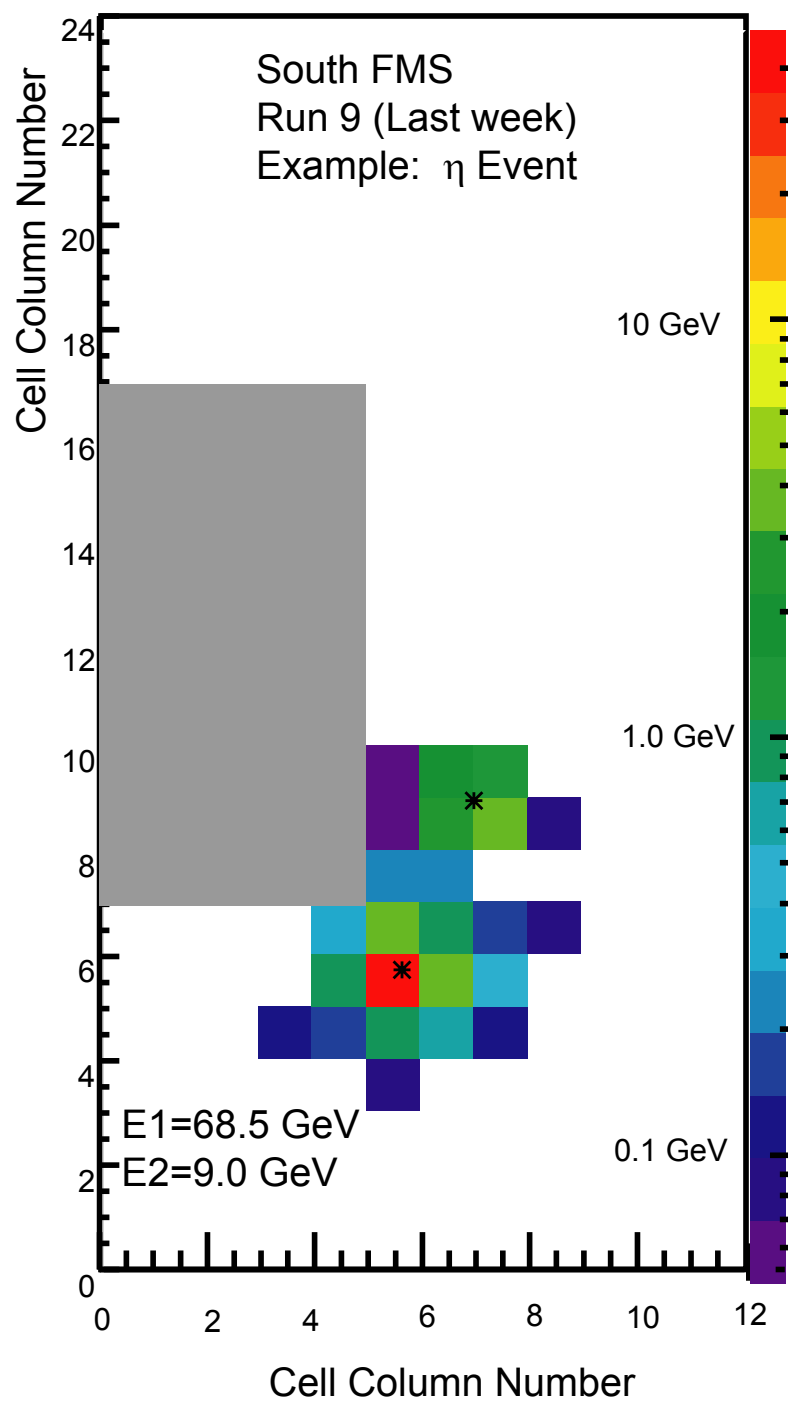
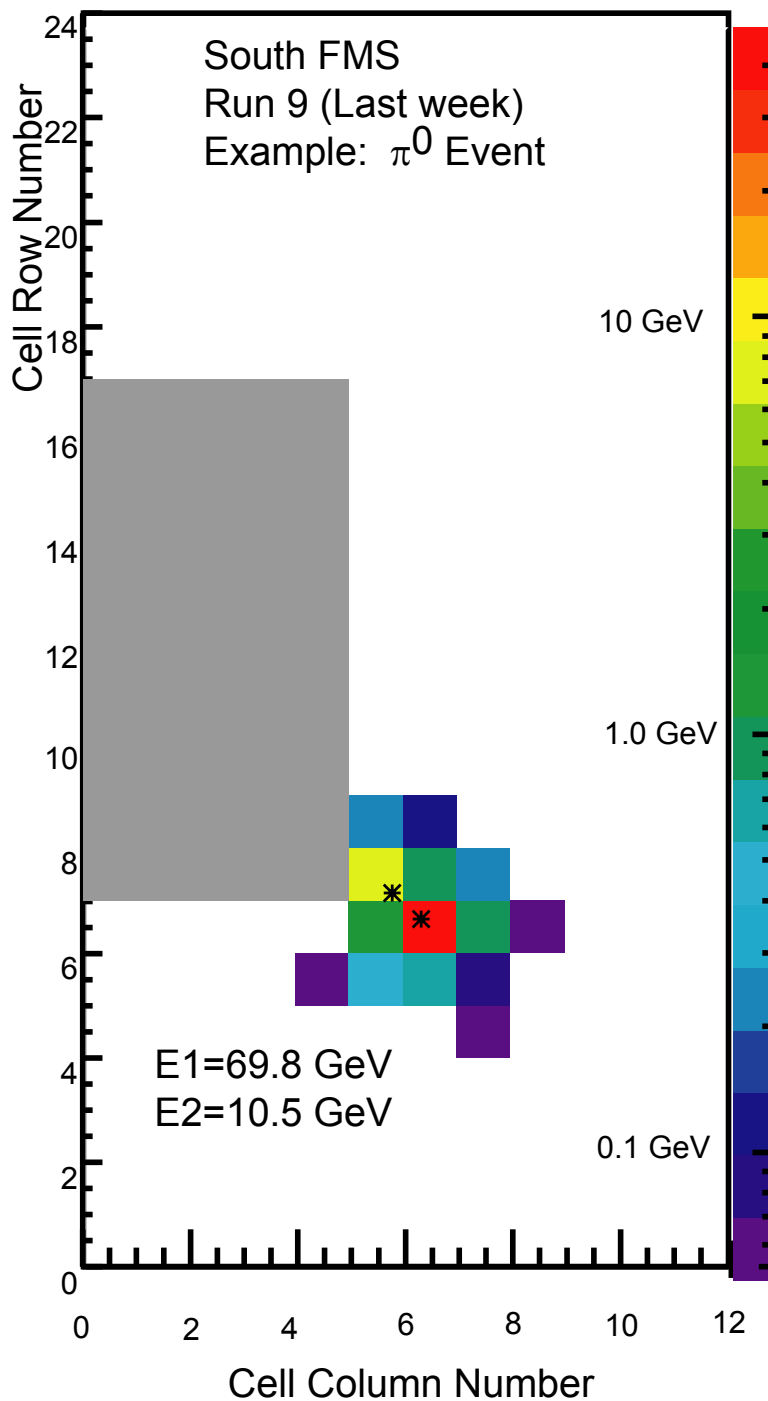
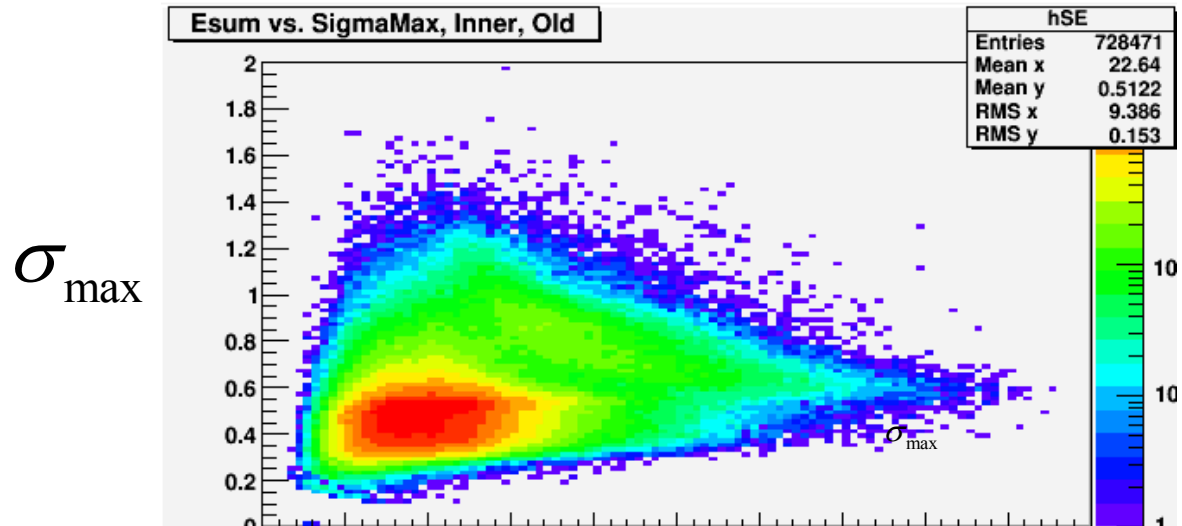


Two Photon Mass Distributions  
 FMS Small Cells  
 Data From Last Week of Run 9 (Preliminary Calibration)

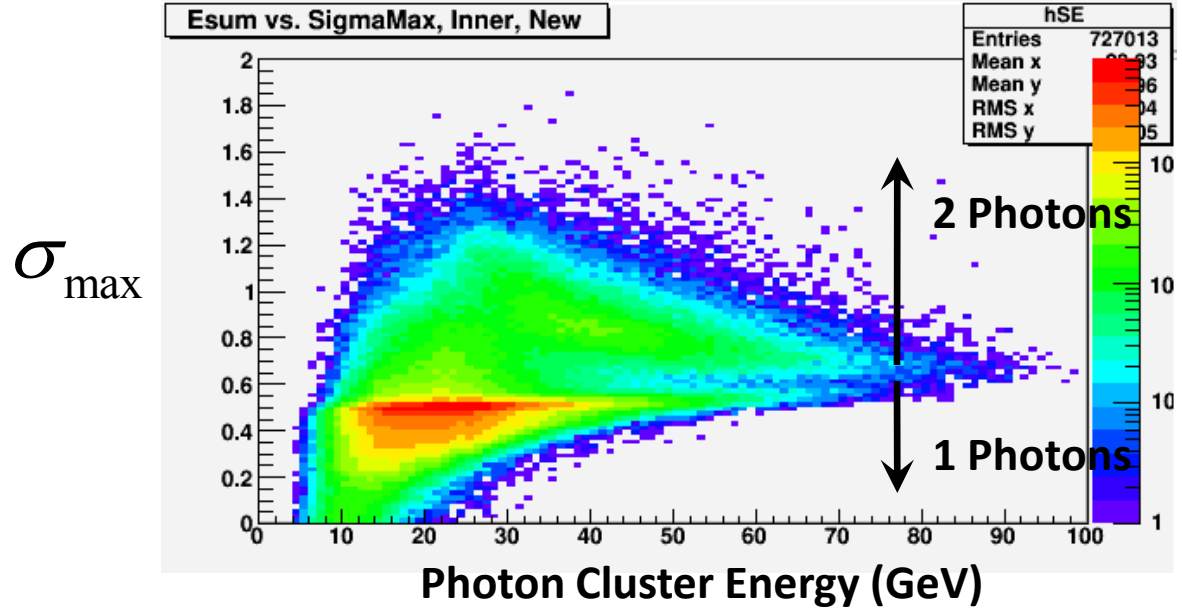


Separation of single photon cluster from two photon cluster based upon distribution of shower energy along a preferred axis.

$$\sigma_{\max} \equiv \text{Max Eigenvalue of } \begin{bmatrix} \Delta\sigma_x^2 & \Delta\sigma_x\Delta\sigma_y \\ \Delta\sigma_y\Delta\sigma_x & \Delta\sigma_y^2 \end{bmatrix}$$



Old algorithm with Energy weighted moments



Improved algorithm with log energy weighted moments.

Provides clearer separation Between  $\pi^0$  and single photon. Clusters up to  $\sim 80$  GeV.