Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Poschiavo 46.3250° N 10.0570° 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		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*		
Mo, 1. Jan		18:34 – 22:16	*3h 42m*	AN$_+$ *bis* M$_↗$		22:16	11:16	06:11	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 41m*	16:43	*36m*	17:20	*37m*	17:57	*36m*	18:34	*15h 18m*	*11h 37m*				Mo, 1. Jan
Di, 2. Jan		18:35 – 23:21	*4h 45m*	AN$_+$ *bis* M$_↗$		23:21	11:32	06:12	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 42m*	16:44	*36m*	17:21	*37m*	17:58	*36m*	18:35	*15h 17m*	*11h 37m*				Di, 2. Jan
Mi, 3. Jan		18:36 – 00:25*	*5h 49m*	AN$_+$ *bis* M$_↗$		—:—	11:46	06:12	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 43m*	16:45	*36m*	17:22	*37m*	17:59	*36m*	18:36	*15h 16m*	*11h 36m*				Mi, 3. Jan
Do, 4. Jan		18:36 – 01:31*	*6h 54m*	AN$_+$ *bis* M$_↗$	◑	00:25	12:01	06:12	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 44m*	16:46	*36m*	17:23	*37m*	18:00	*36m*	18:36	*15h 15m*	*11h 35m*				Do, 4. Jan
Fr, 5. Jan		18:37 – 02:40*	*8h 02m*	AN$_+$ *bis* M$_↗$		01:31	12:18	06:12	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 45m*	16:47	*36m*	17:24	*37m*	18:01	*36m*	18:37	*15h 14m*	*11h 34m*				Fr, 5. Jan
Sa, 6. Jan		18:38 – 03:53*	*9h 14m*	AN$_+$ *bis* M$_↗$		02:40	12:37	06:12	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 46m*	16:48	*36m*	17:25	*37m*	18:02	*36m*	18:38	*15h 13m*	*11h 33m*				Sa, 6. Jan
So, 7. Jan		18:39 – 05:09*	*10h 29m*	AN$_+$ *bis* M$_↗$		03:53	13:01	06:12	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 47m*	16:49	*36m*	17:26	*37m*	18:03	*36m*	18:39	*15h 11m*	*11h 32m*				So, 7. Jan
Mo, 8. Jan		18:40 – 06:12*	*11h 31m*	AN$_+$ *bis* AN$_-$		05:09	13:34	06:12	*36m*	06:48	*36m*	07:25	*36m*	08:01	*8h 49m*	16:50	*36m*	17:27	*36m*	18:04	*36m*	18:40	*15h 10m*	*11h 31m*				Mo, 8. Jan
Di, 9. Jan		18:41 – 06:11*	*11h 30m*	AN$_+$ *bis* AN$_-$		06:24	14:19	06:12	*36m*	06:48	*36m*	07:25	*36m*	08:01	*8h 50m*	16:52	*36m*	17:28	*36m*	18:05	*36m*	18:41	*15h 09m*	*11h 30m*				Di, 9. Jan
Mi, 10. Jan		18:42 – 06:11*	*11h 29m*	AN$_+$ *bis* AN$_-$		07:33	15:19	06:11	*36m*	06:48	*36m*	07:24	*36m*	08:01	*8h 52m*	16:53	*36m*	17:29	*36m*	18:06	*36m*	18:42	*15h 07m*	*11h 29m*				Mi, 10. Jan
Do, 11. Jan		18:43 – 06:11*	*11h 27m*	AN$_+$ *bis* AN$_-$	●	08:30	16:33	06:11	*36m*	06:47	*36m*	07:24	*36m*	08:00	*8h 53m*	16:54	*36m*	17:30	*36m*	18:07	*36m*	18:43	*15h 05m*	*11h 27m*				Do, 11. Jan
Fr, 12. Jan		18:44 – 06:11*	*11h 26m*	AN$_+$ *bis* AN$_-$		09:14	17:58	06:11	*36m*	06:47	*36m*	07:24	*36m*	08:00	*8h 55m*	16:55	*36m*	17:31	*36m*	18:08	*36m*	18:44	*15h 04m*	*11h 26m*				Fr, 12. Jan
Sa, 13. Jan		19:24 – 06:10*	*10h 46m*	M$_↘$ *bis* AN$_-$		09:47	19:24	06:11	*36m*	06:47	*36m*	07:23	*35m*	07:59	*8h 57m*	16:56	*35m*	17:32	*36m*	18:09	*36m*	18:45	*15h 02m*	*11h 25m*				Sa, 13. Jan
So, 14. Jan		20:49 – 06:10*	*9h 21m*	M$_↘$ *bis* AN$_-$		10:12	20:49	06:10	*36m*	06:46	*36m*	07:23	*35m*	07:59	*8h 58m*	16:58	*35m*	17:34	*36m*	18:10	*36m*	18:46	*15h 00m*	*11h 23m*				So, 14. Jan
Mo, 15. Jan		22:10 – 06:10*	*7h 59m*	M$_↘$ *bis* AN$_-$		10:33	22:10	06:10	*35m*	06:46	*36m*	07:22	*35m*	07:58	*9h 00m*	16:59	*35m*	17:35	*36m*	18:11	*35m*	18:47	*14h 58m*	*11h 22m*				Mo, 15. Jan
Di, 16. Jan		23:29 – 06:09*	*6h 39m*	M$_↘$ *bis* AN$_-$		10:52	23:29	06:10	*35m*	06:45	*36m*	07:22	*35m*	07:58	*9h 02m*	17:00	*35m*	17:36	*36m*	18:13	*35m*	18:49	*14h 56m*	*11h 20m*				Di, 16. Jan
Mi, 17. Jan		00:47* – 06:09*	*5h 21m*	M$_↘$ *bis* AN$_-$		11:11	—:—	06:09	*35m*	06:45	*36m*	07:21	*35m*	07:57	*9h 04m*	17:02	*35m*	17:37	*36m*	18:14	*35m*	18:50	*14h 54m*	*11h 18m*				Mi, 17. Jan
Do, 18. Jan		02:05* – 06:08*	*4h 03m*	M$_↘$ *bis* AN$_-$	◐	11:30	00:47	06:09	*35m*	06:44	*36m*	07:21	*35m*	07:56	*9h 06m*	17:03	*35m*	17:39	*36m*	18:15	*35m*	18:51	*14h 52m*	*11h 17m*				Do, 18. Jan
Fr, 19. Jan		03:22* – 06:08*	*2h 45m*	M$_↘$ *bis* AN$_-$		11:52	02:05	06:08	*35m*	06:44	*36m*	07:20	*35m*	07:56	*9h 08m*	17:04	*35m*	17:40	*36m*	18:16	*35m*	18:52	*14h 50m*	*11h 15m*				Fr, 19. Jan
Sa, 20. Jan		04:37* – 06:07*	*1h 30m*	M$_↘$ *bis* AN$_-$		12:19	03:22	06:08	*35m*	06:43	*36m*	07:20	*35m*	07:55	*9h 10m*	17:06	*35m*	17:41	*36m*	18:17	*35m*	18:53	*14h 48m*	*11h 13m*				Sa, 20. Jan
So, 21. Jan		05:46* – 06:06*	*20m*	M$_↘$ *bis* AN$_-$		12:54	04:37	06:07	*35m*	06:43	*36m*	07:19	*35m*	07:54	*9h 13m*	17:07	*35m*	17:42	*36m*	18:19	*35m*	18:54	*14h 46m*	*11h 12m*				So, 21. Jan
Mo, 22. Jan		—:——:—	–	Mond stört		13:37	05:46	06:06	*35m*	06:42	*36m*	07:18	*35m*	07:53	*9h 15m*	17:09	*35m*	17:44	*36m*	18:20	*35m*	18:55	*14h 43m*	*11h 10m*				Mo, 22. Jan
Di, 23. Jan		—:——:—	–	Mond stört		14:31	06:46	06:06	*35m*	06:41	*35m*	07:17	*35m*	07:52	*9h 17m*	17:10	*35m*	17:45	*36m*	18:21	*35m*	18:57	*14h 41m*	*11h 08m*				Di, 23. Jan
Mi, 24. Jan		—:——:—	–	Mond stört		15:34	07:35	06:05	*35m*	06:41	*35m*	07:17	*34m*	07:51	*9h 20m*	17:11	*34m*	17:46	*35m*	18:22	*35m*	18:58	*14h 39m*	*11h 06m*				Mi, 24. Jan
Do, 25. Jan		—:——:—	–	Mond stört	○	16:42	08:12	06:04	*35m*	06:40	*35m*	07:16	*34m*	07:50	*9h 22m*	17:13	*34m*	17:48	*35m*	18:24	*35m*	18:59	*14h 36m*	*11h 04m*				Do, 25. Jan
Fr, 26. Jan		—:——:—	–	Mond stört		17:51	08:40	06:04	*35m*	06:39	*35m*	07:15	*34m*	07:49	*9h 24m*	17:14	*34m*	17:49	*35m*	18:25	*35m*	19:00	*14h 34m*	*11h 02m*				Fr, 26. Jan
Sa, 27. Jan		—:——:—	–	Mond stört		18:59	09:03	06:03	*35m*	06:38	*35m*	07:14	*34m*	07:48	*9h 27m*	17:16	*34m*	17:50	*35m*	18:26	*35m*	19:02	*14h 31m*	*11h 00m*				Sa, 27. Jan
So, 28. Jan		19:03 – 20:05	*1h 01m*	AN$_+$ *bis* M$_↗$		20:05	09:21	06:02	*35m*	06:37	*35m*	07:13	*34m*	07:47	*9h 29m*	17:17	*34m*	17:52	*35m*	18:27	*35m*	19:03	*14h 29m*	*10h 58m*				So, 28. Jan
Mo, 29. Jan		19:04 – 21:09	*2h 05m*	AN$_+$ *bis* M$_↗$		21:09	09:37	06:01	*35m*	06:36	*35m*	07:12	*34m*	07:46	*9h 32m*	17:19	*34m*	17:53	*35m*	18:29	*35m*	19:04	*14h 26m*	*10h 55m*				Mo, 29. Jan
Di, 30. Jan		19:05 – 22:13	*3h 07m*	AN$_+$ *bis* M$_↗$		22:13	09:52	06:00	*35m*	06:35	*35m*	07:11	*34m*	07:45	*9h 35m*	17:20	*34m*	17:55	*35m*	18:30	*35m*	19:05	*14h 23m*	*10h 53m*				Di, 30. Jan
Mi, 31. Jan		19:07 – 23:18	*4h 11m*	AN$_+$ *bis* M$_↗$		23:18	10:06	05:59	*35m*	06:34	*35m*	07:10	*34m*	07:44	*9h 37m*	17:22	*34m*	17:56	*35m*	18:31	*35m*	19:07	*14h 21m*	*10h 51m*				Mi, 31. Jan
Do, 1. Feb		19:08 – 00:25*	*5h 16m*	AN$_+$ *bis* M$_↗$		—:—	10:22	05:58	*35m*	06:33	*35m*	07:09	*34m*	07:43	*9h 40m*	17:23	*34m*	17:57	*35m*	18:33	*35m*	19:08	*14h 18m*	*10h 49m*				Do, 1. Feb
Fr, 2. Feb		19:09 – 01:34*	*6h 24m*	AN$_+$ *bis* M$_↗$		00:25	10:39	05:57	*35m*	06:32	*35m*	07:08	*34m*	07:42	*9h 43m*	17:25	*34m*	17:59	*35m*	18:34	*35m*	19:09	*14h 15m*	*10h 46m*				Fr, 2. Feb
Sa, 3. Feb		19:11 – 02:47*	*7h 36m*	AN$_+$ *bis* M$_↗$	◑	01:34	11:00	05:56	*35m*	06:31	*35m*	07:06	*33m*	07:40	*9h 45m*	17:26	*33m*	18:00	*35m*	18:35	*35m*	19:11	*14h 12m*	*10h 44m*				Sa, 3. Feb
So, 4. Feb		19:12 – 04:01*	*8h 48m*	AN$_+$ *bis* M$_↗$		02:47	11:28	05:55	*35m*	06:30	*35m*	07:05	*33m*	07:39	*9h 48m*	17:28	*33m*	18:02	*35m*	18:37	*35m*	19:12	*14h 10m*	*10h 42m*				So, 4. Feb
Mo, 5. Feb		19:13 – 05:12*	*9h 58m*	AN$_+$ *bis* M$_↗$		04:01	12:05	05:54	*35m*	06:29	*35m*	07:04	*33m*	07:38	*9h 51m*	17:29	*33m*	18:03	*35m*	18:38	*35m*	19:13	*14h 07m*	*10h 39m*				Mo, 5. Feb
Di, 6. Feb		19:14 – 05:52*	*10h 37m*	AN$_+$ *bis* AN$_-$		05:12	12:56	05:53	*35m*	06:28	*35m*	07:03	*33m*	07:36	*9h 54m*	17:31	*33m*	18:04	*35m*	18:39	*35m*	19:14	*14h 04m*	*10h 37m*				Di, 6. Feb
Mi, 7. Feb		19:16 – 05:50*	*10h 34m*	AN$_+$ *bis* AN$_-$		06:14	14:03	05:52	*34m*	06:27	*34m*	07:01	*33m*	07:35	*9h 57m*	17:32	*33m*	18:06	*34m*	18:41	*35m*	19:16	*14h 01m*	*10h 34m*				Mi, 7. Feb
Do, 8. Feb		19:17 – 05:49*	*10h 31m*	AN$_+$ *bis* AN$_-$		07:04	15:24	05:50	*34m*	06:25	*34m*	07:00	*33m*	07:34	*10h 00m*	17:34	*33m*	18:07	*34m*	18:42	*34m*	19:17	*13h 58m*	*10h 31m*				Do, 8. Feb
Fr, 9. Feb		19:18 – 05:48*	*10h 29m*	AN$_+$ *bis* AN$_-$	●	07:42	16:51	05:49	*34m*	06:24	*34m*	06:59	*33m*	07:32	*10h 02m*	17:35	*33m*	18:09	*34m*	18:43	*34m*	19:18	*13h 55m*	*10h 29m*				Fr, 9. Feb
Sa, 10. Feb		19:20 – 05:47*	*10h 26m*	AN$_+$ *bis* AN$_-$		08:12	18:19	05:48	*34m*	06:23	*34m*	06:57	*33m*	07:31	*10h 05m*	17:37	*33m*	18:10	*34m*	18:45	*34m*	19:20	*13h 52m*	*10h 26m*				Sa, 10. Feb
So, 11. Feb		19:45 – 05:45*	*9h 59m*	M$_↘$ *bis* AN$_-$		08:35	19:45	05:47	*34m*	06:21	*34m*	06:56	*33m*	07:29	*10h 08m*	17:38	*33m*	18:11	*34m*	18:46	*34m*	19:21	*13h 49m*	*10h 24m*				So, 11. Feb
Mo, 12. Feb		21:09 – 05:44*	*8h 35m*	M$_↘$ *bis* AN$_-$		08:55	21:09	05:45	*34m*	06:20	*34m*	06:55	*33m*	07:28	*10h 11m*	17:40	*33m*	18:13	*34m*	18:48	*34m*	19:22	*13h 46m*	*10h 21m*				Mo, 12. Feb
Di, 13. Feb		22:30 – 05:42*	*7h 12m*	M$_↘$ *bis* AN$_-$		09:14	22:30	05:44	*34m*	06:19	*34m*	06:53	*33m*	07:26	*10h 14m*	17:41	*33m*	18:14	*34m*	18:49	*34m*	19:24	*13h 43m*	*10h 18m*				Di, 13. Feb
Mi, 14. Feb		23:51 – 05:41*	*5h 50m*	M$_↘$ *bis* AN$_-$		09:34	23:51	05:42	*34m*	06:17	*34m*	06:52	*32m*	07:25	*10h 17m*	17:43	*32m*	18:16	*34m*	18:50	*34m*	19:25	*13h 40m*	*10h 15m*				Mi, 14. Feb
Do, 15. Feb		01:11* – 05:40*	*4h 29m*	M$_↘$ *bis* AN$_-$		09:55	—:—	05:41	*34m*	06:16	*34m*	06:50	*32m*	07:23	*10h 21m*	17:44	*32m*	18:17	*34m*	18:52	*34m*	19:27	*13h 37m*	*10h 13m*				Do, 15. Feb
Fr, 16. Feb		02:28* – 05:38*	*3h 10m*	M$_↘$ *bis* AN$_-$	◐	10:21	01:11	05:40	*34m*	06:14	*34m*	06:49	*32m*	07:22	*10h 24m*	17:46	*32m*	18:19	*34m*	18:53	*34m*	19:28	*13h 34m*	*10h 10m*				Fr, 16. Feb
Sa, 17. Feb		03:40* – 05:37*	*1h 56m*	M$_↘$ *bis* AN$_-$		10:53	02:28	05:38	*34m*	06:13	*34m*	06:47	*32m*	07:20	*10h 27m*	17:47	*32m*	18:20	*34m*	18:54	*34m*	19:29	*13h 31m*	*10h 07m*				Sa, 17. Feb
So, 18. Feb		04:43* – 05:35*	*52m*	M$_↘$ *bis* AN$_-$		11:34	03:40	05:37	*34m*	06:11	*34m*	06:46	*32m*	07:18	*10h 30m*	17:49	*32m*	18:21	*34m*	18:56	*34m*	19:31	*13h 28m*	*10h 04m*				So, 18. Feb
Mo, 19. Feb		—:——:—	–	Mond stört		12:25	04:43	05:35	*34m*	06:10	*34m*	06:44	*32m*	07:17	*10h 33m*	17:50	*32m*	18:23	*34m*	18:57	*34m*	19:32	*13h 24m*	*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		Δt		Ph.	↗	↘	Astr.	Δt	Naut.	Δt	Bürg.	Δt	↗	Δt	↘	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Di, 20. Feb		—:——:—	–	Mond stört		13:25	05:34	05:34	34m	06:08	34m	06:43	32m	07:15	10h 36m	17:52	32m	18:24	34m	18:59	34m	19:33	13h 21m	9h 58m				Di, 20. Feb
Mi, 21. Feb		—:——:—	–	Mond stört		14:32	06:14	05:32	34m	06:07	34m	06:41	32m	07:13	10h 39m	17:53	32m	18:26	34m	19:00	34m	19:35	13h 18m	9h 55m				Mi, 21. Feb
Do, 22. Feb		—:——:—	–	Mond stört		15:40	06:45	05:30	34m	06:05	34m	06:39	32m	07:12	10h 42m	17:55	32m	18:27	34m	19:01	34m	19:36	13h 15m	9h 52m				Do, 22. Feb
Fr, 23. Feb		—:——:—	–	Mond stört		16:48	07:08	05:29	34m	06:03	34m	06:38	32m	07:10	10h 46m	17:56	32m	18:28	34m	19:03	34m	19:38	13h 12m	9h 49m				Fr, 23. Feb
Sa, 24. Feb		—:——:—	–	Mond stört	○	17:55	07:28	05:27	34m	06:02	34m	06:36	32m	07:08	10h 49m	17:58	32m	18:30	34m	19:04	34m	19:39	13h 08m	9h 46m				Sa, 24. Feb
So, 25. Feb		—:——:—	–	Mond stört		19:00	07:44	05:25	34m	06:00	34m	06:34	32m	07:06	10h 52m	17:59	32m	18:31	34m	19:05	34m	19:40	13h 05m	9h 43m				So, 25. Feb
Mo, 26. Feb		19:42 – 20:04	22m	AN+ bis M↗		20:04	07:59	05:24	34m	05:58	34m	06:33	32m	07:05	10h 55m	18:00	32m	18:33	34m	19:07	34m	19:42	13h 02m	9h 40m				Mo, 26. Feb
Di, 27. Feb		19:43 – 21:09	1h 25m	AN+ bis M↗		21:09	08:13	05:22	34m	05:57	34m	06:31	32m	07:03	10h 58m	18:02	32m	18:34	34m	19:08	34m	19:43	12h 59m	9h 36m				Di, 27. Feb
Mi, 28. Feb		19:45 – 22:14	2h 29m	AN+ bis M↗		22:14	08:28	05:20	34m	05:55	34m	06:29	32m	07:01	11h 02m	18:03	32m	18:35	34m	19:10	34m	19:45	12h 56m	9h 33m				Mi, 28. Feb
Do, 29. Feb		19:46 – 23:22	3h 36m	AN+ bis M↗		23:22	08:44	05:18	34m	05:53	34m	06:27	32m	06:59	11h 05m	18:05	32m	18:37	34m	19:11	34m	19:46	12h 52m	9h 30m				Do, 29. Feb
Fr, 1. Mrz		19:47 – 00:33*	4h 45m	AN+ bis M↗		—:—	09:03	05:17	34m	05:51	34m	06:25	32m	06:58	11h 08m	18:06	32m	18:38	34m	19:12	34m	19:47	12h 49m	9h 27m				Fr, 1. Mrz
Sa, 2. Mrz		19:49 – 01:45*	5h 55m	AN+ bis M↗		00:33	09:28	05:15	34m	05:50	34m	06:24	31m	06:56	11h 11m	18:08	32m	18:40	34m	19:14	35m	19:49	12h 46m	9h 24m				Sa, 2. Mrz
So, 3. Mrz		19:50 – 02:55*	7h 05m	AN+ bis M↗	◑	01:45	10:00	05:13	34m	05:48	34m	06:22	31m	06:54	11h 15m	18:09	32m	18:41	34m	19:15	35m	19:50	12h 42m	9h 20m				So, 3. Mrz
Mo, 4. Mrz		19:52 – 04:00*	8h 08m	AN+ bis M↗		02:55	10:43	05:11	34m	05:46	34m	06:20	31m	06:52	11h 18m	18:10	31m	18:42	34m	19:17	35m	19:52	12h 39m	9h 17m				Mo, 4. Mrz
Di, 5. Mrz		19:53 – 04:54*	9h 00m	AN+ bis M↗		04:00	11:41	05:09	35m	05:44	34m	06:18	31m	06:50	11h 21m	18:12	31m	18:44	34m	19:18	35m	19:53	12h 36m	9h 14m				Di, 5. Mrz
Mi, 6. Mrz		19:55 – 05:05*	9h 10m	AN+ bis AN–		04:54	12:53	05:07	35m	05:42	34m	06:16	31m	06:48	11h 25m	18:13	31m	18:45	34m	19:19	35m	19:55	12h 33m	9h 10m				Mi, 6. Mrz
Do, 7. Mrz		19:56 – 05:03*	9h 07m	AN+ bis AN–		05:36	14:16	05:05	35m	05:40	34m	06:15	31m	06:46	11h 28m	18:15	31m	18:47	34m	19:21	35m	19:56	12h 29m	9h 07m				Do, 7. Mrz
Fr, 8. Mrz		19:58 – 05:01*	9h 03m	AN+ bis AN–		06:09	15:43	05:03	35m	05:39	34m	06:13	31m	06:44	11h 31m	18:16	31m	18:48	34m	19:22	35m	19:58	12h 26m	9h 03m				Fr, 8. Mrz
Sa, 9. Mrz		19:59 – 04:59*	9h 00m	AN+ bis AN–		06:34	17:10	05:01	35m	05:37	34m	06:11	31m	06:43	11h 34m	18:17	31m	18:49	34m	19:24	35m	19:59	12h 23m	9h 00m				Sa, 9. Mrz
So, 10. Mrz		20:00 – 04:57*	8h 56m	AN+ bis AN–	●	06:56	18:36	04:59	35m	05:35	34m	06:09	31m	06:41	11h 38m	18:19	31m	18:51	34m	19:25	35m	20:00	12h 19m	8h 56m				So, 10. Mrz
Mo, 11. Mrz		20:02 – 04:55*	8h 53m	AN+ bis AN–		07:16	20:01	04:57	35m	05:33	34m	06:07	31m	06:39	11h 41m	18:20	31m	18:52	34m	19:26	35m	20:02	12h 16m	8h 53m				Mo, 11. Mrz
Di, 12. Mrz		21:25 – 04:53*	7h 28m	M↘ bis AN–		07:35	21:25	04:55	35m	05:31	34m	06:05	31m	06:37	11h 44m	18:22	31m	18:54	34m	19:28	35m	20:03	12h 13m	8h 49m				Di, 12. Mrz
Mi, 13. Mrz		22:49 – 04:51*	6h 02m	M↘ bis AN–		07:56	22:49	04:53	35m	05:29	34m	06:03	31m	06:35	11h 48m	18:23	31m	18:55	34m	19:29	35m	20:05	12h 09m	8h 46m				Mi, 13. Mrz
Do, 14. Mrz		00:11* – 04:49*	4h 38m	M↘ bis AN–		08:21	—:—	04:51	35m	05:27	34m	06:01	31m	06:33	11h 51m	18:24	31m	18:56	34m	19:31	35m	20:06	12h 06m	8h 42m				Do, 14. Mrz
Fr, 15. Mrz		01:28* – 04:47*	3h 19m	M↘ bis AN–		08:51	00:11	04:49	35m	05:25	34m	05:59	31m	06:31	11h 54m	18:26	31m	18:58	34m	19:32	35m	20:08	12h 03m	8h 39m				Fr, 15. Mrz
Sa, 16. Mrz		02:36* – 04:45*	2h 08m	M↘ bis AN–		09:30	01:28	04:47	35m	05:23	34m	05:57	31m	06:29	11h 58m	18:27	31m	18:59	34m	19:34	35m	20:10	12h 00m	8h 35m				Sa, 16. Mrz
So, 17. Mrz		03:32* – 04:43*	1h 10m	M↘ bis AN–	◐	10:19	02:36	04:45	35m	05:21	34m	05:55	31m	06:27	12h 01m	18:29	31m	19:00	34m	19:35	36m	20:11	11h 56m	8h 31m				So, 17. Mrz
Mo, 18. Mrz		04:16* – 04:41*	24m	M↘ bis AN–		11:17	03:32	04:43	36m	05:19	34m	05:53	31m	06:25	12h 04m	18:30	31m	19:02	34m	19:36	36m	20:13	11h 53m	8h 28m				Mo, 18. Mrz
Di, 19. Mrz		—:——:—	–	Mond stört		12:22	04:16	04:41	36m	05:17	34m	05:51	31m	06:23	12h 07m	18:31	31m	19:03	34m	19:38	36m	20:14	11h 50m	8h 24m				Di, 19. Mrz
Mi, 20. Mrz		—:——:—	–	Mond stört		13:30	04:49	04:39	36m	05:15	34m	05:50	31m	06:21	12h 11m	18:33	31m	19:05	34m	19:39	36m	20:16	11h 46m	8h 20m				Mi, 20. Mrz
Do, 21. Mrz		—:——:—	–	Mond stört		14:39	05:14	04:37	36m	05:13	34m	05:48	31m	06:19	12h 14m	18:34	31m	19:06	34m	19:41	36m	20:17	11h 43m	8h 17m				Do, 21. Mrz
Fr, 22. Mrz		—:——:—	–	Mond stört		15:46	05:35	04:34	36m	05:11	34m	05:46	31m	06:17	12h 17m	18:35	31m	19:07	34m	19:42	36m	20:19	11h 40m	8h 13m				Fr, 22. Mrz
Sa, 23. Mrz		—:——:—	–	Mond stört		16:51	05:51	04:32	36m	05:09	34m	05:44	31m	06:16	12h 21m	18:37	32m	19:09	34m	19:44	36m	20:20	11h 36m	8h 09m				Sa, 23. Mrz
So, 24. Mrz		—:——:—	–	Mond stört		17:56	06:06	04:30	36m	05:07	34m	05:42	31m	06:14	12h 24m	18:38	32m	19:10	35m	19:45	36m	20:22	11h 33m	8h 05m				So, 24. Mrz
Mo, 25. Mrz		—:——:—	–	Mond stört	○	19:00	06:21	04:28	36m	05:05	34m	05:40	32m	06:12	12h 27m	18:39	32m	19:12	35m	19:47	37m	20:24	11h 30m	8h 01m				Mo, 25. Mrz
Di, 26. Mrz		—:——:—	–	Mond stört		20:06	06:35	04:26	37m	05:03	35m	05:38	32m	06:10	12h 31m	18:41	32m	19:13	35m	19:48	37m	20:25	11h 26m	7h 57m				Di, 26. Mrz
Mi, 27. Mrz		20:27 – 21:13	46m	AN+ bis M↗		21:13	06:51	04:23	37m	05:01	35m	05:36	32m	06:08	12h 34m	18:42	32m	19:14	35m	19:50	37m	20:27	11h 23m	7h 54m				Mi, 27. Mrz
Do, 28. Mrz		20:29 – 22:23	1h 54m	AN+ bis M↗		22:23	07:09	04:21	37m	04:58	35m	05:34	32m	06:06	12h 37m	18:43	32m	19:16	35m	19:51	37m	20:29	11h 20m	7h 50m				Do, 28. Mrz
Fr, 29. Mrz		20:30 – 23:34	3h 04m	AN+ bis M↗		23:34	07:31	04:19	37m	04:56	35m	05:32	32m	06:04	12h 40m	18:45	32m	19:17	35m	19:53	37m	20:30	11h 17m	7h 46m				Fr, 29. Mrz
Sa, 30. Mrz		20:32 – 00:45*	4h 13m	AN+ bis M↗		—:—	08:00	04:17	37m	04:54	35m	05:30	32m	06:02	12h 44m	18:46	32m	19:18	35m	19:54	37m	20:32	11h 13m	7h 42m				Sa, 30. Mrz
So, 31. Mrz	MESZ	21:34 – 02:51*	5h 17m	AN+ bis M↗		01:45	09:39	05:14	37m	05:52	35m	06:28	32m	07:00	12h 47m	19:47	32m	20:20	35m	20:56	38m	21:34	11h 10m	7h 38m				So, 31. Mrz
Mo, 1. Apr	MESZ	21:35 – 03:47*	6h 11m	AN+ bis M↗		02:51	10:30	05:12	38m	05:50	35m	06:26	32m	06:58	12h 50m	19:49	32m	20:21	35m	20:57	38m	21:35	11h 07m	7h 34m				Mo, 1. Apr
Di, 2. Apr	MESZ	21:37 – 04:32*	6h 55m	AN+ bis M↗	◑	03:47	11:35	05:10	38m	05:48	35m	06:24	32m	06:56	12h 54m	19:50	32m	20:23	35m	20:59	38m	21:37	11h 04m	7h 30m				Di, 2. Apr
Mi, 3. Apr	MESZ	21:39 – 05:05*	7h 26m	AN+ bis AN–		04:32	12:51	05:07	38m	05:46	35m	06:22	32m	06:54	12h 57m	19:51	32m	20:24	36m	21:00	38m	21:39	11h 00m	7h 26m				Mi, 3. Apr
Do, 4. Apr	MESZ	21:41 – 05:03*	7h 22m	AN+ bis AN–		05:07	14:14	05:05	38m	05:44	35m	06:20	32m	06:52	13h 00m	19:53	32m	20:26	36m	21:02	38m	21:41	10h 57m	7h 22m				Do, 4. Apr
Fr, 5. Apr	MESZ	21:42 – 05:00*	7h 18m	AN+ bis AN–		05:35	15:38	05:03	38m	05:42	36m	06:18	32m	06:50	13h 03m	19:54	32m	20:27	36m	21:03	39m	21:42	10h 54m	7h 18m				Fr, 5. Apr
Sa, 6. Apr	MESZ	21:44 – 04:58*	7h 13m	AN+ bis AN–		05:57	17:03	05:00	39m	05:39	36m	06:16	32m	06:48	13h 07m	19:56	32m	20:28	36m	21:05	39m	21:44	10h 51m	7h 13m				Sa, 6. Apr
So, 7. Apr	MESZ	21:46 – 04:56*	7h 09m	AN+ bis AN–		06:17	18:27	04:58	39m	05:37	36m	06:14	32m	06:47	13h 10m	19:57	32m	20:30	36m	21:06	39m	21:46	10h 47m	7h 09m				So, 7. Apr
Mo, 8. Apr	MESZ	21:48 – 04:53*	7h 05m	AN+ bis AN–	●	06:36	19:52	04:56	39m	05:35	36m	06:12	32m	06:45	13h 13m	19:58	32m	20:31	36m	21:08	39m	21:48	10h 44m	7h 05m				Mo, 8. Apr
Di, 9. Apr	MESZ	21:50 – 04:51*	7h 01m	AN+ bis AN–		06:57	21:17	04:53	39m	05:33	36m	06:10	32m	06:43	13h 16m	20:00	33m	20:33	36m	21:09	40m	21:50	10h 41m	7h 01m				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	22:42 – 04:49*	*6h 06m*	M↘ *bis* AN_		07:20	22:42	04:51	*40m*	05:31	*36m*	06:08	*33m*	06:41	*13h 20m*	20:01	*33m*	20:34	*37m*	21:11	*40m*	21:51	*10h 38m*	*6h 57m*				Mi, 10. Apr
Do, 11. Apr	MESZ	00:05* – 04:46*	*4h 41m*	M↘ *bis* AN_		07:47	—:—	04:49	*40m*	05:29	*36m*	06:06	*33m*	06:39	*13h 23m*	20:02	*33m*	20:35	*37m*	21:13	*40m*	21:53	*10h 34m*	*6h 52m*				Do, 11. Apr
Fr, 12. Apr	MESZ	01:20* – 04:44*	*3h 23m*	M↘ *bis* AN_		08:23	00:05	04:46	*40m*	05:27	*37m*	06:04	*33m*	06:37	*13h 26m*	20:04	*33m*	20:37	*37m*	21:14	*40m*	21:55	*10h 31m*	*6h 48m*				Fr, 12. Apr
Sa, 13. Apr	MESZ	02:24* – 04:41*	*2h 17m*	M↘ *bis* AN_		09:09	01:20	04:44	*40m*	05:25	*37m*	06:02	*33m*	06:35	*13h 29m*	20:05	*33m*	20:38	*37m*	21:16	*41m*	21:57	*10h 28m*	*6h 44m*				Sa, 13. Apr
So, 14. Apr	MESZ	03:13* – 04:39*	*1h 25m*	M↘ *bis* AN_		10:05	02:24	04:41	*41m*	05:23	*37m*	06:00	*33m*	06:34	*13h 32m*	20:06	*33m*	20:40	*37m*	21:17	*41m*	21:59	*10h 25m*	*6h 40m*				So, 14. Apr
Mo, 15. Apr	MESZ	03:51* – 04:37*	*46m*	M↘ *bis* AN_	◐	11:10	03:13	04:39	*41m*	05:21	*37m*	05:58	*33m*	06:32	*13h 35m*	20:08	*33m*	20:41	*37m*	21:19	*41m*	22:01	*10h 22m*	*6h 35m*				Mo, 15. Apr
Di, 16. Apr	MESZ	04:19* – 04:34*	*15m*	M↘ *bis* AN_		12:18	03:51	04:37	*41m*	05:18	*37m*	05:56	*33m*	06:30	*13h 39m*	20:09	*33m*	20:43	*38m*	21:21	*42m*	22:03	*10h 19m*	*6h 31m*				Di, 16. Apr
Mi, 17. Apr	MESZ	—:— – —:—	–	Mond stört		13:27	04:19	04:34	*42m*	05:16	*38m*	05:54	*33m*	06:28	*13h 42m*	20:10	*33m*	20:44	*38m*	21:22	*42m*	22:05	*10h 16m*	*6h 27m*				Mi, 17. Apr
Do, 18. Apr	MESZ	—:— – —:—	–	Mond stört		14:35	04:41	04:32	*42m*	05:14	*38m*	05:52	*33m*	06:26	*13h 45m*	20:12	*34m*	20:46	*38m*	21:24	*42m*	22:07	*10h 12m*	*6h 22m*				Do, 18. Apr
Fr, 19. Apr	MESZ	—:— – —:—	–	Mond stört		15:41	04:58	04:29	*42m*	05:12	*38m*	05:51	*33m*	06:25	*13h 48m*	20:13	*34m*	20:47	*38m*	21:26	*43m*	22:09	*10h 09m*	*6h 18m*				Fr, 19. Apr
Sa, 20. Apr	MESZ	—:— – —:—	–	Mond stört		16:46	05:14	04:27	*43m*	05:10	*38m*	05:49	*34m*	06:23	*13h 51m*	20:14	*34m*	20:49	*38m*	21:27	*43m*	22:11	*10h 06m*	*6h 13m*				Sa, 20. Apr
So, 21. Apr	MESZ	—:— – —:—	–	Mond stört		17:50	05:28	04:25	*43m*	05:08	*38m*	05:47	*34m*	06:21	*13h 54m*	20:16	*34m*	20:50	*39m*	21:29	*43m*	22:13	*10h 03m*	*6h 09m*				So, 21. Apr
Mo, 22. Apr	MESZ	—:— – —:—	–	Mond stört		18:55	05:43	04:22	*43m*	05:06	*39m*	05:45	*34m*	06:19	*13h 57m*	20:17	*34m*	20:51	*39m*	21:31	*44m*	22:15	*10h 00m*	*6h 04m*				Mo, 22. Apr
Di, 23. Apr	MESZ	—:— – —:—	–	Mond stört		20:03	05:58	04:20	*44m*	05:04	*39m*	05:43	*34m*	06:18	*14h 00m*	20:18	*34m*	20:53	*39m*	21:32	*44m*	22:17	*9h 57m*	*6h 00m*				Di, 23. Apr
Mi, 24. Apr	MESZ	—:— – —:—	–	Mond stört	○	21:12	06:15	04:17	*44m*	05:02	*39m*	05:41	*34m*	06:16	*14h 03m*	20:20	*34m*	20:54	*39m*	21:34	*44m*	22:19	*9h 54m*	*5h 55m*				Mi, 24. Apr
Do, 25. Apr	MESZ	22:21 – 22:24	*3m*	AN+ *bis* M↗		22:24	06:36	04:15	*44m*	05:00	*39m*	05:40	*34m*	06:14	*14h 06m*	20:21	*34m*	20:56	*39m*	21:36	*45m*	22:21	*9h 51m*	*5h 51m*				Do, 25. Apr
Fr, 26. Apr	MESZ	22:23 – 23:36	*1h 12m*	AN+ *bis* M↗		23:36	07:03	04:13	*45m*	04:58	*39m*	05:38	*34m*	06:13	*14h 09m*	20:22	*35m*	20:57	*40m*	21:37	*45m*	22:23	*9h 48m*	*5h 46m*				Fr, 26. Apr
Sa, 27. Apr	MESZ	22:25 – 00:44*	*2h 18m*	AN+ *bis* M↗		—:—	07:39	04:10	*45m*	04:56	*40m*	05:36	*35m*	06:11	*14h 12m*	20:24	*35m*	20:59	*40m*	21:39	*46m*	22:25	*9h 45m*	*5h 42m*				Sa, 27. Apr
So, 28. Apr	MESZ	22:27 – 01:43*	*3h 15m*	AN+ *bis* M↗		00:44	08:26	04:08	*46m*	04:54	*40m*	05:34	*35m*	06:09	*14h 15m*	20:25	*35m*	21:00	*40m*	21:41	*46m*	22:27	*9h 42m*	*5h 37m*				So, 28. Apr
Mo, 29. Apr	MESZ	22:30 – 02:31*	*4h 01m*	AN+ *bis* M↗		01:43	09:26	04:05	*46m*	04:52	*40m*	05:32	*35m*	06:08	*14h 18m*	20:26	*35m*	21:02	*40m*	21:43	*47m*	22:30	*9h 39m*	*5h 33m*				Mo, 29. Apr
Di, 30. Apr	MESZ	22:32 – 03:08*	*4h 36m*	AN+ *bis* M↗		02:31	10:38	04:03	*47m*	04:50	*40m*	05:31	*35m*	06:06	*14h 21m*	20:28	*35m*	21:03	*41m*	21:44	*47m*	22:32	*9h 37m*	*5h 28m*				Di, 30. Apr
Mi, 1. Mai	MESZ	22:34 – 03:37*	*5h 03m*	AN+ *bis* M↗	◑	03:08	11:57	04:00	*47m*	04:48	*41m*	05:29	*35m*	06:05	*14h 24m*	20:29	*35m*	21:05	*41m*	21:46	*48m*	22:34	*9h 34m*	*5h 24m*				Mi, 1. Mai
Do, 2. Mai	MESZ	22:36 – 03:56*	*5h 19m*	AN+ *bis* AN_		03:37	13:18	03:58	*48m*	04:46	*41m*	05:27	*35m*	06:03	*14h 27m*	20:30	*35m*	21:06	*41m*	21:48	*48m*	22:36	*9h 31m*	*5h 19m*				Do, 2. Mai
Fr, 3. Mai	MESZ	22:38 – 03:53*	*5h 14m*	AN+ *bis* AN_		04:00	14:40	03:56	*48m*	04:44	*41m*	05:26	*35m*	06:02	*14h 29m*	20:31	*36m*	21:08	*41m*	21:49	*49m*	22:38	*9h 28m*	*5h 14m*				Fr, 3. Mai
Sa, 4. Mai	MESZ	22:41 – 03:51*	*5h 10m*	AN+ *bis* AN_		04:20	16:01	03:53	*48m*	04:42	*41m*	05:24	*36m*	06:00	*14h 32m*	20:33	*36m*	21:09	*42m*	21:51	*49m*	22:41	*9h 25m*	*5h 10m*				Sa, 4. Mai
So, 5. Mai	MESZ	22:43 – 03:48*	*5h 05m*	AN+ *bis* AN_		04:39	17:23	03:51	*49m*	04:40	*42m*	05:22	*36m*	05:59	*14h 35m*	20:34	*36m*	21:10	*42m*	21:53	*50m*	22:43	*9h 23m*	*5h 05m*				So, 5. Mai
Mo, 6. Mai	MESZ	22:45 – 03:46*	*5h 00m*	AN+ *bis* AN_		04:58	18:46	03:48	*50m*	04:38	*42m*	05:21	*36m*	05:57	*14h 38m*	20:35	*36m*	21:12	*42m*	21:55	*50m*	22:45	*9h 20m*	*5h 00m*				Mo, 6. Mai
Di, 7. Mai	MESZ	22:47 – 03:44*	*4h 56m*	AN+ *bis* AN_		05:19	20:10	03:46	*50m*	04:37	*42m*	05:19	*36m*	05:56	*14h 40m*	20:37	*36m*	21:13	*42m*	21:56	*51m*	22:47	*9h 17m*	*4h 56m*				Di, 7. Mai
Mi, 8. Mai	MESZ	22:50 – 03:41*	*4h 51m*	AN+ *bis* AN_	●	05:44	21:35	03:44	*51m*	04:35	*42m*	05:18	*36m*	05:54	*14h 43m*	20:38	*36m*	21:15	*43m*	21:58	*51m*	22:50	*9h 15m*	*4h 51m*				Mi, 8. Mai
Do, 9. Mai	MESZ	22:55 – 03:39*	*4h 43m*	M↘ *bis* AN_		06:16	22:55	03:41	*51m*	04:33	*43m*	05:16	*36m*	05:53	*14h 46m*	20:39	*36m*	21:16	*43m*	22:00	*52m*	22:52	*9h 12m*	*4h 46m*				Do, 9. Mai
Fr, 10. Mai	MESZ	00:06* – 03:37*	*3h 30m*	M↘ *bis* AN_		06:57	—:—	03:39	*52m*	04:31	*43m*	05:15	*36m*	05:52	*14h 48m*	20:40	*37m*	21:18	*43m*	22:01	*52m*	22:54	*9h 09m*	*4h 42m*				Fr, 10. Mai
Sa, 11. Mai	MESZ	01:04* – 03:34*	*2h 30m*	M↘ *bis* AN_		07:50	00:06	03:37	*52m*	04:29	*43m*	05:13	*37m*	05:50	*14h 51m*	20:42	*37m*	21:19	*44m*	22:03	*53m*	22:57	*9h 07m*	*4h 37m*				Sa, 11. Mai
So, 12. Mai	MESZ	01:47* – 03:32*	*1h 44m*	M↘ *bis* AN_		08:53	01:04	03:34	*53m*	04:28	*44m*	05:12	*37m*	05:49	*14h 53m*	20:43	*37m*	21:20	*44m*	22:05	*54m*	22:59	*9h 04m*	*4h 33m*				So, 12. Mai
Mo, 13. Mai	MESZ	02:20* – 03:30*	*1h 09m*	M↘ *bis* AN_		10:02	01:47	03:32	*54m*	04:26	*44m*	05:10	*37m*	05:48	*14h 56m*	20:44	*37m*	21:22	*44m*	22:06	*54m*	23:01	*9h 02m*	*4h 28m*				Mo, 13. Mai
Di, 14. Mai	MESZ	02:44* – 03:27*	*43m*	M↘ *bis* AN_		11:13	02:20	03:30	*54m*	04:24	*44m*	05:09	*37m*	05:47	*14h 58m*	20:45	*37m*	21:23	*44m*	22:08	*55m*	23:03	*9h 00m*	*4h 23m*				Di, 14. Mai
Mi, 15. Mai	MESZ	03:04* – 03:25*	*21m*	M↘ *bis* AN_	◐	12:22	02:44	03:27	*55m*	04:23	*44m*	05:08	*37m*	05:45	*15h 01m*	20:47	*37m*	21:25	*45m*	22:10	*56m*	23:06	*8h 57m*	*4h 19m*				Mi, 15. Mai
Do, 16. Mai	MESZ	03:20* – 03:23*	*2m*	M↘ *bis* AN_		13:29	03:04	03:25	*56m*	04:21	*45m*	05:06	*37m*	05:44	*15h 03m*	20:48	*38m*	21:26	*45m*	22:11	*56m*	23:08	*8h 55m*	*4h 14m*				Do, 16. Mai
Fr, 17. Mai	MESZ	—:— – —:—	–	Mond stört		14:34	03:20	03:23	*56m*	04:20	*45m*	05:05	*38m*	05:43	*15h 05m*	20:49	*38m*	21:27	*45m*	22:13	*57m*	23:10	*8h 53m*	*4h 10m*				Fr, 17. Mai
Sa, 18. Mai	MESZ	—:— – —:—	–	Mond stört		15:38	03:35	03:21	*57m*	04:18	*45m*	05:04	*38m*	05:42	*15h 08m*	20:50	*38m*	21:29	*46m*	22:15	*58m*	23:13	*8h 50m*	*4h 05m*				Sa, 18. Mai
So, 19. Mai	MESZ	—:— – —:—	–	Mond stört		16:43	03:49	03:18	*58m*	04:16	*46m*	05:03	*38m*	05:41	*15h 10m*	20:51	*38m*	21:30	*46m*	22:16	*58m*	23:15	*8h 48m*	*4h 01m*				So, 19. Mai
Mo, 20. Mai	MESZ	—:— – —:—	–	Mond stört		17:50	04:04	03:16	*58m*	04:15	*46m*	05:01	*38m*	05:40	*15h 12m*	20:52	*38m*	21:31	*46m*	22:18	*59m*	23:17	*8h 46m*	*3h 56m*				Mo, 20. Mai
Di, 21. Mai	MESZ	—:— – —:—	–	Mond stört		18:58	04:20	03:14	*59m*	04:13	*46m*	05:00	*38m*	05:39	*15h 14m*	20:54	*38m*	21:32	*46m*	22:19	*1h 00m*	23:20	*8h 44m*	*3h 52m*				Di, 21. Mai
Mi, 22. Mai	MESZ	—:— – —:—	–	Mond stört		20:10	04:40	03:12	*1h 00m*	04:12	*46m*	04:59	*38m*	05:38	*15h 16m*	20:55	*39m*	21:34	*47m*	22:21	*1h 00m*	23:22	*8h 42m*	*3h 47m*				Mi, 22. Mai
Do, 23. Mai	MESZ	—:— – —:—	–	Mond stört	○	21:23	05:05	03:10	*1h 00m*	04:11	*47m*	04:58	*39m*	05:37	*15h 18m*	20:56	*39m*	21:35	*47m*	22:23	*1h 01m*	23:24	*8h 40m*	*3h 43m*				Do, 23. Mai
Fr, 24. Mai	MESZ	—:— – —:—	–	Mond stört		22:34	05:38	03:08	*1h 01m*	04:09	*47m*	04:57	*39m*	05:36	*15h 20m*	20:57	*39m*	21:36	*47m*	22:24	*1h 02m*	23:27	*8h 38m*	*3h 39m*				Fr, 24. Mai
Sa, 25. Mai	MESZ	23:29 – 23:37	*8m*	AN+ *bis* M↗		23:37	06:22	03:06	*1h 02m*	04:08	*47m*	04:56	*39m*	05:35	*15h 22m*	20:58	*39m*	21:37	*48m*	22:25	*1h 03m*	23:29	*8h 36m*	*3h 34m*				Sa, 25. Mai
So, 26. Mai	MESZ	23:31 – 00:29*	*58m*	AN+ *bis* M↗		—:—	07:19	03:04	*1h 03m*	04:07	*48m*	04:55	*39m*	05:34	*15h 24m*	20:59	*39m*	21:39	*48m*	22:27	*1h 04m*	23:31	*8h 34m*	*3h 30m*				So, 26. Mai
Mo, 27. Mai	MESZ	23:33 – 01:10*	*1h 36m*	AN+ *bis* M↗		00:29	08:29	03:02	*1h 04m*	04:06	*48m*	04:54	*39m*	05:34	*15h 26m*	21:00	*39m*	21:40	*48m*	22:28	*1h 04m*	23:33	*8h 33m*	*3h 26m*				Mo, 27. Mai
Di, 28. Mai	MESZ	23:35 – 01:41*	*2h 05m*	AN+ *bis* M↗		01:10	09:46	03:00	*1h 04m*	04:04	*48m*	04:53	*39m*	05:33	*15h 27m*	21:01	*39m*	21:41	*48m*	22:30	*1h 05m*	23:35	*8h 31m*	*3h 22m*				Di, 28. Mai
Mi, 29. Mai	MESZ	23:37 – 02:05*	*2h 27m*	AN+ *bis* M↗		01:41	11:07	02:58	*1h 05m*	04:03	*48m*	04:52	*39m*	05:32	*15h 29m*	21:02	*40m*	21:42	*49m*	22:31	*1h 06m*	23:37	*8h 29m*	*3h 18m*				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.	Δ*t*	↗	Δ*t*	↘	Δ*t*	Bürg.	Δ*t*	Naut.	Δ*t*	Astr.	Δ*t*	Δ*t*		Δ*t*		
Do, 30. Mai	MESZ	23:40 – 02:26*	2h 46m	AN_+ bis $M_↗$	◑	02:05	12:27	02:56	1h 06m	04:02	49m	04:51	40m	05:32	15h 31m	21:03	40m	21:43	49m	22:32	1h 07m	23:40	8h 28m	3h 14m				Do, 30. Mai
Fr, 31. Mai	MESZ	23:42 – 02:44*	3h 02m	AN_+ bis $M_↗$		02:26	13:47	02:54	1h 07m	04:01	49m	04:51	40m	05:31	15h 32m	21:04	40m	21:44	49m	22:34	1h 07m	23:42	8h 26m	3h 10m				Fr, 31. Mai
Sa, 1. Jun	MESZ	23:44 – 02:51*	3h 06m	AN_+ bis AN_-		02:44	15:05	02:52	1h 07m	04:00	49m	04:50	40m	05:30	15h 34m	21:05	40m	21:45	49m	22:35	1h 08m	23:44	8h 25m	3h 06m				Sa, 1. Jun
So, 2. Jun	MESZ	23:46 – 02:49*	3h 03m	AN_+ bis AN_-		03:02	16:25	02:51	1h 08m	03:59	49m	04:49	40m	05:30	15h 35m	21:05	40m	21:46	50m	22:36	1h 09m	23:46	8h 23m	3h 03m				So, 2. Jun
Mo, 3. Jun	MESZ	23:48 – 02:47*	2h 59m	AN_+ bis AN_-		03:22	17:46	02:49	1h 09m	03:58	50m	04:49	40m	05:29	15h 37m	21:06	40m	21:47	50m	22:37	1h 10m	23:48	8h 22m	2h 59m				Mo, 3. Jun
Di, 4. Jun	MESZ	23:49 – 02:46*	2h 56m	AN_+ bis AN_-		03:44	19:09	02:47	1h 10m	03:58	50m	04:48	40m	05:29	15h 38m	21:07	40m	21:48	50m	22:39	1h 10m	23:49	8h 21m	2h 56m				Di, 4. Jun
Mi, 5. Jun	MESZ	23:51 – 02:45*	2h 53m	AN_+ bis AN_-		04:13	20:31	02:46	1h 10m	03:57	50m	04:47	40m	05:28	15h 39m	21:08	40m	21:49	50m	22:40	1h 11m	23:51	8h 20m	2h 53m				Mi, 5. Jun
Do, 6. Jun	MESZ	23:53 – 02:43*	2h 50m	AN_+ bis AN_-	●	04:49	21:46	02:45	1h 11m	03:56	50m	04:47	40m	05:28	15h 40m	21:09	41m	21:50	51m	22:41	1h 12m	23:53	8h 18m	2h 50m				Do, 6. Jun
Fr, 7. Jun	MESZ	23:55 – 02:42*	2h 47m	AN_+ bis AN_-		05:36	22:50	02:43	1h 12m	03:55	51m	04:47	41m	05:28	15h 41m	21:09	41m	21:50	51m	22:42	1h 12m	23:55	8h 17m	2h 47m				Fr, 7. Jun
Sa, 8. Jun	MESZ	23:56 – 02:41*	2h 44m	AN_+ bis AN_-		06:35	23:40	02:42	1h 12m	03:55	51m	04:46	41m	05:27	15h 42m	21:10	41m	21:51	51m	22:43	1h 13m	23:56	8h 16m	2h 44m				Sa, 8. Jun
So, 9. Jun	MESZ	00:17* – 02:40*	2h 22m	$M_↘$ bis AN_-		07:43	—:—	02:41	1h 13m	03:54	51m	04:46	41m	05:27	15h 43m	21:11	41m	21:52	51m	22:43	1h 14m	23:58	8h 16m	2h 41m				So, 9. Jun
Mo, 10. Jun	MESZ	00:45* – 02:39*	1h 53m	$M_↘$ bis AN_-		08:55	00:17	02:40	1h 14m	03:54	51m	04:45	41m	05:27	15h 44m	21:11	41m	21:53	51m	22:44	1h 14m	23:59	8h 15m	2h 39m				Mo, 10. Jun
Di, 11. Jun	MESZ	01:07* – 02:38*	1h 30m	$M_↘$ bis AN_-		10:06	00:45	02:39	1h 14m	03:53	51m	04:45	41m	05:27	15h 45m	21:12	41m	21:53	51m	22:45	1h 15m	00:00*	8h 14m	2h 37m				Di, 11. Jun
Mi, 12. Jun	MESZ	01:25* – 02:37*	1h 12m	$M_↘$ bis AN_-		11:15	01:07	02:38	1h 15m	03:53	51m	04:45	41m	05:26	15h 45m	21:12	41m	21:54	51m	22:46	1h 15m	00:02*	8h 13m	2h 35m				Mi, 12. Jun
Do, 13. Jun	MESZ	01:40* – 02:36*	56m	$M_↘$ bis AN_-		12:21	01:25	02:37	1h 15m	03:53	51m	04:45	41m	05:26	15h 46m	21:13	41m	21:54	52m	22:46	1h 16m	00:03*	8h 13m	2h 33m				Do, 13. Jun
Fr, 14. Jun	MESZ	01:54* – 02:36*	41m	$M_↘$ bis AN_-	◐	13:26	01:40	02:36	1h 16m	03:53	52m	04:45	41m	05:26	15h 47m	21:13	41m	21:55	52m	22:47	1h 16m	00:04*	8h 12m	2h 31m				Fr, 14. Jun
Sa, 15. Jun	MESZ	02:09* – 02:35*	26m	$M_↘$ bis AN_-		14:30	01:54	02:36	1h 16m	03:52	52m	04:45	41m	05:26	15h 47m	21:14	41m	21:55	52m	22:48	1h 17m	00:05*	8h 12m	2h 30m				Sa, 15. Jun
So, 16. Jun	MESZ	02:25* – 02:35*	10m	$M_↘$ bis AN_-		15:35	02:09	02:35	1h 17m	03:52	52m	04:45	41m	05:26	15h 47m	21:14	41m	21:56	52m	22:48	1h 17m	00:05*	8h 12m	2h 29m				So, 16. Jun
Mo, 17. Jun	MESZ	—:——:—	–	Mond stört		16:42	02:25	02:35	1h 17m	03:52	52m	04:45	41m	05:26	15h 48m	21:15	41m	21:56	52m	22:49	1h 17m	00:06*	8h 11m	2h 28m				Mo, 17. Jun
Di, 18. Jun	MESZ	—:——:—	–	Mond stört		17:53	02:43	02:35	1h 17m	03:52	52m	04:45	41m	05:26	15h 48m	21:15	41m	21:57	52m	22:49	1h 17m	00:07*	8h 11m	2h 28m				Di, 18. Jun
Mi, 19. Jun	MESZ	—:——:—	–	Mond stört		19:06	03:06	02:35	1h 17m	03:52	52m	04:45	41m	05:26	15h 48m	21:15	41m	21:57	52m	22:49	1h 17m	00:07*	8h 11m	2h 27m				Mi, 19. Jun
Do, 20. Jun	MESZ	—:——:—	–	Mond stört		20:18	03:35	02:35	1h 17m	03:52	52m	04:45	41m	05:27	15h 48m	21:15	41m	21:57	52m	22:50	1h 17m	00:07*	8h 11m	2h 27m				Do, 20. Jun
Fr, 21. Jun	MESZ	—:——:—	–	Mond stört		21:26	04:15	02:35	1h 17m	03:53	52m	04:45	41m	05:27	15h 48m	21:16	41m	21:57	52m	22:50	1h 17m	00:07*	8h 11m	2h 27m				Fr, 21. Jun
Sa, 22. Jun	MESZ	—:——:—	–	Mond stört	○	22:23	05:08	02:35	1h 17m	03:53	52m	04:45	41m	05:27	15h 48m	21:16	41m	21:57	52m	22:50	1h 17m	00:07*	8h 11m	2h 28m				Sa, 22. Jun
So, 23. Jun	MESZ	—:——:—	–	Mond stört		23:08	06:15	02:36	1h 17m	03:53	52m	04:46	41m	05:27	15h 48m	21:16	41m	21:57	52m	22:50	1h 17m	00:07*	8h 11m	2h 28m				So, 23. Jun
Mo, 24. Jun	MESZ	—:——:—	–	Mond stört		23:43	07:32	02:36	1h 17m	03:54	52m	04:46	41m	05:28	15h 48m	21:16	41m	21:58	52m	22:50	1h 17m	00:07*	8h 12m	2h 29m				Mo, 24. Jun
Di, 25. Jun	MESZ	00:07* – 00:09*	2m	AN_+ bis $M_↗$		—:—	08:54	02:37	1h 17m	03:54	52m	04:46	41m	05:28	15h 47m	21:16	41m	21:58	52m	22:50	1h 16m	00:07*	8h 12m	2h 30m				Di, 25. Jun
Mi, 26. Jun	MESZ	00:06* – 00:31*	24m	AN_+ bis $M_↗$		00:09	10:16	02:38	1h 16m	03:55	52m	04:47	41m	05:28	15h 47m	21:16	41m	21:57	52m	22:50	1h 16m	00:06*	8h 12m	2h 32m				Mi, 26. Jun
Do, 27. Jun	MESZ	00:06* – 00:50*	44m	AN_+ bis $M_↗$		00:31	11:36	02:39	1h 16m	03:55	52m	04:47	41m	05:29	15h 47m	21:16	41m	21:57	52m	22:49	1h 16m	00:06*	8h 13m	2h 33m				Do, 27. Jun
Fr, 28. Jun	MESZ	00:05* – 01:08*	1h 03m	AN_+ bis $M_↗$	◑	00:50	12:55	02:40	1h 16m	03:56	52m	04:48	41m	05:29	15h 46m	21:16	41m	21:57	51m	22:49	1h 15m	00:05*	8h 14m	2h 35m				Fr, 28. Jun
Sa, 29. Jun	MESZ	00:04* – 01:27*	1h 22m	AN_+ bis $M_↗$		01:08	14:13	02:41	1h 15m	03:56	51m	04:48	41m	05:30	15h 45m	21:16	41m	21:57	51m	22:49	1h 15m	00:04*	8h 14m	2h 37m				Sa, 29. Jun
So, 30. Jun	MESZ	00:03* – 01:48*	1h 44m	AN_+ bis $M_↗$		01:27	15:33	02:42	1h 15m	03:57	51m	04:49	41m	05:30	15h 45m	21:15	41m	21:57	51m	22:49	1h 14m	00:03*	8h 15m	2h 39m				So, 30. Jun
Mo, 1. Jul	MESZ	00:02* – 02:13*	2h 10m	AN_+ bis $M_↗$		01:48	16:53	02:43	1h 14m	03:58	51m	04:50	41m	05:31	15h 44m	21:15	41m	21:57	51m	22:48	1h 14m	00:02*	8h 16m	2h 42m				Mo, 1. Jul
Di, 2. Jul	MESZ	00:01* – 02:45*	2h 44m	AN_+ bis $M_↗$		02:13	18:13	02:45	1h 14m	03:59	51m	04:50	41m	05:32	15h 43m	21:15	41m	21:56	51m	22:48	1h 13m	00:01*	8h 17m	2h 45m				Di, 2. Jul
Mi, 3. Jul	MESZ	00:00* – 02:48*	2h 47m	AN_+ bis AN_-		02:45	19:30	02:46	1h 13m	04:00	51m	04:51	41m	05:32	15h 42m	21:15	41m	21:56	51m	22:47	1h 12m	00:00*	8h 18m	2h 47m				Mi, 3. Jul
Do, 4. Jul	MESZ	23:59 – 02:49*	2h 50m	AN_+ bis AN_-		03:28	20:38	02:48	1h 12m	04:01	51m	04:52	41m	05:33	15h 41m	21:14	40m	21:55	51m	22:46	1h 12m	23:59	8h 19m	2h 50m				Do, 4. Jul
Fr, 5. Jul	MESZ	23:57 – 02:51*	2h 53m	AN_+ bis AN_-		04:22	21:32	02:49	1h 12m	04:02	51m	04:53	40m	05:34	15h 40m	21:14	40m	21:55	50m	22:46	1h 11m	23:57	8h 20m	2h 53m				Fr, 5. Jul
Sa, 6. Jul	MESZ	23:56 – 02:53*	2h 57m	AN_+ bis AN_-	●	05:26	22:14	02:51	1h 11m	04:03	50m	04:53	40m	05:34	15h 39m	21:14	40m	21:54	50m	22:45	1h 10m	23:56	8h 21m	2h 57m				Sa, 6. Jul
So, 7. Jul	MESZ	23:54 – 02:55*	3h 00m	AN_+ bis AN_-		06:37	22:46	02:53	1h 10m	04:04	50m	04:54	40m	05:35	15h 38m	21:13	40m	21:54	50m	22:44	1h 10m	23:54	8h 22m	3h 00m				So, 7. Jul
Mo, 8. Jul	MESZ	23:53 – 02:57*	3h 03m	AN_+ bis AN_-		07:49	23:10	02:55	1h 10m	04:05	50m	04:55	40m	05:36	15h 36m	21:13	40m	21:53	50m	22:43	1h 09m	23:53	8h 24m	3h 03m				Mo, 8. Jul
Di, 9. Jul	MESZ	23:51 – 02:59*	3h 07m	AN_+ bis AN_-		08:59	23:29	02:57	1h 09m	04:06	50m	04:56	40m	05:37	15h 35m	21:12	40m	21:53	49m	22:42	1h 08m	23:51	8h 25m	3h 07m				Di, 9. Jul
Mi, 10. Jul	MESZ	23:49 – 03:01*	3h 11m	AN_+ bis AN_-		10:07	23:45	02:59	1h 08m	04:07	49m	04:57	40m	05:38	15h 34m	21:12	40m	21:52	49m	22:42	1h 07m	23:49	8h 26m	3h 11m				Mi, 10. Jul
Do, 11. Jul	MESZ	00:00* – 03:03*	3h 03m	$M_↘$ bis AN_-		11:12	—:—	03:01	1h 07m	04:08	49m	04:58	40m	05:38	15h 32m	21:11	40m	21:51	49m	22:41	1h 07m	23:48	8h 28m	3h 15m				Do, 11. Jul
Fr, 12. Jul	MESZ	00:14* – 03:05*	2h 50m	$M_↘$ bis AN_-		12:17	00:00	03:03	1h 07m	04:10	49m	04:59	40m	05:39	15h 30m	21:10	40m	21:50	49m	22:39	1h 06m	23:46	8h 29m	3h 19m				Fr, 12. Jul
Sa, 13. Jul	MESZ	00:29* – 03:07*	2h 38m	$M_↘$ bis AN_-		13:21	00:14	03:05	1h 06m	04:11	49m	05:00	40m	05:40	15h 29m	21:10	39m	21:49	48m	22:38	1h 05m	23:44	8h 31m	3h 22m				Sa, 13. Jul
So, 14. Jul	MESZ	00:46* – 03:09*	2h 23m	$M_↘$ bis AN_-	◐	14:27	00:29	03:07	1h 05m	04:12	48m	05:01	39m	05:41	15h 27m	21:09	39m	21:49	48m	22:37	1h 04m	23:42	8h 33m	3h 27m				So, 14. Jul
Mo, 15. Jul	MESZ	01:06* – 03:11*	2h 05m	$M_↘$ bis AN_-		15:35	00:46	03:09	1h 04m	04:14	48m	05:02	39m	05:42	15h 25m	21:08	39m	21:48	48m	22:36	1h 03m	23:40	8h 34m	3h 31m				Mo, 15. Jul
Di, 16. Jul	MESZ	01:32* – 03:13*	1h 41m	$M_↘$ bis AN_-		16:46	01:06	03:11	1h 03m	04:15	48m	05:03	39m	05:43	15h 24m	21:07	39m	21:47	48m	22:35	1h 03m	23:38	8h 36m	3h 35m				Di, 16. Jul
Mi, 17. Jul	MESZ	02:07* – 03:16*	1h 08m	$M_↘$ bis AN_-		17:59	01:32	03:13	1h 03m	04:16	48m	05:05	39m	05:44	15h 22m	21:06	39m	21:46	47m	22:34	1h 02m	23:36	8h 38m	3h 39m				Mi, 17. Jul
Do, 18. Jul	MESZ	02:54* – 03:18*	24m	$M_↘$ bis AN_-		19:09	02:07	03:16	1h 02m	04:18	47m	05:06	39m	05:45	15h 20m	21:05	39m	21:45	47m	22:32	1h 01m	23:34	8h 40m	3h 43m				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		20:11	02:54	03:18	1h 01m	04:19	47m	05:07	39m	05:46	15h 18m	21:05	39m	21:44	47m	22:31	1h 00m	23:32	8h 42m	3h 48m				Fr, 19. Jul
Sa, 20. Jul	MESZ	—:——:—	–	Mond stört		21:02	03:55	03:20	1h 00m	04:21	47m	05:08	39m	05:47	15h 16m	21:04	38m	21:43	46m	22:29	1h 00m	23:30	8h 44m	3h 52m				Sa, 20. Jul
So, 21. Jul	MESZ	—:——:—	–	Mond stört	○	21:41	05:10	03:22	1h 00m	04:22	46m	05:09	38m	05:48	15h 14m	21:03	38m	21:41	46m	22:28	59m	23:27	8h 46m	3h 57m				So, 21. Jul
Mo, 22. Jul	MESZ	—:——:—	–	Mond stört		22:11	06:33	03:24	59m	04:24	46m	05:11	38m	05:49	15h 12m	21:02	38m	21:40	46m	22:27	58m	23:25	8h 48m	4h 01m				Mo, 22. Jul
Di, 23. Jul	MESZ	—:——:—	–	Mond stört		22:35	07:57	03:27	58m	04:25	46m	05:12	38m	05:50	15h 10m	21:01	38m	21:39	46m	22:25	58m	23:23	8h 50m	4h 05m				Di, 23. Jul
Mi, 24. Jul	MESZ	—:——:—	–	Mond stört		22:55	09:21	03:29	58m	04:27	46m	05:13	38m	05:51	15h 07m	20:59	38m	21:38	45m	22:23	57m	23:21	8h 53m	4h 10m				Mi, 24. Jul
Do, 25. Jul	MESZ	—:——:—	–	Mond stört		23:14	10:42	03:31	57m	04:29	45m	05:14	38m	05:53	15h 05m	20:58	38m	21:36	45m	22:22	56m	23:19	8h 55m	4h 14m				Do, 25. Jul
Fr, 26. Jul	MESZ	23:16 – 23:32	15m	AN+ bis M↗		23:32	12:02	03:33	56m	04:30	45m	05:16	38m	05:54	15h 03m	20:57	37m	21:35	45m	22:20	55m	23:16	8h 57m	4h 19m				Fr, 26. Jul
Sa, 27. Jul	MESZ	23:14 – 23:52	38m	AN+ bis M↗		23:52	13:22	03:36	55m	04:32	45m	05:17	37m	05:55	15h 01m	20:56	37m	21:34	44m	22:19	55m	23:14	9h 00m	4h 24m				Sa, 27. Jul
So, 28. Jul	MESZ	23:12 – 00:16*	1h 04m	AN+ bis M↗	◑	—:—	14:42	03:38	55m	04:33	44m	05:18	37m	05:56	14h 58m	20:55	37m	21:32	44m	22:17	54m	23:12	9h 02m	4h 28m				So, 28. Jul
Mo, 29. Jul	MESZ	23:09 – 00:46*	1h 36m	AN+ bis M↗		00:16	16:02	03:40	54m	04:35	44m	05:20	37m	05:57	14h 56m	20:54	37m	21:31	44m	22:15	54m	23:09	9h 04m	4h 33m				Mo, 29. Jul
Di, 30. Jul	MESZ	23:07 – 01:24*	2h 17m	AN+ bis M↗		00:46	17:20	03:43	54m	04:37	44m	05:21	37m	05:58	14h 53m	20:52	37m	21:30	44m	22:14	53m	23:07	9h 07m	4h 37m				Di, 30. Jul
Mi, 31. Jul	MESZ	23:05 – 02:14*	3h 08m	AN+ bis M↗		01:24	18:29	03:45	53m	04:38	44m	05:22	37m	06:00	14h 51m	20:51	37m	21:28	43m	22:12	52m	23:05	9h 09m	4h 42m				Mi, 31. Jul
Do, 1. Aug	MESZ	23:02 – 03:14*	4h 11m	AN+ bis M↗		02:14	19:28	03:47	52m	04:40	43m	05:24	37m	06:01	14h 48m	20:50	36m	21:27	43m	22:10	52m	23:02	9h 12m	4h 46m				Do, 1. Aug
Fr, 2. Aug	MESZ	23:00 – 03:51*	4h 51m	AN+ bis AN–		03:14	20:13	03:49	52m	04:42	43m	05:25	36m	06:02	14h 46m	20:48	36m	21:25	43m	22:08	51m	23:00	9h 15m	4h 51m				Fr, 2. Aug
Sa, 3. Aug	MESZ	22:58 – 03:54*	4h 56m	AN+ bis AN–		04:22	20:47	03:51	51m	04:43	43m	05:26	36m	06:03	14h 43m	20:47	36m	21:23	42m	22:06	51m	22:58	9h 17m	4h 56m				Sa, 3. Aug
So, 4. Aug	MESZ	22:55 – 03:56*	5h 00m	AN+ bis AN–	●	05:34	21:13	03:54	51m	04:45	42m	05:28	36m	06:04	14h 40m	20:45	36m	21:22	42m	22:05	50m	22:55	9h 20m	5h 00m				So, 4. Aug
Mo, 5. Aug	MESZ	22:53 – 03:58*	5h 05m	AN+ bis AN–		06:45	21:33	03:56	50m	04:46	42m	05:29	36m	06:06	14h 38m	20:44	36m	21:20	42m	22:03	50m	22:53	9h 22m	5h 05m				Mo, 5. Aug
Di, 6. Aug	MESZ	22:50 – 04:00*	5h 09m	AN+ bis AN–		07:54	21:50	03:58	50m	04:48	42m	05:31	36m	06:07	14h 35m	20:43	36m	21:19	42m	22:01	49m	22:50	9h 25m	5h 09m				Di, 6. Aug
Mi, 7. Aug	MESZ	22:48 – 04:02*	5h 14m	AN+ bis AN–		09:00	22:05	04:00	49m	04:50	42m	05:32	36m	06:08	14h 32m	20:41	36m	21:17	41m	21:59	49m	22:48	9h 28m	5h 14m				Mi, 7. Aug
Do, 8. Aug	MESZ	22:46 – 04:05*	5h 19m	AN+ bis AN–		10:05	22:20	04:02	49m	04:51	41m	05:33	36m	06:09	14h 30m	20:40	35m	21:15	41m	21:57	48m	22:46	9h 31m	5h 19m				Do, 8. Aug
Fr, 9. Aug	MESZ	22:43 – 04:07*	5h 23m	AN+ bis AN–		11:09	22:34	04:05	48m	04:53	41m	05:35	35m	06:11	14h 27m	20:38	35m	21:14	41m	21:55	48m	22:43	9h 33m	5h 23m				Fr, 9. Aug
Sa, 10. Aug	MESZ	22:50 – 04:09*	5h 19m	M↘ bis AN–		12:14	22:50	04:07	48m	04:55	41m	05:36	35m	06:12	14h 24m	20:36	35m	21:12	41m	21:53	47m	22:41	9h 36m	5h 28m				Sa, 10. Aug
So, 11. Aug	MESZ	23:08 – 04:11*	5h 02m	M↘ bis AN–		13:20	23:08	04:09	47m	04:56	41m	05:38	35m	06:13	14h 21m	20:35	35m	21:10	40m	21:51	47m	22:38	9h 39m	5h 32m				So, 11. Aug
Mo, 12. Aug	MESZ	23:31 – 04:13*	4h 42m	M↘ bis AN–	◐	14:29	23:31	04:11	47m	04:58	40m	05:39	35m	06:14	14h 18m	20:33	35m	21:09	40m	21:49	46m	22:36	9h 42m	5h 37m				Mo, 12. Aug
Di, 13. Aug	MESZ	00:01* – 04:15*	4h 14m	M↘ bis AN–		15:40	—:—	04:13	46m	05:00	40m	05:40	35m	06:16	14h 15m	20:32	35m	21:07	40m	21:47	46m	22:33	9h 45m	5h 41m				Di, 13. Aug
Mi, 14. Aug	MESZ	00:41* – 04:17*	3h 36m	M↘ bis AN–		16:50	00:01	04:15	46m	05:01	40m	05:42	35m	06:17	14h 13m	20:30	35m	21:05	40m	21:45	45m	22:31	9h 48m	5h 46m				Mi, 14. Aug
Do, 15. Aug	MESZ	01:35* – 04:19*	2h 44m	M↘ bis AN–		17:56	00:41	04:17	45m	05:03	40m	05:43	35m	06:18	14h 10m	20:28	34m	21:03	39m	21:43	45m	22:29	9h 51m	5h 50m				Do, 15. Aug
Fr, 16. Aug	MESZ	02:43* – 04:21*	1h 37m	M↘ bis AN–		18:51	01:35	04:19	45m	05:05	39m	05:45	34m	06:19	14h 07m	20:27	34m	21:01	39m	21:41	45m	22:26	9h 54m	5h 55m				Fr, 16. Aug
Sa, 17. Aug	MESZ	04:03* – 04:23*	20m	M↘ bis AN–		19:36	02:43	04:21	45m	05:06	39m	05:46	34m	06:21	14h 04m	20:25	34m	21:00	39m	21:39	44m	22:24	9h 57m	5h 59m				Sa, 17. Aug
So, 18. Aug	MESZ	—:——:—	–	Mond stört		20:10	04:03	04:23	44m	05:08	39m	05:47	34m	06:22	14h 01m	20:23	34m	20:58	39m	21:37	44m	22:21	10h 00m	6h 03m				So, 18. Aug
Mo, 19. Aug	MESZ	—:——:—	–	Mond stört	○	20:36	05:28	04:25	44m	05:09	39m	05:49	34m	06:23	13h 58m	20:21	34m	20:56	39m	21:35	43m	22:19	10h 03m	6h 08m				Mo, 19. Aug
Di, 20. Aug	MESZ	—:——:—	–	Mond stört		20:58	06:54	04:27	43m	05:11	39m	05:50	34m	06:24	13h 55m	20:20	34m	20:54	38m	21:33	43m	22:16	10h 06m	6h 12m				Di, 20. Aug
Mi, 21. Aug	MESZ	—:——:—	–	Mond stört		21:17	08:19	04:29	43m	05:13	38m	05:51	34m	06:26	13h 52m	20:18	34m	20:52	38m	21:31	43m	22:14	10h 09m	6h 17m				Mi, 21. Aug
Do, 22. Aug	MESZ	—:——:—	–	Mond stört		21:36	09:43	04:31	43m	05:14	38m	05:53	34m	06:27	13h 49m	20:16	34m	20:50	38m	21:29	42m	22:11	10h 12m	6h 21m				Do, 22. Aug
Fr, 23. Aug	MESZ	—:——:—	–	Mond stört		21:56	11:05	04:33	42m	05:16	38m	05:54	34m	06:28	13h 46m	20:14	33m	20:48	38m	21:27	42m	22:09	10h 15m	6h 25m				Fr, 23. Aug
Sa, 24. Aug	MESZ	22:07 – 22:19	12m	AN+ bis M↗		22:19	12:28	04:35	42m	05:17	38m	05:56	33m	06:30	13h 43m	20:13	33m	20:46	38m	21:24	42m	22:07	10h 18m	6h 30m				Sa, 24. Aug
So, 25. Aug	MESZ	22:04 – 22:47	42m	AN+ bis M↗		22:47	13:51	04:37	42m	05:19	38m	05:57	33m	06:31	13h 39m	20:11	33m	20:44	37m	21:22	41m	22:04	10h 21m	6h 34m				So, 25. Aug
Mo, 26. Aug	MESZ	22:02 – 23:23	1h 21m	AN+ bis M↗	◑	23:23	15:10	04:39	41m	05:20	37m	05:58	33m	06:32	13h 36m	20:09	33m	20:42	37m	21:20	41m	22:02	10h 24m	6h 38m				Mo, 26. Aug
Di, 27. Aug	MESZ	21:59 – 00:09*	2h 09m	AN+ bis M↗		—:—	16:23	04:40	41m	05:22	37m	06:00	33m	06:33	13h 33m	20:07	33m	20:41	37m	21:18	41m	21:59	10h 27m	6h 42m				Di, 27. Aug
Mi, 28. Aug	MESZ	21:57 – 01:06*	3h 09m	AN+ bis M↗		00:09	17:25	04:42	41m	05:24	37m	06:01	33m	06:35	13h 30m	20:05	33m	20:39	37m	21:16	40m	21:57	10h 30m	6h 47m				Mi, 28. Aug
Do, 29. Aug	MESZ	21:55 – 02:12*	4h 17m	AN+ bis M↗		01:06	18:13	04:44	41m	05:25	37m	06:02	33m	06:36	13h 27m	20:03	33m	20:37	37m	21:14	40m	21:55	10h 33m	6h 51m				Do, 29. Aug
Fr, 30. Aug	MESZ	21:52 – 03:23*	5h 30m	AN+ bis M↗		02:12	18:50	04:46	40m	05:27	37m	06:04	33m	06:37	13h 24m	20:01	33m	20:35	37m	21:12	40m	21:52	10h 36m	6h 55m				Fr, 30. Aug
Sa, 31. Aug	MESZ	21:50 – 04:33*	6h 43m	AN+ bis M↗		03:23	19:18	04:48	40m	05:28	37m	06:05	33m	06:38	13h 21m	20:00	33m	20:33	36m	21:10	40m	21:50	10h 40m	6h 59m				Sa, 31. Aug
So, 1. Sep	MESZ	21:47 – 04:51*	7h 03m	AN+ bis AN–		04:33	19:39	04:49	40m	05:30	36m	06:07	33m	06:40	13h 18m	19:58	32m	20:31	36m	21:07	39m	21:47	10h 43m	7h 03m				So, 1. Sep
Mo, 2. Sep	MESZ	21:45 – 04:53*	7h 07m	AN+ bis AN–		05:43	19:57	04:51	39m	05:31	36m	06:08	33m	06:41	13h 14m	19:56	32m	20:29	36m	21:05	39m	21:45	10h 46m	7h 07m				Mo, 2. Sep
Di, 3. Sep	MESZ	21:43 – 04:55*	7h 12m	AN+ bis AN–	●	06:50	20:12	04:53	39m	05:33	36m	06:09	32m	06:42	13h 11m	19:54	32m	20:27	36m	21:03	39m	21:43	10h 49m	7h 12m				Di, 3. Sep
Mi, 4. Sep	MESZ	21:40 – 04:56*	7h 16m	AN+ bis AN–		07:55	20:27	04:55	39m	05:34	36m	06:11	32m	06:43	13h 08m	19:52	32m	20:25	36m	21:01	39m	21:40	10h 52m	7h 16m				Mi, 4. Sep
Do, 5. Sep	MESZ	21:38 – 04:58*	7h 20m	AN+ bis AN–		08:59	20:41	04:56	39m	05:36	36m	06:12	32m	06:45	13h 05m	19:50	32m	20:23	36m	20:59	38m	21:38	10h 55m	7h 20m				Do, 5. Sep
Fr, 6. Sep	MESZ	21:35 – 05:00*	7h 24m	AN+ bis AN–		10:03	20:56	04:58	39m	05:37	36m	06:13	32m	06:46	13h 02m	19:48	32m	20:21	36m	20:57	38m	21:35	10h 59m	7h 24m				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	21:33 – 05:01*	*7h 28m*	AN$_+$ *bis* AN$_-$		11:09	21:13	05:00	*38m*	05:39	*36m*	06:15	*32m*	06:47	*12h 58m*	19:46	*32m*	20:19	*35m*	20:55	*38m*	21:33	*11h 02m*	*7h 28m*				Sa, 7. Sep
So, 8. Sep	MESZ	21:33 – 05:03*	*7h 29m*	M$_\searrow$ *bis* AN$_-$		12:17	21:33	05:01	*38m*	05:40	*35m*	06:16	*32m*	06:49	*12h 55m*	19:44	*32m*	20:17	*35m*	20:52	*38m*	21:31	*11h 05m*	*7h 32m*				So, 8. Sep
Mo, 9. Sep	MESZ	22:00 – 05:05*	*7h 05m*	M$_\searrow$ *bis* AN$_-$		13:26	22:00	05:03	*38m*	05:41	*35m*	06:17	*32m*	06:50	*12h 52m*	19:42	*32m*	20:15	*35m*	20:50	*38m*	21:28	*11h 08m*	*7h 36m*				Mo, 9. Sep
Di, 10. Sep	MESZ	22:34 – 05:06*	*6h 31m*	M$_\searrow$ *bis* AN$_-$		14:36	22:34	05:05	*38m*	05:43	*35m*	06:19	*32m*	06:51	*12h 49m*	19:40	*32m*	20:13	*35m*	20:48	*37m*	21:26	*11h 12m*	*7h 40m*				Di, 10. Sep
Mi, 11. Sep	MESZ	23:21 – 05:08*	*5h 46m*	M$_\searrow$ *bis* AN$_-$	◐	15:42	23:21	05:06	*38m*	05:44	*35m*	06:20	*32m*	06:52	*12h 45m*	19:38	*32m*	20:11	*35m*	20:46	*37m*	21:24	*11h 15m*	*7h 44m*				Mi, 11. Sep
Do, 12. Sep	MESZ	00:21* – 05:09*	*4h 48m*	M$_\searrow$ *bis* AN$_-$		16:40	—:—	05:08	*37m*	05:46	*35m*	06:21	*32m*	06:54	*12h 42m*	19:36	*32m*	20:09	*35m*	20:44	*37m*	21:22	*11h 18m*	*7h 47m*				Do, 12. Sep
Fr, 13. Sep	MESZ	01:34* – 05:11*	*3h 36m*	M$_\searrow$ *bis* AN$_-$		17:28	00:21	05:09	*37m*	05:47	*35m*	06:23	*32m*	06:55	*12h 39m*	19:34	*32m*	20:07	*35m*	20:42	*37m*	21:19	*11h 21m*	*7h 51m*				Fr, 13. Sep
Sa, 14. Sep	MESZ	02:56* – 05:13*	*2h 16m*	M$_\searrow$ *bis* AN$_-$		18:06	01:34	05:11	*37m*	05:49	*35m*	06:24	*32m*	06:56	*12h 36m*	19:32	*32m*	20:04	*35m*	20:40	*37m*	21:17	*11h 24m*	*7h 55m*				Sa, 14. Sep
So, 15. Sep	MESZ	04:21* – 05:14*	*53m*	M$_\searrow$ *bis* AN$_-$		18:35	02:56	05:13	*37m*	05:50	*35m*	06:25	*32m*	06:57	*12h 33m*	19:30	*32m*	20:02	*35m*	20:38	*37m*	21:15	*11h 28m*	*7h 59m*				So, 15. Sep
Mo, 16. Sep	MESZ	—:——:—	–	Mond stört		18:59	04:21	05:14	*37m*	05:51	*35m*	06:27	*32m*	06:59	*12h 29m*	19:28	*32m*	20:00	*35m*	20:35	*36m*	21:12	*11h 31m*	*8h 03m*				Mo, 16. Sep
Di, 17. Sep	MESZ	—:——:—	–	Mond stört		19:19	05:47	05:16	*37m*	05:53	*35m*	06:28	*32m*	07:00	*12h 26m*	19:26	*31m*	19:58	*34m*	20:33	*36m*	21:10	*11h 34m*	*8h 07m*				Di, 17. Sep
Mi, 18. Sep	MESZ	—:——:—	–	Mond stört	○	19:39	07:12	05:17	*36m*	05:54	*34m*	06:29	*32m*	07:01	*12h 23m*	19:24	*31m*	19:56	*34m*	20:31	*36m*	21:08	*11h 37m*	*8h 10m*				Mi, 18. Sep
Do, 19. Sep	MESZ	—:——:—	–	Mond stört		19:58	08:37	05:19	*36m*	05:56	*34m*	06:30	*32m*	07:02	*12h 20m*	19:22	*31m*	19:54	*34m*	20:29	*36m*	21:06	*11h 41m*	*8h 14m*				Do, 19. Sep
Fr, 20. Sep	MESZ	—:——:—	–	Mond stört		20:20	10:03	05:20	*36m*	05:57	*34m*	06:32	*31m*	07:04	*12h 16m*	19:20	*31m*	19:52	*34m*	20:27	*36m*	21:04	*11h 44m*	*8h 18m*				Fr, 20. Sep
Sa, 21. Sep	MESZ	—:——:—	–	Mond stört		20:47	11:29	05:22	*36m*	05:58	*34m*	06:33	*31m*	07:05	*12h 13m*	19:19	*31m*	19:50	*34m*	20:25	*36m*	21:01	*11h 47m*	*8h 21m*				Sa, 21. Sep
So, 22. Sep	MESZ	20:59 – 21:20	*21m*	AN$_+$ *bis* M$_\nearrow$		21:20	12:53	05:23	*36m*	06:00	*34m*	06:34	*31m*	07:06	*12h 10m*	19:17	*31m*	19:48	*34m*	20:23	*36m*	20:59	*11h 51m*	*8h 25m*				So, 22. Sep
Mo, 23. Sep	MESZ	20:57 – 22:04	*1h 06m*	AN$_+$ *bis* M$_\nearrow$		22:04	14:12	05:25	*36m*	06:01	*34m*	06:36	*31m*	07:08	*12h 07m*	19:15	*31m*	19:46	*34m*	20:21	*36m*	20:57	*11h 54m*	*8h 29m*				Mo, 23. Sep
Di, 24. Sep	MESZ	20:55 – 22:59	*2h 03m*	AN$_+$ *bis* M$_\nearrow$	◑	22:59	15:19	05:26	*36m*	06:02	*34m*	06:37	*31m*	07:09	*12h 03m*	19:13	*31m*	19:44	*34m*	20:19	*35m*	20:55	*11h 57m*	*8h 32m*				Di, 24. Sep
Mi, 25. Sep	MESZ	20:53 – 00:03*	*3h 10m*	AN$_+$ *bis* M$_\nearrow$		—:—	16:13	05:28	*36m*	06:04	*34m*	06:38	*31m*	07:10	*12h 00m*	19:11	*31m*	19:42	*34m*	20:17	*35m*	20:53	*12h 00m*	*8h 36m*				Mi, 25. Sep
Do, 26. Sep	MESZ	20:51 – 01:13*	*4h 22m*	AN$_+$ *bis* M$_\nearrow$		00:03	16:53	05:29	*35m*	06:05	*34m*	06:40	*31m*	07:11	*11h 57m*	19:09	*31m*	19:40	*34m*	20:15	*35m*	20:51	*12h 04m*	*8h 39m*				Do, 26. Sep
Fr, 27. Sep	MESZ	20:48 – 02:24*	*5h 35m*	AN$_+$ *bis* M$_\nearrow$		01:13	17:23	05:31	*35m*	06:06	*34m*	06:41	*31m*	07:13	*11h 53m*	19:07	*31m*	19:38	*34m*	20:13	*35m*	20:48	*12h 07m*	*8h 43m*				Fr, 27. Sep
Sa, 28. Sep	MESZ	20:46 – 03:33*	*6h 46m*	AN$_+$ *bis* M$_\nearrow$		02:24	17:46	05:32	*35m*	06:08	*34m*	06:42	*31m*	07:14	*11h 50m*	19:05	*31m*	19:36	*34m*	20:11	*35m*	20:46	*12h 10m*	*8h 47m*				Sa, 28. Sep
So, 29. Sep	MESZ	20:44 – 04:41*	*7h 56m*	AN$_+$ *bis* M$_\nearrow$		03:33	18:04	05:33	*35m*	06:09	*34m*	06:43	*31m*	07:15	*11h 47m*	19:03	*31m*	19:35	*34m*	20:09	*35m*	20:44	*12h 13m*	*8h 50m*				So, 29. Sep
Mo, 30. Sep	MESZ	20:42 – 05:36*	*8h 53m*	AN$_+$ *bis* AN$_-$		04:41	18:20	05:35	*35m*	06:10	*34m*	06:45	*31m*	07:17	*11h 44m*	19:01	*31m*	19:33	*34m*	20:07	*35m*	20:42	*12h 17m*	*8h 53m*				Mo, 30. Sep
Di, 1. Okt	MESZ	20:40 – 05:38*	*8h 57m*	AN$_+$ *bis* AN$_-$		05:46	18:35	05:36	*35m*	06:12	*34m*	06:46	*31m*	07:18	*11h 40m*	18:59	*31m*	19:31	*34m*	20:05	*35m*	20:40	*12h 20m*	*8h 57m*				Di, 1. Okt
Mi, 2. Okt	MESZ	20:38 – 05:39*	*9h 00m*	AN$_+$ *bis* AN$_-$	●	06:50	18:49	05:38	*35m*	06:13	*34m*	06:47	*31m*	07:19	*11h 37m*	18:57	*31m*	19:29	*34m*	20:03	*35m*	20:38	*12h 23m*	*9h 00m*				Mi, 2. Okt
Do, 3. Okt	MESZ	20:36 – 05:40*	*9h 04m*	AN$_+$ *bis* AN$_-$		07:55	19:03	05:39	*35m*	06:14	*34m*	06:49	*31m*	07:21	*11h 34m*	18:55	*31m*	19:27	*34m*	20:01	*35m*	20:36	*12h 26m*	*9h 04m*				Do, 3. Okt
Fr, 4. Okt	MESZ	20:34 – 05:42*	*9h 07m*	AN$_+$ *bis* AN$_-$		09:00	19:19	05:40	*35m*	06:16	*34m*	06:50	*31m*	07:22	*11h 31m*	18:53	*31m*	19:25	*34m*	19:59	*35m*	20:34	*12h 30m*	*9h 07m*				Fr, 4. Okt
Sa, 5. Okt	MESZ	20:32 – 05:43*	*9h 10m*	AN$_+$ *bis* AN$_-$		10:07	19:39	05:42	*35m*	06:17	*34m*	06:51	*31m*	07:23	*11h 27m*	18:51	*31m*	19:23	*34m*	19:57	*35m*	20:32	*12h 33m*	*9h 10m*				Sa, 5. Okt
So, 6. Okt	MESZ	20:30 – 05:45*	*9h 14m*	AN$_+$ *bis* AN$_-$		11:16	20:03	05:43	*35m*	06:18	*34m*	06:53	*31m*	07:24	*11h 24m*	18:49	*31m*	19:21	*34m*	19:55	*35m*	20:30	*12h 36m*	*9h 14m*				So, 6. Okt
Mo, 7. Okt	MESZ	20:34 – 05:46*	*9h 12m*	M$_\searrow$ *bis* AN$_-$		12:25	20:34	05:45	*35m*	06:20	*34m*	06:54	*31m*	07:26	*11h 21m*	18:47	*31m*	19:19	*34m*	19:53	*35m*	20:28	*12h 39m*	*9h 17m*				Mo, 7. Okt
Di, 8. Okt	MESZ	21:15 – 05:47*	*8h 31m*	M$_\searrow$ *bis* AN$_-$		13:32	21:15	05:46	*35m*	06:21	*34m*	06:55	*31m*	07:27	*11h 18m*	18:45	*31m*	19:17	*34m*	19:51	*34m*	20:26	*12h 43m*	*9h 20m*				Di, 8. Okt
Mi, 9. Okt	MESZ	22:09 – 05:49*	*7h 39m*	M$_\searrow$ *bis* AN$_-$		14:32	22:09	05:47	*35m*	06:22	*34m*	06:56	*32m*	07:29	*11h 15m*	18:44	*31m*	19:16	*34m*	19:50	*34m*	20:25	*12h 46m*	*9h 24m*				Mi, 9. Okt
Do, 10. Okt	MESZ	23:15 – 05:50*	*6h 34m*	M$_\searrow$ *bis* AN$_-$	◐	15:23	23:15	05:49	*35m*	06:24	*34m*	06:58	*32m*	07:30	*11h 11m*	18:42	*31m*	19:14	*34m*	19:48	*34m*	20:23	*12h 49m*	*9h 27m*				Do, 10. Okt
Fr, 11. Okt	MESZ	00:31* – 05:51*	*5h 20m*	M$_\searrow$ *bis* AN$_-$		16:03	—:—	05:50	*34m*	06:25	*34m*	06:59	*32m*	07:31	*11h 08m*	18:40	*32m*	19:12	*34m*	19:46	*34m*	20:21	*12h 52m*	*9h 30m*				Fr, 11. Okt
Sa, 12. Okt	MESZ	01:52* – 05:53*	*4h 00m*	M$_\searrow$ *bis* AN$_-$		16:34	00:31	05:51	*34m*	06:26	*34m*	07:00	*32m*	07:33	*11h 05m*	18:38	*32m*	19:10	*34m*	19:44	*34m*	20:19	*12h 55m*	*9h 33m*				Sa, 12. Okt
So, 13. Okt	MESZ	03:15* – 05:54*	*2h 38m*	M$_\searrow$ *bis* AN$_-$		16:59	01:52	05:53	*34m*	06:28	*34m*	07:02	*32m*	07:34	*11h 02m*	18:36	*32m*	19:08	*34m*	19:42	*34m*	20:17	*12h 59m*	*9h 36m*				So, 13. Okt
Mo, 14. Okt	MESZ	04:39* – 05:55*	*1h 16m*	M$_\searrow$ *bis* AN$_-$		17:21	03:15	05:54	*34m*	06:29	*34m*	07:03	*32m*	07:35	*10h 59m*	18:34	*32m*	19:06	*34m*	19:41	*34m*	20:15	*13h 02m*	*9h 39m*				Mo, 14. Okt
Di, 15. Okt	MESZ	—:——:—	–	Mond stört		17:40	04:39	05:55	*34m*	06:30	*34m*	07:04	*32m*	07:37	*10h 55m*	18:33	*32m*	19:05	*34m*	19:39	*34m*	20:14	*13h 05m*	*9h 43m*				Di, 15. Okt
Mi, 16. Okt	MESZ	—:——:—	–	Mond stört		17:59	06:03	05:57	*34m*	06:32	*34m*	07:06	*32m*	07:38	*10h 52m*	18:31	*32m*	19:03	*34m*	19:37	*34m*	20:12	*13h 08m*	*9h 46m*				Mi, 16. Okt
Do, 17. Okt	MESZ	—:——:—	–	Mond stört	○	18:20	07:28	05:58	*34m*	06:33	*34m*	07:07	*32m*	07:39	*10h 49m*	18:29	*32m*	19:01	*34m*	19:35	*34m*	20:10	*13h 11m*	*9h 49m*				Do, 17. Okt
Fr, 18. Okt	MESZ	—:——:—	–	Mond stört		18:45	08:56	05:59	*34m*	06:34	*34m*	07:08	*32m*	07:41	*10h 46m*	18:27	*32m*	19:00	*34m*	19:34	*34m*	20:08	*13h 15m*	*9h 52m*				Fr, 18. Okt
Sa, 19. Okt	MESZ	—:——:—	–	Mond stört		19:15	10:24	06:01	*34m*	06:35	*34m*	07:10	*32m*	07:42	*10h 43m*	18:25	*32m*	18:58	*34m*	19:32	*34m*	20:07	*13h 18m*	*9h 55m*				Sa, 19. Okt
So, 20. Okt	MESZ	—:——:—	–	Mond stört		19:55	11:49	06:02	*34m*	06:37	*34m*	07:11	*32m*	07:44	*10h 40m*	18:24	*32m*	18:56	*34m*	19:30	*34m*	20:05	*13h 21m*	*9h 58m*				So, 20. Okt
Mo, 21. Okt	MESZ	20:04 – 20:47	*43m*	AN$_+$ *bis* M$_\nearrow$		20:47	13:04	06:03	*34m*	06:38	*34m*	07:12	*32m*	07:45	*10h 37m*	18:22	*32m*	18:54	*34m*	19:29	*34m*	20:04	*13h 24m*	*10h 01m*				Mo, 21. Okt
Di, 22. Okt	MESZ	20:02 – 21:50	*1h 48m*	AN$_+$ *bis* M$_\nearrow$		21:50	14:05	06:05	*34m*	06:39	*34m*	07:14	*32m*	07:46	*10h 33m*	18:20	*32m*	18:53	*34m*	19:27	*34m*	20:02	*13h 27m*	*10h 03m*				Di, 22. Okt
Mi, 23. Okt	MESZ	20:00 – 23:00	*3h 00m*	AN$_+$ *bis* M$_\nearrow$		23:00	14:52	06:06	*34m*	06:41	*34m*	07:15	*32m*	07:48	*10h 30m*	18:19	*32m*	18:51	*34m*	19:26	*34m*	20:00	*13h 30m*	*10h 06m*				Mi, 23. Okt
Do, 24. Okt	MESZ	19:59 – 00:13*	*4h 13m*	AN$_+$ *bis* M$_\nearrow$	◑	—:—	15:26	06:07	*34m*	06:42	*34m*	07:16	*32m*	07:49	*10h 27m*	18:17	*32m*	18:50	*34m*	19:24	*34m*	19:59	*13h 33m*	*10h 09m*				Do, 24. Okt
Fr, 25. Okt	MESZ	19:57 – 01:23*	*5h 26m*	AN$_+$ *bis* M$_\nearrow$		00:13	15:51	06:08	*34m*	06:43	*34m*	07:18	*32m*	07:51	*10h 24m*	18:15	*32m*	18:48	*34m*	19:23	*34m*	19:57	*13h 36m*	*10h 12m*				Fr, 25. Okt
Sa, 26. Okt	MESZ	19:56 – 02:31*	*6h 35m*	AN$_+$ *bis* M$_\nearrow$		01:23	16:11	06:10	*34m*	06:45	*34m*	07:19	*32m*	07:52	*10h 21m*	18:14	*32m*	18:47	*34m*	19:21	*34m*	19:56	*13h 39m*	*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		18:54 – 02:37*	7h 42m	AN_+ bis $M_↗$		01:31	15:28	05:11	34m	05:46	34m	06:20	32m	06:53	10h 18m	17:12	32m	17:45	34m	18:20	34m	18:54	13h 42m	10h 17m				So, 27. Okt
Mo, 28. Okt		18:53 – 03:42*	8h 48m	AN_+ bis $M_↗$		02:37	15:42	05:12	34m	05:47	34m	06:22	33m	06:55	10h 15m	17:10	33m	17:44	34m	18:18	34m	18:53	13h 45m	10h 20m				Mo, 28. Okt
Di, 29. Okt		18:52 – 04:46*	9h 54m	AN_+ bis $M_↗$		03:42	15:56	05:14	34m	05:49	34m	06:23	33m	06:56	10h 12m	17:09	33m	17:42	34m	18:17	34m	18:52	13h 48m	10h 23m				Di, 29. Okt
Mi, 30. Okt		18:50 – 05:16*	10h 26m	AN_+ bis AN_-		04:46	16:11	05:15	34m	05:50	34m	06:25	33m	06:58	10h 09m	17:07	33m	17:41	34m	18:15	34m	18:50	13h 51m	10h 26m				Mi, 30. Okt
Do, 31. Okt		18:49 – 05:17*	10h 28m	AN_+ bis AN_-		05:51	16:26	05:16	34m	05:51	34m	06:26	33m	06:59	10h 06m	17:06	33m	17:39	34m	18:14	34m	18:49	13h 54m	10h 28m				Do, 31. Okt
Fr, 1. Nov		18:47 – 05:19*	10h 31m	AN_+ bis AN_-	●	06:57	16:45	05:17	34m	05:52	34m	06:27	33m	07:01	10h 03m	17:04	33m	17:38	34m	18:13	34m	18:47	13h 57m	10h 31m				Fr, 1. Nov
Sa, 2. Nov		18:46 – 05:20*	10h 33m	AN_+ bis AN_-		08:06	17:07	05:19	34m	05:54	34m	06:29	33m	07:02	10h 00m	17:03	33m	17:36	34m	18:11	34m	18:46	14h 00m	10h 33m				Sa, 2. Nov
So, 3. Nov		18:45 – 05:21*	10h 36m	AN_+ bis AN_-		09:16	17:36	05:20	35m	05:55	34m	06:30	33m	07:04	9h 57m	17:02	33m	17:35	34m	18:10	34m	18:45	14h 03m	10h 36m				So, 3. Nov
Mo, 4. Nov		18:44 – 05:23*	10h 38m	AN_+ bis AN_-		10:24	18:15	05:21	35m	05:56	35m	06:31	33m	07:05	9h 55m	17:00	33m	17:34	34m	18:09	34m	18:44	14h 06m	10h 38m				Mo, 4. Nov
Di, 5. Nov		19:04 – 05:24*	10h 19m	$M_↘$ bis AN_-		11:26	19:04	05:23	35m	05:58	35m	06:33	33m	07:06	9h 52m	16:59	33m	17:32	35m	18:08	35m	18:43	14h 09m	10h 41m				Di, 5. Nov
Mi, 6. Nov		20:06 – 05:25*	9h 18m	$M_↘$ bis AN_-		12:20	20:06	05:24	35m	05:59	35m	06:34	33m	07:08	9h 49m	16:57	33m	17:31	35m	18:06	35m	18:41	14h 11m	10h 43m				Mi, 6. Nov
Do, 7. Nov		21:18 – 05:26*	8h 08m	$M_↘$ bis AN_-		13:02	21:18	05:25	35m	06:00	35m	06:35	33m	07:09	9h 46m	16:56	33m	17:30	35m	18:05	35m	18:40	14h 14m	10h 46m				Do, 7. Nov
Fr, 8. Nov		22:35 – 05:28*	6h 52m	$M_↘$ bis AN_-		13:35	22:35	05:26	35m	06:01	35m	06:37	34m	07:11	9h 44m	16:55	34m	17:29	35m	18:04	35m	18:39	14h 17m	10h 48m				Fr, 8. Nov
Sa, 9. Nov		23:54 – 05:29*	5h 34m	$M_↘$ bis AN_-	◐	14:02	23:54	05:28	35m	06:03	35m	06:38	34m	07:12	9h 41m	16:54	34m	17:28	35m	18:03	35m	18:38	14h 20m	10h 50m				Sa, 9. Nov
So, 10. Nov		01:14* – 05:30*	4h 15m	$M_↘$ bis AN_-		14:23	—:—	05:29	35m	06:04	35m	06:39	34m	07:14	9h 38m	16:52	34m	17:26	35m	18:02	35m	18:37	14h 22m	10h 52m				So, 10. Nov
Mo, 11. Nov		02:34* – 05:31*	2h 56m	$M_↘$ bis AN_-		14:43	01:14	05:30	35m	06:05	35m	06:41	34m	07:15	9h 36m	16:51	34m	17:25	35m	18:01	35m	18:36	14h 25m	10h 55m				Mo, 11. Nov
Di, 12. Nov		03:56* – 05:32*	1h 36m	$M_↘$ bis AN_-		15:01	02:34	05:31	35m	06:07	35m	06:42	34m	07:16	9h 33m	16:50	34m	17:24	35m	18:00	35m	18:35	14h 28m	10h 57m				Di, 12. Nov
Mi, 13. Nov		05:21* – 05:34*	12m	$M_↘$ bis AN_-		15:20	03:56	05:32	35m	06:08	35m	06:43	34m	07:18	9h 30m	16:49	34m	17:23	35m	17:59	35m	18:34	14h 30m	10h 59m				Mi, 13. Nov
Do, 14. Nov		—:— – —:—	–	Mond stört		15:42	05:21	05:34	35m	06:09	35m	06:45	34m	07:19	9h 28m	16:48	34m	17:22	35m	17:58	35m	18:33	14h 33m	11h 01m				Do, 14. Nov
Fr, 15. Nov		—:— – —:—	–	Mond stört	○	16:10	06:48	05:35	35m	06:10	35m	06:46	34m	07:21	9h 25m	16:47	34m	17:21	35m	17:57	35m	18:32	14h 35m	11h 03m				Fr, 15. Nov
Sa, 16. Nov		—:— – —:—	–	Mond stört		16:45	08:15	05:36	35m	06:12	35m	06:47	34m	07:22	9h 23m	16:46	34m	17:20	35m	17:56	35m	18:32	14h 37m	11h 05m				Sa, 16. Nov
So, 17. Nov		—:— – —:—	–	Mond stört		17:32	09:38	05:37	35m	06:13	35m	06:49	34m	07:24	9h 21m	16:45	34m	17:19	35m	17:55	35m	18:31	14h 40m	11h 07m				So, 17. Nov
Mo, 18. Nov		18:30 – 18:32	1m	AN_+ bis $M_↗$		18:32	10:48	05:38	35m	06:14	35m	06:50	35m	07:25	9h 18m	16:44	34m	17:19	35m	17:55	35m	18:30	14h 42m	11h 09m				Mo, 18. Nov
Di, 19. Nov		18:29 – 19:41	1h 11m	AN_+ bis $M_↗$		19:41	11:43	05:40	35m	06:15	36m	06:51	35m	07:26	9h 16m	16:43	35m	17:18	36m	17:54	35m	18:29	14h 44m	11h 11m				Di, 19. Nov
Mi, 20. Nov		18:29 – 20:55	2h 26m	AN_+ bis $M_↗$		20:55	12:23	05:41	35m	06:16	36m	06:52	35m	07:28	9h 14m	16:42	35m	17:17	36m	17:53	35m	18:29	14h 47m	11h 13m				Mi, 20. Nov
Do, 21. Nov		18:28 – 22:09	3h 40m	AN_+ bis $M_↗$		22:09	12:53	05:42	35m	06:18	36m	06:54	35m	07:29	9h 11m	16:41	35m	17:16	36m	17:52	35m	18:28	14h 49m	11h 14m				Do, 21. Nov
Fr, 22. Nov		18:28 – 23:19	4h 51m	AN_+ bis $M_↗$		23:19	13:15	05:43	35m	06:19	36m	06:55	35m	07:30	9h 09m	16:40	35m	17:16	36m	17:52	35m	18:28	14h 51m	11h 16m				Fr, 22. Nov
Sa, 23. Nov		18:27 – 00:26*	5h 59m	AN_+ bis $M_↗$	◑	—:—	13:33	05:44	35m	06:20	36m	06:56	35m	07:32	9h 07m	16:39	35m	17:15	36m	17:51	35m	18:27	14h 53m	11h 18m				Sa, 23. Nov
So, 24. Nov		18:26 – 01:31*	7h 04m	AN_+ bis $M_↗$		00:26	13:49	05:45	35m	06:21	36m	06:57	35m	07:33	9h 05m	16:39	35m	17:14	36m	17:51	35m	18:26	14h 55m	11h 19m				So, 24. Nov
Mo, 25. Nov		18:26 – 02:35*	8h 09m	AN_+ bis $M_↗$		01:31	14:03	05:46	35m	06:22	36m	06:59	35m	07:34	9h 03m	16:38	35m	17:14	36m	17:50	35m	18:26	14h 57m	11h 21m				Mo, 25. Nov
Di, 26. Nov		18:26 – 03:40*	9h 14m	AN_+ bis $M_↗$		02:35	14:17	05:47	35m	06:23	36m	07:00	35m	07:36	9h 01m	16:37	35m	17:13	36m	17:50	35m	18:26	14h 59m	11h 22m				Di, 26. Nov
Mi, 27. Nov		18:25 – 04:46*	10h 20m	AN_+ bis $M_↗$		03:40	14:32	05:48	36m	06:24	36m	07:01	35m	07:37	8h 59m	16:37	35m	17:13	36m	17:49	35m	18:25	15h 01m	11h 24m				Mi, 27. Nov
Do, 28. Nov		18:25 – 05:51*	11h 25m	AN_+ bis AN_-		04:46	14:50	05:50	36m	06:26	36m	07:02	35m	07:38	8h 58m	16:36	35m	17:12	36m	17:49	36m	18:25	15h 03m	11h 25m				Do, 28. Nov
Fr, 29. Nov		18:25 – 05:52*	11h 27m	AN_+ bis AN_-		05:54	15:11	05:51	36m	06:27	36m	07:03	36m	07:39	8h 56m	16:36	36m	17:12	36m	17:48	36m	18:25	15h 04m	11h 27m				Fr, 29. Nov
Sa, 30. Nov		18:24 – 05:53*	11h 28m	AN_+ bis AN_-		07:04	15:38	05:52	36m	06:28	36m	07:05	36m	07:41	8h 54m	16:35	36m	17:11	36m	17:48	36m	18:24	15h 06m	11h 28m				Sa, 30. Nov
So, 1. Dez		18:24 – 05:54*	11h 29m	AN_+ bis AN_-	●	08:13	16:14	05:53	36m	06:29	36m	07:06	36m	07:42	8h 52m	16:35	36m	17:11	36m	17:48	36m	18:24	15h 08m	11h 29m				So, 1. Dez
Mo, 2. Dez		18:24 – 05:55*	11h 30m	AN_+ bis AN_-		09:19	17:00	05:54	36m	06:30	36m	07:07	36m	07:43	8h 51m	16:34	36m	17:11	36m	17:48	36m	18:24	15h 09m	11h 30m				Mo, 2. Dez
Di, 3. Dez		18:24 – 05:56*	11h 31m	AN_+ bis AN_-		10:16	18:00	05:55	36m	06:31	36m	07:08	36m	07:44	8h 49m	16:34	36m	17:10	36m	17:47	36m	18:24	15h 11m	11h 31m				Di, 3. Dez
Mi, 4. Dez		19:09 – 05:56*	10h 47m	$M_↘$ bis AN_-		11:02	19:09	05:56	36m	06:32	37m	07:09	36m	07:45	8h 48m	16:34	36m	17:10	36m	17:47	36m	18:23	15h 12m	11h 32m				Mi, 4. Dez
Do, 5. Dez		20:25 – 05:57*	9h 32m	$M_↘$ bis AN_-		11:38	20:25	05:56	36m	06:33	37m	07:10	36m	07:46	8h 47m	16:34	36m	17:10	37m	17:47	36m	18:23	15h 13m	11h 33m				Do, 5. Dez
Fr, 6. Dez		21:43 – 05:58*	8h 15m	$M_↘$ bis AN_-		12:05	21:43	05:57	36m	06:34	37m	07:11	36m	07:47	8h 45m	16:33	36m	17:10	37m	17:47	36m	18:23	15h 15m	11h 34m				Fr, 6. Dez
Sa, 7. Dez		23:01 – 05:59*	6h 57m	$M_↘$ bis AN_-		12:28	23:01	05:58	36m	06:35	37m	07:12	36m	07:48	8h 44m	16:33	36m	17:10	37m	17:47	36m	18:23	15h 16m	11h 35m				Sa, 7. Dez
So, 8. Dez		00:19* – 06:00*	5h 41m	$M_↘$ bis AN_-	◐	12:47	—:—	05:59	36m	06:36	37m	07:13	36m	07:49	8h 43m	16:33	36m	17:10	37m	17:47	36m	18:23	15h 17m	11h 36m				So, 8. Dez
Mo, 9. Dez		01:37* – 06:01*	4h 23m	$M_↘$ bis AN_-		13:05	00:19	06:00	36m	06:36	37m	07:14	36m	07:50	8h 42m	16:33	36m	17:10	37m	17:47	36m	18:23	15h 18m	11h 37m				Mo, 9. Dez
Di, 10. Dez		02:57* – 06:02*	3h 04m	$M_↘$ bis AN_-		13:23	01:37	06:01	36m	06:37	37m	07:15	36m	07:51	8h 41m	16:33	36m	17:10	37m	17:47	36m	18:24	15h 19m	11h 38m				Di, 10. Dez
Mi, 11. Dez		04:20* – 06:02*	1h 42m	$M_↘$ bis AN_-		13:43	02:57	06:02	36m	06:38	37m	07:15	36m	07:52	8h 40m	16:33	36m	17:10	37m	17:47	36m	18:24	15h 20m	11h 38m				Mi, 11. Dez
Do, 12. Dez		05:45* – 06:03*	18m	$M_↘$ bis AN_-		14:07	04:20	06:02	36m	06:39	37m	07:16	36m	07:53	8h 40m	16:33	36m	17:10	37m	17:47	36m	18:24	15h 20m	11h 39m				Do, 12. Dez
Fr, 13. Dez		—:— – —:—	–	Mond stört		14:38	05:45	06:03	36m	06:40	37m	07:17	36m	07:54	8h 39m	16:33	36m	17:10	37m	17:48	36m	18:24	15h 21m	11h 39m				Fr, 13. Dez
Sa, 14. Dez		—:— – —:—	–	Mond stört		15:18	07:09	06:04	36m	06:40	37m	07:18	36m	07:55	8h 38m	16:33	36m	17:10	37m	17:48	36m	18:24	15h 22m	11h 40m				Sa, 14. Dez
So, 15. Dez		—:— – —:—	–	Mond stört	○	16:12	08:25	06:05	36m	06:41	37m	07:19	36m	07:55	8h 38m	16:34	36m	17:11	37m	17:48	36m	18:25	15h 22m	11h 40m				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		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*		
Mo, 16. Dez		—:——:—	–	Mond stört		17:18	09:28	06:05	*36m*	06:42	*37m*	07:19	*36m*	07:56	*8h 37m*	16:34	*36m*	17:11	*37m*	17:48	*36m*	18:25	*15h 22m*	*11h 40m*				Mo, 16. Dez
Di, 17. Dez		18:25 – 18:32	*6m*	AN_+ *bis* $M_↗$		18:32	10:16	06:06	*36m*	06:42	*37m*	07:20	*37m*	07:57	*8h 37m*	16:34	*37m*	17:11	*37m*	17:49	*36m*	18:25	*15h 23m*	*11h 41m*				Di, 17. Dez
Mi, 18. Dez		18:26 – 19:48	*1h 22m*	AN_+ *bis* $M_↗$		19:48	10:50	06:06	*36m*	06:43	*37m*	07:20	*37m*	07:58	*8h 37m*	16:35	*37m*	17:12	*37m*	17:49	*36m*	18:26	*15h 23m*	*11h 41m*				Mi, 18. Dez
Do, 19. Dez		18:26 – 21:01	*2h 35m*	AN_+ *bis* $M_↗$		21:01	11:16	06:07	*36m*	06:44	*37m*	07:21	*37m*	07:58	*8h 36m*	16:35	*37m*	17:12	*37m*	17:49	*36m*	18:26	*15h 23m*	*11h 41m*				Do, 19. Dez
Fr, 20. Dez		18:27 – 22:11	*3h 44m*	AN_+ *bis* $M_↗$		22:11	11:36	06:08	*36m*	06:44	*37m*	07:22	*37m*	07:59	*8h 36m*	16:35	*37m*	17:12	*37m*	17:50	*36m*	18:27	*15h 23m*	*11h 41m*				Fr, 20. Dez
Sa, 21. Dez		18:27 – 23:18	*4h 50m*	AN_+ *bis* $M_↗$		23:18	11:53	06:08	*36m*	06:45	*37m*	07:22	*37m*	07:59	*8h 36m*	16:36	*37m*	17:13	*37m*	17:50	*36m*	18:27	*15h 23m*	*11h 41m*				Sa, 21. Dez
So, 22. Dez		18:28 – 00:23*	*5h 55m*	AN_+ *bis* $M_↗$	◑	—:—	12:08	06:09	*36m*	06:45	*37m*	07:23	*37m*	08:00	*8h 36m*	16:36	*37m*	17:13	*37m*	17:51	*36m*	18:28	*15h 23m*	*11h 41m*				So, 22. Dez
Mo, 23. Dez		18:28 – 01:27*	*6h 58m*	AN_+ *bis* $M_↗$		00:23	12:22	06:09	*36m*	06:46	*37m*	07:23	*37m*	08:00	*8h 36m*	16:37	*37m*	17:14	*37m*	17:51	*36m*	18:28	*15h 23m*	*11h 41m*				Mo, 23. Dez
Di, 24. Dez		18:29 – 02:32*	*8h 03m*	AN_+ *bis* $M_↗$		01:27	12:37	06:09	*36m*	06:46	*37m*	07:23	*37m*	08:01	*8h 37m*	16:38	*37m*	17:15	*37m*	17:52	*36m*	18:29	*15h 23m*	*11h 41m*				Di, 24. Dez
Mi, 25. Dez		18:29 – 03:39*	*9h 09m*	AN_+ *bis* $M_↗$		02:32	12:54	06:10	*36m*	06:46	*37m*	07:24	*37m*	08:01	*8h 37m*	16:38	*37m*	17:15	*37m*	17:53	*36m*	18:29	*15h 22m*	*11h 40m*				Mi, 25. Dez
Do, 26. Dez		18:30 – 04:48*	*10h 18m*	AN_+ *bis* $M_↗$		03:39	13:13	06:10	*36m*	06:47	*37m*	07:24	*36m*	08:01	*8h 37m*	16:39	*36m*	17:16	*37m*	17:53	*36m*	18:30	*15h 22m*	*11h 40m*				Do, 26. Dez
Fr, 27. Dez		18:31 – 05:58*	*11h 27m*	AN_+ *bis* $M_↗$		04:48	13:38	06:11	*36m*	06:47	*37m*	07:24	*36m*	08:01	*8h 38m*	16:40	*36m*	17:17	*37m*	17:54	*36m*	18:31	*15h 21m*	*11h 40m*				Fr, 27. Dez
Sa, 28. Dez		18:31 – 06:11*	*11h 39m*	AN_+ *bis* AN_-		05:58	14:10	06:11	*36m*	06:47	*37m*	07:25	*36m*	08:02	*8h 38m*	16:40	*36m*	17:17	*37m*	17:55	*36m*	18:31	*15h 21m*	*11h 39m*				Sa, 28. Dez
So, 29. Dez		18:32 – 06:11*	*11h 39m*	AN_+ *bis* AN_-		07:06	14:53	06:11	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 39m*	16:41	*36m*	17:18	*37m*	17:56	*36m*	18:32	*15h 20m*	*11h 39m*				So, 29. Dez
Mo, 30. Dez		18:33 – 06:11*	*11h 38m*	AN_+ *bis* AN_-	●	08:07	15:48	06:11	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 40m*	16:42	*36m*	17:19	*37m*	17:56	*36m*	18:33	*15h 19m*	*11h 38m*				Mo, 30. Dez
Di, 31. Dez		18:34 – 06:12*	*11h 37m*	AN_+ *bis* AN_-		08:58	16:56	06:11	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 40m*	16:43	*36m*	17:20	*37m*	17:57	*36m*	18:34	*15h 19m*	*11h 37m*				Di, 31. Dez
Mi, 1. Jan		18:34 – 06:12*	*11h 37m*	AN_+ *bis* AN_-		09:38	18:12	06:12	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 41m*	16:44	*36m*	17:21	*37m*	17:58	*36m*	18:34	*15h 18m*	*11h 37m*				Mi, 1. Jan
Do, 2. Jan		19:32 – 06:12*	*10h 40m*	$M_↘$ *bis* AN_-		10:08	19:32	06:12	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 42m*	16:45	*36m*	17:22	*37m*	17:59	*36m*	18:35	*15h 17m*	*11h 36m*				Do, 2. Jan
Fr, 3. Jan		20:51 – 06:12*	*9h 20m*	$M_↘$ *bis* AN_-		10:33	20:51	06:12	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 43m*	16:46	*36m*	17:23	*37m*	18:00	*36m*	18:36	*15h 15m*	*11h 35m*				Fr, 3. Jan
Sa, 4. Jan		22:09 – 06:12*	*8h 02m*	$M_↘$ *bis* AN_-		10:53	22:09	06:12	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 45m*	16:47	*36m*	17:24	*37m*	18:01	*36m*	18:37	*15h 14m*	*11h 34m*				Sa, 4. Jan
So, 5. Jan		23:27 – 06:12*	*6h 45m*	$M_↘$ *bis* AN_-		11:11	23:27	06:12	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 46m*	16:48	*36m*	17:25	*37m*	18:02	*36m*	18:38	*15h 13m*	*11h 33m*				So, 5. Jan
Mo, 6. Jan		00:45* – 06:12*	*5h 26m*	$M_↘$ *bis* AN_-		11:29	—:—	06:12	*36m*	06:48	*37m*	07:25	*36m*	08:02	*8h 47m*	16:49	*36m*	17:26	*37m*	18:03	*36m*	18:39	*15h 12m*	*11h 32m*				Mo, 6. Jan
Di, 7. Jan		02:05* – 06:12*	*4h 06m*	$M_↘$ *bis* AN_-	◐	11:48	00:45	06:12	*36m*	06:48	*36m*	07:25	*36m*	08:01	*8h 48m*	16:50	*36m*	17:27	*36m*	18:04	*36m*	18:40	*15h 10m*	*11h 31m*				Di, 7. Jan
Mi, 8. Jan		03:27* – 06:11*	*2h 44m*	$M_↘$ *bis* AN_-		12:09	02:05	06:12	*36m*	06:48	*36m*	07:25	*36m*	08:01	*8h 50m*	16:51	*36m*	17:28	*36m*	18:05	*36m*	18:41	*15h 09m*	*11h 30m*				Mi, 8. Jan
Do, 9. Jan		04:49* – 06:11*	*1h 22m*	$M_↘$ *bis* AN_-		12:36	03:27	06:11	*36m*	06:48	*36m*	07:24	*36m*	08:01	*8h 51m*	16:53	*36m*	17:29	*36m*	18:06	*36m*	18:42	*15h 07m*	*11h 29m*				Do, 9. Jan
Fr, 10. Jan		06:06* – 06:11*	*4m*	$M_↘$ *bis* AN_-		13:12	04:49	06:11	*36m*	06:47	*36m*	07:24	*36m*	08:00	*8h 53m*	16:54	*36m*	17:30	*36m*	18:07	*36m*	18:43	*15h 06m*	*11h 28m*				Fr, 10. Jan
Sa, 11. Jan		—:——:—	–	Mond stört		13:58	06:06	06:11	*36m*	06:47	*36m*	07:24	*36m*	08:00	*8h 54m*	16:55	*36m*	17:31	*36m*	18:08	*36m*	18:44	*15h 04m*	*11h 26m*				Sa, 11. Jan
So, 12. Jan		—:——:—	–	Mond stört		14:58	07:14	06:11	*36m*	06:47	*36m*	07:23	*36m*	07:59	*8h 56m*	16:56	*36m*	17:32	*36m*	18:09	*36m*	18:45	*15h 02m*	*11h 25m*				So, 12. Jan
Mo, 13. Jan		—:——:—	–	Mond stört	○	16:09	08:07	06:10	*36m*	06:46	*36m*	07:23	*35m*	07:59	*8h 58m*	16:57	*35m*	17:33	*36m*	18:10	*36m*	18:46	*15h 00m*	*11h 23m*				Mo, 13. Jan
Di, 14. Jan		—:——:—	–	Mond stört		17:25	08:47	06:10	*35m*	06:46	*36m*	07:23	*35m*	07:58	*9h 00m*	16:59	*35m*	17:35	*36m*	18:11	*36m*	18:47	*14h 59m*	*11h 22m*				Di, 14. Jan
Mi, 15. Jan		—:——:—	–	Mond stört		18:40	09:16	06:10	*35m*	06:46	*36m*	07:22	*35m*	07:58	*9h 02m*	17:00	*35m*	17:36	*36m*	18:12	*35m*	18:48	*14h 57m*	*11h 20m*				Mi, 15. Jan
Do, 16. Jan		18:49 – 19:52	*1h 03m*	AN_+ *bis* $M_↗$		19:52	09:39	06:09	*35m*	06:45	*36m*	07:22	*35m*	07:57	*9h 04m*	17:01	*35m*	17:37	*36m*	18:13	*35m*	18:49	*14h 55m*	*11h 19m*				Do, 16. Jan
Fr, 17. Jan		18:51 – 21:01	*2h 10m*	AN_+ *bis* $M_↗$		21:01	09:57	06:09	*35m*	06:45	*36m*	07:21	*35m*	07:57	*9h 06m*	17:03	*35m*	17:38	*36m*	18:15	*35m*	18:51	*14h 53m*	*11h 17m*				Fr, 17. Jan
Sa, 18. Jan		18:52 – 22:08	*3h 16m*	AN_+ *bis* $M_↗$		22:08	10:12	06:08	*35m*	06:44	*36m*	07:20	*35m*	07:56	*9h 08m*	17:04	*35m*	17:40	*36m*	18:16	*35m*	18:52	*14h 51m*	*11h 16m*				Sa, 18. Jan
So, 19. Jan		18:53 – 23:13	*4h 20m*	AN_+ *bis* $M_↗$		23:13	10:27	06:08	*35m*	06:43	*36m*	07:20	*35m*	07:55	*9h 10m*	17:05	*35m*	17:41	*36m*	18:17	*35m*	18:53	*14h 48m*	*11h 14m*				So, 19. Jan
Mo, 20. Jan		18:54 – 00:18*	*5h 23m*	AN_+ *bis* $M_↗$		—:—	10:41	06:07	*35m*	06:43	*36m*	07:19	*35m*	07:54	*9h 12m*	17:07	*35m*	17:42	*36m*	18:18	*35m*	18:54	*14h 46m*	*11h 12m*				Mo, 20. Jan
Di, 21. Jan		18:55 – 01:24*	*6h 28m*	AN_+ *bis* $M_↗$	◑	00:18	10:57	06:07	*35m*	06:42	*36m*	07:18	*35m*	07:53	*9h 14m*	17:08	*35m*	17:43	*36m*	18:20	*35m*	18:55	*14h 44m*	*11h 10m*				Di, 21. Jan
Mi, 22. Jan		18:56 – 02:32*	*7h 35m*	AN_+ *bis* $M_↗$		01:24	11:15	06:06	*35m*	06:41	*36m*	07:17	*35m*	07:53	*9h 17m*	17:10	*35m*	17:45	*36m*	18:21	*35m*	18:56	*14h 42m*	*11h 08m*				Mi, 22. Jan
Do, 23. Jan		18:58 – 03:41*	*8h 43m*	AN_+ *bis* $M_↗$		02:32	11:37	06:05	*35m*	06:41	*35m*	07:17	*34m*	07:52	*9h 19m*	17:11	*34m*	17:46	*35m*	18:22	*35m*	18:58	*14h 39m*	*11h 06m*				Do, 23. Jan
Fr, 24. Jan		18:59 – 04:49*	*9h 50m*	AN_+ *bis* $M_↗$		03:41	12:05	06:04	*35m*	06:40	*35m*	07:16	*34m*	07:51	*9h 21m*	17:13	*34m*	17:47	*35m*	18:23	*35m*	18:59	*14h 37m*	*11h 04m*				Fr, 24. Jan
Sa, 25. Jan		19:00 – 05:54*	*10h 53m*	AN_+ *bis* $M_↗$		04:49	12:43	06:04	*35m*	06:39	*35m*	07:15	*34m*	07:50	*9h 24m*	17:14	*34m*	17:49	*35m*	18:25	*35m*	19:00	*14h 34m*	*11h 02m*				Sa, 25. Jan
So, 26. Jan		19:01 – 06:02*	*11h 00m*	AN_+ *bis* AN_-		05:54	13:33	06:03	*35m*	06:38	*35m*	07:14	*34m*	07:49	*9h 26m*	17:15	*34m*	17:50	*35m*	18:26	*35m*	19:01	*14h 32m*	*11h 00m*				So, 26. Jan
Mo, 27. Jan		19:03 – 06:01*	*10h 58m*	AN_+ *bis* AN_-		06:49	14:36	06:02	*35m*	06:37	*35m*	07:13	*34m*	07:48	*9h 29m*	17:17	*34m*	17:51	*35m*	18:27	*35m*	19:03	*14h 29m*	*10h 58m*				Mo, 27. Jan
Di, 28. Jan		19:04 – 06:00*	*10h 56m*	AN_+ *bis* AN_-		07:34	15:50	06:01	*35m*	06:37	*35m*	07:12	*34m*	07:47	*9h 31m*	17:18	*34m*	17:53	*35m*	18:28	*35m*	19:04	*14h 27m*	*10h 56m*				Di, 28. Jan
Mi, 29. Jan		19:05 – 05:59*	*10h 54m*	AN_+ *bis* AN_-	●	08:08	17:10	06:00	*35m*	06:36	*35m*	07:11	*34m*	07:45	*9h 34m*	17:20	*34m*	17:54	*35m*	18:30	*35m*	19:05	*14h 24m*	*10h 54m*				Mi, 29. Jan
Do, 30. Jan		19:06 – 05:58*	*10h 52m*	AN_+ *bis* AN_-		08:35	18:32	05:59	*35m*	06:35	*35m*	07:10	*34m*	07:44	*9h 37m*	17:21	*34m*	17:56	*35m*	18:31	*35m*	19:06	*14h 21m*	*10h 52m*				Do, 30. Jan
Fr, 31. Jan		19:54 – 05:57*	*10h 03m*	$M_↘$ *bis* AN_-		08:57	19:54	05:58	*35m*	06:34	*35m*	07:09	*34m*	07:43	*9h 39m*	17:23	*34m*	17:57	*35m*	18:32	*35m*	19:08	*14h 19m*	*10h 49m*				Fr, 31. Jan
Sa, 1. Feb		21:14 – 05:56*	*8h 42m*	$M_↘$ *bis* AN_-		09:16	21:14	05:57	*35m*	06:33	*35m*	07:08	*34m*	07:42	*9h 42m*	17:24	*34m*	17:58	*35m*	18:34	*35m*	19:09	*14h 16m*	*10h 47m*				Sa, 1. Feb
So, 2. Feb		22:33 – 05:55*	*7h 21m*	$M_↘$ *bis* AN_-		09:34	22:33	05:56	*35m*	06:31	*35m*	07:07	*33m*	07:41	*9h 45m*	17:26	*33m*	18:00	*35m*	18:35	*35m*	19:10	*14h 13m*	*10h 45m*				So, 2. Feb
Mo, 3. Feb		23:54 – 05:54*	*6h 00m*	$M_↘$ *bis* AN_-		09:53	23:54	05:55	*35m*	06:30	*35m*	07:06	*33m*	07:39	*9h 47m*	17:27	*33m*	18:01	*35m*	18:36	*35m*	19:12	*14h 10m*	*10h 42m*				Mo, 3. Feb