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SNMP / GRB

The 1997 Setup

- **SN:** 22 Camac boards = 344 OMs total (max. 352)
  all Am-B-10 (except OM 81-86) & Am-A 48 OMs selected good
  "MP" option off since mid 1996 (stability !) s
- **GRB:** 14 Camac boards = 224 OMs
  all Am-B-4 & 96 OMs of string 5-7 & Am-A 48 OMs selected good

DATA Flow & Analysis Tools (see fig.1)

- Reader/Preprocessor at pole generates HBOOK file
  - Raw Data: binary files & log-file **sn97-047.001,...,sn97-047.187**)
  - Preprocessed files for bunches of 25 binary raw files
    → HBOOK files (**sn97-047_1.hrs,...-047_8.hrs**)
    * Settings/Mappings
    * error analysis (log file: **sn97-047_1.lrs**)
    * Counting rates in 10 sec intervals for each PMT
    * Summed counting rate for array ("good") in 0.5 sec intervals
    * Histogram time base is realtive to run_start (not GPS)
- Ryan's tools, see report 8/97
  - Log-file scan: check for GPS consistency, FIFO-errors, ...
  - GPS time calibration for preprocessed files (HBOOK)
  - Correlate with Amanda-B muon data files
- Noise rate table for OM Data Base: ready
  special run: sn97-055 without dead-time at SN-boards

Performance 1997

- SN-Runs look more stable than 1996 (and 1995)
- Am-B-4 SN data much better than 1997
  (see DESY-Proposal plots for 21 days in 1997)
- Am-B str 5-10: some cross talk, correlated noise present
- Some Camac modules show problems with test functions (also 1996 ?!)
- No GRB Analysis so far,
  R.B. & R.W. tried, also at Penn, needs $\geq$ 1-2 week to get a reader
- GRB-msec timing needs extra calibration experiment at pole

Plans for this expedition - Setup 1998

- No new Camac SN/GRB modules will be produced
- 3 options:
  - keep setup $\rightarrow$ new OMs not SN-monitored
  - skip all 224 GRB Channels $\rightarrow$ new OMs connect as SN
  - do not touch Camac,
    add 5 VME Latch modules STR7201 (32 channels, can act as SN & as GRB counter)
    $\rightarrow$ new OMs connected as SN
    $\rightarrow$ some DAQ programming effort & 20 kDM

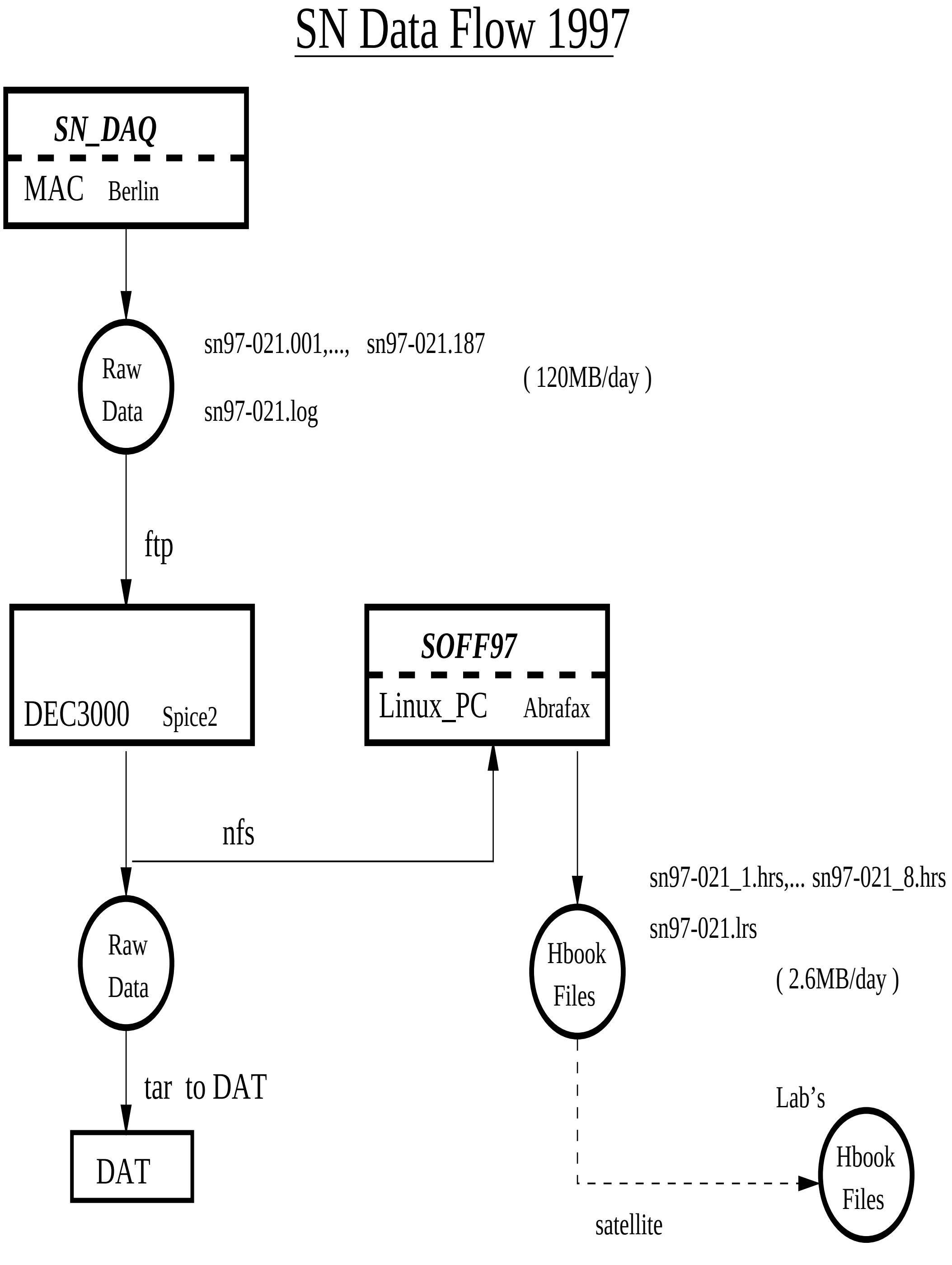

Figure 1: Data flow at South Pole for the SN-experiment