

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Visp 46.2922° N 7.8828° 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		18:43 – 22:25	3h 42m	AN ₊ bis M ₇		22:25	11:25	06:20	36m	06:57	37m	07:34	36m	08:11	8h 41m	16:52	36m	17:29	37m	18:06	36m	18:43	15h 18m	11h 37m				Mo, 1. Jan
Di, 2. Jan		18:43 – 23:30	4h 46m	AN ₊ bis M ₇		23:30	11:40	06:20	36m	06:57	37m	07:34	36m	08:11	8h 42m	16:53	36m	17:30	37m	18:07	36m	18:43	15h 17m	11h 36m				Di, 2. Jan
Mi, 3. Jan		18:44 – 00:34*	5h 49m	AN ₊ bis M ₇		—:—	11:55	06:20	36m	06:57	37m	07:34	36m	08:11	8h 43m	16:54	36m	17:31	37m	18:08	36m	18:44	15h 16m	11h 36m				Mi, 3. Jan
Do, 4. Jan		18:45 – 01:40*	6h 55m	AN ₊ bis M ₇	☾	00:34	12:10	06:20	36m	06:57	37m	07:34	36m	08:11	8h 44m	16:55	36m	17:32	37m	18:09	36m	18:45	15h 15m	11h 35m				Do, 4. Jan
Fr, 5. Jan		18:46 – 02:49*	8h 03m	AN ₊ bis M ₇		01:40	12:26	06:20	36m	06:57	37m	07:34	36m	08:10	8h 45m	16:56	36m	17:33	37m	18:10	36m	18:46	15h 14m	11h 34m				Fr, 5. Jan
Sa, 6. Jan		18:47 – 04:02*	9h 14m	AN ₊ bis M ₇		02:49	12:46	06:20	36m	06:57	37m	07:34	36m	08:10	8h 46m	16:57	36m	17:34	37m	18:11	36m	18:47	15h 13m	11h 33m				Sa, 6. Jan
So, 7. Jan		18:48 – 05:18*	10h 29m	AN ₊ bis M ₇		04:02	13:10	06:20	36m	06:57	36m	07:34	36m	08:10	8h 48m	16:58	36m	17:35	37m	18:12	36m	18:48	15h 11m	11h 32m				So, 7. Jan
Mo, 8. Jan		18:49 – 06:20*	11h 31m	AN ₊ bis AN ₋		05:18	13:43	06:20	36m	06:57	36m	07:33	36m	08:10	8h 49m	16:59	36m	17:36	36m	18:13	36m	18:49	15h 10m	11h 31m				Mo, 8. Jan
Di, 9. Jan		18:50 – 06:20*	11h 30m	AN ₊ bis AN ₋		06:33	14:28	06:20	36m	06:56	36m	07:33	36m	08:10	8h 50m	17:00	36m	17:37	36m	18:14	36m	18:50	15h 08m	11h 30m				Di, 9. Jan
Mi, 10. Jan		18:51 – 06:20*	11h 28m	AN ₊ bis AN ₋		07:42	15:28	06:20	36m	06:56	36m	07:33	36m	08:09	8h 52m	17:02	36m	17:38	36m	18:15	36m	18:51	15h 07m	11h 28m				Mi, 10. Jan
Do, 11. Jan		18:52 – 06:20*	11h 27m	AN ₊ bis AN ₋	☾	08:39	16:43	06:20	36m	06:56	36m	07:33	36m	08:09	8h 53m	17:03	36m	17:39	36m	18:16	36m	18:52	15h 05m	11h 27m				Do, 11. Jan
Fr, 12. Jan		18:53 – 06:19*	11h 26m	AN ₊ bis AN ₋		09:23	18:07	06:20	36m	06:56	36m	07:32	36m	08:08	8h 55m	17:04	36m	17:40	36m	18:17	36m	18:53	15h 03m	11h 26m				Fr, 12. Jan
Sa, 13. Jan		19:33 – 06:19*	10h 45m	M _\ bis AN ₋		09:56	19:33	06:19	36m	06:55	36m	07:32	35m	08:08	8h 57m	17:05	35m	17:41	36m	18:18	36m	18:54	15h 02m	11h 24m				Sa, 13. Jan
So, 14. Jan		20:58 – 06:19*	9h 20m	M _\ bis AN ₋		10:21	20:58	06:19	35m	06:55	36m	07:32	35m	08:07	8h 59m	17:07	35m	17:42	36m	18:19	36m	18:55	15h 00m	11h 23m				So, 14. Jan
Mo, 15. Jan		22:20 – 06:18*	7h 58m	M _\ bis AN ₋		10:42	22:20	06:19	35m	06:55	36m	07:31	35m	08:07	9h 00m	17:08	35m	17:44	36m	18:20	35m	18:56	14h 58m	11h 22m				Mo, 15. Jan
Di, 16. Jan		23:39 – 06:18*	6h 39m	M _\ bis AN ₋		11:01	23:39	06:18	35m	06:54	36m	07:31	35m	08:06	9h 02m	17:09	35m	17:45	36m	18:21	35m	18:57	14h 56m	11h 20m				Di, 16. Jan
Mi, 17. Jan		00:56* – 06:17*	5h 20m	M _\ bis AN ₋		11:20	—:—	06:18	35m	06:54	36m	07:30	35m	08:06	9h 04m	17:11	35m	17:46	36m	18:23	35m	18:58	14h 54m	11h 18m				Mi, 17. Jan
Do, 18. Jan		02:14* – 06:17*	4h 02m	M _\ bis AN ₋	☾	11:39	00:56	06:17	35m	06:53	36m	07:29	35m	08:05	9h 06m	17:12	35m	17:47	36m	18:24	35m	19:00	14h 52m	11h 17m				Do, 18. Jan
Fr, 19. Jan		03:31* – 06:16*	2h 45m	M _\ bis AN ₋		12:01	02:14	06:17	35m	06:53	36m	07:29	35m	08:04	9h 08m	17:13	35m	17:49	36m	18:25	35m	19:01	14h 50m	11h 15m				Fr, 19. Jan
Sa, 20. Jan		04:46* – 06:16*	1h 29m	M _\ bis AN ₋		12:28	03:31	06:16	35m	06:52	36m	07:28	35m	08:03	9h 11m	17:15	35m	17:50	36m	18:26	35m	19:02	14h 48m	11h 13m				Sa, 20. Jan
So, 21. Jan		05:55* – 06:15*	19m	M _\ bis AN ₋		13:03	04:46	06:16	35m	06:51	36m	07:27	35m	08:03	9h 13m	17:16	35m	17:51	36m	18:27	35m	19:03	14h 45m	11h 12m				So, 21. Jan
Mo, 22. Jan		—:—:—:—	–	Mond stört		13:47	05:55	06:15	35m	06:51	36m	07:27	35m	08:02	9h 15m	17:17	35m	17:53	36m	18:29	35m	19:04	14h 43m	11h 10m				Mo, 22. Jan
Di, 23. Jan		—:—:—:—	–	Mond stört		14:41	06:55	06:14	35m	06:50	35m	07:26	35m	08:01	9h 17m	17:19	35m	17:54	35m	18:30	35m	19:05	14h 41m	11h 08m				Di, 23. Jan
Mi, 24. Jan		—:—:—:—	–	Mond stört		15:43	07:43	06:14	35m	06:49	35m	07:25	34m	08:00	9h 20m	17:20	34m	17:55	35m	18:31	35m	19:07	14h 38m	11h 06m				Mi, 24. Jan
Do, 25. Jan		—:—:~:~:~	–	Mond stört	☾	16:51	08:21	06:13	35m	06:48	35m	07:24	34m	07:59	9h 22m	17:22	34m	17:57	35m	18:32	35m	19:08	14h 36m	11h 04m				Do, 25. Jan
Fr, 26. Jan		—:~:~:~:~	–	Mond stört		18:00	08:49	06:12	35m	06:48	35m	07:23	34m	07:58	9h 25m	17:23	34m	17:58	35m	18:34	35m	19:09	14h 33m	11h 02m				Fr, 26. Jan
Sa, 27. Jan		—:~:~:~:~	–	Mond stört		19:08	09:12	06:11	35m	06:47	35m	07:22	34m	07:57	9h 27m	17:25	34m	17:59	35m	18:35	35m	19:10	14h 31m	11h 00m				Sa, 27. Jan
So, 28. Jan		19:12 – 20:14	1h 02m	AN ₊ bis M ₇		20:14	09:30	06:11	35m	06:46	35m	07:21	34m	07:56	9h 30m	17:26	34m	18:01	35m	18:36	35m	19:12	14h 28m	10h 58m				So, 28. Jan
Mo, 29. Jan		19:13 – 21:18	2h 05m	AN ₊ bis M ₇		21:18	09:46	06:10	35m	06:45	35m	07:21	34m	07:55	9h 32m	17:28	34m	18:02	35m	18:38	35m	19:13	14h 26m	10h 55m				Mo, 29. Jan
Di, 30. Jan		19:14 – 22:22	3h 08m	AN ₊ bis M ₇		22:22	10:01	06:09	35m	06:44	35m	07:19	34m	07:54	9h 35m	17:29	34m	18:03	35m	18:39	35m	19:14	14h 23m	10h 53m				Di, 30. Jan
Mi, 31. Jan		19:15 – 23:27	4h 11m	AN ₊ bis M ₇		23:27	10:15	06:08	35m	06:43	35m	07:18	34m	07:53	9h 37m	17:31	34m	18:05	35m	18:40	35m	19:15	14h 20m	10h 51m				Mi, 31. Jan
Do, 1. Feb		19:17 – 00:34*	5h 16m	AN ₊ bis M ₇		—:—	10:30	06:07	35m	06:42	35m	07:17	34m	07:51	9h 40m	17:32	34m	18:06	35m	18:41	35m	19:17	14h 18m	10h 49m				Do, 1. Feb
Fr, 2. Feb		19:18 – 01:43*	6h 25m	AN ₊ bis M ₇		00:34	10:48	06:06	35m	06:41	35m	07:16	34m	07:50	9h 43m	17:33	34m	18:08	35m	18:43	35m	19:18	14h 15m	10h 46m				Fr, 2. Feb
Sa, 3. Feb		19:19 – 02:56*	7h 36m	AN ₊ bis M ₇	☾	01:43	11:09	06:05	35m	06:40	35m	07:15	33m	07:49	9h 46m	17:35	33m	18:09	35m	18:44	35m	19:19	14h 12m	10h 44m				Sa, 3. Feb
So, 4. Feb		19:21 – 04:10*	8h 49m	AN ₊ bis M ₇		02:56	11:37	06:04	35m	06:39	35m	07:14	33m	07:48	9h 48m	17:36	33m	18:10	35m	18:45	35m	19:21	14h 09m	10h 42m				So, 4. Feb
Mo, 5. Feb		19:22 – 05:21*	9h 58m	AN ₊ bis M ₇		04:10	12:14	06:03	35m	06:38	35m	07:13	33m	07:46	9h 51m	17:38	33m	18:12	35m	18:47	35m	19:22	14h 07m	10h 39m				Mo, 5. Feb
Di, 6. Feb		19:23 – 06:00*	10h 37m	AN ₊ bis AN ₋		05:21	13:06	06:01	34m	06:36	34m	07:11	33m	07:45	9h 54m	17:39	33m	18:13	35m	18:48	35m	19:23	14h 04m	10h 37m				Di, 6. Feb
Mi, 7. Feb		19:25 – 05:59*	10h 34m	AN ₊ bis AN ₋		06:23	14:13	06:00	34m	06:35	34m	07:10	33m	07:44	9h 57m	17:41	33m	18:15	34m	18:50	34m	19:25	14h 01m	10h 34m				Mi, 7. Feb
Do, 8. Feb		19:26 – 05:58*	10h 31m	AN ₊ bis AN ₋		07:13	15:33	05:59	34m	06:34	34m	07:09	33m	07:42	10h 00m	17:43	33m	18:16	34m	18:51	34m	19:26	13h 58m	10h 31m				Do, 8. Feb
Fr, 9. Feb		19:27 – 05:57*	10h 29m	AN ₊ bis AN ₋	☾	07:51	17:00	05:58	34m	06:33	34m	07:07	33m	07:41	10h 03m	17:44	33m	18:17	34m	18:52	34m	19:27	13h 55m	10h 29m				Fr, 9. Feb
Sa, 10. Feb		19:29 – 05:55*	10h 26m	AN ₊ bis AN ₋		08:20	18:29	05:57	34m	06:31	34m	07:06	33m	07:39	10h 06m	17:46	33m	18:19	34m	18:54	34m	19:29	13h 52m	10h 26m				Sa, 10. Feb
So, 11. Feb		19:55 – 05:54*	9h 59m	M _\ bis AN ₋		08:44	19:55	05:55	34m	06:30	34m	07:05	33m	07:38	10h 09m	17:47	33m	18:20	34m	18:55	34m	19:30	13h 49m	10h 24m				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		13:35	05:43	05:42	34m	06:17	34m	06:51	32m	07:24	10h 36m	18:00	32m	18:33	34m	19:07	34m	19:42	13h 21m	9h 58m				Di, 20. Feb
Mi, 21. Feb		—:—:—:—	—	Mond stört		14:41	06:23	05:41	34m	06:15	34m	06:50	32m	07:22	10h 39m	18:02	32m	18:34	34m	19:09	34m	19:43	13h 18m	9h 55m				Mi, 21. Feb
Do, 22. Feb		—:—:—:—	—	Mond stört		15:49	06:53	05:39	34m	06:14	34m	06:48	32m	07:20	10h 43m	18:03	32m	18:36	34m	19:10	34m	19:45	13h 15m	9h 52m				Do, 22. Feb
Fr, 23. Feb		—:—:~:~:~	—	Mond stört		16:58	07:17	05:37	34m	06:12	34m	06:46	32m	07:19	10h 46m	18:05	32m	18:37	34m	19:11	34m	19:46	13h 12m	9h 49m				Fr, 23. Feb
Sa, 24. Feb		—:~:~:~:~	—	Mond stört	○	18:04	07:36	05:36	34m	06:10	34m	06:45	32m	07:17	10h 49m	18:06	32m	18:39	34m	19:13	34m	19:48	13h 08m	9h 46m				Sa, 24. Feb
So, 25. Feb		—:~:~:~:~	—	Mond stört		19:09	07:53	05:34	34m	06:09	34m	06:43	32m	07:15	10h 52m	18:08	32m	18:40	34m	19:14	34m	19:49	13h 05m	9h 43m				So, 25. Feb
Mo, 26. Feb		19:50–20:13	22m	AN ₊ bis M ₇		20:13	08:07	05:32	34m	06:07	34m	06:41	32m	07:13	10h 55m	18:09	32m	18:41	34m	19:16	34m	19:50	13h 02m	9h 40m				Mo, 26. Feb
Di, 27. Feb		19:52–21:18	1h 25m	AN ₊ bis M ₇		21:18	08:22	05:31	34m	06:05	34m	06:39	32m	07:12	10h 59m	18:11	32m	18:43	34m	19:17	34m	19:52	12h 59m	9h 37m				Di, 27. Feb
Mi, 28. Feb		19:53–22:23	2h 30m	AN ₊ bis M ₇		22:23	08:36	05:29	34m	06:04	34m	06:38	32m	07:10	11h 02m	18:12	32m	18:44	34m	19:18	34m	19:53	12h 55m	9h 33m				Mi, 28. Feb
Do, 29. Feb		19:55–23:31	3h 36m	AN ₊ bis M ₇		23:31	08:53	05:27	34m	06:02	34m	06:36	32m	07:08	11h 05m	18:13	32m	18:46	34m	19:20	34m	19:55	12h 52m	9h 30m				Do, 29. Feb
Fr, 1. Mrz		19:56–00:42*	4h 45m	AN ₊ bis M ₇		—:—	09:12	05:25	34m	06:00	34m	06:34	31m	07:06	11h 08m	18:15	32m	18:47	34m	19:21	34m	19:56	12h 49m	9h 27m				Fr, 1. Mrz
Sa, 2. Mrz		19:57–01:54*	5h 56m	AN ₊ bis M ₇		00:42	09:37	05:23	34m	05:58	34m	06:32	31m	07:04	11h 12m	18:16	32m	18:48	34m	19:22	34m	19:57	12h 46m	9h 24m				Sa, 2. Mrz
So, 3. Mrz		19:59–03:04*	7h 05m	AN ₊ bis M ₇	●	01:54	10:09	05:22	34m	05:57	34m	06:31	31m	07:03	11h 15m	18:18	31m	18:50	34m	19:24	35m	19:59	12h 42m	9h 20m				So, 3. Mrz
Mo, 4. Mrz		20:00–04:09*	8h 08m	AN ₊ bis M ₇		03:04	10:52	05:20	34m	05:55	34m	06:29	31m	07:01	11h 18m	18:19	31m	18:51	34m	19:25	35m	20:00	12h 39m	9h 17m				Mo, 4. Mrz
Di, 5. Mrz		20:02–05:03*	9h 00m	AN ₊ bis M ₇		04:09	11:50	05:18	35m	05:53	34m	06:27	31m	06:59	11h 21m	18:21	31m	18:53	34m	19:27	35m	20:02	12h 36m	9h 14m				Di, 5. Mrz
Mi, 6. Mrz		20:03–05:14*	9h 10m	AN ₊ bis AN ₋		05:03	13:02	05:16	35m	05:51	34m	06:25	31m	06:57	11h 25m	18:22	31m	18:54	34m	19:28	35m	20:03	12h 33m	9h 10m				Mi, 6. Mrz
Do, 7. Mrz		20:05–05:12*	9h 07m	AN ₊ bis AN ₋		05:45	14:25	05:14	35m	05:49	34m	06:23	31m	06:55	11h 28m	18:23	31m	18:55	34m	19:29	35m	20:05	12h 29m	9h 07m				Do, 7. Mrz
Fr, 8. Mrz		20:06–05:10*	9h 03m	AN ₊ bis AN ₋		06:17	15:52	05:12	35m	05:47	34m	06:21	31m	06:53	11h 31m	18:25	31m	18:57	34m	19:31	35m	20:06	12h 26m	9h 03m				Fr, 8. Mrz
Sa, 9. Mrz		20:08–05:08*	9h 00m	AN ₊ bis AN ₋		06:43	17:20	05:10	35m	05:45	34m	06:19	31m	06:51	11h 34m	18:26	31m	18:58	34m	19:32	35m	20:08	12h 23m	9h 00m				Sa, 9. Mrz
So, 10. Mrz		20:09–05:06*	8h 57m	AN ₊ bis AN ₋	●	07:05	18:46	05:08	35m	05:43	34m	06:18	31m	06:49	11h 38m	18:28	31m	18:59	34m	19:34	35m	20:09	12h 19m	8h 57m				So, 10. Mrz
Mo, 11. Mrz		20:11–05:04*	8h 53m	AN ₊ bis AN ₋		07:25	20:10	05:06	35m	05:42	34m	06:16	31m	06:47	11h 41m	18:29	31m	19:01	34m	19:35	35m	20:11	12h 16m	8h 53m				Mo, 11. Mrz
Di, 12. Mrz		21:34–05:02*	7h 27m	M _\ bis AN ₋		07:44	21:34	05:04	35m	05:40	34m	06:14	31m	06:46	11h 44m	18:30	31m	19:02	34m	19:37	35m	20:12	12h 13m	8h 49m				Di, 12. Mrz
Mi, 13. Mrz		22:58–05:00*	6h 02m	M _\ bis AN ₋		08:05	22:58	05:02	35m	05:38	34m	06:12	31m	06:44	11h 48m	18:32	31m	19:04	34m	19:38	35m	20:14	12h 09m	8h 46m				Mi, 13. Mrz
Do, 14. Mrz		00:20*–04:58*	4h 38m	M _\ bis AN ₋		08:30	—:—	05:00	35m	05:36	34m	06:10	31m	06:42	11h 51m	18:33	31m	19:05	34m	19:39	35m	20:15	12h 06m	8h 42m				Do, 14. Mrz
Fr, 15. Mrz		01:37*–04:56*	3h 19m	M _\ bis AN ₋		09:00	00:20	04:58	35m	05:34	34m	06:08	31m	06:40	11h 54m	18:35	31m	19:06	34m	19:41	35m	20:17	12h 03m	8h 39m				Fr, 15. Mrz
Sa, 16. Mrz		02:45*–04:54*	2h 08m	M _\ bis AN ₋		09:39	01:37	04:56	35m	05:32	34m	06:06	31m	06:38	11h 58m	18:36	31m	19:08	34m	19:42	35m	20:18	12h 00m	8h 35m				Sa, 16. Mrz
So, 17. Mrz		03:41*–04:52*	1h 10m	M _\ bis AN ₋	◐	10:28	02:45	04:54	35m	05:30	34m	06:04	31m	06:36	12h 01m	18:37	31m	19:09	34m	19:44	36m	20:20	11h 56m	8h 32m				So, 17. Mrz
Mo, 18. Mrz		04:25*–04:50*	24m	M _\ bis AN ₋		11:26	03:41	04:52	36m	05:28	34m	06:02	31m	06:34	12h 04m	18:39	31m	19:11	34m	19:45	36m	20:21	11h 53m	8h 28m				Mo, 18. Mrz
Di, 19. Mrz		—:~:~:~:~	—	Mond stört		12:31	04:25	04:50	36m	05:26	34m	06:00	31m	06:32	12h 07m	18:40	31m	19:12	34m	19:47	36m	20:23	11h 50m	8h 24m				Di, 19. Mrz
Mi, 20. Mrz		—:~:~:~:~	—	Mond stört		13:40	04:58	04:47	36m	05:24	34m	05:58	31m	06:30	12h 11m	18:41	31m	19:13	34m	19:48	36m	20:24	11h 46m	8h 20m				Mi, 20. Mrz
Do, 21. Mrz		—:~:~:~:~	—	Mond stört		14:48	05:23	04:45	36m	05:22	34m	05:56	31m	06:28	12h 14m	18:43	31m	19:15	34m	19:49	36m	20:26	11h 43m	8h 17m				Do, 21. Mrz
Fr, 22. Mrz		—:~:~:~:~	—	Mond stört		15:55	05:43	04:43	36m	05:20	34m	05:54	31m	06:26	12h 17m	18:44	31m	19:16	34m	19:51	36m	20:27	11h 40m	8h 13m				Fr, 22. Mrz
Sa, 23. Mrz		—:~:~:~:~	—	Mond stört		17:00	06:00	04:41	36m	05:18	34m	05:52	31m	06:24	12h 21m	18:45	32m	19:17	34m	19:52	36m	20:29	11h 36m	8h 09m				Sa, 23. Mrz
So, 24. Mrz		—:~:~:~:~	—	Mond stört		18:05	06:15	04:39	36m	05:15	34m	05:50	31m	06:22	12h 24m	18:47	32m	19:19	34m	19:54	36m	20:31	11h 33m	8h 05m				So, 24. Mrz
Mo, 25. Mrz		—:~:~:~:~	—	Mond stört	○	19:09	06:29	04:37	36m	05:13	34m	05:48	31m	06:20	12h 27m	18:48	32m	19:20	35m	19:55	37m	20:32	11h 30m	8h 01m				Mo, 25. Mrz
Di, 26. Mrz		—:~:~:~:~	—	Mond stört		20:15	06:44	04:34	37m	05:11	35m	05:46	32m	06:18	12h 31m	18:49	32m	19:22	35m	19:57	37m	20:34	11h 26m	7h 58m				Di, 26. Mrz
Mi, 27. Mrz		20:36–21:22	46m	AN ₊ bis M ₇		21:22	07:00	04:32	37m	05:09	35m	05:44	32m	06:16	12h 34m	18:51	32m	19:23	35m	19:58	37m	20:36	11h 23m	7h 54m				Mi, 27. Mrz
Do, 28. Mrz		20:37–22:32	1h 54m	AN ₊ bis M ₇		22:32	07:18	04:30	37m	05:07	35m	05:42	32m	06:14	12h 37m	18:52	32m	19:24	35m	20:00	37m	20:37	11h 20m	7h 50m				Do, 28. Mrz
Fr, 29. Mrz		20:39–23:43	3h 04m	AN ₊ bis M ₇		23:43	07:40	04:28	37m	05:05	35m	05:40	32m	06:13	12h 40m	18:53	32m	19:26	35m	20:01	37m	20:39	11h 17m	7h 46m				Fr, 29. Mrz
Sa, 30. Mrz		20:41–00:54*	4h 13m	AN ₊ bis M ₇		—:—	08:09	04:25	37m	05:03	35m	05:38	32m	06:11	12h 44m	18:55	32m	19:27	35m	20:03	37m	20:41	11h 13m	7h 42m				Sa, 30. Mrz
So, 31. Mrz	MESZ	21:42–03:00*	5h 17m	AN ₊ bis M ₇		01:54	09:48	05:23	37m	06:01	35m	06:36	32m	07:09	12h 47m	19:56	32m	20:29	35m	21:04	38m	21:42	11h 10m	7h 38m				So, 31. Mrz
Mo, 1. Apr	MESZ	21:44–03:56*	6h 12m	AN ₊ bis M ₇		03:00	10:39	05:21	38m	05:59	35m	06:34	32m	07:07	12h 50m	19:57	32m	20:30	35m	21:06	38m	21:44	11h 07m	7h 34m				Mo, 1. Apr
Di, 2. Apr	MESZ	21:46–04:41*	6h 55m	AN ₊ bis M ₇	◑	03:56	11:44	05:18	38m	05:57	35m	06:3																

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

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

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

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

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