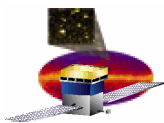


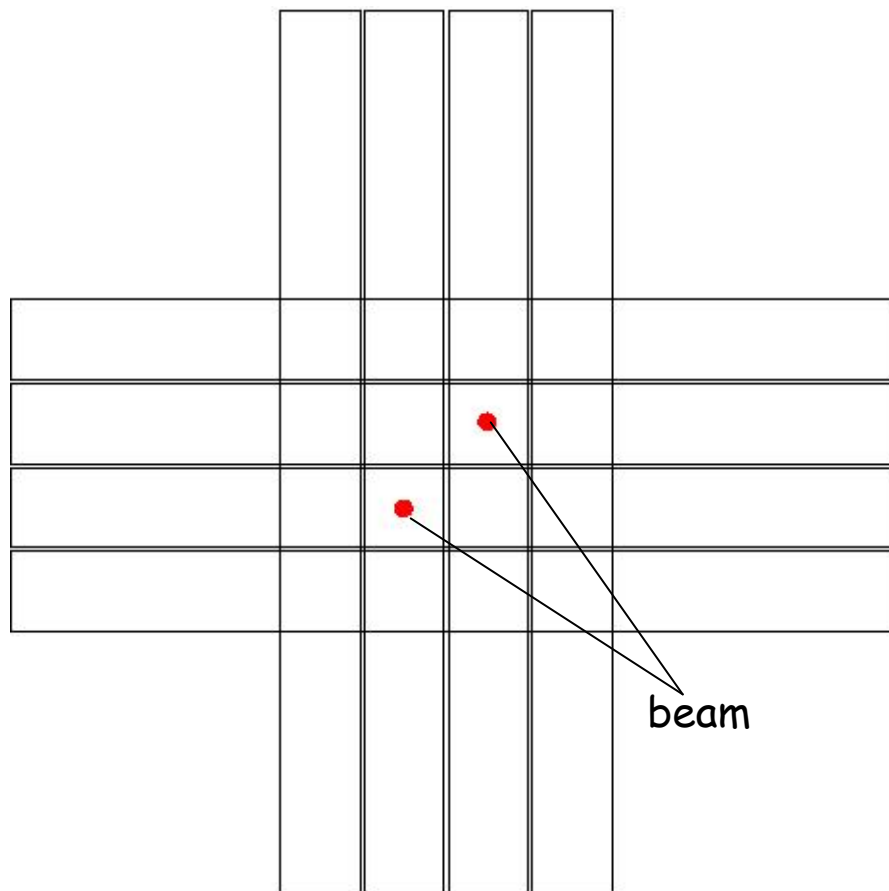
Energy Excess in data w.r.t. MC:

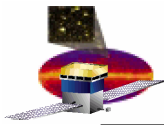
- Calibration: non-linearity... cf Sasha
- Pedestal drifts opposite effect
- Scintillation AC coupling
- MC see later
- Beam:
 - Energy unlikely
 - upstream material this work

What about earlier data?

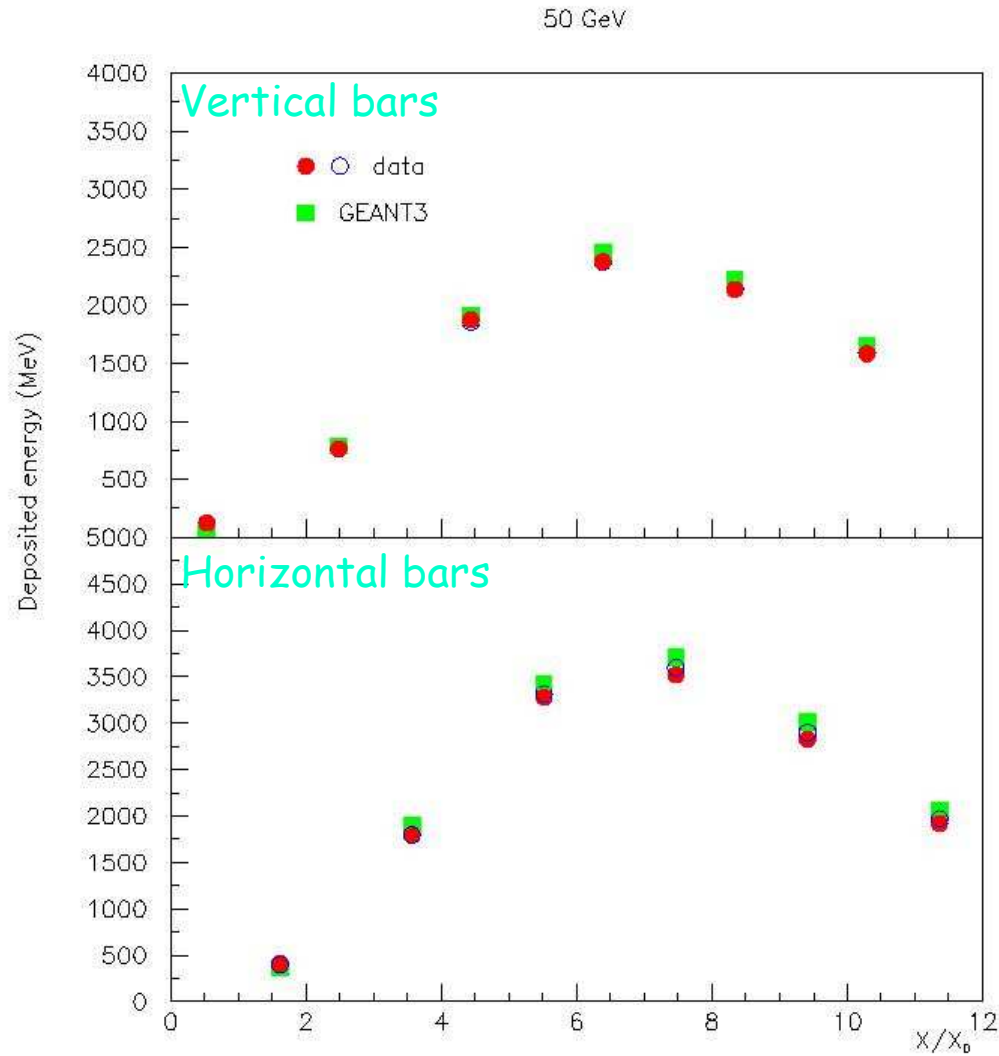


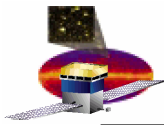
CERN 2002



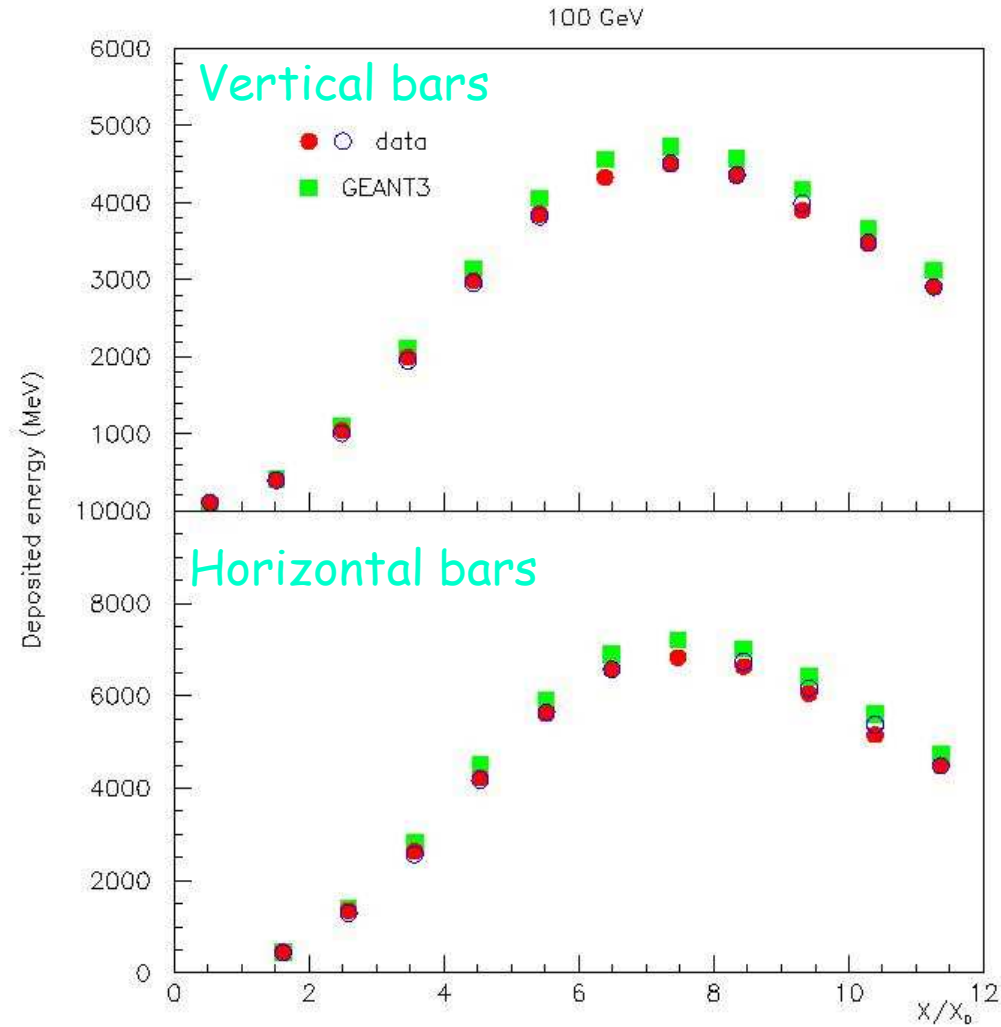


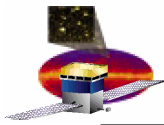
Longitudinal shower profile at 50 GeV (H4)



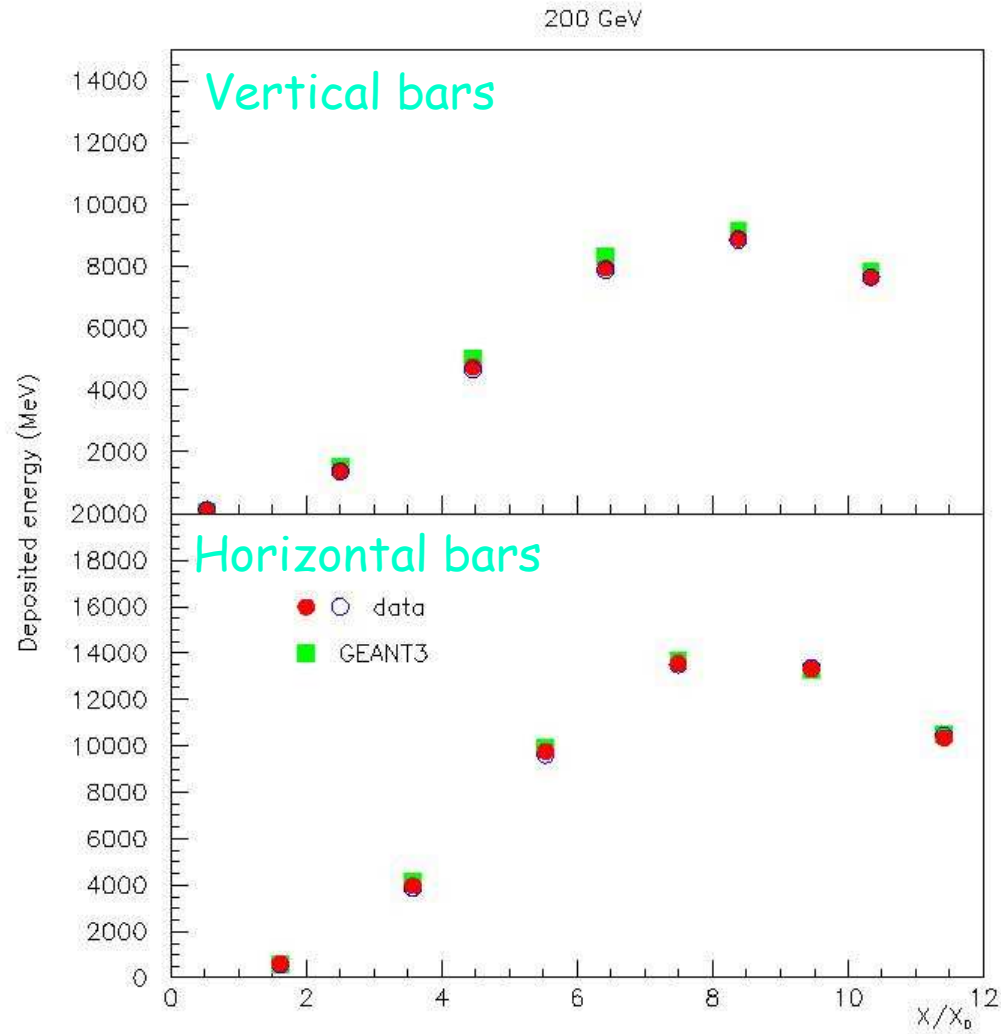


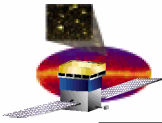
Longitudinal shower profile at 100 GeV (H4)





Longitudinal shower profile at 200 GeV (H4)



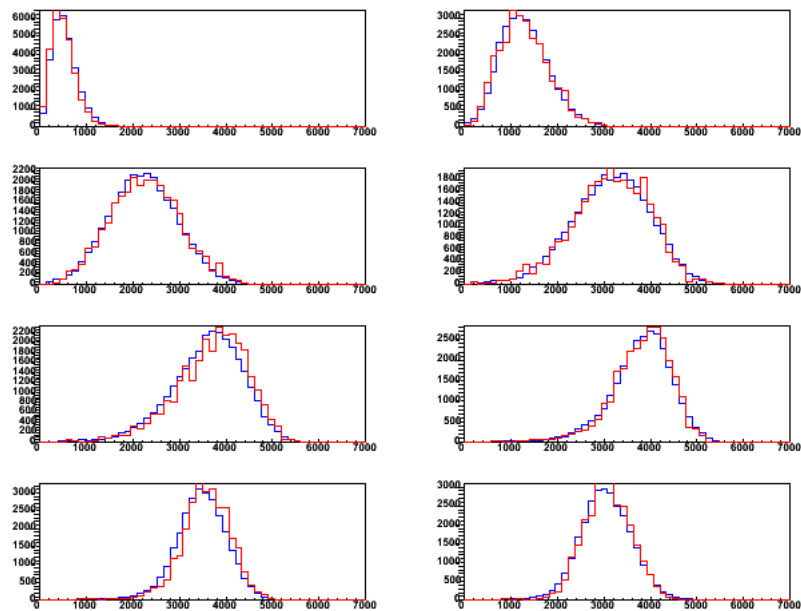


Deposited energy distributions (CERN 2003-H6)

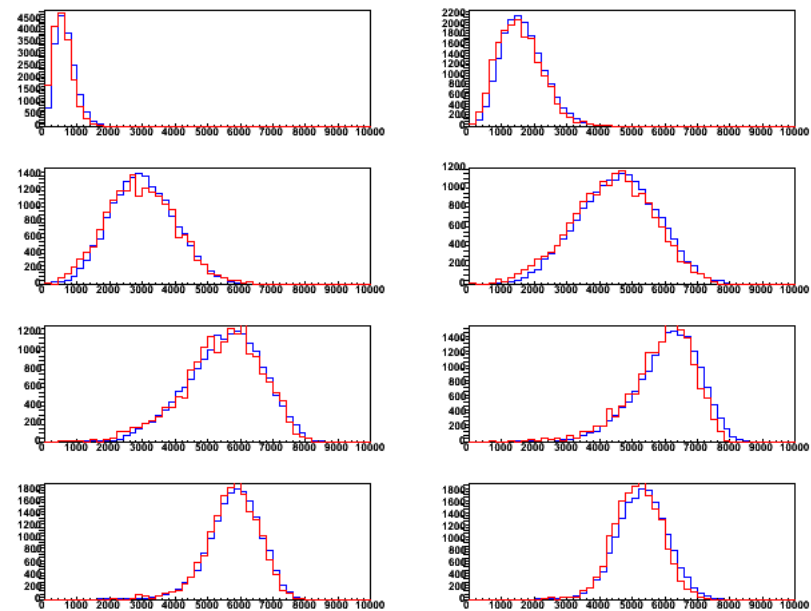
blue: data red: Geant4

50 GeV e⁺ 1.5 X₀

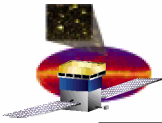
80 GeV e⁺ 1.5 X₀



deposited energy (MeV)

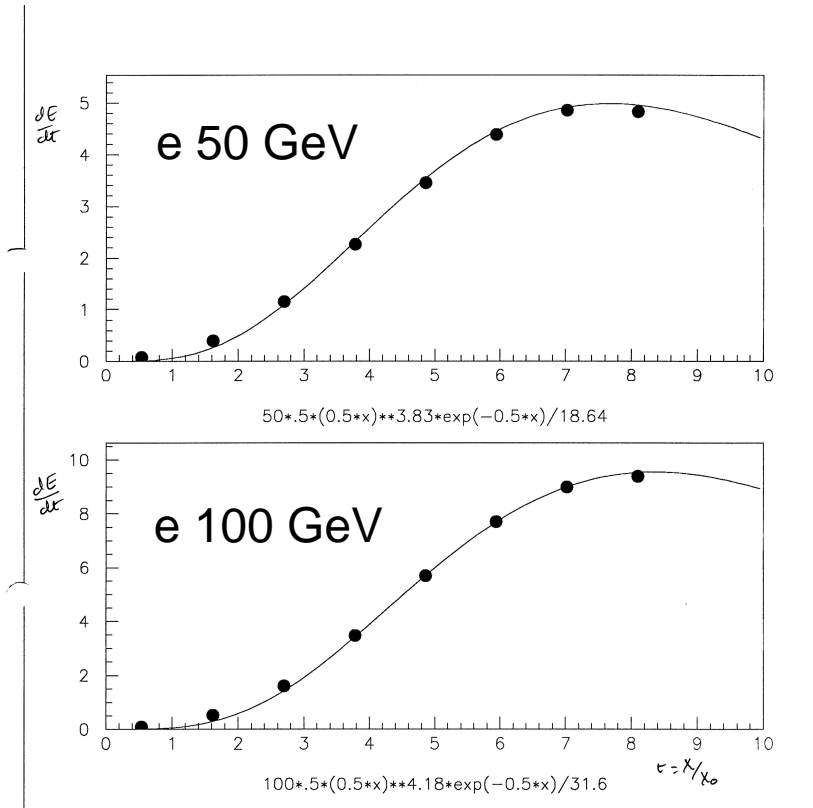


deposited energy (MeV)

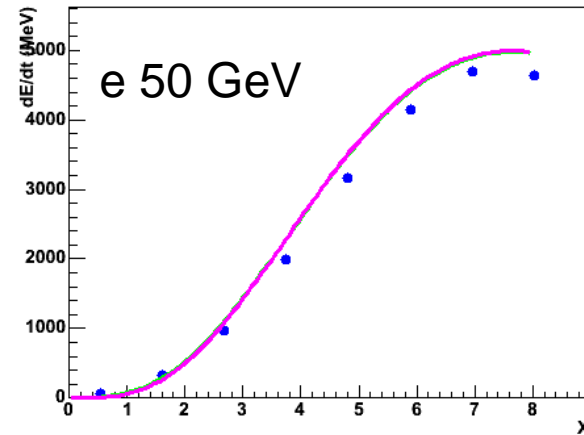


Comparaison G3-G4

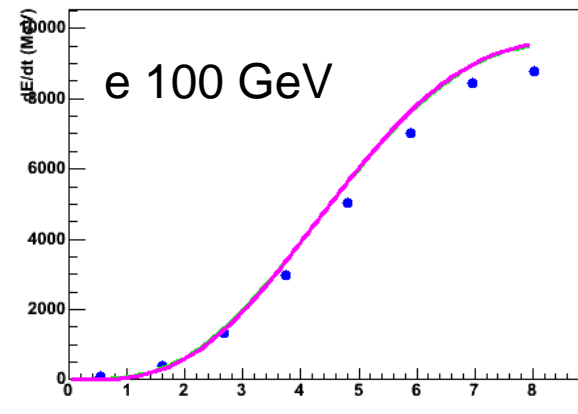
GEANT3

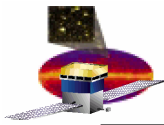


GEANT4



7% discrepancy?

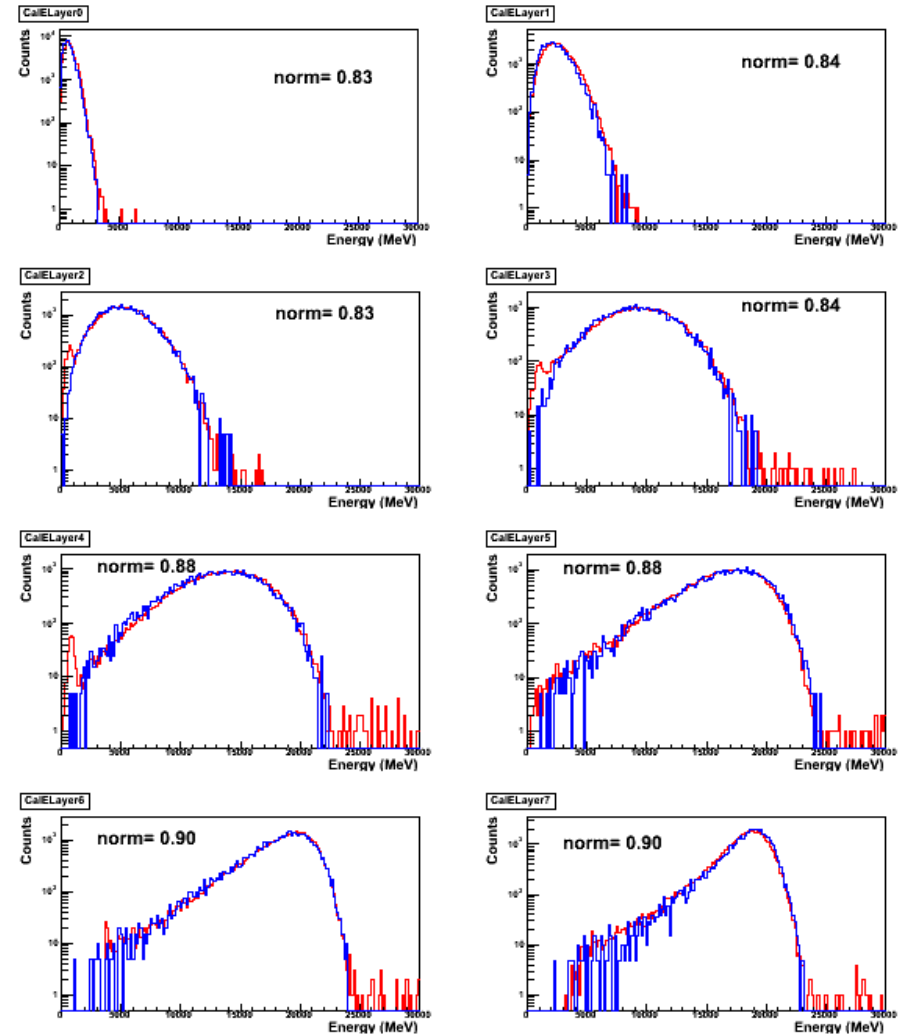
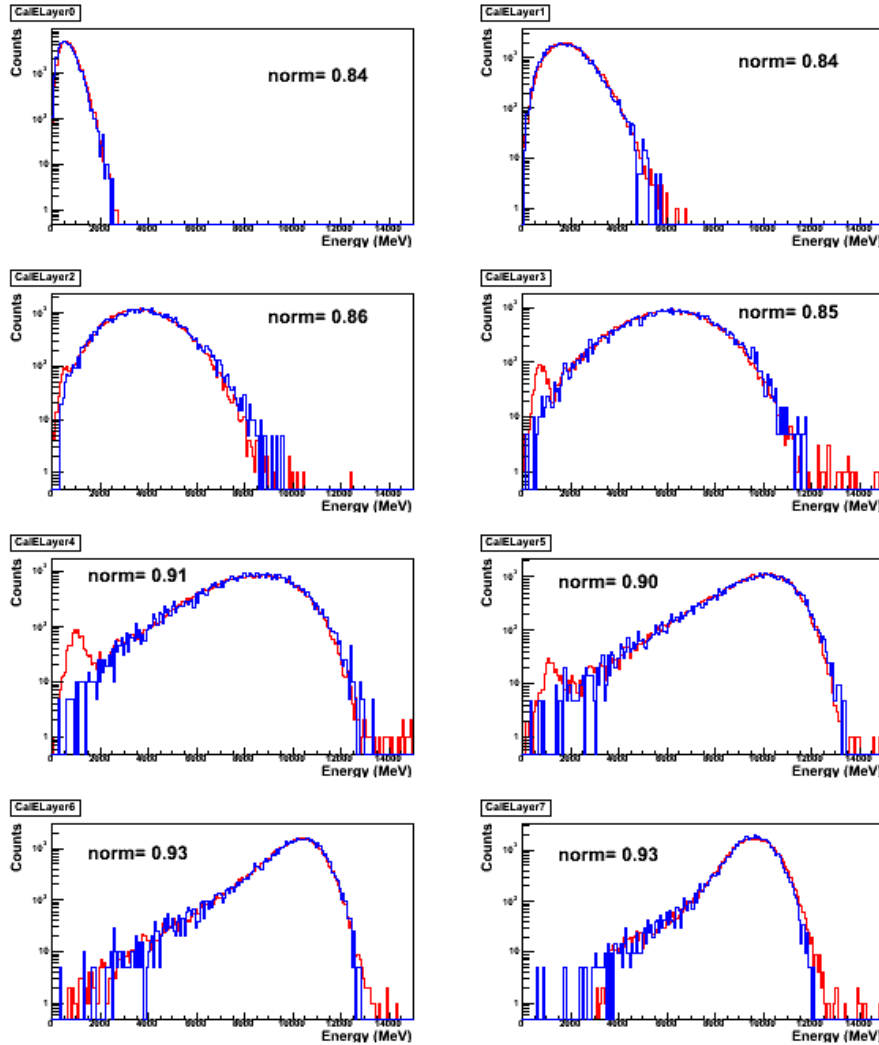


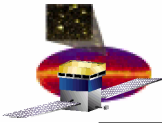


Deposited Energy Distributions per Layer

100 GeV

200 GeV

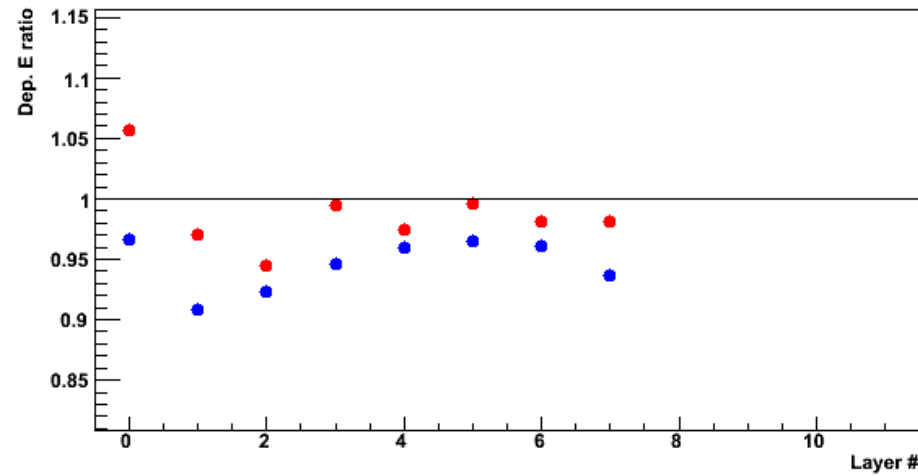
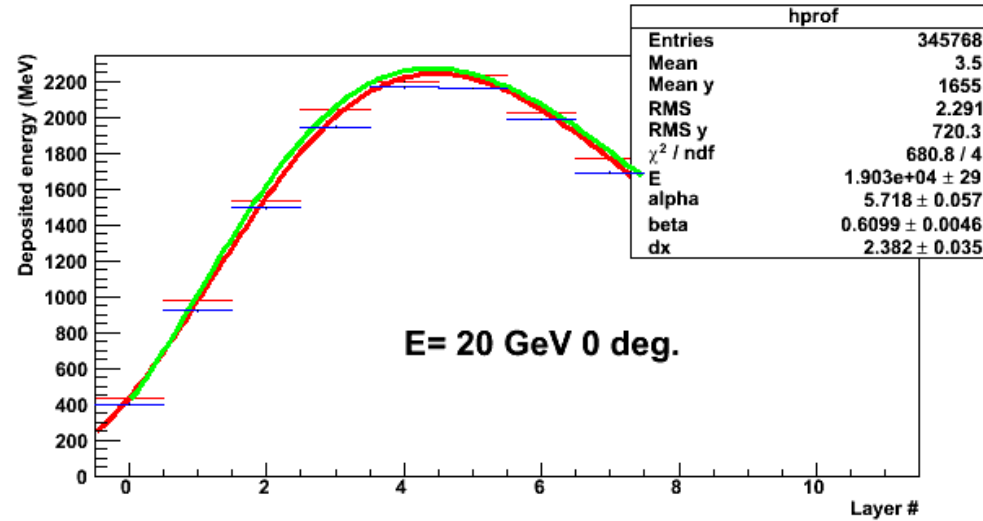


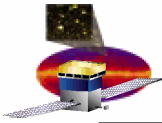


Longitudinal profiles

Red: data
Blue:MC

$\Delta X=1.45$

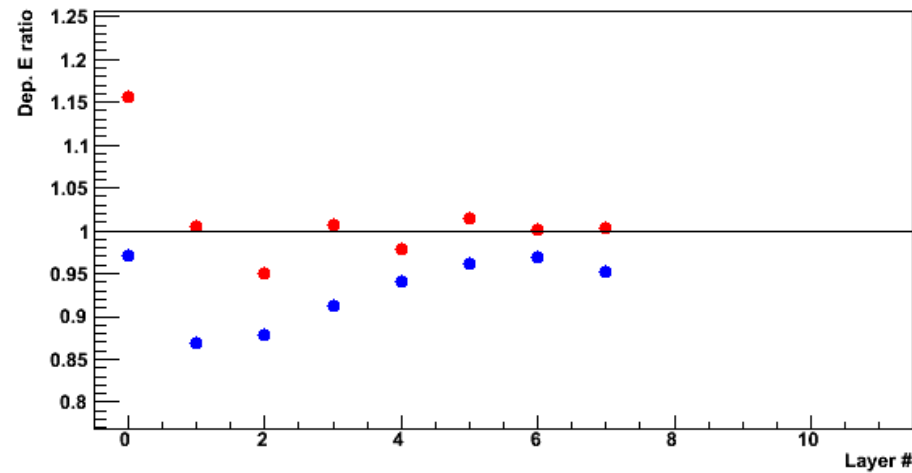
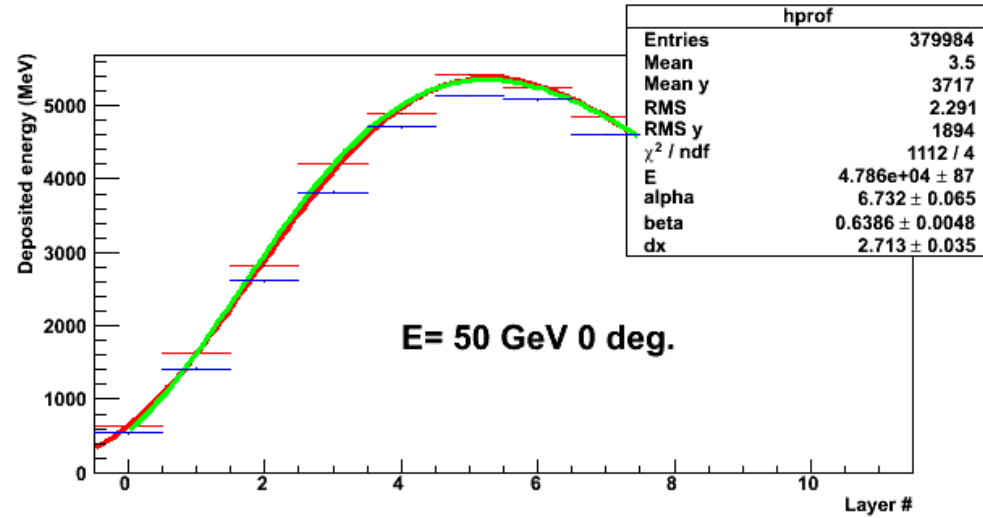


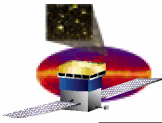


Longitudinal profiles

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Blue:MC

$\Delta X=1.45$

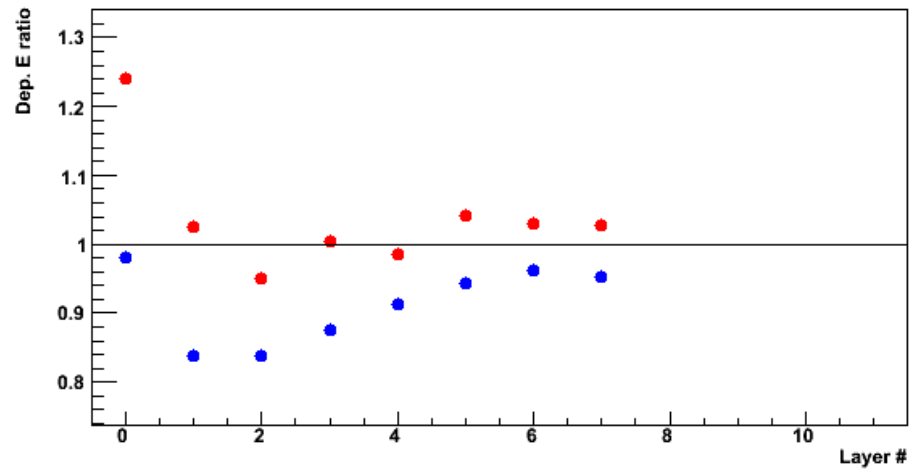
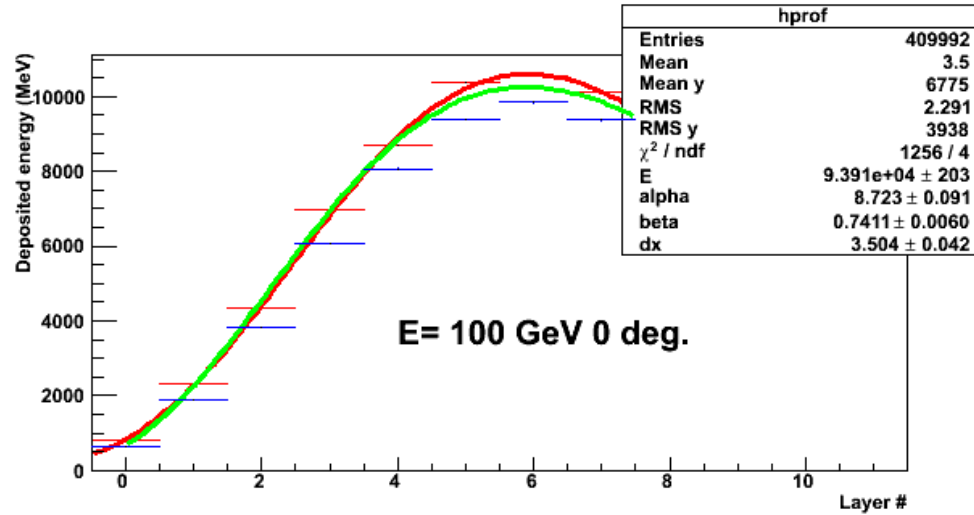


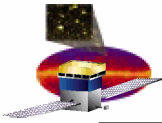


Longitudinal profiles

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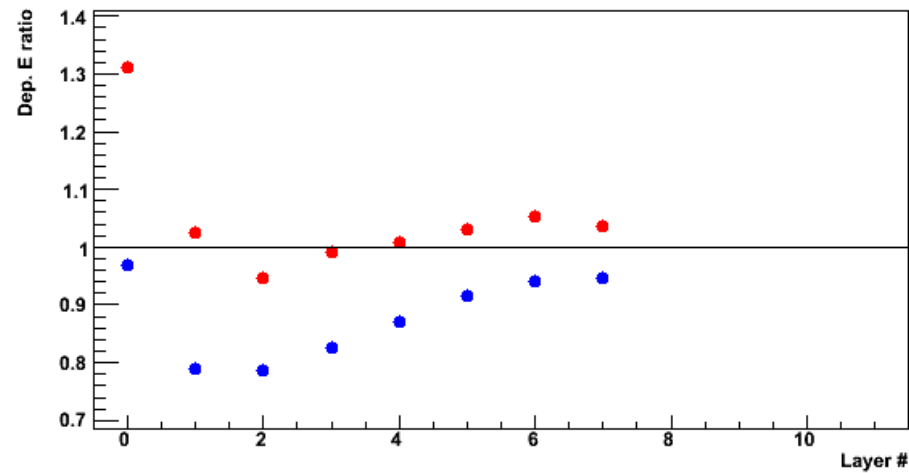
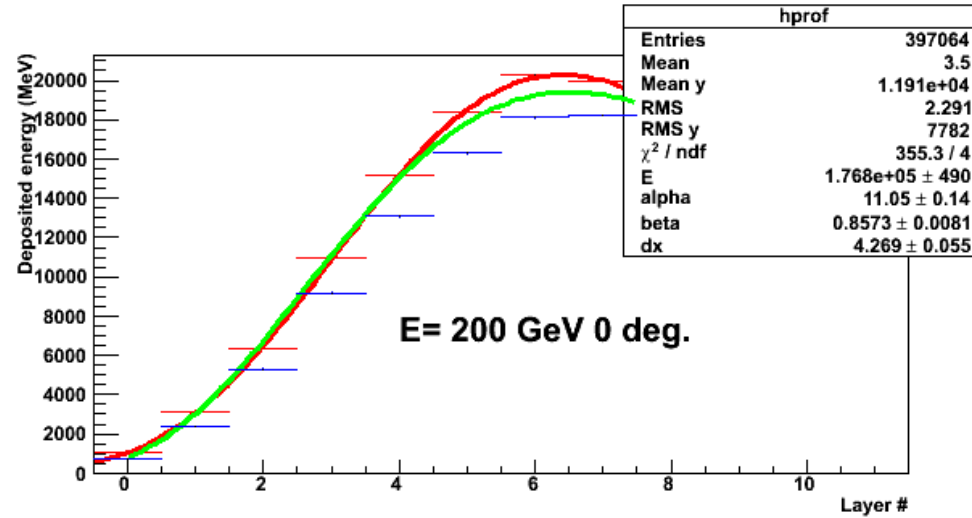


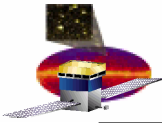


Longitudinal profiles

Red: data
Blue:MC

$\Delta X=1.45$





Longitudinal profiles

Red: data
Blue:MC

$\Delta X=1.45$

