



Integration of 5.1: week of Sep 10 2003



- Bug fixes from the last week:
 - Compression code: fixe, no more memory mishandling
 - Muons pointing to the missing CHA towers (never CEM)
 - 5.1 finds significantly more stubless muons with exactly 0 energies fixed
 - Branch structure: frozen
 - Optimized COT code went into an infinite loop: fixed
- Tests: ran many
 - tests of the BeamExe
 - 10K/ test of the optimized executable was successfull, 100K test requested
- Calibrations:
 - Need Pass 11 :Offline LER's for the latest runs, TOF (Larry - no changes up to run 163800)
 - **any changes in the code? - Calib.cc**



Issues



- Remaining changes in the code
 - **Skimming - begin run records**
 - **Running Level3SummaryMaker: dealing with the L3 objects - some make it into the output file**
 - **COT code:**
 - **$N(\text{hits.segment}) \geq 5$ (now 6)**
 - **Chi^2 of I/O track**
- **Calib.cc ?**
- Remaining valgrind complaints
 - CalibrationManager::beginRun - uninitialized variable
 - ChipStatus::__ct - uninitialized variable - Jason working on it
 - ROOT compression - uninitialized (and unused) members of the data structures
 - **Need to fix everything except ROOT for pre8**



Validation: 5.1.0pre6 maxopt vs minopt



- 5.1.0 vs 4.11.1: at low level no unexpected differences
- 5.1.0maxopt vs 5.1.0minopt (runs stable, speedup factor 1.4)
 - differences in standalone SI tracking:
 - built TrackingKal libs in minopt mode, most differences gone, no reply from Karlsruhe
 - Minor differences in COT tracking (algs 2 and 3 find different number of tracks)
 - Adam scanned about 10 events of interest: didn't find a single case of obvious failure (mostly junk events)
 - Minor differences in CPR clustering (2 clusters moved from 1 bin in X to another)
 - - reported to CPR/CAL librarians yesterday, no reply yet
- **Physics validation:**
 - Processed about 1M events (samples requested by the physics groups)
 - Several crashes in J/Psi sample - suspect corrupted data
 - Ran out of disk space
 - Next steps: gmb08/09 (10M), jbot0h(3M) on the Farm



Calibrations



- Pass 10: runs up to 166.... : need the rest
- Pass 11:
 - SiChipOn
 - What else