

Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Plauen 50.4950° N 12.1383° E

Berechnung: pyEphem
Textsatz: L^AT_EX

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_v (Monduntergang), AN₋ (Ende der astronomischen Nacht = Beginn der astr. Morgendämmerung), M₇

(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°).

Spalte 10 Dauer der astr. Morgendämmerung.

Spalte 11 Beginn der naut. Morgendämmerung (Sonnenhöhe = -12°).

Spalte 12 Dauer der naut. Morgendämmerung.

Spalte 13 Beginn der bürg. Morgendämmerung (Sonnenhöhe = -6°).

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°).

Spalte 20 Dauer der naut. Abenddämmerung.

Spalte 21 Ende der naut. Abenddämmerung (Sonnenhöhe = -12°).

Spalte 22 Dauer der astr. Abenddämmerung.

Spalte 23 Ende der astr. Abenddämmerung (Sonnenhöhe = -18°).

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°) 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_v (Monduntergang), ND₋ (Ende der »naut. Dunkelheit« = Beginn der naut. Morgendämmerung), M₇ (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		
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
So, 1. Jan		03:56* - 06:10*	2h 13m	M _\ bis AN ₋		12:44	02:41	06:10	39m	06:49	40m	07:30	41m	08:11	8h 06m	16:18	41m	16:59	40m	17:40	39m	18:19	15h 53m	11h 50m				So, 1. Jan
Mo, 2. Jan		05:10* - 06:10*	59m	M _\ bis AN ₋		13:03	03:56	06:10	39m	06:49	40m	07:30	40m	08:11	8h 07m	16:19	40m	17:00	40m	17:41	39m	18:20	15h 52m	11h 49m				Mo, 2. Jan
Di, 3. Jan		—:—:—:—	—	Mond stört		13:26	05:10	06:10	39m	06:49	40m	07:30	40m	08:11	8h 08m	16:20	40m	17:01	40m	17:41	39m	18:21	15h 51m	11h 48m				Di, 3. Jan
Mi, 4. Jan		—:—:—:—	—	Mond stört		13:56	06:22	06:10	39m	06:49	40m	07:30	40m	08:11	8h 09m	16:21	40m	17:02	40m	17:42	39m	18:22	15h 49m	11h 47m				Mi, 4. Jan
Do, 5. Jan		—:—:—:—	—	Mond stört		14:36	07:27	06:10	39m	06:49	40m	07:30	40m	08:11	8h 11m	16:22	40m	17:03	40m	17:43	39m	18:23	15h 48m	11h 46m				Do, 5. Jan
Fr, 6. Jan		—:~:~:~:~	—	Mond stört		15:27	08:22	06:10	39m	06:49	40m	07:30	40m	08:10	8h 12m	16:23	40m	17:04	40m	17:45	39m	18:24	15h 46m	11h 45m				Fr, 6. Jan
Sa, 7. Jan		—:~:~:~:~	—	Mond stört	○	16:28	09:06	06:09	39m	06:49	40m	07:29	40m	08:10	8h 14m	16:24	40m	17:05	40m	17:46	39m	18:25	15h 45m	11h 44m				Sa, 7. Jan
So, 8. Jan		—:~:~:~:~	—	Mond stört		17:35	09:39	06:09	39m	06:49	40m	07:29	40m	08:10	8h 16m	16:26	40m	17:06	40m	17:47	39m	18:26	15h 43m	11h 42m				So, 8. Jan
Mo, 9. Jan		18:27 - 18:46	18m	AN ₊ bis M ₇		18:46	10:04	06:09	39m	06:48	40m	07:29	40m	08:09	8h 17m	16:27	40m	17:07	40m	17:48	39m	18:27	15h 41m	11h 41m				Mo, 9. Jan
Di, 10. Jan		18:28 - 19:56	1h 28m	AN ₊ bis M ₇		19:56	10:23	06:09	39m	06:48	40m	07:28	40m	08:09	8h 19m	16:28	40m	17:09	40m	17:49	39m	18:28	15h 39m	11h 40m				Di, 10. Jan
Mi, 11. Jan		18:29 - 21:07	2h 37m	AN ₊ bis M ₇		21:07	10:39	06:08	39m	06:48	40m	07:28	40m	08:08	8h 21m	16:30	40m	17:10	40m	17:50	39m	18:29	15h 37m	11h 38m				Mi, 11. Jan
Do, 12. Jan		18:31 - 22:17	3h 46m	AN ₊ bis M ₇		22:17	10:52	06:08	39m	06:47	40m	07:27	40m	08:07	8h 23m	16:31	40m	17:11	40m	17:51	39m	18:31	15h 35m	11h 37m				Do, 12. Jan
Fr, 13. Jan		18:32 - 23:28	4h 55m	AN ₊ bis M ₇		23:28	11:05	06:08	39m	06:47	40m	07:27	39m	08:07	8h 25m	16:33	39m	17:12	40m	17:53	39m	18:32	15h 33m	11h 35m				Fr, 13. Jan
Sa, 14. Jan		18:33 - 00:41*	6h 07m	AN ₊ bis M ₇		—:—	11:17	06:07	39m	06:46	40m	07:26	39m	08:06	8h 27m	16:34	39m	17:14	40m	17:54	39m	18:33	15h 31m	11h 33m				Sa, 14. Jan
So, 15. Jan		18:34 - 01:58*	7h 23m	AN ₊ bis M ₇	●	00:41	11:31	06:07	39m	06:46	39m	07:26	39m	08:05	8h 30m	16:35	39m	17:15	39m	17:55	39m	18:34	15h 29m	11h 31m				So, 15. Jan
Mo, 16. Jan		18:35 - 03:19*	8h 43m	AN ₊ bis M ₇		01:58	11:48	06:06	39m	06:45	39m	07:25	39m	08:05	8h 32m	16:37	39m	17:17	39m	17:56	39m	18:35	15h 26m	11h 30m				Mo, 16. Jan
Di, 17. Jan		18:37 - 04:45*	10h 07m	AN ₊ bis M ₇		03:19	12:09	06:06	38m	06:45	39m	07:24	39m	08:04	8h 34m	16:38	39m	17:18	39m	17:58	38m	18:37	15h 24m	11h 28m				Di, 17. Jan
Mi, 18. Jan		18:38 - 06:04*	11h 26m	AN ₊ bis AN ₋		04:45	12:40	06:05	38m	06:44	39m	07:24	39m	08:03	8h 37m	16:40	39m	17:19	39m	17:59	38m	18:38	15h 21m	11h 26m				Mi, 18. Jan
Do, 19. Jan		18:39 - 06:04*	11h 24m	AN ₊ bis AN ₋		06:08	13:24	06:04	38m	06:43	39m	07:23	39m	08:02	8h 39m	16:42	39m	17:21	39m	18:00	38m	18:39	15h 19m	11h 24m				Do, 19. Jan
Fr, 20. Jan		18:41 - 06:03*	11h 22m	AN ₊ bis AN ₋		07:22	14:28	06:04	38m	06:42	39m	07:22	39m	08:01	8h 42m	16:43	39m	17:22	39m	18:02	38m	18:41	15h 16m	11h 22m				Fr, 20. Jan
Sa, 21. Jan		18:42 - 06:02*	11h 20m	AN ₊ bis AN ₋	●	08:19	15:50	06:03	38m	06:42	39m	07:21	38m	08:00	8h 44m	16:45	38m	17:24	39m	18:03	38m	18:42	15h 14m	11h 20m				Sa, 21. Jan
So, 22. Jan		18:43 - 06:01*	11h 17m	AN ₊ bis AN ₋		09:00	17:22	06:02	38m	06:41	39m	07:20	38m	07:59	8h 47m	16:46	38m	17:25	39m	18:05	38m	18:43	15h 11m	11h 17m				So, 22. Jan
Mo, 23. Jan		18:55 - 06:00*	11h 05m	M _\ bis AN ₋		09:28	18:55	06:01	38m	06:40	39m	07:19	38m	07:58	8h 50m	16:48	38m	17:27	39m	18:06	38m	18:45	15h 08m	11h 15m				Mo, 23. Jan
Di, 24. Jan		20:24 - 05:59*	9h 35m	M _\ bis AN ₋		09:49	20:24	06:00	38m	06:39	39m	07:18	38m	07:57	8h 53m	16:50	38m	17:28	39m	18:07	38m	18:46	15h 05m	11h 13m				Di, 24. Jan
Mi, 25. Jan		21:49 - 05:59*	8h 09m	M _\ bis AN ₋		10:05	21:49	05:59	38m	06:38	39m	07:17	38m	07:55	8h 55m	16:51	38m	17:30	39m	18:09	38m	18:47	15h 02m	11h 11m				Mi, 25. Jan
Do, 26. Jan		23:09 - 05:58*	6h 48m	M _\ bis AN ₋		10:20	23:09	05:59	38m	06:37	38m	07:16	38m	07:54	8h 58m	16:53	38m	17:31	39m	18:10	38m	18:49	14h 59m	11h 08m				Do, 26. Jan
Fr, 27. Jan		00:28* - 05:57*	5h 28m	M _\ bis AN ₋		10:34	—:—	05:58	38m	06:36	38m	07:15	38m	07:53	9h 01m	16:55	38m	17:33	38m	18:12	38m	18:50	14h 56m	11h 06m				Fr, 27. Jan
Sa, 28. Jan		01:45* - 05:55*	4h 10m	M _\ bis AN ₋	●	10:50	00:28	05:57	38m	06:35	38m	07:14	37m	07:52	9h 04m	16:57	38m	17:35	38m	18:13	38m	18:52	14h 53m	11h 03m				Sa, 28. Jan
So, 29. Jan		03:00* - 05:54*	2h 53m	M _\ bis AN ₋		11:07	01:45	05:55	38m	06:34	38m	07:12	37m	07:50	9h 07m	16:58	37m	17:36	38m	18:15	38m	18:53	14h 50m	11h 01m				So, 29. Jan
Mo, 30. Jan		04:13* - 05:53*	1h 39m	M _\ bis AN ₋		11:29	03:00	05:54	38m	06:33	38m	07:11	37m	07:49	9h 10m	17:00	37m	17:38	38m	18:16	38m	18:55	14h 47m	10h 58m				Mo, 30. Jan
Di, 31. Jan		05:21* - 05:52*	31m	M _\ bis AN ₋		11:57	04:13	05:53	38m	06:31	38m	07:10	37m	07:48	9h 14m	17:02	37m	17:39	38m	18:18	38m	18:56	14h 44m	10h 55m				Di, 31. Jan
Mi, 1. Feb		—:~:~:~:~	—	Mond stört		12:33	05:21	05:52	38m	06:30	38m	07:09	37m	07:46	9h 17m	17:03	37m	17:41	38m	18:19	38m	18:58	14h 41m	10h 53m				Mi, 1. Feb
Do, 2. Feb		—:~:~:~:~	—	Mond stört		13:21	06:19	05:51	38m	06:29	38m	07:07	37m	07:45	9h 20m	17:05	37m	17:43	38m	18:21	38m	18:59	14h 37m	10h 50m				Do, 2. Feb
Fr, 3. Feb		—:~:~:~:~	—	Mond stört		14:19	07:06	05:50	38m	06:28	38m	07:06	37m	07:43	9h 23m	17:07	37m	17:44	38m	18:22	38m	19:01	14h 34m	10h 47m				Fr, 3. Feb
Sa, 4. Feb		—:~:~:~:~	—	Mond stört		15:25	07:42	05:48	38m	06:26	38m	07:04	37m	07:42	9h 27m	17:09	37m	17:46	38m	18:24	38m	19:02	14h 31m	10h 44m				Sa, 4. Feb
So, 5. Feb		—:~:~:~:~	—	Mond stört	○	16:35	08:09	05:47	37m	06:25	38m	07:03	36m	07:40	9h 30m	17:10	36m	17:47	38m	18:26	38m	19:04	14h 28m	10h 41m				So, 5. Feb
Mo, 6. Feb		—:~:~:~:~	—	Mond stört		17:47	08:29	05:46	37m	06:24	38m	07:02	36m	07:38	9h 33m	17:12	36m	17:49	38m	18:27	38m	19:05	14h 24m	10h 39m				Mo, 6. Feb
Di, 7. Feb		—:~:~:~:~	—	Mond stört		18:57	08:46	05:44	37m	06:22	37m	07:00	36m	07:37	9h 37m	17:14	36m	17:51	38m	18:29	37m	19:07	14h 21m	10h 36m				Di, 7. Feb
Mi, 8. Feb		19:08 - 20:08	59m	AN ₊ bis M ₇		20:08	08:59	05:43	37m	06:21	37m	06:59	36m	07:35	9h 40m	17:16	36m	17:52	37m	18:30	37m	19:08	14h 17m	10h 33m				Mi, 8. Feb
Do, 9. Feb		19:10 - 21:18	2h 08m	AN ₊ bis M ₇		21:18	09:12	05:41	37m	06:19	37m	06:57	36m	07:33	9h 43m	17:17	36m	17:54	37m	18:32	37m	19:10	14h 14m	10h 30m				Do, 9. Feb
Fr, 10. Feb		19:11 - 22:30	3h 18m	AN ₊ bis M ₇		22:30	09:24	05:40	37m	06:18	37m	06:55	36m	07:32	9h 47m	17:19	36m	17:56	37m	18:33	37m	19:11	14h 10m	10h 26m				Fr, 10. Feb
Sa, 11. Feb		19:13 - 23:44	4h 31m	AN ₊ bis M ₇		23:44	09:37	05:38	37m	06:16	37m	06:54	36m	07:30	9h 50m	17:21	36m	17:57	37m	18:35	37m	19:13	14h 07m	10h 23m				Sa, 11. Feb
So, 12. Feb		19:14 - 01:02*	5h 47m	AN ₊ bis M ₇		—:—	09:52	05:37	37m	06:14	37m	06:52	36m	07:28	9h 54m	17:23</												

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

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		
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
So, 17. Dez		21:24–06:04*	8h 40m	M _\ bis AN _\		11:51	21:24	06:04	39m	06:44	41m	07:25	41m	08:06	8h 01m	16:08	41m	16:49	41m	17:30	39m	18:10	15h 59m	11h 54m				So, 17. Dez
Mo, 18. Dez		22:50–06:05*	7h 15m	M _\ bis AN _\		12:09	22:50	06:04	39m	06:44	41m	07:25	41m	08:07	8h 01m	16:08	41m	16:49	41m	17:31	39m	18:10	15h 59m	11h 54m				Mo, 18. Dez
Di, 19. Dez		00:13*–06:06*	5h 52m	M _\ bis AN _\	☾	12:24	—:—	06:05	39m	06:45	41m	07:26	41m	08:07	8h 00m	16:08	41m	16:50	41m	17:31	39m	18:11	15h 59m	11h 54m				Di, 19. Dez
Mi, 20. Dez		01:35*–06:06*	4h 31m	M _\ bis AN _\		12:37	00:13	06:06	39m	06:45	41m	07:27	41m	08:08	8h 00m	16:09	41m	16:50	41m	17:31	39m	18:11	15h 59m	11h 55m				Mi, 20. Dez
Do, 21. Dez		02:57*–06:07*	3h 09m	M _\ bis AN _\		12:51	01:35	06:06	39m	06:46	41m	07:27	41m	08:09	8h 00m	16:09	41m	16:51	41m	17:32	39m	18:12	15h 59m	11h 55m				Do, 21. Dez
Fr, 22. Dez		04:19*–06:07*	1h 47m	M _\ bis AN _\		13:07	02:57	06:07	39m	06:46	41m	07:28	41m	08:09	8h 00m	16:10	41m	16:51	41m	17:32	39m	18:12	15h 59m	11h 55m				Fr, 22. Dez
Sa, 23. Dez		05:42*–06:08*	25m	M _\ bis AN _\		13:25	04:19	06:07	39m	06:47	41m	07:28	41m	08:10	8h 00m	16:10	41m	16:52	41m	17:33	39m	18:13	15h 59m	11h 54m				Sa, 23. Dez
So, 24. Dez		—:—:—:—	–	Mond stört		13:50	05:42	06:08	39m	06:47	41m	07:29	41m	08:10	8h 00m	16:11	41m	16:52	41m	17:33	39m	18:13	15h 59m	11h 54m				So, 24. Dez
Mo, 25. Dez		—:—:—:—	–	Mond stört		14:23	07:01	06:08	39m	06:48	41m	07:29	41m	08:10	8h 01m	16:11	41m	16:53	41m	17:34	39m	18:14	15h 59m	11h 54m				Mo, 25. Dez
Di, 26. Dez		—:—:—:—	–	Mond stört		15:08	08:12	06:08	39m	06:48	41m	07:29	41m	08:11	8h 01m	16:12	41m	16:54	41m	17:35	39m	18:14	15h 58m	11h 54m				Di, 26. Dez
Mi, 27. Dez		—:—:~:~:~	–	Mond stört	☉	16:07	09:10	06:09	39m	06:48	41m	07:30	41m	08:11	8h 02m	16:13	41m	16:54	41m	17:35	39m	18:15	15h 58m	11h 53m				Mi, 27. Dez
Do, 28. Dez		—:~:~:~:~	–	Mond stört		17:15	09:52	06:09	39m	06:49	41m	07:30	41m	08:11	8h 02m	16:14	41m	16:55	41m	17:36	39m	18:16	15h 57m	11h 53m				Do, 28. Dez
Fr, 29. Dez		18:17–18:28	11m	AN ₊ bis M ₇		18:28	10:23	06:09	39m	06:49	41m	07:30	41m	08:11	8h 03m	16:15	41m	16:56	41m	17:37	39m	18:17	15h 56m	11h 52m				Fr, 29. Dez
Sa, 30. Dez		18:17–19:41	1h 23m	AN ₊ bis M ₇		19:41	10:45	06:09	39m	06:49	41m	07:30	41m	08:11	8h 04m	16:15	41m	16:57	41m	17:38	39m	18:17	15h 55m	11h 52m				Sa, 30. Dez
So, 31. Dez		18:18–20:53	2h 34m	AN ₊ bis M ₇		20:53	11:02	06:10	39m	06:49	40m	07:30	41m	08:11	8h 05m	16:16	41m	16:58	40m	17:38	39m	18:18	15h 54m	11h 51m				So, 31. Dez
Mo, 1. Jan		18:19–22:02	3h 42m	AN ₊ bis M ₇		22:02	11:15	06:10	39m	06:49	40m	07:30	41m	08:11	8h 06m	16:17	41m	16:58	40m	17:39	39m	18:19	15h 53m	11h 50m				Mo, 1. Jan
Di, 2. Jan		18:20–23:10	4h 50m	AN ₊ bis M ₇		23:10	11:27	06:10	39m	06:49	40m	07:30	41m	08:11	8h 07m	16:18	41m	16:59	40m	17:40	39m	18:20	15h 52m	11h 49m				Di, 2. Jan
Mi, 3. Jan		18:21–00:19*	5h 58m	AN ₊ bis M ₇		—:—	11:37	06:10	39m	06:49	40m	07:30	40m	08:11	8h 08m	16:19	40m	17:00	40m	17:41	39m	18:21	15h 51m	11h 48m				Mi, 3. Jan
Do, 4. Jan		18:22–01:29*	7h 07m	AN ₊ bis M ₇	☾	00:19	11:48	06:10	39m	06:49	40m	07:30	40m	08:11	8h 09m	16:21	40m	17:01	40m	17:42	39m	18:22	15h 50m	11h 47m				Do, 4. Jan
Fr, 5. Jan		18:23–02:43*	8h 19m	AN ₊ bis M ₇		01:29	12:01	06:10	39m	06:49	40m	07:30	40m	08:11	8h 10m	16:22	40m	17:02	40m	17:43	39m	18:23	15h 48m	11h 46m				Fr, 5. Jan
Sa, 6. Jan		18:24–04:00*	9h 36m	AN ₊ bis M ₇		02:43	12:16	06:10	39m	06:49	40m	07:30	40m	08:10	8h 12m	16:23	40m	17:04	40m	17:44	39m	18:24	15h 47m	11h 45m				Sa, 6. Jan
So, 7. Jan		18:25–05:21*	10h 56m	AN ₊ bis M ₇		04:00	12:36	06:09	39m	06:49	40m	07:30	40m	08:10	8h 14m	16:24	40m	17:05	40m	17:45	39m	18:25	15h 45m	11h 44m				So, 7. Jan
Mo, 8. Jan		18:26–06:09*	11h 43m	AN ₊ bis AN _\		05:21	13:03	06:09	39m	06:49	40m	07:29	40m	08:10	8h 15m	16:25	40m	17:06	40m	17:46	39m	18:26	15h 43m	11h 43m				Mo, 8. Jan
Di, 9. Jan		18:27–06:09*	11h 41m	AN ₊ bis AN _\		06:40	13:44	06:09	39m	06:48	40m	07:29	40m	08:09	8h 17m	16:27	40m	17:07	40m	17:48	39m	18:27	15h 42m	11h 41m				Di, 9. Jan
Mi, 10. Jan		18:28–06:08*	11h 40m	AN ₊ bis AN _\		07:51	14:43	06:09	39m	06:48	40m	07:29	40m	08:09	8h 19m	16:28	40m	17:08	40m	17:49	39m	18:28	15h 40m	11h 40m				Mi, 10. Jan
Do, 11. Jan		18:29–06:08*	11h 38m	AN ₊ bis AN _\	☉	08:46	16:00	06:08	39m	06:48	40m	07:28	40m	08:08	8h 21m	16:29	40m	17:10	40m	17:50	39m	18:29	15h 38m	11h 38m				Do, 11. Jan
Fr, 12. Jan		18:30–06:08*	11h 37m	AN ₊ bis AN _\		09:26	17:29	06:08	39m	06:47	40m	07:28	40m	08:08	8h 23m	16:31	40m	17:11	40m	17:51	39m	18:30	15h 36m	11h 37m				Fr, 12. Jan
Sa, 13. Jan		19:02–06:07*	11h 05m	M _\ bis AN _\		09:53	19:02	06:08	39m	06:47	40m	07:27	39m	08:07	8h 25m	16:32	39m	17:12	40m	17:52	39m	18:32	15h 34m	11h 35m				Sa, 13. Jan
So, 14. Jan		20:32–06:07*	9h 34m	M _\ bis AN _\		10:14	20:32	06:07	39m	06:46	40m	07:27	39m	08:06	8h 27m	16:34	39m	17:13	40m	17:54	39m	18:33	15h 31m	11h 34m				So, 14. Jan
Mo, 15. Jan		21:59–06:06*	8h 07m	M _\ bis AN _\		10:30	21:59	06:07	39m	06:46	39m	07:26	39m	08:06	8h 29m	16:35	39m	17:15	40m	17:55	39m	18:34	15h 29m	11h 32m				Mo, 15. Jan
Di, 16. Jan		23:23–06:06*	6h 42m	M _\ bis AN _\		10:44	23:23	06:06	39m	06:45	39m	07:25	39m	08:05	8h 31m	16:37	39m	17:16	39m	17:56	39m	18:35	15h 27m	11h 30m				Di, 16. Jan
Mi, 17. Jan		00:46*–06:05*	5h 19m	M _\ bis AN _\		10:58	—:—	06:06	38m	06:45	39m	07:25	39m	08:04	8h 34m	16:38	39m	17:18	39m	17:57	38m	18:36	15h 24m	11h 28m				Mi, 17. Jan
Do, 18. Jan		02:08*–06:04*	3h 56m	M _\ bis AN _\	☾	11:13	00:46	06:05	38m	06:44	39m	07:24	39m	08:03	8h 36m	16:40	39m	17:19	39m	17:59	38m	18:38	15h 22m	11h 26m				Do, 18. Jan
Fr, 19. Jan		03:31*–06:04*	2h 33m	M _\ bis AN _\		11:30	02:08	06:04	38m	06:43	39m	07:23	39m	08:02	8h 39m	16:41	39m	17:20	39m	18:00	38m	18:39	15h 19m	11h 24m				Fr, 19. Jan
Sa, 20. Jan		04:50*–06:03*	1h 12m	M _\ bis AN _\		11:52	03:31	06:04	38m	06:43	39m	07:22	39m	08:01	8h 41m	16:43	39m	17:22	39m	18:02	38m	18:40	15h 17m	11h 22m				Sa, 20. Jan
So, 21. Jan		—:~:~:~:~	–	Mond stört		12:22	04:50	06:03	38m	06:42	39m	07:21	38m	08:00	8h 44m	16:44	38m	17:23	39m	18:03	38m	18:42	15h 14m	11h 20m				So, 21. Jan
Mo, 22. Jan		—:~:~:~:~	–	Mond stört		13:03	06:03	06:02	38m	06:41	39m	07:20	38m	07:59	8h 46m	16:46	38m	17:25	39m	18:04	38m	18:43	15h 11m	11h 18m				Mo, 22. Jan
Di, 23. Jan		—:~:~:~:~	–	Mond stört		13:56	07:04	06:01	38m	06:40	39m	07:19	38m	07:58	8h 49m	16:48	38m	17:26	39m	18:06	38m	18:44	15h 09m	11h 16m				Di, 23. Jan
Mi, 24. Jan		—:~:~:~:~	–	Mond stört		15:01	07:51	06:01	38m	06:39	39m	07:18	38m	07:57	8h 52m	16:49	38m	17:28	39m	18:07	38m	18:46	15h 06m	11h 13m				Mi, 24. Jan
Do, 25. Jan		—:~:~:~:~	–	Mond stört	☉	16:13	08:25	06:00	38m	06:38	39m	07:17	38m	07:56	8h 55m	16:51	38m	17:29	39m	18:09	38m	18:47	15h 03m	11h 11m				Do, 25. Jan
Fr, 26. Jan		—:~:~:~:~	–	Mond stört		17:26	08:49	05:59	38m	06:37	39m	07:16	38m	07:55	8h 58m	16:53	38m	17:31	39m	18:10	38m	18:49	15h 00m	11h 09m				Fr, 26. Jan
Sa, 27. Jan		—:~:~:~:~	–	Mond stört		18:39	09:07	05:58	38m	06:36	38m	07:15	38m	07:53	9h 01m	16:54	38m	17:33	38m	18:12	38m	18:50	14h 57m	11h 06m				Sa, 27. Jan
So, 28. Jan		18:51–19:49	57m	AN ₊ bis M ₇		19:49	09:21	05:57	38m	06:35	38m	07:14	38m	07:52	9h 0													