

# Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Vöcklabruck 48.0086° N 13.6558° 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		18:17 – 21:59	3h 42m	AN <sub>+</sub> bis M <sub>7</sub>		21:59	11:04	06:00	37m	06:37	38m	07:16	38m	07:54	8h 27m	16:22	38m	17:01	38m	17:39	37m	18:17	15h 32m	11h 42m				Mo, 1. Jan
Di, 2. Jan		18:18 – 23:05	4h 47m	AN <sub>+</sub> bis M <sub>7</sub>		23:05	11:18	06:00	37m	06:37	38m	07:16	38m	07:54	8h 28m	16:23	38m	17:01	38m	17:40	37m	18:18	15h 31m	11h 42m				Di, 2. Jan
Mi, 3. Jan		18:19 – 00:11*	5h 52m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	11:32	06:00	37m	06:37	38m	07:16	38m	07:54	8h 29m	16:24	38m	17:02	38m	17:41	37m	18:19	15h 30m	11h 41m				Mi, 3. Jan
Do, 4. Jan		18:19 – 01:19*	6h 59m	AN <sub>+</sub> bis M <sub>7</sub>	☾	00:11	11:45	06:00	37m	06:37	38m	07:16	38m	07:54	8h 31m	16:25	38m	17:03	38m	17:42	37m	18:19	15h 28m	11h 40m				Do, 4. Jan
Fr, 5. Jan		18:20 – 02:29*	8h 08m	AN <sub>+</sub> bis M <sub>7</sub>		01:19	12:00	06:00	37m	06:37	38m	07:16	38m	07:54	8h 32m	16:26	38m	17:04	38m	17:43	37m	18:20	15h 27m	11h 39m				Fr, 5. Jan
Sa, 6. Jan		18:21 – 03:44*	9h 22m	AN <sub>+</sub> bis M <sub>7</sub>		02:29	12:18	06:00	37m	06:37	38m	07:16	38m	07:54	8h 33m	16:27	38m	17:05	38m	17:44	37m	18:21	15h 26m	11h 38m				Sa, 6. Jan
So, 7. Jan		18:22 – 05:01*	10h 38m	AN <sub>+</sub> bis M <sub>7</sub>		03:44	12:40	06:00	37m	06:37	38m	07:16	37m	07:54	8h 34m	16:29	37m	17:06	38m	17:45	37m	18:22	15h 24m	11h 37m				So, 7. Jan
Mo, 8. Jan		18:23 – 05:59*	11h 36m	AN <sub>+</sub> bis AN <sub>-</sub>		05:01	13:11	06:00	37m	06:37	38m	07:15	37m	07:53	8h 36m	16:30	37m	17:08	38m	17:46	37m	18:23	15h 23m	11h 36m				Mo, 8. Jan
Di, 9. Jan		18:24 – 05:59*	11h 34m	AN <sub>+</sub> bis AN <sub>-</sub>		06:18	13:54	05:59	37m	06:37	38m	07:15	37m	07:53	8h 37m	16:31	37m	17:09	38m	17:47	37m	18:24	15h 21m	11h 34m				Di, 9. Jan
Mi, 10. Jan		18:25 – 05:59*	11h 33m	AN <sub>+</sub> bis AN <sub>-</sub>		07:28	14:53	05:59	37m	06:37	38m	07:15	37m	07:53	8h 39m	16:32	37m	17:10	38m	17:48	37m	18:25	15h 19m	11h 33m				Mi, 10. Jan
Do, 11. Jan		18:26 – 05:59*	11h 32m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	08:24	16:09	05:59	37m	06:36	38m	07:14	37m	07:52	8h 41m	16:33	37m	17:11	38m	17:49	37m	18:26	15h 18m	11h 32m				Do, 11. Jan
Fr, 12. Jan		18:28 – 05:58*	11h 30m	AN <sub>+</sub> bis AN <sub>-</sub>		09:07	17:35	05:59	37m	06:36	38m	07:14	37m	07:52	8h 43m	16:35	37m	17:12	38m	17:50	37m	18:28	15h 16m	11h 30m				Fr, 12. Jan
Sa, 13. Jan		19:04 – 05:58*	10h 54m	M <sub>7</sub> bis AN <sub>-</sub>		09:38	19:04	05:58	37m	06:36	37m	07:14	37m	07:51	8h 44m	16:36	37m	17:13	37m	17:51	37m	18:29	15h 14m	11h 29m				Sa, 13. Jan
So, 14. Jan		20:30 – 05:58*	9h 27m	M <sub>7</sub> bis AN <sub>-</sub>		10:02	20:30	05:58	37m	06:35	37m	07:13	37m	07:50	8h 46m	16:37	37m	17:15	37m	17:53	37m	18:30	15h 12m	11h 27m				So, 14. Jan
Mo, 15. Jan		21:54 – 05:57*	8h 03m	M <sub>7</sub> bis AN <sub>-</sub>		10:21	21:54	05:58	37m	06:35	37m	07:13	37m	07:50	8h 48m	16:39	37m	17:16	37m	17:54	37m	18:31	15h 10m	11h 26m				Mo, 15. Jan
Di, 16. Jan		23:15 – 05:57*	6h 41m	M <sub>7</sub> bis AN <sub>-</sub>		10:38	23:15	05:57	37m	06:34	37m	07:12	37m	07:49	8h 50m	16:40	37m	17:17	37m	17:55	37m	18:32	15h 08m	11h 24m				Di, 16. Jan
Mi, 17. Jan		00:35* – 05:56*	5h 21m	M <sub>7</sub> bis AN <sub>-</sub>		10:54	—:—	05:57	37m	06:34	37m	07:11	37m	07:48	8h 53m	16:41	37m	17:19	37m	17:56	37m	18:33	15h 06m	11h 22m				Mi, 17. Jan
Do, 18. Jan		01:54* – 05:56*	4h 01m	M <sub>7</sub> bis AN <sub>-</sub>	☾	11:12	00:35	05:56	36m	06:33	37m	07:11	36m	07:48	8h 55m	16:43	36m	17:20	37m	17:57	37m	18:35	15h 04m	11h 21m				Do, 18. Jan
Fr, 19. Jan		03:13* – 05:55*	2h 41m	M <sub>7</sub> bis AN <sub>-</sub>		11:33	01:54	05:56	36m	06:33	37m	07:10	36m	07:47	8h 57m	16:44	36m	17:21	37m	17:59	36m	18:36	15h 01m	11h 19m				Fr, 19. Jan
Sa, 20. Jan		04:30* – 05:54*	1h 24m	M <sub>7</sub> bis AN <sub>-</sub>		11:58	03:13	05:55	36m	06:32	37m	07:09	36m	07:46	8h 59m	16:46	36m	17:23	37m	18:00	36m	18:37	14h 59m	11h 17m				Sa, 20. Jan
So, 21. Jan		05:41* – 05:54*	12m	M <sub>7</sub> bis AN <sub>-</sub>		12:30	04:30	05:54	36m	06:31	37m	07:09	36m	07:45	9h 02m	16:47	36m	17:24	37m	18:01	36m	18:38	14h 57m	11h 15m				So, 21. Jan
Mo, 22. Jan		—:—:—:—	–	Mond stört		13:13	05:41	05:54	36m	06:30	37m	07:08	36m	07:44	9h 04m	16:49	36m	17:25	37m	18:03	36m	18:39	14h 54m	11h 13m				Mo, 22. Jan
Di, 23. Jan		—:—:—:—	–	Mond stört		14:07	06:41	05:53	36m	06:30	37m	07:07	36m	07:43	9h 06m	16:50	36m	17:27	37m	18:04	36m	18:41	14h 52m	11h 11m				Di, 23. Jan
Mi, 24. Jan		—:—:—:—	–	Mond stört		15:10	07:29	05:52	36m	06:29	37m	07:06	36m	07:42	9h 09m	16:52	36m	17:28	37m	18:05	36m	18:42	14h 49m	11h 09m				Mi, 24. Jan
Do, 25. Jan		—:~:~:~:~	–	Mond stört	☾	16:19	08:05	05:51	36m	06:28	37m	07:05	36m	07:41	9h 12m	16:53	36m	17:29	37m	18:07	36m	18:43	14h 46m	11h 07m				Do, 25. Jan
Fr, 26. Jan		—:~:~:~:~	–	Mond stört		17:30	08:32	05:51	36m	06:27	36m	07:04	36m	07:40	9h 14m	16:55	36m	17:31	37m	18:08	36m	18:45	14h 44m	11h 05m				Fr, 26. Jan
Sa, 27. Jan		—:~:~:~:~	–	Mond stört		18:39	08:53	05:50	36m	06:26	36m	07:03	35m	07:39	9h 17m	16:56	35m	17:32	36m	18:09	36m	18:46	14h 41m	11h 02m				Sa, 27. Jan
So, 28. Jan		18:47 – 19:47	59m	AN <sub>+</sub> bis M <sub>7</sub>		19:47	09:10	05:49	36m	06:25	36m	07:02	35m	07:38	9h 20m	16:58	35m	17:34	36m	18:11	36m	18:47	14h 38m	11h 00m				So, 28. Jan
Mo, 29. Jan		18:49 – 20:53	2h 04m	AN <sub>+</sub> bis M <sub>7</sub>		20:53	09:24	05:48	36m	06:24	36m	07:01	35m	07:37	9h 22m	17:00	35m	17:35	36m	18:12	36m	18:49	14h 36m	10h 58m				Mo, 29. Jan
Di, 30. Jan		18:50 – 21:59	3h 08m	AN <sub>+</sub> bis M <sub>7</sub>		21:59	09:38	05:47	36m	06:23	36m	07:00	35m	07:36	9h 25m	17:01	35m	17:37	36m	18:13	36m	18:50	14h 33m	10h 56m				Di, 30. Jan
Mi, 31. Jan		18:51 – 23:05	4h 13m	AN <sub>+</sub> bis M <sub>7</sub>		23:05	09:51	05:46	36m	06:22	36m	06:59	35m	07:34	9h 28m	17:03	35m	17:38	36m	18:15	36m	18:51	14h 30m	10h 53m				Mi, 31. Jan
Do, 1. Feb		18:53 – 00:13*	5h 20m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	10:04	05:45	36m	06:21	36m	06:58	35m	07:33	9h 31m	17:04	35m	17:40	36m	18:16	36m	18:53	14h 27m	10h 51m				Do, 1. Feb
Fr, 2. Feb		18:54 – 01:24*	6h 30m	AN <sub>+</sub> bis M <sub>7</sub>		00:13	10:20	05:44	36m	06:20	36m	06:56	35m	07:32	9h 34m	17:06	35m	17:41	36m	18:18	36m	18:54	14h 24m	10h 48m				Fr, 2. Feb
Sa, 3. Feb		18:55 – 02:39*	7h 43m	AN <sub>+</sub> bis M <sub>7</sub>	☾	01:24	10:40	05:43	36m	06:19	36m	06:55	35m	07:30	9h 37m	17:07	35m	17:43	36m	18:19	36m	18:55	14h 21m	10h 46m				Sa, 3. Feb
So, 4. Feb		18:57 – 03:54*	8h 57m	AN <sub>+</sub> bis M <sub>7</sub>		02:39	11:06	05:41	36m	06:18	36m	06:54	35m	07:29	9h 40m	17:09	35m	17:44	36m	18:20	36m	18:57	14h 18m	10h 43m				So, 4. Feb
Mo, 5. Feb		18:58 – 05:07*	10h 08m	AN <sub>+</sub> bis M <sub>7</sub>		03:54	11:41	05:40	36m	06:16	36m	06:53	34m	07:28	9h 43m	17:11	34m	17:46	36m	18:22	36m	18:58	14h 15m	10h 40m				Mo, 5. Feb
Di, 6. Feb		18:59 – 05:38*	10h 38m	AN <sub>+</sub> bis AN <sub>-</sub>		05:07	12:31	05:39	36m	06:15	36m	06:51	34m	07:26	9h 46m	17:12	34m	17:47	36m	18:23	36m	18:59	14h 12m	10h 38m				Di, 6. Feb
Mi, 7. Feb		19:01 – 05:36*	10h 35m	AN <sub>+</sub> bis AN <sub>-</sub>		06:09	13:38	05:38	36m	06:14	36m	06:50	34m	07:25	9h 49m	17:14	34m	17:49	36m	18:25	36m	19:01	14h 09m	10h 35m				Mi, 7. Feb
Do, 8. Feb		19:02 – 05:35*	10h 32m	AN <sub>+</sub> bis AN <sub>-</sub>		06:58	15:00	05:36	36m	06:13	36m	06:49	34m	07:23	9h 52m	17:15	34m	17:50	36m	18:26	36m	19:02	14h 06m	10h 32m				Do, 8. Feb
Fr, 9. Feb		19:04 – 05:34*	10h 30m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	07:34	16:29	05:35	36m	06:11	35m	06:47	34m	07:22	9h 55m	17:17	34m	17:52	35m	18:28	36m	19:04	14h 03m	10h 30m				Fr, 9. Feb
Sa, 10. Feb		19:05 – 05:32*	10h 27m	AN <sub>+</sub> bis AN <sub>-</sub>		08:02	18:00	05:34	35m	06:10	35m	06:46	34m	07:20	9h 58m	17:19	34m	17:53	35m	18:29	36m	19:05	13h 59m	10h 27m				Sa, 10. Feb
So, 11. Feb		19:28 – 05:31*	10h 02m	M <sub>7</sub> bis AN <sub>-</sub>		08:23	19:28	05:32	35m	06:08	35m	06:44	34m	07:19	10h 01m	17:20	34m	17:55	35m	18:31	36m	19:07	13h 56m	10h 24m				So, 11. Feb

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

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

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



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

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



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