

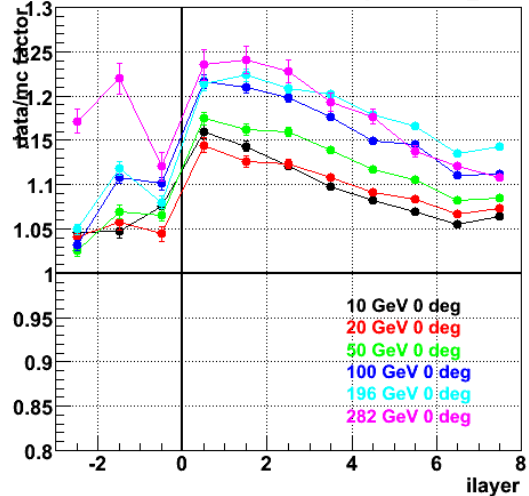


# Data/MC comparison (tracker and cal layers) for new LPM and extra X0

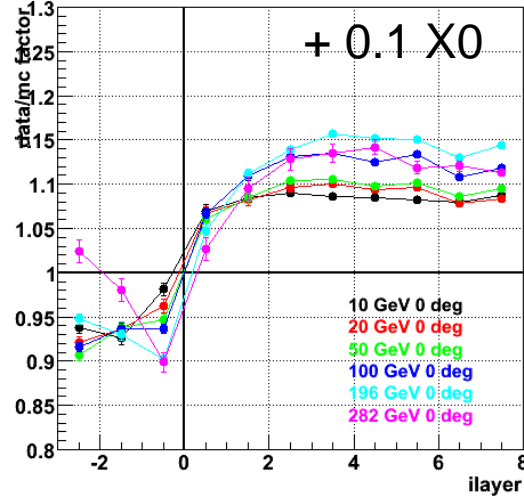
- Last data reprocessing :
  - recon-v2r71215p1
- Simulation
  - v9r1407p3L-QGSP\_BERT : new LPM
  - v9r1407p3L-QB\_010X0 : new LPM + 0.1 X0
  - v9r1407p3L-QB\_020X0 : new LPM + 0.2 X0
  - 10, 20, 50, 100, 196 and 282 GeV for 0, 10 deg
- Including also tracker comparison :
  - ilayer = -2.5 : TkrThinHits
  - ilayer = -1.5 : TkrThickHits
  - ilayer = -0.5 : TkrBlankHits

# Top : 0 deg - bottom : 10 deg

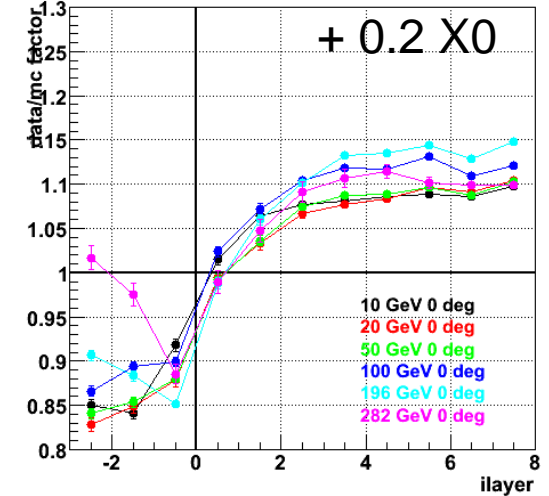
Tracker | Cal layers v9r1407p3L-QGSP\_BERT



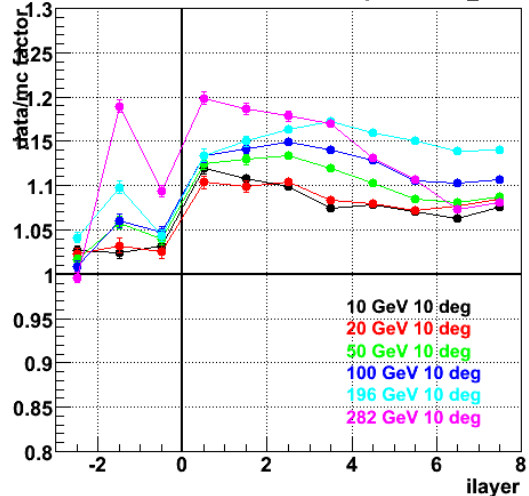
Tracker | Cal layers v9r1407p3L-QB\_010X0



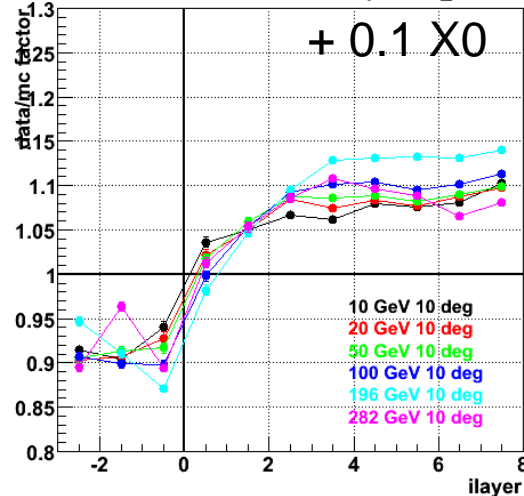
Tracker | Cal layers v9r1407p3L-QB\_020X0



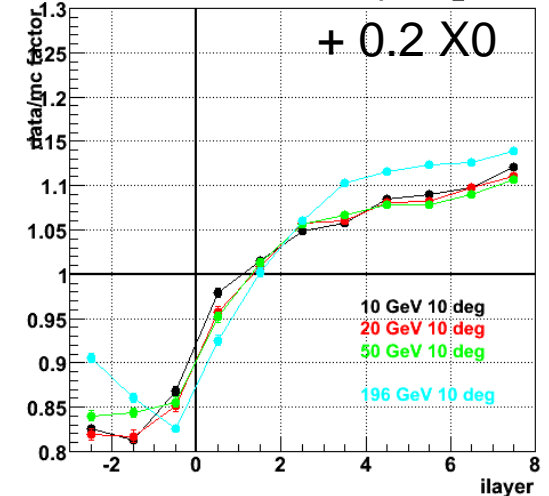
Tracker | Cal layers v9r1407p3L-QGSP\_BERT



Tracker | Cal layers v9r1407p3L-QB\_010X0



Tracker | Cal layers v9r1407p3L-QB\_020X0



# Conclusions

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- The results are nicer with extra material full simulation
- The optimal extra  $X_0$  seems to be between 0.05 and 0.1  $X_0$
- It seems that 0 and 10 deg favor the same optimal extra  $X_0$  (that's really nice !)
- The global scaling factor seems to be  $\sim +10\%$