

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Köln 50.9381° N 6.9569° E

Berechnung: pyEphem
Textsatz: L^AT_EX

Atmosphären-Einstellungen in pyEphem

Standort.pressure = 1010.0
Standort.horizon = '0:00:00.0'

Alle Zeitangaben beziehen sich auf den in der jeweiligen Zeile angegeben Kalendertag. Liegt ein Ereignis bereits nach Mitternacht, also schon am Folgetag, ist die Zeitangabe mit einem * gekennzeichnet, z.B.: 00:20*.

Spalte 1 Kalendertag.

Spalte 2 Bei »MESZ« sind alle Zeitangaben in dieser Zeile in Mitteleuropäischer Sommerzeit, ansonsten standardmäßig in MEZ.

Spalte 3 Die für Deep-Sky-Beobachtungen nutzbare Zeitspanne: Es ist astronomisch dunkel (Sonne steht tiefer als -18°) und kein Mond stört.

Spalte 4 Dauer der für Deep-Sky-Beobachtungen nutzbaren Zeitspanne.

Spalte 5 Ereignisse, die die für Deep-Sky-Beobachtungen nutzbare Zeitspanne begrenzen: AN₊ (Einbruch der astronomischen Nacht = Ende der astr. Abenddämmerung), M_v (Monduntergang), AN₋ (Ende der astronomischen Nacht = Beginn der astr. Morgendämmerung), M₇

(Mondaufgang), Astr. MD (Astronomische Mitternachtsdämmerung), Naut. MD (Nautische Mitternachtsdämmerung).

Spalte 6 Mondphase.

Spalte 7 Mondaufgang.

Spalte 8 Monduntergang.

Spalte 9 Beginn der astr. Morgendämmerung (Sonnenhöhe = -18°).

Spalte 10 Dauer der astr. Morgendämmerung.

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

Spalte 12 Dauer der naut. Morgendämmerung.

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

Spalte 14 Dauer der bürg. Morgendämmerung.

Spalte 15 Sonnenaufgang.

Spalte 16 Taglänge.

Spalte 17 Sonnenuntergang.

Spalte 18 Dauer der bürg. Abenddämmerung.

Spalte 19 Ende der bürg. Abenddämmerung (Sonnenhöhe = -6°).

Spalte 20 Dauer der naut. Abenddämmerung.

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

Spalte 22 Dauer der astr. Abenddämmerung.

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

Spalte 24 Länge der Nacht.

Spalte 25 Länge der astr. Nacht.

Für Beobachter, die zu Zeiten der Mitternachtsdämmerung während der astr. Dämmerung beobachten möchten:

Spalte 26 Nutzbare Zeitspanne: Es ist »nautisch dunkel« (Sonne steht tiefer als -12°) und kein Mond stört.

Spalte 27 Dauer der in Spalte 26 angegebenen Zeitspanne.

Spalte 28 Ereignisse, die die nutzbare Zeitspanne begrenzen: ND₊ (Beginn der »naut. Dunkelheit« = Ende der naut. Abenddämmerung), M_v (Monduntergang), ND₋ (Ende der »naut. Dunkelheit« = Beginn der naut. Morgendämmerung), M₇ (Mondaufgang), Naut. MD (Nautische Mitternachtsdämmerung).

Spalte 29 Identisch zu Spalte 1.

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

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

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

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

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

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

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