

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Schwabach 49.3292° N 11.0208° 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.

Table with 29 columns (numbered 1-29) and 29 rows (numbered 1-29). Columns 2-28 contain astronomical data: sunrise (Zeitzone), moon phases (Astr. dunkel, Mond), dawn (Beginn der Morgendämmerung), and sunset (Ende der Abenddämmerung). Columns 1 and 29 show the date. The table includes various moon phases such as AN+ bis M7, Mv bis AN-, and Mond stört.

Table with 29 columns (1-29) and 45 rows (Di 20. Feb to Di 9. Apr). Columns include dates, moon phases (e.g., 'Mond stört'), moonrise/moonset times, and astronomical data like 'Astr.' and 'Naut.' times. Special markers like 'MESZ' and moon symbols are used for certain rows.

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			
Mi, 10. Apr	MESZ	22:50–04:31*	5h 41m	M \searrow bis AN $_$		07:07	22:50	04:34	43m	05:18	39m	05:58	35m	06:33	13h 28m	20:01	35m	20:37	39m	21:17	44m	22:01	10h 29m	6h 30m					Mi, 10. Apr
Do, 11. Apr	MESZ	00:16*–04:29*	4h 12m	M \searrow bis AN $_$		07:31	—:—	04:31	44m	05:16	39m	05:55	35m	06:31	13h 32m	20:03	35m	20:38	40m	21:18	44m	22:03	10h 25m	6h 25m					Do, 11. Apr
Fr, 12. Apr	MESZ	01:34*–04:26*	2h 51m	M \searrow bis AN $_$		08:03	00:16	04:29	44m	05:13	40m	05:53	35m	06:29	13h 35m	20:04	35m	20:40	40m	21:20	44m	22:05	10h 22m	6h 20m					Fr, 12. Apr
Sa, 13. Apr	MESZ	02:38*–04:23*	1h 44m	M \searrow bis AN $_$		08:46	01:34	04:26	44m	05:11	40m	05:51	35m	06:27	13h 39m	20:06	35m	20:42	40m	21:22	45m	22:07	10h 18m	6h 15m					Sa, 13. Apr
So, 14. Apr	MESZ	03:27*–04:20*	53m	M \searrow bis AN $_$		09:42	02:38	04:23	45m	05:09	40m	05:49	35m	06:25	13h 42m	20:07	35m	20:43	40m	21:24	45m	22:10	10h 15m	6h 10m					So, 14. Apr
Mo, 15. Apr	MESZ	04:02*–04:18*	16m	M \searrow bis AN $_$	☉	10:48	03:27	04:20	45m	05:06	40m	05:47	35m	06:23	13h 46m	20:09	35m	20:45	40m	21:26	46m	22:12	10h 11m	6h 05m					Mo, 15. Apr
Di, 16. Apr	MESZ	—:—:—:—:—	—	Mond stört		12:00	04:02	04:18	46m	05:04	40m	05:45	35m	06:21	13h 49m	20:10	36m	20:47	41m	21:28	46m	22:14	10h 08m	6h 00m					Di, 16. Apr
Mi, 17. Apr	MESZ	—:—:—:—:—	—	Mond stört		13:12	04:27	04:15	46m	05:02	41m	05:43	36m	06:19	13h 53m	20:12	36m	20:48	41m	21:30	47m	22:17	10h 04m	5h 55m					Mi, 17. Apr
Do, 18. Apr	MESZ	—:—:—:—:—	—	Mond stört		14:23	04:46	04:12	47m	04:59	41m	05:41	36m	06:17	13h 56m	20:14	36m	20:50	41m	21:32	47m	22:19	10h 01m	5h 50m					Do, 18. Apr
Fr, 19. Apr	MESZ	—:—:~:~:~	—	Mond stört		15:32	05:01	04:09	47m	04:57	41m	05:38	36m	06:15	14h 00m	20:15	36m	20:52	41m	21:34	48m	22:22	9h 57m	5h 44m					Fr, 19. Apr
Sa, 20. Apr	MESZ	—:~:~:~:~	—	Mond stört		16:40	05:13	04:06	48m	04:55	41m	05:36	36m	06:13	14h 03m	20:17	36m	20:53	42m	21:35	48m	22:24	9h 54m	5h 39m					Sa, 20. Apr
So, 21. Apr	MESZ	~:~:~:~:~	~	Mond stört		17:47	05:25	04:04	48m	04:52	42m	05:34	36m	06:11	14h 07m	20:18	36m	20:55	42m	21:37	49m	22:26	9h 51m	5h 34m					So, 21. Apr
Mo, 22. Apr	MESZ	~:~:~:~:~	~	Mond stört		18:55	05:37	04:01	49m	04:50	42m	05:32	36m	06:09	14h 10m	20:20	37m	20:57	42m	21:39	49m	22:29	9h 47m	5h 29m					Mo, 22. Apr
Di, 23. Apr	MESZ	~:~:~:~:~	~	Mond stört		20:05	05:49	03:58	49m	04:48	42m	05:30	36m	06:07	14h 13m	20:21	37m	20:58	43m	21:41	50m	22:31	9h 44m	5h 23m					Di, 23. Apr
Mi, 24. Apr	MESZ	~:~:~:~:~	~	Mond stört	☉	21:18	06:03	03:55	50m	04:45	42m	05:28	37m	06:05	14h 17m	20:23	37m	21:00	43m	21:43	50m	22:34	9h 40m	5h 18m					Mi, 24. Apr
Do, 25. Apr	MESZ	~:~:~:~:~	~	Mond stört		22:34	06:21	03:52	50m	04:43	43m	05:26	37m	06:03	14h 20m	20:24	37m	21:02	43m	21:45	51m	22:37	9h 37m	5h 12m					Do, 25. Apr
Fr, 26. Apr	MESZ	22:39–23:49	1h 09m	AN $_+$ bis M $_7$		23:49	06:45	03:49	51m	04:41	43m	05:24	37m	06:02	14h 23m	20:26	37m	21:03	43m	21:47	51m	22:39	9h 34m	5h 07m					Fr, 26. Apr
Sa, 27. Apr	MESZ	22:42–00:59*	2h 16m	AN $_+$ bis M $_7$		—:—	07:18	03:46	51m	04:38	43m	05:22	37m	06:00	14h 27m	20:27	37m	21:05	44m	21:49	52m	22:42	9h 30m	5h 01m					Sa, 27. Apr
So, 28. Apr	MESZ	22:44–01:58*	3h 13m	AN $_+$ bis M $_7$		00:59	08:03	03:43	52m	04:36	44m	05:20	37m	05:58	14h 30m	20:29	38m	21:07	44m	21:51	53m	22:44	9h 27m	4h 55m					So, 28. Apr
Mo, 29. Apr	MESZ	22:47–02:44*	3h 56m	AN $_+$ bis M $_7$		01:58	09:04	03:40	53m	04:34	44m	05:18	38m	05:56	14h 33m	20:30	38m	21:08	44m	21:53	53m	22:47	9h 24m	4h 50m					Mo, 29. Apr
Di, 30. Apr	MESZ	22:50–03:18*	4h 28m	AN $_+$ bis M $_7$		02:44	10:18	03:38	53m	04:31	44m	05:16	38m	05:54	14h 37m	20:32	38m	21:10	45m	21:55	54m	22:50	9h 21m	4h 44m					Di, 30. Apr
Mi, 1. Mai	MESZ	22:53–03:32*	4h 38m	AN $_+$ bis AN $_$	☾	03:18	11:40	03:35	54m	04:29	45m	05:14	38m	05:53	14h 40m	20:33	38m	21:12	45m	21:57	55m	22:53	9h 17m	4h 38m					Mi, 1. Mai
Do, 2. Mai	MESZ	22:55–03:29*	4h 33m	AN $_+$ bis AN $_$		03:43	13:05	03:32	55m	04:27	45m	05:12	38m	05:51	14h 43m	20:35	38m	21:13	45m	21:59	56m	22:55	9h 14m	4h 33m					Do, 2. Mai
Fr, 3. Mai	MESZ	22:58–03:26*	4h 27m	AN $_+$ bis AN $_$		04:03	14:31	03:29	56m	04:25	45m	05:11	38m	05:49	14h 46m	20:36	38m	21:15	46m	22:01	57m	22:58	9h 11m	4h 27m					Fr, 3. Mai
Sa, 4. Mai	MESZ	23:01–03:22*	4h 21m	AN $_+$ bis AN $_$		04:20	15:56	03:26	57m	04:23	46m	05:09	38m	05:48	14h 49m	20:38	39m	21:17	46m	22:03	57m	23:01	9h 08m	4h 21m					Sa, 4. Mai
So, 5. Mai	MESZ	23:04–03:19*	4h 15m	AN $_+$ bis AN $_$		04:35	17:21	03:22	57m	04:20	46m	05:07	39m	05:46	14h 52m	20:39	39m	21:18	46m	22:05	58m	23:04	9h 05m	4h 15m					So, 5. Mai
Mo, 6. Mai	MESZ	23:07–03:16*	4h 09m	AN $_+$ bis AN $_$		04:51	18:47	03:19	58m	04:18	46m	05:05	39m	05:44	14h 56m	20:41	39m	21:20	47m	22:07	59m	23:07	9h 02m	4h 09m					Mo, 6. Mai
Di, 7. Mai	MESZ	23:10–03:13*	4h 03m	AN $_+$ bis AN $_$		05:08	20:16	03:16	59m	04:16	47m	05:03	39m	05:43	14h 59m	20:42	39m	21:22	47m	22:09	1h 00m	23:10	8h 59m	4h 03m					Di, 7. Mai
Mi, 8. Mai	MESZ	23:13–03:10*	3h 57m	AN $_+$ bis AN $_$	☼	05:30	21:44	03:13	1h 00m	04:14	47m	05:02	39m	05:41	15h 02m	20:43	39m	21:23	48m	22:12	1h 01m	23:13	8h 56m	3h 57m					Mi, 8. Mai
Do, 9. Mai	MESZ	23:16–03:07*	3h 50m	AN $_+$ bis AN $_$		05:58	23:08	03:10	1h 01m	04:12	48m	05:00	39m	05:40	15h 05m	20:45	40m	21:25	48m	22:14	1h 02m	23:16	8h 53m	3h 50m					Do, 9. Mai
Fr, 10. Mai	MESZ	00:21*–03:04*	2h 42m	M \searrow bis AN $_$		06:36	—:—	03:07	1h 02m	04:10	48m	04:58	40m	05:38	15h 08m	20:46	40m	21:27	48m	22:16	1h 03m	23:19	8h 50m	3h 44m					Fr, 10. Mai
Sa, 11. Mai	MESZ	01:18*–03:01*	1h 42m	M \searrow bis AN $_$		07:27	00:21	03:04	1h 03m	04:08	48m	04:56	40m	05:37	15h 10m	20:48	40m	21:28	49m	22:18	1h 04m	23:22	8h 47m	3h 38m					Sa, 11. Mai
So, 12. Mai	MESZ	01:59*–02:57*	57m	M \searrow bis AN $_$		08:31	01:18	03:01	1h 04m	04:05	49m	04:55	40m	05:35	15h 13m	20:49	40m	21:30	49m	22:20	1h 05m	23:26	8h 44m	3h 31m					So, 12. Mai
Mo, 13. Mai	MESZ	02:29*–02:54*	25m	M \searrow bis AN $_$		09:42	01:59	02:57	1h 05m	04:03	49m	04:53	40m	05:34	15h 16m	20:50	41m	21:32	50m	22:22	1h 07m	23:29	8h 42m	3h 25m					Mo, 13. Mai
Di, 14. Mai	MESZ	02:50*–02:51*	0m	M \searrow bis AN $_$		10:56	02:29	02:54	1h 07m	04:01	50m	04:52	41m	05:33	15h 19m	20:52	41m	21:33	50m	22:24	1h 08m	23:32	8h 39m	3h 18m					Di, 14. Mai
Mi, 15. Mai	MESZ	~:~:~:~:~	~	Mond stört	☾	12:09	02:50	02:51	1h 08m	03:59	50m	04:50	41m	05:31	15h 22m	20:53	41m	21:35	50m	22:26	1h 09m	23:35	8h 36m	3h 12m					Mi, 15. Mai
Do, 16. Mai	MESZ	~:~:~:~:~	~	Mond stört		13:19	03:07	02:48	1h 09m	03:57	50m	04:48	41m	05:30	15h 24m	20:55	41m	21:36	51m	22:28	1h 11m	23:39	8h 33m	3h 05m					Do, 16. Mai
Fr, 17. Mai	MESZ	~:~:~:~:~	~	Mond stört		14:27	03:20	02:44	1h 11m	03:56	51m	04:47	41m	05:29	15h 27m	20:56	41m	21:38	51m	22:30	1h 12m	23:42	8h 31m	2h 58m					Fr, 17. Mai
Sa, 18. Mai	MESZ	~:~:~:~:~	~	Mond stört		15:34	03:32	02:41	1h 12m	03:54	51m	04:45	41m	05:27	15h 29m	20:57	42m	21:39	52m	22:32	1h 14m	23:46	8h 28m	2h 51m					Sa, 18. Mai
So, 19. Mai	MESZ	~:~:~:~:~	~	Mond stört		16:42	03:44	02:38	1h 14m	03:52	52m	04:44	42m	05:26	15h 32m	20:59	42m	21:41	52m	22:34	1h 15m	23:49	8h 26m	2h 44m					So, 19. Mai
Mo, 20. Mai	MESZ	~:~:~:~:~	~	Mond stört		17:51	03:56	02:34	1h 15m	03:50	52m	04:43	42m	05:25	15h 34m	21:00	42m	21:42	53m	22:36	1h 17m	23:53	8h 23m	2h 37m					Mo, 20. Mai
Di, 21. Mai	MESZ	~:~:~:~:~	~	Mond stört		19:03	04:10	02:31	1h 17m	03:48	53m	04:41	42m																

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

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

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

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

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