

# Network Monitoring Report: **L-band** N10L3

**Source:** 3c345, J1606+3124, J1605+3001, J2022+6136

**Length:** 180 min.

**Observing mode:** Mk IV, mode 512-16-2, dual pol.

**Reference antenna:** Westerbork

**Date of observations:** 01/11/10

**Reference date:** 01/11/10; 305d 12h 00m

**Experiment code:** N10L3

**Date of report:** 27/11/10

**by:** Mehreen Mahmud

⊗ According to expectation, no special remarks

■ Problem occurred - see enclosed footnote(s)

⊠ Station did not observe (not scheduled)

○ Entry not applicable/investigated

	EVN stations											
	Kn	Cm	Ef	Jb	Mc	On	Tr	Wb	Zc	Bd	Sv	Hh
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 $\mu$ sec	307.705	951.205		0.245	-61.051	-27.767	7.589	66.357	-0.5	-2.04	-1.510	8.062
Clock rate in psec/sec	-0.00265	-0.00265		-0.00265	1.210	0.308	-0.523	0.196	0	0	0	-0.0842
Recording okay	⊗	⊗		⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Polarization setup okay	⊗	⊗		⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Strong signal amplitude	⊗	⊗		⊗	⊗	⊗	⊗	⊗	■	⊗	⊗	⊗
Phase cal aligns phases	⊗	⊗		⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗	⊗
Sampler statistics okay	⊗	⊗		⊗	⊗	⊗	⊗	⊗	⊗	⊗	■	⊗
Please check VC number(s):	⊗	⊗		⊗	⊗	⊗	2	2	9,10,11,12	⊗	5	⊗
Previous reported problem(s) corrected												
Problem(s) first reported	also N07L2 also N10L1											
See enclosed footnote(s):	a b c d e f											

**Enclosure:** Footnotes L-band N10L3

# Footnotes to the Network Monitoring Report: **L-band** N10L3

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## **General:**

Fringes to all stations except Effelsberg, which did not participate due to a broken switch in the receiver (that was replaced during the NME and in time for participation in the user experiments). Knockin also took part in these observations, as an additional outstation.

**a) On, Onsala:** A new broad-band IF-system was used, which was very sensitive to RFI at L-Band, Subbands 0 and 1 seem to be the most affected, although RFI present in nearly all Subbands. Higher Tsys measurements in subbands 0 and 1. Varying amplitudes across IFs, as can be seen in the pipeline plots.

**b) Tr, Torun:** Temporary problems/no fringes in BBC 6 (Subband 4 & 5 LCP) which were fixed during the NME. In general, the fraction of high bits to low bits was a bit low in all BBCs, with the lowest in Subband 1 LCP (BBC 2/USB) at 20%.

**c) Wb, Westerbork:** L-Band characteristic RFI/fluctuating sampler statistics in Subband 1 RCP (BBC 2/LSB).

**d) Zc, Zelenchuskaya:** Cross-correlation LL amplitudes in all Zc baselines are lower than RR amplitudes in all IFs (corresponding to BBCs 9, 10, 11, 12)

**e) Bd, Badary:** Subband 5 RCP and LCP (BBC 4 and 7 USB) seems to have a consistent feature of a dip in its bandpass; also, cross polarizations have a different delay (additional 2 lags) from parallel polarizations in this particular IF.

**f) Sv, Svetloe:** Subband 1 RCP (BBC 5/USB) has much higher than optimal fraction of high to bits at around 60%. In fact, all KVASAR stations have a slightly higher than optimal fraction of high to low bits in all BBCs (40-44%)