

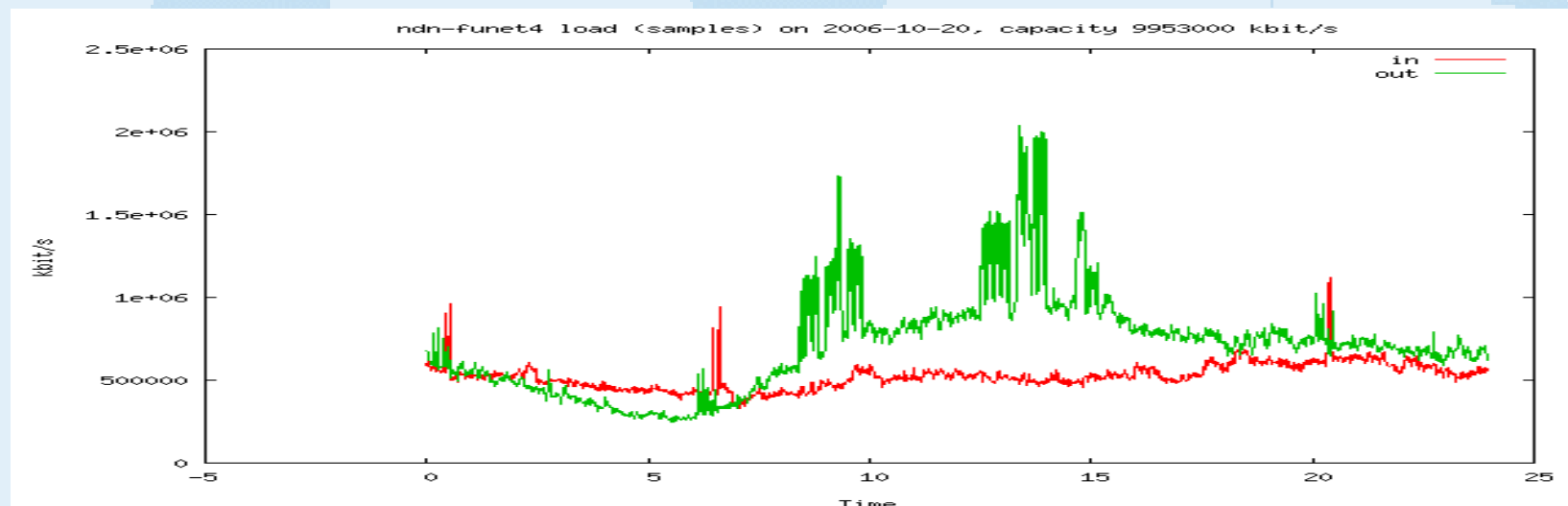


# eVLBI developments in Metsähovi

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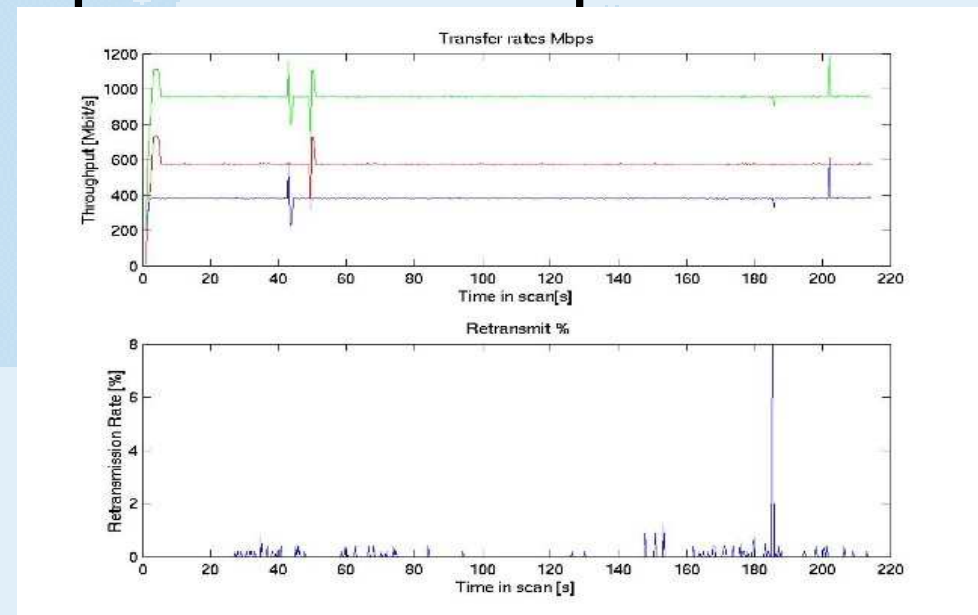
# Month7 demo 20.10.2006

- Simultaneous real-time streaming of data from Onsala and Jodrell Bank to Mh at 512Mbit/s
- Realtime version of the tsunami protocol
- Part of EU:n FP6 EXPReS JRA1 FABRIC



# 896Mbps capability

- Metsähovi is the only station with a 10Gbps link
- Most stations and JIVE have 1Gbps links
- Could we push 896Mbps over a 1Gbps link?
- Seems to work





## 896Mbps-howto

- Use two computers, one streaming at 512Mbps (4BBCs, both sidebands) and other streaming at 384Mbps (4BBCs, 2 LSBs discarded (one byte in four is dropped))
- Using a gigabit switch does not work, the machines are microbursting at >1Gbps aggregate
- So the 512M machine is doubling as a NAT server for the 384M machine



# Pcevn systems in Europe

- Fortunately almost every station has some
- Metsähovi has several
- Jodrell Bank and Torun are upgrading to two
- Onsala has one
- Wettzell and Medicina have one, not installed, Noto has also but no fiber yet
- Effelsberg has one
- Very easy to upgrade EVN to 896Mbps real-time capability



# Software correlation

- Adam Deller is packaging the Australian SW correlator for general distribution
- Playstation 3s available from Japan and Hong Kong for 600\$ = 461€
- Some work done in MRO with cell processor emulator
- Role of Jive in the future?



# Developments with iBob

- The Berkeley SETI group is porting Linux to iBob
- Mileura recombination experiment
  - Four channels @ 800 Msamples/s
  - 200MHz extracted with digital downconverter
  - 1024-channel polyphase filter bank
  - Corner turn
  - UDP/IP packetizer to 10Gbit/s Ethernet