

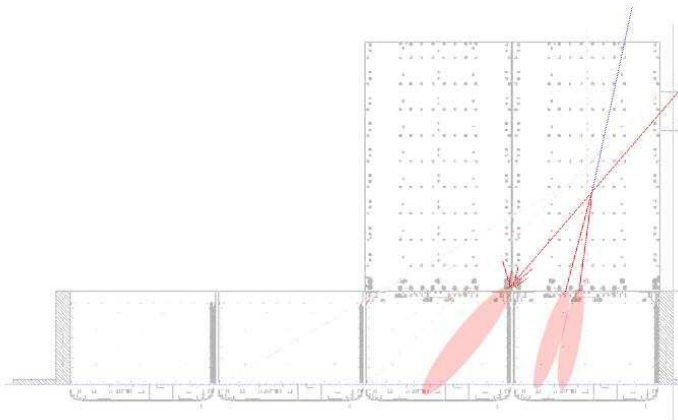
GLAST CERN 2006 Beamtest



Tkr Hits and GEANT4 cuts

Johan Bregeon (INFN-Pisa)

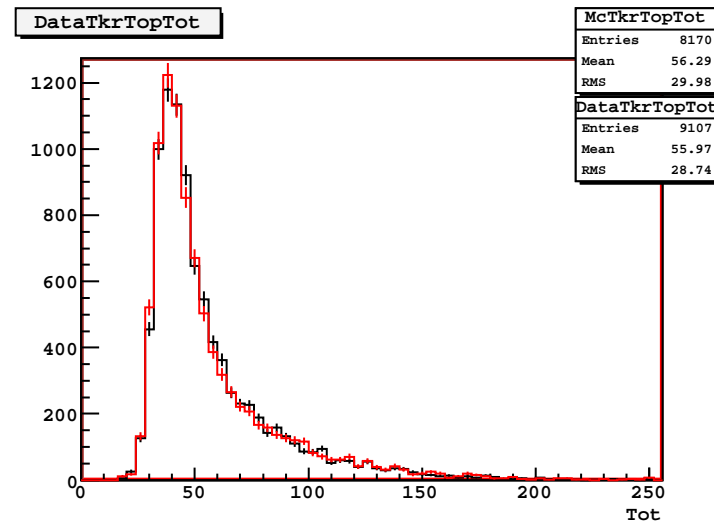
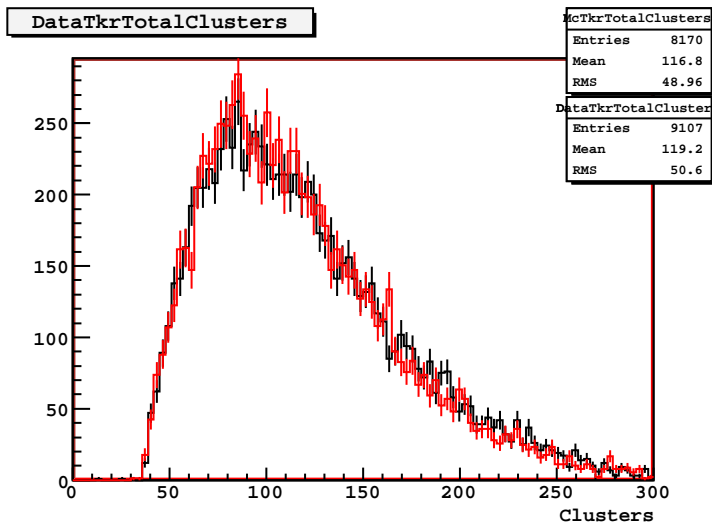
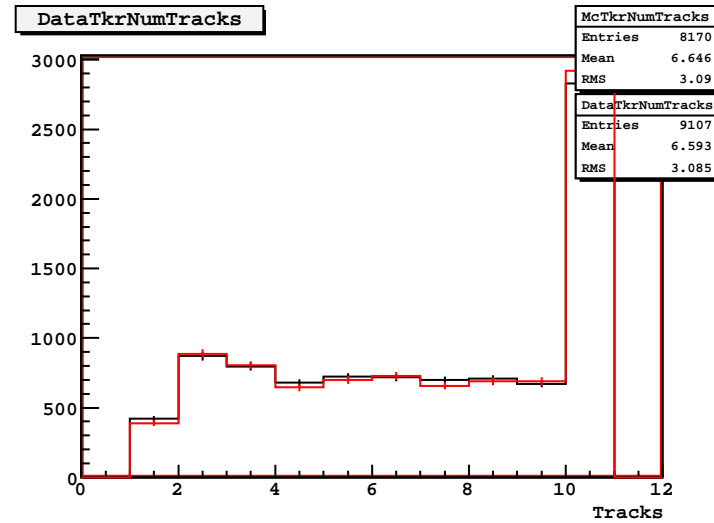
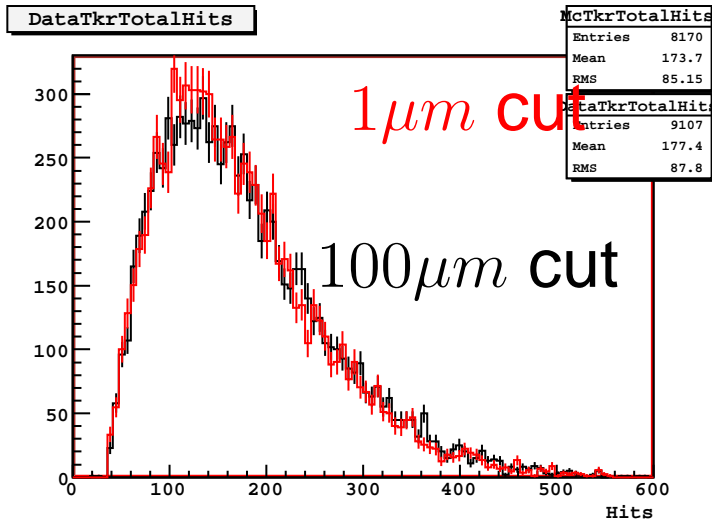
Beamtest Analysis - August 22nd, 2007



GEANT4 cuts

- brainstorming going on...
 - can lower cuts create more hits in the Tkr ?
 - what about fluorescence in tungsten ?
 - geometry/glue/gaps and delta-rays (see Leon's talk)
- ⇒ BTR : current GEANT4 cuts are :
- △ $10\mu m$ default
 - △ $10\mu m$ in the TKR
 - △ $100\mu m$ in the CAL
- ⇒ BTR : LowEnergy just fixed today
- △ could not check Fluorescence
 - △ have lower cuts a meaning if not using LowEnergy ?

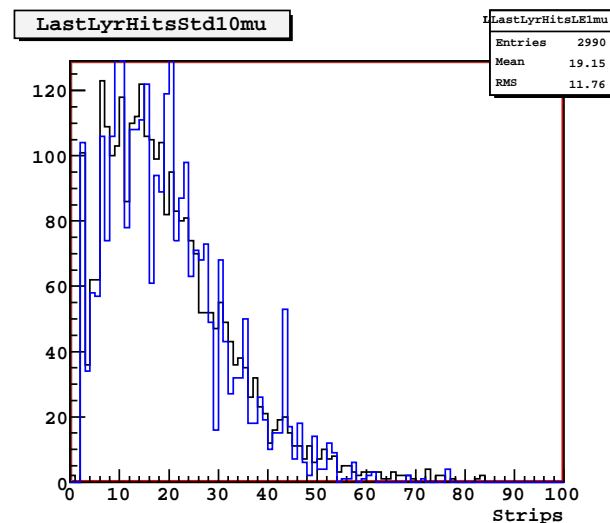
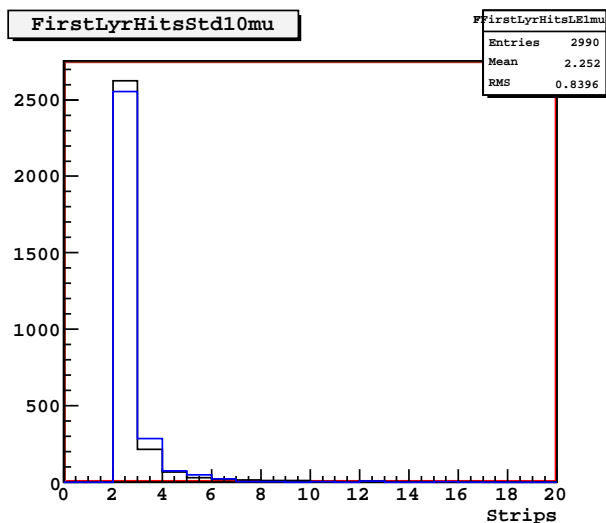
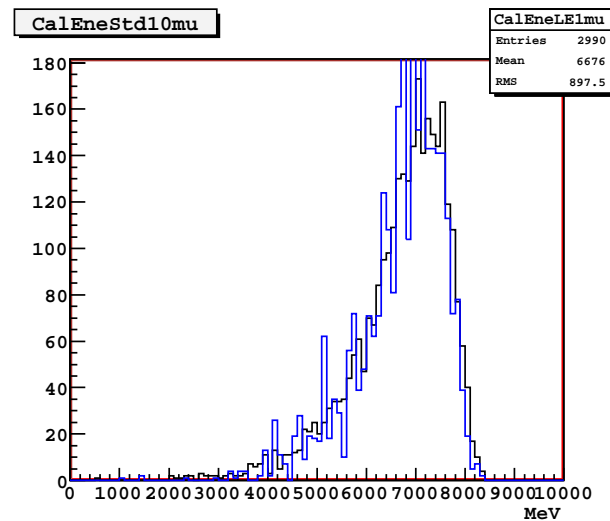
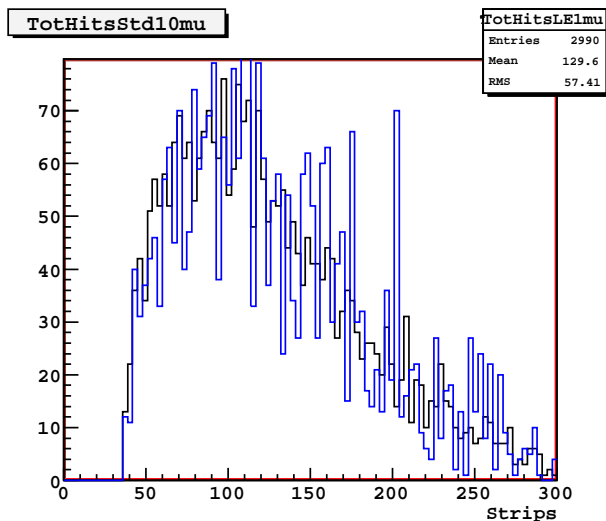
BTR Standard EM : $1\mu m$ vs $100\mu m$



CUTower : $1\mu m$ LowEnergy vs $10\mu m$ Std

$1\mu m$ cut Std

$10\mu m$ cut LowEnergy



conclusions and issues

- surprising that $100\mu m$ and $1\mu m$ are so similar : hint ?
- need to test with full LowEnergy physics turned on
- CUTower results are interesting, but not enough...
- new BTR release will have all the required features to study this carefully.
- work going on