02:05	1h 41m	03:46	57m	04:44	44m	05:29	15h 49m	21:19	44m	22:03	57m	23:01	1h 36m	00:37*	8h 11m	1h 34m				Sa, 20. Jul
So, 21. Jul	MESZ	—:—:~:~:~	—	Mond stört	○	22:00	04:45	02:12	1h 36m	03:48	57m	04:46	44m	05:30	15h 47m	21:18	44m	22:02	56m	22:59	1h 33m	00:32*	8h 13m	1h 45m				So, 21. Jul
Mo, 22. Jul	MESZ	—:~:~:~:~	—	Mond stört		22:24	06:12	02:17	1h 33m	03:50	56m	04:47	44m	05:31	15h 44m	21:16	44m	22:00	56m	22:57	1h 29m	00:26*	8h 16m	1h 56m				Mo, 22. Jul
Di, 23. Jul	MESZ	—:~:~:~:~	—	Mond stört		22:43	07:43	02:23	1h 29m	03:53	56m	04:49	44m	05:33	15h 42m	21:15	43m	21:59	55m	22:55	1h 26m	00:21*	8h 19m	2h 06m				Di, 23. Jul
Mi, 24. Jul	MESZ	—:~:~:~:~	—	Mond stört		22:58	09:12	02:28	1h 26m	03:55	55m	04:50	43m	05:34	15h 39m	21:14	43m	21:57	55m	22:53	1h 24m	00:17*	8h 21m	2h 15m				Mi, 24. Jul
Do, 25. Jul	MESZ	—:~:~:~:~	—	Mond stört		23:12	10:39	02:32	1h 24m	03:57	55m	04:52	43m	05:35	15h 36m	21:12	43m	21:56	54m	22:50	1h 21m	00:12*	8h 24m	2h 24m				Do, 25. Jul
Fr, 26. Jul	MESZ	—:~:~:~:~	—	Mond stört		23:25	12:04	02:37	1h 21m	03:59	54m	04:53	43m	05:37	15h 34m	21:11	43m	21:54	54m	22:48	1h 19m	00:08*	8h 27m	2h 33m				Fr, 26. Jul
Sa, 27. Jul	MESZ	—:~:~:~:~	—	Mond stört		23:41	13:29	02:41	1h 19m	04:01	54m	04:55	43m	05:38	15h 31m	21:10	42m	21:53	53m	22:46	1h 17m	00:04*	8h 29m	2h 41m				Sa, 27. Jul
So, 28. Jul	MESZ	—:~:~:~:~	—	Mond stört	●	23:59	14:55	02:46	1h 17m	04:03	53m	04:57	42m	05:40	15h 28m	21:08	42m	21:51	53m	22:44	1h 15m	00:00*	8h 32m	2h 50m				So, 28. Jul
Mo, 29. Jul	MESZ	23:56 – 00:24*	28m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	16:20	02:50	1h 15m	04:05	53m	04:58	42m	05:41	15h 25m	21:07	42m	21:49	52m	22:42	1h 13m	23:56	8h 35m	2h 57m				Mo, 29. Jul
Di, 30. Jul	MESZ	23:52 – 00:58*	1h 06m	AN <sub>+</sub> bis M <sub>7</sub>		00:24	17:42	02:54	1h 13m	04:07	52m	05:00	42m	05:42	15h 22m	21:05	42m	21:47	52m	22:39	1h 12m	23:52	8h 38m	3h 05m				Di, 30. Jul
Mi, 31. Jul	MESZ	23:48 – 01:45*	1h 56m	AN <sub>+</sub> bis M <sub>7</sub>		00:58	18:55	02:57	1h 12m	04:10	52m	05:02	42m	05:44	15h 19m	21:04	41m	21:46	51m	22:37	1h 10m	23:48	8h 41m	3h 13m				Mi, 31. Jul
Do, 1. Aug	MESZ	23:44 – 02:46*	3h 01m	AN <sub>+</sub> bis M <sub>7</sub>		01:45	19:53	03:01	1h 10m	04:12	51m	05:03	41m	05:45	15h 16m	21:02	41m	21:44	51m	22:35	1h 09m	23:44	8h 44m	3h 20m				Do, 1. Aug
Fr, 2. Aug	MESZ	23:40 – 03:08*	3h 27m	AN <sub>+</sub> bis AN <sub>-</sub>		02:46	20:36	03:05	1h 09m	04:14	51m	05:05	41m	05:47	15h 13m	21:00	41m	21:42	50m	22:33	1h 07m	23:40	8h 47m	3h 27m				Fr, 2. Aug
Sa, 3. Aug	MESZ	23:37 – 03:12*	3h 35m	AN <sub>+</sub> bis AN <sub>-</sub>		03:57	21:05	03:08	1h 07m	04:16	50m	05:07	41m	05:48	15h 10m	20:59	41m	21:40	50m	22:30	1h 06m	23:37	8h 50m	3h 35m				Sa, 3. Aug
So, 4. Aug	MESZ	23:33 – 03:15*	3h 42m	AN <sub>+</sub> bis AN <sub>-</sub>	●	05:14	21:27	03:12	1h 06m	04:18	50m	05:08	41m	05:50	15h 07m	20:57	41m	21:38	49m	22:28	1h 05m	23:33	8h 54m	3h 42m				So, 4. Aug
Mo, 5. Aug	MESZ	23:30 – 03:18*	3h 48m	AN <sub>+</sub> bis AN <sub>-</sub>		06:29	21:43	03:15	1h 05m	04:20	49m	05:10	41m	05:51	15h 04m	20:55	40m	21:36	49m	22:26	1h 03m	23:30	8h 57m	3h 48m				Mo, 5. Aug
Di, 6. Aug	MESZ	23:26 – 03:22*	3h 55m	AN <sub>+</sub> bis AN <sub>-</sub>		07:43	21:55	03:18	1h 03m	04:22	49m	05:12	40m	05:53	15h 01m	20:54	40m	21:34	48m	22:23	1h 02m	23:26	9h 00m	3h 55m				Di, 6. Aug
Mi, 7. Aug	MESZ	23:23 – 03:25*	4h 02m	AN <sub>+</sub> bis AN <sub>-</sub>		08:54	22:06	03:22	1h 02m	04:25	48m	05:14	40m	05:54	14h 57m	20:52	40m	21:32	48m	22:21	1h 01m	23:23	9h 03m	4h 02m				Mi, 7. Aug
Do, 8. Aug	MESZ	23:19 – 03:28*	4h 08m	AN <sub>+</sub> bis AN <sub>-</sub>		10:03	22:17	03:25	1h 01m	04:27	48m	05:15	40m	05:56	14h 54m	20:50	40m	21:30	48m	22:18	1h 00m	23:19	9h 06m	4h 08m				Do, 8. Aug
Fr, 9. Aug	MESZ	23:16 – 03:31*	4h 15m	AN <sub>+</sub> bis AN <sub>-</sub>		11:11	22:27	03:28	1h 00m	04:29	48m	05:17	40m	05:57	14h 51m	20:48	39m	21:28	47m	22:16	59m	23:16	9h 10m	4h 15m				Fr, 9. Aug
Sa, 10. Aug	MESZ	23:12 – 03:34*	4h 21m	AN <sub>+</sub> bis AN <sub>-</sub>		12:20	22:39	03:31	59m	04:31	47m	05:19	39m	05:59	14h 47m	20:47	39m	21:26	47m	22:14	58m	23:12	9h 13m	4h 21m				Sa, 10. Aug
So, 11. Aug	MESZ	23:09 – 03:37*	4h 28m	AN <sub>+</sub> bis AN <sub>-</sub>		13:31	22:53	03:34	58m	04:33	47m	05:20	39m	06:00	14h 44m	20:45	39m	21:24	46m	22:11	57m	23:09	9h 16m	4h 28m				So, 11. Aug
Mo, 12. Aug	MESZ	23:11 – 03:40*	4h 28m	M <sub>7</sub> bis AN <sub>-</sub>	◐	14:45	23:11	03:37	57m	04:35	46m	05:22	39m	06:02	14h 41m	20:43	39m	21:22	46m	22:09	57m	23:06	9h 20m	4h 34m				Mo, 12. Aug
Di, 13. Aug	MESZ	23:37 – 03:43*	4h 06m	M <sub>7</sub> bis AN <sub>-</sub>		16:01	23:37	03:40	57m	04:37	46m	05:24	39m	06:03	14h 37m	20:41	39m	21:20	46m	22:06	56m	23:03	9h 23m	4h 40m				Di, 13. Aug
Mi, 14. Aug	MESZ	00:13* – 03:46*	3h 32m	M <sub>7</sub> bis AN <sub>-</sub>		17:15	—:—	03:43	56m	04:39	46m	05:26	39m	06:05	14h 34m	20:39	38m	21:18	45m	22:04	55m	22:59	9h 27m	4h 46m				Mi, 14. Aug
Do, 15. Aug	MESZ	01:05* – 03:49*	2h 43m	M <sub>7</sub> bis AN <sub>-</sub>		18:22	00:13	03:46	55m	04:41	45m	05:27	38m	06:06	14h 31m	20:37	38m	21:16	45m	22:01	54m	22:56	9h 30m	4h 52m				Do, 15. Aug
Fr, 16. Aug	MESZ	02:16* – 03:52*	1h 35m	M <sub>7</sub> bis AN <sub>-</sub>		19:16	01:05	03:49	54m	04:43	45m	05:29	38m	06:08	14h 27m	20:35	38m	21:14	45m	21:59	53m	22:53	9h 33m	4h 58m				Fr, 16. Aug
Sa, 17. Aug	MESZ	03:40* – 03:54*	14m	M <sub>7</sub> bis AN <sub>-</sub>		19:56	02:16	03:52	53m	04:45	45m	05:31	38m	06:09	14h 24m	20:33	38m	21:12	44m	21:57	53m	22:50	9h 37m	5h 04m				Sa, 17. Aug
So, 18. Aug	MESZ	—:~:~:~:~	—	Mond stört		20:25	03:40	03:54	53m	04:48	44m	05:32	38m	06:11	14h 20m	20:31	38m	21:10	44m	21:54	52m	22:47	9h 40m	5h 10m				So, 18. Aug
Mo, 19. Aug	MESZ	—:~:~:~:~	—	Mond stört	○	20:46	05:11	03:57	52m	04:50	44m	05:34	38m	06:12	14h 17m	20:29	38m	21:07	44m	21:52	51m	22:44	9h 44m	5h 16m				Mo, 19. Aug
Di, 20. Aug	MESZ	—:~:~:~:~	—	Mond stört		21:03	06:43	04:00	51m	04:52	44m	05:36	38m	06:14	14h 13m	20:27	37m	21:05	43m	21:49	51m	22:40	9h 48m	5h 21m				Di, 20. Aug
Mi, 21. Aug	MESZ	—:~:~:~:~	—	Mond stört		21:17	08:14	04:02	51m	04:54	43m	05:37	37m	06:15	14h 09m	20:25	37m	21:03	43m	21:47	50m	22:37	9h 51m	5h 27m				Mi, 21. Aug
Do, 22. Aug	MESZ	—:~:~:~:~	—	Mond stört		21:31	09:42	04:05	50m	04:56	43m	05:39	37m	06:17	14h 06m	20:23	37m	21:01	43m	21:44	50m	22:34	9h 55m	5h 33m				Do, 22. Aug
Fr, 23. Aug	MESZ	—:~:~:~:~	—	Mond stört		21:46	11:11	04:07	50m	04:58	43m	05:41	37m	06:18	14h 02m	20:21	37m	20:59	42m	21:42	49m	22:31	9h 58m	5h 38m				Fr, 23. Aug
Sa, 24. Aug	MESZ	—:~:~:~:~	—	Mond stört		22:04	12:39	04:10	49m	04:59	43m	05:43	37m	06:20	13h 59m	20:19	37m	20:56	42m	21:39	49m	22:28	10h 02m	5h 44m				Sa, 24. Aug
So, 25. Aug	MESZ	22:25 – 22:27	1m	AN <sub>+</sub> bis M <sub>7</sub>		22:27	14:07	04:12	49m	05:01	42m	05:44	37m	06:21	13h 55m	20:17	37m	20:54	42m	21:37	48m	22:25	10h 05m	5h 49m				So, 25. Aug
Mo, 26. Aug	MESZ	22:22 – 22:57	35m	AN <sub>+</sub> bis M <sub>7</sub>	◑	22:57	15:32	04:15	48m	05:03	42m	05:46	37m	06:23	13h 51m	20:15	36m	20:52	42m	21:34	48m	22:22	10h 09m	5h 54m				Mo, 26. Aug
Di, 27. Aug	MESZ	22:19 – 23:40	1h 21m	AN <sub>+</sub> bis M <sub>7</sub>		23:40	16:49	04:17	48m	05:05	42m	05:48	36m	06:25	13h 48m	20:13	36m	20:50	41m	21:32	47m	22:19	10h 13m	6h 00m				Di, 27. Aug
Mi, 28. Aug	MESZ	22:16 – 00:37*	2h 20m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	17:51	04:20	47m	05:07	41m	05:49	36m	06:26	13h 44m	20:11	36m	20:47	41m	21:29	47m	22:16	10h 16m	6h 05m				Mi, 28. Aug
Do, 29. Aug	MESZ	22:13 – 01:46*	3h 32m	AN <sub>+</sub> bis M <sub>7</sub>		00:37	18:37	04:22	47m	05:09	41m	05:51	36m	06:28	13h 41m	20:09	36m	20:45	41m	21:27	46m	22:13	10h 20m	6h 10m				Do, 29. Aug
Fr, 30. Aug</																												

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

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