

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Lyon 45.7597° N 4.8422° 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), M_l

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

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

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

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

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

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

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