

Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Sursee 47.1744° N 8.1083° E

Berechnung: pyEphem
Textsatz: L^AT_EX

Atmosphären-Einstellungen in pyEphem

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

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

Spalte 1 Kalendertag.

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

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

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

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

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

Spalte 6 Mondphase.

Spalte 7 Mondaufgang.

Spalte 8 Monduntergang.

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

Spalte 10 Dauer der astr. Morgendämmerung.

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

Spalte 12 Dauer der naut. Morgendämmerung.

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

Spalte 14 Dauer der bürg. Morgendämmerung.

Spalte 15 Sonnenaufgang.

Spalte 16 Taglänge.

Spalte 17 Sonnenuntergang.

Spalte 18 Dauer der bürg. Abenddämmerung.

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

Spalte 20 Dauer der naut. Abenddämmerung.

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

Spalte 22 Dauer der astr. Abenddämmerung.

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

Spalte 24 Länge der Nacht.

Spalte 25 Länge der astr. Nacht.

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

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

Spalte 27 Dauer der in Spalte 26 angegebenen Zeitspanne.

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

Spalte 29 Identisch zu Spalte 1.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
So, 1. Jan		04:02* - 06:21*	2h 18m	M _{\searrow} bis AN _{\searrow}		13:09	02:50	06:21	37m	06:58	37m	07:36	37m	08:13	8h 34m	16:48	37m	17:26	37m	18:03	37m	18:41	15h 25m	11h 40m				So, 1. Jan
Mo, 2. Jan		05:13* - 06:21*	1h 08m	M _{\searrow} bis AN _{\searrow}		13:31	04:02	06:21	37m	06:58	37m	07:36	37m	08:13	8h 35m	16:49	37m	17:26	37m	18:04	37m	18:41	15h 24m	11h 39m				Mo, 2. Jan
Di, 3. Jan		06:21* - 06:21*	0m	M _{\searrow} bis AN _{\searrow}		13:57	05:13	06:21	37m	06:58	37m	07:36	37m	08:13	8h 36m	16:50	37m	17:27	37m	18:05	37m	18:42	15h 23m	11h 38m				Di, 3. Jan
Mi, 4. Jan		—:—:—:—:—	—	Mond stört		14:31	06:21	06:21	36m	06:58	37m	07:36	37m	08:13	8h 37m	16:51	37m	17:28	37m	18:06	36m	18:43	15h 21m	11h 37m				Mi, 4. Jan
Do, 5. Jan		—:—:—:—:—	—	Mond stört		15:13	07:24	06:21	36m	06:58	37m	07:36	37m	08:13	8h 39m	16:52	37m	17:29	37m	18:07	36m	18:44	15h 20m	11h 36m				Do, 5. Jan
Fr, 6. Jan		—:—:—:—:—	—	Mond stört		16:04	08:19	06:21	36m	06:58	37m	07:35	37m	08:13	8h 40m	16:53	37m	17:30	37m	18:08	36m	18:45	15h 19m	11h 35m				Fr, 6. Jan
Sa, 7. Jan		—:—:~:~:~:~	—	Mond stört	○	17:04	09:03	06:21	36m	06:58	37m	07:35	37m	08:12	8h 41m	16:54	37m	17:31	37m	18:09	36m	18:46	15h 17m	11h 34m				Sa, 7. Jan
So, 8. Jan		—:~:~:~:~:~	—	Mond stört		18:08	09:39	06:21	36m	06:57	37m	07:35	37m	08:12	8h 43m	16:55	37m	17:32	37m	18:10	36m	18:47	15h 16m	11h 33m				So, 8. Jan
Mo, 9. Jan		18:48 - 19:15	27m	AN ₊ bis M _{\searrow}		19:15	10:07	06:20	36m	06:57	37m	07:35	37m	08:12	8h 44m	16:57	37m	17:34	37m	18:11	36m	18:48	15h 14m	11h 32m				Mo, 9. Jan
Di, 10. Jan		18:49 - 20:22	1h 33m	AN ₊ bis M _{\searrow}		20:22	10:29	06:20	36m	06:57	37m	07:34	36m	08:11	8h 46m	16:58	36m	17:35	37m	18:12	36m	18:49	15h 13m	11h 31m				Di, 10. Jan
Mi, 11. Jan		18:50 - 21:29	2h 39m	AN ₊ bis M _{\searrow}		21:29	10:48	06:20	36m	06:57	37m	07:34	36m	08:11	8h 48m	16:59	36m	17:36	37m	18:13	36m	18:50	15h 11m	11h 29m				Mi, 11. Jan
Do, 12. Jan		18:51 - 22:36	3h 44m	AN ₊ bis M _{\searrow}		22:36	11:05	06:20	36m	06:56	37m	07:34	36m	08:11	8h 49m	17:00	36m	17:37	37m	18:14	36m	18:51	15h 09m	11h 28m				Do, 12. Jan
Fr, 13. Jan		18:52 - 23:44	4h 51m	AN ₊ bis M _{\searrow}		23:44	11:20	06:19	36m	06:56	37m	07:33	36m	08:10	8h 51m	17:02	36m	17:38	37m	18:16	36m	18:52	15h 07m	11h 26m				Fr, 13. Jan
Sa, 14. Jan		18:53 - 00:53*	6h 00m	AN ₊ bis M _{\searrow}		—:—	11:36	06:19	36m	06:56	37m	07:33	36m	08:09	8h 53m	17:03	36m	17:39	37m	18:17	36m	18:53	15h 05m	11h 25m				Sa, 14. Jan
So, 15. Jan		18:54 - 02:07*	7h 12m	AN ₊ bis M _{\searrow}	☉	00:53	11:53	06:19	36m	06:55	37m	07:32	36m	08:09	8h 55m	17:04	36m	17:41	37m	18:18	36m	18:54	15h 04m	11h 23m				So, 15. Jan
Mo, 16. Jan		18:56 - 03:24*	8h 28m	AN ₊ bis M _{\searrow}		02:07	12:13	06:18	36m	06:55	37m	07:32	36m	08:08	8h 57m	17:06	36m	17:42	37m	18:19	36m	18:56	15h 01m	11h 22m				Mo, 16. Jan
Di, 17. Jan		18:57 - 04:45*	9h 48m	AN ₊ bis M _{\searrow}		03:24	12:39	06:18	36m	06:54	37m	07:31	36m	08:08	8h 59m	17:07	36m	17:43	37m	18:20	36m	18:57	14h 59m	11h 20m				Di, 17. Jan
Mi, 18. Jan		18:58 - 06:06*	11h 07m	AN ₊ bis M _{\searrow}		04:45	13:13	06:17	36m	06:54	36m	07:31	36m	08:07	9h 01m	17:08	36m	17:45	36m	18:21	36m	18:58	14h 57m	11h 18m				Mi, 18. Jan
Do, 19. Jan		18:59 - 06:16*	11h 17m	AN ₊ bis AN _{\searrow}		06:06	14:01	06:17	36m	06:53	36m	07:30	36m	08:06	9h 03m	17:10	36m	17:46	36m	18:23	36m	18:59	14h 55m	11h 17m				Do, 19. Jan
Fr, 20. Jan		19:00 - 06:16*	11h 15m	AN ₊ bis AN _{\searrow}		07:18	15:05	06:16	36m	06:52	36m	07:29	35m	08:05	9h 05m	17:11	36m	17:47	36m	18:24	36m	19:00	14h 53m	11h 15m				Fr, 20. Jan
Sa, 21. Jan		19:02 - 06:15*	11h 13m	AN ₊ bis AN _{\searrow}	☿	08:17	16:25	06:16	36m	06:52	36m	07:28	35m	08:04	9h 08m	17:13	35m	17:48	36m	18:25	36m	19:02	14h 50m	11h 13m				Sa, 21. Jan
So, 22. Jan		19:03 - 06:14*	11h 11m	AN ₊ bis AN _{\searrow}		09:01	17:53	06:15	36m	06:51	36m	07:28	35m	08:03	9h 10m	17:14	35m	17:50	36m	18:27	36m	19:03	14h 48m	11h 11m				So, 22. Jan
Mo, 23. Jan		19:22 - 06:13*	10h 51m	M _{\searrow} bis AN _{\searrow}		09:33	19:22	06:14	36m	06:50	36m	07:27	35m	08:03	9h 12m	17:16	35m	17:51	36m	18:28	36m	19:04	14h 46m	11h 09m				Mo, 23. Jan
Di, 24. Jan		20:47 - 06:13*	9h 26m	M _{\searrow} bis AN _{\searrow}		09:58	20:47	06:13	36m	06:50	36m	07:26	35m	08:02	9h 15m	17:17	35m	17:53	36m	18:29	36m	19:05	14h 43m	11h 07m				Di, 24. Jan
Mi, 25. Jan		22:07 - 06:12*	8h 04m	M _{\searrow} bis AN _{\searrow}		10:19	22:07	06:13	36m	06:49	36m	07:25	35m	08:01	9h 17m	17:18	35m	17:54	36m	18:30	36m	19:06	14h 41m	11h 05m				Mi, 25. Jan
Do, 26. Jan		23:24 - 06:11*	6h 47m	M _{\searrow} bis AN _{\searrow}		10:37	23:24	06:12	36m	06:48	36m	07:24	35m	08:00	9h 20m	17:20	35m	17:55	36m	18:32	36m	19:08	14h 38m	11h 03m				Do, 26. Jan
Fr, 27. Jan		00:39* - 06:10*	5h 31m	M _{\searrow} bis AN _{\searrow}		10:55	—:—	06:11	35m	06:47	36m	07:23	35m	07:58	9h 23m	17:21	35m	17:57	36m	18:33	35m	19:09	14h 35m	11h 01m				Fr, 27. Jan
Sa, 28. Jan		01:52* - 06:09*	4h 17m	M _{\searrow} bis AN _{\searrow}	☾	11:13	00:39	06:10	35m	06:46	36m	07:22	35m	07:57	9h 25m	17:23	35m	17:58	36m	18:34	35m	19:10	14h 33m	10h 58m				Sa, 28. Jan
So, 29. Jan		03:04* - 06:08*	3h 04m	M _{\searrow} bis AN _{\searrow}		11:34	01:52	06:09	35m	06:45	36m	07:21	35m	07:56	9h 28m	17:25	35m	18:00	36m	18:36	35m	19:12	14h 30m	10h 56m				So, 29. Jan
Mo, 30. Jan		04:13* - 06:07*	1h 54m	M _{\searrow} bis AN _{\searrow}		11:59	03:04	06:08	35m	06:44	36m	07:20	34m	07:55	9h 31m	17:26	34m	18:01	36m	18:37	35m	19:13	14h 27m	10h 54m				Mo, 30. Jan
Di, 31. Jan		05:18* - 06:06*	48m	M _{\searrow} bis AN _{\searrow}		12:31	04:13	06:07	35m	06:43	35m	07:19	34m	07:54	9h 33m	17:28	34m	18:02	35m	18:38	35m	19:14	14h 24m	10h 51m				Di, 31. Jan
Mi, 1. Feb		—:—:~:~:~:~	—	Mond stört		13:10	05:18	06:06	35m	06:42	35m	07:18	34m	07:53	9h 36m	17:29	34m	18:04	35m	18:40	35m	19:16	14h 22m	10h 49m				Mi, 1. Feb
Do, 2. Feb		—:~:~:~:~:~	—	Mond stört		13:58	06:15	06:05	35m	06:41	35m	07:17	34m	07:51	9h 39m	17:31	34m	18:05	35m	18:41	35m	19:17	14h 19m	10h 47m				Do, 2. Feb
Fr, 3. Feb		—:~:~:~:~:~	—	Mond stört		14:56	07:03	06:04	35m	06:40	35m	07:15	34m	07:50	9h 42m	17:32	34m	18:07	35m	18:43	35m	19:18	14h 16m	10h 44m				Fr, 3. Feb
Sa, 4. Feb		—:~:~:~:~:~	—	Mond stört		15:59	07:41	06:03	35m	06:39	35m	07:14	34m	07:49	9h 45m	17:34	34m	18:08	35m	18:44	35m	19:20	14h 13m	10h 42m				Sa, 4. Feb
So, 5. Feb		—:~:~:~:~:~	—	Mond stört	○	17:06	08:11	06:02	35m	06:37	35m	07:13	34m	07:47	9h 48m	17:35	34m	18:10	35m	18:45	35m	19:21	14h 10m	10h 39m				So, 5. Feb
Mo, 6. Feb		—:~:~:~:~:~	—	Mond stört		18:14	08:35	06:01	35m	06:36	35m	07:12	34m	07:46	9h 50m	17:37	34m	18:11	35m	18:47	35m	19:22	14h 07m	10h 37m				Mo, 6. Feb
Di, 7. Feb		—:~:~:~:~:~	—	Mond stört		19:21	08:54	05:59	35m	06:35	35m	07:10	34m	07:44	9h 53m	17:38	34m	18:13	35m	18:48	35m	19:24	14h 04m	10h 34m				Di, 7. Feb
Mi, 8. Feb		19:25 - 20:28	1h 02m	AN ₊ bis M _{\searrow}		20:28	09:11	05:58	35m	06:34	35m	07:09	34m	07:43	9h 56m	17:40	34m	18:14	35m	18:49	35m	19:25	14h 01m	10h 31m				Mi, 8. Feb
Do, 9. Feb		19:26 - 21:35	2h 08m	AN ₊ bis M _{\searrow}		21:35	09:27	05:57	35m	06:32	35m	07:08	33m	07:42	9h 59m	17:42	33m	18:15	35m	18:51	35m	19:26	13h 58m	10h 29m				Do, 9. Feb
Fr, 10. Feb		19:28 - 22:43	3h 15m	AN ₊ bis M _{\searrow}		22:43	09:42	05:55	35m	06:31	35m	07:06	33m	07:40	10h 03m	17:43	33m	18:17	35m	18:52	35m	19:28	13h 55m	10h 26m				Fr, 10. Feb
Sa, 11. Feb		19:29 - 23:54	4h 24m	AN ₊ bis M _{\searrow}		23:54	09:58	05:54	35m	06:30	35m	07:05	33m	07:39	10h 06m	17:45	33m	18:18	35m	18:54	35m	19:29	13h 52m	10h 23m				Sa, 11. Feb
So, 12. Feb		19:31 - 01:08*	5h 37m	AN ₊ bis M _{\se}																								

Table with 29 columns (Days 1-29) and 28 rows (Dates Mo, 20. Feb to Mo, 10. Apr). Columns include time zones, astronomical data (Astr., Δt), moon phases (Ph., ↑, ↓), sunrise/sunset (Bürg., Δt), and astronomical twilight (Astr., Δt). Moon phases are represented by symbols like ●, ○, and ☾.

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

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

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

Table with 29 columns (1-29) and multiple rows. Columns include dates (1-29), time zones (Zeitzone), astronomical twilight (Astr. dunkel und kein Mond), moon phase (Mond), dawn (Beginn der Morgendämmerung), sunrise (Sonne), dusk (Ende der Abenddämmerung), night (Nacht), and astronomical noon (Astr. N.). Rows list dates from Fr, 8. Sep to Fr, 27. Okt with corresponding times and moon phases.

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

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