

Mond- und Dämmerungstabelle 2024

für die visuelle Deep-Sky-Beobachtung

Augsburg 48.3717° N 10.8983° 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
2024	Zeit- zone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne				Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024	
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt		
Fr, 19. Jul	MESZ	—:—:—:—:—	—	Mond stört		20:20	02:38	02:48	1h 13m	04:01	51m	04:53	41m	05:35	15h 33m	21:09	41m	21:50	51m	22:42	1h 12m	23:54	8h 27m	2h 56m				Fr, 19. Jul
Sa, 20. Jul	MESZ	—:—:—:—:—	—	Mond stört		21:10	03:39	02:51	1h 12m	04:03	51m	04:55	41m	05:36	15h 31m	21:08	41m	21:49	51m	22:40	1h 11m	23:51	8h 29m	3h 02m				Sa, 20. Jul
So, 21. Jul	MESZ	—:—:—:—:—	—	Mond stört	○	21:47	04:56	02:54	1h 11m	04:05	51m	04:56	41m	05:37	15h 29m	21:07	41m	21:48	50m	22:39	1h 09m	23:49	8h 31m	3h 07m				So, 21. Jul
Mo, 22. Jul	MESZ	—:—:~:~:~	—	Mond stört		22:14	06:21	02:57	1h 09m	04:06	50m	04:57	41m	05:38	15h 27m	21:06	40m	21:47	50m	22:37	1h 08m	23:46	8h 33m	3h 13m				Mo, 22. Jul
Di, 23. Jul	MESZ	—:~:~:~	—	Mond stört		22:36	07:48	03:00	1h 08m	04:08	50m	04:59	40m	05:40	15h 24m	21:04	40m	21:45	50m	22:35	1h 07m	23:43	8h 36m	3h 19m				Di, 23. Jul
Mi, 24. Jul	MESZ	—:~:~:~	—	Mond stört		22:54	09:14	03:02	1h 07m	04:10	50m	05:00	40m	05:41	15h 22m	21:03	40m	21:44	49m	22:34	1h 06m	23:40	8h 38m	3h 25m				Mi, 24. Jul
Do, 25. Jul	MESZ	—:~:~:~	—	Mond stört		23:10	10:38	03:05	1h 06m	04:12	49m	05:01	40m	05:42	15h 20m	21:02	40m	21:42	49m	22:32	1h 05m	23:37	8h 41m	3h 31m				Do, 25. Jul
Fr, 26. Jul	MESZ	—:~:~:~	—	Mond stört		23:26	12:00	03:08	1h 05m	04:14	49m	05:03	40m	05:43	15h 17m	21:01	40m	21:41	48m	22:30	1h 04m	23:34	8h 43m	3h 36m				Fr, 26. Jul
Sa, 27. Jul	MESZ	23:31 – 23:44	12m	AN ₊ bis M ₇		23:44	13:22	03:11	1h 04m	04:15	48m	05:04	40m	05:45	15h 14m	21:00	40m	21:40	48m	22:28	1h 03m	23:31	8h 46m	3h 42m				Sa, 27. Jul
So, 28. Jul	MESZ	23:28 – 00:06*	37m	AN ₊ bis M ₇	◐	—:—	14:45	03:14	1h 03m	04:17	48m	05:06	40m	05:46	15h 12m	20:58	39m	21:38	48m	22:26	1h 02m	23:28	8h 48m	3h 48m				So, 28. Jul
Mo, 29. Jul	MESZ	23:26 – 00:33*	1h 07m	AN ₊ bis M ₇		00:06	16:08	03:17	1h 02m	04:19	48m	05:07	39m	05:47	15h 09m	20:57	39m	21:36	47m	22:24	1h 01m	23:26	8h 51m	3h 54m				Mo, 29. Jul
Di, 30. Jul	MESZ	23:23 – 01:09*	1h 46m	AN ₊ bis M ₇		00:33	17:27	03:20	1h 01m	04:21	47m	05:09	39m	05:48	15h 07m	20:55	39m	21:35	47m	22:22	1h 00m	23:23	8h 54m	3h 59m				Di, 30. Jul
Mi, 31. Jul	MESZ	23:20 – 01:58*	2h 37m	AN ₊ bis M ₇		01:09	18:38	03:22	1h 00m	04:23	47m	05:10	39m	05:50	15h 04m	20:54	39m	21:33	47m	22:20	59m	23:20	8h 56m	4h 05m				Mi, 31. Jul
Do, 1. Aug	MESZ	23:17 – 02:58*	3h 41m	AN ₊ bis M ₇		01:58	19:36	03:25	59m	04:25	47m	05:12	39m	05:51	15h 01m	20:53	39m	21:32	46m	22:18	58m	23:17	8h 59m	4h 10m				Do, 1. Aug
Fr, 2. Aug	MESZ	23:14 – 03:31*	4h 16m	AN ₊ bis AN ₋		02:58	20:20	03:28	58m	04:26	46m	05:13	39m	05:52	14h 58m	20:51	38m	21:30	46m	22:16	57m	23:14	9h 02m	4h 16m				Fr, 2. Aug
Sa, 3. Aug	MESZ	23:11 – 03:33*	4h 21m	AN ₊ bis AN ₋		04:08	20:53	03:31	57m	04:28	46m	05:15	38m	05:54	14h 55m	20:50	38m	21:28	46m	22:14	57m	23:11	9h 05m	4h 21m				Sa, 3. Aug
So, 4. Aug	MESZ	23:09 – 03:36*	4h 27m	AN ₊ bis AN ₋	●	05:22	21:17	03:33	57m	04:30	46m	05:16	38m	05:55	14h 53m	20:48	38m	21:27	45m	22:12	56m	23:09	9h 08m	4h 27m				So, 4. Aug
Mo, 5. Aug	MESZ	23:06 – 03:38*	4h 32m	AN ₊ bis AN ₋		06:35	21:35	03:36	56m	04:32	45m	05:18	38m	05:56	14h 50m	20:47	38m	21:25	45m	22:10	55m	23:06	9h 11m	4h 32m				Mo, 5. Aug
Di, 6. Aug	MESZ	23:03 – 03:41*	4h 38m	AN ₊ bis AN ₋		07:46	21:50	03:38	55m	04:34	45m	05:19	38m	05:58	14h 47m	20:45	38m	21:23	45m	22:08	54m	23:03	9h 14m	4h 38m				Di, 6. Aug
Mi, 7. Aug	MESZ	23:00 – 03:44*	4h 43m	AN ₊ bis AN ₋		08:54	22:03	03:41	54m	04:36	45m	05:21	38m	05:59	14h 44m	20:43	37m	21:21	44m	22:06	54m	23:00	9h 17m	4h 43m				Mi, 7. Aug
Do, 8. Aug	MESZ	22:57 – 03:46*	4h 48m	AN ₊ bis AN ₋		10:01	22:16	03:44	54m	04:38	44m	05:22	37m	06:00	14h 41m	20:42	37m	21:20	44m	22:04	53m	22:57	9h 20m	4h 48m				Do, 8. Aug
Fr, 9. Aug	MESZ	22:55 – 03:49*	4h 54m	AN ₊ bis AN ₋		11:07	22:28	03:46	53m	04:40	44m	05:24	37m	06:02	14h 38m	20:40	37m	21:18	44m	22:02	52m	22:55	9h 23m	4h 54m				Fr, 9. Aug
Sa, 10. Aug	MESZ	22:52 – 03:51*	4h 59m	AN ₊ bis AN ₋		12:14	22:42	03:49	52m	04:41	44m	05:25	37m	06:03	14h 35m	20:38	37m	21:16	43m	22:00	52m	22:52	9h 26m	4h 59m				Sa, 10. Aug
So, 11. Aug	MESZ	22:58 – 03:54*	4h 55m	M ₇ bis AN ₋		13:22	22:58	03:51	52m	04:43	43m	05:27	37m	06:04	14h 32m	20:37	37m	21:14	43m	21:57	51m	22:49	9h 29m	5h 04m				So, 11. Aug
Mo, 12. Aug	MESZ	23:19 – 03:56*	4h 36m	M ₇ bis AN ₋	◑	14:34	23:19	03:54	51m	04:45	43m	05:29	37m	06:06	14h 29m	20:35	37m	21:12	43m	21:55	50m	22:46	9h 32m	5h 09m				Mo, 12. Aug
Di, 13. Aug	MESZ	23:47 – 03:58*	4h 11m	M ₇ bis AN ₋		15:47	23:47	03:56	50m	04:47	43m	05:30	37m	06:07	14h 26m	20:33	36m	21:10	42m	21:53	50m	22:43	9h 35m	5h 14m				Di, 13. Aug
Mi, 14. Aug	MESZ	00:26* – 04:01*	3h 35m	M ₇ bis AN ₋		16:59	—:—	03:58	50m	04:49	42m	05:32	36m	06:09	14h 22m	20:31	36m	21:08	42m	21:51	49m	22:41	9h 38m	5h 20m				Mi, 14. Aug
Do, 15. Aug	MESZ	01:19* – 04:03*	2h 44m	M ₇ bis AN ₋		18:05	00:26	04:01	49m	04:51	42m	05:33	36m	06:10	14h 19m	20:30	36m	21:06	42m	21:49	49m	22:38	9h 41m	5h 25m				Do, 15. Aug
Fr, 16. Aug	MESZ	02:28* – 04:05*	1h 37m	M ₇ bis AN ₋		19:00	01:19	04:03	49m	04:52	42m	05:35	36m	06:11	14h 16m	20:28	36m	21:04	42m	21:46	48m	22:35	9h 44m	5h 30m				Fr, 16. Aug
Sa, 17. Aug	MESZ	03:50* – 04:08*	17m	M ₇ bis AN ₋		19:42	02:28	04:05	48m	04:54	42m	05:36	36m	06:13	14h 13m	20:26	36m	21:02	41m	21:44	48m	22:32	9h 48m	5h 35m				Sa, 17. Aug
So, 18. Aug	MESZ	—:~:~:~	—	Mond stört		20:14	03:50	04:08	48m	04:56	41m	05:38	36m	06:14	14h 10m	20:24	36m	21:00	41m	21:42	47m	22:30	9h 51m	5h 40m				So, 18. Aug
Mo, 19. Aug	MESZ	—:~:~:~	—	Mond stört	○	20:38	05:18	04:10	47m	04:58	41m	05:39	36m	06:16	14h 06m	20:22	36m	20:58	41m	21:40	47m	22:27	9h 54m	5h 45m				Mo, 19. Aug
Di, 20. Aug	MESZ	—:~:~:~	—	Mond stört		20:57	06:46	04:12	47m	05:00	41m	05:41	36m	06:17	14h 03m	20:21	35m	20:56	41m	21:37	46m	22:24	9h 57m	5h 50m				Di, 20. Aug
Mi, 21. Aug	MESZ	—:~:~:~	—	Mond stört		21:15	08:14	04:14	46m	05:01	41m	05:42	35m	06:18	14h 00m	20:19	35m	20:54	40m	21:35	46m	22:22	10h 01m	5h 55m				Mi, 21. Aug
Do, 22. Aug	MESZ	—:~:~:~	—	Mond stört		21:31	09:40	04:17	46m	05:03	40m	05:44	35m	06:20	13h 57m	20:17	35m	20:52	40m	21:33	45m	22:19	10h 04m	5h 59m				Do, 22. Aug
Fr, 23. Aug	MESZ	—:~:~:~	—	Mond stört		21:49	11:05	04:19	45m	05:05	40m	05:45	35m	06:21	13h 53m	20:15	35m	20:50	40m	21:31	45m	22:16	10h 07m	6h 04m				Fr, 23. Aug
Sa, 24. Aug	MESZ	—:~:~:~	—	Mond stört		22:09	12:30	04:21	45m	05:07	40m	05:47	35m	06:22	13h 50m	20:13	35m	20:48	40m	21:28	45m	22:13	10h 10m	6h 09m				Sa, 24. Aug
So, 25. Aug	MESZ	22:11 – 22:35	24m	AN ₊ bis M ₇		22:35	13:55	04:23	45m	05:08	40m	05:48	35m	06:24	13h 47m	20:11	35m	20:46	39m	21:26	44m	22:11	10h 14m	6h 14m				So, 25. Aug
Mo, 26. Aug	MESZ	22:08 – 23:09	1h 00m	AN ₊ bis M ₇	◐	23:09	15:17	04:25	44m	05:10	39m	05:50	35m	06:25	13h 43m	20:09	35m	20:44	39m	21:24	44m	22:08	10h 17m	6h 19m				Mo, 26. Aug
Di, 27. Aug	MESZ	22:06 – 23:53	1h 47m	AN ₊ bis M ₇		23:53	16:32	04:27	44m	05:12	39m	05:51	35m	06:27	13h 40m	20:07	34m	20:42	39m	21:21	44m	22:06	10h 20m	6h 23m				Di, 27. Aug
Mi, 28. Aug	MESZ	22:03 – 00:50*	2h 47m	AN ₊ bis M ₇		—:—	17:34	04:29	44m	05:13	39m	05:53	35m	06:28	13h 37m	20:05	34m	20:40	39m	21:19	43m	22:03	10h 24m	6h 28m				Mi, 28. Aug
Do, 29. Aug	MESZ	22:00 – 01:57*	3h 57m	AN ₊ bis M ₇		00:50	18:22	04:31	43m	05:15	39m	05:54	34m	06:29	13h 33m	20:03	34m	20:38	39m	21:17	43m	22:00	10h 27m	6h 33m				Do, 29. Aug
Fr, 30. Aug	MESZ	21:58 – 03:10*	5h 12m	AN ₊ bis M																								

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	
2024	Zeitzone	Astr. dunkel und kein Mond			Mond			Beginn der Morgendämmerung					Sonne				Ende der Abenddämmerung					Nacht	Astr. N.	Naut. dunkel und kein Mond			2024		
			Δt		Ph.	\nearrow	\searrow	Astr.	Δt	Naut.	Δt	Bürg.	Δt	\nearrow	Δt	\searrow	Δt	Bürg.	Δt	Naut.	Δt	Astr.	Δt	Δt		Δt			
Sa, 7. Sep	MESZ	21:37–04:51*	7h 13m	AN ₊ bis AN ₋		11:11	21:04	04:49	41m	05:30	37m	06:08	34m	06:42	13h 02m	19:45	33m	20:19	37m	20:56	40m	21:37	10h 58m	7h 13m					Sa, 7. Sep
So, 8. Sep	MESZ	21:34–04:53*	7h 18m	AN ₊ bis AN ₋		12:20	21:22	04:51	40m	05:32	37m	06:09	33m	06:43	12h 59m	19:43	33m	20:16	37m	20:54	40m	21:34	11h 01m	7h 18m					So, 8. Sep
Mo, 9. Sep	MESZ	21:47–04:55*	7h 08m	M _\ bis AN ₋		13:32	21:47	04:53	40m	05:33	37m	06:11	33m	06:45	12h 56m	19:41	33m	20:14	37m	20:52	40m	21:32	11h 05m	7h 22m					Mo, 9. Sep
Di, 10. Sep	MESZ	22:19–04:56*	6h 36m	M _\ bis AN ₋		14:43	22:19	04:55	40m	05:35	37m	06:12	33m	06:46	12h 52m	19:39	33m	20:12	37m	20:49	40m	21:29	11h 08m	7h 26m					Di, 10. Sep
Mi, 11. Sep	MESZ	23:05–04:58*	5h 53m	M _\ bis AN ₋	☾	15:51	23:05	04:56	40m	05:36	37m	06:14	33m	06:47	12h 49m	19:36	33m	20:10	37m	20:47	39m	21:27	11h 12m	7h 31m					Mi, 11. Sep
Do, 12. Sep	MESZ	00:05*–05:00*	4h 54m	M _\ bis AN ₋		16:49	—:—	04:58	39m	05:38	37m	06:15	33m	06:49	12h 45m	19:34	33m	20:08	36m	20:45	39m	21:24	11h 15m	7h 35m					Do, 12. Sep
Fr, 13. Sep	MESZ	01:20*–05:02*	3h 41m	M _\ bis AN ₋		17:36	00:05	05:00	39m	05:40	37m	06:17	33m	06:50	12h 42m	19:32	33m	20:06	36m	20:43	39m	21:22	11h 19m	7h 39m					Fr, 13. Sep
Sa, 14. Sep	MESZ	02:44*–05:03*	2h 19m	M _\ bis AN ₋		18:11	01:20	05:02	39m	05:41	36m	06:18	33m	06:52	12h 38m	19:30	33m	20:04	36m	20:40	39m	21:20	11h 22m	7h 43m					Sa, 14. Sep
So, 15. Sep	MESZ	04:12*–05:05*	53m	M _\ bis AN ₋		18:38	02:44	05:03	39m	05:43	36m	06:19	33m	06:53	12h 35m	19:28	33m	20:01	36m	20:38	39m	21:17	11h 26m	7h 48m					So, 15. Sep
Mo, 16. Sep	MESZ	—:—:—:—	–	Mond stört		19:00	04:12	05:05	39m	05:44	36m	06:21	33m	06:54	12h 31m	19:26	33m	19:59	36m	20:36	38m	21:15	11h 29m	7h 52m					Mo, 16. Sep
Di, 17. Sep	MESZ	—:—:—:—	–	Mond stört		19:18	05:40	05:07	38m	05:46	36m	06:22	33m	06:56	12h 28m	19:24	33m	19:57	36m	20:34	38m	21:12	11h 33m	7h 56m					Di, 17. Sep
Mi, 18. Sep	MESZ	—:—:—:—	–	Mond stört	☾	19:35	07:08	05:09	38m	05:47	36m	06:24	33m	06:57	12h 24m	19:22	33m	19:55	36m	20:31	38m	21:10	11h 36m	8h 00m					Mi, 18. Sep
Do, 19. Sep	MESZ	—:—:—:—	–	Mond stört		19:52	08:36	05:10	38m	05:49	36m	06:25	33m	06:58	12h 21m	19:20	33m	19:53	36m	20:29	38m	21:07	11h 40m	8h 04m					Do, 19. Sep
Fr, 20. Sep	MESZ	—:~:~:~:~	–	Mond stört		20:12	10:04	05:12	38m	05:50	36m	06:27	33m	07:00	12h 17m	19:18	33m	19:51	36m	20:27	38m	21:05	11h 43m	8h 08m					Fr, 20. Sep
Sa, 21. Sep	MESZ	—:~:~:~:~	–	Mond stört		20:36	11:33	05:14	38m	05:52	36m	06:28	33m	07:01	12h 14m	19:15	33m	19:49	36m	20:25	38m	21:03	11h 47m	8h 12m					Sa, 21. Sep
So, 22. Sep	MESZ	21:00–21:07	6m	AN ₊ bis M ₇		21:07	13:00	05:15	38m	05:53	36m	06:29	33m	07:03	12h 10m	19:13	33m	19:46	36m	20:22	37m	21:00	11h 50m	8h 16m					So, 22. Sep
Mo, 23. Sep	MESZ	20:58–21:48	50m	AN ₊ bis M ₇		21:48	14:20	05:17	37m	05:55	36m	06:31	33m	07:04	12h 07m	19:11	33m	19:44	35m	20:20	37m	20:58	11h 54m	8h 20m					Mo, 23. Sep
Di, 24. Sep	MESZ	20:56–22:43	1h 46m	AN ₊ bis M ₇	☾	22:43	15:28	05:18	37m	05:56	36m	06:32	33m	07:05	12h 03m	19:09	33m	19:42	35m	20:18	37m	20:56	11h 57m	8h 24m					Di, 24. Sep
Mi, 25. Sep	MESZ	20:53–23:48	2h 54m	AN ₊ bis M ₇		23:48	16:21	05:20	37m	05:58	35m	06:34	33m	07:07	12h 00m	19:07	33m	19:40	35m	20:16	37m	20:53	12h 01m	8h 28m					Mi, 25. Sep
Do, 26. Sep	MESZ	20:51–00:59*	4h 08m	AN ₊ bis M ₇		—:—	17:00	05:22	37m	05:59	35m	06:35	33m	07:08	11h 56m	19:05	33m	19:38	35m	20:14	37m	20:51	12h 04m	8h 32m					Do, 26. Sep
Fr, 27. Sep	MESZ	20:49–02:12*	5h 23m	AN ₊ bis M ₇		00:59	17:28	05:23	37m	06:01	35m	06:37	33m	07:10	11h 53m	19:03	33m	19:36	35m	20:12	37m	20:49	12h 08m	8h 35m					Fr, 27. Sep
Sa, 28. Sep	MESZ	20:47–03:24*	6h 37m	AN ₊ bis M ₇		02:12	17:49	05:25	37m	06:02	35m	06:38	33m	07:11	11h 49m	19:01	33m	19:34	35m	20:10	37m	20:47	12h 11m	8h 39m					Sa, 28. Sep
So, 29. Sep	MESZ	20:44–04:33*	7h 48m	AN ₊ bis M ₇		03:24	18:05	05:26	37m	06:04	35m	06:39	33m	07:13	11h 46m	18:59	33m	19:32	35m	20:07	37m	20:44	12h 15m	8h 43m					So, 29. Sep
Mo, 30. Sep	MESZ	20:42–05:30*	8h 47m	AN ₊ bis AN ₋		04:33	18:19	05:28	37m	06:05	35m	06:41	33m	07:14	11h 42m	18:57	33m	19:30	35m	20:05	37m	20:42	12h 18m	8h 47m					Mo, 30. Sep
Di, 1. Okt	MESZ	20:40–05:31*	8h 50m	AN ₊ bis AN ₋		05:41	18:32	05:30	37m	06:07	35m	06:42	33m	07:15	11h 39m	18:55	33m	19:28	35m	20:03	36m	20:40	12h 22m	8h 50m					Di, 1. Okt
Mi, 2. Okt	MESZ	20:38–05:33*	8h 54m	AN ₊ bis AN ₋	☾	06:47	18:44	05:31	36m	06:08	35m	06:44	33m	07:17	11h 35m	18:53	33m	19:26	35m	20:01	36m	20:38	12h 25m	8h 54m					Mi, 2. Okt
Do, 3. Okt	MESZ	20:36–05:34*	8h 58m	AN ₊ bis AN ₋		07:53	18:57	05:33	36m	06:10	35m	06:45	33m	07:18	11h 32m	18:50	33m	19:24	35m	19:59	36m	20:36	12h 29m	8h 58m					Do, 3. Okt
Fr, 4. Okt	MESZ	20:34–05:36*	9h 01m	AN ₊ bis AN ₋		09:01	19:11	05:34	36m	06:11	35m	06:47	33m	07:20	11h 28m	18:48	33m	19:22	35m	19:57	36m	20:34	12h 32m	9h 01m					Fr, 4. Okt
Sa, 5. Okt	MESZ	20:32–05:37*	9h 05m	AN ₊ bis AN ₋		10:10	19:28	05:36	36m	06:12	35m	06:48	33m	07:21	11h 25m	18:46	33m	19:19	35m	19:55	36m	20:32	12h 36m	9h 05m					Sa, 5. Okt
So, 6. Okt	MESZ	20:29–05:39*	9h 09m	AN ₊ bis AN ₋		11:21	19:50	05:37	36m	06:14	35m	06:49	33m	07:23	11h 21m	18:44	33m	19:17	35m	19:53	36m	20:29	12h 39m	9h 09m					So, 6. Okt
Mo, 7. Okt	MESZ	20:27–05:40*	9h 12m	AN ₊ bis AN ₋		12:32	20:20	05:39	36m	06:15	35m	06:51	33m	07:24	11h 18m	18:42	33m	19:15	35m	19:51	36m	20:27	12h 43m	9h 12m					Mo, 7. Okt
Di, 8. Okt	MESZ	21:00–05:42*	8h 42m	M _\ bis AN ₋		13:41	21:00	05:40	36m	06:17	35m	06:52	33m	07:25	11h 14m	18:40	33m	19:14	35m	19:49	36m	20:25	12h 46m	9h 16m					Di, 8. Okt
Mi, 9. Okt	MESZ	21:53–05:43*	7h 50m	M _\ bis AN ₋		14:41	21:53	05:42	36m	06:18	35m	06:54	33m	07:27	11h 11m	18:38	33m	19:12	35m	19:47	36m	20:23	12h 50m	9h 19m					Mi, 9. Okt
Do, 10. Okt	MESZ	23:00–05:45*	6h 44m	M _\ bis AN ₋	☾	15:31	23:00	05:43	36m	06:20	35m	06:55	33m	07:28	11h 07m	18:36	33m	19:10	35m	19:45	36m	20:21	12h 53m	9h 23m					Do, 10. Okt
Fr, 11. Okt	MESZ	00:18*–05:46*	5h 28m	M _\ bis AN ₋		16:09	—:—	05:45	36m	06:21	35m	06:57	33m	07:30	11h 04m	18:34	33m	19:08	35m	19:43	36m	20:19	12h 57m	9h 26m					Fr, 11. Okt
Sa, 12. Okt	MESZ	01:42*–05:48*	4h 06m	M _\ bis AN ₋		16:39	00:18	05:46	36m	06:22	35m	06:58	33m	07:31	11h 00m	18:32	33m	19:06	35m	19:41	36m	20:17	13h 00m	9h 30m					Sa, 12. Okt
So, 13. Okt	MESZ	03:07*–05:49*	2h 42m	M _\ bis AN ₋		17:01	01:42	05:48	36m	06:24	35m	06:59	33m	07:33	10h 57m	18:30	33m	19:04	35m	19:39	36m	20:15	13h 03m	9h 33m					So, 13. Okt
Mo, 14. Okt	MESZ	04:33*–05:50*	1h 17m	M _\ bis AN ₋		17:20	03:07	05:49	36m	06:25	35m	07:01	33m	07:34	10h 54m	18:28	33m	19:02	35m	19:37	36m	20:14	13h 07m	9h 36m					Mo, 14. Okt
Di, 15. Okt	MESZ	—:~:~:~:~	–	Mond stört		17:37	04:33	05:50	36m	06:27	35m	07:02	33m	07:36	10h 50m	18:27	33m	19:00	35m	19:35	36m	20:12	13h 10m	9h 40m					Di, 15. Okt
Mi, 16. Okt	MESZ	—:~:~:~:~	–	Mond stört		17:54	06:00	05:52	36m	06:28	35m	07:04	33m	07:37	10h 47m	18:25	33m	18:58	35m	19:34	36m	20:10	13h 14m	9h 43m					Mi, 16. Okt
Do, 17. Okt	MESZ	—:~:~:~:~	–	Mond stört	☾	18:13	07:28	05:53	36m	06:30	35m	07:05	33m	07:39	10h 43m	18:23	33m	18:56	35m	19:32	36m	20:08	13h 17m	9h 46m					Do, 17. Okt
Fr, 18. Okt	MESZ	—:~:~:~:~	–	Mond stört		18:35	08:58	05:55	36m	06:31	35m	07:0																	

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

Table with 29 columns (1-29) and 48 rows (Mo, 16. Dez - Mo, 3. Feb). Columns include dates, time zones, astronomical data (Astr.), moon phases (Mond), dawn/dusk (Beginn der Morgendämmerung, Ende der Abenddämmerung), and sunrise/sunset (Sonne, Nacht). Includes moon phase icons (☉, ☽, ☾, ☿) and astronomical symbols (AN+, M, AN-, M, AN-).