

Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Zirndorf 49.4500° N 10.9500° 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		03:57*–06:13*	2h 15m	M _\ bis AN _\		12:52	02:43	06:13	38m	06:52	39m	07:31	39m	08:11	8h 15m	16:27	39m	17:07	39m	17:47	38m	18:26	15h 44m	11h 47m					So, 1. Jan
Mo, 2. Jan		05:10*–06:13*	1h 02m	M _\ bis AN _\		13:11	03:57	06:13	38m	06:52	39m	07:31	39m	08:11	8h 16m	16:28	39m	17:08	39m	17:48	38m	18:27	15h 43m	11h 46m					Mo, 2. Jan
Di, 3. Jan		—:—:—:—	–	Mond stört		13:36	05:10	06:13	38m	06:52	39m	07:31	39m	08:11	8h 18m	16:29	39m	17:09	39m	17:49	38m	18:27	15h 41m	11h 45m					Di, 3. Jan
Mi, 4. Jan		—:—:—:—	–	Mond stört		14:07	06:21	06:13	38m	06:52	39m	07:31	39m	08:11	8h 19m	16:30	39m	17:10	39m	17:50	38m	18:28	15h 40m	11h 44m					Mi, 4. Jan
Do, 5. Jan		—:—:—:—	–	Mond stört		14:48	07:25	06:13	38m	06:51	39m	07:31	39m	08:11	8h 20m	16:31	39m	17:11	39m	17:51	38m	18:29	15h 39m	11h 43m					Do, 5. Jan
Fr, 6. Jan		—:~:~:~:~	–	Mond stört		15:39	08:20	06:13	38m	06:51	39m	07:31	39m	08:11	8h 22m	16:33	39m	17:12	39m	17:52	38m	18:30	15h 37m	11h 42m					Fr, 6. Jan
Sa, 7. Jan		—:~:~:~:~	–	Mond stört	○	16:39	09:04	06:13	38m	06:51	39m	07:31	39m	08:10	8h 23m	16:34	39m	17:13	39m	17:53	38m	18:31	15h 36m	11h 41m					Sa, 7. Jan
So, 8. Jan		—:~:~:~:~	–	Mond stört		17:46	09:38	06:12	38m	06:51	39m	07:31	39m	08:10	8h 25m	16:35	39m	17:14	39m	17:54	38m	18:32	15h 34m	11h 39m					So, 8. Jan
Mo, 9. Jan		18:33–18:55	21m	AN ₊ bis M ₇		18:55	10:04	06:12	38m	06:51	39m	07:30	39m	08:09	8h 26m	16:36	39m	17:15	39m	17:55	38m	18:33	15h 32m	11h 38m					Mo, 9. Jan
Di, 10. Jan		18:35–20:04	1h 29m	AN ₊ bis M ₇		20:04	10:25	06:12	38m	06:50	39m	07:30	39m	08:09	8h 28m	16:38	39m	17:17	39m	17:56	38m	18:35	15h 30m	11h 37m					Di, 10. Jan
Mi, 11. Jan		18:36–21:14	2h 37m	AN ₊ bis M ₇		21:14	10:41	06:12	38m	06:50	39m	07:29	39m	08:08	8h 30m	16:39	39m	17:18	39m	17:57	38m	18:36	15h 29m	11h 35m					Mi, 11. Jan
Do, 12. Jan		18:37–22:23	3h 45m	AN ₊ bis M ₇		22:23	10:56	06:11	38m	06:50	39m	07:29	38m	08:08	8h 32m	16:40	38m	17:19	39m	17:58	38m	18:37	15h 27m	11h 34m					Do, 12. Jan
Fr, 13. Jan		18:38–23:32	4h 54m	AN ₊ bis M ₇		23:32	11:09	06:11	38m	06:49	39m	07:28	38m	08:07	8h 34m	16:42	38m	17:20	39m	18:00	38m	18:38	15h 25m	11h 32m					Fr, 13. Jan
Sa, 14. Jan		18:39–00:44*	6h 05m	AN ₊ bis M ₇		—:—	11:23	06:11	38m	06:49	39m	07:28	38m	08:07	8h 36m	16:43	38m	17:22	39m	18:01	38m	18:39	15h 22m	11h 31m					Sa, 14. Jan
So, 15. Jan		18:40–02:00*	7h 19m	AN ₊ bis M ₇	●	00:44	11:38	06:10	38m	06:48	39m	07:27	38m	08:06	8h 38m	16:44	38m	17:23	39m	18:02	38m	18:40	15h 20m	11h 29m					So, 15. Jan
Mo, 16. Jan		18:41–03:20*	8h 38m	AN ₊ bis M ₇		02:00	11:55	06:10	38m	06:48	38m	07:27	38m	08:05	8h 40m	16:46	38m	17:24	38m	18:03	38m	18:41	15h 18m	11h 27m					Mo, 16. Jan
Di, 17. Jan		18:43–04:44*	10h 01m	AN ₊ bis M ₇		03:20	12:18	06:09	38m	06:47	38m	07:26	38m	08:04	8h 42m	16:47	38m	17:26	38m	18:05	38m	18:43	15h 16m	11h 25m					Di, 17. Jan
Mi, 18. Jan		18:44–06:07*	11h 22m	AN ₊ bis M ₇		04:44	12:50	06:08	38m	06:47	38m	07:25	38m	08:04	8h 45m	16:49	38m	17:27	38m	18:06	38m	18:44	15h 13m	11h 23m					Mi, 18. Jan
Do, 19. Jan		18:45–06:07*	11h 21m	AN ₊ bis AN _\		06:07	13:36	06:08	38m	06:46	38m	07:25	38m	08:03	8h 47m	16:50	38m	17:28	38m	18:07	38m	18:45	15h 11m	11h 21m					Do, 19. Jan
Fr, 20. Jan		18:47–06:07*	11h 20m	AN ₊ bis AN _\		07:20	14:40	06:07	37m	06:45	38m	07:24	38m	08:02	8h 50m	16:52	38m	17:30	38m	18:09	37m	18:47	15h 08m	11h 20m					Fr, 20. Jan
Sa, 21. Jan		18:48–06:06*	11h 17m	AN ₊ bis AN _\	●	08:18	16:01	06:07	37m	06:44	38m	07:23	37m	08:01	8h 52m	16:53	37m	17:31	38m	18:10	37m	18:48	15h 06m	11h 17m					Sa, 21. Jan
So, 22. Jan		18:49–06:05*	11h 15m	AN ₊ bis AN _\		08:59	17:32	06:06	37m	06:44	38m	07:22	37m	08:00	8h 55m	16:55	37m	17:33	38m	18:11	37m	18:49	15h 03m	11h 15m					So, 22. Jan
Mo, 23. Jan		19:03–06:04*	11h 01m	M _\ bis AN _\		09:29	19:03	06:05	37m	06:43	38m	07:21	37m	07:59	8h 57m	16:57	37m	17:34	38m	18:13	37m	18:50	15h 01m	11h 13m					Mo, 23. Jan
Di, 24. Jan		20:31–06:03*	9h 32m	M _\ bis AN _\		09:51	20:31	06:04	37m	06:42	38m	07:20	37m	07:58	9h 00m	16:58	37m	17:36	38m	18:14	37m	18:52	14h 58m	11h 11m					Di, 24. Jan
Mi, 25. Jan		21:54–06:02*	8h 08m	M _\ bis AN _\		10:09	21:54	06:03	37m	06:41	38m	07:19	37m	07:57	9h 03m	17:00	37m	17:37	38m	18:15	37m	18:53	14h 55m	11h 09m					Mi, 25. Jan
Do, 26. Jan		23:14–06:01*	6h 47m	M _\ bis AN _\		10:25	23:14	06:02	37m	06:40	38m	07:18	37m	07:55	9h 06m	17:01	37m	17:39	38m	18:17	37m	18:55	14h 52m	11h 06m					Do, 26. Jan
Fr, 27. Jan		00:31*–06:00*	5h 29m	M _\ bis AN _\		10:40	—:—	06:01	37m	06:39	38m	07:17	37m	07:54	9h 08m	17:03	37m	17:40	38m	18:18	37m	18:56	14h 49m	11h 04m					Fr, 27. Jan
Sa, 28. Jan		01:46*–05:59*	4h 12m	M _\ bis AN _\	●	10:57	00:31	06:00	37m	06:38	37m	07:16	37m	07:53	9h 11m	17:05	37m	17:42	37m	18:20	37m	18:57	14h 47m	11h 02m					Sa, 28. Jan
So, 29. Jan		03:01*–05:58*	2h 57m	M _\ bis AN _\		11:15	01:46	05:59	37m	06:37	37m	07:15	36m	07:52	9h 14m	17:06	36m	17:43	37m	18:21	37m	18:59	14h 44m	10h 59m					So, 29. Jan
Mo, 30. Jan		04:13*–05:57*	1h 44m	M _\ bis AN _\		11:38	03:01	05:58	37m	06:36	37m	07:14	36m	07:50	9h 17m	17:08	36m	17:45	37m	18:23	37m	19:00	14h 41m	10h 57m					Mo, 30. Jan
Di, 31. Jan		05:19*–05:56*	37m	M _\ bis AN _\		12:07	04:13	05:57	37m	06:35	37m	07:12	36m	07:49	9h 20m	17:10	36m	17:46	37m	18:24	37m	19:01	14h 38m	10h 54m					Di, 31. Jan
Mi, 1. Feb		—:~:~:~:~	–	Mond stört		12:45	05:19	05:56	37m	06:34	37m	07:11	36m	07:48	9h 23m	17:11	36m	17:48	37m	18:26	37m	19:03	14h 34m	10h 52m					Mi, 1. Feb
Do, 2. Feb		—:~:~:~:~	–	Mond stört		13:33	06:17	05:55	37m	06:32	37m	07:10	36m	07:46	9h 26m	17:13	36m	17:49	37m	18:27	37m	19:04	14h 31m	10h 49m					Do, 2. Feb
Fr, 3. Feb		—:~:~:~:~	–	Mond stört		14:31	07:04	05:54	37m	06:31	37m	07:09	36m	07:45	9h 29m	17:15	36m	17:51	37m	18:28	37m	19:06	14h 28m	10h 46m					Fr, 3. Feb
Sa, 4. Feb		—:~:~:~:~	–	Mond stört		15:36	07:41	05:53	37m	06:30	37m	07:07	36m	07:43	9h 33m	17:16	36m	17:53	37m	18:30	37m	19:07	14h 25m	10h 44m					Sa, 4. Feb
So, 5. Feb		—:~:~:~:~	–	Mond stört	○	16:45	08:09	05:51	37m	06:28	37m	07:06	36m	07:42	9h 36m	17:18	36m	17:54	37m	18:31	37m	19:09	14h 22m	10h 41m					So, 5. Feb
Mo, 6. Feb		—:~:~:~:~	–	Mond stört		17:55	08:30	05:50	37m	06:27	37m	07:04	35m	07:40	9h 39m	17:20	35m	17:56	37m	18:33	37m	19:10	14h 19m	10h 38m					Mo, 6. Feb
Di, 7. Feb		—:~:~:~:~	–	Mond stört		19:05	08:48	05:49	37m	06:26	37m	07:03	35m	07:39	9h 42m	17:21	35m	17:57	37m	18:34	37m	19:12	14h 15m	10h 35m					Di, 7. Feb
Mi, 8. Feb		19:13–20:14	1h 00m	AN ₊ bis M ₇		20:14	09:03	05:47	37m	06:24	37m	07:01	35m	07:37	9h 45m	17:23	35m	17:59	37m	18:36	37m	19:13	14h 12m	10h 32m					Mi, 8. Feb
Do, 9. Feb		19:15–21:23	2h 08m	AN ₊ bis M ₇		21:23	09:16	05:46	37m	06:23	36m	07:00	35m	07:36	9h 49m	17:25	35m	18:00	37m	18:38	37m	19:15	14h 09m	10h 29m					Do, 9. Feb
Fr, 10. Feb		19:16–22:34	3h 17m	AN ₊ bis M ₇		22:34	09:29	05:44	37m	06:21	36m	06:58	35m	07:34	9h 52m	17:26	35m	18:02	36m	18:39	37m	19:16	14h 05m	10h 26m					Fr, 10. Feb
Sa, 11. Feb		19:18–23:47	4h 29m	AN ₊ bis M ₇		23:47	09:43	05:43	36m	06:20	36m	06:57	35m	07:32	9h 55m	17:28	35m	18:04	36m	18:41	37m	19:18	14h 02m	10h 23m					Sa, 11. Feb
So, 12. Feb		19:19–01:03*	5h 44m																										

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

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-	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
	zone		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	22:02–02:49*	4h 46m	AN ₊ bis M ₇		01:39	09:02	04:33	44m	05:17	39m	05:57	35m	06:32	13h 29m	20:02	35m	20:38	40m	21:18	44m	22:02	10h 28m	6h 28m				Di, 11. Apr
Mi, 12. Apr	MESZ	22:04–03:44*	5h 40m	AN ₊ bis M ₇		02:49	09:59	04:31	44m	05:15	39m	05:55	35m	06:30	13h 33m	20:04	35m	20:39	40m	21:20	44m	22:04	10h 24m	6h 23m				Mi, 12. Apr
Do, 13. Apr	MESZ	22:07–04:25*	6h 18m	AN ₊ bis AN ₋	☾	03:44	11:11	04:28	44m	05:13	40m	05:53	35m	06:28	13h 36m	20:05	35m	20:41	40m	21:21	45m	22:07	10h 21m	6h 18m				Do, 13. Apr
Fr, 14. Apr	MESZ	22:09–04:22*	6h 13m	AN ₊ bis AN ₋		04:25	12:33	04:25	45m	05:10	40m	05:51	35m	06:26	13h 40m	20:07	35m	20:43	40m	21:23	45m	22:09	10h 17m	6h 13m				Fr, 14. Apr
Sa, 15. Apr	MESZ	22:11–04:19*	6h 08m	AN ₊ bis AN ₋		04:55	14:00	04:22	45m	05:08	40m	05:48	35m	06:24	13h 43m	20:08	35m	20:44	40m	21:25	46m	22:11	10h 14m	6h 08m				Sa, 15. Apr
So, 16. Apr	MESZ	22:14–04:17*	6h 03m	AN ₊ bis AN ₋		05:18	15:26	04:19	46m	05:06	40m	05:46	35m	06:22	13h 47m	20:10	36m	20:46	41m	21:27	46m	22:14	10h 10m	6h 03m				So, 16. Apr
Mo, 17. Apr	MESZ	22:16–04:14*	5h 57m	AN ₊ bis AN ₋		05:36	16:50	04:17	46m	05:03	41m	05:44	36m	06:20	13h 51m	20:11	36m	20:48	41m	21:29	46m	22:16	10h 06m	5h 57m				Mo, 17. Apr
Di, 18. Apr	MESZ	22:18–04:11*	5h 52m	AN ₊ bis AN ₋		05:52	18:12	04:14	46m	05:01	41m	05:42	36m	06:18	13h 54m	20:13	36m	20:49	41m	21:31	47m	22:18	10h 03m	5h 52m				Di, 18. Apr
Mi, 19. Apr	MESZ	22:21–04:08*	5h 47m	AN ₊ bis AN ₋		06:07	19:33	04:11	47m	04:58	41m	05:40	36m	06:16	13h 58m	20:14	36m	20:51	41m	21:33	47m	22:21	9h 59m	5h 47m				Mi, 19. Apr
Do, 20. Apr	MESZ	22:23–04:05*	5h 42m	AN ₊ bis AN ₋	☀	06:23	20:55	04:08	47m	04:56	41m	05:38	36m	06:14	14h 01m	20:16	36m	20:53	42m	21:35	48m	22:23	9h 56m	5h 42m				Do, 20. Apr
Fr, 21. Apr	MESZ	22:26–04:02*	5h 36m	AN ₊ bis AN ₋		06:41	22:15	04:05	48m	04:54	42m	05:36	36m	06:12	14h 05m	20:17	36m	20:54	42m	21:37	48m	22:26	9h 53m	5h 36m				Fr, 21. Apr
Sa, 22. Apr	MESZ	23:34–04:00*	4h 26m	M _\ bis AN ₋		07:04	23:34	04:02	48m	04:51	42m	05:34	36m	06:11	14h 08m	20:19	37m	20:56	42m	21:39	49m	22:28	9h 49m	5h 31m				Sa, 22. Apr
So, 23. Apr	MESZ	00:46*–03:57*	3h 10m	M _\ bis AN ₋		07:33	—:—	04:00	49m	04:49	42m	05:32	36m	06:09	14h 11m	20:21	37m	20:58	42m	21:41	49m	22:31	9h 46m	5h 26m				So, 23. Apr
Mo, 24. Apr	MESZ	01:49*–03:54*	2h 05m	M _\ bis AN ₋		08:10	00:46	03:57	49m	04:47	42m	05:30	37m	06:07	14h 15m	20:22	37m	20:59	43m	21:43	50m	22:33	9h 42m	5h 20m				Mo, 24. Apr
Di, 25. Apr	MESZ	02:39*–03:51*	1h 12m	M _\ bis AN ₋		08:58	01:49	03:54	50m	04:44	43m	05:28	37m	06:05	14h 18m	20:24	37m	21:01	43m	21:45	51m	22:36	9h 39m	5h 15m				Di, 25. Apr
Mi, 26. Apr	MESZ	03:16*–03:48*	31m	M _\ bis AN ₋		09:57	02:39	03:51	51m	04:42	43m	05:26	37m	06:03	14h 22m	20:25	37m	21:03	43m	21:47	51m	22:38	9h 36m	5h 09m				Mi, 26. Apr
Do, 27. Apr	MESZ	03:45*–03:45*	0m	M _\ bis AN ₋	☾	11:03	03:16	03:48	51m	04:40	43m	05:24	37m	06:01	14h 25m	20:27	37m	21:04	44m	21:49	52m	22:41	9h 32m	5h 03m				Do, 27. Apr
Fr, 28. Apr	MESZ	—:—:—:—	–	Mond stört		12:12	03:45	03:45	52m	04:37	44m	05:22	37m	05:59	14h 28m	20:28	38m	21:06	44m	21:51	53m	22:44	9h 29m	4h 58m				Fr, 28. Apr
Sa, 29. Apr	MESZ	—:—:—:—	–	Mond stört		13:22	04:06	03:42	53m	04:35	44m	05:20	37m	05:58	14h 32m	20:30	38m	21:08	44m	21:53	53m	22:46	9h 26m	4h 52m				Sa, 29. Apr
So, 30. Apr	MESZ	—:—:~:~:~	–	Mond stört		14:32	04:24	03:39	53m	04:33	44m	05:18	38m	05:56	14h 35m	20:31	38m	21:10	45m	21:55	54m	22:49	9h 22m	4h 46m				So, 30. Apr
Mo, 1. Mai	MESZ	—:~:~:~:~	–	Mond stört		15:42	04:38	03:36	54m	04:31	45m	05:16	38m	05:54	14h 38m	20:33	38m	21:11	45m	21:57	55m	22:52	9h 19m	4h 41m				Mo, 1. Mai
Di, 2. Mai	MESZ	—:~:~:~:~	–	Mond stört		16:53	04:51	03:33	55m	04:28	45m	05:14	38m	05:52	14h 41m	20:34	38m	21:13	45m	21:59	55m	22:55	9h 16m	4h 35m				Di, 2. Mai
Mi, 3. Mai	MESZ	—:~:~:~:~	–	Mond stört		18:06	05:04	03:30	55m	04:26	45m	05:12	38m	05:51	14h 45m	20:36	38m	21:15	46m	22:01	56m	22:58	9h 13m	4h 29m				Mi, 3. Mai
Do, 4. Mai	MESZ	—:~:~:~:~	–	Mond stört		19:21	05:18	03:27	56m	04:24	46m	05:10	38m	05:49	14h 48m	20:37	39m	21:16	46m	22:03	57m	23:00	9h 10m	4h 23m				Do, 4. Mai
Fr, 5. Mai	MESZ	—:~:~:~:~	–	Mond stört	☽	20:41	05:34	03:24	57m	04:22	46m	05:08	39m	05:47	14h 51m	20:39	39m	21:18	46m	22:05	58m	23:03	9h 06m	4h 17m				Fr, 5. Mai
Sa, 6. Mai	MESZ	—:~:~:~:~	–	Mond stört		22:03	05:55	03:21	58m	04:19	46m	05:06	39m	05:46	14h 54m	20:40	39m	21:20	47m	22:07	59m	23:06	9h 03m	4h 11m				Sa, 6. Mai
So, 7. Mai	MESZ	23:09–23:25	15m	AN ₊ bis M ₇		23:25	06:21	03:18	59m	04:17	47m	05:04	39m	05:44	14h 57m	20:42	39m	21:21	47m	22:09	1h 00m	23:09	9h 00m	4h 05m				So, 7. Mai
Mo, 8. Mai	MESZ	23:12–00:40*	1h 27m	AN ₊ bis M ₇		—:—	06:59	03:15	1h 00m	04:15	47m	05:03	39m	05:42	15h 00m	20:43	39m	21:23	48m	22:11	1h 01m	23:12	8h 57m	3h 59m				Mo, 8. Mai
Di, 9. Mai	MESZ	23:15–01:42*	2h 26m	AN ₊ bis M ₇		00:40	07:51	03:12	1h 01m	04:13	48m	05:01	39m	05:41	15h 03m	20:44	40m	21:25	48m	22:13	1h 02m	23:15	8h 54m	3h 52m				Di, 9. Mai
Mi, 10. Mai	MESZ	23:19–02:27*	3h 08m	AN ₊ bis M ₇		01:42	09:00	03:08	1h 02m	04:11	48m	04:59	40m	05:39	15h 06m	20:46	40m	21:26	48m	22:15	1h 03m	23:19	8h 51m	3h 46m				Mi, 10. Mai
Do, 11. Mai	MESZ	23:22–03:00*	3h 38m	AN ₊ bis M ₇		02:27	10:21	03:05	1h 03m	04:09	48m	04:57	40m	05:38	15h 09m	20:47	40m	21:28	49m	22:17	1h 04m	23:22	8h 48m	3h 40m				Do, 11. Mai
Fr, 12. Mai	MESZ	23:25–02:59*	3h 33m	AN ₊ bis AN ₋	☾	03:00	11:46	03:02	1h 04m	04:06	49m	04:56	40m	05:36	15h 12m	20:49	40m	21:30	49m	22:19	1h 05m	23:25	8h 46m	3h 33m				Fr, 12. Mai
Sa, 13. Mai	MESZ	23:28–02:55*	3h 27m	AN ₊ bis AN ₋		03:24	13:12	02:59	1h 05m	04:04	49m	04:54	40m	05:35	15h 15m	20:50	41m	21:31	50m	22:21	1h 06m	23:28	8h 43m	3h 27m				Sa, 13. Mai
So, 14. Mai	MESZ	23:31–02:52*	3h 20m	AN ₊ bis AN ₋		03:43	14:34	02:55	1h 06m	04:02	50m	04:52	40m	05:33	15h 18m	20:52	41m	21:33	50m	22:23	1h 08m	23:31	8h 40m	3h 20m				So, 14. Mai
Mo, 15. Mai	MESZ	23:35–02:49*	3h 14m	AN ₊ bis AN ₋		03:59	15:55	02:52	1h 08m	04:00	50m	04:51	41m	05:32	15h 20m	20:53	41m	21:34	50m	22:25	1h 09m	23:35	8h 37m	3h 14m				Mo, 15. Mai
Di, 16. Mai	MESZ	23:38–02:45*	3h 07m	AN ₊ bis AN ₋		04:14	17:14	02:49	1h 09m	03:58	50m	04:49	41m	05:31	15h 23m	20:54	41m	21:36	51m	22:27	1h 10m	23:38	8h 35m	3h 07m				Di, 16. Mai
Mi, 17. Mai	MESZ	23:42–02:42*	3h 00m	AN ₊ bis AN ₋		04:29	18:34	02:45	1h 10m	03:56	51m	04:48	41m	05:29	15h 26m	20:56	41m	21:38	51m	22:29	1h 12m	23:42	8h 32m	3h 00m				Mi, 17. Mai
Do, 18. Mai	MESZ	23:45–02:39*	2h 53m	AN ₊ bis AN ₋		04:46	19:53	02:42	1h 12m	03:54	51m	04:46	41m	05:28	15h 28m	20:57	42m	21:39	52m	22:31	1h 13m	23:45	8h 29m	2h 53m				Do, 18. Mai
Fr, 19. Mai	MESZ	23:49–02:35*	2h 46m	AN ₊ bis AN ₋	☀	05:06	21:12	02:39	1h 13m	03:53	52m	04:45	42m	05:27	15h 31m	20:58	42m	21:41	52m	22:33	1h 15m	23:49	8h 27m	2h 46m				Fr, 19. Mai
Sa, 20. Mai	MESZ	23:53–02:32*	2h 38m	AN ₊ bis AN ₋		05:31	22:27	02:35	1h 15m	03:51	52m	04:43	42m	05:26	15h 34m	21:00	42m	21:42	53m	22:35	1h 17m	23:53	8h 24m	2h 38m				Sa, 20. Mai
So, 21. Mai	MESZ	23:56–02:28*	2h 31m	AN ₊ bis AN ₋		06:05	23:35	02:32	1h 17m	03:49	53m	04:42	42m	05:24	15h 36m	21:01	42m	21:44	53m	22:37	1h 19m	23:56	8h 22m	2h 31m				So, 21. Mai
Mo, 22. Mai	MESZ	00:31*–02:24*	1h 53m	M _\ bis AN ₋		06:49	—:—	02:28	1h 19m	03:47	53m	04:41	42m	05:23	15h 38m	21:02	42m	21:45	54m	22:39	1h 21m	00:00*						

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

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

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

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

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