Network Monitoring Report: **X-band 3.6cm** N24X1

Source: J0319+4130, J0530+1331, J0555+3948
Reference antenna: Effelsberg, Yebes
Experiment code: N24X1

Length: 180 min.
Date of observations: 22/02/24
Date of report: 25/06/25

Observing mode: 4096 Mbps, 32x32 MHz, 2 bits, dual pol.
Reference date: 53d 14h 00m
by: Gabor Orosz

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

	Wb	Ef	Mc	Nt	O6	T6	Ur	Tr	Ys	Hh	Ir	Km
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	0.26	−0.06	−0.01	−0.66	0.76	−0.56	0.04	1.37	0.04	0.18	−1.99
Recording okay	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	■
Polarization setup okay	⊗	⊗	⊗	⊗	⊗	⊗	⊗	■	⊗	⊗	⊗	⊗
Strong signal amplitude	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	■	⊗
Sampler statistics okay	⊗	⊗	⊗	⊗	⊗	⊗	⊗	■	⊗	⊗	⊗	⊗
Please check BBC number(s):			01/09			01/09		05				01/05
Previous problem(s) corrected												
Problem(s) first reported											■	■
See enclosed footnote(s):		a	b			b/c	d	e			f	b/g

Enclosure: Footnotes X-band 3.6cm N24X1

Footnotes to the Network Monitoring Report: **X-band 3.6cm** N24X1

General:
1) Westerbork and Urumqi recorded at 1 Gbps and 2 Gbps respectively due to system limitations, while other stations operated at the full 4 Gbps rate. Kunming was also 2 Gbps, but failed to produce fringes in the full correlation (see below).
2) Recording at 4 Gbps pushes some stations beyond their optimal local oscillator frequency ranges. This affects the lowest frequency channels (1-4, corresponding to 8.1-8.2 GHz) most severely, with secondary effects on the highest channels (13-16, corresponding to 8.3-8.4 GHz). This is expected behavior for stations operating at maximum data rates.

a) Ef, Effelsberg: Had to stow at around 15:30 UT (after scan 6) because of high wind speeds.
b) Mc/T6/Km, Medicina/Tianma/Kunming: Lower band edge loses sensitivity due LO range constraints at 4 Gbps recording (expected).
c) T6, Tianma: No log submitted. Likely due to an error in the file upload script, as this happens semi-regularly.
d) Ur, Urumqi: No antabfs file submitted.
e) Tr, Torun: Swapped polarization inputs at the hardware level. The vex file was modified to account for the swap, but this correction is not perfect that still lead to some amplitude and phase irregularities. See e.g., BBC05 (USB) RCP for reduced amplitudes in the middle.
f) Ir, Irbene 32m: Bad position of secondary mirror led to high noise and loss of sensitivity; for the rest of session the mirror was repositioned, fixing the pointing problem (see F24X1).
g) Km, Kunming: Problem with the Mark 6 recorder. Fringes were found during the FTP test using few seconds of transferred data, but the disk recorded data sent to JIVE later turned out to be corrupted. No fringes found in full correlation. Fixed later in the session (see F24X1).