

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Borna 51.1167° N 12.5000° E

Berechnung: pyEphem
Textsatz: L^AT_EX

Atmosphären-Einstellungen in pyEphem

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

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

Spalte 1 Kalendertag.

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

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

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

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

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

Spalte 6 Mondphase.

Spalte 7 Mondaufgang.

Spalte 8 Monduntergang.

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

Spalte 10 Dauer der astr. Morgendämmerung.

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

Spalte 12 Dauer der naut. Morgendämmerung.

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

Spalte 14 Dauer der bürg. Morgendämmerung.

Spalte 15 Sonnenaufgang.

Spalte 16 Taglänge.

Spalte 17 Sonnenuntergang.

Spalte 18 Dauer der bürg. Abenddämmerung.

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

Spalte 20 Dauer der naut. Abenddämmerung.

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

Spalte 22 Dauer der astr. Abenddämmerung.

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

Spalte 24 Länge der Nacht.

Spalte 25 Länge der astr. Nacht.

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

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

Spalte 27 Dauer der in Spalte 26 angegebenen Zeitspanne.

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

Spalte 29 Identisch zu Spalte 1.

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

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

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

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

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2024/25	Zeitzone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024/25		
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Mo, 16. Dez		—:—:—:—	—	Mond stört		16:37	09:49	06:03	40m	06:43	41m	07:25	42m	08:07	7h 55m	16:03	42m	16:45	41m	17:27	40m	18:07	16h 04m	11h 56m				Mo, 16. Dez
Di, 17. Dez		—:—:—:—	—	Mond stört		17:55	10:33	06:04	40m	06:44	41m	07:26	42m	08:08	7h 55m	16:03	42m	16:46	41m	17:27	40m	18:08	16h 05m	11h 56m				Di, 17. Dez
Mi, 18. Dez		18:08–19:17	1h 08m	AN ₊ bis M ₇		19:17	11:02	06:04	40m	06:45	41m	07:27	42m	08:09	7h 54m	16:04	42m	16:46	41m	17:28	40m	18:08	16h 05m	11h 56m				Mi, 18. Dez
Do, 19. Dez		18:08–20:36	2h 27m	AN ₊ bis M ₇		20:36	11:22	06:05	40m	06:45	41m	07:27	42m	08:09	7h 54m	16:04	42m	16:46	41m	17:28	40m	18:08	16h 05m	11h 57m				Do, 19. Dez
Fr, 20. Dez		18:09–21:52	3h 42m	AN ₊ bis M ₇		21:52	11:37	06:06	40m	06:46	41m	07:28	42m	08:10	7h 54m	16:05	42m	16:47	41m	17:29	40m	18:09	16h 05m	11h 57m				Fr, 20. Dez
Sa, 21. Dez		18:09–23:04	4h 54m	AN ₊ bis M ₇		23:04	11:49	06:06	40m	06:47	41m	07:28	42m	08:11	7h 54m	16:05	42m	16:47	41m	17:29	40m	18:09	16h 05m	11h 57m				Sa, 21. Dez
So, 22. Dez		18:10–00:13*	6h 03m	AN ₊ bis M ₇	☾	—:—	12:00	06:07	40m	06:47	41m	07:29	42m	08:11	7h 54m	16:06	42m	16:48	41m	17:30	40m	18:10	16h 05m	11h 57m				So, 22. Dez
Mo, 23. Dez		18:11–01:22*	7h 11m	AN ₊ bis M ₇		00:13	12:10	06:07	40m	06:47	41m	07:29	42m	08:11	7h 54m	16:06	42m	16:48	41m	17:30	40m	18:11	16h 05m	11h 56m				Mo, 23. Dez
Di, 24. Dez		18:11–02:32*	8h 21m	AN ₊ bis M ₇		01:22	12:20	06:07	40m	06:48	41m	07:30	42m	08:12	7h 55m	16:07	42m	16:49	41m	17:31	40m	18:11	16h 05m	11h 56m				Di, 24. Dez
Mi, 25. Dez		18:12–03:45*	9h 32m	AN ₊ bis M ₇		02:32	12:32	06:08	40m	06:48	41m	07:30	42m	08:12	7h 55m	16:07	42m	16:50	41m	17:31	40m	18:12	16h 04m	11h 56m				Mi, 25. Dez
Do, 26. Dez		18:12–04:59*	10h 46m	AN ₊ bis M ₇		03:45	12:46	06:08	40m	06:48	41m	07:30	42m	08:12	7h 55m	16:08	42m	16:50	41m	17:32	40m	18:12	16h 04m	11h 55m				Do, 26. Dez
Fr, 27. Dez		18:13–06:09*	11h 55m	AN ₊ bis AN ₋		04:59	13:05	06:08	40m	06:49	41m	07:30	42m	08:13	7h 56m	16:09	42m	16:51	41m	17:33	40m	18:13	16h 03m	11h 55m				Fr, 27. Dez
Sa, 28. Dez		18:14–06:09*	11h 54m	AN ₊ bis AN ₋		06:15	13:33	06:09	40m	06:49	41m	07:31	42m	08:13	7h 57m	16:10	42m	16:52	41m	17:34	40m	18:14	16h 02m	11h 54m				Sa, 28. Dez
So, 29. Dez		18:15–06:09*	11h 54m	AN ₊ bis AN ₋		07:27	14:12	06:09	40m	06:49	41m	07:31	41m	08:13	7h 57m	16:11	41m	16:53	41m	17:34	40m	18:15	16h 02m	11h 54m				So, 29. Dez
Mo, 30. Dez		18:16–06:09*	11h 53m	AN ₊ bis AN ₋	☉	08:29	15:06	06:09	40m	06:49	41m	07:31	41m	08:13	7h 58m	16:12	41m	16:54	41m	17:35	40m	18:16	16h 01m	11h 53m				Mo, 30. Dez
Di, 31. Dez		18:16–06:09*	11h 52m	AN ₊ bis AN ₋		09:17	16:17	06:09	40m	06:49	41m	07:31	41m	08:13	7h 59m	16:13	41m	16:55	41m	17:36	40m	18:16	16h 00m	11h 52m				Di, 31. Dez
Mi, 1. Jan		18:17–06:09*	11h 51m	AN ₊ bis AN ₋		09:52	17:38	06:09	40m	06:49	41m	07:31	41m	08:13	8h 00m	16:14	41m	16:56	41m	17:37	40m	18:17	15h 58m	11h 51m				Mi, 1. Jan
Do, 2. Jan		19:04–06:09*	11h 05m	M _\ bis AN ₋		10:17	19:04	06:09	40m	06:49	41m	07:31	41m	08:13	8h 02m	16:15	41m	16:57	41m	17:38	40m	18:18	15h 57m	11h 51m				Do, 2. Jan
Fr, 3. Jan		20:30–06:09*	9h 39m	M _\ bis AN ₋		10:36	20:30	06:09	40m	06:49	41m	07:31	41m	08:12	8h 03m	16:16	41m	16:58	41m	17:39	40m	18:19	15h 56m	11h 50m				Fr, 3. Jan
Sa, 4. Jan		21:54–06:09*	8h 15m	M _\ bis AN ₋		10:50	21:54	06:09	40m	06:49	41m	07:31	41m	08:12	8h 04m	16:17	41m	16:59	41m	17:40	40m	18:20	15h 54m	11h 48m				Sa, 4. Jan
So, 5. Jan		23:17–06:09*	6h 51m	M _\ bis AN ₋		11:03	23:17	06:09	40m	06:49	41m	07:30	41m	08:12	8h 06m	16:18	41m	17:00	41m	17:41	40m	18:21	15h 53m	11h 47m				So, 5. Jan
Mo, 6. Jan		00:41*–06:09*	5h 27m	M _\ bis AN ₋		11:16	—:—	06:09	40m	06:49	41m	07:30	41m	08:12	8h 07m	16:20	41m	17:01	41m	17:42	40m	18:22	15h 51m	11h 46m				Mo, 6. Jan
Di, 7. Jan		02:07*–06:09*	4h 01m	M _\ bis AN ₋	☾	11:29	00:41	06:09	39m	06:49	41m	07:30	41m	08:11	8h 09m	16:21	41m	17:02	41m	17:43	39m	18:23	15h 49m	11h 45m				Di, 7. Jan
Mi, 8. Jan		03:35*–06:08*	2h 32m	M _\ bis AN ₋		11:45	02:07	06:09	39m	06:48	41m	07:30	41m	08:11	8h 11m	16:22	41m	17:03	41m	17:44	39m	18:24	15h 48m	11h 43m				Mi, 8. Jan
Do, 9. Jan		05:04*–06:08*	1h 04m	M _\ bis AN ₋		12:06	03:35	06:08	39m	06:48	41m	07:29	41m	08:10	8h 13m	16:23	41m	17:05	41m	17:46	39m	18:25	15h 46m	11h 42m				Do, 9. Jan
Fr, 10. Jan		—:—:—:—	—	Mond stört		12:35	05:04	06:08	39m	06:48	40m	07:29	40m	08:10	8h 15m	16:25	40m	17:06	40m	17:47	39m	18:27	15h 44m	11h 41m				Fr, 10. Jan
Sa, 11. Jan		—:—:—:—	—	Mond stört		13:17	06:26	06:08	39m	06:47	40m	07:28	40m	08:09	8h 17m	16:26	40m	17:07	40m	17:48	39m	18:28	15h 42m	11h 39m				Sa, 11. Jan
So, 12. Jan		—:~:~:~:~	—	Mond stört		14:16	07:35	06:07	39m	06:47	40m	07:28	40m	08:08	8h 19m	16:28	40m	17:08	40m	17:49	39m	18:29	15h 39m	11h 37m				So, 12. Jan
Mo, 13. Jan		—:~:~:~:~	—	Mond stört	☉	15:30	08:26	06:07	39m	06:46	40m	07:27	40m	08:08	8h 21m	16:29	40m	17:10	40m	17:50	39m	18:30	15h 37m	11h 36m				Mo, 13. Jan
Di, 14. Jan		—:~:~:~:~	—	Mond stört		16:51	09:01	06:06	39m	06:46	40m	07:27	40m	08:07	8h 23m	16:31	40m	17:11	40m	17:52	39m	18:31	15h 35m	11h 34m				Di, 14. Jan
Mi, 15. Jan		—:~:~:~:~	—	Mond stört		18:13	09:25	06:06	39m	06:45	40m	07:26	40m	08:06	8h 26m	16:32	40m	17:13	40m	17:53	39m	18:33	15h 33m	11h 32m				Mi, 15. Jan
Do, 16. Jan		18:34–19:31	56m	AN ₊ bis M ₇		19:31	09:42	06:05	39m	06:45	40m	07:25	40m	08:05	8h 28m	16:34	40m	17:14	40m	17:54	39m	18:34	15h 30m	11h 30m				Do, 16. Jan
Fr, 17. Jan		18:35–20:45	2h 09m	AN ₊ bis M ₇		20:45	09:55	06:05	39m	06:44	40m	07:24	40m	08:04	8h 30m	16:35	40m	17:15	40m	17:56	39m	18:35	15h 28m	11h 28m				Fr, 17. Jan
Sa, 18. Jan		18:37–21:56	3h 19m	AN ₊ bis M ₇		21:56	10:06	06:04	39m	06:43	40m	07:24	39m	08:03	8h 33m	16:37	39m	17:17	40m	17:57	39m	18:37	15h 25m	11h 26m				Sa, 18. Jan
So, 19. Jan		18:38–23:06	4h 28m	AN ₊ bis M ₇		23:06	10:16	06:03	39m	06:43	40m	07:23	39m	08:02	8h 36m	16:39	39m	17:18	40m	17:59	39m	18:38	15h 22m	11h 24m				So, 19. Jan
Mo, 20. Jan		18:39–00:16*	5h 36m	AN ₊ bis M ₇		—:—	10:26	06:02	39m	06:42	40m	07:22	39m	08:01	8h 38m	16:40	39m	17:20	40m	18:00	39m	18:39	15h 20m	11h 22m				Mo, 20. Jan
Di, 21. Jan		18:41–01:27*	6h 46m	AN ₊ bis M ₇	☾	00:16	10:37	06:02	39m	06:41	39m	07:21	39m	08:00	8h 41m	16:42	39m	17:21	39m	18:01	39m	18:41	15h 17m	11h 20m				Di, 21. Jan
Mi, 22. Jan		18:42–02:41*	7h 58m	AN ₊ bis M ₇		01:27	10:50	06:01	39m	06:40	39m	07:20	39m	07:59	8h 44m	16:44	39m	17:23	39m	18:03	39m	18:42	15h 14m	11h 17m				Mi, 22. Jan
Do, 23. Jan		18:43–03:55*	9h 11m	AN ₊ bis M ₇		02:41	11:07	06:00	39m	06:39	39m	07:19	39m	07:58	8h 47m	16:45	39m	17:24	39m	18:04	39m	18:43	15h 11m	11h 15m				Do, 23. Jan
Fr, 24. Jan		18:45–05:09*	10h 23m	AN ₊ bis M ₇		03:55	11:30	05:59	39m	06:38	39m	07:18	39m	07:57	8h 50m	16:47	39m	17:26	39m	18:06	39m	18:45	15h 08m	11h 13m				Fr, 24. Jan
Sa, 25. Jan		18:46–05:57*	11h 10m	AN ₊ bis AN ₋		05:09	12:03	05:58	38m	06:37	39m	07:17	38m	07:56	8h 53m	16:49	38m	17:28	39m	18:07	39m	18:46	15h 05m	11h 10m				Sa, 25. Jan
So, 26. Jan		18:48–05:56*	11h 08m	AN ₊ bis AN ₋		06:15	12:51	05:57	38m	06:36	39m	07:16	38m	07:54	8h 56m	16:50	38m	17:29	39m	18:09	38m	18:48	15h 02m	11h 08m				So, 26. Jan
Mo, 27. Jan		18:49–05:55*	11h 05m	AN ₊ bis AN ₋		0																						