

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Frauenfeld 47.5561° N 8.8979° E

Berechnung: pyEphem
Textsatz: L^AT_EX

Atmosphären-Einstellungen in pyEphem

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

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

Spalte 1 Kalendertag.

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

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

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

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

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

Spalte 6 Mondphase.

Spalte 7 Mondaufgang.

Spalte 8 Monduntergang.

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

Spalte 10 Dauer der astr. Morgendämmerung.

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

Spalte 12 Dauer der naut. Morgendämmerung.

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

Spalte 14 Dauer der bürg. Morgendämmerung.

Spalte 15 Sonnenaufgang.

Spalte 16 Taglänge.

Spalte 17 Sonnenuntergang.

Spalte 18 Dauer der bürg. Abenddämmerung.

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

Spalte 20 Dauer der naut. Abenddämmerung.

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

Spalte 22 Dauer der astr. Abenddämmerung.

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

Spalte 24 Länge der Nacht.

Spalte 25 Länge der astr. Nacht.

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

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

Spalte 27 Dauer der in Spalte 26 angegebenen Zeitspanne.

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

Spalte 29 Identisch zu Spalte 1.

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

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

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

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

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

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

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