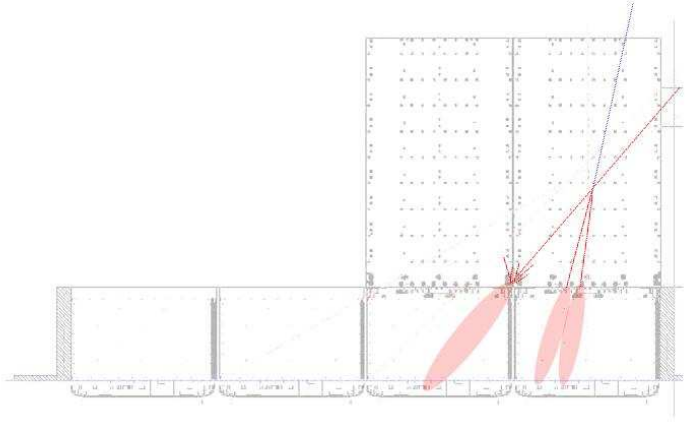
GLAST CERN 2006 Beamtest



Tkr Hits for muons

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Runs

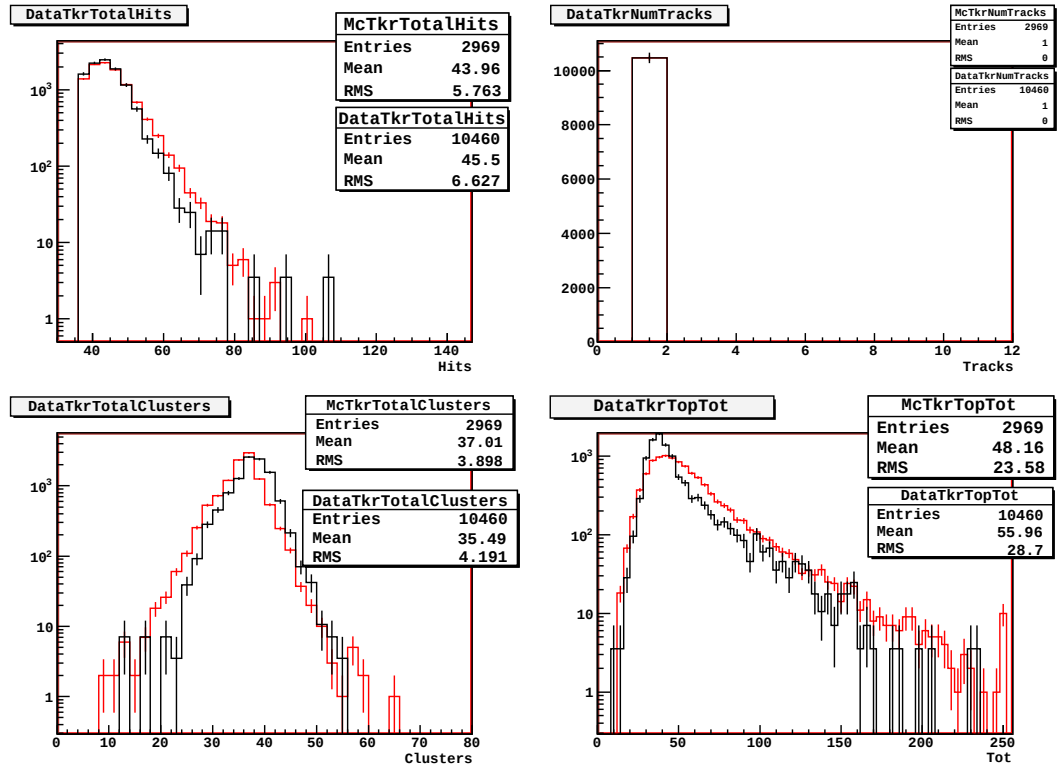
- Cosmic rays : 3300000645 (Pisa)
- 5GeV Muon Beam Self-Trigger : 700000752 (PS)

CUTS

- × 1Hit per plane for Tkr Top & Bottom Layers
- × TkrNumTracks==1 & TkrTotalHits[3]>=36 hits
- × CalNumHit[tower]==8
- × $\Delta_{time} >= 1ms$
- × Abs(dataVtxZDir)>0.95 for run 645)
- × Abs(dataVtxZDir)>0.999 for run 752)

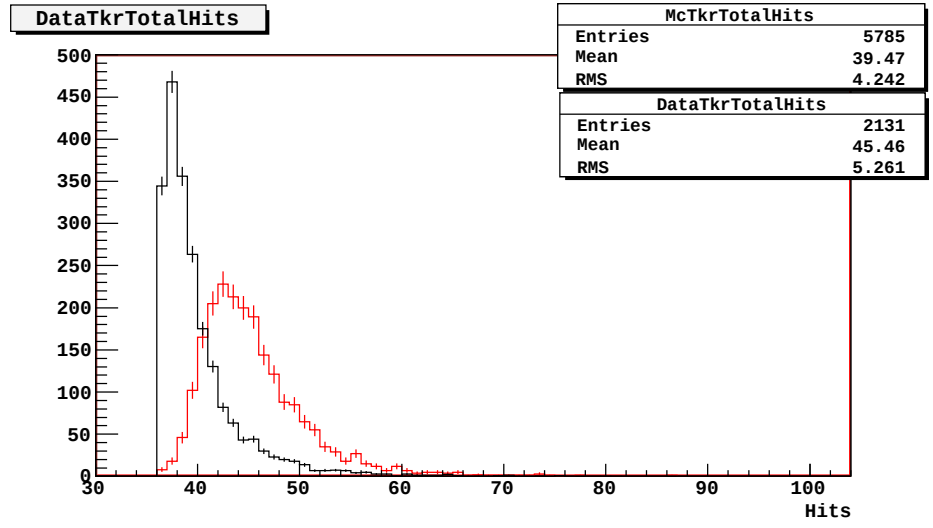
Cosmic Muons : 330000645

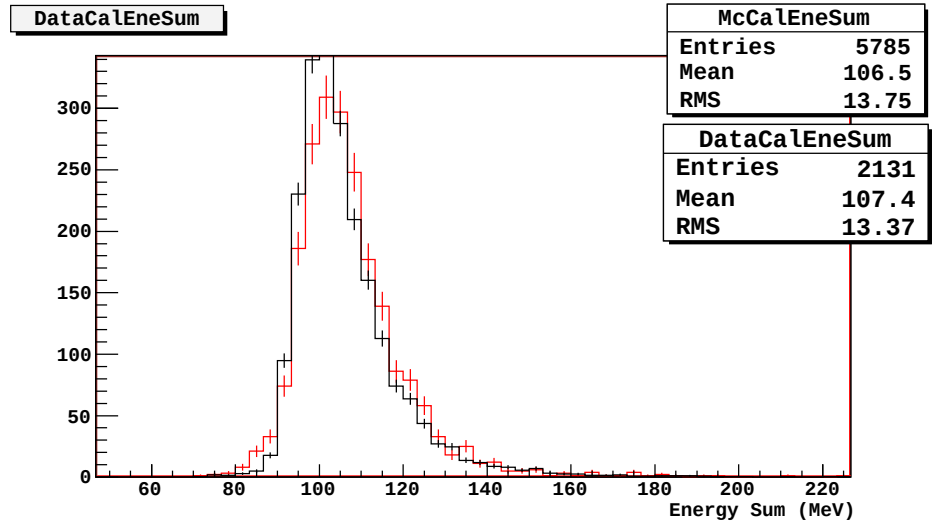
- Quite good agreement
- better when using better cuts
- but then it kills the statistics
- will redo the same plot with data processed with new BTR



Muon Beam 5GeV : 700000752

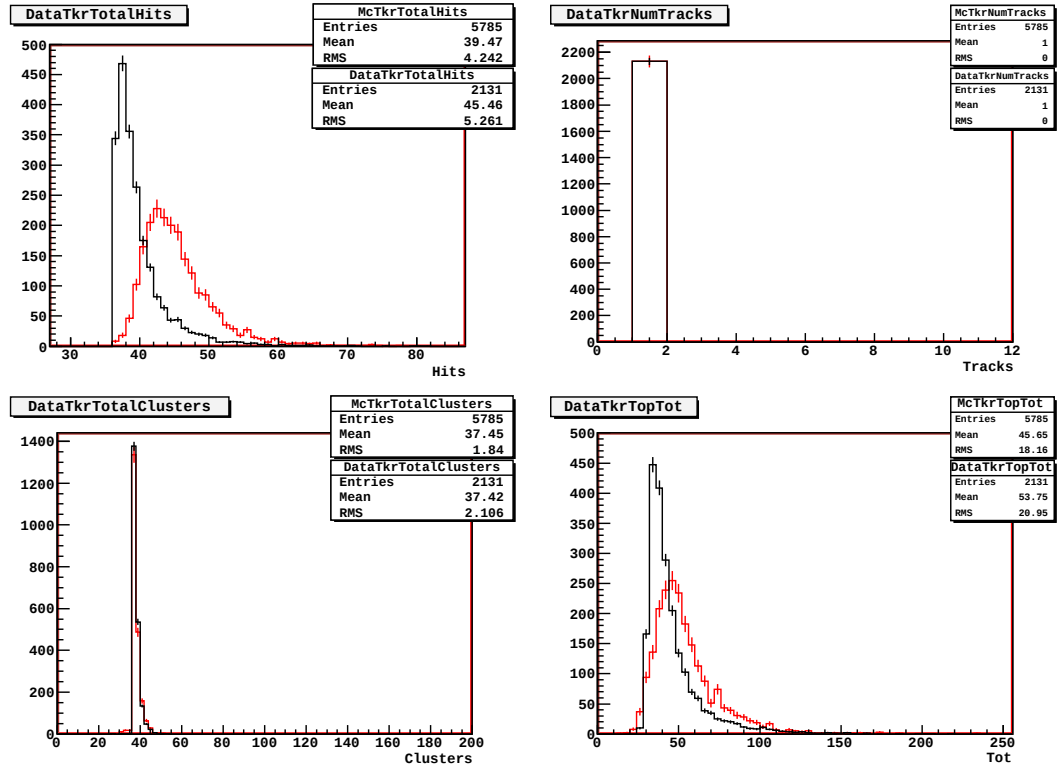
- Data taken while people were working inside the cave.
- Beam spot is very large but Cuts are very strong.
- Custom MC using BT-156
- Very good for CAL energy
- but pb with Tkr hits





Muon Beam 5GeV : 700000752

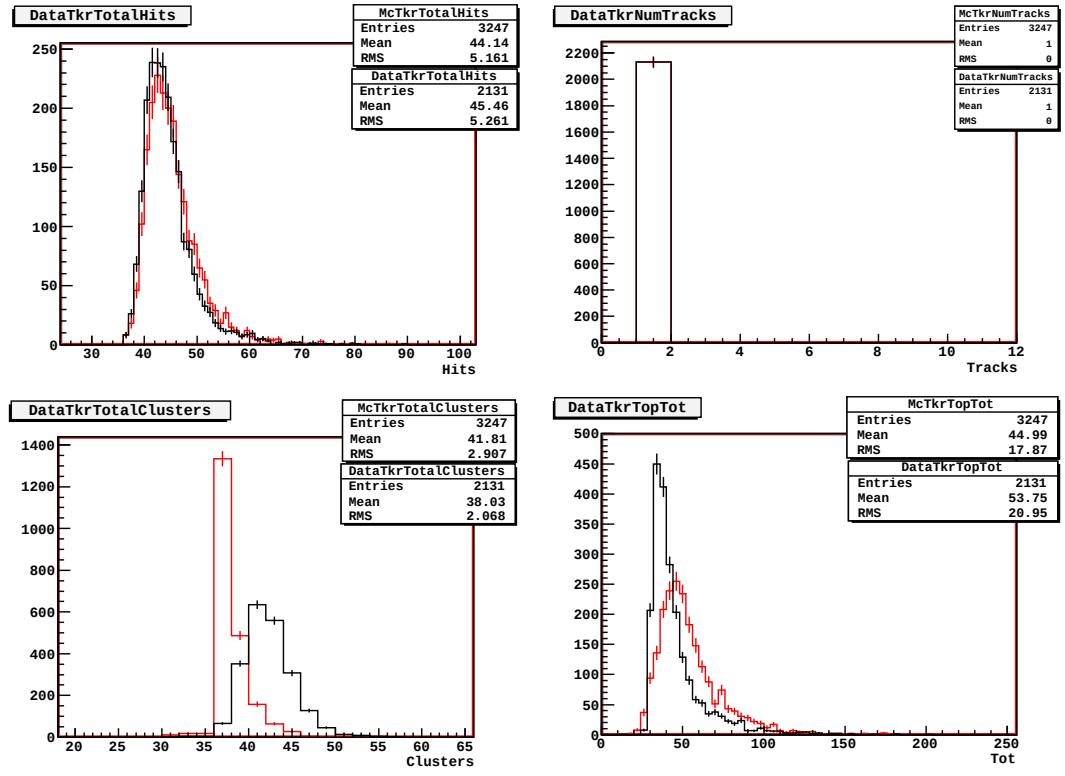
- More hits
- Number of cluster in agreement
- not shown here but Track 1 and 2 parameters also very good.



Muon Beam 5GeV : 700000752

High noise MC

- high noise in MC : 10^{-4}
- Hit distribution is in agreement !
- but we also see more clusters in MC...as one can expect.



Conclusions

- With muons from the beam we see more hits but nor more clusters, maybe 2 differents effects as we also see more clusters for protons for instance.
- need to look at Cluster width
- try to figure out where additional hits are...I do not understand really what I see yet...
- starting to play with ToT thresholds in MC