

Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Germersheim 49.2167° N 8.3667° 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 angegebenen 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.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
So, 1. Jan		04:07* - 06:23*	2h 15m	M _\ bis AN ₋		13:03	02:54	06:23	38m	07:01	39m	07:41	39m	08:21	8h 17m	16:38	39m	17:18	39m	17:58	38m	18:36	15h 42m	11h 46m				So, 1. Jan
Mo, 2. Jan		05:20* - 06:23*	1h 02m	M _\ bis AN ₋		13:23	04:07	06:23	38m	07:01	39m	07:41	39m	08:21	8h 18m	16:39	39m	17:19	39m	17:59	38m	18:37	15h 41m	11h 45m				Mo, 2. Jan
Di, 3. Jan		—:—:—:—:—	—	Mond stört		13:47	05:20	06:23	38m	07:01	39m	07:41	39m	08:20	8h 20m	16:41	39m	17:20	39m	18:00	38m	18:38	15h 39m	11h 44m				Di, 3. Jan
Mi, 4. Jan		—:—:—:—:—	—	Mond stört		14:19	06:30	06:23	38m	07:01	39m	07:41	39m	08:20	8h 21m	16:42	39m	17:21	39m	18:01	38m	18:39	15h 38m	11h 43m				Mi, 4. Jan
Do, 5. Jan		—:—:—:—:—	—	Mond stört		15:00	07:34	06:23	38m	07:01	39m	07:41	39m	08:20	8h 22m	16:43	39m	17:22	39m	18:02	38m	18:40	15h 37m	11h 42m				Do, 5. Jan
Fr, 6. Jan		—:~:~:~:~:~	—	Mond stört		15:51	08:30	06:23	38m	07:01	39m	07:41	39m	08:20	8h 24m	16:44	39m	17:23	39m	18:03	38m	18:41	15h 35m	11h 41m				Fr, 6. Jan
Sa, 7. Jan		—:~:~:~:~:~	—	Mond stört	○	16:51	09:14	06:23	38m	07:01	39m	07:40	39m	08:20	8h 25m	16:45	39m	17:24	39m	18:04	38m	18:42	15h 34m	11h 40m				Sa, 7. Jan
So, 8. Jan		—:~:~:~:~:~	—	Mond stört		17:58	09:48	06:22	38m	07:01	39m	07:40	39m	08:19	8h 27m	16:46	39m	17:25	39m	18:05	38m	18:43	15h 32m	11h 39m				So, 8. Jan
Mo, 9. Jan		18:44 - 19:07	22m	AN ₊ bis M ₇		19:07	10:14	06:22	38m	07:01	39m	07:40	38m	08:19	8h 28m	16:48	38m	17:27	39m	18:06	38m	18:44	15h 30m	11h 37m				Mo, 9. Jan
Di, 10. Jan		18:45 - 20:16	1h 30m	AN ₊ bis M ₇		20:16	10:34	06:22	38m	07:00	39m	07:39	38m	08:18	8h 30m	16:49	38m	17:28	39m	18:07	38m	18:45	15h 29m	11h 36m				Di, 10. Jan
Mi, 11. Jan		18:46 - 21:25	2h 38m	AN ₊ bis M ₇		21:25	10:51	06:22	38m	07:00	39m	07:39	38m	08:18	8h 32m	16:50	38m	17:29	39m	18:08	38m	18:46	15h 27m	11h 35m				Mi, 11. Jan
Do, 12. Jan		18:47 - 22:34	3h 46m	AN ₊ bis M ₇		22:34	11:06	06:21	38m	07:00	39m	07:39	38m	08:17	8h 34m	16:51	38m	17:30	39m	18:09	38m	18:47	15h 25m	11h 33m				Do, 12. Jan
Fr, 13. Jan		18:49 - 23:43	4h 54m	AN ₊ bis M ₇		23:43	11:20	06:21	38m	06:59	38m	07:38	38m	08:17	8h 36m	16:53	38m	17:31	38m	18:10	38m	18:49	15h 23m	11h 32m				Fr, 13. Jan
Sa, 14. Jan		18:50 - 00:55*	6h 05m	AN ₊ bis M ₇		—:—	11:33	06:21	38m	06:59	38m	07:38	38m	08:16	8h 38m	16:54	38m	17:33	38m	18:12	38m	18:50	15h 21m	11h 30m				Sa, 14. Jan
So, 15. Jan		18:51 - 02:10*	7h 19m	AN ₊ bis M ₇	●	00:55	11:49	06:20	38m	06:58	38m	07:37	38m	08:15	8h 40m	16:56	38m	17:34	38m	18:13	38m	18:51	15h 18m	11h 28m				So, 15. Jan
Mo, 16. Jan		18:52 - 03:30*	8h 38m	AN ₊ bis M ₇		02:10	12:07	06:20	37m	06:58	38m	07:36	38m	08:15	8h 42m	16:57	38m	17:35	38m	18:14	38m	18:52	15h 16m	11h 27m				Mo, 16. Jan
Di, 17. Jan		18:53 - 04:54*	10h 00m	AN ₊ bis M ₇		03:30	12:30	06:19	37m	06:57	38m	07:36	38m	08:14	8h 44m	16:59	38m	17:37	38m	18:15	37m	18:53	15h 14m	11h 25m				Di, 17. Jan
Mi, 18. Jan		18:55 - 06:16*	11h 21m	AN ₊ bis M ₇		04:54	13:02	06:19	37m	06:56	38m	07:35	38m	08:13	8h 46m	17:00	38m	17:38	38m	18:17	37m	18:55	15h 12m	11h 23m				Mi, 18. Jan
Do, 19. Jan		18:56 - 06:17*	11h 21m	AN ₊ bis AN ₋		06:16	13:48	06:18	37m	06:56	38m	07:34	37m	08:12	8h 49m	17:02	37m	17:39	38m	18:18	37m	18:56	15h 09m	11h 21m				Do, 19. Jan
Fr, 20. Jan		18:57 - 06:17*	11h 19m	AN ₊ bis AN ₋		07:30	14:52	06:17	37m	06:55	38m	07:33	37m	08:11	8h 51m	17:03	37m	17:41	38m	18:19	37m	18:57	15h 07m	11h 19m				Fr, 20. Jan
Sa, 21. Jan		18:58 - 06:16*	11h 17m	AN ₊ bis AN ₋	●	08:27	16:13	06:17	37m	06:54	38m	07:33	37m	08:10	8h 54m	17:05	37m	17:42	38m	18:21	37m	18:58	15h 04m	11h 17m				Sa, 21. Jan
So, 22. Jan		19:00 - 06:15*	11h 15m	AN ₊ bis AN ₋		09:09	17:44	06:16	37m	06:54	38m	07:32	37m	08:09	8h 56m	17:06	37m	17:44	38m	18:22	37m	19:00	15h 02m	11h 15m				So, 22. Jan
Mo, 23. Jan		19:15 - 06:14*	10h 59m	M _\ bis AN ₋		09:39	19:15	06:15	37m	06:53	38m	07:31	37m	08:08	8h 59m	17:08	37m	17:45	38m	18:23	37m	19:01	14h 59m	11h 13m				Mo, 23. Jan
Di, 24. Jan		20:42 - 06:13*	9h 31m	M _\ bis AN ₋		10:01	20:42	06:14	37m	06:52	38m	07:30	37m	08:07	9h 02m	17:09	37m	17:47	38m	18:25	37m	19:02	14h 56m	11h 11m				Di, 24. Jan
Mi, 25. Jan		22:05 - 06:13*	8h 07m	M _\ bis AN ₋		10:19	22:05	06:13	37m	06:51	37m	07:29	37m	08:06	9h 04m	17:11	37m	17:48	38m	18:26	37m	19:04	14h 54m	11h 08m				Mi, 25. Jan
Do, 26. Jan		23:24 - 06:12*	6h 47m	M _\ bis AN ₋		10:36	23:24	06:13	37m	06:50	37m	07:28	37m	08:05	9h 07m	17:13	37m	17:50	37m	18:28	37m	19:05	14h 51m	11h 06m				Do, 26. Jan
Fr, 27. Jan		00:41* - 06:11*	5h 29m	M _\ bis AN ₋		10:51	—:—	06:12	37m	06:49	37m	07:27	36m	08:04	9h 10m	17:14	36m	17:51	37m	18:29	37m	19:06	14h 48m	11h 04m				Fr, 27. Jan
Sa, 28. Jan		01:57* - 06:10*	4h 12m	M _\ bis AN ₋	●	11:08	00:41	06:11	37m	06:48	37m	07:26	36m	08:03	9h 13m	17:16	36m	17:53	37m	18:30	37m	19:08	14h 45m	11h 01m				Sa, 28. Jan
So, 29. Jan		03:11* - 06:09*	2h 57m	M _\ bis AN ₋		11:27	01:57	06:10	37m	06:47	37m	07:25	36m	08:01	9h 16m	17:17	36m	17:54	37m	18:32	37m	19:09	14h 42m	10h 59m				So, 29. Jan
Mo, 30. Jan		04:22* - 06:08*	1h 45m	M _\ bis AN ₋		11:50	03:11	06:09	37m	06:46	37m	07:23	36m	08:00	9h 19m	17:19	36m	17:56	37m	18:33	37m	19:11	14h 39m	10h 56m				Mo, 30. Jan
Di, 31. Jan		05:29* - 06:06*	37m	M _\ bis AN ₋		12:19	04:22	06:08	37m	06:45	37m	07:22	36m	07:59	9h 22m	17:21	36m	17:57	37m	18:35	37m	19:12	14h 36m	10h 54m				Di, 31. Jan
Mi, 1. Feb		—:~:~:~:~:~	—	Mond stört		12:57	05:29	06:06	37m	06:44	37m	07:21	36m	07:57	9h 25m	17:22	36m	17:59	37m	18:36	37m	19:13	14h 33m	10h 51m				Mi, 1. Feb
Do, 2. Feb		—:~:~:~:~:~	—	Mond stört		13:45	06:26	06:05	37m	06:42	37m	07:20	36m	07:56	9h 28m	17:24	36m	18:00	37m	18:38	37m	19:15	14h 30m	10h 49m				Do, 2. Feb
Fr, 3. Feb		—:~:~:~:~:~	—	Mond stört		14:43	07:13	06:04	37m	06:41	37m	07:18	36m	07:54	9h 31m	17:26	36m	18:02	37m	18:39	37m	19:16	14h 27m	10h 46m				Fr, 3. Feb
Sa, 4. Feb		—:~:~:~:~:~	—	Mond stört		15:48	07:50	06:03	37m	06:40	37m	07:17	35m	07:53	9h 34m	17:27	36m	18:03	37m	18:41	37m	19:18	14h 24m	10h 43m				Sa, 4. Feb
So, 5. Feb		—:~:~:~:~:~	—	Mond stört	○	16:57	08:18	06:02	37m	06:39	37m	07:16	35m	07:52	9h 37m	17:29	35m	18:05	37m	18:42	37m	19:19	14h 20m	10h 41m				So, 5. Feb
Mo, 6. Feb		—:~:~:~:~:~	—	Mond stört		18:06	08:40	06:00	36m	06:37	37m	07:14	35m	07:50	9h 40m	17:31	35m	18:06	37m	18:44	37m	19:21	14h 17m	10h 38m				Mo, 6. Feb
Di, 7. Feb		—:~:~:~:~:~	—	Mond stört		19:16	08:58	05:59	36m	06:36	36m	07:13	35m	07:48	9h 43m	17:32	35m	18:08	36m	18:45	36m	19:22	14h 14m	10h 35m				Di, 7. Feb
Mi, 8. Feb		19:24 - 20:25	1h 01m	AN ₊ bis M ₇		20:25	09:13	05:58	36m	06:34	36m	07:11	35m	07:47	9h 47m	17:34	35m	18:10	36m	18:47	36m	19:24	14h 11m	10h 32m				Mi, 8. Feb
Do, 9. Feb		19:25 - 21:34	2h 08m	AN ₊ bis M ₇		21:34	09:27	05:56	36m	06:33	36m	07:10	35m	07:45	9h 50m	17:36	35m	18:11	36m	18:48	36m	19:25	14h 07m	10h 29m				Do, 9. Feb
Fr, 10. Feb		19:26 - 22:44	3h 17m	AN ₊ bis M ₇		22:44	09:40	05:55	36m	06:32	36m	07:08	35m	07:44	9h 53m	17:37	35m	18:13	36m	18:50	36m	19:26	14h 04m	10h 26m				Fr, 10. Feb
Sa, 11. Feb		19:28 - 23:57	4h 29m	AN ₊ bis M ₇		23:57	09:54	05:53	36m	06:30	36m	07:07	35m	07:42	9h 57m	17:39	35m	18:14	36m	18:51	36m	19:28	14h 01m	10h 23m				Sa, 11. Feb
So, 12. Feb		19:29 - 01:14*	5h 44m	AN ₊ bis M ₇		—:—	10:10	05:52	36m	06:29	36m	07:05	35															

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

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

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

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

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

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

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