

Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Klagenfurt am Wörthersee 46.6178° N 14.3056° 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), M_l

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

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

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