

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Bad Kreuznach 49.8469° N 7.8669° E

Berechnung: pyEphem
Textsatz: L^AT_EX

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°) 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₊ (Einbruch der astronomischen Nacht = Ende der astr. Abenddämmerung), M_v (Monduntergang), AN₋ (Ende der astronomischen Nacht = Beginn der astr. Morgendämmerung), M₇

(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°).

Spalte 10 Dauer der astr. Morgendämmerung.

Spalte 11 Beginn der naut. Morgendämmerung (Sonnenhöhe = -12°).

Spalte 12 Dauer der naut. Morgendämmerung.

Spalte 13 Beginn der bürg. Morgendämmerung (Sonnenhöhe = -6°).

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°).

Spalte 20 Dauer der naut. Abenddämmerung.

Spalte 21 Ende der naut. Abenddämmerung (Sonnenhöhe = -12°).

Spalte 22 Dauer der astr. Abenddämmerung.

Spalte 23 Ende der astr. Abenddämmerung (Sonnenhöhe = -18°).

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°) und kein Mond stört.

Spalte 27 Dauer der in Spalte 26 angegebenen Zeitspanne.

Spalte 28 Ereignisse, die die nutzbare Zeitspanne begrenzen: ND₊ (Beginn der »naut. Dunkelheit« = Ende der naut. Abenddämmerung), M_v (Monduntergang), ND₋ (Ende der »naut. Dunkelheit« = Beginn der naut. Morgendämmerung), M₇ (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		
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt			
Mo, 1. Jan		18:37 – 22:21	3h 43m	AN ₊ bis M ₇		22:21	11:31	06:26	39m	07:05	40m	07:45	40m	08:25	8h 12m	16:37	40m	17:18	40m	17:58	39m	18:37	15h 47m	11h 48m					Mo, 1. Jan
Di, 2. Jan		18:38 – 23:29	4h 50m	AN ₊ bis M ₇		23:29	11:43	06:26	39m	07:05	40m	07:45	40m	08:25	8h 13m	16:38	40m	17:19	40m	17:59	39m	18:38	15h 46m	11h 47m					Di, 2. Jan
Mi, 3. Jan		18:39 – 00:36*	5h 57m	AN ₊ bis M ₇		—:—	11:55	06:26	39m	07:05	40m	07:45	40m	08:25	8h 14m	16:39	40m	17:20	40m	18:00	39m	18:39	15h 45m	11h 46m					Mi, 3. Jan
Do, 4. Jan		18:40 – 01:46*	7h 06m	AN ₊ bis M ₇	☾	00:36	12:06	06:26	39m	07:05	40m	07:45	40m	08:25	8h 15m	16:41	40m	17:21	40m	18:01	39m	18:40	15h 44m	11h 45m					Do, 4. Jan
Fr, 5. Jan		18:41 – 02:59*	8h 17m	AN ₊ bis M ₇		01:46	12:19	06:26	38m	07:05	40m	07:45	40m	08:25	8h 16m	16:42	40m	17:22	40m	18:02	39m	18:41	15h 42m	11h 44m					Fr, 5. Jan
Sa, 6. Jan		18:42 – 04:16*	9h 33m	AN ₊ bis M ₇		02:59	12:35	06:26	38m	07:05	40m	07:45	39m	08:25	8h 18m	16:43	39m	17:23	40m	18:03	38m	18:42	15h 41m	11h 43m					Sa, 6. Jan
So, 7. Jan		18:43 – 05:35*	10h 52m	AN ₊ bis M ₇		04:16	12:56	06:26	38m	07:04	39m	07:44	39m	08:24	8h 19m	16:44	39m	17:24	39m	18:04	38m	18:43	15h 39m	11h 42m					So, 7. Jan
Mo, 8. Jan		18:44 – 06:25*	11h 41m	AN ₊ bis AN ₋		05:35	13:25	06:25	38m	07:04	39m	07:44	39m	08:24	8h 21m	16:45	39m	17:25	39m	18:05	38m	18:44	15h 38m	11h 41m					Mo, 8. Jan
Di, 9. Jan		18:45 – 06:25*	11h 39m	AN ₊ bis AN ₋		06:54	14:06	06:25	38m	07:04	39m	07:44	39m	08:24	8h 23m	16:47	39m	17:26	39m	18:06	38m	18:45	15h 36m	11h 39m					Di, 9. Jan
Mi, 10. Jan		18:46 – 06:25*	11h 38m	AN ₊ bis AN ₋		08:04	15:06	06:25	38m	07:04	39m	07:44	39m	08:23	8h 24m	16:48	39m	17:27	39m	18:07	38m	18:46	15h 34m	11h 38m					Mi, 10. Jan
Do, 11. Jan		18:47 – 06:24*	11h 37m	AN ₊ bis AN ₋	☾	09:00	16:23	06:25	38m	07:03	39m	07:43	39m	08:23	8h 26m	16:49	39m	17:29	39m	18:08	38m	18:47	15h 32m	11h 37m					Do, 11. Jan
Fr, 12. Jan		18:48 – 06:24*	11h 35m	AN ₊ bis AN ₋		09:40	17:51	06:24	38m	07:03	39m	07:43	39m	08:22	8h 28m	16:51	39m	17:30	39m	18:10	38m	18:48	15h 30m	11h 35m					Fr, 12. Jan
Sa, 13. Jan		19:22 – 06:24*	11h 01m	M _\ bis AN ₋		10:08	19:22	06:24	38m	07:03	39m	07:42	39m	08:21	8h 30m	16:52	39m	17:31	39m	18:11	38m	18:49	15h 28m	11h 34m					Sa, 13. Jan
So, 14. Jan		20:51 – 06:23*	9h 31m	M _\ bis AN ₋		10:29	20:51	06:24	38m	07:02	39m	07:42	39m	08:21	8h 32m	16:53	39m	17:33	39m	18:12	38m	18:51	15h 26m	11h 32m					So, 14. Jan
Mo, 15. Jan		22:17 – 06:23*	8h 05m	M _\ bis AN ₋		10:46	22:17	06:23	38m	07:02	39m	07:41	39m	08:20	8h 34m	16:55	39m	17:34	39m	18:13	38m	18:52	15h 24m	11h 30m					Mo, 15. Jan
Di, 16. Jan		23:41 – 06:22*	6h 41m	M _\ bis AN ₋		11:01	23:41	06:23	38m	07:01	39m	07:40	38m	08:19	8h 37m	16:56	38m	17:35	39m	18:15	38m	18:53	15h 22m	11h 28m					Di, 16. Jan
Mi, 17. Jan		01:03* – 06:21*	5h 18m	M _\ bis AN ₋		11:16	—:—	06:22	38m	07:00	39m	07:40	38m	08:18	8h 39m	16:58	38m	17:37	39m	18:16	38m	18:54	15h 19m	11h 27m					Mi, 17. Jan
Do, 18. Jan		02:24* – 06:21*	3h 56m	M _\ bis AN ₋	☾	11:31	01:03	06:21	38m	07:00	39m	07:39	38m	08:18	8h 41m	16:59	38m	17:38	39m	18:17	38m	18:56	15h 17m	11h 25m					Do, 18. Jan
Fr, 19. Jan		03:46* – 06:20*	2h 34m	M _\ bis AN ₋		11:50	02:24	06:21	38m	06:59	39m	07:38	38m	08:17	8h 44m	17:01	38m	17:39	39m	18:19	38m	18:57	15h 14m	11h 23m					Fr, 19. Jan
Sa, 20. Jan		05:04* – 06:19*	1h 14m	M _\ bis AN ₋		12:13	03:46	06:20	38m	06:58	38m	07:37	38m	08:16	8h 46m	17:02	38m	17:41	38m	18:20	38m	18:58	15h 12m	11h 21m					Sa, 20. Jan
So, 21. Jan		06:17* – 06:19*	2m	M _\ bis AN ₋		12:44	05:04	06:19	38m	06:58	38m	07:37	38m	08:15	8h 49m	17:04	38m	17:42	38m	18:21	38m	18:59	15h 09m	11h 19m					So, 21. Jan
Mo, 22. Jan		—:—:—:—:—	–	Mond stört		13:25	06:17	06:19	38m	06:57	38m	07:36	38m	08:14	8h 51m	17:06	38m	17:44	38m	18:23	38m	19:01	15h 07m	11h 17m					Mo, 22. Jan
Di, 23. Jan		—:—:—:—:—	–	Mond stört		14:19	07:17	06:18	38m	06:56	38m	07:35	38m	08:13	8h 54m	17:07	38m	17:45	38m	18:24	38m	19:02	15h 04m	11h 14m					Di, 23. Jan
Mi, 24. Jan		—:—:—:—:—	–	Mond stört		15:23	08:04	06:17	38m	06:55	38m	07:34	37m	08:12	8h 57m	17:09	37m	17:47	38m	18:25	38m	19:03	15h 01m	11h 12m					Mi, 24. Jan
Do, 25. Jan		—:—:~:~:~	–	Mond stört	☾	16:34	08:38	06:16	38m	06:54	38m	07:33	37m	08:11	8h 59m	17:10	37m	17:48	38m	18:27	38m	19:05	14h 58m	11h 10m					Do, 25. Jan
Fr, 26. Jan		—:~:~:~:~	–	Mond stört		17:47	09:03	06:15	37m	06:53	38m	07:32	37m	08:09	9h 02m	17:12	37m	17:50	38m	18:28	37m	19:06	14h 56m	11h 08m					Fr, 26. Jan
Sa, 27. Jan		—:~:~:~:~	–	Mond stört		18:59	09:22	06:14	37m	06:52	38m	07:31	37m	08:08	9h 05m	17:14	37m	17:51	38m	18:30	37m	19:08	14h 53m	11h 05m					Sa, 27. Jan
So, 28. Jan		19:09 – 20:08	59m	AN ₊ bis M ₇		20:08	09:37	06:13	37m	06:51	38m	07:29	37m	08:07	9h 08m	17:15	37m	17:53	38m	18:31	37m	19:09	14h 50m	11h 03m					So, 28. Jan
Mo, 29. Jan		19:10 – 21:16	2h 05m	AN ₊ bis M ₇		21:16	09:50	06:12	37m	06:50	38m	07:28	37m	08:06	9h 11m	17:17	37m	17:54	38m	18:33	37m	19:10	14h 47m	11h 00m					Mo, 29. Jan
Di, 30. Jan		19:12 – 22:23	3h 11m	AN ₊ bis M ₇		22:23	10:01	06:11	37m	06:49	38m	07:27	37m	08:04	9h 14m	17:19	37m	17:56	38m	18:34	37m	19:12	14h 44m	10h 58m					Di, 30. Jan
Mi, 31. Jan		19:13 – 23:32	4h 18m	AN ₊ bis M ₇		23:32	10:13	06:10	37m	06:48	38m	07:26	37m	08:03	9h 17m	17:20	37m	17:57	38m	18:36	37m	19:13	14h 41m	10h 55m					Mi, 31. Jan
Do, 1. Feb		19:15 – 00:42*	5h 27m	AN ₊ bis M ₇		—:—	10:25	06:09	37m	06:47	37m	07:25	36m	08:02	9h 20m	17:22	36m	17:59	37m	18:37	37m	19:15	14h 38m	10h 53m					Do, 1. Feb
Fr, 2. Feb		19:16 – 01:55*	6h 39m	AN ₊ bis M ₇		00:42	10:39	06:08	37m	06:45	37m	07:23	36m	08:00	9h 23m	17:24	36m	18:01	37m	18:38	37m	19:16	14h 34m	10h 50m					Fr, 2. Feb
Sa, 3. Feb		19:18 – 03:12*	7h 54m	AN ₊ bis M ₇	☾	01:55	10:56	06:07	37m	06:44	37m	07:22	36m	07:59	9h 26m	17:25	36m	18:02	37m	18:40	37m	19:18	14h 31m	10h 47m					Sa, 3. Feb
So, 4. Feb		19:19 – 04:30*	9h 10m	AN ₊ bis M ₇		03:12	11:20	06:05	37m	06:43	37m	07:21	36m	07:57	9h 30m	17:27	36m	18:04	37m	18:42	37m	19:19	14h 28m	10h 45m					So, 4. Feb
Mo, 5. Feb		19:21 – 05:43*	10h 22m	AN ₊ bis M ₇		04:30	11:54	06:04	37m	06:42	37m	07:19	36m	07:56	9h 33m	17:29	36m	18:05	37m	18:43	37m	19:21	14h 25m	10h 42m					Mo, 5. Feb
Di, 6. Feb		19:22 – 06:01*	10h 39m	AN ₊ bis AN ₋		05:43	12:43	06:03	37m	06:40	37m	07:18	36m	07:54	9h 36m	17:31	36m	18:07	37m	18:45	37m	19:22	14h 21m	10h 39m					Di, 6. Feb
Mi, 7. Feb		19:24 – 06:00*	10h 36m	AN ₊ bis AN ₋		06:45	13:51	06:01	37m	06:39	37m	07:16	36m	07:53	9h 39m	17:32	36m	18:09	37m	18:46	37m	19:24	14h 18m	10h 36m					Mi, 7. Feb
Do, 8. Feb		19:25 – 05:59*	10h 33m	AN ₊ bis AN ₋		07:32	15:15	06:00	37m	06:37	37m	07:15	36m	07:51	9h 43m	17:34	36m	18:10	37m	18:48	37m	19:25	14h 15m	10h 33m					Do, 8. Feb
Fr, 9. Feb		19:27 – 05:57*	10h 30m	AN ₊ bis AN ₋	☾	08:06	16:47	05:59	37m	06:36	37m	07:13	35m	07:49	9h 46m	17:36	36m	18:12	37m	18:49	37m	19:27	14h 11m	10h 30m					Fr, 9. Feb
Sa, 10. Feb		19:28 – 05:56*	10h 27m	AN ₊ bis AN ₋		08:31	18:20	05:57	37m	06:35	37m	07:12	35m	07:48	9h 49m	17:38	35m	18:13	37m	18:51	37m	19:28	14h 08m	10h 27m					Sa, 10. Feb
So, 11. Feb		19:50 – 05:54*	10h 03m	M _\ bis AN ₋		08:50	19:50	05:56	37m	06:33	37m	07:10	35m	07:4															

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

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

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2024	Zeit-	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024		
	zone		Δt		Ph.	\uparrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\uparrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Do, 30. Mai	MESZ			Astr. MD	☾	02:23	12:29	01:41	2h 00m	03:41	58m	04:40	45m	05:25	16h 00m	21:26	45m	22:12	59m	23:11		—:—	7h 58m		23:11 – 02:39*	3h 28m	ND ₊ bis M ₇	Do, 30. Mai
Fr, 31. Mai	MESZ			Astr. MD		02:39	13:53	—:—		03:40	59m	04:39	45m	05:25	16h 02m	21:27	45m	22:13	59m	23:13		—:—	7h 56m		23:13 – 02:54*	3h 41m	ND ₊ bis M ₇	Fr, 31. Mai
Sa, 1. Jun	MESZ			Astr. MD		02:54	15:16	—:—		03:39	59m	04:38	45m	05:24	16h 04m	21:28	45m	22:14	1h 00m	23:14		—:—	7h 54m		23:14 – 03:08*	3h 54m	ND ₊ bis M ₇	Sa, 1. Jun
So, 2. Jun	MESZ			Astr. MD		03:08	16:40	—:—		03:37	1h 00m	04:38	45m	05:23	16h 06m	21:29	45m	22:15	1h 00m	23:16		—:—	7h 53m		23:16 – 03:24*	4h 07m	ND ₊ bis M ₇	So, 2. Jun
Mo, 3. Jun	MESZ			Astr. MD		03:24	18:05	—:—		03:36	1h 00m	04:37	45m	05:23	16h 07m	21:30	46m	22:16	1h 01m	23:18		—:—	7h 51m		23:18 – 03:35*	4h 17m	ND ₊ bis ND ₋	Mo, 3. Jun
Di, 4. Jun	MESZ			Astr. MD		03:42	19:32	—:—		03:35	1h 01m	04:36	46m	05:22	16h 09m	21:31	46m	22:18	1h 01m	23:19		—:—	7h 50m		23:19 – 03:34*	4h 14m	ND ₊ bis ND ₋	Di, 4. Jun
Mi, 5. Jun	MESZ			Astr. MD		04:06	20:58	—:—		03:34	1h 01m	04:35	46m	05:22	16h 10m	21:32	46m	22:19	1h 01m	23:20		—:—	7h 48m		23:20 – 03:33*	4h 12m	ND ₊ bis ND ₋	Mi, 5. Jun
Do, 6. Jun	MESZ			Astr. MD	☉	04:39	22:17	—:—		03:33	1h 01m	04:35	46m	05:21	16h 12m	21:33	46m	22:20	1h 02m	23:22		—:—	7h 47m		23:22 – 03:32*	4h 10m	ND ₊ bis ND ₋	Do, 6. Jun
Fr, 7. Jun	MESZ			Astr. MD		05:24	23:21	—:—		03:32	1h 02m	04:34	46m	05:21	16h 13m	21:34	46m	22:20	1h 02m	23:23		—:—	7h 46m		23:23 – 03:31*	4h 07m	ND ₊ bis ND ₋	Fr, 7. Jun
Sa, 8. Jun	MESZ			Astr. MD		06:23	—:—	—:—		03:31	1h 02m	04:34	46m	05:20	16h 14m	21:35	46m	22:21	1h 02m	23:24		—:—	7h 45m		00:09* – 03:30*	3h 20m	M _\ bis ND ₋	Sa, 8. Jun
So, 9. Jun	MESZ			Astr. MD		07:33	00:09	—:—		03:30	1h 02m	04:33	46m	05:20	16h 15m	21:35	46m	22:22	1h 03m	23:25		—:—	7h 44m		00:43* – 03:29*	2h 46m	M _\ bis ND ₋	So, 9. Jun
Mo, 10. Jun	MESZ			Astr. MD		08:48	00:43	—:—		03:29	1h 03m	04:33	46m	05:19	16h 16m	21:36	46m	22:23	1h 03m	23:27		—:—	7h 43m		01:08* – 03:29*	2h 21m	M _\ bis ND ₋	Mo, 10. Jun
Di, 11. Jun	MESZ			Astr. MD		10:03	01:08	—:—		03:29	1h 03m	04:32	46m	05:19	16h 17m	21:37	47m	22:24	1h 03m	23:28		—:—	7h 42m		01:26* – 03:28*	2h 02m	M _\ bis ND ₋	Di, 11. Jun
Mi, 12. Jun	MESZ			Astr. MD		11:15	01:26	—:—		03:28	1h 03m	04:32	47m	05:19	16h 18m	21:37	47m	22:24	1h 04m	23:28		—:—	7h 41m		01:40* – 03:28*	1h 47m	M _\ bis ND ₋	Mi, 12. Jun
Do, 13. Jun	MESZ			Astr. MD		12:25	01:40	—:—		03:28	1h 04m	04:32	47m	05:19	16h 18m	21:38	47m	22:25	1h 04m	23:29		—:—	7h 40m		01:52* – 03:27*	1h 35m	M _\ bis ND ₋	Do, 13. Jun
Fr, 14. Jun	MESZ			Astr. MD	☾	13:33	01:52	—:—		03:27	1h 04m	04:31	47m	05:19	16h 19m	21:38	47m	22:26	1h 04m	23:30		—:—	7h 40m		02:03* – 03:27*	1h 23m	M _\ bis ND ₋	Fr, 14. Jun
Sa, 15. Jun	MESZ			Astr. MD		14:41	02:03	—:—		03:27	1h 04m	04:31	47m	05:19	16h 20m	21:39	47m	22:26	1h 04m	23:31		—:—	7h 39m		02:14* – 03:27*	1h 12m	M _\ bis ND ₋	Sa, 15. Jun
So, 16. Jun	MESZ			Astr. MD		15:50	02:14	—:—		03:27	1h 04m	04:31	47m	05:19	16h 20m	21:39	47m	22:27	1h 04m	23:31		—:—	7h 39m		02:27* – 03:26*	59m	M _\ bis ND ₋	So, 16. Jun
Mo, 17. Jun	MESZ			Astr. MD		17:01	02:27	—:—		03:26	1h 04m	04:31	47m	05:19	16h 20m	21:40	47m	22:27	1h 04m	23:32		—:—	7h 39m		02:42* – 03:26*	44m	M _\ bis ND ₋	Mo, 17. Jun
Di, 18. Jun	MESZ			Astr. MD		18:15	02:42	—:—		03:26	1h 04m	04:31	47m	05:19	16h 21m	21:40	47m	22:27	1h 04m	23:32		—:—	7h 38m		03:01* – 03:26*	25m	M _\ bis ND ₋	Di, 18. Jun
Mi, 19. Jun	MESZ			Astr. MD		19:32	03:01	—:—		03:26	1h 04m	04:31	47m	05:19	16h 21m	21:40	47m	22:28	1h 04m	23:33		—:—	7h 38m		03:26* – 03:27*	0m	M _\ bis ND ₋	Mi, 19. Jun
Do, 20. Jun	MESZ			Astr. MD		20:48	03:26	—:—		03:27	1h 04m	04:31	47m	05:19	16h 21m	21:40	47m	22:28	1h 04m	23:33		—:—	7h 38m		—:—:—:—	–	Mond stört	Do, 20. Jun
Fr, 21. Jun	MESZ			Astr. MD		21:57	04:03	—:—		03:27	1h 04m	04:32	47m	05:19	16h 21m	21:41	47m	22:28	1h 04m	23:33		—:—	7h 38m		—:—:—:—	–	Mond stört	Fr, 21. Jun
Sa, 22. Jun	MESZ			Astr. MD	☉	22:54	04:55	—:—		03:27	1h 04m	04:32	47m	05:19	16h 21m	21:41	47m	22:28	1h 04m	23:33		—:—	7h 38m		—:—:—:—	–	Mond stört	Sa, 22. Jun
So, 23. Jun	MESZ			Astr. MD		23:36	06:03	—:—		03:27	1h 04m	04:32	47m	05:20	16h 21m	21:41	47m	22:28	1h 04m	23:33		—:—	7h 39m		23:33 – 23:36	2m	ND ₊ bis M ₇	So, 23. Jun
Mo, 24. Jun	MESZ			Astr. MD		—:—	07:24	—:—		03:28	1h 04m	04:33	47m	05:20	16h 20m	21:41	47m	22:28	1h 04m	23:33		—:—	7h 39m		23:33 – 00:06*	33m	ND ₊ bis M ₇	Mo, 24. Jun
Di, 25. Jun	MESZ			Astr. MD		00:06	08:50	—:—		03:28	1h 04m	04:33	47m	05:20	16h 20m	21:41	47m	22:28	1h 04m	23:33		—:—	7h 39m		23:33 – 00:28*	55m	ND ₊ bis M ₇	Di, 25. Jun
Mi, 26. Jun	MESZ			Astr. MD		00:28	10:16	—:—		03:29	1h 04m	04:34	47m	05:21	16h 20m	21:41	47m	22:28	1h 04m	23:33		—:—	7h 40m		23:33 – 00:46*	1h 13m	ND ₊ bis M ₇	Mi, 26. Jun
Do, 27. Jun	MESZ			Astr. MD		00:46	11:41	—:—		03:30	1h 04m	04:34	47m	05:21	16h 19m	21:41	47m	22:28	1h 04m	23:32		—:—	7h 41m		23:32 – 01:01*	1h 28m	ND ₊ bis M ₇	Do, 27. Jun
Fr, 28. Jun	MESZ			Astr. MD	☾	01:01	13:04	—:—		03:30	1h 04m	04:35	47m	05:22	16h 18m	21:41	47m	22:28	1h 03m	23:32		—:—	7h 41m		23:32 – 01:15*	1h 43m	ND ₊ bis M ₇	Fr, 28. Jun
Sa, 29. Jun	MESZ			Astr. MD		01:15	14:27	—:—		03:31	1h 03m	04:35	47m	05:22	16h 18m	21:41	47m	22:28	1h 03m	23:31		—:—	7h 42m		23:31 – 01:30*	1h 58m	ND ₊ bis M ₇	Sa, 29. Jun
So, 30. Jun	MESZ			Astr. MD		01:30	15:50	—:—		03:32	1h 03m	04:36	47m	05:23	16h 17m	21:40	46m	22:27	1h 03m	23:31		—:—	7h 43m		23:31 – 01:47*	2h 16m	ND ₊ bis M ₇	So, 30. Jun
Mo, 1. Jul	MESZ			Astr. MD		01:47	17:15	—:—		03:33	1h 03m	04:37	46m	05:24	16h 16m	21:40	46m	22:27	1h 03m	23:30		—:—	7h 44m		23:30 – 02:08*	2h 38m	ND ₊ bis M ₇	Mo, 1. Jul
Di, 2. Jul	MESZ			Astr. MD		02:08	18:39	—:—		03:34	1h 03m	04:38	46m	05:24	16h 15m	21:40	46m	22:26	1h 02m	23:29		—:—	7h 45m		23:29 – 02:37*	3h 07m	ND ₊ bis M ₇	Di, 2. Jul
Mi, 3. Jul	MESZ			Astr. MD		02:37	20:00	—:—		03:36	1h 02m	04:38	46m	05:25	16h 14m	21:39	46m	22:26	1h 02m	23:28		—:—	7h 46m		23:28 – 03:16*	3h 47m	ND ₊ bis M ₇	Mi, 3. Jul
Do, 4. Jul	MESZ			Astr. MD		03:16	21:09	—:—		03:37	1h 02m	04:39	46m	05:26	16h 13m	21:39	46m	22:25	1h 02m	23:27		—:—	7h 47m		23:27 – 03:38*	4h 10m	ND ₊ bis ND ₋	Do, 4. Jul
Fr, 5. Jul	MESZ			Astr. MD		04:09	22:03	—:—		03:38	1h 02m	04:40	46m	05:27	16h 11m	21:38	46m	22:25	1h 01m	23:26		—:—	7h 49m		23:26 – 03:39*	4h 12m	ND ₊ bis ND ₋	Fr, 5. Jul
Sa, 6. Jul	MESZ			Astr. MD	☉	05:14	22:42	—:—		03:39	1h 01m	04:41	46m	05:27	16h 10m	21:38	46m	22:24	1h 01m	23:25		—:—	7h 50m		23:25 – 03:41*	4h 15m	ND ₊ bis ND ₋	Sa, 6. Jul
So, 7. Jul	MESZ			Astr. MD		06:28	23:09	—:—		03:41	1h 01m	04:42	46m	05:28	16h 08m	21:37	46m	22:23	1h 00m	23:24		—:—	7h 51m		23:24 – 03:42*	4h 17m	ND ₊ bis ND ₋	So, 7. Jul
Mo, 8. Jul	MESZ			Astr. MD		07:44	23:29	—:—		03:42	1h 00m	04:43	46m	05:29	16h 07m	21:37	45m	22:23	1h 00m	23:23		—:—	7h 53m		23:29 – 03:44*	4h 14m	M _\ bis ND ₋	Mo, 8. Jul
Di, 9. Jul	MESZ			Astr. MD		08:58	23:45	—:—		03:44	1h 00m	04:44	45m	05:30	16h 05m	21:36	45m	22:22	1h 00m	23:22		—:—	7h 55m		23:45 – 03:45*	4h 00m	M _\ bis ND ₋	Di, 9. Jul
Mi, 10. Jul	MESZ			Astr. MD		10:10	23:58	—:—		03:45	1h 00m	04:45	45m	05:31	16h 04m	21:35	45m	22:21	59m	23:21		—:—	7h 56m		23:58 – 03:47*	3h 49m	M _\ bis ND ₋	Mi, 10. Jul
Do, 11. Jul	MESZ			Astr. MD		11:19	—:—	—:—		03:47	59m	04:47	45m	05:32	16h 02m	21:35	45m	22:20	59m	23:19		—:—	7h 58m		00:09* – 03:49*	3h 39m	M _\ bis ND ₋	Do, 11. Jul
Fr, 12. Jul	MESZ	01:16* – 01:52*	35m	AN ₊ bis																								

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

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

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

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