

Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Bamberg 49.8917° N 10.8917° 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
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
So, 1. Jan		03:59*–06:14*	2h 14m	M _\ bis AN ₋		12:51	02:45	06:14	39m	06:53	40m	07:33	40m	08:14	8h 11m	16:25	40m	17:06	40m	17:46	39m	18:25	15h 48m	11h 48m				So, 1. Jan
Mo, 2. Jan		05:13*–06:14*	1h 01m	M _\ bis AN ₋		13:10	03:59	06:14	39m	06:53	40m	07:33	40m	08:13	8h 12m	16:26	40m	17:07	40m	17:47	39m	18:26	15h 46m	11h 47m				Mo, 2. Jan
Di, 3. Jan		—:—:—:—	–	Mond stört		13:34	05:13	06:14	39m	06:53	40m	07:33	40m	08:13	8h 14m	16:27	40m	17:08	40m	17:48	39m	18:27	15h 45m	11h 46m				Di, 3. Jan
Mi, 4. Jan		—:—:—:—	–	Mond stört		14:05	06:23	06:14	39m	06:53	40m	07:33	40m	08:13	8h 15m	16:29	40m	17:09	40m	17:49	39m	18:28	15h 44m	11h 45m				Mi, 4. Jan
Do, 5. Jan		—:—:—:—	–	Mond stört		14:45	07:28	06:14	39m	06:53	40m	07:33	40m	08:13	8h 16m	16:30	40m	17:10	40m	17:50	39m	18:29	15h 42m	11h 44m				Do, 5. Jan
Fr, 6. Jan		—:~:~:~:~	–	Mond stört		15:36	08:23	06:14	38m	06:53	40m	07:33	39m	08:13	8h 18m	16:31	39m	17:11	40m	17:51	38m	18:30	15h 41m	11h 43m				Fr, 6. Jan
Sa, 7. Jan		—:~:~:~:~	–	Mond stört	○	16:37	09:07	06:13	38m	06:52	40m	07:32	39m	08:12	8h 19m	16:32	39m	17:12	40m	17:52	38m	18:31	15h 39m	11h 42m				Sa, 7. Jan
So, 8. Jan		—:~:~:~:~	–	Mond stört		17:44	09:41	06:13	38m	06:52	39m	07:32	39m	08:12	8h 21m	16:33	39m	17:13	39m	17:53	38m	18:32	15h 38m	11h 41m				So, 8. Jan
Mo, 9. Jan		18:33–18:53	20m	AN ₊ bis M ₇		18:53	10:06	06:13	38m	06:52	39m	07:32	39m	08:12	8h 23m	16:35	39m	17:14	39m	17:54	38m	18:33	15h 36m	11h 39m				Mo, 9. Jan
Di, 10. Jan		18:34–20:03	1h 29m	AN ₊ bis M ₇		20:03	10:26	06:13	38m	06:52	39m	07:31	39m	08:11	8h 24m	16:36	39m	17:16	39m	17:55	38m	18:34	15h 34m	11h 38m				Di, 10. Jan
Mi, 11. Jan		18:35–21:13	2h 37m	AN ₊ bis M ₇		21:13	10:42	06:13	38m	06:51	39m	07:31	39m	08:11	8h 26m	16:37	39m	17:17	39m	17:56	38m	18:35	15h 32m	11h 36m				Mi, 11. Jan
Do, 12. Jan		18:36–22:22	3h 46m	AN ₊ bis M ₇		22:22	10:56	06:12	38m	06:51	39m	07:31	39m	08:10	8h 28m	16:39	39m	17:18	39m	17:58	38m	18:36	15h 30m	11h 35m				Do, 12. Jan
Fr, 13. Jan		18:38–23:33	4h 55m	AN ₊ bis M ₇		23:33	11:10	06:12	38m	06:50	39m	07:30	39m	08:09	8h 30m	16:40	39m	17:19	39m	17:59	38m	18:38	15h 28m	11h 33m				Fr, 13. Jan
Sa, 14. Jan		18:39–00:45*	6h 06m	AN ₊ bis M ₇		—:—	11:23	06:11	38m	06:50	39m	07:29	39m	08:09	8h 32m	16:41	39m	17:21	39m	18:00	38m	18:39	15h 26m	11h 32m				Sa, 14. Jan
So, 15. Jan		18:40–02:02*	7h 21m	AN ₊ bis M ₇	●	00:45	11:37	06:11	38m	06:49	39m	07:29	39m	08:08	8h 34m	16:43	39m	17:22	39m	18:01	38m	18:40	15h 24m	11h 30m				So, 15. Jan
Mo, 16. Jan		18:41–03:22*	8h 41m	AN ₊ bis M ₇		02:02	11:54	06:10	38m	06:49	39m	07:28	38m	08:07	8h 37m	16:44	38m	17:23	39m	18:03	38m	18:41	15h 22m	11h 28m				Mo, 16. Jan
Di, 17. Jan		18:42–04:47*	10h 04m	AN ₊ bis M ₇		03:22	12:17	06:10	38m	06:48	39m	07:28	38m	08:06	8h 39m	16:46	38m	17:25	39m	18:04	38m	18:42	15h 19m	11h 26m				Di, 17. Jan
Mi, 18. Jan		18:44–06:09*	11h 24m	AN ₊ bis AN ₋		04:47	12:48	06:09	38m	06:48	39m	07:27	38m	08:06	8h 41m	16:47	38m	17:26	39m	18:05	38m	18:44	15h 17m	11h 24m				Mi, 18. Jan
Do, 19. Jan		18:45–06:08*	11h 22m	AN ₊ bis AN ₋		06:10	13:33	06:09	38m	06:47	39m	07:26	38m	08:05	8h 44m	16:49	38m	17:27	39m	18:07	38m	18:45	15h 14m	11h 22m				Do, 19. Jan
Fr, 20. Jan		18:46–06:07*	11h 20m	AN ₊ bis AN ₋		07:23	14:37	06:08	38m	06:46	38m	07:25	38m	08:04	8h 46m	16:50	38m	17:29	39m	18:08	38m	18:46	15h 12m	11h 20m				Fr, 20. Jan
Sa, 21. Jan		18:48–06:06*	11h 18m	AN ₊ bis AN ₋	●	08:21	15:58	06:07	38m	06:45	38m	07:24	38m	08:03	8h 49m	16:52	38m	17:30	38m	18:09	38m	18:48	15h 09m	11h 18m				Sa, 21. Jan
So, 22. Jan		18:49–06:06*	11h 16m	AN ₊ bis AN ₋		09:02	17:30	06:06	38m	06:45	38m	07:23	38m	08:02	8h 52m	16:54	38m	17:32	38m	18:11	38m	18:49	15h 06m	11h 16m				So, 22. Jan
Mo, 23. Jan		19:02–06:05*	11h 02m	M _\ bis AN ₋		09:31	19:02	06:06	38m	06:44	38m	07:23	38m	08:01	8h 54m	16:55	38m	17:33	38m	18:12	38m	18:50	15h 04m	11h 14m				Mo, 23. Jan
Di, 24. Jan		20:30–06:04*	9h 33m	M _\ bis AN ₋		09:52	20:30	06:05	38m	06:43	38m	07:22	37m	07:59	8h 57m	16:57	37m	17:35	38m	18:14	38m	18:52	15h 01m	11h 12m				Di, 24. Jan
Mi, 25. Jan		21:54–06:03*	8h 08m	M _\ bis AN ₋		10:10	21:54	06:04	38m	06:42	38m	07:21	37m	07:58	9h 00m	16:59	37m	17:36	38m	18:15	38m	18:53	14h 58m	11h 10m				Mi, 25. Jan
Do, 26. Jan		23:14–06:02*	6h 47m	M _\ bis AN ₋		10:25	23:14	06:03	37m	06:41	38m	07:19	37m	07:57	9h 03m	17:00	37m	17:38	38m	18:16	38m	18:54	14h 55m	11h 07m				Do, 26. Jan
Fr, 27. Jan		00:32*–06:01*	5h 29m	M _\ bis AN ₋		10:40	—:—	06:02	37m	06:40	38m	07:18	37m	07:56	9h 05m	17:02	37m	17:39	38m	18:18	37m	18:56	14h 52m	11h 05m				Fr, 27. Jan
Sa, 28. Jan		01:48*–06:00*	4h 11m	M _\ bis AN ₋	●	10:56	00:32	06:01	37m	06:39	38m	07:17	37m	07:55	9h 08m	17:03	37m	17:41	38m	18:19	37m	18:57	14h 49m	11h 02m				Sa, 28. Jan
So, 29. Jan		03:03*–05:59*	2h 55m	M _\ bis AN ₋		11:14	01:48	06:00	37m	06:38	38m	07:16	37m	07:53	9h 11m	17:05	37m	17:42	38m	18:21	37m	18:59	14h 46m	11h 00m				So, 29. Jan
Mo, 30. Jan		04:15*–05:58*	1h 42m	M _\ bis AN ₋		11:37	03:03	05:59	37m	06:37	38m	07:15	37m	07:52	9h 14m	17:07	37m	17:44	38m	18:22	37m	19:00	14h 43m	10h 57m				Mo, 30. Jan
Di, 31. Jan		05:22*–05:57*	34m	M _\ bis AN ₋		12:05	04:15	05:58	37m	06:36	38m	07:14	37m	07:51	9h 17m	17:09	37m	17:46	38m	18:24	37m	19:01	14h 40m	10h 55m				Di, 31. Jan
Mi, 1. Feb		—:~:~:~:~	–	Mond stört		12:42	05:22	05:57	37m	06:34	37m	07:12	36m	07:49	9h 21m	17:10	36m	17:47	37m	18:25	37m	19:03	14h 37m	10h 52m				Mi, 1. Feb
Do, 2. Feb		—:~:~:~:~	–	Mond stört		13:30	06:20	05:55	37m	06:33	37m	07:11	36m	07:48	9h 24m	17:12	36m	17:49	37m	18:27	37m	19:04	14h 34m	10h 49m				Do, 2. Feb
Fr, 3. Feb		—:~:~:~:~	–	Mond stört		14:28	07:07	05:54	37m	06:32	37m	07:10	36m	07:46	9h 27m	17:14	36m	17:50	37m	18:28	37m	19:06	14h 31m	10h 47m				Fr, 3. Feb
Sa, 4. Feb		—:~:~:~:~	–	Mond stört		15:34	07:44	05:53	37m	06:31	37m	07:08	36m	07:45	9h 30m	17:15	36m	17:52	37m	18:30	37m	19:07	14h 27m	10h 44m				Sa, 4. Feb
So, 5. Feb		—:~:~:~:~	–	Mond stört	○	16:43	08:11	05:52	37m	06:29	37m	07:07	36m	07:43	9h 33m	17:17	36m	17:54	37m	18:31	37m	19:09	14h 24m	10h 41m				So, 5. Feb
Mo, 6. Feb		—:~:~:~:~	–	Mond stört		17:54	08:32	05:50	37m	06:28	37m	07:05	36m	07:42	9h 37m	17:19	36m	17:55	37m	18:33	37m	19:10	14h 21m	10h 38m				Mo, 6. Feb
Di, 7. Feb		—:~:~:~:~	–	Mond stört		19:04	08:49	05:49	37m	06:26	37m	07:04	36m	07:40	9h 40m	17:21	36m	17:57	37m	18:34	37m	19:12	14h 18m	10h 35m				Di, 7. Feb
Mi, 8. Feb		19:13–20:14	1h 00m	AN ₊ bis M ₇		20:14	09:04	05:48	37m	06:25	37m	07:02	36m	07:39	9h 43m	17:22	36m	17:58	37m	18:36	37m	19:13	14h 14m	10h 32m				Mi, 8. Feb
Do, 9. Feb		19:15–21:23	2h 08m	AN ₊ bis M ₇		21:23	09:17	05:46	37m	06:24	37m	07:01	35m	07:37	9h 47m	17:24	36m	18:00	37m	18:37	37m	19:15	14h 11m	10h 29m				Do, 9. Feb
Fr, 10. Feb		19:16–22:34	3h 18m	AN ₊ bis M ₇		22:34	09:29	05:45	37m	06:22	37m	06:59	35m	07:35	9h 50m	17:26	35m	18:02	37m	18:39	37m	19:16	14h 07m	10h 26m				Fr, 10. Feb
Sa, 11. Feb		19:18–23:48	4h 30m	AN ₊ bis M ₇		23:48	09:43	05:43	37m	06:21	37m	06:58	35m	07:34	9h 53m	17:27	35m	18:03	37m	18:40	37m	19:18	14h 04m	10h 23m				Sa, 11. Feb
So, 12. Feb		19:19–01:05*	5h 45m	AN ₊ bis M ₇		—:—	09:58	05:42	37m	06:19	37m	06:56	35m	07:32	9h 57m	17:29	35m	18:05	37									

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
2023	Zeitzone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Mo, 20. Feb		19:32 – 05:27*	9h 54m	AN ₊ bis AN ₋	●	07:53	17:55	05:28	37m	06:06	36m	06:42	34m	07:17	10h 25m	17:43	34m	18:18	36m	18:55	37m	19:32	13h 32m	9h 54m				Mo, 20. Feb
Di, 21. Feb		19:34 – 05:25*	9h 51m	AN ₊ bis AN ₋		08:12	19:23	05:27	37m	06:04	36m	06:40	34m	07:15	10h 29m	17:44	34m	18:19	36m	18:56	37m	19:34	13h 28m	9h 51m				Di, 21. Feb
Mi, 22. Feb		20:48 – 05:23*	8h 35m	M _\ bis AN ₋		08:28	20:48	05:25	37m	06:02	36m	06:39	34m	07:13	10h 32m	17:46	34m	18:21	36m	18:58	37m	19:35	13h 25m	9h 47m				Mi, 22. Feb
Do, 23. Feb		22:09 – 05:21*	7h 11m	M _\ bis AN ₋		08:44	22:09	05:23	37m	06:00	36m	06:37	34m	07:11	10h 36m	17:48	34m	18:23	36m	18:59	37m	19:37	13h 21m	9h 44m				Do, 23. Feb
Fr, 24. Feb		23:29 – 05:19*	5h 49m	M _\ bis AN ₋		08:59	23:29	05:21	37m	05:58	36m	06:35	34m	07:10	10h 40m	17:50	34m	18:24	36m	19:01	37m	19:38	13h 18m	9h 40m				Fr, 24. Feb
Sa, 25. Feb		00:47* – 05:17*	4h 29m	M _\ bis AN ₋		09:17	—:—	05:19	37m	05:56	36m	06:33	34m	07:08	10h 43m	17:51	34m	18:26	36m	19:03	37m	19:40	13h 14m	9h 37m				Sa, 25. Feb
So, 26. Feb		02:03* – 05:15*	3h 12m	M _\ bis AN ₋		09:38	00:47	05:17	37m	05:54	36m	06:31	34m	07:06	10h 47m	17:53	34m	18:27	36m	19:04	37m	19:42	13h 10m	9h 33m				So, 26. Feb
Mo, 27. Feb		03:14* – 05:13*	1h 59m	M _\ bis AN ₋	◐	10:04	02:03	05:15	37m	05:53	36m	06:29	34m	07:04	10h 50m	17:55	34m	18:29	36m	19:06	37m	19:43	13h 07m	9h 29m				Mo, 27. Feb
Di, 28. Feb		04:16* – 05:11*	55m	M _\ bis AN ₋		10:39	03:14	05:13	37m	05:51	36m	06:27	34m	07:02	10h 54m	17:56	34m	18:31	36m	19:07	37m	19:45	13h 03m	9h 26m				Di, 28. Feb
Mi, 1. Mär		05:06* – 05:09*	2m	M _\ bis AN ₋		11:24	04:16	05:11	37m	05:49	36m	06:25	34m	07:00	10h 58m	17:58	34m	18:32	36m	19:09	37m	19:47	12h 59m	9h 22m				Mi, 1. Mär
Do, 2. Mär		—:—:—:—	–	Mond stört		12:19	05:06	05:09	37m	05:47	36m	06:23	34m	06:57	11h 02m	18:00	34m	18:34	36m	19:11	37m	19:48	12h 55m	9h 18m				Do, 2. Mär
Fr, 3. Mär		—:—:—:—	–	Mond stört		13:22	05:46	05:07	37m	05:45	36m	06:21	34m	06:55	11h 05m	18:01	34m	18:36	36m	19:12	37m	19:50	12h 52m	9h 15m				Fr, 3. Mär
Sa, 4. Mär		—:—:~:~:~	–	Mond stört		14:31	06:16	05:05	37m	05:43	36m	06:19	34m	06:53	11h 09m	18:03	34m	18:37	36m	19:14	37m	19:52	12h 48m	9h 11m				Sa, 4. Mär
So, 5. Mär		—:~:~:~:~	–	Mond stört		15:42	06:38	05:03	37m	05:41	36m	06:17	34m	06:51	11h 13m	18:04	34m	18:39	36m	19:15	37m	19:53	12h 44m	9h 07m				So, 5. Mär
Mo, 6. Mär		—:~:~:~:~	–	Mond stört		16:53	06:56	05:01	37m	05:38	36m	06:15	34m	06:49	11h 16m	18:06	34m	18:40	36m	19:17	37m	19:55	12h 41m	9h 03m				Mo, 6. Mär
Di, 7. Mär		—:~:~:~:~	–	Mond stört	◑	18:03	07:11	04:59	37m	05:36	36m	06:13	34m	06:47	11h 20m	18:08	34m	18:42	36m	19:19	37m	19:57	12h 37m	8h 59m				Di, 7. Mär
Mi, 8. Mär		—:~:~:~:~	–	Mond stört		19:14	07:25	04:56	37m	05:34	36m	06:11	34m	06:45	11h 24m	18:09	34m	18:44	36m	19:20	38m	19:58	12h 33m	8h 55m				Mi, 8. Mär
Do, 9. Mär		20:00 – 20:25	25m	AN ₊ bis M _\		20:25	07:37	04:54	37m	05:32	36m	06:09	34m	06:43	11h 28m	18:11	34m	18:45	36m	19:22	38m	20:00	12h 29m	8h 52m				Do, 9. Mär
Fr, 10. Mär		20:02 – 21:39	1h 36m	AN ₊ bis M _\		21:39	07:50	04:52	38m	05:30	36m	06:07	34m	06:41	11h 31m	18:13	34m	18:47	36m	19:24	38m	20:02	12h 26m	8h 48m				Fr, 10. Mär
Sa, 11. Mär		20:03 – 22:55	2h 51m	AN ₊ bis M _\		22:55	08:05	04:50	38m	05:28	36m	06:05	34m	06:39	11h 35m	18:14	34m	18:48	36m	19:25	38m	20:03	12h 22m	8h 44m				Sa, 11. Mär
So, 12. Mär		20:05 – 00:14*	4h 08m	AN ₊ bis M _\		—:—	08:23	04:48	38m	05:26	36m	06:02	34m	06:37	11h 39m	18:16	34m	18:50	36m	19:27	38m	20:05	12h 18m	8h 40m				So, 12. Mär
Mo, 13. Mär		20:07 – 01:34*	5h 27m	AN ₊ bis M _\		00:14	08:46	04:45	38m	05:24	36m	06:00	34m	06:34	11h 43m	18:17	34m	18:52	36m	19:28	38m	20:07	12h 14m	8h 35m				Mo, 13. Mär
Di, 14. Mär		20:09 – 02:51*	6h 42m	AN ₊ bis M _\		01:34	09:18	04:43	38m	05:21	36m	05:58	34m	06:32	11h 46m	18:19	34m	18:53	36m	19:30	38m	20:09	12h 11m	8h 31m				Di, 14. Mär
Mi, 15. Mär		20:11 – 03:57*	7h 46m	AN ₊ bis M _\	◒	02:51	10:03	04:41	38m	05:19	36m	05:56	34m	06:30	11h 50m	18:21	34m	18:55	36m	19:32	38m	20:11	12h 07m	8h 27m				Mi, 15. Mär
Do, 16. Mär		20:12 – 04:36*	8h 23m	AN ₊ bis AN ₋		03:57	11:05	04:38	38m	05:17	36m	05:54	34m	06:28	11h 54m	18:22	34m	18:56	37m	19:33	38m	20:12	12h 03m	8h 23m				Do, 16. Mär
Fr, 17. Mär		20:14 – 04:34*	8h 19m	AN ₊ bis AN ₋		04:49	12:23	04:36	38m	05:15	36m	05:52	34m	06:26	11h 58m	18:24	34m	18:58	37m	19:35	39m	20:14	11h 59m	8h 19m				Fr, 17. Mär
Sa, 18. Mär		20:16 – 04:31*	8h 15m	AN ₊ bis AN ₋		05:26	13:51	04:34	38m	05:12	37m	05:50	34m	06:24	12h 01m	18:25	34m	19:00	37m	19:37	39m	20:16	11h 56m	8h 15m				Sa, 18. Mär
So, 19. Mär		20:18 – 04:29*	8h 10m	AN ₊ bis AN ₋		05:54	15:21	04:31	39m	05:10	37m	05:47	34m	06:21	12h 05m	18:27	34m	19:01	37m	19:38	39m	20:18	11h 52m	8h 10m				So, 19. Mär
Mo, 20. Mär		20:20 – 04:26*	8h 06m	AN ₊ bis AN ₋		06:14	16:50	04:29	39m	05:08	37m	05:45	34m	06:19	12h 09m	18:29	34m	19:03	37m	19:40	39m	20:20	11h 48m	8h 06m				Mo, 20. Mär
Di, 21. Mär		20:21 – 04:24*	8h 02m	AN ₊ bis AN ₋	●	06:32	18:16	04:26	39m	05:06	37m	05:43	34m	06:17	12h 13m	18:30	34m	19:04	37m	19:42	39m	20:21	11h 44m	8h 02m				Di, 21. Mär
Mi, 22. Mär		20:23 – 04:21*	7h 57m	AN ₊ bis AN ₋		06:47	19:39	04:24	39m	05:03	37m	05:41	34m	06:15	12h 16m	18:32	34m	19:06	37m	19:44	39m	20:23	11h 41m	7h 57m				Mi, 22. Mär
Do, 23. Mär		21:02 – 04:19*	7h 17m	M _\ bis AN ₋		07:02	21:02	04:21	39m	05:01	37m	05:39	34m	06:13	12h 20m	18:33	34m	19:08	37m	19:45	39m	20:25	11h 37m	7h 53m				Do, 23. Mär
Fr, 24. Mär		22:23 – 04:16*	5h 53m	M _\ bis AN ₋		07:19	22:23	04:19	39m	04:59	37m	05:36	34m	06:11	12h 24m	18:35	34m	19:09	37m	19:47	40m	20:27	11h 33m	7h 49m				Fr, 24. Mär
Sa, 25. Mär		23:43 – 04:14*	4h 31m	M _\ bis AN ₋		07:38	23:43	04:16	40m	04:56	37m	05:34	34m	06:08	12h 28m	18:36	34m	19:11	37m	19:49	40m	20:29	11h 29m	7h 44m				Sa, 25. Mär
So, 26. Mär	MESZ	01:58* – 05:11*	3h 13m	M _\ bis AN ₋		09:03	00:43	05:14	40m	05:54	37m	06:32	34m	07:06	12h 31m	19:38	34m	20:13	37m	20:50	40m	21:31	11h 26m	7h 40m				So, 26. Mär
Mo, 27. Mär	MESZ	03:06* – 05:09*	2h 03m	M _\ bis AN ₋		09:34	01:58	05:11	40m	05:52	37m	06:30	34m	07:04	12h 35m	19:40	34m	20:14	38m	20:52	40m	21:33	11h 22m	7h 35m				Mo, 27. Mär
Di, 28. Mär	MESZ	04:02* – 05:06*	1h 04m	M _\ bis AN ₋		10:15	03:06	05:09	40m	05:49	37m	06:27	34m	07:02	12h 39m	19:41	34m	20:16	38m	20:54	40m	21:35	11h 18m	7h 31m				Di, 28. Mär
Mi, 29. Mär	MESZ	04:46* – 05:04*	17m	M _\ bis AN ₋	◑	11:07	04:02	05:06	40m	05:47	38m	06:25	34m	07:00	12h 43m	19:43	34m	20:17	38m	20:56	41m	21:37	11h 14m	7h 26m				Mi, 29. Mär
Do, 30. Mär	MESZ	—:~:~:~:~	–	Mond stört		12:09	04:46	05:04	41m	05:45	38m	06:23	34m	06:58	12h 46m	19:44	34m	20:19	38m	20:57	41m	21:39	11h 11m	7h 22m				Do, 30. Mär
Fr, 31. Mär	MESZ	—:~:~:~:~	–	Mond stört		13:16	05:19	05:01	41m	05:42	38m	06:21	34m	06:55	12h 50m	19:46	34m	20:21	38m	20:59	41m	21:41	11h 07m	7h 17m				Fr, 31. Mär
Sa, 1. Apr	MESZ	—:~:~:~:~	–	Mond stört		14:27	05:44	04:58	41m	05:40	38m	06:19	34m	06:53	12h 54m	19:47	34m	20:22	38m	21:01	41m	21:43	11h 03m	7h 12m				Sa, 1. Apr
So, 2. Apr	MESZ	—:~:~:~:~	–	Mond stört		15:38	06:03	04:56	41m	05:38	38m	06:16	34m	06:51	12h 57m	19:49	34m	20:24	38m	21:03	42m	21:45	10h 59m	7h 07m				So, 2. Apr
Mo, 3. Apr	MESZ	—:~:~:~:~	–	Mond stört		16:49	06:19	04:53	42m	05:35	38m	06:1																

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	
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023			
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt			
Di, 11. Apr	MESZ	22:05 – 02:52*	4h 47m	AN ₊ bis M ₇		01:42	08:59	04:31	44m	05:16	40m	05:56	35m	06:32	13h 31m	20:03	35m	20:39	40m	21:19	45m	22:05	10h 26m	6h 23m					Di, 11. Apr
Mi, 12. Apr	MESZ	22:07 – 03:48*	5h 40m	AN ₊ bis M ₇		02:52	09:56	04:29	45m	05:14	40m	05:54	35m	06:30	13h 34m	20:05	35m	20:41	40m	21:21	45m	22:07	10h 23m	6h 18m					Mi, 12. Apr
Do, 13. Apr	MESZ	22:09 – 04:23*	6h 13m	AN ₊ bis AN ₋	☾	03:48	11:08	04:26	45m	05:11	40m	05:52	35m	06:28	13h 38m	20:06	36m	20:42	40m	21:23	45m	22:09	10h 19m	6h 13m					Do, 13. Apr
Fr, 14. Apr	MESZ	22:12 – 04:20*	6h 08m	AN ₊ bis AN ₋		04:28	12:31	04:23	45m	05:09	40m	05:50	36m	06:26	13h 41m	20:08	36m	20:44	41m	21:25	46m	22:12	10h 16m	6h 08m					Fr, 14. Apr
Sa, 15. Apr	MESZ	22:14 – 04:17*	6h 03m	AN ₊ bis AN ₋		04:57	13:59	04:20	46m	05:06	41m	05:48	36m	06:24	13h 45m	20:09	36m	20:46	41m	21:27	46m	22:14	10h 12m	6h 03m					Sa, 15. Apr
So, 16. Apr	MESZ	22:16 – 04:14*	5h 58m	AN ₊ bis AN ₋		05:19	15:25	04:17	46m	05:04	41m	05:45	36m	06:22	13h 49m	20:11	36m	20:47	41m	21:29	47m	22:16	10h 08m	5h 58m					So, 16. Apr
Mo, 17. Apr	MESZ	22:19 – 04:11*	5h 52m	AN ₊ bis AN ₋		05:37	16:50	04:14	47m	05:02	41m	05:43	36m	06:20	13h 52m	20:12	36m	20:49	41m	21:31	47m	22:19	10h 05m	5h 52m					Mo, 17. Apr
Di, 18. Apr	MESZ	22:21 – 04:09*	5h 47m	AN ₊ bis AN ₋		05:52	18:13	04:11	47m	04:59	41m	05:41	36m	06:18	13h 56m	20:14	36m	20:51	42m	21:33	48m	22:21	10h 01m	5h 47m					Di, 18. Apr
Mi, 19. Apr	MESZ	22:24 – 04:06*	5h 41m	AN ₊ bis AN ₋		06:07	19:34	04:09	48m	04:57	42m	05:39	36m	06:16	13h 59m	20:16	36m	20:53	42m	21:35	48m	22:24	9h 58m	5h 41m					Mi, 19. Apr
Do, 20. Apr	MESZ	22:26 – 04:03*	5h 36m	AN ₊ bis AN ₋	☀	06:23	20:56	04:06	48m	04:54	42m	05:37	36m	06:14	14h 03m	20:17	37m	20:54	42m	21:37	49m	22:26	9h 54m	5h 36m					Do, 20. Apr
Fr, 21. Apr	MESZ	22:29 – 04:00*	5h 31m	AN ₊ bis AN ₋		06:40	22:17	04:03	49m	04:52	42m	05:35	37m	06:12	14h 06m	20:19	37m	20:56	42m	21:39	49m	22:29	9h 51m	5h 31m					Fr, 21. Apr
Sa, 22. Apr	MESZ	23:36 – 03:57*	4h 20m	M ₇ bis AN ₋		07:02	23:36	04:00	49m	04:50	42m	05:33	37m	06:10	14h 10m	20:20	37m	20:58	43m	21:41	50m	22:31	9h 47m	5h 25m					Sa, 22. Apr
So, 23. Apr	MESZ	00:49* – 03:54*	3h 04m	M ₇ bis AN ₋		07:30	—:—	03:57	50m	04:47	43m	05:30	37m	06:08	14h 13m	20:22	37m	20:59	43m	21:43	50m	22:34	9h 44m	5h 19m					So, 23. Apr
Mo, 24. Apr	MESZ	01:52* – 03:51*	1h 59m	M ₇ bis AN ₋		08:08	00:49	03:54	50m	04:45	43m	05:28	37m	06:06	14h 17m	20:23	37m	21:01	43m	21:45	51m	22:37	9h 40m	5h 14m					Mo, 24. Apr
Di, 25. Apr	MESZ	02:42* – 03:48*	1h 06m	M ₇ bis AN ₋		08:56	01:52	03:51	51m	04:42	43m	05:26	37m	06:04	14h 20m	20:25	37m	21:03	44m	21:47	52m	22:39	9h 37m	5h 08m					Di, 25. Apr
Mi, 26. Apr	MESZ	03:19* – 03:45*	25m	M ₇ bis AN ₋		09:54	02:42	03:48	52m	04:40	44m	05:24	37m	06:02	14h 24m	20:26	38m	21:05	44m	21:49	52m	22:42	9h 33m	5h 02m					Mi, 26. Apr
Do, 27. Apr	MESZ	—:—:—:—	–	Mond stört	☾	11:00	03:19	03:45	52m	04:38	44m	05:22	38m	06:00	14h 27m	20:28	38m	21:06	44m	21:51	53m	22:45	9h 30m	4h 57m					Do, 27. Apr
Fr, 28. Apr	MESZ	—:—:—:—	–	Mond stört		12:10	03:47	03:42	53m	04:35	44m	05:20	38m	05:58	14h 31m	20:30	38m	21:08	45m	21:53	54m	22:47	9h 27m	4h 51m					Fr, 28. Apr
Sa, 29. Apr	MESZ	—:~:~:~:~	–	Mond stört		13:21	04:08	03:39	54m	04:33	45m	05:18	38m	05:57	14h 34m	20:31	38m	21:10	45m	21:55	55m	22:50	9h 23m	4h 45m					Sa, 29. Apr
So, 30. Apr	MESZ	—:~:~:~:~	–	Mond stört		14:32	04:25	03:36	55m	04:31	45m	05:16	38m	05:55	14h 37m	20:33	38m	21:11	45m	21:57	55m	22:53	9h 20m	4h 39m					So, 30. Apr
Mo, 1. Mai	MESZ	—:~:~:~:~	–	Mond stört		15:42	04:39	03:33	55m	04:28	45m	05:14	38m	05:53	14h 41m	20:34	39m	21:13	46m	21:59	56m	22:56	9h 17m	4h 33m					Mo, 1. Mai
Di, 2. Mai	MESZ	—:~:~:~:~	–	Mond stört		16:53	04:52	03:29	56m	04:26	46m	05:12	39m	05:51	14h 44m	20:36	39m	21:15	46m	22:01	57m	22:59	9h 13m	4h 27m					Di, 2. Mai
Mi, 3. Mai	MESZ	—:~:~:~:~	–	Mond stört		18:06	05:05	03:26	57m	04:24	46m	05:10	39m	05:49	14h 47m	20:37	39m	21:17	46m	22:04	58m	23:02	9h 10m	4h 21m					Mi, 3. Mai
Do, 4. Mai	MESZ	—:~:~:~:~	–	Mond stört		19:22	05:18	03:23	58m	04:21	46m	05:08	39m	05:48	14h 50m	20:39	39m	21:18	47m	22:06	59m	23:05	9h 07m	4h 15m					Do, 4. Mai
Fr, 5. Mai	MESZ	—:~:~:~:~	–	Mond stört	☽	20:42	05:34	03:20	59m	04:19	47m	05:06	39m	05:46	14h 54m	20:40	39m	21:20	47m	22:08	1h 00m	23:08	9h 04m	4h 08m					Fr, 5. Mai
Sa, 6. Mai	MESZ	—:~:~:~:~	–	Mond stört		22:05	05:53	03:17	1h 00m	04:17	47m	05:05	39m	05:44	14h 57m	20:42	40m	21:22	48m	22:10	1h 01m	23:11	9h 01m	4h 02m					Sa, 6. Mai
So, 7. Mai	MESZ	23:14 – 23:28	13m	AN ₊ bis M ₇		23:28	06:19	03:13	1h 01m	04:15	48m	05:03	40m	05:43	15h 00m	20:43	40m	21:23	48m	22:12	1h 02m	23:14	8h 57m	3h 56m					So, 7. Mai
Mo, 8. Mai	MESZ	23:17 – 00:43*	1h 26m	AN ₊ bis M ₇		—:—	06:56	03:10	1h 02m	04:12	48m	05:01	40m	05:41	15h 03m	20:45	40m	21:25	48m	22:14	1h 03m	23:17	8h 54m	3h 49m					Mo, 8. Mai
Di, 9. Mai	MESZ	23:21 – 01:45*	2h 24m	AN ₊ bis M ₇		00:43	07:49	03:07	1h 03m	04:10	48m	04:59	40m	05:40	15h 06m	20:46	40m	21:27	49m	22:16	1h 04m	23:21	8h 51m	3h 42m					Di, 9. Mai
Mi, 10. Mai	MESZ	23:24 – 02:30*	3h 05m	AN ₊ bis M ₇		01:45	08:57	03:04	1h 04m	04:08	49m	04:57	40m	05:38	15h 09m	20:48	40m	21:29	49m	22:18	1h 05m	23:24	8h 48m	3h 36m					Mi, 10. Mai
Do, 11. Mai	MESZ	23:27 – 02:57*	3h 29m	AN ₊ bis AN ₋		02:30	10:19	03:00	1h 05m	04:06	49m	04:56	40m	05:36	15h 12m	20:49	41m	21:30	50m	22:20	1h 06m	23:27	8h 45m	3h 29m					Do, 11. Mai
Fr, 12. Mai	MESZ	23:31 – 02:53*	3h 22m	AN ₊ bis AN ₋	☾	03:02	11:45	02:57	1h 06m	04:04	50m	04:54	41m	05:35	15h 15m	20:51	41m	21:32	50m	22:23	1h 08m	23:31	8h 42m	3h 22m					Fr, 12. Mai
Sa, 13. Mai	MESZ	23:34 – 02:50*	3h 15m	AN ₊ bis AN ₋		03:25	13:11	02:53	1h 08m	04:02	50m	04:52	41m	05:33	15h 18m	20:52	41m	21:34	51m	22:25	1h 09m	23:34	8h 40m	3h 15m					Sa, 13. Mai
So, 14. Mai	MESZ	23:38 – 02:46*	3h 08m	AN ₊ bis AN ₋		03:44	14:34	02:50	1h 09m	03:59	51m	04:50	41m	05:32	15h 21m	20:53	41m	21:35	51m	22:27	1h 10m	23:38	8h 37m	3h 08m					So, 14. Mai
Mo, 15. Mai	MESZ	23:41 – 02:43*	3h 01m	AN ₊ bis AN ₋		03:59	15:55	02:46	1h 10m	03:57	51m	04:49	41m	05:31	15h 24m	20:55	42m	21:37	51m	22:29	1h 12m	23:41	8h 34m	3h 01m					Mo, 15. Mai
Di, 16. Mai	MESZ	23:45 – 02:39*	2h 53m	AN ₊ bis AN ₋		04:14	17:15	02:43	1h 12m	03:55	51m	04:47	42m	05:29	15h 26m	20:56	42m	21:38	52m	22:31	1h 14m	23:45	8h 31m	2h 53m					Di, 16. Mai
Mi, 17. Mai	MESZ	23:49 – 02:35*	2h 46m	AN ₊ bis AN ₋		04:28	18:35	02:39	1h 14m	03:53	52m	04:46	42m	05:28	15h 29m	20:58	42m	21:40	52m	22:33	1h 15m	23:49	8h 28m	2h 46m					Mi, 17. Mai
Do, 18. Mai	MESZ	23:53 – 02:32*	2h 38m	AN ₊ bis AN ₋		04:45	19:55	02:35	1h 15m	03:51	52m	04:44	42m	05:27	15h 32m	20:59	42m	21:42	53m	22:35	1h 17m	23:53	8h 26m	2h 38m					Do, 18. Mai
Fr, 19. Mai	MESZ	23:57 – 02:28*	2h 30m	AN ₊ bis AN ₋	☀	05:04	21:14	02:32	1h 17m	03:49	53m	04:43	42m	05:25	15h 35m	21:00	42m	21:43	53m	22:37	1h 19m	23:57	8h 23m	2h 30m					Fr, 19. Mai
Sa, 20. Mai	MESZ	00:01* – 02:24*	2h 22m	AN ₊ bis AN ₋		05:29	22:30	02:28	1h 19m	03:47	53m	04:41	42m	05:24	15h 37m	21:02	43m	21:45	54m	22:39	1h 21m	00:01*	8h 21m	2h 22m					Sa, 20. Mai
So, 21. Mai	MESZ	00:05* – 02:20*	2h 14m	AN ₊ bis AN ₋		06:03	23:38	02:24	1h 21m	03:45	54m	04:40	43m	05:23	15h 40m	21:03	43m	21:46	54m	22:41	1h 23m	00:05*	8h 18m	2h 14m					So, 21. Mai
Mo,																													

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	
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023			
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt			
Mi, 31. Mai	MESZ			Astr. MD		16:59	03:23	01:17	2h 11m	03:29	59m	04:28	45m	05:13	16h 01m	21:15	45m	22:00	59m	23:00		—:—	7h 57m		—:—:—:—:—	—	Mond stört	Mi, 31. Mai	
Do, 1. Jun	MESZ			Astr. MD		18:17	03:38	—:—		03:27	59m	04:27	45m	05:12	16h 03m	21:16	45m	22:02	1h 00m	23:02		—:—	7h 55m		—:—:—:—:—	—	Mond stört	Do, 1. Jun	
Fr, 2. Jun	MESZ			Astr. MD		19:40	03:55	—:—		03:26	1h 00m	04:26	45m	05:12	16h 05m	21:17	45m	22:03	1h 00m	23:03		—:—	7h 53m		—:—:—:—:—	—	Mond stört	Fr, 2. Jun	
Sa, 3. Jun	MESZ			Astr. MD		21:04	04:19	—:—		03:25	1h 00m	04:25	45m	05:11	16h 06m	21:18	45m	22:04	1h 00m	23:05		—:—	7h 52m		—:—:—:—:—	—	Mond stört	Sa, 3. Jun	
So, 4. Jun	MESZ			Astr. MD	○	22:25	04:51	—:—		03:23	1h 00m	04:24	45m	05:10	16h 08m	21:19	46m	22:05	1h 01m	23:06		—:—	7h 50m		—:—:—:—:—	—	Mond stört	So, 4. Jun	
Mo, 5. Jun	MESZ			Astr. MD		23:34	05:38	—:—		03:22	1h 01m	04:23	46m	05:10	16h 10m	21:20	46m	22:06	1h 01m	23:08		—:—	7h 49m		23:08–23:34	26m	ND ₊ bis M ₇	Mo, 5. Jun	
Di, 6. Jun	MESZ			Astr. MD		—:—	06:42	—:—		03:21	1h 01m	04:23	46m	05:09	16h 11m	21:21	46m	22:07	1h 02m	23:09		—:—	7h 48m		23:09–00:27*	1h 17m	ND ₊ bis M ₇	Di, 6. Jun	
Mi, 7. Jun	MESZ			Astr. MD		00:27	08:02	—:—		03:20	1h 02m	04:22	46m	05:09	16h 12m	21:21	46m	22:08	1h 02m	23:10		—:—	7h 46m		23:10–01:04*	1h 53m	ND ₊ bis M ₇	Mi, 7. Jun	
Do, 8. Jun	MESZ			Astr. MD		01:04	09:30	—:—		03:19	1h 02m	04:22	46m	05:08	16h 14m	21:22	46m	22:09	1h 02m	23:12		—:—	7h 45m		23:12–01:31*	2h 18m	ND ₊ bis M ₇	Do, 8. Jun	
Fr, 9. Jun	MESZ			Astr. MD		01:31	10:58	—:—		03:18	1h 02m	04:21	46m	05:08	16h 15m	21:23	46m	22:10	1h 03m	23:13		—:—	7h 44m		23:13–01:50*	2h 37m	ND ₊ bis M ₇	Fr, 9. Jun	
Sa, 10. Jun	MESZ			Astr. MD	◐	01:50	12:22	—:—		03:17	1h 03m	04:21	46m	05:07	16h 16m	21:24	46m	22:11	1h 03m	23:14		—:—	7h 43m		23:14–02:07*	2h 52m	ND ₊ bis M ₇	Sa, 10. Jun	
So, 11. Jun	MESZ			Astr. MD		02:07	13:44	—:—		03:17	1h 03m	04:20	46m	05:07	16h 17m	21:24	47m	22:11	1h 03m	23:15		—:—	7h 42m		23:15–02:21*	3h 06m	ND ₊ bis M ₇	So, 11. Jun	
Mo, 12. Jun	MESZ			Astr. MD		02:21	15:03	—:—		03:16	1h 03m	04:20	47m	05:07	16h 18m	21:25	47m	22:12	1h 04m	23:16		—:—	7h 41m		23:16–02:36*	3h 19m	ND ₊ bis M ₇	Mo, 12. Jun	
Di, 13. Jun	MESZ			Astr. MD		02:36	16:22	—:—		03:15	1h 04m	04:19	47m	05:07	16h 18m	21:26	47m	22:13	1h 04m	23:17		—:—	7h 40m		23:17–02:51*	3h 33m	ND ₊ bis M ₇	Di, 13. Jun	
Mi, 14. Jun	MESZ			Astr. MD		02:51	17:40	—:—		03:15	1h 04m	04:19	47m	05:06	16h 19m	21:26	47m	22:13	1h 04m	23:18		—:—	7h 40m		23:18–03:09*	3h 51m	ND ₊ bis M ₇	Mi, 14. Jun	
Do, 15. Jun	MESZ			Astr. MD		03:09	18:59	—:—		03:15	1h 04m	04:19	47m	05:06	16h 20m	21:27	47m	22:14	1h 04m	23:19		—:—	7h 39m		23:19–03:14*	3h 55m	ND ₊ bis ND ₋	Do, 15. Jun	
Fr, 16. Jun	MESZ			Astr. MD		03:32	20:15	—:—		03:14	1h 04m	04:19	47m	05:06	16h 20m	21:27	47m	22:15	1h 04m	23:19		—:—	7h 39m		23:19–03:14*	3h 54m	ND ₊ bis ND ₋	Fr, 16. Jun	
Sa, 17. Jun	MESZ			Astr. MD		04:01	21:25	—:—		03:14	1h 04m	04:19	47m	05:06	16h 21m	21:27	47m	22:15	1h 04m	23:20		—:—	7h 38m		23:20–03:14*	3h 53m	ND ₊ bis ND ₋	Sa, 17. Jun	
So, 18. Jun	MESZ			Astr. MD	◑	04:41	22:26	—:—		03:14	1h 04m	04:19	47m	05:06	16h 21m	21:28	47m	22:15	1h 05m	23:20		—:—	7h 38m		23:20–03:14*	3h 53m	ND ₊ bis ND ₋	So, 18. Jun	
Mo, 19. Jun	MESZ			Astr. MD		05:31	23:13	—:—		03:14	1h 05m	04:19	47m	05:06	16h 21m	21:28	47m	22:16	1h 05m	23:21		—:—	7h 38m		23:21–03:14*	3h 52m	ND ₊ bis ND ₋	Mo, 19. Jun	
Di, 20. Jun	MESZ			Astr. MD		06:32	23:48	—:—		03:14	1h 05m	04:19	47m	05:07	16h 21m	21:28	47m	22:16	1h 05m	23:21		—:—	7h 38m		23:48–03:14*	3h 25m	M _v bis ND ₋	Di, 20. Jun	
Mi, 21. Jun	MESZ			Astr. MD		07:40	—:—	—:—		03:14	1h 05m	04:19	47m	05:07	16h 21m	21:29	47m	22:16	1h 05m	23:21		—:—	7h 38m		00:15*–03:14*	2h 59m	M _v bis ND ₋	Mi, 21. Jun	
Do, 22. Jun	MESZ			Astr. MD		08:50	00:15	—:—		03:14	1h 05m	04:19	47m	05:07	16h 21m	21:29	47m	22:16	1h 05m	23:22		—:—	7h 38m		00:35*–03:14*	2h 39m	M _v bis ND ₋	Do, 22. Jun	
Fr, 23. Jun	MESZ			Astr. MD		10:01	00:35	—:—		03:14	1h 05m	04:20	47m	05:07	16h 21m	21:29	47m	22:17	1h 05m	23:22		—:—	7h 38m		00:51*–03:15*	2h 24m	M _v bis ND ₋	Fr, 23. Jun	
Sa, 24. Jun	MESZ			Astr. MD		11:10	00:51	—:—		03:15	1h 05m	04:20	47m	05:08	16h 21m	21:29	47m	22:17	1h 05m	23:22		—:—	7h 38m		01:04*–03:15*	2h 11m	M _v bis ND ₋	Sa, 24. Jun	
So, 25. Jun	MESZ			Astr. MD		12:19	01:04	—:—		03:15	1h 05m	04:20	47m	05:08	16h 21m	21:29	47m	22:17	1h 04m	23:22		—:—	7h 39m		01:17*–03:16*	1h 59m	M _v bis ND ₋	So, 25. Jun	
Mo, 26. Jun	MESZ			Astr. MD	◒	13:28	01:17	—:—		03:16	1h 04m	04:21	47m	05:08	16h 20m	21:29	47m	22:17	1h 04m	23:21		—:—	7h 39m		01:29*–03:17*	1h 47m	M _v bis ND ₋	Mo, 26. Jun	
Di, 27. Jun	MESZ			Astr. MD		14:39	01:29	—:—		03:17	1h 04m	04:21	47m	05:09	16h 20m	21:29	47m	22:16	1h 04m	23:21		—:—	7h 40m		01:42*–03:17*	1h 35m	M _v bis ND ₋	Di, 27. Jun	
Mi, 28. Jun	MESZ			Astr. MD		15:53	01:42	—:—		03:17	1h 04m	04:22	47m	05:09	16h 19m	21:29	47m	22:16	1h 04m	23:21		—:—	7h 40m		01:58*–03:18*	1h 20m	M _v bis ND ₋	Mi, 28. Jun	
Do, 29. Jun	MESZ			Astr. MD		17:12	01:58	—:—		03:18	1h 04m	04:22	47m	05:10	16h 19m	21:29	47m	22:16	1h 04m	23:20		—:—	7h 41m		02:18*–03:19*	1h 01m	M _v bis ND ₋	Do, 29. Jun	
Fr, 30. Jun	MESZ			Astr. MD		18:35	02:18	—:—		03:19	1h 04m	04:23	47m	05:10	16h 18m	21:29	47m	22:16	1h 03m	23:20		—:—	7h 42m		02:45*–03:20*	34m	M _v bis ND ₋	Fr, 30. Jun	
Sa, 1. Jul	MESZ			Astr. MD		19:58	02:45	—:—		03:20	1h 03m	04:24	47m	05:11	16h 17m	21:28	47m	22:15	1h 03m	23:19		—:—	7h 43m		—:—:—:—:—	—	Mond stört	Sa, 1. Jul	
So, 2. Jul	MESZ			Astr. MD		21:15	03:24	—:—		03:21	1h 03m	04:25	47m	05:12	16h 16m	21:28	46m	22:15	1h 03m	23:18		—:—	7h 44m		—:—:—:—:—	—	Mond stört	So, 2. Jul	
Mo, 3. Jul	MESZ			Astr. MD	○	22:16	04:21	—:—		03:22	1h 03m	04:25	46m	05:12	16h 15m	21:28	46m	22:15	1h 02m	23:17		—:—	7h 45m		—:—:—:—:—	—	Mond stört	Mo, 3. Jul	
Di, 4. Jul	MESZ			Astr. MD		23:01	05:37	—:—		03:23	1h 02m	04:26	46m	05:13	16h 14m	21:27	46m	22:14	1h 02m	23:17		—:—	7h 46m		—:—:—:—:—	—	Mond stört	Di, 4. Jul	
Mi, 5. Jul	MESZ			Astr. MD		23:32	07:05	—:—		03:24	1h 02m	04:27	46m	05:14	16h 13m	21:27	46m	22:13	1h 02m	23:16		—:—	7h 47m		23:16–23:32	16m	ND ₊ bis M ₇	Mi, 5. Jul	
Do, 6. Jul	MESZ			Astr. MD		23:55	08:36	—:—		03:26	1h 02m	04:28	46m	05:15	16h 11m	21:26	46m	22:13	1h 01m	23:15		—:—	7h 48m		23:15–23:55	40m	ND ₊ bis M ₇	Do, 6. Jul	
Fr, 7. Jul	MESZ			Astr. MD		—:—	10:05	—:—		03:27	1h 01m	04:29	46m	05:15	16h 10m	21:26	46m	22:12	1h 01m	23:14		—:—	7h 50m		23:14–00:13*	59m	ND ₊ bis M ₇	Fr, 7. Jul	
Sa, 8. Jul	MESZ			Astr. MD		00:13	11:30	—:—		03:29	1h 01m	04:30	46m	05:16	16h 09m	21:25	46m	22:11	1h 01m	23:12		—:—	7h 51m		23:12–00:28*	1h 15m	ND ₊ bis M ₇	Sa, 8. Jul	
So, 9. Jul	MESZ			Astr. MD		00:28	12:52	—:—		03:30	1h 01m	04:31	46m	05:17	16h 07m	21:25	45m	22:11	1h 00m	23:11		—:—	7h 53m		23:11–00:42*	1h 31m	ND ₊ bis M ₇	So, 9. Jul	
Mo, 10. Jul	MESZ			Astr. MD	◑	00:42	14:12	—:—		03:32	1h 00m	04:32	45m	05:18	16h 05m	21:24	45m	22:10	1h 00m	23:10		—:—	7h 55m		23:10–00:58*	1h 47m	ND ₊ bis M ₇	Mo, 10. Jul	
Di, 11. Jul	MESZ			Astr. MD		00:58	15:30	—:—		03:33	1h 00m	04:33	45m	05:19	16h 04m	21:23	45m	22:09	59m	23:09		—:—	7h 56m		23:09–01:15*	2h 06m	ND ₊ bis M ₇	Di, 11. Jul	
Mi, 12. Jul	MESZ			Astr. MD		01:15	16:48	—:—		03:35	59m	04:35	45m	05:20	16h 02m	21:23	45m	22:08	59m	23:07		—:—	7h 58m		23:07–01:36*	2h 28m	ND ₊ bis M ₇	Mi, 12. Jul	
Do, 13. Jul	MESZ	01:05*–01:39*	33m	AN ₊ bis AN ₋		01:36	18:05	—:—		03:36	59m	04:36	45m	05:21	16h 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	
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne				Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt			
Do, 20. Jul	MESZ	00:22*–02:24*	2h 01m	AN ₊ bis AN ₋		07:49	22:57	02:19	1h 30m	03:49	55m	04:45	43m	05:29	15h 45m	21:15	43m	21:59	55m	22:54	1h 27m	00:22*	8h 15m	2h 01m					Do, 20. Jul
Fr, 21. Jul	MESZ	00:17*–02:28*	2h 10m	AN ₊ bis AN ₋		08:59	23:11	02:24	1h 27m	03:51	55m	04:47	43m	05:30	15h 43m	21:14	43m	21:57	55m	22:52	1h 24m	00:17*	8h 17m	2h 10m					Fr, 21. Jul
Sa, 22. Jul	MESZ	00:13*–02:32*	2h 19m	AN ₊ bis AN ₋		10:08	23:23	02:28	1h 24m	03:53	55m	04:48	43m	05:31	15h 41m	21:13	43m	21:56	54m	22:50	1h 22m	00:13*	8h 20m	2h 19m					Sa, 22. Jul
So, 23. Jul	MESZ	00:09*–02:36*	2h 27m	AN ₊ bis AN ₋		11:16	23:35	02:32	1h 22m	03:55	54m	04:49	43m	05:33	15h 38m	21:11	43m	21:54	54m	22:48	1h 20m	00:09*	8h 22m	2h 27m					So, 23. Jul
Mo, 24. Jul	MESZ	00:05*–02:40*	2h 35m	AN ₊ bis AN ₋		12:25	23:47	02:36	1h 20m	03:57	54m	04:51	43m	05:34	15h 36m	21:10	42m	21:53	53m	22:47	1h 18m	00:05*	8h 25m	2h 35m					Mo, 24. Jul
Di, 25. Jul	MESZ	00:02*–02:44*	2h 42m	M _\ bis AN ₋		13:36	—:—	02:40	1h 18m	03:59	53m	04:53	42m	05:35	15h 33m	21:09	42m	21:51	53m	22:45	1h 16m	00:01*	8h 27m	2h 43m					Di, 25. Jul
Mi, 26. Jul	MESZ	00:19*–02:48*	2h 29m	M _\ bis AN ₋	☾	14:51	00:02	02:44	1h 16m	04:01	53m	04:54	42m	05:37	15h 30m	21:08	42m	21:50	52m	22:43	1h 14m	23:57	8h 30m	2h 50m					Mi, 26. Jul
Do, 27. Jul	MESZ	00:42*–02:52*	2h 10m	M _\ bis AN ₋		16:10	00:19	02:48	1h 14m	04:03	52m	04:56	42m	05:38	15h 28m	21:06	42m	21:48	52m	22:40	1h 13m	23:54	8h 33m	2h 57m					Do, 27. Jul
Fr, 28. Jul	MESZ	01:14*–02:55*	1h 41m	M _\ bis AN ₋		17:32	00:42	02:52	1h 13m	04:05	52m	04:57	42m	05:39	15h 25m	21:05	41m	21:47	51m	22:38	1h 11m	23:50	8h 35m	3h 05m					Fr, 28. Jul
Sa, 29. Jul	MESZ	02:01*–02:59*	57m	M _\ bis AN ₋		18:51	01:14	02:55	1h 11m	04:07	51m	04:59	41m	05:41	15h 22m	21:03	41m	21:45	51m	22:36	1h 10m	23:47	8h 38m	3h 12m					Sa, 29. Jul
So, 30. Jul	MESZ	—:—:—:—	–	Mond stört		19:59	02:01	02:59	1h 10m	04:09	51m	05:00	41m	05:42	15h 19m	21:02	41m	21:43	50m	22:34	1h 08m	23:43	8h 41m	3h 19m					So, 30. Jul
Mo, 31. Jul	MESZ	—:—:—:—	–	Mond stört		20:52	03:07	03:02	1h 08m	04:11	50m	05:02	41m	05:43	15h 17m	21:00	41m	21:42	50m	22:32	1h 07m	23:40	8h 44m	3h 26m					Mo, 31. Jul
Di, 1. Aug	MESZ	—:—:—:—	–	Mond stört	☾	21:29	04:31	03:06	1h 07m	04:13	50m	05:04	41m	05:45	15h 14m	20:59	41m	21:40	49m	22:30	1h 06m	23:36	8h 47m	3h 32m					Di, 1. Aug
Mi, 2. Aug	MESZ	—:—:~:~:~	–	Mond stört		21:56	06:03	03:09	1h 06m	04:15	49m	05:05	41m	05:46	15h 11m	20:57	40m	21:38	49m	22:28	1h 05m	23:33	8h 50m	3h 39m					Mi, 2. Aug
Do, 3. Aug	MESZ	—:~:~:~:~	–	Mond stört		22:16	07:36	03:12	1h 05m	04:17	49m	05:07	40m	05:48	15h 08m	20:56	40m	21:36	49m	22:26	1h 03m	23:29	8h 53m	3h 45m					Do, 3. Aug
Fr, 4. Aug	MESZ	—:~:~:~:~	–	Mond stört		22:33	09:06	03:15	1h 03m	04:19	49m	05:08	40m	05:49	15h 05m	20:54	40m	21:35	48m	22:23	1h 02m	23:26	8h 56m	3h 52m					Fr, 4. Aug
Sa, 5. Aug	MESZ	—:~:~:~:~	–	Mond stört		22:48	10:32	03:19	1h 02m	04:21	48m	05:10	40m	05:50	15h 02m	20:53	40m	21:33	48m	22:21	1h 01m	23:23	8h 59m	3h 58m					Sa, 5. Aug
So, 6. Aug	MESZ	—:~:~:~:~	–	Mond stört		23:03	11:56	03:22	1h 01m	04:23	48m	05:12	40m	05:52	14h 59m	20:51	39m	21:31	47m	22:19	1h 00m	23:20	9h 02m	4h 05m					So, 6. Aug
Mo, 7. Aug	MESZ	23:16–23:20	3m	AN ₊ bis M ₇		23:20	13:17	03:25	1h 00m	04:25	47m	05:13	39m	05:53	14h 55m	20:49	39m	21:29	47m	22:17	59m	23:16	9h 05m	4h 11m					Mo, 7. Aug
Di, 8. Aug	MESZ	23:13–23:39	26m	AN ₊ bis M ₇	☾	23:39	14:37	03:28	59m	04:27	47m	05:15	39m	05:55	14h 52m	20:48	39m	21:27	47m	22:14	58m	23:13	9h 08m	4h 17m					Di, 8. Aug
Mi, 9. Aug	MESZ	23:10–00:05*	54m	AN ₊ bis M ₇		—:—	15:55	03:31	58m	04:29	47m	05:17	39m	05:56	14h 49m	20:46	39m	21:25	46m	22:12	57m	23:10	9h 11m	4h 23m					Mi, 9. Aug
Do, 10. Aug	MESZ	23:07–00:38*	1h 30m	AN ₊ bis M ₇		00:05	17:09	03:34	57m	04:31	46m	05:18	39m	05:58	14h 46m	20:44	39m	21:23	46m	22:10	57m	23:07	9h 15m	4h 29m					Do, 10. Aug
Fr, 11. Aug	MESZ	23:04–01:21*	2h 17m	AN ₊ bis M ₇		00:38	18:15	03:36	57m	04:34	46m	05:20	39m	05:59	14h 43m	20:42	38m	21:21	46m	22:07	56m	23:04	9h 18m	4h 35m					Fr, 11. Aug
Sa, 12. Aug	MESZ	23:00–02:16*	3h 15m	AN ₊ bis M ₇		01:21	19:09	03:39	56m	04:36	46m	05:22	38m	06:01	14h 39m	20:40	38m	21:19	45m	22:05	55m	23:00	9h 21m	4h 41m					Sa, 12. Aug
So, 13. Aug	MESZ	22:57–03:19*	4h 21m	AN ₊ bis M ₇		02:16	19:51	03:42	55m	04:38	45m	05:23	38m	06:02	14h 36m	20:39	38m	21:17	45m	22:03	54m	22:57	9h 24m	4h 47m					So, 13. Aug
Mo, 14. Aug	MESZ	22:54–03:48*	4h 53m	AN ₊ bis AN ₋		03:19	20:22	03:45	54m	04:40	45m	05:25	38m	06:04	14h 33m	20:37	38m	21:15	45m	22:00	54m	22:54	9h 28m	4h 53m					Mo, 14. Aug
Di, 15. Aug	MESZ	22:51–03:50*	4h 58m	AN ₊ bis AN ₋		04:28	20:46	03:48	54m	04:42	45m	05:27	38m	06:05	14h 29m	20:35	38m	21:13	44m	21:58	53m	22:51	9h 31m	4h 58m					Di, 15. Aug
Mi, 16. Aug	MESZ	22:48–03:53*	5h 04m	AN ₊ bis AN ₋	☾	05:39	21:04	03:50	53m	04:44	44m	05:28	38m	06:06	14h 26m	20:33	38m	21:11	44m	21:55	52m	22:48	9h 34m	5h 04m					Mi, 16. Aug
Do, 17. Aug	MESZ	22:45–03:55*	5h 10m	AN ₊ bis AN ₋		06:49	21:18	03:53	52m	04:46	44m	05:30	38m	06:08	14h 23m	20:31	37m	21:09	44m	21:53	52m	22:45	9h 38m	5h 10m					Do, 17. Aug
Fr, 18. Aug	MESZ	22:42–03:58*	5h 15m	AN ₊ bis AN ₋		07:58	21:31	03:55	52m	04:47	44m	05:32	37m	06:09	14h 19m	20:29	37m	21:07	43m	21:51	51m	22:42	9h 41m	5h 15m					Fr, 18. Aug
Sa, 19. Aug	MESZ	22:39–04:01*	5h 21m	AN ₊ bis AN ₋		09:07	21:43	03:58	51m	04:49	43m	05:33	37m	06:11	14h 16m	20:27	37m	21:05	43m	21:48	50m	22:39	9h 45m	5h 21m					Sa, 19. Aug
So, 20. Aug	MESZ	22:36–04:03*	5h 26m	AN ₊ bis AN ₋		10:15	21:55	04:01	50m	04:51	43m	05:35	37m	06:12	14h 12m	20:25	37m	21:03	43m	21:46	50m	22:36	9h 48m	5h 26m					So, 20. Aug
Mo, 21. Aug	MESZ	22:33–04:06*	5h 32m	AN ₊ bis AN ₋		11:25	22:08	04:03	50m	04:53	43m	05:37	37m	06:14	14h 09m	20:23	37m	21:01	42m	21:43	49m	22:33	9h 51m	5h 32m					Mo, 21. Aug
Di, 22. Aug	MESZ	22:30–04:08*	5h 37m	AN ₊ bis AN ₋		12:37	22:23	04:06	49m	04:55	42m	05:38	37m	06:15	14h 06m	20:21	37m	20:58	42m	21:41	49m	22:30	9h 55m	5h 37m					Di, 22. Aug
Mi, 23. Aug	MESZ	22:43–04:10*	5h 27m	M _\ bis AN ₋		13:53	22:43	04:08	49m	04:57	42m	05:40	37m	06:17	14h 02m	20:19	36m	20:56	42m	21:39	48m	22:27	9h 58m	5h 43m					Mi, 23. Aug
Do, 24. Aug	MESZ	23:10–04:13*	5h 03m	M _\ bis AN ₋	☾	15:12	23:10	04:10	48m	04:59	42m	05:41	36m	06:18	13h 59m	20:17	36m	20:54	42m	21:36	48m	22:24	10h 02m	5h 48m					Do, 24. Aug
Fr, 25. Aug	MESZ	23:48–04:15*	4h 26m	M _\ bis AN ₋		16:31	23:48	04:13	48m	05:01	42m	05:43	36m	06:20	13h 55m	20:15	36m	20:52	41m	21:34	47m	22:21	10h 05m	5h 53m					Fr, 25. Aug
Sa, 26. Aug	MESZ	00:44*–04:17*	3h 33m	M _\ bis AN ₋		17:42	—:—	04:15	47m	05:03	41m	05:45	36m	06:21	13h 52m	20:13	36m	20:50	41m	21:31	47m	22:19	10h 09m	5h 58m					Sa, 26. Aug
So, 27. Aug	MESZ	01:58*–04:20*	2h 21m	M _\ bis AN ₋		18:41	00:44	04:17	47m	05:05	41m	05:46	36m	06:23	13h 48m	20:11	36m	20:48	41m	21:29	46m	22:16	10h 12m	6h 04m					So, 27. Aug
Mo, 28. Aug	MESZ	03:26*–04:22*	56m	M _\ bis AN ₋		19:24	01:58	04:20	46m	05:07	41m	05:48	36m	06:24	13h 44m	20:09	36m	20:45	41m	21:27	46m	22:13	10h 16m	6h 09m					Mo, 28. Aug
Di, 29. Aug	MESZ	—:~:~:~:~	–	Mond stört		19:55	03:26	04:22	46m	05:08	41m	05:50	36m	06:26	13h 41m	20:07	36m	20:43	40m	21:24	45m	22:10	10h 20m	6h 14m					Di, 29. Aug
Mi, 30. Aug	MESZ	—:~:~:~																											

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Fr, 8. Sep	MESZ	21:42-00:08*	2h 25m	AN ₊ bis M ₇		—:—	17:07	04:43	42m	05:26	39m	06:05	35m	06:41	13h 05m	19:46	34m	20:21	38m	21:00	42m	21:42	10h 56m	7h 03m				Fr, 8. Sep
Sa, 9. Sep	MESZ	21:40-01:09*	3h 29m	AN ₊ bis M ₇		00:08	17:53	04:45	42m	05:28	39m	06:07	35m	06:42	13h 01m	19:44	34m	20:19	38m	20:57	42m	21:40	10h 59m	7h 07m				Sa, 9. Sep
So, 10. Sep	MESZ	21:37-02:18*	4h 40m	AN ₊ bis M ₇		01:09	18:27	04:47	42m	05:30	38m	06:09	34m	06:44	12h 57m	19:42	34m	20:16	38m	20:55	41m	21:37	11h 03m	7h 12m				So, 10. Sep
Mo, 11. Sep	MESZ	21:34-03:28*	5h 53m	AN ₊ bis M ₇		02:18	18:52	04:49	41m	05:31	38m	06:10	34m	06:45	12h 54m	19:39	34m	20:14	38m	20:53	41m	21:34	11h 07m	7h 17m				Mo, 11. Sep
Di, 12. Sep	MESZ	21:32-04:39*	7h 07m	AN ₊ bis M ₇		03:28	19:11	04:51	41m	05:33	38m	06:12	34m	06:46	12h 50m	19:37	34m	20:12	38m	20:50	41m	21:32	11h 10m	7h 21m				Di, 12. Sep
Mi, 13. Sep	MESZ	21:29-04:55*	7h 26m	AN ₊ bis AN ₋		04:39	19:26	04:53	41m	05:35	38m	06:13	34m	06:48	12h 46m	19:35	34m	20:10	38m	20:48	41m	21:29	11h 14m	7h 26m				Mi, 13. Sep
Do, 14. Sep	MESZ	21:26-04:57*	7h 30m	AN ₊ bis AN ₋		05:49	19:39	04:55	41m	05:36	38m	06:15	34m	06:49	12h 43m	19:33	34m	20:07	38m	20:45	40m	21:26	11h 18m	7h 30m				Do, 14. Sep
Fr, 15. Sep	MESZ	21:24-04:59*	7h 35m	AN ₊ bis AN ₋	●	06:57	19:51	04:57	41m	05:38	38m	06:16	34m	06:51	12h 39m	19:31	34m	20:05	37m	20:43	40m	21:24	11h 21m	7h 35m				Fr, 15. Sep
Sa, 16. Sep	MESZ	21:21-05:01*	7h 39m	AN ₊ bis AN ₋		08:06	20:03	04:59	40m	05:40	38m	06:18	34m	06:52	12h 35m	19:28	34m	20:03	37m	20:41	40m	21:21	11h 25m	7h 39m				Sa, 16. Sep
So, 17. Sep	MESZ	21:19-05:03*	7h 44m	AN ₊ bis AN ₋		09:16	20:15	05:01	40m	05:41	37m	06:19	34m	06:54	12h 32m	19:26	34m	20:01	37m	20:38	40m	21:19	11h 29m	7h 44m				So, 17. Sep
Mo, 18. Sep	MESZ	21:16-05:05*	7h 48m	AN ₊ bis AN ₋		10:28	20:30	05:03	40m	05:43	37m	06:21	34m	06:55	12h 28m	19:24	34m	19:58	37m	20:36	40m	21:16	11h 32m	7h 48m				Mo, 18. Sep
Di, 19. Sep	MESZ	21:14-05:06*	7h 52m	AN ₊ bis AN ₋		11:43	20:47	05:05	40m	05:45	37m	06:22	34m	06:57	12h 24m	19:22	34m	19:56	37m	20:34	39m	21:14	11h 36m	7h 52m				Di, 19. Sep
Mi, 20. Sep	MESZ	21:11-05:08*	7h 57m	M _\ bis AN ₋		13:00	21:11	05:06	40m	05:46	37m	06:24	34m	06:58	12h 21m	19:20	34m	19:54	37m	20:31	39m	21:11	11h 40m	7h 57m				Mi, 20. Sep
Do, 21. Sep	MESZ	21:44-05:10*	7h 25m	M _\ bis AN ₋		14:18	21:44	05:08	39m	05:48	37m	06:26	34m	07:00	12h 17m	19:17	34m	19:52	37m	20:29	39m	21:09	11h 43m	8h 01m				Do, 21. Sep
Fr, 22. Sep	MESZ	22:32-05:12*	6h 39m	M _\ bis AN ₋	☾	15:31	22:32	05:10	39m	05:50	37m	06:27	34m	07:01	12h 13m	19:15	34m	19:49	37m	20:27	39m	21:06	11h 47m	8h 05m				Fr, 22. Sep
Sa, 23. Sep	MESZ	23:37-05:14*	5h 37m	M _\ bis AN ₋		16:33	23:37	05:12	39m	05:51	37m	06:29	34m	07:03	12h 10m	19:13	34m	19:47	37m	20:24	39m	21:04	11h 51m	8h 09m				Sa, 23. Sep
So, 24. Sep	MESZ	00:57*-05:15*	4h 18m	M _\ bis AN ₋		17:20	—:—	05:14	39m	05:53	37m	06:30	34m	07:04	12h 06m	19:11	34m	19:45	37m	20:22	39m	21:01	11h 55m	8h 14m				So, 24. Sep
Mo, 25. Sep	MESZ	02:25*-05:17*	2h 51m	M _\ bis AN ₋		17:54	00:57	05:15	39m	05:54	37m	06:32	34m	07:06	12h 02m	19:09	34m	19:43	37m	20:20	38m	20:59	11h 58m	8h 18m				Mo, 25. Sep
Di, 26. Sep	MESZ	03:57*-05:19*	1h 22m	M _\ bis AN ₋		18:19	02:25	05:17	39m	05:56	37m	06:33	34m	07:07	11h 59m	19:06	34m	19:41	36m	20:18	38m	20:56	12h 02m	8h 22m				Di, 26. Sep
Mi, 27. Sep	MESZ	—:—:—:—	—	Mond stört		18:39	03:57	05:19	38m	05:58	37m	06:35	34m	07:09	11h 55m	19:04	34m	19:38	36m	20:15	38m	20:54	12h 06m	8h 26m				Mi, 27. Sep
Do, 28. Sep	MESZ	—:—:—:—	—	Mond stört		18:55	05:27	05:20	38m	05:59	36m	06:36	34m	07:10	11h 51m	19:02	34m	19:36	36m	20:13	38m	20:52	12h 09m	8h 30m				Do, 28. Sep
Fr, 29. Sep	MESZ	—:—:—:—	—	Mond stört	☾	19:10	06:55	05:22	38m	06:01	36m	06:38	34m	07:12	11h 47m	19:00	34m	19:34	36m	20:11	38m	20:49	12h 13m	8h 34m				Fr, 29. Sep
Sa, 30. Sep	MESZ	—:—:—:—	—	Mond stört		19:26	08:22	05:24	38m	06:02	36m	06:39	34m	07:13	11h 44m	18:58	34m	19:32	36m	20:09	38m	20:47	12h 17m	8h 38m				Sa, 30. Sep
So, 1. Okt	MESZ	—:—:—:—	—	Mond stört		19:44	09:48	05:25	38m	06:04	36m	06:41	34m	07:15	11h 40m	18:56	34m	19:30	36m	20:06	38m	20:45	12h 20m	8h 42m				So, 1. Okt
Mo, 2. Okt	MESZ	—:—:~:~:~	—	Mond stört		20:05	11:14	05:27	38m	06:05	36m	06:42	34m	07:16	11h 36m	18:53	34m	19:27	36m	20:04	38m	20:42	12h 24m	8h 46m				Mo, 2. Okt
Di, 3. Okt	MESZ	—:~:~:~:~	—	Mond stört		20:33	12:37	05:29	38m	06:07	36m	06:44	34m	07:18	11h 33m	18:51	34m	19:25	36m	20:02	38m	20:40	12h 28m	8h 50m				Di, 3. Okt
Mi, 4. Okt	MESZ	20:38-21:10	32m	AN ₊ bis M ₇		21:10	13:54	05:30	38m	06:09	36m	06:45	34m	07:20	11h 29m	18:49	34m	19:23	36m	20:00	37m	20:38	12h 31m	8h 54m				Mi, 4. Okt
Do, 5. Okt	MESZ	20:36-21:58	1h 22m	AN ₊ bis M ₇		21:58	14:59	05:32	38m	06:10	36m	06:47	34m	07:21	11h 25m	18:47	34m	19:21	36m	19:58	37m	20:36	12h 35m	8h 58m				Do, 5. Okt
Fr, 6. Okt	MESZ	20:33-22:57	2h 24m	AN ₊ bis M ₇	☾	22:57	15:51	05:34	37m	06:12	36m	06:48	34m	07:23	11h 22m	18:45	34m	19:19	36m	19:56	37m	20:33	12h 39m	9h 02m				Fr, 6. Okt
Sa, 7. Okt	MESZ	20:31-00:04*	3h 33m	AN ₊ bis M ₇		—:—	16:29	05:35	37m	06:13	36m	06:50	34m	07:24	11h 18m	18:43	34m	19:17	36m	19:53	37m	20:31	12h 43m	9h 05m				Sa, 7. Okt
So, 8. Okt	MESZ	20:29-01:15*	4h 46m	AN ₊ bis M ₇		00:04	16:57	05:37	37m	06:15	36m	06:51	34m	07:26	11h 14m	18:41	34m	19:15	36m	19:51	37m	20:29	12h 46m	9h 09m				So, 8. Okt
Mo, 9. Okt	MESZ	20:27-02:26*	5h 59m	AN ₊ bis M ₇		01:15	17:18	05:39	37m	06:16	36m	06:53	34m	07:27	11h 11m	18:38	34m	19:13	36m	19:49	37m	20:27	12h 50m	9h 13m				Mo, 9. Okt
Di, 10. Okt	MESZ	20:25-03:36*	7h 11m	AN ₊ bis M ₇		02:26	17:34	05:40	37m	06:18	36m	06:54	34m	07:29	11h 07m	18:36	34m	19:11	36m	19:47	37m	20:25	12h 54m	9h 17m				Di, 10. Okt
Mi, 11. Okt	MESZ	20:23-04:46*	8h 22m	AN ₊ bis M ₇		03:36	17:48	05:42	37m	06:19	36m	06:56	34m	07:30	11h 03m	18:34	34m	19:09	36m	19:45	37m	20:23	12h 57m	9h 20m				Mi, 11. Okt
Do, 12. Okt	MESZ	20:21-05:45*	9h 24m	AN ₊ bis AN ₋		04:46	18:00	05:43	37m	06:21	36m	06:58	34m	07:32	11h 00m	18:32	34m	19:07	36m	19:43	37m	20:21	13h 01m	9h 24m				Do, 12. Okt
Fr, 13. Okt	MESZ	20:18-05:46*	9h 27m	AN ₊ bis AN ₋		05:55	18:11	05:45	37m	06:22	36m	06:59	34m	07:34	10h 56m	18:30	34m	19:05	36m	19:41	37m	20:18	13h 04m	9h 27m				Fr, 13. Okt
Sa, 14. Okt	MESZ	20:16-05:48*	9h 31m	AN ₊ bis AN ₋	●	07:04	18:23	05:46	37m	06:24	36m	07:01	34m	07:35	10h 52m	18:28	34m	19:03	36m	19:39	37m	20:16	13h 08m	9h 31m				Sa, 14. Okt
So, 15. Okt	MESZ	20:14-05:50*	9h 35m	AN ₊ bis AN ₋		08:16	18:37	05:48	37m	06:25	36m	07:02	34m	07:37	10h 49m	18:26	34m	19:01	36m	19:37	37m	20:14	13h 12m	9h 35m				So, 15. Okt
Mo, 16. Okt	MESZ	20:12-05:51*	9h 38m	AN ₊ bis AN ₋		09:31	18:54	05:50	37m	06:27	36m	07:04	34m	07:38	10h 45m	18:24	34m	18:59	36m	19:35	37m	20:12	13h 15m	9h 38m				Mo, 16. Okt
Di, 17. Okt	MESZ	20:11-05:53*	9h 42m	AN ₊ bis AN ₋		10:49	19:15	05:51	37m	06:29	36m	07:05	34m	07:40	10h 42m	18:22	34m	18:57	36m	19:33	37m	20:11	13h 19m	9h 42m				Di, 17. Okt
Mi, 18. Okt	MESZ	20:09-05:54*	9h 45m	AN ₊ bis AN ₋		12:08	19:45	05:53	37m	06:30	36m	07:07	34m	07:41	10h 38m	18:20	34m	18:55	36m	19:31	37m	20:09	13h 23m	9h 45m				Mi, 18. Okt
Do, 19. Okt	MESZ	20:28-05:56*	9h 27m	M _\ bis AN ₋		13:23	20:28	05:54	37m	06:32	36m	07:08	34m	07:43	10h 34m	18:18	34m	18:53	36m	19:29	37m	20:07	13h 2					

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
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Sa, 28. Okt	MESZ	—:—:—:—	—	Mond stört	○	17:46	07:16	06:08	37m	06:45	37m	07:22	35m	07:58	10h 03m	18:01	35m	18:37	37m	19:14	37m	19:51	13h 58m	10h 18m				Sa, 28. Okt
So, 29. Okt		—:—:—:—	—	Mond stört		17:05	07:42	05:09	37m	05:47	37m	06:24	35m	06:59	9h 59m	16:59	35m	17:35	37m	18:12	37m	18:49	14h 01m	10h 21m				So, 29. Okt
Mo, 30. Okt		—:—:—:—	—	Mond stört		17:30	09:08	05:11	37m	05:48	37m	06:25	35m	07:01	9h 56m	16:57	35m	17:33	37m	18:10	37m	18:48	14h 05m	10h 24m				Mo, 30. Okt
Di, 31. Okt		—:—:—:—	—	Mond stört		18:03	10:30	05:12	37m	05:50	37m	06:27	35m	07:03	9h 53m	16:56	35m	17:32	37m	18:09	37m	18:46	14h 08m	10h 27m				Di, 31. Okt
Mi, 1. Nov		18:45–18:47	2m	AN ₊ bis M ₇		18:47	11:43	05:14	37m	05:51	37m	06:28	35m	07:04	9h 49m	16:54	35m	17:30	37m	18:07	37m	18:45	14h 11m	10h 30m				Mi, 1. Nov
Do, 2. Nov		18:43–19:43	59m	AN ₊ bis M ₇		19:43	12:42	05:15	37m	05:53	37m	06:30	36m	07:06	9h 46m	16:52	36m	17:28	37m	18:06	37m	18:43	14h 15m	10h 33m				Do, 2. Nov
Fr, 3. Nov		18:42–20:48	2h 06m	AN ₊ bis M ₇		20:48	13:27	05:17	37m	05:54	37m	06:31	36m	07:08	9h 43m	16:51	36m	17:27	37m	18:04	37m	18:42	14h 18m	10h 36m				Fr, 3. Nov
Sa, 4. Nov		18:40–21:59	3h 18m	AN ₊ bis M ₇		21:59	13:59	05:18	37m	05:55	37m	06:33	36m	07:09	9h 39m	16:49	36m	17:25	37m	18:03	37m	18:40	14h 21m	10h 39m				Sa, 4. Nov
So, 5. Nov		18:39–23:11	4h 31m	AN ₊ bis M ₇	☾	23:11	14:22	05:19	37m	05:57	37m	06:35	36m	07:11	9h 36m	16:47	36m	17:24	37m	18:01	37m	18:39	14h 25m	10h 42m				So, 5. Nov
Mo, 6. Nov		18:37–00:21*	5h 43m	AN ₊ bis M ₇		—:—	14:40	05:21	37m	05:58	37m	06:36	36m	07:13	9h 33m	16:46	36m	17:22	37m	18:00	37m	18:37	14h 28m	10h 44m				Mo, 6. Nov
Di, 7. Nov		18:36–01:31*	6h 54m	AN ₊ bis M ₇		00:21	14:55	05:22	37m	06:00	37m	06:38	36m	07:14	9h 30m	16:44	36m	17:21	37m	17:59	37m	18:36	14h 31m	10h 47m				Di, 7. Nov
Mi, 8. Nov		18:35–02:39*	8h 04m	AN ₊ bis M ₇		01:31	15:07	05:24	37m	06:01	37m	06:39	36m	07:16	9h 26m	16:43	36m	17:19	37m	17:57	37m	18:35	14h 34m	10h 50m				Mi, 8. Nov
Do, 9. Nov		18:34–03:49*	9h 15m	AN ₊ bis M ₇		02:39	15:19	05:25	37m	06:03	37m	06:41	36m	07:18	9h 23m	16:41	36m	17:18	37m	17:56	37m	18:34	14h 37m	10h 52m				Do, 9. Nov
Fr, 10. Nov		18:32–05:00*	10h 27m	AN ₊ bis M ₇		03:49	15:31	05:26	37m	06:04	37m	06:42	36m	07:19	9h 20m	16:40	36m	17:17	37m	17:55	37m	18:32	14h 40m	10h 55m				Fr, 10. Nov
Sa, 11. Nov		18:31–05:29*	10h 58m	AN ₊ bis AN ₋		05:00	15:44	05:28	37m	06:06	38m	06:44	37m	07:21	9h 17m	16:38	37m	17:15	38m	17:54	37m	18:31	14h 44m	10h 58m				Sa, 11. Nov
So, 12. Nov		18:30–05:31*	11h 00m	AN ₊ bis AN ₋		06:14	15:59	05:29	37m	06:07	38m	06:45	37m	07:22	9h 14m	16:37	37m	17:14	38m	17:52	37m	18:30	14h 47m	11h 00m				So, 12. Nov
Mo, 13. Nov		18:29–05:32*	11h 03m	AN ₊ bis AN ₋	☀	07:32	16:19	05:31	37m	06:09	38m	06:47	37m	07:24	9h 11m	16:36	37m	17:13	38m	17:51	37m	18:29	14h 50m	11h 03m				Mo, 13. Nov
Di, 14. Nov		18:28–05:33*	11h 05m	AN ₊ bis AN ₋		08:52	16:47	05:32	37m	06:10	38m	06:48	37m	07:26	9h 08m	16:34	37m	17:12	38m	17:50	37m	18:28	14h 52m	11h 05m				Di, 14. Nov
Mi, 15. Nov		18:27–05:35*	11h 07m	AN ₊ bis AN ₋		10:11	17:25	05:33	37m	06:11	38m	06:50	37m	07:27	9h 05m	16:33	37m	17:11	38m	17:49	37m	18:27	14h 55m	11h 07m				Mi, 15. Nov
Do, 16. Nov		18:26–05:36*	11h 10m	AN ₊ bis AN ₋		11:21	18:20	05:35	38m	06:13	38m	06:51	37m	07:29	9h 02m	16:32	37m	17:09	38m	17:48	37m	18:26	14h 58m	11h 10m				Do, 16. Nov
Fr, 17. Nov		19:30–05:37*	10h 07m	M _\ bis AN ₋		12:17	19:30	05:36	38m	06:14	38m	06:53	37m	07:31	9h 00m	16:31	37m	17:08	38m	17:47	38m	18:25	15h 01m	11h 12m				Fr, 17. Nov
Sa, 18. Nov		20:52–05:39*	8h 47m	M _\ bis AN ₋		12:58	20:52	05:37	38m	06:15	38m	06:54	37m	07:32	8h 57m	16:29	37m	17:07	38m	17:46	38m	18:24	15h 04m	11h 14m				Sa, 18. Nov
So, 19. Nov		22:18–05:40*	7h 22m	M _\ bis AN ₋		13:27	22:18	05:39	38m	06:17	38m	06:56	38m	07:34	8h 54m	16:28	38m	17:06	38m	17:45	38m	18:23	15h 06m	11h 16m				So, 19. Nov
Mo, 20. Nov		23:44–05:41*	5h 57m	M _\ bis AN ₋	☾	13:49	23:44	05:40	38m	06:18	38m	06:57	38m	07:35	8h 51m	16:27	38m	17:05	38m	17:44	38m	18:22	15h 09m	11h 18m				Mo, 20. Nov
Di, 21. Nov		01:08*–05:43*	4h 34m	M _\ bis AN ₋		14:06	—:—	05:41	38m	06:20	38m	06:58	38m	07:37	8h 49m	16:26	38m	17:04	38m	17:43	38m	18:22	15h 12m	11h 20m				Di, 21. Nov
Mi, 22. Nov		02:30*–05:44*	3h 13m	M _\ bis AN ₋		14:21	01:08	05:43	38m	06:21	39m	07:00	38m	07:38	8h 46m	16:25	38m	17:04	38m	17:43	38m	18:21	15h 14m	11h 22m				Mi, 22. Nov
Do, 23. Nov		03:53*–05:45*	1h 52m	M _\ bis AN ₋		14:36	02:30	05:44	38m	06:22	39m	07:01	38m	07:40	8h 44m	16:24	38m	17:03	39m	17:42	38m	18:20	15h 17m	11h 24m				Do, 23. Nov
Fr, 24. Nov		05:16*–05:46*	30m	M _\ bis AN ₋		14:51	03:53	05:45	38m	06:23	39m	07:03	38m	07:41	8h 41m	16:23	38m	17:02	39m	17:41	38m	18:20	15h 19m	11h 26m				Fr, 24. Nov
Sa, 25. Nov		—:—:—:—	—	Mond stört		15:08	05:16	05:46	38m	06:25	39m	07:04	38m	07:43	8h 39m	16:22	38m	17:01	39m	17:40	38m	18:19	15h 21m	11h 28m				Sa, 25. Nov
So, 26. Nov		—:~:~:~:~	—	Mond stört		15:30	06:40	05:47	38m	06:26	39m	07:05	38m	07:44	8h 37m	16:22	38m	17:00	39m	17:40	38m	18:18	15h 24m	11h 30m				So, 26. Nov
Mo, 27. Nov		—:~:~:~:~	—	Mond stört	○	15:58	08:03	05:49	38m	06:27	39m	07:07	39m	07:46	8h 35m	16:21	39m	17:00	39m	17:39	38m	18:18	15h 26m	11h 32m				Mo, 27. Nov
Di, 28. Nov		—:~:~:~:~	—	Mond stört		16:37	09:21	05:50	38m	06:28	39m	07:08	39m	07:47	8h 32m	16:20	39m	16:59	39m	17:39	38m	18:17	15h 28m	11h 33m				Di, 28. Nov
Mi, 29. Nov		—:~:~:~:~	—	Mond stört		17:28	10:28	05:51	38m	06:30	39m	07:09	39m	07:49	8h 30m	16:19	39m	16:59	39m	17:38	38m	18:17	15h 30m	11h 35m				Mi, 29. Nov
Do, 30. Nov		18:16–18:31	14m	AN ₊ bis M ₇		18:31	11:19	05:52	38m	06:31	39m	07:11	39m	07:50	8h 28m	16:19	39m	16:58	39m	17:38	38m	18:16	15h 32m	11h 36m				Do, 30. Nov
Fr, 1. Dez		18:16–19:41	1h 25m	AN ₊ bis M ₇		19:41	11:57	05:53	38m	06:32	39m	07:12	39m	07:51	8h 26m	16:18	39m	16:58	39m	17:37	38m	18:16	15h 34m	11h 38m				Fr, 1. Dez
Sa, 2. Dez		18:16–20:53	2h 37m	AN ₊ bis M ₇		20:53	12:24	05:54	38m	06:33	39m	07:13	39m	07:53	8h 24m	16:18	39m	16:57	39m	17:37	38m	18:16	15h 36m	11h 39m				Sa, 2. Dez
So, 3. Dez		18:15–22:05	3h 49m	AN ₊ bis M ₇		22:05	12:44	05:55	38m	06:34	39m	07:14	39m	07:54	8h 23m	16:17	39m	16:57	39m	17:37	38m	18:15	15h 38m	11h 41m				So, 3. Dez
Mo, 4. Dez		18:15–23:15	4h 59m	AN ₊ bis M ₇		23:15	13:00	05:56	38m	06:35	39m	07:15	39m	07:55	8h 21m	16:17	39m	16:56	39m	17:36	38m	18:15	15h 39m	11h 42m				Mo, 4. Dez
Di, 5. Dez		18:15–00:23*	6h 08m	AN ₊ bis M ₇	☾	—:—	13:13	05:57	38m	06:36	40m	07:16	39m	07:56	8h 19m	16:16	39m	16:56	39m	17:36	38m	18:15	15h 41m	11h 43m				Di, 5. Dez
Mi, 6. Dez		18:15–01:31*	7h 16m	AN ₊ bis M ₇		00:23	13:25	05:58	38m	06:37	40m	07:18	39m	07:58	8h 18m	16:16	39m	16:56	40m	17:36	38m	18:15	15h 42m	11h 44m				Mi, 6. Dez
Do, 7. Dez		18:15–02:41*	8h 26m	AN ₊ bis M ₇		01:31	13:37	05:59	39m	06:38	40m	07:19	40m	07:59	8h 16m	16:16	40m	16:56	40m	17:36	39m	18:15	15h 44m	11h 45m				Do, 7. Dez
Fr, 8. Dez		18:15–03:53*	9h 38m	AN ₊ bis M ₇		02:41	13:49	06:00	39m	06:39	40m	07:20	40m	08:00	8h 15m	16:15	40m	16:55	40m	17:36	39m	18:15	15h 45m	11h 46m				Fr, 8. Dez
Sa, 9. Dez		18:15–05:09*	10h 54m	AN ₊ bis M ₇		03:53	14:03	06:01	39m	06:40																		

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
2023/24	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023/24		
		Δt			Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
So, 17. Dez		21:31 – 06:08*	8h 37m	M _\ bis AN _\		11:54	21:31	06:08	39m	06:47	40m	07:28	40m	08:08	8h 07m	16:16	40m	16:56	40m	17:37	39m	18:16	15h 53m	11h 52m				So, 17. Dez
Mo, 18. Dez		22:56 – 06:09*	7h 12m	M _\ bis AN _\		12:13	22:56	06:08	39m	06:48	40m	07:28	40m	08:09	8h 06m	16:16	40m	16:56	40m	17:37	39m	18:16	15h 53m	11h 52m				Mo, 18. Dez
Di, 19. Dez		00:19* – 06:10*	5h 50m	M _\ bis AN _\	☾	12:28	—:—	06:09	39m	06:48	40m	07:29	40m	08:10	8h 06m	16:16	40m	16:57	40m	17:37	39m	18:17	15h 53m	11h 52m				Di, 19. Dez
Mi, 20. Dez		01:40* – 06:10*	4h 30m	M _\ bis AN _\		12:43	00:19	06:10	39m	06:49	40m	07:29	40m	08:10	8h 06m	16:17	40m	16:57	40m	17:38	39m	18:17	15h 54m	11h 53m				Mi, 20. Dez
Do, 21. Dez		03:01* – 06:11*	3h 09m	M _\ bis AN _\		12:57	01:40	06:10	39m	06:49	40m	07:30	40m	08:11	8h 06m	16:17	40m	16:58	40m	17:38	39m	18:18	15h 54m	11h 53m				Do, 21. Dez
Fr, 22. Dez		04:23* – 06:11*	1h 48m	M _\ bis AN _\		13:13	03:01	06:11	39m	06:50	40m	07:31	40m	08:11	8h 06m	16:17	40m	16:58	40m	17:39	39m	18:18	15h 54m	11h 53m				Fr, 22. Dez
Sa, 23. Dez		05:44* – 06:12*	27m	M _\ bis AN _\		13:33	04:23	06:11	39m	06:50	40m	07:31	40m	08:12	8h 06m	16:18	40m	16:59	40m	17:39	39m	18:19	15h 54m	11h 52m				Sa, 23. Dez
So, 24. Dez		—:—:—:—	–	Mond stört		13:58	05:44	06:12	39m	06:51	40m	07:31	40m	08:12	8h 06m	16:19	40m	16:59	40m	17:40	39m	18:19	15h 53m	11h 52m				So, 24. Dez
Mo, 25. Dez		—:—:—:—	–	Mond stört		14:32	07:03	06:12	39m	06:51	40m	07:32	40m	08:12	8h 06m	16:19	40m	17:00	40m	17:40	39m	18:20	15h 53m	11h 52m				Mo, 25. Dez
Di, 26. Dez		—:—:—:—	–	Mond stört		15:18	08:13	06:12	39m	06:52	40m	07:32	40m	08:13	8h 07m	16:20	40m	17:01	40m	17:41	39m	18:20	15h 53m	11h 52m				Di, 26. Dez
Mi, 27. Dez		—:—:~:~	–	Mond stört	☉	16:16	09:11	06:13	39m	06:52	40m	07:32	40m	08:13	8h 07m	16:21	40m	17:01	40m	17:42	39m	18:21	15h 52m	11h 51m				Mi, 27. Dez
Do, 28. Dez		—:~:~:~	–	Mond stört		17:24	09:54	06:13	39m	06:52	40m	07:33	40m	08:13	8h 08m	16:22	40m	17:02	40m	17:43	39m	18:22	15h 51m	11h 51m				Do, 28. Dez
Fr, 29. Dez		18:23 – 18:36	13m	AN ₊ bis M ₇		18:36	10:25	06:13	39m	06:52	40m	07:33	40m	08:13	8h 08m	16:22	40m	17:03	40m	17:43	39m	18:23	15h 51m	11h 50m				Fr, 29. Dez
Sa, 30. Dez		18:23 – 19:49	1h 25m	AN ₊ bis M ₇		19:49	10:48	06:13	39m	06:53	40m	07:33	40m	08:13	8h 09m	16:23	40m	17:04	40m	17:44	39m	18:23	15h 50m	11h 50m				Sa, 30. Dez
So, 31. Dez		18:24 – 20:59	2h 35m	AN ₊ bis M ₇		20:59	11:05	06:14	39m	06:53	40m	07:33	40m	08:14	8h 10m	16:24	40m	17:05	40m	17:45	39m	18:24	15h 49m	11h 49m				So, 31. Dez
Mo, 1. Jan		18:25 – 22:08	3h 43m	AN ₊ bis M ₇		22:08	11:19	06:14	39m	06:53	40m	07:33	40m	08:14	8h 11m	16:25	40m	17:05	40m	17:46	39m	18:25	15h 48m	11h 48m				Mo, 1. Jan
Di, 2. Jan		18:26 – 23:16	4h 49m	AN ₊ bis M ₇		23:16	11:31	06:14	39m	06:53	40m	07:33	40m	08:13	8h 12m	16:26	40m	17:06	40m	17:47	39m	18:26	15h 47m	11h 47m				Di, 2. Jan
Mi, 3. Jan		18:27 – 00:24*	5h 56m	AN ₊ bis M ₇		—:—	11:42	06:14	39m	06:53	40m	07:33	40m	08:13	8h 13m	16:27	40m	17:07	40m	17:48	39m	18:27	15h 46m	11h 46m				Mi, 3. Jan
Do, 4. Jan		18:28 – 01:33*	7h 05m	AN ₊ bis M ₇	☾	00:24	11:54	06:14	39m	06:53	40m	07:33	40m	08:13	8h 15m	16:28	40m	17:08	40m	17:49	39m	18:28	15h 44m	11h 46m				Do, 4. Jan
Fr, 5. Jan		18:29 – 02:46*	8h 17m	AN ₊ bis M ₇		01:33	12:07	06:14	39m	06:53	40m	07:33	40m	08:13	8h 16m	16:29	40m	17:09	40m	17:50	39m	18:29	15h 43m	11h 44m				Fr, 5. Jan
Sa, 6. Jan		18:30 – 04:03*	9h 33m	AN ₊ bis M ₇		02:46	12:23	06:14	38m	06:53	40m	07:33	40m	08:13	8h 17m	16:31	40m	17:11	40m	17:51	39m	18:30	15h 41m	11h 43m				Sa, 6. Jan
So, 7. Jan		18:31 – 05:23*	10h 52m	AN ₊ bis M ₇		04:03	12:43	06:14	38m	06:52	40m	07:33	39m	08:12	8h 19m	16:32	39m	17:12	40m	17:52	38m	18:31	15h 40m	11h 42m				So, 7. Jan
Mo, 8. Jan		18:32 – 06:13*	11h 41m	AN ₊ bis AN _\		05:23	13:12	06:13	38m	06:52	39m	07:32	39m	08:12	8h 20m	16:33	39m	17:13	39m	17:53	38m	18:32	15h 38m	11h 41m				Mo, 8. Jan
Di, 9. Jan		18:33 – 06:13*	11h 40m	AN ₊ bis AN _\		06:41	13:54	06:13	38m	06:52	39m	07:32	39m	08:12	8h 22m	16:34	39m	17:14	39m	17:54	38m	18:33	15h 36m	11h 40m				Di, 9. Jan
Mi, 10. Jan		18:34 – 06:13*	11h 38m	AN ₊ bis AN _\		07:52	14:53	06:13	38m	06:52	39m	07:32	39m	08:11	8h 24m	16:36	39m	17:15	39m	17:55	38m	18:34	15h 35m	11h 38m				Mi, 10. Jan
Do, 11. Jan		18:35 – 06:12*	11h 37m	AN ₊ bis AN _\	☉	08:47	16:09	06:13	38m	06:51	39m	07:31	39m	08:11	8h 26m	16:37	39m	17:16	39m	17:56	38m	18:35	15h 33m	11h 37m				Do, 11. Jan
Fr, 12. Jan		18:36 – 06:12*	11h 35m	AN ₊ bis AN _\		09:28	17:38	06:12	38m	06:51	39m	07:31	39m	08:10	8h 28m	16:38	39m	17:18	39m	17:57	38m	18:36	15h 31m	11h 35m				Fr, 12. Jan
Sa, 13. Jan		19:09 – 06:12*	11h 02m	M _\ bis AN _\		09:56	19:09	06:12	38m	06:51	39m	07:30	39m	08:10	8h 30m	16:40	39m	17:19	39m	17:59	38m	18:37	15h 29m	11h 34m				Sa, 13. Jan
So, 14. Jan		20:39 – 06:11*	9h 32m	M _\ bis AN _\		10:17	20:39	06:12	38m	06:50	39m	07:30	39m	08:09	8h 32m	16:41	39m	17:20	39m	18:00	38m	18:39	15h 27m	11h 32m				So, 14. Jan
Mo, 15. Jan		22:05 – 06:11*	8h 06m	M _\ bis AN _\		10:34	22:05	06:11	38m	06:50	39m	07:29	39m	08:08	8h 34m	16:43	39m	17:22	39m	18:01	38m	18:40	15h 24m	11h 30m				Mo, 15. Jan
Di, 16. Jan		23:28 – 06:10*	6h 42m	M _\ bis AN _\		10:49	23:28	06:11	38m	06:49	39m	07:28	38m	08:07	8h 36m	16:44	38m	17:23	39m	18:02	38m	18:41	15h 22m	11h 29m				Di, 16. Jan
Mi, 17. Jan		00:50* – 06:09*	5h 19m	M _\ bis AN _\		11:04	—:—	06:10	38m	06:48	39m	07:28	38m	08:07	8h 38m	16:46	38m	17:24	39m	18:04	38m	18:42	15h 20m	11h 27m				Mi, 17. Jan
Do, 18. Jan		02:12* – 06:09*	3h 57m	M _\ bis AN _\	☾	11:19	00:50	06:09	38m	06:48	39m	07:27	38m	08:06	8h 41m	16:47	38m	17:26	39m	18:05	38m	18:43	15h 17m	11h 25m				Do, 18. Jan
Fr, 19. Jan		03:33* – 06:08*	2h 35m	M _\ bis AN _\		11:37	02:12	06:09	38m	06:47	39m	07:26	38m	08:05	8h 43m	16:49	38m	17:27	39m	18:06	38m	18:45	15h 15m	11h 23m				Fr, 19. Jan
Sa, 20. Jan		04:52* – 06:07*	1h 15m	M _\ bis AN _\		12:00	03:33	06:08	38m	06:46	39m	07:25	38m	08:04	8h 46m	16:50	38m	17:29	39m	18:08	38m	18:46	15h 12m	11h 21m				Sa, 20. Jan
So, 21. Jan		06:04* – 06:07*	2m	M _\ bis AN _\		12:31	04:52	06:07	38m	06:46	38m	07:25	38m	08:03	8h 48m	16:52	38m	17:30	38m	18:09	38m	18:47	15h 10m	11h 19m				So, 21. Jan
Mo, 22. Jan		—:~:~:~	–	Mond stört		13:12	06:04	06:07	38m	06:45	38m	07:24	38m	08:02	8h 51m	16:53	38m	17:32	38m	18:10	38m	18:49	15h 07m	11h 17m				Mo, 22. Jan
Di, 23. Jan		—:~:~:~	–	Mond stört		14:06	07:05	06:06	38m	06:44	38m	07:23	38m	08:01	8h 54m	16:55	38m	17:33	38m	18:12	38m	18:50	15h 04m	11h 15m				Di, 23. Jan
Mi, 24. Jan		—:~:~:~	–	Mond stört		15:10	07:52	06:05	38m	06:43	38m	07:22	37m	08:00	8h 56m	16:57	37m	17:34	38m	18:13	38m	18:51	15h 02m	11h 12m				Mi, 24. Jan
Do, 25. Jan		—:~:~:~	–	Mond stört	☉	16:21	08:26	06:04	38m	06:42	38m	07:21	37m	07:59	8h 59m	16:58	37m	17:36	38m	18:15	38m	18:53	14h 59m	11h 10m				Do, 25. Jan
Fr, 26. Jan		—:~:~:~	–	Mond stört		17:34	08:51	06:03	37m	06:41	38m	07:20	37m	07:57	9h 02m	17:00	37m	17:38	38m	18:16	38m	18:54	14h 56m	11h 08m				Fr, 26. Jan
Sa, 27. Jan		—:~:~:~	–	Mond stört		18:46	09:10	06:02	37m	06:40	38m	07:19	37m	07:56	9h 05m	17:01	37m	17:39	38m	18:17	37m	18:55	14h 53m	11h 05m				Sa, 27. Jan
So, 28. Jan		18:57 – 19:55	58m	AN ₊ bis M ₇		19:55	09:25	06:01	37m	06:39	38m																	