

Network Monitoring Report: M-band 5cm N25M1

Source: J0854+2006 **Length:** 180 min. **Observing mode:** 256 Mbps, 8x8 MHz, 2 bits, dual pol.
Reference antenna: Effelsberg **Date of observations:** 01/06/25 **Reference date:** 152d 12h 00m
Experiment code: N25M1 **Date of report:** 01/08/25 **by:** Gabor Orosz

⊗ According to expectation, no special remarks □ Station did not observe (not scheduled)
 ■ Problem occured - see enclosed footnote(s) ○ Entry not applicable/investigated

	Jb2	Wb	Ef	O8	Tr	Hh	Ib	Sr	Mc	Ys
Station has observed	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	■	■
Station produced fringes (ftp)	⊗	⊗	⊗	⊗	⊗	⊗	⊗	■	□	□
Station produced fringes (disk)	⊗	⊗	⊗	⊗	⊗	⊗	⊗	■	□	□
Logs are available (within 72 h)	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	□	□
Antabs on vlbeer (within 7 days)	⊗	⊗	⊗	■	⊗	⊗	⊗	⊗	□	□
Feedback on www (within 7 days)	⊗	⊗	⊗	⊗	■	⊗	■	⊗	■	■
GPS clock estimate gives fringes	⊗	⊗	⊗	⊗	⊗	⊗	⊗	■	□	□
Clock rate in psec/sec	0.25	0.12	0.47	-0.70	0.07	-0.06	1.16	-	-	-
Recording okay	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	□	□
Polarization setup okay	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	□	□
Strong signal amplitude	⊗	■	⊗	⊗	⊗	⊗	⊗	⊗	□	□
Sampler statistics okay	■	⊗	■	⊗	⊗	⊗	⊗	⊗	□	□
Please check BBC number(s):			02		02/10	02/10	02/10			
Previous reported problem(s) corrected							■			
Problem(s) first reported								■		
See enclosed footnote(s):	a	b	c	d	e	e	e/f	g	h	h

Enclosure: Footnotes M-band 5cm N25M1

Footnotes to the Network Monitoring Report: **M-band 5cm** N25M1

General:

1) Chinese stations (Tianma, Urumqi, Kunming) could not participate due to national tasks.

a) Jb2, Jodrell Bank Mark 2: Shows normal 2-bit behavior, though there's a slight difference between RCP and LCP sampler statistics.

b) Wb, Westerbork: Westerbork showed weak fringe amplitudes and ~200 ns linear delay residuals due to incorrect antenna coordinates used in correlation (WB_RT1 instead of WB_RT0). Post-fringe fitting phases were acceptable, and the telescope operated normally in the subsequent F25M1 test, confirming no underlying hardware issues.

c) Ef, Effelsberg: Observed with its linear wide-band receiver. Data polconverted in post-processing. Sampler statistics for the 6663.49MHz RCP channel (BBC05) showed deviations from expected 2-bit behavior, likely caused by band-edge RFI contamination visible in the autocorrelation spectra.

d) O8, Onsala 25m: No Tsys data due to a configuration error in the noise source control system. Used a nominal antabfs table for post-processing.

e) Tr/Hh/Ib, Torun/Hartebeesthoek/Irbene 16m: Identically shaped RFI spike at the same frequency and both polarizations in the 6663.49 MHz (USB) channel of all three stations.

f) Ib, Irbene 16m: Autoftp fixed, data copied properly during the FTP-FT.

g) Sr, Sardinia: No fringes detected, with the same issue observed in F25M1 two days later. The problem was identified during testing in RSO04 (two weeks later), which produced good fringes after a faulty cable was replaced. See: https://services.jive.eu/ftp_fringes/RS004/index.html.

h) Mc/Ys, Medicina/Yebes: Could not observe due to ongoing hardware maintenance.