

# Mond- und Dämmerungstabelle 2024

## für die visuelle Deep-Sky-Beobachtung

Calvi 42.5686° N 8.7569° E

Berechnung: pyEphem  
Textsatz: L<sup>A</sup>T<sub>E</sub>X

### Atmosphären-Einstellungen in pyEphem

Standort.pressure = 1010.0  
Standort.horizon = '0:00:00.0'

Alle Zeitangaben beziehen sich auf den in der jeweiligen Zeile angegeben Kalendertag. Liegt ein Ereignis bereits nach Mitternacht, also schon am Folgetag, ist die Zeitangabe mit einem \* gekennzeichnet, z.B.: 00:20\*.

**Spalte 1** Kalendertag.

**Spalte 2** Bei »MESZ« sind alle Zeitangaben in dieser Zeile in Mitteleuropäischer Sommerzeit, ansonsten standardmäßig in MEZ.

**Spalte 3** Die für Deep-Sky-Beobachtungen nutzbare Zeitspanne: Es ist astronomisch dunkel (Sonne steht tiefer als  $-18^\circ$ ) und kein Mond stört.

**Spalte 4** Dauer der für Deep-Sky-Beobachtungen nutzbaren Zeitspanne.

**Spalte 5** Ereignisse, die die für Deep-Sky-Beobachtungen nutzbare Zeitspanne begrenzen: AN<sub>+</sub> (Einbruch der astronomischen Nacht = Ende der astr. Abenddämmerung), M<sub>v</sub> (Monduntergang), AN<sub>-</sub> (Ende der astronomischen Nacht = Beginn der astr. Morgendämmerung), M<sub>l</sub>

(Mondaufgang), Astr. MD (Astronomische Mitternachtsdämmerung), Naut. MD (Nautische Mitternachtsdämmerung).

**Spalte 6** Mondphase.

**Spalte 7** Mondaufgang.

**Spalte 8** Monduntergang.

**Spalte 9** Beginn der astr. Morgendämmerung (Sonnenhöhe =  $-18^\circ$ ).

**Spalte 10** Dauer der astr. Morgendämmerung.

**Spalte 11** Beginn der naut. Morgendämmerung (Sonnenhöhe =  $-12^\circ$ ).

**Spalte 12** Dauer der naut. Morgendämmerung.

**Spalte 13** Beginn der bürg. Morgendämmerung (Sonnenhöhe =  $-6^\circ$ ).

**Spalte 14** Dauer der bürg. Morgendämmerung.

**Spalte 15** Sonnenaufgang.

**Spalte 16** Taglänge.

**Spalte 17** Sonnenuntergang.

**Spalte 18** Dauer der bürg. Abenddämmerung.

**Spalte 19** Ende der bürg. Abenddämmerung (Sonnenhöhe =  $-6^\circ$ ).

**Spalte 20** Dauer der naut. Abenddämmerung.

**Spalte 21** Ende der naut. Abenddämmerung (Sonnenhöhe =  $-12^\circ$ ).

**Spalte 22** Dauer der astr. Abenddämmerung.

**Spalte 23** Ende der astr. Abenddämmerung (Sonnenhöhe =  $-18^\circ$ ).

**Spalte 24** Länge der Nacht.

**Spalte 25** Länge der astr. Nacht.

**Für Beobachter, die zu Zeiten der Mitternachtsdämmerung während der astr. Dämmerung beobachten möchten:**

**Spalte 26** Nutzbare Zeitspanne: Es ist »nautisch dunkel« (Sonne steht tiefer als  $-12^\circ$ ) und kein Mond stört.

**Spalte 27** Dauer der in Spalte 26 angegebenen Zeitspanne.

**Spalte 28** Ereignisse, die die nutzbare Zeitspanne begrenzen: ND<sub>+</sub> (Beginn der »naut. Dunkelheit« = Ende der naut. Abenddämmerung), M<sub>v</sub> (Monduntergang), ND<sub>-</sub> (Ende der »naut. Dunkelheit« = Beginn der naut. Morgendämmerung), M<sub>l</sub> (Mondaufgang), Naut. MD (Nautische Mitternachtsdämmerung).

**Spalte 29** Identisch zu Spalte 1.

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

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

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

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



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

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