Network Monitoring Report: **K-band 1.3cm** N24K3

Source: J1801+4404, J2025+3343, J2139+1423, J2203+3145, J2157+3127
Reference antenna: Sardinia
Experiment code: N24K3

Length: 180 min.
Date of observations: 01/11/24
Date of report: 20/06/25

Observing mode: 2048 Mbps, 16x32 MHz, 2 bits, dual pol.
Reference date: 306d 12h 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

	Jb2	O6	Ur	Mh	Ys	Hh	Sr	Kt	Ky	Ku	Kc	T6	Tr	Cm	Da	Kn	Pi	Vm	Vr	Vo	Vs
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	0.11	−0.67	−0.58	−0.01	1.35	−0.04	0.03	0	0	0	0.31	–	–	–	–	–	–	–	–	–	–
Recording okay	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⬚	⬚	⬚	⬚	⬚	⬚	⊗	⊗	⊗	⬚
Polarization setup okay	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⬚	⬚	⬚	⬚	⬚	⬚	○	○	○	⬚
Strong signal amplitude	⊗	⊗	⊗	⊗	⊗	⊗	⊗	■	⊗	■	⊗	⬚	⬚	⬚	⬚	⬚	⬚	○	○	○	⬚
Sampler statistics okay	⊗	⊗	■	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⬚	⬚	⬚	⬚	⬚	⬚	○	○	○	⬚
Please check BBC number(s):				LCP																	
Previous problem(s) corrected											■										
Problem(s) first reported																					
See enclosed footnote(s):	a		b	c	d	e		f		f	g	h	i	j	j	j	j	k	k	k	k

Enclosure: Footnotes K-band 1.3cm N24K3

Footnotes to the Network Monitoring Report: **K-band 1.3cm** N24K3

General:
1) Included VERA stations for testing with the EVN. They did not take part in the FTP test, but sent the data later (still waiting for correlation).
2) The first two fringe finders were quite resolved on the longest baselines, not ideal (don't use, if possible, for intercontinental baseline testing).
3) eMERLIN stations did not take part as all their K-band science experiments were postponed (due to Effelsberg being out for maintenance).
4) In the last 45 minutes, J2157+3127 was observed in a typical K-band phase-referencing cycle with J2203+3145 as the calibrator. Phase-referencing worked well with an 85% flux recovery (peak was 100 mJy/beam in the phase-referenced map of J2157, vs 120 mJy/beam after self-calibration).

a) Jb2, Jodrell Bank Mark 2: No fringes during FTP test, probably due to bad weather. Fringes in full correlation.
b) Ur, Urumqi: Sampler statistics were off. No feedback or antab file submitted.
c) Mh, Metsahovi: LCP channels (BBC 9-12) have RFI spikes in the autocorrelations. No feedback submitted, but in the chat bad weather mentioned during the observations.
d) Ys, Yebes: First fringes with the new K-band receiver, ASTROREC.
e) Hh, Hartebeesthoek: Only detected fringes with the last two fringe finders, J2139+1423 and J2203+3145. Other fringe finders had too much structure and resolved out.
f) Kt/Ku, KVN-Tamna/Ulsan: Very high Tsys due to an incoming typhoon. No fringes during FTP, but could find weak fringes in full correlation towards J2203. Other sources were too weak and/or resolved.
g) Kc, KVN-Pyeongchang: H-maser has settled, the stabilized offset is +8.17 μs.
h) T6, Tianma: Could not observer due to an incoming typhoon.
i) Tr, Torun: Did not take part in the observation due to a receiver malfunction.
j) Cm/Da/Kn/Pi, eMERLIN: Did not take part in the test as all K-band science experiments with eMERLIN stations got postponed.
k) Vm/Vr/Vo/Vs, VERA: VERA stations joined for initial testing with the EVN. First time participation of Iriki (Vr) and Ogasawara (Vo). Ishigakijima (Vs) could not observe in the end due to an incoming typhoon. Still waiting full correlation, but Iriki already sent 30s of test data which produced good fringes with Sardinia. Report will be updated when remaining data is correlated.