

CalTuple

CalTupleAlg

CalTupleAlg generates CalTuple entries from TDS digi data. Current entries include:

- CalXtalAdcPed[16][8][12][2]
 - pedestal subtracted adc values per channel. (BESTRANGE)
- CalXtalAdcRng[16][8][12][2]
 - adc range selection per channel
- CalXtalFaceSignal[16][8][12][2]
 - Signal @ each crystal face in units of MeV deposited at center of xtal

Each of the above branches is a multi-dimensional array matching CAL geometry ([16][8][12][2], representing tower, layer, xtal & xtal face respectively)

- CalXtalAdcPedAllRange[16][8][12][2][4]
 - pedestal subtracted adc values for all adc channels (may be zero if data is not available). shape is [16][8][12][2][4] (last index represents ADC range.)
- CalXtalFaceSignalAllRange[16][8][12][2][4]
 - face signal for all adc channels (may be zero if data is not available). shape is [16][8][12][2][4] (last index represents ADC range.)

Each of the above branches is a multi-dimensional array matching CAL geometry ([16][8][12][2][4], representing tower, layer, xtal, xtal face & adc range respectively) (adc range runs from LEX8=0 to HEX1=3)

jobOptions

- **CalTupleAlg.tupleName**
 - override name of CalTuple tree. (default is "CalTuple")
- **CalTupleAlg.tupleFilename**
 - optional name of CalTuple file. instructs ntupleWriterSvc to create CalTuple in it's own file instead of sharing the default file w/ other modules. The default ("") will use the shared file
- **CalCalibSvc CalCalibSvcSpecifies**
 - which CalCalibSvc object should be used by CalTupleAlg. default is "CalCalibSvc"

CalTuple only jobOptions file

can be found in [CalXtalResponse CVS](#)

Up to Date Documentation

find most recent documentation of CalTuple in [CalXtalResponse doxygen](#) here: