

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Arnstadt 50.8342° N 10.9464° 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	Zeitzone	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		18:23 – 22:07	3h 43m	AN ₊ bis M ₇		22:07	11:20	06:15	39m	06:55	41m	07:36	41m	08:18	8h 02m	16:21	41m	17:02	41m	17:43	39m	18:23	15h 57m	11h 51m				Mo, 1. Jan
Di, 2. Jan		18:24 – 23:15	4h 51m	AN ₊ bis M ₇		23:15	11:32	06:15	39m	06:55	41m	07:36	41m	08:18	8h 03m	16:22	41m	17:03	41m	17:44	39m	18:24	15h 55m	11h 50m				Di, 2. Jan
Mi, 3. Jan		18:25 – 00:24*	5h 59m	AN ₊ bis M ₇		—:—	11:42	06:15	39m	06:55	41m	07:36	41m	08:17	8h 05m	16:23	41m	17:04	41m	17:45	39m	18:25	15h 54m	11h 49m				Mi, 3. Jan
Do, 4. Jan		18:26 – 01:35*	7h 08m	AN ₊ bis M ₇	☾	00:24	11:53	06:15	39m	06:55	41m	07:36	41m	08:17	8h 06m	16:24	41m	17:05	41m	17:46	39m	18:26	15h 53m	11h 48m				Do, 4. Jan
Fr, 5. Jan		18:27 – 02:49*	8h 21m	AN ₊ bis M ₇		01:35	12:05	06:15	39m	06:55	41m	07:36	41m	08:17	8h 07m	16:25	41m	17:06	41m	17:47	39m	18:27	15h 51m	11h 47m				Fr, 5. Jan
Sa, 6. Jan		18:28 – 04:07*	9h 38m	AN ₊ bis M ₇		02:49	12:20	06:15	39m	06:55	40m	07:36	41m	08:17	8h 09m	16:26	41m	17:07	41m	17:48	39m	18:28	15h 50m	11h 46m				Sa, 6. Jan
So, 7. Jan		18:29 – 05:28*	10h 58m	AN ₊ bis M ₇		04:07	12:39	06:15	39m	06:54	40m	07:35	40m	08:16	8h 10m	16:27	41m	17:08	40m	17:49	39m	18:29	15h 48m	11h 45m				So, 7. Jan
Mo, 8. Jan		18:30 – 06:14*	11h 44m	AN ₊ bis AN ₋		05:28	13:06	06:15	39m	06:54	40m	07:35	40m	08:16	8h 12m	16:29	40m	17:10	40m	17:50	39m	18:30	15h 46m	11h 44m				Mo, 8. Jan
Di, 9. Jan		18:31 – 06:14*	11h 42m	AN ₊ bis AN ₋		06:48	13:47	06:14	39m	06:54	40m	07:35	40m	08:16	8h 14m	16:30	40m	17:11	40m	17:52	39m	18:31	15h 45m	11h 42m				Di, 9. Jan
Mi, 10. Jan		18:32 – 06:14*	11h 41m	AN ₊ bis AN ₋		07:58	14:46	06:14	39m	06:54	40m	07:34	40m	08:15	8h 16m	16:31	40m	17:12	40m	17:53	39m	18:32	15h 43m	11h 41m				Mi, 10. Jan
Do, 11. Jan		18:33 – 06:13*	11h 39m	AN ₊ bis AN ₋	☾	08:53	16:03	06:14	39m	06:53	40m	07:34	40m	08:15	8h 18m	16:33	40m	17:13	40m	17:54	39m	18:33	15h 41m	11h 39m				Do, 11. Jan
Fr, 12. Jan		18:35 – 06:13*	11h 38m	AN ₊ bis AN ₋		09:32	17:33	06:13	39m	06:53	40m	07:33	40m	08:14	8h 20m	16:34	40m	17:15	40m	17:55	39m	18:35	15h 39m	11h 38m				Fr, 12. Jan
Sa, 13. Jan		19:06 – 06:13*	11h 06m	M _\ bis AN ₋		10:00	19:06	06:13	39m	06:52	40m	07:33	40m	08:13	8h 22m	16:36	40m	17:16	40m	17:56	39m	18:36	15h 37m	11h 36m				Sa, 13. Jan
So, 14. Jan		20:36 – 06:12*	9h 35m	M _\ bis AN ₋		10:19	20:36	06:13	39m	06:52	40m	07:32	40m	08:13	8h 24m	16:37	40m	17:17	40m	17:58	39m	18:37	15h 34m	11h 34m				So, 14. Jan
Mo, 15. Jan		22:04 – 06:11*	8h 07m	M _\ bis AN ₋		10:35	22:04	06:12	39m	06:51	40m	07:32	40m	08:12	8h 26m	16:38	40m	17:19	40m	17:59	39m	18:38	15h 32m	11h 33m				Mo, 15. Jan
Di, 16. Jan		23:28 – 06:11*	6h 42m	M _\ bis AN ₋		10:49	23:28	06:11	39m	06:51	40m	07:31	39m	08:11	8h 29m	16:40	39m	17:20	40m	18:00	39m	18:40	15h 30m	11h 31m				Di, 16. Jan
Mi, 17. Jan		00:51* – 06:10*	5h 18m	M _\ bis AN ₋		11:02	—:—	06:11	39m	06:50	40m	07:30	39m	08:10	8h 31m	16:42	39m	17:21	40m	18:02	39m	18:41	15h 27m	11h 29m				Mi, 17. Jan
Do, 18. Jan		02:15* – 06:10*	3h 55m	M _\ bis AN ₋	☾	11:17	00:51	06:10	39m	06:49	40m	07:30	39m	08:09	8h 33m	16:43	39m	17:23	40m	18:03	39m	18:42	15h 25m	11h 27m				Do, 18. Jan
Fr, 19. Jan		03:37* – 06:09*	2h 31m	M _\ bis AN ₋		11:34	02:15	06:10	39m	06:49	39m	07:29	39m	08:08	8h 36m	16:45	39m	17:24	39m	18:04	39m	18:43	15h 22m	11h 25m				Fr, 19. Jan
Sa, 20. Jan		04:57* – 06:08*	1h 10m	M _\ bis AN ₋		11:56	03:37	06:09	39m	06:48	39m	07:28	39m	08:07	8h 38m	16:46	39m	17:26	39m	18:06	39m	18:45	15h 19m	11h 23m				Sa, 20. Jan
So, 21. Jan		—:— —:— —:—	–	Mond stört		12:25	04:57	06:08	39m	06:47	39m	07:27	39m	08:06	8h 41m	16:48	39m	17:27	39m	18:07	39m	18:46	15h 17m	11h 21m				So, 21. Jan
Mo, 22. Jan		—:— —:— —:—	–	Mond stört		13:05	06:10	06:07	38m	06:46	39m	07:26	39m	08:05	8h 44m	16:50	39m	17:29	39m	18:08	38m	18:47	15h 14m	11h 19m				Mo, 22. Jan
Di, 23. Jan		—:— —:~ —:~	–	Mond stört		13:59	07:11	06:07	38m	06:45	39m	07:25	39m	08:04	8h 47m	16:51	39m	17:30	39m	18:10	38m	18:49	15h 11m	11h 16m				Di, 23. Jan
Mi, 24. Jan		—:~ —:~ —:~	–	Mond stört		15:04	07:58	06:06	38m	06:45	39m	07:24	38m	08:03	8h 49m	16:53	38m	17:32	39m	18:11	38m	18:50	15h 08m	11h 14m				Mi, 24. Jan
Do, 25. Jan		—:~ —:~ —:~	–	Mond stört	☾	16:16	08:31	06:05	38m	06:44	39m	07:23	38m	08:02	8h 52m	16:55	38m	17:33	39m	18:13	38m	18:52	15h 05m	11h 12m				Do, 25. Jan
Fr, 26. Jan		—:~ —:~ —:~	–	Mond stört		17:30	08:55	06:04	38m	06:43	39m	07:22	38m	08:00	8h 55m	16:56	38m	17:35	39m	18:14	38m	18:53	15h 02m	11h 09m				Fr, 26. Jan
Sa, 27. Jan		—:~ —:~ —:~	–	Mond stört		18:43	09:13	06:03	38m	06:42	39m	07:21	38m	07:59	8h 58m	16:58	38m	17:37	39m	18:16	38m	18:54	14h 59m	11h 07m				Sa, 27. Jan
So, 28. Jan		18:56 – 19:53	57m	AN ₊ bis M ₇		19:53	09:27	06:02	38m	06:40	39m	07:20	38m	07:58	9h 01m	17:00	38m	17:38	39m	18:17	38m	18:56	14h 56m	11h 04m				So, 28. Jan
Mo, 29. Jan		18:57 – 21:02	2h 05m	AN ₊ bis M ₇		21:02	09:39	06:01	38m	06:39	39m	07:18	38m	07:57	9h 04m	17:01	38m	17:40	39m	18:19	38m	18:57	14h 53m	11h 02m				Mo, 29. Jan
Di, 30. Jan		18:59 – 22:11	3h 11m	AN ₊ bis M ₇		22:11	09:49	06:00	38m	06:38	38m	07:17	38m	07:55	9h 08m	17:03	38m	17:41	38m	18:20	38m	18:59	14h 50m	10h 59m				Di, 30. Jan
Mi, 31. Jan		19:00 – 23:20	4h 19m	AN ₊ bis M ₇		23:20	09:59	05:58	38m	06:37	38m	07:16	37m	07:54	9h 11m	17:05	37m	17:43	38m	18:22	38m	19:00	14h 47m	10h 56m				Mi, 31. Jan
Do, 1. Feb		19:02 – 00:31*	5h 29m	AN ₊ bis M ₇		—:~	10:10	05:57	38m	06:36	38m	07:14	37m	07:52	9h 14m	17:07	37m	17:45	38m	18:23	38m	19:02	14h 44m	10h 54m				Do, 1. Feb
Fr, 2. Feb		19:03 – 01:46*	6h 42m	AN ₊ bis M ₇		00:31	10:23	05:56	38m	06:34	38m	07:13	37m	07:51	9h 17m	17:08	37m	17:46	38m	18:25	38m	19:03	14h 40m	10h 51m				Fr, 2. Feb
Sa, 3. Feb		19:05 – 03:04*	7h 59m	AN ₊ bis M ₇	☾	01:46	10:40	05:55	38m	06:33	38m	07:12	37m	07:49	9h 20m	17:10	37m	17:48	38m	18:26	38m	19:05	14h 37m	10h 48m				Sa, 3. Feb
So, 4. Feb		19:06 – 04:23*	9h 16m	AN ₊ bis M ₇		03:04	11:02	05:54	38m	06:32	38m	07:10	37m	07:48	9h 24m	17:12	37m	17:49	38m	18:28	38m	19:06	14h 34m	10h 45m				So, 4. Feb
Mo, 5. Feb		19:08 – 05:37*	10h 29m	AN ₊ bis M ₇		04:23	11:35	05:52	38m	06:30	38m	07:09	37m	07:46	9h 27m	17:14	37m	17:51	38m	18:30	38m	19:08	14h 30m	10h 42m				Mo, 5. Feb
Di, 6. Feb		19:09 – 05:49*	10h 39m	AN ₊ bis AN ₋		05:37	12:23	05:51	38m	06:29	38m	07:07	37m	07:45	9h 31m	17:16	37m	17:53	38m	18:31	38m	19:09	14h 27m	10h 39m				Di, 6. Feb
Mi, 7. Feb		19:11 – 05:48*	10h 36m	AN ₊ bis AN ₋		06:39	13:31	05:49	38m	06:28	38m	07:06	37m	07:43	9h 34m	17:17	37m	17:54	38m	18:33	38m	19:11	14h 23m	10h 36m				Mi, 7. Feb
Do, 8. Feb		19:13 – 05:46*	10h 33m	AN ₊ bis AN ₋		07:26	14:56	05:48	38m	06:26	38m	07:04	36m	07:41	9h 37m	17:19	36m	17:56	38m	18:34	38m	19:13	14h 20m	10h 33m				Do, 8. Feb
Fr, 9. Feb		19:14 – 05:45*	10h 30m	AN ₊ bis AN ₋	☾	07:58	16:29	05:46	38m	06:25	38m	07:03	36m	07:40	9h 41m	17:21	36m	17:58	38m	18:36	38m	19:14	14h 16m	10h 30m				Fr, 9. Feb
Sa, 10. Feb		19:16 – 05:43*	10h 27m	AN ₊ bis AN ₋		08:21	18:04	05:45	38m	06:23	38m	07:01	36m	07:38	9h 44m	17:23	36m	17:59	38m	18:38	38m	19:16	14h 13m	10h 27m				Sa, 10. Feb
So, 11. Feb		19:36 – 05:42*	10h 05m	M _\ bis AN ₋		08:39	19:36	05:43	38m	06:21	37m	06:59	36m	07:36	9h 48m	17:24	36m	18:01	38m	18:39	38m	19:17	14h 09m	10h 24m				So, 11. Feb
Mo, 12. Feb		21:05 – 05:4																										

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

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

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

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