Network Monitoring Report: **X-band 3.6cm** N23X2

Source: J0927+3902, J1159+2914 **Length:** 180 min. **Observing mode:** 2048 Mbps, 8x32 MHz, 2 bits, dual pol.
Reference antenna: Effelsberg **Date of observations:** 13/06/23 **Reference date:** 164d 12h 00m
Experiment code: N23X2 **Date of report:** 28/09/25 **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

	Wb	Ef	Mc	Nt	O6	Sh	Ur	Tr	Ys	Hh	Ib
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	0.10	0.33	−0.03	−0.11	−0.63	0.80	−0.45	2.10	1.38	0.01	1.00
Recording okay	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Polarization setup okay	⊗	⊗	⊗	⊗	⊗	⊗	■	⊗	⊗	⊗	⊗
Strong signal amplitude	⊗	⊗	⊗	⊗	⊗	⊗	■	⊗	⊗	⊗	⊗
Sampler statistics okay	⊗	⊗	⊗	■	⊗	⊗	⊗	■	⊗	⊗	⊗
Please check BBC number(s):				01				all			
Previous problem(s) corrected								■			
Problem(s) first reported											
See enclosed footnote(s):	a		1	b		c	d	e	1		f

Enclosure: Footnotes X-band 3.6cm N23X2

Footnotes to the Network Monitoring Report: **X-band 3.6cm** N23X2

General:
1) Medicina (Md) and Yebes (Yd) conducted DBBC3 tests in parallel with normal recording. Correlated results not included here.

a) Wb, Westerbork: Recorded at 1 Gbps due to system limitations.
b) Nt, Noto: Asymmetric sampler distribution 8319.49MHz LSB RCP (BBC 01) – same as N23X1.
c) Sh, Sheshan: Clock offsets updated from a historical value to the current ca. +65 μs based on recent GNSS measurements. No station feedback.
d) Ur, Urumqi: Polarizations levels are corrupted with data almost appearing as linearly polarized (receiver is circular). Fringes are also weaker than expected (same as N23X1). This issue disappeared later, with once again normal polarization levels in N24X1. No station feedback provided.
e) Tr, Torun: Elevated invalid rates for recorded bits (4.27% instead of expected <1%). Previously reported 4-min phase instability issue (from early 2022, see N23X1/N22X1/N22C3), was solved between sessions and here phases are once again normal. Instabilities came back briefly in 2025 Session 1 (N25X1), but with a different period and possibly different cause.
f) Ib, Irbene 16m: Scheduled instead of the 32m telescope, which had maintenance issues. No station feedback.