

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Landsberg am Lech 48.0494° N 10.8778° 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.

Table with 29 columns (1-29) and multiple rows (1-31). Columns include dates, time zones, astronomical data (Astr. dunkel und kein Mond, Astr. N.), moon phases (Mond, Ph., Moon symbols), dawn/dusk times (Beginn der Morgendämmerung, Ende der Abenddämmerung), and solar data (Sonne). Rows represent days from January 1st to February 19th, 2024.

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

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

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