

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Mirande 43.5200° N 0.4000° 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
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		
Mo, 1. Jan		19:17–23:00	3h 43m	AN ₊ bis M ₇		23:00	11:51	06:46	34m	07:21	35m	07:56	34m	08:31	9h 01m	17:32	34m	18:07	35m	18:42	34m	19:17	14h 58m	11h 29m				Mo, 1. Jan
Di, 2. Jan		19:17–00:02*	4h 44m	AN ₊ bis M ₇		—:—	12:09	06:46	34m	07:21	35m	07:56	34m	08:31	9h 02m	17:33	34m	18:07	35m	18:43	34m	19:17	14h 57m	11h 28m				Di, 2. Jan
Mi, 3. Jan		19:18–01:04*	5h 45m	AN ₊ bis M ₇		00:02	12:26	06:46	34m	07:21	35m	07:56	34m	08:31	9h 03m	17:34	34m	18:08	35m	18:44	34m	19:18	14h 56m	11h 28m				Mi, 3. Jan
Do, 4. Jan		19:19–02:08*	6h 48m	AN ₊ bis M ₇	☾	01:04	12:43	06:46	34m	07:21	35m	07:56	34m	08:31	9h 04m	17:35	34m	18:09	35m	18:44	34m	19:19	14h 55m	11h 27m				Do, 4. Jan
Fr, 5. Jan		19:20–03:14*	7h 54m	AN ₊ bis M ₇		02:08	13:02	06:46	34m	07:21	35m	07:56	34m	08:31	9h 05m	17:36	34m	18:10	35m	18:45	34m	19:20	14h 54m	11h 26m				Fr, 5. Jan
Sa, 6. Jan		19:21–04:24*	9h 03m	AN ₊ bis M ₇		03:14	13:24	06:46	34m	07:21	35m	07:56	34m	08:31	9h 06m	17:37	34m	18:11	35m	18:46	34m	19:21	14h 53m	11h 25m				Sa, 6. Jan
So, 7. Jan		19:22–05:37*	10h 15m	AN ₊ bis M ₇		04:24	13:51	06:46	34m	07:21	35m	07:56	34m	08:30	9h 07m	17:38	34m	18:12	35m	18:47	34m	19:22	14h 52m	11h 24m				So, 7. Jan
Mo, 8. Jan		19:23–06:46*	11h 23m	AN ₊ bis AN ₋		05:37	14:26	06:46	34m	07:21	35m	07:56	34m	08:30	9h 08m	17:39	34m	18:13	35m	18:48	34m	19:23	14h 51m	11h 23m				Mo, 8. Jan
Di, 9. Jan		19:24–06:46*	11h 22m	AN ₊ bis AN ₋		06:50	15:13	06:46	34m	07:21	34m	07:56	34m	08:30	9h 09m	17:40	34m	18:14	34m	18:49	34m	19:24	14h 49m	11h 22m				Di, 9. Jan
Mi, 10. Jan		19:24–06:46*	11h 21m	AN ₊ bis AN ₋		07:58	16:14	06:46	34m	07:21	34m	07:56	34m	08:30	9h 11m	17:41	34m	18:15	34m	18:50	34m	19:24	14h 48m	11h 21m				Mi, 10. Jan
Do, 11. Jan		19:25–06:46*	11h 20m	AN ₊ bis AN ₋	☾	08:56	17:28	06:46	34m	07:21	34m	07:55	34m	08:29	9h 12m	17:42	34m	18:16	34m	18:51	34m	19:25	14h 47m	11h 20m				Do, 11. Jan
Fr, 12. Jan		19:26–06:46*	11h 19m	AN ₊ bis AN ₋		09:42	18:49	06:46	34m	07:20	34m	07:55	33m	08:29	9h 14m	17:43	33m	18:17	34m	18:52	34m	19:26	14h 45m	11h 19m				Fr, 12. Jan
Sa, 13. Jan		20:13–06:45*	10h 32m	M _\ bis AN ₋		10:18	20:13	06:46	34m	07:20	34m	07:55	33m	08:29	9h 15m	17:44	33m	18:18	34m	18:53	34m	19:27	14h 43m	11h 18m				Sa, 13. Jan
So, 14. Jan		21:34–06:45*	9h 11m	M _\ bis AN ₋		10:46	21:34	06:45	34m	07:20	34m	07:55	33m	08:28	9h 17m	17:46	33m	18:19	34m	18:54	34m	19:28	14h 42m	11h 16m				So, 14. Jan
Mo, 15. Jan		22:53–06:45*	7h 52m	M _\ bis AN ₋		11:10	22:53	06:45	34m	07:19	34m	07:54	33m	08:28	9h 18m	17:47	33m	18:20	34m	18:55	34m	19:29	14h 40m	11h 15m				Mo, 15. Jan
Di, 16. Jan		00:09*–06:45*	6h 35m	M _\ bis AN ₋		11:31	—:—	06:45	34m	07:19	34m	07:54	33m	08:27	9h 20m	17:48	33m	18:22	34m	18:56	34m	19:30	14h 38m	11h 14m				Di, 16. Jan
Mi, 17. Jan		01:24*–06:44*	5h 20m	M _\ bis AN ₋		11:53	00:09	06:45	34m	07:19	34m	07:53	33m	08:27	9h 22m	17:49	33m	18:23	34m	18:57	34m	19:32	14h 37m	11h 12m				Mi, 17. Jan
Do, 18. Jan		02:38*–06:44*	4h 05m	M _\ bis AN ₋	☾	12:15	01:24	06:44	34m	07:18	34m	07:53	33m	08:26	9h 24m	17:50	33m	18:24	34m	18:58	34m	19:33	14h 35m	11h 11m				Do, 18. Jan
Fr, 19. Jan		03:52*–06:43*	2h 50m	M _\ bis AN ₋		12:40	02:38	06:44	34m	07:18	34m	07:52	33m	08:26	9h 26m	17:52	33m	18:25	34m	19:00	34m	19:34	14h 33m	11h 09m				Fr, 19. Jan
Sa, 20. Jan		05:05*–06:43*	1h 37m	M _\ bis AN ₋		13:10	03:52	06:43	34m	07:17	34m	07:52	33m	08:25	9h 27m	17:53	33m	18:26	34m	19:01	34m	19:35	14h 31m	11h 08m				Sa, 20. Jan
So, 21. Jan		06:12*–06:42*	29m	M _\ bis AN ₋		13:46	05:05	06:43	34m	07:17	34m	07:51	33m	08:24	9h 29m	17:54	33m	18:27	34m	19:02	34m	19:36	14h 29m	11h 06m				So, 21. Jan
Mo, 22. Jan		—:—:—:—:—	–	Mond stört		14:32	06:12	06:42	33m	07:16	34m	07:50	33m	08:24	9h 31m	17:55	33m	18:29	34m	19:03	33m	19:37	14h 27m	11h 04m				Mo, 22. Jan
Di, 23. Jan		—:—:—:—:—	–	Mond stört		15:26	07:12	06:42	33m	07:16	34m	07:50	33m	08:23	9h 33m	17:57	33m	18:30	34m	19:04	33m	19:38	14h 25m	11h 03m				Di, 23. Jan
Mi, 24. Jan		—:—:—:—:—	–	Mond stört		16:28	08:00	06:41	33m	07:15	34m	07:49	33m	08:22	9h 36m	17:58	33m	18:31	34m	19:05	33m	19:39	14h 23m	11h 01m				Mi, 24. Jan
Do, 25. Jan		—:~:~:~:~:~	–	Mond stört	☾	17:34	08:39	06:40	33m	07:14	34m	07:48	32m	08:21	9h 38m	17:59	32m	18:32	34m	19:06	33m	19:40	14h 20m	10h 59m				Do, 25. Jan
Fr, 26. Jan		—:~:~:~:~:~	–	Mond stört		18:40	09:10	06:40	33m	07:14	33m	07:47	32m	08:20	9h 40m	18:01	32m	18:34	34m	19:08	33m	19:41	14h 18m	10h 57m				Fr, 26. Jan
Sa, 27. Jan		19:43–19:46	3m	AN ₊ bis M ₇		19:46	09:35	06:39	33m	07:13	33m	07:47	32m	08:19	9h 42m	18:02	32m	18:35	33m	19:09	33m	19:43	14h 16m	10h 55m				Sa, 27. Jan
So, 28. Jan		19:44–20:49	1h 05m	AN ₊ bis M ₇		20:49	09:55	06:38	33m	07:12	33m	07:46	32m	08:18	9h 44m	18:03	32m	18:36	33m	19:10	33m	19:44	14h 14m	10h 53m				So, 28. Jan
Mo, 29. Jan		19:45–21:51	2h 06m	AN ₊ bis M ₇		21:51	10:13	06:38	33m	07:11	33m	07:45	32m	08:18	9h 47m	18:05	32m	18:37	33m	19:11	33m	19:45	14h 11m	10h 51m				Mo, 29. Jan
Di, 30. Jan		19:46–22:53	3h 06m	AN ₊ bis M ₇		22:53	10:30	06:37	33m	07:10	33m	07:44	32m	08:17	9h 49m	18:06	32m	18:39	33m	19:12	33m	19:46	14h 09m	10h 49m				Di, 30. Jan
Mi, 31. Jan		19:47–23:55	4h 08m	AN ₊ bis M ₇		23:55	10:47	06:36	33m	07:09	33m	07:43	32m	08:16	9h 51m	18:07	32m	18:40	33m	19:14	33m	19:47	14h 07m	10h 47m				Mi, 31. Jan
Do, 1. Feb		19:48–00:59*	5h 11m	AN ₊ bis M ₇		—:—	11:05	06:35	33m	07:09	33m	07:42	32m	08:14	9h 54m	18:09	32m	18:41	33m	19:15	33m	19:48	14h 04m	10h 45m				Do, 1. Feb
Fr, 2. Feb		19:50–02:06*	6h 16m	AN ₊ bis M ₇		00:59	11:25	06:34	33m	07:08	33m	07:41	32m	08:13	9h 56m	18:10	32m	18:42	33m	19:16	33m	19:50	14h 02m	10h 43m				Fr, 2. Feb
Sa, 3. Feb		19:51–03:16*	7h 25m	AN ₊ bis M ₇	☾	02:06	11:49	06:33	33m	07:07	33m	07:40	32m	08:12	9h 59m	18:12	32m	18:44	33m	19:17	33m	19:51	13h 59m	10h 41m				Sa, 3. Feb
So, 4. Feb		19:52–04:28*	8h 36m	AN ₊ bis M ₇		03:16	12:19	06:32	33m	07:06	33m	07:39	32m	08:11	10h 01m	18:13	32m	18:45	33m	19:18	33m	19:52	13h 57m	10h 39m				So, 4. Feb
Mo, 5. Feb		19:53–05:37*	9h 44m	AN ₊ bis M ₇		04:28	12:59	06:31	33m	07:05	33m	07:38	31m	08:10	10h 04m	18:14	32m	18:46	33m	19:20	33m	19:53	13h 54m	10h 37m				Mo, 5. Feb
Di, 6. Feb		19:54–06:29*	10h 34m	AN ₊ bis AN ₋		05:37	13:52	06:30	33m	07:04	33m	07:37	31m	08:09	10h 06m	18:16	31m	18:48	33m	19:21	33m	19:54	13h 51m	10h 34m				Di, 6. Feb
Mi, 7. Feb		19:55–06:28*	10h 32m	AN ₊ bis AN ₋		06:40	14:58	06:29	33m	07:02	33m	07:36	31m	08:08	10h 09m	18:17	31m	18:49	33m	19:22	33m	19:55	13h 49m	10h 32m				Mi, 7. Feb
Do, 8. Feb		19:57–06:27*	10h 30m	AN ₊ bis AN ₋		07:31	16:17	06:28	33m	07:01	33m	07:35	31m	08:06	10h 12m	18:18	31m	18:50	33m	19:23	33m	19:57	13h 46m	10h 30m				Do, 8. Feb
Fr, 9. Feb		19:58–06:26*	10h 27m	AN ₊ bis AN ₋	☾	08:12	17:41	06:27	33m	07:00	33m	07:33	31m	08:05	10h 14m	18:20	31m	18:51	33m	19:25	33m	19:58	13h 43m	10h 27m				Fr, 9. Feb
Sa, 10. Feb		19:59–06:25*	10h 25m	AN ₊ bis AN ₋		08:44	19:06	06:26	33m	06:59	33m	07:32	31m	08:04	10h 17m	18:21	31m	18:53	33m	19:26	33m	19:59	13h 41m	10h 25m				Sa, 10. Feb
So, 11. Feb		20:29–06:23*	9h 54m	M _\ bis AN ₋		09:10	20:29	06:25	33m	06:58	33m	07:31	31m	08:02	10h 20m	18:22	31m	18:54	33m	19:27	33m	20:00	13h 38m	10h 23m				So, 11. Feb
Mo, 12. Feb																												

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

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

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

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

Table with 29 columns (1-29) and 62 rows (1-62). Columns include dates, time zones, astronomical data (Astr. dunkel, Astr., Astr. N.), moon phases (Mond), and sunrise/sunset times (Sonne, Ende der Abenddämmerung, Nacht). Rows represent 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- 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		
So, 27. Okt		19:33–03:20*	7h 47m	AN ₊ bis M ₇		02:17	16:03	05:50	33m	06:23	32m	06:56	31m	07:27	10h 28m	17:56	31m	18:27	32m	19:00	33m	19:33	13h 32m	10h 17m				So, 27. Okt
Mo, 28. Okt		19:32–04:22*	8h 50m	AN ₊ bis M ₇		03:20	16:20	05:51	33m	06:24	32m	06:57	31m	07:28	10h 25m	17:54	31m	18:26	32m	18:59	33m	19:32	13h 35m	10h 20m				Mo, 28. Okt
Di, 29. Okt		19:30–05:24*	9h 53m	AN ₊ bis M ₇		04:22	16:36	05:52	33m	06:25	33m	06:58	31m	07:30	10h 23m	17:53	31m	18:24	32m	18:57	33m	19:30	13h 38m	10h 22m				Di, 29. Okt
Mi, 30. Okt		19:29–05:54*	10h 25m	AN ₊ bis AN ₋		05:24	16:53	05:53	33m	06:26	33m	06:59	31m	07:31	10h 20m	17:52	31m	18:23	33m	18:56	33m	19:29	13h 40m	10h 25m				Mi, 30. Okt
Do, 31. Okt		19:28–05:55*	10h 27m	AN ₊ bis AN ₋		06:27	17:11	05:54	33m	06:28	33m	07:01	31m	07:32	10h 17m	17:50	31m	18:22	33m	18:55	33m	19:28	13h 43m	10h 27m				Do, 31. Okt
Fr, 1. Nov		19:27–05:57*	10h 29m	AN ₊ bis AN ₋	●	07:31	17:32	05:55	33m	06:29	33m	07:02	31m	07:34	10h 15m	17:49	31m	18:20	33m	18:54	33m	19:27	13h 46m	10h 29m				Fr, 1. Nov
Sa, 2. Nov		19:26–05:58*	10h 31m	AN ₊ bis AN ₋		08:37	17:57	05:57	33m	06:30	33m	07:03	31m	07:35	10h 12m	17:47	31m	18:19	33m	18:52	33m	19:26	13h 48m	10h 31m				Sa, 2. Nov
So, 3. Nov		19:25–05:59*	10h 34m	AN ₊ bis AN ₋		09:44	18:28	05:58	33m	06:31	33m	07:04	31m	07:36	10h 10m	17:46	31m	18:18	33m	18:51	33m	19:25	13h 51m	10h 34m				So, 3. Nov
Mo, 4. Nov		19:23–06:00*	10h 36m	AN ₊ bis AN ₋		10:50	19:09	05:59	33m	06:32	33m	07:06	31m	07:37	10h 07m	17:45	31m	18:17	33m	18:50	33m	19:23	13h 53m	10h 36m				Mo, 4. Nov
Di, 5. Nov		20:00–06:01*	10h 01m	M _\ bis AN ₋		11:51	20:00	06:00	33m	06:33	33m	07:07	31m	07:39	10h 04m	17:44	31m	18:16	33m	18:49	33m	19:22	13h 56m	10h 38m				Di, 5. Nov
Mi, 6. Nov		21:01–06:02*	9h 01m	M _\ bis AN ₋		12:45	21:01	06:01	33m	06:35	33m	07:08	32m	07:40	10h 02m	17:42	32m	18:15	33m	18:48	33m	19:21	13h 58m	10h 40m				Mi, 6. Nov
Do, 7. Nov		22:11–06:03*	7h 52m	M _\ bis AN ₋		13:29	22:11	06:02	33m	06:36	33m	07:09	32m	07:41	9h 59m	17:41	32m	18:13	33m	18:47	33m	19:20	14h 01m	10h 43m				Do, 7. Nov
Fr, 8. Nov		23:25–06:04*	6h 39m	M _\ bis AN ₋		14:04	23:25	06:03	33m	06:37	33m	07:10	32m	07:43	9h 57m	17:40	32m	18:12	33m	18:46	33m	19:19	14h 03m	10h 45m				Fr, 8. Nov
Sa, 9. Nov		00:42*–06:06*	5h 23m	M _\ bis AN ₋	◐	14:33	—:—	06:04	33m	06:38	33m	07:12	32m	07:44	9h 55m	17:39	32m	18:11	33m	18:45	33m	19:18	14h 06m	10h 47m				Sa, 9. Nov
So, 10. Nov		01:59*–06:07*	4h 08m	M _\ bis AN ₋		14:58	00:42	06:06	33m	06:39	33m	07:13	32m	07:45	9h 52m	17:38	32m	18:10	33m	18:44	33m	19:18	14h 08m	10h 49m				So, 10. Nov
Mo, 11. Nov		03:16*–06:08*	2h 51m	M _\ bis AN ₋		15:20	01:59	06:07	33m	06:40	33m	07:14	32m	07:47	9h 50m	17:37	32m	18:09	33m	18:43	33m	19:17	14h 10m	10h 51m				Mo, 11. Nov
Di, 12. Nov		04:35*–06:09*	1h 34m	M _\ bis AN ₋		15:41	03:16	06:08	33m	06:42	33m	07:15	32m	07:48	9h 47m	17:36	32m	18:08	33m	18:42	33m	19:16	14h 13m	10h 53m				Di, 12. Nov
Mi, 13. Nov		05:56*–06:10*	13m	M _\ bis AN ₋		16:03	04:35	06:09	33m	06:43	33m	07:17	32m	07:49	9h 45m	17:35	32m	18:07	33m	18:41	33m	19:15	14h 15m	10h 55m				Mi, 13. Nov
Do, 14. Nov		—:—:—:—	–	Mond stört		16:28	05:56	06:10	33m	06:44	33m	07:18	32m	07:50	9h 43m	17:34	32m	18:07	33m	18:40	33m	19:14	14h 17m	10h 56m				Do, 14. Nov
Fr, 15. Nov		—:—:—:—	–	Mond stört	◑	16:59	07:20	06:11	33m	06:45	33m	07:19	32m	07:52	9h 41m	17:33	32m	18:06	33m	18:40	33m	19:13	14h 20m	10h 58m				Fr, 15. Nov
Sa, 16. Nov		—:—:—:—	–	Mond stört		17:37	08:44	06:12	33m	06:46	34m	07:20	32m	07:53	9h 39m	17:32	32m	18:05	34m	18:39	33m	19:13	14h 22m	11h 00m				Sa, 16. Nov
So, 17. Nov		—:~:~:~:~	–	Mond stört		18:27	10:04	06:13	33m	06:47	34m	07:21	32m	07:54	9h 36m	17:31	32m	18:04	34m	18:38	33m	19:12	14h 24m	11h 02m				So, 17. Nov
Mo, 18. Nov		19:11–19:27	15m	AN ₊ bis M ₇		19:27	11:14	06:14	33m	06:48	34m	07:22	33m	07:56	9h 34m	17:30	33m	18:03	34m	18:38	33m	19:11	14h 26m	11h 04m				Mo, 18. Nov
Di, 19. Nov		19:11–20:36	1h 24m	AN ₊ bis M ₇		20:36	12:09	06:15	33m	06:49	34m	07:24	33m	07:57	9h 32m	17:30	33m	18:03	34m	18:37	33m	19:11	14h 28m	11h 05m				Di, 19. Nov
Mi, 20. Nov		19:10–21:47	2h 37m	AN ₊ bis M ₇		21:47	12:51	06:17	34m	06:51	34m	07:25	33m	07:58	9h 30m	17:29	33m	18:02	34m	18:36	33m	19:10	14h 30m	11h 07m				Mi, 20. Nov
Do, 21. Nov		19:10–22:58	3h 48m	AN ₊ bis M ₇		22:58	13:23	06:18	34m	06:52	34m	07:26	33m	07:59	9h 28m	17:28	33m	18:01	34m	18:36	34m	19:10	14h 32m	11h 08m				Do, 21. Nov
Fr, 22. Nov		19:09–00:06*	4h 56m	AN ₊ bis M ₇		—:~	13:47	06:19	34m	06:53	34m	07:27	33m	08:01	9h 26m	17:27	33m	18:01	34m	18:35	34m	19:09	14h 34m	11h 10m				Fr, 22. Nov
Sa, 23. Nov		19:09–01:10*	6h 01m	AN ₊ bis M ₇	◒	00:06	14:08	06:20	34m	06:54	34m	07:28	33m	08:02	9h 24m	17:27	33m	18:00	34m	18:35	34m	19:09	14h 36m	11h 11m				Sa, 23. Nov
So, 24. Nov		19:08–02:13*	7h 04m	AN ₊ bis M ₇		01:10	14:25	06:21	34m	06:55	34m	07:29	33m	08:03	9h 23m	17:26	33m	18:00	34m	18:34	34m	19:08	14h 38m	11h 13m				So, 24. Nov
Mo, 25. Nov		19:08–03:14*	8h 06m	AN ₊ bis M ₇		02:13	14:42	06:22	34m	06:56	34m	07:31	33m	08:04	9h 21m	17:25	33m	17:59	34m	18:34	34m	19:08	14h 39m	11h 14m				Mo, 25. Nov
Di, 26. Nov		19:08–04:16*	9h 08m	AN ₊ bis M ₇		03:14	14:58	06:23	34m	06:57	34m	07:32	33m	08:05	9h 19m	17:25	33m	17:59	34m	18:33	34m	19:08	14h 41m	11h 16m				Di, 26. Nov
Mi, 27. Nov		19:07–05:20*	10h 12m	AN ₊ bis M ₇		04:16	15:16	06:24	34m	06:58	34m	07:33	33m	08:07	9h 17m	17:24	33m	17:58	34m	18:33	34m	19:07	14h 43m	11h 17m				Mi, 27. Nov
Do, 28. Nov		19:07–06:26*	11h 18m	AN ₊ bis M ₇		05:20	15:36	06:25	34m	06:59	34m	07:34	33m	08:08	9h 16m	17:24	33m	17:58	34m	18:33	34m	19:07	14h 44m	11h 18m				Do, 28. Nov
Fr, 29. Nov		19:07–06:27*	11h 19m	AN ₊ bis AN ₋		06:26	16:00	06:26	34m	07:00	34m	07:35	33m	08:09	9h 14m	17:24	33m	17:58	34m	18:32	34m	19:07	14h 46m	11h 19m				Fr, 29. Nov
Sa, 30. Nov		19:06–06:28*	11h 21m	AN ₊ bis AN ₋		07:33	16:29	06:27	34m	07:01	34m	07:36	33m	08:10	9h 13m	17:23	33m	17:57	34m	18:32	34m	19:06	14h 47m	11h 21m				Sa, 30. Nov
So, 1. Dez		19:06–06:29*	11h 22m	AN ₊ bis AN ₋	●	08:40	17:07	06:28	34m	07:02	34m	07:37	34m	08:11	9h 11m	17:23	34m	17:57	34m	18:32	34m	19:06	14h 49m	11h 22m				So, 1. Dez
Mo, 2. Dez		19:06–06:29*	11h 23m	AN ₊ bis AN ₋		09:44	17:55	06:29	34m	07:03	34m	07:38	34m	08:12	9h 10m	17:23	34m	17:57	34m	18:32	34m	19:06	14h 50m	11h 23m				Mo, 2. Dez
Di, 3. Dez		19:06–06:30*	11h 24m	AN ₊ bis AN ₋		10:41	18:55	06:29	34m	07:04	35m	07:39	34m	08:13	9h 09m	17:22	34m	17:57	35m	18:32	34m	19:06	14h 51m	11h 24m				Di, 3. Dez
Mi, 4. Dez		20:03–06:31*	10h 28m	M _\ bis AN ₋		11:28	20:03	06:30	34m	07:05	35m	07:40	34m	08:14	9h 07m	17:22	34m	17:56	35m	18:31	34m	19:06	14h 53m	11h 25m				Mi, 4. Dez
Do, 5. Dez		21:16–06:32*	9h 15m	M _\ bis AN ₋		12:06	21:16	06:31	34m	07:06	35m	07:41	34m	08:15	9h 06m	17:22	34m	17:56	35m	18:31	34m	19:06	14h 54m	11h 26m				Do, 5. Dez
Fr, 6. Dez		22:31–06:33*	8h 01m	M _\ bis AN ₋		12:36	22:31	06:32	34m	07:07	35m	07:42	34m	08:16	9h 05m	17:22	34m	17:56	35m	18:31	34m	19:06	14h 55m	11h 26m				Fr, 6. Dez
Sa, 7. Dez		23:46–06:34*	6h 47m	M _\ bis AN ₋		13:01	23:46	06:33	34m	07:08	35m	07:43	34m	08:17	9h 04m	17:22	34m	17:56	35m	18:31	34m	19:06	14h 56m	11h 27m				Sa, 7. Dez
So, 8. Dez																												

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