Offline Tracking Monitoring

Mike Hildreth

for the

Global Tracking Group

DØ Beaune Workshop

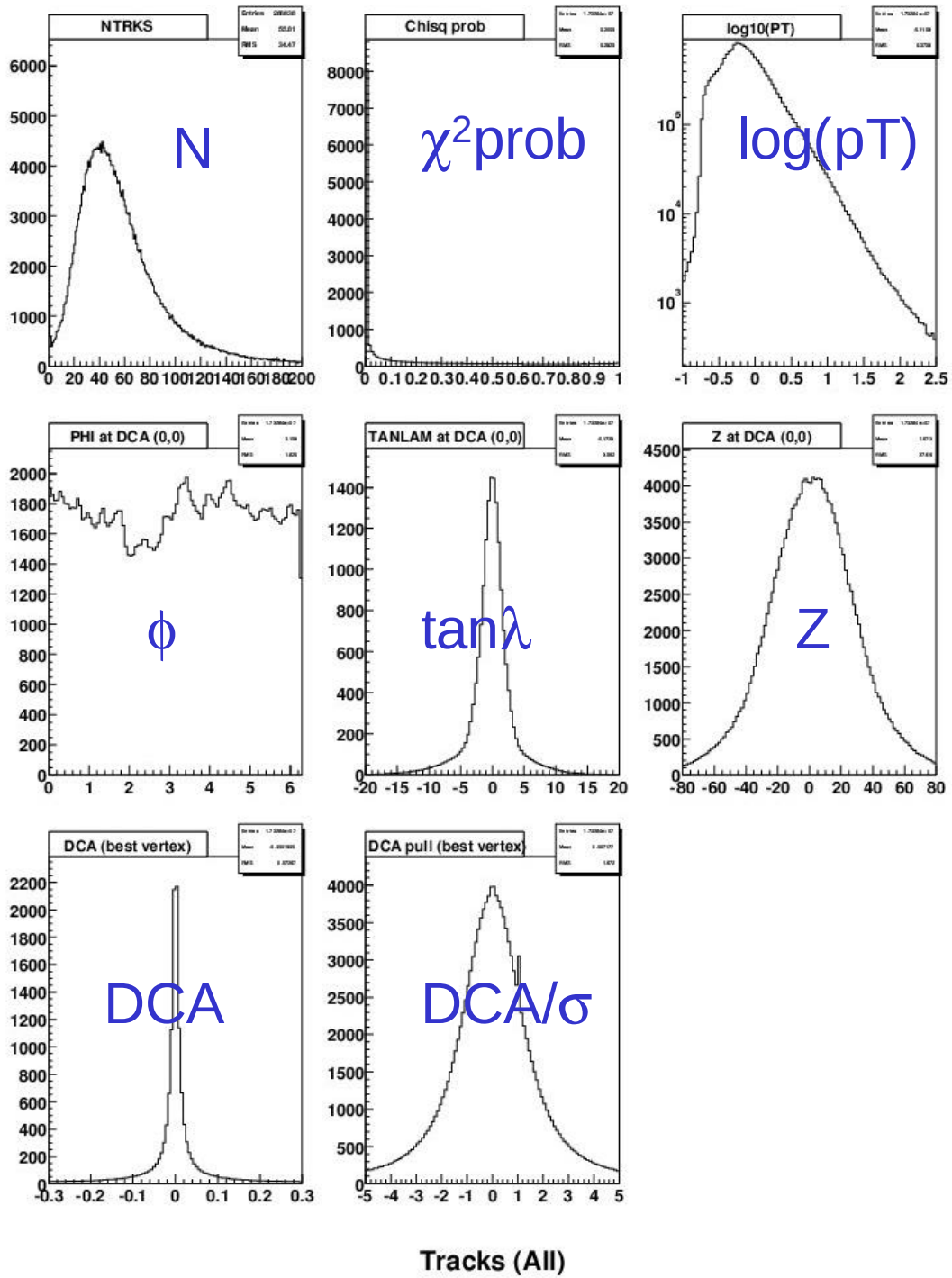
June 17, 2003

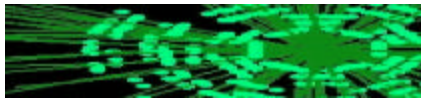
RecoCert Overview

- Tracking portion contains:
  - basic track distributions
  - efficiency plots
  - vertexing performance
- Subdetector info
  - SMT
  - CFT

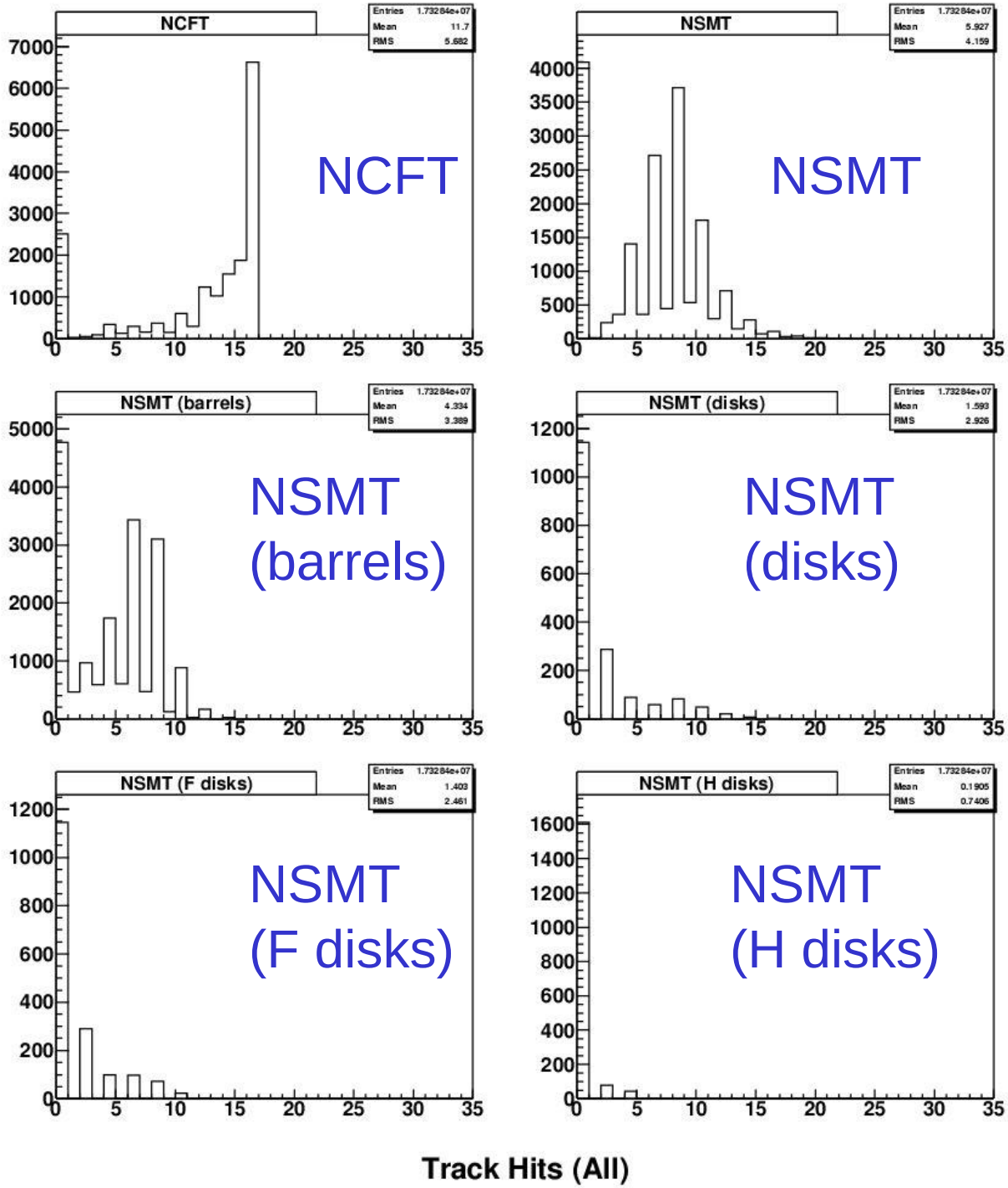
Nice, but NO ONE looks at this stuff automatically!

Tracking Plots - All tracks, common distributions



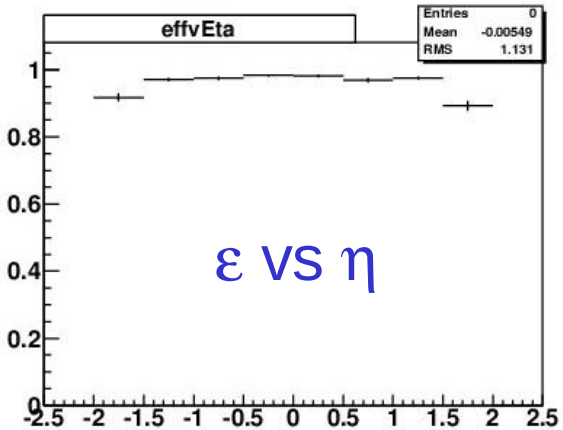


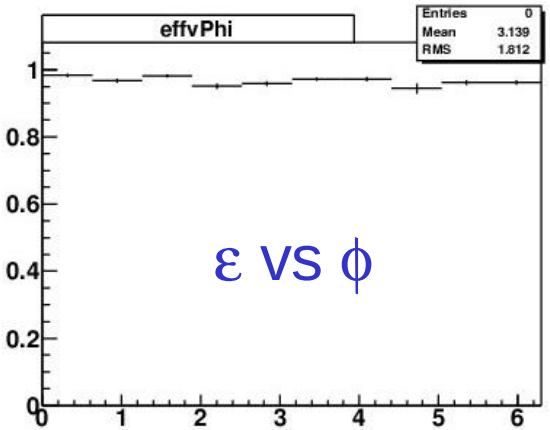
Hits on Tracks from each detector

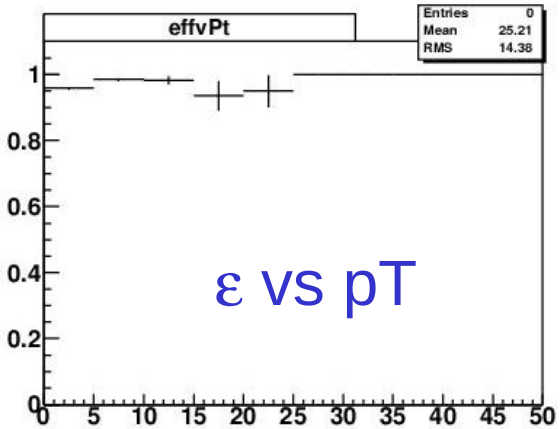


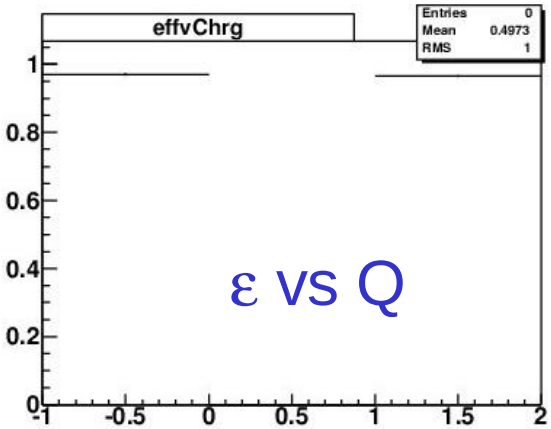
Efficiency vs useful stuff

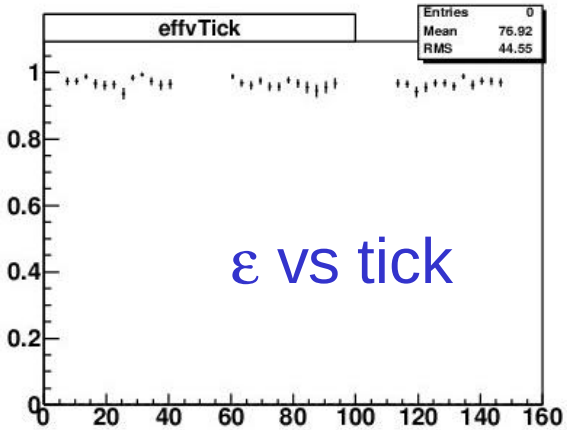
Calculated using Muons

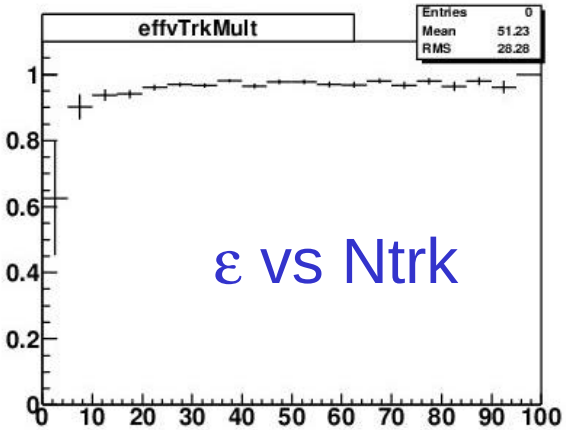






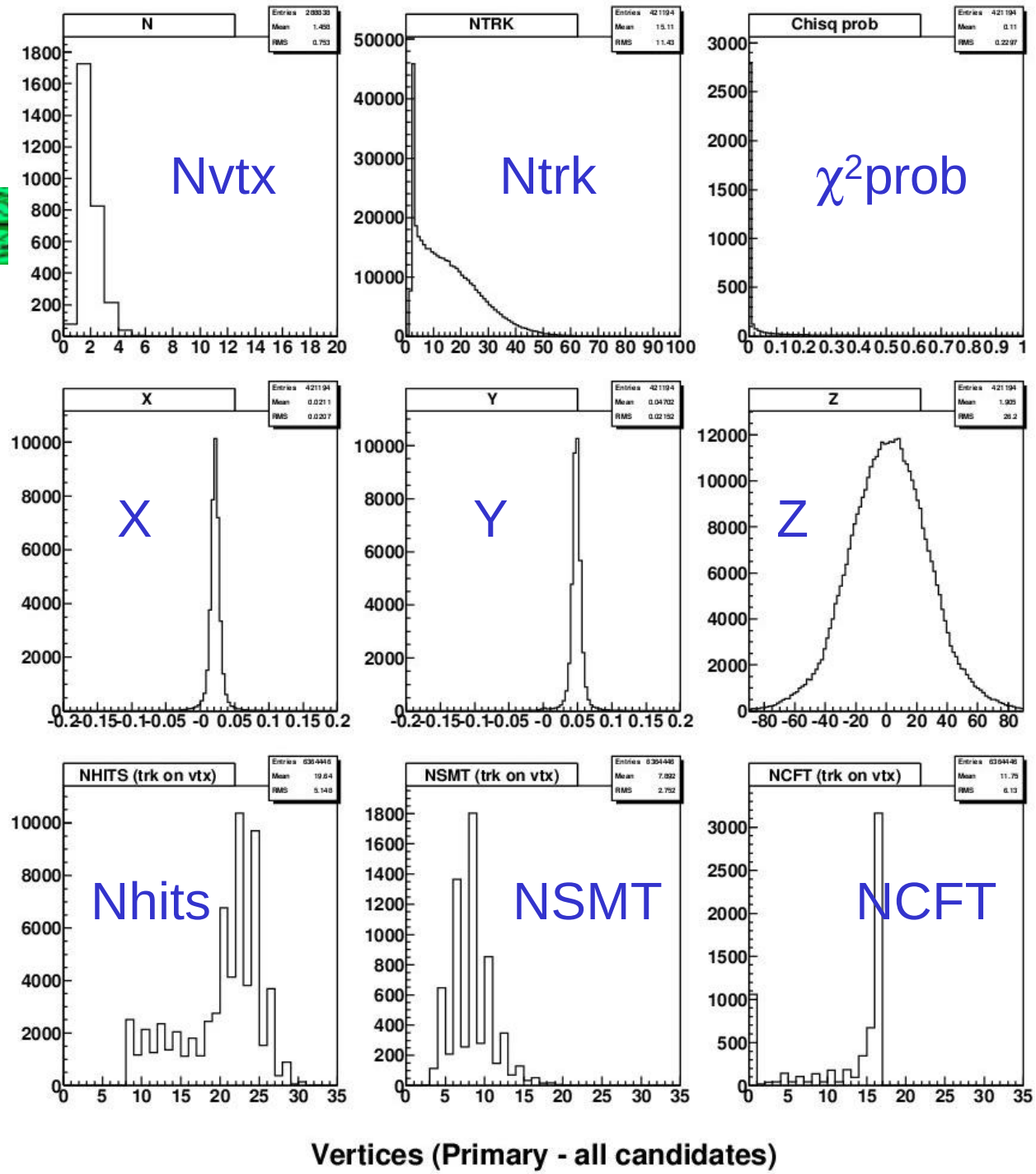






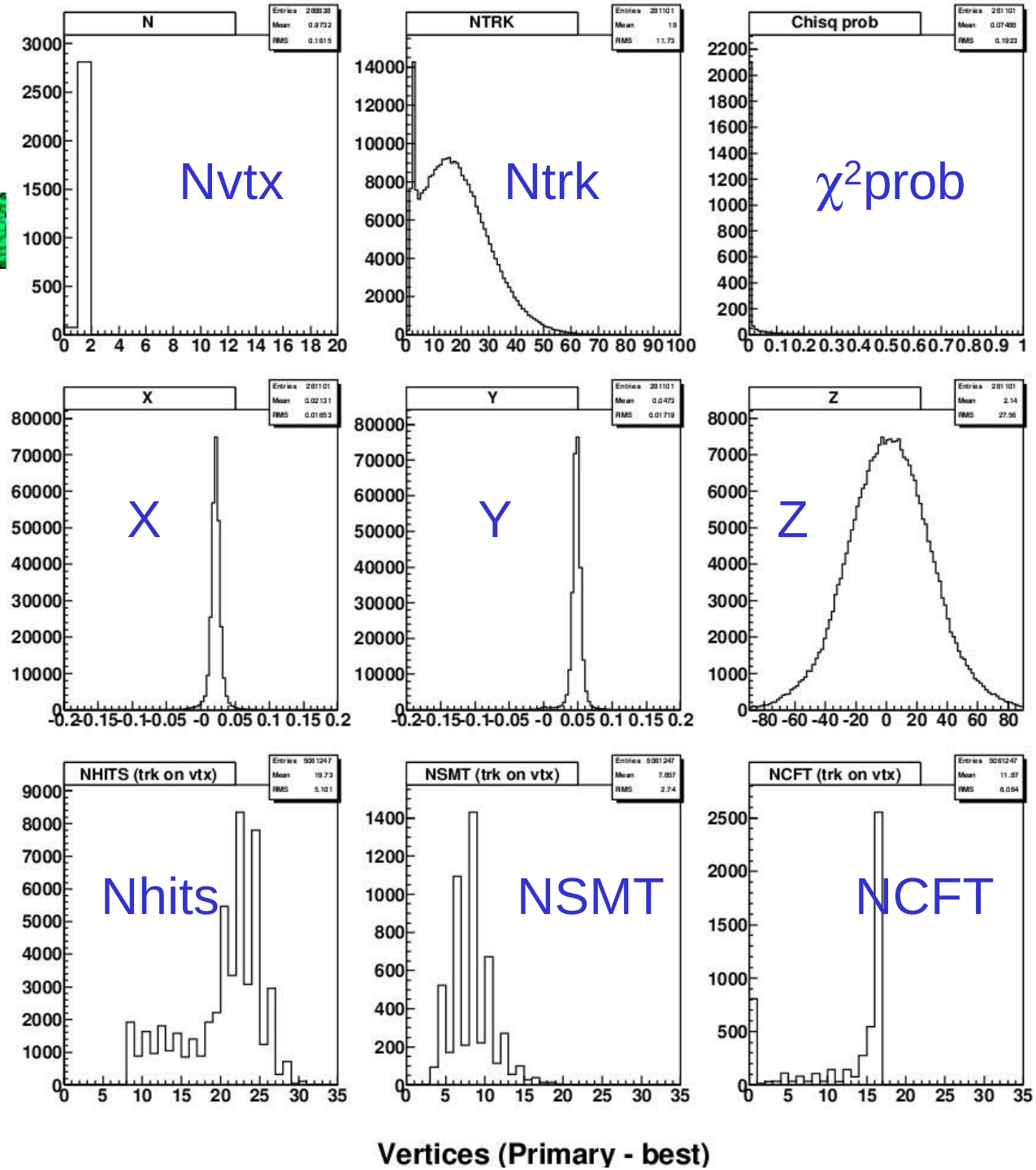
All Vertices, useful parameters

Tracks in vertices only



Best Primary Vertex

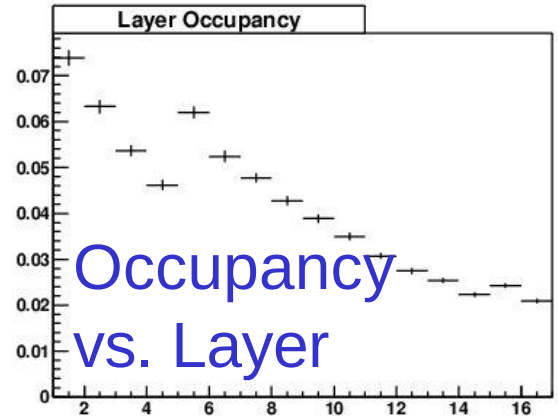
Tracks in vertices only

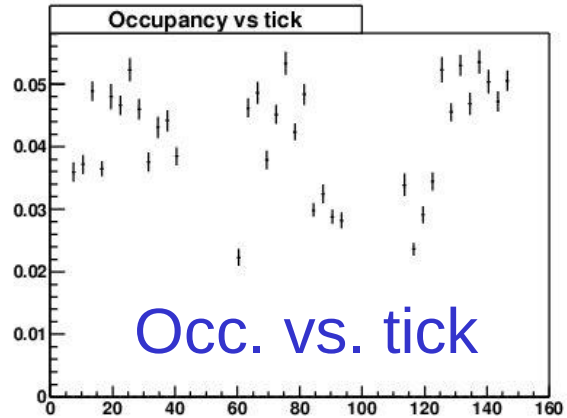


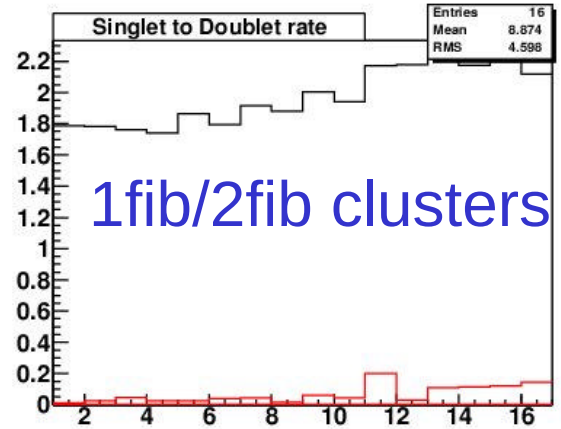
June 17, 2003

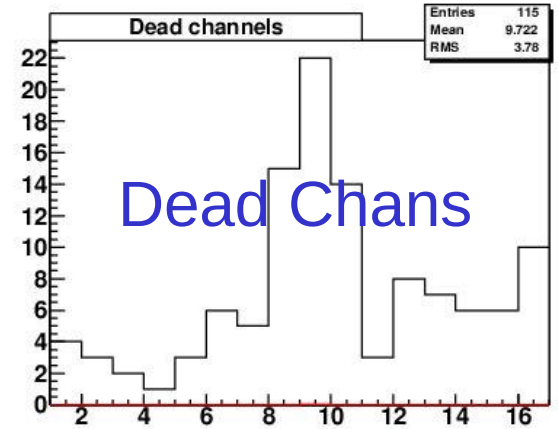
Detector Plots:

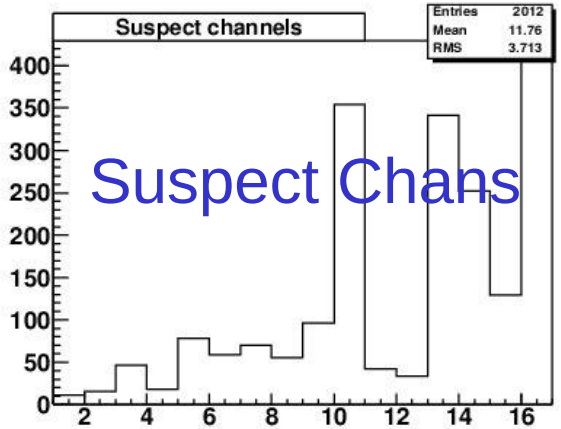
CFT params

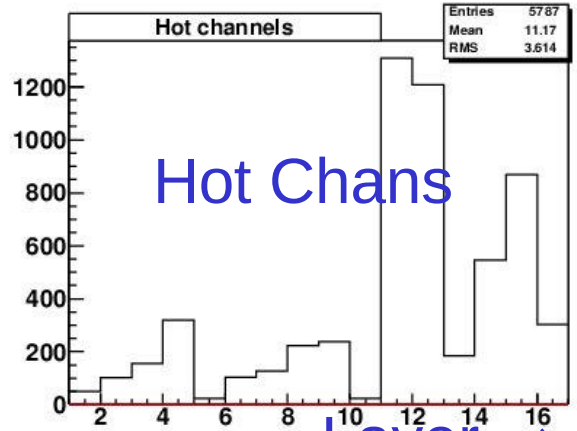










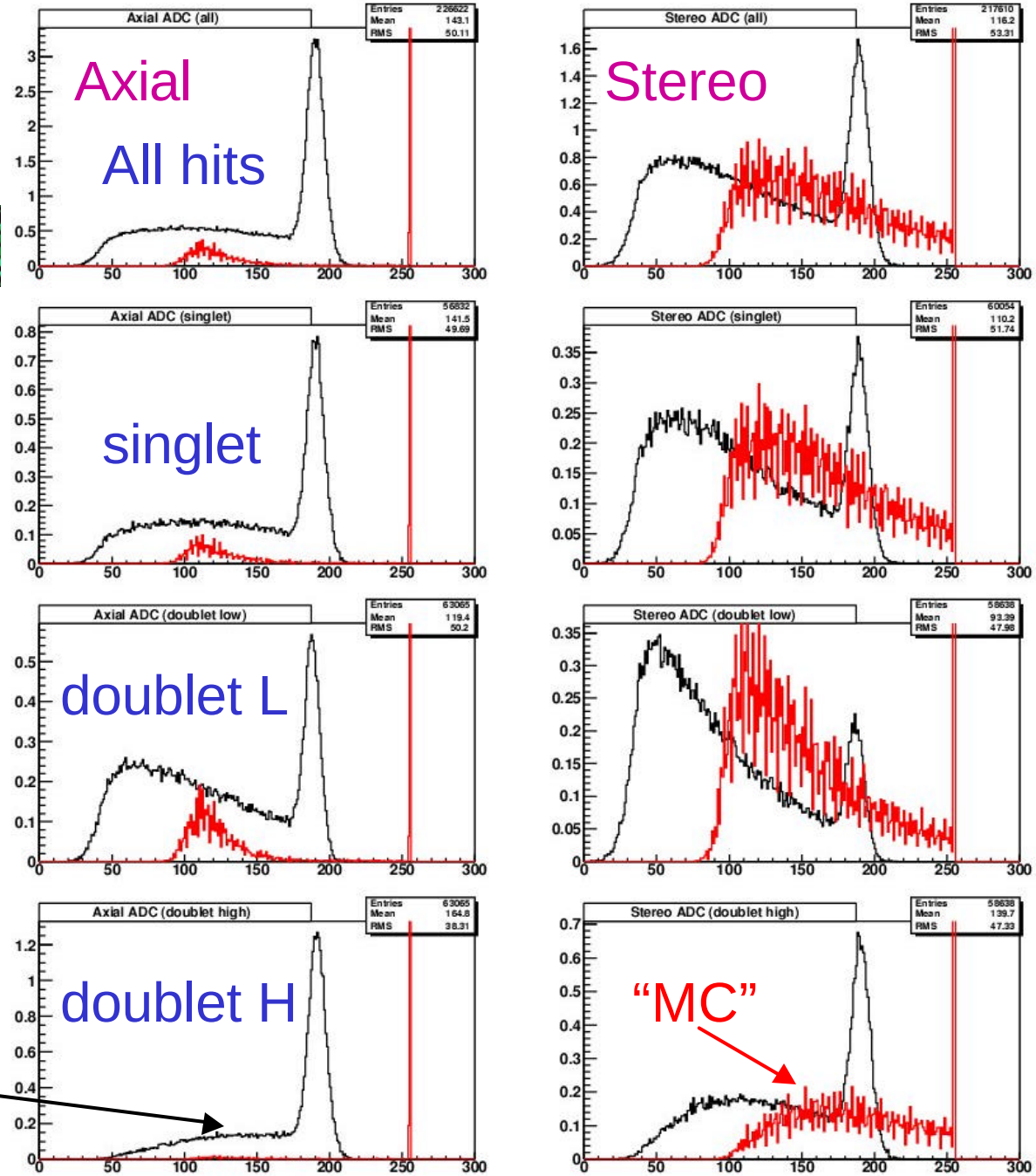


Layer →

CFT Summary (All Clusters)

CFT ADC Distributions

Hits on Tracks

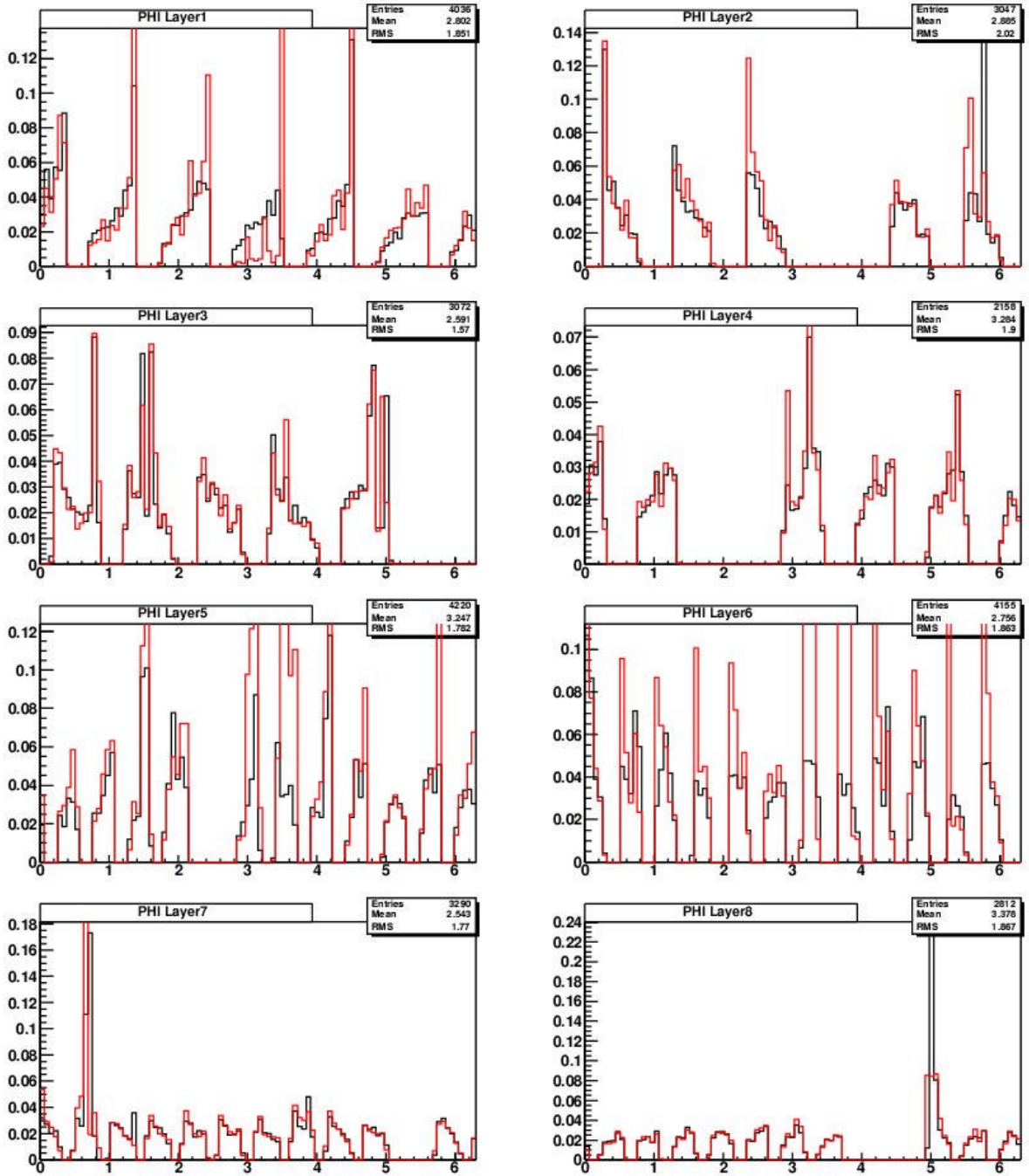


"Data"

CFT ADC Summary (Clusters on tracks)

SMT Plots:

Clusters in individual barrels, disks, etc., plus summary plots for the whole detector



SmtClusters (ClustrBar1)

Conclusions

A wealth of information

- Would be useful if someone (or something) looked at this stuff automatically!
  - either “offline shifts”
  - or automatic histogram checking
- Only one example I know of where something “bad” happened only in offline reco
  - wrong calibration constants resulted in phi holes
  - may have been caught with offline shifts