

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Zirndorf 49.4500° N 10.9500° E

Berechnung: pyEphem
Textsatz: L^AT_EX

Atmosphären-Einstellungen in pyEphem

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

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

Spalte 1 Kalendertag.

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

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

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

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

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

Spalte 6 Mondphase.

Spalte 7 Mondaufgang.

Spalte 8 Monduntergang.

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

Spalte 10 Dauer der astr. Morgendämmerung.

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

Spalte 12 Dauer der naut. Morgendämmerung.

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

Spalte 14 Dauer der bürg. Morgendämmerung.

Spalte 15 Sonnenaufgang.

Spalte 16 Taglänge.

Spalte 17 Sonnenuntergang.

Spalte 18 Dauer der bürg. Abenddämmerung.

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

Spalte 20 Dauer der naut. Abenddämmerung.

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

Spalte 22 Dauer der astr. Abenddämmerung.

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

Spalte 24 Länge der Nacht.

Spalte 25 Länge der astr. Nacht.

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

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

Spalte 27 Dauer der in Spalte 26 angegebenen Zeitspanne.

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

Spalte 29 Identisch zu Spalte 1.

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

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

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

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

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

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

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

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