

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Miesbach 47.7833° N 11.8333° E

Berechnung: pyEphem
Textsatz: L^AT_EX

Atmosphären-Einstellungen in pyEphem

Standort.pressure = 1010.0
Standort.horizon = '0:00:00.0'

Alle Zeitangaben beziehen sich auf den in der jeweiligen Zeile angegeben Kalendertag. Liegt ein Ereignis bereits nach Mitternacht, also schon am Folgetag, ist die Zeitangabe mit einem * gekennzeichnet, z.B.: 00:20*.

Spalte 1 Kalendertag.

Spalte 2 Bei »MESZ« sind alle Zeitangaben in dieser Zeile in Mitteleuropäischer Sommerzeit, ansonsten standardmäßig in MEZ.

Spalte 3 Die für Deep-Sky-Beobachtungen nutzbare Zeitspanne: Es ist astronomisch dunkel (Sonne steht tiefer als -18°) und kein Mond stört.

Spalte 4 Dauer der für Deep-Sky-Beobachtungen nutzbaren Zeitspanne.

Spalte 5 Ereignisse, die die für Deep-Sky-Beobachtungen nutzbare Zeitspanne begrenzen: AN₊ (Einbruch der astronomischen Nacht = Ende der astr. Abenddämmerung), M_v (Monduntergang), AN₋ (Ende der astronomischen Nacht = Beginn der astr. Morgendämmerung), M₇

(Mondaufgang), Astr. MD (Astronomische Mitternachtsdämmerung), Naut. MD (Nautische Mitternachtsdämmerung).

Spalte 6 Mondphase.

Spalte 7 Mondaufgang.

Spalte 8 Monduntergang.

Spalte 9 Beginn der astr. Morgendämmerung (Sonnenhöhe = -18°).

Spalte 10 Dauer der astr. Morgendämmerung.

Spalte 11 Beginn der naut. Morgendämmerung (Sonnenhöhe = -12°).

Spalte 12 Dauer der naut. Morgendämmerung.

Spalte 13 Beginn der bürg. Morgendämmerung (Sonnenhöhe = -6°).

Spalte 14 Dauer der bürg. Morgendämmerung.

Spalte 15 Sonnenaufgang.

Spalte 16 Taglänge.

Spalte 17 Sonnenuntergang.

Spalte 18 Dauer der bürg. Abenddämmerung.

Spalte 19 Ende der bürg. Abenddämmerung (Sonnenhöhe = -6°).

Spalte 20 Dauer der naut. Abenddämmerung.

Spalte 21 Ende der naut. Abenddämmerung (Sonnenhöhe = -12°).

Spalte 22 Dauer der astr. Abenddämmerung.

Spalte 23 Ende der astr. Abenddämmerung (Sonnenhöhe = -18°).

Spalte 24 Länge der Nacht.

Spalte 25 Länge der astr. Nacht.

Für Beobachter, die zu Zeiten der Mitternachtsdämmerung während der astr. Dämmerung beobachten möchten:

Spalte 26 Nutzbare Zeitspanne: Es ist »nautisch dunkel« (Sonne steht tiefer als -12°) und kein Mond stört.

Spalte 27 Dauer der in Spalte 26 angegebenen Zeitspanne.

Spalte 28 Ereignisse, die die nutzbare Zeitspanne begrenzen: ND₊ (Beginn der »naut. Dunkelheit« = Ende der naut. Abenddämmerung), M_v (Monduntergang), ND₋ (Ende der »naut. Dunkelheit« = Beginn der naut. Morgendämmerung), M₇ (Mondaufgang), Naut. MD (Nautische Mitternachtsdämmerung).

Spalte 29 Identisch zu Spalte 1.

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

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

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		
Mi, 10. Apr	MESZ	22:40–04:35*	5h 55m	M _\ bis AN _\		07:08	22:40	04:38	41m	05:20	38m	05:58	34m	06:32	13h 23m	19:56	34m	20:30	38m	21:08	42m	21:50	10h 34m	6h 44m				Mi, 10. Apr
Do, 11. Apr	MESZ	00:04*–04:33*	4h 28m	M _\ bis AN _\		07:34	—:—	04:35	42m	05:17	38m	05:56	34m	06:30	13h 27m	19:57	34m	20:32	38m	21:10	42m	21:52	10h 30m	6h 40m				Do, 11. Apr
Fr, 12. Apr	MESZ	01:21*–04:30*	3h 09m	M _\ bis AN _\		08:08	00:04	04:33	42m	05:15	38m	05:54	34m	06:28	13h 30m	19:59	34m	20:33	38m	21:12	42m	21:54	10h 27m	6h 35m				Fr, 12. Apr
Sa, 13. Apr	MESZ	02:25*–04:28*	2h 02m	M _\ bis AN _\		08:53	01:21	04:30	42m	05:13	38m	05:52	34m	06:26	13h 34m	20:00	34m	20:35	38m	21:13	43m	21:57	10h 24m	6h 31m				Sa, 13. Apr
So, 14. Apr	MESZ	03:14*–04:25*	1h 11m	M _\ bis AN _\		09:49	02:25	04:28	43m	05:11	38m	05:50	34m	06:24	13h 37m	20:02	34m	20:36	39m	21:15	43m	21:59	10h 20m	6h 26m				So, 14. Apr
Mo, 15. Apr	MESZ	03:50*–04:23*	32m	M _\ bis AN _\	☾	10:54	03:14	04:25	43m	05:09	39m	05:48	34m	06:22	13h 40m	20:03	34m	20:38	39m	21:17	43m	22:01	10h 17m	6h 21m				Mo, 15. Apr
Di, 16. Apr	MESZ	04:17*–04:20*	2m	M _\ bis AN _\		12:04	03:50	04:23	43m	05:06	39m	05:46	34m	06:20	13h 44m	20:04	34m	20:39	39m	21:19	44m	22:03	10h 14m	6h 17m				Di, 16. Apr
Mi, 17. Apr	MESZ	—:—:—:—	–	Mond stört		13:15	04:17	04:20	44m	05:04	39m	05:44	34m	06:18	13h 47m	20:06	34m	20:41	39m	21:20	44m	22:05	10h 10m	6h 12m				Mi, 17. Apr
Do, 18. Apr	MESZ	—:—:—:—	–	Mond stört		14:24	04:38	04:17	44m	05:02	39m	05:42	34m	06:17	13h 50m	20:07	35m	20:42	39m	21:22	44m	22:07	10h 07m	6h 07m				Do, 18. Apr
Fr, 19. Apr	MESZ	—:—:~:~	–	Mond stört		15:31	04:54	04:15	44m	05:00	39m	05:40	35m	06:15	13h 53m	20:09	35m	20:44	40m	21:24	45m	22:09	10h 04m	6h 02m				Fr, 19. Apr
Sa, 20. Apr	MESZ	—:~:~:~	–	Mond stört		16:37	05:08	04:12	45m	04:58	40m	05:38	35m	06:13	13h 57m	20:10	35m	20:45	40m	21:26	45m	22:11	10h 00m	5h 58m				Sa, 20. Apr
So, 21. Apr	MESZ	—:~:~:~	–	Mond stört		17:43	05:21	04:10	45m	04:55	40m	05:36	35m	06:11	14h 00m	20:11	35m	20:47	40m	21:28	46m	22:14	9h 57m	5h 53m				So, 21. Apr
Mo, 22. Apr	MESZ	—:~:~:~	–	Mond stört		18:50	05:34	04:07	46m	04:53	40m	05:34	35m	06:09	14h 03m	20:13	35m	20:49	40m	21:29	46m	22:16	9h 54m	5h 48m				Mo, 22. Apr
Di, 23. Apr	MESZ	—:~:~:~	–	Mond stört		19:58	05:48	04:04	46m	04:51	40m	05:32	35m	06:07	14h 06m	20:14	35m	20:50	41m	21:31	47m	22:18	9h 51m	5h 43m				Di, 23. Apr
Mi, 24. Apr	MESZ	—:~:~:~	–	Mond stört	☾	21:10	06:04	04:02	47m	04:49	41m	05:30	35m	06:06	14h 10m	20:16	35m	20:52	41m	21:33	47m	22:20	9h 48m	5h 38m				Mi, 24. Apr
Do, 25. Apr	MESZ	22:23–22:23	0m	AN ₊ bis M ₇		22:23	06:24	03:59	47m	04:47	41m	05:28	35m	06:04	14h 13m	20:17	36m	20:53	41m	21:35	47m	22:23	9h 45m	5h 33m				Do, 25. Apr
Fr, 26. Apr	MESZ	22:25–23:36	1h 11m	AN ₊ bis M ₇		23:36	06:49	03:57	47m	04:45	41m	05:26	36m	06:02	14h 16m	20:19	36m	20:55	41m	21:37	48m	22:25	9h 41m	5h 28m				Fr, 26. Apr
Sa, 27. Apr	MESZ	22:27–00:45*	2h 17m	AN ₊ bis M ₇		—:—	07:23	03:54	48m	04:42	41m	05:24	36m	06:00	14h 19m	20:20	36m	20:56	42m	21:38	48m	22:27	9h 38m	5h 23m				Sa, 27. Apr
So, 28. Apr	MESZ	22:30–01:45*	3h 14m	AN ₊ bis M ₇		00:45	08:10	03:51	48m	04:40	42m	05:22	36m	05:59	14h 22m	20:21	36m	20:58	42m	21:40	49m	22:30	9h 35m	5h 18m				So, 28. Apr
Mo, 29. Apr	MESZ	22:32–02:32*	3h 59m	AN ₊ bis M ₇		01:45	09:10	03:49	49m	04:38	42m	05:21	36m	05:57	14h 25m	20:23	36m	20:59	42m	21:42	50m	22:32	9h 32m	5h 13m				Mo, 29. Apr
Di, 30. Apr	MESZ	22:35–03:07*	4h 32m	AN ₊ bis M ₇		02:32	10:23	03:46	50m	04:36	42m	05:19	36m	05:55	14h 28m	20:24	36m	21:01	42m	21:44	50m	22:35	9h 29m	5h 08m				Di, 30. Apr
Mi, 1. Mai	MESZ	22:37–03:35*	4h 57m	AN ₊ bis M ₇	☾	03:07	11:43	03:43	50m	04:34	42m	05:17	36m	05:54	14h 31m	20:26	37m	21:03	43m	21:46	51m	22:37	9h 26m	5h 03m				Mi, 1. Mai
Do, 2. Mai	MESZ	22:40–03:38*	4h 58m	AN ₊ bis AN _\		03:35	13:07	03:41	51m	04:32	43m	05:15	37m	05:52	14h 34m	20:27	37m	21:04	43m	21:48	51m	22:40	9h 23m	4h 58m				Do, 2. Mai
Fr, 3. Mai	MESZ	22:42–03:35*	4h 53m	AN ₊ bis AN _\		03:56	14:30	03:38	51m	04:30	43m	05:13	37m	05:51	14h 37m	20:28	37m	21:06	43m	21:50	52m	22:42	9h 20m	4h 53m				Fr, 3. Mai
Sa, 4. Mai	MESZ	22:45–03:33*	4h 48m	AN ₊ bis AN _\		04:15	15:53	03:35	52m	04:28	43m	05:12	37m	05:49	14h 40m	20:30	37m	21:07	44m	21:51	53m	22:45	9h 17m	4h 48m				Sa, 4. Mai
So, 5. Mai	MESZ	22:47–03:30*	4h 43m	AN ₊ bis AN _\		04:32	17:16	03:33	53m	04:26	44m	05:10	37m	05:47	14h 43m	20:31	37m	21:09	44m	21:53	53m	22:47	9h 14m	4h 43m				So, 5. Mai
Mo, 6. Mai	MESZ	22:50–03:27*	4h 37m	AN ₊ bis AN _\		04:49	18:41	03:30	53m	04:24	44m	05:08	37m	05:46	14h 46m	20:32	37m	21:10	44m	21:55	54m	22:50	9h 11m	4h 37m				Mo, 6. Mai
Di, 7. Mai	MESZ	22:52–03:25*	4h 32m	AN ₊ bis AN _\		05:09	20:07	03:27	54m	04:22	44m	05:07	37m	05:44	14h 49m	20:34	38m	21:12	45m	21:57	55m	22:52	9h 09m	4h 32m				Di, 7. Mai
Mi, 8. Mai	MESZ	22:55–03:22*	4h 27m	AN ₊ bis AN _\	☾	05:32	21:34	03:25	55m	04:20	45m	05:05	38m	05:43	14h 52m	20:35	38m	21:13	45m	21:59	55m	22:55	9h 06m	4h 27m				Mi, 8. Mai
Do, 9. Mai	MESZ	22:57–03:19*	4h 22m	AN ₊ bis AN _\		06:02	22:56	03:22	55m	04:18	45m	05:03	38m	05:42	14h 55m	20:37	38m	21:15	45m	22:01	56m	22:57	9h 03m	4h 22m				Do, 9. Mai
Fr, 10. Mai	MESZ	00:08*–03:17*	3h 08m	M _\ bis AN _\		06:42	—:—	03:19	56m	04:16	45m	05:02	38m	05:40	14h 57m	20:38	38m	21:17	46m	22:03	57m	23:00	9h 00m	4h 16m				Fr, 10. Mai
Sa, 11. Mai	MESZ	01:05*–03:14*	2h 09m	M _\ bis AN _\		07:34	00:08	03:17	57m	04:14	46m	05:00	38m	05:39	15h 00m	20:39	38m	21:18	46m	22:04	58m	23:03	8h 58m	4h 11m				Sa, 11. Mai
So, 12. Mai	MESZ	01:48*–03:11*	1h 23m	M _\ bis AN _\		08:37	01:05	03:14	58m	04:12	46m	04:59	38m	05:37	15h 03m	20:41	38m	21:20	46m	22:06	58m	23:05	8h 55m	4h 06m				So, 12. Mai
Mo, 13. Mai	MESZ	02:19*–03:09*	50m	M _\ bis AN _\		09:47	01:48	03:11	58m	04:10	46m	04:57	38m	05:36	15h 05m	20:42	39m	21:21	47m	22:08	59m	23:08	8h 52m	4h 00m				Mo, 13. Mai
Di, 14. Mai	MESZ	02:42*–03:06*	24m	M _\ bis AN _\		10:59	02:19	03:09	59m	04:08	47m	04:56	39m	05:35	15h 08m	20:43	39m	21:22	47m	22:10	1h 00m	23:11	8h 50m	3h 55m				Di, 14. Mai
Mi, 15. Mai	MESZ	03:00*–03:03*	3m	M _\ bis AN _\	☾	12:10	02:42	03:06	1h 00m	04:07	47m	04:54	39m	05:33	15h 10m	20:44	39m	21:24	47m	22:12	1h 01m	23:13	8h 47m	3h 50m				Mi, 15. Mai
Do, 16. Mai	MESZ	—:~:~:~	–	Mond stört		13:19	03:00	03:03	1h 01m	04:05	47m	04:53	39m	05:32	15h 13m	20:46	39m	21:25	48m	22:14	1h 02m	23:16	8h 45m	3h 44m				Do, 16. Mai
Fr, 17. Mai	MESZ	—:~:~:~	–	Mond stört		14:25	03:15	03:01	1h 02m	04:03	48m	04:51	39m	05:31	15h 15m	20:47	39m	21:27	48m	22:15	1h 03m	23:19	8h 42m	3h 39m				Fr, 17. Mai
Sa, 18. Mai	MESZ	—:~:~:~	–	Mond stört		15:31	03:28	02:58	1h 03m	04:01	48m	04:50	39m	05:30	15h 18m	20:48	40m	21:28	48m	22:17	1h 04m	23:21	8h 40m	3h 34m				Sa, 18. Mai
So, 19. Mai	MESZ	—:~:~:~	–	Mond stört		16:37	03:41	02:55	1h 04m	04:00	48m	04:49	40m	05:29	15h 20m	20:49	40m	21:30	49m	22:19	1h 05m	23:24	8h 38m	3h 28m				So, 19. Mai
Mo, 20. Mai	MESZ	—:~:~:~	–	Mond stört		17:45	03:55	02:53	1h 05m	03:58	49m	04:47	40m	05:28	15h 22m	20:51	40m	21:31	49m	22:21	1h 06m	23:27	8h 35m	3h 23m				Mo, 20. Mai
Di, 21. Mai	MESZ	—:~:~:~	–	Mond stört		18:55	04:10	02:50	1h 06m	03:57	49m	04:46	40m	05:27	15h 25m	20:52	40m	21:32	49m	22:22	1h 07m	23:30	8h 33m	3h 17m				Di, 21. Mai
Mi, 22. Mai	MESZ	—:~:~:~	–	Mond stört		20:08	04:28	02:48	1h 07m	03:5																		

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

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		20:12	02:38	02:52	1h 09m	04:02	50m	04:53	40m	05:34	15h 29m	21:03	40m	21:44	50m	22:34	1h 08m	23:42	8h 31m	3h 12m				Fr, 19. Jul
Sa, 20. Jul	MESZ	—:—:—:—	—	Mond stört		21:03	03:39	02:55	1h 08m	04:04	50m	04:54	40m	05:35	15h 27m	21:02	40m	21:42	49m	22:32	1h 07m	23:40	8h 33m	3h 18m				Sa, 20. Jul
So, 21. Jul	MESZ	—:—:~:~:~	—	Mond stört	○	21:40	04:55	02:58	1h 07m	04:05	49m	04:55	40m	05:36	15h 25m	21:01	40m	21:41	49m	22:31	1h 06m	23:37	8h 36m	3h 23m				So, 21. Jul
Mo, 22. Jul	MESZ	—:~:~:~:~	—	Mond stört		22:09	06:19	03:01	1h 06m	04:07	49m	04:56	40m	05:37	15h 22m	21:00	40m	21:40	49m	22:29	1h 05m	23:34	8h 38m	3h 29m				Mo, 22. Jul
Di, 23. Jul	MESZ	—:~:~:~:~	—	Mond stört		22:31	07:46	03:03	1h 05m	04:09	49m	04:58	40m	05:38	15h 20m	20:59	40m	21:39	48m	22:27	1h 04m	23:32	8h 40m	3h 34m				Di, 23. Jul
Mi, 24. Jul	MESZ	—:~:~:~:~	—	Mond stört		22:49	09:11	03:06	1h 04m	04:10	48m	04:59	40m	05:39	15h 18m	20:57	39m	21:37	48m	22:26	1h 03m	23:29	8h 43m	3h 39m				Mi, 24. Jul
Do, 25. Jul	MESZ	—:~:~:~:~	—	Mond stört		23:06	10:34	03:09	1h 03m	04:12	48m	05:01	39m	05:40	15h 15m	20:56	39m	21:36	48m	22:24	1h 02m	23:26	8h 45m	3h 45m				Do, 25. Jul
Fr, 26. Jul	MESZ	—:~:~:~:~	—	Mond stört		23:23	11:56	03:11	1h 02m	04:14	48m	05:02	39m	05:42	15h 13m	20:55	39m	21:35	47m	22:22	1h 01m	23:24	8h 47m	3h 50m				Fr, 26. Jul
Sa, 27. Jul	MESZ	23:21 – 23:42	20m	AN ₊ bis M ₇		23:42	13:17	03:14	1h 01m	04:16	47m	05:03	39m	05:43	15h 10m	20:54	39m	21:33	47m	22:20	1h 00m	23:21	8h 50m	3h 55m				Sa, 27. Jul
So, 28. Jul	MESZ	23:18 – 00:04*	45m	AN ₊ bis M ₇	◐	—:—	14:39	03:17	1h 00m	04:17	47m	05:05	39m	05:44	15h 08m	20:52	39m	21:32	47m	22:19	59m	23:18	8h 52m	4h 00m				So, 28. Jul
Mo, 29. Jul	MESZ	23:16 – 00:32*	1h 16m	AN ₊ bis M ₇		00:04	16:01	03:19	59m	04:19	47m	05:06	39m	05:45	15h 05m	20:51	38m	21:30	46m	22:17	58m	23:16	8h 55m	4h 06m				Mo, 29. Jul
Di, 30. Jul	MESZ	23:13 – 01:09*	1h 55m	AN ₊ bis M ₇		00:32	17:20	03:22	58m	04:21	46m	05:08	38m	05:47	15h 03m	20:50	38m	21:29	46m	22:15	58m	23:13	8h 58m	4h 11m				Di, 30. Jul
Mi, 31. Jul	MESZ	23:10 – 01:58*	2h 47m	AN ₊ bis M ₇		01:09	18:31	03:25	58m	04:23	46m	05:09	38m	05:48	15h 00m	20:48	38m	21:27	46m	22:13	57m	23:10	9h 00m	4h 16m				Mi, 31. Jul
Do, 1. Aug	MESZ	23:08 – 02:58*	3h 50m	AN ₊ bis M ₇		01:58	19:29	03:27	57m	04:24	46m	05:11	38m	05:49	14h 57m	20:47	38m	21:25	45m	22:11	56m	23:08	9h 03m	4h 21m				Do, 1. Aug
Fr, 2. Aug	MESZ	23:05 – 03:32*	4h 27m	AN ₊ bis AN ₋		02:58	20:13	03:30	56m	04:26	45m	05:12	38m	05:50	14h 55m	20:46	38m	21:24	45m	22:09	55m	23:05	9h 06m	4h 27m				Fr, 2. Aug
Sa, 3. Aug	MESZ	23:02 – 03:35*	4h 32m	AN ₊ bis AN ₋		04:07	20:46	03:32	55m	04:28	45m	05:13	38m	05:52	14h 52m	20:44	38m	21:22	45m	22:07	55m	23:02	9h 08m	4h 32m				Sa, 3. Aug
So, 4. Aug	MESZ	23:00 – 03:37*	4h 37m	AN ₊ bis AN ₋	●	05:20	21:11	03:35	55m	04:30	45m	05:15	38m	05:53	14h 49m	20:43	37m	21:20	44m	22:05	54m	23:00	9h 11m	4h 37m				So, 4. Aug
Mo, 5. Aug	MESZ	22:57 – 03:40*	4h 42m	AN ₊ bis AN ₋		06:33	21:30	03:37	54m	04:32	44m	05:16	37m	05:54	14h 46m	20:41	37m	21:19	44m	22:03	53m	22:57	9h 14m	4h 42m				Mo, 5. Aug
Di, 6. Aug	MESZ	22:54 – 03:42*	4h 47m	AN ₊ bis AN ₋		07:43	21:45	03:40	53m	04:33	44m	05:18	37m	05:56	14h 43m	20:40	37m	21:17	44m	22:01	53m	22:54	9h 17m	4h 47m				Di, 6. Aug
Mi, 7. Aug	MESZ	22:52 – 03:45*	4h 52m	AN ₊ bis AN ₋		08:51	21:59	03:42	53m	04:35	44m	05:19	37m	05:57	14h 40m	20:38	37m	21:15	43m	21:59	52m	22:52	9h 20m	4h 52m				Mi, 7. Aug
Do, 8. Aug	MESZ	22:49 – 03:47*	4h 58m	AN ₊ bis AN ₋		09:57	22:12	03:45	52m	04:37	43m	05:21	37m	05:58	14h 38m	20:36	37m	21:14	43m	21:57	51m	22:49	9h 23m	4h 58m				Do, 8. Aug
Fr, 9. Aug	MESZ	22:46 – 03:49*	5h 03m	AN ₊ bis AN ₋		11:03	22:25	03:47	51m	04:39	43m	05:22	37m	06:00	14h 35m	20:35	37m	21:12	43m	21:55	51m	22:46	9h 26m	5h 03m				Fr, 9. Aug
Sa, 10. Aug	MESZ	22:44 – 03:52*	5h 08m	AN ₊ bis AN ₋		12:09	22:39	03:49	51m	04:41	43m	05:24	37m	06:01	14h 32m	20:33	36m	21:10	42m	21:53	50m	22:44	9h 29m	5h 08m				Sa, 10. Aug
So, 11. Aug	MESZ	22:56 – 03:54*	4h 57m	M ₇ bis AN ₋		13:17	22:56	03:52	50m	04:42	42m	05:25	36m	06:02	14h 29m	20:31	36m	21:08	42m	21:51	50m	22:41	9h 32m	5h 13m				So, 11. Aug
Mo, 12. Aug	MESZ	23:18 – 03:56*	4h 38m	M ₇ bis AN ₋	◐	14:27	23:18	03:54	50m	04:44	42m	05:27	36m	06:04	14h 26m	20:30	36m	21:06	42m	21:49	49m	22:38	9h 35m	5h 18m				Mo, 12. Aug
Di, 13. Aug	MESZ	23:46 – 03:59*	4h 12m	M ₇ bis AN ₋		15:40	23:46	03:56	49m	04:46	42m	05:28	36m	06:05	14h 23m	20:28	36m	21:04	42m	21:47	49m	22:36	9h 38m	5h 23m				Di, 13. Aug
Mi, 14. Aug	MESZ	00:25* – 04:01*	3h 35m	M ₇ bis AN ₋		16:51	—:—	03:59	49m	04:48	42m	05:30	36m	06:06	14h 19m	20:26	36m	21:03	41m	21:44	48m	22:33	9h 41m	5h 27m				Mi, 14. Aug
Do, 15. Aug	MESZ	01:19* – 04:03*	2h 44m	M ₇ bis AN ₋		17:57	00:25	04:01	48m	04:50	41m	05:31	36m	06:08	14h 16m	20:25	36m	21:01	41m	21:42	48m	22:30	9h 44m	5h 32m				Do, 15. Aug
Fr, 16. Aug	MESZ	02:28* – 04:05*	1h 37m	M ₇ bis AN ₋		18:52	01:19	04:03	48m	04:51	41m	05:33	36m	06:09	14h 13m	20:23	35m	20:59	41m	21:40	47m	22:28	9h 47m	5h 37m				Fr, 16. Aug
Sa, 17. Aug	MESZ	03:49* – 04:08*	18m	M ₇ bis AN ₋		19:35	02:28	04:05	47m	04:53	41m	05:34	35m	06:10	14h 10m	20:21	35m	20:57	41m	21:38	47m	22:25	9h 50m	5h 42m				Sa, 17. Aug
So, 18. Aug	MESZ	—:~:~:~:~	—	Mond stört		20:08	03:49	04:08	47m	04:55	41m	05:36	35m	06:12	14h 07m	20:19	35m	20:55	40m	21:36	46m	22:22	9h 53m	5h 47m				So, 18. Aug
Mo, 19. Aug	MESZ	—:~:~:~:~	—	Mond stört	○	20:33	05:16	04:10	46m	04:56	40m	05:37	35m	06:13	14h 04m	20:17	35m	20:53	40m	21:34	46m	22:20	9h 57m	5h 52m				Mo, 19. Aug
Di, 20. Aug	MESZ	—:~:~:~:~	—	Mond stört		20:53	06:44	04:12	46m	04:58	40m	05:39	35m	06:14	14h 01m	20:16	35m	20:51	40m	21:31	45m	22:17	10h 00m	5h 57m				Di, 20. Aug
Mi, 21. Aug	MESZ	—:~:~:~:~	—	Mond stört		21:11	08:10	04:14	45m	05:00	40m	05:40	35m	06:16	13h 57m	20:14	35m	20:49	40m	21:29	45m	22:14	10h 03m	6h 01m				Mi, 21. Aug
Do, 22. Aug	MESZ	—:~:~:~:~	—	Mond stört		21:28	09:36	04:16	45m	05:02	40m	05:42	35m	06:17	13h 54m	20:12	35m	20:47	39m	21:27	44m	22:12	10h 06m	6h 06m				Do, 22. Aug
Fr, 23. Aug	MESZ	—:~:~:~:~	—	Mond stört		21:46	11:00	04:18	45m	05:03	39m	05:43	35m	06:18	13h 51m	20:10	34m	20:45	39m	21:25	44m	22:09	10h 09m	6h 11m				Fr, 23. Aug
Sa, 24. Aug	MESZ	22:07 – 22:07	0m	AN ₊ bis M ₇		22:07	12:25	04:20	44m	05:05	39m	05:45	35m	06:20	13h 48m	20:08	34m	20:43	39m	21:22	44m	22:07	10h 13m	6h 15m				Sa, 24. Aug
So, 25. Aug	MESZ	22:04 – 22:34	29m	AN ₊ bis M ₇		22:34	13:49	04:22	44m	05:07	39m	05:46	34m	06:21	13h 45m	20:06	34m	20:41	39m	21:20	43m	22:04	10h 16m	6h 20m				So, 25. Aug
Mo, 26. Aug	MESZ	22:01 – 23:08	1h 06m	AN ₊ bis M ₇	◐	23:08	15:10	04:25	43m	05:08	39m	05:48	34m	06:22	13h 41m	20:04	34m	20:39	39m	21:18	43m	22:01	10h 19m	6h 25m				Mo, 26. Aug
Di, 27. Aug	MESZ	21:59 – 23:53	1h 54m	AN ₊ bis M ₇		23:53	16:24	04:27	43m	05:10	39m	05:49	34m	06:24	13h 38m	20:02	34m	20:37	38m	21:16	43m	21:59	10h 22m	6h 29m				Di, 27. Aug
Mi, 28. Aug	MESZ	21:56 – 00:50*	2h 53m	AN ₊ bis M ₇		—:—	17:26	04:29	43m	05:12	38m	05:51	34m	06:25	13h 35m	20:00	34m	20:35	38m	21:13	42m	21:56	10h 26m	6h 34m				Mi, 28. Aug
Do, 29. Aug	MESZ	21:54 – 01:57*	4h 03m	AN ₊ bis M ₇		00:50	18:14	04:31	42m	05:13	38m	05:52	34m	06:27	13h 31m	19:58	34m	20:33	38m	21:11	42m	21:54	10h 29m	6h 38m				Do, 29. Aug
Fr, 30. Aug	MESZ																											

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

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

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