Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Kulmbach 50.1081° N 11.4556° E

Berechnung: pyEphem
Textsatz: LaTeX

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*), $M_\searrow$ (*Monduntergang*), AN_- (*Ende der astronomischen Nacht = Beginn der astr. Morgendämmerung*), $M_\nearrow$ (*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 = $-18°_\nearrow$).
Spalte 10 Dauer der astr. Morgendämmerung.
Spalte 11 Beginn der naut. Morgendämmerung (Sonnenhöhe = $-12°_\nearrow$).
Spalte 12 Dauer der naut. Morgendämmerung.
Spalte 13 Beginn der bürg. Morgendämmerung (Sonnenhöhe = $-6°_\nearrow$).
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 = $-6°_\searrow$).
Spalte 20 Dauer der naut. Abenddämmerung.
Spalte 21 Ende der naut. Abenddämmerung (Sonnenhöhe = $-12°_\searrow$).
Spalte 22 Dauer der astr. Abenddämmerung.
Spalte 23 Ende der astr. Abenddämmerung (Sonnenhöhe = $-18°_\searrow$).
Spalte 24 Länge der Nacht.
Spalte 25 Länge der astr. Nacht.

Für Beobachter, die zu Zeiten der Mitternachtsdämmerung während der astr. Dämmerung beoachten 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*), $M_\searrow$ (*Monduntergang*), ND_- (*Ende der »naut. Dunkelheit« = Beginn der naut. Morgendämmerung*), $M_\nearrow$ (*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-	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.	↗	↘	Astr.	Δt	Naut.	Δt	Bürg.	Δt	↗	Δt	↘	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
So, 1. Jan		03:57* – 06:12*	2h 14m	M↘ bis AN–		12:48	02:43	06:12	39m	06:51	40m	07:32	40m	08:12	8h 09m	16:22	40m	17:03	40m	17:43	39m	18:23	15h 50m	11h 49m				So, 1. Jan
Mo, 2. Jan		05:11* – 06:12*	1h 00m	M↘ bis AN–		13:07	03:57	06:12	39m	06:51	40m	07:32	40m	08:12	8h 10m	16:23	40m	17:04	40m	17:44	39m	18:23	15h 48m	11h 48m				Mo, 2. Jan
Di, 3. Jan		—:——:—	–	Mond stört		13:30	05:11	06:12	39m	06:51	40m	07:32	40m	08:12	8h 12m	16:24	40m	17:05	40m	17:45	39m	18:24	15h 47m	11h 47m				Di, 3. Jan
Mi, 4. Jan		—:——:—	–	Mond stört		14:01	06:22	06:12	39m	06:51	40m	07:31	40m	08:12	8h 13m	16:25	40m	17:06	40m	17:46	39m	18:25	15h 46m	11h 46m				Mi, 4. Jan
Do, 5. Jan		—:——:—	–	Mond stört		14:41	07:27	06:12	39m	06:51	40m	07:31	40m	08:12	8h 14m	16:26	40m	17:07	40m	17:47	39m	18:26	15h 44m	11h 45m				Do, 5. Jan
Fr, 6. Jan		—:——:—	–	Mond stört		15:32	08:22	06:12	39m	06:51	40m	07:31	40m	08:11	8h 16m	16:28	40m	17:08	40m	17:48	39m	18:27	15h 43m	11h 44m				Fr, 6. Jan
Sa, 7. Jan		—:——:—	–	Mond stört	○	16:33	09:06	06:12	39m	06:51	40m	07:31	40m	08:11	8h 17m	16:29	40m	17:09	40m	17:49	39m	18:28	15h 41m	11h 43m				Sa, 7. Jan
So, 8. Jan		—:——:—	–	Mond stört		17:40	09:40	06:11	39m	06:50	40m	07:31	40m	08:11	8h 19m	16:30	40m	17:10	40m	17:50	39m	18:29	15h 40m	11h 41m				So, 8. Jan
Mo, 9. Jan		18:30 – 18:50	19m	AN+ bis M↗		18:50	10:05	06:11	39m	06:50	40m	07:30	39m	08:10	8h 21m	16:31	39m	17:11	40m	17:51	39m	18:30	15h 38m	11h 40m				Mo, 9. Jan
Di, 10. Jan		18:32 – 20:00	1h 28m	AN+ bis M↗		20:00	10:25	06:11	38m	06:50	40m	07:30	39m	08:10	8h 23m	16:33	39m	17:13	40m	17:53	39m	18:32	15h 36m	11h 38m				Di, 10. Jan
Mi, 11. Jan		18:33 – 21:10	2h 37m	AN+ bis M↗		21:10	10:41	06:11	38m	06:50	39m	07:29	39m	08:09	8h 24m	16:34	39m	17:14	39m	17:54	38m	18:33	15h 34m	11h 37m				Mi, 11. Jan
Do, 12. Jan		18:34 – 22:20	3h 46m	AN+ bis M↗		22:20	10:54	06:10	38m	06:49	39m	07:29	39m	08:09	8h 26m	16:35	39m	17:15	39m	17:55	38m	18:34	15h 32m	11h 35m				Do, 12. Jan
Fr, 13. Jan		18:35 – 23:30	4h 55m	AN+ bis M↗		23:30	11:07	06:10	38m	06:49	39m	07:28	39m	08:08	8h 28m	16:37	39m	17:16	39m	17:56	38m	18:35	15h 30m	11h 34m				Fr, 13. Jan
Sa, 14. Jan		18:36 – 00:43*	6h 07m	AN+ bis M↗		—:—	11:20	06:09	38m	06:48	39m	07:28	39m	08:07	8h 31m	16:38	39m	17:18	39m	17:57	38m	18:36	15h 28m	11h 32m				Sa, 14. Jan
So, 15. Jan		18:37 – 02:00*	7h 22m	AN+ bis M↗	◑	00:43	11:34	06:09	38m	06:48	39m	07:27	39m	08:07	8h 33m	16:40	39m	17:19	39m	17:59	38m	18:37	15h 26m	11h 30m				So, 15. Jan
Mo, 16. Jan		18:39 – 03:21*	8h 42m	AN+ bis M↗		02:00	11:51	06:08	38m	06:47	39m	07:27	39m	08:06	8h 35m	16:41	39m	17:20	39m	18:00	38m	18:39	15h 23m	11h 29m				Mo, 16. Jan
Di, 17. Jan		18:40 – 04:45*	10h 05m	AN+ bis M↗		03:21	12:14	06:08	38m	06:46	39m	07:26	39m	08:05	8h 37m	16:43	39m	17:22	39m	18:01	38m	18:40	15h 21m	11h 27m				Di, 17. Jan
Mi, 18. Jan		18:41 – 06:07*	11h 25m	AN+ bis AN–		04:45	12:45	06:07	38m	06:46	39m	07:25	38m	08:04	8h 40m	16:44	38m	17:23	39m	18:03	38m	18:41	15h 18m	11h 25m				Mi, 18. Jan
Do, 19. Jan		18:42 – 06:06*	11h 23m	AN+ bis AN–		06:09	13:29	06:07	38m	06:45	39m	07:24	38m	08:03	8h 42m	16:46	38m	17:25	39m	18:04	38m	18:42	15h 16m	11h 23m				Do, 19. Jan
Fr, 20. Jan		18:44 – 06:05*	11h 21m	AN+ bis AN–		07:23	14:33	06:06	38m	06:44	39m	07:24	38m	08:02	8h 45m	16:47	38m	17:26	39m	18:05	38m	18:44	15h 13m	11h 21m				Fr, 20. Jan
Sa, 21. Jan		18:45 – 06:04*	11h 19m	AN+ bis AN–	●	08:20	15:55	06:05	38m	06:44	39m	07:23	38m	08:01	8h 47m	16:49	38m	17:28	39m	18:07	38m	18:45	15h 11m	11h 19m				Sa, 21. Jan
So, 22. Jan		18:46 – 06:04*	11h 17m	AN+ bis AN–		09:01	17:26	06:04	38m	06:43	39m	07:22	38m	08:00	8h 50m	16:51	38m	17:29	39m	18:08	38m	18:46	15h 08m	11h 17m				So, 22. Jan
Mo, 23. Jan		18:59 – 06:03*	11h 03m	M↘ bis AN–		09:29	18:59	06:04	38m	06:42	38m	07:21	38m	07:59	8h 53m	16:52	38m	17:31	38m	18:09	38m	18:48	15h 05m	11h 14m				Mo, 23. Jan
Di, 24. Jan		20:28 – 06:02*	9h 34m	M↘ bis AN–		09:51	20:28	06:03	38m	06:41	38m	07:20	38m	07:58	8h 55m	16:54	38m	17:32	38m	18:11	38m	18:49	15h 02m	11h 12m				Di, 24. Jan
Mi, 25. Jan		21:52 – 06:01*	8h 09m	M↘ bis AN–		10:08	21:52	06:02	38m	06:40	38m	07:19	38m	07:57	8h 58m	16:56	38m	17:34	38m	18:12	38m	18:51	15h 00m	11h 10m				Mi, 25. Jan
Do, 26. Jan		23:12 – 06:00*	6h 48m	M↘ bis AN–		10:23	23:12	06:01	38m	06:39	38m	07:18	37m	07:56	9h 01m	16:57	37m	17:35	38m	18:14	38m	18:52	14h 57m	11h 08m				Do, 26. Jan
Fr, 27. Jan		00:30* – 05:59*	5h 29m	M↘ bis AN–		10:38	—:—	06:00	38m	06:38	38m	07:17	37m	07:54	9h 04m	16:59	37m	17:37	38m	18:15	38m	18:53	14h 54m	11h 05m				Fr, 27. Jan
Sa, 28. Jan		01:46* – 05:58*	4h 11m	M↘ bis AN–	◐	10:53	00:30	05:59	38m	06:37	38m	07:15	37m	07:53	9h 07m	17:01	37m	17:38	38m	18:17	38m	18:55	14h 51m	11h 03m				Sa, 28. Jan
So, 29. Jan		03:02* – 05:57*	2h 55m	M↘ bis AN–		11:11	01:46	05:58	37m	06:36	38m	07:14	37m	07:52	9h 10m	17:02	37m	17:40	38m	18:18	38m	18:56	14h 48m	11h 00m				So, 29. Jan
Mo, 30. Jan		04:14* – 05:56*	1h 41m	M↘ bis AN–		11:33	03:02	05:57	37m	06:35	38m	07:13	37m	07:50	9h 13m	17:04	37m	17:41	38m	18:20	37m	18:58	14h 45m	10h 58m				Mo, 30. Jan
Di, 31. Jan		05:21* – 05:55*	33m	M↘ bis AN–		12:02	04:14	05:56	37m	06:34	38m	07:12	37m	07:49	9h 16m	17:06	37m	17:43	38m	18:21	37m	18:59	14h 42m	10h 55m				Di, 31. Jan
Mi, 1. Feb		—:——:—	–	Mond stört		12:39	05:21	05:55	37m	06:32	38m	07:11	37m	07:48	9h 19m	17:07	37m	17:44	38m	18:23	37m	19:01	14h 38m	10h 52m				Mi, 1. Feb
Do, 2. Feb		—:——:—	–	Mond stört		13:27	06:19	05:53	37m	06:31	38m	07:09	36m	07:46	9h 22m	17:09	37m	17:46	38m	18:24	37m	19:02	14h 35m	10h 50m				Do, 2. Feb
Fr, 3. Feb		—:——:—	–	Mond stört		14:25	07:06	05:52	37m	06:30	37m	07:08	36m	07:45	9h 26m	17:11	36m	17:48	38m	18:26	37m	19:03	14h 32m	10h 47m				Fr, 3. Feb
Sa, 4. Feb		—:——:—	–	Mond stört		15:30	07:42	05:51	37m	06:29	37m	07:06	36m	07:43	9h 29m	17:12	36m	17:49	37m	18:27	37m	19:05	14h 29m	10h 44m				Sa, 4. Feb
So, 5. Feb		—:——:—	–	Mond stört	○	16:40	08:10	05:50	37m	06:27	37m	07:05	36m	07:42	9h 32m	17:14	36m	17:51	37m	18:29	37m	19:06	14h 25m	10h 41m				So, 5. Feb
Mo, 6. Feb		—:——:—	–	Mond stört		17:51	08:31	05:48	37m	06:26	37m	07:04	36m	07:40	9h 35m	17:16	36m	17:52	37m	18:30	37m	19:08	14h 22m	10h 38m				Mo, 6. Feb
Di, 7. Feb		—:——:—	–	Mond stört		19:01	08:47	05:47	37m	06:24	37m	07:02	36m	07:38	9h 39m	17:18	36m	17:54	37m	18:32	37m	19:09	14h 19m	10h 35m				Di, 7. Feb
Mi, 8. Feb		19:11 – 20:11	1h 00m	AN+ bis M↗		20:11	09:02	05:45	37m	06:23	37m	07:01	36m	07:37	9h 42m	17:19	36m	17:56	37m	18:33	37m	19:11	14h 15m	10h 32m				Mi, 8. Feb
Do, 9. Feb		19:13 – 21:21	2h 08m	AN+ bis M↗		21:21	09:14	05:44	37m	06:22	37m	06:59	36m	07:35	9h 45m	17:21	36m	17:57	37m	18:35	37m	19:13	14h 12m	10h 29m				Do, 9. Feb
Fr, 10. Feb		19:14 – 22:32	3h 18m	AN+ bis M↗		22:32	09:27	05:42	37m	06:20	37m	06:57	36m	07:34	9h 49m	17:23	36m	17:59	37m	18:36	37m	19:14	14h 08m	10h 26m				Fr, 10. Feb
Sa, 11. Feb		19:16 – 23:46	4h 30m	AN+ bis M↗		23:46	09:40	05:41	37m	06:18	37m	06:56	35m	07:32	9h 52m	17:25	35m	18:01	37m	18:38	37m	19:16	14h 05m	10h 23m				Sa, 11. Feb
So, 12. Feb		19:17 – 01:04*	5h 46m	AN+ bis M↗		—:—	09:56	05:39	37m	06:17	37m	06:54	35m	07:30	9h 56m	17:26	35m	18:02	37m	18:40	37m	19:17	14h 01m	10h 20m				So, 12. Feb
Mo, 13. Feb		19:19 – 02:24*	7h 05m	AN+ bis M↗	◑	01:04	10:15	05:38	37m	06:15	37m	06:53	35m	07:28	9h 59m	17:28	35m	18:04	37m	18:41	37m	19:19	13h 58m	10h 17m				Mo, 13. Feb
Di, 14. Feb		19:20 – 03:46*	8h 25m	AN+ bis M↗		02:24	10:41	05:36	37m	06:14	37m	06:51	35m	07:27	10h 03m	17:30	35m	18:05	37m	18:43	37m	19:20	13h 54m	10h 14m				Di, 14. Feb
Mi, 15. Feb		19:22 – 05:02*	9h 40m	AN+ bis M↗		03:46	11:17	05:35	37m	06:12	37m	06:49	35m	07:25	10h 06m	17:32	35m	18:07	37m	18:44	37m	19:22	13h 51m	10h 11m				Mi, 15. Feb
Do, 16. Feb		19:23 – 05:31*	10h 07m	AN+ bis AN–		05:02	12:10	05:33	37m	06:10	37m	06:47	35m	07:23	10h 10m	17:33	35m	18:09	37m	18:46	37m	19:23	13h 47m	10h 07m				Do, 16. Feb
Fr, 17. Feb		19:25 – 05:30*	10h 04m	AN+ bis AN–		06:05	13:21	05:31	37m	06:09	37m	06:46	35m	07:21	10h 13m	17:35	35m	18:10	37m	18:47	37m	19:25	13h 44m	10h 04m				Fr, 17. Feb
Sa, 18. Feb		19:27 – 05:28*	10h 01m	AN+ bis AN–		06:53	14:47	05:30	37m	06:07	36m	06:44	35m	07:19	10h 17m	17:37	35m	18:12	37m	18:49	37m	19:27	13h 40m	10h 01m				Sa, 18. Feb
So, 19. Feb		19:28 – 05:26*	9h 57m	AN+ bis AN–		07:26	16:20	05:28	37m	06:05	36m	06:42	35m	07:17	10h 21m	17:38	35m	18:14	37m	18:51	37m	19:28	13h 36m	9h 57m				So, 19. Feb

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

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

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

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.	↗	↘	Astr.	Δt	Naut.	Δt	Bürg.	Δt	↗	Δt	↘	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Do, 20. Jul	MESZ	00:25* – 02:16*	1h 51m	AN+ bis AN−		07:46	22:55	02:11	1h 34m	03:45	56m	04:42	44m	05:26	15h 47m	21:14	44m	21:58	56m	22:54	1h 30m	00:25*	8h 13m	1h 51m				Do, 20. Jul
Fr, 21. Jul	MESZ	00:20* – 02:21*	2h 01m	AN+ bis AN−		08:56	23:09	02:16	1h 30m	03:47	56m	04:43	44m	05:27	15h 45m	21:12	43m	21:56	55m	22:52	1h 27m	00:20*	8h 15m	2h 01m				Fr, 21. Jul
Sa, 22. Jul	MESZ	00:15* – 02:25*	2h 10m	AN+ bis AN−		10:05	23:21	02:21	1h 27m	03:49	55m	04:45	43m	05:28	15h 42m	21:11	43m	21:55	55m	22:50	1h 25m	00:15*	8h 18m	2h 10m				Sa, 22. Jul
So, 23. Jul	MESZ	00:11* – 02:30*	2h 18m	AN+ bis AN−		11:13	23:33	02:25	1h 25m	03:51	55m	04:46	43m	05:30	15h 40m	21:10	43m	21:53	54m	22:48	1h 22m	00:11*	8h 20m	2h 18m				So, 23. Jul
Mo, 24. Jul	MESZ	00:07* – 02:34*	2h 27m	AN+ bis AN−		12:22	23:45	02:30	1h 22m	03:53	54m	04:48	43m	05:31	15h 37m	21:09	43m	21:52	54m	22:46	1h 20m	00:07*	8h 23m	2h 27m				Mo, 24. Jul
Di, 25. Jul	MESZ	00:03* – 02:38*	2h 35m	AN+ bis AN−		13:34	23:59	02:34	1h 20m	03:55	54m	04:49	43m	05:32	15h 35m	21:07	42m	21:50	53m	22:44	1h 18m	00:03*	8h 26m	2h 35m				Di, 25. Jul
Mi, 26. Jul	MESZ	00:16* – 02:42*	2h 26m	M↘ bis AN−	◐	14:49	—:—	02:38	1h 18m	03:57	53m	04:51	42m	05:34	15h 32m	21:06	42m	21:49	53m	22:42	1h 16m	23:59	8h 28m	2h 43m				Mi, 26. Jul
Do, 27. Jul	MESZ	00:38* – 02:46*	2h 07m	M↘ bis AN−		16:09	00:16	02:42	1h 16m	03:59	53m	04:52	42m	05:35	15h 29m	21:05	42m	21:47	52m	22:40	1h 14m	23:55	8h 31m	2h 51m				Do, 27. Jul
Fr, 28. Jul	MESZ	01:10* – 02:50*	1h 39m	M↘ bis AN−		17:30	00:38	02:46	1h 14m	04:01	52m	04:54	42m	05:36	15h 27m	21:03	42m	21:46	52m	22:38	1h 13m	23:51	8h 34m	2h 58m				Fr, 28. Jul
Sa, 29. Jul	MESZ	01:57* – 02:53*	56m	M↘ bis AN−		18:50	01:10	02:50	1h 13m	04:03	52m	04:55	42m	05:38	15h 24m	21:02	41m	21:44	51m	22:36	1h 11m	23:47	8h 37m	3h 06m				Sa, 29. Jul
So, 30. Jul	MESZ	—:— – —:—	–	Mond stört		19:58	01:57	02:53	1h 11m	04:05	51m	04:57	41m	05:39	15h 21m	21:00	41m	21:42	51m	22:34	1h 10m	23:44	8h 39m	3h 13m				So, 30. Jul
Mo, 31. Jul	MESZ	—:— – —:—	–	Mond stört		20:51	03:03	02:57	1h 10m	04:07	51m	04:59	41m	05:40	15h 18m	20:59	41m	21:40	50m	22:31	1h 08m	23:40	8h 42m	3h 20m				Mo, 31. Jul
Di, 1. Aug	MESZ	—:— – —:—	–	Mond stört	○	21:28	04:27	03:01	1h 08m	04:09	50m	05:00	41m	05:42	15h 15m	20:57	41m	21:39	50m	22:29	1h 07m	23:37	8h 45m	3h 27m				Di, 1. Aug
Mi, 2. Aug	MESZ	—:— – —:—	–	Mond stört		21:54	06:00	03:04	1h 07m	04:11	50m	05:02	41m	05:43	15h 12m	20:56	41m	21:37	50m	22:27	1h 06m	23:33	8h 48m	3h 34m				Mi, 2. Aug
Do, 3. Aug	MESZ	—:— – —:—	–	Mond stört		22:14	07:33	03:07	1h 06m	04:13	50m	05:03	41m	05:45	15h 09m	20:54	40m	21:35	49m	22:25	1h 04m	23:30	8h 51m	3h 40m				Do, 3. Aug
Fr, 4. Aug	MESZ	—:— – —:—	–	Mond stört		22:31	09:04	03:11	1h 04m	04:16	49m	05:05	40m	05:46	15h 06m	20:53	40m	21:33	49m	22:22	1h 03m	23:26	8h 54m	3h 47m				Fr, 4. Aug
Sa, 5. Aug	MESZ	—:— – —:—	–	Mond stört		22:45	10:30	03:14	1h 03m	04:18	49m	05:07	40m	05:47	15h 03m	20:51	40m	21:31	48m	22:20	1h 02m	23:23	8h 57m	3h 54m				Sa, 5. Aug
So, 6. Aug	MESZ	—:— – —:—	–	Mond stört		23:00	11:53	03:17	1h 02m	04:20	48m	05:08	40m	05:49	15h 00m	20:49	40m	21:30	48m	22:18	1h 01m	23:20	9h 00m	4h 00m				So, 6. Aug
Mo, 7. Aug	MESZ	23:16 – 23:17	0m	AN+ bis M↗		23:17	13:15	03:20	1h 01m	04:22	48m	05:10	40m	05:50	14h 57m	20:48	40m	21:28	47m	22:16	1h 00m	23:16	9h 04m	4h 06m				Mo, 7. Aug
Di, 8. Aug	MESZ	23:13 – 23:36	23m	AN+ bis M↗	◑	23:36	14:35	03:23	1h 00m	04:24	47m	05:12	40m	05:52	14h 54m	20:46	39m	21:26	47m	22:13	59m	23:13	9h 07m	4h 13m				Di, 8. Aug
Mi, 9. Aug	MESZ	23:10 – 00:01*	51m	AN+ bis M↗		—:—	15:54	03:26	59m	04:26	47m	05:13	39m	05:53	14h 50m	20:44	39m	21:24	47m	22:11	58m	23:10	9h 10m	4h 19m				Mi, 9. Aug
Do, 10. Aug	MESZ	23:06 – 00:34*	1h 27m	AN+ bis M↗		00:01	17:08	03:29	58m	04:28	47m	05:15	39m	05:55	14h 47m	20:42	39m	21:22	46m	22:09	57m	23:06	9h 13m	4h 25m				Do, 10. Aug
Fr, 11. Aug	MESZ	23:03 – 01:17*	2h 13m	AN+ bis M↗		00:34	18:14	03:32	57m	04:30	46m	05:17	39m	05:56	14h 44m	20:41	39m	21:20	46m	22:06	56m	23:03	9h 17m	4h 31m				Fr, 11. Aug
Sa, 12. Aug	MESZ	23:00 – 02:12*	3h 11m	AN+ bis M↗		01:17	19:09	03:35	57m	04:32	46m	05:18	39m	05:58	14h 41m	20:39	38m	21:18	46m	22:04	56m	23:00	9h 20m	4h 37m				Sa, 12. Aug
So, 13. Aug	MESZ	22:57 – 03:16*	4h 18m	AN+ bis M↗		02:12	19:50	03:38	56m	04:34	46m	05:20	39m	05:59	14h 37m	20:37	38m	21:16	45m	22:02	55m	22:57	9h 23m	4h 43m				So, 13. Aug
Mo, 14. Aug	MESZ	22:54 – 03:43*	4h 49m	AN+ bis AN−		03:16	20:21	03:41	55m	04:36	45m	05:22	38m	06:01	14h 34m	20:35	38m	21:14	45m	21:59	54m	22:54	9h 26m	4h 49m				Mo, 14. Aug
Di, 15. Aug	MESZ	22:51 – 03:46*	4h 55m	AN+ bis AN−		04:25	20:44	03:43	54m	04:38	45m	05:24	38m	06:02	14h 31m	20:33	38m	21:12	45m	21:57	53m	22:51	9h 30m	4h 55m				Di, 15. Aug
Mi, 16. Aug	MESZ	22:48 – 03:49*	5h 01m	AN+ bis AN−	●	05:36	21:02	03:46	53m	04:40	45m	05:25	38m	06:04	14h 27m	20:31	38m	21:10	44m	21:54	53m	22:48	9h 33m	5h 01m				Mi, 16. Aug
Do, 17. Aug	MESZ	22:44 – 03:52*	5h 07m	AN+ bis AN−		06:46	21:16	03:49	53m	04:42	44m	05:27	38m	06:05	14h 24m	20:29	38m	21:08	44m	21:52	52m	22:44	9h 37m	5h 07m				Do, 17. Aug
Fr, 18. Aug	MESZ	22:41 – 03:54*	5h 12m	AN+ bis AN−		07:56	21:29	03:52	52m	04:44	44m	05:29	38m	06:07	14h 20m	20:28	37m	21:05	44m	21:50	51m	22:41	9h 40m	5h 12m				Fr, 18. Aug
Sa, 19. Aug	MESZ	22:38 – 03:57*	5h 18m	AN+ bis AN−		09:04	21:40	03:54	51m	04:46	44m	05:30	37m	06:08	14h 17m	20:26	37m	21:03	43m	21:47	51m	22:38	9h 44m	5h 18m				Sa, 19. Aug
So, 20. Aug	MESZ	22:35 – 03:59*	5h 23m	AN+ bis AN−		10:13	21:52	03:57	51m	04:48	43m	05:32	37m	06:10	14h 14m	20:24	37m	21:01	43m	21:45	50m	22:35	9h 47m	5h 23m				So, 20. Aug
Mo, 21. Aug	MESZ	22:32 – 04:02*	5h 29m	AN+ bis AN−		11:23	22:05	03:59	50m	04:50	43m	05:34	37m	06:11	14h 10m	20:22	37m	20:59	43m	21:42	50m	22:32	9h 50m	5h 29m				Mo, 21. Aug
Di, 22. Aug	MESZ	22:29 – 04:04*	5h 34m	AN+ bis AN−		12:36	22:20	04:02	50m	04:52	43m	05:35	37m	06:13	14h 07m	20:20	37m	20:57	42m	21:40	49m	22:29	9h 54m	5h 34m				Di, 22. Aug
Mi, 23. Aug	MESZ	22:39 – 04:07*	5h 27m	M↘ bis AN−		13:52	22:39	04:04	49m	04:54	42m	05:37	37m	06:14	14h 03m	20:18	37m	20:55	42m	21:37	49m	22:26	9h 57m	5h 40m				Mi, 23. Aug
Do, 24. Aug	MESZ	23:06 – 04:09*	5h 03m	M↘ bis AN−	◐	15:11	23:06	04:07	49m	04:56	42m	05:39	37m	06:16	13h 59m	20:16	36m	20:53	42m	21:35	48m	22:23	10h 01m	5h 45m				Do, 24. Aug
Fr, 25. Aug	MESZ	23:45 – 04:12*	4h 26m	M↘ bis AN−		16:30	23:45	04:09	48m	04:58	42m	05:40	36m	06:17	13h 56m	20:14	36m	20:50	42m	21:32	48m	22:20	10h 05m	5h 51m				Fr, 25. Aug
Sa, 26. Aug	MESZ	00:40* – 04:14*	3h 34m	M↘ bis AN−		17:42	—:—	04:12	48m	05:00	42m	05:42	36m	06:19	13h 52m	20:12	36m	20:48	41m	21:30	47m	22:18	10h 08m	5h 56m				Sa, 26. Aug
So, 27. Aug	MESZ	01:54* – 04:16*	2h 22m	M↘ bis AN−		18:40	00:40	04:14	47m	05:02	41m	05:43	36m	06:20	13h 49m	20:09	36m	20:46	41m	21:28	47m	22:15	10h 12m	6h 01m				So, 27. Aug
Mo, 28. Aug	MESZ	03:22* – 04:19*	56m	M↘ bis AN−		19:23	01:54	04:16	47m	05:03	41m	05:45	36m	06:22	13h 45m	20:07	36m	20:44	41m	21:25	46m	22:12	10h 15m	6h 06m				Mo, 28. Aug
Di, 29. Aug	MESZ	—:— – —:—	–	Mond stört		19:53	03:22	04:19	46m	05:05	41m	05:47	36m	06:23	13h 42m	20:05	36m	20:42	41m	21:23	46m	22:09	10h 19m	6h 12m				Di, 29. Aug
Mi, 30. Aug	MESZ	—:— – —:—	–	Mond stört		20:16	04:56	04:21	46m	05:07	41m	05:48	36m	06:25	13h 38m	20:03	36m	20:39	40m	21:20	45m	22:06	10h 22m	6h 17m				Mi, 30. Aug
Do, 31. Aug	MESZ	—:— – —:—	–	Mond stört	○	20:34	06:29	04:23	45m	05:09	40m	05:50	36m	06:26	13h 34m	20:01	35m	20:37	40m	21:18	45m	22:03	10h 26m	6h 22m				Do, 31. Aug
Fr, 1. Sep	MESZ	—:— – —:—	–	Mond stört		20:49	07:59	04:25	45m	05:11	40m	05:52	36m	06:28	13h 31m	19:59	35m	20:35	40m	21:15	45m	22:00	10h 30m	6h 27m				Fr, 1. Sep
Sa, 2. Sep	MESZ	—:— – —:—	–	Mond stört		21:04	09:27	04:28	45m	05:13	40m	05:53	35m	06:29	13h 27m	19:57	35m	20:33	40m	21:13	44m	21:58	10h 33m	6h 32m				Sa, 2. Sep
So, 3. Sep	MESZ	—:— – —:—	–	Mond stört		21:20	10:52	04:30	44m	05:14	40m	05:55	35m	06:31	13h 24m	19:55	35m	20:30	40m	21:10	44m	21:55	10h 37m	6h 37m				So, 3. Sep
Mo, 4. Sep	MESZ	—:— – —:—	–	Mond stört		21:39	12:16	04:32	44m	05:16	40m	05:56	35m	06:32	13h 20m	19:53	35m	20:28	39m	21:08	44m	21:52	10h 41m	6h 42m				Mo, 4. Sep
Di, 5. Sep	MESZ	21:49 – 22:02	12m	AN+ bis M↗		22:02	13:38	04:34	44m	05:18	39m	05:58	35m	06:34	13h 16m	19:50	35m	20:26	39m	21:05	43m	21:49	10h 44m	6h 46m				Di, 5. Sep
Mi, 6. Sep	MESZ	21:46 – 22:32	45m	AN+ bis M↗		22:32	14:57	04:36	43m	05:20	39m	06:00	35m	06:35	13h 13m	19:48	35m	20:24	39m	21:03	43m	21:46	10h 48m	6h 51m				Mi, 6. Sep
Do, 7. Sep	MESZ	21:44 – 23:12	1h 28m	AN+ bis M↗	◑	23:12	16:07	04:38	43m	05:22	39m	06:01	35m	06:37	13h 09m	19:46	35m	20:21	39m	21:01	43m	21:44	10h 52m	6h 56m				Do, 7. Sep

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

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.	↗	↘	Astr.	Δt	Naut.	Δt	Bürg.	Δt	↗	Δt	↘	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Sa, 28. Okt	MESZ	—:——:—	–	Mond stört	○	17:43	07:14	06:05	37m	06:43	37m	07:20	35m	07:56	10h 02m	17:58	35m	18:34	37m	19:11	37m	19:49	13h 59m	10h 18m				Sa, 28. Okt
So, 29. Okt		—:——:—	–	Mond stört		17:02	07:41	05:07	37m	05:44	37m	06:22	35m	06:58	9h 58m	16:56	35m	17:32	37m	18:10	37m	18:47	14h 02m	10h 21m				So, 29. Okt
Mo, 30. Okt		—:——:—	–	Mond stört		17:27	09:06	05:08	37m	05:46	37m	06:23	35m	06:59	9h 55m	16:55	35m	17:31	37m	18:08	37m	18:45	14h 06m	10h 24m				Mo, 30. Okt
Di, 31. Okt		—:——:—	–	Mond stört		17:59	10:29	05:10	37m	05:47	37m	06:25	36m	07:01	9h 52m	16:53	35m	17:29	37m	18:06	37m	18:44	14h 09m	10h 27m				Di, 31. Okt
Mi, 1. Nov		18:42 – 18:43	0m	AN+ bis M↗		18:43	11:42	05:11	37m	05:49	37m	06:26	36m	07:03	9h 48m	16:51	36m	17:27	37m	18:05	37m	18:42	14h 13m	10h 30m				Mi, 1. Nov
Do, 2. Nov		18:41 – 19:39	58m	AN+ bis M↗		19:39	12:41	05:13	37m	05:50	37m	06:28	36m	07:04	9h 45m	16:50	36m	17:26	37m	18:03	37m	18:41	14h 16m	10h 33m				Do, 2. Nov
Fr, 3. Nov		18:39 – 20:45	2h 05m	AN+ bis M↗		20:45	13:26	05:14	37m	05:52	37m	06:30	36m	07:06	9h 41m	16:48	36m	17:24	37m	18:02	37m	18:39	14h 19m	10h 36m				Fr, 3. Nov
Sa, 4. Nov		18:38 – 21:56	3h 17m	AN+ bis M↗		21:56	13:58	05:16	37m	05:53	37m	06:31	36m	07:08	9h 38m	16:46	36m	17:23	37m	18:00	37m	18:38	14h 23m	10h 39m				Sa, 4. Nov
So, 5. Nov		18:36 – 23:07	4h 30m	AN+ bis M↗	◑	23:07	14:21	05:17	37m	05:55	37m	06:33	36m	07:09	9h 35m	16:45	36m	17:21	37m	17:59	37m	18:36	14h 26m	10h 42m				So, 5. Nov
Mo, 6. Nov		18:35 – 00:18*	5h 43m	AN+ bis M↗		—:—	14:39	05:19	37m	05:56	37m	06:34	36m	07:11	9h 32m	16:43	36m	17:20	37m	17:57	37m	18:35	14h 29m	10h 44m				Mo, 6. Nov
Di, 7. Nov		18:34 – 01:28*	6h 54m	AN+ bis M↗		00:18	14:53	05:20	37m	05:58	37m	06:36	36m	07:13	9h 28m	16:41	36m	17:18	37m	17:56	37m	18:34	14h 32m	10h 47m				Di, 7. Nov
Mi, 8. Nov		18:33 – 02:37*	8h 04m	AN+ bis M↗		01:28	15:05	05:22	37m	05:59	38m	06:37	36m	07:14	9h 25m	16:40	36m	17:17	37m	17:55	37m	18:33	14h 36m	10h 50m				Mi, 8. Nov
Do, 9. Nov		18:31 – 03:46*	9h 15m	AN+ bis M↗		02:37	15:17	05:23	37m	06:01	38m	06:39	37m	07:16	9h 22m	16:38	37m	17:15	38m	17:53	37m	18:31	14h 39m	10h 53m				Do, 9. Nov
Fr, 10. Nov		18:30 – 04:58*	10h 27m	AN+ bis M↗		03:46	15:28	05:24	37m	06:02	38m	06:40	37m	07:18	9h 19m	16:37	37m	17:14	38m	17:52	37m	18:30	14h 42m	10h 55m				Fr, 10. Nov
Sa, 11. Nov		18:29 – 05:27*	10h 58m	AN+ bis AN−		04:58	15:41	05:26	37m	06:04	38m	06:42	37m	07:19	9h 16m	16:35	37m	17:13	38m	17:51	37m	18:29	14h 45m	10h 58m				Sa, 11. Nov
So, 12. Nov		18:28 – 05:29*	11h 00m	AN+ bis AN−		06:13	15:56	05:27	37m	06:05	38m	06:43	37m	07:21	9h 13m	16:34	37m	17:11	38m	17:50	37m	18:28	14h 48m	11h 00m				So, 12. Nov
Mo, 13. Nov		18:27 – 05:30*	11h 03m	AN+ bis AN−	●	07:31	16:16	05:29	38m	06:07	38m	06:45	37m	07:23	9h 10m	16:33	37m	17:10	38m	17:49	37m	18:27	14h 51m	11h 03m				Mo, 13. Nov
Di, 14. Nov		18:26 – 05:31*	11h 05m	AN+ bis AN−		08:51	16:43	05:30	38m	06:08	38m	06:47	37m	07:24	9h 07m	16:31	37m	17:09	38m	17:47	38m	18:26	14h 54m	11h 05m				Di, 14. Nov
Mi, 15. Nov		18:24 – 05:33*	11h 08m	AN+ bis AN−		10:10	17:22	05:31	38m	06:09	38m	06:48	37m	07:26	9h 04m	16:30	37m	17:08	38m	17:46	38m	18:24	14h 57m	11h 08m				Mi, 15. Nov
Do, 16. Nov		18:23 – 05:34*	11h 10m	AN+ bis AN−		11:20	18:16	05:33	38m	06:11	38m	06:50	37m	07:27	9h 01m	16:29	37m	17:07	38m	17:45	38m	18:23	15h 00m	11h 10m				Do, 16. Nov
Fr, 17. Nov		19:26 – 05:35*	10h 09m	M↘ bis AN−		12:16	19:26	05:34	38m	06:12	38m	06:51	38m	07:29	8h 58m	16:28	38m	17:06	38m	17:44	38m	18:23	15h 03m	11h 12m				Fr, 17. Nov
Sa, 18. Nov		20:48 – 05:37*	8h 48m	M↘ bis AN−		12:57	20:48	05:35	38m	06:14	38m	06:52	38m	07:31	8h 55m	16:26	38m	17:05	38m	17:43	38m	18:22	15h 05m	11h 15m				Sa, 18. Nov
So, 19. Nov		22:15 – 05:38*	7h 23m	M↘ bis AN−		13:26	22:15	05:37	38m	06:15	38m	06:54	38m	07:32	8h 53m	16:25	38m	17:04	38m	17:42	38m	18:21	15h 08m	11h 17m				So, 19. Nov
Mo, 20. Nov		23:41 – 05:39*	5h 58m	M↘ bis AN−	◐	13:47	23:41	05:38	38m	06:16	39m	06:55	38m	07:34	8h 50m	16:24	38m	17:03	39m	17:42	38m	18:20	15h 11m	11h 19m				Mo, 20. Nov
Di, 21. Nov		01:05* – 05:41*	4h 35m	M↘ bis AN−		14:04	—:—	05:39	38m	06:18	39m	06:57	38m	07:35	8h 47m	16:23	38m	17:02	39m	17:41	38m	18:19	15h 13m	11h 21m				Di, 21. Nov
Mi, 22. Nov		02:28* – 05:42*	3h 13m	M↘ bis AN−		14:19	01:05	05:41	38m	06:19	39m	06:58	38m	07:37	8h 45m	16:22	38m	17:01	39m	17:40	38m	18:18	15h 16m	11h 23m				Mi, 22. Nov
Do, 23. Nov		03:51* – 05:43*	1h 52m	M↘ bis AN−		14:33	02:28	05:42	38m	06:20	39m	07:00	38m	07:38	8h 42m	16:21	38m	17:00	39m	17:39	38m	18:18	15h 18m	11h 25m				Do, 23. Nov
Fr, 24. Nov		05:14* – 05:44*	30m	M↘ bis AN−		14:48	03:51	05:43	38m	06:22	39m	07:01	38m	07:40	8h 40m	16:20	38m	16:59	39m	17:38	38m	18:17	15h 21m	11h 27m				Fr, 24. Nov
Sa, 25. Nov		—:——:—	–	Mond stört		15:05	05:14	05:44	38m	06:23	39m	07:02	39m	07:41	8h 37m	16:19	39m	16:58	39m	17:38	38m	18:16	15h 23m	11h 29m				Sa, 25. Nov
So, 26. Nov		—:——:—	–	Mond stört		15:27	06:39	05:45	38m	06:24	39m	07:04	39m	07:43	8h 35m	16:18	39m	16:58	39m	17:37	38m	18:16	15h 25m	11h 30m				So, 26. Nov
Mo, 27. Nov		—:——:—	–	Mond stört	○	15:55	08:02	05:47	38m	06:25	39m	07:05	39m	07:44	8h 33m	16:18	39m	16:57	39m	17:37	38m	18:15	15h 28m	11h 32m				Mo, 27. Nov
Di, 28. Nov		—:——:—	–	Mond stört		16:34	09:20	05:48	38m	06:27	39m	07:06	39m	07:46	8h 31m	16:17	39m	16:56	39m	17:36	38m	18:15	15h 30m	11h 34m				Di, 28. Nov
Mi, 29. Nov		—:——:—	–	Mond stört		17:25	10:27	05:49	38m	06:28	39m	07:08	39m	07:47	8h 28m	16:16	39m	16:56	39m	17:35	38m	18:14	15h 32m	11h 35m				Mi, 29. Nov
Do, 30. Nov		18:14 – 18:27	13m	AN+ bis M↗		18:27	11:18	05:50	38m	06:29	39m	07:09	39m	07:49	8h 26m	16:16	39m	16:55	39m	17:35	38m	18:14	15h 34m	11h 37m				Do, 30. Nov
Fr, 1. Dez		18:13 – 19:37	1h 23m	AN+ bis M↗		19:37	11:56	05:51	38m	06:30	39m	07:10	39m	07:50	8h 24m	16:15	39m	16:55	39m	17:35	38m	18:13	15h 36m	11h 38m				Fr, 1. Dez
Sa, 2. Dez		18:13 – 20:50	2h 36m	AN+ bis M↗		20:50	12:23	05:52	39m	06:31	40m	07:11	39m	07:51	8h 23m	16:14	39m	16:54	39m	17:34	38m	18:13	15h 38m	11h 40m				Sa, 2. Dez
So, 3. Dez		18:13 – 22:02	3h 48m	AN+ bis M↗		22:02	12:43	05:53	39m	06:33	40m	07:13	39m	07:53	8h 21m	16:14	39m	16:54	40m	17:34	39m	18:13	15h 39m	11h 41m				So, 3. Dez
Mo, 4. Dez		18:13 – 23:12	4h 59m	AN+ bis M↗		23:12	12:58	05:55	39m	06:34	40m	07:14	40m	07:54	8h 19m	16:13	40m	16:53	40m	17:34	39m	18:13	15h 41m	11h 42m				Mo, 4. Dez
Di, 5. Dez		18:12 – 00:20*	6h 08m	AN+ bis M↗	◑	—:—	13:11	05:56	39m	06:35	40m	07:15	40m	07:55	8h 17m	16:13	40m	16:53	40m	17:33	39m	18:12	15h 43m	11h 44m				Di, 5. Dez
Mi, 6. Dez		18:12 – 01:29*	7h 16m	AN+ bis M↗		00:20	13:23	05:57	39m	06:36	40m	07:16	40m	07:56	8h 16m	16:13	40m	16:53	40m	17:33	39m	18:12	15h 44m	11h 45m				Mi, 6. Dez
Do, 7. Dez		18:12 – 02:39*	8h 26m	AN+ bis M↗		01:29	13:34	05:58	39m	06:37	40m	07:17	40m	07:57	8h 14m	16:12	40m	16:53	40m	17:33	39m	18:12	15h 46m	11h 46m				Do, 7. Dez
Fr, 8. Dez		18:12 – 03:51*	9h 39m	AN+ bis M↗		02:39	13:46	05:58	39m	06:38	40m	07:18	40m	07:59	8h 13m	16:12	40m	16:52	40m	17:33	39m	18:12	15h 47m	11h 47m				Fr, 8. Dez
Sa, 9. Dez		18:12 – 05:08*	10h 55m	AN+ bis M↗		03:51	14:00	05:59	39m	06:39	40m	07:19	40m	08:00	8h 12m	16:12	40m	16:52	40m	17:33	39m	18:12	15h 48m	11h 48m				Sa, 9. Dez
So, 10. Dez		18:12 – 06:01*	11h 49m	AN+ bis AN−		05:08	14:18	06:00	39m	06:40	40m	07:20	40m	08:01	8h 11m	16:12	40m	16:52	40m	17:33	39m	18:12	15h 49m	11h 49m				So, 10. Dez
Mo, 11. Dez		18:12 – 06:02*	11h 49m	AN+ bis AN−		06:28	14:42	06:01	39m	06:41	40m	07:21	40m	08:02	8h 09m	16:12	40m	16:52	40m	17:33	39m	18:12	15h 51m	11h 49m				Mo, 11. Dez
Di, 12. Dez		18:12 – 06:03*	11h 50m	AN+ bis AN−		07:49	15:16	06:02	39m	06:41	40m	07:22	40m	08:03	8h 08m	16:12	40m	16:52	40m	17:33	39m	18:12	15h 51m	11h 50m				Di, 12. Dez
Mi, 13. Dez		18:12 – 06:04*	11h 51m	AN+ bis AN−	●	09:05	16:05	06:03	39m	06:42	40m	07:23	40m	08:04	8h 08m	16:12	40m	16:52	40m	17:33	39m	18:12	15h 52m	11h 51m				Mi, 13. Dez
Do, 14. Dez		18:13 – 06:04*	11h 51m	AN+ bis AN−		10:08	17:11	06:04	39m	06:43	40m	07:24	40m	08:04	8h 07m	16:12	40m	16:52	40m	17:33	39m	18:13	15h 53m	11h 51m				Do, 14. Dez
Fr, 15. Dez		18:32 – 06:05*	11h 32m	M↘ bis AN−		10:55	18:32	06:04	39m	06:44	40m	07:25	40m	08:05	8h 06m	16:12	40m	16:53	40m	17:33	39m	18:13	15h 54m	11h 52m				Fr, 15. Dez
Sa, 16. Dez		20:00 – 06:06*	10h 05m	M↘ bis AN−		11:29	20:00	06:05	39m	06:45	40m	07:25	40m	08:06	8h 05m	16:12	40m	16:53	40m	17:34	39m	18:13	15h 54m	11h 52m				Sa, 16. Dez

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