

Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Pfaffenhofen an der Ilm 48.5297° N 11.5067° E

Berechnung: pyEphem
Textsatz: L^AT_EX

Atmosphären-Einstellungen in pyEphem

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

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

Spalte 1 Kalendertag.

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

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

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

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

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

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

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

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

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

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