

# Mond- und Dämmerungstabelle 2023

## für die visuelle Deep-Sky-Beobachtung

Erbach (Odenwald) 49.6569° N 8.9931° E

Berechnung: pyEphem  
Textsatz: L<sup>A</sup>T<sub>E</sub>X

### 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  $-18^\circ$ ) 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<sub>+</sub> (Einbruch der astronomischen Nacht = Ende der astr. Abenddämmerung), M<sub>v</sub> (Monduntergang), AN<sub>-</sub> (Ende der astronomischen Nacht = Beginn der astr. Morgendämmerung), M<sub>7</sub>

(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 =  $-18^\circ$ ).

**Spalte 10** Dauer der astr. Morgendämmerung.

**Spalte 11** Beginn der naut. Morgendämmerung (Sonnenhöhe =  $-12^\circ$ ).

**Spalte 12** Dauer der naut. Morgendämmerung.

**Spalte 13** Beginn der bürg. Morgendämmerung (Sonnenhöhe =  $-6^\circ$ ).

**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 =  $-6^\circ$ ).

**Spalte 20** Dauer der naut. Abenddämmerung.

**Spalte 21** Ende der naut. Abenddämmerung (Sonnenhöhe =  $-12^\circ$ ).

**Spalte 22** Dauer der astr. Abenddämmerung.

**Spalte 23** Ende der astr. Abenddämmerung (Sonnenhöhe =  $-18^\circ$ ).

**Spalte 24** Länge der Nacht.

**Spalte 25** Länge der astr. Nacht.

**Für Beobachter, die zu Zeiten der Mitternachtsdämmerung während der astr. Dämmerung beobachten möchten:**

**Spalte 26** Nutzbare Zeitspanne: Es ist »nautisch dunkel« (Sonne steht tiefer als  $-12^\circ$ ) und kein Mond stört.

**Spalte 27** Dauer der in Spalte 26 angegebenen Zeitspanne.

**Spalte 28** Ereignisse, die die nutzbare Zeitspanne begrenzen: ND<sub>+</sub> (Beginn der »naut. Dunkelheit« = Ende der naut. Abenddämmerung), M<sub>v</sub> (Monduntergang), ND<sub>-</sub> (Ende der »naut. Dunkelheit« = Beginn der naut. Morgendämmerung), M<sub>7</sub> (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
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
			$\Delta t$		Ph.	$\nearrow$	$\searrow$	Astr.	$\Delta t$	Naut.	$\Delta t$	Bürg.	$\Delta t$	$\nearrow$	$\Delta t$	$\searrow$	$\Delta t$	Bürg.	$\Delta t$	Naut.	$\Delta t$	Astr.	$\Delta t$	$\Delta t$		$\Delta t$		
So, 1. Jan		04:06* - 06:21*	2h 14m	M <sub>\</sub> bis AN <sub>-</sub>		12:59	02:52	06:21	38m	07:00	40m	07:40	40m	08:20	8h 13m	16:34	40m	17:14	40m	17:54	38m	18:33	15h 45m	11h 47m				So, 1. Jan
Mo, 2. Jan		05:19* - 06:21*	1h 01m	M <sub>\</sub> bis AN <sub>-</sub>		13:18	04:06	06:21	38m	07:00	40m	07:40	40m	08:20	8h 15m	16:35	40m	17:15	40m	17:55	38m	18:34	15h 44m	11h 46m				Mo, 2. Jan
Di, 3. Jan		—:—:—:—:—	—	Mond stört		13:43	05:19	06:21	38m	07:00	40m	07:40	39m	08:20	8h 16m	16:36	39m	17:16	40m	17:56	38m	18:35	15h 43m	11h 46m				Di, 3. Jan
Mi, 4. Jan		—:—:—:—:—	—	Mond stört		14:14	06:30	06:21	38m	07:00	39m	07:40	39m	08:20	8h 17m	16:37	39m	17:17	39m	17:57	38m	18:36	15h 42m	11h 45m				Mi, 4. Jan
Do, 5. Jan		—:—:—:—:—	—	Mond stört		14:54	07:35	06:21	38m	07:00	39m	07:40	39m	08:19	8h 18m	16:38	39m	17:18	39m	17:58	38m	18:37	15h 40m	11h 44m				Do, 5. Jan
Fr, 6. Jan		—:~:~:~:~:~	—	Mond stört		15:46	08:30	06:21	38m	07:00	39m	07:40	39m	08:19	8h 20m	16:39	39m	17:19	39m	17:59	38m	18:38	15h 39m	11h 42m				Fr, 6. Jan
Sa, 7. Jan		—:~:~:~:~:~	—	Mond stört	○	16:46	09:14	06:21	38m	06:59	39m	07:39	39m	08:19	8h 21m	16:41	39m	17:20	39m	18:00	38m	18:39	15h 37m	11h 41m				Sa, 7. Jan
So, 8. Jan		—:~:~:~:~:~	—	Mond stört		17:53	09:48	06:21	38m	06:59	39m	07:39	39m	08:19	8h 23m	16:42	39m	17:21	39m	18:01	38m	18:40	15h 36m	11h 40m				So, 8. Jan
Mo, 9. Jan		18:41 - 19:02	21m	AN <sub>+</sub> bis M <sub>7</sub>		19:02	10:13	06:20	38m	06:59	39m	07:39	39m	08:18	8h 25m	16:43	39m	17:23	39m	18:02	38m	18:41	15h 34m	11h 39m				Mo, 9. Jan
Di, 10. Jan		18:42 - 20:12	1h 30m	AN <sub>+</sub> bis M <sub>7</sub>		20:12	10:33	06:20	38m	06:59	39m	07:38	39m	08:18	8h 26m	16:44	39m	17:24	39m	18:03	38m	18:42	15h 32m	11h 37m				Di, 10. Jan
Mi, 11. Jan		18:43 - 21:21	2h 38m	AN <sub>+</sub> bis M <sub>7</sub>		21:21	10:50	06:20	38m	06:58	39m	07:38	39m	08:17	8h 28m	16:46	39m	17:25	39m	18:05	38m	18:43	15h 30m	11h 36m				Mi, 11. Jan
Do, 12. Jan		18:44 - 22:31	3h 46m	AN <sub>+</sub> bis M <sub>7</sub>		22:31	11:04	06:19	38m	06:58	39m	07:37	39m	08:17	8h 30m	16:47	39m	17:26	39m	18:06	38m	18:44	15h 28m	11h 34m				Do, 12. Jan
Fr, 13. Jan		18:45 - 23:41	4h 55m	AN <sub>+</sub> bis M <sub>7</sub>		23:41	11:17	06:19	38m	06:58	39m	07:37	39m	08:16	8h 32m	16:49	39m	17:28	39m	18:07	38m	18:45	15h 26m	11h 33m				Fr, 13. Jan
Sa, 14. Jan		18:47 - 00:53*	6h 06m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	11:31	06:19	38m	06:57	39m	07:36	38m	08:15	8h 34m	16:50	38m	17:29	39m	18:08	38m	18:47	15h 24m	11h 31m				Sa, 14. Jan
So, 15. Jan		18:48 - 02:09*	7h 21m	AN <sub>+</sub> bis M <sub>7</sub>	●	00:53	11:45	06:18	38m	06:57	39m	07:36	38m	08:15	8h 36m	16:51	38m	17:30	39m	18:09	38m	18:48	15h 22m	11h 29m				So, 15. Jan
Mo, 16. Jan		18:49 - 03:29*	8h 40m	AN <sub>+</sub> bis M <sub>7</sub>		02:09	12:03	06:18	38m	06:56	39m	07:35	38m	08:14	8h 39m	16:53	38m	17:32	39m	18:11	38m	18:49	15h 20m	11h 28m				Mo, 16. Jan
Di, 17. Jan		18:50 - 04:53*	10h 03m	AN <sub>+</sub> bis M <sub>7</sub>		03:29	12:26	06:17	38m	06:55	39m	07:34	38m	08:13	8h 41m	16:54	38m	17:33	39m	18:12	38m	18:50	15h 17m	11h 26m				Di, 17. Jan
Mi, 18. Jan		18:52 - 06:16*	11h 24m	AN <sub>+</sub> bis AN <sub>-</sub>		04:53	12:57	06:17	38m	06:55	38m	07:34	38m	08:12	8h 43m	16:56	38m	17:34	38m	18:13	38m	18:52	15h 15m	11h 24m				Mi, 18. Jan
Do, 19. Jan		18:53 - 06:15*	11h 22m	AN <sub>+</sub> bis AN <sub>-</sub>		06:16	13:43	06:16	38m	06:54	38m	07:33	38m	08:11	8h 46m	16:57	38m	17:36	38m	18:15	38m	18:53	15h 12m	11h 22m				Do, 19. Jan
Fr, 20. Jan		18:54 - 06:15*	11h 20m	AN <sub>+</sub> bis AN <sub>-</sub>		07:30	14:46	06:15	38m	06:53	38m	07:32	38m	08:10	8h 48m	16:59	38m	17:37	38m	18:16	38m	18:54	15h 10m	11h 20m				Fr, 20. Jan
Sa, 21. Jan		18:55 - 06:14*	11h 18m	AN <sub>+</sub> bis AN <sub>-</sub>	●	08:27	16:08	06:15	38m	06:53	38m	07:31	38m	08:09	8h 51m	17:01	38m	17:39	38m	18:17	38m	18:55	15h 07m	11h 18m				Sa, 21. Jan
So, 22. Jan		18:57 - 06:13*	11h 16m	AN <sub>+</sub> bis AN <sub>-</sub>		09:08	17:39	06:14	38m	06:52	38m	07:30	37m	08:08	8h 53m	17:02	37m	17:40	38m	18:19	38m	18:57	15h 05m	11h 16m				So, 22. Jan
Mo, 23. Jan		19:11 - 06:12*	11h 01m	M <sub>\</sub> bis AN <sub>-</sub>		09:38	19:11	06:13	37m	06:51	38m	07:29	37m	08:07	8h 56m	17:04	37m	17:42	38m	18:20	37m	18:58	15h 02m	11h 14m				Mo, 23. Jan
Di, 24. Jan		20:39 - 06:11*	9h 32m	M <sub>\</sub> bis AN <sub>-</sub>		10:00	20:39	06:12	37m	06:50	38m	07:29	37m	08:06	8h 59m	17:05	37m	17:43	38m	18:22	37m	18:59	14h 59m	11h 11m				Di, 24. Jan
Mi, 25. Jan		22:02 - 06:10*	8h 08m	M <sub>\</sub> bis AN <sub>-</sub>		10:17	22:02	06:11	37m	06:49	38m	07:28	37m	08:05	9h 01m	17:07	37m	17:45	38m	18:23	37m	19:01	14h 56m	11h 09m				Mi, 25. Jan
Do, 26. Jan		23:22 - 06:09*	6h 47m	M <sub>\</sub> bis AN <sub>-</sub>		10:33	23:22	06:10	37m	06:48	38m	07:26	37m	08:04	9h 04m	17:09	37m	17:46	38m	18:24	37m	19:02	14h 54m	11h 07m				Do, 26. Jan
Fr, 27. Jan		00:39* - 06:08*	5h 29m	M <sub>\</sub> bis AN <sub>-</sub>		10:48	—:—	06:09	37m	06:47	38m	07:25	37m	08:03	9h 07m	17:10	37m	17:48	38m	18:26	37m	19:04	14h 51m	11h 04m				Fr, 27. Jan
Sa, 28. Jan		01:55* - 06:07*	4h 12m	M <sub>\</sub> bis AN <sub>-</sub>	●	11:04	00:39	06:08	37m	06:46	38m	07:24	37m	08:01	9h 10m	17:12	37m	17:49	38m	18:27	37m	19:05	14h 48m	11h 02m				Sa, 28. Jan
So, 29. Jan		03:10* - 06:06*	2h 56m	M <sub>\</sub> bis AN <sub>-</sub>		11:23	01:55	06:07	37m	06:45	38m	07:23	37m	08:00	9h 13m	17:14	37m	17:51	38m	18:29	37m	19:06	14h 45m	11h 00m				So, 29. Jan
Mo, 30. Jan		04:22* - 06:05*	1h 43m	M <sub>\</sub> bis AN <sub>-</sub>		11:45	03:10	06:06	37m	06:44	37m	07:22	36m	07:59	9h 16m	17:15	36m	17:52	37m	18:30	37m	19:08	14h 42m	10h 57m				Mo, 30. Jan
Di, 31. Jan		05:29* - 06:04*	35m	M <sub>\</sub> bis AN <sub>-</sub>		12:14	04:22	06:05	37m	06:43	37m	07:21	36m	07:57	9h 19m	17:17	36m	17:54	37m	18:32	37m	19:09	14h 39m	10h 54m				Di, 31. Jan
Mi, 1. Feb		—:~:~:~:~:~	—	Mond stört		12:52	05:29	06:04	37m	06:42	37m	07:19	36m	07:56	9h 22m	17:19	36m	17:55	37m	18:33	37m	19:11	14h 36m	10h 52m				Mi, 1. Feb
Do, 2. Feb		—:~:~:~:~:~	—	Mond stört		13:40	06:27	06:03	37m	06:40	37m	07:18	36m	07:55	9h 25m	17:20	36m	17:57	37m	18:35	37m	19:12	14h 32m	10h 49m				Do, 2. Feb
Fr, 3. Feb		—:~:~:~:~:~	—	Mond stört		14:38	07:14	06:02	37m	06:39	37m	07:17	36m	07:53	9h 28m	17:22	36m	17:58	37m	18:36	37m	19:14	14h 29m	10h 46m				Fr, 3. Feb
Sa, 4. Feb		—:~:~:~:~:~	—	Mond stört		15:43	07:50	06:00	37m	06:38	37m	07:15	36m	07:52	9h 31m	17:24	36m	18:00	37m	18:38	37m	19:15	14h 26m	10h 44m				Sa, 4. Feb
So, 5. Feb		—:~:~:~:~:~	—	Mond stört	○	16:52	08:18	05:59	37m	06:37	37m	07:14	36m	07:50	9h 35m	17:25	36m	18:02	37m	18:39	37m	19:16	14h 23m	10h 41m				So, 5. Feb
Mo, 6. Feb		—:~:~:~:~:~	—	Mond stört		18:02	08:39	05:58	37m	06:35	37m	07:13	36m	07:49	9h 38m	17:27	36m	18:03	37m	18:41	37m	19:18	14h 20m	10h 38m				Mo, 6. Feb
Di, 7. Feb		—:~:~:~:~:~	—	Mond stört		19:12	08:56	05:57	37m	06:34	37m	07:11	36m	07:47	9h 41m	17:29	36m	18:05	37m	18:42	37m	19:19	14h 16m	10h 35m				Di, 7. Feb
Mi, 8. Feb		19:21 - 20:22	1h 00m	AN <sub>+</sub> bis M <sub>7</sub>		20:22	09:11	05:55	37m	06:32	37m	07:10	35m	07:46	9h 44m	17:30	35m	18:06	37m	18:44	37m	19:21	14h 13m	10h 32m				Mi, 8. Feb
Do, 9. Feb		19:22 - 21:31	2h 08m	AN <sub>+</sub> bis M <sub>7</sub>		21:31	09:24	05:54	37m	06:31	37m	07:08	35m	07:44	9h 48m	17:32	35m	18:08	37m	18:45	37m	19:22	14h 10m	10h 29m				Do, 9. Feb
Fr, 10. Feb		19:24 - 22:42	3h 18m	AN <sub>+</sub> bis M <sub>7</sub>		22:42	09:37	05:52	37m	06:29	37m	07:07	35m	07:42	9h 51m	17:34	35m	18:10	37m	18:47	37m	19:24	14h 06m	10h 26m				Fr, 10. Feb
Sa, 11. Feb		19:25 - 23:56	4h 30m	AN <sub>+</sub> bis M <sub>7</sub>		23:56	09:51	05:51	37m	06:28	37m	07:05	35m	07:41	9h 54m	17:36	35m	18:11	37m	18:48	37m	19:25	14h 03m	10h 23m				Sa, 11. Feb
So, 12. Feb		19:27 - 01:12*	5h 45m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	10:07	05:49	37m	06:26	36m	07:03	35m															

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	
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023			
			$\Delta t$		Ph.	$\nearrow$	$\searrow$	Astr.	$\Delta t$	Naut.	$\Delta t$	Bürg.	$\Delta t$	$\nearrow$	$\Delta t$	$\searrow$	$\Delta t$	Bürg.	$\Delta t$	Naut.	$\Delta t$	Astr.	$\Delta t$	$\Delta t$		$\Delta t$			
Mo, 20. Feb		19:39–05:34*	9h 54m	AN <sub>+</sub> bis AN <sub>-</sub>	●	08:00	18:04	05:36	37m	06:13	36m	06:50	34m	07:24	10h 26m	17:51	34m	18:26	36m	19:02	37m	19:39	13h 31m	9h 54m					Mo, 20. Feb
Di, 21. Feb		19:41–05:32*	9h 51m	AN <sub>+</sub> bis AN <sub>-</sub>		08:19	19:32	05:34	37m	06:11	36m	06:48	34m	07:23	10h 29m	17:52	34m	18:27	36m	19:04	37m	19:41	13h 28m	9h 51m					Di, 21. Feb
Mi, 22. Feb		20:56–05:31*	8h 34m	M <sub>\</sub> bis AN <sub>-</sub>		08:36	20:56	05:32	37m	06:10	36m	06:46	34m	07:21	10h 33m	17:54	34m	18:29	36m	19:05	37m	19:43	13h 24m	9h 48m					Mi, 22. Feb
Do, 23. Feb		22:17–05:29*	7h 11m	M <sub>\</sub> bis AN <sub>-</sub>		08:52	22:17	05:31	37m	06:08	36m	06:44	34m	07:19	10h 37m	17:56	34m	18:30	36m	19:07	37m	19:44	13h 20m	9h 44m					Do, 23. Feb
Fr, 24. Feb		23:37–05:27*	5h 50m	M <sub>\</sub> bis AN <sub>-</sub>		09:08	23:37	05:29	37m	06:06	36m	06:42	34m	07:17	10h 40m	17:57	34m	18:32	36m	19:09	37m	19:46	13h 17m	9h 41m					Fr, 24. Feb
Sa, 25. Feb		00:55*–05:25*	4h 30m	M <sub>\</sub> bis AN <sub>-</sub>		09:25	—:—	05:27	37m	06:04	36m	06:40	34m	07:15	10h 44m	17:59	34m	18:34	36m	19:10	37m	19:47	13h 13m	9h 37m					Sa, 25. Feb
So, 26. Feb		02:10*–05:23*	3h 13m	M <sub>\</sub> bis AN <sub>-</sub>		09:47	00:55	05:25	37m	06:02	36m	06:38	34m	07:13	10h 47m	18:01	34m	18:35	36m	19:12	37m	19:49	13h 10m	9h 34m					So, 26. Feb
Mo, 27. Feb		03:20*–05:21*	2h 00m	M <sub>\</sub> bis AN <sub>-</sub>	◐	10:13	02:10	05:23	37m	06:00	36m	06:37	34m	07:11	10h 51m	18:02	34m	18:37	36m	19:13	37m	19:51	13h 06m	9h 30m					Mo, 27. Feb
Di, 28. Feb		04:22*–05:19*	57m	M <sub>\</sub> bis AN <sub>-</sub>		10:48	03:20	05:21	37m	05:58	36m	06:35	34m	07:09	10h 55m	18:04	34m	18:38	36m	19:15	37m	19:52	13h 02m	9h 26m					Di, 28. Feb
Mi, 1. Mär		05:13*–05:17*	4m	M <sub>\</sub> bis AN <sub>-</sub>		11:33	04:22	05:19	37m	05:56	36m	06:33	34m	07:07	10h 58m	18:06	34m	18:40	36m	19:16	37m	19:54	12h 59m	9h 23m					Mi, 1. Mär
Do, 2. Mär		—:—:—:—	–	Mond stört		12:28	05:13	05:17	37m	05:54	36m	06:31	34m	07:05	11h 02m	18:07	34m	18:42	36m	19:18	37m	19:55	12h 55m	9h 19m					Do, 2. Mär
Fr, 3. Mär		—:—:—:—	–	Mond stört		13:32	05:52	05:15	37m	05:52	36m	06:29	34m	07:03	11h 06m	18:09	34m	18:43	36m	19:20	37m	19:57	12h 51m	9h 15m					Fr, 3. Mär
Sa, 4. Mär		—:—:~:~:~	–	Mond stört		14:40	06:22	05:13	37m	05:50	36m	06:27	34m	07:01	11h 09m	18:11	34m	18:45	36m	19:21	37m	19:59	12h 48m	9h 12m					Sa, 4. Mär
So, 5. Mär		—:~:~:~:~	–	Mond stört		15:51	06:45	05:11	37m	05:48	36m	06:25	34m	06:59	11h 13m	18:12	34m	18:46	36m	19:23	37m	20:00	12h 44m	9h 08m					So, 5. Mär
Mo, 6. Mär		—:~:~:~:~	–	Mond stört		17:01	07:03	05:09	37m	05:46	36m	06:23	34m	06:57	11h 17m	18:14	34m	18:48	36m	19:24	37m	20:02	12h 40m	9h 04m					Mo, 6. Mär
Di, 7. Mär		—:~:~:~:~	–	Mond stört	○	18:12	07:19	05:07	37m	05:44	36m	06:21	33m	06:55	11h 20m	18:16	34m	18:50	36m	19:26	37m	20:04	12h 36m	9h 00m					Di, 7. Mär
Mi, 8. Mär		—:~:~:~:~	–	Mond stört		19:22	07:32	05:04	37m	05:42	36m	06:18	33m	06:52	11h 24m	18:17	34m	18:51	36m	19:28	37m	20:05	12h 33m	8h 56m					Mi, 8. Mär
Do, 9. Mär		20:07–20:33	25m	AN <sub>+</sub> bis M <sub>7</sub>		20:33	07:45	05:02	37m	05:40	36m	06:16	33m	06:50	11h 28m	18:19	34m	18:53	36m	19:29	37m	20:07	12h 29m	8h 52m					Do, 9. Mär
Fr, 10. Mär		20:09–21:46	1h 37m	AN <sub>+</sub> bis M <sub>7</sub>		21:46	07:58	05:00	37m	05:38	36m	06:14	33m	06:48	11h 32m	18:20	34m	18:54	36m	19:31	37m	20:09	12h 25m	8h 48m					Fr, 10. Mär
Sa, 11. Mär		20:11–23:02	2h 51m	AN <sub>+</sub> bis M <sub>7</sub>		23:02	08:13	04:58	37m	05:36	36m	06:12	33m	06:46	11h 35m	18:22	34m	18:56	36m	19:33	38m	20:11	12h 22m	8h 44m					Sa, 11. Mär
So, 12. Mär		20:12–00:21*	4h 08m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	08:31	04:56	38m	05:34	36m	06:10	33m	06:44	11h 39m	18:24	33m	18:58	36m	19:34	38m	20:12	12h 18m	8h 40m					So, 12. Mär
Mo, 13. Mär		20:14–01:41*	5h 26m	AN <sub>+</sub> bis M <sub>7</sub>		00:21	08:55	04:53	38m	05:31	36m	06:08	33m	06:42	11h 43m	18:25	33m	18:59	36m	19:36	38m	20:14	12h 14m	8h 36m					Mo, 13. Mär
Di, 14. Mär		20:16–02:57*	6h 41m	AN <sub>+</sub> bis M <sub>7</sub>		01:41	09:27	04:51	38m	05:29	36m	06:06	33m	06:40	11h 46m	18:27	33m	19:01	36m	19:37	38m	20:16	12h 10m	8h 32m					Di, 14. Mär
Mi, 15. Mär		20:18–04:04*	7h 46m	AN <sub>+</sub> bis M <sub>7</sub>	◑	02:57	10:12	04:49	38m	05:27	36m	06:04	33m	06:38	11h 50m	18:28	34m	19:02	36m	19:39	38m	20:18	12h 07m	8h 28m					Mi, 15. Mär
Do, 16. Mär		20:19–04:44*	8h 24m	AN <sub>+</sub> bis AN <sub>-</sub>		04:04	11:15	04:46	38m	05:25	36m	06:02	33m	06:35	11h 54m	18:30	34m	19:04	36m	19:41	38m	20:19	12h 03m	8h 24m					Do, 16. Mär
Fr, 17. Mär		20:21–04:42*	8h 20m	AN <sub>+</sub> bis AN <sub>-</sub>		04:55	12:33	04:44	38m	05:23	36m	05:59	33m	06:33	11h 58m	18:31	34m	19:05	36m	19:42	38m	20:21	11h 59m	8h 20m					Fr, 17. Mär
Sa, 18. Mär		20:23–04:39*	8h 16m	AN <sub>+</sub> bis AN <sub>-</sub>		05:33	14:00	04:42	38m	05:20	36m	05:57	33m	06:31	12h 01m	18:33	34m	19:07	36m	19:44	38m	20:23	11h 56m	8h 16m					Sa, 18. Mär
So, 19. Mär		20:25–04:37*	8h 12m	AN <sub>+</sub> bis AN <sub>-</sub>		06:00	15:30	04:39	38m	05:18	36m	05:55	33m	06:29	12h 05m	18:35	34m	19:09	37m	19:46	39m	20:25	11h 52m	8h 12m					So, 19. Mär
Mo, 20. Mär		20:27–04:34*	8h 07m	AN <sub>+</sub> bis AN <sub>-</sub>		06:22	16:58	04:37	39m	05:16	36m	05:53	33m	06:27	12h 09m	18:36	34m	19:10	37m	19:47	39m	20:27	11h 48m	8h 07m					Mo, 20. Mär
Di, 21. Mär		20:28–04:32*	8h 03m	AN <sub>+</sub> bis AN <sub>-</sub>	●	06:39	18:24	04:34	39m	05:14	37m	05:51	34m	06:25	12h 12m	18:38	34m	19:12	37m	19:49	39m	20:28	11h 44m	8h 03m					Di, 21. Mär
Mi, 22. Mär		20:30–04:30*	7h 59m	AN <sub>+</sub> bis AN <sub>-</sub>		06:55	19:47	04:32	39m	05:11	37m	05:49	34m	06:23	12h 16m	18:39	34m	19:13	37m	19:51	39m	20:30	11h 41m	7h 59m					Mi, 22. Mär
Do, 23. Mär		21:09–04:27*	7h 17m	M <sub>\</sub> bis AN <sub>-</sub>		07:10	21:09	04:30	39m	05:09	37m	05:46	34m	06:20	12h 20m	18:41	34m	19:15	37m	19:52	39m	20:32	11h 37m	7h 54m					Do, 23. Mär
Fr, 24. Mär		22:30–04:25*	5h 54m	M <sub>\</sub> bis AN <sub>-</sub>		07:27	22:30	04:27	39m	05:07	37m	05:44	34m	06:18	12h 24m	18:42	34m	19:17	37m	19:54	39m	20:34	11h 33m	7h 50m					Fr, 24. Mär
Sa, 25. Mär		23:50–04:22*	4h 32m	M <sub>\</sub> bis AN <sub>-</sub>		07:47	23:50	04:25	39m	05:05	37m	05:42	34m	06:16	12h 27m	18:44	34m	19:18	37m	19:56	40m	20:36	11h 29m	7h 46m					Sa, 25. Mär
So, 26. Mär	MESZ	02:05*–05:20*	3h 14m	M <sub>\</sub> bis AN <sub>-</sub>		09:12	00:50	05:22	40m	06:02	37m	06:40	34m	07:14	12h 31m	19:46	34m	20:20	37m	20:58	40m	21:38	11h 26m	7h 41m					So, 26. Mär
Mo, 27. Mär	MESZ	03:12*–05:17*	2h 05m	M <sub>\</sub> bis AN <sub>-</sub>		09:43	02:05	05:20	40m	06:00	37m	06:38	34m	07:12	12h 35m	19:47	34m	20:21	37m	20:59	40m	21:40	11h 22m	7h 37m					Mo, 27. Mär
Di, 28. Mär	MESZ	04:08*–05:15*	1h 06m	M <sub>\</sub> bis AN <sub>-</sub>		10:25	03:12	05:17	40m	05:58	37m	06:35	34m	07:10	12h 38m	19:49	34m	20:23	37m	21:01	40m	21:42	11h 18m	7h 32m					Di, 28. Mär
Mi, 29. Mär	MESZ	04:52*–05:12*	19m	M <sub>\</sub> bis AN <sub>-</sub>	◒	11:17	04:08	05:15	40m	05:55	37m	06:33	34m	07:08	12h 42m	19:50	34m	20:25	38m	21:03	40m	21:44	11h 15m	7h 28m					Mi, 29. Mär
Do, 30. Mär	MESZ	—:~:~:~:~	–	Mond stört		12:18	04:52	05:12	40m	05:53	38m	06:31	34m	07:05	12h 46m	19:52	34m	20:26	38m	21:05	41m	21:46	11h 11m	7h 23m					Do, 30. Mär
Fr, 31. Mär	MESZ	—:~:~:~:~	–	Mond stört		13:26	05:25	05:09	41m	05:51	38m	06:29	34m	07:03	12h 50m	19:53	34m	20:28	38m	21:06	41m	21:48	11h 07m	7h 19m					Fr, 31. Mär
Sa, 1. Apr	MESZ	—:~:~:~:~	–	Mond stört		14:36	05:50	05:07	41m	05:48	38m	06:26	34m	07:01	12h 53m	19:55	34m	20:30	38m	21:08	41m	21:50	11h 04m	7h 14m					Sa, 1. Apr
So, 2. Apr	MESZ	—:~:~:~:~	–	Mond stört		15:47	06:10	05:04	41m	05:46	38m	06:24	34m	06:59	12h 57m	19:56	34m	20:31	38m	21:10	41m	21:52	11h 00m						

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	
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne					Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023	
			$\Delta t$		Ph.	$\nearrow$	$\searrow$	Astr.	$\Delta t$	Naut.	$\Delta t$	Bürg.	$\Delta t$	$\nearrow$	$\Delta t$	$\searrow$	$\Delta t$	Bürg.	$\Delta t$	Naut.	$\Delta t$	Astr.	$\Delta t$	$\Delta t$		$\Delta t$			
Di, 11. Apr	MESZ	22:11 – 02:58*	4h 47m	AN <sub>+</sub> bis M <sub>7</sub>		01:49	09:09	04:40	44m	05:24	40m	06:04	35m	06:40	13h 30m	20:10	35m	20:46	40m	21:26	44m	22:11	10h 27m	6h 26m					Di, 11. Apr
Mi, 12. Apr	MESZ	22:13 – 03:54*	5h 40m	AN <sub>+</sub> bis M <sub>7</sub>		02:58	10:05	04:37	44m	05:22	40m	06:02	35m	06:38	13h 33m	20:12	35m	20:48	40m	21:28	45m	22:13	10h 23m	6h 21m					Mi, 12. Apr
Do, 13. Apr	MESZ	22:16 – 04:32*	6h 16m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	03:54	11:18	04:35	45m	05:20	40m	06:00	35m	06:36	13h 37m	20:13	35m	20:49	40m	21:30	45m	22:16	10h 20m	6h 16m					Do, 13. Apr
Fr, 14. Apr	MESZ	22:18 – 04:29*	6h 11m	AN <sub>+</sub> bis AN <sub>-</sub>		04:35	12:41	04:32	45m	05:17	40m	05:58	35m	06:34	13h 41m	20:15	36m	20:51	40m	21:32	46m	22:18	10h 16m	6h 11m					Fr, 14. Apr
Sa, 15. Apr	MESZ	22:20 – 04:26*	6h 05m	AN <sub>+</sub> bis AN <sub>-</sub>		05:04	14:07	04:29	45m	05:15	40m	05:56	35m	06:32	13h 44m	20:16	36m	20:53	41m	21:34	46m	22:20	10h 13m	6h 05m					Sa, 15. Apr
So, 16. Apr	MESZ	22:23 – 04:23*	6h 00m	AN <sub>+</sub> bis AN <sub>-</sub>		05:26	15:34	04:26	46m	05:13	41m	05:54	36m	06:30	13h 48m	20:18	36m	20:54	41m	21:36	46m	22:23	10h 09m	6h 00m					So, 16. Apr
Mo, 17. Apr	MESZ	22:25 – 04:20*	5h 55m	AN <sub>+</sub> bis AN <sub>-</sub>		05:44	16:58	04:23	46m	05:10	41m	05:51	36m	06:28	13h 51m	20:20	36m	20:56	41m	21:38	47m	22:25	10h 06m	5h 55m					Mo, 17. Apr
Di, 18. Apr	MESZ	22:27 – 04:18*	5h 50m	AN <sub>+</sub> bis AN <sub>-</sub>		06:00	18:20	04:20	47m	05:08	41m	05:49	36m	06:26	13h 55m	20:21	36m	20:58	41m	21:40	47m	22:27	10h 02m	5h 50m					Di, 18. Apr
Mi, 19. Apr	MESZ	22:30 – 04:15*	5h 44m	AN <sub>+</sub> bis AN <sub>-</sub>		06:15	19:42	04:18	47m	05:05	41m	05:47	36m	06:24	13h 58m	20:23	36m	20:59	42m	21:42	48m	22:30	9h 59m	5h 44m					Mi, 19. Apr
Do, 20. Apr	MESZ	22:32 – 04:12*	5h 39m	AN <sub>+</sub> bis AN <sub>-</sub>	☀	06:31	21:03	04:15	48m	05:03	42m	05:45	36m	06:22	14h 02m	20:24	36m	21:01	42m	21:44	48m	22:32	9h 55m	5h 39m					Do, 20. Apr
Fr, 21. Apr	MESZ	22:35 – 04:09*	5h 34m	AN <sub>+</sub> bis AN <sub>-</sub>		06:49	22:24	04:12	48m	05:01	42m	05:43	36m	06:20	14h 05m	20:26	37m	21:03	42m	21:45	49m	22:35	9h 52m	5h 34m					Fr, 21. Apr
Sa, 22. Apr	MESZ	23:43 – 04:06*	4h 23m	M <sub>7</sub> bis AN <sub>-</sub>		07:11	23:43	04:09	49m	04:58	42m	05:41	37m	06:18	14h 09m	20:27	37m	21:05	42m	21:47	49m	22:37	9h 48m	5h 28m					Sa, 22. Apr
So, 23. Apr	MESZ	00:56* – 04:03*	3h 07m	M <sub>7</sub> bis AN <sub>-</sub>		07:39	—:—	04:06	49m	04:56	42m	05:39	37m	06:16	14h 12m	20:29	37m	21:06	43m	21:49	50m	22:40	9h 45m	5h 23m					So, 23. Apr
Mo, 24. Apr	MESZ	01:58* – 04:00*	2h 02m	M <sub>7</sub> bis AN <sub>-</sub>		08:17	00:56	04:03	50m	04:54	43m	05:37	37m	06:14	14h 16m	20:30	37m	21:08	43m	21:51	51m	22:42	9h 41m	5h 17m					Mo, 24. Apr
Di, 25. Apr	MESZ	02:48* – 03:57*	1h 09m	M <sub>7</sub> bis AN <sub>-</sub>		09:05	01:58	04:00	51m	04:51	43m	05:35	37m	06:12	14h 19m	20:32	37m	21:10	43m	21:53	51m	22:45	9h 38m	5h 12m					Di, 25. Apr
Mi, 26. Apr	MESZ	03:26* – 03:54*	28m	M <sub>7</sub> bis AN <sub>-</sub>		10:04	02:48	03:57	51m	04:49	43m	05:33	37m	06:10	14h 23m	20:33	37m	21:11	44m	21:55	52m	22:48	9h 35m	5h 06m					Mi, 26. Apr
Do, 27. Apr	MESZ	—:—:—:—	–	Mond stört	☾	11:10	03:26	03:54	52m	04:46	44m	05:31	37m	06:08	14h 26m	20:35	38m	21:13	44m	21:58	52m	22:50	9h 31m	5h 00m					Do, 27. Apr
Fr, 28. Apr	MESZ	—:—:—:—	–	Mond stört		12:19	03:54	03:51	52m	04:44	44m	05:29	38m	06:07	14h 29m	20:37	38m	21:15	44m	22:00	53m	22:53	9h 28m	4h 55m					Fr, 28. Apr
Sa, 29. Apr	MESZ	—:~:~:~:~	–	Mond stört		13:30	04:15	03:48	53m	04:42	44m	05:27	38m	06:05	14h 33m	20:38	38m	21:16	45m	22:02	54m	22:56	9h 24m	4h 49m					Sa, 29. Apr
So, 30. Apr	MESZ	—:~:~:~:~	–	Mond stört		14:40	04:32	03:45	54m	04:40	45m	05:25	38m	06:03	14h 36m	20:40	38m	21:18	45m	22:04	55m	22:59	9h 21m	4h 43m					So, 30. Apr
Mo, 1. Mai	MESZ	—:~:~:~:~	–	Mond stört		15:50	04:46	03:42	55m	04:37	45m	05:23	38m	06:01	14h 39m	20:41	38m	21:20	45m	22:06	55m	23:02	9h 18m	4h 37m					Mo, 1. Mai
Di, 2. Mai	MESZ	—:~:~:~:~	–	Mond stört		17:01	04:59	03:39	55m	04:35	45m	05:21	38m	06:00	14h 43m	20:43	38m	21:22	46m	22:08	56m	23:04	9h 15m	4h 31m					Di, 2. Mai
Mi, 3. Mai	MESZ	—:~:~:~:~	–	Mond stört		18:14	05:12	03:36	56m	04:33	46m	05:19	38m	05:58	14h 46m	20:44	39m	21:23	46m	22:10	57m	23:07	9h 11m	4h 25m					Mi, 3. Mai
Do, 4. Mai	MESZ	—:~:~:~:~	–	Mond stört		19:30	05:26	03:33	57m	04:30	46m	05:17	39m	05:56	14h 49m	20:46	39m	21:25	46m	22:12	58m	23:10	9h 08m	4h 19m					Do, 4. Mai
Fr, 5. Mai	MESZ	—:~:~:~:~	–	Mond stört	☽	20:50	05:42	03:30	58m	04:28	46m	05:15	39m	05:54	14h 52m	20:47	39m	21:27	47m	22:14	59m	23:13	9h 05m	4h 13m					Fr, 5. Mai
Sa, 6. Mai	MESZ	—:~:~:~:~	–	Mond stört		22:12	06:02	03:27	59m	04:26	47m	05:13	39m	05:53	14h 55m	20:49	39m	21:28	47m	22:16	1h 00m	23:16	9h 02m	4h 07m					Sa, 6. Mai
So, 7. Mai	MESZ	23:19 – 23:35	15m	AN <sub>+</sub> bis M <sub>7</sub>		23:35	06:28	03:23	1h 00m	04:24	47m	05:11	39m	05:51	14h 58m	20:50	39m	21:30	48m	22:18	1h 01m	23:19	8h 59m	4h 01m					So, 7. Mai
Mo, 8. Mai	MESZ	23:22 – 00:50*	1h 27m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	07:06	03:20	1h 01m	04:21	48m	05:10	39m	05:50	15h 02m	20:52	40m	21:32	48m	22:20	1h 02m	23:22	8h 56m	3h 54m					Mo, 8. Mai
Di, 9. Mai	MESZ	23:26 – 01:51*	2h 25m	AN <sub>+</sub> bis M <sub>7</sub>		00:50	07:58	03:17	1h 02m	04:19	48m	05:08	40m	05:48	15h 05m	20:53	40m	21:33	48m	22:22	1h 03m	23:26	8h 53m	3h 48m					Di, 9. Mai
Mi, 10. Mai	MESZ	23:29 – 02:36*	3h 07m	AN <sub>+</sub> bis M <sub>7</sub>		01:51	09:07	03:14	1h 03m	04:17	48m	05:06	40m	05:46	15h 08m	20:54	40m	21:35	49m	22:24	1h 04m	23:29	8h 50m	3h 41m					Mi, 10. Mai
Do, 11. Mai	MESZ	23:32 – 03:07*	3h 35m	AN <sub>+</sub> bis AN <sub>-</sub>		02:36	10:28	03:11	1h 04m	04:15	49m	05:04	40m	05:45	15h 11m	20:56	40m	21:37	49m	22:26	1h 05m	23:32	8h 47m	3h 35m					Do, 11. Mai
Fr, 12. Mai	MESZ	23:35 – 03:04*	3h 28m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	03:09	11:54	03:07	1h 05m	04:13	49m	05:03	40m	05:43	15h 13m	20:57	41m	21:38	50m	22:28	1h 06m	23:35	8h 44m	3h 28m					Fr, 12. Mai
Sa, 13. Mai	MESZ	23:39 – 03:01*	3h 21m	AN <sub>+</sub> bis AN <sub>-</sub>		03:32	13:19	03:04	1h 06m	04:11	50m	05:01	41m	05:42	15h 16m	20:59	41m	21:40	50m	22:31	1h 08m	23:39	8h 41m	3h 21m					Sa, 13. Mai
So, 14. Mai	MESZ	23:42 – 02:57*	3h 15m	AN <sub>+</sub> bis AN <sub>-</sub>		03:51	14:42	03:01	1h 08m	04:09	50m	04:59	41m	05:40	15h 19m	21:00	41m	21:42	50m	22:33	1h 09m	23:42	8h 38m	3h 15m					So, 14. Mai
Mo, 15. Mai	MESZ	23:46 – 02:54*	3h 08m	AN <sub>+</sub> bis AN <sub>-</sub>		04:07	16:03	02:57	1h 09m	04:07	50m	04:58	41m	05:39	15h 22m	21:02	41m	21:43	51m	22:35	1h 10m	23:46	8h 36m	3h 08m					Mo, 15. Mai
Di, 16. Mai	MESZ	23:49 – 02:50*	3h 01m	AN <sub>+</sub> bis AN <sub>-</sub>		04:21	17:23	02:54	1h 10m	04:05	51m	04:56	41m	05:38	15h 25m	21:03	41m	21:45	51m	22:37	1h 12m	23:49	8h 33m	3h 01m					Di, 16. Mai
Mi, 17. Mai	MESZ	23:53 – 02:47*	2h 53m	AN <sub>+</sub> bis AN <sub>-</sub>		04:36	18:42	02:50	1h 12m	04:03	51m	04:54	41m	05:36	15h 27m	21:04	42m	21:46	52m	22:39	1h 13m	23:53	8h 30m	2h 53m					Mi, 17. Mai
Do, 18. Mai	MESZ	23:56 – 02:43*	2h 46m	AN <sub>+</sub> bis AN <sub>-</sub>		04:53	20:02	02:47	1h 13m	04:01	52m	04:53	42m	05:35	15h 30m	21:06	42m	21:48	52m	22:41	1h 15m	23:56	8h 28m	2h 46m					Do, 18. Mai
Fr, 19. Mai	MESZ	00:00* – 02:39*	2h 39m	AN <sub>+</sub> bis AN <sub>-</sub>	☀	05:13	21:21	02:43	1h 15m	03:59	52m	04:51	42m	05:34	15h 33m	21:07	42m	21:50	53m	22:43	1h 17m	00:00*	8h 25m	2h 39m					Fr, 19. Mai
Sa, 20. Mai	MESZ	00:04* – 02:36*	2h 31m	AN <sub>+</sub> bis AN <sub>-</sub>		05:38	22:37	02:39	1h 17m	03:57	53m	04:50	42m	05:33	15h 35m	21:08	42m	21:51	53m	22:45	1h 19m	00:04*	8h 23m	2h 31m					Sa, 20. Mai
So, 21. Mai	MESZ	00:08* – 02:32*	2h 23m	AN <sub>+</sub> bis AN <sub>-</sub>		06:12	23:44	02:36	1h 19m	03:55	53m	04:49	42m	05:31	15h 38m	21:10	43m	21:53	54m	22:47	1h 21m	00:08*	8h 20m	2h 23m					So, 21. Mai
Mo,																													

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
2023	Zeit-	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
	zone		$\Delta t$		Ph.	$\nearrow$	$\searrow$	Astr.	$\Delta t$	Naut.	$\Delta t$	Bürg.	$\Delta t$	$\nearrow$	$\Delta t$	$\searrow$	$\Delta t$	Bürg.	$\Delta t$	Naut.	$\Delta t$	Astr.	$\Delta t$	$\Delta t$		$\Delta t$		
Mi, 31. Mai	MESZ	—:—:—:—:—	—	Mond stört		17:07	03:31	01:47	1h 51m	03:38	58m	04:37	44m	05:22	15h 59m	21:21	45m	22:06	58m	23:05	1h 59m	01:04*	7h 59m	33m				Mi, 31. Mai
Do, 1. Jun	MESZ			Astr. MD		18:25	03:46	01:38	1h 59m	03:37	58m	04:36	45m	05:21	16h 01m	21:22	45m	22:08	59m	23:07		—:—	7h 57m		—:—:—:—:—	—	Mond stört	Do, 1. Jun
Fr, 2. Jun	MESZ			Astr. MD		19:47	04:04	—:—		03:36	59m	04:35	45m	05:20	16h 03m	21:23	45m	22:09	59m	23:08		—:—	7h 56m		—:—:—:—:—	—	Mond stört	Fr, 2. Jun
Sa, 3. Jun	MESZ			Astr. MD		21:11	04:27	—:—		03:35	59m	04:34	45m	05:20	16h 04m	21:24	45m	22:10	1h 00m	23:10		—:—	7h 54m		—:—:—:—:—	—	Mond stört	Sa, 3. Jun
So, 4. Jun	MESZ			Astr. MD	○	22:32	05:00	—:—		03:33	1h 00m	04:33	45m	05:19	16h 06m	21:25	45m	22:11	1h 00m	23:11		—:—	7h 53m		—:—:~:~:~:~:~	—	Mond stört	So, 4. Jun
Mo, 5. Jun	MESZ			Astr. MD		23:41	05:47	—:~		03:32	1h 00m	04:33	45m	05:18	16h 07m	21:26	45m	22:12	1h 00m	23:13		—:~	7h 51m		23:13—23:41	27m	ND <sub>+</sub> bis M <sub>7</sub>	Mo, 5. Jun
Di, 6. Jun	MESZ			Astr. MD		—:~	06:52	—:~		03:31	1h 00m	04:32	45m	05:18	16h 09m	21:27	46m	22:13	1h 01m	23:14		—:~	7h 50m		23:14—00:33*	1h 19m	ND <sub>+</sub> bis M <sub>7</sub>	Di, 6. Jun
Mi, 7. Jun	MESZ			Astr. MD		00:33	08:12	—:~		03:30	1h 01m	04:31	46m	05:17	16h 10m	21:28	46m	22:14	1h 01m	23:16		—:~	7h 49m		23:16—01:11*	1h 55m	ND <sub>+</sub> bis M <sub>7</sub>	Mi, 7. Jun
Do, 8. Jun	MESZ			Astr. MD		01:11	09:39	—:~		03:29	1h 01m	04:31	46m	05:17	16h 11m	21:29	46m	22:15	1h 01m	23:17		—:~	7h 47m		23:17—01:37*	2h 20m	ND <sub>+</sub> bis M <sub>7</sub>	Do, 8. Jun
Fr, 9. Jun	MESZ			Astr. MD		01:37	11:06	—:~		03:28	1h 01m	04:30	46m	05:17	16h 12m	21:29	46m	22:16	1h 02m	23:18		—:~	7h 46m		23:18—01:58*	2h 39m	ND <sub>+</sub> bis M <sub>7</sub>	Fr, 9. Jun
Sa, 10. Jun	MESZ			Astr. MD	◐	01:58	12:31	—:~		03:28	1h 02m	04:30	46m	05:16	16h 13m	21:30	46m	22:17	1h 02m	23:19		—:~	7h 45m		23:19—02:14*	2h 55m	ND <sub>+</sub> bis M <sub>7</sub>	Sa, 10. Jun
So, 11. Jun	MESZ			Astr. MD		02:14	13:52	—:~		03:27	1h 02m	04:29	46m	05:16	16h 14m	21:31	46m	22:17	1h 02m	23:20		—:~	7h 44m		23:20—02:29*	3h 08m	ND <sub>+</sub> bis M <sub>7</sub>	So, 11. Jun
Mo, 12. Jun	MESZ			Astr. MD		02:29	15:11	—:~		03:26	1h 02m	04:29	46m	05:16	16h 15m	21:31	46m	22:18	1h 02m	23:21		—:~	7h 44m		23:21—02:43*	3h 22m	ND <sub>+</sub> bis M <sub>7</sub>	Mo, 12. Jun
Di, 13. Jun	MESZ			Astr. MD		02:43	16:29	—:~		03:26	1h 02m	04:29	46m	05:15	16h 16m	21:32	46m	22:19	1h 03m	23:22		—:~	7h 43m		23:22—02:59*	3h 37m	ND <sub>+</sub> bis M <sub>7</sub>	Di, 13. Jun
Mi, 14. Jun	MESZ			Astr. MD		02:59	17:48	—:~		03:25	1h 03m	04:28	46m	05:15	16h 17m	21:32	46m	22:19	1h 03m	23:23		—:~	7h 42m		23:23—03:18*	3h 54m	ND <sub>+</sub> bis M <sub>7</sub>	Mi, 14. Jun
Do, 15. Jun	MESZ			Astr. MD		03:18	19:06	—:~		03:25	1h 03m	04:28	46m	05:15	16h 17m	21:33	46m	22:20	1h 03m	23:24		—:~	7h 42m		23:24—03:25*	4h 01m	ND <sub>+</sub> bis ND <sub>-</sub>	Do, 15. Jun
Fr, 16. Jun	MESZ			Astr. MD		03:41	20:22	—:~		03:25	1h 03m	04:28	46m	05:15	16h 18m	21:33	47m	22:20	1h 03m	23:24		—:~	7h 41m		23:24—03:24*	4h 00m	ND <sub>+</sub> bis ND <sub>-</sub>	Fr, 16. Jun
Sa, 17. Jun	MESZ			Astr. MD		04:10	21:32	—:~		03:24	1h 03m	04:28	47m	05:15	16h 18m	21:34	47m	22:21	1h 03m	23:25		—:~	7h 41m		23:25—03:24*	3h 59m	ND <sub>+</sub> bis ND <sub>-</sub>	Sa, 17. Jun
So, 18. Jun	MESZ			Astr. MD	◑	04:50	22:32	—:~		03:24	1h 03m	04:28	47m	05:15	16h 19m	21:34	47m	22:21	1h 03m	23:25		—:~	7h 40m		23:25—03:24*	3h 58m	ND <sub>+</sub> bis ND <sub>-</sub>	So, 18. Jun
Mo, 19. Jun	MESZ			Astr. MD		05:41	23:19	—:~		03:24	1h 03m	04:28	47m	05:15	16h 19m	21:35	47m	22:22	1h 03m	23:26		—:~	7h 40m		23:26—03:24*	3h 58m	ND <sub>+</sub> bis ND <sub>-</sub>	Mo, 19. Jun
Di, 20. Jun	MESZ			Astr. MD		06:42	23:55	—:~		03:24	1h 03m	04:28	47m	05:15	16h 19m	21:35	47m	22:22	1h 04m	23:26		—:~	7h 40m		23:55—03:24*	3h 29m	M <sub>v</sub> bis ND <sub>-</sub>	Di, 20. Jun
Mi, 21. Jun	MESZ			Astr. MD		07:49	—:~	—:~		03:24	1h 04m	04:28	47m	05:16	16h 19m	21:35	47m	22:22	1h 04m	23:26		—:~	7h 40m		00:21*—03:25*	3h 03m	M <sub>v</sub> bis ND <sub>-</sub>	Mi, 21. Jun
Do, 22. Jun	MESZ			Astr. MD		08:59	00:21	—:~		03:25	1h 04m	04:29	47m	05:16	16h 19m	21:35	47m	22:22	1h 04m	23:26		—:~	7h 40m		00:42*—03:25*	2h 43m	M <sub>v</sub> bis ND <sub>-</sub>	Do, 22. Jun
Fr, 23. Jun	MESZ			Astr. MD		10:10	00:42	—:~		03:25	1h 04m	04:29	47m	05:16	16h 19m	21:35	47m	22:23	1h 03m	23:26		—:~	7h 40m		00:58*—03:25*	2h 27m	M <sub>v</sub> bis ND <sub>-</sub>	Fr, 23. Jun
Sa, 24. Jun	MESZ			Astr. MD		11:19	00:58	—:~		03:25	1h 03m	04:29	47m	05:16	16h 19m	21:36	47m	22:23	1h 03m	23:26		—:~	7h 41m		01:12*—03:26*	2h 14m	M <sub>v</sub> bis ND <sub>-</sub>	Sa, 24. Jun
So, 25. Jun	MESZ			Astr. MD		12:27	01:12	—:~		03:26	1h 03m	04:30	47m	05:17	16h 18m	21:36	47m	22:23	1h 03m	23:26		—:~	7h 41m		01:24*—03:26*	2h 02m	M <sub>v</sub> bis ND <sub>-</sub>	So, 25. Jun
Mo, 26. Jun	MESZ			Astr. MD	◒	13:36	01:24	—:~		03:26	1h 03m	04:30	47m	05:17	16h 18m	21:36	46m	22:23	1h 03m	23:26		—:~	7h 41m		01:37*—03:27*	1h 50m	M <sub>v</sub> bis ND <sub>-</sub>	Mo, 26. Jun
Di, 27. Jun	MESZ			Astr. MD		14:47	01:37	—:~		03:27	1h 03m	04:31	46m	05:17	16h 18m	21:35	46m	22:22	1h 03m	23:26		—:~	7h 42m		01:50*—03:28*	1h 37m	M <sub>v</sub> bis ND <sub>-</sub>	Di, 27. Jun
Mi, 28. Jun	MESZ			Astr. MD		16:01	01:50	—:~		03:28	1h 03m	04:31	46m	05:18	16h 17m	21:35	46m	22:22	1h 03m	23:26		—:~	7h 43m		02:06*—03:28*	1h 22m	M <sub>v</sub> bis ND <sub>-</sub>	Mi, 28. Jun
Do, 29. Jun	MESZ			Astr. MD		17:19	02:06	—:~		03:28	1h 03m	04:32	46m	05:18	16h 16m	21:35	46m	22:22	1h 03m	23:25		—:~	7h 43m		02:26*—03:29*	1h 03m	M <sub>v</sub> bis ND <sub>-</sub>	Do, 29. Jun
Fr, 30. Jun	MESZ			Astr. MD		18:42	02:26	—:~		03:29	1h 03m	04:32	46m	05:19	16h 15m	21:35	46m	22:22	1h 02m	23:25		—:~	7h 44m		02:54*—03:30*	36m	M <sub>v</sub> bis ND <sub>-</sub>	Fr, 30. Jun
Sa, 1. Jul	MESZ			Astr. MD		20:05	02:54	—:~		03:30	1h 02m	04:33	46m	05:20	16h 15m	21:35	46m	22:21	1h 02m	23:24		—:~	7h 45m		—:~:~:~:~:~	—	Mond stört	Sa, 1. Jul
So, 2. Jul	MESZ			Astr. MD		21:21	03:34	—:~		03:31	1h 02m	04:34	46m	05:20	16h 14m	21:35	46m	22:21	1h 02m	23:23		—:~	7h 46m		—:~:~:~:~:~	—	Mond stört	So, 2. Jul
Mo, 3. Jul	MESZ			Astr. MD	○	22:23	04:31	—:~		03:32	1h 02m	04:35	46m	05:21	16h 13m	21:34	46m	22:21	1h 01m	23:22		—:~	7h 47m		—:~:~:~:~:~	—	Mond stört	Mo, 3. Jul
Di, 4. Jul	MESZ			Astr. MD		23:07	05:46	—:~		03:33	1h 01m	04:35	46m	05:22	16h 12m	21:34	46m	22:20	1h 01m	23:22		—:~	7h 48m		—:~:~:~:~:~	—	Mond stört	Di, 4. Jul
Mi, 5. Jul	MESZ			Astr. MD		23:39	07:14	—:~		03:35	1h 01m	04:36	46m	05:22	16h 10m	21:33	46m	22:19	1h 01m	23:21		—:~	7h 49m		23:21—23:39	18m	ND <sub>+</sub> bis M <sub>7</sub>	Mi, 5. Jul
Do, 6. Jul	MESZ			Astr. MD		—:~	08:45	—:~		03:36	1h 01m	04:37	46m	05:23	16h 09m	21:33	45m	22:19	1h 00m	23:20		—:~	7h 51m		23:20—00:02*	42m	ND <sub>+</sub> bis M <sub>7</sub>	Do, 6. Jul
Fr, 7. Jul	MESZ			Astr. MD		00:02	10:14	—:~		03:37	1h 00m	04:38	45m	05:24	16h 08m	21:32	45m	22:18	1h 00m	23:19		—:~	7h 52m		23:19—00:20*	1h 01m	ND <sub>+</sub> bis M <sub>7</sub>	Fr, 7. Jul
Sa, 8. Jul	MESZ			Astr. MD		00:20	11:39	—:~		03:39	1h 00m	04:39	45m	05:25	16h 06m	21:32	45m	22:17	1h 00m	23:18		—:~	7h 54m		23:18—00:36*	1h 18m	ND <sub>+</sub> bis M <sub>7</sub>	Sa, 8. Jul
So, 9. Jul	MESZ			Astr. MD		00:36	13:00	—:~		03:40	1h 00m	04:40	45m	05:26	16h 05m	21:31	45m	22:17	59m	23:16		—:~	7h 55m		23:16—00:50*	1h 33m	ND <sub>+</sub> bis M <sub>7</sub>	So, 9. Jul
Mo, 10. Jul	MESZ			Astr. MD	◑	00:50	14:19	—:~		03:42	59m	04:41	45m	05:27	16h 03m	21:30	45m	22:16	59m	23:15		—:~	7h 57m		23:15—01:06*	1h 50m	ND <sub>+</sub> bis M <sub>7</sub>	Mo, 10. Jul
Di, 11. Jul	MESZ	01:17*—01:23*	5m	AN <sub>+</sub> bis M <sub>7</sub>		01:06	15:38	—:~		03:43	59m	04:42	45m	05:28	16h 02m	21:30	45m	22:15	58m	23:14	2h 03m	01:17*	7h 58m	23m				Di, 11. Jul
Mi, 12. Jul	MESZ	01:06*—01:44*	38m	AN <sub>+</sub> bis M <sub>7</sub>		01:23	16:55	01:41	2h 03m	03:45	58m	04:44	45m	05:29	16h 00m	21:29	44m	22:14	58m	23:12	1h 53m	01:06*	8h 00m	46m				Mi, 12.



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	
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023			
			$\Delta t$		Ph.	$\nearrow$	$\searrow$	Astr.	$\Delta t$	Naut.	$\Delta t$	Bürg.	$\Delta t$	$\nearrow$	$\Delta t$	$\searrow$	$\Delta t$	Bürg.	$\Delta t$	Naut.	$\Delta t$	Astr.	$\Delta t$	$\Delta t$		$\Delta t$			
Do, 20. Jul	MESZ	00:24* - 02:36*	2h 12m	AN <sub>+</sub> bis AN <sub>-</sub>		07:58	23:04	02:32	1h 26m	03:59	55m	04:54	43m	05:38	15h 43m	21:21	43m	22:05	54m	23:00	1h 24m	00:24*	8h 17m	2h 12m					Do, 20. Jul
Fr, 21. Jul	MESZ	00:20* - 02:40*	2h 20m	AN <sub>+</sub> bis AN <sub>-</sub>		09:08	23:18	02:36	1h 24m	04:01	54m	04:55	43m	05:39	15h 41m	21:20	43m	22:03	54m	22:58	1h 22m	00:20*	8h 19m	2h 20m					Fr, 21. Jul
Sa, 22. Jul	MESZ	00:16* - 02:44*	2h 28m	AN <sub>+</sub> bis AN <sub>-</sub>		10:16	23:31	02:40	1h 22m	04:03	54m	04:57	43m	05:40	15h 39m	21:19	42m	22:02	53m	22:56	1h 20m	00:16*	8h 22m	2h 28m					Sa, 22. Jul
So, 23. Jul	MESZ	00:12* - 02:48*	2h 35m	AN <sub>+</sub> bis AN <sub>-</sub>		11:24	23:43	02:44	1h 20m	04:05	53m	04:58	42m	05:41	15h 36m	21:18	42m	22:01	53m	22:54	1h 18m	00:12*	8h 24m	2h 35m					So, 23. Jul
Mo, 24. Jul	MESZ	00:09* - 02:52*	2h 43m	AN <sub>+</sub> bis AN <sub>-</sub>		12:32	23:55	02:48	1h 18m	04:06	53m	05:00	42m	05:43	15h 34m	21:17	42m	21:59	52m	22:52	1h 16m	00:09*	8h 27m	2h 43m					Mo, 24. Jul
Di, 25. Jul	MESZ	00:10* - 02:56*	2h 45m	M <sub>\</sub> bis AN <sub>-</sub>		13:44	—:—	02:52	1h 16m	04:08	52m	05:01	42m	05:44	15h 31m	21:16	42m	21:58	52m	22:50	1h 14m	00:05*	8h 29m	2h 50m					Di, 25. Jul
Mi, 26. Jul	MESZ	00:27* - 02:59*	2h 32m	M <sub>\</sub> bis AN <sub>-</sub>	☾	14:58	00:10	02:56	1h 14m	04:10	52m	05:03	42m	05:45	15h 29m	21:14	42m	21:56	52m	22:48	1h 13m	00:01*	8h 32m	2h 57m					Mi, 26. Jul
Do, 27. Jul	MESZ	00:50* - 03:03*	2h 12m	M <sub>\</sub> bis AN <sub>-</sub>		16:17	00:27	02:59	1h 13m	04:12	52m	05:04	42m	05:46	15h 26m	21:13	41m	21:55	51m	22:46	1h 11m	23:58	8h 34m	3h 04m					Do, 27. Jul
Fr, 28. Jul	MESZ	01:23* - 03:06*	1h 43m	M <sub>\</sub> bis AN <sub>-</sub>		17:38	00:50	03:03	1h 11m	04:14	51m	05:06	41m	05:48	15h 23m	21:11	41m	21:53	51m	22:44	1h 10m	23:54	8h 37m	3h 11m					Fr, 28. Jul
Sa, 29. Jul	MESZ	02:11* - 03:10*	59m	M <sub>\</sub> bis AN <sub>-</sub>		18:57	01:23	03:06	1h 10m	04:16	51m	05:08	41m	05:49	15h 20m	21:10	41m	21:51	50m	22:42	1h 08m	23:51	8h 40m	3h 18m					Sa, 29. Jul
So, 30. Jul	MESZ	—:—:—:—	—	Mond stört		20:06	02:11	03:10	1h 08m	04:18	50m	05:09	41m	05:50	15h 18m	21:09	41m	21:50	50m	22:40	1h 07m	23:48	8h 43m	3h 25m					So, 30. Jul
Mo, 31. Jul	MESZ	—:—:—:—	—	Mond stört		20:58	03:17	03:13	1h 07m	04:20	50m	05:11	41m	05:52	15h 15m	21:07	40m	21:48	49m	22:38	1h 06m	23:44	8h 46m	3h 31m					Mo, 31. Jul
Di, 1. Aug	MESZ	—:—:—:—	—	Mond stört	☾	21:36	04:40	03:16	1h 06m	04:22	49m	05:12	40m	05:53	15h 12m	21:06	40m	21:46	49m	22:36	1h 04m	23:41	8h 48m	3h 38m					Di, 1. Aug
Mi, 2. Aug	MESZ	—:—:~:~:~	—	Mond stört		22:03	06:12	03:19	1h 05m	04:24	49m	05:14	40m	05:55	15h 09m	21:04	40m	21:45	49m	22:34	1h 03m	23:38	8h 51m	3h 44m					Mi, 2. Aug
Do, 3. Aug	MESZ	—:~:~:~:~	—	Mond stört		22:23	07:45	03:23	1h 03m	04:26	49m	05:15	40m	05:56	15h 06m	21:03	40m	21:43	48m	22:32	1h 02m	23:34	8h 54m	3h 51m					Do, 3. Aug
Fr, 4. Aug	MESZ	—:~:~:~:~	—	Mond stört		22:40	09:15	03:26	1h 02m	04:28	48m	05:17	40m	05:57	15h 03m	21:01	40m	21:41	48m	22:29	1h 01m	23:31	8h 57m	3h 57m					Fr, 4. Aug
Sa, 5. Aug	MESZ	—:~:~:~:~	—	Mond stört		22:56	10:41	03:29	1h 01m	04:30	48m	05:19	40m	05:59	15h 00m	20:59	39m	21:39	47m	22:27	1h 00m	23:28	9h 00m	4h 03m					Sa, 5. Aug
So, 6. Aug	MESZ	—:~:~:~:~	—	Mond stört		23:11	12:03	03:32	1h 00m	04:32	47m	05:20	39m	06:00	14h 57m	20:58	39m	21:37	47m	22:25	59m	23:25	9h 03m	4h 09m					So, 6. Aug
Mo, 7. Aug	MESZ	23:22 - 23:28	6m	AN <sub>+</sub> bis M <sub>7</sub>		23:28	13:24	03:35	59m	04:34	47m	05:22	39m	06:02	14h 54m	20:56	39m	21:36	47m	22:23	58m	23:22	9h 06m	4h 16m					Mo, 7. Aug
Di, 8. Aug	MESZ	23:18 - 23:48	29m	AN <sub>+</sub> bis M <sub>7</sub>	☾	23:48	14:44	03:38	58m	04:36	47m	05:24	39m	06:03	14h 51m	20:54	39m	21:34	46m	22:20	57m	23:18	9h 10m	4h 22m					Di, 8. Aug
Mi, 9. Aug	MESZ	23:15 - 00:14*	58m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	16:02	03:40	57m	04:38	46m	05:25	39m	06:05	14h 48m	20:53	39m	21:32	46m	22:18	57m	23:15	9h 13m	4h 28m					Mi, 9. Aug
Do, 10. Aug	MESZ	23:12 - 00:47*	1h 34m	AN <sub>+</sub> bis M <sub>7</sub>		00:14	17:16	03:43	57m	04:40	46m	05:27	39m	06:06	14h 44m	20:51	38m	21:30	46m	22:16	56m	23:12	9h 16m	4h 33m					Do, 10. Aug
Fr, 11. Aug	MESZ	23:09 - 01:30*	2h 21m	AN <sub>+</sub> bis M <sub>7</sub>		00:47	18:22	03:46	56m	04:42	46m	05:28	38m	06:07	14h 41m	20:49	38m	21:28	45m	22:14	55m	23:09	9h 19m	4h 39m					Fr, 11. Aug
Sa, 12. Aug	MESZ	23:06 - 02:25*	3h 18m	AN <sub>+</sub> bis M <sub>7</sub>		01:30	19:16	03:49	55m	04:44	45m	05:30	38m	06:09	14h 38m	20:47	38m	21:26	45m	22:11	54m	23:06	9h 22m	4h 45m					Sa, 12. Aug
So, 13. Aug	MESZ	23:03 - 03:29*	4h 25m	AN <sub>+</sub> bis M <sub>7</sub>		02:25	19:58	03:52	54m	04:46	45m	05:32	38m	06:10	14h 35m	20:46	38m	21:24	44m	22:09	54m	23:03	9h 26m	4h 51m					So, 13. Aug
Mo, 14. Aug	MESZ	23:00 - 03:57*	4h 57m	AN <sub>+</sub> bis AN <sub>-</sub>		03:29	20:29	03:54	54m	04:48	45m	05:33	38m	06:12	14h 32m	20:44	38m	21:22	44m	22:07	53m	23:00	9h 29m	4h 57m					Mo, 14. Aug
Di, 15. Aug	MESZ	22:57 - 04:00*	5h 02m	AN <sub>+</sub> bis AN <sub>-</sub>		04:38	20:52	03:57	53m	04:50	44m	05:35	38m	06:13	14h 28m	20:42	37m	21:20	44m	22:04	52m	22:57	9h 32m	5h 02m					Di, 15. Aug
Mi, 16. Aug	MESZ	22:54 - 04:02*	5h 08m	AN <sub>+</sub> bis AN <sub>-</sub>	☾	05:48	21:11	04:00	52m	04:52	44m	05:37	37m	06:15	14h 25m	20:40	37m	21:18	44m	22:02	52m	22:54	9h 36m	5h 08m					Mi, 16. Aug
Do, 17. Aug	MESZ	22:51 - 04:05*	5h 13m	AN <sub>+</sub> bis AN <sub>-</sub>		06:58	21:25	04:02	52m	04:54	44m	05:38	37m	06:16	14h 22m	20:38	37m	21:16	43m	22:00	51m	22:51	9h 39m	5h 13m					Do, 17. Aug
Fr, 18. Aug	MESZ	22:48 - 04:07*	5h 19m	AN <sub>+</sub> bis AN <sub>-</sub>		08:07	21:38	04:05	51m	04:56	43m	05:40	37m	06:18	14h 18m	20:36	37m	21:14	43m	21:57	50m	22:48	9h 42m	5h 19m					Fr, 18. Aug
Sa, 19. Aug	MESZ	22:45 - 04:10*	5h 24m	AN <sub>+</sub> bis AN <sub>-</sub>		09:15	21:50	04:07	50m	04:58	43m	05:42	37m	06:19	14h 15m	20:34	37m	21:12	43m	21:55	50m	22:45	9h 46m	5h 24m					Sa, 19. Aug
So, 20. Aug	MESZ	22:42 - 04:12*	5h 30m	AN <sub>+</sub> bis AN <sub>-</sub>		10:23	22:02	04:10	50m	05:00	43m	05:43	37m	06:21	14h 11m	20:32	37m	21:10	42m	21:52	49m	22:42	9h 49m	5h 30m					So, 20. Aug
Mo, 21. Aug	MESZ	22:39 - 04:15*	5h 35m	AN <sub>+</sub> bis AN <sub>-</sub>		11:33	22:16	04:12	49m	05:02	42m	05:45	37m	06:22	14h 08m	20:30	36m	21:07	42m	21:50	49m	22:39	9h 53m	5h 35m					Mo, 21. Aug
Di, 22. Aug	MESZ	22:36 - 04:17*	5h 40m	AN <sub>+</sub> bis AN <sub>-</sub>		12:45	22:31	04:15	49m	05:04	42m	05:46	37m	06:23	14h 05m	20:29	36m	21:05	42m	21:48	48m	22:36	9h 56m	5h 40m					Di, 22. Aug
Mi, 23. Aug	MESZ	22:51 - 04:19*	5h 28m	M <sub>\</sub> bis AN <sub>-</sub>		14:01	22:51	04:17	48m	05:06	42m	05:48	36m	06:25	14h 01m	20:27	36m	21:03	42m	21:45	48m	22:33	9h 59m	5h 46m					Mi, 23. Aug
Do, 24. Aug	MESZ	23:19 - 04:22*	5h 03m	M <sub>\</sub> bis AN <sub>-</sub>	☾	15:19	23:19	04:19	48m	05:08	42m	05:50	36m	06:26	13h 58m	20:25	36m	21:01	41m	21:43	47m	22:31	10h 03m	5h 51m					Do, 24. Aug
Fr, 25. Aug	MESZ	23:58 - 04:24*	4h 26m	M <sub>\</sub> bis AN <sub>-</sub>		16:37	23:58	04:22	47m	05:10	41m	05:51	36m	06:28	13h 54m	20:23	36m	20:59	41m	21:40	47m	22:28	10h 06m	5h 56m					Fr, 25. Aug
Sa, 26. Aug	MESZ	00:53* - 04:26*	3h 33m	M <sub>\</sub> bis AN <sub>-</sub>		17:49	—:—	04:24	47m	05:11	41m	05:53	36m	06:29	13h 51m	20:20	36m	20:57	41m	21:38	46m	22:25	10h 10m	6h 01m					Sa, 26. Aug
So, 27. Aug	MESZ	02:07* - 04:29*	2h 21m	M <sub>\</sub> bis AN <sub>-</sub>		18:47	00:53	04:26	46m	05:13	41m	05:55	36m	06:31	13h 47m	20:18	36m	20:55	41m	21:36	46m	22:22	10h 13m	6h 06m					So, 27. Aug
Mo, 28. Aug	MESZ	03:35* - 04:31*	56m	M <sub>\</sub> bis AN <sub>-</sub>		19:30	02:07	04:29	46m	05:15	41m	05:56	36m	06:32	13h 44m	20:16	35m	20:52	40m	21:33	45m	22:19	10h 17m	6h 11m					Mo, 28. Aug
Di, 29. Aug	MESZ	—:~:~:~:~	—	Mond stört		20:01	03:35	04:31	45m	05:17	40m	05:58	36m	06:34	13h 40m	20:14	35m	20:50	40m	21:31	45m	22:16	10h 20m	6h 16m					Di, 29. Aug

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
2023	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
			$\Delta t$		Ph.	$\nearrow$	$\searrow$	Astr.	$\Delta t$	Naut.	$\Delta t$	Bürg.	$\Delta t$	$\nearrow$	$\Delta t$	$\searrow$	$\Delta t$	Bürg.	$\Delta t$	Naut.	$\Delta t$	Astr.	$\Delta t$	$\Delta t$		$\Delta t$		
Fr, 8. Sep	MESZ	21:49–00:17*	2h 28m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	17:13	04:52	42m	05:35	38m	06:13	34m	06:48	13h 04m	19:53	34m	20:28	38m	21:07	42m	21:49	10h 56m	7h 05m				Fr, 8. Sep
Sa, 9. Sep	MESZ	21:46–01:19*	3h 32m	AN <sub>+</sub> bis M <sub>7</sub>		00:17	17:59	04:54	42m	05:36	38m	06:15	34m	06:50	13h 01m	19:51	34m	20:26	38m	21:04	41m	21:46	11h 00m	7h 09m				Sa, 9. Sep
So, 10. Sep	MESZ	21:44–02:27*	4h 43m	AN <sub>+</sub> bis M <sub>7</sub>		01:19	18:33	04:56	41m	05:38	38m	06:17	34m	06:51	12h 57m	19:49	34m	20:24	38m	21:02	41m	21:44	11h 03m	7h 14m				So, 10. Sep
Mo, 11. Sep	MESZ	21:41–03:37*	5h 56m	AN <sub>+</sub> bis M <sub>7</sub>		02:27	18:59	04:58	41m	05:40	38m	06:18	34m	06:53	12h 53m	19:47	34m	20:21	38m	21:00	41m	21:41	11h 07m	7h 18m				Mo, 11. Sep
Di, 12. Sep	MESZ	21:38–04:48*	7h 09m	AN <sub>+</sub> bis M <sub>7</sub>		03:37	19:18	05:00	41m	05:41	38m	06:20	34m	06:54	12h 50m	19:45	34m	20:19	38m	20:57	41m	21:38	11h 11m	7h 23m				Di, 12. Sep
Mi, 13. Sep	MESZ	21:36–05:04*	7h 27m	AN <sub>+</sub> bis AN <sub>-</sub>		04:48	19:34	05:02	41m	05:43	38m	06:21	34m	06:56	12h 46m	19:42	34m	20:17	38m	20:55	40m	21:36	11h 14m	7h 27m				Mi, 13. Sep
Do, 14. Sep	MESZ	21:33–05:06*	7h 32m	AN <sub>+</sub> bis AN <sub>-</sub>		05:57	19:47	05:04	40m	05:45	38m	06:23	34m	06:57	12h 42m	19:40	34m	20:15	37m	20:52	40m	21:33	11h 18m	7h 32m				Do, 14. Sep
Fr, 15. Sep	MESZ	21:31–05:07*	7h 36m	AN <sub>+</sub> bis AN <sub>-</sub>	●	07:06	19:59	05:06	40m	05:46	37m	06:24	34m	06:59	12h 39m	19:38	34m	20:12	37m	20:50	40m	21:31	11h 22m	7h 36m				Fr, 15. Sep
Sa, 16. Sep	MESZ	21:28–05:09*	7h 41m	AN <sub>+</sub> bis AN <sub>-</sub>		08:14	20:11	05:07	40m	05:48	37m	06:26	34m	07:00	12h 35m	19:36	34m	20:10	37m	20:48	40m	21:28	11h 25m	7h 41m				Sa, 16. Sep
So, 17. Sep	MESZ	21:26–05:11*	7h 45m	AN <sub>+</sub> bis AN <sub>-</sub>		09:24	20:23	05:09	40m	05:50	37m	06:27	34m	07:02	12h 32m	19:34	34m	20:08	37m	20:45	40m	21:26	11h 29m	7h 45m				So, 17. Sep
Mo, 18. Sep	MESZ	21:23–05:13*	7h 49m	AN <sub>+</sub> bis AN <sub>-</sub>		10:35	20:38	05:11	40m	05:51	37m	06:29	34m	07:03	12h 28m	19:31	34m	20:06	37m	20:43	39m	21:23	11h 33m	7h 49m				Mo, 18. Sep
Di, 19. Sep	MESZ	21:20–05:15*	7h 54m	AN <sub>+</sub> bis AN <sub>-</sub>		11:50	20:56	05:13	39m	05:53	37m	06:30	34m	07:05	12h 24m	19:29	34m	20:03	37m	20:41	39m	21:20	11h 36m	7h 54m				Di, 19. Sep
Mi, 20. Sep	MESZ	21:20–05:16*	7h 56m	M <sub>\</sub> bis AN <sub>-</sub>		13:07	21:20	05:15	39m	05:54	37m	06:32	34m	07:06	12h 21m	19:27	34m	20:01	37m	20:38	39m	21:18	11h 40m	7h 58m				Mi, 20. Sep
Do, 21. Sep	MESZ	21:54–05:18*	7h 24m	M <sub>\</sub> bis AN <sub>-</sub>		14:25	21:54	05:16	39m	05:56	37m	06:33	34m	07:08	12h 17m	19:25	34m	19:59	37m	20:36	39m	21:16	11h 44m	8h 02m				Do, 21. Sep
Fr, 22. Sep	MESZ	22:41–05:20*	6h 38m	M <sub>\</sub> bis AN <sub>-</sub>	☉	15:37	22:41	05:18	39m	05:58	37m	06:35	34m	07:09	12h 13m	19:23	34m	19:57	37m	20:34	39m	21:13	11h 47m	8h 06m				Fr, 22. Sep
Sa, 23. Sep	MESZ	23:46–05:22*	5h 35m	M <sub>\</sub> bis AN <sub>-</sub>		16:39	23:46	05:20	39m	05:59	37m	06:36	34m	07:11	12h 10m	19:21	33m	19:55	37m	20:32	39m	21:11	11h 51m	8h 11m				Sa, 23. Sep
So, 24. Sep	MESZ	01:06*–05:23*	4h 17m	M <sub>\</sub> bis AN <sub>-</sub>		17:26	—:—	05:22	39m	06:01	37m	06:38	34m	07:12	12h 06m	19:18	33m	19:52	36m	20:29	38m	21:08	11h 55m	8h 15m				So, 24. Sep
Mo, 25. Sep	MESZ	02:35*–05:25*	2h 50m	M <sub>\</sub> bis AN <sub>-</sub>		18:01	01:06	05:23	38m	06:02	36m	06:39	34m	07:13	12h 02m	19:16	33m	19:50	36m	20:27	38m	21:06	11h 58m	8h 19m				Mo, 25. Sep
Di, 26. Sep	MESZ	04:05*–05:27*	1h 21m	M <sub>\</sub> bis AN <sub>-</sub>		18:26	02:35	05:25	38m	06:04	36m	06:41	34m	07:15	11h 59m	19:14	33m	19:48	36m	20:25	38m	21:03	12h 02m	8h 23m				Di, 26. Sep
Mi, 27. Sep	MESZ	—:—:—:—	–	Mond stört		18:46	04:05	05:27	38m	06:06	36m	06:42	34m	07:16	11h 55m	19:12	33m	19:46	36m	20:23	38m	21:01	12h 06m	8h 27m				Mi, 27. Sep
Do, 28. Sep	MESZ	—:—:—:—	–	Mond stört		19:03	05:35	05:29	38m	06:07	36m	06:44	34m	07:18	11h 51m	19:10	33m	19:44	36m	20:20	38m	20:59	12h 09m	8h 31m				Do, 28. Sep
Fr, 29. Sep	MESZ	—:—:—:—	–	Mond stört	○	19:18	07:03	05:30	38m	06:09	36m	06:45	33m	07:19	11h 48m	19:08	33m	19:41	36m	20:18	38m	20:56	12h 13m	8h 35m				Fr, 29. Sep
Sa, 30. Sep	MESZ	—:—:—:—	–	Mond stört		19:34	08:30	05:32	38m	06:10	36m	06:47	33m	07:21	11h 44m	19:05	33m	19:39	36m	20:16	38m	20:54	12h 17m	8h 39m				Sa, 30. Sep
So, 1. Okt	MESZ	—:—:—:—	–	Mond stört		19:52	09:56	05:34	38m	06:12	36m	06:48	33m	07:22	11h 40m	19:03	33m	19:37	36m	20:14	38m	20:52	12h 20m	8h 43m				So, 1. Okt
Mo, 2. Okt	MESZ	—:—:~:~:~	–	Mond stört		20:14	11:21	05:35	38m	06:13	36m	06:50	34m	07:24	11h 37m	19:01	33m	19:35	36m	20:11	37m	20:49	12h 24m	8h 47m				Mo, 2. Okt
Di, 3. Okt	MESZ	—:~:~:~:~	–	Mond stört		20:42	12:44	05:37	38m	06:15	36m	06:51	34m	07:25	11h 33m	18:59	33m	19:33	36m	20:09	37m	20:47	12h 28m	8h 51m				Di, 3. Okt
Mi, 4. Okt	MESZ	20:45–21:19	34m	AN <sub>+</sub> bis M <sub>7</sub>		21:19	14:00	05:38	37m	06:16	36m	06:53	34m	07:27	11h 29m	18:57	33m	19:31	36m	20:07	37m	20:45	12h 31m	8h 55m				Mi, 4. Okt
Do, 5. Okt	MESZ	20:43–22:08	1h 24m	AN <sub>+</sub> bis M <sub>7</sub>		22:08	15:05	05:40	37m	06:18	36m	06:54	34m	07:28	11h 26m	18:55	33m	19:29	36m	20:05	37m	20:43	12h 35m	8h 58m				Do, 5. Okt
Fr, 6. Okt	MESZ	20:41–23:07	2h 26m	AN <sub>+</sub> bis M <sub>7</sub>	☾	23:07	15:57	05:42	37m	06:19	36m	06:56	34m	07:30	11h 22m	18:53	33m	19:27	36m	20:03	37m	20:41	12h 39m	9h 02m				Fr, 6. Okt
Sa, 7. Okt	MESZ	20:38–00:14*	3h 35m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	16:35	05:43	37m	06:21	36m	06:57	34m	07:32	11h 18m	18:50	34m	19:24	36m	20:01	37m	20:38	12h 42m	9h 06m				Sa, 7. Okt
So, 8. Okt	MESZ	20:36–01:24*	4h 47m	AN <sub>+</sub> bis M <sub>7</sub>		00:14	17:04	05:45	37m	06:23	36m	06:59	34m	07:33	11h 15m	18:48	34m	19:22	36m	19:59	37m	20:36	12h 46m	9h 10m				So, 8. Okt
Mo, 9. Okt	MESZ	20:34–02:35*	6h 00m	AN <sub>+</sub> bis M <sub>7</sub>		01:24	17:25	05:46	37m	06:24	36m	07:00	34m	07:35	11h 11m	18:46	34m	19:20	36m	19:57	37m	20:34	12h 49m	9h 13m				Mo, 9. Okt
Di, 10. Okt	MESZ	20:32–03:45*	7h 12m	AN <sub>+</sub> bis M <sub>7</sub>		02:35	17:41	05:48	37m	06:26	36m	07:02	34m	07:36	11h 07m	18:44	34m	19:18	36m	19:55	37m	20:32	12h 53m	9h 17m				Di, 10. Okt
Mi, 11. Okt	MESZ	20:30–04:54*	8h 23m	AN <sub>+</sub> bis M <sub>7</sub>		03:45	17:55	05:50	37m	06:27	36m	07:04	34m	07:38	11h 04m	18:42	34m	19:16	36m	19:53	37m	20:30	12h 57m	9h 21m				Mi, 11. Okt
Do, 12. Okt	MESZ	20:28–05:53*	9h 24m	AN <sub>+</sub> bis AN <sub>-</sub>		04:54	18:07	05:51	37m	06:29	36m	07:05	34m	07:39	11h 00m	18:40	34m	19:14	36m	19:51	37m	20:28	13h 00m	9h 24m				Do, 12. Okt
Fr, 13. Okt	MESZ	20:26–05:54*	9h 28m	AN <sub>+</sub> bis AN <sub>-</sub>		06:03	18:19	05:53	37m	06:30	36m	07:07	34m	07:41	10h 57m	18:38	34m	19:12	36m	19:49	37m	20:26	13h 04m	9h 28m				Fr, 13. Okt
Sa, 14. Okt	MESZ	20:24–05:56*	9h 32m	AN <sub>+</sub> bis AN <sub>-</sub>	●	07:12	18:31	05:54	37m	06:32	36m	07:08	34m	07:42	10h 53m	18:36	34m	19:10	36m	19:47	37m	20:24	13h 08m	9h 32m				Sa, 14. Okt
So, 15. Okt	MESZ	20:22–05:57*	9h 35m	AN <sub>+</sub> bis AN <sub>-</sub>		08:24	18:45	05:56	37m	06:33	36m	07:10	34m	07:44	10h 49m	18:34	34m	19:08	36m	19:45	37m	20:22	13h 11m	9h 35m				So, 15. Okt
Mo, 16. Okt	MESZ	20:20–05:59*	9h 39m	AN <sub>+</sub> bis AN <sub>-</sub>		09:39	19:02	05:57	37m	06:35	36m	07:11	34m	07:46	10h 46m	18:32	34m	19:06	36m	19:43	37m	20:20	13h 15m	9h 39m				Mo, 16. Okt
Di, 17. Okt	MESZ	20:18–06:00*	9h 42m	AN <sub>+</sub> bis AN <sub>-</sub>		10:56	19:24	05:59	37m	06:36	36m	07:13	34m	07:47	10h 42m	18:30	34m	19:04	36m	19:41	37m	20:18	13h 18m	9h 42m				Di, 17. Okt
Mi, 18. Okt	MESZ	20:16–06:02*	9h 45m	AN <sub>+</sub> bis AN <sub>-</sub>		12:14	19:55	06:00	37m	06:38	36m	07:14	34m	07:49	10h 39m	18:28	34m	19:02	36m	19:39	37m	20:16	13h 22m	9h 45m				Mi, 18. Okt
Do, 19. Okt	MESZ	20:37–06:03*	9h 26m	M <sub>\</sub> bis AN <sub>-</sub>		13:29	20:37	06:02	37m	06:39	36m	07:16	34m	07:50	10h 35m	18:26	34m	19:01	36m	19:37	37m	20:14	13h 25					

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
2023	Zeit-	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023		
	zone		$\Delta t$		Ph.	$\uparrow$	$\searrow$	Astr.	$\Delta t$	Naut.	$\Delta t$	Bürg.	$\Delta t$	$\uparrow$	$\Delta t$	$\searrow$	$\Delta t$	Bürg.	$\Delta t$	Naut.	$\Delta t$	Astr.	$\Delta t$	$\Delta t$		$\Delta t$		
Sa, 28. Okt	MESZ	—:—:—:—	—	Mond stört	○	17:54	07:24	06:15	37m	06:53	36m	07:29	35m	08:05	10h 04m	18:09	35m	18:44	36m	19:21	37m	19:58	13h 57m	10h 18m				Sa, 28. Okt
So, 29. Okt		—:—:—:—	—	Mond stört		17:14	07:50	05:17	37m	05:54	36m	06:31	35m	07:06	10h 00m	17:07	35m	17:43	36m	18:20	37m	18:57	14h 00m	10h 21m				So, 29. Okt
Mo, 30. Okt		—:—:—:—	—	Mond stört		17:39	09:15	05:18	37m	05:56	37m	06:33	35m	07:08	9h 57m	17:06	35m	17:41	36m	18:18	37m	18:55	14h 04m	10h 24m				Mo, 30. Okt
Di, 31. Okt		—:—:—:—	—	Mond stört		18:12	10:36	05:20	37m	05:57	37m	06:34	35m	07:10	9h 54m	17:04	35m	17:39	37m	18:17	37m	18:54	14h 07m	10h 27m				Di, 31. Okt
Mi, 1. Nov		18:52 – 18:56	4m	AN <sub>+</sub> bis M <sub>7</sub>		18:56	11:49	05:21	37m	05:58	37m	06:36	35m	07:11	9h 50m	17:02	35m	17:38	37m	18:15	37m	18:52	14h 10m	10h 30m				Mi, 1. Nov
Do, 2. Nov		18:51 – 19:52	1h 01m	AN <sub>+</sub> bis M <sub>7</sub>		19:52	12:48	05:23	37m	06:00	37m	06:37	35m	07:13	9h 47m	17:01	35m	17:36	37m	18:13	37m	18:51	14h 14m	10h 33m				Do, 2. Nov
Fr, 3. Nov		18:49 – 20:58	2h 08m	AN <sub>+</sub> bis M <sub>7</sub>		20:58	13:33	05:24	37m	06:01	37m	06:39	35m	07:15	9h 44m	16:59	35m	17:35	37m	18:12	37m	18:49	14h 17m	10h 36m				Fr, 3. Nov
Sa, 4. Nov		18:48 – 22:08	3h 20m	AN <sub>+</sub> bis M <sub>7</sub>		22:08	14:05	05:26	37m	06:03	37m	06:40	36m	07:16	9h 40m	16:57	36m	17:33	37m	18:11	37m	18:48	14h 20m	10h 39m				Sa, 4. Nov
So, 5. Nov		18:46 – 23:20	4h 33m	AN <sub>+</sub> bis M <sub>7</sub>	●	23:20	14:29	05:27	37m	06:04	37m	06:42	36m	07:18	9h 37m	16:56	36m	17:32	37m	18:09	37m	18:46	14h 23m	10h 41m				So, 5. Nov
Mo, 6. Nov		18:45 – 00:30*	5h 44m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	14:47	05:28	37m	06:06	37m	06:43	36m	07:20	9h 34m	16:54	36m	17:30	37m	18:08	37m	18:45	14h 27m	10h 44m				Mo, 6. Nov
Di, 7. Nov		18:44 – 01:39*	6h 55m	AN <sub>+</sub> bis M <sub>7</sub>		00:30	15:02	05:30	37m	06:07	37m	06:45	36m	07:21	9h 31m	16:53	36m	17:29	37m	18:06	37m	18:44	14h 30m	10h 47m				Di, 7. Nov
Mi, 8. Nov		18:43 – 02:47*	8h 04m	AN <sub>+</sub> bis M <sub>7</sub>		01:39	15:15	05:31	37m	06:09	37m	06:46	36m	07:23	9h 28m	16:51	36m	17:28	37m	18:05	37m	18:43	14h 33m	10h 50m				Mi, 8. Nov
Do, 9. Nov		18:41 – 03:57*	9h 15m	AN <sub>+</sub> bis M <sub>7</sub>		02:47	15:26	05:33	37m	06:10	37m	06:48	36m	07:24	9h 25m	16:50	36m	17:26	37m	18:04	37m	18:41	14h 36m	10h 52m				Do, 9. Nov
Fr, 10. Nov		18:40 – 05:08*	10h 27m	AN <sub>+</sub> bis M <sub>7</sub>		03:57	15:38	05:34	37m	06:12	37m	06:49	36m	07:26	9h 22m	16:48	36m	17:25	37m	18:03	37m	18:40	14h 39m	10h 55m				Fr, 10. Nov
Sa, 11. Nov		18:39 – 05:37*	10h 57m	AN <sub>+</sub> bis AN <sub>-</sub>		05:08	15:52	05:35	37m	06:13	37m	06:51	36m	07:28	9h 19m	16:47	36m	17:24	37m	18:01	37m	18:39	14h 42m	10h 57m				Sa, 11. Nov
So, 12. Nov		18:38 – 05:38*	11h 00m	AN <sub>+</sub> bis AN <sub>-</sub>		06:22	16:08	05:37	37m	06:14	37m	06:52	36m	07:29	9h 16m	16:45	36m	17:22	37m	18:00	37m	18:38	14h 45m	11h 00m				So, 12. Nov
Mo, 13. Nov		18:37 – 05:39*	11h 02m	AN <sub>+</sub> bis AN <sub>-</sub>	●	07:39	16:28	05:38	37m	06:16	38m	06:54	37m	07:31	9h 13m	16:44	37m	17:21	38m	17:59	37m	18:37	14h 48m	11h 02m				Mo, 13. Nov
Di, 14. Nov		18:36 – 05:41*	11h 05m	AN <sub>+</sub> bis AN <sub>-</sub>		08:59	16:56	05:39	37m	06:17	38m	06:55	37m	07:33	9h 10m	16:43	37m	17:20	38m	17:58	37m	18:36	14h 51m	11h 05m				Di, 14. Nov
Mi, 15. Nov		18:35 – 05:42*	11h 07m	AN <sub>+</sub> bis AN <sub>-</sub>		10:17	17:35	05:41	37m	06:19	38m	06:57	37m	07:34	9h 07m	16:41	37m	17:19	38m	17:57	37m	18:35	14h 54m	11h 07m				Mi, 15. Nov
Do, 16. Nov		18:34 – 05:43*	11h 09m	AN <sub>+</sub> bis AN <sub>-</sub>		11:27	18:29	05:42	37m	06:20	38m	06:58	37m	07:36	9h 04m	16:40	37m	17:18	38m	17:56	37m	18:34	14h 57m	11h 09m				Do, 16. Nov
Fr, 17. Nov		19:40 – 05:45*	10h 05m	M <sub>\</sub> bis AN <sub>-</sub>		12:23	19:40	05:43	37m	06:21	38m	07:00	37m	07:37	9h 01m	16:39	37m	17:17	38m	17:55	37m	18:33	14h 59m	11h 11m				Fr, 17. Nov
Sa, 18. Nov		21:01 – 05:46*	8h 45m	M <sub>\</sub> bis AN <sub>-</sub>		13:04	21:01	05:45	37m	06:23	38m	07:01	37m	07:39	8h 58m	16:38	37m	17:16	38m	17:54	37m	18:32	15h 02m	11h 14m				Sa, 18. Nov
So, 19. Nov		22:27 – 05:47*	7h 20m	M <sub>\</sub> bis AN <sub>-</sub>		13:34	22:27	05:46	37m	06:24	38m	07:03	37m	07:40	8h 56m	16:37	37m	17:15	38m	17:53	37m	18:31	15h 05m	11h 16m				So, 19. Nov
Mo, 20. Nov		23:52 – 05:49*	5h 56m	M <sub>\</sub> bis AN <sub>-</sub>	●	13:56	23:52	05:47	38m	06:25	38m	07:04	37m	07:42	8h 53m	16:36	37m	17:14	38m	17:52	38m	18:30	15h 07m	11h 18m				Mo, 20. Nov
Di, 21. Nov		01:16* – 05:50*	4h 34m	M <sub>\</sub> bis AN <sub>-</sub>		14:14	—:—	05:49	38m	06:27	38m	07:05	38m	07:44	8h 51m	16:35	38m	17:13	38m	17:51	38m	18:29	15h 10m	11h 20m				Di, 21. Nov
Mi, 22. Nov		02:38* – 05:51*	3h 12m	M <sub>\</sub> bis AN <sub>-</sub>		14:29	01:16	05:50	38m	06:28	38m	07:07	38m	07:45	8h 48m	16:34	38m	17:12	38m	17:51	38m	18:29	15h 12m	11h 22m				Mi, 22. Nov
Do, 23. Nov		04:00* – 05:52*	1h 51m	M <sub>\</sub> bis AN <sub>-</sub>		14:43	02:38	05:51	38m	06:29	38m	07:08	38m	07:47	8h 46m	16:33	38m	17:11	38m	17:50	38m	18:28	15h 15m	11h 24m				Do, 23. Nov
Fr, 24. Nov		05:23* – 05:54*	30m	M <sub>\</sub> bis AN <sub>-</sub>		14:59	04:00	05:52	38m	06:31	38m	07:10	38m	07:48	8h 43m	16:32	38m	17:10	38m	17:49	38m	18:27	15h 17m	11h 26m				Fr, 24. Nov
Sa, 25. Nov		—:—:—:—	—	Mond stört		15:17	05:23	05:54	38m	06:32	39m	07:11	38m	07:50	8h 41m	16:31	38m	17:09	39m	17:48	38m	18:27	15h 20m	11h 28m				Sa, 25. Nov
So, 26. Nov		—:~:~:~:~	—	Mond stört		15:39	06:47	05:55	38m	06:33	39m	07:12	38m	07:51	8h 39m	16:30	38m	17:09	39m	17:48	38m	18:26	15h 22m	11h 29m				So, 26. Nov
Mo, 27. Nov		—:~:~:~:~	—	Mond stört	○	16:08	08:10	05:56	38m	06:34	39m	07:14	38m	07:52	8h 36m	16:29	38m	17:08	39m	17:47	38m	18:26	15h 24m	11h 31m				Mo, 27. Nov
Di, 28. Nov		—:~:~:~:~	—	Mond stört		16:47	09:28	05:57	38m	06:36	39m	07:15	38m	07:54	8h 34m	16:29	38m	17:07	39m	17:47	38m	18:25	15h 26m	11h 33m				Di, 28. Nov
Mi, 29. Nov		—:~:~:~:~	—	Mond stört		17:38	10:34	05:58	38m	06:37	39m	07:16	39m	07:55	8h 32m	16:28	39m	17:07	39m	17:46	38m	18:25	15h 28m	11h 34m				Mi, 29. Nov
Do, 30. Nov		18:24 – 18:41	16m	AN <sub>+</sub> bis M <sub>7</sub>		18:41	11:26	05:59	38m	06:38	39m	07:17	39m	07:57	8h 30m	16:27	39m	17:06	39m	17:46	38m	18:24	15h 30m	11h 36m				Do, 30. Nov
Fr, 1. Dez		18:24 – 19:50	1h 26m	AN <sub>+</sub> bis M <sub>7</sub>		19:50	12:04	06:01	38m	06:39	39m	07:19	39m	07:58	8h 28m	16:27	39m	17:06	39m	17:45	38m	18:24	15h 32m	11h 37m				Fr, 1. Dez
Sa, 2. Dez		18:24 – 21:02	2h 38m	AN <sub>+</sub> bis M <sub>7</sub>		21:02	12:31	06:02	38m	06:40	39m	07:20	39m	07:59	8h 26m	16:26	39m	17:05	39m	17:45	38m	18:24	15h 34m	11h 39m				Sa, 2. Dez
So, 3. Dez		18:23 – 22:14	3h 50m	AN <sub>+</sub> bis M <sub>7</sub>		22:14	12:51	06:03	38m	06:41	39m	07:21	39m	08:00	8h 25m	16:26	39m	17:05	39m	17:45	38m	18:23	15h 36m	11h 40m				So, 3. Dez
Mo, 4. Dez		18:23 – 23:23	4h 59m	AN <sub>+</sub> bis M <sub>7</sub>		23:23	13:07	06:04	38m	06:42	39m	07:22	39m	08:02	8h 23m	16:25	39m	17:05	39m	17:44	38m	18:23	15h 37m	11h 41m				Mo, 4. Dez
Di, 5. Dez		18:23 – 00:31*	6h 08m	AN <sub>+</sub> bis M <sub>7</sub>	●	—:—	13:21	06:05	38m	06:43	39m	07:23	39m	08:03	8h 21m	16:25	39m	17:04	39m	17:44	38m	18:23	15h 39m	11h 42m				Di, 5. Dez
Mi, 6. Dez		18:23 – 01:39*	7h 16m	AN <sub>+</sub> bis M <sub>7</sub>		00:31	13:33	06:06	38m	06:45	39m	07:24	39m	08:04	8h 20m	16:24	39m	17:04	39m	17:44	38m	18:23	15h 40m	11h 43m				Mi, 6. Dez
Do, 7. Dez		18:23 – 02:49*	8h 25m	AN <sub>+</sub> bis M <sub>7</sub>		01:39	13:45	06:07	38m	06:46	39m	07:25	39m	08:05	8h 18m	16:24	39m	17:04	39m	17:44	38m	18:23	15h 42m	11h 44m				Do, 7. Dez
Fr, 8. Dez		18:23 – 04:01*	9h 37m	AN <sub>+</sub> bis M <sub>7</sub>		02:49	13:57	06:08	38m	06:47	39m	07:26	39m	08:06	8h 17m	16:24	39m	17:04	39m	17:44	38m	18:23	15h 43m	11h 45m				Fr, 8. Dez
Sa, 9. Dez		18:23 – 05:16*	10h 53m	AN <sub>+</sub> bis M <sub>7</sub>		04:01																						



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
2023/24	Zeitzone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne			Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2023/24		
			$\Delta t$		Ph.	$\nearrow$	$\searrow$	Astr.	$\Delta t$	Naut.	$\Delta t$	Bürg.	$\Delta t$	$\nearrow$	$\Delta t$	$\searrow$	$\Delta t$	Bürg.	$\Delta t$	Naut.	$\Delta t$	Astr.	$\Delta t$	$\Delta t$		$\Delta t$		
So, 17. Dez		21:40–06:16*	8h 35m	M <sub>\</sub> bis AN <sub>\</sub>		12:01	21:40	06:15	39m	06:54	40m	07:34	40m	08:15	8h 09m	16:24	40m	17:05	40m	17:45	39m	18:24	15h 51m	11h 51m				So, 17. Dez
Mo, 18. Dez		23:05–06:16*	7h 11m	M <sub>\</sub> bis AN <sub>\</sub>		12:20	23:05	06:16	39m	06:55	40m	07:35	40m	08:15	8h 09m	16:24	40m	17:05	40m	17:45	39m	18:24	15h 51m	11h 51m				Mo, 18. Dez
Di, 19. Dez		00:27*–06:17*	5h 50m	M <sub>\</sub> bis AN <sub>\</sub>	☾	12:36	—:—	06:16	39m	06:55	40m	07:36	40m	08:16	8h 08m	16:25	40m	17:05	40m	17:46	39m	18:25	15h 51m	11h 52m				Di, 19. Dez
Mi, 20. Dez		01:47*–06:17*	4h 29m	M <sub>\</sub> bis AN <sub>\</sub>		12:50	00:27	06:17	39m	06:56	40m	07:36	40m	08:17	8h 08m	16:25	40m	17:06	40m	17:46	39m	18:25	15h 51m	11h 52m				Mi, 20. Dez
Do, 21. Dez		03:08*–06:18*	3h 09m	M <sub>\</sub> bis AN <sub>\</sub>		13:05	01:47	06:17	39m	06:56	40m	07:37	40m	08:17	8h 08m	16:26	40m	17:06	40m	17:46	39m	18:26	15h 52m	11h 52m				Do, 21. Dez
Fr, 22. Dez		04:30*–06:18*	1h 48m	M <sub>\</sub> bis AN <sub>\</sub>		13:21	03:08	06:18	39m	06:57	40m	07:37	40m	08:18	8h 08m	16:26	40m	17:07	40m	17:47	39m	18:26	15h 52m	11h 52m				Fr, 22. Dez
Sa, 23. Dez		05:51*–06:19*	27m	M <sub>\</sub> bis AN <sub>\</sub>		13:41	04:30	06:18	39m	06:57	40m	07:38	40m	08:18	8h 08m	16:27	40m	17:07	40m	17:47	39m	18:27	15h 51m	11h 52m				Sa, 23. Dez
So, 24. Dez		—:—:—:—	–	Mond stört		14:07	05:51	06:19	39m	06:58	40m	07:38	40m	08:19	8h 08m	16:27	40m	17:08	40m	17:48	39m	18:27	15h 51m	11h 51m				So, 24. Dez
Mo, 25. Dez		—:—:—:—	–	Mond stört		14:41	07:09	06:19	39m	06:58	40m	07:39	40m	08:19	8h 09m	16:28	40m	17:08	40m	17:49	39m	18:28	15h 51m	11h 51m				Mo, 25. Dez
Di, 26. Dez		—:—:—:—	–	Mond stört		15:27	08:20	06:20	39m	06:59	40m	07:39	40m	08:19	8h 09m	16:29	40m	17:09	40m	17:49	39m	18:28	15h 50m	11h 51m				Di, 26. Dez
Mi, 27. Dez		—:—:—:—	–	Mond stört	☉	16:26	09:17	06:20	39m	06:59	40m	07:39	40m	08:20	8h 09m	16:29	40m	17:10	40m	17:50	39m	18:29	15h 50m	11h 51m				Mi, 27. Dez
Do, 28. Dez		—:—:~:~	–	Mond stört		17:33	10:00	06:20	39m	06:59	40m	07:39	40m	08:20	8h 10m	16:30	40m	17:10	40m	17:51	39m	18:30	15h 49m	11h 50m				Do, 28. Dez
Fr, 29. Dez		18:31–18:45	14m	AN <sub>+</sub> bis M <sub>7</sub>		18:45	10:31	06:20	39m	06:59	40m	07:40	40m	08:20	8h 11m	16:31	40m	17:11	40m	17:52	39m	18:31	15h 48m	11h 50m				Fr, 29. Dez
Sa, 30. Dez		18:31–19:57	1h 26m	AN <sub>+</sub> bis M <sub>7</sub>		19:57	10:54	06:21	39m	07:00	40m	07:40	40m	08:20	8h 11m	16:32	40m	17:12	40m	17:52	39m	18:31	15h 48m	11h 49m				Sa, 30. Dez
So, 31. Dez		18:32–21:08	2h 35m	AN <sub>+</sub> bis M <sub>7</sub>		21:08	11:12	06:21	38m	07:00	40m	07:40	40m	08:20	8h 12m	16:33	40m	17:13	40m	17:53	38m	18:32	15h 47m	11h 48m				So, 31. Dez
Mo, 1. Jan		18:33–22:16	3h 43m	AN <sub>+</sub> bis M <sub>7</sub>		22:16	11:26	06:21	38m	07:00	40m	07:40	40m	08:20	8h 13m	16:34	40m	17:14	40m	17:54	38m	18:33	15h 46m	11h 47m				Mo, 1. Jan
Di, 2. Jan		18:34–23:24	4h 50m	AN <sub>+</sub> bis M <sub>7</sub>		23:24	11:39	06:21	38m	07:00	40m	07:40	40m	08:20	8h 14m	16:35	40m	17:15	40m	17:55	38m	18:34	15h 45m	11h 47m				Di, 2. Jan
Mi, 3. Jan		18:35–00:32*	5h 56m	AN <sub>+</sub> bis M <sub>7</sub>		—:—	11:50	06:21	38m	07:00	40m	07:40	39m	08:20	8h 15m	16:36	39m	17:16	40m	17:56	38m	18:35	15h 43m	11h 46m				Mi, 3. Jan
Do, 4. Jan		18:36–01:41*	7h 05m	AN <sub>+</sub> bis M <sub>7</sub>	☾	00:32	12:02	06:21	38m	07:00	39m	07:40	39m	08:20	8h 17m	16:37	39m	17:17	39m	17:57	38m	18:36	15h 42m	11h 45m				Do, 4. Jan
Fr, 5. Jan		18:37–02:54*	8h 16m	AN <sub>+</sub> bis M <sub>7</sub>		01:41	12:15	06:21	38m	07:00	39m	07:40	39m	08:20	8h 18m	16:38	39m	17:18	39m	17:58	38m	18:37	15h 41m	11h 44m				Fr, 5. Jan
Sa, 6. Jan		18:38–04:10*	9h 32m	AN <sub>+</sub> bis M <sub>7</sub>		02:54	12:31	06:21	38m	07:00	39m	07:40	39m	08:19	8h 19m	16:39	39m	17:19	39m	17:59	38m	18:38	15h 39m	11h 43m				Sa, 6. Jan
So, 7. Jan		18:39–05:30*	10h 50m	AN <sub>+</sub> bis M <sub>7</sub>		04:10	12:52	06:21	38m	07:00	39m	07:39	39m	08:19	8h 21m	16:40	39m	17:20	39m	18:00	38m	18:39	15h 38m	11h 41m				So, 7. Jan
Mo, 8. Jan		18:40–06:20*	11h 40m	AN <sub>+</sub> bis AN <sub>\</sub>		05:30	13:21	06:21	38m	06:59	39m	07:39	39m	08:19	8h 22m	16:42	39m	17:21	39m	18:01	38m	18:40	15h 36m	11h 40m				Mo, 8. Jan
Di, 9. Jan		18:41–06:20*	11h 39m	AN <sub>+</sub> bis AN <sub>\</sub>		06:48	14:03	06:20	38m	06:59	39m	07:39	39m	08:18	8h 24m	16:43	39m	17:22	39m	18:02	38m	18:41	15h 34m	11h 39m				Di, 9. Jan
Mi, 10. Jan		18:42–06:20*	11h 38m	AN <sub>+</sub> bis AN <sub>\</sub>		07:58	15:02	06:20	38m	06:59	39m	07:38	39m	08:18	8h 26m	16:44	39m	17:24	39m	18:03	38m	18:42	15h 33m	11h 38m				Mi, 10. Jan
Do, 11. Jan		18:43–06:20*	11h 36m	AN <sub>+</sub> bis AN <sub>\</sub>	☉	08:54	16:19	06:20	38m	06:58	39m	07:38	39m	08:17	8h 28m	16:46	39m	17:25	39m	18:04	38m	18:43	15h 31m	11h 36m				Do, 11. Jan
Fr, 12. Jan		18:44–06:19*	11h 35m	AN <sub>+</sub> bis AN <sub>\</sub>		09:34	17:47	06:20	38m	06:58	39m	07:38	39m	08:17	8h 30m	16:47	39m	17:26	39m	18:06	38m	18:44	15h 29m	11h 35m				Fr, 12. Jan
Sa, 13. Jan		19:18–06:19*	11h 00m	M <sub>\</sub> bis AN <sub>\</sub>		10:03	19:18	06:19	38m	06:58	39m	07:37	39m	08:16	8h 32m	16:48	39m	17:27	39m	18:07	38m	18:45	15h 27m	11h 33m				Sa, 13. Jan
So, 14. Jan		20:47–06:18*	9h 31m	M <sub>\</sub> bis AN <sub>\</sub>		10:24	20:47	06:19	38m	06:57	39m	07:37	38m	08:15	8h 34m	16:50	38m	17:29	39m	18:08	38m	18:46	15h 25m	11h 31m				So, 14. Jan
Mo, 15. Jan		22:13–06:18*	8h 05m	M <sub>\</sub> bis AN <sub>\</sub>		10:42	22:13	06:18	38m	06:57	39m	07:36	38m	08:15	8h 36m	16:51	38m	17:30	39m	18:09	38m	18:48	15h 22m	11h 30m				Mo, 15. Jan
Di, 16. Jan		23:36–06:17*	6h 41m	M <sub>\</sub> bis AN <sub>\</sub>		10:57	23:36	06:18	38m	06:56	39m	07:35	38m	08:14	8h 38m	16:53	38m	17:31	39m	18:10	38m	18:49	15h 20m	11h 28m				Di, 16. Jan
Mi, 17. Jan		00:58*–06:17*	5h 19m	M <sub>\</sub> bis AN <sub>\</sub>		11:12	—:—	06:17	38m	06:56	39m	07:35	38m	08:13	8h 40m	16:54	38m	17:33	39m	18:12	38m	18:50	15h 18m	11h 26m				Mi, 17. Jan
Do, 18. Jan		02:19*–06:16*	3h 57m	M <sub>\</sub> bis AN <sub>\</sub>	☾	11:27	00:58	06:17	38m	06:55	38m	07:34	38m	08:12	8h 43m	16:56	38m	17:34	38m	18:13	38m	18:51	15h 15m	11h 24m				Do, 18. Jan
Fr, 19. Jan		03:40*–06:15*	2h 35m	M <sub>\</sub> bis AN <sub>\</sub>		11:46	02:19	06:16	38m	06:54	38m	07:33	38m	08:12	8h 45m	16:57	38m	17:35	38m	18:14	38m	18:53	15h 13m	11h 22m				Fr, 19. Jan
Sa, 20. Jan		04:59*–06:15*	1h 16m	M <sub>\</sub> bis AN <sub>\</sub>		12:09	03:40	06:15	38m	06:54	38m	07:32	38m	08:11	8h 47m	16:59	38m	17:37	38m	18:16	38m	18:54	15h 11m	11h 20m				Sa, 20. Jan
So, 21. Jan		06:11*–06:14*	3m	M <sub>\</sub> bis AN <sub>\</sub>		12:40	04:59	06:15	38m	06:53	38m	07:32	38m	08:10	8h 50m	17:00	38m	17:38	38m	18:17	38m	18:55	15h 08m	11h 18m				So, 21. Jan
Mo, 22. Jan		—:~:~:~	–	Mond stört		13:22	06:11	06:14	38m	06:52	38m	07:31	37m	08:09	8h 53m	17:02	38m	17:40	38m	18:18	38m	18:56	15h 05m	11h 16m				Mo, 22. Jan
Di, 23. Jan		—:~:~:~	–	Mond stört		14:15	07:11	06:13	37m	06:51	38m	07:30	37m	08:08	8h 55m	17:03	37m	17:41	38m	18:20	37m	18:58	15h 03m	11h 14m				Di, 23. Jan
Mi, 24. Jan		—:~:~:~	–	Mond stört		15:20	07:58	06:12	37m	06:50	38m	07:29	37m	08:07	8h 58m	17:05	37m	17:43	38m	18:21	37m	18:59	15h 00m	11h 12m				Mi, 24. Jan
Do, 25. Jan		—:~:~:~	–	Mond stört	☉	16:30	08:33	06:12	37m	06:49	38m	07:28	37m	08:05	9h 01m	17:07	37m	17:44	38m	18:23	37m	19:00	14h 57m	11h 10m				Do, 25. Jan
Fr, 26. Jan		—:~:~:~	–	Mond stört		17:43	08:58	06:11	37m	06:48	38m	07:27	37m	08:04	9h 03m	17:08	37m	17:46	38m	18:24	37m	19:02	14h 54m	11h 07m				Fr, 26. Jan
Sa, 27. Jan		—:~:~:~	–	Mond stört		18:54	09:17	06:10	37m	06:47	38m	07:26	37m	08:03	9h 06m	17:10	37m	17:47	38m	18:25	37m	19:03	14h 51m	11h 05m				Sa, 27. Jan
So, 28. Jan		19:05–20:04	59m	AN <sub>+</sub> bis M <sub>7</sub>		20:04	09:32	06:09	37m	06:46	38m	07:25	37m	08:02	9													