

Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Solingen 51.1714° N 7.0833° 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), M_l

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

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

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

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

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

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

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