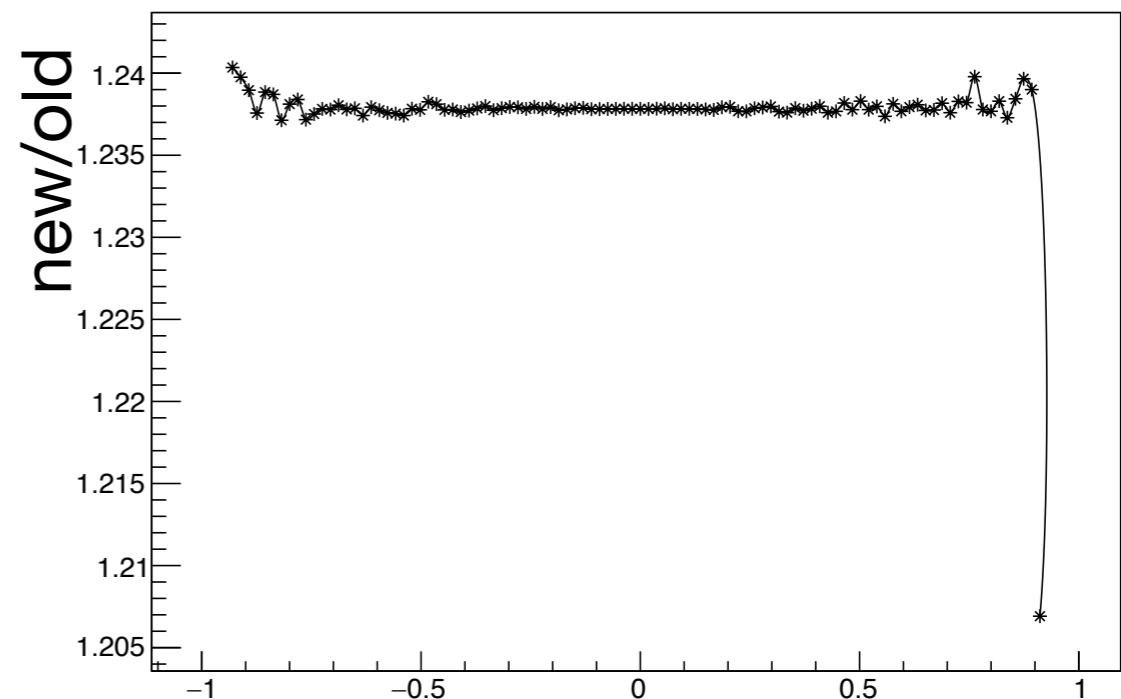
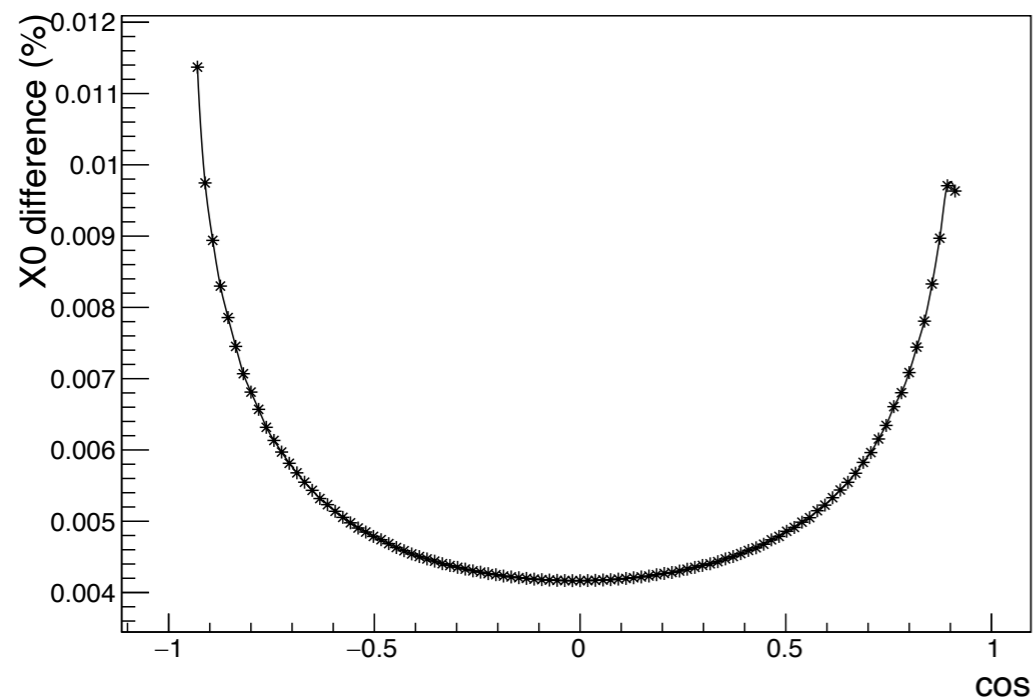


Checks on CGEM material budget

X_0 difference between old and new CGEM geometry

Difference in the barrel region

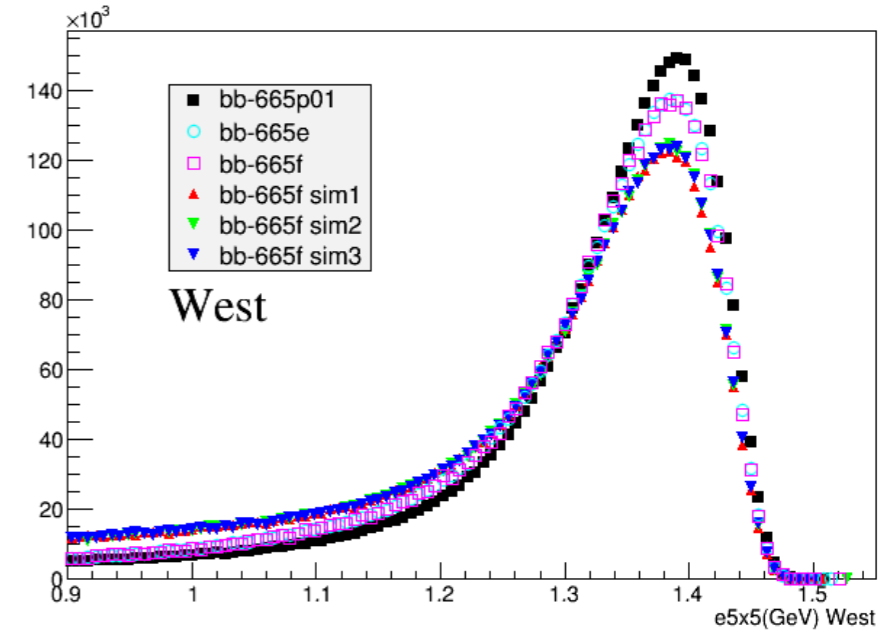
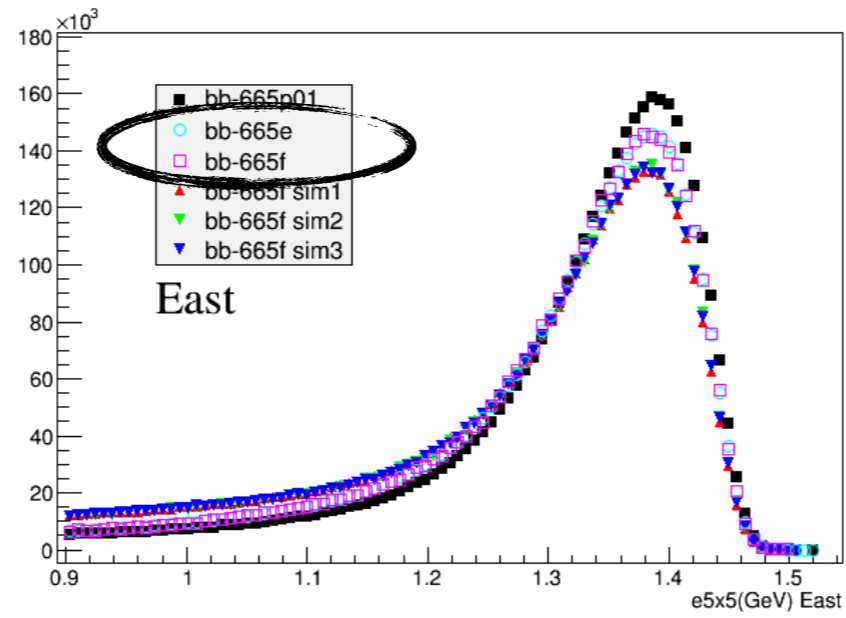
BETWEEN OLD AND NEW CGEM GEOMETRY CONFIGURATION



Effect more evident in the endcap regions: more material budget crossed

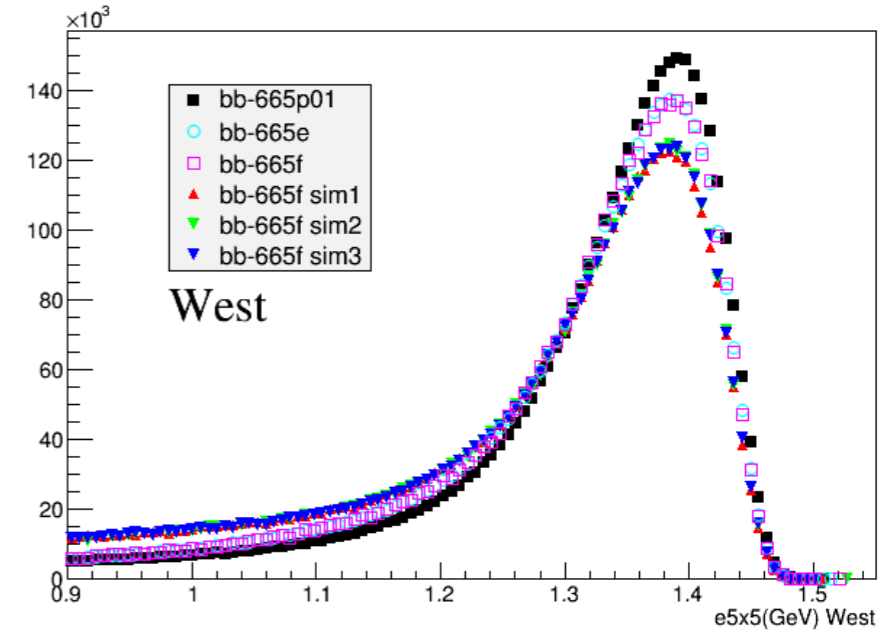
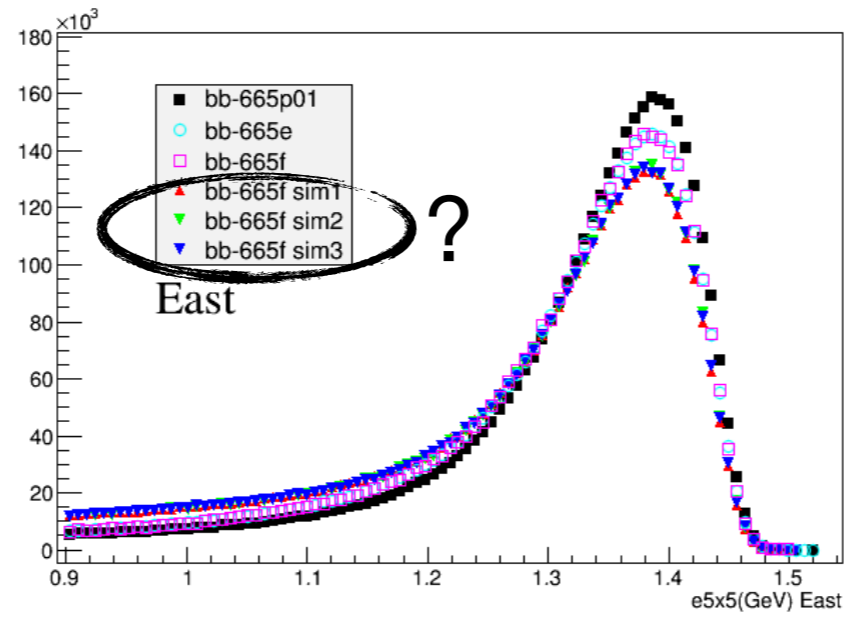
Additional checks

Difference only in
the passive
material



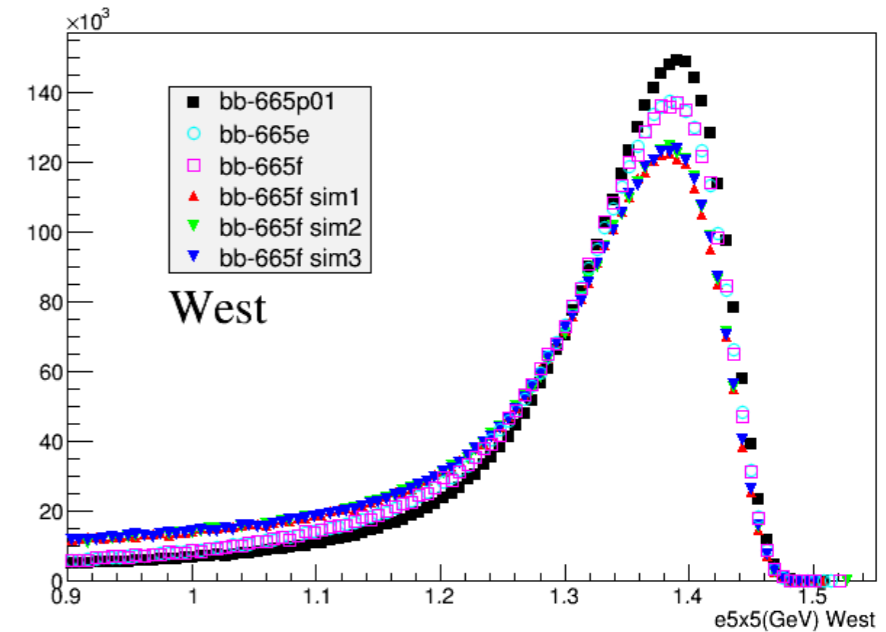
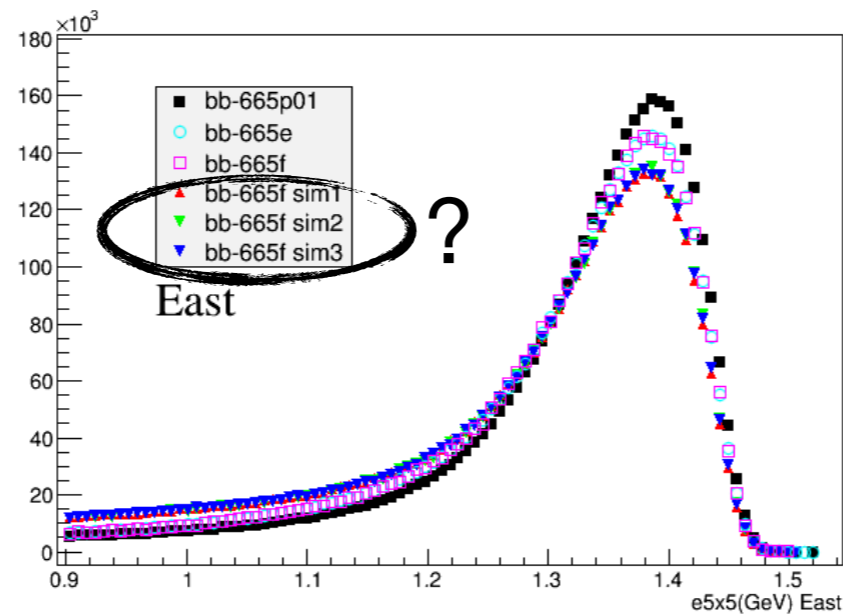
Additional checks

There is still something not clear



Additional checks

There is still something not clear



Single particle simulation

- 20000 e⁻ with p=1.5 GeV/c
- 20000 e⁺ with p=1.5 GeV/c
- Three different configurations
 - ❖ NO CGEM
 - ❖ Old CGEM geometry (L1=L2=L3; cgemboss665f) □
 - ❖ New CGEM geometry (almost the final one) ▲

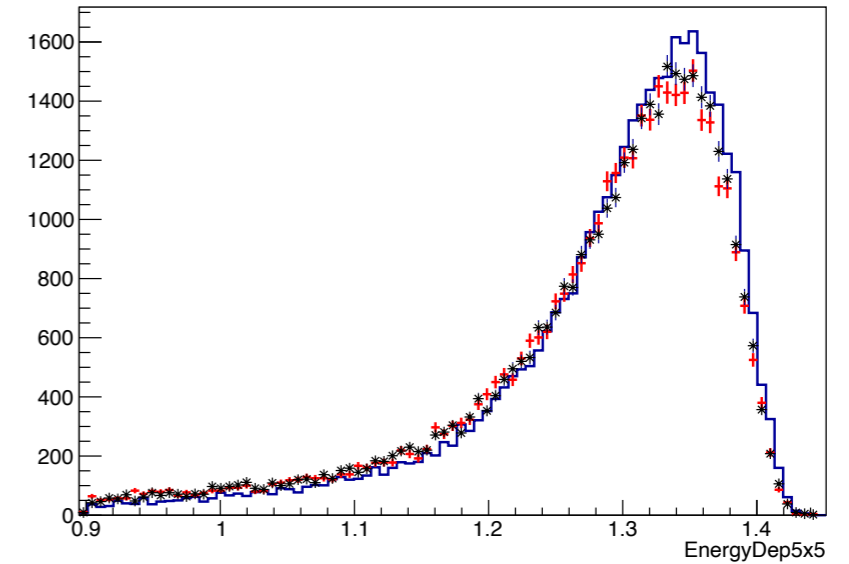
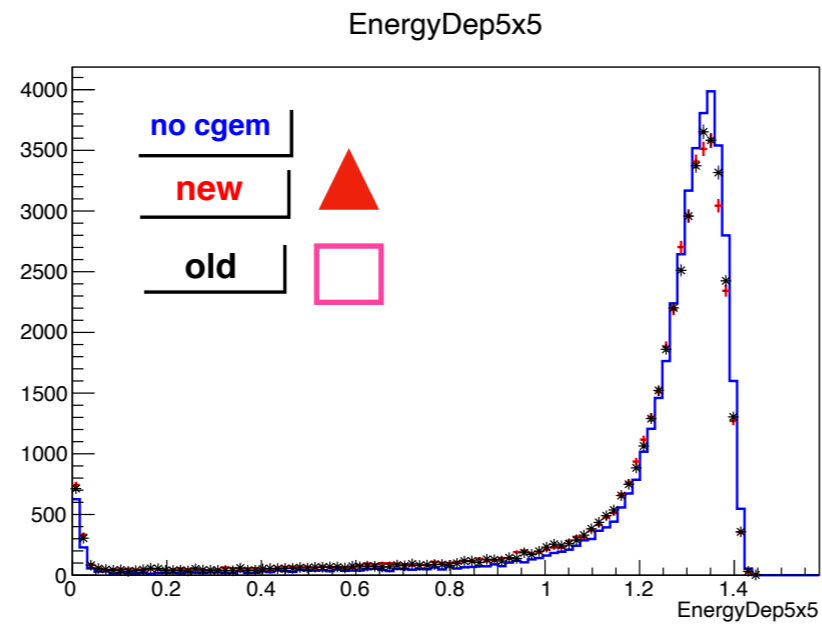
$X_0 = 1.44\%$

$X_0 = 1.8\%$

Additional checks: results

No difference observed in the barrel region, as expected

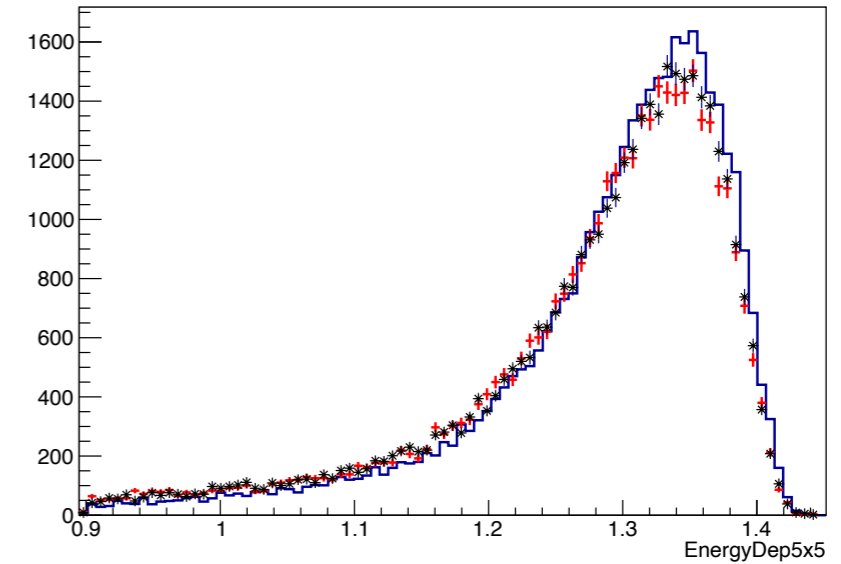
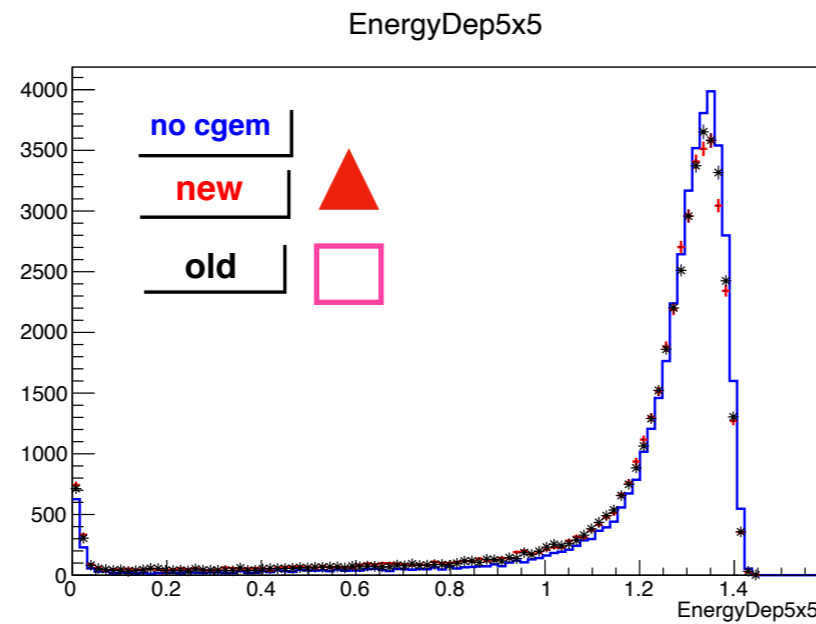
e- simulated
uniformly within:
 $0.85 < \cos\theta < 0.93$



Additional checks: results

No difference observed in the barrel region, as expected

e- simulated
uniformly within:
 $0.85 < \cos\theta < 0.93$



but BhaBha angular distribution is $\propto (1 + \cos^2\theta)$ the c.m.

e- simulated
uniformly within:
 $0.925 < \cos\theta < 0.93$

