

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Bad Kissingen 50.1994° N 10.0764° 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.	(Mondaufgang), Astr. MD (Astronomische Mitternachtsdämmerung), Naut. MD (Nautische Mitternachtsdämmerung).	Spalte 15 Sonnenaufgang.	
Spalte 2 Bei »MESZ« sind alle Zeitangaben in dieser Zeile in Mitteleuropäischer Sommerzeit, ansonsten standardmäßig in MEZ.	Spalte 6 Mondphase.	Spalte 16 Taglänge.	Für Beobachter, die zu Zeiten der Mitternachtsdämmerung während der astr. Dämmerung beobachten möchten:
Spalte 3 Die für Deep-Sky-Beobachtungen nutzbare Zeitspanne: Es ist astronomisch dunkel (Sonne steht tiefer als -18°) und kein Mond stört.	Spalte 7 Mondaufgang.	Spalte 17 Sonnenuntergang.	Spalte 26 Nutzbare Zeitspanne: Es ist »nautisch dunkel« (Sonne steht tiefer als -12°) und kein Mond stört.
Spalte 4 Dauer der für Deep-Sky-Beobachtungen nutzbaren Zeitspanne.	Spalte 8 Monduntergang.	Spalte 18 Dauer der bürgerl. Abenddämmerung.	Spalte 27 Dauer der in Spalte 26 angegebenen Zeitspanne.
Spalte 5 Ereignisse, die die für Deep-Sky-Beobachtungen nutzbare Zeitspanne begrenzen: AN ₊ (Einbruch der astronomischen Nacht = Ende der astr. Abenddämmerung), M _↓ (Monduntergang), AN ₋ (Ende der astronomischen Nacht = Beginn der astr. Morgendämmerung), M _↑	Spalte 9 Beginn der astr. Morgendämmerung (Sonnenhöhe = -18°).	Spalte 19 Ende der bürgerl. Abenddämmerung (Sonnenhöhe = -6°).	Spalte 28 Ereignisse, die die nutzbare Zeitspanne begrenzen: ND ₊ (Beginn der »naut. Dunkelheit« = Ende der naut. Abenddämmerung), M _↓ (Monduntergang), ND ₋ (Ende der »naut. Dunkelheit« = Beginn der naut. Morgendämmerung), M _↑ (Mondaufgang), Naut. MD (Nautische Mitternachtsdämmerung).
	Spalte 10 Dauer der astr. Morgendämmerung.	Spalte 20 Dauer der naut. Abenddämmerung.	Spalte 29 Identisch zu Spalte 1.
	Spalte 11 Beginn der naut. Morgendämmerung (Sonnenhöhe = -12°).	Spalte 21 Ende der naut. Abenddämmerung (Sonnenhöhe = -12°).	
	Spalte 12 Dauer der naut. Morgendämmerung.	Spalte 22 Dauer der astr. Abenddämmerung.	
	Spalte 13 Beginn der bürgerl. Morgendämmerung (Sonnenhöhe = -6°).	Spalte 23 Ende der astr. Abenddämmerung (Sonnenhöhe = -18°).	
	Spalte 14 Dauer der bürgerl. Morgendämmerung.	Spalte 24 Länge der Nacht.	
		Spalte 25 Länge der astr. Nacht.	

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

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

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

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

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

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

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

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