

GLAST LAT Project

Update on CAL calibrations at CERN (David, Fred, Johan, Thierry)

- Procedure
 - Muon + CI calibration of CU already done at beginning
 - New muon runs also planned at CERN
 - First e- runs taken with 4-range readout
 - To be processed with CalTupleAlg.fourRangeMode set to true (default is false, Cf Doxygen documentation of CalXtalResponse) : "if this option is chosen, then the array shape is altered to support the extra range information ([16][8][12][2][4])" (Zach)
 - CalXtalAdcPed[16][8][12][2][4]: pedestal subtracted ADC values per channel
 - CalXtalFaceSignal[16][8][12][2][4]: signal at each crystal face in units of MeV deposited at center of xtal
 - Note: "TDS Digi data must be in ALLRANGE mode, not the default BEST. Otherwise the additional CalTuple entries will be zero."
 - Fred: ???
 - Intercalibration of consecutive energy gains with offline macro
 - If some ratios differ significantly (5, 10, 20 %?) from 1, then
 - Check muon calibration
 - If muon calibration ok, then apply corrrection to DB calibration constants
 - Use Zach's mpd[TXT2XML][XML2TXT].py scripts
 - Update DB xml file (calibGenCal experts know how)
- To be done
 - Test new CalTuple production (CalTupleAlg.fourRangeMode true)
 - Run BTrelease with modified jobOptions file on real data taken in Pisa ?
 - Exercise with offline macro and scripts