

Mond- und Dämmerungstabelle 2023

für die visuelle Deep-Sky-Beobachtung

Neustadt an der Waldnaab 49.7308° N 12.1707° 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.

Table with 29 columns (1-29) and multiple rows (Mi, 31. Mai to Mi, 19. Jul). Columns include dates, time zones (MESZ), astronomical data (Astr. MD, Astr. N.), moon phases (Ph., Ph.), and various astronomical times (rise, set, twilight, etc.).

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

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