Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Elmshorn 53.7547° N 9.6536° 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		18:24 – 22:07	3h 43m	AN_+ bis $M_↗$		22:07	11:32	06:25	42m	07:08	44m	07:52	45m	08:38	7h 32m	16:11	45m	16:56	44m	17:41	42m	18:24	16h 27m	12h 01m				Mo, 1. Jan
Di, 2. Jan		18:25 – 23:19	4h 54m	AN_+ bis $M_↗$		23:19	11:40	06:25	42m	07:08	44m	07:52	45m	08:38	7h 33m	16:12	45m	16:57	44m	17:42	42m	18:25	16h 25m	12h 00m				Di, 2. Jan
Mi, 3. Jan		18:26 – 00:32*	6h 06m	AN_+ bis $M_↗$		—:—	11:47	06:25	42m	07:08	44m	07:52	45m	08:38	7h 35m	16:13	45m	16:58	44m	17:43	42m	18:26	16h 24m	11h 59m				Mi, 3. Jan
Do, 4. Jan		18:27 – 01:46*	7h 19m	AN_+ bis $M_↗$	◑	00:32	11:55	06:25	42m	07:08	44m	07:52	45m	08:37	7h 36m	16:14	45m	16:59	44m	17:44	42m	18:27	16h 22m	11h 58m				Do, 4. Jan
Fr, 5. Jan		18:28 – 03:04*	8h 36m	AN_+ bis $M_↗$		01:46	12:03	06:25	42m	07:07	44m	07:52	45m	08:37	7h 38m	16:15	45m	17:01	44m	17:45	42m	18:28	16h 21m	11h 57m				Fr, 5. Jan
Sa, 6. Jan		18:29 – 04:26*	9h 57m	AN_+ bis $M_↗$		03:04	12:14	06:25	42m	07:07	44m	07:51	45m	08:37	7h 40m	16:17	45m	17:02	44m	17:46	42m	18:29	16h 19m	11h 55m				Sa, 6. Jan
So, 7. Jan		18:30 – 05:52*	11h 22m	AN_+ bis $M_↗$		04:26	12:29	06:24	42m	07:07	44m	07:51	44m	08:36	7h 42m	16:18	44m	17:03	44m	17:47	42m	18:30	16h 17m	11h 54m				So, 7. Jan
Mo, 8. Jan		18:31 – 06:24*	11h 52m	AN_+ bis AN_-		05:52	12:52	06:24	42m	07:07	44m	07:51	44m	08:36	7h 43m	16:19	44m	17:04	44m	17:48	42m	18:31	16h 15m	11h 52m				Mo, 8. Jan
Di, 9. Jan		18:32 – 06:23*	11h 51m	AN_+ bis AN_-		07:16	13:29	06:24	42m	07:06	44m	07:50	44m	08:35	7h 45m	16:21	44m	17:06	44m	17:50	42m	18:32	16h 13m	11h 51m				Di, 9. Jan
Mi, 10. Jan		18:33 – 06:23*	11h 49m	AN_+ bis AN_-		08:28	14:26	06:23	42m	07:06	43m	07:50	44m	08:34	7h 48m	16:22	44m	17:07	43m	17:51	42m	18:33	16h 11m	11h 49m				Mi, 10. Jan
Do, 11. Jan		18:35 – 06:23*	11h 48m	AN_+ bis AN_-	●	09:21	15:47	06:23	42m	07:05	43m	07:49	44m	08:34	7h 50m	16:24	44m	17:08	43m	17:52	42m	18:35	16h 08m	11h 48m				Do, 11. Jan
Fr, 12. Jan		18:36 – 06:22*	11h 46m	AN_+ bis AN_-		09:55	17:21	06:23	42m	07:05	43m	07:49	44m	08:33	7h 52m	16:25	44m	17:10	43m	17:53	42m	18:36	16h 06m	11h 46m				Fr, 12. Jan
Sa, 13. Jan		19:00 – 06:22*	11h 21m	$M_↘$ bis AN_-		10:17	19:00	06:22	42m	07:04	43m	07:48	44m	08:32	7h 55m	16:27	44m	17:11	43m	17:55	42m	18:37	16h 04m	11h 44m				Sa, 13. Jan
So, 14. Jan		20:35 – 06:21*	9h 45m	$M_↘$ bis AN_-		10:33	20:35	06:22	42m	07:04	43m	07:47	43m	08:31	7h 57m	16:29	43m	17:13	43m	17:56	42m	18:38	16h 01m	11h 42m				So, 14. Jan
Mo, 15. Jan		22:07 – 06:20*	8h 13m	$M_↘$ bis AN_-		10:44	22:07	06:21	42m	07:03	43m	07:47	43m	08:30	8h 00m	16:30	43m	17:14	43m	17:58	42m	18:40	15h 58m	11h 40m				Mo, 15. Jan
Di, 16. Jan		23:36 – 06:20*	6h 44m	$M_↘$ bis AN_-		10:54	23:36	06:20	42m	07:02	43m	07:46	43m	08:29	8h 02m	16:32	43m	17:16	43m	17:59	42m	18:41	15h 56m	11h 38m				Di, 16. Jan
Mi, 17. Jan		01:03* – 06:19*	5h 15m	$M_↘$ bis AN_-		11:04	—:—	06:20	41m	07:02	43m	07:45	43m	08:28	8h 05m	16:34	43m	17:17	43m	18:00	41m	18:42	15h 53m	11h 36m				Mi, 17. Jan
Do, 18. Jan		02:30* – 06:18*	3h 47m	$M_↘$ bis AN_-	◐	11:14	01:03	06:19	41m	07:01	43m	07:44	43m	08:27	8h 08m	16:36	43m	17:19	43m	18:02	41m	18:44	15h 50m	11h 34m				Do, 18. Jan
Fr, 19. Jan		03:58* – 06:17*	2h 19m	$M_↘$ bis AN_-		11:27	02:30	06:18	41m	07:00	42m	07:43	43m	08:26	8h 11m	16:37	43m	17:20	43m	18:03	41m	18:45	15h 47m	11h 32m				Fr, 19. Jan
Sa, 20. Jan		05:22* – 06:16*	54m	$M_↘$ bis AN_-		11:45	03:58	06:17	41m	06:59	42m	07:42	42m	08:25	8h 14m	16:39	42m	17:22	42m	18:05	41m	18:47	15h 44m	11h 29m				Sa, 20. Jan
So, 21. Jan		—:——:—	–	Mond stört		12:10	05:22	06:16	41m	06:58	42m	07:41	42m	08:24	8h 17m	16:41	42m	17:24	42m	18:06	41m	18:48	15h 41m	11h 27m				So, 21. Jan
Mo, 22. Jan		—:——:—	–	Mond stört		12:47	06:39	06:16	41m	06:57	42m	07:40	42m	08:22	8h 20m	16:43	42m	17:25	42m	18:08	41m	18:50	15h 38m	11h 24m				Mo, 22. Jan
Di, 23. Jan		—:——:—	–	Mond stört		13:40	07:41	06:15	41m	06:56	42m	07:39	42m	08:21	8h 23m	16:45	42m	17:27	42m	18:10	41m	18:51	15h 35m	11h 22m				Di, 23. Jan
Mi, 24. Jan		—:——:—	–	Mond stört		14:48	08:25	06:14	41m	06:55	42m	07:38	42m	08:20	8h 26m	16:46	42m	17:29	42m	18:11	41m	18:53	15h 31m	11h 19m				Mi, 24. Jan
Do, 25. Jan		—:——:—	–	Mond stört	○	16:03	08:55	06:13	41m	06:54	42m	07:36	42m	08:18	8h 29m	16:48	42m	17:30	42m	18:13	41m	18:54	15h 28m	11h 17m				Do, 25. Jan
Fr, 26. Jan		—:——:—	–	Mond stört		17:22	09:15	06:11	41m	06:53	42m	07:35	41m	08:17	8h 33m	16:50	41m	17:32	42m	18:14	41m	18:56	15h 25m	11h 14m				Fr, 26. Jan
Sa, 27. Jan		—:——:—	–	Mond stört		18:38	09:29	06:10	41m	06:52	42m	07:34	41m	08:15	8h 36m	16:52	41m	17:34	42m	18:16	41m	18:57	15h 21m	11h 11m				Sa, 27. Jan
So, 28. Jan		18:59 – 19:53	53m	AN_+ bis $M_↗$		19:53	09:39	06:09	41m	06:50	41m	07:32	41m	08:14	8h 40m	16:54	41m	17:36	42m	18:18	41m	18:59	15h 18m	11h 08m				So, 28. Jan
Mo, 29. Jan		19:01 – 21:05	2h 04m	AN_+ bis $M_↗$		21:05	09:48	06:08	41m	06:49	41m	07:31	41m	08:12	8h 43m	16:56	41m	17:37	41m	18:19	41m	19:01	15h 14m	11h 06m				Mo, 29. Jan
Di, 30. Jan		19:02 – 22:17	3h 15m	AN_+ bis $M_↗$		22:17	09:55	06:07	41m	06:48	41m	07:30	41m	08:11	8h 47m	16:58	41m	17:39	41m	18:21	41m	19:02	15h 11m	11h 03m				Di, 30. Jan
Mi, 31. Jan		19:04 – 23:30	4h 26m	AN_+ bis $M_↗$		23:30	10:02	06:05	41m	06:46	41m	07:28	41m	08:09	8h 50m	17:00	41m	17:41	41m	18:23	41m	19:04	15h 07m	11h 00m				Mi, 31. Jan
Do, 1. Feb		19:05 – 00:45*	5h 39m	AN_+ bis $M_↗$		—:—	10:10	06:04	41m	06:45	41m	07:27	40m	08:07	8h 54m	17:02	40m	17:43	41m	18:24	41m	19:05	15h 03m	10h 57m				Do, 1. Feb
Fr, 2. Feb		19:07 – 02:04*	6h 56m	AN_+ bis $M_↗$		00:45	10:19	06:03	40m	06:44	41m	07:25	40m	08:06	8h 58m	17:04	40m	17:45	41m	18:26	41m	19:07	15h 00m	10h 54m				Fr, 2. Feb
Sa, 3. Feb		19:09 – 03:26*	8h 17m	AN_+ bis $M_↗$	◑	02:04	10:32	06:01	40m	06:42	41m	07:24	40m	08:04	9h 01m	17:06	40m	17:46	41m	18:28	41m	19:09	14h 56m	10h 50m				Sa, 3. Feb
So, 4. Feb		19:11 – 04:50*	9h 39m	AN_+ bis $M_↗$		03:26	10:50	06:00	40m	06:41	41m	07:22	40m	08:02	9h 05m	17:08	40m	17:48	41m	18:30	40m	19:11	14h 52m	10h 47m				So, 4. Feb
Mo, 5. Feb		19:12 – 05:57*	10h 44m	AN_+ bis AN_-		04:50	11:19	05:58	40m	06:39	41m	07:20	40m	08:00	9h 09m	17:10	40m	17:50	41m	18:31	40m	19:12	14h 48m	10h 44m				Mo, 5. Feb
Di, 6. Feb		19:14 – 05:55*	10h 41m	AN_+ bis AN_-		06:07	12:04	05:57	40m	06:38	41m	07:19	40m	07:59	9h 13m	17:12	40m	17:52	41m	18:33	40m	19:14	14h 44m	10h 41m				Di, 6. Feb
Mi, 7. Feb		19:16 – 05:54*	10h 37m	AN_+ bis AN_-		07:09	13:13	05:55	40m	06:36	40m	07:17	39m	07:57	9h 17m	17:14	39m	17:54	41m	18:35	40m	19:16	14h 41m	10h 37m				Mi, 7. Feb
Do, 8. Feb		19:17 – 05:52*	10h 34m	AN_+ bis AN_-		07:51	14:41	05:54	40m	06:34	40m	07:15	39m	07:55	9h 20m	17:16	39m	17:56	40m	18:37	40m	19:17	14h 37m	10h 34m				Do, 8. Feb
Fr, 9. Feb		19:19 – 05:50*	10h 31m	AN_+ bis AN_-	●	08:19	16:20	05:52	40m	06:33	40m	07:13	39m	07:53	9h 24m	17:18	39m	17:58	40m	18:38	40m	19:19	14h 33m	10h 31m				Fr, 9. Feb
Sa, 10. Feb		19:21 – 05:48*	10h 27m	AN_+ bis AN_-		08:37	18:00	05:50	40m	06:31	40m	07:12	39m	07:51	9h 28m	17:20	39m	17:59	40m	18:40	40m	19:21	14h 29m	10h 27m				Sa, 10. Feb
So, 11. Feb		19:37 – 05:47*	10h 09m	$M_↘$ bis AN_-		08:50	19:37	05:48	40m	06:29	40m	07:10	39m	07:49	9h 32m	17:22	39m	18:01	40m	18:42	40m	19:23	14h 25m	10h 24m				So, 11. Feb
Mo, 12. Feb		21:11 – 05:45*	8h 33m	$M_↘$ bis AN_-		09:01	21:11	05:47	40m	06:27	40m	07:08	39m	07:47	9h 36m	17:24	39m	18:03	40m	18:44	40m	19:24	14h 21m	10h 20m				Mo, 12. Feb
Di, 13. Feb		22:43 – 05:43*	7h 00m	$M_↘$ bis AN_-		09:11	22:43	05:45	40m	06:26	40m	07:06	39m	07:45	9h 40m	17:26	39m	18:05	40m	18:46	40m	19:26	14h 17m	10h 16m				Di, 13. Feb
Mi, 14. Feb		00:14* – 05:41*	5h 27m	$M_↘$ bis AN_-		09:21	—:—	05:43	40m	06:24	40m	07:04	38m	07:43	9h 44m	17:28	38m	18:07	40m	18:47	40m	19:28	14h 13m	10h 13m				Mi, 14. Feb
Do, 15. Feb		01:44* – 05:39*	3h 55m	$M_↘$ bis AN_-		09:33	00:14	05:41	40m	06:22	40m	07:02	38m	07:41	9h 48m	17:30	38m	18:09	40m	18:49	40m	19:30	14h 08m	10h 09m				Do, 15. Feb
Fr, 16. Feb		03:11* – 05:37*	2h 26m	$M_↘$ bis AN_-	◐	09:49	01:44	05:39	40m	06:20	40m	07:00	38m	07:39	9h 53m	17:32	38m	18:11	40m	18:51	40m	19:32	14h 04m	10h 05m				Fr, 16. Feb
Sa, 17. Feb		04:32* – 05:35*	1h 03m	$M_↘$ bis AN_-		10:12	03:11	05:37	40m	06:18	40m	06:58	38m	07:37	9h 57m	17:34	38m	18:13	40m	18:53	40m	19:33	14h 00m	10h 02m				Sa, 17. Feb
So, 18. Feb		—:——:—	–	Mond stört		10:45	04:32	05:35	40m	06:16	40m	06:56	38m	07:35	10h 01m	17:36	38m	18:14	40m	18:55	40m	19:35	13h 56m	9h 58m				So, 18. Feb
Mo, 19. Feb		—:——:—	–	Mond stört		11:33	05:38	05:33	40m	06:14	40m	06:54	38m	07:32	10h 05m	17:38	38m	18:16	40m	18:56	40m	19:37	13h 52m	9h 54m				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		12:36	06:27	05:31	*40m*	06:12	*40m*	06:52	*38m*	07:30	*10h 09m*	17:40	*38m*	18:18	*40m*	18:58	*40m*	19:39	*13h 48m*	*9h 50m*				Di, 20. Feb
Mi, 21. Feb		—:——:—	–	Mond stört		13:50	07:00	05:29	*40m*	06:10	*39m*	06:50	*38m*	07:28	*10h 13m*	17:42	*38m*	18:20	*40m*	19:00	*40m*	19:41	*13h 44m*	*9h 46m*				Mi, 21. Feb
Do, 22. Feb		—:——:—	–	Mond stört		15:08	07:22	05:27	*40m*	06:08	*39m*	06:48	*38m*	07:26	*10h 17m*	17:44	*38m*	18:22	*40m*	19:02	*40m*	19:43	*13h 39m*	*9h 42m*				Do, 22. Feb
Fr, 23. Feb		—:——:—	–	Mond stört		16:25	07:37	05:25	*40m*	06:06	*39m*	06:46	*37m*	07:24	*10h 22m*	17:46	*38m*	18:24	*40m*	19:04	*40m*	19:45	*13h 35m*	*9h 38m*				Fr, 23. Feb
Sa, 24. Feb		—:——:—	–	Mond stört	○	17:40	07:48	05:23	*40m*	06:04	*39m*	06:44	*37m*	07:21	*10h 26m*	17:48	*37m*	18:26	*39m*	19:06	*40m*	19:46	*13h 31m*	*9h 34m*				Sa, 24. Feb
So, 25. Feb		—:——:—	–	Mond stört		18:54	07:57	05:21	*40m*	06:02	*39m*	06:41	*37m*	07:19	*10h 30m*	17:50	*37m*	18:28	*39m*	19:07	*40m*	19:48	*13h 27m*	*9h 30m*				So, 25. Feb
Mo, 26. Feb		19:50 – 20:06	*15m*	AN$_+$ *bis* M↗		20:06	08:04	05:19	*40m*	05:59	*39m*	06:39	*37m*	07:17	*10h 34m*	17:52	*37m*	18:29	*39m*	19:09	*40m*	19:50	*13h 23m*	*9h 26m*				Mo, 26. Feb
Di, 27. Feb		19:52 – 21:18	*1h 25m*	AN$_+$ *bis* M↗		21:18	08:11	05:16	*40m*	05:57	*39m*	06:37	*37m*	07:15	*10h 38m*	17:54	*37m*	18:31	*39m*	19:11	*40m*	19:52	*13h 18m*	*9h 21m*				Di, 27. Feb
Mi, 28. Feb		19:54 – 22:32	*2h 37m*	AN$_+$ *bis* M↗		22:32	08:18	05:14	*40m*	05:55	*39m*	06:35	*37m*	07:12	*10h 43m*	17:56	*37m*	18:33	*39m*	19:13	*41m*	19:54	*13h 14m*	*9h 17m*				Mi, 28. Feb
Do, 29. Feb		19:56 – 23:49	*3h 52m*	AN$_+$ *bis* M↗		23:49	08:27	05:12	*40m*	05:53	*39m*	06:33	*37m*	07:10	*10h 47m*	17:57	*37m*	18:35	*39m*	19:15	*41m*	19:56	*13h 10m*	*9h 13m*				Do, 29. Feb
Fr, 1. Mär		19:58 – 01:09*	*5h 10m*	AN$_+$ *bis* M↗		—:—	08:38	05:09	*41m*	05:50	*39m*	06:30	*37m*	07:08	*10h 51m*	17:59	*37m*	18:37	*39m*	19:17	*41m*	19:58	*13h 05m*	*9h 09m*				Fr, 1. Mär
Sa, 2. Mär		20:00 – 02:30*	*6h 30m*	AN$_+$ *bis* M↗		01:09	08:53	05:07	*41m*	05:48	*39m*	06:28	*37m*	07:05	*10h 55m*	18:01	*37m*	18:39	*39m*	19:19	*41m*	20:00	*13h 01m*	*9h 04m*				Sa, 2. Mär
So, 3. Mär		20:02 – 03:49*	*7h 47m*	AN$_+$ *bis* M↗	◑	02:30	09:16	05:05	*41m*	05:46	*39m*	06:26	*37m*	07:03	*11h 00m*	18:03	*37m*	18:41	*39m*	19:21	*41m*	20:02	*12h 57m*	*9h 00m*				So, 3. Mär
Mo, 4. Mär		20:04 – 04:56*	*8h 52m*	AN$_+$ *bis* M↗		03:49	09:52	05:02	*41m*	05:44	*39m*	06:23	*37m*	07:01	*11h 04m*	18:05	*37m*	18:43	*39m*	19:23	*41m*	20:04	*12h 53m*	*8h 55m*				Mo, 4. Mär
Di, 5. Mär		20:06 – 04:57*	*8h 51m*	AN$_+$ *bis* AN$_-$		04:56	10:48	05:00	*41m*	05:41	*39m*	06:21	*37m*	06:58	*11h 08m*	18:07	*37m*	18:44	*39m*	19:24	*41m*	20:06	*12h 48m*	*8h 51m*				Di, 5. Mär
Mi, 6. Mär		20:08 – 04:55*	*8h 46m*	AN$_+$ *bis* AN$_-$		05:46	12:05	04:57	*41m*	05:39	*39m*	06:19	*37m*	06:56	*11h 13m*	18:09	*37m*	18:46	*40m*	19:26	*41m*	20:08	*12h 44m*	*8h 46m*				Mi, 6. Mär
Do, 7. Mär		20:10 – 04:52*	*8h 42m*	AN$_+$ *bis* AN$_-$		06:18	13:39	04:55	*41m*	05:36	*39m*	06:16	*37m*	06:54	*11h 17m*	18:11	*37m*	18:48	*40m*	19:28	*41m*	20:10	*12h 40m*	*8h 42m*				Do, 7. Mär
Fr, 8. Mär		20:12 – 04:50*	*8h 37m*	AN$_+$ *bis* AN$_-$		06:40	15:18	04:52	*41m*	05:34	*39m*	06:14	*37m*	06:51	*11h 21m*	18:13	*37m*	18:50	*40m*	19:30	*41m*	20:12	*12h 35m*	*8h 37m*				Fr, 8. Mär
Sa, 9. Mär		20:14 – 04:47*	*8h 33m*	AN$_+$ *bis* AN$_-$		06:55	16:57	04:50	*41m*	05:32	*39m*	06:12	*37m*	06:49	*11h 25m*	18:15	*37m*	18:52	*40m*	19:32	*42m*	20:14	*12h 31m*	*8h 33m*				Sa, 9. Mär
So, 10. Mär		20:16 – 04:45*	*8h 28m*	AN$_+$ *bis* AN$_-$	●	07:07	18:33	04:47	*41m*	05:29	*40m*	06:09	*37m*	06:46	*11h 30m*	18:17	*37m*	18:54	*40m*	19:34	*42m*	20:16	*12h 27m*	*8h 28m*				So, 10. Mär
Mo, 11. Mär		20:18 – 04:42*	*8h 23m*	AN$_+$ *bis* AN$_-$		07:17	20:08	04:45	*42m*	05:27	*40m*	06:07	*37m*	06:44	*11h 34m*	18:19	*37m*	18:56	*40m*	19:36	*42m*	20:18	*12h 23m*	*8h 23m*				Mo, 11. Mär
Di, 12. Mär		21:43 – 04:39*	*6h 56m*	M↘ *bis* AN$_-$		07:27	21:43	04:42	*42m*	05:24	*40m*	06:04	*37m*	06:42	*11h 38m*	18:20	*37m*	18:58	*40m*	19:38	*42m*	20:20	*12h 18m*	*8h 19m*				Di, 12. Mär
Mi, 13. Mär		23:17 – 04:37*	*5h 19m*	M↘ *bis* AN$_-$		07:38	23:17	04:39	*42m*	05:22	*40m*	06:02	*37m*	06:39	*11h 43m*	18:22	*37m*	19:00	*40m*	19:40	*42m*	20:23	*12h 14m*	*8h 14m*				Mi, 13. Mär
Do, 14. Mär		00:50* – 04:34*	*3h 43m*	M↘ *bis* AN$_-$		07:53	—:—	04:37	*42m*	05:19	*40m*	06:00	*37m*	06:37	*11h 47m*	18:24	*37m*	19:01	*40m*	19:42	*42m*	20:25	*12h 10m*	*8h 09m*				Do, 14. Mär
Fr, 15. Mär		02:18* – 04:31*	*2h 13m*	M↘ *bis* AN$_-$		08:13	00:50	04:34	*42m*	05:17	*40m*	05:57	*37m*	06:34	*11h 51m*	18:26	*37m*	19:03	*40m*	19:44	*42m*	20:27	*12h 05m*	*8h 04m*				Fr, 15. Mär
Sa, 16. Mär		03:32* – 04:29*	*56m*	M↘ *bis* AN$_-$		08:42	02:18	04:31	*42m*	05:14	*40m*	05:55	*37m*	06:32	*11h 56m*	18:28	*37m*	19:05	*40m*	19:46	*43m*	20:29	*12h 01m*	*7h 59m*				Sa, 16. Mär
So, 17. Mär		—:——:—	–	Mond stört	◐	09:26	03:32	04:29	*43m*	05:12	*40m*	05:52	*37m*	06:29	*12h 00m*	18:30	*37m*	19:07	*40m*	19:48	*43m*	20:31	*11h 57m*	*7h 54m*				So, 17. Mär
Mo, 18. Mär		—:——:—	–	Mond stört		10:26	04:27	04:26	*43m*	05:09	*40m*	05:50	*37m*	06:27	*12h 04m*	18:32	*37m*	19:09	*40m*	19:50	*43m*	20:33	*11h 52m*	*7h 49m*				Mo, 18. Mär
Di, 19. Mär		—:——:—	–	Mond stört		11:37	05:05	04:23	*43m*	05:07	*40m*	05:47	*37m*	06:25	*12h 09m*	18:34	*37m*	19:11	*40m*	19:52	*43m*	20:36	*11h 48m*	*7h 44m*				Di, 19. Mär
Mi, 20. Mär		—:——:—	–	Mond stört		12:55	05:30	04:20	*43m*	05:04	*40m*	05:45	*37m*	06:22	*12h 13m*	18:35	*37m*	19:13	*41m*	19:54	*44m*	20:38	*11h 44m*	*7h 39m*				Mi, 20. Mär
Do, 21. Mär		—:——:—	–	Mond stört		14:12	05:46	04:17	*43m*	05:01	*40m*	05:42	*37m*	06:20	*12h 17m*	18:37	*37m*	19:15	*41m*	19:56	*44m*	20:40	*11h 39m*	*7h 34m*				Do, 21. Mär
Fr, 22. Mär		—:——:—	–	Mond stört		15:28	05:58	04:15	*44m*	04:59	*41m*	05:40	*37m*	06:17	*12h 21m*	18:39	*37m*	19:17	*41m*	19:58	*44m*	20:42	*11h 35m*	*7h 29m*				Fr, 22. Mär
Sa, 23. Mär		—:——:—	–	Mond stört		16:42	06:07	04:12	*44m*	04:56	*41m*	05:37	*37m*	06:15	*12h 26m*	18:41	*37m*	19:19	*41m*	20:00	*44m*	20:45	*11h 31m*	*7h 23m*				Sa, 23. Mär
So, 24. Mär		—:——:—	–	Mond stört		17:54	06:14	04:09	*44m*	04:53	*41m*	05:35	*37m*	06:12	*12h 30m*	18:43	*37m*	19:20	*41m*	20:02	*45m*	20:47	*11h 26m*	*7h 18m*				So, 24. Mär
Mo, 25. Mär		—:——:—	–	Mond stört	○	19:07	06:21	04:06	*45m*	04:51	*41m*	05:32	*37m*	06:10	*12h 34m*	18:45	*37m*	19:22	*41m*	20:04	*45m*	20:50	*11h 22m*	*7h 13m*				Mo, 25. Mär
Di, 26. Mär		—:——:—	–	Mond stört		20:21	06:28	04:03	*45m*	04:48	*41m*	05:30	*37m*	06:07	*12h 39m*	18:47	*37m*	19:24	*41m*	20:06	*45m*	20:52	*11h 18m*	*7h 07m*				Di, 26. Mär
Mi, 27. Mär		20:54 – 21:37	*42m*	AN$_+$ *bis* M↗		21:37	06:36	04:00	*45m*	04:45	*41m*	05:27	*37m*	06:05	*12h 43m*	18:48	*37m*	19:26	*42m*	20:08	*46m*	20:54	*11h 14m*	*7h 02m*				Mi, 27. Mär
Do, 28. Mär		20:57 – 22:56	*1h 59m*	AN$_+$ *bis* M↗		22:56	06:46	03:57	*45m*	04:43	*41m*	05:25	*37m*	06:02	*12h 47m*	18:50	*37m*	19:28	*42m*	20:10	*46m*	20:57	*11h 09m*	*6h 56m*				Do, 28. Mär
Fr, 29. Mär		20:59 – 00:17*	*3h 17m*	AN$_+$ *bis* M↗		—:—	07:00	03:54	*46m*	04:40	*42m*	05:22	*37m*	06:00	*12h 52m*	18:52	*37m*	19:30	*42m*	20:13	*46m*	20:59	*11h 05m*	*6h 51m*				Fr, 29. Mär
Sa, 30. Mär		21:02 – 01:37*	*4h 35m*	AN$_+$ *bis* M↗		00:17	07:19	03:51	*46m*	04:37	*42m*	05:20	*37m*	05:58	*12h 56m*	18:54	*38m*	19:32	*42m*	20:15	*47m*	21:02	*11h 01m*	*6h 45m*				Sa, 30. Mär
So, 31. Mär	MESZ	22:04 – 03:47*	*5h 43m*	AN$_+$ *bis* M↗		02:37	08:49	04:48	*47m*	05:35	*42m*	06:17	*38m*	06:55	*13h 00m*	19:56	*38m*	20:34	*42m*	21:17	*47m*	22:04	*10h 56m*	*6h 40m*				So, 31. Mär
Mo, 1. Apr	MESZ	22:07 – 04:41*	*6h 34m*	AN$_+$ *bis* AN$_-$		03:47	09:36	04:44	*47m*	05:32	*42m*	06:15	*38m*	06:53	*13h 04m*	19:58	*38m*	20:36	*43m*	21:19	*47m*	22:07	*10h 52m*	*6h 34m*				Mo, 1. Apr
Di, 2. Apr	MESZ	22:09 – 04:38*	*6h 28m*	AN$_+$ *bis* AN$_-$	◑	04:42	10:44	04:41	*47m*	05:29	*42m*	06:12	*38m*	06:50	*13h 09m*	19:59	*38m*	20:38	*43m*	21:21	*48m*	22:09	*10h 48m*	*6h 28m*				Di, 2. Apr
Mi, 3. Apr	MESZ	22:12 – 04:35*	*6h 22m*	AN$_+$ *bis* AN$_-$		05:19	12:09	04:38	*48m*	05:26	*43m*	06:10	*38m*	06:48	*13h 13m*	20:01	*38m*	20:40	*43m*	21:23	*48m*	22:12	*10h 44m*	*6h 22m*				Mi, 3. Apr
Do, 4. Apr	MESZ	22:15 – 04:32*	*6h 16m*	AN$_+$ *bis* AN$_-$		05:44	13:43	04:35	*48m*	05:24	*43m*	06:07	*38m*	06:45	*13h 17m*	20:03	*38m*	20:42	*43m*	21:26	*49m*	22:15	*10h 39m*	*6h 16m*				Do, 4. Apr
Fr, 5. Apr	MESZ	22:17 – 04:28*	*6h 10m*	AN$_+$ *bis* AN$_-$		06:00	15:19	04:32	*49m*	05:21	*43m*	06:04	*38m*	06:43	*13h 21m*	20:05	*38m*	20:44	*43m*	21:28	*49m*	22:17	*10h 35m*	*6h 10m*				Fr, 5. Apr
Sa, 6. Apr	MESZ	22:20 – 04:25*	*6h 04m*	AN$_+$ *bis* AN$_-$		06:13	16:54	04:28	*49m*	05:18	*43m*	06:02	*38m*	06:41	*13h 26m*	20:07	*38m*	20:46	*44m*	21:30	*50m*	22:20	*10h 31m*	*6h 04m*				Sa, 6. Apr
So, 7. Apr	MESZ	22:23 – 04:22*	*5h 58m*	AN$_+$ *bis* AN$_-$		06:23	18:29	04:25	*50m*	05:15	*44m*	05:59	*38m*	06:38	*13h 30m*	20:09	*39m*	20:48	*44m*	21:32	*50m*	22:23	*10h 27m*	*5h 58m*				So, 7. Apr
Mo, 8. Apr	MESZ	22:26 – 04:18*	*5h 52m*	AN$_+$ *bis* AN$_-$	●	06:33	20:04	04:22	*50m*	05:12	*44m*	05:57	*38m*	06:36	*13h 34m*	20:11	*39m*	20:50	*44m*	21:35	*51m*	22:26	*10h 22m*	*5h 52m*				Mo, 8. Apr
Di, 9. Apr	MESZ	22:29 – 04:15*	*5h 46m*	AN$_+$ *bis* AN$_-$		06:44	21:40	04:18	*51m*	05:10	*44m*	05:54	*39m*	06:33	*13h 38m*	20:12	*39m*	20:52	*45m*	21:37	*51m*	22:29	*10h 18m*	*5h 46m*				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		Δt		Ph.	↗	↘	Astr.	Δt	Naut.	Δt	Bürg.	Δt	↗	Δt	↘	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Mi, 10. Apr	MESZ	23:16 – 04:11*	*4h 55m*	M↘ *bis* AN_		06:57	23:16	04:15	*51m*	05:07	*45m*	05:52	*39m*	06:31	*13h 43m*	20:14	*39m*	20:54	*45m*	21:39	*52m*	22:32	*10h 14m*	*5h 39m*				Mi, 10. Apr
Do, 11. Apr	MESZ	00:50* – 04:08*	*3h 17m*	M↘ *bis* AN_		07:14	—:—	04:11	*52m*	05:04	*45m*	05:49	*39m*	06:29	*13h 47m*	20:16	*39m*	20:56	*45m*	21:41	*53m*	22:35	*10h 10m*	*5h 33m*				Do, 11. Apr
Fr, 12. Apr	MESZ	02:14* – 04:04*	*1h 50m*	M↘ *bis* AN_		07:39	00:50	04:08	*53m*	05:01	*45m*	05:47	*39m*	06:26	*13h 51m*	20:18	*39m*	20:58	*46m*	21:44	*53m*	22:38	*10h 06m*	*5h 26m*				Fr, 12. Apr
Sa, 13. Apr	MESZ	03:20* – 04:01*	*41m*	M↘ *bis* AN_		08:17	02:14	04:04	*53m*	04:58	*45m*	05:44	*39m*	06:24	*13h 55m*	20:20	*40m*	21:00	*46m*	21:46	*54m*	22:41	*10h 01m*	*5h 20m*				Sa, 13. Apr
So, 14. Apr	MESZ	—:——:—	–	Mond stört		09:12	03:20	04:01	*54m*	04:55	*46m*	05:42	*39m*	06:22	*13h 59m*	20:22	*40m*	21:02	*46m*	21:49	*55m*	22:44	*9h 57m*	*5h 13m*				So, 14. Apr
Mo, 15. Apr	MESZ	—:——:—	–	Mond stört	◐	10:22	04:05	03:57	*55m*	04:53	*46m*	05:39	*40m*	06:19	*14h 04m*	20:23	*40m*	21:04	*47m*	21:51	*56m*	22:47	*9h 53m*	*5h 06m*				Mo, 15. Apr
Di, 16. Apr	MESZ	—:——:—	–	Mond stört		11:39	04:34	03:54	*56m*	04:50	*47m*	05:37	*40m*	06:17	*14h 08m*	20:25	*40m*	21:06	*47m*	21:53	*56m*	22:50	*9h 49m*	*4h 59m*				Di, 16. Apr
Mi, 17. Apr	MESZ	—:——:—	–	Mond stört		12:58	04:54	03:50	*56m*	04:47	*47m*	05:34	*40m*	06:15	*14h 12m*	20:27	*40m*	21:08	*47m*	21:56	*57m*	22:54	*9h 45m*	*4h 52m*				Mi, 17. Apr
Do, 18. Apr	MESZ	—:——:—	–	Mond stört		14:15	05:07	03:46	*57m*	04:44	*47m*	05:32	*40m*	06:12	*14h 16m*	20:29	*40m*	21:10	*48m*	21:58	*58m*	22:57	*9h 41m*	*4h 45m*				Do, 18. Apr
Fr, 19. Apr	MESZ	—:——:—	–	Mond stört		15:29	05:16	03:42	*58m*	04:41	*48m*	05:29	*40m*	06:10	*14h 20m*	20:31	*41m*	21:12	*48m*	22:01	*59m*	23:00	*9h 37m*	*4h 38m*				Fr, 19. Apr
Sa, 20. Apr	MESZ	—:——:—	–	Mond stört		16:42	05:24	03:39	*59m*	04:38	*48m*	05:27	*41m*	06:08	*14h 24m*	20:33	*41m*	21:14	*49m*	22:03	*1h 00m*	23:04	*9h 32m*	*4h 30m*				Sa, 20. Apr
So, 21. Apr	MESZ	—:——:—	–	Mond stört		17:54	05:31	03:35	*1h 00m*	04:35	*48m*	05:24	*41m*	06:06	*14h 28m*	20:35	*41m*	21:16	*49m*	22:06	*1h 01m*	23:07	*9h 28m*	*4h 23m*				So, 21. Apr
Mo, 22. Apr	MESZ	—:——:—	–	Mond stört		19:08	05:38	03:31	*1h 01m*	04:32	*49m*	05:22	*41m*	06:03	*14h 32m*	20:36	*41m*	21:18	*49m*	22:08	*1h 02m*	23:11	*9h 24m*	*4h 15m*				Mo, 22. Apr
Di, 23. Apr	MESZ	—:——:—	–	Mond stört		20:23	05:46	03:27	*1h 02m*	04:29	*49m*	05:19	*41m*	06:01	*14h 37m*	20:38	*42m*	21:20	*50m*	22:11	*1h 04m*	23:15	*9h 20m*	*4h 07m*				Di, 23. Apr
Mi, 24. Apr	MESZ	—:——:—	–	Mond stört	○	21:42	05:55	03:23	*1h 04m*	04:27	*50m*	05:17	*42m*	05:59	*14h 41m*	20:40	*42m*	21:22	*50m*	22:13	*1h 05m*	23:19	*9h 16m*	*3h 59m*				Mi, 24. Apr
Do, 25. Apr	MESZ	—:——:—	–	Mond stört		23:04	06:07	03:18	*1h 05m*	04:24	*50m*	05:15	*42m*	05:57	*14h 45m*	20:42	*42m*	21:25	*51m*	22:16	*1h 06m*	23:23	*9h 12m*	*3h 51m*				Do, 25. Apr
Fr, 26. Apr	MESZ	23:27 – 00:25*	*58m*	AN+ *bis* M↗		—:—	06:25	03:14	*1h 06m*	04:21	*51m*	05:12	*42m*	05:55	*14h 49m*	20:44	*42m*	21:27	*51m*	22:18	*1h 08m*	23:27	*9h 08m*	*3h 42m*				Fr, 26. Apr
Sa, 27. Apr	MESZ	23:31 – 01:40*	*2h 08m*	AN+ *bis* M↗		00:25	06:52	03:10	*1h 08m*	04:18	*51m*	05:10	*42m*	05:53	*14h 53m*	20:46	*43m*	21:29	*52m*	22:21	*1h 09m*	23:31	*9h 04m*	*3h 34m*				Sa, 27. Apr
So, 28. Apr	MESZ	23:35 – 02:39*	*3h 03m*	AN+ *bis* M↗		01:40	07:33	03:05	*1h 09m*	04:15	*52m*	05:07	*43m*	05:50	*14h 56m*	20:47	*43m*	21:31	*52m*	22:24	*1h 11m*	23:35	*9h 00m*	*3h 25m*				So, 28. Apr
Mo, 29. Apr	MESZ	23:40 – 02:56*	*3h 15m*	AN+ *bis* AN_		02:39	08:34	03:01	*1h 11m*	04:12	*52m*	05:05	*43m*	05:48	*15h 00m*	20:49	*43m*	21:33	*53m*	22:26	*1h 13m*	23:40	*8h 57m*	*3h 15m*				Mo, 29. Apr
Di, 30. Apr	MESZ	23:45 – 02:51*	*3h 06m*	AN+ *bis* AN_		03:21	09:53	02:56	*1h 13m*	04:09	*53m*	05:03	*43m*	05:46	*15h 04m*	20:51	*43m*	21:35	*54m*	22:29	*1h 15m*	23:45	*8h 53m*	*3h 06m*				Di, 30. Apr
Mi, 1. Mai	MESZ	23:49 – 02:46*	*2h 56m*	AN+ *bis* AN_	◑	03:48	11:22	02:51	*1h 15m*	04:06	*54m*	05:00	*43m*	05:44	*15h 08m*	20:53	*44m*	21:37	*54m*	22:32	*1h 17m*	23:49	*8h 49m*	*2h 56m*				Mi, 1. Mai
Do, 2. Mai	MESZ	23:55 – 02:40*	*2h 45m*	AN+ *bis* AN_		04:07	12:55	02:46	*1h 17m*	04:03	*54m*	04:58	*44m*	05:42	*15h 12m*	20:55	*44m*	21:39	*55m*	22:35	*1h 20m*	23:55	*8h 45m*	*2h 45m*				Do, 2. Mai
Fr, 3. Mai	MESZ	00:00* – 02:35*	*2h 34m*	AN+ *bis* AN_		04:20	14:27	02:40	*1h 20m*	04:00	*55m*	04:56	*44m*	05:40	*15h 16m*	20:56	*44m*	21:41	*56m*	22:37	*1h 22m*	00:00*	*8h 41m*	*2h 34m*				Fr, 3. Mai
Sa, 4. Mai	MESZ	00:06* – 02:29*	*2h 22m*	AN+ *bis* AN_		04:31	15:59	02:35	*1h 22m*	03:57	*55m*	04:53	*44m*	05:38	*15h 20m*	20:58	*45m*	21:43	*56m*	22:40	*1h 25m*	00:06*	*8h 37m*	*2h 22m*				Sa, 4. Mai
So, 5. Mai	MESZ	00:12* – 02:22*	*2h 10m*	AN+ *bis* AN_		04:40	17:30	02:29	*1h 25m*	03:54	*56m*	04:51	*45m*	05:36	*15h 23m*	21:00	*45m*	21:45	*57m*	22:43	*1h 29m*	00:12*	*8h 34m*	*2h 10m*				So, 5. Mai
Mo, 6. Mai	MESZ	00:19* – 02:15*	*1h 56m*	AN+ *bis* AN_		04:50	19:03	02:22	*1h 29m*	03:52	*57m*	04:49	*45m*	05:34	*15h 27m*	21:02	*45m*	21:48	*58m*	22:46	*1h 33m*	00:19*	*8h 30m*	*1h 56m*				Mo, 6. Mai
Di, 7. Mai	MESZ	00:27* – 02:08*	*1h 41m*	AN+ *bis* AN_		05:02	20:39	02:15	*1h 33m*	03:49	*58m*	04:47	*45m*	05:32	*15h 31m*	21:04	*46m*	21:50	*58m*	22:48	*1h 38m*	00:27*	*8h 26m*	*1h 41m*				Di, 7. Mai
Mi, 8. Mai	MESZ	00:36* – 01:59*	*1h 23m*	AN+ *bis* AN_	●	05:16	22:15	02:08	*1h 38m*	03:46	*58m*	04:44	*46m*	05:30	*15h 34m*	21:05	*46m*	21:52	*59m*	22:51	*1h 44m*	00:36*	*8h 23m*	*1h 23m*				Mi, 8. Mai
Do, 9. Mai	MESZ	00:47* – 01:47*	*1h 00m*	AN+ *bis* AN_		05:38	23:46	01:59	*1h 44m*	03:43	*59m*	04:42	*46m*	05:29	*15h 38m*	21:07	*46m*	21:54	*1h 00m*	22:54	*1h 52m*	00:47*	*8h 19m*	*1h 00m*				Do, 9. Mai
Fr, 10. Mai	MESZ	01:06* – 01:28*	*21m*	AN+ *bis* AN_		06:10	—:—	01:47	*1h 52m*	03:40	*1h 00m*	04:40	*46m*	05:27	*15h 42m*	21:09	*47m*	21:56	*1h 01m*	22:57	*2h 09m*	01:06*	*8h 16m*	*21m*				Fr, 10. Mai
Sa, 11. Mai	MESZ			Astr. MD		06:57	01:02	01:28	*2h 09m*	03:37	*1h 01m*	04:38	*47m*	05:25	*15h 45m*	21:11	*47m*	21:58	*1h 01m*	23:00		—:—	*8h 12m*		01:58* – 03:34*	*1h 35m*	M↘ *bis* ND_	Sa, 11. Mai
So, 12. Mai	MESZ			Astr. MD		08:03	01:58	—:—		03:34	*1h 01m*	04:36	*47m*	05:23	*15h 49m*	21:12	*47m*	22:00	*1h 02m*	23:03		—:—	*8h 09m*		02:35* – 03:31*	*56m*	M↘ *bis* ND_	So, 12. Mai
Mo, 13. Mai	MESZ			Astr. MD		09:19	02:35	—:—		03:31	*1h 02m*	04:34	*47m*	05:22	*15h 52m*	21:14	*48m*	22:02	*1h 03m*	23:06		—:—	*8h 05m*		02:58* – 03:28*	*30m*	M↘ *bis* ND_	Mo, 13. Mai
Di, 14. Mai	MESZ			Astr. MD		10:40	02:58	—:—		03:28	*1h 03m*	04:32	*48m*	05:20	*15h 55m*	21:16	*48m*	22:04	*1h 04m*	23:09		—:—	*8h 02m*		03:13* – 03:25*	*11m*	M↘ *bis* ND_	Di, 14. Mai
Mi, 15. Mai	MESZ			Astr. MD	◐	11:58	03:13	—:—		03:25	*1h 04m*	04:30	*48m*	05:18	*15h 59m*	21:17	*48m*	22:06	*1h 05m*	23:12		—:—	*7h 59m*		—:——:—	–	Mond stört	Mi, 15. Mai
Do, 16. Mai	MESZ			Astr. MD		13:14	03:25	—:—		03:22	*1h 05m*	04:28	*48m*	05:17	*16h 02m*	21:19	*49m*	22:08	*1h 06m*	23:15		—:—	*7h 56m*		—:——:—	–	Mond stört	Do, 16. Mai
Fr, 17. Mai	MESZ			Astr. MD		14:27	03:33	—:—		03:19	*1h 06m*	04:26	*49m*	05:15	*16h 05m*	21:21	*49m*	22:10	*1h 07m*	23:18		—:—	*7h 52m*		—:——:—	–	Mond stört	Fr, 17. Mai
Sa, 18. Mai	MESZ			Astr. MD		15:40	03:41	—:—		03:17	*1h 07m*	04:24	*49m*	05:13	*16h 08m*	21:22	*49m*	22:12	*1h 08m*	23:21		—:—	*7h 49m*		—:——:—	–	Mond stört	Sa, 18. Mai
So, 19. Mai	MESZ			Astr. MD		16:52	03:48	—:—		03:14	*1h 08m*	04:22	*49m*	05:12	*16h 11m*	21:24	*50m*	22:14	*1h 09m*	23:24		—:—	*7h 46m*		—:——:—	–	Mond stört	So, 19. Mai
Mo, 20. Mai	MESZ			Astr. MD		18:07	03:55	—:—		03:11	*1h 09m*	04:20	*50m*	05:11	*16h 14m*	21:25	*50m*	22:16	*1h 10m*	23:27		—:—	*7h 43m*		—:——:—	–	Mond stört	Mo, 20. Mai
Di, 21. Mai	MESZ			Astr. MD		19:25	04:04	—:—		03:08	*1h 10m*	04:19	*50m*	05:09	*16h 17m*	21:27	*50m*	22:18	*1h 11m*	23:30		—:—	*7h 40m*		—:——:—	–	Mond stört	Di, 21. Mai
Mi, 22. Mai	MESZ			Astr. MD		20:46	04:15	—:—		03:05	*1h 11m*	04:17	*50m*	05:08	*16h 20m*	21:28	*51m*	22:20	*1h 12m*	23:33		—:—	*7h 37m*		—:——:—	–	Mond stört	Mi, 22. Mai
Do, 23. Mai	MESZ			Astr. MD	○	22:09	04:30	—:—		03:02	*1h 12m*	04:15	*51m*	05:06	*16h 23m*	21:30	*51m*	22:22	*1h 14m*	23:36		—:—	*7h 35m*		—:——:—	–	Mond stört	Do, 23. Mai
Fr, 24. Mai	MESZ			Astr. MD		23:28	04:54	—:—		02:59	*1h 14m*	04:13	*51m*	05:05	*16h 26m*	21:31	*51m*	22:23	*1h 15m*	23:39		—:—	*7h 32m*		—:——:—	–	Mond stört	Fr, 24. Mai
Sa, 25. Mai	MESZ			Astr. MD		—:—	05:31	—:—		02:57	*1h 15m*	04:12	*51m*	05:04	*16h 29m*	21:33	*52m*	22:25	*1h 16m*	23:42		—:—	*7h 29m*		23:42 – 00:33*	*51m*	ND+ *bis* M↗	Sa, 25. Mai
So, 26. Mai	MESZ			Astr. MD		00:33	06:26	—:—		02:54	*1h 16m*	04:10	*52m*	05:03	*16h 31m*	21:34	*52m*	22:27	*1h 17m*	23:45		—:—	*7h 27m*		23:45 – 01:21*	*1h 36m*	ND+ *bis* M↗	So, 26. Mai
Mo, 27. Mai	MESZ			Astr. MD		01:21	07:41	—:—		02:51	*1h 17m*	04:09	*52m*	05:01	*16h 34m*	21:36	*52m*	22:29	*1h 19m*	23:48		—:—	*7h 24m*		23:48 – 01:52*	*2h 04m*	ND+ *bis* M↗	Mo, 27. Mai
Di, 28. Mai	MESZ			Astr. MD		01:52	09:09	—:—		02:48	*1h 19m*	04:07	*52m*	05:00	*16h 36m*	21:37	*53m*	22:30	*1h 20m*	23:51		—:—	*7h 22m*		23:51 – 02:13*	*2h 22m*	ND+ *bis* M↗	Di, 28. Mai
Mi, 29. Mai	MESZ			Astr. MD		02:13	10:40	—:—		02:46	*1h 20m*	04:06	*53m*	04:59	*16h 39m*	21:38	*53m*	22:32	*1h 21m*	23:54		—:—	*7h 19m*		23:54 – 02:27*	*2h 33m*	ND+ *bis* M↗	Mi, 29. Mai

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
2024	Zeit-	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung						Sonne			Ende der Abenddämmerung						Nacht	Astr. N.	Naut. dunkel und kein Mond			2024
	zone		Δ*t*		Ph.	↗	↘	Astr.	Δ*t*	Naut.	Δ*t*	Bürg.	Δt	↗	Δ*t*	↘	Δ*t*	Bürg.	Δ*t*	Naut.	Δ*t*	Astr.	Δ*t*	Δ*t*		Δ*t*		
Do, 30. Mai	MESZ			Astr. MD	◑	02:27	12:11	—:—		02:43	*1h 21m*	04:05	*53m*	04:58	*16h 41m*	21:40	*53m*	22:34	*1h 23m*	23:57		—:—	*7h 17m*		23:57 – 02:39*	*2h 42m*	ND$_+$ *bis* M$_\nearrow$	Do, 30. Mai
Fr, 31. Mai	MESZ			Astr. MD		02:39	13:41	—:—		02:40	*1h 23m*	04:03	*53m*	04:57	*16h 43m*	21:41	*54m*	22:35	*1h 24m*	00:00*		—:—	*7h 15m*		00:00* – 02:38*	*2h 38m*	ND$_+$ *bis* ND$_-$	Fr, 31. Mai
Sa, 1. Jun	MESZ			Astr. MD		02:48	15:09	—:—		02:38	*1h 24m*	04:02	*54m*	04:56	*16h 45m*	21:42	*54m*	22:37	*1h 25m*	00:02*		—:—	*7h 13m*		00:02* – 02:35*	*2h 32m*	ND$_+$ *bis* ND$_-$	Sa, 1. Jun
So, 2. Jun	MESZ			Astr. MD		02:58	16:39	—:—		02:35	*1h 25m*	04:01	*54m*	04:55	*16h 47m*	21:43	*54m*	22:38	*1h 27m*	00:05*		—:—	*7h 11m*		00:05* – 02:32*	*2h 27m*	ND$_+$ *bis* ND$_-$	So, 2. Jun
Mo, 3. Jun	MESZ			Astr. MD		03:08	18:10	—:—		02:32	*1h 27m*	04:00	*54m*	04:55	*16h 49m*	21:44	*55m*	22:39	*1h 28m*	00:08*		—:—	*7h 09m*		00:08* – 02:30*	*2h 21m*	ND$_+$ *bis* ND$_-$	Mo, 3. Jun
Di, 4. Jun	MESZ			Astr. MD		03:21	19:44	—:—		02:30	*1h 28m*	03:59	*55m*	04:54	*16h 51m*	21:45	*55m*	22:41	*1h 30m*	00:11*		—:—	*7h 07m*		00:11* – 02:28*	*2h 16m*	ND$_+$ *bis* ND$_-$	Di, 4. Jun
Mi, 5. Jun	MESZ			Astr. MD		03:39	21:16	—:—		02:28	*1h 30m*	03:58	*55m*	04:53	*16h 53m*	21:46	*55m*	22:42	*1h 31m*	00:14*		—:—	*7h 06m*		00:14* – 02:25*	*2h 11m*	ND$_+$ *bis* ND$_-$	Mi, 5. Jun
Do, 6. Jun	MESZ			Astr. MD	●	04:05	22:40	—:—		02:25	*1h 31m*	03:57	*55m*	04:53	*16h 54m*	21:47	*55m*	22:43	*1h 33m*	00:16*		—:—	*7h 04m*		00:16* – 02:23*	*2h 06m*	ND$_+$ *bis* ND$_-$	Do, 6. Jun
Fr, 7. Jun	MESZ			Astr. MD		04:45	23:45	—:—		02:23	*1h 33m*	03:56	*55m*	04:52	*16h 56m*	21:48	*56m*	22:45	*1h 34m*	00:19*		—:—	*7h 03m*		00:19* – 02:21*	*2h 01m*	ND$_+$ *bis* ND$_-$	Fr, 7. Jun
Sa, 8. Jun	MESZ			Astr. MD		05:44	—:—	—:—		02:21	*1h 34m*	03:55	*56m*	04:51	*16h 57m*	21:49	*56m*	22:46	*1h 35m*	00:22*		—:—	*7h 01m*		00:30* – 02:18*	*1h 47m*	M$_\searrow$ *bis* ND$_-$	Sa, 8. Jun
So, 9. Jun	MESZ			Astr. MD		06:57	00:30	—:—		02:18	*1h 35m*	03:54	*56m*	04:51	*16h 59m*	21:50	*56m*	22:47	*1h 37m*	00:24*		—:—	*7h 00m*		00:59* – 02:16*	*1h 17m*	M$_\searrow$ *bis* ND$_-$	So, 9. Jun
Mo, 10. Jun	MESZ			Astr. MD		08:18	00:59	—:—		02:16	*1h 37m*	03:54	*56m*	04:50	*17h 00m*	21:51	*56m*	22:48	*1h 38m*	00:26*		—:—	*6h 59m*		01:18* – 02:15*	*56m*	M$_\searrow$ *bis* ND$_-$	Mo, 10. Jun
Di, 11. Jun	MESZ			Astr. MD		09:39	01:18	—:—		02:15	*1h 38m*	03:53	*56m*	04:50	*17h 01m*	21:52	*57m*	22:49	*1h 40m*	00:29*		—:—	*6h 58m*		01:31* – 02:13*	*41m*	M$_\searrow$ *bis* ND$_-$	Di, 11. Jun
Mi, 12. Jun	MESZ			Astr. MD		10:57	01:31	—:—		02:13	*1h 40m*	03:53	*57m*	04:50	*17h 02m*	21:52	*57m*	22:49	*1h 41m*	00:31*		—:—	*6h 57m*		01:41* – 02:11*	*30m*	M$_\searrow$ *bis* ND$_-$	Mi, 12. Jun
Do, 13. Jun	MESZ			Astr. MD		12:11	01:41	—:—		02:11	*1h 41m*	03:52	*57m*	04:50	*17h 03m*	21:53	*57m*	22:50	*1h 42m*	00:33*		—:—	*6h 56m*		01:49* – 02:10*	*21m*	M$_\searrow$ *bis* ND$_-$	Do, 13. Jun
Fr, 14. Jun	MESZ			Astr. MD	◐	13:24	01:49	—:—		02:10	*1h 42m*	03:52	*57m*	04:49	*17h 04m*	21:53	*57m*	22:51	*1h 43m*	00:34*		—:—	*6h 55m*		01:56* – 02:08*	*12m*	M$_\searrow$ *bis* ND$_-$	Fr, 14. Jun
Sa, 15. Jun	MESZ			Astr. MD		14:36	01:56	—:—		02:08	*1h 43m*	03:52	*57m*	04:49	*17h 04m*	21:54	*57m*	22:52	*1h 44m*	00:36*		—:—	*6h 55m*		02:03* – 02:07*	*4m*	M$_\searrow$ *bis* ND$_-$	Sa, 15. Jun
So, 16. Jun	MESZ			Astr. MD		15:49	02:03	—:—		02:07	*1h 44m*	03:52	*57m*	04:49	*17h 05m*	21:54	*57m*	22:52	*1h 45m*	00:37*		—:—	*6h 54m*		—:— – —:—	–	Mond stört	So, 16. Jun
Mo, 17. Jun	MESZ			Astr. MD		17:05	02:11	—:—		02:06	*1h 45m*	03:51	*57m*	04:49	*17h 05m*	21:55	*57m*	22:53	*1h 45m*	00:38*		—:—	*6h 54m*		—:— – —:—	–	Mond stört	Mo, 17. Jun
Di, 18. Jun	MESZ			Astr. MD		18:25	02:21	—:—		02:06	*1h 45m*	03:51	*57m*	04:49	*17h 06m*	21:55	*57m*	22:53	*1h 46m*	00:39*		—:—	*6h 53m*		—:— – —:—	–	Mond stört	Di, 18. Jun
Mi, 19. Jun	MESZ			Astr. MD		19:48	02:35	—:—		02:05	*1h 46m*	03:51	*57m*	04:49	*17h 06m*	21:56	*57m*	22:53	*1h 46m*	00:40*		—:—	*6h 53m*		—:— – —:—	–	Mond stört	Mi, 19. Jun
Do, 20. Jun	MESZ			Astr. MD		21:09	02:55	—:—		02:05	*1h 46m*	03:52	*57m*	04:49	*17h 06m*	21:56	*57m*	22:54	*1h 46m*	00:40*		—:—	*6h 53m*		—:— – —:—	–	Mond stört	Do, 20. Jun
Fr, 21. Jun	MESZ			Astr. MD		22:22	03:26	—:—		02:05	*1h 46m*	03:52	*57m*	04:50	*17h 06m*	21:56	*57m*	22:54	*1h 46m*	00:40*		—:—	*6h 53m*		—:— – —:—	–	Mond stört	Fr, 21. Jun
Sa, 22. Jun	MESZ			Astr. MD	○	23:17	04:15	—:—		02:06	*1h 46m*	03:52	*57m*	04:50	*17h 06m*	21:56	*57m*	22:54	*1h 46m*	00:40*		—:—	*6h 53m*		—:— – —:—	–	Mond stört	Sa, 22. Jun
So, 23. Jun	MESZ			Astr. MD		23:54	05:25	—:—		02:06	*1h 46m*	03:52	*57m*	04:50	*17h 06m*	21:56	*57m*	22:54	*1h 45m*	00:40*		—:—	*6h 54m*		—:— – —:—	–	Mond stört	So, 23. Jun
Mo, 24. Jun	MESZ			Astr. MD		—:—	06:52	—:—		02:07	*1h 45m*	03:53	*57m*	04:51	*17h 05m*	21:56	*57m*	22:54	*1h 44m*	00:39*		—:—	*6h 54m*		—:— – —:—	–	Mond stört	Mo, 24. Jun
Di, 25. Jun	MESZ			Astr. MD		00:18	08:24	—:—		02:08	*1h 44m*	03:53	*57m*	04:51	*17h 05m*	21:56	*57m*	22:54	*1h 44m*	00:38*		—:—	*6h 55m*		—:— – —:—	–	Mond stört	Di, 25. Jun
Mi, 26. Jun	MESZ			Astr. MD		00:34	09:57	—:—		02:10	*1h 44m*	03:54	*57m*	04:51	*17h 04m*	21:56	*57m*	22:54	*1h 43m*	00:37*		—:—	*6h 55m*		00:37* – 00:47*	*9m*	ND$_+$ *bis* M$_\nearrow$	Mi, 26. Jun
Do, 27. Jun	MESZ			Astr. MD		00:47	11:28	—:—		02:11	*1h 43m*	03:54	*57m*	04:52	*17h 03m*	21:56	*57m*	22:53	*1h 42m*	00:35*		—:—	*6h 56m*		00:35* – 00:57*	*21m*	ND$_+$ *bis* M$_\nearrow$	Do, 27. Jun
Fr, 28. Jun	MESZ			Astr. MD	◑	00:57	12:56	—:—		02:13	*1h 42m*	03:55	*57m*	04:53	*17h 03m*	21:56	*57m*	22:53	*1h 40m*	00:34*		—:—	*6h 57m*		00:34* – 01:06*	*31m*	ND$_+$ *bis* M$_\nearrow$	Fr, 28. Jun
Sa, 29. Jun	MESZ			Astr. MD		01:06	14:24	—:—		02:15	*1h 40m*	03:56	*57m*	04:53	*17h 02m*	21:55	*57m*	22:52	*1h 39m*	00:32*		—:—	*6h 58m*		00:32* – 01:16*	*43m*	ND$_+$ *bis* M$_\nearrow$	Sa, 29. Jun
So, 30. Jun	MESZ			Astr. MD		01:16	15:53	—:—		02:17	*1h 39m*	03:57	*57m*	04:54	*17h 01m*	21:55	*56m*	22:52	*1h 38m*	00:30*		—:—	*6h 59m*		00:30* – 01:27*	*56m*	ND$_+$ *bis* M$_\nearrow$	So, 30. Jun
Mo, 1. Jul	MESZ			Astr. MD		01:27	17:24	—:—		02:19	*1h 38m*	03:58	*56m*	04:55	*17h 00m*	21:55	*56m*	22:51	*1h 37m*	00:28*		—:—	*7h 00m*		00:28* – 01:43*	*1h 14m*	ND$_+$ *bis* M$_\nearrow$	Mo, 1. Jul
Di, 2. Jul	MESZ			Astr. MD		01:43	18:55	—:—		02:22	*1h 37m*	03:59	*56m*	04:55	*16h 58m*	21:54	*56m*	22:51	*1h 35m*	00:26*		—:—	*7h 01m*		00:26* – 02:05*	*1h 38m*	ND$_+$ *bis* M$_\nearrow$	Di, 2. Jul
Mi, 3. Jul	MESZ			Astr. MD		02:05	20:21	—:—		02:24	*1h 35m*	04:00	*56m*	04:56	*16h 57m*	21:54	*56m*	22:50	*1h 34m*	00:24*		—:—	*7h 03m*		00:24* – 02:27*	*2h 02m*	ND$_+$ *bis* ND$_-$	Mi, 3. Jul
Do, 4. Jul	MESZ			Astr. MD		02:39	21:33	—:—		02:27	*1h 34m*	04:01	*56m*	04:57	*16h 56m*	21:53	*55m*	22:49	*1h 32m*	00:22*		—:—	*7h 04m*		00:22* – 02:29*	*2h 07m*	ND$_+$ *bis* ND$_-$	Do, 4. Jul
Fr, 5. Jul	MESZ			Astr. MD		03:29	22:25	—:—		02:29	*1h 32m*	04:02	*55m*	04:58	*16h 54m*	21:53	*55m*	22:48	*1h 31m*	00:20*		—:—	*7h 06m*		00:20* – 02:32*	*2h 12m*	ND$_+$ *bis* ND$_-$	Fr, 5. Jul
Sa, 6. Jul	MESZ			Astr. MD	●	04:37	23:00	—:—		02:32	*1h 31m*	04:03	*55m*	04:59	*16h 52m*	21:52	*55m*	22:47	*1h 29m*	00:17*		—:—	*7h 08m*		00:17* – 02:35*	*2h 17m*	ND$_+$ *bis* ND$_-$	Sa, 6. Jul
So, 7. Jul	MESZ			Astr. MD		05:56	23:22	—:—		02:35	*1h 29m*	04:05	*55m*	05:00	*16h 51m*	21:51	*55m*	22:46	*1h 28m*	00:15*		—:—	*7h 09m*		00:15* – 02:37*	*2h 22m*	ND$_+$ *bis* ND$_-$	So, 7. Jul
Mo, 8. Jul	MESZ			Astr. MD		07:18	23:37	—:—		02:37	*1h 28m*	04:06	*55m*	05:01	*16h 49m*	21:50	*54m*	22:45	*1h 27m*	00:12*		—:—	*7h 11m*		00:12* – 02:40*	*2h 27m*	ND$_+$ *bis* ND$_-$	Mo, 8. Jul
Di, 9. Jul	MESZ			Astr. MD		08:38	23:48	—:—		02:40	*1h 27m*	04:07	*54m*	05:02	*16h 47m*	21:50	*54m*	22:44	*1h 25m*	00:10*		—:—	*7h 13m*		00:10* – 02:43*	*2h 33m*	ND$_+$ *bis* ND$_-$	Di, 9. Jul
Mi, 10. Jul	MESZ			Astr. MD		09:54	23:56	—:—		02:43	*1h 25m*	04:09	*54m*	05:03	*16h 45m*	21:49	*54m*	22:43	*1h 24m*	00:07*		—:—	*7h 15m*		00:07* – 02:46*	*2h 38m*	ND$_+$ *bis* ND$_-$	Mi, 10. Jul
Do, 11. Jul	MESZ			Astr. MD		11:08	—:—	—:—		02:46	*1h 24m*	04:10	*54m*	05:05	*16h 43m*	21:48	*53m*	22:42	*1h 22m*	00:04*		—:—	*7h 18m*		00:04* – 02:49*	*2h 44m*	ND$_+$ *bis* ND$_-$	Do, 11. Jul
Fr, 12. Jul	MESZ			Astr. MD		12:20	00:03	—:—		02:49	*1h 22m*	04:12	*53m*	05:06	*16h 40m*	21:47	*53m*	22:40	*1h 21m*	00:02*		—:—	*7h 20m*		00:10* – 02:52*	*2h 41m*	M$_\searrow$ *bis* ND$_-$	Fr, 12. Jul
Sa, 13. Jul	MESZ			Astr. MD		13:32	00:10	—:—		02:52	*1h 21m*	04:13	*53m*	05:07	*16h 38m*	21:46	*53m*	22:39	*1h 20m*	23:59		—:—	*7h 22m*		00:18* – 02:55*	*2h 36m*	M$_\searrow$ *bis* ND$_-$	Sa, 13. Jul
So, 14. Jul	MESZ			Astr. MD	◐	14:46	00:18	—:—		02:55	*1h 20m*	04:15	*53m*	05:08	*16h 36m*	21:45	*52m*	22:37	*1h 18m*	23:56		—:—	*7h 25m*		00:27* – 02:58*	*2h 30m*	M$_\searrow$ *bis* ND$_-$	So, 14. Jul
Mo, 15. Jul	MESZ			Astr. MD		16:04	00:27	—:—		02:58	*1h 18m*	04:17	*52m*	05:10	*16h 33m*	21:43	*52m*	22:36	*1h 17m*	23:54		—:—	*7h 27m*		00:39* – 03:01*	*2h 22m*	M$_\searrow$ *bis* ND$_-$	Mo, 15. Jul
Di, 16. Jul	MESZ			Astr. MD		17:24	00:39	—:—		03:01	*1h 17m*	04:18	*52m*	05:11	*16h 31m*	21:42	*52m*	22:34	*1h 16m*	23:51		—:—	*7h 30m*		00:55* – 03:04*	*2h 08m*	M$_\searrow$ *bis* ND$_-$	Di, 16. Jul
Mi, 17. Jul	MESZ			Astr. MD		18:46	00:55	—:—		03:04	*1h 16m*	04:20	*52m*	05:12	*16h 28m*	21:41	*51m*	22:33	*1h 15m*	23:48		—:—	*7h 32m*		01:21* – 03:07*	*1h 45m*	M$_\searrow$ *bis* ND$_-$	Mi, 17. Jul
Do, 18. Jul	MESZ			Astr. MD		20:04	01:21	—:—		03:07	*1h 15m*	04:22	*51m*	05:14	*16h 26m*	21:40	*51m*	22:31	*1h 13m*	23:45		—:—	*7h 35m*		02:02* – 03:10*	*1h 08m*	M$_\searrow$ *bis* ND$_-$	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		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*		
Fr, 19. Jul	MESZ			Astr. MD		21:07	02:02	—:—		03:10	*1h 13m*	04:24	*51m*	05:15	*16h 23m*	21:38	*51m*	22:30	*1h 12m*	23:42		—:—	*7h 38m*		03:03* – 03:13*	*9m*	M↘ *bis* ND_	Fr, 19. Jul
Sa, 20. Jul	MESZ			Astr. MD		21:52	03:03	—:—		03:13	*1h 12m*	04:25	*51m*	05:17	*16h 20m*	21:37	*50m*	22:28	*1h 11m*	23:40		—:—	*7h 41m*		—:— – —:—	–	Mond stört	Sa, 20. Jul
So, 21. Jul	MESZ			Astr. MD	○	22:21	04:25	—:—		03:16	*1h 11m*	04:27	*50m*	05:18	*16h 17m*	21:36	*50m*	22:26	*1h 10m*	23:37		—:—	*7h 43m*		—:— – —:—	–	Mond stört	So, 21. Jul
Mo, 22. Jul	MESZ			Astr. MD		22:40	05:59	—:—		03:19	*1h 10m*	04:29	*50m*	05:20	*16h 14m*	21:34	*50m*	22:24	*1h 09m*	23:34		—:—	*7h 46m*		—:— – —:—	–	Mond stört	Mo, 22. Jul
Di, 23. Jul	MESZ			Astr. MD		22:54	07:35	—:—		03:21	*1h 09m*	04:31	*50m*	05:21	*16h 11m*	21:33	*49m*	22:22	*1h 08m*	23:31		—:—	*7h 49m*		—:— – —:—	–	Mond stört	Di, 23. Jul
Mi, 24. Jul	MESZ			Astr. MD		23:04	09:09	—:—		03:24	*1h 08m*	04:33	*49m*	05:23	*16h 08m*	21:31	*49m*	22:21	*1h 07m*	23:28		—:—	*7h 53m*		—:— – —:—	–	Mond stört	Mi, 24. Jul
Do, 25. Jul	MESZ			Astr. MD		23:14	10:40	—:—		03:27	*1h 07m*	04:35	*49m*	05:24	*16h 05m*	21:30	*49m*	22:19	*1h 06m*	23:25		—:—	*7h 56m*		—:— – —:—	–	Mond stört	Do, 25. Jul
Fr, 26. Jul	MESZ			Astr. MD		23:24	12:10	—:—		03:30	*1h 06m*	04:37	*49m*	05:26	*16h 02m*	21:28	*48m*	22:17	*1h 05m*	23:22		—:—	*7h 59m*		23:22 – 23:24	*1m*	ND+ *bis* M↗	Fr, 26. Jul
Sa, 27. Jul	MESZ			Astr. MD		23:34	13:40	—:—		03:33	*1h 05m*	04:39	*48m*	05:27	*15h 58m*	21:26	*48m*	22:15	*1h 04m*	23:19		—:—	*8h 02m*		23:19 – 23:34	*15m*	ND+ *bis* M↗	Sa, 27. Jul
So, 28. Jul	MESZ			Astr. MD	◑	23:48	15:11	—:—		03:36	*1h 04m*	04:41	*48m*	05:29	*15h 55m*	21:25	*48m*	22:13	*1h 03m*	23:16		—:—	*8h 05m*		23:16 – 23:48	*32m*	ND+ *bis* M↗	So, 28. Jul
Mo, 29. Jul	MESZ			Astr. MD		—:—	16:42	—:—		03:39	*1h 03m*	04:43	*48m*	05:31	*15h 52m*	21:23	*47m*	22:11	*1h 02m*	23:13		—:—	*8h 09m*		23:13 – 00:08*	*54m*	ND+ *bis* M↗	Mo, 29. Jul
Di, 30. Jul	MESZ			Astr. MD		00:08	18:09	—:—		03:42	*1h 02m*	04:45	*47m*	05:32	*15h 48m*	21:21	*47m*	22:09	*1h 01m*	23:11		—:—	*8h 12m*		23:11 – 00:37*	*1h 26m*	ND+ *bis* M↗	Di, 30. Jul
Mi, 31. Jul	MESZ	01:17* – 01:21*	*4m*	AN+ *bis* M↗		00:37	19:25	—:—		03:45	*1h 01m*	04:47	*47m*	05:34	*15h 45m*	21:19	*47m*	22:06	*1h 01m*	23:08	*2h 09m*	01:17*	*8h 16m*	*21m*				Mi, 31. Jul
Do, 1. Aug	MESZ	00:57* – 01:58*	*1h 00m*	AN+ *bis* AN_		01:21	20:22	01:38	*2h 09m*	03:47	*1h 01m*	04:49	*47m*	05:36	*15h 42m*	21:18	*46m*	22:04	*1h 00m*	23:05	*1h 52m*	00:57*	*8h 19m*	*1h 00m*				Do, 1. Aug
Fr, 2. Aug	MESZ	00:46* – 02:09*	*1h 22m*	AN+ *bis* AN_		02:23	21:01	01:58	*1h 52m*	03:50	*1h 00m*	04:51	*46m*	05:37	*15h 38m*	21:16	*46m*	22:02	*59m*	23:02	*1h 44m*	00:46*	*8h 23m*	*1h 22m*				Fr, 2. Aug
Sa, 3. Aug	MESZ	00:37* – 02:18*	*1h 40m*	AN+ *bis* AN_		03:38	21:27	02:09	*1h 44m*	03:53	*59m*	04:53	*46m*	05:39	*15h 34m*	21:14	*46m*	22:00	*58m*	22:59	*1h 38m*	00:37*	*8h 26m*	*1h 40m*				Sa, 3. Aug
So, 4. Aug	MESZ	00:29* – 02:25*	*1h 55m*	AN+ *bis* AN_	●	04:59	21:43	02:18	*1h 38m*	03:56	*58m*	04:55	*46m*	05:41	*15h 31m*	21:12	*45m*	21:58	*58m*	22:56	*1h 33m*	00:29*	*8h 30m*	*1h 55m*				So, 4. Aug
Mo, 5. Aug	MESZ	00:22* – 02:32*	*2h 09m*	AN+ *bis* AN_		06:20	21:55	02:25	*1h 33m*	03:59	*58m*	04:57	*45m*	05:42	*15h 27m*	21:10	*45m*	21:56	*57m*	22:53	*1h 29m*	00:22*	*8h 34m*	*2h 09m*				Mo, 5. Aug
Di, 6. Aug	MESZ	00:16* – 02:38*	*2h 22m*	AN+ *bis* AN_		07:38	22:04	02:32	*1h 29m*	04:01	*57m*	04:59	*45m*	05:44	*15h 24m*	21:08	*45m*	21:53	*56m*	22:50	*1h 25m*	00:16*	*8h 37m*	*2h 22m*				Di, 6. Aug
Mi, 7. Aug	MESZ	00:10* – 02:44*	*2h 33m*	AN+ *bis* AN_		08:53	22:12	02:38	*1h 25m*	04:04	*56m*	05:01	*45m*	05:46	*15h 20m*	21:06	*44m*	21:51	*56m*	22:47	*1h 22m*	00:10*	*8h 41m*	*2h 33m*				Mi, 7. Aug
Do, 8. Aug	MESZ	00:04* – 02:49*	*2h 44m*	AN+ *bis* AN_		10:05	22:19	02:44	*1h 22m*	04:07	*56m*	05:03	*44m*	05:48	*15h 16m*	21:04	*44m*	21:49	*55m*	22:44	*1h 20m*	00:04*	*8h 45m*	*2h 44m*				Do, 8. Aug
Fr, 9. Aug	MESZ	23:59 – 02:54*	*2h 55m*	AN+ *bis* AN_		11:17	22:26	02:49	*1h 20m*	04:09	*55m*	05:05	*44m*	05:49	*15h 12m*	21:02	*44m*	21:46	*54m*	22:41	*1h 17m*	23:59	*8h 48m*	*2h 55m*				Fr, 9. Aug
Sa, 10. Aug	MESZ	23:54 – 02:59*	*3h 05m*	AN+ *bis* AN_		12:30	22:34	02:54	*1h 17m*	04:12	*54m*	05:07	*44m*	05:51	*15h 09m*	21:00	*43m*	21:44	*54m*	22:38	*1h 15m*	23:54	*8h 52m*	*3h 05m*				Sa, 10. Aug
So, 11. Aug	MESZ	23:49 – 03:04*	*3h 14m*	AN+ *bis* AN_		13:45	22:44	02:59	*1h 15m*	04:15	*54m*	05:09	*43m*	05:53	*15h 05m*	20:58	*43m*	21:42	*53m*	22:35	*1h 13m*	23:49	*8h 56m*	*3h 14m*				So, 11. Aug
Mo, 12. Aug	MESZ	23:44 – 03:08*	*3h 24m*	AN+ *bis* AN_	◐	15:04	22:58	03:04	*1h 13m*	04:17	*53m*	05:11	*43m*	05:55	*15h 01m*	20:56	*43m*	21:39	*53m*	22:32	*1h 11m*	23:44	*9h 00m*	*3h 24m*				Mo, 12. Aug
Di, 13. Aug	MESZ	23:39 – 03:12*	*3h 32m*	AN+ *bis* AN_		16:24	23:18	03:08	*1h 11m*	04:20	*53m*	05:13	*43m*	05:56	*14h 57m*	20:54	*43m*	21:37	*52m*	22:29	*1h 10m*	23:39	*9h 04m*	*3h 32m*				Di, 13. Aug
Mi, 14. Aug	MESZ	23:51 – 03:17*	*3h 25m*	M↘ *bis* AN_		17:43	23:51	03:12	*1h 10m*	04:22	*52m*	05:15	*43m*	05:58	*14h 53m*	20:52	*42m*	21:35	*51m*	22:26	*1h 08m*	23:35	*9h 08m*	*3h 41m*				Mi, 14. Aug
Do, 15. Aug	MESZ	00:41* – 03:21*	*2h 39m*	M↘ *bis* AN_		18:53	—:—	03:17	*1h 08m*	04:25	*51m*	05:17	*42m*	06:00	*14h 49m*	20:50	*42m*	21:32	*51m*	22:24	*1h 06m*	23:30	*9h 12m*	*3h 50m*				Do, 15. Aug
Fr, 16. Aug	MESZ	01:54* – 03:24*	*1h 30m*	M↘ *bis* AN_		19:45	00:41	03:21	*1h 06m*	04:28	*51m*	05:19	*42m*	06:02	*14h 45m*	20:47	*42m*	21:30	*50m*	22:21	*1h 05m*	23:26	*9h 16m*	*3h 58m*				Fr, 16. Aug
Sa, 17. Aug	MESZ	03:23* – 03:28*	*4m*	M↘ *bis* AN_		20:20	01:54	03:24	*1h 05m*	04:30	*50m*	05:21	*42m*	06:03	*14h 41m*	20:45	*42m*	21:27	*50m*	22:18	*1h 04m*	23:22	*9h 19m*	*4h 06m*				Sa, 17. Aug
So, 18. Aug	MESZ	—:— – —:—	–	Mond stört		20:44	03:23	03:28	*1h 04m*	04:33	*50m*	05:23	*42m*	06:05	*14h 37m*	20:43	*41m*	21:25	*49m*	22:15	*1h 03m*	23:18	*9h 23m*	*4h 14m*				So, 18. Aug
Mo, 19. Aug	MESZ	—:— – —:—	–	Mond stört	○	20:59	05:00	03:32	*1h 03m*	04:35	*50m*	05:25	*41m*	06:07	*14h 33m*	20:41	*41m*	21:22	*49m*	22:12	*1h 01m*	23:14	*9h 27m*	*4h 21m*				Mo, 19. Aug
Di, 20. Aug	MESZ	—:— – —:—	–	Mond stört		21:11	06:38	03:35	*1h 01m*	04:37	*49m*	05:27	*41m*	06:09	*14h 29m*	20:38	*41m*	21:20	*49m*	22:09	*1h 00m*	23:10	*9h 31m*	*4h 29m*				Di, 20. Aug
Mi, 21. Aug	MESZ	—:— – —:—	–	Mond stört		21:21	08:13	03:39	*1h 00m*	04:40	*49m*	05:29	*41m*	06:10	*14h 25m*	20:36	*41m*	21:17	*48m*	22:06	*59m*	23:06	*9h 36m*	*4h 36m*				Mi, 21. Aug
Do, 22. Aug	MESZ	—:— – —:—	–	Mond stört		21:31	09:47	03:42	*59m*	04:42	*48m*	05:31	*41m*	06:12	*14h 21m*	20:34	*40m*	21:15	*48m*	22:03	*58m*	23:02	*9h 40m*	*4h 43m*				Do, 22. Aug
Fr, 23. Aug	MESZ	—:— – —:—	–	Mond stört		21:42	11:20	03:46	*58m*	04:45	*48m*	05:33	*41m*	06:14	*14h 17m*	20:32	*40m*	21:12	*47m*	22:00	*57m*	22:58	*9h 44m*	*4h 50m*				Fr, 23. Aug
Sa, 24. Aug	MESZ	—:— – —:—	–	Mond stört		21:54	12:53	03:49	*57m*	04:47	*47m*	05:35	*40m*	06:16	*14h 13m*	20:29	*40m*	21:10	*47m*	21:57	*57m*	22:54	*9h 48m*	*4h 57m*				Sa, 24. Aug
So, 25. Aug	MESZ	—:— – —:—	–	Mond stört		22:12	14:27	03:52	*57m*	04:49	*47m*	05:37	*40m*	06:17	*14h 09m*	20:27	*40m*	21:07	*47m*	21:54	*56m*	22:51	*9h 52m*	*5h 04m*				So, 25. Aug
Mo, 26. Aug	MESZ	—:— – —:—	–	Mond stört	◑	22:38	15:57	03:55	*56m*	04:52	*47m*	05:39	*40m*	06:19	*14h 05m*	20:25	*40m*	21:05	*46m*	21:52	*55m*	22:47	*9h 56m*	*5h 11m*				Mo, 26. Aug
Di, 27. Aug	MESZ	22:43 – 23:17	*33m*	AN+ *bis* M↗		23:17	17:18	03:58	*55m*	04:54	*46m*	05:41	*40m*	06:21	*14h 01m*	20:22	*40m*	21:02	*46m*	21:49	*54m*	22:43	*10h 00m*	*5h 18m*				Di, 27. Aug
Mi, 28. Aug	MESZ	22:40 – 00:14*	*1h 33m*	AN+ *bis* M↗		—:—	18:21	04:02	*54m*	04:56	*46m*	05:43	*40m*	06:23	*13h 57m*	20:20	*39m*	21:00	*46m*	21:46	*54m*	22:40	*10h 04m*	*5h 24m*				Mi, 28. Aug
Do, 29. Aug	MESZ	22:36 – 01:25*	*2h 48m*	AN+ *bis* M↗		00:14	19:05	04:04	*54m*	04:59	*46m*	05:45	*39m*	06:25	*13h 53m*	20:18	*39m*	20:57	*45m*	21:43	*53m*	22:36	*10h 08m*	*5h 31m*				Do, 29. Aug
Fr, 30. Aug	MESZ	22:33 – 02:45*	*4h 11m*	AN+ *bis* M↗		01:25	19:33	04:07	*53m*	05:01	*45m*	05:47	*39m*	06:26	*13h 48m*	20:15	*39m*	20:55	*45m*	21:40	*52m*	22:33	*10h 12m*	*5h 37m*				Fr, 30. Aug
Sa, 31. Aug	MESZ	22:29 – 04:05*	*5h 35m*	AN+ *bis* M↗		02:45	19:51	04:10	*52m*	05:03	*45m*	05:49	*39m*	06:28	*13h 44m*	20:13	*39m*	20:52	*45m*	21:37	*52m*	22:29	*10h 17m*	*5h 43m*				Sa, 31. Aug
So, 1. Sep	MESZ	22:26 – 04:16*	*5h 49m*	AN+ *bis* AN_		04:05	20:04	04:13	*52m*	05:05	*45m*	05:50	*39m*	06:30	*13h 40m*	20:10	*39m*	20:50	*44m*	21:34	*51m*	22:26	*10h 21m*	*5h 49m*				So, 1. Sep
Mo, 2. Sep	MESZ	22:23 – 04:19*	*5h 56m*	AN+ *bis* AN_		05:24	20:14	04:16	*51m*	05:07	*44m*	05:52	*39m*	06:32	*13h 36m*	20:08	*39m*	20:47	*44m*	21:32	*50m*	22:23	*10h 25m*	*5h 56m*				Mo, 2. Sep
Di, 3. Sep	MESZ	22:19 – 04:21*	*6h 02m*	AN+ *bis* AN_	●	06:39	20:21	04:19	*50m*	05:10	*44m*	05:54	*39m*	06:33	*13h 32m*	20:06	*38m*	20:45	*44m*	21:29	*50m*	22:19	*10h 29m*	*6h 02m*				Di, 3. Sep
Mi, 4. Sep	MESZ	22:16 – 04:24*	*6h 08m*	AN+ *bis* AN_		07:52	20:28	04:21	*50m*	05:12	*44m*	05:56	*38m*	06:35	*13h 28m*	20:03	*38m*	20:42	*44m*	21:26	*49m*	22:16	*10h 33m*	*6h 08m*				Mi, 4. Sep
Do, 5. Sep	MESZ	22:13 – 04:27*	*6h 14m*	AN+ *bis* AN_		09:05	20:35	04:24	*49m*	05:14	*44m*	05:58	*38m*	06:37	*13h 23m*	20:01	*38m*	20:39	*43m*	21:23	*49m*	22:13	*10h 37m*	*6h 14m*				Do, 5. Sep
Fr, 6. Sep	MESZ	22:09 – 04:29*	*6h 19m*	AN+ *bis* AN_		10:17	20:42	04:27	*49m*	05:16	*43m*	06:00	*38m*	06:39	*13h 19m*	19:58	*38m*	20:37	*43m*	21:20	*48m*	22:09	*10h 42m*	*6h 19m*				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.	Δ*t*	↗	Δ*t*	↘	Δ*t*	Bürg.	Δ*t*	Naut.	Δ*t*	Astr.	Δ*t*	Δ*t*		Δ*t*		
Sa, 7. Sep	MESZ	22:06 – 04:32*	6h 25m	AN_+ bis AN_-		11:31	20:51	04:29	48m	05:18	43m	06:02	38m	06:40	13h 15m	19:56	38m	20:34	43m	21:18	48m	22:06	10h 46m	6h 25m				Sa, 7. Sep
So, 8. Sep	MESZ	22:03 – 04:34*	6h 31m	AN_+ bis AN_-		12:48	21:03	04:32	48m	05:20	43m	06:04	38m	06:42	13h 11m	19:53	38m	20:32	43m	21:15	48m	22:03	10h 50m	6h 31m				So, 8. Sep
Mo, 9. Sep	MESZ	22:00 – 04:37*	6h 37m	AN_+ bis AN_-		14:07	21:20	04:34	48m	05:22	43m	06:06	38m	06:44	13h 07m	19:51	38m	20:29	42m	21:12	47m	22:00	10h 54m	6h 37m				Mo, 9. Sep
Di, 10. Sep	MESZ	21:57 – 04:39*	6h 42m	AN_+ bis AN_-		15:26	21:47	04:37	47m	05:25	42m	06:07	38m	06:46	13h 02m	19:49	38m	20:27	42m	21:09	47m	21:57	10h 58m	6h 42m				Di, 10. Sep
Mi, 11. Sep	MESZ	22:28 – 04:42*	6h 14m	$M_\searrow$ bis AN_-	◐	16:38	22:28	04:39	47m	05:27	42m	06:09	38m	06:47	12h 58m	19:46	37m	20:24	42m	21:07	46m	21:53	11h 03m	6h 48m				Mi, 11. Sep
Do, 12. Sep	MESZ	23:29 – 04:44*	5h 15m	$M_\searrow$ bis AN_-		17:37	23:29	04:42	46m	05:29	42m	06:11	38m	06:49	12h 54m	19:44	37m	20:22	42m	21:04	46m	21:50	11h 07m	6h 53m				Do, 12. Sep
Fr, 13. Sep	MESZ	00:49* – 04:46*	3h 57m	$M_\searrow$ bis AN_-		18:18	—:—	04:44	46m	05:31	42m	06:13	37m	06:51	12h 50m	19:41	37m	20:19	42m	21:01	46m	21:47	11h 11m	6h 59m				Fr, 13. Sep
Sa, 14. Sep	MESZ	02:22* – 04:49*	2h 27m	$M_\searrow$ bis AN_-		18:46	00:49	04:46	46m	05:33	42m	06:15	37m	06:53	12h 45m	19:39	37m	20:16	41m	20:58	45m	21:44	11h 15m	7h 04m				Sa, 14. Sep
So, 15. Sep	MESZ	03:58* – 04:51*	52m	$M_\searrow$ bis AN_-		19:04	02:22	04:49	45m	05:35	41m	06:17	37m	06:55	12h 41m	19:36	37m	20:14	41m	20:56	45m	21:41	11h 20m	7h 09m				So, 15. Sep
Mo, 16. Sep	MESZ	—:— – —:—	–	Mond stört		19:17	03:58	04:51	45m	05:37	41m	06:19	37m	06:56	12h 37m	19:34	37m	20:11	41m	20:53	45m	21:38	11h 24m	7h 15m				Mo, 16. Sep
Di, 17. Sep	MESZ	—:— – —:—	–	Mond stört		19:28	05:35	04:53	45m	05:39	41m	06:20	37m	06:58	12h 33m	19:31	37m	20:09	41m	20:50	44m	21:35	11h 28m	7h 20m				Di, 17. Sep
Mi, 18. Sep	MESZ	—:— – —:—	–	Mond stört	○	19:38	07:11	04:56	44m	05:41	41m	06:22	37m	07:00	12h 29m	19:29	37m	20:06	41m	20:48	44m	21:32	11h 32m	7h 25m				Mi, 18. Sep
Do, 19. Sep	MESZ	—:— – —:—	–	Mond stört		19:48	08:47	04:58	44m	05:43	41m	06:24	37m	07:02	12h 24m	19:26	37m	20:04	41m	20:45	44m	21:29	11h 37m	7h 30m				Do, 19. Sep
Fr, 20. Sep	MESZ	—:— – —:—	–	Mond stört		20:00	10:23	05:00	44m	05:45	41m	06:26	37m	07:03	12h 20m	19:24	37m	20:01	41m	20:42	44m	21:26	11h 41m	7h 35m				Fr, 20. Sep
Sa, 21. Sep	MESZ	—:— – —:—	–	Mond stört		20:16	12:01	05:02	44m	05:47	41m	06:28	37m	07:05	12h 16m	19:21	37m	19:59	40m	20:40	43m	21:24	11h 45m	7h 40m				Sa, 21. Sep
So, 22. Sep	MESZ	—:— – —:—	–	Mond stört		20:39	13:37	05:05	43m	05:48	40m	06:29	37m	07:07	12h 12m	19:19	37m	19:56	40m	20:37	43m	21:21	11h 49m	7h 46m				So, 22. Sep
Mo, 23. Sep	MESZ	—:— – —:—	–	Mond stört		21:14	15:05	05:07	43m	05:50	40m	06:31	37m	07:09	12h 07m	19:16	37m	19:54	40m	20:34	43m	21:18	11h 53m	7h 50m				Mo, 23. Sep
Di, 24. Sep	MESZ	21:15 – 22:05	50m	AN_+ bis $M_\nearrow$	◑	22:05	16:16	05:09	43m	05:52	40m	06:33	37m	07:10	12h 03m	19:14	37m	19:51	40m	20:32	43m	21:15	11h 58m	7h 55m				Di, 24. Sep
Mi, 25. Sep	MESZ	21:12 – 23:14	2h 01m	AN_+ bis $M_\nearrow$		23:14	17:06	05:11	43m	05:54	40m	06:35	37m	07:12	11h 59m	19:12	37m	19:49	40m	20:29	43m	21:12	12h 02m	8h 00m				Mi, 25. Sep
Do, 26. Sep	MESZ	21:09 – 00:32*	3h 22m	AN_+ bis $M_\nearrow$		—:—	17:39	05:13	43m	05:56	40m	06:37	37m	07:14	11h 55m	19:09	37m	19:46	40m	20:27	42m	21:09	12h 06m	8h 05m				Do, 26. Sep
Fr, 27. Sep	MESZ	21:07 – 01:53*	4h 45m	AN_+ bis $M_\nearrow$		00:32	18:00	05:15	42m	05:58	40m	06:39	37m	07:16	11h 50m	19:07	37m	19:44	40m	20:24	42m	21:07	12h 10m	8h 10m				Fr, 27. Sep
Sa, 28. Sep	MESZ	21:04 – 03:11*	6h 07m	AN_+ bis $M_\nearrow$		01:53	18:14	05:17	42m	06:00	40m	06:40	37m	07:18	11h 46m	19:04	37m	19:41	40m	20:22	42m	21:04	12h 15m	8h 15m				Sa, 28. Sep
So, 29. Sep	MESZ	21:01 – 04:27*	7h 26m	AN_+ bis $M_\nearrow$		03:11	18:24	05:19	42m	06:02	40m	06:42	37m	07:19	11h 42m	19:02	37m	19:39	40m	20:19	42m	21:01	12h 19m	8h 19m				So, 29. Sep
Mo, 30. Sep	MESZ	20:59 – 05:23*	8h 24m	AN_+ bis AN_-		04:27	18:32	05:21	42m	06:04	40m	06:44	37m	07:21	11h 38m	18:59	37m	19:36	40m	20:16	42m	20:59	12h 23m	8h 24m				Mo, 30. Sep
Di, 1. Okt	MESZ	20:56 – 05:25*	8h 29m	AN_+ bis AN_-		05:41	18:39	05:23	42m	06:05	40m	06:46	37m	07:23	11h 33m	18:57	37m	19:34	40m	20:14	42m	20:56	12h 27m	8h 29m				Di, 1. Okt
Mi, 2. Okt	MESZ	20:53 – 05:27*	8h 33m	AN_+ bis AN_-	●	06:53	18:45	05:25	42m	06:07	40m	06:48	37m	07:25	11h 29m	18:54	37m	19:32	40m	20:12	41m	20:53	12h 32m	8h 33m				Mi, 2. Okt
Do, 3. Okt	MESZ	20:51 – 05:29*	8h 38m	AN_+ bis AN_-		08:06	18:52	05:27	41m	06:09	40m	06:49	37m	07:27	11h 25m	18:52	37m	19:29	39m	20:09	41m	20:51	12h 36m	8h 38m				Do, 3. Okt
Fr, 4. Okt	MESZ	20:48 – 05:31*	8h 42m	AN_+ bis AN_-		09:19	19:01	05:29	41m	06:11	40m	06:51	37m	07:28	11h 21m	18:50	37m	19:27	39m	20:07	41m	20:48	12h 40m	8h 42m				Fr, 4. Okt
Sa, 5. Okt	MESZ	20:46 – 05:33*	8h 47m	AN_+ bis AN_-		10:35	19:11	05:31	41m	06:13	40m	06:53	37m	07:30	11h 16m	18:47	37m	19:24	39m	20:04	41m	20:46	12h 44m	8h 47m				Sa, 5. Okt
So, 6. Okt	MESZ	20:43 – 05:35*	8h 51m	AN_+ bis AN_-		11:54	19:26	05:33	41m	06:15	39m	06:55	37m	07:32	11h 12m	18:45	37m	19:22	39m	20:02	41m	20:43	12h 49m	8h 51m				So, 6. Okt
Mo, 7. Okt	MESZ	20:41 – 05:37*	8h 56m	AN_+ bis AN_-		13:12	19:49	05:35	41m	06:17	39m	06:56	37m	07:34	11h 08m	18:42	37m	19:20	39m	19:59	41m	20:41	12h 53m	8h 56m				Mo, 7. Okt
Di, 8. Okt	MESZ	20:38 – 05:39*	9h 00m	AN_+ bis AN_-		14:27	20:23	05:37	41m	06:18	39m	06:58	37m	07:36	11h 04m	18:40	37m	19:17	39m	19:57	41m	20:38	12h 57m	9h 00m				Di, 8. Okt
Mi, 9. Okt	MESZ	21:15 – 05:41*	8h 25m	$M_\searrow$ bis AN_-		15:29	21:15	05:39	41m	06:20	39m	07:00	37m	07:38	11h 00m	18:38	37m	19:15	39m	19:55	41m	20:36	13h 01m	9h 04m				Mi, 9. Okt
Do, 10. Okt	MESZ	22:27 – 05:43*	7h 15m	$M_\searrow$ bis AN_-	◐	16:16	22:27	05:41	41m	06:22	39m	07:02	37m	07:39	10h 55m	18:35	37m	19:13	39m	19:52	41m	20:33	13h 06m	9h 09m				Do, 10. Okt
Fr, 11. Okt	MESZ	23:52 – 05:44*	5h 52m	$M_\searrow$ bis AN_-		16:47	23:52	05:43	41m	06:24	39m	07:04	37m	07:41	10h 51m	18:33	37m	19:10	39m	19:50	41m	20:31	13h 10m	9h 13m				Fr, 11. Okt
Sa, 12. Okt	MESZ	01:24* – 05:46*	4h 22m	$M_\searrow$ bis AN_-		17:08	—:—	05:44	41m	06:26	39m	07:05	37m	07:43	10h 47m	18:30	37m	19:08	39m	19:48	40m	20:29	13h 14m	9h 17m				Sa, 12. Okt
So, 13. Okt	MESZ	02:58* – 05:48*	2h 50m	$M_\searrow$ bis AN_-		17:23	01:24	05:46	41m	06:27	39m	07:07	37m	07:45	10h 43m	18:28	37m	19:06	39m	19:46	40m	20:26	13h 18m	9h 21m				So, 13. Okt
Mo, 14. Okt	MESZ	04:32* – 05:50*	1h 17m	$M_\searrow$ bis AN_-		17:34	02:58	05:48	40m	06:29	39m	07:09	37m	07:47	10h 39m	18:26	37m	19:03	39m	19:43	40m	20:24	13h 22m	9h 25m				Mo, 14. Okt
Di, 15. Okt	MESZ	—:— – —:—	–	Mond stört		17:44	04:32	05:50	40m	06:31	39m	07:11	37m	07:49	10h 34m	18:24	37m	19:01	39m	19:41	40m	20:22	13h 26m	9h 29m				Di, 15. Okt
Mi, 16. Okt	MESZ	—:— – —:—	–	Mond stört		17:54	06:07	05:52	40m	06:33	39m	07:13	37m	07:51	10h 30m	18:21	37m	18:59	39m	19:39	40m	20:20	13h 31m	9h 34m				Mi, 16. Okt
Do, 17. Okt	MESZ	—:— – —:—	–	Mond stört	○	18:05	07:43	05:54	40m	06:34	39m	07:14	37m	07:52	10h 26m	18:19	37m	18:57	39m	19:37	40m	20:17	13h 35m	9h 38m				Do, 17. Okt
Fr, 18. Okt	MESZ	—:— – —:—	–	Mond stört		18:19	09:22	05:55	40m	06:36	39m	07:16	38m	07:54	10h 22m	18:17	37m	18:55	39m	19:35	40m	20:15	13h 39m	9h 42m				Fr, 18. Okt
Sa, 19. Okt	MESZ	—:— – —:—	–	Mond stört		18:39	11:02	05:57	40m	06:38	40m	07:18	38m	07:56	10h 18m	18:14	38m	18:52	39m	19:32	40m	20:13	13h 43m	9h 45m				Sa, 19. Okt
So, 20. Okt	MESZ	—:— – —:—	–	Mond stört		19:09	12:38	05:59	40m	06:40	40m	07:20	38m	07:58	10h 14m	18:12	38m	18:50	39m	19:30	40m	20:11	13h 47m	9h 49m				So, 20. Okt
Mo, 21. Okt	MESZ	—:— – —:—	–	Mond stört		19:54	14:00	06:01	40m	06:42	40m	07:22	38m	08:00	10h 10m	18:10	38m	18:48	40m	19:28	40m	20:09	13h 51m	9h 53m				Mo, 21. Okt
Di, 22. Okt	MESZ	20:07 – 20:59	51m	AN_+ bis $M_\nearrow$		20:59	15:01	06:03	40m	06:43	40m	07:23	38m	08:02	10h 05m	18:08	38m	18:46	40m	19:26	40m	20:07	13h 55m	9h 57m				Di, 22. Okt
Mi, 23. Okt	MESZ	20:05 – 22:16	2h 11m	AN_+ bis $M_\nearrow$		22:16	15:41	06:04	40m	06:45	40m	07:25	38m	08:04	10h 01m	18:06	38m	18:44	40m	19:24	40m	20:05	14h 00m	10h 01m				Mi, 23. Okt
Do, 24. Okt	MESZ	20:03 – 23:38	3h 35m	AN_+ bis $M_\nearrow$	◑	23:38	16:05	06:06	40m	06:47	40m	07:27	38m	08:06	9h 57m	18:03	38m	18:42	40m	19:22	40m	20:03	14h 04m	10h 05m				Do, 24. Okt
Fr, 25. Okt	MESZ	20:01 – 00:58*	4h 57m	AN_+ bis $M_\nearrow$		—:—	16:22	06:08	40m	06:49	40m	07:29	38m	08:08	9h 53m	18:01	38m	18:40	40m	19:20	40m	20:01	14h 08m	10h 08m				Fr, 25. Okt
Sa, 26. Okt	MESZ	19:59 – 02:16*	6h 16m	AN_+ bis $M_\nearrow$		00:58	16:33	06:10	40m	06:50	40m	07:31	38m	08:10	9h 49m	17:59	38m	18:38	40m	19:18	40m	19:59	14h 12m	10h 12m				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		18:57 – 02:30*	7h 32m	AN_+ bis $M_↗$		01:16	15:41	05:11	40m	05:52	40m	06:32	38m	07:11	9h 45m	16:57	38m	17:36	40m	18:16	40m	18:57	14h 16m	10h 16m				So, 27. Okt
Mo, 28. Okt		18:55 – 03:42*	8h 46m	AN_+ bis $M_↗$		02:30	15:49	05:13	40m	05:54	40m	06:34	39m	07:13	9h 41m	16:55	39m	17:34	40m	18:15	40m	18:55	14h 20m	10h 19m				Mo, 28. Okt
Di, 29. Okt		18:53 – 04:54*	10h 00m	AN_+ bis $M_↗$		03:42	15:55	05:15	40m	05:56	40m	06:36	39m	07:15	9h 37m	16:53	39m	17:32	40m	18:13	40m	18:53	14h 24m	10h 23m				Di, 29. Okt
Mi, 30. Okt		18:52 – 05:18*	10h 26m	AN_+ bis AN_-		04:54	16:02	05:17	40m	05:57	40m	06:38	39m	07:17	9h 33m	16:51	39m	17:30	40m	18:11	40m	18:52	14h 28m	10h 26m				Mi, 30. Okt
Do, 31. Okt		18:50 – 05:20*	10h 30m	AN_+ bis AN_-		06:07	16:10	05:18	40m	05:59	40m	06:40	39m	07:19	9h 29m	16:49	39m	17:28	40m	18:09	40m	18:50	14h 32m	10h 30m				Do, 31. Okt
Fr, 1. Nov		18:48 – 05:22*	10h 33m	AN_+ bis AN_-	●	07:23	16:20	05:20	40m	06:01	40m	06:41	39m	07:21	9h 25m	16:47	39m	17:27	40m	18:07	40m	18:48	14h 35m	10h 33m				Fr, 1. Nov
Sa, 2. Nov		18:46 – 05:23*	10h 36m	AN_+ bis AN_-		08:41	16:34	05:22	40m	06:02	40m	06:43	39m	07:23	9h 22m	16:45	39m	17:25	40m	18:06	40m	18:46	14h 39m	10h 36m				Sa, 2. Nov
So, 3. Nov		18:45 – 05:25*	10h 40m	AN_+ bis AN_-		10:00	16:54	05:23	40m	06:04	40m	06:45	39m	07:25	9h 18m	16:43	39m	17:23	40m	18:04	40m	18:45	14h 43m	10h 40m				So, 3. Nov
Mo, 4. Nov		18:43 – 05:27*	10h 43m	AN_+ bis AN_-		11:16	17:25	05:25	40m	06:06	41m	06:47	40m	07:27	9h 14m	16:41	40m	17:21	41m	18:02	40m	18:43	14h 47m	10h 43m				Mo, 4. Nov
Di, 5. Nov		18:42 – 05:28*	10h 46m	AN_+ bis AN_-		12:23	18:11	05:27	40m	06:07	41m	06:49	40m	07:29	9h 10m	16:39	40m	17:20	41m	18:01	40m	18:42	14h 51m	10h 46m				Di, 5. Nov
Mi, 6. Nov		19:16 – 05:30*	10h 14m	$M_↘$ bis AN_-		13:14	19:16	05:28	40m	06:09	41m	06:50	40m	07:31	9h 06m	16:38	40m	17:18	41m	17:59	40m	18:40	14h 55m	10h 49m				Mi, 6. Nov
Do, 7. Nov		20:36 – 05:31*	8h 55m	$M_↘$ bis AN_-		13:49	20:36	05:30	40m	06:11	41m	06:52	40m	07:33	9h 03m	16:36	40m	17:16	41m	17:58	40m	18:38	14h 58m	10h 53m				Do, 7. Nov
Fr, 8. Nov		22:03 – 05:33*	7h 29m	$M_↘$ bis AN_-		14:13	22:03	05:31	41m	06:13	41m	06:54	40m	07:35	8h 59m	16:34	40m	17:15	41m	17:56	40m	18:37	15h 02m	10h 56m				Fr, 8. Nov
Sa, 9. Nov		23:33 – 05:35*	6h 01m	$M_↘$ bis AN_-	◐	14:29	23:33	05:33	41m	06:14	41m	06:56	40m	07:37	8h 55m	16:32	40m	17:13	41m	17:55	41m	18:36	15h 06m	10h 59m				Sa, 9. Nov
So, 10. Nov		01:03* – 05:36*	4h 33m	$M_↘$ bis AN_-		14:41	—:—	05:35	41m	06:16	41m	06:57	40m	07:38	8h 52m	16:31	40m	17:12	41m	17:53	41m	18:34	15h 09m	11h 02m				So, 10. Nov
Mo, 11. Nov		02:34* – 05:38*	3h 04m	$M_↘$ bis AN_-		14:51	01:03	05:36	41m	06:17	41m	06:59	41m	07:40	8h 48m	16:29	41m	17:10	41m	17:52	41m	18:33	15h 13m	11h 04m				Mo, 11. Nov
Di, 12. Nov		04:05* – 05:39*	1h 33m	$M_↘$ bis AN_-		15:01	02:34	05:38	41m	06:19	41m	07:01	41m	07:42	8h 45m	16:27	41m	17:09	41m	17:50	41m	18:32	15h 16m	11h 07m				Di, 12. Nov
Mi, 13. Nov		05:41* – 05:41*	0m	$M_↘$ bis AN_-		15:11	04:05	05:39	41m	06:21	41m	07:03	41m	07:44	8h 41m	16:26	41m	17:07	41m	17:49	41m	18:30	15h 20m	11h 10m				Mi, 13. Nov
Do, 14. Nov		—:— – —:—	–	Mond stört		15:23	05:41	05:41	41m	06:22	42m	07:04	41m	07:46	8h 38m	16:24	41m	17:06	42m	17:48	41m	18:29	15h 23m	11h 13m				Do, 14. Nov
Fr, 15. Nov		—:— – —:—	–	Mond stört	○	15:39	07:19	05:42	41m	06:24	42m	07:06	41m	07:48	8h 34m	16:23	41m	17:04	42m	17:47	41m	18:28	15h 27m	11h 16m				Fr, 15. Nov
Sa, 16. Nov		—:— – —:—	–	Mond stört		16:04	08:58	05:44	41m	06:25	42m	07:08	42m	07:50	8h 31m	16:21	41m	17:03	42m	17:45	41m	18:27	15h 30m	11h 18m				Sa, 16. Nov
So, 17. Nov		—:— – —:—	–	Mond stört		16:42	10:31	05:45	41m	06:27	42m	07:09	42m	07:52	8h 28m	16:20	42m	17:02	42m	17:44	41m	18:26	15h 33m	11h 21m				So, 17. Nov
Mo, 18. Nov		—:— – —:—	–	Mond stört		17:39	11:45	05:47	41m	06:29	42m	07:11	42m	07:53	8h 24m	16:18	42m	17:01	42m	17:43	41m	18:25	15h 36m	11h 23m				Mo, 18. Nov
Di, 19. Nov		18:24 – 18:54	30m	AN_+ bis $M_↗$		18:54	12:35	05:48	41m	06:30	42m	07:13	42m	07:55	8h 21m	16:17	42m	16:59	42m	17:42	41m	18:24	15h 40m	11h 26m				Di, 19. Nov
Mi, 20. Nov		18:23 – 20:17	1h 54m	AN_+ bis $M_↗$		20:17	13:07	05:50	41m	06:32	42m	07:14	42m	07:57	8h 18m	16:16	42m	16:58	42m	17:41	41m	18:23	15h 43m	11h 28m				Mi, 20. Nov
Do, 21. Nov		18:22 – 21:40	3h 18m	AN_+ bis $M_↗$		21:40	13:26	05:51	41m	06:33	42m	07:16	42m	07:59	8h 15m	16:14	42m	16:57	42m	17:40	41m	18:22	15h 46m	11h 30m				Do, 21. Nov
Fr, 22. Nov		18:21 – 23:00	4h 39m	AN_+ bis $M_↗$		23:00	13:40	05:53	41m	06:35	42m	07:18	43m	08:01	8h 12m	16:13	43m	16:56	42m	17:39	41m	18:21	15h 49m	11h 33m				Fr, 22. Nov
Sa, 23. Nov		18:20 – 00:16*	5h 55m	AN_+ bis $M_↗$	◑	—:—	13:50	05:54	41m	06:36	43m	07:19	43m	08:02	8h 09m	16:12	43m	16:55	43m	17:38	41m	18:20	15h 52m	11h 35m				Sa, 23. Nov
So, 24. Nov		18:19 – 01:29*	7h 09m	AN_+ bis $M_↗$		00:16	13:58	05:56	41m	06:37	43m	07:21	43m	08:04	8h 06m	16:11	43m	16:54	43m	17:37	41m	18:19	15h 54m	11h 37m				So, 24. Nov
Mo, 25. Nov		18:19 – 02:41*	8h 22m	AN_+ bis $M_↗$		01:29	14:04	05:57	42m	06:39	43m	07:22	43m	08:06	8h 04m	16:10	43m	16:53	43m	17:37	41m	18:19	15h 57m	11h 39m				Mo, 25. Nov
Di, 26. Nov		18:18 – 03:53*	9h 35m	AN_+ bis $M_↗$		02:41	14:11	05:58	42m	06:40	43m	07:24	43m	08:07	8h 01m	16:09	43m	16:52	43m	17:36	42m	18:18	16h 00m	11h 41m				Di, 26. Nov
Mi, 27. Nov		18:17 – 05:08*	10h 50m	AN_+ bis $M_↗$		03:53	14:19	06:00	42m	06:42	43m	07:25	43m	08:09	7h 58m	16:08	43m	16:52	43m	17:35	42m	18:17	16h 02m	11h 43m				Mi, 27. Nov
Do, 28. Nov		18:17 – 06:02*	11h 45m	AN_+ bis AN_-		05:08	14:28	06:01	42m	06:43	43m	07:27	44m	08:11	7h 56m	16:07	43m	16:51	43m	17:34	42m	18:17	16h 05m	11h 45m				Do, 28. Nov
Fr, 29. Nov		18:16 – 06:03*	11h 47m	AN_+ bis AN_-		06:25	14:41	06:02	42m	06:44	43m	07:28	44m	08:12	7h 53m	16:06	44m	16:50	43m	17:34	42m	18:16	16h 07m	11h 47m				Fr, 29. Nov
Sa, 30. Nov		18:16 – 06:05*	11h 48m	AN_+ bis AN_-		07:45	14:59	06:03	42m	06:46	43m	07:29	44m	08:14	7h 51m	16:05	44m	16:50	43m	17:33	42m	18:16	16h 09m	11h 48m				Sa, 30. Nov
So, 1. Dez		18:15 – 06:06*	11h 50m	AN_+ bis AN_-	●	09:03	15:26	06:05	42m	06:47	43m	07:31	44m	08:15	7h 49m	16:05	44m	16:49	43m	17:33	42m	18:15	16h 12m	11h 50m				So, 1. Dez
Mo, 2. Dez		18:15 – 06:07*	11h 52m	AN_+ bis AN_-		10:14	16:08	06:06	42m	06:48	43m	07:32	44m	08:17	7h 47m	16:04	44m	16:48	43m	17:32	42m	18:15	16h 14m	11h 52m				Mo, 2. Dez
Di, 3. Dez		18:14 – 06:08*	11h 53m	AN_+ bis AN_-		11:11	17:08	06:07	42m	06:49	44m	07:33	44m	08:18	7h 45m	16:03	44m	16:48	44m	17:32	42m	18:14	16h 16m	11h 53m				Di, 3. Dez
Mi, 4. Dez		18:25 – 06:09*	11h 44m	$M_↘$ bis AN_-		11:51	18:25	06:08	42m	06:51	44m	07:35	44m	08:20	7h 43m	16:03	44m	16:47	44m	17:32	42m	18:14	16h 18m	11h 55m				Mi, 4. Dez
Do, 5. Dez		19:51 – 06:10*	10h 19m	$M_↘$ bis AN_-		12:17	19:51	06:09	42m	06:52	44m	07:36	45m	08:21	7h 41m	16:02	44m	16:47	44m	17:31	42m	18:14	16h 20m	11h 56m				Do, 5. Dez
Fr, 6. Dez		21:19 – 06:11*	8h 52m	$M_↘$ bis AN_-		12:35	21:19	06:10	42m	06:53	44m	07:37	45m	08:22	7h 39m	16:02	45m	16:47	44m	17:31	42m	18:14	16h 21m	11h 57m				Fr, 6. Dez
Sa, 7. Dez		22:47 – 06:12*	7h 24m	$M_↘$ bis AN_-		12:48	22:47	06:11	42m	06:54	44m	07:38	45m	08:24	7h 37m	16:01	45m	16:46	44m	17:31	42m	18:14	16h 23m	11h 58m				Sa, 7. Dez
So, 8. Dez		00:15* – 06:13*	5h 58m	$M_↘$ bis AN_-	◐	12:59	—:—	06:12	42m	06:55	44m	07:39	45m	08:25	7h 36m	16:01	45m	16:46	44m	17:31	42m	18:13	16h 25m	11h 59m				So, 8. Dez
Mo, 9. Dez		01:42* – 06:14*	4h 31m	$M_↘$ bis AN_-		13:08	00:15	06:13	42m	06:56	44m	07:41	45m	08:26	7h 34m	16:01	45m	16:46	44m	17:31	42m	18:13	16h 26m	12h 00m				Mo, 9. Dez
Di, 10. Dez		03:12* – 06:15*	3h 02m	$M_↘$ bis AN_-		13:17	01:42	06:14	42m	06:57	44m	07:42	45m	08:27	7h 33m	16:00	45m	16:46	44m	17:31	42m	18:13	16h 27m	12h 01m				Di, 10. Dez
Mi, 11. Dez		04:46* – 06:16*	1h 30m	$M_↘$ bis AN_-		13:28	03:12	06:15	42m	06:58	44m	07:43	45m	08:28	7h 32m	16:00	45m	16:46	44m	17:31	42m	18:13	16h 28m	12h 02m				Mi, 11. Dez
Do, 12. Dez		—:— – —:—	–	Mond stört		13:42	04:46	06:16	42m	06:59	44m	07:44	45m	08:29	7h 30m	16:00	45m	16:46	44m	17:31	42m	18:13	16h 29m	12h 03m				Do, 12. Dez
Fr, 13. Dez		—:— – —:—	–	Mond stört		14:02	06:22	06:17	42m	07:00	44m	07:44	45m	08:30	7h 29m	16:00	45m	16:46	44m	17:31	42m	18:14	16h 30m	12h 04m				Fr, 13. Dez
Sa, 14. Dez		—:— – —:—	–	Mond stört		14:32	07:57	06:18	42m	07:01	44m	07:45	45m	08:31	7h 29m	16:00	45m	16:46	44m	17:31	42m	18:14	16h 31m	12h 04m				Sa, 14. Dez
So, 15. Dez		—:— – —:—	–	Mond stört	○	15:20	09:21	06:18	42m	07:01	44m	07:46	45m	08:32	7h 28m	16:00	45m	16:46	44m	17:31	42m	18:14	16h 32m	12h 05m				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		16:27	10:23	06:19	42m	07:02	44m	07:47	45m	08:33	7h 27m	16:00	45m	16:46	44m	17:31	42m	18:14	16h 33m	12h 05m				Mo, 16. Dez
Di, 17. Dez		—:——:—	–	Mond stört		17:49	11:03	06:20	42m	07:03	44m	07:48	45m	08:34	7h 27m	16:01	45m	16:47	44m	17:32	42m	18:15	16h 33m	12h 05m				Di, 17. Dez
Mi, 18. Dez		18:15 – 19:15	1h 00m	AN+ bis M↗		19:15	11:28	06:20	42m	07:03	44m	07:48	46m	08:34	7h 26m	16:01	46m	16:47	44m	17:32	42m	18:15	16h 33m	12h 06m				Mi, 18. Dez
Do, 19. Dez		18:15 – 20:39	2h 23m	AN+ bis M↗		20:39	11:45	06:21	42m	07:04	44m	07:49	46m	08:35	7h 26m	16:01	46m	16:47	44m	17:32	42m	18:15	16h 34m	12h 06m				Do, 19. Dez
Fr, 20. Dez		18:16 – 21:58	3h 41m	AN+ bis M↗		21:58	11:56	06:22	42m	07:05	44m	07:49	46m	08:36	7h 26m	16:02	46m	16:48	44m	17:33	42m	18:16	16h 34m	12h 06m				Fr, 20. Dez
Sa, 21. Dez		18:16 – 23:13	4h 56m	AN+ bis M↗		23:13	12:05	06:22	42m	07:05	44m	07:50	46m	08:36	7h 26m	16:02	46m	16:48	44m	17:33	42m	18:16	16h 34m	12h 06m				Sa, 21. Dez
So, 22. Dez		18:17 – 00:26*	6h 08m	AN+ bis M↗	◑	—:—	12:12	06:23	42m	07:06	44m	07:50	46m	08:37	7h 26m	16:03	46m	16:49	44m	17:34	42m	18:17	16h 34m	12h 06m				So, 22. Dez
Mo, 23. Dez		18:17 – 01:38*	7h 20m	AN+ bis M↗		00:26	12:19	06:23	42m	07:06	44m	07:51	46m	08:37	7h 26m	16:03	46m	16:49	44m	17:34	42m	18:17	16h 33m	12h 06m				Mo, 23. Dez
Di, 24. Dez		18:18 – 02:51*	8h 33m	AN+ bis M↗		01:38	12:27	06:23	42m	07:06	44m	07:51	46m	08:37	7h 26m	16:04	46m	16:50	44m	17:35	42m	18:18	16h 33m	12h 05m				Di, 24. Dez
Mi, 25. Dez		18:19 – 04:07*	9h 48m	AN+ bis M↗		02:51	12:35	06:24	42m	07:07	44m	07:52	45m	08:38	7h 27m	16:05	45m	16:51	44m	17:36	42m	18:19	16h 33m	12h 05m				Mi, 25. Dez
Do, 26. Dez		18:19 – 05:25*	11h 06m	AN+ bis M↗		04:07	12:46	06:24	42m	07:07	44m	07:52	45m	08:38	7h 27m	16:06	45m	16:52	44m	17:36	42m	18:19	16h 32m	12h 05m				Do, 26. Dez
Fr, 27. Dez		18:20 – 06:25*	12h 04m	AN+ bis AN–		05:25	13:02	06:24	42m	07:07	44m	07:52	45m	08:38	7h 28m	16:06	45m	16:52	44m	17:37	42m	18:20	16h 31m	12h 04m				Fr, 27. Dez
Sa, 28. Dez		18:21 – 06:25*	12h 03m	AN+ bis AN–		06:45	13:25	06:25	42m	07:07	44m	07:52	45m	08:38	7h 29m	16:07	45m	16:53	44m	17:38	42m	18:21	16h 30m	12h 03m				Sa, 28. Dez
So, 29. Dez		18:22 – 06:25*	12h 03m	AN+ bis AN–		08:00	14:01	06:25	42m	07:08	44m	07:52	45m	08:38	7h 30m	16:08	45m	16:54	44m	17:39	42m	18:22	16h 29m	12h 03m				So, 29. Dez
Mo, 30. Dez		18:22 – 06:25*	12h 02m	AN+ bis AN–	●	09:03	14:56	06:25	42m	07:08	44m	07:52	45m	08:38	7h 31m	16:09	45m	16:55	44m	17:40	42m	18:22	16h 28m	12h 02m				Mo, 30. Dez
Di, 31. Dez		18:23 – 06:25*	12h 01m	AN+ bis AN–		09:50	16:09	06:25	42m	07:08	44m	07:52	45m	08:38	7h 32m	16:10	45m	16:56	44m	17:41	42m	18:23	16h 27m	12h 01m				Di, 31. Dez
Mi, 1. Jan		18:24 – 06:25*	12h 00m	AN+ bis AN–		10:21	17:34	06:25	42m	07:08	44m	07:52	45m	08:38	7h 33m	16:11	45m	16:57	44m	17:42	42m	18:24	16h 26m	12h 00m				Mi, 1. Jan
Do, 2. Jan		19:05 – 06:25*	11h 20m	M↘ bis AN–		10:41	19:05	06:25	42m	07:08	44m	07:52	45m	08:38	7h 34m	16:13	45m	16:58	44m	17:43	42m	18:25	16h 24m	11h 59m				Do, 2. Jan
Fr, 3. Jan		20:34 – 06:25*	9h 50m	M↘ bis AN–		10:56	20:34	06:25	42m	07:08	44m	07:52	45m	08:37	7h 36m	16:14	45m	16:59	44m	17:44	42m	18:26	16h 23m	11h 58m				Fr, 3. Jan
Sa, 4. Jan		22:02 – 06:25*	8h 22m	M↘ bis AN–		11:07	22:02	06:25	42m	07:07	44m	07:52	45m	08:37	7h 38m	16:15	45m	17:00	44m	17:45	42m	18:27	16h 21m	11h 57m				Sa, 4. Jan
So, 5. Jan		23:30 – 06:24*	6h 54m	M↘ bis AN–		11:16	23:30	06:25	42m	07:07	44m	07:52	45m	08:37	7h 39m	16:16	45m	17:02	44m	17:46	42m	18:28	16h 19m	11h 56m				So, 5. Jan
Mo, 6. Jan		00:57* – 06:24*	5h 26m	M↘ bis AN–		11:25	—:—	06:24	42m	07:07	44m	07:51	44m	08:36	7h 41m	16:18	44m	17:03	44m	17:47	42m	18:30	16h 17m	11h 54m				Mo, 6. Jan
Di, 7. Jan		02:27* – 06:24*	3h 56m	M↘ bis AN–	◐	11:35	00:57	06:24	42m	07:07	44m	07:51	44m	08:36	7h 43m	16:19	44m	17:04	44m	17:48	42m	18:31	16h 15m	11h 53m				Di, 7. Jan
Mi, 8. Jan		04:00* – 06:24*	2h 23m	M↘ bis AN–		11:47	02:27	06:24	42m	07:06	44m	07:50	44m	08:35	7h 45m	16:21	44m	17:05	44m	17:49	42m	18:32	16h 13m	11h 51m				Mi, 8. Jan
Do, 9. Jan		05:33* – 06:23*	49m	M↘ bis AN–		12:04	04:00	06:24	42m	07:06	43m	07:50	44m	08:34	7h 47m	16:22	44m	17:07	43m	17:51	42m	18:33	16h 11m	11h 50m				Do, 9. Jan
Fr, 10. Jan		—:——:—	–	Mond stört		12:29	05:33	06:23	42m	07:06	43m	07:49	44m	08:34	7h 49m	16:24	44m	17:08	43m	17:52	42m	18:34	16h 09m	11h 48m				Fr, 10. Jan
Sa, 11. Jan		—:——:—	–	Mond stört		13:08	07:00	06:23	42m	07:05	43m	07:49	44m	08:33	7h 52m	16:25	44m	17:09	43m	17:53	42m	18:35	16h 07m	11h 46m				Sa, 11. Jan
So, 12. Jan		—:——:—	–	Mond stört		14:06	08:10	06:22	42m	07:04	43m	07:48	44m	08:32	7h 54m	16:27	44m	17:11	43m	17:54	42m	18:37	16h 04m	11h 44m				So, 12. Jan
Mo, 13. Jan		—:——:—	–	Mond stört	○	15:22	08:58	06:22	42m	07:04	43m	07:47	43m	08:31	7h 56m	16:28	43m	17:12	43m	17:56	42m	18:38	16h 02m	11h 43m				Mo, 13. Jan
Di, 14. Jan		—:——:—	–	Mond stört		16:48	09:29	06:21	42m	07:03	43m	07:47	43m	08:30	7h 59m	16:30	43m	17:14	43m	17:57	42m	18:39	15h 59m	11h 41m				Di, 14. Jan
Mi, 15. Jan		—:——:—	–	Mond stört		18:13	09:48	06:21	42m	07:03	43m	07:46	43m	08:30	8h 02m	16:32	43m	17:15	43m	17:59	42m	18:41	15h 56m	11h 39m				Mi, 15. Jan
Do, 16. Jan		18:42 – 19:35	53m	AN+ bis M↗		19:35	10:02	06:20	41m	07:02	43m	07:45	43m	08:29	8h 04m	16:33	43m	17:17	43m	18:00	42m	18:42	15h 54m	11h 37m				Do, 16. Jan
Fr, 17. Jan		18:43 – 20:53	2h 09m	AN+ bis M↗		20:53	10:12	06:19	41m	07:01	43m	07:44	43m	08:27	8h 07m	16:35	43m	17:18	43m	18:02	41m	18:43	15h 51m	11h 34m				Fr, 17. Jan
Sa, 18. Jan		18:45 – 22:08	3h 22m	AN+ bis M↗		22:08	10:20	06:18	41m	07:00	43m	07:43	43m	08:26	8h 10m	16:37	43m	17:20	43m	18:03	41m	18:45	15h 48m	11h 32m				Sa, 18. Jan
So, 19. Jan		18:46 – 23:21	4h 34m	AN+ bis M↗		23:21	10:27	06:18	41m	06:59	42m	07:42	42m	08:25	8h 13m	16:39	42m	17:22	42m	18:05	41m	18:46	15h 45m	11h 30m				So, 19. Jan
Mo, 20. Jan		18:48 – 00:34*	5h 45m	AN+ bis M↗		—:—	10:34	06:17	41m	06:58	42m	07:41	42m	08:24	8h 16m	16:40	42m	17:23	42m	18:06	41m	18:48	15h 42m	11h 27m				Mo, 20. Jan
Di, 21. Jan		18:49 – 01:48*	6h 58m	AN+ bis M↗	◑	00:34	10:42	06:16	41m	06:57	42m	07:40	42m	08:23	8h 19m	16:42	42m	17:25	42m	18:08	41m	18:49	15h 39m	11h 25m				Di, 21. Jan
Mi, 22. Jan		18:51 – 03:05*	8h 14m	AN+ bis M↗		01:48	10:52	06:15	41m	06:56	42m	07:39	42m	08:21	8h 22m	16:44	42m	17:27	42m	18:09	41m	18:51	15h 35m	11h 23m				Mi, 22. Jan
Do, 23. Jan		18:52 – 04:24*	9h 31m	AN+ bis M↗		03:05	11:05	06:14	41m	06:55	42m	07:38	42m	08:20	8h 25m	16:46	42m	17:28	42m	18:11	41m	18:52	15h 32m	11h 20m				Do, 23. Jan
Fr, 24. Jan		18:54 – 05:41*	10h 47m	AN+ bis M↗		04:24	11:24	06:13	41m	06:54	42m	07:37	42m	08:19	8h 29m	16:48	42m	17:30	42m	18:12	41m	18:54	15h 29m	11h 17m				Fr, 24. Jan
Sa, 25. Jan		18:55 – 06:11*	11h 15m	AN+ bis AN–		05:41	11:54	06:12	41m	06:53	42m	07:35	41m	08:17	8h 32m	16:50	41m	17:32	42m	18:14	41m	18:55	15h 26m	11h 15m				Sa, 25. Jan
So, 26. Jan		18:57 – 06:09*	11h 12m	AN+ bis AN–		06:50	12:39	06:11	41m	06:52	42m	07:34	41m	08:16	8h 35m	16:52	41m	17:33	42m	18:16	41m	18:57	15h 22m	11h 12m				So, 26. Jan
Mo, 27. Jan		18:59 – 06:08*	11h 09m	AN+ bis AN–		07:44	13:45	06:09	41m	06:51	41m	07:33	41m	08:14	8h 39m	16:54	41m	17:35	42m	18:17	41m	18:59	15h 19m	11h 09m				Mo, 27. Jan
Di, 28. Jan		19:00 – 06:07*	11h 06m	AN+ bis AN–		08:21	15:08	06:08	41m	06:49	41m	07:31	41m	08:13	8h 42m	16:56	41m	17:37	41m	18:19	41m	19:00	15h 15m	11h 06m				Di, 28. Jan
Mi, 29. Jan		19:02 – 06:06*	11h 03m	AN+ bis AN–	●	08:45	16:39	06:07	41m	06:48	41m	07:30	41m	08:11	8h 46m	16:58	41m	17:39	41m	18:21	41m	19:02	15h 12m	11h 03m				Mi, 29. Jan
Do, 30. Jan		19:03 – 06:04*	11h 00m	AN+ bis AN–		09:02	18:12	06:06	41m	06:47	41m	07:28	41m	08:10	8h 49m	16:59	41m	17:41	41m	18:22	41m	19:03	15h 08m	11h 00m				Do, 30. Jan
Fr, 31. Jan		19:43 – 06:03*	10h 19m	M↘ bis AN–		09:14	19:43	06:04	41m	06:45	41m	07:27	40m	08:08	8h 53m	17:01	40m	17:42	41m	18:24	41m	19:05	15h 04m	10h 57m				Fr, 31. Jan
Sa, 1. Feb		21:14 – 06:02*	8h 48m	M↘ bis AN–		09:24	21:14	06:03	40m	06:44	41m	07:25	40m	08:06	8h 57m	17:03	40m	17:44	41m	18:26	41m	19:07	15h 01m	10h 54m				Sa, 1. Feb
So, 2. Feb		22:43 – 06:00*	7h 17m	M↘ bis AN–		09:33	22:43	06:02	40m	06:43	41m	07:24	40m	08:04	9h 00m	17:05	40m	17:46	41m	18:27	41m	19:08	14h 57m	10h 51m				So, 2. Feb
Mo, 3. Feb		00:14* – 05:59*	5h 44m	M↘ bis AN–		09:43	—:—	06:00	40m	06:41	41m	07:22	40m	08:03	9h 04m	17:07	40m	17:48	41m	18:29	40m	19:10	14h 53m	10h 48m				Mo, 3. Feb