Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Châlons-en-Champagne 48.9575° N 4.3650° 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
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.	↗	↘	Astr.	Δt	Naut.	Δt	Bürg.	Δt	↗	Δt	↘	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Mo, 1. Jan		18:53 – 22:37	3h 44m	AN_+ bis $M_↗$		22:37	11:44	06:38	38m	07:17	39m	07:56	39m	08:36	8h 19m	16:55	39m	17:35	39m	18:14	38m	18:53	15h 40m	11h 45m				Mo, 1. Jan
Di, 2. Jan		18:53 – 23:43	4h 50m	AN_+ bis $M_↗$		23:43	11:57	06:38	38m	07:17	39m	07:56	39m	08:35	8h 20m	16:56	39m	17:36	39m	18:15	38m	18:53	15h 39m	11h 44m				Di, 2. Jan
Mi, 3. Jan		18:54 – 00:50*	5h 56m	AN_+ bis $M_↗$		—:—	12:09	06:38	38m	07:17	39m	07:56	39m	08:35	8h 21m	16:57	39m	17:37	39m	18:16	38m	18:54	15h 37m	11h 44m				Mi, 3. Jan
Do, 4. Jan		18:55 – 01:59*	7h 03m	AN_+ bis $M_↗$	◑	00:50	12:22	06:38	38m	07:17	39m	07:56	39m	08:35	8h 23m	16:58	39m	17:38	39m	18:17	38m	18:55	15h 36m	11h 43m				Do, 4. Jan
Fr, 5. Jan		18:56 – 03:11*	8h 14m	AN_+ bis $M_↗$		01:59	12:35	06:38	38m	07:17	39m	07:56	39m	08:35	8h 24m	17:00	39m	17:39	39m	18:18	38m	18:56	15h 35m	11h 42m				Fr, 5. Jan
Sa, 6. Jan		18:57 – 04:27*	9h 29m	AN_+ bis $M_↗$		03:11	12:52	06:38	38m	07:17	39m	07:56	38m	08:35	8h 25m	17:01	39m	17:40	39m	18:19	38m	18:57	15h 33m	11h 41m				Sa, 6. Jan
So, 7. Jan		18:58 – 05:45*	10h 47m	AN_+ bis $M_↗$		04:27	13:14	06:38	38m	07:16	39m	07:56	38m	08:35	8h 27m	17:02	38m	17:41	39m	18:20	38m	18:58	15h 32m	11h 39m				So, 7. Jan
Mo, 8. Jan		18:59 – 06:38*	11h 38m	AN_+ bis AN_-		05:45	13:44	06:38	38m	07:16	39m	07:55	38m	08:34	8h 28m	17:03	38m	17:42	39m	18:21	38m	18:59	15h 30m	11h 38m				Mo, 8. Jan
Di, 9. Jan		19:00 – 06:38*	11h 37m	AN_+ bis AN_-		07:03	14:27	06:38	38m	07:16	39m	07:55	38m	08:34	8h 30m	17:04	38m	17:43	39m	18:22	38m	19:00	15h 29m	11h 37m				Di, 9. Jan
Mi, 10. Jan		19:01 – 06:37*	11h 36m	AN_+ bis AN_-		08:13	15:26	06:38	38m	07:16	38m	07:55	38m	08:33	8h 32m	17:06	38m	17:44	38m	18:23	38m	19:01	15h 27m	11h 36m				Mi, 10. Jan
Do, 11. Jan		19:02 – 06:37*	11h 34m	AN_+ bis AN_-	●	09:09	16:43	06:37	38m	07:15	38m	07:54	38m	08:33	8h 33m	17:07	38m	17:45	38m	18:24	38m	19:02	15h 25m	11h 34m				Do, 11. Jan
Fr, 12. Jan		19:04 – 06:37*	11h 33m	AN_+ bis AN_-		09:50	18:10	06:37	37m	07:15	38m	07:54	38m	08:32	8h 35m	17:08	38m	17:47	38m	18:26	38m	19:04	15h 23m	11h 33m				Fr, 12. Jan
Sa, 13. Jan		19:40 – 06:36*	10h 56m	$M_↘$ bis AN_-		10:19	19:40	06:37	37m	07:15	38m	07:53	38m	08:32	8h 37m	17:10	38m	17:48	38m	18:27	37m	19:05	15h 21m	11h 31m				Sa, 13. Jan
So, 14. Jan		21:08 – 06:36*	9h 27m	$M_↘$ bis AN_-		10:41	21:08	06:36	37m	07:14	38m	07:53	38m	08:31	8h 39m	17:11	38m	17:49	38m	18:28	37m	19:06	15h 19m	11h 30m				So, 14. Jan
Mo, 15. Jan		22:33 – 06:35*	8h 02m	$M_↘$ bis AN_-		10:59	22:33	06:36	37m	07:14	38m	07:52	38m	08:31	8h 41m	17:12	38m	17:51	38m	18:29	37m	19:07	15h 17m	11h 28m				Mo, 15. Jan
Di, 16. Jan		23:55 – 06:35*	6h 40m	$M_↘$ bis AN_-		11:15	23:55	06:35	37m	07:13	38m	07:52	38m	08:30	8h 43m	17:14	38m	17:52	38m	18:30	37m	19:08	15h 15m	11h 26m				Di, 16. Jan
Mi, 17. Jan		01:16* – 06:34*	5h 18m	$M_↘$ bis AN_-		11:31	—:—	06:35	37m	07:13	38m	07:51	37m	08:29	8h 46m	17:15	37m	17:53	38m	18:32	37m	19:09	15h 13m	11h 25m				Mi, 17. Jan
Do, 18. Jan		02:36* – 06:34*	3h 57m	$M_↘$ bis AN_-	◐	11:48	01:16	06:34	37m	07:12	38m	07:50	37m	08:28	8h 48m	17:17	37m	17:55	38m	18:33	37m	19:11	15h 10m	11h 23m				Do, 18. Jan
Fr, 19. Jan		03:57* – 06:33*	2h 36m	$M_↘$ bis AN_-		12:07	02:36	06:34	37m	07:11	38m	07:50	37m	08:27	8h 50m	17:18	37m	17:56	38m	18:34	37m	19:12	15h 08m	11h 21m				Fr, 19. Jan
Sa, 20. Jan		05:14* – 06:33*	1h 18m	$M_↘$ bis AN_-		12:31	03:57	06:33	37m	07:11	38m	07:49	37m	08:27	8h 53m	17:20	37m	17:57	38m	18:36	37m	19:13	15h 05m	11h 19m				Sa, 20. Jan
So, 21. Jan		06:25* – 06:32*	6m	$M_↘$ bis AN_-		13:03	05:14	06:33	37m	07:10	38m	07:48	37m	08:26	8h 55m	17:21	37m	17:59	38m	18:37	37m	19:14	15h 03m	11h 17m				So, 21. Jan
Mo, 22. Jan		—:——:—	–	Mond stört		13:45	06:25	06:32	37m	07:09	38m	07:47	37m	08:25	8h 58m	17:23	37m	18:00	38m	18:38	37m	19:16	15h 00m	11h 15m				Mo, 22. Jan
Di, 23. Jan		—:——:—	–	Mond stört		14:39	07:26	06:31	37m	07:08	37m	07:46	37m	08:24	9h 00m	17:24	37m	18:02	37m	18:40	37m	19:17	14h 58m	11h 13m				Di, 23. Jan
Mi, 24. Jan		—:——:—	–	Mond stört		15:43	08:13	06:30	37m	07:08	37m	07:46	37m	08:23	9h 03m	17:26	37m	18:03	37m	18:41	37m	19:18	14h 55m	11h 11m				Mi, 24. Jan
Do, 25. Jan		—:——:—	–	Mond stört	○	16:53	08:48	06:29	37m	07:07	37m	07:45	36m	08:22	9h 05m	17:27	36m	18:04	37m	18:42	37m	19:20	14h 52m	11h 08m				Do, 25. Jan
Fr, 26. Jan		—:——:—	–	Mond stört		18:05	09:14	06:29	37m	07:06	37m	07:44	36m	08:20	9h 08m	17:29	36m	18:06	37m	18:44	37m	19:21	14h 50m	11h 06m				Fr, 26. Jan
Sa, 27. Jan		—:——:—	–	Mond stört		19:16	09:34	06:28	37m	07:05	37m	07:42	36m	08:19	9h 11m	17:31	36m	18:07	37m	18:45	37m	19:22	14h 47m	11h 04m				Sa, 27. Jan
So, 28. Jan		19:24 – 20:24	1h 00m	AN_+ bis $M_↗$		20:24	09:49	06:27	37m	07:04	37m	07:41	36m	08:18	9h 14m	17:32	36m	18:09	37m	18:46	37m	19:24	14h 44m	11h 02m				So, 28. Jan
Mo, 29. Jan		19:25 – 21:31	2h 06m	AN_+ bis $M_↗$		21:31	10:03	06:26	37m	07:03	37m	07:40	36m	08:17	9h 17m	17:34	36m	18:10	37m	18:48	37m	19:25	14h 41m	10h 59m				Mo, 29. Jan
Di, 30. Jan		19:26 – 22:38	3h 11m	AN_+ bis $M_↗$		22:38	10:15	06:25	37m	07:02	37m	07:39	36m	08:16	9h 19m	17:35	36m	18:12	37m	18:49	37m	19:26	14h 38m	10h 57m				Di, 30. Jan
Mi, 31. Jan		19:28 – 23:45	4h 17m	AN_+ bis $M_↗$		23:45	10:27	06:24	37m	07:01	37m	07:38	36m	08:14	9h 22m	17:37	36m	18:13	37m	18:51	37m	19:28	14h 35m	10h 54m				Mi, 31. Jan
Do, 1. Feb		19:29 – 00:54*	5h 25m	AN_+ bis $M_↗$		—:—	10:40	06:23	36m	06:59	37m	07:37	36m	08:13	9h 25m	17:39	36m	18:15	37m	18:52	37m	19:29	14h 32m	10h 52m				Do, 1. Feb
Fr, 2. Feb		19:31 – 02:07*	6h 36m	AN_+ bis $M_↗$		00:54	10:55	06:21	36m	06:58	37m	07:35	36m	08:11	9h 28m	17:40	36m	18:16	37m	18:54	36m	19:31	14h 29m	10h 49m				Fr, 2. Feb
Sa, 3. Feb		19:32 – 03:22*	7h 50m	AN_+ bis $M_↗$	◑	02:07	11:14	06:20	36m	06:57	37m	07:34	35m	08:10	9h 31m	17:42	35m	18:18	37m	18:55	36m	19:32	14h 26m	10h 46m				Sa, 3. Feb
So, 4. Feb		19:33 – 04:39*	9h 05m	AN_+ bis $M_↗$		03:22	11:39	06:19	36m	06:56	36m	07:33	35m	08:09	9h 35m	17:44	35m	18:20	37m	18:57	36m	19:33	14h 23m	10h 44m				So, 4. Feb
Mo, 5. Feb		19:35 – 05:52*	10h 16m	AN_+ bis $M_↗$		04:39	12:14	06:18	36m	06:55	36m	07:32	35m	08:07	9h 38m	17:45	35m	18:21	36m	18:58	36m	19:35	14h 20m	10h 41m				Mo, 5. Feb
Di, 6. Feb		19:36 – 06:15*	10h 38m	AN_+ bis AN_-		05:52	13:04	06:16	36m	06:53	36m	07:30	35m	08:06	9h 41m	17:47	35m	18:23	36m	19:00	36m	19:36	14h 17m	10h 38m				Di, 6. Feb
Mi, 7. Feb		19:38 – 06:14*	10h 36m	AN_+ bis AN_-		06:54	14:12	06:15	36m	06:52	36m	07:29	35m	08:04	9h 44m	17:49	35m	18:24	36m	19:01	36m	19:38	14h 13m	10h 36m				Mi, 7. Feb
Do, 8. Feb		19:39 – 06:12*	10h 33m	AN_+ bis AN_-		07:42	15:34	06:14	36m	06:51	36m	07:27	35m	08:03	9h 47m	17:50	35m	18:26	36m	19:02	36m	19:39	14h 10m	10h 33m				Do, 8. Feb
Fr, 9. Feb		19:41 – 06:11*	10h 30m	AN_+ bis AN_-	●	08:16	17:05	06:12	36m	06:49	36m	07:26	35m	08:01	9h 50m	17:52	35m	18:27	36m	19:04	36m	19:41	14h 07m	10h 30m				Fr, 9. Feb
Sa, 10. Feb		19:42 – 06:10*	10h 27m	AN_+ bis AN_-		08:42	18:37	06:11	36m	06:48	36m	07:24	35m	07:59	9h 54m	17:54	35m	18:29	36m	19:05	36m	19:42	14h 04m	10h 27m				Sa, 10. Feb
So, 11. Feb		20:06 – 06:08*	10h 01m	$M_↘$ bis AN_-		09:02	20:06	06:10	36m	06:46	36m	07:23	35m	07:58	9h 57m	17:55	35m	18:30	36m	19:07	36m	19:44	14h 00m	10h 24m				So, 11. Feb
Mo, 12. Feb		21:33 – 06:07*	8h 33m	$M_↘$ bis AN_-		09:20	21:33	06:08	36m	06:45	36m	07:21	34m	07:56	10h 00m	17:57	35m	18:32	36m	19:08	36m	19:45	13h 57m	10h 21m				Mo, 12. Feb
Di, 13. Feb		22:58 – 06:05*	7h 07m	$M_↘$ bis AN_-		09:36	22:58	06:07	36m	06:43	36m	07:20	34m	07:54	10h 04m	17:59	34m	18:34	36m	19:10	36m	19:47	13h 54m	10h 18m				Di, 13. Feb
Mi, 14. Feb		00:22* – 06:04*	5h 41m	$M_↘$ bis AN_-		09:52	—:—	06:05	36m	06:42	36m	07:18	34m	07:53	10h 07m	18:00	34m	18:35	36m	19:12	36m	19:48	13h 50m	10h 15m				Mi, 14. Feb
Do, 15. Feb		01:44* – 06:02*	4h 17m	$M_↘$ bis AN_-		10:11	00:22	06:04	36m	06:40	36m	07:16	34m	07:51	10h 10m	18:02	34m	18:37	36m	19:13	36m	19:50	13h 47m	10h 12m				Do, 15. Feb
Fr, 16. Feb		03:05* – 06:00*	2h 55m	$M_↘$ bis AN_-	◐	10:34	01:44	06:02	36m	06:39	36m	07:15	34m	07:49	10h 14m	18:04	34m	18:38	36m	19:15	36m	19:51	13h 43m	10h 09m				Fr, 16. Feb
Sa, 17. Feb		04:19* – 05:59*	1h 39m	$M_↘$ bis AN_-		11:03	03:05	06:00	36m	06:37	36m	07:13	34m	07:48	10h 17m	18:05	34m	18:40	36m	19:16	36m	19:53	13h 40m	10h 06m				Sa, 17. Feb
So, 18. Feb		05:23* – 05:57*	34m	$M_↘$ bis AN_-		11:42	04:19	05:59	36m	06:35	36m	07:11	34m	07:46	10h 21m	18:07	34m	18:41	36m	19:18	36m	19:54	13h 37m	10h 02m				So, 18. Feb
Mo, 19. Feb		—:——:—	–	Mond stört		12:33	05:23	05:57	36m	06:34	36m	07:10	34m	07:44	10h 24m	18:09	34m	18:43	36m	19:19	36m	19:56	13h 33m	9h 59m				Mo, 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
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		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*		
Di, 20. Feb		—:——:—	–	Mond stört		13:34	06:13	05:55	*36m*	06:32	*35m*	07:08	*34m*	07:42	*10h 28m*	18:10	*34m*	18:44	*36m*	19:21	*36m*	19:57	*13h 30m*	*9h 56m*				Di, 20. Feb
Mi, 21. Feb		—:——:—	–	Mond stört		14:42	06:51	05:54	*36m*	06:30	*36m*	07:06	*34m*	07:40	*10h 31m*	18:12	*34m*	18:46	*36m*	19:22	*36m*	19:59	*13h 26m*	*9h 53m*				Mi, 21. Feb
Do, 22. Feb		—:——:—	–	Mond stört		15:53	07:19	05:52	*36m*	06:28	*35m*	07:04	*34m*	07:38	*10h 34m*	18:13	*34m*	18:48	*36m*	19:24	*36m*	20:00	*13h 23m*	*9h 49m*				Do, 22. Feb
Fr, 23. Feb		—:——:—	–	Mond stört		17:04	07:40	05:50	*36m*	06:27	*35m*	07:03	*34m*	07:37	*10h 38m*	18:15	*34m*	18:49	*36m*	19:25	*36m*	20:02	*13h 19m*	*9h 46m*				Fr, 23. Feb
Sa, 24. Feb		—:——:—	–	Mond stört	○	18:14	07:57	05:48	*36m*	06:25	*35m*	07:01	*34m*	07:35	*10h 41m*	18:17	*34m*	18:51	*35m*	19:27	*36m*	20:03	*13h 16m*	*9h 42m*				Sa, 24. Feb
So, 25. Feb		—:——:—	–	Mond stört		19:21	08:10	05:46	*36m*	06:23	*35m*	06:59	*33m*	07:33	*10h 45m*	18:18	*33m*	18:52	*35m*	19:28	*36m*	20:05	*13h 12m*	*9h 39m*				So, 25. Feb
Mo, 26. Feb		20:07 – 20:28	*21m*	AN$_+$ *bis* M↗		20:28	08:23	05:44	*36m*	06:21	*35m*	06:57	*33m*	07:31	*10h 49m*	18:20	*33m*	18:54	*35m*	19:30	*36m*	20:07	*13h 09m*	*9h 36m*				Mo, 26. Feb
Di, 27. Feb		20:08 – 21:35	*1h 26m*	AN$_+$ *bis* M↗		21:35	08:35	05:43	*36m*	06:19	*35m*	06:55	*33m*	07:29	*10h 52m*	18:22	*33m*	18:55	*35m*	19:31	*36m*	20:08	*13h 05m*	*9h 32m*				Di, 27. Feb
Mi, 28. Feb		20:10 – 22:43	*2h 33m*	AN$_+$ *bis* M↗		22:43	08:47	05:41	*36m*	06:17	*35m*	06:53	*33m*	07:27	*10h 56m*	18:23	*33m*	18:57	*35m*	19:33	*36m*	20:10	*13h 01m*	*9h 29m*				Mi, 28. Feb
Do, 29. Feb		20:11 – 23:54	*3h 42m*	AN$_+$ *bis* M↗		23:54	09:01	05:39	*36m*	06:15	*35m*	06:51	*33m*	07:25	*10h 59m*	18:25	*33m*	18:58	*35m*	19:34	*36m*	20:11	*12h 58m*	*9h 25m*				Do, 29. Feb
Fr, 1. Mrz		20:13 – 01:07*	*4h 54m*	AN$_+$ *bis* M↗		—:—	09:18	05:37	*36m*	06:13	*35m*	06:49	*33m*	07:23	*11h 03m*	18:26	*33m*	19:00	*35m*	19:36	*36m*	20:13	*12h 54m*	*9h 21m*				Fr, 1. Mrz
Sa, 2. Mrz		20:14 – 02:22*	*6h 07m*	AN$_+$ *bis* M↗		01:07	09:39	05:35	*36m*	06:12	*35m*	06:47	*33m*	07:21	*11h 06m*	18:28	*33m*	19:02	*35m*	19:38	*36m*	20:14	*12h 51m*	*9h 18m*				Sa, 2. Mrz
So, 3. Mrz		20:16 – 03:35*	*7h 18m*	AN$_+$ *bis* M↗	◑	02:22	10:09	05:33	*36m*	06:10	*35m*	06:45	*33m*	07:19	*11h 10m*	18:29	*33m*	19:03	*35m*	19:39	*36m*	20:16	*12h 47m*	*9h 14m*				So, 3. Mrz
Mo, 4. Mrz		20:18 – 04:40*	*8h 22m*	AN$_+$ *bis* M↗		03:35	10:51	05:31	*36m*	06:08	*35m*	06:43	*33m*	07:17	*11h 14m*	18:31	*33m*	19:05	*35m*	19:41	*37m*	20:18	*12h 43m*	*9h 10m*				Mo, 4. Mrz
Di, 5. Mrz		20:19 – 05:27*	*9h 07m*	AN$_+$ *bis* AN$_-$		04:40	11:48	05:29	*36m*	06:06	*35m*	06:41	*33m*	07:15	*11h 17m*	18:33	*33m*	19:06	*35m*	19:42	*37m*	20:19	*12h 40m*	*9h 07m*				Di, 5. Mrz
Mi, 6. Mrz		20:21 – 05:24*	*9h 03m*	AN$_+$ *bis* AN$_-$		05:33	13:02	05:27	*37m*	06:04	*35m*	06:39	*33m*	07:13	*11h 21m*	18:34	*33m*	19:08	*35m*	19:44	*37m*	20:21	*12h 36m*	*9h 03m*				Mi, 6. Mrz
Do, 7. Mrz		20:23 – 05:22*	*8h 59m*	AN$_+$ *bis* AN$_-$		06:12	14:28	05:24	*37m*	06:02	*35m*	06:37	*33m*	07:11	*11h 24m*	18:36	*33m*	19:09	*35m*	19:45	*37m*	20:23	*12h 33m*	*8h 59m*				Do, 7. Mrz
Fr, 8. Mrz		20:24 – 05:20*	*8h 56m*	AN$_+$ *bis* AN$_-$		06:41	15:59	05:22	*37m*	05:59	*35m*	06:35	*33m*	07:09	*11h 28m*	18:37	*33m*	19:11	*36m*	19:47	*37m*	20:24	*12h 29m*	*8h 56m*				Fr, 8. Mrz
Sa, 9. Mrz		20:26 – 05:18*	*8h 52m*	AN$_+$ *bis* AN$_-$		07:04	17:30	05:20	*37m*	05:57	*35m*	06:33	*33m*	07:07	*11h 32m*	18:39	*33m*	19:12	*36m*	19:48	*37m*	20:26	*12h 25m*	*8h 52m*				Sa, 9. Mrz
So, 10. Mrz		20:28 – 05:16*	*8h 48m*	AN$_+$ *bis* AN$_-$	●	07:22	18:59	05:18	*37m*	05:55	*35m*	06:31	*33m*	07:05	*11h 35m*	18:40	*33m*	19:14	*36m*	19:50	*37m*	20:28	*12h 22m*	*8h 48m*				So, 10. Mrz
Mo, 11. Mrz		20:29 – 05:14*	*8h 44m*	AN$_+$ *bis* AN$_-$		07:39	20:27	05:16	*37m*	05:53	*35m*	06:29	*33m*	07:03	*11h 39m*	18:42	*33m*	19:16	*36m*	19:52	*37m*	20:29	*12h 18m*	*8h 44m*				Mo, 11. Mrz
Di, 12. Mrz		21:54 – 05:11*	*7h 17m*	M↘ *bis* AN$_-$		07:55	21:54	05:14	*37m*	05:51	*36m*	06:27	*33m*	07:01	*11h 42m*	18:44	*33m*	19:17	*36m*	19:53	*37m*	20:31	*12h 14m*	*8h 40m*				Di, 12. Mrz
Mi, 13. Mrz		23:21 – 05:09*	*5h 47m*	M↘ *bis* AN$_-$		08:13	23:21	05:11	*37m*	05:49	*36m*	06:25	*33m*	06:59	*11h 46m*	18:45	*33m*	19:19	*36m*	19:55	*37m*	20:33	*12h 11m*	*8h 36m*				Mi, 13. Mrz
Do, 14. Mrz		00:46* – 05:07*	*4h 20m*	M↘ *bis* AN$_-$		08:35	—:—	05:09	*37m*	05:47	*36m*	06:23	*33m*	06:56	*11h 50m*	18:47	*33m*	19:20	*36m*	19:56	*37m*	20:34	*12h 07m*	*8h 32m*				Do, 14. Mrz
Fr, 15. Mrz		02:06* – 05:05*	*2h 58m*	M↘ *bis* AN$_-$		09:02	00:46	05:07	*37m*	05:45	*36m*	06:21	*33m*	06:54	*11h 53m*	18:48	*33m*	19:22	*36m*	19:58	*38m*	20:36	*12h 04m*	*8h 28m*				Fr, 15. Mrz
Sa, 16. Mrz		03:16* – 05:02*	*1h 46m*	M↘ *bis* AN$_-$		09:38	02:06	05:05	*37m*	05:43	*36m*	06:19	*33m*	06:52	*11h 57m*	18:50	*33m*	19:23	*36m*	20:00	*38m*	20:38	*12h 00m*	*8h 24m*				Sa, 16. Mrz
So, 17. Mrz		04:12* – 05:00*	*48m*	M↘ *bis* AN$_-$	◐	10:26	03:16	05:02	*38m*	05:40	*36m*	06:17	*33m*	06:50	*12h 01m*	18:51	*33m*	19:25	*36m*	20:01	*38m*	20:39	*11h 56m*	*8h 20m*				So, 17. Mrz
Mo, 18. Mrz		04:54* – 04:58*	*3m*	M↘ *bis* AN$_-$		11:25	04:12	05:00	*38m*	05:38	*36m*	06:15	*33m*	06:48	*12h 04m*	18:53	*33m*	19:26	*36m*	20:03	*38m*	20:41	*11h 53m*	*8h 16m*				Mo, 18. Mrz
Di, 19. Mrz		—:——:—	–	Mond stört		12:32	04:54	04:58	*38m*	05:36	*36m*	06:12	*33m*	06:46	*12h 08m*	18:54	*33m*	19:28	*36m*	20:04	*38m*	20:43	*11h 49m*	*8h 12m*				Di, 19. Mrz
Mi, 20. Mrz		—:——:—	–	Mond stört		13:43	05:24	04:55	*38m*	05:34	*36m*	06:10	*33m*	06:44	*12h 11m*	18:56	*33m*	19:29	*36m*	20:06	*38m*	20:45	*11h 45m*	*8h 08m*				Mi, 20. Mrz
Do, 21. Mrz		—:——:—	–	Mond stört		14:54	05:47	04:53	*38m*	05:32	*36m*	06:08	*33m*	06:42	*12h 15m*	18:57	*33m*	19:31	*36m*	20:08	*38m*	20:47	*11h 42m*	*8h 04m*				Do, 21. Mrz
Fr, 22. Mrz		—:——:—	–	Mond stört		16:03	06:04	04:51	*38m*	05:29	*36m*	06:06	*33m*	06:40	*12h 19m*	18:59	*33m*	19:33	*36m*	20:09	*39m*	20:48	*11h 38m*	*7h 59m*				Fr, 22. Mrz
Sa, 23. Mrz		—:——:—	–	Mond stört		17:11	06:19	04:48	*38m*	05:27	*36m*	06:04	*33m*	06:37	*12h 22m*	19:00	*33m*	19:34	*36m*	20:11	*39m*	20:50	*11h 35m*	*7h 55m*				Sa, 23. Mrz
So, 24. Mrz		—:——:—	–	Mond stört		18:19	06:31	04:46	*39m*	05:25	*36m*	06:02	*33m*	06:35	*12h 26m*	19:02	*33m*	19:36	*36m*	20:13	*39m*	20:52	*11h 31m*	*7h 51m*				So, 24. Mrz
Mo, 25. Mrz		—:——:—	–	Mond stört	○	19:26	06:43	04:43	*39m*	05:23	*36m*	06:00	*33m*	06:33	*12h 30m*	19:03	*33m*	19:37	*37m*	20:14	*39m*	20:54	*11h 27m*	*7h 47m*				Mo, 25. Mrz
Di, 26. Mrz		—:——:—	–	Mond stört		20:34	06:55	04:41	*39m*	05:20	*37m*	05:57	*33m*	06:31	*12h 33m*	19:05	*33m*	19:39	*37m*	20:16	*39m*	20:56	*11h 24m*	*7h 42m*				Di, 26. Mrz
Mi, 27. Mrz		20:58 – 21:44	*46m*	AN$_+$ *bis* M↗		21:44	07:09	04:38	*39m*	05:18	*37m*	05:55	*33m*	06:29	*12h 37m*	19:06	*33m*	19:40	*37m*	20:18	*39m*	20:58	*11h 20m*	*7h 38m*				Mi, 27. Mrz
Do, 28. Mrz		20:59 – 22:57	*1h 57m*	AN$_+$ *bis* M↗		22:57	07:24	04:36	*39m*	05:16	*37m*	05:53	*33m*	06:27	*12h 40m*	19:08	*33m*	19:42	*37m*	20:19	*40m*	20:59	*11h 16m*	*7h 34m*				Do, 28. Mrz
Fr, 29. Mrz		21:01 – 00:11*	*3h 09m*	AN$_+$ *bis* M↗		—:—	07:44	04:33	*40m*	05:14	*37m*	05:51	*33m*	06:25	*12h 44m*	19:09	*34m*	19:43	*37m*	20:21	*40m*	21:01	*11h 13m*	*7h 29m*				Fr, 29. Mrz
Sa, 30. Mrz		21:03 – 01:24*	*4h 20m*	AN$_+$ *bis* M↗		00:11	08:10	04:31	*40m*	05:11	*37m*	05:49	*33m*	06:23	*12h 48m*	19:11	*34m*	19:45	*37m*	20:23	*40m*	21:03	*11h 09m*	*7h 25m*				Sa, 30. Mrz
So, 31. Mrz	MESZ	22:05 – 03:31*	*5h 25m*	AN$_+$ *bis* M↗		02:24	09:47	05:28	*40m*	06:09	*37m*	06:47	*34m*	07:21	*12h 51m*	20:12	*34m*	20:47	*37m*	21:24	*40m*	22:05	*11h 06m*	*7h 20m*				So, 31. Mrz
Mo, 1. Apr	MESZ	22:07 – 04:27*	*6h 19m*	AN$_+$ *bis* M↗		03:31	10:37	05:26	*40m*	06:07	*37m*	06:44	*34m*	07:19	*12h 55m*	20:14	*34m*	20:48	*37m*	21:26	*41m*	22:07	*11h 02m*	*7h 16m*				Mo, 1. Apr
Di, 2. Apr	MESZ	22:09 – 05:10*	*7h 00m*	AN$_+$ *bis* M↗	◑	04:27	11:43	05:23	*41m*	06:04	*37m*	06:42	*34m*	07:16	*12h 58m*	20:15	*34m*	20:50	*38m*	21:28	*41m*	22:09	*10h 58m*	*7h 11m*				Di, 2. Apr
Mi, 3. Apr	MESZ	22:11 – 05:18*	*7h 07m*	AN$_+$ *bis* AN$_-$		05:10	13:02	05:21	*41m*	06:02	*38m*	06:40	*34m*	07:14	*13h 02m*	20:17	*34m*	20:51	*38m*	21:30	*41m*	22:11	*10h 55m*	*7h 07m*				Mi, 3. Apr
Do, 4. Apr	MESZ	22:13 – 05:16*	*7h 02m*	AN$_+$ *bis* AN$_-$		05:41	14:28	05:18	*41m*	06:00	*38m*	06:38	*34m*	07:12	*13h 06m*	20:18	*34m*	20:53	*38m*	21:31	*41m*	22:13	*10h 51m*	*7h 02m*				Do, 4. Apr
Fr, 5. Apr	MESZ	22:15 – 05:13*	*6h 57m*	AN$_+$ *bis* AN$_-$		06:05	15:56	05:16	*41m*	05:57	*38m*	06:36	*34m*	07:10	*13h 09m*	20:20	*34m*	20:54	*38m*	21:33	*42m*	22:15	*10h 48m*	*6h 57m*				Fr, 5. Apr
Sa, 6. Apr	MESZ	22:17 – 05:10*	*6h 53m*	AN$_+$ *bis* AN$_-$		06:25	17:24	05:13	*42m*	05:55	*38m*	06:34	*34m*	07:08	*13h 13m*	20:21	*34m*	20:56	*38m*	21:35	*42m*	22:17	*10h 44m*	*6h 53m*				Sa, 6. Apr
So, 7. Apr	MESZ	22:19 – 05:08*	*6h 48m*	AN$_+$ *bis* AN$_-$		06:42	18:51	05:10	*42m*	05:53	*38m*	06:31	*34m*	07:06	*13h 16m*	20:23	*34m*	20:58	*38m*	21:37	*42m*	22:19	*10h 41m*	*6h 48m*				So, 7. Apr
Mo, 8. Apr	MESZ	22:21 – 05:05*	*6h 43m*	AN$_+$ *bis* AN$_-$	●	06:58	20:19	05:08	*42m*	05:50	*38m*	06:29	*34m*	07:04	*13h 20m*	20:24	*34m*	20:59	*39m*	21:38	*43m*	22:21	*10h 37m*	*6h 43m*				Mo, 8. Apr
Di, 9. Apr	MESZ	22:24 – 05:02*	*6h 38m*	AN$_+$ *bis* AN$_-$		07:15	21:48	05:05	*43m*	05:48	*39m*	06:27	*34m*	07:02	*13h 23m*	20:26	*34m*	21:01	*39m*	21:40	*43m*	22:24	*10h 34m*	*6h 38m*				Di, 9. 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
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		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*		
Mi, 10. Apr	MESZ	23:16 – 05:00*	*5h 43m*	M↘ *bis* AN_		07:35	23:16	05:02	*43m*	05:46	*39m*	06:25	*34m*	07:00	*13h 27m*	20:27	*35m*	21:02	*39m*	21:42	*43m*	22:26	*10h 30m*	*6h 34m*				Mi, 10. Apr
Do, 11. Apr	MESZ	00:42* – 04:57*	*4h 15m*	M↘ *bis* AN_		08:00	—:—	05:00	*43m*	05:44	*39m*	06:23	*35m*	06:58	*13h 30m*	20:29	*35m*	21:04	*39m*	21:44	*44m*	22:28	*10h 27m*	*6h 29m*				Do, 11. Apr
Fr, 12. Apr	MESZ	02:00* – 04:54*	*2h 54m*	M↘ *bis* AN_		08:33	00:42	04:57	*44m*	05:41	*39m*	06:21	*35m*	06:56	*13h 34m*	20:30	*35m*	21:06	*39m*	21:46	*44m*	22:30	*10h 23m*	*6h 24m*				Fr, 12. Apr
Sa, 13. Apr	MESZ	03:04* – 04:52*	*1h 48m*	M↘ *bis* AN_		09:16	02:00	04:54	*44m*	05:39	*39m*	06:19	*35m*	06:54	*13h 37m*	20:32	*35m*	21:07	*40m*	21:47	*44m*	22:32	*10h 20m*	*6h 19m*				Sa, 13. Apr
So, 14. Apr	MESZ	03:52* – 04:49*	*57m*	M↘ *bis* AN_		10:12	03:04	04:52	*44m*	05:37	*40m*	06:17	*35m*	06:52	*13h 41m*	20:33	*35m*	21:09	*40m*	21:49	*45m*	22:34	*10h 16m*	*6h 14m*				So, 14. Apr
Mo, 15. Apr	MESZ	04:27* – 04:46*	*19m*	M↘ *bis* AN_	◐	11:18	03:52	04:49	*45m*	05:34	*40m*	06:14	*35m*	06:50	*13h 44m*	20:35	*35m*	21:11	*40m*	21:51	*45m*	22:37	*10h 13m*	*6h 09m*				Mo, 15. Apr
Di, 16. Apr	MESZ	—:——:—	–	Mond stört		12:30	04:27	04:46	*45m*	05:32	*40m*	06:12	*35m*	06:48	*13h 48m*	20:36	*35m*	21:12	*40m*	21:53	*46m*	22:39	*10h 09m*	*6h 04m*				Di, 16. Apr
Mi, 17. Apr	MESZ	—:——:—	–	Mond stört		13:42	04:52	04:44	*45m*	05:30	*40m*	06:10	*35m*	06:46	*13h 51m*	20:38	*35m*	21:14	*40m*	21:55	*46m*	22:41	*10h 06m*	*5h 59m*				Mi, 17. Apr
Do, 18. Apr	MESZ	—:——:—	–	Mond stört		14:52	05:11	04:41	*46m*	05:27	*40m*	06:08	*35m*	06:44	*13h 55m*	20:39	*36m*	21:15	*41m*	21:57	*46m*	22:44	*10h 02m*	*5h 54m*				Do, 18. Apr
Fr, 19. Apr	MESZ	—:——:—	–	Mond stört		16:01	05:27	04:38	*46m*	05:25	*41m*	06:06	*36m*	06:42	*13h 58m*	20:41	*36m*	21:17	*41m*	21:59	*47m*	22:46	*9h 59m*	*5h 49m*				Fr, 19. Apr
Sa, 20. Apr	MESZ	—:——:—	–	Mond stört		17:08	05:40	04:35	*47m*	05:23	*41m*	06:04	*36m*	06:40	*14h 02m*	20:42	*36m*	21:19	*41m*	22:01	*47m*	22:48	*9h 55m*	*5h 44m*				Sa, 20. Apr
So, 21. Apr	MESZ	—:——:—	–	Mond stört		18:15	05:52	04:33	*47m*	05:20	*41m*	06:02	*36m*	06:38	*14h 05m*	20:44	*36m*	21:20	*41m*	22:02	*48m*	22:51	*9h 52m*	*5h 39m*				So, 21. Apr
Mo, 22. Apr	MESZ	—:——:—	–	Mond stört		19:23	06:04	04:30	*48m*	05:18	*41m*	06:00	*36m*	06:37	*14h 08m*	20:45	*36m*	21:22	*42m*	22:04	*48m*	22:53	*9h 49m*	*5h 33m*				Mo, 22. Apr
Di, 23. Apr	MESZ	—:——:—	–	Mond stört		20:33	06:16	04:27	*48m*	05:16	*42m*	05:58	*36m*	06:35	*14h 12m*	20:47	*36m*	21:24	*42m*	22:06	*49m*	22:56	*9h 45m*	*5h 28m*				Di, 23. Apr
Mi, 24. Apr	MESZ	—:——:—	–	Mond stört	○	21:45	06:31	04:24	*49m*	05:13	*42m*	05:56	*36m*	06:33	*14h 15m*	20:48	*36m*	21:25	*42m*	22:08	*49m*	22:58	*9h 42m*	*5h 23m*				Mi, 24. Apr
Do, 25. Apr	MESZ	—:——:—	–	Mond stört		23:00	06:50	04:21	*49m*	05:11	*42m*	05:54	*36m*	06:31	*14h 18m*	20:50	*37m*	21:27	*43m*	22:10	*50m*	23:01	*9h 39m*	*5h 17m*				Do, 25. Apr
Fr, 26. Apr	MESZ	23:03 – 00:14*	*1h 11m*	AN+ *bis* M↗		—:—	07:14	04:18	*50m*	05:09	*43m*	05:52	*37m*	06:29	*14h 22m*	20:51	*37m*	21:29	*43m*	22:12	*51m*	23:03	*9h 36m*	*5h 12m*				Fr, 26. Apr
Sa, 27. Apr	MESZ	23:06 – 01:24*	*2h 18m*	AN+ *bis* M↗		00:14	07:47	04:16	*51m*	05:07	*43m*	05:50	*37m*	06:27	*14h 25m*	20:53	*37m*	21:30	*43m*	22:14	*51m*	23:06	*9h 32m*	*5h 07m*				Sa, 27. Apr
So, 28. Apr	MESZ	23:08 – 02:23*	*3h 14m*	AN+ *bis* M↗		01:24	08:33	04:13	*51m*	05:04	*43m*	05:48	*37m*	06:26	*14h 28m*	20:54	*37m*	21:32	*44m*	22:16	*52m*	23:08	*9h 29m*	*5h 01m*				So, 28. Apr
Mo, 29. Apr	MESZ	23:11 – 03:09*	*3h 58m*	AN+ *bis* M↗		02:23	09:34	04:10	*52m*	05:02	*43m*	05:46	*37m*	06:24	*14h 31m*	20:56	*37m*	21:34	*44m*	22:18	*52m*	23:11	*9h 26m*	*4h 56m*				Mo, 29. Apr
Di, 30. Apr	MESZ	23:14 – 03:43*	*4h 29m*	AN+ *bis* M↗		03:09	10:48	04:07	*52m*	05:00	*44m*	05:44	*37m*	06:22	*14h 35m*	20:57	*38m*	21:35	*44m*	22:20	*53m*	23:14	*9h 23m*	*4h 50m*				Di, 30. Apr
Mi, 1. Mai	MESZ	23:16 – 04:01*	*4h 45m*	AN+ *bis* AN_	◑	03:43	12:10	04:04	*53m*	04:58	*44m*	05:42	*37m*	06:20	*14h 38m*	20:59	*38m*	21:37	*44m*	22:22	*54m*	23:16	*9h 19m*	*4h 45m*				Mi, 1. Mai
Do, 2. Mai	MESZ	23:19 – 03:58*	*4h 39m*	AN+ *bis* AN_		04:09	13:35	04:01	*54m*	04:56	*44m*	05:41	*38m*	06:19	*14h 41m*	21:00	*38m*	21:39	*45m*	22:24	*55m*	23:19	*9h 16m*	*4h 39m*				Do, 2. Mai
Fr, 3. Mai	MESZ	23:22 – 03:55*	*4h 33m*	AN+ *bis* AN_		04:29	15:00	03:58	*55m*	04:53	*45m*	05:39	*38m*	06:17	*14h 44m*	21:02	*38m*	21:40	*45m*	22:26	*55m*	23:22	*9h 13m*	*4h 33m*				Fr, 3. Mai
Sa, 4. Mai	MESZ	23:24 – 03:52*	*4h 28m*	AN+ *bis* AN_		04:46	16:24	03:55	*55m*	04:51	*45m*	05:37	*38m*	06:15	*14h 47m*	21:03	*38m*	21:42	*45m*	22:28	*56m*	23:24	*9h 10m*	*4h 28m*				Sa, 4. Mai
So, 5. Mai	MESZ	23:27 – 03:50*	*4h 22m*	AN+ *bis* AN_		05:02	17:49	03:52	*56m*	04:49	*45m*	05:35	*38m*	06:14	*14h 50m*	21:05	*38m*	21:43	*46m*	22:30	*57m*	23:27	*9h 07m*	*4h 22m*				So, 5. Mai
Mo, 6. Mai	MESZ	23:30 – 03:47*	*4h 16m*	AN+ *bis* AN_		05:18	19:15	03:50	*57m*	04:47	*46m*	05:33	*38m*	06:12	*14h 53m*	21:06	*39m*	21:45	*46m*	22:32	*58m*	23:30	*9h 04m*	*4h 16m*				Mo, 6. Mai
Di, 7. Mai	MESZ	23:33 – 03:44*	*4h 10m*	AN+ *bis* AN_		05:36	20:43	03:47	*58m*	04:45	*46m*	05:32	*39m*	06:11	*14h 56m*	21:07	*39m*	21:47	*47m*	22:34	*59m*	23:33	*9h 01m*	*4h 10m*				Di, 7. Mai
Mi, 8. Mai	MESZ	23:36 – 03:41*	*4h 04m*	AN+ *bis* AN_	●	05:58	22:11	03:44	*59m*	04:43	*47m*	05:30	*39m*	06:09	*14h 59m*	21:09	*39m*	21:48	*47m*	22:36	*1h 00m*	23:36	*8h 58m*	*4h 04m*				Mi, 8. Mai
Do, 9. Mai	MESZ	23:39 – 03:38*	*3h 58m*	AN+ *bis* AN_		06:27	23:34	03:41	*1h 00m*	04:41	*47m*	05:28	*39m*	06:08	*15h 02m*	21:10	*39m*	21:50	*47m*	22:38	*1h 00m*	23:39	*8h 55m*	*3h 58m*				Do, 9. Mai
Fr, 10. Mai	MESZ	00:46* – 03:35*	*2h 48m*	M↘ *bis* AN_		07:06	—:—	03:38	*1h 00m*	04:39	*47m*	05:26	*39m*	06:06	*15h 05m*	21:12	*39m*	21:52	*48m*	22:40	*1h 01m*	23:42	*8h 52m*	*3h 52m*				Fr, 10. Mai
Sa, 11. Mai	MESZ	01:43* – 03:32*	*1h 48m*	M↘ *bis* AN_		07:57	00:46	03:35	*1h 01m*	04:37	*48m*	05:25	*39m*	06:05	*15h 08m*	21:13	*40m*	21:53	*48m*	22:42	*1h 02m*	23:45	*8h 50m*	*3h 46m*				Sa, 11. Mai
So, 12. Mai	MESZ	02:25* – 03:28*	*1h 03m*	M↘ *bis* AN_		09:01	01:43	03:32	*1h 02m*	04:35	*48m*	05:23	*40m*	06:03	*15h 11m*	21:14	*40m*	21:55	*48m*	22:44	*1h 04m*	23:48	*8h 47m*	*3h 40m*				So, 12. Mai
Mo, 13. Mai	MESZ	02:54* – 03:25*	*31m*	M↘ *bis* AN_		10:12	02:25	03:28	*1h 04m*	04:33	*48m*	05:22	*40m*	06:02	*15h 13m*	21:16	*40m*	21:56	*49m*	22:46	*1h 05m*	23:51	*8h 44m*	*3h 34m*				Mo, 13. Mai
Di, 14. Mai	MESZ	03:16* – 03:22*	*6m*	M↘ *bis* AN_		11:26	02:54	03:25	*1h 05m*	04:31	*49m*	05:20	*40m*	06:00	*15h 16m*	21:17	*40m*	21:58	*49m*	22:48	*1h 06m*	23:54	*8h 41m*	*3h 28m*				Di, 14. Mai
Mi, 15. Mai	MESZ	—:——:—	–	Mond stört	◐	12:38	03:16	03:22	*1h 06m*	04:29	*49m*	05:18	*40m*	05:59	*15h 19m*	21:19	*40m*	21:59	*50m*	22:50	*1h 07m*	23:57	*8h 39m*	*3h 22m*				Mi, 15. Mai
Do, 16. Mai	MESZ	—:——:—	–	Mond stört		13:48	03:33	03:19	*1h 07m*	04:27	*50m*	05:17	*40m*	05:58	*15h 21m*	21:20	*41m*	22:01	*50m*	22:52	*1h 08m*	00:00*	*8h 36m*	*3h 15m*				Do, 16. Mai
Fr, 17. Mai	MESZ	—:——:—	–	Mond stört		14:55	03:47	03:16	*1h 08m*	04:25	*50m*	05:15	*41m*	05:57	*15h 24m*	21:21	*41m*	22:03	*50m*	22:54	*1h 10m*	00:04*	*8h 34m*	*3h 09m*				Fr, 17. Mai
Sa, 18. Mai	MESZ	—:——:—	–	Mond stört		16:02	03:59	03:13	*1h 10m*	04:23	*50m*	05:14	*41m*	05:55	*15h 27m*	21:22	*41m*	22:04	*51m*	22:55	*1h 11m*	00:07*	*8h 31m*	*3h 02m*				Sa, 18. Mai
So, 19. Mai	MESZ	—:——:—	–	Mond stört		17:09	04:11	03:10	*1h 11m*	04:21	*51m*	05:13	*41m*	05:54	*15h 29m*	21:24	*41m*	22:06	*51m*	22:57	*1h 12m*	00:10*	*8h 29m*	*2h 56m*				So, 19. Mai
Mo, 20. Mai	MESZ	—:——:—	–	Mond stört		18:18	04:23	03:07	*1h 12m*	04:19	*51m*	05:11	*41m*	05:53	*15h 32m*	21:25	*41m*	22:07	*52m*	22:59	*1h 14m*	00:14*	*8h 26m*	*2h 49m*				Mo, 20. Mai
Di, 21. Mai	MESZ	—:——:—	–	Mond stört		19:30	04:38	03:03	*1h 14m*	04:18	*52m*	05:10	*41m*	05:52	*15h 34m*	21:26	*42m*	22:08	*52m*	23:01	*1h 15m*	00:17*	*8h 24m*	*2h 43m*				Di, 21. Mai
Mi, 22. Mai	MESZ	—:——:—	–	Mond stört		20:45	04:55	03:00	*1h 15m*	04:16	*52m*	05:09	*42m*	05:51	*15h 36m*	21:27	*42m*	22:10	*53m*	23:03	*1h 17m*	00:20*	*8h 22m*	*2h 36m*				Mi, 22. Mai
Do, 23. Mai	MESZ	—:——:—	–	Mond stört	○	22:01	05:17	02:57	*1h 17m*	04:14	*53m*	05:07	*42m*	05:50	*15h 38m*	21:29	*42m*	22:11	*53m*	23:05	*1h 19m*	00:24*	*8h 20m*	*2h 29m*				Do, 23. Mai
Fr, 24. Mai	MESZ	—:——:—	–	Mond stört		23:13	05:47	02:53	*1h 19m*	04:13	*53m*	05:06	*42m*	05:49	*15h 41m*	21:30	*42m*	22:13	*53m*	23:07	*1h 20m*	00:28*	*8h 17m*	*2h 22m*				Fr, 24. Mai
Sa, 25. Mai	MESZ	—:——:—	–	Mond stört		—:—	06:30	02:50	*1h 20m*	04:11	*53m*	05:05	*42m*	05:48	*15h 43m*	21:31	*42m*	22:14	*54m*	23:08	*1h 22m*	00:31*	*8h 15m*	*2h 15m*				Sa, 25. Mai
So, 26. Mai	MESZ	00:35* – 01:08*	*33m*	AN+ *bis* M↗		00:17	07:27	02:47	*1h 22m*	04:10	*54m*	05:04	*42m*	05:47	*15h 45m*	21:32	*43m*	22:15	*54m*	23:10	*1h 24m*	00:35*	*8h 13m*	*2h 08m*				So, 26. Mai
Mo, 27. Mai	MESZ	00:39* – 01:46*	*1h 06m*	AN+ *bis* M↗		01:08	08:38	02:43	*1h 24m*	04:08	*54m*	05:03	*43m*	05:46	*15h 47m*	21:33	*43m*	22:17	*55m*	23:12	*1h 27m*	00:39*	*8h 11m*	*2h 00m*				Mo, 27. Mai
Di, 28. Mai	MESZ	00:43* – 02:14*	*1h 30m*	AN+ *bis* M↗		01:46	09:58	02:40	*1h 27m*	04:07	*55m*	05:02	*43m*	05:45	*15h 49m*	21:34	*43m*	22:18	*55m*	23:13	*1h 29m*	00:43*	*8h 09m*	*1h 53m*				Di, 28. Mai
Mi, 29. Mai	MESZ	00:47* – 02:32*	*1h 45m*	AN+ *bis* AN_		02:14	11:22	02:36	*1h 29m*	04:05	*55m*	05:01	*43m*	05:44	*15h 51m*	21:35	*43m*	22:19	*55m*	23:15	*1h 31m*	00:47*	*8h 08m*	*1h 45m*				Mi, 29. 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
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		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*		
Do, 30. Mai	MESZ	00:51* – 02:28*	*1h 37m*	AN$_+$ *bis* AN$_-$	◑	02:35	12:46	02:32	*1h 31m*	04:04	*55m*	05:00	*43m*	05:43	*15h 52m*	21:36	*43m*	22:20	*56m*	23:17	*1h 34m*	00:51*	*8h 06m*	*1h 37m*				Do, 30. Mai
Fr, 31. Mai	MESZ	00:55* – 02:24*	*1h 29m*	AN$_+$ *bis* AN$_-$		02:52	14:08	02:28	*1h 34m*	04:03	*56m*	04:59	*43m*	05:43	*15h 54m*	21:37	*44m*	22:21	*56m*	23:18	*1h 37m*	00:55*	*8h 04m*	*1h 29m*				Fr, 31. Mai
Sa, 1. Jun	MESZ	01:00* – 02:20*	*1h 20m*	AN$_+$ *bis* AN$_-$		03:08	15:30	02:24	*1h 37m*	04:01	*56m*	04:58	*44m*	05:42	*15h 56m*	21:38	*44m*	22:23	*57m*	23:20	*1h 40m*	01:00*	*8h 02m*	*1h 20m*				Sa, 1. Jun
So, 2. Jun	MESZ	01:05* – 02:15*	*1h 10m*	AN$_+$ *bis* AN$_-$		03:23	16:53	02:20	*1h 40m*	04:00	*57m*	04:57	*44m*	05:41	*15h 57m*	21:39	*44m*	22:24	*57m*	23:21	*1h 43m*	01:05*	*8h 01m*	*1h 10m*				So, 2. Jun
Mo, 3. Jun	MESZ	01:10* – 02:11*	*1h 00m*	AN$_+$ *bis* AN$_-$		03:40	18:17	02:15	*1h 43m*	03:59	*57m*	04:56	*44m*	05:41	*15h 59m*	21:40	*44m*	22:25	*57m*	23:23	*1h 47m*	01:10*	*7h 59m*	*1h 00m*				Mo, 3. Jun
Di, 4. Jun	MESZ	01:16* – 02:05*	*48m*	AN$_+$ *bis* AN$_-$		04:00	19:43	02:11	*1h 47m*	03:58	*57m*	04:56	*44m*	05:40	*16h 00m*	21:41	*44m*	22:26	*58m*	23:24	*1h 52m*	01:16*	*7h 58m*	*48m*				Di, 4. Jun
Mi, 5. Jun	MESZ	01:23* – 01:58*	*34m*	AN$_+$ *bis* AN$_-$		04:25	21:08	02:05	*1h 52m*	03:57	*58m*	04:55	*44m*	05:40	*16h 02m*	21:42	*44m*	22:27	*58m*	23:25	*1h 58m*	01:23*	*7h 57m*	*34m*				Mi, 5. Jun
Do, 6. Jun	MESZ	01:37* – 01:44*	*7m*	AN$_+$ *bis* AN$_-$	●	04:58	22:26	01:58	*1h 58m*	03:56	*58m*	04:54	*44m*	05:39	*16h 03m*	21:43	*44m*	22:28	*58m*	23:26	*2h 10m*	01:37*	*7h 55m*	*7m*				Do, 6. Jun
Fr, 7. Jun	MESZ			Astr. MD		05:44	23:30	01:44	*2h 10m*	03:55	*58m*	04:54	*44m*	05:39	*16h 04m*	21:44	*45m*	22:29	*59m*	23:28		—:—	*7h 54m*		23:30 – 03:54*	*4h 24m*	M$_\searrow$ *bis* ND$_-$	Fr, 7. Jun
Sa, 8. Jun	MESZ			Astr. MD		06:43	—:—	—:—		03:54	*59m*	04:53	*45m*	05:38	*16h 05m*	21:44	*45m*	22:29	*59m*	23:29		—:—	*7h 53m*		00:18* – 03:54*	*3h 35m*	M$_\searrow$ *bis* ND$_-$	Sa, 8. Jun
So, 9. Jun	MESZ			Astr. MD		07:53	00:18	—:—		03:54	*59m*	04:53	*45m*	05:38	*16h 06m*	21:45	*45m*	22:30	*59m*	23:30		—:—	*7h 52m*		00:53* – 03:53*	*2h 59m*	M$_\searrow$ *bis* ND$_-$	So, 9. Jun
Mo, 10. Jun	MESZ			Astr. MD		09:07	00:53	—:—		03:53	*59m*	04:53	*45m*	05:38	*16h 07m*	21:46	*45m*	22:31	*59m*	23:31		—:—	*7h 51m*		01:18* – 03:52*	*2h 34m*	M$_\searrow$ *bis* ND$_-$	Mo, 10. Jun
Di, 11. Jun	MESZ			Astr. MD		10:21	01:18	—:—		03:52	*59m*	04:52	*45m*	05:38	*16h 08m*	21:46	*45m*	22:32	*1h 00m*	23:32		—:—	*7h 51m*		01:37* – 03:52*	*2h 14m*	M$_\searrow$ *bis* ND$_-$	Di, 11. Jun
Mi, 12. Jun	MESZ			Astr. MD		11:32	01:37	—:—		03:52	*1h 00m*	04:52	*45m*	05:37	*16h 09m*	21:47	*45m*	22:32	*1h 00m*	23:33		—:—	*7h 50m*		01:52* – 03:51*	*1h 59m*	M$_\searrow$ *bis* ND$_-$	Mi, 12. Jun
Do, 13. Jun	MESZ			Astr. MD		12:41	01:52	—:—		03:51	*1h 00m*	04:52	*45m*	05:37	*16h 10m*	21:47	*45m*	22:33	*1h 00m*	23:33		—:—	*7h 49m*		02:05* – 03:51*	*1h 45m*	M$_\searrow$ *bis* ND$_-$	Do, 13. Jun
Fr, 14. Jun	MESZ			Astr. MD	◐	13:48	02:05	—:—		03:51	*1h 00m*	04:52	*45m*	05:37	*16h 10m*	21:48	*45m*	22:34	*1h 00m*	23:34		—:—	*7h 49m*		02:17* – 03:51*	*1h 33m*	M$_\searrow$ *bis* ND$_-$	Fr, 14. Jun
Sa, 15. Jun	MESZ			Astr. MD		14:55	02:17	—:—		03:51	*1h 00m*	04:51	*45m*	05:37	*16h 11m*	21:48	*45m*	22:34	*1h 00m*	23:35		—:—	*7h 48m*		02:29* – 03:51*	*1h 21m*	M$_\searrow$ *bis* ND$_-$	Sa, 15. Jun
So, 16. Jun	MESZ			Astr. MD		16:03	02:29	—:—		03:51	*1h 00m*	04:51	*45m*	05:37	*16h 11m*	21:49	*45m*	22:35	*1h 00m*	23:35		—:—	*7h 48m*		02:43* – 03:51*	*1h 07m*	M$_\searrow$ *bis* ND$_-$	So, 16. Jun
Mo, 17. Jun	MESZ			Astr. MD		17:13	02:43	—:—		03:51	*1h 00m*	04:51	*45m*	05:37	*16h 12m*	21:49	*45m*	22:35	*1h 00m*	23:36		—:—	*7h 47m*		02:59* – 03:50*	*51m*	M$_\searrow$ *bis* ND$_-$	Mo, 17. Jun
Di, 18. Jun	MESZ			Astr. MD		18:26	02:59	—:—		03:50	*1h 00m*	04:51	*45m*	05:37	*16h 12m*	21:50	*45m*	22:35	*1h 00m*	23:36		—:—	*7h 47m*		03:19* – 03:51*	*32m*	M$_\searrow$ *bis* ND$_-$	Di, 18. Jun
Mi, 19. Jun	MESZ			Astr. MD		19:42	03:19	—:—		03:51	*1h 00m*	04:51	*45m*	05:37	*16h 12m*	21:50	*45m*	22:36	*1h 00m*	23:37		—:—	*7h 47m*		03:45* – 03:51*	*5m*	M$_\searrow$ *bis* ND$_-$	Mi, 19. Jun
Do, 20. Jun	MESZ			Astr. MD		20:57	03:45	—:—		03:51	*1h 00m*	04:52	*45m*	05:37	*16h 12m*	21:50	*45m*	22:36	*1h 00m*	23:37		—:—	*7h 47m*		—:— – —:—	–	Mond stört	Do, 20. Jun
Fr, 21. Jun	MESZ			Astr. MD		22:06	04:23	—:—		03:51	*1h 00m*	04:52	*45m*	05:38	*16h 12m*	21:50	*45m*	22:36	*1h 00m*	23:37		—:—	*7h 47m*		—:— – —:—	–	Mond stört	Fr, 21. Jun
Sa, 22. Jun	MESZ			Astr. MD	○	23:02	05:15	—:—		03:51	*1h 00m*	04:52	*45m*	05:38	*16h 12m*	21:50	*45m*	22:36	*1h 00m*	23:37		—:—	*7h 47m*		—:— – —:—	–	Mond stört	Sa, 22. Jun
So, 23. Jun	MESZ			Astr. MD		23:45	06:23	—:—		03:51	*1h 00m*	04:52	*45m*	05:38	*16h 12m*	21:51	*45m*	22:36	*1h 00m*	23:37		—:—	*7h 47m*		23:37 – 23:45	*8m*	ND$_+$ *bis* M$_\nearrow$	So, 23. Jun
Mo, 24. Jun	MESZ			Astr. MD		—:—	07:43	—:—		03:52	*1h 00m*	04:53	*45m*	05:39	*16h 12m*	21:51	*45m*	22:36	*1h 00m*	23:37		—:—	*7h 48m*		23:37 – 00:17*	*39m*	ND$_+$ *bis* M$_\nearrow$	Mo, 24. Jun
Di, 25. Jun	MESZ			Astr. MD		00:17	09:08	—:—		03:52	*1h 00m*	04:53	*45m*	05:39	*16h 11m*	21:51	*45m*	22:36	*1h 00m*	23:37		—:—	*7h 48m*		23:37 – 00:40*	*1h 03m*	ND$_+$ *bis* M$_\nearrow$	Di, 25. Jun
Mi, 26. Jun	MESZ			Astr. MD		00:40	10:34	—:—		03:53	*1h 00m*	04:54	*45m*	05:39	*16h 11m*	21:51	*45m*	22:36	*1h 00m*	23:37		—:—	*7h 49m*		23:37 – 00:59*	*1h 21m*	ND$_+$ *bis* M$_\nearrow$	Mi, 26. Jun
Do, 27. Jun	MESZ			Astr. MD		00:59	11:57	—:—		03:54	*1h 00m*	04:54	*45m*	05:40	*16h 10m*	21:50	*45m*	22:36	*1h 00m*	23:36		—:—	*7h 49m*		23:36 – 01:15*	*1h 38m*	ND$_+$ *bis* M$_\nearrow$	Do, 27. Jun
Fr, 28. Jun	MESZ			Astr. MD	◑	01:15	13:19	—:—		03:54	*1h 00m*	04:55	*45m*	05:40	*16h 10m*	21:50	*45m*	22:36	*1h 00m*	23:36		—:—	*7h 50m*		23:36 – 01:30*	*1h 53m*	ND$_+$ *bis* M$_\nearrow$	Fr, 28. Jun
Sa, 29. Jun	MESZ			Astr. MD		01:30	14:40	—:—		03:55	*1h 00m*	04:55	*45m*	05:41	*16h 09m*	21:50	*45m*	22:36	*59m*	23:36		—:—	*7h 51m*		23:36 – 01:46*	*2h 10m*	ND$_+$ *bis* M$_\nearrow$	Sa, 29. Jun
So, 30. Jun	MESZ			Astr. MD		01:46	16:03	—:—		03:56	*59m*	04:56	*45m*	05:41	*16h 08m*	21:50	*45m*	22:35	*59m*	23:35		—:—	*7h 52m*		23:35 – 02:04*	*2h 28m*	ND$_+$ *bis* M$_\nearrow$	So, 30. Jun
Mo, 1. Jul	MESZ			Astr. MD		02:04	17:26	—:—		03:57	*59m*	04:57	*45m*	05:42	*16h 07m*	21:50	*45m*	22:35	*59m*	23:34		—:—	*7h 52m*		23:34 – 02:26*	*2h 51m*	ND$_+$ *bis* M$_\nearrow$	Mo, 1. Jul
Di, 2. Jul	MESZ			Astr. MD		02:26	18:50	—:—		03:58	*59m*	04:57	*45m*	05:43	*16h 06m*	21:49	*45m*	22:35	*59m*	23:34		—:—	*7h 53m*		23:34 – 02:56*	*3h 22m*	ND$_+$ *bis* M$_\nearrow$	Di, 2. Jul
Mi, 3. Jul	MESZ			Astr. MD		02:56	20:09	—:—		03:59	*59m*	04:58	*45m*	05:43	*16h 05m*	21:49	*45m*	22:34	*58m*	23:33		—:—	*7h 55m*		23:33 – 03:36*	*4h 02m*	ND$_+$ *bis* M$_\nearrow$	Mi, 3. Jul
Do, 4. Jul	MESZ	01:38* – 01:55*	*17m*	AN$_+$ *bis* AN$_-$		03:36	21:17	—:—		04:00	*58m*	04:59	*45m*	05:44	*16h 04m*	21:49	*44m*	22:34	*58m*	23:32	*2h 06m*	01:38*	*7h 56m*	*17m*				Do, 4. Jul
Fr, 5. Jul	MESZ	01:28* – 02:06*	*37m*	AN$_+$ *bis* AN$_-$		04:29	22:11	01:55	*2h 06m*	04:01	*58m*	05:00	*44m*	05:45	*16h 03m*	21:48	*44m*	22:33	*58m*	23:31	*1h 56m*	01:28*	*7h 57m*	*37m*				Fr, 5. Jul
Sa, 6. Jul	MESZ	01:21* – 02:13*	*51m*	AN$_+$ *bis* AN$_-$	●	05:35	22:51	02:06	*1h 56m*	04:03	*58m*	05:01	*44m*	05:46	*16h 02m*	21:48	*44m*	22:32	*58m*	23:30	*1h 51m*	01:21*	*7h 58m*	*51m*				Sa, 6. Jul
So, 7. Jul	MESZ	01:16* – 02:19*	*1h 02m*	AN$_+$ *bis* AN$_-$		06:48	23:20	02:13	*1h 51m*	04:04	*58m*	05:02	*44m*	05:47	*16h 00m*	21:47	*44m*	22:32	*57m*	23:29	*1h 46m*	01:16*	*8h 00m*	*1h 02m*				So, 7. Jul
Mo, 8. Jul	MESZ	01:11* – 02:24*	*1h 12m*	AN$_+$ *bis* AN$_-$		08:03	23:41	02:19	*1h 46m*	04:05	*57m*	05:03	*44m*	05:47	*15h 59m*	21:47	*44m*	22:31	*57m*	23:28	*1h 42m*	01:11*	*8h 01m*	*1h 12m*				Mo, 8. Jul
Di, 9. Jul	MESZ	01:07* – 02:29*	*1h 21m*	AN$_+$ *bis* AN$_-$		09:16	23:57	02:24	*1h 42m*	04:07	*57m*	05:04	*44m*	05:48	*15h 57m*	21:46	*44m*	22:30	*56m*	23:27	*1h 39m*	01:07*	*8h 03m*	*1h 21m*				Di, 9. Jul
Mi, 10. Jul	MESZ	01:02* – 02:33*	*1h 30m*	AN$_+$ *bis* AN$_-$		10:26	—:—	02:29	*1h 39m*	04:08	*56m*	05:05	*44m*	05:49	*15h 56m*	21:45	*43m*	22:29	*56m*	23:26	*1h 36m*	01:02*	*8h 04m*	*1h 30m*				Mi, 10. Jul
Do, 11. Jul	MESZ	00:58* – 02:37*	*1h 38m*	AN$_+$ *bis* AN$_-$		11:34	00:11	02:33	*1h 36m*	04:10	*56m*	05:06	*44m*	05:50	*15h 54m*	21:45	*43m*	22:28	*56m*	23:25	*1h 33m*	00:58*	*8h 06m*	*1h 38m*				Do, 11. Jul
Fr, 12. Jul	MESZ	00:55* – 02:41*	*1h 46m*	AN$_+$ *bis* AN$_-$		12:41	00:23	02:37	*1h 33m*	04:11	*56m*	05:07	*43m*	05:51	*15h 52m*	21:44	*43m*	22:27	*55m*	23:23	*1h 31m*	00:55*	*8h 08m*	*1h 46m*				Fr, 12. Jul
Sa, 13. Jul	MESZ	00:51* – 02:45*	*1h 54m*	AN$_+$ *bis* AN$_-$		13:48	00:35	02:41	*1h 31m*	04:13	*55m*	05:09	*43m*	05:52	*15h 50m*	21:43	*43m*	22:26	*55m*	23:22	*1h 28m*	00:51*	*8h 10m*	*1h 54m*				Sa, 13. Jul
So, 14. Jul	MESZ	01:02* – 02:49*	*1h 47m*	M$_\searrow$ *bis* AN$_-$	◐	14:56	00:48	02:45	*1h 28m*	04:14	*55m*	05:10	*43m*	05:53	*15h 48m*	21:42	*43m*	22:25	*55m*	23:21	*1h 26m*	00:47*	*8h 12m*	*2h 02m*				So, 14. Jul
Mo, 15. Jul	MESZ	01:20* – 02:53*	*1h 33m*	M$_\searrow$ *bis* AN$_-$		16:07	01:02	02:49	*1h 26m*	04:16	*55m*	05:11	*43m*	05:54	*15h 47m*	21:41	*43m*	22:24	*54m*	23:19	*1h 24m*	00:44*	*8h 14m*	*2h 09m*				Mo, 15. Jul
Di, 16. Jul	MESZ	01:43* – 02:57*	*1h 13m*	M$_\searrow$ *bis* AN$_-$		17:21	01:20	02:53	*1h 24m*	04:18	*54m*	05:12	*43m*	05:55	*15h 45m*	21:40	*42m*	22:23	*54m*	23:18	*1h 22m*	00:40*	*8h 16m*	*2h 16m*				Di, 16. Jul
Mi, 17. Jul	MESZ	02:16* – 03:00*	*44m*	M$_\searrow$ *bis* AN$_-$		18:37	01:43	02:57	*1h 22m*	04:19	*54m*	05:14	*42m*	05:56	*15h 42m*	21:39	*42m*	22:22	*53m*	23:16	*1h 20m*	00:37*	*8h 18m*	*2h 23m*				Mi, 17. Jul
Do, 18. Jul	MESZ	03:01* – 03:04*	*2m*	M$_\searrow$ *bis* AN$_-$		19:48	02:16	03:00	*1h 20m*	04:21	*53m*	05:15	*42m*	05:58	*15h 40m*	21:38	*42m*	22:21	*53m*	23:14	*1h 18m*	00:33*	*8h 20m*	*2h 30m*				Do, 18. 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
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.	↗	↘	Astr.	Δt	Naut.	Δt	Bürg.	Δt	↗	Δt	↘	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Fr, 19. Jul	MESZ	—:——:—	–	Mond stört		20:51	03:01	03:04	1h 18m	04:23	53m	05:16	42m	05:59	15h 38m	21:37	42m	22:20	52m	23:13	1h 17m	00:30*	8h 22m	2h 37m				Fr, 19. Jul
Sa, 20. Jul	MESZ	—:——:—	–	Mond stört		21:40	04:03	03:07	1h 17m	04:25	53m	05:18	42m	06:00	15h 36m	21:36	42m	22:18	52m	23:11	1h 15m	00:27*	8h 24m	2h 44m				Sa, 20. Jul
So, 21. Jul	MESZ	—:——:—	–	Mond stört	○	22:16	05:20	03:11	1h 15m	04:26	52m	05:19	42m	06:01	15h 34m	21:35	41m	22:17	52m	23:09	1h 14m	00:23*	8h 27m	2h 50m				So, 21. Jul
Mo, 22. Jul	MESZ	—:——:—	–	Mond stört		22:43	06:46	03:14	1h 14m	04:28	52m	05:20	41m	06:02	15h 31m	21:34	41m	22:16	51m	23:08	1h 12m	00:20*	8h 29m	2h 57m				Mo, 22. Jul
Di, 23. Jul	MESZ	—:——:—	–	Mond stört		23:03	08:14	03:17	1h 12m	04:30	51m	05:22	41m	06:04	15h 29m	21:33	41m	22:14	51m	23:06	1h 11m	00:17*	8h 31m	3h 03m				Di, 23. Jul
Mi, 24. Jul	MESZ	—:——:—	–	Mond stört		23:21	09:41	03:21	1h 11m	04:32	51m	05:23	41m	06:05	15h 26m	21:32	41m	22:13	50m	23:04	1h 09m	00:14*	8h 34m	3h 10m				Mi, 24. Jul
Do, 25. Jul	MESZ	—:——:—	–	Mond stört		23:36	11:05	03:24	1h 09m	04:34	50m	05:25	41m	06:06	15h 24m	21:30	41m	22:11	50m	23:02	1h 08m	00:11*	8h 36m	3h 16m				Do, 25. Jul
Fr, 26. Jul	MESZ	—:——:—	–	Mond stört		23:52	12:28	03:27	1h 08m	04:36	50m	05:26	41m	06:07	15h 21m	21:29	40m	22:10	50m	23:00	1h 07m	00:08*	8h 39m	3h 22m				Fr, 26. Jul
Sa, 27. Jul	MESZ	00:04* – 00:09*	4m	AN+ bis M↗		—:—	13:51	03:30	1h 07m	04:37	50m	05:28	40m	06:09	15h 19m	21:28	40m	22:08	49m	22:58	1h 06m	00:04*	8h 42m	3h 28m				Sa, 27. Jul
So, 28. Jul	MESZ	00:01* – 00:30*	28m	AN+ bis M↗	◑	00:09	15:15	03:33	1h 06m	04:39	49m	05:29	40m	06:10	15h 16m	21:26	40m	22:07	49m	22:56	1h 05m	00:01*	8h 44m	3h 34m				So, 28. Jul
Mo, 29. Jul	MESZ	23:58 – 00:57*	58m	AN+ bis M↗		00:30	16:38	03:36	1h 05m	04:41	49m	05:31	40m	06:11	15h 13m	21:25	40m	22:05	48m	22:54	1h 03m	23:58	8h 47m	3h 40m				Mo, 29. Jul
Di, 30. Jul	MESZ	23:55 – 01:33*	1h 37m	AN+ bis M↗		00:57	17:58	03:39	1h 03m	04:43	48m	05:32	40m	06:13	15h 11m	21:24	40m	22:04	48m	22:52	1h 02m	23:55	8h 50m	3h 47m				Di, 30. Jul
Mi, 31. Jul	MESZ	23:52 – 02:21*	2h 28m	AN+ bis M↗		01:33	19:09	03:42	1h 02m	04:45	48m	05:34	40m	06:14	15h 08m	21:22	39m	22:02	48m	22:50	1h 01m	23:52	8h 53m	3h 53m				Mi, 31. Jul
Do, 1. Aug	MESZ	23:49 – 03:22*	3h 32m	AN+ bis M↗		02:21	20:07	03:45	1h 01m	04:47	48m	05:35	39m	06:15	15h 05m	21:21	39m	22:00	47m	22:48	1h 00m	23:49	8h 55m	3h 58m				Do, 1. Aug
Fr, 2. Aug	MESZ	23:46 – 03:51*	4h 04m	AN+ bis AN–		03:22	20:51	03:48	1h 00m	04:49	47m	05:37	39m	06:17	15h 02m	21:19	39m	21:59	47m	22:46	1h 00m	23:46	8h 58m	4h 04m				Fr, 2. Aug
Sa, 3. Aug	MESZ	23:43 – 03:54*	4h 10m	AN+ bis AN–		04:32	21:22	03:51	1h 00m	04:51	47m	05:38	39m	06:18	14h 59m	21:18	39m	21:57	47m	22:44	59m	23:43	9h 01m	4h 10m				Sa, 3. Aug
So, 4. Aug	MESZ	23:40 – 03:57*	4h 16m	AN+ bis AN–	●	05:47	21:45	03:54	59m	04:53	47m	05:40	39m	06:19	14h 56m	21:16	39m	21:55	46m	22:42	58m	23:40	9h 04m	4h 16m				So, 4. Aug
Mo, 5. Aug	MESZ	23:37 – 03:59*	4h 22m	AN+ bis AN–		07:01	22:03	03:57	58m	04:55	46m	05:41	39m	06:21	14h 53m	21:14	38m	21:53	46m	22:40	57m	23:37	9h 07m	4h 22m				Mo, 5. Aug
Di, 6. Aug	MESZ	23:34 – 04:02*	4h 27m	AN+ bis AN–		08:12	22:17	03:59	57m	04:57	46m	05:43	38m	06:22	14h 50m	21:13	38m	21:52	45m	22:38	56m	23:34	9h 10m	4h 27m				Di, 6. Aug
Mi, 7. Aug	MESZ	23:31 – 04:05*	4h 33m	AN+ bis AN–		09:21	22:30	04:02	56m	04:59	45m	05:45	38m	06:23	14h 47m	21:11	38m	21:50	45m	22:35	55m	23:31	9h 13m	4h 33m				Mi, 7. Aug
Do, 8. Aug	MESZ	23:28 – 04:07*	4h 39m	AN+ bis AN–		10:28	22:42	04:05	55m	05:01	45m	05:46	38m	06:25	14h 44m	21:10	38m	21:48	45m	22:33	55m	23:28	9h 16m	4h 39m				Do, 8. Aug
Fr, 9. Aug	MESZ	23:25 – 04:10*	4h 44m	AN+ bis AN–		11:35	22:54	04:07	55m	05:03	45m	05:48	38m	06:26	14h 41m	21:08	38m	21:46	44m	22:31	54m	23:25	9h 19m	4h 44m				Fr, 9. Aug
Sa, 10. Aug	MESZ	23:22 – 04:13*	4h 50m	AN+ bis AN–		12:42	23:07	04:10	54m	05:04	44m	05:49	38m	06:28	14h 38m	21:06	38m	21:44	44m	22:29	53m	23:22	9h 22m	4h 50m				Sa, 10. Aug
So, 11. Aug	MESZ	23:23 – 04:15*	4h 52m	M↘ bis AN–		13:52	23:23	04:13	53m	05:06	44m	05:51	38m	06:29	14h 35m	21:04	37m	21:42	44m	22:27	52m	23:20	9h 26m	4h 55m				So, 11. Aug
Mo, 12. Aug	MESZ	23:43 – 04:18*	4h 34m	M↘ bis AN–	◐	15:03	23:43	04:15	53m	05:08	44m	05:53	37m	06:30	14h 32m	21:03	37m	21:40	44m	22:24	52m	23:17	9h 29m	5h 01m				Mo, 12. Aug
Di, 13. Aug	MESZ	00:11* – 04:20*	4h 09m	M↘ bis AN–		16:17	—:—	04:18	52m	05:10	44m	05:54	37m	06:32	14h 29m	21:01	37m	21:38	43m	22:22	51m	23:14	9h 32m	5h 06m				Di, 13. Aug
Mi, 14. Aug	MESZ	00:49* – 04:23*	3h 33m	M↘ bis AN–		17:30	00:11	04:20	51m	05:12	43m	05:56	37m	06:33	14h 25m	20:59	37m	21:36	43m	22:20	51m	23:11	9h 35m	5h 11m				Mi, 14. Aug
Do, 15. Aug	MESZ	01:42* – 04:25*	2h 43m	M↘ bis AN–		18:36	00:49	04:23	51m	05:14	43m	05:57	37m	06:35	14h 22m	20:57	37m	21:34	43m	22:18	50m	23:08	9h 38m	5h 17m				Do, 15. Aug
Fr, 16. Aug	MESZ	02:52* – 04:28*	1h 35m	M↘ bis AN–		19:31	01:42	04:25	50m	05:16	43m	05:59	37m	06:36	14h 19m	20:55	36m	21:32	42m	22:15	49m	23:05	9h 42m	5h 22m				Fr, 16. Aug
Sa, 17. Aug	MESZ	04:14* – 04:30*	15m	M↘ bis AN–		20:12	02:52	04:28	49m	05:18	42m	06:00	37m	06:38	14h 16m	20:54	36m	21:30	42m	22:13	49m	23:02	9h 45m	5h 27m				Sa, 17. Aug
So, 18. Aug	MESZ	—:——:—	–	Mond stört		20:43	04:14	04:30	49m	05:19	42m	06:02	36m	06:39	14h 12m	20:52	36m	21:28	42m	22:11	48m	23:00	9h 48m	5h 32m				So, 18. Aug
Mo, 19. Aug	MESZ	—:——:—	–	Mond stört	○	21:06	05:43	04:32	48m	05:21	42m	06:04	36m	06:40	14h 09m	20:50	36m	21:26	42m	22:08	48m	22:57	9h 51m	5h 38m				Mo, 19. Aug
Di, 20. Aug	MESZ	—:——:—	–	Mond stört		21:25	07:13	04:35	48m	05:23	42m	06:05	36m	06:42	14h 06m	20:48	36m	21:24	41m	22:06	47m	22:54	9h 55m	5h 43m				Di, 20. Aug
Mi, 21. Aug	MESZ	—:——:—	–	Mond stört		21:41	08:41	04:37	47m	05:25	41m	06:07	36m	06:43	14h 02m	20:46	36m	21:22	41m	22:04	47m	22:51	9h 58m	5h 48m				Mi, 21. Aug
Do, 22. Aug	MESZ	—:——:—	–	Mond stört		21:57	10:08	04:39	47m	05:27	41m	06:08	36m	06:45	13h 59m	20:44	36m	21:20	41m	22:01	46m	22:48	10h 01m	5h 53m				Do, 22. Aug
Fr, 23. Aug	MESZ	—:——:—	–	Mond stört		22:14	11:34	04:42	46m	05:29	41m	06:10	36m	06:46	13h 56m	20:42	35m	21:18	41m	21:59	46m	22:46	10h 05m	5h 58m				Fr, 23. Aug
Sa, 24. Aug	MESZ	—:——:—	–	Mond stört		22:34	13:00	04:44	46m	05:30	41m	06:11	35m	06:47	13h 52m	20:40	35m	21:16	40m	21:57	46m	22:43	10h 08m	6h 03m				Sa, 24. Aug
So, 25. Aug	MESZ	22:40 – 22:59	18m	AN+ bis M↗		22:59	14:25	04:46	46m	05:32	40m	06:13	35m	06:49	13h 49m	20:38	35m	21:14	40m	21:54	45m	22:40	10h 12m	6h 08m				So, 25. Aug
Mo, 26. Aug	MESZ	22:37 – 23:32	54m	AN+ bis M↗	◑	23:32	15:48	04:48	45m	05:34	40m	06:15	35m	06:50	13h 45m	20:36	35m	21:12	40m	21:52	45m	22:37	10h 15m	6h 13m				Mo, 26. Aug
Di, 27. Aug	MESZ	22:35 – 00:17*	1h 42m	AN+ bis M↗		—:—	17:03	04:50	45m	05:36	40m	06:16	35m	06:52	13h 42m	20:34	35m	21:10	40m	21:50	44m	22:35	10h 18m	6h 18m				Di, 27. Aug
Mi, 28. Aug	MESZ	22:32 – 01:14*	2h 41m	AN+ bis M↗		00:17	18:05	04:53	44m	05:38	40m	06:18	35m	06:53	13h 38m	20:32	35m	21:07	39m	21:47	44m	22:32	10h 22m	6h 22m				Mi, 28. Aug
Do, 29. Aug	MESZ	22:29 – 02:21*	3h 52m	AN+ bis M↗		01:14	18:52	04:55	44m	05:39	39m	06:19	35m	06:55	13h 35m	20:30	35m	21:05	39m	21:45	44m	22:29	10h 25m	6h 27m				Do, 29. Aug
Fr, 30. Aug	MESZ	22:26 – 03:34*	5h 07m	AN+ bis M↗		02:21	19:26	04:57	44m	05:41	39m	06:21	35m	06:56	13h 32m	20:28	35m	21:03	39m	21:43	43m	22:26	10h 29m	6h 32m				Fr, 30. Aug
Sa, 31. Aug	MESZ	22:24 – 04:48*	6h 24m	AN+ bis M↗		03:34	19:51	04:59	43m	05:43	39m	06:22	35m	06:57	13h 28m	20:26	34m	21:01	39m	21:40	43m	22:24	10h 32m	6h 37m				Sa, 31. Aug
So, 1. Sep	MESZ	22:21 – 05:03*	6h 41m	AN+ bis AN–		04:48	20:10	05:01	43m	05:44	39m	06:24	35m	06:59	13h 25m	20:24	34m	20:59	39m	21:38	43m	22:21	10h 36m	6h 41m				So, 1. Sep
Mo, 2. Sep	MESZ	22:18 – 05:05*	6h 46m	AN+ bis AN–		06:00	20:25	05:03	43m	05:46	39m	06:25	34m	07:00	13h 21m	20:22	34m	20:57	38m	21:36	42m	22:18	10h 39m	6h 46m				Mo, 2. Sep
Di, 3. Sep	MESZ	22:16 – 05:07*	6h 51m	AN+ bis AN–	●	07:10	20:38	05:05	42m	05:48	38m	06:27	34m	07:02	13h 18m	20:20	34m	20:54	38m	21:33	42m	22:16	10h 43m	6h 51m				Di, 3. Sep
Mi, 4. Sep	MESZ	22:13 – 05:09*	6h 55m	AN+ bis AN–		08:17	20:50	05:07	42m	05:50	38m	06:28	34m	07:03	13h 14m	20:18	34m	20:52	38m	21:31	42m	22:13	10h 46m	6h 55m				Mi, 4. Sep
Do, 5. Sep	MESZ	22:10 – 05:11*	7h 00m	AN+ bis AN–		09:24	21:01	05:09	42m	05:51	38m	06:30	34m	07:05	13h 11m	20:16	34m	20:50	38m	21:29	41m	22:10	10h 50m	7h 00m				Do, 5. Sep
Fr, 6. Sep	MESZ	22:08 – 05:13*	7h 05m	AN+ bis AN–		10:31	21:14	05:11	41m	05:53	38m	06:31	34m	07:06	13h 07m	20:14	34m	20:48	38m	21:26	41m	22:08	10h 53m	7h 05m				Fr, 6. 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
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		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*		
Sa, 7. Sep	MESZ	22:05 – 05:15*	*7h 09m*	AN$_+$ *bis* AN$_-$		11:39	21:28	05:13	*41m*	05:55	*38m*	06:33	*34m*	07:07	*13h 04m*	20:11	*34m*	20:46	*38m*	21:24	*41m*	22:05	*10h 57m*	*7h 09m*				Sa, 7. Sep
So, 8. Sep	MESZ	22:03 – 05:17*	*7h 14m*	AN$_+$ *bis* AN$_-$		12:50	21:46	05:15	*41m*	05:56	*38m*	06:34	*34m*	07:09	*13h 00m*	20:09	*34m*	20:44	*37m*	21:22	*41m*	22:03	*11h 00m*	*7h 14m*				So, 8. Sep
Mo, 9. Sep	MESZ	22:10 – 05:19*	*7h 08m*	M$_\searrow$ *bis* AN$_-$		14:02	22:10	05:17	*41m*	05:58	*38m*	06:36	*34m*	07:10	*12h 57m*	20:07	*34m*	20:41	*37m*	21:19	*40m*	22:00	*11h 04m*	*7h 18m*				Mo, 9. Sep
Di, 10. Sep	MESZ	22:43 – 05:20*	*6h 37m*	M$_\searrow$ *bis* AN$_-$		15:14	22:43	05:19	*40m*	06:00	*37m*	06:37	*34m*	07:12	*12h 53m*	20:05	*34m*	20:39	*37m*	21:17	*40m*	21:58	*11h 07m*	*7h 22m*				Di, 10. Sep
Mi, 11. Sep	MESZ	23:28 – 05:22*	*5h 54m*	M$_\searrow$ *bis* AN$_-$	◐	16:22	23:28	05:20	*40m*	06:01	*37m*	06:39	*34m*	07:13	*12h 49m*	20:03	*34m*	20:37	*37m*	21:15	*40m*	21:55	*11h 11m*	*7h 27m*				Mi, 11. Sep
Do, 12. Sep	MESZ	00:29* – 05:24*	*4h 55m*	M$_\searrow$ *bis* AN$_-$		17:20	—:—	05:22	*40m*	06:03	*37m*	06:40	*34m*	07:14	*12h 46m*	20:01	*33m*	20:35	*37m*	21:12	*40m*	21:52	*11h 15m*	*7h 31m*				Do, 12. Sep
Fr, 13. Sep	MESZ	01:44* – 05:26*	*3h 41m*	M$_\searrow$ *bis* AN$_-$		18:06	00:29	05:24	*40m*	06:04	*37m*	06:42	*34m*	07:16	*12h 42m*	19:59	*33m*	20:33	*37m*	21:10	*39m*	21:50	*11h 18m*	*7h 36m*				Fr, 13. Sep
Sa, 14. Sep	MESZ	03:09* – 05:28*	*2h 18m*	M$_\searrow$ *bis* AN$_-$		18:41	01:44	05:26	*40m*	06:06	*37m*	06:43	*33m*	07:17	*12h 39m*	19:57	*33m*	20:30	*37m*	21:08	*39m*	21:47	*11h 22m*	*7h 40m*				Sa, 14. Sep
So, 15. Sep	MESZ	04:38* – 05:30*	*51m*	M$_\searrow$ *bis* AN$_-$		19:07	03:09	05:28	*39m*	06:08	*37m*	06:45	*33m*	07:19	*12h 35m*	19:54	*33m*	20:28	*37m*	21:05	*39m*	21:45	*11h 25m*	*7h 44m*				So, 15. Sep
Mo, 16. Sep	MESZ	—:——:—	–	Mond stört		19:27	04:38	05:30	*39m*	06:09	*37m*	06:46	*33m*	07:20	*12h 32m*	19:52	*33m*	20:26	*36m*	21:03	*39m*	21:42	*11h 29m*	*7h 48m*				Mo, 16. Sep
Di, 17. Sep	MESZ	—:——:—	–	Mond stört		19:45	06:07	05:31	*39m*	06:11	*37m*	06:48	*33m*	07:22	*12h 28m*	19:50	*33m*	20:24	*36m*	21:01	*39m*	21:40	*11h 32m*	*7h 53m*				Di, 17. Sep
Mi, 18. Sep	MESZ	—:——:—	–	Mond stört	○	20:01	07:35	05:33	*39m*	06:12	*36m*	06:49	*33m*	07:23	*12h 25m*	19:48	*33m*	20:22	*36m*	20:58	*39m*	21:38	*11h 36m*	*7h 57m*				Mi, 18. Sep
Do, 19. Sep	MESZ	—:——:—	–	Mond stört		20:18	09:04	05:35	*39m*	06:14	*36m*	06:51	*33m*	07:24	*12h 21m*	19:46	*33m*	20:20	*36m*	20:56	*38m*	21:35	*11h 39m*	*8h 01m*				Do, 19. Sep
Fr, 20. Sep	MESZ	—:——:—	–	Mond stört		20:36	10:33	05:36	*38m*	06:15	*36m*	06:52	*33m*	07:26	*12h 17m*	19:44	*33m*	20:17	*36m*	20:54	*38m*	21:33	*11h 43m*	*8h 05m*				Fr, 20. Sep
Sa, 21. Sep	MESZ	—:——:—	–	Mond stört		21:00	12:02	05:38	*38m*	06:17	*36m*	06:54	*33m*	07:27	*12h 14m*	19:42	*33m*	20:15	*36m*	20:52	*38m*	21:30	*11h 47m*	*8h 09m*				Sa, 21. Sep
So, 22. Sep	MESZ	21:28 – 21:30	*2m*	AN$_+$ *bis* M$_\nearrow$		21:30	13:30	05:40	*38m*	06:19	*36m*	06:55	*33m*	07:29	*12h 10m*	19:39	*33m*	20:13	*36m*	20:49	*38m*	21:28	*11h 50m*	*8h 13m*				So, 22. Sep
Mo, 23. Sep	MESZ	21:26 – 22:12	*46m*	AN$_+$ *bis* M$_\nearrow$		22:12	14:51	05:42	*38m*	06:20	*36m*	06:57	*33m*	07:30	*12h 07m*	19:37	*33m*	20:11	*36m*	20:47	*38m*	21:26	*11h 54m*	*8h 17m*				Mo, 23. Sep
Di, 24. Sep	MESZ	21:23 – 23:06	*1h 42m*	AN$_+$ *bis* M$_\nearrow$	◑	23:06	16:00	05:43	*38m*	06:22	*36m*	06:58	*33m*	07:32	*12h 03m*	19:35	*33m*	20:09	*36m*	20:45	*38m*	21:23	*11h 57m*	*8h 21m*				Di, 24. Sep
Mi, 25. Sep	MESZ	21:21 – 00:12*	*2h 50m*	AN$_+$ *bis* M$_\nearrow$		—:—	16:52	05:45	*38m*	06:23	*36m*	07:00	*33m*	07:33	*12h 00m*	19:33	*33m*	20:07	*36m*	20:43	*38m*	21:21	*12h 01m*	*8h 25m*				Mi, 25. Sep
Do, 26. Sep	MESZ	21:19 – 01:24*	*4h 05m*	AN$_+$ *bis* M$_\nearrow$		00:12	17:30	05:47	*38m*	06:25	*36m*	07:01	*33m*	07:35	*11h 56m*	19:31	*33m*	20:04	*36m*	20:41	*37m*	21:19	*12h 04m*	*8h 29m*				Do, 26. Sep
Fr, 27. Sep	MESZ	21:16 – 02:38*	*5h 21m*	AN$_+$ *bis* M$_\nearrow$		01:24	17:57	05:48	*37m*	06:26	*36m*	07:02	*33m*	07:36	*11h 52m*	19:29	*33m*	20:02	*36m*	20:38	*37m*	21:16	*12h 08m*	*8h 33m*				Fr, 27. Sep
Sa, 28. Sep	MESZ	21:14 – 03:50*	*6h 35m*	AN$_+$ *bis* M$_\nearrow$		02:38	18:17	05:50	*37m*	06:28	*36m*	07:04	*33m*	07:37	*11h 49m*	19:27	*33m*	20:00	*36m*	20:36	*37m*	21:14	*12h 12m*	*8h 37m*				Sa, 28. Sep
So, 29. Sep	MESZ	21:12 – 05:00*	*7h 48m*	AN$_+$ *bis* M$_\nearrow$		03:50	18:33	05:51	*37m*	06:29	*36m*	07:05	*33m*	07:39	*11h 45m*	19:25	*33m*	19:58	*36m*	20:34	*37m*	21:12	*12h 15m*	*8h 41m*				So, 29. Sep
Mo, 30. Sep	MESZ	21:09 – 05:55*	*8h 45m*	AN$_+$ *bis* AN$_-$		05:00	18:46	05:53	*37m*	06:31	*36m*	07:07	*33m*	07:40	*11h 42m*	19:23	*33m*	19:56	*36m*	20:32	*37m*	21:09	*12h 19m*	*8h 45m*				Mo, 30. Sep
Di, 1. Okt	MESZ	21:07 – 05:56*	*8h 49m*	AN$_+$ *bis* AN$_-$		06:08	18:58	05:55	*37m*	06:32	*36m*	07:08	*33m*	07:42	*11h 38m*	19:20	*33m*	19:54	*35m*	20:30	*37m*	21:07	*12h 22m*	*8h 49m*				Di, 1. Okt
Mi, 2. Okt	MESZ	21:05 – 05:58*	*8h 52m*	AN$_+$ *bis* AN$_-$	●	07:14	19:10	05:56	*37m*	06:34	*36m*	07:10	*33m*	07:43	*11h 35m*	19:18	*33m*	19:52	*35m*	20:28	*37m*	21:05	*12h 26m*	*8h 52m*				Mi, 2. Okt
Do, 3. Okt	MESZ	21:03 – 05:59*	*8h 56m*	AN$_+$ *bis* AN$_-$		08:21	19:22	05:58	*37m*	06:35	*36m*	07:11	*33m*	07:45	*11h 31m*	19:16	*33m*	19:50	*35m*	20:26	*37m*	21:03	*12h 30m*	*8h 56m*				Do, 3. Okt
Fr, 4. Okt	MESZ	21:01 – 06:01*	*9h 00m*	AN$_+$ *bis* AN$_-$		09:29	19:36	05:59	*37m*	06:37	*35m*	07:13	*33m*	07:46	*11h 27m*	19:14	*33m*	19:48	*35m*	20:24	*37m*	21:01	*12h 33m*	*9h 00m*				Fr, 4. Okt
Sa, 5. Okt	MESZ	20:59 – 06:02*	*9h 03m*	AN$_+$ *bis* AN$_-$		10:39	19:53	06:01	*37m*	06:38	*35m*	07:14	*33m*	07:48	*11h 24m*	19:12	*33m*	19:46	*35m*	20:21	*37m*	20:59	*12h 37m*	*9h 03m*				Sa, 5. Okt
So, 6. Okt	MESZ	20:56 – 06:04*	*9h 07m*	AN$_+$ *bis* AN$_-$		11:51	20:14	06:02	*37m*	06:40	*35m*	07:16	*33m*	07:49	*11h 20m*	19:10	*33m*	19:44	*35m*	20:19	*37m*	20:56	*12h 40m*	*9h 07m*				So, 6. Okt
Mo, 7. Okt	MESZ	20:54 – 06:06*	*9h 11m*	AN$_+$ *bis* AN$_-$		13:03	20:43	06:04	*37m*	06:41	*35m*	07:17	*33m*	07:51	*11h 17m*	19:08	*33m*	19:41	*35m*	20:17	*36m*	20:54	*12h 44m*	*9h 11m*				Mo, 7. Okt
Di, 8. Okt	MESZ	21:23 – 06:07*	*8h 44m*	M$_\searrow$ *bis* AN$_-$		14:12	21:23	06:06	*37m*	06:43	*35m*	07:19	*33m*	07:52	*11h 13m*	19:06	*33m*	19:39	*35m*	20:15	*36m*	20:52	*12h 47m*	*9h 14m*				Di, 8. Okt
Mi, 9. Okt	MESZ	22:16 – 06:09*	*7h 52m*	M$_\searrow$ *bis* AN$_-$		15:12	22:16	06:07	*36m*	06:44	*35m*	07:20	*33m*	07:54	*11h 10m*	19:04	*33m*	19:37	*35m*	20:13	*36m*	20:50	*12h 51m*	*9h 18m*				Mi, 9. Okt
Do, 10. Okt	MESZ	23:24 – 06:10*	*6h 45m*	M$_\searrow$ *bis* AN$_-$	◐	16:02	23:24	06:09	*36m*	06:46	*35m*	07:21	*33m*	07:55	*11h 06m*	19:02	*33m*	19:35	*35m*	20:11	*36m*	20:48	*12h 54m*	*9h 22m*				Do, 10. Okt
Fr, 11. Okt	MESZ	00:43* – 06:12*	*5h 28m*	M$_\searrow$ *bis* AN$_-$		16:39	—:—	06:10	*36m*	06:47	*35m*	07:23	*33m*	07:57	*11h 03m*	19:00	*33m*	19:33	*35m*	20:09	*36m*	20:46	*12h 58m*	*9h 25m*				Fr, 11. Okt
Sa, 12. Okt	MESZ	02:07* – 06:13*	*4h 06m*	M$_\searrow$ *bis* AN$_-$		17:08	00:43	06:12	*36m*	06:48	*35m*	07:24	*33m*	07:58	*10h 59m*	18:58	*33m*	19:32	*35m*	20:07	*36m*	20:44	*13h 01m*	*9h 29m*				Sa, 12. Okt
So, 13. Okt	MESZ	03:33* – 06:15*	*2h 41m*	M$_\searrow$ *bis* AN$_-$		17:29	02:07	06:13	*36m*	06:50	*35m*	07:26	*33m*	08:00	*10h 56m*	18:56	*33m*	19:30	*35m*	20:05	*36m*	20:42	*13h 05m*	*9h 32m*				So, 13. Okt
Mo, 14. Okt	MESZ	05:00* – 06:16*	*1h 16m*	M$_\searrow$ *bis* AN$_-$		17:48	03:33	06:15	*36m*	06:51	*35m*	07:27	*33m*	08:01	*10h 52m*	18:54	*33m*	19:28	*35m*	20:04	*36m*	20:40	*13h 08m*	*9h 35m*				Mo, 14. Okt
Di, 15. Okt	MESZ	—:——:—	–	Mond stört		18:04	05:00	06:16	*36m*	06:53	*35m*	07:29	*33m*	08:03	*10h 49m*	18:52	*33m*	19:26	*35m*	20:02	*36m*	20:38	*13h 12m*	*9h 39m*				Di, 15. Okt
Mi, 16. Okt	MESZ	—:——:—	–	Mond stört		18:20	06:28	06:18	*36m*	06:54	*35m*	07:30	*33m*	08:04	*10h 45m*	18:50	*33m*	19:24	*35m*	20:00	*36m*	20:36	*13h 15m*	*9h 42m*				Mi, 16. Okt
Do, 17. Okt	MESZ	—:——:—	–	Mond stört	○	18:38	07:56	06:19	*36m*	06:56	*35m*	07:32	*34m*	08:06	*10h 42m*	18:48	*34m*	19:22	*35m*	19:58	*36m*	20:34	*13h 19m*	*9h 46m*				Do, 17. Okt
Fr, 18. Okt	MESZ	—:——:—	–	Mond stört		18:59	09:27	06:21	*36m*	06:57	*36m*	07:33	*34m*	08:07	*10h 38m*	18:46	*34m*	19:20	*35m*	19:56	*36m*	20:33	*13h 22m*	*9h 49m*				Fr, 18. Okt
Sa, 19. Okt	MESZ	—:——:—	–	Mond stört		19:27	10:59	06:22	*36m*	06:59	*36m*	07:35	*34m*	08:09	*10h 35m*	18:44	*34m*	19:18	*35m*	19:54	*36m*	20:31	*13h 26m*	*9h 52m*				Sa, 19. Okt
So, 20. Okt	MESZ	—:——:—	–	Mond stört		20:04	12:27	06:24	*36m*	07:00	*36m*	07:36	*34m*	08:10	*10h 31m*	18:42	*34m*	19:16	*36m*	19:52	*36m*	20:29	*13h 29m*	*9h 55m*				So, 20. Okt
Mo, 21. Okt	MESZ	20:27 – 20:55	*27m*	AN$_+$ *bis* M$_\nearrow$		20:55	13:44	06:25	*36m*	07:02	*36m*	07:38	*34m*	08:12	*10h 28m*	18:40	*34m*	19:15	*36m*	19:51	*36m*	20:27	*13h 33m*	*9h 59m*				Mo, 21. Okt
Di, 22. Okt	MESZ	20:25 – 21:58	*1h 32m*	AN$_+$ *bis* M$_\nearrow$		21:58	14:45	06:26	*36m*	07:03	*36m*	07:39	*34m*	08:14	*10h 24m*	18:39	*34m*	19:13	*36m*	19:49	*36m*	20:25	*13h 36m*	*10h 02m*				Di, 22. Okt
Mi, 23. Okt	MESZ	20:24 – 23:10	*2h 46m*	AN$_+$ *bis* M$_\nearrow$		23:10	15:29	06:28	*36m*	07:04	*36m*	07:41	*34m*	08:15	*10h 21m*	18:37	*34m*	19:11	*36m*	19:47	*36m*	20:24	*13h 40m*	*10h 05m*				Mi, 23. Okt
Do, 24. Okt	MESZ	20:22 – 00:25*	*4h 03m*	AN$_+$ *bis* M$_\nearrow$	◑	—:—	16:01	06:29	*36m*	07:06	*36m*	07:42	*34m*	08:17	*10h 18m*	18:35	*34m*	19:09	*36m*	19:46	*36m*	20:22	*13h 43m*	*10h 08m*				Do, 24. Okt
Fr, 25. Okt	MESZ	20:20 – 01:39*	*5h 18m*	AN$_+$ *bis* M$_\nearrow$		00:25	16:23	06:31	*36m*	07:07	*36m*	07:44	*34m*	08:18	*10h 14m*	18:33	*34m*	19:08	*36m*	19:44	*36m*	20:20	*13h 46m*	*10h 11m*				Fr, 25. Okt
Sa, 26. Okt	MESZ	20:19 – 02:50*	*6h 30m*	AN$_+$ *bis* M$_\nearrow$		01:39	16:40	06:32	*36m*	07:09	*36m*	07:45	*34m*	08:20	*10h 11m*	18:31	*34m*	19:06	*36m*	19:42	*36m*	20:19	*13h 50m*	*10h 14m*				Sa, 26. 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
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		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*		
So, 27. Okt		19:17 – 02:58*	7h 40m	AN_+ bis $M_↗$		01:50	15:54	05:34	36m	06:10	36m	06:47	34m	07:21	10h 08m	17:30	34m	18:04	36m	18:41	36m	19:17	13h 53m	10h 17m				So, 27. Okt
Mo, 28. Okt		19:16 – 04:05*	8h 49m	AN_+ bis $M_↗$		02:58	16:07	05:35	36m	06:12	36m	06:48	34m	07:23	10h 04m	17:28	34m	18:03	36m	18:39	36m	19:16	13h 56m	10h 20m				Mo, 28. Okt
Di, 29. Okt		19:14 – 05:12*	9h 57m	AN_+ bis $M_↗$		04:05	16:18	05:36	36m	06:13	36m	06:50	34m	07:25	10h 01m	17:26	34m	18:01	36m	18:37	36m	19:14	14h 00m	10h 23m				Di, 29. Okt
Mi, 30. Okt		19:13 – 05:39*	10h 26m	AN_+ bis AN_-		05:12	16:30	05:38	36m	06:15	36m	06:51	35m	07:26	9h 58m	17:24	35m	17:59	36m	18:36	36m	19:13	14h 03m	10h 26m				Mi, 30. Okt
Do, 31. Okt		19:11 – 05:41*	10h 29m	AN_+ bis AN_-		06:19	16:44	05:39	36m	06:16	36m	06:53	35m	07:28	9h 54m	17:23	35m	17:58	36m	18:34	36m	19:11	14h 06m	10h 29m				Do, 31. Okt
Fr, 1. Nov		19:10 – 05:42*	10h 32m	AN_+ bis AN_-	●	07:29	16:59	05:41	36m	06:17	36m	06:54	35m	07:29	9h 51m	17:21	35m	17:56	36m	18:33	36m	19:10	14h 09m	10h 32m				Fr, 1. Nov
Sa, 2. Nov		19:08 – 05:44*	10h 35m	AN_+ bis AN_-		08:40	17:20	05:42	36m	06:19	36m	06:56	35m	07:31	9h 48m	17:20	35m	17:55	36m	18:32	36m	19:08	14h 13m	10h 35m				Sa, 2. Nov
So, 3. Nov		19:07 – 05:45*	10h 38m	AN_+ bis AN_-		09:53	17:46	05:44	36m	06:20	36m	06:57	35m	07:33	9h 45m	17:18	35m	17:53	36m	18:30	36m	19:07	14h 16m	10h 38m				So, 3. Nov
Mo, 4. Nov		19:06 – 05:46*	10h 40m	AN_+ bis AN_-		11:03	18:22	05:45	36m	06:22	36m	06:59	35m	07:34	9h 42m	17:16	35m	17:52	36m	18:29	36m	19:06	14h 19m	10h 40m				Mo, 4. Nov
Di, 5. Nov		19:12 – 05:48*	10h 36m	$M_↘$ bis AN_-		12:07	19:12	05:46	36m	06:23	36m	07:00	35m	07:36	9h 39m	17:15	35m	17:51	36m	18:27	36m	19:04	14h 22m	10h 43m				Di, 5. Nov
Mi, 6. Nov		20:15 – 05:49*	9h 34m	$M_↘$ bis AN_-		12:59	20:15	05:48	36m	06:25	37m	07:02	35m	07:37	9h 35m	17:13	35m	17:49	36m	18:26	36m	19:03	14h 25m	10h 46m				Mi, 6. Nov
Do, 7. Nov		21:28 – 05:50*	8h 21m	$M_↘$ bis AN_-		13:39	21:28	05:49	36m	06:26	37m	07:03	35m	07:39	9h 32m	17:12	35m	17:48	37m	18:25	36m	19:02	14h 28m	10h 48m				Do, 7. Nov
Fr, 8. Nov		22:49 – 05:52*	7h 03m	$M_↘$ bis AN_-		14:10	22:49	05:50	36m	06:27	37m	07:05	36m	07:41	9h 29m	17:10	35m	17:46	37m	18:24	36m	19:00	14h 31m	10h 51m				Fr, 8. Nov
Sa, 9. Nov		00:11* – 05:53*	5h 42m	$M_↘$ bis AN_-	◐	14:33	—:—	05:52	37m	06:29	37m	07:06	36m	07:42	9h 26m	17:09	36m	17:45	37m	18:22	36m	18:59	14h 34m	10h 53m				Sa, 9. Nov
So, 10. Nov		01:34* – 05:54*	4h 20m	$M_↘$ bis AN_-		14:51	00:11	05:53	37m	06:30	37m	07:08	36m	07:44	9h 23m	17:08	36m	17:44	37m	18:21	37m	18:58	14h 37m	10h 56m				So, 10. Nov
Mo, 11. Nov		02:58* – 05:56*	2h 58m	$M_↘$ bis AN_-		15:08	01:34	05:54	37m	06:32	37m	07:09	36m	07:45	9h 20m	17:06	36m	17:43	37m	18:20	37m	18:57	14h 40m	10h 58m				Mo, 11. Nov
Di, 12. Nov		04:23* – 05:57*	1h 34m	$M_↘$ bis AN_-		15:23	02:58	05:56	37m	06:33	37m	07:10	36m	07:47	9h 18m	17:05	36m	17:41	37m	18:19	37m	18:56	14h 43m	11h 01m				Di, 12. Nov
Mi, 13. Nov		05:51* – 05:58*	7m	$M_↘$ bis AN_-		15:40	04:23	05:57	37m	06:34	37m	07:12	36m	07:48	9h 15m	17:04	36m	17:40	37m	18:18	37m	18:55	14h 46m	11h 03m				Mi, 13. Nov
Do, 14. Nov		—:— – —:—	–	Mond stört		15:59	05:51	05:58	37m	06:36	37m	07:13	36m	07:50	9h 12m	17:02	36m	17:39	37m	18:17	37m	18:54	14h 49m	11h 05m				Do, 14. Nov
Fr, 15. Nov		—:— – —:—	–	Mond stört	○	16:23	07:21	06:00	37m	06:37	37m	07:15	36m	07:52	9h 09m	17:01	36m	17:38	37m	18:16	37m	18:53	14h 51m	11h 08m				Fr, 15. Nov
Sa, 16. Nov		—:— – —:—	–	Mond stört		16:55	08:52	06:01	37m	06:38	37m	07:16	36m	07:53	9h 06m	17:00	36m	17:37	37m	18:15	37m	18:52	14h 54m	11h 10m				Sa, 16. Nov
So, 17. Nov		—:— – —:—	–	Mond stört		17:40	10:17	06:02	37m	06:40	37m	07:18	37m	07:55	9h 04m	16:59	37m	17:36	37m	18:14	37m	18:51	14h 57m	11h 12m				So, 17. Nov
Mo, 18. Nov		—:— – —:—	–	Mond stört		18:39	11:28	06:04	37m	06:41	37m	07:19	37m	07:56	9h 01m	16:58	37m	17:35	37m	18:13	37m	18:50	14h 59m	11h 14m				Mo, 18. Nov
Di, 19. Nov		18:50 – 19:50	1h 00m	AN_+ bis $M_↗$		19:50	12:22	06:05	37m	06:42	38m	07:20	37m	07:58	8h 59m	16:57	37m	17:34	38m	18:12	37m	18:50	15h 02m	11h 16m				Di, 19. Nov
Mi, 20. Nov		18:49 – 21:07	2h 18m	AN_+ bis $M_↗$		21:07	12:59	06:06	37m	06:44	38m	07:22	37m	07:59	8h 56m	16:56	37m	17:33	38m	18:11	37m	18:49	15h 04m	11h 18m				Mi, 20. Nov
Do, 21. Nov		18:48 – 22:23	3h 35m	AN_+ bis $M_↗$		22:23	13:26	06:07	37m	06:45	38m	07:23	37m	08:01	8h 54m	16:55	37m	17:32	38m	18:11	37m	18:48	15h 07m	11h 20m				Do, 21. Nov
Fr, 22. Nov		18:47 – 23:36	4h 49m	AN_+ bis $M_↗$		23:36	13:46	06:09	37m	06:46	38m	07:25	37m	08:02	8h 51m	16:54	37m	17:32	38m	18:10	37m	18:47	15h 09m	11h 22m				Fr, 22. Nov
Sa, 23. Nov		18:47 – 00:46*	5h 59m	AN_+ bis $M_↗$	◑	—:—	14:01	06:10	37m	06:47	38m	07:26	37m	08:04	8h 49m	16:53	37m	17:31	38m	18:09	37m	18:47	15h 12m	11h 24m				Sa, 23. Nov
So, 24. Nov		18:46 – 01:54*	7h 07m	AN_+ bis $M_↗$		00:46	14:14	06:11	37m	06:49	38m	07:27	37m	08:05	8h 47m	16:52	37m	17:30	38m	18:08	37m	18:46	15h 14m	11h 25m				So, 24. Nov
Mo, 25. Nov		18:46 – 03:00*	8h 14m	AN_+ bis $M_↗$		01:54	14:26	06:12	37m	06:50	38m	07:28	37m	08:06	8h 44m	16:51	37m	17:29	38m	18:08	37m	18:46	15h 16m	11h 27m				Mo, 25. Nov
Di, 26. Nov		18:45 – 04:07*	9h 22m	AN_+ bis $M_↗$		03:00	14:38	06:13	37m	06:51	38m	07:30	38m	08:08	8h 42m	16:51	38m	17:29	38m	18:07	37m	18:45	15h 18m	11h 29m				Di, 26. Nov
Mi, 27. Nov		18:45 – 05:16*	10h 31m	AN_+ bis $M_↗$		04:07	14:51	06:14	37m	06:52	38m	07:31	38m	08:09	8h 40m	16:50	38m	17:28	38m	18:07	37m	18:45	15h 20m	11h 30m				Mi, 27. Nov
Do, 28. Nov		18:44 – 06:17*	11h 32m	AN_+ bis AN_-		05:16	15:06	06:16	37m	06:54	38m	07:32	38m	08:11	8h 38m	16:49	38m	17:28	38m	18:06	37m	18:44	15h 22m	11h 32m				Do, 28. Nov
Fr, 29. Nov		18:44 – 06:18*	11h 34m	AN_+ bis AN_-		06:27	15:24	06:17	37m	06:55	38m	07:34	38m	08:12	8h 36m	16:49	38m	17:27	38m	18:06	37m	18:44	15h 24m	11h 34m				Fr, 29. Nov
Sa, 30. Nov		18:43 – 06:19*	11h 35m	AN_+ bis AN_-		07:40	15:49	06:18	38m	06:56	38m	07:35	38m	08:13	8h 34m	16:48	38m	17:27	38m	18:05	38m	18:43	15h 26m	11h 35m				Sa, 30. Nov
So, 1. Dez		18:43 – 06:20*	11h 36m	AN_+ bis AN_-	●	08:52	16:22	06:19	38m	06:57	38m	07:36	38m	08:15	8h 33m	16:48	38m	17:26	38m	18:05	38m	18:43	15h 28m	11h 36m				So, 1. Dez
Mo, 2. Dez		18:43 – 06:21*	11h 38m	AN_+ bis AN_-		09:59	17:08	06:20	38m	06:58	39m	07:37	38m	08:16	8h 31m	16:47	38m	17:26	39m	18:05	38m	18:43	15h 29m	11h 38m				Mo, 2. Dez
Di, 3. Dez		18:43 – 06:22*	11h 39m	AN_+ bis AN_-		10:55	18:07	06:21	38m	06:59	39m	07:38	38m	08:17	8h 29m	16:47	38m	17:25	39m	18:05	38m	18:43	15h 31m	11h 39m				Di, 3. Dez
Mi, 4. Dez		19:19 – 06:23*	11h 03m	$M_↘$ bis AN_-		11:40	19:19	06:22	38m	07:00	39m	07:39	38m	08:18	8h 28m	16:46	38m	17:25	39m	18:04	38m	18:43	15h 33m	11h 40m				Mi, 4. Dez
Do, 5. Dez		20:38 – 06:24*	9h 46m	$M_↘$ bis AN_-		12:13	20:38	06:23	38m	07:01	39m	07:40	38m	08:19	8h 26m	16:46	38m	17:25	39m	18:04	38m	18:42	15h 34m	11h 41m				Do, 5. Dez
Fr, 6. Dez		21:59 – 06:25*	8h 25m	$M_↘$ bis AN_-		12:37	21:59	06:24	38m	07:02	39m	07:42	39m	08:21	8h 25m	16:46	39m	17:25	39m	18:04	38m	18:42	15h 35m	11h 42m				Fr, 6. Dez
Sa, 7. Dez		23:20 – 06:26*	7h 05m	$M_↘$ bis AN_-		12:57	23:20	06:25	38m	07:03	39m	07:43	39m	08:22	8h 23m	16:45	39m	17:25	39m	18:04	38m	18:42	15h 37m	11h 43m				Sa, 7. Dez
So, 8. Dez		00:41* – 06:27*	5h 45m	$M_↘$ bis AN_-	◐	13:13	—:—	06:26	38m	07:04	39m	07:44	39m	08:23	8h 22m	16:45	39m	17:25	39m	18:04	38m	18:42	15h 38m	11h 44m				So, 8. Dez
Mo, 9. Dez		02:02* – 06:28*	4h 25m	$M_↘$ bis AN_-		13:29	00:41	06:27	38m	07:05	39m	07:44	39m	08:24	8h 21m	16:45	39m	17:24	39m	18:04	38m	18:42	15h 39m	11h 45m				Mo, 9. Dez
Di, 10. Dez		03:25* – 06:28*	3h 02m	$M_↘$ bis AN_-		13:44	02:02	06:28	38m	07:06	39m	07:45	39m	08:25	8h 20m	16:45	39m	17:24	39m	18:04	38m	18:42	15h 40m	11h 46m				Di, 10. Dez
Mi, 11. Dez		04:52* – 06:29*	1h 37m	$M_↘$ bis AN_-		14:01	03:25	06:28	38m	07:07	39m	07:46	39m	08:26	8h 19m	16:45	39m	17:24	39m	18:04	38m	18:42	15h 41m	11h 46m				Mi, 11. Dez
Do, 12. Dez		06:20* – 06:30*	9m	$M_↘$ bis AN_-		14:22	04:52	06:29	38m	07:08	39m	07:47	39m	08:27	8h 18m	16:45	39m	17:25	39m	18:04	38m	18:43	15h 42m	11h 47m				Do, 12. Dez
Fr, 13. Dez		—:— – —:—	–	Mond stört		14:49	06:20	06:30	38m	07:08	39m	07:48	39m	08:27	8h 17m	16:45	39m	17:25	39m	18:04	38m	18:43	15h 43m	11h 48m				Fr, 13. Dez
Sa, 14. Dez		—:— – —:—	–	Mond stört		15:27	07:47	06:31	38m	07:09	39m	07:49	39m	08:28	8h 17m	16:45	39m	17:25	39m	18:04	38m	18:43	15h 43m	11h 48m				Sa, 14. Dez
So, 15. Dez		—:— – —:—	–	Mond stört	○	16:19	09:05	06:31	38m	07:10	39m	07:50	39m	08:29	8h 16m	16:46	39m	17:25	39m	18:05	38m	18:43	15h 44m	11h 48m				So, 15. 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
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.	↗	↘	Astr.	Δt	Naut.	Δt	Bürg.	Δt	↗	Δt	↘	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Mo, 16. Dez		—:——:—	–	Mond stört		17:26	10:08	06:32	38m	07:11	39m	07:50	39m	08:30	8h 15m	16:46	39m	17:25	39m	18:05	38m	18:43	15h 44m	11h 49m				Mo, 16. Dez
Di, 17. Dez		—:——:—	–	Mond stört		18:42	10:53	06:33	38m	07:11	39m	07:51	39m	08:31	8h 15m	16:46	39m	17:26	39m	18:05	38m	18:44	15h 45m	11h 49m				Di, 17. Dez
Mi, 18. Dez		18:44 – 20:01	1h 16m	AN+ bis M↗		20:01	11:25	06:33	38m	07:12	39m	07:52	39m	08:31	8h 15m	16:46	39m	17:26	39m	18:06	38m	18:44	15h 45m	11h 49m				Mi, 18. Dez
Do, 19. Dez		18:45 – 21:18	2h 32m	AN+ bis M↗		21:18	11:48	06:34	38m	07:13	39m	07:52	39m	08:32	8h 14m	16:47	39m	17:26	39m	18:06	38m	18:45	15h 45m	11h 49m				Do, 19. Dez
Fr, 20. Dez		18:45 – 22:30	3h 45m	AN+ bis M↗		22:30	12:05	06:35	38m	07:13	39m	07:53	39m	08:32	8h 14m	16:47	39m	17:27	39m	18:07	38m	18:45	15h 45m	11h 49m				Fr, 20. Dez
Sa, 21. Dez		18:46 – 23:40	4h 54m	AN+ bis M↗		23:40	12:19	06:35	38m	07:14	39m	07:53	39m	08:33	8h 14m	16:48	39m	17:27	39m	18:07	38m	18:46	15h 45m	11h 49m				Sa, 21. Dez
So, 22. Dez		18:46 – 00:47*	6h 00m	AN+ bis M↗	◑	—:—	12:32	06:36	38m	07:14	39m	07:54	39m	08:33	8h 14m	16:48	39m	17:28	39m	18:08	38m	18:46	15h 45m	11h 49m				So, 22. Dez
Mo, 23. Dez		18:47 – 01:54*	7h 07m	AN+ bis M↗		00:47	12:44	06:36	38m	07:15	39m	07:54	39m	08:34	8h 14m	16:49	39m	17:28	39m	18:08	38m	18:47	15h 45m	11h 49m				Mo, 23. Dez
Di, 24. Dez		18:47 – 03:02*	8h 14m	AN+ bis M↗		01:54	12:56	06:36	38m	07:15	39m	07:55	39m	08:34	8h 15m	16:49	39m	17:29	39m	18:09	38m	18:47	15h 45m	11h 49m				Di, 24. Dez
Mi, 25. Dez		18:48 – 04:11*	9h 23m	AN+ bis M↗		03:02	13:10	06:37	38m	07:15	39m	07:55	39m	08:35	8h 15m	16:50	39m	17:30	39m	18:09	38m	18:48	15h 44m	11h 49m				Mi, 25. Dez
Do, 26. Dez		18:49 – 05:23*	10h 34m	AN+ bis M↗		04:11	13:27	06:37	38m	07:16	39m	07:55	39m	08:35	8h 16m	16:51	39m	17:30	39m	18:10	38m	18:49	15h 44m	11h 48m				Do, 26. Dez
Fr, 27. Dez		18:49 – 06:36*	11h 46m	AN+ bis M↗		05:23	13:49	06:37	38m	07:16	39m	07:56	39m	08:35	8h 16m	16:52	39m	17:31	39m	18:11	38m	18:49	15h 43m	11h 48m				Fr, 27. Dez
Sa, 28. Dez		18:50 – 06:38*	11h 47m	AN+ bis AN–		06:36	14:19	06:38	38m	07:16	39m	07:56	39m	08:35	8h 17m	16:52	39m	17:32	39m	18:12	38m	18:50	15h 42m	11h 47m				Sa, 28. Dez
So, 29. Dez		18:51 – 06:38*	11h 47m	AN+ bis AN–		07:46	15:00	06:38	38m	07:16	39m	07:56	39m	08:35	8h 17m	16:53	39m	17:33	39m	18:12	38m	18:51	15h 42m	11h 47m				So, 29. Dez
Mo, 30. Dez		18:52 – 06:38*	11h 46m	AN+ bis AN–	●	08:47	15:56	06:38	38m	07:17	39m	07:56	39m	08:35	8h 18m	16:54	39m	17:34	39m	18:13	38m	18:52	15h 41m	11h 46m				Mo, 30. Dez
Di, 31. Dez		18:52 – 06:38*	11h 45m	AN+ bis AN–		09:37	17:05	06:38	38m	07:17	39m	07:56	39m	08:36	8h 19m	16:55	39m	17:34	39m	18:14	38m	18:52	15h 40m	11h 45m				Di, 31. Dez
Mi, 1. Jan		18:53 – 06:38*	11h 45m	AN+ bis AN–		10:14	18:24	06:38	38m	07:17	39m	07:56	39m	08:35	8h 20m	16:56	39m	17:35	39m	18:15	38m	18:53	15h 39m	11h 45m				Mi, 1. Jan
Do, 2. Jan		19:47 – 06:38*	10h 51m	M↘ bis AN–		10:41	19:47	06:38	38m	07:17	39m	07:56	39m	08:35	8h 21m	16:57	39m	17:36	39m	18:16	38m	18:54	15h 38m	11h 44m				Do, 2. Jan
Fr, 3. Jan		21:09 – 06:38*	9h 29m	M↘ bis AN–		11:03	21:09	06:38	38m	07:17	39m	07:56	39m	08:35	8h 22m	16:58	39m	17:37	39m	18:17	38m	18:55	15h 36m	11h 43m				Fr, 3. Jan
Sa, 4. Jan		22:31 – 06:38*	8h 07m	M↘ bis AN–		11:20	22:31	06:38	38m	07:17	39m	07:56	39m	08:35	8h 24m	16:59	39m	17:38	39m	18:18	38m	18:56	15h 35m	11h 42m				Sa, 4. Jan
So, 5. Jan		23:51 – 06:38*	6h 47m	M↘ bis AN–		11:35	23:51	06:38	38m	07:17	39m	07:56	39m	08:35	8h 25m	17:00	39m	17:39	39m	18:19	38m	18:57	15h 34m	11h 41m				So, 5. Jan
Mo, 6. Jan		01:12* – 06:38*	5h 25m	M↘ bis AN–		11:50	—:—	06:38	38m	07:17	39m	07:56	38m	08:35	8h 26m	17:02	38m	17:41	39m	18:20	38m	18:58	15h 32m	11h 40m				Mo, 6. Jan
Di, 7. Jan		02:35* – 06:38*	4h 02m	M↘ bis AN–	◐	12:06	01:12	06:38	38m	07:16	39m	07:55	38m	08:34	8h 28m	17:03	38m	17:42	39m	18:21	38m	18:59	15h 31m	11h 39m				Di, 7. Jan
Mi, 8. Jan		04:01* – 06:38*	2h 37m	M↘ bis AN–		12:25	02:35	06:38	38m	07:16	39m	07:55	38m	08:34	8h 30m	17:04	38m	17:43	39m	18:22	38m	19:00	15h 29m	11h 37m				Mi, 8. Jan
Do, 9. Jan		05:26* – 06:38*	1h 11m	M↘ bis AN–		12:49	04:01	06:38	38m	07:16	38m	07:55	38m	08:34	8h 31m	17:05	38m	17:44	39m	18:23	38m	19:01	15h 27m	11h 36m				Do, 9. Jan
Fr, 10. Jan		—:——:—	–	Mond stört		13:21	05:26	06:38	38m	07:16	38m	07:54	38m	08:33	8h 33m	17:07	38m	17:45	38m	18:24	38m	19:02	15h 25m	11h 35m				Fr, 10. Jan
Sa, 11. Jan		—:——:—	–	Mond stört		14:06	06:46	06:37	37m	07:15	38m	07:54	38m	08:33	8h 35m	17:08	38m	17:46	38m	18:25	38m	19:03	15h 24m	11h 33m				Sa, 11. Jan
So, 12. Jan		—:——:—	–	Mond stört		15:06	07:54	06:37	37m	07:15	38m	07:54	38m	08:32	8h 37m	17:09	38m	17:48	38m	18:26	37m	19:04	15h 22m	11h 32m				So, 12. Jan
Mo, 13. Jan		—:——:—	–	Mond stört	○	16:18	08:45	06:36	37m	07:14	38m	07:53	38m	08:31	8h 39m	17:11	38m	17:49	38m	18:28	37m	19:06	15h 20m	11h 30m				Mo, 13. Jan
Di, 14. Jan		—:——:—	–	Mond stört		17:37	09:22	06:36	37m	07:14	38m	07:53	38m	08:31	8h 41m	17:12	38m	17:50	38m	18:29	37m	19:07	15h 18m	11h 28m				Di, 14. Jan
Mi, 15. Jan		—:——:—	–	Mond stört		18:55	09:49	06:36	37m	07:13	38m	07:52	38m	08:30	8h 43m	17:13	38m	17:51	38m	18:30	37m	19:08	15h 15m	11h 27m				Mi, 15. Jan
Do, 16. Jan		19:09 – 20:10	1h 01m	AN+ bis M↗		20:10	10:08	06:35	37m	07:13	38m	07:51	37m	08:29	8h 45m	17:15	37m	17:53	38m	18:31	37m	19:09	15h 13m	11h 25m				Do, 16. Jan
Fr, 17. Jan		19:10 – 21:22	2h 11m	AN+ bis M↗		21:22	10:24	06:35	37m	07:12	38m	07:51	37m	08:28	8h 47m	17:16	37m	17:54	38m	18:33	37m	19:10	15h 11m	11h 23m				Fr, 17. Jan
Sa, 18. Jan		19:12 – 22:31	3h 19m	AN+ bis M↗		22:31	10:37	06:34	37m	07:12	38m	07:50	37m	08:28	8h 50m	17:18	37m	17:56	38m	18:34	37m	19:12	15h 08m	11h 21m				Sa, 18. Jan
So, 19. Jan		19:13 – 23:39	4h 25m	AN+ bis M↗		23:39	10:49	06:33	37m	07:11	38m	07:49	37m	08:27	8h 52m	17:19	37m	17:57	38m	18:35	37m	19:13	15h 06m	11h 19m				So, 19. Jan
Mo, 20. Jan		19:14 – 00:46*	5h 32m	AN+ bis M↗		—:—	11:01	06:33	37m	07:10	38m	07:48	37m	08:26	8h 54m	17:21	37m	17:58	38m	18:36	37m	19:14	15h 04m	11h 17m				Mo, 20. Jan
Di, 21. Jan		19:15 – 01:55*	6h 39m	AN+ bis M↗	◑	00:46	11:15	06:32	37m	07:09	38m	07:48	37m	08:25	8h 57m	17:22	37m	18:00	38m	18:38	37m	19:15	15h 01m	11h 15m				Di, 21. Jan
Mi, 22. Jan		19:17 – 03:06*	7h 48m	AN+ bis M↗		01:55	11:30	06:31	37m	07:09	37m	07:47	37m	08:24	9h 00m	17:24	37m	18:01	38m	18:39	37m	19:17	14h 58m	11h 13m				Mi, 22. Jan
Do, 23. Jan		19:18 – 04:18*	8h 59m	AN+ bis M↗		03:06	11:50	06:30	37m	07:08	37m	07:46	37m	08:23	9h 02m	17:25	37m	18:03	37m	18:41	37m	19:18	14h 56m	11h 11m				Do, 23. Jan
Fr, 24. Jan		19:19 – 05:28*	10h 09m	AN+ bis M↗		04:18	12:15	06:30	37m	07:07	37m	07:45	37m	08:22	9h 05m	17:27	37m	18:04	37m	18:42	37m	19:19	14h 53m	11h 09m				Fr, 24. Jan
Sa, 25. Jan		19:21 – 06:28*	11h 07m	AN+ bis AN–		05:28	12:51	06:29	37m	07:06	37m	07:44	36m	08:21	9h 07m	17:29	36m	18:06	37m	18:43	37m	19:21	14h 50m	11h 07m				Sa, 25. Jan
So, 26. Jan		19:22 – 06:27*	11h 04m	AN+ bis AN–		06:34	13:40	06:28	37m	07:05	37m	07:43	36m	08:20	9h 10m	17:30	36m	18:07	37m	18:45	37m	19:22	14h 48m	11h 04m				So, 26. Jan
Mo, 27. Jan		19:23 – 06:26*	11h 02m	AN+ bis AN–		07:28	14:44	06:27	37m	07:04	37m	07:42	36m	08:18	9h 13m	17:32	36m	18:09	37m	18:46	37m	19:23	14h 45m	11h 02m				Mo, 27. Jan
Di, 28. Jan		19:25 – 06:25*	11h 00m	AN+ bis AN–		08:11	16:01	06:26	37m	07:03	37m	07:41	36m	08:17	9h 16m	17:33	36m	18:10	37m	18:48	37m	19:25	14h 42m	11h 00m				Di, 28. Jan
Mi, 29. Jan		19:26 – 06:24*	10h 57m	AN+ bis AN–	●	08:42	17:24	06:25	37m	07:02	37m	07:39	36m	08:16	9h 19m	17:35	36m	18:12	37m	18:49	37m	19:26	14h 39m	10h 57m				Mi, 29. Jan
Do, 30. Jan		19:27 – 06:23*	10h 55m	AN+ bis AN–		09:06	18:49	06:24	37m	07:01	37m	07:38	36m	08:15	9h 22m	17:37	36m	18:13	37m	18:50	37m	19:27	14h 36m	10h 55m				Do, 30. Jan
Fr, 31. Jan		20:14 – 06:22*	10h 07m	M↘ bis AN–		09:25	20:14	06:23	36m	07:00	37m	07:37	36m	08:13	9h 25m	17:38	36m	18:15	37m	18:52	37m	19:29	14h 33m	10h 52m				Fr, 31. Jan
Sa, 1. Feb		21:37 – 06:20*	8h 43m	M↘ bis AN–		09:41	21:37	06:22	36m	06:59	37m	07:36	36m	08:12	9h 28m	17:40	36m	18:16	37m	18:53	36m	19:30	14h 30m	10h 50m				Sa, 1. Feb
So, 2. Feb		23:00 – 06:19*	7h 19m	M↘ bis AN–		09:57	23:00	06:20	36m	06:57	37m	07:34	35m	08:10	9h 31m	17:42	35m	18:18	37m	18:55	36m	19:32	14h 27m	10h 47m				So, 2. Feb
Mo, 3. Feb		00:24* – 06:18*	5h 54m	M↘ bis AN–		10:12	—:—	06:19	36m	06:56	37m	07:33	35m	08:09	9h 34m	17:43	35m	18:19	37m	18:56	36m	19:33	14h 24m	10h 44m				Mo, 3. Feb