

System Tests Report – Dec 20

Engineering Model – added a system test to look at Tower A data.

v5r0p1: Processing time decreased by a factor of three. (G4 now built with optimisation).

Decrease in the number of position hits.

Change in the distribution of particle types producing pos. hits.

Increase in the energy of position hits.

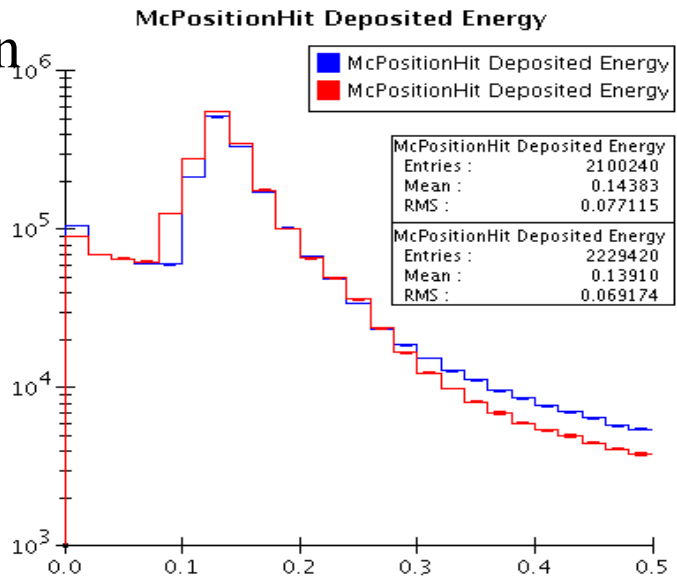
Increase in the Kalman energy for muon and proton tracks.

Increase in the number of low energy integrating hits for protons.

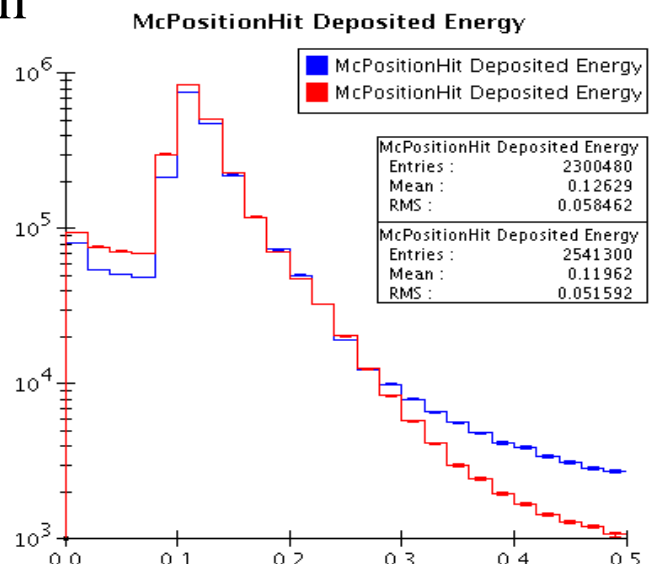
v5r0p2: Should be identical to v5r0p1, switch added to allow use of the G4 v5.2 EM processes. There are no significant differences between this and v5r0p1, but I do not understand why some of the muon and proton distributions are not identical.

Position Hits

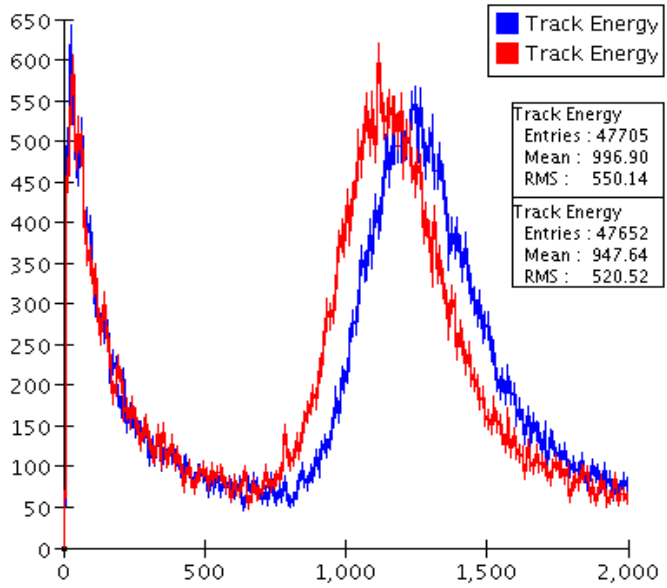
Proton



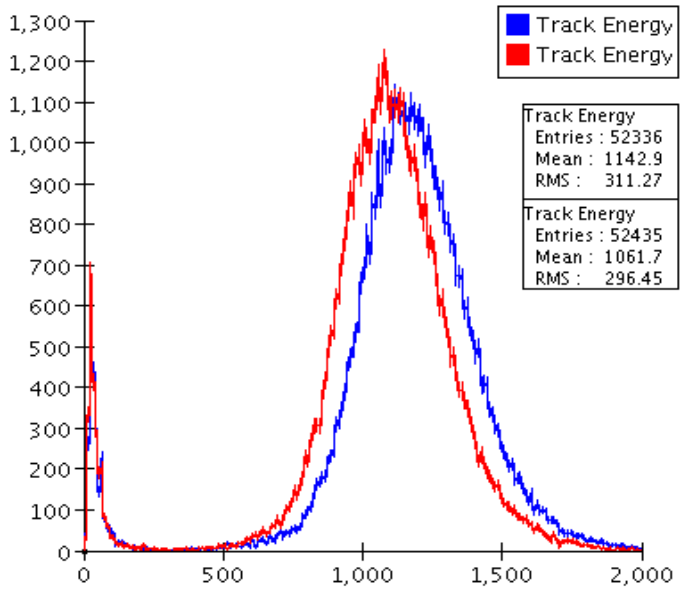
Muon



Track Energy

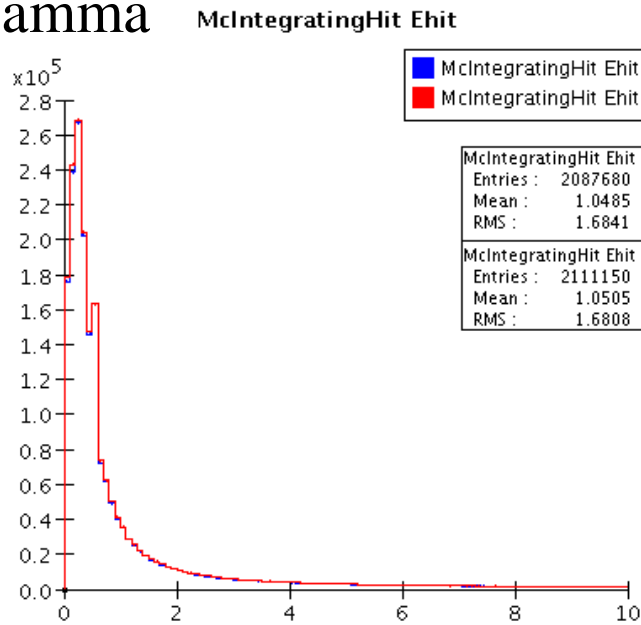


Track Energy

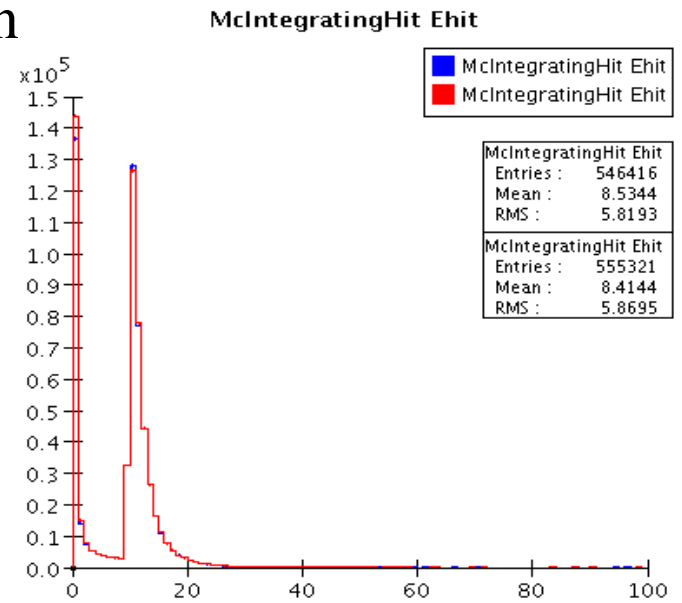


Integrating Hits

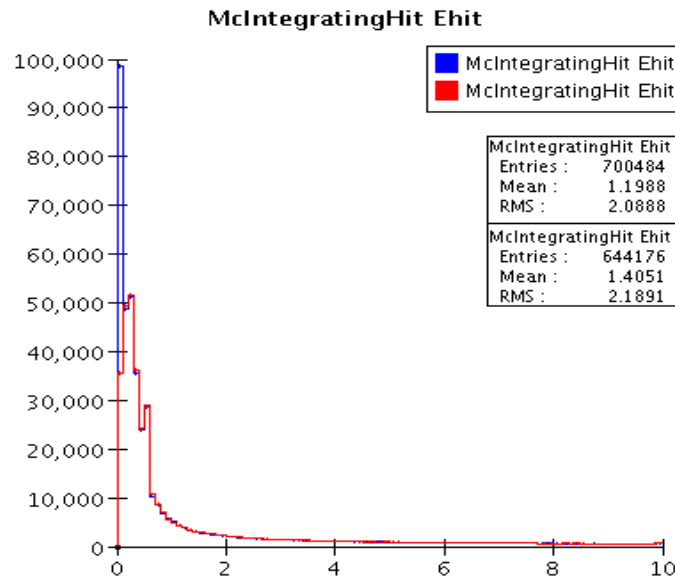
1 GeV gamma



1 GeV muon



1 GeV proton



No noticeable change in CalDigi distributions.