

Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Gotha 50.9489° N 10.7183° 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		04:04*–06:16*	2h 12m	M _\ bis AN _\		12:49	02:48	06:16	40m	06:56	41m	07:38	41m	08:19	8h 02m	16:21	41m	17:03	41m	17:44	40m	18:24	15h 57m	11h 51m				So, 1. Jan
Mo, 2. Jan		05:18*–06:16*	57m	M _\ bis AN _\		13:06	04:04	06:16	40m	06:56	41m	07:37	41m	08:19	8h 03m	16:22	41m	17:04	41m	17:45	40m	18:25	15h 56m	11h 51m				Mo, 2. Jan
Di, 3. Jan		—:—:—:—	–	Mond stört		13:29	05:18	06:16	39m	06:56	41m	07:37	41m	08:19	8h 04m	16:23	41m	17:05	41m	17:46	40m	18:26	15h 55m	11h 50m				Di, 3. Jan
Mi, 4. Jan		—:—:—:—	–	Mond stört		13:59	06:30	06:16	39m	06:56	41m	07:37	41m	08:19	8h 05m	16:24	41m	17:06	41m	17:47	39m	18:27	15h 54m	11h 49m				Mi, 4. Jan
Do, 5. Jan		—:—:—:—	–	Mond stört		14:39	07:36	06:16	39m	06:56	41m	07:37	41m	08:18	8h 07m	16:26	41m	17:07	41m	17:48	39m	18:28	15h 52m	11h 47m				Do, 5. Jan
Fr, 6. Jan		—:~:~:~:~	–	Mond stört		15:30	08:31	06:16	39m	06:56	41m	07:37	41m	08:18	8h 08m	16:27	41m	17:08	41m	17:49	39m	18:29	15h 50m	11h 46m				Fr, 6. Jan
Sa, 7. Jan		—:~:~:~:~	–	Mond stört	○	16:31	09:15	06:16	39m	06:56	41m	07:37	41m	08:18	8h 10m	16:28	41m	17:09	41m	17:50	39m	18:30	15h 49m	11h 45m				Sa, 7. Jan
So, 8. Jan		—:~:~:~:~	–	Mond stört		17:39	09:47	06:16	39m	06:55	40m	07:36	41m	08:17	8h 12m	16:29	41m	17:10	40m	17:51	39m	18:31	15h 47m	11h 44m				So, 8. Jan
Mo, 9. Jan		18:32–18:50	17m	AN ₊ bis M ₇		18:50	10:12	06:15	39m	06:55	40m	07:36	40m	08:17	8h 13m	16:31	40m	17:12	40m	17:52	39m	18:32	15h 45m	11h 42m				Mo, 9. Jan
Di, 10. Jan		18:33–20:01	1h 27m	AN ₊ bis M ₇		20:01	10:30	06:15	39m	06:55	40m	07:36	40m	08:16	8h 15m	16:32	40m	17:13	40m	17:54	39m	18:33	15h 43m	11h 41m				Di, 10. Jan
Mi, 11. Jan		18:35–21:12	2h 37m	AN ₊ bis M ₇		21:12	10:46	06:15	39m	06:54	40m	07:35	40m	08:16	8h 17m	16:33	40m	17:14	40m	17:55	39m	18:35	15h 41m	11h 39m				Mi, 11. Jan
Do, 12. Jan		18:36–22:22	3h 46m	AN ₊ bis M ₇		22:22	10:58	06:14	39m	06:54	40m	07:35	40m	08:15	8h 19m	16:35	40m	17:15	40m	17:56	39m	18:36	15h 39m	11h 38m				Do, 12. Jan
Fr, 13. Jan		18:37–23:34	4h 56m	AN ₊ bis M ₇		23:34	11:10	06:14	39m	06:53	40m	07:34	40m	08:14	8h 21m	16:36	40m	17:17	40m	17:57	39m	18:37	15h 37m	11h 36m				Fr, 13. Jan
Sa, 14. Jan		18:38–00:48*	6h 09m	AN ₊ bis M ₇		—:—	11:23	06:13	39m	06:53	40m	07:33	40m	08:14	8h 23m	16:38	40m	17:18	40m	17:59	39m	18:38	15h 35m	11h 34m				Sa, 14. Jan
So, 15. Jan		18:39–02:05*	7h 25m	AN ₊ bis M ₇	●	00:48	11:36	06:13	39m	06:52	40m	07:33	40m	08:13	8h 26m	16:39	40m	17:19	40m	18:00	39m	18:39	15h 32m	11h 33m				So, 15. Jan
Mo, 16. Jan		18:41–03:27*	8h 46m	AN ₊ bis M ₇		02:05	11:52	06:12	39m	06:52	40m	07:32	40m	08:12	8h 28m	16:41	40m	17:21	40m	18:01	39m	18:41	15h 30m	11h 31m				Mo, 16. Jan
Di, 17. Jan		18:42–04:53*	10h 11m	AN ₊ bis M ₇		03:27	12:13	06:12	39m	06:51	40m	07:31	39m	08:11	8h 31m	16:42	39m	17:22	40m	18:03	39m	18:42	15h 28m	11h 29m				Di, 17. Jan
Mi, 18. Jan		18:43–06:10*	11h 27m	AN ₊ bis AN _\		04:53	12:43	06:11	39m	06:50	40m	07:31	39m	08:10	8h 33m	16:44	39m	17:24	40m	18:04	39m	18:43	15h 25m	11h 27m				Mi, 18. Jan
Do, 19. Jan		18:44–06:10*	11h 25m	AN ₊ bis AN _\		06:17	13:27	06:10	39m	06:50	40m	07:30	39m	08:09	8h 36m	16:46	39m	17:25	40m	18:05	39m	18:44	15h 22m	11h 25m				Do, 19. Jan
Fr, 20. Jan		18:46–06:09*	11h 23m	AN ₊ bis AN _\		07:31	14:30	06:10	39m	06:49	39m	07:29	39m	08:08	8h 38m	16:47	39m	17:27	39m	18:07	39m	18:46	15h 20m	11h 23m				Fr, 20. Jan
Sa, 21. Jan		18:47–06:08*	11h 21m	AN ₊ bis AN _\	●	08:28	15:53	06:09	39m	06:48	39m	07:28	39m	08:07	8h 41m	16:49	39m	17:28	39m	18:08	39m	18:47	15h 17m	11h 21m				Sa, 21. Jan
So, 22. Jan		18:49–06:07*	11h 18m	AN ₊ bis AN _\		09:08	17:26	06:08	39m	06:47	39m	07:27	39m	08:06	8h 44m	16:50	39m	17:30	39m	18:09	39m	18:49	15h 14m	11h 18m				So, 22. Jan
Mo, 23. Jan		18:59–06:06*	11h 07m	M _\ bis AN _\		09:35	18:59	06:07	38m	06:46	39m	07:26	39m	08:05	8h 46m	16:52	39m	17:31	39m	18:11	39m	18:50	15h 11m	11h 16m				Mo, 23. Jan
Di, 24. Jan		20:29–06:06*	9h 36m	M _\ bis AN _\		09:55	20:29	06:06	38m	06:45	39m	07:25	38m	08:04	8h 49m	16:54	38m	17:33	39m	18:12	38m	18:51	15h 08m	11h 14m				Di, 24. Jan
Mi, 25. Jan		21:54–06:05*	8h 10m	M _\ bis AN _\		10:12	21:54	06:06	38m	06:44	39m	07:24	38m	08:03	8h 52m	16:55	38m	17:34	39m	18:14	38m	18:53	15h 06m	11h 11m				Mi, 25. Jan
Do, 26. Jan		23:16–06:04*	6h 47m	M _\ bis AN _\		10:26	23:16	06:05	38m	06:43	39m	07:23	38m	08:02	8h 55m	16:57	38m	17:36	39m	18:15	38m	18:54	15h 03m	11h 09m				Do, 26. Jan
Fr, 27. Jan		00:35*–06:03*	5h 27m	M _\ bis AN _\		10:39	—:—	06:04	38m	06:42	39m	07:22	38m	08:00	8h 58m	16:59	38m	17:38	39m	18:17	38m	18:56	14h 59m	11h 06m				Fr, 27. Jan
Sa, 28. Jan		01:52*–06:01*	4h 09m	M _\ bis AN _\	●	10:54	00:35	06:03	38m	06:41	39m	07:20	38m	07:59	9h 01m	17:01	38m	17:39	39m	18:18	38m	18:57	14h 56m	11h 04m				Sa, 28. Jan
So, 29. Jan		03:08*–06:00*	2h 51m	M _\ bis AN _\		11:11	01:52	06:01	38m	06:40	39m	07:19	38m	07:58	9h 04m	17:02	38m	17:41	39m	18:20	38m	18:59	14h 53m	11h 01m				So, 29. Jan
Mo, 30. Jan		04:22*–05:59*	1h 37m	M _\ bis AN _\		11:32	03:08	06:00	38m	06:39	39m	07:18	38m	07:56	9h 08m	17:04	38m	17:42	39m	18:21	38m	19:00	14h 50m	10h 59m				Mo, 30. Jan
Di, 31. Jan		05:30*–05:58*	28m	M _\ bis AN _\		12:00	04:22	05:59	38m	06:38	38m	07:17	38m	07:55	9h 11m	17:06	38m	17:44	38m	18:23	38m	19:02	14h 47m	10h 56m				Di, 31. Jan
Mi, 1. Feb		—:~:~:~:~	–	Mond stört		12:36	05:30	05:58	38m	06:36	38m	07:15	37m	07:53	9h 14m	17:08	37m	17:46	38m	18:24	38m	19:03	14h 44m	10h 53m				Mi, 1. Feb
Do, 2. Feb		—:~:~:~:~	–	Mond stört		13:24	06:28	05:57	38m	06:35	38m	07:14	37m	07:52	9h 17m	17:09	37m	17:47	38m	18:26	38m	19:05	14h 40m	10h 50m				Do, 2. Feb
Fr, 3. Feb		—:~:~:~:~	–	Mond stört		14:22	07:15	05:55	38m	06:34	38m	07:13	37m	07:50	9h 21m	17:11	37m	17:49	38m	18:28	38m	19:06	14h 37m	10h 48m				Fr, 3. Feb
Sa, 4. Feb		—:~:~:~:~	–	Mond stört		15:29	07:50	05:54	38m	06:33	38m	07:11	37m	07:49	9h 24m	17:13	37m	17:51	38m	18:29	38m	19:08	14h 33m	10h 45m				Sa, 4. Feb
So, 5. Feb		—:~:~:~:~	–	Mond stört	○	16:39	08:17	05:53	38m	06:31	38m	07:10	37m	07:47	9h 27m	17:15	37m	17:52	38m	18:31	38m	19:09	14h 30m	10h 42m				So, 5. Feb
Mo, 6. Feb		—:~:~:~:~	–	Mond stört		17:51	08:37	05:51	38m	06:30	38m	07:08	37m	07:45	9h 31m	17:17	37m	17:54	38m	18:32	38m	19:11	14h 27m	10h 39m				Mo, 6. Feb
Di, 7. Feb		—:~:~:~:~	–	Mond stört		19:02	08:53	05:50	38m	06:28	38m	07:07	37m	07:44	9h 34m	17:18	37m	17:56	38m	18:34	38m	19:12	14h 23m	10h 36m				Di, 7. Feb
Mi, 8. Feb		19:14–20:13	59m	AN ₊ bis M ₇		20:13	09:06	05:49	38m	06:27	38m	07:05	36m	07:42	9h 38m	17:20	37m	17:57	38m	18:35	38m	19:14	14h 20m	10h 33m				Mi, 8. Feb
Do, 9. Feb		19:15–21:24	2h 08m	AN ₊ bis M ₇		21:24	09:18	05:47	38m	06:25	38m	07:03	36m	07:40	9h 41m	17:22	36m	17:59	38m	18:37	38m	19:15	14h 16m	10h 30m				Do, 9. Feb
Fr, 10. Feb		19:17–22:36	3h 19m	AN ₊ bis M ₇		22:36	09:30	05:46	38m	06:24	38m	07:02	36m	07:39	9h 45m	17:24	36m	18:01	38m	18:39	38m	19:17	14h 13m	10h 26m				Fr, 10. Feb
Sa, 11. Feb		19:19–23:51	4h 32m	AN ₊ bis M ₇		23:51	09:42	05:44	38m	06:22	38m	07:00	36m	07:37	9h 48m	17:26	36m	18:02	38m	18:40	38m	19:19	14h 09m	10h 23m				Sa, 11. Feb
So, 12. Feb		19:20–01:10*	5h 49m	AN ₊ bis M ₇		—:—	09:56	05:42	38m	06:20	37m	06:58	36m	07:35	9h 52m	17:27	36m	18:04	38m	18:42	38m	19:20						

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

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

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

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

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

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