

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Günzburg 48.4544° N 10.2814° 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	
2024	Zeit-	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne				Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024		
	zone		Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt			
Mo, 1. Jan		18:30–22:13	3h 42m	AN ₊ bis M ₇		22:13	11:19	06:14	38m	06:52	39m	07:31	38m	08:10	8h 24m	16:34	38m	17:13	39m	17:52	38m	18:30	15h 35m	11h 44m					Mo, 1. Jan
Di, 2. Jan		18:31–23:19	4h 48m	AN ₊ bis M ₇		23:19	11:32	06:14	37m	06:52	38m	07:31	38m	08:10	8h 25m	16:35	38m	17:14	38m	17:53	37m	18:31	15h 34m	11h 43m					Di, 2. Jan
Mi, 3. Jan		18:31–00:25*	5h 53m	AN ₊ bis M ₇		—:—	11:45	06:14	37m	06:52	38m	07:31	38m	08:10	8h 26m	16:36	38m	17:15	38m	17:53	37m	18:31	15h 33m	11h 42m					Mi, 3. Jan
Do, 4. Jan		18:32–01:34*	7h 01m	AN ₊ bis M ₇	☾	00:25	11:58	06:14	37m	06:52	38m	07:31	38m	08:09	8h 27m	16:37	38m	17:16	38m	17:54	37m	18:32	15h 32m	11h 41m					Do, 4. Jan
Fr, 5. Jan		18:33–02:45*	8h 11m	AN ₊ bis M ₇		01:34	12:13	06:14	37m	06:52	38m	07:31	38m	08:09	8h 28m	16:38	38m	17:17	38m	17:55	37m	18:33	15h 31m	11h 40m					Fr, 5. Jan
Sa, 6. Jan		18:34–04:00*	9h 25m	AN ₊ bis M ₇		02:45	12:30	06:14	37m	06:52	38m	07:31	38m	08:09	8h 29m	16:39	38m	17:18	38m	17:56	37m	18:34	15h 29m	11h 39m					Sa, 6. Jan
So, 7. Jan		18:35–05:18*	10h 42m	AN ₊ bis M ₇		04:00	12:52	06:14	37m	06:52	38m	07:30	38m	08:09	8h 31m	16:40	38m	17:19	38m	17:57	37m	18:35	15h 28m	11h 38m					So, 7. Jan
Mo, 8. Jan		18:36–06:14*	11h 37m	AN ₊ bis AN ₋		05:18	13:22	06:14	37m	06:52	38m	07:30	38m	08:09	8h 32m	16:41	38m	17:20	38m	17:58	37m	18:36	15h 26m	11h 37m					Mo, 8. Jan
Di, 9. Jan		18:37–06:13*	11h 36m	AN ₊ bis AN ₋		06:35	14:05	06:14	37m	06:51	38m	07:30	38m	08:08	8h 34m	16:43	38m	17:21	38m	18:00	37m	18:37	15h 25m	11h 36m					Di, 9. Jan
Mi, 10. Jan		18:38–06:13*	11h 34m	AN ₊ bis AN ₋		07:45	15:05	06:13	37m	06:51	38m	07:30	38m	08:08	8h 36m	16:44	38m	17:22	38m	18:01	37m	18:38	15h 23m	11h 34m					Mi, 10. Jan
Do, 11. Jan		18:39–06:13*	11h 33m	AN ₊ bis AN ₋	☽	08:41	16:21	06:13	37m	06:51	38m	07:29	38m	08:07	8h 37m	16:45	38m	17:23	38m	18:02	37m	18:39	15h 21m	11h 33m					Do, 11. Jan
Fr, 12. Jan		18:41–06:12*	11h 31m	AN ₊ bis AN ₋		09:23	17:47	06:13	37m	06:50	38m	07:29	37m	08:07	8h 39m	16:46	37m	17:24	38m	18:03	37m	18:41	15h 19m	11h 31m					Fr, 12. Jan
Sa, 13. Jan		19:17–06:12*	10h 55m	M _\ bis AN ₋		09:53	19:17	06:12	37m	06:50	38m	07:28	37m	08:06	8h 41m	16:48	37m	17:26	38m	18:04	37m	18:42	15h 17m	11h 30m					Sa, 13. Jan
So, 14. Jan		20:44–06:12*	9h 27m	M _\ bis AN ₋		10:16	20:44	06:12	37m	06:50	38m	07:28	37m	08:06	8h 43m	16:49	37m	17:27	38m	18:05	37m	18:43	15h 15m	11h 28m					So, 14. Jan
Mo, 15. Jan		22:08–06:11*	8h 03m	M _\ bis AN ₋		10:35	22:08	06:12	37m	06:49	38m	07:27	37m	08:05	8h 45m	16:51	37m	17:28	38m	18:06	37m	18:44	15h 13m	11h 27m					Mo, 15. Jan
Di, 16. Jan		23:30–06:11*	6h 41m	M _\ bis AN ₋		10:52	23:30	06:11	37m	06:49	38m	07:27	37m	08:04	8h 47m	16:52	37m	17:30	38m	18:08	37m	18:45	15h 11m	11h 25m					Di, 16. Jan
Mi, 17. Jan		00:50*–06:10*	5h 20m	M _\ bis AN ₋		11:08	—:—	06:11	37m	06:48	38m	07:26	37m	08:04	8h 49m	16:53	37m	17:31	38m	18:09	37m	18:46	15h 09m	11h 23m					Mi, 17. Jan
Do, 18. Jan		02:10*–06:10*	3h 59m	M _\ bis AN ₋	☽	11:25	00:50	06:10	37m	06:48	37m	07:25	37m	08:03	8h 52m	16:55	37m	17:32	37m	18:10	37m	18:48	15h 07m	11h 22m					Do, 18. Jan
Fr, 19. Jan		03:29*–06:09*	2h 39m	M _\ bis AN ₋		11:45	02:10	06:10	37m	06:47	37m	07:25	37m	08:02	8h 54m	16:56	37m	17:34	37m	18:11	37m	18:49	15h 04m	11h 20m					Fr, 19. Jan
Sa, 20. Jan		04:47*–06:08*	1h 21m	M _\ bis AN ₋		12:10	03:29	06:09	37m	06:46	37m	07:24	37m	08:01	8h 56m	16:58	37m	17:35	37m	18:13	37m	18:50	15h 02m	11h 18m					Sa, 20. Jan
So, 21. Jan		05:58*–06:08*	10m	M _\ bis AN ₋		12:42	04:47	06:08	37m	06:45	37m	07:23	37m	08:00	8h 59m	16:59	37m	17:36	37m	18:14	37m	18:51	15h 00m	11h 16m					So, 21. Jan
Mo, 22. Jan		—:—:—:—:—	–	Mond stört		13:24	05:58	06:08	37m	06:45	37m	07:22	36m	07:59	9h 01m	17:01	36m	17:38	37m	18:15	37m	18:52	14h 57m	11h 14m					Mo, 22. Jan
Di, 23. Jan		—:—:—:—:—	–	Mond stört		14:18	06:58	06:07	37m	06:44	37m	07:22	36m	07:58	9h 04m	17:02	36m	17:39	37m	18:17	37m	18:54	14h 54m	11h 12m					Di, 23. Jan
Mi, 24. Jan		—:—:—:—:—	–	Mond stört		15:22	07:46	06:06	37m	06:43	37m	07:21	36m	07:57	9h 06m	17:04	36m	17:41	37m	18:18	37m	18:55	14h 52m	11h 10m					Mi, 24. Jan
Do, 25. Jan		—:~:~:~:~:~	–	Mond stört	☽	16:31	08:21	06:05	36m	06:42	37m	07:20	36m	07:56	9h 09m	17:05	36m	17:42	37m	18:19	36m	18:56	14h 49m	11h 08m					Do, 25. Jan
Fr, 26. Jan		—:~:~:~:~:~	–	Mond stört		17:42	08:48	06:04	36m	06:41	37m	07:19	36m	07:55	9h 11m	17:07	36m	17:43	37m	18:21	36m	18:58	14h 47m	11h 05m					Fr, 26. Jan
Sa, 27. Jan		—:~:~:~:~:~	–	Mond stört		18:52	09:08	06:04	36m	06:40	37m	07:18	36m	07:54	9h 14m	17:09	36m	17:45	37m	18:22	36m	18:59	14h 44m	11h 03m					Sa, 27. Jan
So, 28. Jan		19:00–20:00	1h 00m	AN ₊ bis M ₇		20:00	09:25	06:03	36m	06:39	37m	07:17	36m	07:53	9h 17m	17:10	36m	17:46	37m	18:24	36m	19:00	14h 41m	11h 01m					So, 28. Jan
Mo, 29. Jan		19:02–21:07	2h 05m	AN ₊ bis M ₇		21:07	09:38	06:02	36m	06:38	37m	07:16	36m	07:52	9h 20m	17:12	36m	17:48	37m	18:25	36m	19:02	14h 38m	10h 58m					Mo, 29. Jan
Di, 30. Jan		19:03–22:13	3h 09m	AN ₊ bis M ₇		22:13	09:51	06:01	36m	06:37	37m	07:14	35m	07:50	9h 22m	17:13	35m	17:49	37m	18:26	36m	19:03	14h 35m	10h 56m					Di, 30. Jan
Mi, 31. Jan		19:04–23:20	4h 15m	AN ₊ bis M ₇		23:20	10:04	06:00	36m	06:36	36m	07:13	35m	07:49	9h 25m	17:15	35m	17:51	36m	18:28	36m	19:04	14h 32m	10h 54m					Mi, 31. Jan
Do, 1. Feb		19:06–00:28*	5h 22m	AN ₊ bis M ₇		—:—	10:17	05:59	36m	06:35	36m	07:12	35m	07:48	9h 28m	17:17	35m	17:52	36m	18:29	36m	19:06	14h 29m	10h 51m					Do, 1. Feb
Fr, 2. Feb		19:07–01:40*	6h 32m	AN ₊ bis M ₇		00:28	10:33	05:57	36m	06:34	36m	07:11	35m	07:46	9h 31m	17:18	35m	17:54	36m	18:31	36m	19:07	14h 26m	10h 49m					Fr, 2. Feb
Sa, 3. Feb		19:09–02:55*	7h 46m	AN ₊ bis M ₇	☽	01:40	10:52	05:56	36m	06:33	36m	07:10	35m	07:45	9h 34m	17:20	35m	17:55	36m	18:32	36m	19:09	14h 23m	10h 46m					Sa, 3. Feb
So, 4. Feb		19:10–04:11*	9h 01m	AN ₊ bis M ₇		02:55	11:17	05:55	36m	06:32	36m	07:08	35m	07:44	9h 37m	17:21	35m	17:57	36m	18:33	36m	19:10	14h 20m	10h 43m					So, 4. Feb
Mo, 5. Feb		19:11–05:24*	10h 12m	AN ₊ bis M ₇		04:11	11:53	05:54	36m	06:30	36m	07:07	35m	07:42	9h 40m	17:23	35m	17:58	36m	18:35	36m	19:11	14h 17m	10h 41m					Mo, 5. Feb
Di, 6. Feb		19:13–05:51*	10h 38m	AN ₊ bis AN ₋		05:24	12:43	05:53	36m	06:29	36m	07:06	35m	07:41	9h 43m	17:25	35m	18:00	36m	18:36	36m	19:13	14h 14m	10h 38m					Di, 6. Feb
Mi, 7. Feb		19:14–05:50*	10h 35m	AN ₊ bis AN ₋		06:26	13:50	05:51	36m	06:28	36m	07:04	35m	07:39	9h 46m	17:26	35m	18:01	36m	18:38	36m	19:14	14h 11m	10h 35m					Mi, 7. Feb
Do, 8. Feb		19:16–05:49*	10h 33m	AN ₊ bis AN ₋		07:14	15:12	05:50	36m	06:26	36m	07:03	34m	07:38	9h 50m	17:28	35m	18:03	36m	18:39	36m	19:16	14h 08m	10h 33m					Do, 8. Feb
Fr, 9. Feb		19:17–05:47*	10h 30m	AN ₊ bis AN ₋	☽	07:50	16:42	05:49	36m	06:25	36m	07:01	34m	07:36	9h 53m	17:30	34m	18:04	36m	18:41	36m	19:17	14h 05m	10h 30m					Fr, 9. Feb
Sa, 10. Feb		19:19–05:46*	10h 27m	AN ₊ bis AN ₋		08:17	18:13	05:47	36m	06:24	36m	07:00	34m	07:35	9h 56m	17:31	34m	18:06	36m	18:42	36m	19:19	14h 01m	10h 27m					Sa, 10. Feb
So, 11. Feb		19:42–05:44*	10h 02m	M _\ bis AN ₋		08:38	19:42	05:46	36m	06:22	36m	06:58	34m	07:33	9h 59m	17:33	34m												

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2024	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne				Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024	
			Δt		Ph.	\uparrow	\downarrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\uparrow	Δt	\downarrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Di, 20. Feb		—:—:—:—	—	Mond stört		13:12	05:46	05:32	36m	06:08	35m	06:44	33m	07:18	10h 29m	17:47	33m	18:21	35m	18:57	36m	19:33	13h 28m	9h 56m				Di, 20. Feb
Mi, 21. Feb		—:—:—:—	—	Mond stört		14:20	06:24	05:30	36m	06:06	35m	06:42	33m	07:16	10h 33m	17:49	33m	18:23	35m	18:59	36m	19:35	13h 25m	9h 53m				Mi, 21. Feb
Do, 22. Feb		—:—:—:—	—	Mond stört		15:31	06:53	05:28	36m	06:05	35m	06:40	33m	07:14	10h 36m	17:51	33m	18:24	35m	19:00	36m	19:36	13h 21m	9h 50m				Do, 22. Feb
Fr, 23. Feb		—:~:~:~:~	—	Mond stört		16:41	07:14	05:27	36m	06:03	35m	06:38	33m	07:12	10h 39m	17:52	33m	18:26	35m	19:02	36m	19:38	13h 18m	9h 47m				Fr, 23. Feb
Sa, 24. Feb		—:~:~:~:~	—	Mond stört	☉	17:50	07:31	05:25	36m	06:01	35m	06:37	33m	07:10	10h 43m	17:54	33m	18:27	35m	19:03	36m	19:39	13h 14m	9h 43m				Sa, 24. Feb
So, 25. Feb		—:~:~:~:~	—	Mond stört		18:57	07:46	05:23	36m	05:59	35m	06:35	33m	07:08	10h 46m	17:55	33m	18:29	35m	19:05	36m	19:41	13h 11m	9h 40m				So, 25. Feb
Mo, 26. Feb		19:42–20:03	20m	AN ₊ bis M ₇		20:03	07:59	05:21	36m	05:57	35m	06:33	33m	07:07	10h 50m	17:57	33m	18:30	35m	19:06	36m	19:42	13h 07m	9h 36m				Mo, 26. Feb
Di, 27. Feb		19:44–21:10	1h 25m	AN ₊ bis M ₇		21:10	08:11	05:19	36m	05:56	35m	06:31	33m	07:05	10h 53m	17:58	33m	18:32	35m	19:08	36m	19:44	13h 04m	9h 33m				Di, 27. Feb
Mi, 28. Feb		19:45–22:17	2h 31m	AN ₊ bis M ₇		22:17	08:24	05:17	36m	05:54	35m	06:29	33m	07:03	10h 57m	18:00	33m	18:34	35m	19:09	36m	19:45	13h 00m	9h 30m				Mi, 28. Feb
Do, 29. Feb		19:47–23:27	3h 40m	AN ₊ bis M ₇		23:27	08:38	05:16	36m	05:52	35m	06:27	33m	07:01	11h 00m	18:02	33m	18:35	35m	19:11	36m	19:47	12h 57m	9h 26m				Do, 29. Feb
Fr, 1. Mär		19:49–00:40*	4h 51m	AN ₊ bis M ₇		—:—	08:56	05:14	36m	05:50	35m	06:25	33m	06:59	11h 04m	18:03	33m	18:37	35m	19:12	36m	19:49	12h 53m	9h 23m				Fr, 1. Mär
Sa, 2. Mär		19:50–01:54*	6h 04m	AN ₊ bis M ₇		00:40	09:18	05:12	36m	05:48	35m	06:24	33m	06:57	11h 07m	18:05	33m	18:38	35m	19:14	36m	19:50	12h 50m	9h 19m				Sa, 2. Mär
So, 3. Mär		19:52–03:07*	7h 15m	AN ₊ bis M ₇	☾	01:54	09:48	05:10	36m	05:46	35m	06:22	33m	06:55	11h 11m	18:06	33m	18:40	35m	19:15	36m	19:52	12h 46m	9h 15m				So, 3. Mär
Mo, 4. Mär		19:53–04:12*	8h 18m	AN ₊ bis M ₇		03:07	10:29	05:08	36m	05:44	35m	06:20	33m	06:53	11h 14m	18:08	33m	18:41	35m	19:17	36m	19:53	12h 43m	9h 12m				Mo, 4. Mär
Di, 5. Mär		19:55–05:04*	9h 08m	AN ₊ bis AN _–		04:12	11:27	05:06	36m	05:42	35m	06:18	33m	06:51	11h 18m	18:09	33m	18:43	35m	19:18	36m	19:55	12h 39m	9h 08m				Di, 5. Mär
Mi, 6. Mär		19:56–05:02*	9h 05m	AN ₊ bis AN _–		05:05	12:40	05:04	36m	05:40	35m	06:16	33m	06:49	11h 21m	18:11	33m	18:44	35m	19:20	36m	19:56	12h 36m	9h 05m				Mi, 6. Mär
Do, 7. Mär		19:58–04:59*	9h 01m	AN ₊ bis AN _–		05:45	14:05	05:02	36m	05:38	35m	06:14	33m	06:47	11h 25m	18:12	33m	18:46	35m	19:21	36m	19:58	12h 32m	9h 01m				Do, 7. Mär
Fr, 8. Mär		20:00–04:57*	8h 57m	AN ₊ bis AN _–		06:15	15:35	04:59	36m	05:36	35m	06:12	33m	06:45	11h 29m	18:14	33m	18:47	35m	19:23	36m	20:00	12h 28m	8h 57m				Fr, 8. Mär
Sa, 9. Mär		20:01–04:55*	8h 53m	AN ₊ bis AN _–		06:38	17:05	04:57	36m	05:34	35m	06:10	33m	06:43	11h 32m	18:15	33m	18:49	35m	19:24	36m	20:01	12h 25m	8h 53m				Sa, 9. Mär
So, 10. Mär		20:03–04:53*	8h 50m	AN ₊ bis AN _–	☾	06:57	18:34	04:55	36m	05:32	35m	06:08	33m	06:41	11h 36m	18:17	33m	18:50	35m	19:26	37m	20:03	12h 21m	8h 50m				So, 10. Mär
Mo, 11. Mär		20:05–04:51*	8h 46m	AN ₊ bis AN _–		07:15	20:02	04:53	37m	05:30	35m	06:06	33m	06:39	11h 39m	18:19	33m	18:52	35m	19:27	37m	20:05	12h 18m	8h 46m				Mo, 11. Mär
Di, 12. Mär		21:28–04:49*	7h 20m	M _– bis AN _–		07:32	21:28	04:51	37m	05:28	35m	06:04	33m	06:37	11h 43m	18:20	33m	18:53	35m	19:29	37m	20:06	12h 14m	8h 42m				Di, 12. Mär
Mi, 13. Mär		22:54–04:47*	5h 52m	M _– bis AN _–		07:51	22:54	04:49	37m	05:26	35m	06:02	33m	06:35	11h 46m	18:22	33m	18:55	35m	19:31	37m	20:08	12h 11m	8h 38m				Mi, 13. Mär
Do, 14. Mär		00:19*–04:44*	4h 25m	M _– bis AN _–		08:13	—:—	04:47	37m	05:24	35m	06:00	33m	06:33	11h 50m	18:23	33m	18:56	35m	19:32	37m	20:10	12h 07m	8h 34m				Do, 14. Mär
Fr, 15. Mär		01:38*–04:42*	3h 03m	M _– bis AN _–		08:41	00:19	04:44	37m	05:22	35m	05:58	33m	06:31	11h 53m	18:25	33m	18:58	35m	19:34	37m	20:11	12h 03m	8h 30m				Fr, 15. Mär
Sa, 16. Mär		02:48*–04:40*	1h 51m	M _– bis AN _–		09:17	01:38	04:42	37m	05:20	35m	05:55	33m	06:29	11h 57m	18:26	33m	18:59	35m	19:35	37m	20:13	12h 00m	8h 26m				Sa, 16. Mär
So, 17. Mär		03:44*–04:38*	53m	M _– bis AN _–	☾	10:05	02:48	04:40	37m	05:17	35m	05:53	33m	06:26	12h 01m	18:28	33m	19:01	36m	19:37	37m	20:15	11h 56m	8h 22m				So, 17. Mär
Mo, 18. Mär		04:27*–04:35*	8m	M _– bis AN _–		11:03	03:44	04:38	37m	05:15	35m	05:51	33m	06:24	12h 04m	18:29	33m	19:02	36m	19:38	37m	20:16	11h 53m	8h 18m				Mo, 18. Mär
Di, 19. Mär		—:~:~:~:~	—	Mond stört		12:10	04:27	04:35	37m	05:13	36m	05:49	33m	06:22	12h 08m	18:31	33m	19:04	36m	19:40	38m	20:18	11h 49m	8h 14m				Di, 19. Mär
Mi, 20. Mär		—:~:~:~:~	—	Mond stört		13:20	04:58	04:33	38m	05:11	36m	05:47	33m	06:20	12h 11m	18:32	33m	19:05	36m	19:42	38m	20:20	11h 46m	8h 10m				Mi, 20. Mär
Do, 21. Mär		—:~:~:~:~	—	Mond stört		14:31	05:21	04:31	38m	05:09	36m	05:45	33m	06:18	12h 15m	18:34	33m	19:07	36m	19:43	38m	20:22	11h 42m	8h 06m				Do, 21. Mär
Fr, 22. Mär		—:~:~:~:~	—	Mond stört		15:40	05:39	04:28	38m	05:07	36m	05:43	33m	06:16	12h 18m	18:35	33m	19:08	36m	19:45	38m	20:23	11h 39m	8h 02m				Fr, 22. Mär
Sa, 23. Mär		—:~:~:~:~	—	Mond stört		16:47	05:54	04:26	38m	05:04	36m	05:41	33m	06:14	12h 22m	18:36	33m	19:10	36m	19:46	38m	20:25	11h 35m	7h 58m				Sa, 23. Mär
So, 24. Mär		—:~:~:~:~	—	Mond stört		17:54	06:07	04:24	38m	05:02	36m	05:39	33m	06:12	12h 26m	18:38	33m	19:11	36m	19:48	38m	20:27	11h 31m	7h 54m				So, 24. Mär
Mo, 25. Mär		—:~:~:~:~	—	Mond stört	☉	19:00	06:19	04:21	38m	05:00	36m	05:37	33m	06:10	12h 29m	18:39	33m	19:13	36m	19:50	39m	20:29	11h 28m	7h 50m				Mo, 25. Mär
Di, 26. Mär		—:~:~:~:~	—	Mond stört		20:08	06:32	04:19	38m	04:58	36m	05:34	33m	06:08	12h 33m	18:41	33m	19:14	36m	19:51	39m	20:30	11h 24m	7h 45m				Di, 26. Mär
Mi, 27. Mär		20:32–21:18	45m	AN ₊ bis M ₇		21:18	06:46	04:16	39m	04:56	36m	05:32	33m	06:06	12h 36m	18:42	33m	19:16	36m	19:53	39m	20:32	11h 21m	7h 41m				Mi, 27. Mär
Do, 28. Mär		20:34–22:30	1h 55m	AN ₊ bis M ₇		22:30	07:02	04:14	39m	04:53	36m	05:30	33m	06:04	12h 40m	18:44	33m	19:17	37m	19:54	39m	20:34	11h 17m	7h 37m				Do, 28. Mär
Fr, 29. Mär		20:36–23:43	3h 07m	AN ₊ bis M ₇		23:43	07:22	04:11	39m	04:51	36m	05:28	33m	06:02	12h 43m	18:45	33m	19:19	37m	19:56	39m	20:36	11h 14m	7h 33m				Fr, 29. Mär
Sa, 30. Mär		20:38–00:56*	4h 18m	AN ₊ bis M ₇		—:—	07:49	04:09	39m	04:49	37m	05:26	33m	05:59	12h 47m	18:47	33m	19:21	37m	19:58	40m	20:38	11h 10m	7h 28m				Sa, 30. Mär
So, 31. Mär	MESZ	21:40–03:03*	5h 23m	AN ₊ bis M ₇		01:56	09:25	05:07	39m	05:47	37m	06:24	33m	06:57	12h 50m	19:48	33m	20:22	37m	20:59	40m	21:40	11h 07m	7h 24m				So, 31. Mär
Mo, 1. Apr	MESZ	21:42–03:59*	6h 17m	AN ₊ bis M ₇		03:03	10:16	05:04	40m	05:44	37m	06:22	33m	06:55	12h 54m	19:50	33m	20:24	37m	21:01	40m	21:42	11h 03m	7h 19m				Mo, 1. Apr
Di, 2. Apr	MESZ	21:44–04:42*	6h 58m	AN ₊ bis M ₇	☾	03:59	11:21	05:02	40m	05:42	37m	06:19	33m	06:53	12h 57m	19:51												

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
2024	Zeitzone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024		
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Mi, 10. Apr	MESZ	22:49–04:39*	5h 49m	M _\ bis AN _\		07:12	22:49	04:41	42m	05:24	38m	06:03	34m	06:37	13h 25m	20:03	34m	20:38	38m	21:17	43m	22:00	10h 32m	6h 38m				Mi, 10. Apr
Do, 11. Apr	MESZ	00:14*–04:36*	4h 21m	M _\ bis AN _\		07:38	—:—	04:39	42m	05:22	38m	06:00	34m	06:35	13h 29m	20:04	34m	20:39	39m	21:18	43m	22:02	10h 28m	6h 34m				Do, 11. Apr
Fr, 12. Apr	MESZ	01:32*–04:33*	3h 01m	M _\ bis AN _\		08:11	00:14	04:36	43m	05:19	39m	05:58	34m	06:33	13h 32m	20:06	34m	20:41	39m	21:20	43m	22:04	10h 25m	6h 29m				Fr, 12. Apr
Sa, 13. Apr	MESZ	02:36*–04:31*	1h 55m	M _\ bis AN _\		08:55	01:32	04:33	43m	05:17	39m	05:56	34m	06:31	13h 36m	20:07	35m	20:42	39m	21:22	44m	22:06	10h 21m	6h 24m				Sa, 13. Apr
So, 14. Apr	MESZ	03:24*–04:28*	1h 03m	M _\ bis AN _\		09:51	02:36	04:31	44m	05:15	39m	05:54	34m	06:29	13h 39m	20:09	35m	20:44	39m	21:24	44m	22:08	10h 18m	6h 19m				So, 14. Apr
Mo, 15. Apr	MESZ	04:00*–04:25*	25m	M _\ bis AN _\	☾	10:57	03:24	04:28	44m	05:12	39m	05:52	35m	06:27	13h 43m	20:10	35m	20:46	39m	21:26	44m	22:10	10h 14m	6h 15m				Mo, 15. Apr
Di, 16. Apr	MESZ	—:—:—:—	–	Mond stört		12:07	04:00	04:25	44m	05:10	39m	05:50	35m	06:25	13h 46m	20:12	35m	20:47	40m	21:27	45m	22:13	10h 11m	6h 10m				Di, 16. Apr
Mi, 17. Apr	MESZ	—:—:—:—	–	Mond stört		13:19	04:26	04:23	45m	05:08	40m	05:48	35m	06:23	13h 49m	20:13	35m	20:49	40m	21:29	45m	22:15	10h 08m	6h 05m				Mi, 17. Apr
Do, 18. Apr	MESZ	—:—:~:~:~	–	Mond stört		14:29	04:46	04:20	45m	05:06	40m	05:46	35m	06:21	13h 53m	20:15	35m	20:50	40m	21:31	45m	22:17	10h 04m	6h 00m				Do, 18. Apr
Fr, 19. Apr	MESZ	—:~:~:~:~	–	Mond stört		15:37	05:02	04:17	45m	05:03	40m	05:44	35m	06:20	13h 56m	20:16	35m	20:52	40m	21:33	46m	22:19	10h 01m	5h 55m				Fr, 19. Apr
Sa, 20. Apr	MESZ	—:~:~:~:~	–	Mond stört		16:43	05:15	04:15	46m	05:01	40m	05:42	35m	06:18	13h 59m	20:18	35m	20:54	41m	21:35	46m	22:22	9h 58m	5h 50m				Sa, 20. Apr
So, 21. Apr	MESZ	—:~:~:~:~	–	Mond stört		17:50	05:28	04:12	46m	04:59	41m	05:40	35m	06:16	14h 03m	20:19	36m	20:55	41m	21:37	47m	22:24	9h 54m	5h 45m				So, 21. Apr
Mo, 22. Apr	MESZ	—:~:~:~:~	–	Mond stört		18:57	05:40	04:09	47m	04:57	41m	05:38	36m	06:14	14h 06m	20:21	36m	20:57	41m	21:38	47m	22:26	9h 51m	5h 40m				Mo, 22. Apr
Di, 23. Apr	MESZ	—:~:~:~:~	–	Mond stört		20:06	05:53	04:07	47m	04:54	41m	05:36	36m	06:12	14h 09m	20:22	36m	20:58	41m	21:40	48m	22:29	9h 48m	5h 35m				Di, 23. Apr
Mi, 24. Apr	MESZ	—:~:~:~:~	–	Mond stört	☾	21:18	06:09	04:04	48m	04:52	41m	05:34	36m	06:10	14h 13m	20:23	36m	21:00	42m	21:42	48m	22:31	9h 45m	5h 30m				Mi, 24. Apr
Do, 25. Apr	MESZ	—:~:~:~:~	–	Mond stört		22:33	06:28	04:01	48m	04:50	42m	05:32	36m	06:09	14h 16m	20:25	36m	21:02	42m	21:44	49m	22:33	9h 41m	5h 24m				Do, 25. Apr
Fr, 26. Apr	MESZ	22:36–23:47	1h 10m	AN ₊ bis M ₇		23:47	06:52	03:58	49m	04:48	42m	05:30	36m	06:07	14h 19m	20:26	36m	21:03	42m	21:46	49m	22:36	9h 38m	5h 19m				Fr, 26. Apr
Sa, 27. Apr	MESZ	22:38–00:56*	2h 17m	AN ₊ bis M ₇		—:—	07:26	03:56	49m	04:45	42m	05:28	36m	06:05	14h 22m	20:28	37m	21:05	42m	21:48	50m	22:38	9h 35m	5h 14m				Sa, 27. Apr
So, 28. Apr	MESZ	22:41–01:55*	3h 14m	AN ₊ bis M ₇		00:56	08:12	03:53	50m	04:43	42m	05:26	36m	06:03	14h 26m	20:29	37m	21:06	43m	21:50	51m	22:41	9h 32m	5h 09m				So, 28. Apr
Mo, 29. Apr	MESZ	22:43–02:42*	3h 58m	AN ₊ bis M ₇		01:55	09:12	03:50	51m	04:41	43m	05:24	37m	06:02	14h 29m	20:31	37m	21:08	43m	21:52	51m	22:43	9h 29m	5h 03m				Mo, 29. Apr
Di, 30. Apr	MESZ	22:46–03:17*	4h 31m	AN ₊ bis M ₇		02:42	10:26	03:47	51m	04:39	43m	05:23	37m	06:00	14h 32m	20:32	37m	21:10	43m	21:54	52m	22:46	9h 25m	4h 58m				Di, 30. Apr
Mi, 1. Mai	MESZ	22:48–03:42*	4h 53m	AN ₊ bis AN _\	☾	03:17	11:47	03:45	52m	04:37	43m	05:21	37m	05:58	14h 35m	20:34	37m	21:11	44m	21:56	52m	22:48	9h 22m	4h 53m				Mi, 1. Mai
Do, 2. Mai	MESZ	22:51–03:39*	4h 47m	AN ₊ bis AN _\		03:43	13:11	03:42	52m	04:35	44m	05:19	37m	05:56	14h 38m	20:35	37m	21:13	44m	21:57	53m	22:51	9h 19m	4h 47m				Do, 2. Mai
Fr, 3. Mai	MESZ	22:54–03:36*	4h 42m	AN ₊ bis AN _\		04:04	14:35	03:39	53m	04:33	44m	05:17	37m	05:55	14h 41m	20:36	38m	21:15	44m	21:59	54m	22:54	9h 16m	4h 42m				Fr, 3. Mai
Sa, 4. Mai	MESZ	22:56–03:33*	4h 37m	AN ₊ bis AN _\		04:22	15:59	03:36	54m	04:30	44m	05:15	38m	05:53	14h 44m	20:38	38m	21:16	45m	22:01	55m	22:56	9h 13m	4h 37m				Sa, 4. Mai
So, 5. Mai	MESZ	22:59–03:30*	4h 31m	AN ₊ bis AN _\		04:38	17:23	03:33	54m	04:28	45m	05:13	38m	05:52	14h 47m	20:39	38m	21:18	45m	22:03	55m	22:59	9h 10m	4h 31m				So, 5. Mai
Mo, 6. Mai	MESZ	23:02–03:28*	4h 25m	AN ₊ bis AN _\		04:55	18:49	03:30	55m	04:26	45m	05:12	38m	05:50	14h 50m	20:41	38m	21:19	45m	22:05	56m	23:02	9h 07m	4h 25m				Mo, 6. Mai
Di, 7. Mai	MESZ	23:04–03:25*	4h 20m	AN ₊ bis AN _\		05:13	20:16	03:28	56m	04:24	45m	05:10	38m	05:49	14h 53m	20:42	38m	21:21	46m	22:07	57m	23:04	9h 04m	4h 20m				Di, 7. Mai
Mi, 8. Mai	MESZ	23:07–03:22*	4h 14m	AN ₊ bis AN _\	☾	05:36	21:43	03:25	57m	04:22	46m	05:08	38m	05:47	14h 56m	20:44	38m	21:22	46m	22:09	58m	23:07	9h 02m	4h 14m				Mi, 8. Mai
Do, 9. Mai	MESZ	23:10–03:19*	4h 09m	AN ₊ bis AN _\		06:05	23:06	03:22	58m	04:20	46m	05:07	38m	05:46	14h 59m	20:45	39m	21:24	46m	22:11	58m	23:10	8h 59m	4h 09m				Do, 9. Mai
Fr, 10. Mai	MESZ	00:18*–03:16*	2h 57m	M _\ bis AN _\		06:45	—:—	03:19	58m	04:18	46m	05:05	39m	05:44	15h 02m	20:46	39m	21:26	47m	22:13	59m	23:13	8h 56m	4h 03m				Fr, 10. Mai
Sa, 11. Mai	MESZ	01:16*–03:13*	1h 57m	M _\ bis AN _\		07:36	00:18	03:16	59m	04:16	47m	05:03	39m	05:43	15h 04m	20:48	39m	21:27	47m	22:15	1h 00m	23:16	8h 53m	3h 57m				Sa, 11. Mai
So, 12. Mai	MESZ	01:58*–03:11*	1h 12m	M _\ bis AN _\		08:40	01:16	03:13	1h 00m	04:14	47m	05:02	39m	05:41	15h 07m	20:49	39m	21:29	47m	22:17	1h 01m	23:18	8h 50m	3h 52m				So, 12. Mai
Mo, 13. Mai	MESZ	02:28*–03:08*	39m	M _\ bis AN _\		09:50	01:58	03:11	1h 01m	04:12	47m	05:00	39m	05:40	15h 10m	20:50	39m	21:30	48m	22:19	1h 02m	23:21	8h 48m	3h 46m				Mo, 13. Mai
Di, 14. Mai	MESZ	02:50*–03:05*	14m	M _\ bis AN _\		11:03	02:28	03:08	1h 02m	04:10	48m	04:59	39m	05:39	15h 13m	20:52	40m	21:32	48m	22:21	1h 03m	23:24	8h 45m	3h 40m				Di, 14. Mai
Mi, 15. Mai	MESZ	—:~:~:~:~	–	Mond stört	☾	12:15	02:50	03:05	1h 03m	04:08	48m	04:57	40m	05:37	15h 15m	20:53	40m	21:33	49m	22:22	1h 04m	23:27	8h 43m	3h 34m				Mi, 15. Mai
Do, 16. Mai	MESZ	—:~:~:~:~	–	Mond stört		13:24	03:08	03:02	1h 04m	04:07	49m	04:56	40m	05:36	15h 18m	20:54	40m	21:35	49m	22:24	1h 05m	23:30	8h 40m	3h 28m				Do, 16. Mai
Fr, 17. Mai	MESZ	—:~:~:~:~	–	Mond stört		14:31	03:22	02:59	1h 05m	04:05	49m	04:54	40m	05:35	15h 20m	20:56	40m	21:36	49m	22:26	1h 06m	23:33	8h 38m	3h 22m				Fr, 17. Mai
Sa, 18. Mai	MESZ	—:~:~:~:~	–	Mond stört		15:37	03:35	02:56	1h 06m	04:03	49m	04:53	40m	05:34	15h 23m	20:57	40m	21:38	50m	22:28	1h 08m	23:36	8h 35m	3h 17m				Sa, 18. Mai
So, 19. Mai	MESZ	—:~:~:~:~	–	Mond stört		16:44	03:47	02:53	1h 08m	04:01	50m	04:52	40m	05:32	15h 25m	20:58	41m	21:39	50m	22:30	1h 09m	23:39	8h 33m	3h 11m				So, 19. Mai
Mo, 20. Mai	MESZ	—:~:~:~:~	–	Mond stört		17:53	04:00	02:50	1h 09m	04:00	50m	04:50	41m	05:31	15h 28m	20:59	41m	21:41	51m	22:32	1h 10m	23:42	8h 30m	3h 05m				Mo, 20. Mai
Di, 21. Mai	MESZ	—:~:~:~:~	–	Mond stört		19:04	04:15	02:47	1h 10m	03:58	51m	04:49	41m	05:30	15h 30m	21:01	41m	21:42	51m	22:33	1h 11m	23:45	8h 28m	2h 59m				Di, 21. Mai
Mi, 22. Mai	MESZ	—:~:~:~:~	–	Mond stört		20:18	04:32	02:44	1h 11m	03:56	51m																	

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
2024	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024		
		Δt			Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Do, 30. Mai	MESZ	00:14*–02:17*	2h 03m	AN ₊ bis AN _–	☉	02:10	12:22	02:21	1h 24m	03:45	54m	04:39	42m	05:22	15h 48m	21:11	43m	21:54	54m	22:48	1h 25m	00:14*	8h 10m	2h 03m				Do, 30. Mai
Fr, 31. Mai	MESZ	00:18*–02:14*	1h 56m	AN ₊ bis AN _–		02:28	13:44	02:17	1h 25m	03:43	54m	04:38	43m	05:21	15h 50m	21:12	43m	21:55	55m	22:50	1h 27m	00:18*	8h 09m	1h 56m				Fr, 31. Mai
Sa, 1. Jun	MESZ	00:21*–02:11*	1h 50m	AN ₊ bis AN _–		02:44	15:05	02:14	1h 27m	03:42	55m	04:37	43m	05:21	15h 51m	21:13	43m	21:56	55m	22:51	1h 29m	00:21*	8h 07m	1h 50m				Sa, 1. Jun
So, 2. Jun	MESZ	00:25*–02:08*	1h 43m	AN ₊ bis AN _–		03:00	16:27	02:11	1h 29m	03:41	55m	04:37	43m	05:20	15h 53m	21:13	43m	21:57	55m	22:53	1h 31m	00:25*	8h 05m	1h 43m				So, 2. Jun
Mo, 3. Jun	MESZ	00:28*–02:05*	1h 36m	AN ₊ bis AN _–		03:17	17:51	02:08	1h 31m	03:40	55m	04:36	43m	05:19	15h 54m	21:14	43m	21:58	56m	22:54	1h 34m	00:28*	8h 04m	1h 36m				Mo, 3. Jun
Di, 4. Jun	MESZ	00:32*–02:02*	1h 30m	AN ₊ bis AN _–		03:37	19:16	02:05	1h 34m	03:39	56m	04:35	43m	05:19	15h 56m	21:15	43m	21:59	56m	22:55	1h 36m	00:32*	8h 03m	1h 30m				Di, 4. Jun
Mi, 5. Jun	MESZ	00:35*–01:59*	1h 23m	AN ₊ bis AN _–		04:03	20:40	02:02	1h 36m	03:38	56m	04:35	43m	05:18	15h 57m	21:16	43m	22:00	56m	22:57	1h 38m	00:35*	8h 01m	1h 23m				Mi, 5. Jun
Do, 6. Jun	MESZ	00:39*–01:55*	1h 16m	AN ₊ bis AN _–	●	04:37	21:58	01:59	1h 38m	03:37	56m	04:34	43m	05:18	15h 58m	21:17	44m	22:01	56m	22:58	1h 41m	00:39*	8h 00m	1h 16m				Do, 6. Jun
Fr, 7. Jun	MESZ	00:43*–01:52*	1h 09m	AN ₊ bis AN _–		05:23	23:02	01:55	1h 41m	03:36	56m	04:33	44m	05:17	16h 00m	21:18	44m	22:02	57m	22:59	1h 43m	00:43*	7h 59m	1h 09m				Fr, 7. Jun
Sa, 8. Jun	MESZ	00:47*–01:48*	1h 01m	AN ₊ bis AN _–		06:22	23:51	01:52	1h 43m	03:36	57m	04:33	44m	05:17	16h 01m	21:18	44m	22:03	57m	23:00	1h 46m	00:47*	7h 58m	1h 01m				Sa, 8. Jun
So, 9. Jun	MESZ	00:51*–01:45*	53m	AN ₊ bis AN _–		07:31	—:—	01:48	1h 46m	03:35	57m	04:32	44m	05:17	16h 02m	21:19	44m	22:03	57m	23:01	1h 49m	00:51*	7h 57m	53m				So, 9. Jun
Mo, 10. Jun	MESZ	00:55*–01:41*	45m	AN ₊ bis AN _–		08:44	00:26	01:45	1h 49m	03:34	57m	04:32	44m	05:17	16h 03m	21:20	44m	22:04	57m	23:02	1h 52m	00:55*	7h 56m	45m				Mo, 10. Jun
Di, 11. Jun	MESZ	01:12*–01:37*	24m	M _\ bis AN _–		09:58	00:52	01:41	1h 52m	03:34	57m	04:32	44m	05:16	16h 04m	21:20	44m	22:05	58m	23:03	1h 56m	01:00*	7h 55m	36m				Di, 11. Jun
Mi, 12. Jun	MESZ	01:27*–01:32*	4m	M _\ bis AN _–		11:09	01:12	01:37	1h 56m	03:33	58m	04:32	44m	05:16	16h 04m	21:21	44m	22:06	58m	23:04	2h 01m	01:05*	7h 55m	26m				Mi, 12. Jun
Do, 13. Jun	MESZ	—:—:—:—	–	Mond stört		12:17	01:27	01:32	2h 01m	03:33	58m	04:31	44m	05:16	16h 05m	21:21	44m	22:06	58m	23:05	2h 08m	01:13*	7h 54m	11m				Do, 13. Jun
Fr, 14. Jun	MESZ			Astr. MD	☾	13:24	01:41	01:24	2h 08m	03:33	58m	04:31	44m	05:16	16h 06m	21:22	44m	22:07	58m	23:05	—:—	7h 53m			01:53*–03:32*	1h 38m	M _\ bis ND _–	Fr, 14. Jun
Sa, 15. Jun	MESZ			Astr. MD		14:30	01:53	—:—		03:32	58m	04:31	44m	05:16	16h 06m	21:22	44m	22:07	58m	23:06	—:—	7h 53m			02:06*–03:32*	1h 26m	M _\ bis ND _–	Sa, 15. Jun
So, 16. Jun	MESZ			Astr. MD		15:37	02:06	—:—		03:32	58m	04:31	44m	05:16	16h 06m	21:23	44m	22:08	58m	23:07	—:—	7h 53m			02:20*–03:32*	1h 12m	M _\ bis ND _–	So, 16. Jun
Mo, 17. Jun	MESZ			Astr. MD		16:47	02:20	—:—		03:32	58m	04:31	44m	05:16	16h 07m	21:23	44m	22:08	58m	23:07	—:—	7h 52m			02:36*–03:32*	56m	M _\ bis ND _–	Mo, 17. Jun
Di, 18. Jun	MESZ			Astr. MD		17:59	02:36	—:—		03:32	58m	04:31	44m	05:16	16h 07m	21:23	44m	22:08	58m	23:07	—:—	7h 52m			02:57*–03:32*	35m	M _\ bis ND _–	Di, 18. Jun
Mi, 19. Jun	MESZ			Astr. MD		19:14	02:57	—:—		03:32	58m	04:31	44m	05:16	16h 07m	21:24	44m	22:09	59m	23:08	—:—	7h 52m			03:24*–03:32*	8m	M _\ bis ND _–	Mi, 19. Jun
Do, 20. Jun	MESZ			Astr. MD		20:29	03:24	—:—		03:32	59m	04:31	44m	05:16	16h 07m	21:24	44m	22:09	59m	23:08	—:—	7h 52m			—:—:—:—:—	–	Mond stört	Do, 20. Jun
Fr, 21. Jun	MESZ			Astr. MD		21:38	04:02	—:—		03:32	59m	04:31	44m	05:16	16h 07m	21:24	44m	22:09	59m	23:08	—:—	7h 52m			—:—:—:—:—	–	Mond stört	Fr, 21. Jun
Sa, 22. Jun	MESZ			Astr. MD	○	22:35	04:54	—:—		03:33	59m	04:32	44m	05:17	16h 07m	21:24	44m	22:09	58m	23:08	—:—	7h 52m			—:—:—:—:—	–	Mond stört	Sa, 22. Jun
So, 23. Jun	MESZ			Astr. MD		23:18	06:02	—:—		03:33	58m	04:32	44m	05:17	16h 07m	21:24	44m	22:09	58m	23:08	—:—	7h 52m			23:08–23:18	9m	ND ₊ bis M ₇	So, 23. Jun
Mo, 24. Jun	MESZ			Astr. MD		23:50	07:21	—:—		03:33	58m	04:32	44m	05:17	16h 07m	21:25	44m	22:09	58m	23:08	—:—	7h 53m			23:08–23:50	42m	ND ₊ bis M ₇	Mo, 24. Jun
Di, 25. Jun	MESZ			Astr. MD		—:—	08:45	—:—		03:34	58m	04:33	44m	05:18	16h 06m	21:25	44m	22:09	58m	23:08	—:—	7h 53m			23:08–00:14*	1h 06m	ND ₊ bis M ₇	Di, 25. Jun
Mi, 26. Jun	MESZ			Astr. MD		00:14	10:10	—:—		03:34	58m	04:33	44m	05:18	16h 06m	21:25	44m	22:09	58m	23:08	—:—	7h 53m			23:08–00:34*	1h 25m	ND ₊ bis M ₇	Mi, 26. Jun
Do, 27. Jun	MESZ	—:—:—:—	–	Mond stört		00:34	11:33	—:—		03:35	58m	04:34	44m	05:18	16h 05m	21:24	44m	22:09	58m	23:08	2h 06m	01:14*	7h 54m	15m				Do, 27. Jun
Fr, 28. Jun	MESZ	—:—:—:—	–	Mond stört	☾	00:50	12:54	01:29	2h 06m	03:36	58m	04:34	44m	05:19	16h 05m	21:24	44m	22:09	58m	23:07	2h 00m	01:08*	7h 55m	28m				Fr, 28. Jun
Sa, 29. Jun	MESZ	01:03*–01:23*	19m	AN ₊ bis M ₇		01:06	14:15	01:36	2h 00m	03:37	58m	04:35	44m	05:20	16h 04m	21:24	44m	22:09	58m	23:07	1h 55m	01:03*	7h 55m	38m				Sa, 29. Jun
So, 30. Jun	MESZ	00:59*–01:41*	42m	AN ₊ bis M ₇		01:23	15:36	01:42	1h 55m	03:37	58m	04:36	44m	05:20	16h 03m	21:24	44m	22:08	57m	23:06	1h 52m	00:59*	7h 56m	47m				So, 30. Jun
Mo, 1. Jul	MESZ	00:55*–01:50*	55m	AN ₊ bis AN _–		01:41	16:59	01:46	1h 52m	03:38	57m	04:36	44m	05:21	16h 02m	21:24	44m	22:08	57m	23:06	1h 49m	00:55*	7h 57m	55m				Mo, 1. Jul
Di, 2. Jul	MESZ	00:51*–01:54*	1h 03m	AN ₊ bis AN _–		02:04	18:22	01:50	1h 49m	03:39	57m	04:37	44m	05:21	16h 02m	21:23	44m	22:08	57m	23:05	1h 46m	00:51*	7h 58m	1h 03m				Di, 2. Jul
Mi, 3. Jul	MESZ	00:48*–01:58*	1h 10m	AN ₊ bis AN _–		02:34	19:41	01:54	1h 46m	03:40	57m	04:38	44m	05:22	16h 01m	21:23	44m	22:07	57m	23:04	1h 43m	00:48*	7h 59m	1h 10m				Mi, 3. Jul
Do, 4. Jul	MESZ	00:44*–02:02*	1h 17m	AN ₊ bis AN _–		03:15	20:49	01:58	1h 43m	03:41	57m	04:39	44m	05:23	15h 59m	21:23	44m	22:07	56m	23:04	1h 40m	00:44*	8h 00m	1h 17m				Do, 4. Jul
Fr, 5. Jul	MESZ	00:41*–02:05*	1h 24m	AN ₊ bis AN _–		04:08	21:44	02:02	1h 40m	03:43	56m	04:39	44m	05:24	15h 58m	21:22	43m	22:06	56m	23:03	1h 38m	00:41*	8h 02m	1h 24m				Fr, 5. Jul
Sa, 6. Jul	MESZ	00:38*–02:09*	1h 31m	AN ₊ bis AN _–	●	05:13	22:24	02:05	1h 38m	03:44	56m	04:40	43m	05:24	15h 57m	21:22	43m	22:06	56m	23:02	1h 35m	00:38*	8h 03m	1h 31m				Sa, 6. Jul
So, 7. Jul	MESZ	00:35*–02:13*	1h 37m	AN ₊ bis AN _–		06:26	22:53	02:09	1h 35m	03:45	56m	04:41	43m	05:25	15h 56m	21:21	43m	22:05	56m	23:01	1h 33m	00:35*	8h 04m	1h 37m				So, 7. Jul
Mo, 8. Jul	MESZ	00:31*–02:16*	1h 44m	AN ₊ bis AN _–		07:40	23:15	02:13	1h 33m	03:46	56m	04:42	43m	05:26	15h 54m	21:21	43m	22:04	55m	23:00	1h 31m	00:31*	8h 06m	1h 44m				Mo, 8. Jul
Di, 9. Jul	MESZ	00:28*–02:19*	1h 51m	AN ₊ bis AN _–		08:52	23:32	02:16	1h 31m	03:48	55m	04:43	43m	05:27	15h 53m	21:20	43m	22:03	55m	22:59	1h 29m	00:28*	8h 07m	1h 51m				Di, 9. Jul
Mi, 10. Jul	MESZ	00:25*–02:23*	1h 57m	AN ₊ bis AN _–		10:02	23:46	02:19	1h 29m	03:49	55m	04:44	43m	05:28	15h 51m	21:19	43m	22:03	55m	22:58	1h 27m	00:25*	8h 09m	1h 57m				Mi, 10. Jul
Do, 11. Jul	MESZ	00:22*–02:26*	2h 0																									

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2024	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024		
		Δt	Δt		Ph.	\uparrow	\downarrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\uparrow	Δt	\downarrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Fr, 19. Jul	MESZ	—:—:—:—	—	Mond stört		20:23	02:40	02:49	1h 14m	04:03	52m	04:55	41m	05:37	15h 34m	21:12	41m	21:53	51m	22:45	1h 13m	23:58	8h 26m	2h 53m				Fr, 19. Jul
Sa, 20. Jul	MESZ	—:—:—:—	—	Mond stört		21:13	03:41	02:52	1h 13m	04:05	51m	04:57	41m	05:38	15h 32m	21:11	41m	21:52	51m	22:43	1h 11m	23:55	8h 28m	2h 59m				Sa, 20. Jul
So, 21. Jul	MESZ	—:~:~:~:~	—	Mond stört	○	21:50	04:58	02:55	1h 11m	04:07	51m	04:58	41m	05:39	15h 30m	21:10	41m	21:51	50m	22:42	1h 10m	23:52	8h 31m	3h 05m				So, 21. Jul
Mo, 22. Jul	MESZ	—:~:~:~:~	—	Mond stört		22:17	06:23	02:58	1h 10m	04:08	50m	04:59	41m	05:41	15h 27m	21:08	41m	21:50	50m	22:40	1h 09m	23:49	8h 33m	3h 11m				Mo, 22. Jul
Di, 23. Jul	MESZ	—:~:~:~:~	—	Mond stört		22:38	07:50	03:01	1h 09m	04:10	50m	05:01	41m	05:42	15h 25m	21:07	40m	21:48	50m	22:38	1h 08m	23:46	8h 35m	3h 17m				Di, 23. Jul
Mi, 24. Jul	MESZ	—:~:~:~:~	—	Mond stört		22:56	09:16	03:04	1h 08m	04:12	50m	05:02	40m	05:43	15h 23m	21:06	40m	21:47	49m	22:37	1h 06m	23:43	8h 38m	3h 23m				Mi, 24. Jul
Do, 25. Jul	MESZ	—:~:~:~:~	—	Mond stört		23:12	10:40	03:07	1h 06m	04:14	49m	05:04	40m	05:44	15h 20m	21:05	40m	21:45	49m	22:35	1h 05m	23:41	8h 40m	3h 29m				Do, 25. Jul
Fr, 26. Jul	MESZ	—:~:~:~:~	—	Mond stört		23:29	12:03	03:10	1h 05m	04:15	49m	05:05	40m	05:45	15h 18m	21:04	40m	21:44	49m	22:33	1h 04m	23:38	8h 43m	3h 35m				Fr, 26. Jul
Sa, 27. Jul	MESZ	23:35–23:46	11m	AN ₊ bis M ₇		23:46	13:25	03:13	1h 04m	04:17	49m	05:06	40m	05:47	15h 15m	21:02	40m	21:42	48m	22:31	1h 03m	23:35	8h 45m	3h 40m				Sa, 27. Jul
So, 28. Jul	MESZ	23:32–00:08*	35m	AN ₊ bis M ₇	☉	—:~:~:~:~	14:48	03:16	1h 03m	04:19	48m	05:08	40m	05:48	15h 12m	21:01	39m	21:41	48m	22:29	1h 02m	23:32	8h 48m	3h 46m				So, 28. Jul
Mo, 29. Jul	MESZ	23:29–00:35*	1h 06m	AN ₊ bis M ₇		00:08	16:11	03:18	1h 02m	04:21	48m	05:09	39m	05:49	15h 10m	21:00	39m	21:39	47m	22:27	1h 01m	23:29	8h 50m	3h 52m				Mo, 29. Jul
Di, 30. Jul	MESZ	23:26–01:12*	1h 45m	AN ₊ bis M ₇		00:35	17:30	03:21	1h 01m	04:23	47m	05:11	39m	05:51	15h 07m	20:58	39m	21:38	47m	22:25	1h 00m	23:26	8h 53m	3h 57m				Di, 30. Jul
Mi, 31. Jul	MESZ	23:23–02:00*	2h 36m	AN ₊ bis M ₇		01:12	18:41	03:24	1h 00m	04:25	47m	05:12	39m	05:52	15h 04m	20:57	39m	21:36	47m	22:23	59m	23:23	8h 56m	4h 03m				Mi, 31. Jul
Do, 1. Aug	MESZ	23:20–03:01*	3h 40m	AN ₊ bis M ₇		02:00	19:39	03:27	59m	04:27	47m	05:14	39m	05:53	15h 02m	20:55	39m	21:34	46m	22:21	58m	23:20	8h 59m	4h 09m				Do, 1. Aug
Fr, 2. Aug	MESZ	23:17–03:32*	4h 14m	AN ₊ bis AN ₋		03:01	20:23	03:29	58m	04:28	46m	05:15	39m	05:55	14h 59m	20:54	38m	21:33	46m	22:19	58m	23:17	9h 01m	4h 14m				Fr, 2. Aug
Sa, 3. Aug	MESZ	23:15–03:35*	4h 20m	AN ₊ bis AN ₋		04:10	20:56	03:32	58m	04:30	46m	05:17	38m	05:56	14h 56m	20:52	38m	21:31	46m	22:17	57m	23:15	9h 04m	4h 20m				Sa, 3. Aug
So, 4. Aug	MESZ	23:12–03:38*	4h 25m	AN ₊ bis AN ₋	☉	05:24	21:19	03:35	57m	04:32	46m	05:18	38m	05:57	14h 53m	20:51	38m	21:29	45m	22:15	56m	23:12	9h 07m	4h 25m				So, 4. Aug
Mo, 5. Aug	MESZ	23:09–03:40*	4h 31m	AN ₊ bis AN ₋		06:37	21:38	03:38	56m	04:34	45m	05:20	38m	05:59	14h 50m	20:49	38m	21:28	45m	22:13	55m	23:09	9h 10m	4h 31m				Mo, 5. Aug
Di, 6. Aug	MESZ	23:06–03:43*	4h 36m	AN ₊ bis AN ₋		07:48	21:53	03:40	55m	04:36	45m	05:21	38m	06:00	14h 47m	20:48	38m	21:26	45m	22:11	55m	23:06	9h 13m	4h 36m				Di, 6. Aug
Mi, 7. Aug	MESZ	23:03–03:45*	4h 42m	AN ₊ bis AN ₋		08:57	22:06	03:43	55m	04:38	45m	05:23	38m	06:01	14h 44m	20:46	38m	21:24	44m	22:09	54m	23:03	9h 16m	4h 42m				Mi, 7. Aug
Do, 8. Aug	MESZ	23:00–03:48*	4h 47m	AN ₊ bis AN ₋		10:03	22:18	03:45	54m	04:40	44m	05:25	38m	06:03	14h 41m	20:44	37m	21:22	44m	22:07	53m	23:00	9h 19m	4h 47m				Do, 8. Aug
Fr, 9. Aug	MESZ	22:58–03:50*	4h 52m	AN ₊ bis AN ₋		11:10	22:31	03:48	53m	04:42	44m	05:26	37m	06:04	14h 38m	20:43	37m	21:20	44m	22:05	52m	22:58	9h 22m	4h 52m				Fr, 9. Aug
Sa, 10. Aug	MESZ	22:55–03:53*	4h 58m	AN ₊ bis AN ₋		12:17	22:44	03:50	52m	04:43	44m	05:28	37m	06:05	14h 35m	20:41	37m	21:19	43m	22:03	52m	22:55	9h 25m	4h 58m				Sa, 10. Aug
So, 11. Aug	MESZ	23:01–03:55*	4h 54m	M ₇ bis AN ₋		13:25	23:01	03:53	52m	04:45	43m	05:29	37m	06:07	14h 32m	20:39	37m	21:17	43m	22:00	51m	22:52	9h 28m	5h 03m				So, 11. Aug
Mo, 12. Aug	MESZ	23:21–03:58*	4h 36m	M ₇ bis AN ₋	☉	14:37	23:21	03:55	51m	04:47	43m	05:31	37m	06:08	14h 29m	20:38	37m	21:15	43m	21:58	51m	22:49	9h 31m	5h 08m				Mo, 12. Aug
Di, 13. Aug	MESZ	23:49–04:00*	4h 11m	M ₇ bis AN ₋		15:50	23:49	03:58	51m	04:49	43m	05:32	37m	06:09	14h 26m	20:36	37m	21:13	43m	21:56	50m	22:46	9h 34m	5h 13m				Di, 13. Aug
Mi, 14. Aug	MESZ	00:28*–04:03*	3h 35m	M ₇ bis AN ₋		17:02	—:~:~:~:~	04:00	50m	04:51	43m	05:34	37m	06:11	14h 23m	20:34	36m	21:11	42m	21:54	49m	22:44	9h 38m	5h 18m				Mi, 14. Aug
Do, 15. Aug	MESZ	01:21*–04:05*	2h 44m	M ₇ bis AN ₋		18:08	00:28	04:03	49m	04:53	42m	05:35	36m	06:12	14h 20m	20:32	36m	21:09	42m	21:52	49m	22:41	9h 41m	5h 24m				Do, 15. Aug
Fr, 16. Aug	MESZ	02:30*–04:07*	1h 37m	M ₇ bis AN ₋		19:03	01:21	04:05	49m	04:54	42m	05:37	36m	06:14	14h 16m	20:31	36m	21:07	42m	21:49	48m	22:38	9h 44m	5h 29m				Fr, 16. Aug
Sa, 17. Aug	MESZ	03:52*–04:10*	17m	M ₇ bis AN ₋		19:45	02:30	04:07	48m	04:56	42m	05:38	36m	06:15	14h 13m	20:29	36m	21:05	41m	21:47	48m	22:35	9h 47m	5h 34m				Sa, 17. Aug
So, 18. Aug	MESZ	—:~:~:~:~	—	Mond stört		20:17	03:52	04:10	48m	04:58	41m	05:40	36m	06:16	14h 10m	20:27	36m	21:03	41m	21:45	47m	22:33	9h 50m	5h 39m				So, 18. Aug
Mo, 19. Aug	MESZ	—:~:~:~:~	—	Mond stört	○	20:41	05:20	04:12	47m	05:00	41m	05:42	36m	06:18	14h 07m	20:25	36m	21:01	41m	21:43	47m	22:30	9h 54m	5h 44m				Mo, 19. Aug
Di, 20. Aug	MESZ	—:~:~:~:~	—	Mond stört		21:00	06:49	04:14	47m	05:02	41m	05:43	36m	06:19	14h 03m	20:23	35m	20:59	41m	21:40	46m	22:27	9h 57m	5h 49m				Di, 20. Aug
Mi, 21. Aug	MESZ	—:~:~:~:~	—	Mond stört		21:17	08:16	04:16	46m	05:03	41m	05:45	35m	06:21	14h 00m	20:21	35m	20:57	40m	21:38	46m	22:25	10h 00m	5h 54m				Mi, 21. Aug
Do, 22. Aug	MESZ	—:~:~:~:~	—	Mond stört		21:34	09:42	04:19	46m	05:05	40m	05:46	35m	06:22	13h 57m	20:19	35m	20:55	40m	21:36	46m	22:22	10h 03m	5h 59m				Do, 22. Aug
Fr, 23. Aug	MESZ	—:~:~:~:~	—	Mond stört		21:51	11:08	04:21	46m	05:07	40m	05:48	35m	06:23	13h 54m	20:17	35m	20:53	40m	21:33	45m	22:19	10h 07m	6h 03m				Fr, 23. Aug
Sa, 24. Aug	MESZ	—:~:~:~:~	—	Mond stört		22:12	12:33	04:23	45m	05:09	40m	05:49	35m	06:25	13h 50m	20:16	35m	20:51	40m	21:31	45m	22:16	10h 10m	6h 08m				Sa, 24. Aug
So, 25. Aug	MESZ	22:14–22:37	23m	AN ₊ bis M ₇		22:37	13:58	04:25	45m	05:10	40m	05:51	35m	06:26	13h 47m	20:14	35m	20:49	39m	21:29	44m	22:14	10h 13m	6h 13m				So, 25. Aug
Mo, 26. Aug	MESZ	22:11–23:11	59m	AN ₊ bis M ₇	☉	23:11	15:20	04:27	44m	05:12	40m	05:52	35m	06:28	13h 44m	20:12	35m	20:47	39m	21:27	44m	22:11	10h 17m	6h 18m				Mo, 26. Aug
Di, 27. Aug	MESZ	22:08–23:55	1h 46m	AN ₊ bis M ₇		23:55	16:35	04:29	44m	05:14	39m	05:54	35m	06:29	13h 40m	20:10	35m	20:45	39m	21:24	44m	22:08	10h 20m	6h 23m				Di, 27. Aug
Mi, 28. Aug	MESZ	22:06–00:52*	2h 46m	AN ₊ bis M ₇		—:~:~:~:~	17:37	04:31	44m	05:16	39m	05:55	35m	06:30	13h 37m	20:08	34m	20:43	39m	21:22	43m	22:06	10h 24m	6h 27m				Mi, 28. Aug
Do, 29. Aug	MESZ	22:03–01:59*	3h 56m	AN ₊ bis M ₇		00:52	18:25	04:34	43m	05:17	39m	05:57	34m	06:32	13h 33m	20:06	34m	20:40	39m	21:20	43m	22:03	10h 27m	6h 32m				Do, 29. Aug
Fr, 30. Aug	MESZ																											

Table with 29 columns (1-29) and 49 rows (1-49). Columns include day numbers, time zones (Zeitzone), astronomical twilight (Astr. dunkel und kein Mond), moon phases (Mond), sunrise (Beginn der Morgendämmerung), sunset (Sonne), and astronomical twilight (Ende der Abenddämmerung). Rows list dates from Sep 7 to Oct 26.

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
2024	Zeit-	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024		
	zone		Δt		Ph.	↑	↓	Astr.	Δt	Naut.	Δt	Bürg.	Δt	↑	Δt	↓	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
So, 27. Okt		18:54–02:34*	7h 40m	AN ₊ bis M _J		01:26	15:30	05:10	36m	05:46	36m	06:22	34m	06:57	10h 10m	17:07	34m	17:41	35m	18:17	36m	18:54	13h 51m	10h 17m				So, 27. Okt
Mo, 28. Okt		18:52–03:40*	8h 48m	AN ₊ bis M _J		02:34	15:43	05:11	36m	05:48	36m	06:24	34m	06:58	10h 06m	17:05	34m	17:40	36m	18:16	36m	18:52	13h 54m	10h 20m				Mo, 28. Okt
Di, 29. Okt		18:50–04:46*	9h 55m	AN ₊ bis M _J		03:40	15:55	05:13	36m	05:49	36m	06:25	34m	07:00	10h 03m	17:04	34m	17:38	36m	18:14	36m	18:50	13h 57m	10h 23m				Di, 29. Okt
Mi, 30. Okt		18:49–05:16*	10h 26m	AN ₊ bis AN ₋		04:46	16:07	05:14	36m	05:51	36m	06:27	34m	07:01	10h 00m	17:02	34m	17:37	36m	18:13	36m	18:49	14h 01m	10h 26m				Mi, 30. Okt
Do, 31. Okt		18:48–05:17*	10h 29m	AN ₊ bis AN ₋		05:53	16:21	05:16	36m	05:52	36m	06:28	34m	07:03	9h 57m	17:00	34m	17:35	36m	18:11	36m	18:48	14h 04m	10h 29m				Do, 31. Okt
Fr, 1. Nov		18:46–05:18*	10h 32m	AN ₊ bis AN ₋	●	07:02	16:37	05:17	36m	05:53	36m	06:30	34m	07:05	9h 54m	16:59	34m	17:34	36m	18:10	36m	18:46	14h 07m	10h 32m				Fr, 1. Nov
Sa, 2. Nov		18:45–05:20*	10h 34m	AN ₊ bis AN ₋		08:13	16:58	05:18	36m	05:55	36m	06:31	34m	07:06	9h 51m	16:57	34m	17:32	36m	18:08	36m	18:45	14h 10m	10h 34m				Sa, 2. Nov
So, 3. Nov		18:43–05:21*	10h 37m	AN ₊ bis AN ₋		09:25	17:25	05:20	36m	05:56	36m	06:33	35m	07:08	9h 47m	16:56	35m	17:31	36m	18:07	36m	18:43	14h 13m	10h 37m				So, 3. Nov
Mo, 4. Nov		18:42–05:22*	10h 40m	AN ₊ bis AN ₋		10:35	18:01	05:21	36m	05:58	36m	06:34	35m	07:09	9h 44m	16:54	35m	17:29	36m	18:06	36m	18:42	14h 16m	10h 40m				Mo, 4. Nov
Di, 5. Nov		18:50–05:24*	10h 33m	M _↓ bis AN ₋		11:39	18:50	05:22	36m	05:59	36m	06:36	35m	07:11	9h 41m	16:53	35m	17:28	36m	18:04	36m	18:41	14h 19m	10h 43m				Di, 5. Nov
Mi, 6. Nov		19:53–05:25*	9h 32m	M _↓ bis AN ₋		12:31	19:53	05:24	36m	06:00	36m	06:37	35m	07:12	9h 38m	16:51	35m	17:26	36m	18:03	36m	18:40	14h 22m	10h 45m				Mi, 6. Nov
Do, 7. Nov		21:06–05:26*	8h 20m	M _↓ bis AN ₋		13:12	21:06	05:25	36m	06:02	36m	06:38	35m	07:14	9h 35m	16:50	35m	17:25	36m	18:02	36m	18:38	14h 25m	10h 48m				Do, 7. Nov
Fr, 8. Nov		22:26–05:28*	7h 02m	M _↓ bis AN ₋		13:43	22:26	05:26	36m	06:03	36m	06:40	35m	07:15	9h 32m	16:48	35m	17:24	36m	18:01	36m	18:37	14h 28m	10h 50m				Fr, 8. Nov
Sa, 9. Nov		23:48–05:29*	5h 41m	M _↓ bis AN ₋	◐	14:07	23:48	05:28	36m	06:04	36m	06:41	35m	07:17	9h 29m	16:47	35m	17:23	36m	17:59	36m	18:36	14h 31m	10h 53m				Sa, 9. Nov
So, 10. Nov		01:10*–05:30*	4h 20m	M _↓ bis AN ₋		14:27	—:—	05:29	36m	06:06	36m	06:43	35m	07:19	9h 26m	16:45	35m	17:21	36m	17:58	36m	18:35	14h 34m	10h 55m				So, 10. Nov
Mo, 11. Nov		02:33*–05:32*	2h 58m	M _↓ bis AN ₋		14:43	01:10	05:30	36m	06:07	36m	06:44	35m	07:20	9h 24m	16:44	35m	17:20	36m	17:57	36m	18:34	14h 37m	10h 58m				Mo, 11. Nov
Di, 12. Nov		03:57*–05:33*	1h 35m	M _↓ bis AN ₋		15:00	02:33	05:32	36m	06:09	37m	06:46	36m	07:22	9h 21m	16:43	36m	17:19	37m	17:56	36m	18:33	14h 40m	11h 00m				Di, 12. Nov
Mi, 13. Nov		05:24*–05:34*	9m	M _↓ bis AN ₋		15:17	03:57	05:33	36m	06:10	37m	06:47	36m	07:23	9h 18m	16:42	36m	17:18	37m	17:55	36m	18:32	14h 43m	11h 02m				Mi, 13. Nov
Do, 14. Nov		—:—:—:—	–	Mond stört		15:36	05:24	05:34	36m	06:11	37m	06:48	36m	07:25	9h 15m	16:40	36m	17:17	37m	17:54	36m	18:31	14h 45m	11h 04m				Do, 14. Nov
Fr, 15. Nov		—:—:—:—	–	Mond stört	○	16:01	06:54	05:36	36m	06:13	37m	06:50	36m	07:26	9h 12m	16:39	36m	17:16	37m	17:53	36m	18:30	14h 48m	11h 07m				Fr, 15. Nov
Sa, 16. Nov		—:—:—:—	–	Mond stört		16:34	08:25	05:37	36m	06:14	37m	06:51	36m	07:28	9h 10m	16:38	36m	17:15	37m	17:52	36m	18:29	14h 51m	11h 09m				Sa, 16. Nov
So, 17. Nov		—:~:~:~:~	–	Mond stört		17:19	09:49	05:38	37m	06:15	37m	06:53	36m	07:29	9h 07m	16:37	36m	17:14	37m	17:51	36m	18:28	14h 53m	11h 11m				So, 17. Nov
Mo, 18. Nov		—:~:~:~:~	–	Mond stört		18:18	11:00	05:39	37m	06:17	37m	06:54	36m	07:31	9h 05m	16:36	36m	17:13	37m	17:50	37m	18:27	14h 56m	11h 13m				Mo, 18. Nov
Di, 19. Nov		18:26–19:29	1h 02m	AN ₊ bis M _J		19:29	11:54	05:41	37m	06:18	37m	06:55	36m	07:32	9h 02m	16:35	36m	17:12	37m	17:49	37m	18:26	14h 58m	11h 15m				Di, 19. Nov
Mi, 20. Nov		18:26–20:45	2h 18m	AN ₊ bis M _J		20:45	12:33	05:42	37m	06:19	37m	06:57	36m	07:34	9h 00m	16:34	36m	17:11	37m	17:49	37m	18:26	15h 01m	11h 17m				Mi, 20. Nov
Do, 21. Nov		18:25–22:00	3h 35m	AN ₊ bis M _J		22:00	13:00	05:43	37m	06:20	37m	06:58	37m	07:35	8h 57m	16:33	37m	17:10	37m	17:48	37m	18:25	15h 03m	11h 19m				Do, 21. Nov
Fr, 22. Nov		18:24–23:13	4h 48m	AN ₊ bis M _J		23:13	13:20	05:44	37m	06:22	37m	06:59	37m	07:37	8h 55m	16:32	37m	17:09	37m	17:47	37m	18:24	15h 06m	11h 21m				Fr, 22. Nov
Sa, 23. Nov		18:24–00:22*	5h 58m	AN ₊ bis M _J	◑	—:—	13:36	05:46	37m	06:23	37m	07:01	37m	07:38	8h 53m	16:31	37m	17:09	37m	17:46	37m	18:24	15h 08m	11h 23m				Sa, 23. Nov
So, 24. Nov		18:23–01:29*	7h 06m	AN ₊ bis M _J		00:22	13:50	05:47	37m	06:24	38m	07:02	37m	07:40	8h 50m	16:30	37m	17:08	38m	17:46	37m	18:23	15h 10m	11h 24m				So, 24. Nov
Mo, 25. Nov		18:23–02:35*	8h 12m	AN ₊ bis M _J		01:29	14:02	05:48	37m	06:25	38m	07:03	37m	07:41	8h 48m	16:30	37m	17:07	38m	17:45	37m	18:23	15h 12m	11h 26m				Mo, 25. Nov
Di, 26. Nov		18:22–03:42*	9h 19m	AN ₊ bis M _J		02:35	14:14	05:49	37m	06:27	38m	07:05	37m	07:42	8h 46m	16:29	37m	17:07	38m	17:45	37m	18:22	15h 14m	11h 28m				Di, 26. Nov
Mi, 27. Nov		18:22–04:50*	10h 28m	AN ₊ bis M _J		03:42	14:28	05:50	37m	06:28	38m	07:06	37m	07:44	8h 44m	16:28	37m	17:06	38m	17:44	37m	18:22	15h 16m	11h 29m				Mi, 27. Nov
Do, 28. Nov		18:21–05:52*	11h 31m	AN ₊ bis AN ₋		04:50	14:43	05:51	37m	06:29	38m	07:07	37m	07:45	8h 42m	16:28	37m	17:05	38m	17:44	37m	18:21	15h 18m	11h 31m				Do, 28. Nov
Fr, 29. Nov		18:21–05:53*	11h 32m	AN ₊ bis AN ₋		06:00	15:02	05:52	37m	06:30	38m	07:08	37m	07:46	8h 40m	16:27	37m	17:05	38m	17:43	37m	18:21	15h 20m	11h 32m				Fr, 29. Nov
Sa, 30. Nov		18:21–05:55*	11h 34m	AN ₊ bis AN ₋		07:12	15:27	05:53	37m	06:31	38m	07:10	38m	07:48	8h 38m	16:26	38m	17:04	38m	17:43	37m	18:21	15h 22m	11h 34m				Sa, 30. Nov
So, 1. Dez		18:20–05:56*	11h 35m	AN ₊ bis AN ₋	●	08:24	16:01	05:55	37m	06:32	38m	07:11	38m	07:49	8h 37m	16:26	38m	17:04	38m	17:43	37m	18:20	15h 24m	11h 35m				So, 1. Dez
Mo, 2. Dez		18:20–05:57*	11h 36m	AN ₊ bis AN ₋		09:31	16:47	05:56	37m	06:33	38m	07:12	38m	07:50	8h 35m	16:25	38m	17:04	38m	17:42	37m	18:20	15h 25m	11h 36m				Mo, 2. Dez
Di, 3. Dez		18:20–05:58*	11h 37m	AN ₊ bis AN ₋		10:28	17:46	05:57	37m	06:34	38m	07:13	38m	07:51	8h 33m	16:25	38m	17:03	38m	17:42	37m	18:20	15h 27m	11h 37m				Di, 3. Dez
Mi, 4. Dez		18:57–05:59*	11h 01m	M _↓ bis AN ₋		11:12	18:57	05:58	37m	06:35	38m	07:14	38m	07:53	8h 32m	16:25	38m	17:03	38m	17:42	37m	18:20	15h 28m	11h 39m				Mi, 4. Dez
Do, 5. Dez		20:15–06:00*	9h 44m	M _↓ bis AN ₋		11:46	20:15	05:59	37m	06:36	38m	07:15	38m	07:54	8h 30m	16:24	38m	17:03	38m	17:42	37m	18:19	15h 30m	11h 40m				Do, 5. Dez
Fr, 6. Dez		21:36–06:00*	8h 24m	M _↓ bis AN ₋		12:12	21:36	06:00	37m	06:37	38m	07:16	38m	07:55	8h 29m	16:24	38m	17:03	38m	17:41	37m	18:19	15h 31m	11h 41m				Fr, 6. Dez
Sa, 7. Dez		22:56–06:01*	7h 05m	M _↓ bis AN ₋		12:32	22:56	06:00	37m	06:38	38m	07:17	38m	07:56	8h 28m	16:24	38m	17:03	38m	17:41	37m	18:19	15h 32m	11h 42m				Sa, 7. Dez
So, 8. Dez		00:16*–06:02*	5h 45m	M _↓ bis AN ₋	◒	12:49	—:—	06:01	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	
2024/25	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne				Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024/25		
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt			
Mo, 16. Dez		—:—:—:—	—	Mond stört		17:04	09:40	06:08	38m	06:46	39m	07:25	39m	08:04	8h 20m	16:24	39m	17:03	39m	17:43	38m	18:21	15h 40m	11h 47m					Mo, 16. Dez
Di, 17. Dez		—:—:—:—	—	Mond stört		18:20	10:26	06:08	38m	06:46	39m	07:26	39m	08:05	8h 19m	16:25	39m	17:04	39m	17:43	38m	18:21	15h 40m	11h 47m					Di, 17. Dez
Mi, 18. Dez		18:21–19:38	1h 16m	AN ₊ bis M ₇		19:38	10:58	06:09	38m	06:47	39m	07:26	39m	08:05	8h 19m	16:25	39m	17:04	39m	17:43	38m	18:21	15h 41m	11h 48m					Mi, 18. Dez
Do, 19. Dez		18:22–20:54	2h 32m	AN ₊ bis M ₇		20:54	11:22	06:10	38m	06:48	39m	07:27	39m	08:06	8h 19m	16:25	39m	17:04	39m	17:44	38m	18:22	15h 41m	11h 48m					Do, 19. Dez
Fr, 20. Dez		18:22–22:06	3h 44m	AN ₊ bis M ₇		22:06	11:40	06:10	38m	06:48	39m	07:27	39m	08:07	8h 19m	16:26	39m	17:05	39m	17:44	38m	18:22	15h 41m	11h 48m					Fr, 20. Dez
Sa, 21. Dez		18:23–23:15	4h 52m	AN ₊ bis M ₇		23:15	11:55	06:11	38m	06:49	39m	07:28	39m	08:07	8h 19m	16:26	39m	17:05	39m	17:45	38m	18:23	15h 41m	11h 48m					Sa, 21. Dez
So, 22. Dez		18:23–00:22*	5h 58m	AN ₊ bis M ₇	☉	—:—	12:08	06:11	38m	06:49	39m	07:28	39m	08:08	8h 19m	16:27	39m	17:06	39m	17:45	38m	18:23	15h 41m	11h 48m					So, 22. Dez
Mo, 23. Dez		18:24–01:28*	7h 04m	AN ₊ bis M ₇		00:22	12:20	06:12	38m	06:50	39m	07:29	39m	08:08	8h 19m	16:27	39m	17:06	39m	17:46	38m	18:24	15h 41m	11h 48m					Mo, 23. Dez
Di, 24. Dez		18:24–02:36*	8h 11m	AN ₊ bis M ₇		01:28	12:33	06:12	38m	06:50	39m	07:29	39m	08:08	8h 19m	16:28	39m	17:07	39m	17:46	38m	18:24	15h 40m	11h 47m					Di, 24. Dez
Mi, 25. Dez		18:25–03:45*	9h 19m	AN ₊ bis M ₇		02:36	12:48	06:12	38m	06:50	39m	07:30	39m	08:09	8h 19m	16:29	39m	17:08	39m	17:47	38m	18:25	15h 40m	11h 47m					Mi, 25. Dez
Do, 26. Dez		18:26–04:56*	10h 30m	AN ₊ bis M ₇		03:45	13:05	06:13	38m	06:51	39m	07:30	39m	08:09	8h 20m	16:29	39m	17:08	39m	17:48	38m	18:26	15h 39m	11h 47m					Do, 26. Dez
Fr, 27. Dez		18:26–06:08*	11h 41m	AN ₊ bis M ₇		04:56	13:27	06:13	38m	06:51	39m	07:30	39m	08:09	8h 20m	16:30	39m	17:09	39m	17:48	38m	18:26	15h 39m	11h 46m					Fr, 27. Dez
Sa, 28. Dez		18:27–06:13*	11h 46m	AN ₊ bis AN ₋		06:08	13:58	06:13	38m	06:51	39m	07:30	38m	08:09	8h 21m	16:31	38m	17:10	39m	17:49	38m	18:27	15h 38m	11h 46m					Sa, 28. Dez
So, 29. Dez		18:28–06:14*	11h 45m	AN ₊ bis AN ₋		07:18	14:39	06:13	38m	06:52	39m	07:31	38m	08:10	8h 22m	16:32	38m	17:11	39m	17:50	38m	18:28	15h 37m	11h 45m					So, 29. Dez
Mo, 30. Dez		18:29–06:14*	11h 45m	AN ₊ bis AN ₋	☉	08:19	15:34	06:14	38m	06:52	39m	07:31	38m	08:10	8h 23m	16:33	38m	17:12	39m	17:51	38m	18:29	15h 37m	11h 45m					Mo, 30. Dez
Di, 31. Dez		18:29–06:14*	11h 44m	AN ₊ bis AN ₋		09:09	16:43	06:14	38m	06:52	39m	07:31	38m	08:10	8h 23m	16:34	38m	17:12	39m	17:51	38m	18:29	15h 36m	11h 44m					Di, 31. Dez
Mi, 1. Jan		18:30–06:14*	11h 43m	AN ₊ bis AN ₋		09:47	18:02	06:14	37m	06:52	38m	07:31	38m	08:10	8h 24m	16:35	38m	17:13	38m	17:52	37m	18:30	15h 35m	11h 43m					Mi, 1. Jan
Do, 2. Jan		19:23–06:14*	10h 50m	M _\ bis AN ₋		10:15	19:23	06:14	37m	06:52	38m	07:31	38m	08:10	8h 25m	16:36	38m	17:14	38m	17:53	37m	18:31	15h 33m	11h 42m					Do, 2. Jan
Fr, 3. Jan		20:45–06:14*	9h 28m	M _\ bis AN ₋		10:37	20:45	06:14	37m	06:52	38m	07:31	38m	08:10	8h 27m	16:37	38m	17:15	38m	17:54	37m	18:32	15h 32m	11h 41m					Fr, 3. Jan
Sa, 4. Jan		22:06–06:14*	8h 07m	M _\ bis AN ₋		10:55	22:06	06:14	37m	06:52	38m	07:31	38m	08:09	8h 28m	16:38	38m	17:16	38m	17:55	37m	18:33	15h 31m	11h 40m					Sa, 4. Jan
So, 5. Jan		23:26–06:14*	6h 47m	M _\ bis AN ₋		11:11	23:26	06:14	37m	06:52	38m	07:31	38m	08:09	8h 29m	16:39	38m	17:17	38m	17:56	37m	18:34	15h 30m	11h 39m					So, 5. Jan
Mo, 6. Jan		00:47*–06:14*	5h 27m	M _\ bis AN ₋		11:27	—:—	06:14	37m	06:52	38m	07:30	38m	08:09	8h 31m	16:40	38m	17:18	38m	17:57	37m	18:35	15h 28m	11h 38m					Mo, 6. Jan
Di, 7. Jan		02:09*–06:14*	4h 04m	M _\ bis AN ₋	☉	11:43	00:47	06:14	37m	06:52	38m	07:30	38m	08:09	8h 32m	16:41	38m	17:20	38m	17:58	37m	18:36	15h 27m	11h 37m					Di, 7. Jan
Mi, 8. Jan		03:34*–06:13*	2h 39m	M _\ bis AN ₋		12:02	02:09	06:14	37m	06:51	38m	07:30	38m	08:08	8h 34m	16:42	38m	17:21	38m	17:59	37m	18:37	15h 25m	11h 36m					Mi, 8. Jan
Do, 9. Jan		04:58*–06:13*	1h 14m	M _\ bis AN ₋		12:27	03:34	06:13	37m	06:51	38m	07:30	38m	08:08	8h 35m	16:44	38m	17:22	38m	18:00	37m	18:38	15h 23m	11h 35m					Do, 9. Jan
Fr, 10. Jan		—:—:—:—	—	Mond stört		13:00	04:58	06:13	37m	06:51	38m	07:29	38m	08:07	8h 37m	16:45	38m	17:23	38m	18:01	37m	18:39	15h 22m	11h 33m					Fr, 10. Jan
Sa, 11. Jan		—:—:—:—	—	Mond stört		13:45	06:18	06:13	37m	06:50	38m	07:29	37m	08:07	8h 39m	16:46	37m	17:24	38m	18:03	37m	18:40	15h 20m	11h 32m					Sa, 11. Jan
So, 12. Jan		—:~:~:~:~	—	Mond stört		14:44	07:26	06:13	37m	06:50	38m	07:28	37m	08:06	8h 41m	16:47	37m	17:25	38m	18:04	37m	18:41	15h 18m	11h 30m					So, 12. Jan
Mo, 13. Jan		—:~:~:~:~	—	Mond stört	☉	15:56	08:18	06:12	37m	06:50	38m	07:28	37m	08:06	8h 43m	16:49	37m	17:27	38m	18:05	37m	18:42	15h 16m	11h 29m					Mo, 13. Jan
Di, 14. Jan		—:~:~:~:~	—	Mond stört		17:14	08:56	06:12	37m	06:49	38m	07:27	37m	08:05	8h 45m	16:50	37m	17:28	38m	18:06	37m	18:44	15h 14m	11h 27m					Di, 14. Jan
Mi, 15. Jan		—:~:~:~:~	—	Mond stört		18:32	09:23	06:11	37m	06:49	38m	07:27	37m	08:04	8h 47m	16:52	37m	17:29	38m	18:07	37m	18:45	15h 12m	11h 26m					Mi, 15. Jan
Do, 16. Jan		18:46–19:47	1h 00m	AN ₊ bis M ₇		19:47	09:43	06:11	37m	06:48	38m	07:26	37m	08:04	8h 49m	16:53	37m	17:31	38m	18:09	37m	18:46	15h 09m	11h 24m					Do, 16. Jan
Fr, 17. Jan		18:47–20:58	2h 10m	AN ₊ bis M ₇		20:58	09:59	06:10	37m	06:48	37m	07:26	37m	08:03	8h 51m	16:54	37m	17:32	38m	18:10	37m	18:47	15h 07m	11h 22m					Fr, 17. Jan
Sa, 18. Jan		18:48–22:06	3h 18m	AN ₊ bis M ₇		22:06	10:13	06:10	37m	06:47	37m	07:25	37m	08:02	8h 53m	16:56	37m	17:33	37m	18:11	37m	18:48	15h 05m	11h 20m					Sa, 18. Jan
So, 19. Jan		18:50–23:13	4h 23m	AN ₊ bis M ₇		23:13	10:26	06:09	37m	06:46	37m	07:24	37m	08:01	8h 56m	16:57	37m	17:35	37m	18:12	37m	18:50	15h 03m	11h 18m					So, 19. Jan
Mo, 20. Jan		18:51–00:20*	5h 29m	AN ₊ bis M ₇		—:—	10:38	06:08	37m	06:46	37m	07:23	37m	08:00	8h 58m	16:59	37m	17:36	37m	18:14	37m	18:51	15h 00m	11h 16m					Mo, 20. Jan
Di, 21. Jan		18:52–01:29*	6h 36m	AN ₊ bis M ₇	☉	00:20	10:52	06:08	37m	06:45	37m	07:23	36m	08:00	9h 00m	17:00	36m	17:37	37m	18:15	37m	18:52	14h 58m	11h 14m					Di, 21. Jan
Mi, 22. Jan		18:53–02:39*	7h 45m	AN ₊ bis M ₇		01:29	11:08	06:07	37m	06:44	37m	07:22	36m	07:59	9h 03m	17:02	36m	17:39	37m	18:16	37m	18:53	14h 55m	11h 12m					Mi, 22. Jan
Do, 23. Jan		18:55–03:50*	8h 55m	AN ₊ bis M ₇		02:39	11:28	06:06	37m	06:43	37m	07:21	36m	07:58	9h 05m	17:03	36m	17:40	37m	18:18	37m	18:55	14h 53m	11h 10m					Do, 23. Jan
Fr, 24. Jan		18:56–05:01*	10h 04m	AN ₊ bis M ₇		03:50	11:54	06:05	36m	06:42	37m	07:20	36m	07:56	9h 08m	17:05	36m	17:42	37m	18:19	37m	18:56	14h 50m	11h 08m					Fr, 24. Jan
Sa, 25. Jan		18:57–06:04*	11h 06m	AN ₊ bis AN ₋		05:01	12:30	06:05	36m	06:42	37m	07:19	36m	07:55	9h 11m	17:07	36m	17:43	37m	18:20	36m	18:57	14h 47m	11h 06m					Sa, 25. Jan
So, 26. Jan		18:59–06:03*	11h 04m	AN ₊ bis AN ₋		06:06	13:19	06:04	36m	06:41	37m	07:18	36m	07:54	9h 13m	17:08	36m	17:44	37m										