SVT update

Bill A, for the SVT group, 2001-03-08

- All (baseline) hardware installed, except XTFA/B. XTFA has been tested in Pisa; XTFB is under test now in Pisa. Expect both at FNAL next week.
- One spare SVT board now receives XTRP output, as part of XFT/XTRP data flow test (CDFVME). Nathan sent ~100 top quark events w/ 2 XTRP data boards; more boards, more data coming soon.
- L2/track board successfully delivered SVTD bank data in Oct/Nov c-run. Jane has done some further tests of readout; most of her recent visits have focused on L2 processor interface, I think.
- SPQR are running overnight tests of spy buffer monitoring; working on long-term stability.
- TRGSim code got same tracks, parameters as one slice of SVT; we've made the Track Fitters fit tracks from cdf2sim single-muon events.
  - Hope soon to have bit-level validation of SVTD offline, and in-situ exercise of whole SVT online.
- G. Punzi is refining the specifications of what goes in, comes out of code to make patterns, etc.

- Doing major upgrade of cold-start code:
  - Store high-level files, not memory image files, and generate images on MVME; then check checksum.
    - Fit constants: fixed-point vs IEEE 754 floats?
  - Allow multiple configurations; select from R_C
    - Must decide how to partition configuration data, to avoid duplication of large files.
    - Mustn't prevent eventual storage of all data in DB.
    - Must decide what is linked to trigger table vs hardware database vs R_C GUI (I'd like GUI to override DBs)
  - Move register settings from flat files to HW DB.
    - Accessible from offline?
  - Bookkeeping must be adequate for TRGSim to work.
- We hope to be ready soon to join integration tests, with data flowing through as much of SVT as possible, into SVTD, using realistic configuration data; first generate data internally; use XTRP, SVX when available.