

Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Perg 48.2503° N 14.6336° 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), M_l

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

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

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

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

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

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

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