

Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Euskirchen 50.6608° N 6.7858° 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		04:19*–06:31*	2h 12m	M _\ bis AN _\		13:05	03:04	06:31	39m	07:11	41m	07:52	41m	08:33	8h 04m	16:38	41m	17:20	41m	18:01	39m	18:40	15h 55m	11h 50m				So, 1. Jan
Mo, 2. Jan		05:33*–06:31*	57m	M _\ bis AN _\		13:24	04:19	06:31	39m	07:11	41m	07:52	41m	08:33	8h 05m	16:39	41m	17:20	41m	18:02	39m	18:41	15h 53m	11h 50m				Mo, 2. Jan
Di, 3. Jan		—:—:—:—	–	Mond stört		13:47	05:33	06:31	39m	07:11	40m	07:52	41m	08:33	8h 07m	16:40	41m	17:21	40m	18:02	39m	18:42	15h 52m	11h 49m				Di, 3. Jan
Mi, 4. Jan		—:—:—:—	–	Mond stört		14:17	06:45	06:31	39m	07:11	40m	07:52	41m	08:33	8h 08m	16:41	41m	17:23	40m	18:03	39m	18:43	15h 51m	11h 48m				Mi, 4. Jan
Do, 5. Jan		—:—:—:—	–	Mond stört		14:57	07:50	06:31	39m	07:11	40m	07:52	40m	08:33	8h 09m	16:43	40m	17:24	40m	18:04	39m	18:44	15h 49m	11h 47m				Do, 5. Jan
Fr, 6. Jan		—:~:~:~:~	–	Mond stört		15:48	08:46	06:31	39m	07:11	40m	07:52	40m	08:33	8h 11m	16:44	40m	17:25	40m	18:06	39m	18:45	15h 48m	11h 45m				Fr, 6. Jan
Sa, 7. Jan		—:~:~:~:~	–	Mond stört	○	16:49	09:29	06:31	39m	07:11	40m	07:51	40m	08:32	8h 12m	16:45	40m	17:26	40m	18:07	39m	18:46	15h 46m	11h 44m				Sa, 7. Jan
So, 8. Jan		—:~:~:~:~	–	Mond stört		17:57	10:02	06:31	39m	07:10	40m	07:51	40m	08:32	8h 14m	16:46	40m	17:27	40m	18:08	39m	18:47	15h 44m	11h 43m				So, 8. Jan
Mo, 9. Jan		18:48–19:08	19m	AN ₊ bis M ₇		19:08	10:26	06:31	39m	07:10	40m	07:51	40m	08:31	8h 16m	16:48	40m	17:28	40m	18:09	39m	18:48	15h 43m	11h 41m				Mo, 9. Jan
Di, 10. Jan		18:50–20:18	1h 28m	AN ₊ bis M ₇		20:18	10:45	06:30	39m	07:10	40m	07:50	40m	08:31	8h 18m	16:49	40m	17:29	40m	18:10	39m	18:50	15h 41m	11h 40m				Di, 10. Jan
Mi, 11. Jan		18:51–21:29	2h 38m	AN ₊ bis M ₇		21:29	11:01	06:30	39m	07:09	40m	07:50	40m	08:30	8h 20m	16:50	40m	17:31	40m	18:11	39m	18:51	15h 39m	11h 39m				Mi, 11. Jan
Do, 12. Jan		18:52–22:39	3h 47m	AN ₊ bis M ₇		22:39	11:14	06:30	39m	07:09	40m	07:49	40m	08:30	8h 22m	16:52	40m	17:32	40m	18:12	39m	18:52	15h 37m	11h 37m				Do, 12. Jan
Fr, 13. Jan		18:53–23:50	4h 57m	AN ₊ bis M ₇		23:50	11:26	06:29	39m	07:09	40m	07:49	40m	08:29	8h 24m	16:53	40m	17:33	40m	18:14	39m	18:53	15h 35m	11h 35m				Fr, 13. Jan
Sa, 14. Jan		18:54–01:04*	6h 09m	AN ₊ bis M ₇		—:—	11:39	06:29	39m	07:08	40m	07:48	39m	08:28	8h 26m	16:55	40m	17:35	40m	18:15	39m	18:54	15h 32m	11h 34m				Sa, 14. Jan
So, 15. Jan		18:55–02:21*	7h 25m	AN ₊ bis M ₇	●	01:04	11:52	06:28	39m	07:07	40m	07:48	39m	08:27	8h 28m	16:56	39m	17:36	40m	18:16	39m	18:55	15h 30m	11h 32m				So, 15. Jan
Mo, 16. Jan		18:57–03:43*	8h 46m	AN ₊ bis M ₇		02:21	12:09	06:28	39m	07:07	40m	07:47	39m	08:27	8h 31m	16:58	39m	17:37	40m	18:18	39m	18:57	15h 28m	11h 30m				Mo, 16. Jan
Di, 17. Jan		18:58–05:08*	10h 10m	AN ₊ bis M ₇		03:43	12:30	06:27	39m	07:06	39m	07:46	39m	08:26	8h 33m	16:59	39m	17:39	39m	18:19	39m	18:58	15h 25m	11h 28m				Di, 17. Jan
Mi, 18. Jan		18:59–06:26*	11h 26m	AN ₊ bis AN _\		05:08	13:01	06:27	39m	07:06	39m	07:45	39m	08:25	8h 35m	17:01	39m	17:40	39m	18:20	39m	18:59	15h 23m	11h 26m				Mi, 18. Jan
Do, 19. Jan		19:01–06:25*	11h 24m	AN ₊ bis AN _\		06:32	13:45	06:26	38m	07:05	39m	07:45	39m	08:24	8h 38m	17:02	39m	17:42	39m	18:22	39m	19:01	15h 20m	11h 24m				Do, 19. Jan
Fr, 20. Jan		19:02–06:24*	11h 22m	AN ₊ bis AN _\		07:46	14:49	06:25	38m	07:04	39m	07:44	39m	08:23	8h 40m	17:04	39m	17:43	39m	18:23	38m	19:02	15h 17m	11h 22m				Fr, 20. Jan
Sa, 21. Jan		19:03–06:24*	11h 20m	AN ₊ bis AN _\	●	08:43	16:11	06:24	38m	07:03	39m	07:43	39m	08:22	8h 43m	17:06	39m	17:45	39m	18:24	38m	19:03	15h 15m	11h 20m				Sa, 21. Jan
So, 22. Jan		19:05–06:23*	11h 18m	AN ₊ bis AN _\		09:22	17:44	06:24	38m	07:02	39m	07:42	38m	08:21	8h 46m	17:07	38m	17:46	39m	18:26	38m	19:05	15h 12m	11h 18m				So, 22. Jan
Mo, 23. Jan		19:17–06:22*	11h 04m	M _\ bis AN _\		09:50	19:17	06:23	38m	07:02	39m	07:41	38m	08:20	8h 49m	17:09	38m	17:48	39m	18:27	38m	19:06	15h 09m	11h 15m				Mo, 23. Jan
Di, 24. Jan		20:46–06:21*	9h 34m	M _\ bis AN _\		10:11	20:46	06:22	38m	07:01	39m	07:40	38m	08:19	8h 51m	17:11	38m	17:49	39m	18:29	38m	19:07	15h 06m	11h 13m				Di, 24. Jan
Mi, 25. Jan		22:11–06:20*	8h 08m	M _\ bis AN _\		10:27	22:11	06:21	38m	07:00	39m	07:39	38m	08:17	8h 54m	17:12	38m	17:51	39m	18:30	38m	19:09	15h 03m	11h 11m				Mi, 25. Jan
Do, 26. Jan		23:32–06:19*	6h 46m	M _\ bis AN _\		10:42	23:32	06:20	38m	06:59	39m	07:38	38m	08:16	8h 57m	17:14	38m	17:52	39m	18:32	38m	19:10	15h 00m	11h 08m				Do, 26. Jan
Fr, 27. Jan		00:51*–06:18*	5h 27m	M _\ bis AN _\		10:56	—:—	06:19	38m	06:58	39m	07:37	38m	08:15	9h 00m	17:16	38m	17:54	39m	18:33	38m	19:12	14h 57m	11h 06m				Fr, 27. Jan
Sa, 28. Jan		02:08*–06:17*	4h 09m	M _\ bis AN _\	●	11:11	00:51	06:18	38m	06:57	38m	07:35	38m	08:14	9h 03m	17:17	38m	17:56	38m	18:35	38m	19:13	14h 54m	11h 03m				Sa, 28. Jan
So, 29. Jan		03:24*–06:16*	2h 52m	M _\ bis AN _\		11:28	02:08	06:17	38m	06:55	38m	07:34	38m	08:12	9h 06m	17:19	38m	17:57	38m	18:36	38m	19:15	14h 51m	11h 01m				So, 29. Jan
Mo, 30. Jan		04:37*–06:15*	1h 37m	M _\ bis AN _\		11:50	03:24	06:16	38m	06:54	38m	07:33	37m	08:11	9h 09m	17:21	37m	17:59	38m	18:38	38m	19:16	14h 48m	10h 58m				Mo, 30. Jan
Di, 31. Jan		05:44*–06:14*	29m	M _\ bis AN _\		12:18	04:37	06:15	38m	06:53	38m	07:32	37m	08:09	9h 13m	17:23	37m	18:00	38m	18:39	38m	19:17	14h 45m	10h 56m				Di, 31. Jan
Mi, 1. Feb		—:~:~:~:~	–	Mond stört		12:54	05:44	06:14	38m	06:52	38m	07:30	37m	08:08	9h 16m	17:24	37m	18:02	38m	18:41	38m	19:19	14h 42m	10h 53m				Mi, 1. Feb
Do, 2. Feb		—:~:~:~:~	–	Mond stört		13:42	06:42	06:12	38m	06:51	38m	07:29	37m	08:07	9h 19m	17:26	37m	18:04	38m	18:42	38m	19:20	14h 38m	10h 50m				Do, 2. Feb
Fr, 3. Feb		—:~:~:~:~	–	Mond stört		14:40	07:29	06:11	38m	06:49	38m	07:28	37m	08:05	9h 22m	17:28	37m	18:05	38m	18:44	38m	19:22	14h 35m	10h 47m				Fr, 3. Feb
Sa, 4. Feb		—:~:~:~:~	–	Mond stört		15:47	08:05	06:10	38m	06:48	38m	07:26	37m	08:03	9h 26m	17:30	37m	18:07	38m	18:45	38m	19:23	14h 32m	10h 44m				Sa, 4. Feb
So, 5. Feb		—:~:~:~:~	–	Mond stört	○	16:57	08:31	06:08	38m	06:47	38m	07:25	37m	08:02	9h 29m	17:31	37m	18:08	38m	18:47	38m	19:25	14h 28m	10h 42m				So, 5. Feb
Mo, 6. Feb		—:~:~:~:~	–	Mond stört		18:08	08:52	06:07	38m	06:45	38m	07:23	36m	08:00	9h 32m	17:33	37m	18:10	38m	18:48	38m	19:27	14h 25m	10h 39m				Mo, 6. Feb
Di, 7. Feb		—:~:~:~:~	–	Mond stört		19:20	09:08	06:06	38m	06:44	38m	07:22	36m	07:59	9h 36m	17:35	36m	18:12	38m	18:50	38m	19:28	14h 22m	10h 36m				Di, 7. Feb
Mi, 8. Feb		19:30–20:30	1h 00m	AN ₊ bis M ₇		20:30	09:21	06:04	38m	06:42	38m	07:20	36m	07:57	9h 39m	17:37	36m	18:13	38m	18:52	38m	19:30	14h 18m	10h 33m				Mi, 8. Feb
Do, 9. Feb		19:31–21:41	2h 09m	AN ₊ bis M ₇		21:41	09:34	06:03	37m	06:41	37m	07:19	36m	07:55	9h 43m	17:38	36m	18:15	38m	18:53	38m	19:31	14h 15m	10h 30m				Do, 9. Feb
Fr, 10. Feb		19:33–22:53	3h 19m	AN ₊ bis M ₇		22:53	09:46	06:01	37m	06:39	37m	07:17	36m	07:54	9h 46m	17:40	36m	18:17	37m	18:55	38m	19:33	14h 11m	10h 26m				Fr, 10. Feb
Sa, 11. Feb		19:34–00:07*	4h 32m	AN ₊ bis M ₇		—:—	09:58	06:00	37m	06:38	37m	07:15	36m	07:52	9h 50m	17:42	36m	18:18	37m	18:56	37m	19:34	14h 08m	10h 23m				Sa, 11. Feb
So, 12. Feb		19:36–01:25*	5h 49m	AN ₊ bis M ₇		00:07	10:13	05:58	37m	06:36	37m	07:14	36m	07:50	9h 53m	17:44	36m	18:20	37m	18:58	37m	19:36						

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

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

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

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

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