Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Acquarossa 46.4555° N 8.9383° 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		18:38 – 22:21	*3h 42m*	AN_+ *bis* $M_↗$		22:21	11:21	06:16	*36m*	06:53	*37m*	07:30	*36m*	08:07	*8h 40m*	16:47	*36m*	17:24	*37m*	18:02	*36m*	18:38	*15h 19m*	*11h 38m*				Mo, 1. Jan
Di, 2. Jan		18:39 – 23:25	*4h 46m*	AN_+ *bis* $M_↗$		23:25	11:36	06:16	*36m*	06:53	*37m*	07:30	*36m*	08:07	*8h 41m*	16:48	*36m*	17:25	*37m*	18:02	*36m*	18:39	*15h 18m*	*11h 37m*				Di, 2. Jan
Mi, 3. Jan		18:40 – 00:30*	*5h 50m*	AN_+ *bis* $M_↗$		—:—	11:51	06:16	*36m*	06:53	*37m*	07:30	*36m*	08:07	*8h 42m*	16:49	*36m*	17:26	*37m*	18:03	*36m*	18:40	*15h 17m*	*11h 36m*				Mi, 3. Jan
Do, 4. Jan		18:41 – 01:36*	*6h 55m*	AN_+ *bis* $M_↗$	◑	00:30	12:06	06:16	*36m*	06:53	*37m*	07:30	*36m*	08:07	*8h 43m*	16:50	*36m*	17:27	*37m*	18:04	*36m*	18:41	*15h 16m*	*11h 35m*				Do, 4. Jan
Fr, 5. Jan		18:42 – 02:45*	*8h 03m*	AN_+ *bis* $M_↗$		01:36	12:22	06:16	*36m*	06:53	*37m*	07:30	*36m*	08:07	*8h 44m*	16:51	*36m*	17:28	*37m*	18:05	*36m*	18:42	*15h 15m*	*11h 34m*				Fr, 5. Jan
Sa, 6. Jan		18:42 – 03:58*	*9h 15m*	AN_+ *bis* $M_↗$		02:45	12:41	06:16	*36m*	06:53	*37m*	07:30	*36m*	08:07	*8h 45m*	16:52	*36m*	17:29	*37m*	18:06	*36m*	18:42	*15h 14m*	*11h 33m*				Sa, 6. Jan
So, 7. Jan		18:43 – 05:14*	*10h 30m*	AN_+ *bis* $M_↗$		03:58	13:05	06:16	*36m*	06:53	*37m*	07:30	*36m*	08:06	*8h 46m*	16:53	*36m*	17:30	*37m*	18:07	*36m*	18:43	*15h 12m*	*11h 32m*				So, 7. Jan
Mo, 8. Jan		18:44 – 06:16*	*11h 31m*	AN_+ *bis* AN_-		05:14	13:38	06:16	*36m*	06:53	*37m*	07:30	*36m*	08:06	*8h 48m*	16:54	*36m*	17:31	*37m*	18:08	*36m*	18:44	*15h 11m*	*11h 31m*				Mo, 8. Jan
Di, 9. Jan		18:45 – 06:16*	*11h 30m*	AN_+ *bis* AN_-		06:29	14:23	06:16	*36m*	06:52	*37m*	07:30	*36m*	08:06	*8h 49m*	16:56	*36m*	17:32	*37m*	18:09	*36m*	18:45	*15h 09m*	*11h 30m*				Di, 9. Jan
Mi, 10. Jan		18:46 – 06:16*	*11h 29m*	AN_+ *bis* AN_-		07:38	15:22	06:16	*36m*	06:52	*36m*	07:29	*36m*	08:06	*8h 51m*	16:57	*36m*	17:33	*36m*	18:10	*36m*	18:46	*15h 08m*	*11h 29m*				Mi, 10. Jan
Do, 11. Jan		18:47 – 06:16*	*11h 28m*	AN_+ *bis* AN_-	●	08:35	16:37	06:16	*36m*	06:52	*36m*	07:29	*36m*	08:05	*8h 52m*	16:58	*36m*	17:34	*36m*	18:11	*36m*	18:47	*15h 06m*	*11h 28m*				Do, 11. Jan
Fr, 12. Jan		18:48 – 06:15*	*11h 26m*	AN_+ *bis* AN_-		09:19	18:02	06:16	*36m*	06:52	*36m*	07:29	*36m*	08:05	*8h 54m*	16:59	*36m*	17:35	*36m*	18:12	*36m*	18:48	*15h 05m*	*11h 26m*				Fr, 12. Jan
Sa, 13. Jan		19:28 – 06:15*	*10h 46m*	$M_↘$ *bis* AN_-		09:52	19:28	06:15	*36m*	06:51	*36m*	07:28	*36m*	08:04	*8h 56m*	17:01	*36m*	17:37	*36m*	18:13	*36m*	18:50	*15h 03m*	*11h 25m*				Sa, 13. Jan
So, 14. Jan		20:53 – 06:15*	*9h 21m*	$M_↘$ *bis* AN_-		10:17	20:53	06:15	*36m*	06:51	*36m*	07:28	*36m*	08:04	*8h 58m*	17:02	*36m*	17:38	*36m*	18:15	*36m*	18:51	*15h 01m*	*11h 23m*				So, 14. Jan
Mo, 15. Jan		22:15 – 06:14*	*7h 59m*	$M_↘$ *bis* AN_-		10:38	22:15	06:15	*36m*	06:51	*36m*	07:27	*35m*	08:03	*8h 59m*	17:03	*35m*	17:39	*36m*	18:16	*36m*	18:52	*14h 59m*	*11h 22m*				Mo, 15. Jan
Di, 16. Jan		23:34 – 06:14*	*6h 39m*	$M_↘$ *bis* AN_-		10:57	23:34	06:14	*36m*	06:50	*36m*	07:27	*35m*	08:03	*9h 01m*	17:04	*35m*	17:40	*36m*	18:17	*36m*	18:53	*14h 57m*	*11h 20m*				Di, 16. Jan
Mi, 17. Jan		00:52* – 06:13*	*5h 21m*	$M_↘$ *bis* AN_-		11:15	—:—	06:14	*35m*	06:50	*36m*	07:26	*35m*	08:02	*9h 03m*	17:06	*35m*	17:41	*36m*	18:18	*35m*	18:54	*14h 55m*	*11h 19m*				Mi, 17. Jan
Do, 18. Jan		02:10* – 06:13*	*4h 02m*	$M_↘$ *bis* AN_-	◐	11:34	00:52	06:13	*35m*	06:49	*36m*	07:26	*35m*	08:01	*9h 05m*	17:07	*35m*	17:43	*36m*	18:19	*35m*	18:55	*14h 53m*	*11h 17m*				Do, 18. Jan
Fr, 19. Jan		03:27* – 06:12*	*2h 45m*	$M_↘$ *bis* AN_-		11:57	02:10	06:13	*35m*	06:49	*36m*	07:25	*35m*	08:01	*9h 07m*	17:08	*35m*	17:44	*36m*	18:20	*35m*	18:56	*14h 51m*	*11h 15m*				Fr, 19. Jan
Sa, 20. Jan		04:42* – 06:12*	*1h 29m*	$M_↘$ *bis* AN_-		12:23	03:27	06:12	*35m*	06:48	*36m*	07:24	*35m*	08:00	*9h 10m*	17:10	*35m*	17:45	*36m*	18:22	*35m*	18:57	*14h 49m*	*11h 14m*				Sa, 20. Jan
So, 21. Jan		05:52* – 06:11*	*19m*	$M_↘$ *bis* AN_-		12:58	04:42	06:12	*35m*	06:47	*36m*	07:24	*35m*	07:59	*9h 12m*	17:11	*35m*	17:47	*36m*	18:23	*35m*	18:59	*14h 46m*	*11h 12m*				So, 21. Jan
Mo, 22. Jan		—:——:—	–	Mond stört		13:41	05:52	06:11	*35m*	06:47	*36m*	07:23	*35m*	07:58	*9h 14m*	17:13	*35m*	17:48	*36m*	18:24	*35m*	19:00	*14h 44m*	*11h 10m*				Mo, 22. Jan
Di, 23. Jan		—:——:—	–	Mond stört		14:35	06:52	06:10	*35m*	06:46	*36m*	07:22	*35m*	07:57	*9h 16m*	17:14	*35m*	17:49	*36m*	18:25	*35m*	19:01	*14h 42m*	*11h 08m*				Di, 23. Jan
Mi, 24. Jan		—:——:—	–	Mond stört		15:38	07:40	06:10	*35m*	06:45	*36m*	07:21	*35m*	07:56	*9h 19m*	17:16	*35m*	17:51	*36m*	18:27	*35m*	19:02	*14h 39m*	*11h 06m*				Mi, 24. Jan
Do, 25. Jan		—:——:—	–	Mond stört	○	16:46	08:17	06:09	*35m*	06:44	*35m*	07:20	*34m*	07:55	*9h 21m*	17:17	*34m*	17:52	*35m*	18:28	*35m*	19:03	*14h 37m*	*11h 04m*				Do, 25. Jan
Fr, 26. Jan		—:——:—	–	Mond stört		17:55	08:45	06:08	*35m*	06:44	*35m*	07:20	*34m*	07:54	*9h 24m*	17:18	*34m*	17:53	*35m*	18:29	*35m*	19:05	*14h 34m*	*11h 02m*				Fr, 26. Jan
Sa, 27. Jan		—:——:—	–	Mond stört		19:03	09:08	06:07	*35m*	06:43	*35m*	07:19	*34m*	07:53	*9h 26m*	17:20	*34m*	17:55	*35m*	18:30	*35m*	19:06	*14h 32m*	*11h 00m*				Sa, 27. Jan
So, 28. Jan		19:07 – 20:09	*1h 02m*	AN_+ *bis* $M_↗$		20:09	09:26	06:06	*35m*	06:42	*35m*	07:18	*34m*	07:52	*9h 29m*	17:21	*34m*	17:56	*35m*	18:32	*35m*	19:07	*14h 29m*	*10h 58m*				So, 28. Jan
Mo, 29. Jan		19:09 – 21:14	*2h 05m*	AN_+ *bis* $M_↗$		21:14	09:42	06:06	*35m*	06:41	*35m*	07:17	*34m*	07:51	*9h 31m*	17:23	*34m*	17:57	*35m*	18:33	*35m*	19:09	*14h 27m*	*10h 56m*				Mo, 29. Jan
Di, 30. Jan		19:10 – 22:18	*3h 08m*	AN_+ *bis* $M_↗$		22:18	09:56	06:05	*35m*	06:40	*35m*	07:16	*34m*	07:50	*9h 34m*	17:24	*34m*	17:59	*35m*	18:34	*35m*	19:10	*14h 24m*	*10h 53m*				Di, 30. Jan
Mi, 31. Jan		19:11 – 23:23	*4h 11m*	AN_+ *bis* $M_↗$		23:23	10:11	06:04	*35m*	06:39	*35m*	07:15	*34m*	07:49	*9h 36m*	17:26	*34m*	18:00	*35m*	18:36	*35m*	19:11	*14h 21m*	*10h 51m*				Mi, 31. Jan
Do, 1. Feb		19:12 – 00:30*	*5h 17m*	AN_+ *bis* $M_↗$		—:—	10:26	06:03	*35m*	06:38	*35m*	07:13	*34m*	07:48	*9h 39m*	17:27	*34m*	18:02	*35m*	18:37	*35m*	19:12	*14h 19m*	*10h 49m*				Do, 1. Feb
Fr, 2. Feb		19:14 – 01:39*	*6h 25m*	AN_+ *bis* $M_↗$		00:30	10:43	06:02	*35m*	06:37	*35m*	07:12	*34m*	07:46	*9h 42m*	17:29	*34m*	18:03	*35m*	18:38	*35m*	19:14	*14h 16m*	*10h 46m*				Fr, 2. Feb
Sa, 3. Feb		19:15 – 02:52*	*7h 37m*	AN_+ *bis* $M_↗$	◑	01:39	11:04	06:01	*35m*	06:36	*35m*	07:11	*34m*	07:45	*9h 45m*	17:30	*34m*	18:04	*35m*	18:40	*35m*	19:15	*14h 13m*	*10h 44m*				Sa, 3. Feb
So, 4. Feb		19:16 – 04:06*	*8h 49m*	AN_+ *bis* $M_↗$		02:52	11:32	06:00	*35m*	06:35	*35m*	07:10	*33m*	07:44	*9h 47m*	17:32	*33m*	18:06	*35m*	18:41	*35m*	19:16	*14h 10m*	*10h 42m*				So, 4. Feb
Mo, 5. Feb		19:18 – 05:17*	*9h 59m*	AN_+ *bis* $M_↗$		04:06	12:09	05:58	*35m*	06:34	*35m*	07:09	*33m*	07:43	*9h 50m*	17:33	*33m*	18:07	*35m*	18:42	*35m*	19:18	*14h 07m*	*10h 39m*				Mo, 5. Feb
Di, 6. Feb		19:19 – 05:56*	*10h 37m*	AN_+ *bis* AN_-		05:17	13:00	05:57	*35m*	06:32	*35m*	07:07	*33m*	07:41	*9h 53m*	17:35	*33m*	18:09	*35m*	18:44	*35m*	19:19	*14h 04m*	*10h 37m*				Di, 6. Feb
Mi, 7. Feb		19:20 – 05:55*	*10h 34m*	AN_+ *bis* AN_-		06:19	14:07	05:56	*35m*	06:31	*35m*	07:06	*33m*	07:40	*9h 56m*	17:36	*33m*	18:10	*35m*	18:45	*35m*	19:20	*14h 02m*	*10h 34m*				Mi, 7. Feb
Do, 8. Feb		19:22 – 05:54*	*10h 32m*	AN_+ *bis* AN_-		07:09	15:28	05:55	*35m*	06:30	*34m*	07:05	*33m*	07:38	*9h 59m*	17:38	*33m*	18:12	*34m*	18:46	*35m*	19:22	*13h 59m*	*10h 32m*				Do, 8. Feb
Fr, 9. Feb		19:23 – 05:52*	*10h 29m*	AN_+ *bis* AN_-	●	07:47	16:55	05:54	*34m*	06:29	*34m*	07:04	*33m*	07:37	*10h 02m*	17:39	*33m*	18:13	*34m*	18:48	*35m*	19:23	*13h 56m*	*10h 29m*				Fr, 9. Feb
Sa, 10. Feb		19:24 – 05:51*	*10h 26m*	AN_+ *bis* AN_-		08:16	18:24	05:52	*34m*	06:27	*34m*	07:02	*33m*	07:36	*10h 05m*	17:41	*33m*	18:14	*34m*	18:49	*35m*	19:24	*13h 53m*	*10h 26m*				Sa, 10. Feb
So, 11. Feb		19:50 – 05:50*	*9h 59m*	$M_↘$ *bis* AN_-		08:40	19:50	05:51	*34m*	06:26	*34m*	07:01	*33m*	07:34	*10h 08m*	17:42	*33m*	18:16	*34m*	18:51	*34m*	19:26	*13h 50m*	*10h 24m*				So, 11. Feb
Mo, 12. Feb		21:13 – 05:48*	*8h 34m*	$M_↘$ *bis* AN_-		09:00	21:13	05:50	*34m*	06:25	*34m*	06:59	*33m*	07:33	*10h 11m*	17:44	*33m*	18:17	*34m*	18:52	*34m*	19:27	*13h 47m*	*10h 21m*				Mo, 12. Feb
Di, 13. Feb		22:35 – 05:47*	*7h 11m*	$M_↘$ *bis* AN_-		09:19	22:35	05:48	*34m*	06:23	*34m*	06:58	*33m*	07:31	*10h 14m*	17:45	*33m*	18:19	*34m*	18:53	*34m*	19:28	*13h 43m*	*10h 18m*				Di, 13. Feb
Mi, 14. Feb		23:56 – 05:45*	*5h 49m*	$M_↘$ *bis* AN_-		09:38	23:56	05:47	*34m*	06:22	*34m*	06:56	*33m*	07:29	*10h 17m*	17:47	*33m*	18:20	*34m*	18:55	*34m*	19:30	*13h 40m*	*10h 15m*				Mi, 14. Feb
Do, 15. Feb		01:16* – 05:44*	*4h 28m*	$M_↘$ *bis* AN_-		10:00	—:—	05:45	*34m*	06:20	*34m*	06:55	*32m*	07:28	*10h 20m*	17:48	*33m*	18:21	*34m*	18:56	*34m*	19:31	*13h 37m*	*10h 13m*				Do, 15. Feb
Fr, 16. Feb		02:33* – 05:43*	*3h 09m*	$M_↘$ *bis* AN_-	◐	10:25	01:16	05:44	*34m*	06:19	*34m*	06:53	*32m*	07:26	*10h 23m*	17:50	*32m*	18:23	*34m*	18:57	*34m*	19:32	*13h 34m*	*10h 10m*				Fr, 16. Feb
Sa, 17. Feb		03:45* – 05:41*	*1h 55m*	$M_↘$ *bis* AN_-		10:57	02:33	05:43	*34m*	06:17	*34m*	06:52	*32m*	07:25	*10h 26m*	17:51	*32m*	18:24	*34m*	18:59	*34m*	19:34	*13h 31m*	*10h 07m*				Sa, 17. Feb
So, 18. Feb		04:48* – 05:40*	*51m*	$M_↘$ *bis* AN_-		11:38	03:45	05:41	*34m*	06:16	*34m*	06:50	*32m*	07:23	*10h 29m*	17:53	*32m*	18:26	*34m*	19:00	*34m*	19:35	*13h 28m*	*10h 04m*				So, 18. Feb
Mo, 19. Feb		—:——:—	–	Mond stört		12:29	04:48	05:40	*34m*	06:14	*34m*	06:49	*32m*	07:21	*10h 33m*	17:54	*32m*	18:27	*34m*	19:02	*34m*	19:37	*13h 25m*	*10h 01m*				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		13:29	05:40	05:38	*34m*	06:13	*34m*	06:47	*32m*	07:20	*10h 36m*	17:56	*32m*	18:29	*34m*	19:03	*34m*	19:38	*13h 22m*	*9h 58m*				Di, 20. Feb
Mi, 21. Feb		—:——:—	–	Mond stört		14:36	06:19	05:36	*34m*	06:11	*34m*	06:45	*32m*	07:18	*10h 39m*	17:57	*32m*	18:30	*34m*	19:04	*34m*	19:39	*13h 18m*	*9h 55m*				Mi, 21. Feb
Do, 22. Feb		—:——:—	–	Mond stört		15:44	06:50	05:35	*34m*	06:10	*34m*	06:44	*32m*	07:16	*10h 42m*	17:59	*32m*	18:31	*34m*	19:06	*34m*	19:41	*13h 15m*	*9h 52m*				Do, 22. Feb
Fr, 23. Feb		—:——:—	–	Mond stört		16:53	07:13	05:33	*34m*	06:08	*34m*	06:42	*32m*	07:15	*10h 45m*	18:00	*32m*	18:33	*34m*	19:07	*34m*	19:42	*13h 12m*	*9h 49m*				Fr, 23. Feb
Sa, 24. Feb		—:——:—	–	Mond stört	○	17:59	07:32	05:31	*34m*	06:06	*34m*	06:40	*32m*	07:13	*10h 48m*	18:02	*32m*	18:34	*34m*	19:09	*34m*	19:43	*13h 09m*	*9h 46m*				Sa, 24. Feb
So, 25. Feb		—:——:—	–	Mond stört		19:05	07:49	05:30	*34m*	06:05	*34m*	06:39	*32m*	07:11	*10h 52m*	18:03	*32m*	18:36	*34m*	19:10	*34m*	19:45	*13h 06m*	*9h 43m*				So, 25. Feb
Mo, 26. Feb		19:46 – 20:09	*22m*	AN$_+$ *bis* M↗		20:09	08:03	05:28	*34m*	06:03	*34m*	06:37	*32m*	07:09	*10h 55m*	18:05	*32m*	18:37	*34m*	19:11	*34m*	19:46	*13h 02m*	*9h 39m*				Mo, 26. Feb
Di, 27. Feb		19:48 – 21:13	*1h 25m*	AN$_+$ *bis* M↗		21:13	08:17	05:26	*34m*	06:01	*34m*	06:35	*32m*	07:08	*10h 58m*	18:06	*32m*	18:38	*34m*	19:13	*34m*	19:48	*12h 59m*	*9h 36m*				Di, 27. Feb
Mi, 28. Feb		19:49 – 22:19	*2h 30m*	AN$_+$ *bis* M↗		22:19	08:32	05:24	*34m*	05:59	*34m*	06:34	*32m*	07:06	*11h 01m*	18:08	*32m*	18:40	*34m*	19:14	*35m*	19:49	*12h 56m*	*9h 33m*				Mi, 28. Feb
Do, 29. Feb		19:51 – 23:27	*3h 36m*	AN$_+$ *bis* M↗		23:27	08:48	05:23	*34m*	05:58	*34m*	06:32	*32m*	07:04	*11h 05m*	18:09	*32m*	18:41	*34m*	19:16	*35m*	19:51	*12h 53m*	*9h 30m*				Do, 29. Feb
Fr, 1. Mrz		19:52 – 00:38*	*4h 45m*	AN$_+$ *bis* M↗		—:—	09:07	05:21	*34m*	05:56	*34m*	06:30	*32m*	07:02	*11h 08m*	18:11	*32m*	18:43	*34m*	19:17	*35m*	19:52	*12h 49m*	*9h 27m*				Fr, 1. Mrz
Sa, 2. Mrz		19:53 – 01:50*	*5h 56m*	AN$_+$ *bis* M↗		00:38	09:32	05:19	*34m*	05:54	*34m*	06:28	*32m*	07:00	*11h 11m*	18:12	*32m*	18:44	*34m*	19:18	*35m*	19:53	*12h 46m*	*9h 23m*				Sa, 2. Mrz
So, 3. Mrz		19:55 – 03:01*	*7h 05m*	AN$_+$ *bis* M↗	◑	01:50	10:04	05:17	*35m*	05:52	*34m*	06:26	*32m*	06:58	*11h 14m*	18:13	*32m*	18:45	*34m*	19:20	*35m*	19:55	*12h 43m*	*9h 20m*				So, 3. Mrz
Mo, 4. Mrz		19:56 – 04:05*	*8h 08m*	AN$_+$ *bis* M↗		03:01	10:47	05:15	*35m*	05:50	*34m*	06:25	*31m*	06:57	*11h 18m*	18:15	*32m*	18:47	*34m*	19:21	*35m*	19:56	*12h 39m*	*9h 17m*				Mo, 4. Mrz
Di, 5. Mrz		19:58 – 04:59*	*9h 01m*	AN$_+$ *bis* M↗		04:05	11:45	05:13	*35m*	05:49	*34m*	06:23	*31m*	06:55	*11h 21m*	18:16	*32m*	18:48	*34m*	19:23	*35m*	19:58	*12h 36m*	*9h 13m*				Di, 5. Mrz
Mi, 6. Mrz		19:59 – 05:10*	*9h 10m*	AN$_+$ *bis* AN$_-$		04:59	12:57	05:12	*35m*	05:47	*34m*	06:21	*31m*	06:53	*11h 24m*	18:18	*32m*	18:50	*34m*	19:24	*35m*	19:59	*12h 33m*	*9h 10m*				Mi, 6. Mrz
Do, 7. Mrz		20:01 – 05:08*	*9h 06m*	AN$_+$ *bis* AN$_-$		05:41	14:20	05:10	*35m*	05:45	*34m*	06:19	*31m*	06:51	*11h 28m*	18:19	*31m*	18:51	*34m*	19:25	*35m*	20:01	*12h 29m*	*9h 06m*				Do, 7. Mrz
Fr, 8. Mrz		20:02 – 05:06*	*9h 03m*	AN$_+$ *bis* AN$_-$		06:14	15:47	05:08	*35m*	05:43	*34m*	06:17	*31m*	06:49	*11h 31m*	18:21	*31m*	18:52	*34m*	19:27	*35m*	20:02	*12h 26m*	*9h 03m*				Fr, 8. Mrz
Sa, 9. Mrz		20:04 – 05:04*	*9h 00m*	AN$_+$ *bis* AN$_-$		06:39	17:15	05:06	*35m*	05:41	*34m*	06:15	*31m*	06:47	*11h 34m*	18:22	*31m*	18:54	*34m*	19:28	*35m*	20:04	*12h 23m*	*9h 00m*				Sa, 9. Mrz
So, 10. Mrz		20:05 – 05:02*	*8h 56m*	AN$_+$ *bis* AN$_-$	●	07:01	18:41	05:04	*35m*	05:39	*34m*	06:13	*31m*	06:45	*11h 38m*	18:23	*31m*	18:55	*34m*	19:30	*35m*	20:05	*12h 20m*	*8h 56m*				So, 10. Mrz
Mo, 11. Mrz		20:07 – 05:00*	*8h 53m*	AN$_+$ *bis* AN$_-$		07:20	20:06	05:02	*35m*	05:37	*34m*	06:11	*31m*	06:43	*11h 41m*	18:25	*31m*	18:57	*34m*	19:31	*35m*	20:07	*12h 16m*	*8h 53m*				Mo, 11. Mrz
Di, 12. Mrz		21:30 – 04:58*	*7h 27m*	M↘ *bis* AN$_-$		07:40	21:30	05:00	*35m*	05:35	*34m*	06:10	*31m*	06:41	*11h 44m*	18:26	*31m*	18:58	*34m*	19:32	*35m*	20:08	*12h 13m*	*8h 49m*				Di, 12. Mrz
Mi, 13. Mrz		22:54 – 04:56*	*6h 01m*	M↘ *bis* AN$_-$		08:01	22:54	04:58	*35m*	05:33	*34m*	06:08	*31m*	06:39	*11h 48m*	18:27	*31m*	18:59	*34m*	19:34	*35m*	20:10	*12h 10m*	*8h 45m*				Mi, 13. Mrz
Do, 14. Mrz		00:16* – 04:53*	*4h 37m*	M↘ *bis* AN$_-$		08:25	—:—	04:56	*35m*	05:31	*34m*	06:06	*31m*	06:38	*11h 51m*	18:29	*31m*	19:01	*34m*	19:35	*35m*	20:11	*12h 06m*	*8h 42m*				Do, 14. Mrz
Fr, 15. Mrz		01:33* – 04:51*	*3h 18m*	M↘ *bis* AN$_-$		08:55	00:16	04:53	*35m*	05:29	*34m*	06:04	*31m*	06:36	*11h 54m*	18:30	*31m*	19:02	*34m*	19:37	*35m*	20:13	*12h 03m*	*8h 38m*				Fr, 15. Mrz
Sa, 16. Mrz		02:41* – 04:49*	*2h 07m*	M↘ *bis* AN$_-$		09:34	01:33	04:51	*35m*	05:27	*34m*	06:02	*31m*	06:34	*11h 58m*	18:32	*31m*	19:04	*34m*	19:38	*36m*	20:14	*12h 00m*	*8h 35m*				Sa, 16. Mrz
So, 17. Mrz		03:38* – 04:47*	*1h 09m*	M↘ *bis* AN$_-$	◐	10:22	02:41	04:49	*36m*	05:25	*34m*	06:00	*31m*	06:32	*12h 01m*	18:33	*31m*	19:05	*34m*	19:40	*36m*	20:16	*11h 56m*	*8h 31m*				So, 17. Mrz
Mo, 18. Mrz		04:21* – 04:45*	*23m*	M↘ *bis* AN$_-$		11:21	03:38	04:47	*36m*	05:23	*34m*	05:58	*31m*	06:30	*12h 04m*	18:34	*31m*	19:06	*34m*	19:41	*36m*	20:17	*11h 53m*	*8h 27m*				Mo, 18. Mrz
Di, 19. Mrz		—:——:—	–	Mond stört		12:26	04:21	04:45	*36m*	05:21	*34m*	05:56	*31m*	06:28	*12h 07m*	18:36	*31m*	19:08	*34m*	19:43	*36m*	20:19	*11h 50m*	*8h 23m*				Di, 19. Mrz
Mi, 20. Mrz		—:——:—	–	Mond stört		13:34	04:54	04:43	*36m*	05:19	*34m*	05:54	*31m*	06:26	*12h 11m*	18:37	*32m*	19:09	*34m*	19:44	*36m*	20:20	*11h 46m*	*8h 20m*				Mi, 20. Mrz
Do, 21. Mrz		—:——:—	–	Mond stört		14:43	05:19	04:41	*36m*	05:17	*34m*	05:52	*31m*	06:24	*12h 14m*	18:39	*32m*	19:11	*34m*	19:45	*36m*	20:22	*11h 43m*	*8h 16m*				Do, 21. Mrz
Fr, 22. Mrz		—:——:—	–	Mond stört		15:50	05:39	04:39	*36m*	05:15	*34m*	05:50	*31m*	06:22	*12h 17m*	18:40	*32m*	19:12	*34m*	19:47	*36m*	20:24	*11h 40m*	*8h 12m*				Fr, 22. Mrz
Sa, 23. Mrz		—:——:—	–	Mond stört		16:56	05:56	04:36	*36m*	05:13	*34m*	05:48	*32m*	06:20	*12h 21m*	18:41	*32m*	19:13	*35m*	19:48	*36m*	20:25	*11h 36m*	*8h 08m*				Sa, 23. Mrz
So, 24. Mrz		—:——:—	–	Mond stört		18:00	06:11	04:34	*36m*	05:11	*34m*	05:46	*32m*	06:18	*12h 24m*	18:43	*32m*	19:15	*35m*	19:50	*37m*	20:27	*11h 33m*	*8h 05m*				So, 24. Mrz
Mo, 25. Mrz		—:——:—	–	Mond stört	○	19:05	06:25	04:32	*37m*	05:09	*35m*	05:44	*32m*	06:16	*12h 27m*	18:44	*32m*	19:16	*35m*	19:51	*37m*	20:29	*11h 30m*	*8h 01m*				Mo, 25. Mrz
Di, 26. Mrz		—:——:—	–	Mond stört		20:10	06:39	04:30	*37m*	05:07	*35m*	05:42	*32m*	06:14	*12h 31m*	18:45	*32m*	19:18	*35m*	19:53	*37m*	20:30	*11h 26m*	*7h 57m*				Di, 26. Mrz
Mi, 27. Mrz		20:32 – 21:18	*46m*	AN$_+$ *bis* M↗		21:18	06:55	04:27	*37m*	05:05	*35m*	05:40	*32m*	06:12	*12h 34m*	18:47	*32m*	19:19	*35m*	19:54	*37m*	20:32	*11h 23m*	*7h 53m*				Mi, 27. Mrz
Do, 28. Mrz		20:33 – 22:28	*1h 54m*	AN$_+$ *bis* M↗		22:28	07:13	04:25	*37m*	05:03	*35m*	05:38	*32m*	06:10	*12h 37m*	18:48	*32m*	19:20	*35m*	19:56	*37m*	20:33	*11h 20m*	*7h 49m*				Do, 28. Mrz
Fr, 29. Mrz		20:35 – 23:40	*3h 04m*	AN$_+$ *bis* M↗		23:40	07:35	04:23	*37m*	05:01	*35m*	05:36	*32m*	06:08	*12h 41m*	18:49	*32m*	19:22	*35m*	19:57	*37m*	20:35	*11h 16m*	*7h 45m*				Fr, 29. Mrz
Sa, 30. Mrz		20:37 – 00:50*	*4h 13m*	AN$_+$ *bis* M↗		—:—	08:04	04:21	*37m*	04:58	*35m*	05:34	*32m*	06:06	*12h 44m*	18:51	*32m*	19:23	*35m*	19:59	*38m*	20:37	*11h 13m*	*7h 41m*				Sa, 30. Mrz
So, 31. Mrz	MESZ	21:39 – 02:56*	*5h 17m*	AN$_+$ *bis* M↗		01:50	09:43	05:18	*38m*	05:56	*35m*	06:32	*32m*	07:04	*12h 47m*	19:52	*32m*	20:25	*35m*	21:00	*38m*	21:39	*11h 10m*	*7h 37m*				So, 31. Mrz
Mo, 1. Apr	MESZ	21:40 – 03:53*	*6h 12m*	AN$_+$ *bis* M↗		02:56	10:34	05:16	*38m*	05:54	*35m*	06:30	*32m*	07:02	*12h 51m*	19:53	*32m*	20:26	*35m*	21:02	*38m*	21:40	*11h 07m*	*7h 33m*				Mo, 1. Apr
Di, 2. Apr	MESZ	21:42 – 04:38*	*6h 55m*	AN$_+$ *bis* M↗	◑	03:53	11:39	05:14	*38m*	05:52	*35m*	06:28	*32m*	07:00	*12h 54m*	19:55	*32m*	20:27	*36m*	21:03	*38m*	21:42	*11h 03m*	*7h 29m*				Di, 2. Apr
Mi, 3. Apr	MESZ	21:44 – 05:09*	*7h 25m*	AN$_+$ *bis* AN$_-$		04:38	12:55	05:11	*38m*	05:50	*35m*	06:26	*32m*	06:59	*12h 57m*	19:56	*32m*	20:29	*36m*	21:05	*38m*	21:44	*11h 00m*	*7h 25m*				Mi, 3. Apr
Do, 4. Apr	MESZ	21:46 – 05:07*	*7h 21m*	AN$_+$ *bis* AN$_-$		05:12	14:18	05:09	*38m*	05:48	*36m*	06:24	*32m*	06:57	*13h 00m*	19:57	*32m*	20:30	*36m*	21:06	*39m*	21:46	*10h 57m*	*7h 21m*				Do, 4. Apr
Fr, 5. Apr	MESZ	21:47 – 05:04*	*7h 17m*	AN$_+$ *bis* AN$_-$		05:40	15:43	05:07	*39m*	05:46	*36m*	06:22	*32m*	06:55	*13h 04m*	19:59	*32m*	20:32	*36m*	21:08	*39m*	21:47	*10h 53m*	*7h 17m*				Fr, 5. Apr
Sa, 6. Apr	MESZ	21:49 – 05:02*	*7h 12m*	AN$_+$ *bis* AN$_-$		06:02	17:08	05:04	*39m*	05:44	*36m*	06:20	*32m*	06:53	*13h 07m*	20:00	*32m*	20:33	*36m*	21:10	*39m*	21:49	*10h 50m*	*7h 12m*				Sa, 6. Apr
So, 7. Apr	MESZ	21:51 – 05:00*	*7h 08m*	AN$_+$ *bis* AN$_-$		06:22	18:32	05:02	*39m*	05:41	*36m*	06:18	*32m*	06:51	*13h 10m*	20:01	*32m*	20:34	*36m*	21:11	*39m*	21:51	*10h 47m*	*7h 08m*				So, 7. Apr
Mo, 8. Apr	MESZ	21:53 – 04:57*	*7h 04m*	AN$_+$ *bis* AN$_-$	●	06:41	19:56	05:00	*39m*	05:39	*36m*	06:16	*32m*	06:49	*13h 13m*	20:03	*33m*	20:36	*36m*	21:13	*39m*	21:53	*10h 44m*	*7h 04m*				Mo, 8. Apr
Di, 9. Apr	MESZ	21:55 – 04:55*	*7h 00m*	AN$_+$ *bis* AN$_-$		07:01	21:22	04:57	*39m*	05:37	*36m*	06:14	*33m*	06:47	*13h 17m*	20:04	*33m*	20:37	*36m*	21:14	*40m*	21:55	*10h 40m*	*7h 00m*				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	22:47 – 04:53*	*6h 05m*	M↘ *bis* AN_		07:24	22:47	04:55	*40m*	05:35	*36m*	06:12	*33m*	06:45	*13h 20m*	20:06	*33m*	20:39	*37m*	21:16	*40m*	21:56	*10h 37m*	*6h 56m*				Mi, 10. Apr
Do, 11. Apr	MESZ	00:10* – 04:50*	*4h 40m*	M↘ *bis* AN_		07:52	—:—	04:53	*40m*	05:33	*37m*	06:10	*33m*	06:43	*13h 23m*	20:07	*33m*	20:40	*37m*	21:18	*40m*	21:58	*10h 34m*	*6h 51m*				Do, 11. Apr
Fr, 12. Apr	MESZ	01:25* – 04:48*	*3h 22m*	M↘ *bis* AN_		08:27	00:10	04:50	*40m*	05:31	*37m*	06:08	*33m*	06:41	*13h 26m*	20:08	*33m*	20:42	*37m*	21:19	*41m*	22:00	*10h 31m*	*6h 47m*				Fr, 12. Apr
Sa, 13. Apr	MESZ	02:29* – 04:45*	*2h 16m*	M↘ *bis* AN_		09:13	01:25	04:48	*41m*	05:29	*37m*	06:06	*33m*	06:40	*13h 29m*	20:10	*33m*	20:43	*37m*	21:21	*41m*	22:02	*10h 28m*	*6h 43m*				Sa, 13. Apr
So, 14. Apr	MESZ	03:19* – 04:43*	*1h 24m*	M↘ *bis* AN_		10:09	02:29	04:45	*41m*	05:27	*37m*	06:04	*33m*	06:38	*13h 33m*	20:11	*33m*	20:45	*37m*	21:22	*41m*	22:04	*10h 25m*	*6h 38m*				So, 14. Apr
Mo, 15. Apr	MESZ	03:56* – 04:41*	*44m*	M↘ *bis* AN_	◐	11:14	03:19	04:43	*41m*	05:25	*37m*	06:02	*33m*	06:36	*13h 36m*	20:12	*33m*	20:46	*37m*	21:24	*41m*	22:06	*10h 21m*	*6h 34m*				Mo, 15. Apr
Di, 16. Apr	MESZ	04:24* – 04:38*	*14m*	M↘ *bis* AN_		12:22	03:56	04:41	*41m*	05:22	*37m*	06:00	*33m*	06:34	*13h 39m*	20:14	*33m*	20:48	*38m*	21:26	*42m*	22:08	*10h 18m*	*6h 30m*				Di, 16. Apr
Mi, 17. Apr	MESZ	—:—–—:—	–	Mond stört		13:32	04:24	04:38	*42m*	05:20	*38m*	05:58	*33m*	06:32	*13h 42m*	20:15	*33m*	20:49	*38m*	21:27	*42m*	22:10	*10h 15m*	*6h 25m*				Mi, 17. Apr
Do, 18. Apr	MESZ	—:—–—:—	–	Mond stört		14:40	04:45	04:36	*42m*	05:18	*38m*	05:57	*33m*	06:31	*13h 45m*	20:16	*34m*	20:50	*38m*	21:29	*42m*	22:12	*10h 12m*	*6h 21m*				Do, 18. Apr
Fr, 19. Apr	MESZ	—:—–—:—	–	Mond stört		15:46	05:03	04:33	*42m*	05:16	*38m*	05:55	*34m*	06:29	*13h 48m*	20:18	*34m*	20:52	*38m*	21:31	*43m*	22:14	*10h 09m*	*6h 16m*				Fr, 19. Apr
Sa, 20. Apr	MESZ	—:—–—:—	–	Mond stört		16:50	05:19	04:31	*43m*	05:14	*38m*	05:53	*34m*	06:27	*13h 52m*	20:19	*34m*	20:53	*38m*	21:32	*43m*	22:16	*10h 06m*	*6h 12m*				Sa, 20. Apr
So, 21. Apr	MESZ	—:—–—:—	–	Mond stört		17:55	05:33	04:28	*43m*	05:12	*38m*	05:51	*34m*	06:25	*13h 55m*	20:20	*34m*	20:55	*39m*	21:34	*43m*	22:18	*10h 03m*	*6h 07m*				So, 21. Apr
Mo, 22. Apr	MESZ	—:—–—:—	–	Mond stört		19:00	05:47	04:26	*43m*	05:10	*39m*	05:49	*34m*	06:24	*13h 58m*	20:22	*34m*	20:56	*39m*	21:36	*44m*	22:20	*10h 00m*	*6h 03m*				Mo, 22. Apr
Di, 23. Apr	MESZ	—:—–—:—	–	Mond stört		20:08	06:02	04:24	*44m*	05:08	*39m*	05:47	*34m*	06:22	*14h 01m*	20:23	*34m*	20:58	*39m*	21:37	*44m*	22:22	*9h 57m*	*5h 58m*				Di, 23. Apr
Mi, 24. Apr	MESZ	—:—–—:—	–	Mond stört	○	21:17	06:19	04:21	*44m*	05:06	*39m*	05:45	*34m*	06:20	*14h 04m*	20:24	*34m*	20:59	*39m*	21:39	*45m*	22:24	*9h 54m*	*5h 54m*				Mi, 24. Apr
Do, 25. Apr	MESZ	22:26 – 22:29	*3m*	AN+ *bis* M↗		22:29	06:40	04:19	*45m*	05:04	*39m*	05:44	*34m*	06:18	*14h 07m*	20:26	*34m*	21:01	*40m*	21:41	*45m*	22:26	*9h 51m*	*5h 49m*				Do, 25. Apr
Fr, 26. Apr	MESZ	22:28 – 23:41	*1h 12m*	AN+ *bis* M↗		23:41	07:07	04:16	*45m*	05:02	*40m*	05:42	*34m*	06:17	*14h 10m*	20:27	*35m*	21:02	*40m*	21:42	*45m*	22:28	*9h 48m*	*5h 45m*				Fr, 26. Apr
Sa, 27. Apr	MESZ	22:31 – 00:49*	*2h 18m*	AN+ *bis* M↗		—:—	07:42	04:14	*45m*	05:00	*40m*	05:40	*35m*	06:15	*14h 13m*	20:28	*35m*	21:04	*40m*	21:44	*46m*	22:31	*9h 45m*	*5h 40m*				Sa, 27. Apr
So, 28. Apr	MESZ	22:33 – 01:49*	*3h 15m*	AN+ *bis* M↗		00:49	08:30	04:11	*46m*	04:58	*40m*	05:38	*35m*	06:13	*14h 16m*	20:30	*35m*	21:05	*40m*	21:46	*46m*	22:33	*9h 42m*	*5h 36m*				So, 28. Apr
Mo, 29. Apr	MESZ	22:35 – 02:36*	*4h 01m*	AN+ *bis* M↗		01:49	09:30	04:09	*46m*	04:56	*40m*	05:37	*35m*	06:12	*14h 19m*	20:31	*35m*	21:07	*41m*	21:48	*47m*	22:35	*9h 39m*	*5h 31m*				Mo, 29. Apr
Di, 30. Apr	MESZ	22:37 – 03:13*	*4h 36m*	AN+ *bis* M↗		02:36	10:42	04:06	*47m*	04:54	*40m*	05:35	*35m*	06:10	*14h 22m*	20:32	*35m*	21:08	*41m*	21:49	*47m*	22:37	*9h 36m*	*5h 26m*				Di, 30. Apr
Mi, 1. Mai	MESZ	22:39 – 03:42*	*5h 02m*	AN+ *bis* M↗	◑	03:13	12:01	04:04	*47m*	04:52	*41m*	05:33	*35m*	06:09	*14h 24m*	20:34	*35m*	21:10	*41m*	21:51	*48m*	22:39	*9h 33m*	*5h 22m*				Mi, 1. Mai
Do, 2. Mai	MESZ	22:42 – 03:59*	*5h 17m*	AN+ *bis* AN_		03:42	13:23	04:02	*48m*	04:50	*41m*	05:31	*35m*	06:07	*14h 27m*	20:35	*36m*	21:11	*41m*	21:53	*48m*	22:42	*9h 30m*	*5h 17m*				Do, 2. Mai
Fr, 3. Mai	MESZ	22:44 – 03:57*	*5h 12m*	AN+ *bis* AN_		04:05	14:45	03:59	*48m*	04:48	*41m*	05:30	*35m*	06:06	*14h 30m*	20:36	*36m*	21:12	*42m*	21:54	*49m*	22:44	*9h 27m*	*5h 12m*				Fr, 3. Mai
Sa, 4. Mai	MESZ	22:46 – 03:54*	*5h 08m*	AN+ *bis* AN_		04:25	16:06	03:57	*49m*	04:46	*42m*	05:28	*36m*	06:04	*14h 33m*	20:38	*36m*	21:14	*42m*	21:56	*49m*	22:46	*9h 25m*	*5h 08m*				Sa, 4. Mai
So, 5. Mai	MESZ	22:48 – 03:52*	*5h 03m*	AN+ *bis* AN_		04:44	17:28	03:54	*49m*	04:44	*42m*	05:26	*36m*	06:03	*14h 36m*	20:39	*36m*	21:15	*42m*	21:58	*50m*	22:48	*9h 22m*	*5h 03m*				So, 5. Mai
Mo, 6. Mai	MESZ	22:51 – 03:50*	*4h 58m*	AN+ *bis* AN_		05:03	18:51	03:52	*50m*	04:42	*42m*	05:25	*36m*	06:01	*14h 38m*	20:40	*36m*	21:17	*42m*	22:00	*50m*	22:51	*9h 19m*	*4h 58m*				Mo, 6. Mai
Di, 7. Mai	MESZ	22:53 – 03:47*	*4h 54m*	AN+ *bis* AN_		05:23	20:15	03:50	*50m*	04:40	*42m*	05:23	*36m*	06:00	*14h 41m*	20:42	*36m*	21:18	*43m*	22:01	*51m*	22:53	*9h 16m*	*4h 54m*				Di, 7. Mai
Mi, 8. Mai	MESZ	22:55 – 03:45*	*4h 49m*	AN+ *bis* AN_	●	05:49	21:40	03:47	*51m*	04:39	*43m*	05:22	*36m*	05:58	*14h 44m*	20:43	*36m*	21:20	*43m*	22:03	*52m*	22:55	*9h 14m*	*4h 49m*				Mi, 8. Mai
Do, 9. Mai	MESZ	23:01 – 03:42*	*4h 41m*	M↘ *bis* AN_		06:20	23:01	03:45	*52m*	04:37	*43m*	05:20	*36m*	05:57	*14h 46m*	20:44	*37m*	21:21	*43m*	22:05	*52m*	22:57	*9h 11m*	*4h 44m*				Do, 9. Mai
Fr, 10. Mai	MESZ	00:12* – 03:40*	*3h 28m*	M↘ *bis* AN_		07:01	—:—	03:42	*52m*	04:35	*43m*	05:19	*37m*	05:56	*14h 49m*	20:45	*37m*	21:23	*43m*	22:07	*53m*	23:00	*9h 09m*	*4h 40m*				Fr, 10. Mai
Sa, 11. Mai	MESZ	01:09* – 03:38*	*2h 28m*	M↘ *bis* AN_		07:54	00:12	03:40	*53m*	04:33	*43m*	05:17	*37m*	05:54	*14h 52m*	20:47	*37m*	21:24	*44m*	22:08	*53m*	23:02	*9h 06m*	*4h 35m*				Sa, 11. Mai
So, 12. Mai	MESZ	01:53* – 03:35*	*1h 42m*	M↘ *bis* AN_		08:57	01:09	03:38	*53m*	04:31	*44m*	05:16	*37m*	05:53	*14h 54m*	20:48	*37m*	21:25	*44m*	22:10	*54m*	23:04	*9h 04m*	*4h 30m*				So, 12. Mai
Mo, 13. Mai	MESZ	02:25* – 03:33*	*1h 08m*	M↘ *bis* AN_		10:06	01:53	03:35	*54m*	04:30	*44m*	05:14	*37m*	05:52	*14h 57m*	20:49	*37m*	21:27	*44m*	22:12	*55m*	23:07	*9h 01m*	*4h 26m*				Mo, 13. Mai
Di, 14. Mai	MESZ	02:49* – 03:31*	*41m*	M↘ *bis* AN_		11:17	02:25	03:33	*55m*	04:28	*44m*	05:13	*37m*	05:51	*14h 59m*	20:50	*37m*	21:28	*45m*	22:13	*55m*	23:09	*8h 59m*	*4h 21m*				Di, 14. Mai
Mi, 15. Mai	MESZ	03:08* – 03:28*	*19m*	M↘ *bis* AN_	◐	12:26	02:49	03:31	*55m*	04:26	*45m*	05:12	*37m*	05:49	*15h 02m*	20:52	*38m*	21:30	*45m*	22:15	*56m*	23:11	*8h 56m*	*4h 16m*				Mi, 15. Mai
Do, 16. Mai	MESZ	03:25* – 03:26*	*1m*	M↘ *bis* AN_		13:33	03:08	03:28	*56m*	04:25	*45m*	05:10	*38m*	05:48	*15h 04m*	20:53	*38m*	21:31	*45m*	22:17	*57m*	23:14	*8h 54m*	*4h 12m*				Do, 16. Mai
Fr, 17. Mai	MESZ	—:—–—:—	–	Mond stört		14:39	03:25	03:26	*57m*	04:23	*45m*	05:09	*38m*	05:47	*15h 06m*	20:54	*38m*	21:32	*46m*	22:18	*57m*	23:16	*8h 52m*	*4h 07m*				Fr, 17. Mai
Sa, 18. Mai	MESZ	—:—–—:—	–	Mond stört		15:43	03:39	03:24	*57m*	04:22	*46m*	05:08	*38m*	05:46	*15h 09m*	20:55	*38m*	21:34	*46m*	22:20	*58m*	23:19	*8h 49m*	*4h 02m*				Sa, 18. Mai
So, 19. Mai	MESZ	—:—–—:—	–	Mond stört		16:48	03:53	03:22	*58m*	04:20	*46m*	05:06	*38m*	05:45	*15h 11m*	20:56	*38m*	21:35	*46m*	22:22	*59m*	23:21	*8h 47m*	*3h 58m*				So, 19. Mai
Mo, 20. Mai	MESZ	—:—–—:—	–	Mond stört		17:54	04:08	03:19	*59m*	04:19	*46m*	05:05	*38m*	05:44	*15h 13m*	20:57	*38m*	21:36	*46m*	22:23	*1h 00m*	23:23	*8h 45m*	*3h 53m*				Mo, 20. Mai
Di, 21. Mai	MESZ	—:—–—:—	–	Mond stört		19:04	04:25	03:17	*1h 00m*	04:17	*46m*	05:04	*38m*	05:43	*15h 15m*	20:59	*39m*	21:38	*47m*	22:25	*1h 00m*	23:26	*8h 43m*	*3h 49m*				Di, 21. Mai
Mi, 22. Mai	MESZ	—:—–—:—	–	Mond stört		20:15	04:44	03:15	*1h 00m*	04:16	*47m*	05:03	*39m*	05:42	*15h 17m*	21:00	*39m*	21:39	*47m*	22:26	*1h 01m*	23:28	*8h 41m*	*3h 44m*				Mi, 22. Mai
Do, 23. Mai	MESZ	—:—–—:—	–	Mond stört	○	21:29	05:09	03:13	*1h 01m*	04:14	*47m*	05:02	*39m*	05:41	*15h 19m*	21:01	*39m*	21:40	*47m*	22:28	*1h 02m*	23:30	*8h 39m*	*3h 40m*				Do, 23. Mai
Fr, 24. Mai	MESZ	—:—–—:—	–	Mond stört		22:39	05:42	03:11	*1h 02m*	04:13	*47m*	05:01	*39m*	05:40	*15h 21m*	21:02	*39m*	21:41	*48m*	22:29	*1h 03m*	23:32	*8h 37m*	*3h 36m*				Fr, 24. Mai
Sa, 25. Mai	MESZ	23:35 – 23:43	*7m*	AN+ *bis* M↗		23:43	06:26	03:09	*1h 03m*	04:12	*48m*	05:00	*39m*	05:39	*15h 23m*	21:03	*39m*	21:42	*48m*	22:31	*1h 03m*	23:35	*8h 35m*	*3h 31m*				Sa, 25. Mai
So, 26. Mai	MESZ	23:37 – 00:35*	*57m*	AN+ *bis* M↗		—:—	07:23	03:06	*1h 03m*	04:10	*48m*	04:59	*39m*	05:38	*15h 25m*	21:04	*39m*	21:44	*48m*	22:32	*1h 04m*	23:37	*8h 33m*	*3h 27m*				So, 26. Mai
Mo, 27. Mai	MESZ	23:39 – 01:15*	*1h 35m*	AN+ *bis* M↗		00:35	08:33	03:04	*1h 04m*	04:09	*48m*	04:58	*39m*	05:38	*15h 27m*	21:05	*39m*	21:45	*48m*	22:34	*1h 05m*	23:39	*8h 32m*	*3h 23m*				Mo, 27. Mai
Di, 28. Mai	MESZ	23:41 – 01:46*	*2h 04m*	AN+ *bis* M↗		01:15	09:50	03:02	*1h 05m*	04:08	*48m*	04:57	*39m*	05:37	*15h 28m*	21:06	*40m*	21:46	*49m*	22:35	*1h 06m*	23:41	*8h 30m*	*3h 19m*				Di, 28. Mai
Mi, 29. Mai	MESZ	23:44 – 02:10*	*2h 26m*	AN+ *bis* M↗		01:46	11:11	03:01	*1h 06m*	04:07	*49m*	04:56	*40m*	05:36	*15h 30m*	21:07	*40m*	21:47	*49m*	22:37	*1h 07m*	23:44	*8h 28m*	*3h 15m*				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		Δt		Ph.	↗	↘	Astr.	Δt	Naut.	Δt	Bürg.	Δt	↗	Δt	↘	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Do, 30. Mai	MESZ	23:46 – 02:30*	2h 44m	AN_+ bis $M_↗$	◑	02:10	12:32	02:59	1h 07m	04:06	49m	04:55	40m	05:35	15h 32m	21:08	40m	21:48	49m	22:38	1h 07m	23:46	8h 27m	3h 11m				Do, 30. Mai
Fr, 31. Mai	MESZ	23:48 – 02:49*	3h 00m	AN_+ bis $M_↗$		02:30	13:51	02:57	1h 07m	04:05	49m	04:54	40m	05:35	15h 33m	21:09	40m	21:49	49m	22:39	1h 08m	23:48	8h 25m	3h 07m				Fr, 31. Mai
Sa, 1. Jun	MESZ	23:50 – 02:53*	3h 03m	AN_+ bis AN_-		02:49	15:10	02:55	1h 08m	04:04	49m	04:54	40m	05:34	15h 35m	21:10	40m	21:50	50m	22:40	1h 09m	23:50	8h 24m	3h 03m				Sa, 1. Jun
So, 2. Jun	MESZ	23:52 – 02:52*	2h 59m	AN_+ bis AN_-		03:07	16:30	02:53	1h 09m	04:03	50m	04:53	40m	05:34	15h 36m	21:10	40m	21:51	50m	22:42	1h 10m	23:52	8h 22m	2h 59m				So, 2. Jun
Mo, 3. Jun	MESZ	23:54 – 02:50*	2h 56m	AN_+ bis AN_-		03:26	17:51	02:52	1h 10m	04:02	50m	04:52	40m	05:33	15h 38m	21:11	40m	21:52	50m	22:43	1h 11m	23:54	8h 21m	2h 56m				Mo, 3. Jun
Di, 4. Jun	MESZ	23:56 – 02:48*	2h 52m	AN_+ bis AN_-		03:49	19:14	02:50	1h 11m	04:01	50m	04:52	40m	05:33	15h 39m	21:12	40m	21:53	50m	22:44	1h 11m	23:56	8h 20m	2h 52m				Di, 4. Jun
Mi, 5. Jun	MESZ	23:58 – 02:47*	2h 49m	AN_+ bis AN_-		04:17	20:36	02:48	1h 11m	04:00	50m	04:51	40m	05:32	15h 40m	21:13	41m	21:54	51m	22:45	1h 12m	23:58	8h 19m	2h 49m				Mi, 5. Jun
Do, 6. Jun	MESZ	23:59 – 02:46*	2h 46m	AN_+ bis AN_-	●	04:53	21:52	02:47	1h 12m	04:00	51m	04:51	41m	05:32	15h 41m	21:14	41m	21:55	51m	22:46	1h 13m	23:59	8h 17m	2h 46m				Do, 6. Jun
Fr, 7. Jun	MESZ	00:01* – 02:44*	2h 43m	AN_+ bis AN_-		05:40	22:56	02:46	1h 13m	03:59	51m	04:50	41m	05:31	15h 42m	21:14	41m	21:56	51m	22:47	1h 14m	00:01*	8h 16m	2h 43m				Fr, 7. Jun
Sa, 8. Jun	MESZ	00:03* – 02:43*	2h 40m	AN_+ bis AN_-		06:39	23:45	02:44	1h 14m	03:58	51m	04:50	41m	05:31	15h 43m	21:15	41m	21:56	51m	22:48	1h 14m	00:03*	8h 15m	2h 40m				Sa, 8. Jun
So, 9. Jun	MESZ	00:23* – 02:42*	2h 19m	$M_↘$ bis AN_-		07:47	—:—	02:43	1h 14m	03:58	51m	04:50	41m	05:31	15h 44m	21:16	41m	21:57	51m	22:49	1h 15m	00:04*	8h 15m	2h 37m				So, 9. Jun
Mo, 10. Jun	MESZ	00:50* – 02:41*	1h 50m	$M_↘$ bis AN_-		08:59	00:23	02:42	1h 15m	03:57	51m	04:49	41m	05:31	15h 45m	21:16	41m	21:58	52m	22:50	1h 15m	00:06*	8h 14m	2h 35m				Mo, 10. Jun
Di, 11. Jun	MESZ	01:12* – 02:40*	1h 28m	$M_↘$ bis AN_-		10:10	00:50	02:41	1h 15m	03:57	52m	04:49	41m	05:30	15h 46m	21:17	41m	21:58	52m	22:51	1h 16m	00:07*	8h 13m	2h 32m				Di, 11. Jun
Mi, 12. Jun	MESZ	01:29* – 02:39*	1h 09m	$M_↘$ bis AN_-		11:19	01:12	02:40	1h 16m	03:57	52m	04:49	41m	05:30	15h 47m	21:17	41m	21:59	52m	22:51	1h 17m	00:08*	8h 12m	2h 30m				Mi, 12. Jun
Do, 13. Jun	MESZ	01:45* – 02:38*	53m	$M_↘$ bis AN_-		12:25	01:29	02:39	1h 17m	03:56	52m	04:49	41m	05:30	15h 47m	21:18	41m	22:00	52m	22:52	1h 17m	00:10*	8h 12m	2h 28m				Do, 13. Jun
Fr, 14. Jun	MESZ	01:59* – 02:38*	38m	$M_↘$ bis AN_-	◐	13:30	01:45	02:38	1h 17m	03:56	52m	04:48	41m	05:30	15h 48m	21:18	41m	22:00	52m	22:53	1h 17m	00:11*	8h 11m	2h 27m				Fr, 14. Jun
Sa, 15. Jun	MESZ	02:13* – 02:37*	24m	$M_↘$ bis AN_-		14:34	01:59	02:38	1h 17m	03:56	52m	04:48	41m	05:30	15h 48m	21:19	41m	22:01	52m	22:53	1h 18m	00:11*	8h 11m	2h 25m				Sa, 15. Jun
So, 16. Jun	MESZ	02:29* – 02:37*	8m	$M_↘$ bis AN_-		15:40	02:13	02:37	1h 18m	03:56	52m	04:48	41m	05:30	15h 49m	21:19	41m	22:01	52m	22:54	1h 18m	00:12*	8h 10m	2h 24m				So, 16. Jun
Mo, 17. Jun	MESZ	—:——:—	–	Mond stört		16:47	02:29	02:37	1h 18m	03:56	52m	04:48	41m	05:30	15h 49m	21:20	41m	22:01	52m	22:54	1h 18m	00:13*	8h 10m	2h 23m				Mo, 17. Jun
Di, 18. Jun	MESZ	—:——:—	–	Mond stört		17:58	02:47	02:37	1h 18m	03:56	52m	04:48	41m	05:30	15h 49m	21:20	41m	22:02	52m	22:54	1h 18m	00:13*	8h 10m	2h 23m				Di, 18. Jun
Mi, 19. Jun	MESZ	—:——:—	–	Mond stört		19:11	03:10	02:37	1h 18m	03:56	52m	04:48	41m	05:30	15h 49m	21:20	41m	22:02	52m	22:55	1h 19m	00:14*	8h 10m	2h 22m				Mi, 19. Jun
Do, 20. Jun	MESZ	—:——:—	–	Mond stört		20:24	03:39	02:37	1h 19m	03:56	52m	04:49	41m	05:31	15h 49m	21:20	41m	22:02	52m	22:55	1h 19m	00:14*	8h 10m	2h 22m				Do, 20. Jun
Fr, 21. Jun	MESZ	—:——:—	–	Mond stört		21:31	04:19	02:37	1h 19m	03:56	52m	04:49	41m	05:31	15h 49m	21:21	41m	22:02	52m	22:55	1h 19m	00:14*	8h 10m	2h 22m				Fr, 21. Jun
Sa, 22. Jun	MESZ	—:——:—	–	Mond stört	○	22:29	05:12	02:37	1h 19m	03:56	52m	04:49	41m	05:31	15h 49m	21:21	41m	22:03	52m	22:55	1h 18m	00:14*	8h 10m	2h 23m				Sa, 22. Jun
So, 23. Jun	MESZ	—:——:—	–	Mond stört		23:14	06:19	02:38	1h 18m	03:57	52m	04:49	41m	05:31	15h 49m	21:21	41m	22:03	52m	22:55	1h 18m	00:14*	8h 10m	2h 24m				So, 23. Jun
Mo, 24. Jun	MESZ	—:——:—	–	Mond stört		23:48	07:36	02:38	1h 18m	03:57	52m	04:50	41m	05:32	15h 49m	21:21	41m	22:03	52m	22:55	1h 18m	00:14*	8h 11m	2h 25m				Mo, 24. Jun
Di, 25. Jun	MESZ	00:14* – 00:14*	0m	AN_+ bis $M_↗$		—:—	08:58	02:39	1h 18m	03:57	52m	04:50	41m	05:32	15h 48m	21:21	41m	22:03	52m	22:55	1h 18m	00:14*	8h 11m	2h 26m				Di, 25. Jun
Mi, 26. Jun	MESZ	00:13* – 00:36*	22m	AN_+ bis $M_↗$		00:14	10:20	02:40	1h 18m	03:58	52m	04:51	41m	05:32	15h 48m	21:21	41m	22:03	52m	22:55	1h 17m	00:13*	8h 11m	2h 27m				Mi, 26. Jun
Do, 27. Jun	MESZ	00:12* – 00:55*	42m	AN_+ bis $M_↗$		00:36	11:41	02:41	1h 17m	03:59	52m	04:51	41m	05:33	15h 48m	21:21	41m	22:03	52m	22:55	1h 17m	00:12*	8h 12m	2h 29m				Do, 27. Jun
Fr, 28. Jun	MESZ	00:12* – 01:13*	1h 00m	AN_+ bis $M_↗$	◑	00:55	13:00	02:42	1h 17m	03:59	52m	04:52	41m	05:33	15h 47m	21:21	41m	22:02	52m	22:55	1h 16m	00:12*	8h 12m	2h 31m				Fr, 28. Jun
Sa, 29. Jun	MESZ	00:11* – 01:31*	1h 20m	AN_+ bis $M_↗$		01:13	14:18	02:43	1h 16m	04:00	52m	04:52	41m	05:34	15h 46m	21:21	41m	22:02	52m	22:54	1h 16m	00:11*	8h 13m	2h 33m				Sa, 29. Jun
So, 30. Jun	MESZ	00:10* – 01:52*	1h 42m	AN_+ bis $M_↗$		01:31	15:38	02:44	1h 16m	04:01	52m	04:53	41m	05:34	15h 46m	21:21	41m	22:02	52m	22:54	1h 15m	00:10*	8h 14m	2h 35m				So, 30. Jun
Mo, 1. Jul	MESZ	00:09* – 02:17*	2h 08m	AN_+ bis $M_↗$		01:52	16:58	02:46	1h 15m	04:01	52m	04:53	41m	05:35	15h 45m	21:20	41m	22:02	51m	22:54	1h 15m	00:09*	8h 15m	2h 38m				Mo, 1. Jul
Di, 2. Jul	MESZ	00:08* – 02:48*	2h 40m	AN_+ bis AN_-		02:17	18:19	02:47	1h 15m	04:02	51m	04:54	41m	05:35	15h 44m	21:20	41m	22:01	51m	22:53	1h 14m	00:08*	8h 16m	2h 40m				Di, 2. Jul
Mi, 3. Jul	MESZ	00:06* – 02:50*	2h 43m	AN_+ bis AN_-		02:49	19:35	02:48	1h 14m	04:03	51m	04:55	41m	05:36	15h 43m	21:20	41m	22:01	51m	22:53	1h 13m	00:06*	8h 17m	2h 43m				Mi, 3. Jul
Do, 4. Jul	MESZ	00:05* – 02:52*	2h 46m	AN_+ bis AN_-		03:32	20:43	02:50	1h 13m	04:04	51m	04:56	41m	05:37	15h 42m	21:19	41m	22:01	51m	22:52	1h 13m	00:05*	8h 18m	2h 46m				Do, 4. Jul
Fr, 5. Jul	MESZ	00:04* – 02:54*	2h 49m	AN_+ bis AN_-		04:26	21:38	02:52	1h 13m	04:05	51m	04:56	41m	05:38	15h 41m	21:19	41m	22:00	51m	22:51	1h 12m	00:04*	8h 19m	2h 49m				Fr, 5. Jul
Sa, 6. Jul	MESZ	00:02* – 02:55*	2h 53m	AN_+ bis AN_-	●	05:30	22:20	02:54	1h 12m	04:06	51m	04:57	41m	05:38	15h 40m	21:19	40m	22:00	50m	22:50	1h 11m	00:02*	8h 20m	2h 53m				Sa, 6. Jul
So, 7. Jul	MESZ	00:01* – 02:57*	2h 56m	AN_+ bis AN_-		06:41	22:51	02:55	1h 11m	04:07	50m	04:58	40m	05:39	15h 39m	21:18	40m	21:59	50m	22:50	1h 10m	00:01*	8h 21m	2h 56m				So, 7. Jul
Mo, 8. Jul	MESZ	23:59 – 02:59*	3h 00m	AN_+ bis AN_-		07:53	23:14	02:57	1h 10m	04:08	50m	04:59	40m	05:40	15h 37m	21:18	40m	21:58	50m	22:49	1h 10m	23:59	8h 22m	3h 00m				Mo, 8. Jul
Di, 9. Jul	MESZ	23:57 – 03:01*	3h 03m	AN_+ bis AN_-		09:04	23:33	02:59	1h 10m	04:09	50m	05:00	40m	05:41	15h 36m	21:17	40m	21:58	50m	22:48	1h 09m	23:57	8h 24m	3h 03m				Di, 9. Jul
Mi, 10. Jul	MESZ	23:56 – 03:03*	3h 07m	AN_+ bis AN_-		10:11	23:50	03:01	1h 09m	04:11	50m	05:01	40m	05:41	15h 35m	21:17	40m	21:57	49m	22:47	1h 08m	23:56	8h 25m	3h 07m				Mi, 10. Jul
Do, 11. Jul	MESZ	00:04* – 03:05*	3h 01m	$M_↘$ bis AN_-		11:17	—:—	03:03	1h 08m	04:12	49m	05:02	40m	05:42	15h 33m	21:16	40m	21:56	49m	22:46	1h 07m	23:54	8h 27m	3h 11m				Do, 11. Jul
Fr, 12. Jul	MESZ	00:18* – 03:07*	2h 49m	$M_↘$ bis AN_-		12:21	00:04	03:05	1h 07m	04:13	49m	05:03	40m	05:43	15h 32m	21:15	40m	21:55	49m	22:45	1h 06m	23:52	8h 28m	3h 15m				Fr, 12. Jul
Sa, 13. Jul	MESZ	00:33* – 03:10*	2h 36m	$M_↘$ bis AN_-		13:26	00:18	03:07	1h 06m	04:14	49m	05:04	40m	05:44	15h 30m	21:15	40m	21:55	49m	22:44	1h 06m	23:50	8h 30m	3h 19m				Sa, 13. Jul
So, 14. Jul	MESZ	00:50* – 03:12*	2h 21m	$M_↘$ bis AN_-	◐	14:32	00:33	03:10	1h 06m	04:16	49m	05:05	40m	05:45	15h 28m	21:14	39m	21:54	48m	22:43	1h 05m	23:48	8h 32m	3h 23m				So, 14. Jul
Mo, 15. Jul	MESZ	01:10* – 03:14*	2h 03m	$M_↘$ bis AN_-		15:40	00:50	03:12	1h 05m	04:17	48m	05:06	39m	05:46	15h 26m	21:13	39m	21:53	48m	22:41	1h 04m	23:46	8h 34m	3h 28m				Mo, 15. Jul
Di, 16. Jul	MESZ	01:36* – 03:16*	1h 40m	$M_↘$ bis AN_-		16:51	01:10	03:14	1h 04m	04:19	48m	05:07	39m	05:47	15h 25m	21:12	39m	21:52	48m	22:40	1h 03m	23:44	8h 35m	3h 32m				Di, 16. Jul
Mi, 17. Jul	MESZ	02:11* – 03:18*	1h 07m	$M_↘$ bis AN_-		18:04	01:36	03:16	1h 03m	04:20	48m	05:08	39m	05:48	15h 23m	21:11	39m	21:51	48m	22:39	1h 03m	23:42	8h 37m	3h 36m				Mi, 17. Jul
Do, 18. Jul	MESZ	02:57* – 03:21*	23m	$M_↘$ bis AN_-		19:14	02:11	03:18	1h 03m	04:21	48m	05:10	39m	05:49	15h 21m	21:10	39m	21:50	47m	22:38	1h 02m	23:40	8h 39m	3h 40m				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		20:17	02:57	03:21	1h 02m	04:23	47m	05:11	39m	05:50	15h 19m	21:10	39m	21:49	47m	22:36	1h 01m	23:38	8h 41m	3h 45m				Fr, 19. Jul
Sa, 20. Jul	MESZ	—:——:—	–	Mond stört		21:07	03:59	03:23	1h 01m	04:24	47m	05:12	39m	05:51	15h 17m	21:09	39m	21:48	47m	22:35	1h 00m	23:35	8h 43m	3h 49m				Sa, 20. Jul
So, 21. Jul	MESZ	—:——:—	–	Mond stört	○	21:46	05:14	03:25	1h 00m	04:26	47m	05:13	39m	05:52	15h 15m	21:08	38m	21:46	46m	22:33	59m	23:33	8h 45m	3h 54m				So, 21. Jul
Mo, 22. Jul	MESZ	—:——:—	–	Mond stört		22:16	06:37	03:28	59m	04:28	46m	05:14	38m	05:53	15h 13m	21:07	38m	21:45	46m	22:32	59m	23:31	8h 47m	3h 58m				Mo, 22. Jul
Di, 23. Jul	MESZ	—:——:—	–	Mond stört		22:40	08:02	03:30	59m	04:29	46m	05:16	38m	05:54	15h 11m	21:05	38m	21:44	46m	22:30	58m	23:29	8h 50m	4h 03m				Di, 23. Jul
Mi, 24. Jul	MESZ	—:——:—	–	Mond stört		23:00	09:25	03:32	58m	04:31	46m	05:17	38m	05:56	15h 08m	21:04	38m	21:43	45m	22:29	57m	23:27	8h 52m	4h 07m				Mi, 24. Jul
Do, 25. Jul	MESZ	—:——:—	–	Mond stört		23:18	10:47	03:34	57m	04:32	46m	05:18	38m	05:57	15h 06m	21:03	38m	21:41	45m	22:27	57m	23:24	8h 54m	4h 12m				Do, 25. Jul
Fr, 26. Jul	MESZ	23:22 – 23:37	14m	AN+ bis M↗		23:37	12:07	03:37	57m	04:34	45m	05:20	38m	05:58	15h 04m	21:02	38m	21:40	45m	22:26	56m	23:22	8h 56m	4h 17m				Fr, 26. Jul
Sa, 27. Jul	MESZ	23:20 – 23:57	36m	AN+ bis M↗		23:57	13:27	03:39	56m	04:35	45m	05:21	38m	05:59	15h 01m	21:01	37m	21:39	45m	22:24	55m	23:20	8h 59m	4h 21m				Sa, 27. Jul
So, 28. Jul	MESZ	23:17 – 00:20*	1h 02m	AN+ bis M↗	◑	—:—	14:47	03:41	55m	04:37	45m	05:22	37m	06:00	14h 59m	21:00	37m	21:37	44m	22:22	55m	23:17	9h 01m	4h 26m				So, 28. Jul
Mo, 29. Jul	MESZ	23:15 – 00:50*	1h 34m	AN+ bis M↗		00:20	16:08	03:44	55m	04:39	44m	05:24	37m	06:01	14h 57m	20:58	37m	21:36	44m	22:20	54m	23:15	9h 04m	4h 30m				Mo, 29. Jul
Di, 30. Jul	MESZ	23:13 – 01:28*	2h 15m	AN+ bis M↗		00:50	17:25	03:46	54m	04:40	44m	05:25	37m	06:02	14h 54m	20:57	37m	21:35	44m	22:19	53m	23:13	9h 06m	4h 35m				Di, 30. Jul
Mi, 31. Jul	MESZ	23:10 – 02:18*	3h 07m	AN+ bis M↗		01:28	18:35	03:48	53m	04:42	44m	05:26	37m	06:04	14h 52m	20:56	37m	21:33	43m	22:17	53m	23:10	9h 09m	4h 40m				Mi, 31. Jul
Do, 1. Aug	MESZ	23:08 – 03:18*	4h 10m	AN+ bis M↗		02:18	19:33	03:50	53m	04:44	43m	05:28	37m	06:05	14h 49m	20:54	37m	21:32	43m	22:15	52m	23:08	9h 11m	4h 44m				Do, 1. Aug
Fr, 2. Aug	MESZ	23:05 – 03:55*	4h 49m	AN+ bis AN−		03:18	20:18	03:53	52m	04:45	43m	05:29	37m	06:06	14h 46m	20:53	36m	21:30	43m	22:13	52m	23:05	9h 14m	4h 49m				Fr, 2. Aug
Sa, 3. Aug	MESZ	23:03 – 03:57*	4h 54m	AN+ bis AN−		04:26	20:52	03:55	52m	04:47	43m	05:30	36m	06:07	14h 44m	20:52	36m	21:28	43m	22:12	51m	23:03	9h 16m	4h 54m				Sa, 3. Aug
So, 4. Aug	MESZ	23:01 – 03:59*	4h 58m	AN+ bis AN−	●	05:38	21:18	03:57	51m	04:49	43m	05:32	36m	06:09	14h 41m	20:50	36m	21:27	42m	22:10	50m	23:01	9h 19m	4h 58m				So, 4. Aug
Mo, 5. Aug	MESZ	22:58 – 04:02*	5h 03m	AN+ bis AN−		06:49	21:38	03:59	50m	04:50	42m	05:33	36m	06:10	14h 39m	20:49	36m	21:25	42m	22:08	50m	22:58	9h 22m	5h 03m				Mo, 5. Aug
Di, 6. Aug	MESZ	22:56 – 04:04*	5h 08m	AN+ bis AN−		07:58	21:55	04:02	50m	04:52	42m	05:35	36m	06:11	14h 36m	20:47	36m	21:24	42m	22:06	49m	22:56	9h 24m	5h 08m				Di, 6. Aug
Mi, 7. Aug	MESZ	22:53 – 04:06*	5h 12m	AN+ bis AN−		09:05	22:10	04:04	49m	04:54	42m	05:36	36m	06:12	14h 33m	20:46	36m	21:22	42m	22:04	49m	22:53	9h 27m	5h 12m				Mi, 7. Aug
Do, 8. Aug	MESZ	22:51 – 04:08*	5h 17m	AN+ bis AN−		10:09	22:24	04:06	49m	04:55	42m	05:37	36m	06:14	14h 30m	20:44	36m	21:20	41m	22:02	48m	22:51	9h 30m	5h 17m				Do, 8. Aug
Fr, 9. Aug	MESZ	22:48 – 04:10*	5h 21m	AN+ bis AN−		11:14	22:38	04:08	48m	04:57	41m	05:39	36m	06:15	14h 27m	20:43	35m	21:19	41m	22:00	48m	22:48	9h 33m	5h 21m				Fr, 9. Aug
Sa, 10. Aug	MESZ	22:54 – 04:12*	5h 18m	M↘ bis AN−		12:19	22:54	04:10	48m	04:59	41m	05:40	35m	06:16	14h 25m	20:41	35m	21:17	41m	21:58	47m	22:46	9h 36m	5h 26m				Sa, 10. Aug
So, 11. Aug	MESZ	23:12 – 04:15*	5h 02m	M↘ bis AN−		13:25	23:12	04:12	47m	05:00	41m	05:42	35m	06:17	14h 22m	20:40	35m	21:15	41m	21:56	47m	22:44	9h 38m	5h 31m				So, 11. Aug
Mo, 12. Aug	MESZ	23:35 – 04:17*	4h 41m	M↘ bis AN−	◐	14:35	23:35	04:15	47m	05:02	41m	05:43	35m	06:19	14h 19m	20:38	35m	21:13	40m	21:54	46m	22:41	9h 41m	5h 35m				Mo, 12. Aug
Di, 13. Aug	MESZ	00:05* – 04:19*	4h 14m	M↘ bis AN−		15:45	—:—	04:17	46m	05:04	40m	05:44	35m	06:20	14h 16m	20:36	35m	21:12	40m	21:52	46m	22:39	9h 44m	5h 40m				Di, 13. Aug
Mi, 14. Aug	MESZ	00:45* – 04:21*	3h 35m	M↘ bis AN−		16:56	00:05	04:19	46m	05:05	40m	05:46	35m	06:21	14h 13m	20:35	35m	21:10	40m	21:50	46m	22:36	9h 47m	5h 44m				Mi, 14. Aug
Do, 15. Aug	MESZ	01:39* – 04:23*	2h 44m	M↘ bis AN−		18:01	00:45	04:21	46m	05:07	40m	05:47	35m	06:22	14h 10m	20:33	34m	21:08	40m	21:48	45m	22:34	9h 50m	5h 49m				Do, 15. Aug
Fr, 16. Aug	MESZ	02:47* – 04:25*	1h 37m	M↘ bis AN−		18:57	01:39	04:23	45m	05:09	40m	05:49	35m	06:24	14h 07m	20:31	34m	21:06	39m	21:46	45m	22:31	9h 53m	5h 53m				Fr, 16. Aug
Sa, 17. Aug	MESZ	04:07* – 04:27*	19m	M↘ bis AN−		19:41	02:47	04:25	45m	05:10	39m	05:50	34m	06:25	14h 04m	20:30	34m	21:04	39m	21:44	44m	22:29	9h 56m	5h 58m				Sa, 17. Aug
So, 18. Aug	MESZ	—:——:—	–	Mond stört		20:15	04:07	04:27	44m	05:12	39m	05:51	34m	06:26	14h 01m	20:28	34m	21:03	39m	21:42	44m	22:26	9h 59m	6h 02m				So, 18. Aug
Mo, 19. Aug	MESZ	—:——:—	–	Mond stört	○	20:41	05:33	04:29	44m	05:13	39m	05:53	34m	06:27	13h 58m	20:26	34m	21:01	39m	21:40	44m	22:24	10h 02m	6h 07m				Mo, 19. Aug
Di, 20. Aug	MESZ	—:——:—	–	Mond stört		21:03	06:59	04:31	44m	05:15	39m	05:54	34m	06:29	13h 55m	20:24	34m	20:59	38m	21:38	43m	22:21	10h 05m	6h 11m				Di, 20. Aug
Mi, 21. Aug	MESZ	—:——:—	–	Mond stört		21:22	08:24	04:33	43m	05:17	39m	05:56	34m	06:30	13h 52m	20:23	34m	20:57	38m	21:36	43m	22:19	10h 08m	6h 15m				Mi, 21. Aug
Do, 22. Aug	MESZ	—:——:—	–	Mond stört		21:41	09:47	04:35	43m	05:18	38m	05:57	34m	06:31	13h 49m	20:21	34m	20:55	38m	21:34	42m	22:17	10h 11m	6h 20m				Do, 22. Aug
Fr, 23. Aug	MESZ	—:——:—	–	Mond stört		22:01	11:10	04:37	43m	05:20	38m	05:58	34m	06:33	13h 46m	20:19	33m	20:53	38m	21:31	42m	22:14	10h 14m	6h 24m				Fr, 23. Aug
Sa, 24. Aug	MESZ	22:12 – 22:23	11m	AN+ bis M↗		22:23	12:33	04:39	42m	05:21	38m	06:00	34m	06:34	13h 43m	20:17	33m	20:51	38m	21:29	42m	22:12	10h 17m	6h 28m				Sa, 24. Aug
So, 25. Aug	MESZ	22:09 – 22:51	41m	AN+ bis M↗		22:51	13:56	04:41	42m	05:23	38m	06:01	33m	06:35	13h 40m	20:15	33m	20:49	38m	21:27	42m	22:09	10h 20m	6h 33m				So, 25. Aug
Mo, 26. Aug	MESZ	22:07 – 23:27	1h 20m	AN+ bis M↗	◑	23:27	15:16	04:42	42m	05:25	38m	06:03	33m	06:36	13h 37m	20:14	33m	20:47	37m	21:25	41m	22:07	10h 24m	6h 37m				Mo, 26. Aug
Di, 27. Aug	MESZ	22:04 – 00:13*	2h 08m	AN+ bis M↗		—:—	16:29	04:44	41m	05:26	37m	06:04	33m	06:38	13h 34m	20:12	33m	20:45	37m	21:23	41m	22:04	10h 27m	6h 41m				Di, 27. Aug
Mi, 28. Aug	MESZ	22:02 – 01:10*	3h 08m	AN+ bis M↗		00:13	17:30	04:46	41m	05:28	37m	06:05	33m	06:39	13h 30m	20:10	33m	20:43	37m	21:21	41m	22:02	10h 30m	6h 46m				Mi, 28. Aug
Do, 29. Aug	MESZ	22:00 – 02:16*	4h 16m	AN+ bis M↗		01:10	18:19	04:48	41m	05:29	37m	06:07	33m	06:40	13h 27m	20:08	33m	20:41	37m	21:19	40m	22:00	10h 33m	6h 50m				Do, 29. Aug
Fr, 30. Aug	MESZ	21:57 – 03:27*	5h 29m	AN+ bis M↗		02:16	18:55	04:50	40m	05:31	37m	06:08	33m	06:41	13h 24m	20:06	33m	20:39	37m	21:17	40m	21:57	10h 36m	6h 54m				Fr, 30. Aug
Sa, 31. Aug	MESZ	21:55 – 04:38*	6h 43m	AN+ bis M↗		03:27	19:23	04:52	40m	05:32	37m	06:09	33m	06:43	13h 21m	20:04	33m	20:37	36m	21:14	40m	21:55	10h 39m	6h 58m				Sa, 31. Aug
So, 1. Sep	MESZ	21:52 – 04:55*	7h 02m	AN+ bis AN−		04:38	19:44	04:53	40m	05:34	37m	06:11	33m	06:44	13h 18m	20:02	33m	20:35	36m	21:12	40m	21:52	10h 42m	7h 02m				So, 1. Sep
Mo, 2. Sep	MESZ	21:50 – 04:57*	7h 07m	AN+ bis AN−		05:47	20:02	04:55	40m	05:35	36m	06:12	33m	06:45	13h 15m	20:00	32m	20:33	36m	21:10	39m	21:50	10h 46m	7h 07m				Mo, 2. Sep
Di, 3. Sep	MESZ	21:48 – 04:59*	7h 11m	AN+ bis AN−	●	06:54	20:17	04:57	39m	05:37	36m	06:14	33m	06:47	13h 11m	19:58	32m	20:31	36m	21:08	39m	21:48	10h 49m	7h 11m				Di, 3. Sep
Mi, 4. Sep	MESZ	21:45 – 05:00*	7h 15m	AN+ bis AN−		07:59	20:31	04:59	39m	05:38	36m	06:15	32m	06:48	13h 08m	19:57	32m	20:29	36m	21:06	39m	21:45	10h 52m	7h 15m				Mi, 4. Sep
Do, 5. Sep	MESZ	21:43 – 05:02*	7h 19m	AN+ bis AN−		09:04	20:45	05:00	39m	05:40	36m	06:16	32m	06:49	13h 05m	19:55	32m	20:27	36m	21:04	39m	21:43	10h 55m	7h 19m				Do, 5. Sep
Fr, 6. Sep	MESZ	21:40 – 05:04*	7h 23m	AN+ bis AN−		10:08	21:00	05:02	39m	05:41	36m	06:18	32m	06:50	13h 02m	19:53	32m	20:25	36m	21:01	38m	21:40	10h 58m	7h 23m				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	21:38 – 05:05*	*7h 27m*	AN$_+$ *bis* AN$_-$		11:14	21:17	05:04	*38m*	05:43	*36m*	06:19	*32m*	06:52	*12h 59m*	19:51	*32m*	20:23	*36m*	20:59	*38m*	21:38	*11h 02m*	*7h 27m*				Sa, 7. Sep
So, 8. Sep	MESZ	21:37 – 05:07*	*7h 29m*	M$_\searrow$ *bis* AN$_-$		12:22	21:37	05:05	*38m*	05:44	*36m*	06:20	*32m*	06:53	*12h 55m*	19:49	*32m*	20:21	*35m*	20:57	*38m*	21:36	*11h 05m*	*7h 31m*				So, 8. Sep
Mo, 9. Sep	MESZ	22:04 – 05:09*	*7h 05m*	M$_\searrow$ *bis* AN$_-$		13:31	22:04	05:07	*38m*	05:46	*35m*	06:22	*32m*	06:54	*12h 52m*	19:47	*32m*	20:19	*35m*	20:55	*38m*	21:33	*11h 08m*	*7h 35m*				Mo, 9. Sep
Di, 10. Sep	MESZ	22:38 – 05:10*	*6h 32m*	M$_\searrow$ *bis* AN$_-$		14:41	22:38	05:09	*38m*	05:47	*35m*	06:23	*32m*	06:55	*12h 49m*	19:45	*32m*	20:17	*35m*	20:53	*38m*	21:31	*11h 11m*	*7h 39m*				Di, 10. Sep
Mi, 11. Sep	MESZ	23:25 – 05:12*	*5h 47m*	M$_\searrow$ *bis* AN$_-$	◐	15:47	23:25	05:10	*38m*	05:49	*35m*	06:24	*32m*	06:57	*12h 46m*	19:43	*32m*	20:15	*35m*	20:51	*37m*	21:29	*11h 15m*	*7h 43m*				Mi, 11. Sep
Do, 12. Sep	MESZ	00:25* – 05:14*	*4h 48m*	M$_\searrow$ *bis* AN$_-$		16:46	—:—	05:12	*37m*	05:50	*35m*	06:26	*32m*	06:58	*12h 42m*	19:41	*32m*	20:13	*35m*	20:49	*37m*	21:26	*11h 18m*	*7h 47m*				Do, 12. Sep
Fr, 13. Sep	MESZ	01:38* – 05:15*	*3h 36m*	M$_\searrow$ *bis* AN$_-$		17:34	00:25	05:14	*37m*	05:51	*35m*	06:27	*32m*	06:59	*12h 39m*	19:39	*32m*	20:11	*35m*	20:47	*37m*	21:24	*11h 21m*	*7h 51m*				Fr, 13. Sep
Sa, 14. Sep	MESZ	03:00* – 05:17*	*2h 16m*	M$_\searrow$ *bis* AN$_-$		18:11	01:38	05:15	*37m*	05:53	*35m*	06:28	*32m*	07:01	*12h 36m*	19:37	*32m*	20:09	*35m*	20:44	*37m*	21:22	*11h 24m*	*7h 54m*				Sa, 14. Sep
So, 15. Sep	MESZ	04:25* – 05:18*	*52m*	M$_\searrow$ *bis* AN$_-$		18:40	03:00	05:17	*37m*	05:54	*35m*	06:30	*32m*	07:02	*12h 33m*	19:35	*32m*	20:07	*35m*	20:42	*37m*	21:20	*11h 28m*	*7h 58m*				So, 15. Sep
Mo, 16. Sep	MESZ	—:——:—	–	Mond stört		19:04	04:25	05:18	*37m*	05:56	*35m*	06:31	*32m*	07:03	*12h 29m*	19:33	*32m*	20:05	*35m*	20:40	*37m*	21:17	*11h 31m*	*8h 02m*				Mo, 16. Sep
Di, 17. Sep	MESZ	—:——:—	–	Mond stört		19:24	05:51	05:20	*37m*	05:57	*35m*	06:32	*32m*	07:04	*12h 26m*	19:31	*32m*	20:03	*35m*	20:38	*36m*	21:15	*11h 34m*	*8h 06m*				Di, 17. Sep
Mi, 18. Sep	MESZ	—:——:—	–	Mond stört	○	19:43	07:17	05:21	*37m*	05:58	*35m*	06:33	*32m*	07:06	*12h 23m*	19:29	*32m*	20:01	*34m*	20:36	*36m*	21:13	*11h 37m*	*8h 10m*				Mi, 18. Sep
Do, 19. Sep	MESZ	—:——:—	–	Mond stört		20:03	08:42	05:23	*36m*	06:00	*34m*	06:35	*32m*	07:07	*12h 20m*	19:27	*32m*	19:59	*34m*	20:34	*36m*	21:11	*11h 41m*	*8h 13m*				Do, 19. Sep
Fr, 20. Sep	MESZ	—:——:—	–	Mond stört		20:25	10:08	05:24	*36m*	06:01	*34m*	06:36	*32m*	07:08	*12h 16m*	19:25	*31m*	19:57	*34m*	20:32	*36m*	21:08	*11h 44m*	*8h 17m*				Fr, 20. Sep
Sa, 21. Sep	MESZ	—:——:—	–	Mond stört		20:51	11:34	05:26	*36m*	06:03	*34m*	06:37	*32m*	07:09	*12h 13m*	19:23	*31m*	19:55	*34m*	20:30	*36m*	21:06	*11h 47m*	*8h 21m*				Sa, 21. Sep
So, 22. Sep	MESZ	21:04 – 21:24	*20m*	AN$_+$ *bis* M$_\nearrow$		21:24	12:59	05:27	*36m*	06:04	*34m*	06:39	*32m*	07:11	*12h 10m*	19:21	*31m*	19:53	*34m*	20:28	*36m*	21:04	*11h 51m*	*8h 25m*				So, 22. Sep
Mo, 23. Sep	MESZ	21:02 – 22:08	*1h 06m*	AN$_+$ *bis* M$_\nearrow$		22:08	14:17	05:29	*36m*	06:05	*34m*	06:40	*31m*	07:12	*12h 07m*	19:19	*31m*	19:51	*34m*	20:26	*36m*	21:02	*11h 54m*	*8h 28m*				Mo, 23. Sep
Di, 24. Sep	MESZ	21:00 – 23:03	*2h 03m*	AN$_+$ *bis* M$_\nearrow$	◑	23:03	15:25	05:30	*36m*	06:07	*34m*	06:41	*31m*	07:13	*12h 03m*	19:17	*31m*	19:49	*34m*	20:23	*36m*	21:00	*11h 57m*	*8h 32m*				Di, 24. Sep
Mi, 25. Sep	MESZ	20:57 – 00:07*	*3h 09m*	AN$_+$ *bis* M$_\nearrow$		—:—	16:18	05:32	*36m*	06:08	*34m*	06:43	*31m*	07:15	*12h 00m*	19:15	*31m*	19:47	*34m*	20:21	*35m*	20:57	*12h 00m*	*8h 35m*				Mi, 25. Sep
Do, 26. Sep	MESZ	20:55 – 01:17*	*4h 21m*	AN$_+$ *bis* M$_\nearrow$		00:07	16:58	05:33	*36m*	06:09	*34m*	06:44	*31m*	07:16	*11h 57m*	19:13	*31m*	19:45	*34m*	20:19	*35m*	20:55	*12h 04m*	*8h 39m*				Do, 26. Sep
Fr, 27. Sep	MESZ	20:53 – 02:28*	*5h 34m*	AN$_+$ *bis* M$_\nearrow$		01:17	17:28	05:35	*35m*	06:11	*34m*	06:45	*31m*	07:17	*11h 53m*	19:11	*31m*	19:43	*34m*	20:17	*35m*	20:53	*12h 07m*	*8h 43m*				Fr, 27. Sep
Sa, 28. Sep	MESZ	20:51 – 03:38*	*6h 46m*	AN$_+$ *bis* M$_\nearrow$		02:28	17:51	05:36	*35m*	06:12	*34m*	06:47	*31m*	07:18	*11h 50m*	19:09	*31m*	19:41	*34m*	20:15	*35m*	20:51	*12h 10m*	*8h 46m*				Sa, 28. Sep
So, 29. Sep	MESZ	20:49 – 04:45*	*7h 56m*	AN$_+$ *bis* M$_\nearrow$		03:38	18:09	05:38	*35m*	06:13	*34m*	06:48	*31m*	07:20	*11h 47m*	19:07	*31m*	19:39	*34m*	20:13	*35m*	20:49	*12h 13m*	*8h 50m*				So, 29. Sep
Mo, 30. Sep	MESZ	20:47 – 05:41*	*8h 53m*	AN$_+$ *bis* AN$_-$		04:45	18:25	05:39	*35m*	06:15	*34m*	06:49	*31m*	07:21	*11h 44m*	19:05	*31m*	19:37	*34m*	20:11	*35m*	20:47	*12h 17m*	*8h 53m*				Mo, 30. Sep
Di, 1. Okt	MESZ	20:45 – 05:42*	*8h 57m*	AN$_+$ *bis* AN$_-$		05:51	18:39	05:41	*35m*	06:16	*34m*	06:50	*31m*	07:22	*11h 40m*	19:03	*31m*	19:35	*34m*	20:09	*35m*	20:45	*12h 20m*	*8h 57m*				Di, 1. Okt
Mi, 2. Okt	MESZ	20:43 – 05:43*	*9h 00m*	AN$_+$ *bis* AN$_-$	●	06:55	18:53	05:42	*35m*	06:17	*34m*	06:52	*31m*	07:24	*11h 37m*	19:01	*31m*	19:33	*34m*	20:07	*35m*	20:43	*12h 23m*	*9h 00m*				Mi, 2. Okt
Do, 3. Okt	MESZ	20:41 – 05:45*	*9h 03m*	AN$_+$ *bis* AN$_-$		07:59	19:07	05:43	*35m*	06:19	*34m*	06:53	*31m*	07:25	*11h 34m*	18:59	*31m*	19:31	*34m*	20:05	*35m*	20:41	*12h 27m*	*9h 03m*				Do, 3. Okt
Fr, 4. Okt	MESZ	20:39 – 05:46*	*9h 07m*	AN$_+$ *bis* AN$_-$		09:05	19:24	05:45	*35m*	06:20	*34m*	06:54	*31m*	07:26	*11h 31m*	18:57	*31m*	19:29	*34m*	20:04	*35m*	20:39	*12h 30m*	*9h 07m*				Fr, 4. Okt
Sa, 5. Okt	MESZ	20:37 – 05:48*	*9h 10m*	AN$_+$ *bis* AN$_-$		10:12	19:43	05:46	*35m*	06:21	*34m*	06:56	*31m*	07:28	*11h 27m*	18:56	*31m*	19:27	*34m*	20:02	*35m*	20:37	*12h 33m*	*9h 10m*				Sa, 5. Okt
So, 6. Okt	MESZ	20:35 – 05:49*	*9h 14m*	AN$_+$ *bis* AN$_-$		11:21	20:07	05:48	*35m*	06:23	*34m*	06:57	*32m*	07:29	*11h 24m*	18:54	*31m*	19:26	*34m*	20:00	*35m*	20:35	*12h 36m*	*9h 14m*				So, 6. Okt
Mo, 7. Okt	MESZ	20:38 – 05:50*	*9h 12m*	M$_\searrow$ *bis* AN$_-$		12:30	20:38	05:49	*35m*	06:24	*34m*	06:58	*32m*	07:30	*11h 21m*	18:52	*31m*	19:24	*34m*	19:58	*35m*	20:33	*12h 40m*	*9h 17m*				Mo, 7. Okt
Di, 8. Okt	MESZ	21:19 – 05:52*	*8h 32m*	M$_\searrow$ *bis* AN$_-$		13:37	21:19	05:50	*35m*	06:25	*34m*	07:00	*32m*	07:32	*11h 18m*	18:50	*32m*	19:22	*34m*	19:56	*35m*	20:31	*12h 43m*	*9h 20m*				Di, 8. Okt
Mi, 9. Okt	MESZ	22:13 – 05:53*	*7h 39m*	M$_\searrow$ *bis* AN$_-$		14:38	22:13	05:52	*35m*	06:27	*34m*	07:01	*32m*	07:33	*11h 14m*	18:48	*32m*	19:20	*34m*	19:54	*35m*	20:29	*12h 46m*	*9h 23m*				Mi, 9. Okt
Do, 10. Okt	MESZ	23:19 – 05:54*	*6h 34m*	M$_\searrow$ *bis* AN$_-$	◐	15:28	23:19	05:53	*35m*	06:28	*34m*	07:02	*32m*	07:34	*11h 11m*	18:46	*32m*	19:18	*34m*	19:52	*34m*	20:27	*12h 49m*	*9h 27m*				Do, 10. Okt
Fr, 11. Okt	MESZ	00:35* – 05:56*	*5h 20m*	M$_\searrow$ *bis* AN$_-$		16:08	—:—	05:54	*35m*	06:29	*34m*	07:04	*32m*	07:36	*11h 08m*	18:44	*32m*	19:16	*34m*	19:50	*34m*	20:25	*12h 53m*	*9h 30m*				Fr, 11. Okt
Sa, 12. Okt	MESZ	01:57* – 05:57*	*4h 00m*	M$_\searrow$ *bis* AN$_-$		16:39	00:35	05:56	*35m*	06:31	*34m*	07:05	*32m*	07:37	*11h 05m*	18:42	*32m*	19:14	*34m*	19:49	*34m*	20:24	*12h 56m*	*9h 33m*				Sa, 12. Okt
So, 13. Okt	MESZ	03:20* – 05:58*	*2h 38m*	M$_\searrow$ *bis* AN$_-$		17:04	01:57	05:57	*34m*	06:32	*34m*	07:06	*32m*	07:39	*11h 01m*	18:40	*32m*	19:13	*34m*	19:47	*34m*	20:22	*12h 59m*	*9h 36m*				So, 13. Okt
Mo, 14. Okt	MESZ	04:43* – 06:00*	*1h 16m*	M$_\searrow$ *bis* AN$_-$		17:25	03:20	05:58	*34m*	06:33	*34m*	07:08	*32m*	07:40	*10h 58m*	18:39	*32m*	19:11	*34m*	19:45	*34m*	20:20	*13h 02m*	*9h 39m*				Mo, 14. Okt
Di, 15. Okt	MESZ	—:——:—	–	Mond stört		17:45	04:43	06:00	*34m*	06:35	*34m*	07:09	*32m*	07:41	*10h 55m*	18:37	*32m*	19:09	*34m*	19:43	*34m*	20:18	*13h 05m*	*9h 42m*				Di, 15. Okt
Mi, 16. Okt	MESZ	—:——:—	–	Mond stört		18:04	06:07	06:01	*34m*	06:36	*34m*	07:10	*32m*	07:43	*10h 52m*	18:35	*32m*	19:07	*34m*	19:42	*34m*	20:16	*13h 09m*	*9h 46m*				Mi, 16. Okt
Do, 17. Okt	MESZ	—:——:—	–	Mond stört	○	18:24	07:33	06:02	*34m*	06:37	*34m*	07:12	*32m*	07:44	*10h 49m*	18:33	*32m*	19:06	*34m*	19:40	*34m*	20:15	*13h 12m*	*9h 49m*				Do, 17. Okt
Fr, 18. Okt	MESZ	—:——:—	–	Mond stört		18:49	09:01	06:04	*34m*	06:39	*34m*	07:13	*32m*	07:45	*10h 46m*	18:31	*32m*	19:04	*34m*	19:38	*34m*	20:13	*13h 15m*	*9h 52m*				Fr, 18. Okt
Sa, 19. Okt	MESZ	—:——:—	–	Mond stört		19:19	10:29	06:05	*34m*	06:40	*34m*	07:14	*32m*	07:47	*10h 42m*	18:30	*32m*	19:02	*34m*	19:36	*34m*	20:11	*13h 18m*	*9h 55m*				Sa, 19. Okt
So, 20. Okt	MESZ	—:——:—	–	Mond stört		19:59	11:54	06:06	*34m*	06:41	*34m*	07:16	*32m*	07:48	*10h 39m*	18:28	*32m*	19:00	*34m*	19:35	*34m*	20:10	*13h 21m*	*9h 58m*				So, 20. Okt
Mo, 21. Okt	MESZ	20:08 – 20:51	*43m*	AN$_+$ *bis* M$_\nearrow$		20:51	13:10	06:08	*34m*	06:43	*34m*	07:17	*32m*	07:50	*10h 36m*	18:26	*32m*	18:59	*34m*	19:33	*34m*	20:08	*13h 24m*	*10h 00m*				Mo, 21. Okt
Di, 22. Okt	MESZ	20:06 – 21:54	*1h 47m*	AN$_+$ *bis* M$_\nearrow$		21:54	14:11	06:09	*34m*	06:44	*34m*	07:18	*32m*	07:51	*10h 33m*	18:25	*32m*	18:57	*34m*	19:32	*34m*	20:06	*13h 27m*	*10h 03m*				Di, 22. Okt
Mi, 23. Okt	MESZ	20:05 – 23:04	*2h 59m*	AN$_+$ *bis* M$_\nearrow$		23:04	14:57	06:10	*34m*	06:45	*34m*	07:20	*32m*	07:52	*10h 30m*	18:23	*32m*	18:56	*34m*	19:30	*34m*	20:05	*13h 31m*	*10h 06m*				Mi, 23. Okt
Do, 24. Okt	MESZ	20:03 – 00:17*	*4h 13m*	AN$_+$ *bis* M$_\nearrow$	◑	—:—	15:31	06:12	*34m*	06:47	*34m*	07:21	*32m*	07:54	*10h 27m*	18:21	*32m*	18:54	*34m*	19:28	*34m*	20:03	*13h 34m*	*10h 09m*				Do, 24. Okt
Fr, 25. Okt	MESZ	20:02 – 01:28*	*5h 25m*	AN$_+$ *bis* M$_\nearrow$		00:17	15:56	06:13	*34m*	06:48	*34m*	07:22	*32m*	07:55	*10h 24m*	18:20	*32m*	18:52	*34m*	19:27	*34m*	20:02	*13h 37m*	*10h 12m*				Fr, 25. Okt
Sa, 26. Okt	MESZ	20:00 – 02:36*	*6h 35m*	AN$_+$ *bis* M$_\nearrow$		01:28	16:16	06:14	*34m*	06:49	*34m*	07:24	*32m*	07:57	*10h 21m*	18:18	*32m*	18:51	*34m*	19:25	*34m*	20:00	*13h 40m*	*10h 15m*				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		18:59 – 02:42*	7h 42m	AN_+ bis $M_↗$		01:36	15:32	05:16	34m	05:50	34m	06:25	33m	06:58	10h 18m	17:16	33m	17:49	34m	18:24	34m	18:59	13h 43m	10h 18m				So, 27. Okt
Mo, 28. Okt		18:57 – 03:46*	8h 48m	AN_+ bis $M_↗$		02:42	15:47	05:17	34m	05:52	34m	06:26	33m	07:00	10h 15m	17:15	33m	17:48	34m	18:22	34m	18:57	13h 46m	10h 20m				Mo, 28. Okt
Di, 29. Okt		18:56 – 04:50*	9h 54m	AN_+ bis $M_↗$		03:46	16:01	05:18	34m	05:53	34m	06:28	33m	07:01	10h 12m	17:13	33m	17:46	34m	18:21	34m	18:56	13h 49m	10h 23m				Di, 29. Okt
Mi, 30. Okt		18:55 – 05:21*	10h 26m	AN_+ bis AN_-		04:50	16:15	05:19	34m	05:54	34m	06:29	33m	07:03	10h 09m	17:12	33m	17:45	34m	18:20	34m	18:55	13h 52m	10h 26m				Mi, 30. Okt
Do, 31. Okt		18:53 – 05:22*	10h 28m	AN_+ bis AN_-		05:56	16:31	05:21	35m	05:56	34m	06:31	33m	07:04	10h 06m	17:10	33m	17:43	34m	18:18	34m	18:53	13h 55m	10h 28m				Do, 31. Okt
Fr, 1. Nov		18:52 – 05:23*	10h 31m	AN_+ bis AN_-	●	07:02	16:49	05:22	35m	05:57	34m	06:32	33m	07:05	10h 03m	17:09	33m	17:42	34m	18:17	34m	18:52	13h 58m	10h 31m				Fr, 1. Nov
Sa, 2. Nov		18:51 – 05:25*	10h 33m	AN_+ bis AN_-		08:11	17:11	05:23	35m	05:58	34m	06:33	33m	07:07	10h 00m	17:07	33m	17:41	34m	18:16	35m	18:51	14h 01m	10h 33m				Sa, 2. Nov
So, 3. Nov		18:49 – 05:26*	10h 36m	AN_+ bis AN_-		09:21	17:40	05:25	35m	06:00	35m	06:35	33m	07:08	9h 57m	17:06	33m	17:39	35m	18:14	35m	18:49	14h 04m	10h 36m				So, 3. Nov
Mo, 4. Nov		18:48 – 05:27*	10h 38m	AN_+ bis AN_-		10:29	18:18	05:26	35m	06:01	35m	06:36	33m	07:10	9h 54m	17:04	33m	17:38	35m	18:13	35m	18:48	14h 06m	10h 38m				Mo, 4. Nov
Di, 5. Nov		19:08 – 05:28*	10h 19m	$M_↘$ bis AN_-		11:32	19:08	05:27	35m	06:02	35m	06:37	33m	07:11	9h 51m	17:03	33m	17:37	35m	18:12	35m	18:47	14h 09m	10h 41m				Di, 5. Nov
Mi, 6. Nov		20:10 – 05:30*	9h 19m	$M_↘$ bis AN_-		12:25	20:10	05:28	35m	06:04	35m	06:39	33m	07:13	9h 48m	17:02	33m	17:35	35m	18:11	35m	18:46	14h 12m	10h 43m				Mi, 6. Nov
Do, 7. Nov		21:22 – 05:31*	8h 08m	$M_↘$ bis AN_-		13:07	21:22	05:30	35m	06:05	35m	06:40	34m	07:14	9h 46m	17:00	34m	17:34	35m	18:09	35m	18:45	14h 15m	10h 46m				Do, 7. Nov
Fr, 8. Nov		22:39 – 05:32*	6h 52m	$M_↘$ bis AN_-		13:40	22:39	05:31	35m	06:06	35m	06:41	34m	07:16	9h 43m	16:59	34m	17:33	35m	18:08	35m	18:44	14h 18m	10h 48m				Fr, 8. Nov
Sa, 9. Nov		23:59 – 05:33*	5h 34m	$M_↘$ bis AN_-	◐	14:07	23:59	05:32	35m	06:07	35m	06:43	34m	07:17	9h 40m	16:58	34m	17:32	35m	18:07	35m	18:43	14h 20m	10h 50m				Sa, 9. Nov
So, 10. Nov		01:19* – 05:35*	4h 15m	$M_↘$ bis AN_-		14:28	—:—	05:33	35m	06:09	35m	06:44	34m	07:18	9h 37m	16:56	34m	17:31	35m	18:06	35m	18:41	14h 23m	10h 53m				So, 10. Nov
Mo, 11. Nov		02:39* – 05:36*	2h 56m	$M_↘$ bis AN_-		14:47	01:19	05:35	35m	06:10	35m	06:45	34m	07:20	9h 35m	16:55	34m	17:30	35m	18:05	35m	18:40	14h 26m	10h 55m				Mo, 11. Nov
Di, 12. Nov		04:01* – 05:37*	1h 35m	$M_↘$ bis AN_-		15:06	02:39	05:36	35m	06:11	35m	06:47	34m	07:21	9h 32m	16:54	34m	17:29	35m	18:04	35m	18:40	14h 28m	10h 57m				Di, 12. Nov
Mi, 13. Nov		05:26* – 05:38*	12m	$M_↘$ bis AN_-		15:25	04:01	05:37	35m	06:12	35m	06:48	34m	07:23	9h 30m	16:53	34m	17:27	35m	18:03	35m	18:39	14h 31m	10h 59m				Mi, 13. Nov
Do, 14. Nov		—:——:—	–	Mond stört		15:47	05:26	05:38	35m	06:14	35m	06:49	34m	07:24	9h 27m	16:52	34m	17:26	35m	18:02	35m	18:38	14h 33m	11h 01m				Do, 14. Nov
Fr, 15. Nov		—:——:—	–	Mond stört	○	16:14	06:53	05:39	35m	06:15	35m	06:51	34m	07:26	9h 25m	16:51	34m	17:25	35m	18:01	35m	18:37	14h 36m	11h 03m				Fr, 15. Nov
Sa, 16. Nov		—:——:—	–	Mond stört		16:49	08:21	05:41	35m	06:16	35m	06:52	34m	07:27	9h 22m	16:50	34m	17:25	35m	18:00	35m	18:36	14h 38m	11h 05m				Sa, 16. Nov
So, 17. Nov		—:——:—	–	Mond stört		17:36	09:43	05:42	35m	06:17	35m	06:53	35m	07:28	9h 20m	16:49	34m	17:24	35m	18:00	35m	18:35	14h 41m	11h 07m				So, 17. Nov
Mo, 18. Nov		18:35 – 18:36	1m	AN_+ bis $M_↗$		18:36	10:54	05:43	35m	06:19	36m	06:55	35m	07:30	9h 17m	16:48	35m	17:23	36m	17:59	35m	18:35	14h 43m	11h 09m				Mo, 18. Nov
Di, 19. Nov		18:34 – 19:45	1h 11m	AN_+ bis $M_↗$		19:45	11:48	05:44	35m	06:20	36m	06:56	35m	07:31	9h 15m	16:47	35m	17:22	36m	17:58	35m	18:34	14h 45m	11h 11m				Di, 19. Nov
Mi, 20. Nov		18:33 – 20:59	2h 26m	AN_+ bis $M_↗$		20:59	12:28	05:45	35m	06:21	36m	06:57	35m	07:33	9h 13m	16:46	35m	17:21	36m	17:57	35m	18:33	14h 48m	11h 13m				Mi, 20. Nov
Do, 21. Nov		18:32 – 22:13	3h 40m	AN_+ bis $M_↗$		22:13	12:58	05:46	35m	06:22	36m	06:59	35m	07:34	9h 11m	16:45	35m	17:20	36m	17:57	35m	18:32	14h 50m	11h 15m				Do, 21. Nov
Fr, 22. Nov		18:32 – 23:23	4h 51m	AN_+ bis $M_↗$		23:23	13:20	05:48	35m	06:23	36m	07:00	35m	07:35	9h 08m	16:44	35m	17:20	36m	17:56	35m	18:32	14h 52m	11h 16m				Fr, 22. Nov
Sa, 23. Nov		18:31 – 00:31*	5h 59m	AN_+ bis $M_↗$	◑	—:—	13:38	05:49	35m	06:25	36m	07:01	35m	07:37	9h 06m	16:43	35m	17:19	36m	17:55	35m	18:31	14h 54m	11h 18m				Sa, 23. Nov
So, 24. Nov		18:31 – 01:36*	7h 05m	AN_+ bis $M_↗$		00:31	13:53	05:50	35m	06:26	36m	07:02	35m	07:38	9h 04m	16:43	35m	17:18	36m	17:55	35m	18:31	14h 56m	11h 20m				So, 24. Nov
Mo, 25. Nov		18:30 – 02:40*	8h 09m	AN_+ bis $M_↗$		01:36	14:07	05:51	36m	06:27	36m	07:03	35m	07:39	9h 02m	16:42	35m	17:18	36m	17:54	35m	18:30	14h 58m	11h 21m				Mo, 25. Nov
Di, 26. Nov		18:30 – 03:45*	9h 14m	AN_+ bis $M_↗$		02:40	14:22	05:52	36m	06:28	36m	07:05	35m	07:41	9h 00m	16:41	35m	17:17	36m	17:54	36m	18:30	15h 00m	11h 23m				Di, 26. Nov
Mi, 27. Nov		18:29 – 04:51*	10h 21m	AN_+ bis $M_↗$		03:45	14:37	05:53	36m	06:29	36m	07:06	35m	07:42	8h 58m	16:41	35m	17:17	36m	17:53	36m	18:29	15h 02m	11h 24m				Mi, 27. Nov
Do, 28. Nov		18:29 – 05:55*	11h 26m	AN_+ bis AN_-		04:51	14:54	05:54	36m	06:30	36m	07:07	36m	07:43	8h 57m	16:40	36m	17:16	36m	17:53	36m	18:29	15h 04m	11h 26m				Do, 28. Nov
Fr, 29. Nov		18:29 – 05:56*	11h 27m	AN_+ bis AN_-		05:59	15:15	05:55	36m	06:31	36m	07:08	36m	07:44	8h 55m	16:40	36m	17:16	36m	17:53	36m	18:29	15h 05m	11h 27m				Fr, 29. Nov
Sa, 30. Nov		18:29 – 05:57*	11h 28m	AN_+ bis AN_-		07:09	15:42	05:56	36m	06:32	36m	07:09	36m	07:46	8h 53m	16:39	36m	17:15	36m	17:52	36m	18:29	15h 07m	11h 28m				Sa, 30. Nov
So, 1. Dez		18:28 – 05:58*	11h 29m	AN_+ bis AN_-	●	08:19	16:17	05:57	36m	06:34	36m	07:10	36m	07:47	8h 52m	16:39	36m	17:15	36m	17:52	36m	18:28	15h 09m	11h 29m				So, 1. Dez
Mo, 2. Dez		18:28 – 05:59*	11h 31m	AN_+ bis AN_-		09:24	17:04	05:58	36m	06:35	36m	07:12	36m	07:48	8h 50m	16:38	36m	17:15	36m	17:52	36m	18:28	15h 10m	11h 31m				Mo, 2. Dez
Di, 3. Dez		18:28 – 06:00*	11h 32m	AN_+ bis AN_-		10:21	18:04	05:59	36m	06:36	37m	07:13	36m	07:49	8h 49m	16:38	36m	17:15	37m	17:52	36m	18:28	15h 12m	11h 32m				Di, 3. Dez
Mi, 4. Dez		19:13 – 06:01*	10h 47m	$M_↘$ bis AN_-		11:07	19:13	06:00	36m	06:37	37m	07:14	36m	07:50	8h 47m	16:38	36m	17:14	37m	17:51	36m	18:28	15h 13m	11h 33m				Mi, 4. Dez
Do, 5. Dez		20:29 – 06:02*	9h 32m	$M_↘$ bis AN_-		11:43	20:29	06:01	36m	06:38	37m	07:15	36m	07:51	8h 46m	16:38	36m	17:14	37m	17:51	36m	18:28	15h 14m	11h 34m				Do, 5. Dez
Fr, 6. Dez		21:47 – 06:03*	8h 15m	$M_↘$ bis AN_-		12:10	21:47	06:02	36m	06:38	37m	07:16	36m	07:52	8h 44m	16:37	36m	17:14	37m	17:51	36m	18:28	15h 16m	11h 35m				Fr, 6. Dez
Sa, 7. Dez		23:06 – 06:04*	6h 58m	$M_↘$ bis AN_-		12:33	23:06	06:03	36m	06:39	37m	07:17	36m	07:53	8h 43m	16:37	36m	17:14	37m	17:51	36m	18:28	15h 17m	11h 36m				Sa, 7. Dez
So, 8. Dez		00:23* – 06:05*	5h 41m	$M_↘$ bis AN_-	◐	12:52	—:—	06:04	36m	06:40	37m	07:18	36m	07:54	8h 42m	16:37	36m	17:14	37m	17:51	36m	18:28	15h 18m	11h 37m				So, 8. Dez
Mo, 9. Dez		01:42* – 06:05*	4h 23m	$M_↘$ bis AN_-		13:10	00:23	06:05	36m	06:41	37m	07:19	36m	07:55	8h 41m	16:37	36m	17:14	37m	17:51	36m	18:28	15h 19m	11h 37m				Mo, 9. Dez
Di, 10. Dez		03:02* – 06:06*	3h 04m	$M_↘$ bis AN_-		13:28	01:42	06:05	36m	06:42	37m	07:19	36m	07:56	8h 40m	16:37	36m	17:14	37m	17:51	36m	18:28	15h 20m	11h 38m				Di, 10. Dez
Mi, 11. Dez		04:25* – 06:07*	1h 42m	$M_↘$ bis AN_-		13:48	03:02	06:06	36m	06:43	37m	07:20	36m	07:57	8h 39m	16:37	36m	17:14	37m	17:51	36m	18:28	15h 21m	11h 39m				Mi, 11. Dez
Do, 12. Dez		05:50* – 06:08*	17m	$M_↘$ bis AN_-		14:11	04:25	06:07	36m	06:44	37m	07:21	36m	07:58	8h 39m	16:37	36m	17:14	37m	17:52	36m	18:28	15h 21m	11h 39m				Do, 12. Dez
Fr, 13. Dez		—:——:—	–	Mond stört		14:42	05:50	06:08	36m	06:44	37m	07:22	37m	07:59	8h 38m	16:37	37m	17:14	37m	17:52	36m	18:28	15h 22m	11h 40m				Fr, 13. Dez
Sa, 14. Dez		—:——:—	–	Mond stört		15:22	07:14	06:09	36m	06:45	37m	07:23	37m	08:00	8h 37m	16:37	37m	17:14	37m	17:52	36m	18:29	15h 23m	11h 40m				Sa, 14. Dez
So, 15. Dez		—:——:—	–	Mond stört	○	16:16	08:31	06:09	36m	06:46	37m	07:23	37m	08:00	8h 37m	16:38	37m	17:15	37m	17:52	36m	18:29	15h 23m	11h 41m				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		17:22	09:33	06:10	36m	06:47	37m	07:24	37m	08:01	8h 36m	16:38	37m	17:15	37m	17:52	36m	18:29	15h 24m	11h 41m				Mo, 16. Dez
Di, 17. Dez		18:30 – 18:36	6m	AN_+ bis $M_↗$		18:36	10:21	06:11	36m	06:47	37m	07:25	37m	08:02	8h 36m	16:38	37m	17:15	37m	17:53	36m	18:30	15h 24m	11h 41m				Di, 17. Dez
Mi, 18. Dez		18:30 – 19:52	1h 22m	AN_+ bis $M_↗$		19:52	10:55	06:11	36m	06:48	37m	07:25	37m	08:03	8h 36m	16:39	37m	17:16	37m	17:53	36m	18:30	15h 24m	11h 41m				Mi, 18. Dez
Do, 19. Dez		18:30 – 21:06	2h 35m	AN_+ bis $M_↗$		21:06	11:21	06:12	36m	06:48	37m	07:26	37m	08:03	8h 35m	16:39	37m	17:16	37m	17:54	36m	18:30	15h 24m	11h 41m				Do, 19. Dez
Fr, 20. Dez		18:31 – 22:16	3h 44m	AN_+ bis $M_↗$		22:16	11:41	06:12	36m	06:49	37m	07:27	37m	08:04	8h 35m	16:39	37m	17:17	37m	17:54	36m	18:31	15h 24m	11h 41m				Fr, 20. Dez
Sa, 21. Dez		18:31 – 23:22	4h 51m	AN_+ bis $M_↗$		23:22	11:58	06:13	36m	06:49	37m	07:27	37m	08:04	8h 35m	16:40	37m	17:17	37m	17:55	36m	18:31	15h 24m	11h 41m				Sa, 21. Dez
So, 22. Dez		18:32 – 00:27*	5h 55m	AN_+ bis $M_↗$	◑	—:—	12:13	06:13	36m	06:50	37m	07:28	37m	08:05	8h 35m	16:40	37m	17:18	37m	17:55	36m	18:32	15h 24m	11h 41m				So, 22. Dez
Mo, 23. Dez		18:32 – 01:32*	6h 59m	AN_+ bis $M_↗$		00:27	12:27	06:14	36m	06:50	37m	07:28	37m	08:05	8h 35m	16:41	37m	17:18	37m	17:56	36m	18:32	15h 24m	11h 41m				Mo, 23. Dez
Di, 24. Dez		18:33 – 02:37*	8h 04m	AN_+ bis $M_↗$		01:32	12:41	06:14	36m	06:51	37m	07:28	37m	08:06	8h 36m	16:42	37m	17:19	37m	17:56	36m	18:33	15h 24m	11h 41m				Di, 24. Dez
Mi, 25. Dez		18:34 – 03:44*	9h 10m	AN_+ bis $M_↗$		02:37	12:58	06:15	36m	06:51	37m	07:29	37m	08:06	8h 36m	16:42	37m	17:19	37m	17:57	36m	18:34	15h 23m	11h 41m				Mi, 25. Dez
Do, 26. Dez		18:34 – 04:54*	10h 19m	AN_+ bis $M_↗$		03:44	13:17	06:15	36m	06:52	37m	07:29	37m	08:06	8h 36m	16:43	37m	17:20	37m	17:58	36m	18:34	15h 23m	11h 40m				Do, 26. Dez
Fr, 27. Dez		18:35 – 06:04*	11h 28m	AN_+ bis $M_↗$		04:54	13:42	06:15	36m	06:52	37m	07:29	37m	08:06	8h 37m	16:44	37m	17:21	37m	17:58	36m	18:35	15h 22m	11h 40m				Fr, 27. Dez
Sa, 28. Dez		18:36 – 06:16*	11h 40m	AN_+ bis AN_-		06:04	14:14	06:15	36m	06:52	37m	07:30	37m	08:07	8h 37m	16:44	37m	17:21	37m	17:59	36m	18:36	15h 22m	11h 40m				Sa, 28. Dez
So, 29. Dez		18:36 – 06:16*	11h 39m	AN_+ bis AN_-		07:12	14:57	06:16	36m	06:52	37m	07:30	37m	08:07	8h 38m	16:45	37m	17:22	37m	18:00	36m	18:36	15h 21m	11h 39m				So, 29. Dez
Mo, 30. Dez		18:37 – 06:16*	11h 39m	AN_+ bis AN_-	●	08:13	15:52	06:16	36m	06:53	37m	07:30	36m	08:07	8h 39m	16:46	36m	17:23	37m	18:01	36m	18:37	15h 20m	11h 39m				Mo, 30. Dez
Di, 31. Dez		18:38 – 06:16*	11h 38m	AN_+ bis AN_-		09:03	17:00	06:16	36m	06:53	37m	07:30	36m	08:07	8h 39m	16:47	36m	17:24	37m	18:01	36m	18:38	15h 20m	11h 38m				Di, 31. Dez
Mi, 1. Jan		18:39 – 06:16*	11h 37m	AN_+ bis AN_-		09:43	18:16	06:16	36m	06:53	37m	07:30	36m	08:07	8h 40m	16:48	36m	17:25	37m	18:02	36m	18:39	15h 19m	11h 37m				Mi, 1. Jan
Do, 2. Jan		19:36 – 06:16*	10h 40m	$M_↘$ bis AN_-		10:13	19:36	06:16	36m	06:53	37m	07:30	36m	08:07	8h 41m	16:49	36m	17:26	37m	18:03	36m	18:40	15h 18m	11h 36m				Do, 2. Jan
Fr, 3. Jan		20:55 – 06:16*	9h 21m	$M_↘$ bis AN_-		10:38	20:55	06:16	36m	06:53	37m	07:30	36m	08:07	8h 42m	16:50	36m	17:27	37m	18:04	36m	18:40	15h 16m	11h 36m				Fr, 3. Jan
Sa, 4. Jan		22:14 – 06:16*	8h 02m	$M_↘$ bis AN_-		10:58	22:14	06:16	36m	06:53	37m	07:30	36m	08:07	8h 44m	16:51	36m	17:28	37m	18:05	36m	18:41	15h 15m	11h 35m				Sa, 4. Jan
So, 5. Jan		23:31 – 06:16*	6h 44m	$M_↘$ bis AN_-		11:16	23:31	06:16	36m	06:53	37m	07:30	36m	08:07	8h 45m	16:52	36m	17:29	37m	18:06	36m	18:42	15h 14m	11h 34m				So, 5. Jan
Mo, 6. Jan		00:50* – 06:16*	5h 26m	$M_↘$ bis AN_-		11:33	—:—	06:16	36m	06:53	37m	07:30	36m	08:07	8h 46m	16:53	36m	17:30	37m	18:07	36m	18:43	15h 13m	11h 33m				Mo, 6. Jan
Di, 7. Jan		02:10* – 06:16*	4h 06m	$M_↘$ bis AN_-	◐	11:52	00:50	06:16	36m	06:53	37m	07:30	36m	08:06	8h 47m	16:54	36m	17:31	37m	18:08	36m	18:44	15h 11m	11h 32m				Di, 7. Jan
Mi, 8. Jan		03:32* – 06:16*	2h 44m	$M_↘$ bis AN_-		12:14	02:10	06:16	36m	06:53	37m	07:30	36m	08:06	8h 49m	16:55	36m	17:32	37m	18:09	36m	18:45	15h 10m	11h 30m				Mi, 8. Jan
Do, 9. Jan		04:54* – 06:16*	1h 21m	$M_↘$ bis AN_-		12:40	03:32	06:16	36m	06:52	36m	07:29	36m	08:06	8h 50m	16:57	36m	17:33	36m	18:10	36m	18:46	15h 08m	11h 29m				Do, 9. Jan
Fr, 10. Jan		06:12* – 06:16*	3m	$M_↘$ bis AN_-		13:15	04:54	06:16	36m	06:52	36m	07:29	36m	08:05	8h 52m	16:58	36m	17:34	36m	18:11	36m	18:47	15h 07m	11h 28m				Fr, 10. Jan
Sa, 11. Jan		—:——:—	–	Mond stört		14:02	06:12	06:16	36m	06:52	36m	07:29	36m	08:05	8h 54m	16:59	36m	17:35	36m	18:12	36m	18:48	15h 05m	11h 27m				Sa, 11. Jan
So, 12. Jan		—:——:—	–	Mond stört		15:02	07:19	06:15	36m	06:51	36m	07:28	36m	08:04	8h 55m	17:00	36m	17:36	36m	18:13	36m	18:49	15h 03m	11h 25m				So, 12. Jan
Mo, 13. Jan		—:——:—	–	Mond stört	○	16:13	08:12	06:15	36m	06:51	36m	07:28	36m	08:04	8h 57m	17:01	36m	17:37	36m	18:14	36m	18:50	15h 01m	11h 24m				Mo, 13. Jan
Di, 14. Jan		—:——:—	–	Mond stört		17:29	08:52	06:15	36m	06:51	36m	07:27	35m	08:03	8h 59m	17:03	35m	17:39	36m	18:15	36m	18:51	14h 59m	11h 22m				Di, 14. Jan
Mi, 15. Jan		—:——:—	–	Mond stört		18:44	09:21	06:14	36m	06:50	36m	07:27	35m	08:03	9h 01m	17:04	35m	17:40	36m	18:17	36m	18:53	14h 58m	11h 21m				Mi, 15. Jan
Do, 16. Jan		18:54 – 19:57	1h 03m	AN_+ bis $M_↗$		19:57	09:43	06:14	35m	06:50	36m	07:26	35m	08:02	9h 03m	17:05	35m	17:41	36m	18:18	35m	18:54	14h 56m	11h 19m				Do, 16. Jan
Fr, 17. Jan		18:55 – 21:06	2h 11m	AN_+ bis $M_↗$		21:06	10:01	06:13	35m	06:49	36m	07:26	35m	08:01	9h 05m	17:07	35m	17:42	36m	18:19	35m	18:55	14h 53m	11h 18m				Fr, 17. Jan
Sa, 18. Jan		18:56 – 22:13	3h 16m	AN_+ bis $M_↗$		22:13	10:17	06:13	35m	06:49	36m	07:25	35m	08:01	9h 07m	17:08	35m	17:44	36m	18:20	35m	18:56	14h 51m	11h 16m				Sa, 18. Jan
So, 19. Jan		18:57 – 23:18	4h 20m	AN_+ bis $M_↗$		23:18	10:31	06:12	35m	06:48	36m	07:24	35m	08:00	9h 09m	17:09	35m	17:45	36m	18:21	35m	18:57	14h 49m	11h 14m				So, 19. Jan
Mo, 20. Jan		18:58 – 00:23*	5h 24m	AN_+ bis $M_↗$		—:—	10:46	06:12	35m	06:48	36m	07:24	35m	07:59	9h 11m	17:11	35m	17:46	36m	18:23	35m	18:58	14h 47m	11h 12m				Mo, 20. Jan
Di, 21. Jan		19:00 – 01:29*	6h 29m	AN_+ bis $M_↗$	◑	00:23	11:01	06:11	35m	06:47	36m	07:23	35m	07:58	9h 13m	17:12	35m	17:48	36m	18:24	35m	19:00	14h 45m	11h 10m				Di, 21. Jan
Mi, 22. Jan		19:01 – 02:37*	7h 36m	AN_+ bis $M_↗$		01:29	11:19	06:10	35m	06:46	36m	07:22	35m	07:57	9h 16m	17:14	35m	17:49	36m	18:25	35m	19:01	14h 42m	11h 09m				Mi, 22. Jan
Do, 23. Jan		19:02 – 03:46*	8h 44m	AN_+ bis $M_↗$		02:37	11:41	06:10	35m	06:45	36m	07:21	35m	07:57	9h 18m	17:15	35m	17:50	36m	18:26	35m	19:02	14h 40m	11h 07m				Do, 23. Jan
Fr, 24. Jan		19:03 – 04:55*	9h 51m	AN_+ bis $M_↗$		03:46	12:09	06:09	35m	06:45	35m	07:21	34m	07:56	9h 21m	17:17	34m	17:52	35m	18:28	35m	19:03	14h 37m	11h 05m				Fr, 24. Jan
Sa, 25. Jan		19:04 – 05:59*	10h 54m	AN_+ bis $M_↗$		04:55	12:47	06:08	35m	06:44	35m	07:20	34m	07:55	9h 23m	17:18	34m	17:53	35m	18:29	35m	19:04	14h 35m	11h 03m				Sa, 25. Jan
So, 26. Jan		19:06 – 06:07*	11h 00m	AN_+ bis AN_-		05:59	13:37	06:07	35m	06:43	35m	07:19	34m	07:54	9h 25m	17:20	34m	17:54	35m	18:30	35m	19:06	14h 32m	11h 00m				So, 26. Jan
Mo, 27. Jan		19:07 – 06:06*	10h 58m	AN_+ bis AN_-		06:54	14:40	06:07	35m	06:42	35m	07:18	34m	07:53	9h 28m	17:21	34m	17:56	35m	18:31	35m	19:07	14h 30m	10h 58m				Mo, 27. Jan
Di, 28. Jan		19:08 – 06:05*	10h 56m	AN_+ bis AN_-		07:39	15:54	06:06	35m	06:41	35m	07:17	34m	07:51	9h 31m	17:22	34m	17:57	35m	18:33	35m	19:08	14h 27m	10h 56m				Di, 28. Jan
Mi, 29. Jan		19:09 – 06:04*	10h 54m	AN_+ bis AN_-	●	08:13	17:15	06:05	35m	06:40	35m	07:16	34m	07:50	9h 33m	17:24	34m	17:58	35m	18:34	35m	19:09	14h 25m	10h 54m				Mi, 29. Jan
Do, 30. Jan		19:11 – 06:03*	10h 52m	AN_+ bis AN_-		08:40	18:37	06:04	35m	06:39	35m	07:15	34m	07:49	9h 36m	17:25	34m	18:00	35m	18:35	35m	19:11	14h 22m	10h 52m				Do, 30. Jan
Fr, 31. Jan		19:58 – 06:02*	10h 03m	$M_↘$ bis AN_-		09:02	19:58	06:03	35m	06:38	35m	07:14	34m	07:48	9h 39m	17:27	34m	18:01	35m	18:37	35m	19:12	14h 19m	10h 49m				Fr, 31. Jan
Sa, 1. Feb		21:18 – 06:01*	8h 42m	$M_↘$ bis AN_-		09:21	21:18	06:02	35m	06:37	35m	07:13	34m	07:47	9h 41m	17:28	34m	18:03	35m	18:38	35m	19:13	14h 16m	10h 47m				Sa, 1. Feb
So, 2. Feb		22:38 – 06:00*	7h 21m	$M_↘$ bis AN_-		09:39	22:38	06:01	35m	06:36	35m	07:11	34m	07:45	9h 44m	17:30	34m	18:04	35m	18:39	35m	19:15	14h 14m	10h 45m				So, 2. Feb
Mo, 3. Feb		23:59 – 05:59*	5h 59m	$M_↘$ bis AN_-		09:57	23:59	06:00	35m	06:35	35m	07:10	33m	07:44	9h 47m	17:32	33m	18:05	35m	18:41	35m	19:16	14h 11m	10h 42m				Mo, 3. Feb