

Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Feldbach (Steiermark) 46.9550° N 15.8883° 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
2023	Zeit-zone	Astr. dunkel und kein Mond		Mond		Beginn der Morgendämmerung				Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023					
		Δt			Ph.	\uparrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\uparrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
So, 1. Jan		03:29* – 05:49*	2h 20m	M _\ bis AN _\		12:38	02:17	05:49	36m	06:26	37m	07:04	37m	07:41	8h 36m	16:18	37m	16:55	37m	17:33	36m	18:10	15h 23m	11h 39m				So, 1. Jan
Mo, 2. Jan		04:39* – 05:49*	1h 10m	M _\ bis AN _\		13:00	03:29	05:49	36m	06:26	37m	07:04	37m	07:41	8h 37m	16:19	37m	16:56	37m	17:34	36m	18:11	15h 22m	11h 38m				Mo, 2. Jan
Di, 3. Jan		05:47* – 05:49*	2m	M _\ bis AN _\		13:27	04:39	05:49	36m	06:26	37m	07:04	37m	07:41	8h 38m	16:20	37m	16:57	37m	17:35	36m	18:11	15h 21m	11h 37m				Di, 3. Jan
Mi, 4. Jan		—:—:—:—	–	Mond stört		14:00	05:47	05:49	36m	06:26	37m	07:04	37m	07:41	8h 39m	16:21	37m	16:58	37m	17:35	36m	18:12	15h 20m	11h 37m				Mi, 4. Jan
Do, 5. Jan		—:—:—:—	–	Mond stört		14:42	06:50	05:49	36m	06:26	37m	07:04	37m	07:41	8h 40m	16:22	37m	16:59	37m	17:36	36m	18:13	15h 18m	11h 36m				Do, 5. Jan
Fr, 6. Jan		—:~:~:~:~	–	Mond stört		15:33	07:45	05:49	36m	06:26	37m	07:04	37m	07:41	8h 42m	16:23	37m	17:00	37m	17:37	36m	18:14	15h 17m	11h 35m				Fr, 6. Jan
Sa, 7. Jan		—:~:~:~:~	–	Mond stört	○	16:32	08:30	05:49	36m	06:26	37m	07:03	36m	07:40	8h 43m	16:24	36m	17:01	37m	17:38	36m	18:15	15h 16m	11h 34m				Sa, 7. Jan
So, 8. Jan		—:~:~:~:~	–	Mond stört	○	17:37	09:06	05:49	36m	06:26	37m	07:03	36m	07:40	8h 44m	16:25	36m	17:02	37m	17:39	36m	18:16	15h 14m	11h 32m				So, 8. Jan
Mo, 9. Jan		18:17 – 18:43	26m	AN ₊ bis M ₇		18:43	09:35	05:49	36m	06:26	37m	07:03	36m	07:40	8h 46m	16:26	36m	17:03	37m	17:40	36m	18:17	15h 13m	11h 31m				Mo, 9. Jan
Di, 10. Jan		18:18 – 19:50	1h 32m	AN ₊ bis M ₇		19:50	09:57	05:49	36m	06:25	37m	07:03	36m	07:39	8h 47m	16:27	36m	17:04	37m	17:42	36m	18:18	15h 11m	11h 30m				Di, 10. Jan
Mi, 11. Jan		18:19 – 20:57	2h 37m	AN ₊ bis M ₇		20:57	10:16	05:49	36m	06:25	37m	07:02	36m	07:39	8h 49m	16:29	36m	17:05	37m	17:43	36m	18:19	15h 09m	11h 29m				Mi, 11. Jan
Do, 12. Jan		18:20 – 22:04	3h 43m	AN ₊ bis M ₇		22:04	10:33	05:48	36m	06:25	37m	07:02	36m	07:39	8h 51m	16:30	36m	17:07	37m	17:44	36m	18:20	15h 08m	11h 27m				Do, 12. Jan
Fr, 13. Jan		18:21 – 23:11	4h 49m	AN ₊ bis M ₇		23:11	10:49	05:48	36m	06:24	37m	07:02	36m	07:38	8h 53m	16:31	36m	17:08	37m	17:45	36m	18:21	15h 06m	11h 26m				Fr, 13. Jan
Sa, 14. Jan		18:22 – 00:20*	5h 58m	AN ₊ bis M ₇		—:—	11:05	05:48	36m	06:24	37m	07:01	36m	07:38	8h 54m	16:32	36m	17:09	37m	17:46	36m	18:22	15h 04m	11h 24m				Sa, 14. Jan
So, 15. Jan		18:24 – 01:33*	7h 09m	AN ₊ bis M ₇	●	00:20	11:22	05:47	36m	06:24	36m	07:01	36m	07:37	8h 56m	16:34	36m	17:10	37m	17:47	36m	18:24	15h 02m	11h 23m				So, 15. Jan
Mo, 16. Jan		18:25 – 02:51*	8h 25m	AN ₊ bis M ₇		01:33	11:42	05:47	36m	06:23	36m	07:00	36m	07:36	8h 58m	16:35	36m	17:11	36m	17:48	36m	18:25	15h 00m	11h 21m				Mo, 16. Jan
Di, 17. Jan		18:26 – 04:11*	9h 45m	AN ₊ bis M ₇		02:51	12:08	05:46	36m	06:23	36m	07:00	36m	07:36	9h 00m	16:37	36m	17:13	36m	17:50	36m	18:26	14h 58m	11h 20m				Di, 17. Jan
Mi, 18. Jan		18:27 – 05:32*	11h 04m	AN ₊ bis M ₇		04:11	12:42	05:46	36m	06:22	36m	06:59	36m	07:35	9h 02m	16:38	36m	17:14	36m	17:51	36m	18:27	14h 56m	11h 18m				Mi, 18. Jan
Do, 19. Jan		18:28 – 05:45*	11h 16m	AN ₊ bis AN _\		05:32	13:30	05:45	36m	06:22	36m	06:58	35m	07:34	9h 05m	16:39	35m	17:15	36m	17:52	36m	18:28	14h 54m	11h 16m				Do, 19. Jan
Fr, 20. Jan		18:29 – 05:44*	11h 14m	AN ₊ bis AN _\		06:44	14:34	05:45	36m	06:21	36m	06:58	35m	07:33	9h 07m	16:41	35m	17:17	36m	17:53	36m	18:29	14h 51m	11h 14m				Fr, 20. Jan
Sa, 21. Jan		18:31 – 05:44*	11h 12m	AN ₊ bis AN _\	●	07:44	15:53	05:44	36m	06:20	36m	06:57	35m	07:33	9h 09m	16:42	35m	17:18	36m	17:54	36m	18:31	14h 49m	11h 12m				Sa, 21. Jan
So, 22. Jan		18:32 – 05:43*	11h 11m	AN ₊ bis AN _\		08:28	17:21	05:44	36m	06:20	36m	06:56	35m	07:32	9h 11m	16:44	35m	17:19	36m	17:56	36m	18:32	14h 47m	11h 11m				So, 22. Jan
Mo, 23. Jan		18:49 – 05:42*	10h 52m	M _\ bis AN _\		09:01	18:49	05:43	36m	06:19	36m	06:55	35m	07:31	9h 14m	16:45	35m	17:21	36m	17:57	36m	18:33	14h 44m	11h 09m				Mo, 23. Jan
Di, 24. Jan		20:14 – 05:41*	9h 27m	M _\ bis AN _\		09:26	20:14	05:42	35m	06:18	36m	06:54	35m	07:30	9h 16m	16:47	35m	17:22	36m	17:58	35m	18:34	14h 42m	11h 07m				Di, 24. Jan
Mi, 25. Jan		21:34 – 05:41*	8h 06m	M _\ bis AN _\		09:47	21:34	05:41	35m	06:17	36m	06:54	35m	07:29	9h 19m	16:48	35m	17:23	36m	18:00	35m	18:36	14h 39m	11h 05m				Mi, 25. Jan
Do, 26. Jan		22:51 – 05:40*	6h 48m	M _\ bis AN _\		10:05	22:51	05:41	35m	06:16	36m	06:53	35m	07:28	9h 21m	16:49	35m	17:25	36m	18:01	35m	18:37	14h 37m	11h 02m				Do, 26. Jan
Fr, 27. Jan		00:05* – 05:39*	5h 33m	M _\ bis AN _\		10:23	—:—	05:40	35m	06:16	36m	06:52	35m	07:27	9h 24m	16:51	35m	17:26	36m	18:02	35m	18:38	14h 34m	11h 00m				Fr, 27. Jan
Sa, 28. Jan		01:18* – 05:38*	4h 19m	M _\ bis AN _\	●	10:42	00:05	05:39	35m	06:15	36m	06:51	34m	07:26	9h 26m	16:52	34m	17:27	36m	18:04	35m	18:39	14h 32m	10h 58m				Sa, 28. Jan
So, 29. Jan		02:30* – 05:37*	3h 06m	M _\ bis AN _\		11:03	01:18	05:38	35m	06:14	35m	06:50	34m	07:24	9h 29m	16:54	34m	17:29	35m	18:05	35m	18:41	14h 29m	10h 56m				So, 29. Jan
Mo, 30. Jan		03:40* – 05:36*	1h 56m	M _\ bis AN _\		11:29	02:30	05:37	35m	06:13	35m	06:49	34m	07:23	9h 32m	16:56	34m	17:30	35m	18:06	35m	18:42	14h 26m	10h 54m				Mo, 30. Jan
Di, 31. Jan		04:44* – 05:35*	50m	M _\ bis AN _\		12:00	03:40	05:36	35m	06:12	35m	06:47	34m	07:22	9h 34m	16:57	34m	17:32	35m	18:08	35m	18:43	14h 23m	10h 51m				Di, 31. Jan
Mi, 1. Feb		—:~:~:~:~	–	Mond stört		12:39	04:44	05:35	35m	06:11	35m	06:46	34m	07:21	9h 37m	16:59	34m	17:33	35m	18:09	35m	18:45	14h 21m	10h 49m				Mi, 1. Feb
Do, 2. Feb		—:~:~:~:~	–	Mond stört		13:27	05:42	05:34	35m	06:09	35m	06:45	34m	07:20	9h 40m	17:00	34m	17:35	35m	18:10	35m	18:46	14h 18m	10h 46m				Do, 2. Feb
Fr, 3. Feb		—:~:~:~:~	–	Mond stört		14:24	06:30	05:33	35m	06:08	35m	06:44	34m	07:18	9h 43m	17:02	34m	17:36	35m	18:12	35m	18:47	14h 15m	10h 44m				Fr, 3. Feb
Sa, 4. Feb		—:~:~:~:~	–	Mond stört		15:28	07:08	05:32	35m	06:07	35m	06:43	34m	07:17	9h 46m	17:03	34m	17:37	35m	18:13	35m	18:49	14h 12m	10h 42m				Sa, 4. Feb
So, 5. Feb		—:~:~:~:~	–	Mond stört	○	16:34	07:38	05:31	35m	06:06	35m	06:41	34m	07:16	9h 49m	17:05	34m	17:39	35m	18:14	35m	18:50	14h 09m	10h 39m				So, 5. Feb
Mo, 6. Feb		—:~:~:~:~	–	Mond stört		17:42	08:02	05:29	35m	06:05	35m	06:40	34m	07:14	9h 51m	17:06	34m	17:40	35m	18:16	35m	18:51	14h 06m	10h 36m				Mo, 6. Feb
Di, 7. Feb		—:~:~:~:~	–	Mond stört		18:49	08:22	05:28	35m	06:04	35m	06:39	33m	07:13	9h 54m	17:08	34m	17:42	35m	18:17	35m	18:53	14h 03m	10h 34m				Di, 7. Feb
Mi, 8. Feb		18:54 – 19:56	1h 01m	AN ₊ bis M ₇		19:56	08:39	05:27	35m	06:02	35m	06:38	33m	07:11	9h 57m	17:09	33m	17:43	35m	18:19	35m	18:54	14h 00m	10h 31m				Mi, 8. Feb
Do, 9. Feb		18:55 – 21:02	2h 07m	AN ₊ bis M ₇		21:02	08:55	05:26	35m	06:01	35m	06:36	33m	07:10	10h 00m	17:11	33m	17:45	35m	18:20	35m	18:55	13h 57m	10h 29m				Do, 9. Feb
Fr, 10. Feb		18:57 – 22:11	3h 13m	AN ₊ bis M ₇		22:11	09:11	05:24	35m	06:00	35m	06:35	33m	07:08	10h 03m	17:12	33m	17:46	35m	18:21	35m	18:57	13h 54m	10h 26m				Fr, 10. Feb
Sa, 11. Feb		18:58 – 23:21	4h 22m	AN ₊ bis M ₇		23:21	09:27	05:23	35m	05:58	35m	06:33	33m	07:07	10h 06m	17:14	33m	17:48	35m	18:23	35m	18:58	13h 51m	10h 23m				Sa, 11. Feb
So, 12. Feb		18:59 – 00:35*	5h 35m	AN ₊ bis M ₇		—:~	09:45	05:22	35m	05:57	35m	06:32	33m															

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	
2023	Zeit-	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne				Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond				2023	
	zone		Δt		Ph.	↑	↓	Astr.	Δt	Naut.	Δt	Bürg.	Δt	↑	Δt	↓	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt			Δt		
Mo, 20. Feb		19:11 – 05:08*	9h 57m	AN ₊ bis AN ₋	●	07:24	17:41	05:10	35m	05:45	34m	06:19	32m	06:52	10h 35m	17:28	32m	18:01	34m	18:35	35m	19:11	13h 22m	9h 57m					Mo, 20. Feb
Di, 21. Feb		19:12 – 05:06*	9h 54m	AN ₊ bis AN ₋		07:47	19:05	05:08	35m	05:43	34m	06:18	32m	06:51	10h 38m	17:29	32m	18:02	34m	18:37	35m	19:12	13h 19m	9h 54m					Di, 21. Feb
Mi, 22. Feb		20:26 – 05:05*	8h 38m	M _↓ bis AN ₋		08:07	20:26	05:06	35m	05:41	34m	06:16	32m	06:49	10h 41m	17:31	32m	18:04	34m	18:38	35m	19:13	13h 16m	9h 51m					Mi, 22. Feb
Do, 23. Feb		21:44 – 05:03*	7h 18m	M _↓ bis AN ₋		08:26	21:44	05:05	35m	05:40	34m	06:14	32m	06:47	10h 45m	17:32	32m	18:05	34m	18:40	35m	19:15	13h 13m	9h 48m					Do, 23. Feb
Fr, 24. Feb		23:01 – 05:01*	6h 00m	M _↓ bis AN ₋		08:44	23:01	05:03	35m	05:38	34m	06:13	32m	06:45	10h 48m	17:34	32m	18:06	34m	18:41	35m	19:16	13h 09m	9h 44m					Fr, 24. Feb
Sa, 25. Feb		00:16* – 04:59*	4h 43m	M _↓ bis AN ₋		09:05	—:—	05:01	35m	05:36	34m	06:11	32m	06:44	10h 51m	17:35	32m	18:08	34m	18:42	35m	19:18	13h 06m	9h 41m					Sa, 25. Feb
So, 26. Feb		01:28* – 04:58*	3h 29m	M _↓ bis AN ₋		09:29	00:16	04:59	35m	05:35	34m	06:09	32m	06:42	10h 54m	17:37	32m	18:09	34m	18:44	35m	19:19	13h 03m	9h 38m					So, 26. Feb
Mo, 27. Feb		02:36* – 04:56*	2h 19m	M _↓ bis AN ₋	◐	09:58	01:28	04:58	35m	05:33	34m	06:07	32m	06:40	10h 58m	17:38	32m	18:11	34m	18:45	35m	19:21	12h 59m	9h 35m					Mo, 27. Feb
Di, 28. Feb		03:37* – 04:54*	1h 17m	M _↓ bis AN ₋		10:35	02:36	04:56	35m	05:31	34m	06:06	32m	06:38	11h 01m	17:40	32m	18:12	34m	18:47	35m	19:22	12h 56m	9h 32m					Di, 28. Feb
Mi, 1. Mär		04:28* – 04:52*	24m	M _↓ bis AN ₋		11:21	03:37	04:54	35m	05:29	34m	06:04	32m	06:36	11h 04m	17:41	32m	18:14	34m	18:48	35m	19:24	12h 53m	9h 28m					Mi, 1. Mär
Do, 2. Mär		—:—:—:—	–	Mond stört		12:15	04:28	04:52	35m	05:28	34m	06:02	32m	06:34	11h 08m	17:43	32m	18:15	34m	18:50	35m	19:25	12h 49m	9h 25m					Do, 2. Mär
Fr, 3. Mär		—:—:—:—	–	Mond stört		13:17	05:09	04:50	35m	05:26	34m	06:00	32m	06:33	11h 11m	17:44	32m	18:16	34m	18:51	35m	19:26	12h 46m	9h 22m					Fr, 3. Mär
Sa, 4. Mär		—:~:~:~:~	–	Mond stört		14:23	05:42	04:48	35m	05:24	34m	05:58	32m	06:31	11h 14m	17:45	32m	18:18	34m	18:52	35m	19:28	12h 43m	9h 18m					Sa, 4. Mär
So, 5. Mär		—:~:~:~:~	–	Mond stört		15:31	06:07	04:47	35m	05:22	34m	05:56	32m	06:29	11h 18m	17:47	32m	18:19	34m	18:54	35m	19:29	12h 39m	9h 15m					So, 5. Mär
Mo, 6. Mär		—:~:~:~:~	–	Mond stört		16:39	06:28	04:45	35m	05:20	34m	05:55	32m	06:27	11h 21m	17:48	32m	18:21	34m	18:55	35m	19:31	12h 36m	9h 11m					Mo, 6. Mär
Di, 7. Mär		—:~:~:~:~	–	Mond stört	○	17:46	06:46	04:43	35m	05:18	34m	05:53	32m	06:25	11h 24m	17:50	32m	18:22	34m	18:57	35m	19:32	12h 33m	9h 08m					Di, 7. Mär
Mi, 8. Mär		—:~:~:~:~	–	Mond stört		18:54	07:02	04:41	35m	05:16	34m	05:51	32m	06:23	11h 28m	17:51	32m	18:24	34m	18:58	35m	19:34	12h 29m	9h 04m					Mi, 8. Mär
Do, 9. Mär		19:35 – 20:02	26m	AN ₊ bis M _↑		20:02	07:18	04:39	35m	05:14	34m	05:49	32m	06:21	11h 31m	17:53	32m	18:25	34m	19:00	35m	19:35	12h 26m	9h 01m					Do, 9. Mär
Fr, 10. Mär		19:37 – 21:12	1h 35m	AN ₊ bis M _↑		21:12	07:33	04:37	35m	05:12	34m	05:47	32m	06:19	11h 34m	17:54	32m	18:26	34m	19:01	35m	19:37	12h 23m	8h 57m					Fr, 10. Mär
Sa, 11. Mär		19:38 – 22:25	2h 46m	AN ₊ bis M _↑		22:25	07:51	04:35	35m	05:10	34m	05:45	32m	06:17	11h 38m	17:56	32m	18:28	34m	19:02	35m	19:38	12h 19m	8h 54m					Sa, 11. Mär
So, 12. Mär		19:40 – 23:41	4h 01m	AN ₊ bis M _↑		23:41	08:12	04:33	35m	05:09	34m	05:43	32m	06:15	11h 41m	17:57	32m	18:29	34m	19:04	36m	19:40	12h 16m	8h 50m					So, 12. Mär
Mo, 13. Mär		19:41 – 00:58*	5h 16m	AN ₊ bis M _↑		—:—	08:38	04:31	35m	05:07	34m	05:41	32m	06:13	11h 45m	17:58	32m	18:31	34m	19:05	36m	19:41	12h 12m	8h 47m					Mo, 13. Mär
Di, 14. Mär		19:43 – 02:12*	6h 29m	AN ₊ bis M _↑		00:58	09:13	04:29	36m	05:05	34m	05:39	32m	06:11	11h 48m	18:00	32m	18:32	34m	19:07	36m	19:43	12h 09m	8h 43m					Di, 14. Mär
Mi, 15. Mär		19:45 – 03:18*	7h 33m	AN ₊ bis M _↑	◑	02:12	10:00	04:26	36m	05:03	34m	05:37	32m	06:09	11h 51m	18:01	32m	18:33	34m	19:08	36m	19:45	12h 06m	8h 39m					Mi, 15. Mär
Do, 16. Mär		19:46 – 04:12*	8h 25m	AN ₊ bis M _↑		03:18	11:02	04:24	36m	05:01	34m	05:35	32m	06:07	11h 55m	18:03	32m	18:35	34m	19:10	36m	19:46	12h 02m	8h 36m					Do, 16. Mär
Fr, 17. Mär		19:48 – 04:20*	8h 32m	AN ₊ bis AN ₋		04:12	12:18	04:22	36m	04:58	34m	05:33	32m	06:05	11h 58m	18:04	32m	18:36	34m	19:11	36m	19:48	11h 59m	8h 32m					Fr, 17. Mär
Sa, 18. Mär		19:49 – 04:18*	8h 28m	AN ₊ bis AN ₋		04:52	13:42	04:20	36m	04:56	34m	05:31	32m	06:03	12h 02m	18:05	32m	18:38	34m	19:13	36m	19:49	11h 56m	8h 28m					Sa, 18. Mär
So, 19. Mär		19:51 – 04:16*	8h 24m	AN ₊ bis AN ₋		05:23	15:09	04:18	36m	04:54	34m	05:29	32m	06:02	12h 05m	18:07	32m	18:39	35m	19:14	36m	19:51	11h 52m	8h 24m					So, 19. Mär
Mo, 20. Mär		19:53 – 04:13*	8h 20m	AN ₊ bis AN ₋		05:48	16:33	04:16	36m	04:52	34m	05:27	32m	06:00	12h 08m	18:08	32m	18:41	35m	19:16	36m	19:53	11h 49m	8h 20m					Mo, 20. Mär
Di, 21. Mär		19:54 – 04:11*	8h 17m	AN ₊ bis AN ₋	●	06:09	17:56	04:13	36m	04:50	35m	05:25	32m	05:58	12h 12m	18:10	32m	18:42	35m	19:17	36m	19:54	11h 45m	8h 17m					Di, 21. Mär
Mi, 22. Mär		19:56 – 04:09*	8h 13m	AN ₊ bis AN ₋		06:27	19:16	04:11	36m	04:48	35m	05:23	32m	05:56	12h 15m	18:11	32m	18:43	35m	19:19	37m	19:56	11h 42m	8h 13m					Mi, 22. Mär
Do, 23. Mär		20:35 – 04:07*	7h 31m	M _↓ bis AN ₋		06:46	20:35	04:09	37m	04:46	35m	05:21	32m	05:54	12h 18m	18:12	32m	18:45	35m	19:20	37m	19:57	11h 39m	8h 09m					Do, 23. Mär
Fr, 24. Mär		21:53 – 04:05*	6h 11m	M _↓ bis AN ₋		07:06	21:53	04:07	37m	04:44	35m	05:19	32m	05:52	12h 22m	18:14	32m	18:46	35m	19:22	37m	19:59	11h 35m	8h 05m					Fr, 24. Mär
Sa, 25. Mär		23:09 – 04:02*	4h 53m	M _↓ bis AN ₋		07:28	23:09	04:05	37m	04:42	35m	05:17	32m	05:50	12h 25m	18:15	32m	18:48	35m	19:23	37m	20:01	11h 32m	8h 01m					Sa, 25. Mär
So, 26. Mär	MESZ	01:21* – 05:00*	3h 38m	M _↓ bis AN ₋		08:56	00:09	05:02	37m	05:40	35m	06:15	32m	06:48	12h 29m	19:17	32m	19:49	35m	20:25	37m	21:02	11h 28m	7h 57m					So, 26. Mär
Mo, 27. Mär	MESZ	02:27* – 04:58*	2h 30m	M _↓ bis AN ₋		09:30	01:21	05:00	37m	05:38	35m	06:13	32m	06:46	12h 32m	19:18	32m	19:51	35m	20:26	37m	21:04	11h 25m	7h 53m					Mo, 27. Mär
Di, 28. Mär	MESZ	03:23* – 04:55*	1h 32m	M _↓ bis AN ₋		10:13	02:27	04:58	37m	05:36	35m	06:11	32m	06:44	12h 35m	19:19	32m	19:52	35m	20:28	38m	21:06	11h 22m	7h 49m					Di, 28. Mär
Mi, 29. Mär	MESZ	04:08* – 04:53*	44m	M _↓ bis AN ₋	◒	11:05	03:23	04:55	37m	05:33	35m	06:09	32m	06:42	12h 39m	19:21	32m	19:53	35m	20:29	38m	21:07	11h 18m	7h 45m					Mi, 29. Mär
Do, 30. Mär	MESZ	04:44* – 04:51*	7m	M _↓ bis AN ₋		12:05	04:08	04:53	38m	05:31	35m	06:07	32m	06:40	12h 42m	19:22	32m	19:55	35m	20:31	38m	21:09	11h 15m	7h 41m					Do, 30. Mär
Fr, 31. Mär	MESZ	—:~:~:~:~	–	Mond stört		13:10	04:44	04:51	38m	05:29	35m	06:05	32m	06:38	12h 45m	19:24	32m	19:56	36m	20:32	38m	21:11	11h 12m	7h 37m					Fr, 31. Mär
Sa, 1. Apr	MESZ	—:~:~:~:~	–	Mond stört		14:17	05:12	04:48	38m	05:27	36m	06:03	32m	06:36	12h 49m	19:25	32m	19:58	36m	20:34	38m	21:13	11h 08m	7h 33m					Sa, 1. Apr
So, 2. Apr	MESZ	—:~:~:~:~	–	Mond stört		15:25	05:34	04:46	38m	05:25	36m	06:01	32m	06:34	12h 52m	19:26	32m	19:59	36m	20:36	38m	21:14	11h 05m	7h 29m					

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	
2023	Zeit-	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne				Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
	zone		Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt			
Di, 11. Apr	MESZ	21:31–02:13*	4h 41m	AN ₊ bis M ₇		01:04	08:56	04:25	40m	05:05	37m	05:43	33m	06:16	13h 22m	19:39	33m	20:12	37m	20:50	41m	21:31	10h 35m	6h 51m					Di, 11. Apr
Mi, 12. Apr	MESZ	21:33–03:09*	5h 36m	AN ₊ bis M ₇		02:13	09:54	04:22	41m	05:03	37m	05:41	33m	06:14	13h 25m	19:40	33m	20:14	37m	20:52	41m	21:33	10h 32m	6h 46m					Mi, 12. Apr
Do, 13. Apr	MESZ	21:35–03:53*	6h 17m	AN ₊ bis M ₇	☾	03:09	11:04	04:20	41m	05:01	37m	05:39	33m	06:13	13h 28m	19:41	33m	20:15	37m	20:53	41m	21:35	10h 29m	6h 42m					Do, 13. Apr
Fr, 14. Apr	MESZ	21:37–04:15*	6h 37m	AN ₊ bis AN ₋		03:53	12:24	04:17	41m	04:59	37m	05:37	33m	06:11	13h 32m	19:43	33m	20:17	38m	20:55	42m	21:37	10h 25m	6h 37m					Fr, 14. Apr
Sa, 15. Apr	MESZ	21:39–04:12*	6h 33m	AN ₊ bis AN ₋		04:26	13:48	04:15	42m	04:57	38m	05:35	33m	06:09	13h 35m	19:44	34m	20:18	38m	20:57	42m	21:39	10h 22m	6h 33m					Sa, 15. Apr
So, 16. Apr	MESZ	21:41–04:10*	6h 28m	AN ₊ bis AN ₋		04:51	15:10	04:12	42m	04:55	38m	05:33	33m	06:07	13h 38m	19:46	34m	20:20	38m	20:58	42m	21:41	10h 19m	6h 28m					So, 16. Apr
Mo, 17. Apr	MESZ	21:43–04:07*	6h 24m	AN ₊ bis AN ₋		05:12	16:31	04:10	42m	04:53	38m	05:31	34m	06:05	13h 41m	19:47	34m	20:21	38m	21:00	43m	21:43	10h 16m	6h 24m					Mo, 17. Apr
Di, 18. Apr	MESZ	21:45–04:05*	6h 19m	AN ₊ bis AN ₋		05:31	17:51	04:07	42m	04:50	38m	05:29	34m	06:03	13h 45m	19:48	34m	20:23	38m	21:02	43m	21:45	10h 13m	6h 19m					Di, 18. Apr
Mi, 19. Apr	MESZ	21:47–04:02*	6h 15m	AN ₊ bis AN ₋		05:49	19:09	04:05	43m	04:48	38m	05:27	34m	06:01	13h 48m	19:50	34m	20:24	39m	21:03	43m	21:47	10h 09m	6h 15m					Mi, 19. Apr
Do, 20. Apr	MESZ	21:49–04:00*	6h 10m	AN ₊ bis AN ₋	☀	06:08	20:27	04:02	43m	04:46	39m	05:25	34m	06:00	13h 51m	19:51	34m	20:26	39m	21:05	44m	21:49	10h 06m	6h 10m					Do, 20. Apr
Fr, 21. Apr	MESZ	21:51–03:57*	6h 06m	AN ₊ bis AN ₋		06:29	21:45	04:00	44m	04:44	39m	05:23	34m	05:58	13h 54m	19:52	34m	20:27	39m	21:07	44m	21:51	10h 03m	6h 06m					Fr, 21. Apr
Sa, 22. Apr	MESZ	23:01–03:55*	4h 54m	M _\ bis AN ₋		06:54	23:01	03:57	44m	04:42	39m	05:21	34m	05:56	13h 57m	19:54	34m	20:29	39m	21:08	44m	21:53	10h 00m	6h 01m					Sa, 22. Apr
So, 23. Apr	MESZ	00:11*–03:52*	3h 41m	M _\ bis AN ₋		07:25	—:—	03:55	44m	04:40	39m	05:19	34m	05:54	14h 00m	19:55	35m	20:30	39m	21:10	45m	21:55	9h 57m	5h 56m					So, 23. Apr
Mo, 24. Apr	MESZ	01:13*–03:50*	2h 37m	M _\ bis AN ₋		08:04	00:11	03:52	45m	04:38	39m	05:18	34m	05:53	14h 04m	19:57	35m	20:32	40m	21:12	45m	21:58	9h 54m	5h 52m					Mo, 24. Apr
Di, 25. Apr	MESZ	02:03*–03:47*	1h 44m	M _\ bis AN ₋		08:53	01:13	03:50	45m	04:36	40m	05:16	35m	05:51	14h 07m	19:58	35m	20:33	40m	21:14	46m	22:00	9h 51m	5h 47m					Di, 25. Apr
Mi, 26. Apr	MESZ	02:43*–03:45*	1h 01m	M _\ bis AN ₋		09:51	02:03	03:47	46m	04:33	40m	05:14	35m	05:49	14h 10m	19:59	35m	20:35	40m	21:15	46m	22:02	9h 48m	5h 42m					Mi, 26. Apr
Do, 27. Apr	MESZ	03:14*–03:42*	28m	M _\ bis AN ₋	☾	10:55	02:43	03:45	46m	04:31	40m	05:12	35m	05:47	14h 13m	20:01	35m	20:36	40m	21:17	46m	22:04	9h 45m	5h 38m					Do, 27. Apr
Fr, 28. Apr	MESZ	03:38*–03:40*	2m	M _\ bis AN ₋		12:02	03:14	03:42	46m	04:29	40m	05:10	35m	05:46	14h 16m	20:02	35m	20:38	41m	21:19	47m	22:06	9h 42m	5h 33m					Fr, 28. Apr
Sa, 29. Apr	MESZ	—:—:—:—	–	Mond stört		13:09	03:38	03:40	47m	04:27	41m	05:08	35m	05:44	14h 19m	20:03	35m	20:39	41m	21:21	47m	22:09	9h 39m	5h 28m					Sa, 29. Apr
So, 30. Apr	MESZ	—:—:—:—	–	Mond stört		14:17	03:57	03:37	47m	04:25	41m	05:07	35m	05:43	14h 22m	20:05	36m	20:41	41m	21:22	48m	22:11	9h 36m	5h 23m					So, 30. Apr
Mo, 1. Mai	MESZ	—:—:~:~:~	–	Mond stört		15:25	04:14	03:35	48m	04:23	41m	05:05	35m	05:41	14h 25m	20:06	36m	20:42	41m	21:24	48m	22:13	9h 33m	5h 19m					Mo, 1. Mai
Di, 2. Mai	MESZ	—:~:~:~:~	–	Mond stört		16:33	04:30	03:32	48m	04:21	41m	05:03	36m	05:39	14h 28m	20:07	36m	20:44	42m	21:26	49m	22:15	9h 30m	5h 14m					Di, 2. Mai
Mi, 3. Mai	MESZ	—:~:~:~:~	–	Mond stört		17:43	04:45	03:30	49m	04:19	42m	05:01	36m	05:38	14h 31m	20:09	36m	20:45	42m	21:28	49m	22:18	9h 27m	5h 09m					Mi, 3. Mai
Do, 4. Mai	MESZ	~:~:~:~:~	–	Mond stört		18:55	05:02	03:27	49m	04:17	42m	05:00	36m	05:36	14h 33m	20:10	36m	20:47	42m	21:30	50m	22:20	9h 24m	5h 04m					Do, 4. Mai
Fr, 5. Mai	MESZ	~:~:~:~:~	–	Mond stört	☾	20:12	05:20	03:25	50m	04:15	42m	04:58	36m	05:35	14h 36m	20:11	36m	20:48	43m	21:31	51m	22:22	9h 21m	4h 59m					Fr, 5. Mai
Sa, 6. Mai	MESZ	~:~:~:~:~	–	Mond stört		21:31	05:43	03:22	51m	04:13	43m	04:56	36m	05:33	14h 39m	20:13	36m	20:50	43m	21:33	51m	22:25	9h 18m	4h 55m					Sa, 6. Mai
So, 7. Mai	MESZ	22:27–22:50	23m	AN ₊ bis M ₇		22:50	06:13	03:20	51m	04:12	43m	04:55	36m	05:32	14h 42m	20:14	37m	20:51	43m	21:35	52m	22:27	9h 16m	4h 50m					So, 7. Mai
Mo, 8. Mai	MESZ	22:30–00:04*	1h 34m	AN ₊ bis M ₇		—:~	06:53	03:17	52m	04:10	43m	04:53	37m	05:30	14h 45m	20:15	37m	20:53	43m	21:37	52m	22:30	9h 13m	4h 45m					Mo, 8. Mai
Di, 9. Mai	MESZ	22:32–01:06*	2h 33m	AN ₊ bis M ₇		00:04	07:46	03:15	52m	04:08	43m	04:52	37m	05:29	14h 47m	20:17	37m	20:54	44m	21:38	53m	22:32	9h 10m	4h 40m					Di, 9. Mai
Mi, 10. Mai	MESZ	22:34–01:54*	3h 19m	AN ₊ bis M ₇		01:06	08:54	03:12	53m	04:06	44m	04:50	37m	05:28	14h 50m	20:18	37m	20:56	44m	21:40	54m	22:34	9h 08m	4h 35m					Mi, 10. Mai
Do, 11. Mai	MESZ	22:37–02:29*	3h 52m	AN ₊ bis M ₇		01:54	10:13	03:10	54m	04:04	44m	04:49	37m	05:26	14h 53m	20:19	37m	20:57	44m	21:42	54m	22:37	9h 05m	4h 30m					Do, 11. Mai
Fr, 12. Mai	MESZ	22:39–02:56*	4h 17m	AN ₊ bis M ₇	☾	02:29	11:35	03:07	54m	04:02	44m	04:47	37m	05:25	14h 55m	20:21	37m	20:59	45m	21:44	55m	22:39	9h 02m	4h 25m					Fr, 12. Mai
Sa, 13. Mai	MESZ	22:42–03:03*	4h 20m	AN ₊ bis AN ₋		02:56	12:57	03:05	55m	04:00	45m	04:46	37m	05:23	14h 58m	20:22	38m	21:00	45m	21:45	56m	22:42	9h 00m	4h 20m					Sa, 13. Mai
So, 14. Mai	MESZ	22:44–03:00*	4h 15m	AN ₊ bis AN ₋		03:18	14:17	03:03	56m	03:59	45m	04:44	38m	05:22	15h 00m	20:23	38m	21:01	45m	21:47	56m	22:44	8h 57m	4h 15m					So, 14. Mai
Mo, 15. Mai	MESZ	22:47–02:58*	4h 11m	AN ₊ bis AN ₋		03:37	15:35	03:00	56m	03:57	45m	04:43	38m	05:21	15h 03m	20:24	38m	21:03	46m	21:49	57m	22:47	8h 55m	4h 11m					Mo, 15. Mai
Di, 16. Mai	MESZ	22:49–02:55*	4h 06m	AN ₊ bis AN ₋		03:54	16:51	02:58	57m	03:55	46m	04:41	38m	05:20	15h 05m	20:26	38m	21:04	46m	21:51	58m	22:49	8h 52m	4h 06m					Di, 16. Mai
Mi, 17. Mai	MESZ	22:52–02:53*	4h 01m	AN ₊ bis AN ₋		04:12	18:08	02:55	58m	03:54	46m	04:40	38m	05:19	15h 08m	20:27	38m	21:06	46m	21:52	59m	22:52	8h 50m	4h 01m					Mi, 17. Mai
Do, 18. Mai	MESZ	22:54–02:50*	3h 56m	AN ₊ bis AN ₋		04:32	19:24	02:53	59m	03:52	46m	04:39	38m	05:17	15h 10m	20:28	38m	21:07	46m	21:54	59m	22:54	8h 48m	3h 56m					Do, 18. Mai
Fr, 19. Mai	MESZ	22:56–02:48*	3h 51m	AN ₊ bis AN ₋	☀	04:55	20:40	02:50	59m	03:50	46m	04:37	38m	05:16	15h 12m	20:29	39m	21:08	47m	21:56	1h 00m	22:56	8h 45m	3h 51m					Fr, 19. Mai
Sa, 20. Mai	MESZ	22:59–02:46*	3h 46m	AN ₊ bis AN ₋		05:23	21:53	02:48	1h 00m	03:49	47m	04:36	39m	05:15	15h 15m	20:30	39m	21:10	47m	21:57	1h 01m	22:59	8h 43m	3h 46m					Sa, 20. Mai
So, 21. Mai	MESZ	23:01–02:43*	3h 41m	AN ₊ bis AN ₋		05:58	22:59	02:46	1h 01m	03:47	47m	04:35	39m	05:14	15h 17m	20:32	39m	21:11	47m	21:59	1h 02m	23:01	8h 41m	3h 41m					So, 21. Mai
Mo, 22. Mai	MESZ	23:55–02:41*	2h 45m	M _\ bis AN ₋		06:44	23:55	02:43	1h 02m																				

Table with 29 columns (1-29) and 55 rows (Mi, 31. Mai to Mi, 19. Jul). Columns include date, time zone, astronomical data (Astr. dunkel und kein Mond, Astr., Δt), moon phase (Ph., ↑, ↓), dawn/dusk (Astr., Naut., Δt, Bürg.), and sunrise/sunset (Sonne, Δt, Bürg.).

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
2023	Zeitzone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne				Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023	
			Δt		Ph.	↑	↓	Astr.	Δt	Naut.	Δt	Bürg.	Δt	↑	Δt	↓	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Do, 20. Jul	MESZ	23:15–02:50*	3h 35m	AN ₊ bis AN ₋		07:38	22:29	02:48	1h 04m	03:52	48m	04:41	39m	05:21	15h 22m	20:43	39m	21:23	48m	22:11	1h 03m	23:15	8h 38m	3h 35m				Do, 20. Jul
Fr, 21. Jul	MESZ	23:13–02:52*	3h 39m	AN ₊ bis AN ₋		08:45	22:46	02:50	1h 03m	03:54	48m	04:42	39m	05:22	15h 20m	20:42	39m	21:22	48m	22:10	1h 02m	23:13	8h 40m	3h 39m				Fr, 21. Jul
Sa, 22. Jul	MESZ	23:10–02:55*	3h 44m	AN ₊ bis AN ₋		09:50	23:01	02:52	1h 02m	03:55	48m	04:43	39m	05:23	15h 18m	20:41	39m	21:21	47m	22:08	1h 01m	23:10	8h 42m	3h 44m				Sa, 22. Jul
So, 23. Jul	MESZ	23:16–02:57*	3h 41m	M _↓ bis AN ₋		10:55	23:16	02:55	1h 01m	03:57	47m	04:45	39m	05:24	15h 16m	20:40	39m	21:19	47m	22:07	1h 01m	23:08	8h 44m	3h 49m				So, 23. Jul
Mo, 24. Jul	MESZ	23:31–03:00*	3h 29m	M _↓ bis AN ₋		12:02	23:31	02:57	1h 01m	03:58	47m	04:46	39m	05:25	15h 14m	20:39	39m	21:18	47m	22:05	1h 00m	23:06	8h 47m	3h 54m				Mo, 24. Jul
Di, 25. Jul	MESZ	23:48–03:02*	3h 14m	M _↓ bis AN ₋		13:10	23:48	03:00	1h 00m	04:00	47m	04:47	39m	05:26	15h 11m	20:38	38m	21:17	46m	22:04	59m	23:03	8h 49m	3h 58m				Di, 25. Jul
Mi, 26. Jul	MESZ	00:08*–03:05*	2h 56m	M _↓ bis AN ₋	☾	14:21	—:—	03:02	59m	04:02	46m	04:49	38m	05:27	15h 09m	20:37	38m	21:16	46m	22:02	58m	23:01	8h 51m	4h 03m				Mi, 26. Jul
Do, 27. Jul	MESZ	00:34*–03:07*	2h 33m	M _↓ bis AN ₋		15:37	00:08	03:05	58m	04:03	46m	04:50	38m	05:29	15h 07m	20:36	38m	21:14	46m	22:00	58m	22:58	8h 54m	4h 08m				Do, 27. Jul
Fr, 28. Jul	MESZ	01:09*–03:09*	2h 00m	M _↓ bis AN ₋		16:55	00:34	03:07	58m	04:05	46m	04:51	38m	05:30	15h 04m	20:34	38m	21:13	45m	21:59	57m	22:56	8h 56m	4h 13m				Fr, 28. Jul
Sa, 29. Jul	MESZ	01:58*–03:12*	1h 13m	M _↓ bis AN ₋		18:12	01:09	03:09	57m	04:07	45m	04:53	38m	05:31	15h 02m	20:33	38m	21:11	45m	21:57	56m	22:54	8h 59m	4h 18m				Sa, 29. Jul
So, 30. Jul	MESZ	03:04*–03:14*	9m	M _↓ bis AN ₋		19:20	01:58	03:12	56m	04:08	45m	04:54	38m	05:32	14h 59m	20:32	38m	21:10	45m	21:55	55m	22:51	9h 01m	4h 23m				So, 30. Jul
Mo, 31. Jul	MESZ	—:—:—:—:—	–	Mond stört		20:15	03:04	03:14	55m	04:10	45m	04:55	38m	05:33	14h 57m	20:31	37m	21:08	44m	21:53	55m	22:49	9h 04m	4h 28m				Mo, 31. Jul
Di, 1. Aug	MESZ	—:—:—:—:—	–	Mond stört	☉	20:56	04:25	03:17	55m	04:12	44m	04:57	37m	05:35	14h 54m	20:29	37m	21:07	44m	21:52	54m	22:46	9h 06m	4h 32m				Di, 1. Aug
Mi, 2. Aug	MESZ	—:~:~:~:~:~	–	Mond stört		21:26	05:54	03:19	54m	04:13	44m	04:58	37m	05:36	14h 51m	20:28	37m	21:05	44m	21:50	53m	22:44	9h 09m	4h 37m				Mi, 2. Aug
Do, 3. Aug	MESZ	—:~:~:~:~:~	–	Mond stört		21:50	07:23	03:21	53m	04:15	44m	05:00	37m	05:37	14h 49m	20:26	37m	21:04	44m	21:48	53m	22:41	9h 11m	4h 42m				Do, 3. Aug
Fr, 4. Aug	MESZ	—:~:~:~:~:~	–	Mond stört		22:10	08:49	03:24	53m	04:17	44m	05:01	37m	05:38	14h 46m	20:25	37m	21:02	43m	21:46	52m	22:39	9h 14m	4h 47m				Fr, 4. Aug
Sa, 5. Aug	MESZ	—:~:~:~:~:~	–	Mond stört		22:29	10:12	03:26	52m	04:19	43m	05:02	37m	05:40	14h 43m	20:24	37m	21:01	43m	21:44	52m	22:36	9h 17m	4h 52m				Sa, 5. Aug
So, 6. Aug	MESZ	22:34–22:47	13m	AN ₊ bis M _↑		22:47	11:31	03:28	52m	04:20	43m	05:04	37m	05:41	14h 41m	20:22	36m	20:59	43m	21:42	51m	22:34	9h 20m	4h 56m				So, 6. Aug
Mo, 7. Aug	MESZ	22:31–23:07	35m	AN ₊ bis M _↑		23:07	12:49	03:31	51m	04:22	43m	05:05	36m	05:42	14h 38m	20:21	36m	20:57	42m	21:40	50m	22:31	9h 22m	5h 01m				Mo, 7. Aug
Di, 8. Aug	MESZ	22:29–23:30	1h 01m	AN ₊ bis M _↑	☾	23:30	14:06	03:33	50m	04:24	42m	05:07	36m	05:43	14h 35m	20:19	36m	20:56	42m	21:38	50m	22:29	9h 25m	5h 06m				Di, 8. Aug
Mi, 9. Aug	MESZ	22:26–23:58	1h 32m	AN ₊ bis M _↑		23:58	15:21	03:35	50m	04:25	42m	05:08	36m	05:45	14h 32m	20:17	36m	20:54	42m	21:36	49m	22:26	9h 28m	5h 11m				Mi, 9. Aug
Do, 10. Aug	MESZ	22:24–00:34*	2h 10m	AN ₊ bis M _↑		—:—	16:32	03:37	49m	04:27	42m	05:10	36m	05:46	14h 29m	20:16	36m	20:52	42m	21:34	49m	22:24	9h 31m	5h 16m				Do, 10. Aug
Fr, 11. Aug	MESZ	22:21–01:18*	2h 57m	AN ₊ bis M _↑		00:34	17:36	03:40	49m	04:29	42m	05:11	36m	05:47	14h 27m	20:14	36m	20:50	41m	21:32	48m	22:21	9h 34m	5h 20m				Fr, 11. Aug
Sa, 12. Aug	MESZ	22:18–02:13*	3h 54m	AN ₊ bis M _↑		01:18	18:31	03:42	48m	04:31	41m	05:12	36m	05:49	14h 24m	20:13	35m	20:49	41m	21:30	48m	22:18	9h 37m	5h 25m				Sa, 12. Aug
So, 13. Aug	MESZ	22:16–03:15*	4h 58m	AN ₊ bis M _↑		02:13	19:14	03:44	48m	04:32	41m	05:14	35m	05:50	14h 21m	20:11	35m	20:47	41m	21:28	47m	22:16	9h 40m	5h 30m				So, 13. Aug
Mo, 14. Aug	MESZ	22:13–03:48*	5h 34m	AN ₊ bis AN ₋		03:15	19:48	03:46	47m	04:34	41m	05:15	35m	05:51	14h 18m	20:09	35m	20:45	41m	21:26	47m	22:13	9h 43m	5h 34m				Mo, 14. Aug
Di, 15. Aug	MESZ	22:11–03:50*	5h 39m	AN ₊ bis AN ₋		04:21	20:14	03:48	47m	04:36	41m	05:17	35m	05:52	14h 15m	20:08	35m	20:43	40m	21:24	46m	22:11	9h 45m	5h 39m				Di, 15. Aug
Mi, 16. Aug	MESZ	22:08–03:53*	5h 44m	AN ₊ bis AN ₋	☀	05:29	20:35	03:50	46m	04:37	40m	05:18	35m	05:54	14h 12m	20:06	35m	20:41	40m	21:22	46m	22:08	9h 48m	5h 44m				Mi, 16. Aug
Do, 17. Aug	MESZ	22:06–03:55*	5h 48m	AN ₊ bis AN ₋		06:36	20:53	03:53	46m	04:39	40m	05:20	35m	05:55	14h 09m	20:04	35m	20:40	40m	21:20	45m	22:06	9h 52m	5h 48m				Do, 17. Aug
Fr, 18. Aug	MESZ	22:03–03:57*	5h 53m	AN ₊ bis AN ₋		07:42	21:08	03:55	45m	04:41	40m	05:21	35m	05:56	14h 06m	20:03	35m	20:38	40m	21:18	45m	22:03	9h 55m	5h 53m				Fr, 18. Aug
Sa, 19. Aug	MESZ	22:01–03:59*	5h 58m	AN ₊ bis AN ₋		08:47	21:22	03:57	45m	04:42	40m	05:22	35m	05:58	14h 03m	20:01	34m	20:36	39m	21:16	45m	22:01	9h 58m	5h 58m				Sa, 19. Aug
So, 20. Aug	MESZ	21:58–04:01*	6h 02m	AN ₊ bis AN ₋		09:53	21:37	03:59	45m	04:44	39m	05:24	34m	05:59	14h 00m	19:59	34m	20:34	39m	21:14	44m	21:58	10h 01m	6h 02m				So, 20. Aug
Mo, 21. Aug	MESZ	21:56–04:03*	6h 07m	AN ₊ bis AN ₋		11:00	21:53	04:01	44m	04:46	39m	05:25	34m	06:00	13h 57m	19:57	34m	20:32	39m	21:11	44m	21:56	10h 04m	6h 07m				Mo, 21. Aug
Di, 22. Aug	MESZ	22:11–04:05*	5h 53m	M _↓ bis AN ₋		12:09	22:11	04:03	44m	04:47	39m	05:27	34m	06:02	13h 53m	19:55	34m	20:30	39m	21:09	43m	21:53	10h 07m	6h 11m				Di, 22. Aug
Mi, 23. Aug	MESZ	22:34–04:07*	5h 33m	M _↓ bis AN ₋		13:22	22:34	04:05	44m	04:49	39m	05:28	34m	06:03	13h 50m	19:54	34m	20:28	39m	21:07	43m	21:51	10h 10m	6h 16m				Mi, 23. Aug
Do, 24. Aug	MESZ	23:04–04:09*	5h 04m	M _↓ bis AN ₋	☾	14:37	23:04	04:07	43m	04:51	39m	05:30	34m	06:04	13h 47m	19:52	34m	20:26	38m	21:05	43m	21:48	10h 13m	6h 20m				Do, 24. Aug
Fr, 25. Aug	MESZ	23:45–04:11*	4h 25m	M _↓ bis AN ₋		15:52	23:45	04:09	43m	04:52	38m	05:31	34m	06:05	13h 44m	19:50	34m	20:24	38m	21:03	42m	21:46	10h 16m	6h 25m				Fr, 25. Aug
Sa, 26. Aug	MESZ	00:42*–04:13*	3h 31m	M _↓ bis AN ₋		17:03	—:—	04:11	42m	04:54	38m	05:32	34m	06:07	13h 41m	19:48	34m	20:22	38m	21:01	42m	21:43	10h 19m	6h 29m				Sa, 26. Aug
So, 27. Aug	MESZ	01:54*–04:15*	2h 20m	M _↓ bis AN ₋		18:02	00:42	04:13	42m	04:55	38m	05:34	34m	06:08	13h 38m	19:46	33m	20:20	38m	20:58	42m	21:41	10h 23m	6h 33m				So, 27. Aug
Mo, 28. Aug	MESZ	03:19*–04:17*	58m	M _↓ bis AN ₋		18:48	01:54	04:15	42m	04:57	38m	05:35	34m	06:09	13h 35m	19:44	33m	20:18	38m	20:56	41m	21:38	10h 26m	6h 38m				Mo, 28. Aug
Di, 29. Aug	MESZ	—:~:~:~:~:~	–	Mond stört		19:23	03:19	04:17	42m	04:59	38m	05:37	33m	06:11	13h 31m	19:42	33m	20:16	37m	20:54	41m	21:36	10h 29m	6h 42m				Di, 29. Aug
Mi, 30. Aug	MESZ	—:~:~:~:~:~	–	Mond stört		19:50	04:48	04:18	41m	05:00	37m	05:38	33m	06:12	13h 28m	19:41	33m	20:14	37m	20:52	41m	21:33	10h 32m	6h 47m				Mi, 30. Aug
Do,																												

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	
2023	Zeit-	Astr. dunkel und kein Mond			Mond		Beginn der Morgendämmerung						Sonne			Ende der Abenddämmerung						Nacht	Astr. N.	Naut. dunkel und kein Mond				2023	
	zone		Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt			
Fr, 8. Sep	MESZ	21:11–00:06*	2h 54m	AN ₊ bis M ₇		—:—	16:28	04:35	39m	05:14	36m	05:51	33m	06:24	12h 59m	19:23	32m	19:56	36m	20:32	39m	21:11	11h 01m	7h 24m					Fr, 8. Sep
Sa, 9. Sep	MESZ	21:09–01:06*	3h 56m	AN ₊ bis M ₇		00:06	17:15	04:36	39m	05:16	36m	05:52	32m	06:25	12h 56m	19:21	32m	19:54	36m	20:30	38m	21:09	11h 05m	7h 29m					Sa, 9. Sep
So, 10. Sep	MESZ	21:07–02:11*	5h 04m	AN ₊ bis M ₇		01:06	17:51	04:38	38m	05:17	36m	05:53	32m	06:26	12h 52m	19:19	32m	19:52	36m	20:28	38m	21:07	11h 08m	7h 33m					So, 10. Sep
Mo, 11. Sep	MESZ	21:04–03:19*	6h 14m	AN ₊ bis M ₇		02:11	18:19	04:40	38m	05:18	36m	05:55	32m	06:28	12h 49m	19:17	32m	19:50	36m	20:26	38m	21:04	11h 11m	7h 37m					Mo, 11. Sep
Di, 12. Sep	MESZ	21:02–04:26*	7h 24m	AN ₊ bis M ₇		03:19	18:42	04:41	38m	05:20	36m	05:56	32m	06:29	12h 46m	19:15	32m	19:48	35m	20:24	38m	21:02	11h 15m	7h 41m					Di, 12. Sep
Mi, 13. Sep	MESZ	21:00–04:45*	7h 45m	AN ₊ bis AN ₋		04:26	19:00	04:43	38m	05:21	35m	05:57	32m	06:30	12h 42m	19:13	32m	19:46	35m	20:21	38m	21:00	11h 18m	7h 45m					Mi, 13. Sep
Do, 14. Sep	MESZ	20:57–04:46*	7h 49m	AN ₊ bis AN ₋		05:33	19:16	04:45	38m	05:23	35m	05:59	32m	06:31	12h 39m	19:11	32m	19:44	35m	20:19	37m	20:57	11h 21m	7h 49m					Do, 14. Sep
Fr, 15. Sep	MESZ	20:55–04:48*	7h 53m	AN ₊ bis AN ₋	●	06:39	19:30	04:46	38m	05:24	35m	06:00	32m	06:33	12h 36m	19:09	32m	19:41	35m	20:17	37m	20:55	11h 25m	7h 53m					Fr, 15. Sep
Sa, 16. Sep	MESZ	20:53–04:50*	7h 56m	AN ₊ bis AN ₋		07:45	19:44	04:48	37m	05:26	35m	06:01	32m	06:34	12h 32m	19:07	32m	19:39	35m	20:15	37m	20:53	11h 28m	7h 56m					Sa, 16. Sep
So, 17. Sep	MESZ	20:50–04:51*	8h 00m	AN ₊ bis AN ₋		08:52	20:00	04:50	37m	05:27	35m	06:03	32m	06:35	12h 29m	19:05	32m	19:37	35m	20:13	37m	20:50	11h 31m	8h 00m					So, 17. Sep
Mo, 18. Sep	MESZ	20:48–04:53*	8h 04m	AN ₊ bis AN ₋		10:00	20:17	04:51	37m	05:29	35m	06:04	32m	06:37	12h 26m	19:03	32m	19:35	35m	20:11	37m	20:48	11h 35m	8h 04m					Mo, 18. Sep
Di, 19. Sep	MESZ	20:46–04:54*	8h 08m	AN ₊ bis AN ₋		11:12	20:38	04:53	37m	05:30	35m	06:06	32m	06:38	12h 22m	19:01	32m	19:33	35m	20:08	37m	20:46	11h 38m	8h 08m					Di, 19. Sep
Mi, 20. Sep	MESZ	21:05–04:56*	7h 51m	M _{\searrow} bis AN ₋		12:26	21:05	04:54	37m	05:32	35m	06:07	32m	06:39	12h 19m	18:59	32m	19:31	35m	20:06	37m	20:43	11h 41m	8h 12m					Mi, 20. Sep
Do, 21. Sep	MESZ	21:41–04:57*	7h 16m	M _{\searrow} bis AN ₋		13:40	21:41	04:56	37m	05:33	35m	06:08	32m	06:41	12h 16m	18:57	32m	19:29	35m	20:04	36m	20:41	11h 45m	8h 16m					Do, 21. Sep
Fr, 22. Sep	MESZ	22:30–04:59*	6h 29m	M _{\searrow} bis AN ₋	◐	14:51	22:30	04:57	36m	05:34	35m	06:10	32m	06:42	12h 12m	18:55	32m	19:27	35m	20:02	36m	20:39	11h 48m	8h 19m					Fr, 22. Sep
Sa, 23. Sep	MESZ	23:34–05:00*	5h 26m	M _{\searrow} bis AN ₋		15:53	23:34	04:59	36m	05:36	35m	06:11	32m	06:43	12h 09m	18:53	32m	19:25	34m	20:00	36m	20:37	11h 51m	8h 23m					Sa, 23. Sep
So, 24. Sep	MESZ	00:51*–05:02*	4h 10m	M _{\searrow} bis AN ₋		16:43	—:—	05:00	36m	05:37	35m	06:12	32m	06:45	12h 06m	18:51	32m	19:23	34m	19:58	36m	20:34	11h 55m	8h 27m					So, 24. Sep
Mo, 25. Sep	MESZ	02:16*–05:03*	2h 47m	M _{\searrow} bis AN ₋		17:21	00:51	05:02	36m	05:39	34m	06:14	32m	06:46	12h 02m	18:49	32m	19:21	34m	19:56	36m	20:32	11h 58m	8h 31m					Mo, 25. Sep
Di, 26. Sep	MESZ	03:44*–05:05*	1h 21m	M _{\searrow} bis AN ₋		17:50	02:16	05:03	36m	05:40	34m	06:15	32m	06:47	11h 59m	18:47	32m	19:19	34m	19:54	36m	20:30	12h 01m	8h 34m					Di, 26. Sep
Mi, 27. Sep	MESZ	—:— —:—:—	–	Mond stört		18:13	03:44	05:05	36m	05:41	34m	06:16	32m	06:48	11h 56m	18:45	32m	19:17	34m	19:52	36m	20:28	12h 05m	8h 38m					Mi, 27. Sep
Do, 28. Sep	MESZ	—:— —:—:—	–	Mond stört		18:33	05:10	05:06	36m	05:43	34m	06:18	32m	06:50	11h 52m	18:43	32m	19:15	34m	19:50	36m	20:26	12h 08m	8h 42m					Do, 28. Sep
Fr, 29. Sep	MESZ	—:— —:~:~:~	–	Mond stört	◑	18:51	06:34	05:08	36m	05:44	34m	06:19	32m	06:51	11h 49m	18:41	32m	19:13	34m	19:48	36m	20:24	12h 11m	8h 45m					Fr, 29. Sep
Sa, 30. Sep	MESZ	—:~:~:~ —:~:~	–	Mond stört		19:11	07:57	05:09	36m	05:45	34m	06:20	32m	06:52	11h 46m	18:39	32m	19:11	34m	19:46	35m	20:22	12h 15m	8h 49m					Sa, 30. Sep
So, 1. Okt	MESZ	—:~:~:~ —:~:~	–	Mond stört		19:32	09:20	05:11	36m	05:47	34m	06:22	32m	06:54	11h 42m	18:37	32m	19:09	34m	19:44	35m	20:19	12h 18m	8h 52m					So, 1. Okt
Mo, 2. Okt	MESZ	—:~:~:~ —:~:~	–	Mond stört		19:56	10:42	05:12	35m	05:48	34m	06:23	32m	06:55	11h 39m	18:35	32m	19:07	34m	19:42	35m	20:17	12h 21m	8h 56m					Mo, 2. Okt
Di, 3. Okt	MESZ	20:15–20:27	12m	AN ₊ bis M ₇		20:27	12:01	05:14	35m	05:50	34m	06:24	32m	06:56	11h 36m	18:33	32m	19:05	34m	19:40	35m	20:15	12h 24m	8h 59m					Di, 3. Okt
Mi, 4. Okt	MESZ	20:13–21:07	53m	AN ₊ bis M ₇		21:07	13:15	05:15	35m	05:51	34m	06:26	32m	06:58	11h 33m	18:31	32m	19:03	34m	19:38	35m	20:13	12h 28m	9h 03m					Mi, 4. Okt
Do, 5. Okt	MESZ	20:11–21:56	1h 44m	AN ₊ bis M ₇		21:56	14:20	05:17	35m	05:52	34m	06:27	32m	06:59	11h 29m	18:29	32m	19:01	34m	19:36	35m	20:11	12h 31m	9h 06m					Do, 5. Okt
Fr, 6. Okt	MESZ	20:09–22:55	2h 45m	AN ₊ bis M ₇	◑	22:55	15:12	05:18	35m	05:54	34m	06:28	32m	07:01	11h 26m	18:27	32m	18:59	34m	19:34	35m	20:09	12h 34m	9h 10m					Fr, 6. Okt
Sa, 7. Okt	MESZ	20:07–23:59	3h 52m	AN ₊ bis M ₇		23:59	15:52	05:19	35m	05:55	34m	06:30	32m	07:02	11h 23m	18:25	32m	18:57	34m	19:32	35m	20:07	12h 38m	9h 13m					Sa, 7. Okt
So, 8. Okt	MESZ	20:05–01:07*	5h 01m	AN ₊ bis M ₇		—:—	16:23	05:21	35m	05:56	34m	06:31	32m	07:03	11h 19m	18:23	32m	18:55	34m	19:30	35m	20:05	12h 41m	9h 16m					So, 8. Okt
Mo, 9. Okt	MESZ	20:03–02:15*	6h 11m	AN ₊ bis M ₇		01:07	16:47	05:22	35m	05:58	34m	06:32	32m	07:05	11h 16m	18:21	32m	18:53	34m	19:28	35m	20:03	12h 44m	9h 20m					Mo, 9. Okt
Di, 10. Okt	MESZ	20:01–03:22*	7h 20m	AN ₊ bis M ₇		02:15	17:06	05:24	35m	05:59	34m	06:34	32m	07:06	11h 13m	18:19	32m	18:52	34m	19:26	35m	20:01	12h 48m	9h 23m					Di, 10. Okt
Mi, 11. Okt	MESZ	19:59–04:28*	8h 28m	AN ₊ bis M ₇		03:22	17:23	05:25	35m	06:00	34m	06:35	32m	07:07	11h 09m	18:17	32m	18:50	34m	19:24	35m	19:59	12h 51m	9h 26m					Mi, 11. Okt
Do, 12. Okt	MESZ	19:58–05:28*	9h 30m	AN ₊ bis AN ₋		04:28	17:38	05:26	35m	06:02	34m	06:36	32m	07:09	11h 06m	18:15	32m	18:48	34m	19:22	35m	19:58	12h 54m	9h 30m					Do, 12. Okt
Fr, 13. Okt	MESZ	19:56–05:29*	9h 33m	AN ₊ bis AN ₋		05:34	17:52	05:28	35m	06:03	34m	06:38	32m	07:10	11h 03m	18:14	32m	18:46	34m	19:20	35m	19:56	12h 58m	9h 33m					Fr, 13. Okt
Sa, 14. Okt	MESZ	19:54–05:31*	9h 36m	AN ₊ bis AN ₋	●	06:41	18:07	05:29	35m	06:04	34m	06:39	32m	07:12	11h 00m	18:12	32m	18:44	34m	19:19	35m	19:54	13h 01m	9h 36m					Sa, 14. Okt
So, 15. Okt	MESZ	19:52–05:32*	9h 39m	AN ₊ bis AN ₋		07:50	18:23	05:31	35m	06:06	34m	06:40	32m	07:13	10h 56m	18:10	32m	18:42	34m	19:17	35m	19:52	13h 04m	9h 39m					So, 15. Okt
Mo, 16. Okt	MESZ	19:50–05:33*	9h 42m	AN ₊ bis AN ₋		09:01	18:43	05:32	35m	06:07	34m	06:42	32m	07:14	10h 53m	18:08	32m	18:41	34m	19:15	35m	19:50	13h 07m	9h 42m					Mo, 16. Okt
Di, 17. Okt	MESZ	19:49–05:35*	9h 46m	AN ₊ bis AN ₋		10:16	19:08	05:33	35m	06:09	34m	06:43	32m	07:16	10h 50m	18:06	32m	18:39	34m	19:13	35m	19:49	13h 11m	9h 46m					Di, 17. Okt
Mi, 18. Okt	MESZ	19:47–05:36*	9h 49m	AN ₊ bis AN ₋		11:31	19:41	05:35	35m	06:10	34m	06:45	32m	07:17	10h 47m	18:04	32m	18:37	34m	19:12	35m	19:47	13h 14m	9h 49m					Mi, 18. Okt
Do, 19. Okt	MESZ	20:26–05:37*	9h																										

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
2023	Zeit- zone	Astr. dunkel und kein Mond		Mond		Beginn der Morgendämmerung						Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023			
			Δt		Ph.	\uparrow	\downarrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\uparrow	Δt	\downarrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Sa, 28. Okt	MESZ	---:---:--	-	Mond stört	○	17:32	06:50	05:48	35m	06:23	34m	06:58	33m	07:32	10h 15m	17:47	33m	18:21	34m	18:55	35m	19:31	13h 45m	10h 18m				Sa, 28. Okt
So, 29. Okt		---:---:--	-	Mond stört		16:55	07:12	04:49	35m	05:25	35m	06:00	33m	06:33	10h 12m	16:46	33m	17:19	34m	17:54	35m	18:29	13h 49m	10h 21m				So, 29. Okt
Mo, 30. Okt		---:---:--	-	Mond stört		17:23	08:34	04:51	35m	05:26	35m	06:01	33m	06:35	10h 09m	16:44	33m	17:18	35m	17:53	35m	18:28	13h 52m	10h 24m				Mo, 30. Okt
Di, 31. Okt		---:---:--	-	Mond stört		17:59	09:53	04:52	35m	05:27	35m	06:02	33m	06:36	10h 06m	16:42	33m	17:16	35m	17:51	35m	18:26	13h 55m	10h 26m				Di, 31. Okt
Mi, 1. Nov		18:25-18:45	19m	AN ₊ bis M ₇		18:45	11:03	04:53	35m	05:29	35m	06:04	33m	06:38	10h 03m	16:41	33m	17:15	35m	17:50	35m	18:25	13h 58m	10h 29m				Mi, 1. Nov
Do, 2. Nov		18:24-19:41	1h 16m	AN ₊ bis M ₇		19:41	12:03	04:55	35m	05:30	35m	06:05	33m	06:39	10h 00m	16:39	33m	17:13	35m	17:48	35m	18:24	14h 01m	10h 32m				Do, 2. Nov
Fr, 3. Nov		18:22-20:44	2h 21m	AN ₊ bis M ₇		20:44	12:49	04:56	35m	05:31	35m	06:07	33m	06:40	9h 57m	16:38	33m	17:12	35m	17:47	35m	18:22	14h 04m	10h 34m				Fr, 3. Nov
Sa, 4. Nov		18:21-21:52	3h 30m	AN ₊ bis M ₇		21:52	13:24	04:57	35m	05:33	35m	06:08	34m	06:42	9h 54m	16:36	33m	17:10	35m	17:46	35m	18:21	14h 07m	10h 37m				Sa, 4. Nov
So, 5. Nov		18:20-23:01	4h 40m	AN ₊ bis M ₇	◐	23:01	13:51	04:58	35m	05:34	35m	06:09	34m	06:43	9h 51m	16:35	34m	17:09	35m	17:44	35m	18:20	14h 09m	10h 39m				So, 5. Nov
Mo, 6. Nov		18:19-00:08*	5h 49m	AN ₊ bis M ₇		---	14:11	05:00	35m	05:35	35m	06:11	34m	06:45	9h 48m	16:34	34m	17:08	35m	17:43	35m	18:19	14h 12m	10h 42m				Mo, 6. Nov
Di, 7. Nov		18:17-01:14*	6h 56m	AN ₊ bis M ₇		00:08	14:29	05:01	35m	05:37	35m	06:12	34m	06:46	9h 45m	16:32	34m	17:06	35m	17:42	35m	18:17	14h 15m	10h 44m				Di, 7. Nov
Mi, 8. Nov		18:16-02:20*	8h 03m	AN ₊ bis M ₇		01:14	14:44	05:02	35m	05:38	35m	06:13	34m	06:48	9h 42m	16:31	34m	17:05	35m	17:41	35m	18:16	14h 18m	10h 47m				Mi, 8. Nov
Do, 9. Nov		18:15-03:27*	9h 11m	AN ₊ bis M ₇		02:20	14:58	05:04	35m	05:39	35m	06:15	34m	06:49	9h 40m	16:30	34m	17:04	35m	17:40	35m	18:15	14h 21m	10h 49m				Do, 9. Nov
Fr, 10. Nov		18:14-04:35*	10h 20m	AN ₊ bis M ₇		03:27	15:13	05:05	35m	05:40	35m	06:16	34m	06:51	9h 37m	16:28	34m	17:03	35m	17:39	35m	18:14	14h 24m	10h 51m				Fr, 10. Nov
Sa, 11. Nov		18:13-05:07*	10h 54m	AN ₊ bis AN ₋		04:35	15:29	05:06	35m	05:42	35m	06:18	34m	06:52	9h 34m	16:27	34m	17:02	35m	17:37	35m	18:13	14h 26m	10h 54m				Sa, 11. Nov
So, 12. Nov		18:12-05:09*	10h 56m	AN ₊ bis AN ₋		05:46	15:47	05:07	35m	05:43	35m	06:19	34m	06:54	9h 31m	16:26	34m	17:01	35m	17:36	35m	18:12	14h 29m	10h 56m				So, 12. Nov
Mo, 13. Nov		18:11-05:10*	10h 58m	AN ₊ bis AN ₋	●	07:00	16:11	05:09	35m	05:44	35m	06:20	34m	06:55	9h 29m	16:25	34m	16:59	35m	17:35	35m	18:11	14h 32m	10h 58m				Mo, 13. Nov
Di, 14. Nov		18:10-05:11*	11h 00m	AN ₊ bis AN ₋		08:17	16:41	05:10	35m	05:46	36m	06:22	35m	06:57	9h 26m	16:23	34m	16:58	36m	17:34	35m	18:10	14h 34m	11h 00m				Di, 14. Nov
Mi, 15. Nov		18:09-05:12*	11h 02m	AN ₊ bis AN ₋		09:32	17:23	05:11	35m	05:47	36m	06:23	35m	06:58	9h 24m	16:22	35m	16:57	36m	17:33	35m	18:09	14h 37m	11h 02m				Mi, 15. Nov
Do, 16. Nov		18:18-05:14*	10h 55m	M _\ bis AN ₋		10:41	18:18	05:12	35m	05:48	36m	06:24	35m	07:00	9h 21m	16:21	35m	16:56	36m	17:33	35m	18:08	14h 39m	11h 05m				Do, 16. Nov
Fr, 17. Nov		19:27-05:15*	9h 48m	M _\ bis AN ₋		11:38	19:27	05:14	35m	05:49	36m	06:26	35m	07:01	9h 19m	16:20	35m	16:55	36m	17:32	35m	18:08	14h 42m	11h 07m				Fr, 17. Nov
Sa, 18. Nov		20:45-05:16*	8h 30m	M _\ bis AN ₋		12:22	20:45	05:15	35m	05:51	36m	06:27	35m	07:02	9h 16m	16:19	35m	16:55	36m	17:31	35m	18:07	14h 44m	11h 09m				Sa, 18. Nov
So, 19. Nov		22:07-05:17*	7h 09m	M _\ bis AN ₋		12:55	22:07	05:16	36m	05:52	36m	06:28	35m	07:04	9h 14m	16:18	35m	16:54	36m	17:30	36m	18:06	14h 47m	11h 11m				So, 19. Nov
Mo, 20. Nov		23:29-05:18*	5h 48m	M _\ bis AN ₋	◑	13:21	23:29	05:17	36m	05:53	36m	06:30	35m	07:05	9h 11m	16:17	35m	16:53	36m	17:29	36m	18:05	14h 49m	11h 12m				Mo, 20. Nov
Di, 21. Nov		00:50*-05:19*	4h 29m	M _\ bis AN ₋		13:41	---	05:18	36m	05:54	36m	06:31	35m	07:07	9h 09m	16:16	35m	16:52	36m	17:29	36m	18:05	14h 51m	11h 14m				Di, 21. Nov
Mi, 22. Nov		02:09*-05:21*	3h 11m	M _\ bis AN ₋		14:00	00:50	05:19	36m	05:56	36m	06:32	35m	07:08	9h 07m	16:15	35m	16:51	36m	17:28	36m	18:04	14h 54m	11h 16m				Mi, 22. Nov
Do, 23. Nov		03:28*-05:22*	1h 53m	M _\ bis AN ₋		14:17	02:09	05:21	36m	05:57	36m	06:34	35m	07:09	9h 05m	16:15	35m	16:51	36m	17:27	36m	18:03	14h 56m	11h 18m				Do, 23. Nov
Fr, 24. Nov		04:48*-05:23*	35m	M _\ bis AN ₋		14:35	03:28	05:22	36m	05:58	36m	06:35	36m	07:11	9h 03m	16:14	36m	16:50	36m	17:27	36m	18:03	14h 58m	11h 19m				Fr, 24. Nov
Sa, 25. Nov		---:---:--	-	Mond stört		14:56	04:48	05:23	36m	05:59	36m	06:36	36m	07:12	9h 00m	16:13	36m	16:49	36m	17:26	36m	18:02	15h 00m	11h 21m				Sa, 25. Nov
So, 26. Nov		---:---:--	-	Mond stört		15:21	06:08	05:24	36m	06:00	36m	06:37	36m	07:13	8h 58m	16:12	36m	16:49	36m	17:26	36m	18:02	15h 02m	11h 23m				So, 26. Nov
Mo, 27. Nov		---:---:--	-	Mond stört	○	15:53	07:28	05:25	36m	06:01	37m	06:38	36m	07:15	8h 56m	16:12	36m	16:48	36m	17:25	36m	18:01	15h 04m	11h 24m				Mo, 27. Nov
Di, 28. Nov		---:---:--	-	Mond stört		16:34	08:43	05:26	36m	06:03	37m	06:40	36m	07:16	8h 55m	16:11	36m	16:48	37m	17:25	36m	18:01	15h 06m	11h 26m				Di, 28. Nov
Mi, 29. Nov		---:---:--	-	Mond stört		17:26	09:48	05:27	36m	06:04	37m	06:41	36m	07:17	8h 53m	16:11	36m	16:47	37m	17:24	36m	18:01	15h 08m	11h 27m				Mi, 29. Nov
Do, 30. Nov		18:00-18:28	27m	AN ₊ bis M ₇		18:28	10:41	05:28	36m	06:05	37m	06:42	36m	07:19	8h 51m	16:10	36m	16:47	37m	17:24	36m	18:00	15h 09m	11h 29m				Do, 30. Nov
Fr, 1. Dez		18:00-19:35	1h 35m	AN ₊ bis M ₇		19:35	11:21	05:29	36m	06:06	37m	06:43	36m	07:20	8h 49m	16:10	36m	16:46	37m	17:23	36m	18:00	15h 11m	11h 30m				Fr, 1. Dez
Sa, 2. Dez		18:00-20:44	2h 44m	AN ₊ bis M ₇		20:44	11:51	05:30	36m	06:07	37m	06:44	36m	07:21	8h 48m	16:09	36m	16:46	37m	17:23	36m	18:00	15h 13m	11h 31m				Sa, 2. Dez
So, 3. Dez		18:00-21:53	3h 53m	AN ₊ bis M ₇		21:53	12:14	05:31	36m	06:08	37m	06:45	36m	07:22	8h 46m	16:09	36m	16:46	37m	17:23	36m	18:00	15h 14m	11h 32m				So, 3. Dez
Mo, 4. Dez		17:59-23:00	5h 00m	AN ₊ bis M ₇		23:00	12:33	05:32	36m	06:09	37m	06:46	36m	07:23	8h 45m	16:08	36m	16:45	37m	17:23	36m	17:59	15h 16m	11h 33m				Mo, 4. Dez
Di, 5. Dez		17:59-00:05*	6h 05m	AN ₊ bis M ₇	◐	---	12:49	05:33	36m	06:10	37m	06:48	36m	07:24	8h 43m	16:08	36m	16:45	37m	17:23	36m	17:59	15h 17m	11h 34m				Di, 5. Dez
Mi, 6. Dez		17:59-01:10*	7h 11m	AN ₊ bis M ₇		00:05	13:04	05:34	36m	06:11	37m	06:49	37m	07:26	8h 42m	16:08	37m	16:45	37m	17:22	36m	17:59	15h 18m	11h 35m				Mi, 6. Dez
Do, 7. Dez		17:59-02:17*	8h 17m	AN ₊ bis M ₇		01:10	13:18	05:35	36m	06:12	37m	06:50	37m	07:27	8h 40m	16:08	37m	16:45	37m	17:22	36m	17:59	15h 20m	11h 36m				Do, 7. Dez
Fr, 8. Dez		17:59-03:26*	9h 26m	AN ₊ bis M ₇		02:17	13:33	05:36	36m	06:13	37m	06:51	37m	07:28	8h 39m	16:07	37m	16:45	37m	17:22	36m	17:59	15h 21m	11h 37m				Fr, 8. Dez
Sa, 9. Dez		17:59-04:39*	10h 39m	AN ₊ bis M ₇		03:26	13:50	05:37	36m	06:14	37m	06:51	37m	07:29	8h 3													

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2023/24	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023/24		
		Δt			Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt			Δt	
So, 17. Dez		21:18–05:44*	8h 25m	M_{\searrow} bis AN ₋		11:25	21:18	05:43	37m	06:20	37m	06:58	37m	07:36	8h 32m	16:08	37m	16:46	37m	17:24	37m	18:01	15h 28m	11h 42m				So, 17. Dez
Mo, 18. Dez		22:39–05:44*	7h 04m	M_{\searrow} bis AN ₋		11:47	22:39	05:44	37m	06:21	37m	06:59	37m	07:36	8h 32m	16:08	37m	16:46	37m	17:24	37m	18:01	15h 28m	11h 43m				Mo, 18. Dez
Di, 19. Dez		23:58–05:45*	5h 46m	M_{\searrow} bis AN ₋	☾	12:06	23:58	05:44	37m	06:21	37m	06:59	37m	07:37	8h 31m	16:09	37m	16:46	37m	17:24	37m	18:01	15h 28m	11h 43m				Di, 19. Dez
Mi, 20. Dez		01:16*–05:45*	4h 29m	M_{\searrow} bis AN ₋		12:23	—:—	05:45	37m	06:22	37m	07:00	37m	07:37	8h 31m	16:09	37m	16:47	37m	17:25	37m	18:02	15h 28m	11h 43m				Mi, 20. Dez
Do, 21. Dez		02:34*–05:46*	3h 12m	M_{\searrow} bis AN ₋		12:41	01:16	05:45	37m	06:22	37m	07:00	37m	07:38	8h 31m	16:10	37m	16:47	37m	17:25	37m	18:02	15h 28m	11h 43m				Do, 21. Dez
Fr, 22. Dez		03:52*–05:46*	1h 54m	M_{\searrow} bis AN ₋		13:00	02:34	05:46	37m	06:23	37m	07:01	37m	07:39	8h 31m	16:10	37m	16:48	37m	17:26	37m	18:03	15h 28m	11h 43m				Fr, 22. Dez
Sa, 23. Dez		05:10*–05:47*	36m	M_{\searrow} bis AN ₋		13:23	03:52	05:46	37m	06:23	37m	07:01	37m	07:39	8h 31m	16:11	37m	16:48	37m	17:26	37m	18:03	15h 28m	11h 43m				Sa, 23. Dez
So, 24. Dez		—:—:—:—	–	Mond stört		13:51	05:10	05:47	37m	06:24	37m	07:02	37m	07:39	8h 31m	16:11	37m	16:49	37m	17:27	37m	18:04	15h 28m	11h 43m				So, 24. Dez
Mo, 25. Dez		—:—:—:—	–	Mond stört		14:28	06:26	05:47	37m	06:24	37m	07:02	37m	07:40	8h 32m	16:12	37m	16:50	37m	17:27	37m	18:05	15h 28m	11h 43m				Mo, 25. Dez
Di, 26. Dez		—:—:—:—	–	Mond stört		15:16	07:34	05:48	37m	06:25	37m	07:03	37m	07:40	8h 32m	16:13	37m	16:50	37m	17:28	37m	18:05	15h 27m	11h 42m				Di, 26. Dez
Mi, 27. Dez		—:~—:~:~	–	Mond stört	☾	16:13	08:32	05:48	37m	06:25	37m	07:03	37m	07:40	8h 32m	16:13	37m	16:51	37m	17:29	37m	18:06	15h 27m	11h 42m				Mi, 27. Dez
Do, 28. Dez		—:~—:~:~	–	Mond stört		17:19	09:16	05:48	36m	06:25	37m	07:03	37m	07:41	8h 33m	16:14	37m	16:52	37m	17:30	36m	18:06	15h 26m	11h 42m				Do, 28. Dez
Fr, 29. Dez		18:07–18:28	21m	AN ₊ bis M ₇		18:28	09:51	05:49	36m	06:25	37m	07:03	37m	07:41	8h 34m	16:15	37m	16:52	37m	17:30	36m	18:07	15h 26m	11h 41m				Fr, 29. Dez
Sa, 30. Dez		18:08–19:38	1h 29m	AN ₊ bis M ₇		19:38	10:16	05:49	36m	06:26	37m	07:04	37m	07:41	8h 34m	16:16	37m	16:53	37m	17:31	36m	18:08	15h 25m	11h 40m				Sa, 30. Dez
So, 31. Dez		18:09–20:45	2h 36m	AN ₊ bis M ₇		20:45	10:37	05:49	36m	06:26	37m	07:04	37m	07:41	8h 35m	16:17	37m	16:54	37m	17:32	36m	18:09	15h 24m	11h 40m				So, 31. Dez
Mo, 1. Jan		18:10–21:51	3h 41m	AN ₊ bis M ₇		21:51	10:54	05:49	36m	06:26	37m	07:04	37m	07:41	8h 36m	16:17	37m	16:55	37m	17:33	36m	18:10	15h 23m	11h 39m				Mo, 1. Jan
Di, 2. Jan		18:10–22:56	4h 45m	AN ₊ bis M ₇		22:56	11:09	05:49	36m	06:26	37m	07:04	37m	07:41	8h 37m	16:18	37m	16:56	37m	17:33	36m	18:10	15h 22m	11h 38m				Di, 2. Jan
Mi, 3. Jan		18:11–00:01*	5h 49m	AN ₊ bis M ₇		—:—	11:23	05:49	36m	06:26	37m	07:04	37m	07:41	8h 38m	16:19	37m	16:57	37m	17:34	36m	18:11	15h 21m	11h 38m				Mi, 3. Jan
Do, 4. Jan		18:12–01:08*	6h 55m	AN ₊ bis M ₇	☾	00:01	11:37	05:49	36m	06:26	37m	07:04	37m	07:41	8h 39m	16:20	37m	16:58	37m	17:35	36m	18:12	15h 20m	11h 37m				Do, 4. Jan
Fr, 5. Jan		18:13–02:17*	8h 04m	AN ₊ bis M ₇		01:08	11:53	05:49	36m	06:26	37m	07:04	37m	07:41	8h 40m	16:21	37m	16:59	37m	17:36	36m	18:13	15h 19m	11h 36m				Fr, 5. Jan
Sa, 6. Jan		18:14–03:31*	9h 16m	AN ₊ bis M ₇		02:17	12:12	05:49	36m	06:26	37m	07:04	37m	07:41	8h 41m	16:23	37m	17:00	37m	17:37	36m	18:14	15h 18m	11h 35m				Sa, 6. Jan
So, 7. Jan		18:15–04:47*	10h 31m	AN ₊ bis M ₇		03:31	12:35	05:49	36m	06:26	37m	07:04	37m	07:41	8h 43m	16:24	37m	17:01	37m	17:38	36m	18:15	15h 16m	11h 34m				So, 7. Jan
Mo, 8. Jan		18:16–05:49*	11h 33m	AN ₊ bis AN ₋		04:47	13:07	05:49	36m	06:26	37m	07:03	36m	07:40	8h 44m	16:25	36m	17:02	37m	17:39	36m	18:16	15h 15m	11h 33m				Mo, 8. Jan
Di, 9. Jan		18:17–05:49*	11h 31m	AN ₊ bis AN ₋		06:03	13:51	05:49	36m	06:26	37m	07:03	36m	07:40	8h 45m	16:26	36m	17:03	37m	17:40	36m	18:17	15h 13m	11h 31m				Di, 9. Jan
Mi, 10. Jan		18:18–05:49*	11h 30m	AN ₊ bis AN ₋		07:12	14:50	05:49	36m	06:25	37m	07:03	36m	07:40	8h 47m	16:27	36m	17:04	37m	17:41	36m	18:18	15h 12m	11h 30m				Mi, 10. Jan
Do, 11. Jan		18:19–05:48*	11h 29m	AN ₊ bis AN ₋	☽	08:09	16:05	05:49	36m	06:25	37m	07:03	36m	07:39	8h 49m	16:28	36m	17:05	37m	17:42	36m	18:19	15h 10m	11h 29m				Do, 11. Jan
Fr, 12. Jan		18:20–05:48*	11h 28m	AN ₊ bis AN ₋		08:53	17:30	05:48	36m	06:25	37m	07:02	36m	07:39	8h 50m	16:30	36m	17:06	37m	17:43	36m	18:20	15h 08m	11h 28m				Fr, 12. Jan
Sa, 13. Jan		18:57–05:48*	10h 50m	M_{\searrow} bis AN ₋		09:25	18:57	05:48	36m	06:25	37m	07:02	36m	07:38	8h 52m	16:31	36m	17:07	37m	17:45	36m	18:21	15h 06m	11h 26m				Sa, 13. Jan
So, 14. Jan		20:23–05:47*	9h 24m	M_{\searrow} bis AN ₋		09:50	20:23	05:48	36m	06:24	37m	07:01	36m	07:38	8h 54m	16:32	36m	17:09	37m	17:46	36m	18:22	15h 04m	11h 25m				So, 14. Jan
Mo, 15. Jan		21:45–05:47*	8h 01m	M_{\searrow} bis AN ₋		10:11	21:45	05:47	36m	06:24	37m	07:01	36m	07:37	8h 56m	16:34	36m	17:10	37m	17:47	36m	18:23	15h 02m	11h 23m				Mo, 15. Jan
Di, 16. Jan		23:05–05:47*	6h 41m	M_{\searrow} bis AN ₋		10:29	23:05	05:47	36m	06:23	36m	07:00	36m	07:37	8h 58m	16:35	36m	17:11	36m	17:48	36m	18:24	15h 00m	11h 22m				Di, 16. Jan
Mi, 17. Jan		00:24*–05:46*	5h 22m	M_{\searrow} bis AN ₋		10:46	—:—	05:47	36m	06:23	36m	07:00	36m	07:36	9h 00m	16:36	36m	17:12	36m	17:49	36m	18:26	14h 58m	11h 20m				Mi, 17. Jan
Do, 18. Jan		01:42*–05:46*	4h 03m	M_{\searrow} bis AN ₋	☽	11:05	00:24	05:46	36m	06:22	36m	06:59	36m	07:35	9h 02m	16:38	36m	17:14	36m	17:50	36m	18:27	14h 56m	11h 18m				Do, 18. Jan
Fr, 19. Jan		03:00*–05:45*	2h 45m	M_{\searrow} bis AN ₋		11:27	01:42	05:46	36m	06:22	36m	06:58	35m	07:34	9h 04m	16:39	35m	17:15	36m	17:52	36m	18:28	14h 54m	11h 17m				Fr, 19. Jan
Sa, 20. Jan		04:15*–05:44*	1h 28m	M_{\searrow} bis AN ₋		11:53	03:00	05:45	36m	06:21	36m	06:58	35m	07:34	9h 06m	16:40	35m	17:16	36m	17:53	36m	18:29	14h 52m	11h 15m				Sa, 20. Jan
So, 21. Jan		05:25*–05:44*	18m	M_{\searrow} bis AN ₋		12:27	04:15	05:44	36m	06:20	36m	06:57	35m	07:33	9h 09m	16:42	35m	17:18	36m	17:54	36m	18:30	14h 50m	11h 13m				So, 21. Jan
Mo, 22. Jan		—:~—:~:~	–	Mond stört		13:10	05:25	05:44	36m	06:20	36m	06:56	35m	07:32	9h 11m	16:43	35m	17:19	36m	17:55	36m	18:32	14h 47m	11h 11m				Mo, 22. Jan
Di, 23. Jan		—:~—:~:~	–	Mond stört		14:04	06:26	05:43	36m	06:19	36m	06:55	35m	07:31	9h 13m	16:45	35m	17:20	36m	17:57	36m	18:33	14h 45m	11h 09m				Di, 23. Jan
Mi, 24. Jan		—:~—:~:~	–	Mond stört		15:06	07:14	05:42	35m	06:18	36m	06:55	35m	07:30	9h 16m	16:46	35m	17:22	36m	17:58	35m	18:34	14h 42m	11h 07m				Mi, 24. Jan
Do, 25. Jan		—:~—:~:~	–	Mond stört	☾	16:15	07:51	05:42	35m	06:17	36m	06:54	35m	07:29	9h 18m	16:48	35m	17:23	36m	17:59	35m	18:35	14h 40m	11h 05m				Do, 25. Jan
Fr, 26. Jan		—:~—:~:~	–	Mond stört		17:24	08:19	05:41	35m	06:17	36m	06:53	35m	07:28	9h 21m	16:49	35m	17:24	36m	18:01	35m	18:36	14h 37m	11h 03m				Fr, 26. Jan
Sa, 27. Jan		—:~—:~:~	–	Mond stört		18:33	08:41	05:40	35m	06:16	36m	06:52	35m	07:27	9h 23m	16:51	35m	17:26	36m	18:02	35m	18:38	14h 35m	11h 01m				Sa, 27. Jan
So, 28. Jan		18:39–19:39	1h 00m	AN ₊ bis M ₇		19:39	08:59	05:39	35m	06:15																		