Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Thonon-les-Bains 46.3736° N 6.4770° 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		18:48 – 22:31	3h 43m	AN+ bis M↗		22:31	11:31	06:26	36m	07:02	37m	07:40	36m	08:17	8h 40m	16:57	36m	17:34	37m	18:12	36m	18:48	15h 19m	11h 37m				Mo, 1. Jan
Di, 2. Jan		18:49 – 23:36	4h 46m	AN+ bis M↗		23:36	11:46	06:26	36m	07:03	37m	07:40	36m	08:17	8h 41m	16:58	36m	17:35	37m	18:12	36m	18:49	15h 18m	11h 37m				Di, 2. Jan
Mi, 3. Jan		18:50 – 00:40*	5h 50m	AN+ bis M↗		—:—	12:01	06:26	36m	07:03	37m	07:40	36m	08:17	8h 42m	16:59	36m	17:36	37m	18:13	36m	18:50	15h 17m	11h 36m				Mi, 3. Jan
Do, 4. Jan		18:51 – 01:46*	6h 55m	AN+ bis M↗	◑	00:40	12:16	06:26	36m	07:03	37m	07:40	36m	08:16	8h 43m	17:00	36m	17:37	37m	18:14	36m	18:51	15h 16m	11h 35m				Do, 4. Jan
Fr, 5. Jan		18:52 – 02:55*	8h 03m	AN+ bis M↗		01:46	12:32	06:26	36m	07:03	37m	07:40	36m	08:16	8h 44m	17:01	36m	17:38	37m	18:15	36m	18:52	15h 14m	11h 34m				Fr, 5. Jan
Sa, 6. Jan		18:52 – 04:08*	9h 15m	AN+ bis M↗		02:55	12:51	06:26	36m	07:03	37m	07:40	36m	08:16	8h 46m	17:02	36m	17:39	37m	18:16	36m	18:52	15h 13m	11h 33m				Sa, 6. Jan
So, 7. Jan		18:53 – 05:24*	10h 30m	AN+ bis M↗		04:08	13:16	06:26	36m	07:02	37m	07:40	36m	08:16	8h 47m	17:03	36m	17:40	37m	18:17	36m	18:53	15h 12m	11h 32m				So, 7. Jan
Mo, 8. Jan		18:54 – 06:26*	11h 31m	AN+ bis AN−		05:24	13:48	06:26	36m	07:02	37m	07:39	36m	08:16	8h 48m	17:05	36m	17:41	37m	18:18	36m	18:54	15h 10m	11h 31m				Mo, 8. Jan
Di, 9. Jan		18:55 – 06:26*	11h 30m	AN+ bis AN−		06:39	14:33	06:26	36m	07:02	36m	07:39	36m	08:15	8h 50m	17:06	36m	17:42	36m	18:19	36m	18:55	15h 09m	11h 30m				Di, 9. Jan
Mi, 10. Jan		18:56 – 06:26*	11h 29m	AN+ bis AN−		07:48	15:33	06:26	36m	07:02	36m	07:39	36m	08:15	8h 51m	17:07	36m	17:43	36m	18:20	36m	18:56	15h 07m	11h 29m				Mi, 10. Jan
Do, 11. Jan		18:57 – 06:25*	11h 27m	AN+ bis AN−	●	08:45	16:48	06:26	36m	07:02	36m	07:39	36m	08:15	8h 53m	17:08	36m	17:44	36m	18:21	36m	18:57	15h 06m	11h 27m				Do, 11. Jan
Fr, 12. Jan		18:58 – 06:25*	11h 26m	AN+ bis AN−		09:29	18:12	06:25	36m	07:01	36m	07:38	36m	08:14	8h 55m	17:09	36m	17:46	36m	18:22	36m	18:58	15h 04m	11h 26m				Fr, 12. Jan
Sa, 13. Jan		19:39 – 06:25*	10h 45m	M↘ bis AN−		10:02	19:39	06:25	36m	07:01	36m	07:38	36m	08:14	8h 56m	17:11	36m	17:47	36m	18:23	36m	19:00	15h 02m	11h 25m				Sa, 13. Jan
So, 14. Jan		21:04 – 06:24*	9h 20m	M↘ bis AN−		10:27	21:04	06:25	36m	07:01	36m	07:37	35m	08:13	8h 58m	17:12	35m	17:48	36m	18:25	36m	19:01	15h 00m	11h 23m				So, 14. Jan
Mo, 15. Jan		22:25 – 06:24*	7h 58m	M↘ bis AN−		10:48	22:25	06:24	36m	07:00	36m	07:37	35m	08:13	9h 00m	17:13	35m	17:49	36m	18:26	36m	19:02	14h 58m	11h 22m				Mo, 15. Jan
Di, 16. Jan		23:45 – 06:24*	6h 38m	M↘ bis AN−		11:07	23:45	06:24	35m	07:00	36m	07:36	35m	08:12	9h 02m	17:15	35m	17:50	36m	18:27	35m	19:03	14h 56m	11h 20m				Di, 16. Jan
Mi, 17. Jan		01:02* – 06:23*	5h 20m	M↘ bis AN−		11:25	—:—	06:24	35m	06:59	36m	07:36	35m	08:12	9h 04m	17:16	35m	17:52	36m	18:28	35m	19:04	14h 54m	11h 19m				Mi, 17. Jan
Do, 18. Jan		02:20* – 06:23*	4h 02m	M↘ bis AN−	◐	11:45	01:02	06:23	35m	06:59	36m	07:35	35m	08:11	9h 06m	17:17	35m	17:53	36m	18:29	35m	19:05	14h 52m	11h 17m				Do, 18. Jan
Fr, 19. Jan		03:37* – 06:22*	2h 44m	M↘ bis AN−		12:07	02:20	06:23	35m	06:58	36m	07:35	35m	08:10	9h 08m	17:19	35m	17:54	36m	18:30	35m	19:06	14h 50m	11h 15m				Fr, 19. Jan
Sa, 20. Jan		04:52* – 06:21*	1h 29m	M↘ bis AN−		12:34	03:37	06:22	35m	06:58	36m	07:34	35m	08:09	9h 10m	17:20	35m	17:55	36m	18:32	35m	19:07	14h 48m	11h 13m				Sa, 20. Jan
So, 21. Jan		06:01* – 06:21*	19m	M↘ bis AN−		13:08	04:52	06:21	35m	06:57	36m	07:33	35m	08:09	9h 12m	17:21	35m	17:57	36m	18:33	35m	19:09	14h 46m	11h 12m				So, 21. Jan
Mo, 22. Jan		—:——:—	–	Mond stört		13:52	06:01	06:21	35m	06:56	36m	07:33	35m	08:08	9h 15m	17:23	35m	17:58	36m	18:34	35m	19:10	14h 44m	11h 10m				Mo, 22. Jan
Di, 23. Jan		—:——:—	–	Mond stört		14:46	07:01	06:20	35m	06:56	36m	07:32	35m	08:07	9h 17m	17:24	35m	17:59	36m	18:35	35m	19:11	14h 41m	11h 08m				Di, 23. Jan
Mi, 24. Jan		—:——:—	–	Mond stört		15:49	07:50	06:19	35m	06:55	35m	07:31	34m	08:06	9h 19m	17:26	34m	18:01	35m	18:37	35m	19:12	14h 39m	11h 06m				Mi, 24. Jan
Do, 25. Jan		—:——:—	–	Mond stört	○	16:57	08:27	06:19	35m	06:54	35m	07:30	34m	08:05	9h 22m	17:27	34m	18:02	35m	18:38	35m	19:13	14h 36m	11h 04m				Do, 25. Jan
Fr, 26. Jan		—:——:—	–	Mond stört		18:06	08:55	06:18	35m	06:53	35m	07:29	34m	08:04	9h 24m	17:29	34m	18:03	35m	18:39	35m	19:15	14h 34m	11h 02m				Fr, 26. Jan
Sa, 27. Jan		—:——:—	–	Mond stört		19:14	09:18	06:17	35m	06:53	35m	07:28	34m	08:03	9h 27m	17:30	34m	18:05	35m	18:40	35m	19:16	14h 31m	11h 00m				Sa, 27. Jan
So, 28. Jan		19:17 – 20:20	1h 02m	AN+ bis M↗		20:20	09:36	06:16	35m	06:52	35m	07:27	34m	08:02	9h 29m	17:31	34m	18:06	35m	18:42	35m	19:17	14h 29m	10h 58m				So, 28. Jan
Mo, 29. Jan		19:18 – 21:24	2h 05m	AN+ bis M↗		21:24	09:52	06:15	35m	06:51	35m	07:26	34m	08:01	9h 32m	17:33	34m	18:07	35m	18:43	35m	19:18	14h 26m	10h 56m				Mo, 29. Jan
Di, 30. Jan		19:20 – 22:28	3h 08m	AN+ bis M↗		22:28	10:06	06:14	35m	06:50	35m	07:25	34m	08:00	9h 34m	17:34	34m	18:09	35m	18:44	35m	19:20	14h 24m	10h 53m				Di, 30. Jan
Mi, 31. Jan		19:21 – 23:33	4h 12m	AN+ bis M↗		23:33	10:21	06:13	35m	06:49	35m	07:24	34m	07:58	9h 37m	17:36	34m	18:10	35m	18:46	35m	19:21	14h 21m	10h 51m				Mi, 31. Jan
Do, 1. Feb		19:22 – 00:40*	5h 17m	AN+ bis M↗		—:—	10:36	06:13	35m	06:48	35m	07:23	34m	07:57	9h 40m	17:37	34m	18:12	35m	18:47	35m	19:22	14h 18m	10h 49m				Do, 1. Feb
Fr, 2. Feb		19:24 – 01:49*	6h 25m	AN+ bis M↗		00:40	10:53	06:11	35m	06:47	35m	07:22	34m	07:56	9h 42m	17:39	34m	18:13	35m	18:48	35m	19:24	14h 15m	10h 46m				Fr, 2. Feb
Sa, 3. Feb		19:25 – 03:02*	7h 37m	AN+ bis M↗	◑	01:49	11:15	06:10	35m	06:46	35m	07:21	33m	07:55	9h 45m	17:40	33m	18:14	35m	18:50	35m	19:25	14h 13m	10h 44m				Sa, 3. Feb
So, 4. Feb		19:26 – 04:16*	8h 49m	AN+ bis M↗		03:02	11:42	06:09	35m	06:44	35m	07:20	33m	07:53	9h 48m	17:42	33m	18:16	35m	18:51	35m	19:26	14h 10m	10h 42m				So, 4. Feb
Mo, 5. Feb		19:27 – 05:27*	9h 59m	AN+ bis M↗		04:16	12:20	06:08	35m	06:43	35m	07:18	33m	07:52	9h 51m	17:43	33m	18:17	35m	18:52	35m	19:27	14h 07m	10h 39m				Mo, 5. Feb
Di, 6. Feb		19:29 – 06:06*	10h 37m	AN+ bis AN−		05:27	13:11	06:07	35m	06:42	35m	07:17	33m	07:51	9h 54m	17:45	33m	18:19	35m	18:54	35m	19:29	14h 04m	10h 37m				Di, 6. Feb
Mi, 7. Feb		19:30 – 06:05*	10h 34m	AN+ bis AN−		06:29	14:18	06:06	35m	06:41	34m	07:16	33m	07:49	9h 56m	17:46	33m	18:20	35m	18:55	35m	19:30	14h 01m	10h 34m				Mi, 7. Feb
Do, 8. Feb		19:31 – 06:03*	10h 31m	AN+ bis AN−		07:19	15:39	06:05	34m	06:40	34m	07:15	33m	07:48	9h 59m	17:48	33m	18:21	34m	18:56	35m	19:31	13h 58m	10h 31m				Do, 8. Feb
Fr, 9. Feb		19:33 – 06:02*	10h 29m	AN+ bis AN−	●	07:57	17:06	06:03	34m	06:38	34m	07:13	33m	07:47	10h 02m	17:49	33m	18:23	34m	18:58	34m	19:33	13h 55m	10h 29m				Fr, 9. Feb
Sa, 10. Feb		19:34 – 06:01*	10h 26m	AN+ bis AN−		08:26	18:34	06:02	34m	06:37	34m	07:12	33m	07:45	10h 05m	17:51	33m	18:24	34m	18:59	34m	19:34	13h 52m	10h 26m				Sa, 10. Feb
So, 11. Feb		20:00 – 06:00*	9h 59m	M↘ bis AN−		08:50	20:00	06:01	34m	06:36	34m	07:10	33m	07:44	10h 08m	17:52	33m	18:26	34m	19:01	34m	19:35	13h 49m	10h 24m				So, 11. Feb
Mo, 12. Feb		21:24 – 05:58*	8h 34m	M↘ bis AN−		09:10	21:24	06:00	34m	06:34	34m	07:09	33m	07:42	10h 11m	17:54	33m	18:27	34m	19:02	34m	19:37	13h 46m	10h 21m				Mo, 12. Feb
Di, 13. Feb		22:46 – 05:57*	7h 11m	M↘ bis AN−		09:29	22:46	05:58	34m	06:33	34m	07:08	33m	07:41	10h 14m	17:55	33m	18:29	34m	19:03	34m	19:38	13h 43m	10h 18m				Di, 13. Feb
Mi, 14. Feb		00:06* – 05:55*	5h 49m	M↘ bis AN−		09:48	—:—	05:57	34m	06:32	34m	07:06	32m	07:39	10h 17m	17:57	33m	18:30	34m	19:05	34m	19:40	13h 40m	10h 15m				Mi, 14. Feb
Do, 15. Feb		01:26* – 05:54*	4h 28m	M↘ bis AN−		10:10	00:06	05:55	34m	06:30	34m	07:05	32m	07:38	10h 20m	17:58	32m	18:31	34m	19:06	34m	19:41	13h 37m	10h 12m				Do, 15. Feb
Fr, 16. Feb		02:43* – 05:52*	3h 09m	M↘ bis AN−	◐	10:36	01:26	05:54	34m	06:29	34m	07:03	32m	07:36	10h 23m	18:00	32m	18:33	34m	19:07	34m	19:42	13h 34m	10h 10m				Fr, 16. Feb
Sa, 17. Feb		03:55* – 05:51*	1h 55m	M↘ bis AN−		11:08	02:43	05:52	34m	06:27	34m	07:02	32m	07:34	10h 27m	18:01	32m	18:34	34m	19:09	34m	19:44	13h 31m	10h 07m				Sa, 17. Feb
So, 18. Feb		04:58* – 05:49*	51m	M↘ bis AN−		11:49	03:55	05:51	34m	06:26	34m	07:00	32m	07:33	10h 30m	18:03	32m	18:36	34m	19:10	34m	19:45	13h 28m	10h 04m				So, 18. Feb
Mo, 19. Feb		—:——:—	–	Mond stört		12:40	04:58	05:49	34m	06:24	34m	06:58	32m	07:31	10h 33m	18:04	32m	18:37	34m	19:12	34m	19:46	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		Δ*t*		Ph.	↗	↘	Astr.	Δ*t*	Naut.	Δ*t*	Bürg.	Δt	↗	Δ*t*	↘	Δ*t*	Bürg.	Δ*t*	Naut.	Δ*t*	Astr.	Δ*t*	Δ*t*		Δ*t*		
Di, 20. Feb		—:——:—	–	Mond stört		13:40	05:49	05:48	*34m*	06:23	*34m*	06:57	*32m*	07:29	*10h 36m*	18:06	*32m*	18:39	*34m*	19:13	*34m*	19:48	*13h 21m*	*9h 58m*				Di, 20. Feb
Mi, 21. Feb		—:——:—	–	Mond stört		14:46	06:29	05:46	*34m*	06:21	*34m*	06:55	*32m*	07:28	*10h 39m*	18:07	*32m*	18:40	*34m*	19:14	*34m*	19:49	*13h 18m*	*9h 55m*				Mi, 21. Feb
Do, 22. Feb		—:——:—	–	Mond stört		15:55	06:59	05:45	*34m*	06:19	*34m*	06:54	*32m*	07:26	*10h 42m*	18:09	*32m*	18:41	*34m*	19:16	*34m*	19:51	*13h 15m*	*9h 52m*				Do, 22. Feb
Fr, 23. Feb		—:——:—	–	Mond stört		17:03	07:23	05:43	*34m*	06:18	*34m*	06:52	*32m*	07:24	*10h 46m*	18:10	*32m*	18:43	*34m*	19:17	*34m*	19:52	*13h 12m*	*9h 49m*				Fr, 23. Feb
Sa, 24. Feb		—:——:—	–	Mond stört	○	18:10	07:42	05:41	*34m*	06:16	*34m*	06:50	*32m*	07:23	*10h 49m*	18:12	*32m*	18:44	*34m*	19:18	*34m*	19:53	*13h 09m*	*9h 46m*				Sa, 24. Feb
So, 25. Feb		—:——:—	–	Mond stört		19:15	07:58	05:40	*34m*	06:14	*34m*	06:49	*32m*	07:21	*10h 52m*	18:13	*32m*	18:46	*34m*	19:20	*34m*	19:55	*13h 05m*	*9h 43m*				So, 25. Feb
Mo, 26. Feb		19:56 – 20:19	*23m*	AN$_+$ *bis* M↗		20:19	08:13	05:38	*34m*	06:13	*34m*	06:47	*32m*	07:19	*10h 55m*	18:15	*32m*	18:47	*34m*	19:21	*34m*	19:56	*13h 02m*	*9h 40m*				Mo, 26. Feb
Di, 27. Feb		19:58 – 21:24	*1h 26m*	AN$_+$ *bis* M↗		21:24	08:27	05:36	*34m*	06:11	*34m*	06:45	*32m*	07:17	*10h 58m*	18:16	*32m*	18:48	*34m*	19:23	*34m*	19:58	*12h 59m*	*9h 36m*				Di, 27. Feb
Mi, 28. Feb		19:59 – 22:29	*2h 30m*	AN$_+$ *bis* M↗		22:29	08:42	05:34	*34m*	06:09	*34m*	06:43	*32m*	07:15	*11h 02m*	18:18	*32m*	18:50	*34m*	19:24	*34m*	19:59	*12h 56m*	*9h 33m*				Mi, 28. Feb
Do, 29. Feb		20:00 – 23:37	*3h 36m*	AN$_+$ *bis* M↗		23:37	08:58	05:33	*34m*	06:07	*34m*	06:42	*32m*	07:14	*11h 05m*	18:19	*32m*	18:51	*34m*	19:25	*34m*	20:00	*12h 52m*	*9h 30m*				Do, 29. Feb
Fr, 1. Mrz		20:02 – 00:48*	*4h 46m*	AN$_+$ *bis* M↗		—:—	09:18	05:31	*34m*	06:06	*34m*	06:40	*32m*	07:12	*11h 08m*	18:20	*32m*	18:53	*34m*	19:27	*35m*	20:02	*12h 49m*	*9h 27m*				Fr, 1. Mrz
Sa, 2. Mrz		20:03 – 02:00*	*5h 56m*	AN$_+$ *bis* M↗		00:48	09:42	05:29	*34m*	06:04	*34m*	06:38	*32m*	07:10	*11h 11m*	18:22	*32m*	18:54	*34m*	19:28	*35m*	20:03	*12h 46m*	*9h 23m*				Sa, 2. Mrz
So, 3. Mrz		20:05 – 03:11*	*7h 05m*	AN$_+$ *bis* M↗	◑	02:00	10:14	05:27	*34m*	06:02	*34m*	06:36	*31m*	07:08	*11h 15m*	18:23	*32m*	18:55	*34m*	19:30	*35m*	20:05	*12h 43m*	*9h 20m*				So, 3. Mrz
Mo, 4. Mrz		20:06 – 04:15*	*8h 08m*	AN$_+$ *bis* M↗		03:11	10:58	05:25	*35m*	06:00	*34m*	06:34	*31m*	07:06	*11h 18m*	18:25	*32m*	18:57	*34m*	19:31	*35m*	20:06	*12h 39m*	*9h 17m*				Mo, 4. Mrz
Di, 5. Mrz		20:08 – 05:09*	*9h 01m*	AN$_+$ *bis* M↗		04:15	11:55	05:23	*35m*	05:58	*34m*	06:33	*31m*	07:04	*11h 21m*	18:26	*31m*	18:58	*34m*	19:32	*35m*	20:08	*12h 36m*	*9h 13m*				Di, 5. Mrz
Mi, 6. Mrz		20:09 – 05:20*	*9h 10m*	AN$_+$ *bis* AN$_-$		05:09	13:08	05:21	*35m*	05:57	*34m*	06:31	*31m*	07:03	*11h 24m*	18:28	*31m*	19:00	*34m*	19:34	*35m*	20:09	*12h 33m*	*9h 10m*				Mi, 6. Mrz
Do, 7. Mrz		20:10 – 05:18*	*9h 07m*	AN$_+$ *bis* AN$_-$		05:51	14:31	05:20	*35m*	05:55	*34m*	06:29	*31m*	07:01	*11h 28m*	18:29	*31m*	19:01	*34m*	19:35	*35m*	20:10	*12h 29m*	*9h 07m*				Do, 7. Mrz
Fr, 8. Mrz		20:12 – 05:16*	*9h 03m*	AN$_+$ *bis* AN$_-$		06:23	15:58	05:18	*35m*	05:53	*34m*	06:27	*31m*	06:59	*11h 31m*	18:30	*31m*	19:02	*34m*	19:37	*35m*	20:12	*12h 26m*	*9h 03m*				Fr, 8. Mrz
Sa, 9. Mrz		20:13 – 05:14*	*9h 00m*	AN$_+$ *bis* AN$_-$		06:49	17:25	05:16	*35m*	05:51	*34m*	06:25	*31m*	06:57	*11h 34m*	18:32	*31m*	19:04	*34m*	19:38	*35m*	20:13	*12h 23m*	*9h 00m*				Sa, 9. Mrz
So, 10. Mrz		20:15 – 05:12*	*8h 56m*	AN$_+$ *bis* AN$_-$	●	07:11	18:51	05:14	*35m*	05:49	*34m*	06:23	*31m*	06:55	*11h 38m*	18:33	*31m*	19:05	*34m*	19:39	*35m*	20:15	*12h 19m*	*8h 56m*				So, 10. Mrz
Mo, 11. Mrz		20:16 – 05:10*	*8h 53m*	AN$_+$ *bis* AN$_-$		07:30	20:16	05:12	*35m*	05:47	*34m*	06:21	*31m*	06:53	*11h 41m*	18:35	*31m*	19:06	*34m*	19:41	*35m*	20:16	*12h 16m*	*8h 53m*				Mo, 11. Mrz
Di, 12. Mrz		21:40 – 05:08*	*7h 27m*	M↘ *bis* AN$_-$		07:50	21:40	05:10	*35m*	05:45	*34m*	06:19	*31m*	06:51	*11h 44m*	18:36	*31m*	19:08	*34m*	19:42	*35m*	20:18	*12h 13m*	*8h 49m*				Di, 12. Mrz
Mi, 13. Mrz		23:04 – 05:06*	*6h 01m*	M↘ *bis* AN$_-$		08:11	23:04	05:08	*35m*	05:43	*34m*	06:17	*31m*	06:49	*11h 48m*	18:37	*31m*	19:09	*34m*	19:44	*35m*	20:19	*12h 09m*	*8h 46m*				Mi, 13. Mrz
Do, 14. Mrz		00:26* – 05:03*	*4h 37m*	M↘ *bis* AN$_-$		08:35	—:—	05:06	*35m*	05:41	*34m*	06:16	*31m*	06:47	*11h 51m*	18:39	*31m*	19:11	*34m*	19:45	*35m*	20:21	*12h 06m*	*8h 42m*				Do, 14. Mrz
Fr, 15. Mrz		01:43* – 05:01*	*3h 18m*	M↘ *bis* AN$_-$		09:06	00:26	05:03	*35m*	05:39	*34m*	06:14	*31m*	06:45	*11h 54m*	18:40	*31m*	19:12	*34m*	19:46	*35m*	20:22	*12h 03m*	*8h 38m*				Fr, 15. Mrz
Sa, 16. Mrz		02:51* – 04:59*	*2h 07m*	M↘ *bis* AN$_-$		09:44	01:43	05:01	*35m*	05:37	*34m*	06:12	*31m*	06:43	*11h 58m*	18:42	*31m*	19:13	*34m*	19:48	*36m*	20:24	*12h 00m*	*8h 35m*				Sa, 16. Mrz
So, 17. Mrz		03:47* – 04:57*	*1h 09m*	M↘ *bis* AN$_-$	◐	10:33	02:51	04:59	*35m*	05:35	*34m*	06:10	*31m*	06:42	*12h 01m*	18:43	*31m*	19:15	*34m*	19:49	*36m*	20:25	*11h 56m*	*8h 31m*				So, 17. Mrz
Mo, 18. Mrz		04:31* – 04:55*	*24m*	M↘ *bis* AN$_-$		11:31	03:47	04:57	*36m*	05:33	*34m*	06:08	*31m*	06:40	*12h 04m*	18:44	*31m*	19:16	*34m*	19:51	*36m*	20:27	*11h 53m*	*8h 27m*				Mo, 18. Mrz
Di, 19. Mrz		—:——:—	–	Mond stört		12:37	04:31	04:55	*36m*	05:31	*34m*	06:06	*31m*	06:38	*12h 07m*	18:46	*31m*	19:18	*34m*	19:52	*36m*	20:29	*11h 50m*	*8h 24m*				Di, 19. Mrz
Mi, 20. Mrz		—:——:—	–	Mond stört		13:45	05:04	04:53	*36m*	05:29	*34m*	06:04	*31m*	06:36	*12h 11m*	18:47	*31m*	19:19	*34m*	19:54	*36m*	20:30	*11h 46m*	*8h 20m*				Mi, 20. Mrz
Do, 21. Mrz		—:——:—	–	Mond stört		14:53	05:29	04:51	*36m*	05:27	*34m*	06:02	*31m*	06:34	*12h 14m*	18:48	*31m*	19:20	*34m*	19:55	*36m*	20:32	*11h 43m*	*8h 16m*				Do, 21. Mrz
Fr, 22. Mrz		—:——:—	–	Mond stört		16:01	05:49	04:49	*36m*	05:25	*34m*	06:00	*31m*	06:32	*12h 17m*	18:50	*32m*	19:22	*34m*	19:57	*36m*	20:33	*11h 40m*	*8h 13m*				Fr, 22. Mrz
Sa, 23. Mrz		—:——:—	–	Mond stört		17:06	06:06	04:46	*36m*	05:23	*34m*	05:58	*31m*	06:30	*12h 21m*	18:51	*32m*	19:23	*34m*	19:58	*36m*	20:35	*11h 36m*	*8h 09m*				Sa, 23. Mrz
So, 24. Mrz		—:——:—	–	Mond stört		18:11	06:21	04:44	*36m*	05:21	*34m*	05:56	*32m*	06:28	*12h 24m*	18:52	*32m*	19:25	*35m*	20:00	*36m*	20:37	*11h 33m*	*8h 05m*				So, 24. Mrz
Mo, 25. Mrz		—:——:—	–	Mond stört	○	19:15	06:35	04:42	*36m*	05:19	*34m*	05:54	*32m*	06:26	*12h 27m*	18:54	*32m*	19:26	*35m*	20:01	*37m*	20:38	*11h 30m*	*8h 01m*				Mo, 25. Mrz
Di, 26. Mrz		—:——:—	–	Mond stört		20:21	06:49	04:40	*37m*	05:17	*35m*	05:52	*32m*	06:24	*12h 31m*	18:55	*32m*	19:27	*35m*	20:02	*37m*	20:40	*11h 26m*	*7h 57m*				Di, 26. Mrz
Mi, 27. Mrz		20:41 – 21:28	*46m*	AN$_+$ *bis* M↗		21:28	07:05	04:37	*37m*	05:15	*35m*	05:50	*32m*	06:22	*12h 34m*	18:56	*32m*	19:29	*35m*	20:04	*37m*	20:41	*11h 23m*	*7h 53m*				Mi, 27. Mrz
Do, 28. Mrz		20:43 – 22:38	*1h 54m*	AN$_+$ *bis* M↗		22:38	07:23	04:35	*37m*	05:13	*35m*	05:48	*32m*	06:20	*12h 37m*	18:58	*32m*	19:30	*35m*	20:05	*37m*	20:43	*11h 20m*	*7h 49m*				Do, 28. Mrz
Fr, 29. Mrz		20:45 – 23:50	*3h 04m*	AN$_+$ *bis* M↗		23:50	07:46	04:33	*37m*	05:11	*35m*	05:46	*32m*	06:18	*12h 41m*	18:59	*32m*	19:31	*35m*	20:07	*37m*	20:45	*11h 17m*	*7h 45m*				Fr, 29. Mrz
Sa, 30. Mrz		20:46 – 01:00*	*4h 13m*	AN$_+$ *bis* M↗		—:—	08:15	04:31	*37m*	05:08	*35m*	05:44	*32m*	06:16	*12h 44m*	19:00	*32m*	19:33	*35m*	20:08	*37m*	20:46	*11h 13m*	*7h 41m*				Sa, 30. Mrz
So, 31. Mrz	MESZ	21:48 – 03:06*	*5h 17m*	AN$_+$ *bis* M↗		02:00	09:53	05:28	*37m*	06:06	*35m*	06:42	*32m*	07:14	*12h 47m*	20:02	*32m*	20:34	*35m*	21:10	*38m*	21:48	*11h 10m*	*7h 37m*				So, 31. Mrz
Mo, 1. Apr	MESZ	21:50 – 04:02*	*6h 12m*	AN$_+$ *bis* M↗		03:06	10:44	05:26	*38m*	06:04	*35m*	06:40	*32m*	07:12	*12h 50m*	20:03	*32m*	20:36	*35m*	21:12	*38m*	21:50	*11h 07m*	*7h 33m*				Mo, 1. Apr
Di, 2. Apr	MESZ	21:52 – 04:47*	*6h 55m*	AN$_+$ *bis* M↗	◑	04:02	11:50	05:24	*38m*	06:02	*35m*	06:38	*32m*	07:10	*12h 54m*	20:05	*32m*	20:37	*35m*	21:13	*38m*	21:52	*11h 03m*	*7h 29m*				Di, 2. Apr
Mi, 3. Apr	MESZ	21:53 – 05:19*	*7h 25m*	AN$_+$ *bis* AN$_-$		04:47	13:06	05:21	*38m*	06:00	*35m*	06:36	*32m*	07:08	*12h 57m*	20:06	*32m*	20:39	*36m*	21:15	*38m*	21:53	*11h 00m*	*7h 25m*				Mi, 3. Apr
Do, 4. Apr	MESZ	21:55 – 05:17*	*7h 21m*	AN$_+$ *bis* AN$_-$		05:22	14:29	05:19	*38m*	05:58	*36m*	06:34	*32m*	07:07	*13h 00m*	20:07	*32m*	20:40	*36m*	21:16	*38m*	21:55	*10h 57m*	*7h 21m*				Do, 4. Apr
Fr, 5. Apr	MESZ	21:57 – 05:14*	*7h 17m*	AN$_+$ *bis* AN$_-$		05:49	15:53	05:17	*38m*	05:56	*36m*	06:32	*32m*	07:05	*13h 03m*	20:09	*32m*	20:41	*36m*	21:18	*39m*	21:57	*10h 54m*	*7h 17m*				Fr, 5. Apr
Sa, 6. Apr	MESZ	21:59 – 05:12*	*7h 13m*	AN$_+$ *bis* AN$_-$		06:12	17:18	05:14	*39m*	05:54	*36m*	06:30	*32m*	07:03	*13h 07m*	20:10	*32m*	20:43	*36m*	21:19	*39m*	21:59	*10h 50m*	*7h 13m*				Sa, 6. Apr
So, 7. Apr	MESZ	22:00 – 05:10*	*7h 09m*	AN$_+$ *bis* AN$_-$		06:32	18:42	05:12	*39m*	05:52	*36m*	06:28	*32m*	07:01	*13h 10m*	20:11	*32m*	20:44	*36m*	21:21	*39m*	22:00	*10h 47m*	*7h 09m*				So, 7. Apr
Mo, 8. Apr	MESZ	22:02 – 05:07*	*7h 05m*	AN$_+$ *bis* AN$_-$	●	06:51	20:07	05:10	*39m*	05:49	*36m*	06:26	*32m*	06:59	*13h 13m*	20:13	*33m*	20:46	*36m*	21:22	*39m*	22:02	*10h 44m*	*7h 05m*				Mo, 8. Apr
Di, 9. Apr	MESZ	22:04 – 05:05*	*7h 00m*	AN$_+$ *bis* AN$_-$		07:11	21:32	05:07	*39m*	05:47	*36m*	06:24	*32m*	06:57	*13h 16m*	20:14	*33m*	20:47	*36m*	21:24	*40m*	22:04	*10h 41m*	*7h 00m*				Di, 9. Apr

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

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

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