CALICE TCMT software work @ NIU

- Online monitoring package: Monitor

  TCMT development, maintenance and support for data quality at TB site

- TCMT geometry drivers in Mokka:

  maintenance and support for TCMT simulation

- Official TCMT reconstruction packages in Marlin

  hit reconstruction and selection, in collaboration with S. Schmidt, B.Lutz et.al. (DESY)

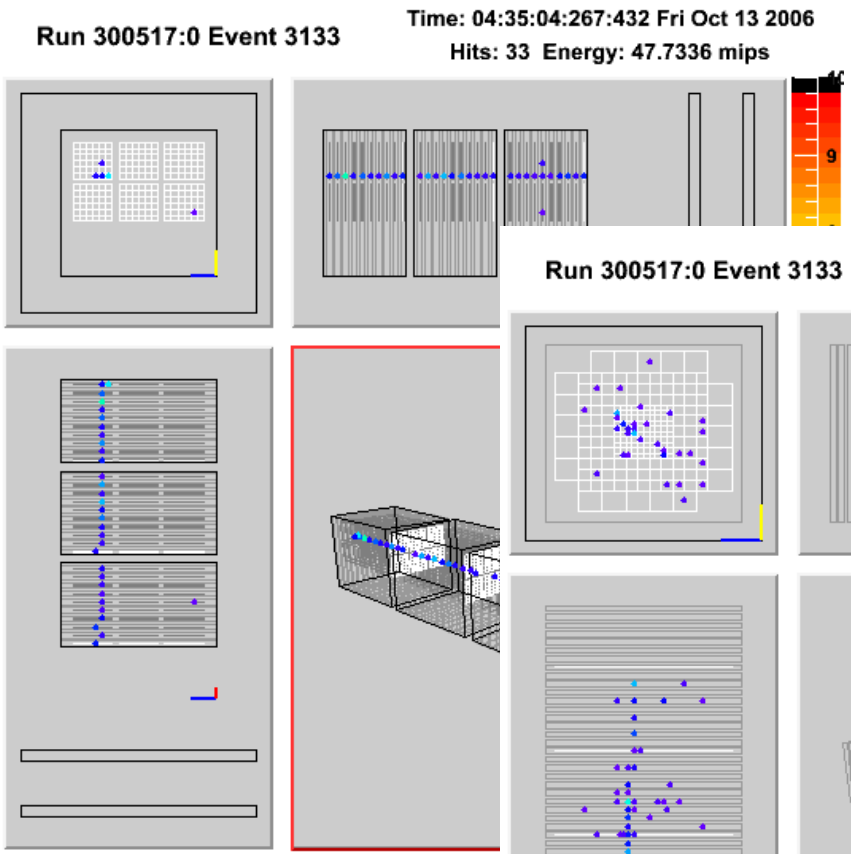
- Digitization framework and modifiers

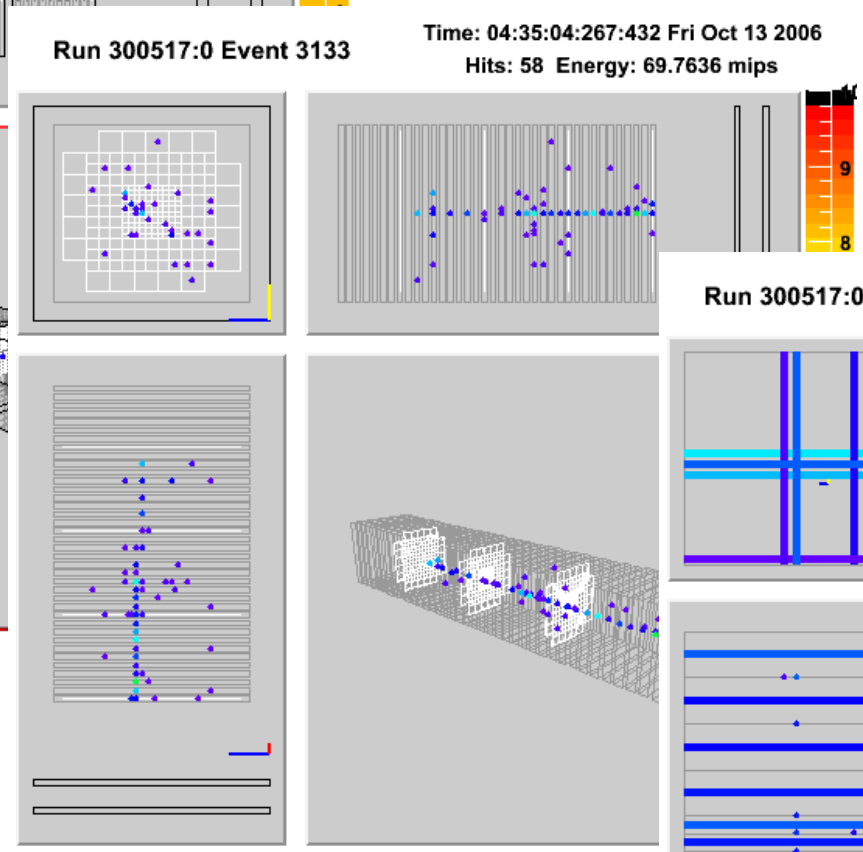
  noise, x-talk, E-threshold & hit ganging (simulation 5x5cm^2 cells --> real 5x100cm^2 strips)

- Support Java-based processing of CALICE data: JAS3+org.lcsim+Wired

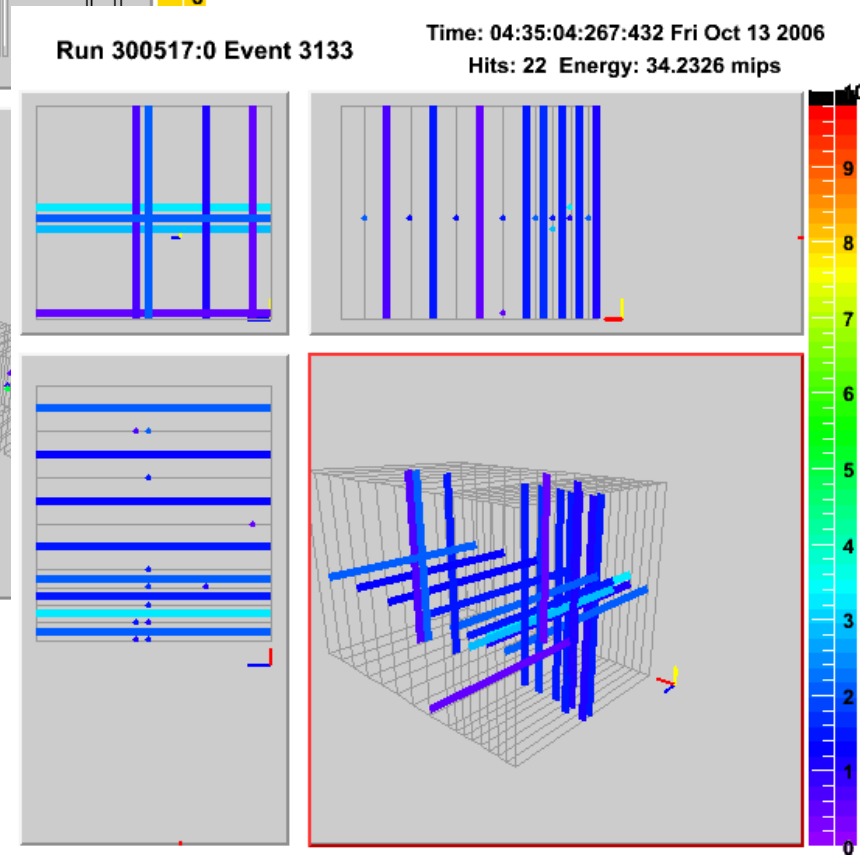
  Directed tree clustering in TB data, analysis and interactive event display (under way)

TCMT monitoring + event display





A typical muon event



- Add TCMT-specific classes to the root-based Monitor package, by G.Mavromanolakis

TCMT reco + analysis packages (Marlin)

For reference, here is the partial list of Marlin processors used for real data

Thanks to S.Schmidt et.al. (DESY) for support and for providing lots of code and calibration constants!!!

(...)

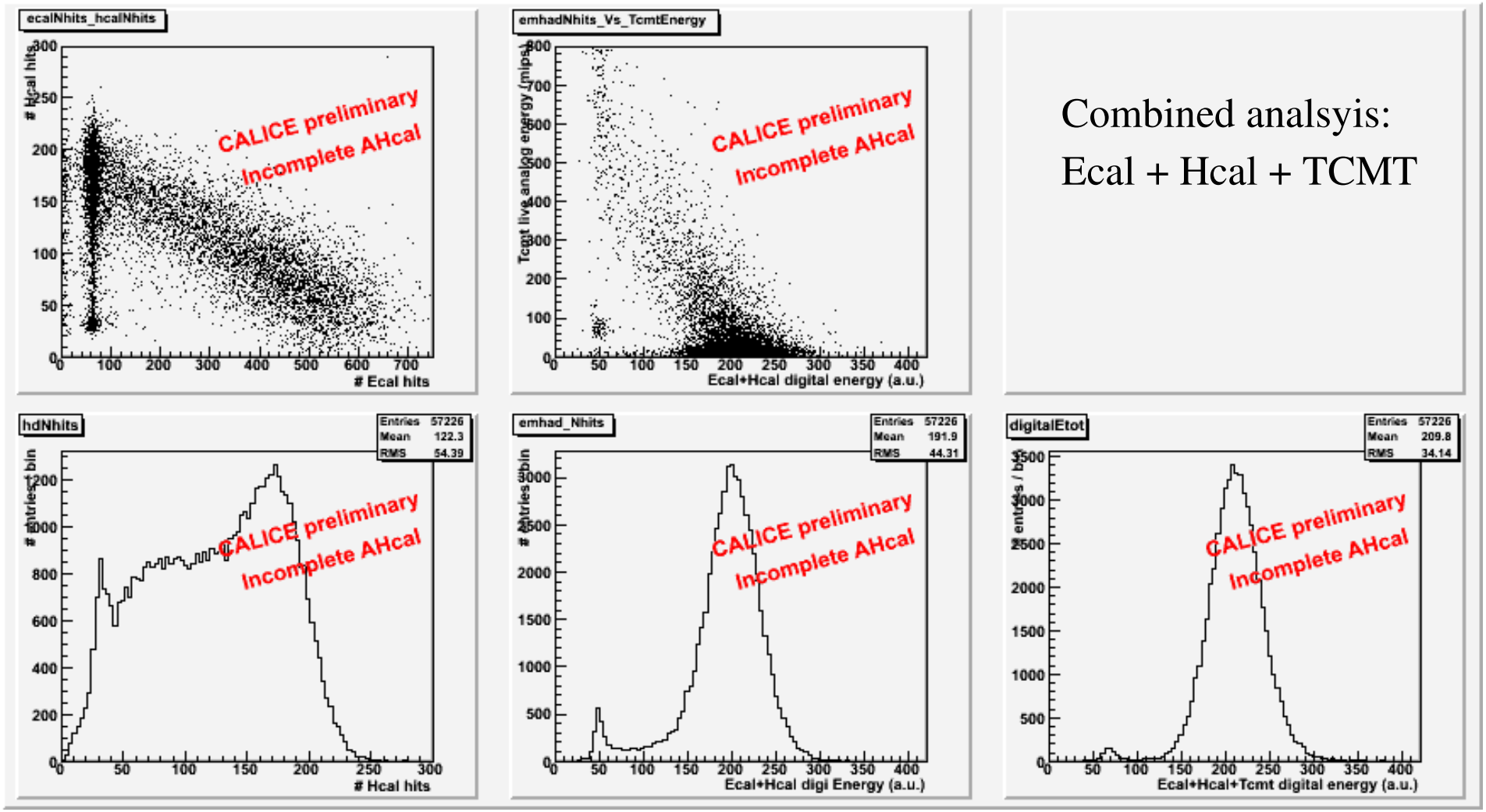
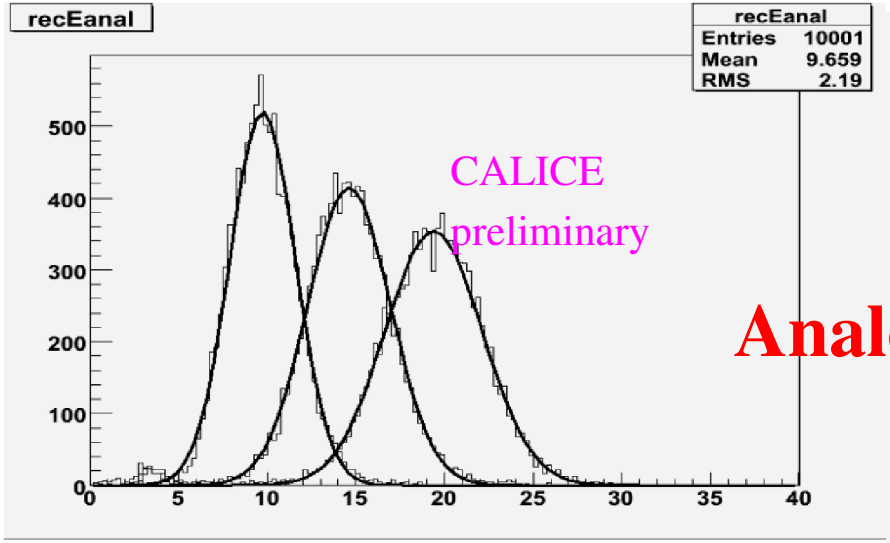
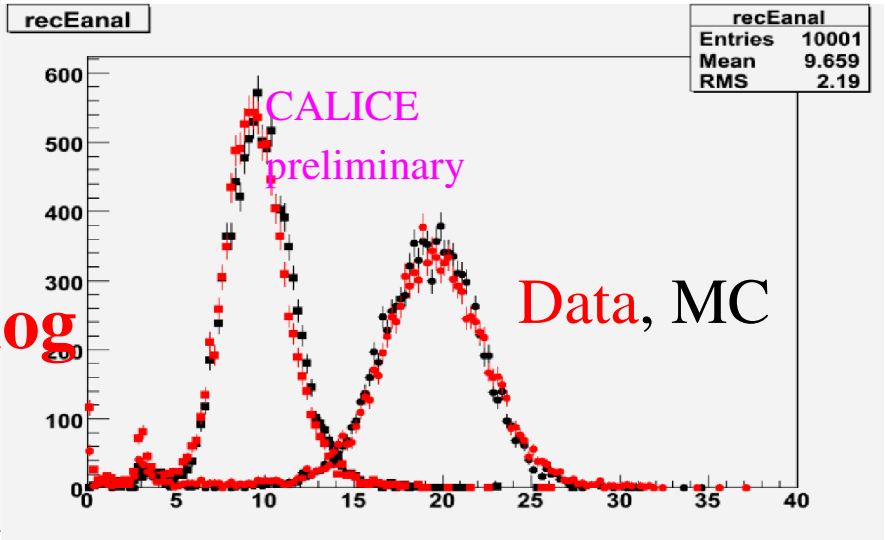
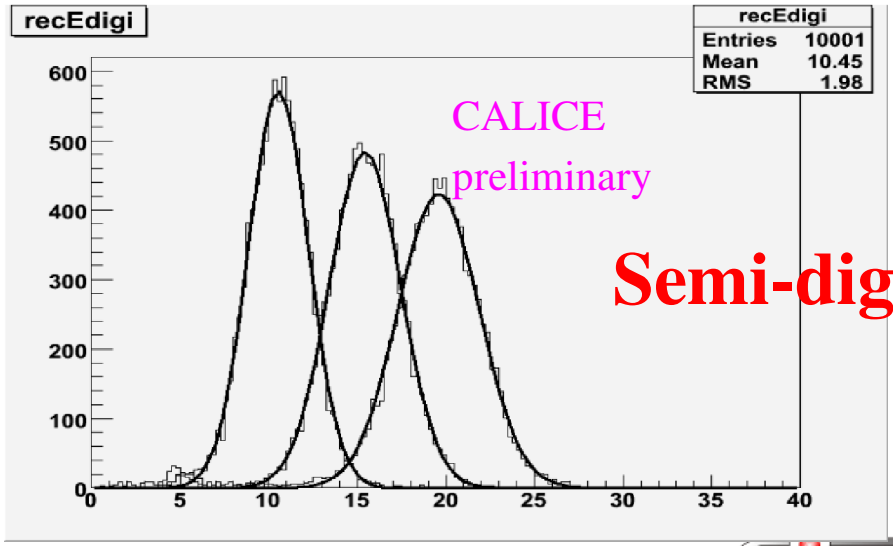
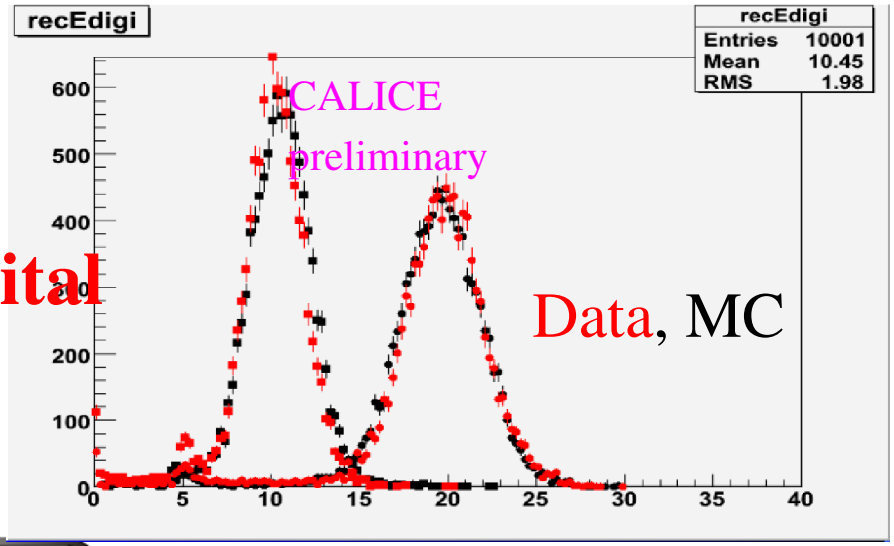
```
### AHcal Processors
        ActiveProcessors MyFastMappingIProcessor
        ActiveProcessors MyPedestalOnTheFlyProcessor
        ActiveProcessors MyFastInterCalibrationProcessor
        ActiveProcessors MyFastGainCalibrationProcessor
        ActiveProcessors MyFastSaturationCalibrationProcessor
        ActiveProcessors MyFastMIPCalibrationProcessor
#       ActiveProcessors MySimpleHcalCalibrationProcessor
        ActiveProcessors MyFastMappingIIProcessor
### TCMT Processors
##        ActiveProcessors tcmtMappingIProcessor
        ActiveProcessors tcmtMappingI
        ActiveProcessors tcmtPedestalSubtraction
        ActiveProcessors tcmtMipCalibration
        ActiveProcessors tcmtMappingII

### Guilherme's stuff
        ActiveProcessors GLAnalyzer
        ActiveProcessors MyBasicAnalysis
#       ActiveProcessors GLHitCollections
#       ActiveProcessors GLMuonCalib
#       ActiveProcessors GLLEDCalib
### other miscellaneous stuff
#       ActiveProcessors MyLCIOOutputProcessor
#       ActiveProcessors MyCollectionHistogramer
#       ActiveProcessors GlobalHistogramOutput
#       ActiveProcessors MyEventSeparator
#       ActiveProcessors MyProgressHandler
```

TCMT

analysis

(...)

CALICE test beam: preliminary results



CALICE test beam: preliminary results