

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Schärding 48.4569° N 13.4317° 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		18:17–21:59	3h 42m	AN ₊ bis M ₇		21:59	11:06	06:01	38m	06:39	39m	07:18	38m	07:57	8h 24m	16:21	38m	17:00	39m	17:39	38m	18:17	15h 35m	11h 44m				Mo, 1. Jan
Di, 2. Jan		18:18–23:06	4h 47m	AN ₊ bis M ₇		23:06	11:20	06:01	37m	06:39	38m	07:18	38m	07:57	8h 25m	16:22	38m	17:01	38m	17:40	37m	18:18	15h 34m	11h 43m				Di, 2. Jan
Mi, 3. Jan		18:19–00:12*	5h 53m	AN ₊ bis M ₇		—:—	11:32	06:01	37m	06:39	38m	07:18	38m	07:57	8h 26m	16:23	38m	17:02	38m	17:41	37m	18:19	15h 33m	11h 42m				Mi, 3. Jan
Do, 4. Jan		18:20–01:20*	7h 00m	AN ₊ bis M ₇	☾	00:12	11:45	06:01	37m	06:39	38m	07:18	38m	07:57	8h 27m	16:24	38m	17:03	38m	17:42	37m	18:20	15h 32m	11h 41m				Do, 4. Jan
Fr, 5. Jan		18:21–02:32*	8h 10m	AN ₊ bis M ₇		01:20	12:00	06:01	37m	06:39	38m	07:18	38m	07:57	8h 28m	16:25	38m	17:04	38m	17:43	37m	18:21	15h 31m	11h 40m				Fr, 5. Jan
Sa, 6. Jan		18:22–03:47*	9h 24m	AN ₊ bis M ₇		02:32	12:17	06:01	37m	06:39	38m	07:18	38m	07:57	8h 29m	16:26	38m	17:05	38m	17:44	37m	18:22	15h 29m	11h 39m				Sa, 6. Jan
So, 7. Jan		18:23–05:05*	10h 41m	AN ₊ bis M ₇		03:47	12:39	06:01	37m	06:39	38m	07:18	38m	07:56	8h 31m	16:28	38m	17:06	38m	17:45	37m	18:23	15h 28m	11h 38m				So, 7. Jan
Mo, 8. Jan		18:24–06:01*	11h 37m	AN ₊ bis AN ₋		05:05	13:10	06:01	37m	06:39	38m	07:18	38m	07:56	8h 32m	16:29	38m	17:07	38m	17:46	37m	18:24	15h 26m	11h 37m				Mo, 8. Jan
Di, 9. Jan		18:25–06:01*	11h 36m	AN ₊ bis AN ₋		06:22	13:52	06:01	37m	06:39	38m	07:17	38m	07:56	8h 34m	16:30	38m	17:08	38m	17:47	37m	18:25	15h 25m	11h 36m				Di, 9. Jan
Mi, 10. Jan		18:26–06:01*	11h 34m	AN ₊ bis AN ₋		07:32	14:52	06:01	37m	06:38	38m	07:17	38m	07:55	8h 36m	16:31	38m	17:09	38m	17:48	37m	18:26	15h 23m	11h 34m				Mi, 10. Jan
Do, 11. Jan		18:27–06:00*	11h 33m	AN ₊ bis AN ₋	☾	08:28	16:07	06:01	37m	06:38	38m	07:17	38m	07:55	8h 37m	16:33	38m	17:11	38m	17:49	37m	18:27	15h 21m	11h 33m				Do, 11. Jan
Fr, 12. Jan		18:28–06:00*	11h 31m	AN ₊ bis AN ₋		09:10	17:34	06:00	37m	06:38	38m	07:16	37m	07:54	8h 39m	16:34	37m	17:12	38m	17:50	37m	18:28	15h 19m	11h 31m				Fr, 12. Jan
Sa, 13. Jan		19:03–06:00*	10h 56m	M ₇ bis AN ₋		09:40	19:03	06:00	37m	06:37	38m	07:16	37m	07:54	8h 41m	16:35	37m	17:13	38m	17:51	37m	18:29	15h 17m	11h 30m				Sa, 13. Jan
So, 14. Jan		20:31–05:59*	9h 28m	M ₇ bis AN ₋		10:03	20:31	06:00	37m	06:37	38m	07:15	37m	07:53	8h 43m	16:37	37m	17:14	38m	17:53	37m	18:30	15h 15m	11h 28m				So, 14. Jan
Mo, 15. Jan		21:55–05:59*	8h 03m	M ₇ bis AN ₋		10:22	21:55	05:59	37m	06:37	38m	07:15	37m	07:52	8h 45m	16:38	37m	17:16	38m	17:54	37m	18:31	15h 13m	11h 27m				Mo, 15. Jan
Di, 16. Jan		23:16–05:58*	6h 41m	M ₇ bis AN ₋		10:39	23:16	05:59	37m	06:36	38m	07:14	37m	07:52	8h 47m	16:39	37m	17:17	38m	17:55	37m	18:32	15h 11m	11h 25m				Di, 16. Jan
Mi, 17. Jan		00:37*–05:58*	5h 21m	M ₇ bis AN ₋		10:55	—:—	05:58	37m	06:35	38m	07:14	37m	07:51	8h 49m	16:41	37m	17:18	38m	17:56	37m	18:34	15h 09m	11h 23m				Mi, 17. Jan
Do, 18. Jan		01:57*–05:57*	4h 00m	M ₇ bis AN ₋	☾	11:12	00:37	05:58	37m	06:35	37m	07:13	37m	07:50	8h 51m	16:42	37m	17:20	37m	17:58	37m	18:35	15h 07m	11h 22m				Do, 18. Jan
Fr, 19. Jan		03:16*–05:56*	2h 40m	M ₇ bis AN ₋		11:32	01:57	05:57	37m	06:34	37m	07:12	37m	07:49	8h 54m	16:44	37m	17:21	37m	17:59	37m	18:36	15h 04m	11h 20m				Fr, 19. Jan
Sa, 20. Jan		04:33*–05:56*	1h 22m	M ₇ bis AN ₋		11:57	03:16	05:56	37m	06:34	37m	07:11	37m	07:49	8h 56m	16:45	37m	17:22	37m	18:00	37m	18:37	15h 02m	11h 18m				Sa, 20. Jan
So, 21. Jan		05:44*–05:55*	10m	M ₇ bis AN ₋		12:29	04:33	05:56	37m	06:33	37m	07:11	37m	07:48	8h 59m	16:47	37m	17:24	37m	18:01	37m	18:39	15h 00m	11h 16m				So, 21. Jan
Mo, 22. Jan		—:—:—:—:—	–	Mond stört		13:11	05:44	05:55	37m	06:32	37m	07:10	36m	07:47	9h 01m	16:48	36m	17:25	37m	18:03	37m	18:40	14h 57m	11h 14m				Mo, 22. Jan
Di, 23. Jan		—:—:—:—:—	–	Mond stört		14:05	06:45	05:54	37m	06:31	37m	07:09	36m	07:46	9h 03m	16:50	36m	17:26	37m	18:04	37m	18:41	14h 55m	11h 12m				Di, 23. Jan
Mi, 24. Jan		—:—:—:—:—	–	Mond stört		15:08	07:33	05:54	37m	06:31	37m	07:08	36m	07:45	9h 06m	16:51	36m	17:28	37m	18:05	37m	18:42	14h 52m	11h 10m				Mi, 24. Jan
Do, 25. Jan		—:—:~:~:~	–	Mond stört	☾	16:18	08:08	05:53	36m	06:30	37m	07:07	36m	07:44	9h 09m	16:53	36m	17:29	37m	18:07	36m	18:44	14h 49m	11h 08m				Do, 25. Jan
Fr, 26. Jan		—:~:~:~:~	–	Mond stört		17:29	08:35	05:52	36m	06:29	37m	07:06	36m	07:43	9h 11m	16:54	36m	17:31	37m	18:08	36m	18:45	14h 47m	11h 05m				Fr, 26. Jan
Sa, 27. Jan		—:~:~:~:~	–	Mond stört		18:39	08:55	05:51	36m	06:28	37m	07:05	36m	07:41	9h 14m	16:56	36m	17:32	37m	18:10	36m	18:46	14h 44m	11h 03m				Sa, 27. Jan
So, 28. Jan		18:48–19:47	59m	AN ₊ bis M ₇		19:47	09:12	05:50	36m	06:27	37m	07:04	36m	07:40	9h 17m	16:57	36m	17:34	37m	18:11	36m	18:48	14h 41m	11h 01m				So, 28. Jan
Mo, 29. Jan		18:49–20:54	2h 04m	AN ₊ bis M ₇		20:54	09:26	05:49	36m	06:26	37m	07:03	36m	07:39	9h 20m	16:59	36m	17:35	37m	18:12	36m	18:49	14h 38m	10h 58m				Mo, 29. Jan
Di, 30. Jan		18:50–22:00	3h 09m	AN ₊ bis M ₇		22:00	09:39	05:48	36m	06:25	37m	07:02	35m	07:38	9h 22m	17:01	35m	17:37	37m	18:14	36m	18:50	14h 35m	10h 56m				Di, 30. Jan
Mi, 31. Jan		18:52–23:06	4h 14m	AN ₊ bis M ₇		23:06	09:51	05:47	36m	06:24	36m	07:01	35m	07:36	9h 25m	17:02	35m	17:38	36m	18:15	36m	18:52	14h 32m	10h 54m				Mi, 31. Jan
Do, 1. Feb		18:53–00:15*	5h 21m	AN ₊ bis M ₇		—:—	10:05	05:46	36m	06:23	36m	06:59	35m	07:35	9h 28m	17:04	35m	17:40	36m	18:17	36m	18:53	14h 29m	10h 51m				Do, 1. Feb
Fr, 2. Feb		18:55–01:27*	6h 32m	AN ₊ bis M ₇		00:15	10:20	05:45	36m	06:21	36m	06:58	35m	07:34	9h 31m	17:05	35m	17:41	36m	18:18	36m	18:55	14h 26m	10h 49m				Fr, 2. Feb
Sa, 3. Feb		18:56–02:42*	7h 45m	AN ₊ bis M ₇	☾	01:27	10:39	05:44	36m	06:20	36m	06:57	35m	07:32	9h 34m	17:07	35m	17:43	36m	18:19	36m	18:56	14h 23m	10h 46m				Sa, 3. Feb
So, 4. Feb		18:57–03:58*	9h 00m	AN ₊ bis M ₇		02:42	11:04	05:43	36m	06:19	36m	06:56	35m	07:31	9h 37m	17:09	35m	17:44	36m	18:21	36m	18:57	14h 20m	10h 43m				So, 4. Feb
Mo, 5. Feb		18:59–05:10*	10h 11m	AN ₊ bis M ₇		03:58	11:40	05:41	36m	06:18	36m	06:54	35m	07:30	9h 40m	17:10	35m	17:46	36m	18:22	36m	18:59	14h 17m	10h 41m				Mo, 5. Feb
Di, 6. Feb		19:00–05:39*	10h 38m	AN ₊ bis AN ₋		05:10	12:29	05:40	36m	06:17	36m	06:53	35m	07:28	9h 43m	17:12	35m	17:47	36m	18:24	36m	19:00	14h 14m	10h 38m				Di, 6. Feb
Mi, 7. Feb		19:02–05:37*	10h 35m	AN ₊ bis AN ₋		06:13	13:37	05:39	36m	06:15	36m	06:52	35m	07:27	9h 46m	17:14	35m	17:49	36m	18:25	36m	19:02	14h 11m	10h 35m				Mi, 7. Feb
Do, 8. Feb		19:03–05:36*	10h 33m	AN ₊ bis AN ₋		07:01	14:59	05:37	36m	06:14	36m	06:50	34m	07:25	9h 50m	17:15	35m	17:50	36m	18:27	36m	19:03	14h 08m	10h 33m				Do, 8. Feb
Fr, 9. Feb		19:05–05:35*	10h 30m	AN ₊ bis AN ₋	☾	07:37	16:29	05:36	36m	06:12	36m	06:49	34m	07:24	9h 53m	17:17	34m	17:52	36m	18:28	36m	19:05	14h 05m	10h 30m				Fr, 9. Feb
Sa, 10. Feb		19:06–05:33*	10h 27m	AN ₊ bis AN ₋		08:04	18:00	05:35	36m	06:11	36m	06:47	34m	07:22	9h 56m	17:19	34m	17:53	36m	18:30	36m	19:06	14h 01m	10h 27m				Sa, 10. Feb
So, 11. Feb		19:29–05:32*	10h 03m	M ₇ bis AN ₋		08:25	19:29	05:33	36m	06:10	36m	06:46	34m	07:20	9h 59m	17:20	34m	17:55	36m	18:31	36m	19:07	13h 58m	10h 24m				So, 11. Feb
Mo, 12. Feb		20:55–05:30*	8h 35m	M ₇ bis AN ₋ </																								

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

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

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

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

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

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

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