

Network Monitoring Report: K-band N11K1

Source: 3C345 and J1640+3946 **Length:** 180 min. **Observing mode:** Mk IV, mode 512-8-2, RCP & LCP.
Reference antenna: Effelsberg **Date of observations:** 09/11/11 **Reference date:** 09/11/11; 313d 12h 00m
Experiment code: N11K1 **Date of report:** 05/01/12 **by:** Jun Yang

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

	Bd	Ef	Zc	Mc	Nt	On	Sh	Sv	Ur	Wb	Od	Hh	Mh	Ys	Wz	Ro
Station has observed	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Station produced fringes (ftp)	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	■	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Station produced fringes (disk)	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	○	⊗	⊗	⊗	⊗	⊗	⊗
Filled in TRACK	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	○	⊗	⊗	⊗	⊗	⊗	⊗
Logs are available (within 72 hours)	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	○	⊗	⊗	⊗	⊗	⊗	⊗
GPS data available (within 7 days)	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Disks are available (within 7 days)	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	○	⊗	⊗	⊗	⊗	⊗	⊗
Feedback on www (within 7 days)	⊗	⊗	■	⊗	⊗	⊗	⊗	■	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
GPS clock estimate gives fringes	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	■	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Clock offset in μ sec	-23.588	-0.416			-14.993			0.076			-14.417	9.329	0.195	3.673		
Clock rate in psec/sec	-2.51	○	○	○	0.523	○	○	○	○	○	0.523	0.005	0.017	0.455		
Recording okay	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Polarization setup okay	⊗	⊗	■	⊗	⊗	⊗	⊗	⊗	○	○	⊗	⊗	⊗	⊗	⊗	⊗
Strong signal amplitude	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	○	⊗	⊗	⊗	⊗	⊗	⊗
Phase cal aligns phases	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
Sampler statistics okay	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	○	○	⊗	⊗	⊗	⊗	⊗	⊗
Please check VC number(s):				⊗												
Previous reported problem(s) corrected																
Problem(s) first reported																
See enclosed footnote(s):			a						b						c	

Enclosure: Footnotes K-band N11K1

Footnotes to the Network Monitoring Report: K-band N11K1

General: There are three more EVN stations at 22 GHz now. Russian stations Sv and Zc has started to participate in the EVN experiments since this session. The fringes to the two stations were detected right away after the ftp data were received. Furthermore, Urumqi has installed a new 22GHz receiver and is expected to pop out fringes.

a) **Zc, Zellenchukskaya:** Ploarisation swapped.

b) **Ur, Urumqi:** No fringes due to wrong LO frequency. The problem was fixed before the EVN user experiment.

c) **Od, Onsala DBBC backend:** There were also some phase jumps on scales of ~ 100 ns, much larger than that reported in N11X2. Furthermore, the residual fringe rate was quite large ~ 100 mHz and varied significantly. See the pipeline fringe-fitting plots. The later problem was not shown in N11X2. It is not clear whether this new problem is associated with the change of the frequency setup (N11X2: 8 MHz x 16, N11K1: 16 MHz x 8).

Questions? yang@jive.nl

Report ends