

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Worms 49.6331° N 8.3608° E

Berechnung: pyEphem
Textsatz: L^AT_EX

Atmosphären-Einstellungen in pyEphem

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

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

Spalte 1 Kalendertag.

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

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

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

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

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

Spalte 6 Mondphase.

Spalte 7 Mondaufgang.

Spalte 8 Monduntergang.

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

Spalte 10 Dauer der astr. Morgendämmerung.

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

Spalte 12 Dauer der naut. Morgendämmerung.

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

Spalte 14 Dauer der bürg. Morgendämmerung.

Spalte 15 Sonnenaufgang.

Spalte 16 Taglänge.

Spalte 17 Sonnenuntergang.

Spalte 18 Dauer der bürg. Abenddämmerung.

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

Spalte 20 Dauer der naut. Abenddämmerung.

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

Spalte 22 Dauer der astr. Abenddämmerung.

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

Spalte 24 Länge der Nacht.

Spalte 25 Länge der astr. Nacht.

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

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

Spalte 27 Dauer der in Spalte 26 angegebenen Zeitspanne.

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

Spalte 29 Identisch zu Spalte 1.

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

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

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

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

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

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

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