

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Charleville-Mézières 49.7719° N 4.7161° 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		18:50 – 22:34	3h 44m	AN ₊ bis M ₇		22:34	11:44	06:38	39m	07:17	40m	07:57	40m	08:38	8h 12m	16:50	40m	17:31	40m	18:11	39m	18:50	15h 47m	11h 48m				Mo, 1. Jan
Di, 2. Jan		18:51 – 23:42	4h 50m	AN ₊ bis M ₇		23:42	11:56	06:38	39m	07:17	40m	07:57	40m	08:38	8h 13m	16:51	40m	17:32	40m	18:12	39m	18:51	15h 46m	11h 47m				Di, 2. Jan
Mi, 3. Jan		18:52 – 00:50*	5h 57m	AN ₊ bis M ₇		—:—	12:07	06:38	38m	07:17	40m	07:57	40m	08:38	8h 14m	16:52	40m	17:33	40m	18:13	39m	18:52	15h 44m	11h 46m				Mi, 3. Jan
Do, 4. Jan		18:53 – 01:59*	7h 06m	AN ₊ bis M ₇	☾	00:50	12:19	06:38	38m	07:17	40m	07:57	40m	08:37	8h 16m	16:54	40m	17:34	40m	18:14	38m	18:53	15h 43m	11h 45m				Do, 4. Jan
Fr, 5. Jan		18:54 – 03:12*	8h 18m	AN ₊ bis M ₇		01:59	12:32	06:38	38m	07:17	40m	07:57	39m	08:37	8h 17m	16:55	39m	17:35	40m	18:15	38m	18:54	15h 42m	11h 44m				Fr, 5. Jan
Sa, 6. Jan		18:55 – 04:29*	9h 33m	AN ₊ bis M ₇		03:12	12:48	06:38	38m	07:17	39m	07:57	39m	08:37	8h 18m	16:56	39m	17:36	39m	18:16	38m	18:55	15h 40m	11h 43m				Sa, 6. Jan
So, 7. Jan		18:56 – 05:48*	10h 52m	AN ₊ bis M ₇		04:29	13:09	06:38	38m	07:17	39m	07:57	39m	08:37	8h 20m	16:57	39m	17:37	39m	18:17	38m	18:56	15h 39m	11h 42m				So, 7. Jan
Mo, 8. Jan		18:57 – 06:38*	11h 41m	AN ₊ bis AN ₋		05:48	13:38	06:38	38m	07:17	39m	07:57	39m	08:36	8h 22m	16:58	39m	17:38	39m	18:18	38m	18:57	15h 37m	11h 41m				Mo, 8. Jan
Di, 9. Jan		18:58 – 06:37*	11h 39m	AN ₊ bis AN ₋		07:07	14:20	06:38	38m	07:16	39m	07:56	39m	08:36	8h 23m	17:00	39m	17:39	39m	18:19	38m	18:58	15h 35m	11h 39m				Di, 9. Jan
Mi, 10. Jan		18:59 – 06:37*	11h 38m	AN ₊ bis AN ₋		08:17	15:19	06:37	38m	07:16	39m	07:56	39m	08:35	8h 25m	17:01	39m	17:40	39m	18:20	38m	18:59	15h 34m	11h 38m				Mi, 10. Jan
Do, 11. Jan		19:00 – 06:37*	11h 36m	AN ₊ bis AN ₋	☾	09:12	16:36	06:37	38m	07:16	39m	07:55	39m	08:35	8h 27m	17:02	39m	17:42	39m	18:21	38m	19:00	15h 32m	11h 36m				Do, 11. Jan
Fr, 12. Jan		19:01 – 06:36*	11h 35m	AN ₊ bis AN ₋		09:52	18:05	06:37	38m	07:15	39m	07:55	39m	08:34	8h 29m	17:04	39m	17:43	39m	18:22	38m	19:01	15h 30m	11h 35m				Fr, 12. Jan
Sa, 13. Jan		19:36 – 06:36*	11h 00m	M _\ bis AN ₋		10:21	19:36	06:36	38m	07:15	39m	07:55	39m	08:34	8h 31m	17:05	39m	17:44	39m	18:24	38m	19:02	15h 28m	11h 33m				Sa, 13. Jan
So, 14. Jan		21:05 – 06:36*	9h 30m	M _\ bis AN ₋		10:42	21:05	06:36	38m	07:15	39m	07:54	39m	08:33	8h 33m	17:06	39m	17:45	39m	18:25	38m	19:03	15h 26m	11h 32m				So, 14. Jan
Mo, 15. Jan		22:31 – 06:35*	8h 04m	M _\ bis AN ₋		10:59	22:31	06:36	38m	07:14	39m	07:53	38m	08:32	8h 35m	17:08	38m	17:47	39m	18:26	38m	19:05	15h 23m	11h 30m				Mo, 15. Jan
Di, 16. Jan		23:54 – 06:35*	6h 40m	M _\ bis AN ₋		11:14	23:54	06:35	38m	07:14	39m	07:53	38m	08:32	8h 37m	17:09	38m	17:48	39m	18:27	38m	19:06	15h 21m	11h 28m				Di, 16. Jan
Mi, 17. Jan		01:16* – 06:34*	5h 18m	M _\ bis AN ₋		11:29	—:—	06:35	38m	07:13	39m	07:52	38m	08:31	8h 39m	17:11	38m	17:49	39m	18:29	38m	19:07	15h 19m	11h 26m				Mi, 17. Jan
Do, 18. Jan		02:37* – 06:33*	3h 55m	M _\ bis AN ₋	☾	11:44	01:16	06:34	38m	07:12	39m	07:51	38m	08:30	8h 42m	17:12	38m	17:51	39m	18:30	38m	19:08	15h 16m	11h 25m				Do, 18. Jan
Fr, 19. Jan		03:59* – 06:33*	2h 34m	M _\ bis AN ₋		12:03	02:37	06:33	38m	07:12	38m	07:51	38m	08:29	8h 44m	17:14	38m	17:52	39m	18:31	38m	19:10	15h 14m	11h 23m				Fr, 19. Jan
Sa, 20. Jan		05:17* – 06:32*	1h 14m	M _\ bis AN ₋		12:26	03:59	06:33	38m	07:11	38m	07:50	38m	08:28	8h 47m	17:15	38m	17:54	38m	18:33	38m	19:11	15h 11m	11h 21m				Sa, 20. Jan
So, 21. Jan		06:29* – 06:31*	1m	M _\ bis AN ₋		12:57	05:17	06:32	38m	07:10	38m	07:49	38m	08:27	8h 49m	17:17	38m	17:55	38m	18:34	38m	19:12	15h 09m	11h 19m				So, 21. Jan
Mo, 22. Jan		—:—:—:—:—	–	Mond stört		13:39	06:29	06:31	38m	07:09	38m	07:48	38m	08:26	8h 52m	17:18	38m	17:57	38m	18:35	38m	19:13	15h 06m	11h 16m				Mo, 22. Jan
Di, 23. Jan		—:—:—:—:—	–	Mond stört		14:32	07:30	06:30	38m	07:08	38m	07:47	37m	08:25	8h 54m	17:20	37m	17:58	38m	18:37	38m	19:15	15h 03m	11h 14m				Di, 23. Jan
Mi, 24. Jan		—:—:—:—:—	–	Mond stört		15:37	08:16	06:30	37m	07:08	38m	07:46	37m	08:24	8h 57m	17:22	37m	18:00	38m	18:38	38m	19:16	15h 01m	11h 12m				Mi, 24. Jan
Do, 25. Jan		—:—:~:~:~	–	Mond stört	☾	16:48	08:51	06:29	37m	07:07	38m	07:45	37m	08:23	9h 00m	17:23	37m	18:01	38m	18:40	37m	19:18	14h 58m	11h 10m				Do, 25. Jan
Fr, 26. Jan		—:~:~:~:~	–	Mond stört		18:00	09:16	06:28	37m	07:06	38m	07:44	37m	08:22	9h 03m	17:25	37m	18:03	38m	18:41	37m	19:19	14h 55m	11h 08m				Fr, 26. Jan
Sa, 27. Jan		—:~:~:~:~	–	Mond stört		19:12	09:35	06:27	37m	07:05	38m	07:43	37m	08:20	9h 06m	17:27	37m	18:04	38m	18:42	37m	19:20	14h 52m	11h 05m				Sa, 27. Jan
So, 28. Jan		19:22 – 20:21	59m	AN ₊ bis M ₇		20:21	09:50	06:26	37m	07:04	38m	07:42	37m	08:19	9h 08m	17:28	37m	18:06	38m	18:44	37m	19:22	14h 49m	11h 03m				So, 28. Jan
Mo, 29. Jan		19:23 – 21:29	2h 06m	AN ₊ bis M ₇		21:29	10:02	06:25	37m	07:03	38m	07:41	37m	08:18	9h 11m	17:30	37m	18:07	38m	18:45	37m	19:23	14h 46m	11h 00m				Mo, 29. Jan
Di, 30. Jan		19:24 – 22:37	3h 12m	AN ₊ bis M ₇		22:37	10:14	06:24	37m	07:02	38m	07:40	37m	08:17	9h 14m	17:32	37m	18:09	38m	18:47	37m	19:24	14h 43m	10h 58m				Di, 30. Jan
Mi, 31. Jan		19:26 – 23:45	4h 18m	AN ₊ bis M ₇		23:45	10:25	06:23	37m	07:00	37m	07:38	36m	08:15	9h 17m	17:33	36m	18:10	37m	18:48	37m	19:26	14h 40m	10h 55m				Mi, 31. Jan
Do, 1. Feb		19:27 – 00:55*	5h 27m	AN ₊ bis M ₇		—:—	10:37	06:22	37m	06:59	37m	07:37	36m	08:14	9h 21m	17:35	36m	18:12	37m	18:50	37m	19:27	14h 37m	10h 53m				Do, 1. Feb
Fr, 2. Feb		19:29 – 02:08*	6h 39m	AN ₊ bis M ₇		00:55	10:52	06:20	37m	06:58	37m	07:36	36m	08:12	9h 24m	17:37	36m	18:13	37m	18:51	37m	19:29	14h 34m	10h 50m				Fr, 2. Feb
Sa, 3. Feb		19:30 – 03:25*	7h 54m	AN ₊ bis M ₇	☾	02:08	11:09	06:19	37m	06:57	37m	07:34	36m	08:11	9h 27m	17:38	36m	18:15	37m	18:53	37m	19:30	14h 31m	10h 47m				Sa, 3. Feb
So, 4. Feb		19:32 – 04:42*	9h 10m	AN ₊ bis M ₇		03:25	11:33	06:18	37m	06:55	37m	07:33	36m	08:10	9h 30m	17:40	36m	18:17	37m	18:54	37m	19:32	14h 27m	10h 44m				So, 4. Feb
Mo, 5. Feb		19:33 – 05:56*	10h 22m	AN ₊ bis M ₇		04:42	12:08	06:17	37m	06:54	37m	07:32	36m	08:08	9h 33m	17:42	36m	18:18	37m	18:56	37m	19:33	14h 24m	10h 42m				Mo, 5. Feb
Di, 6. Feb		19:35 – 06:14*	10h 39m	AN ₊ bis AN ₋		05:56	12:57	06:15	37m	06:53	37m	07:30	36m	08:06	9h 36m	17:43	36m	18:20	37m	18:57	37m	19:35	14h 21m	10h 39m				Di, 6. Feb
Mi, 7. Feb		19:36 – 06:13*	10h 36m	AN ₊ bis AN ₋		06:58	14:05	06:14	37m	06:51	37m	07:29	36m	08:05	9h 40m	17:45	36m	18:21	37m	18:59	37m	19:36	14h 18m	10h 36m				Mi, 7. Feb
Do, 8. Feb		19:38 – 06:11*	10h 33m	AN ₊ bis AN ₋		07:45	15:28	06:13	37m	06:50	37m	07:27	36m	08:03	9h 43m	17:47	36m	18:23	37m	19:00	37m	19:38	14h 14m	10h 33m				Do, 8. Feb
Fr, 9. Feb		19:39 – 06:10*	10h 30m	AN ₊ bis AN ₋	☾	08:19	17:00	06:11	37m	06:49	37m	07:26	35m	08:02	9h 46m	17:49	35m	18:25	37m	19:02	37m	19:39	14h 11m	10h 30m				Fr, 9. Feb
Sa, 10. Feb		19:41 – 06:08*	10h 27m	AN ₊ bis AN ₋		08:43	18:33	06:10	37m	06:47	37m	07:24	35m	08:00	9h 50m	17:50	35m	18:26	37m	19:03	37m	19:41	14h 08m	10h 27m				Sa, 10. Feb
So, 11. Feb		20:04 – 06:07*	10h 02m	M _\ bis AN ₋		09:02	20:04	06:08	37m	06:46	37m	07:23	35m	07:58	9h 53m	17:52	35m	18:28	37m	19:05	37m	19:42	14h 04m	10h 24m				So, 11. Feb
Mo, 12. Feb		21:32 – 06:05*																										

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

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

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

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

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

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

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