

# **More on Cluster Widths**

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Beamtest VRVS Meeting

# Runs and Cuts

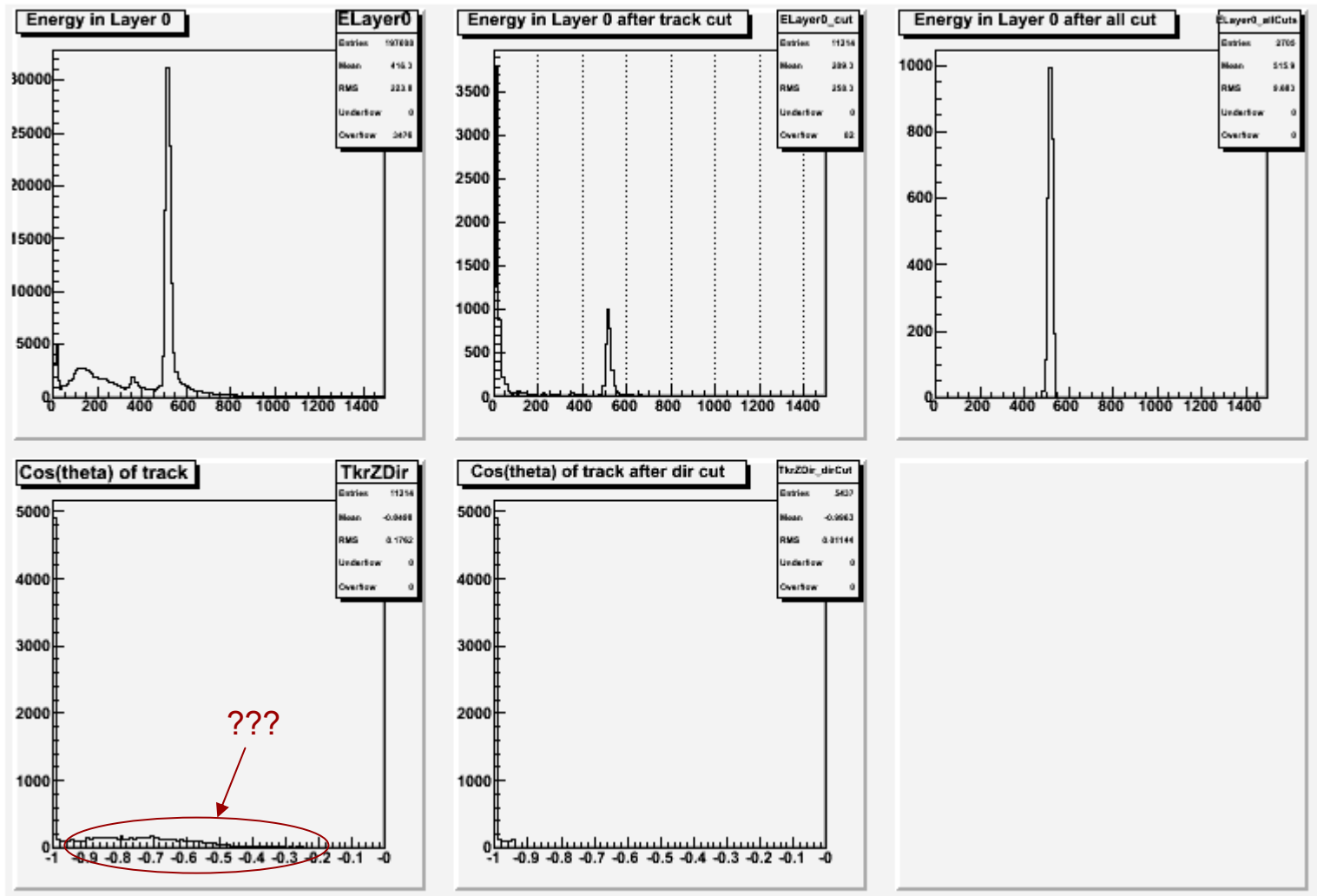
- Carbon Runs

- 2572 (0°), 2540 (30°), 2552 (60°)
- recon.root files

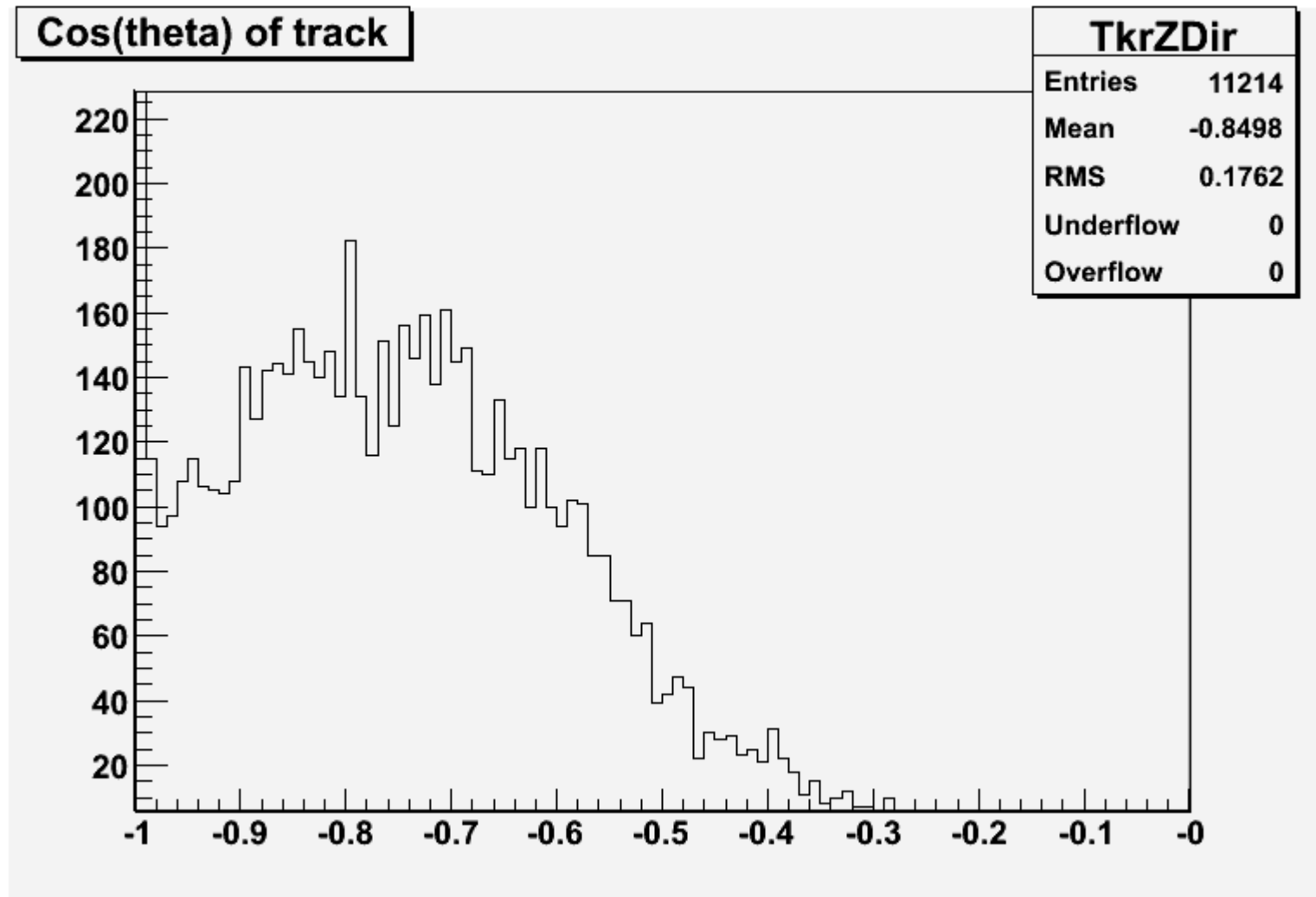
- Cuts

- not random trigger
- 1 track
- 36 hits (24 for 60° run)
- $\cos(\theta)$  in band around correct direction
- Cal layer-0 energy in band around expected energy

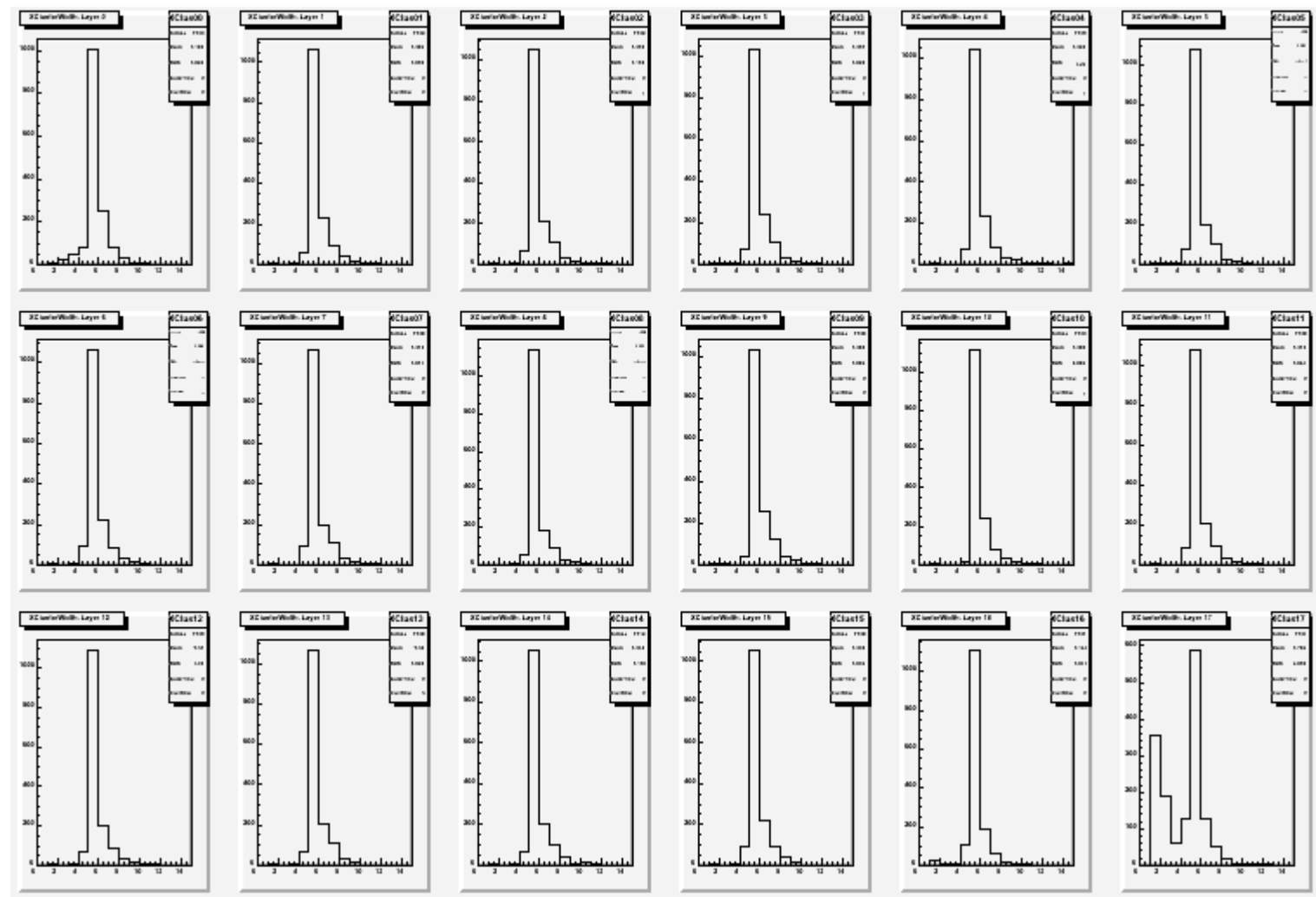
# Results of Cuts, 0° Run



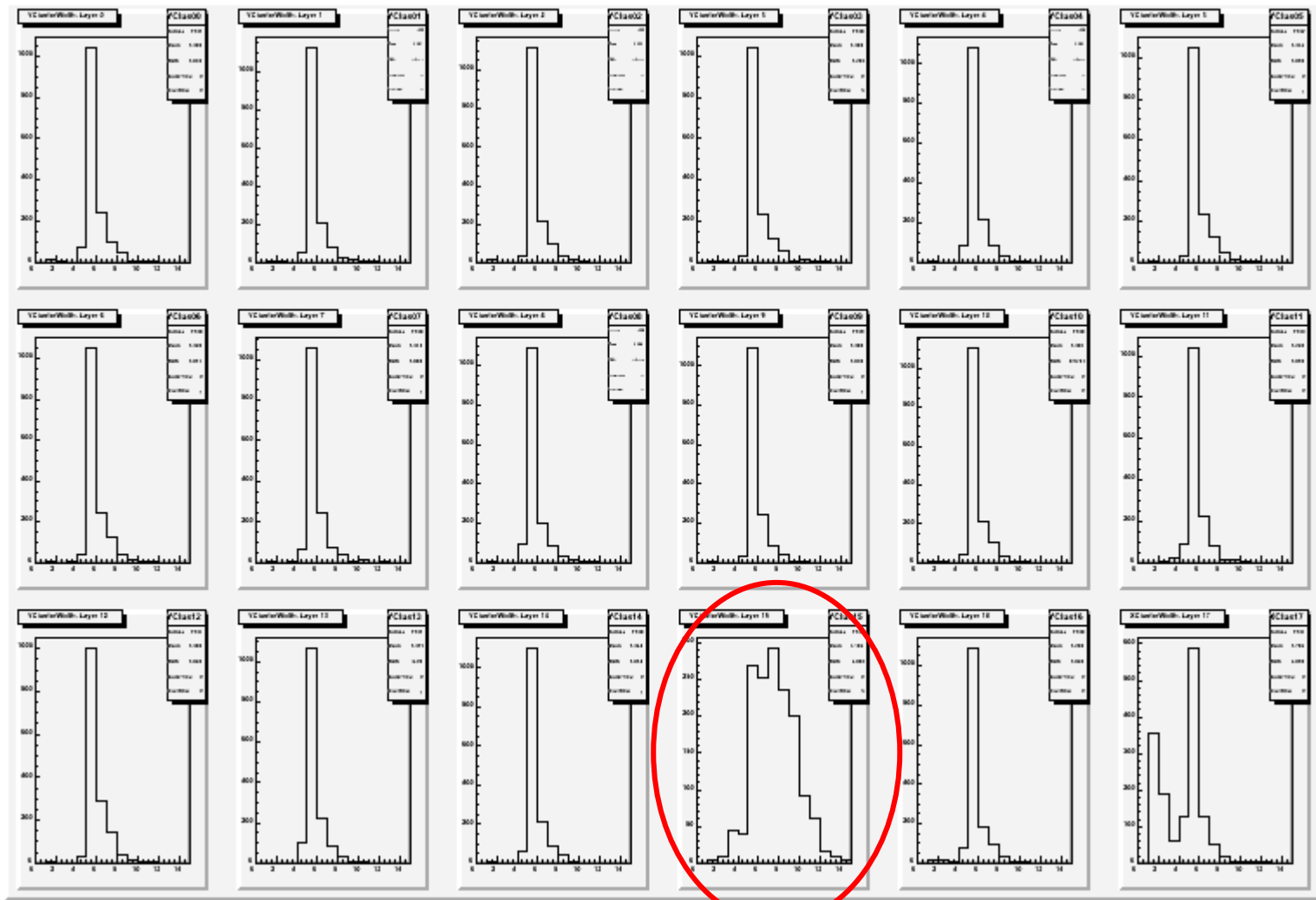
# A Closer Look that the Off-Angle Events



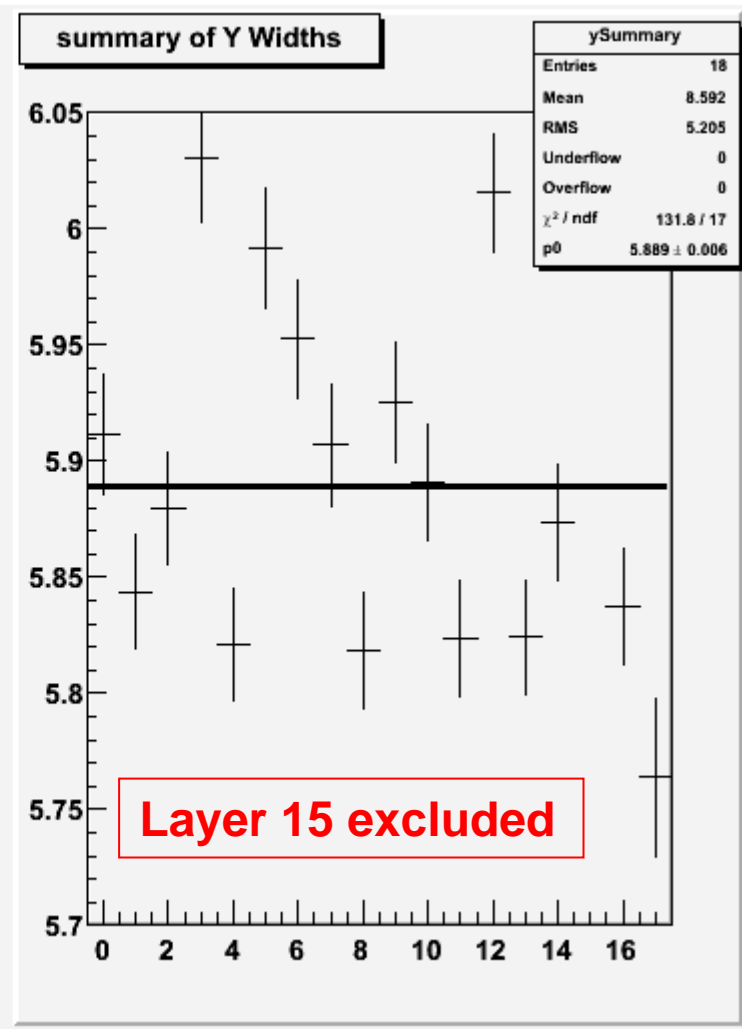
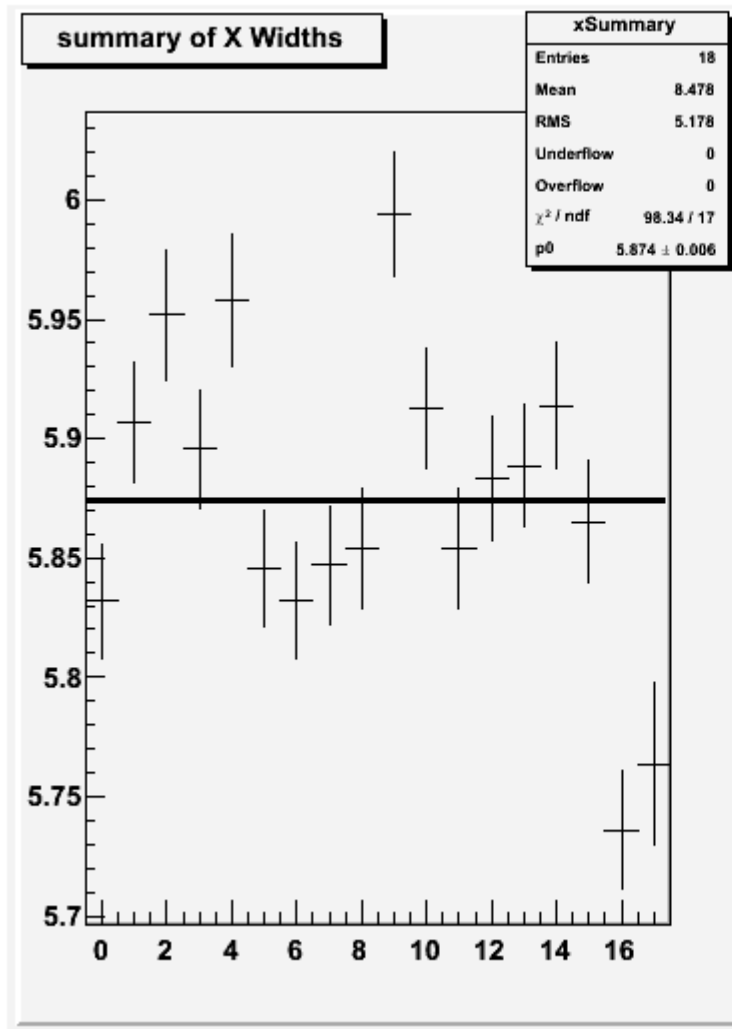
# Width of Clusters for all X Layers



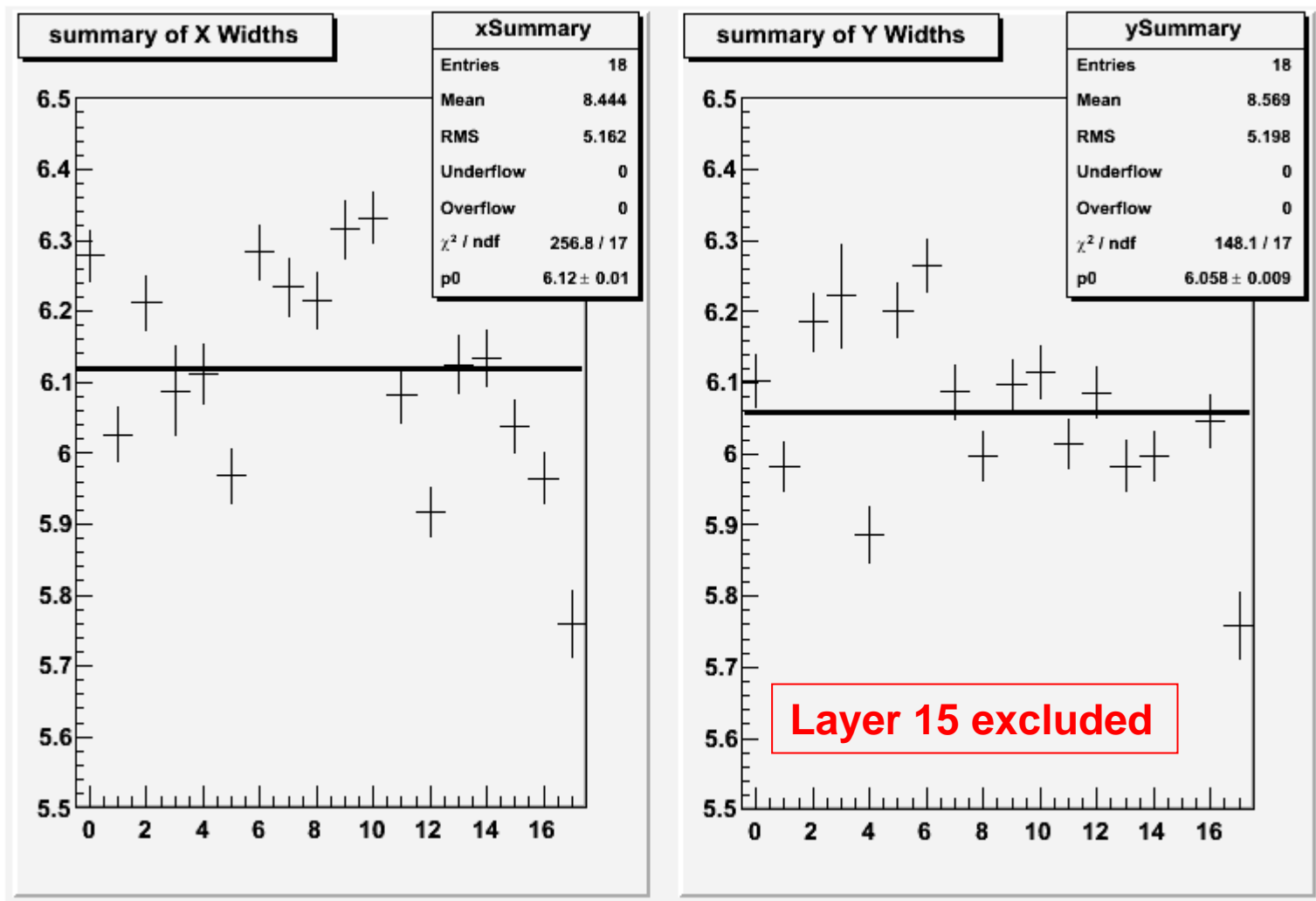
# Width of Clusters for all Y Layers



# Summary of Widths, 0° Run

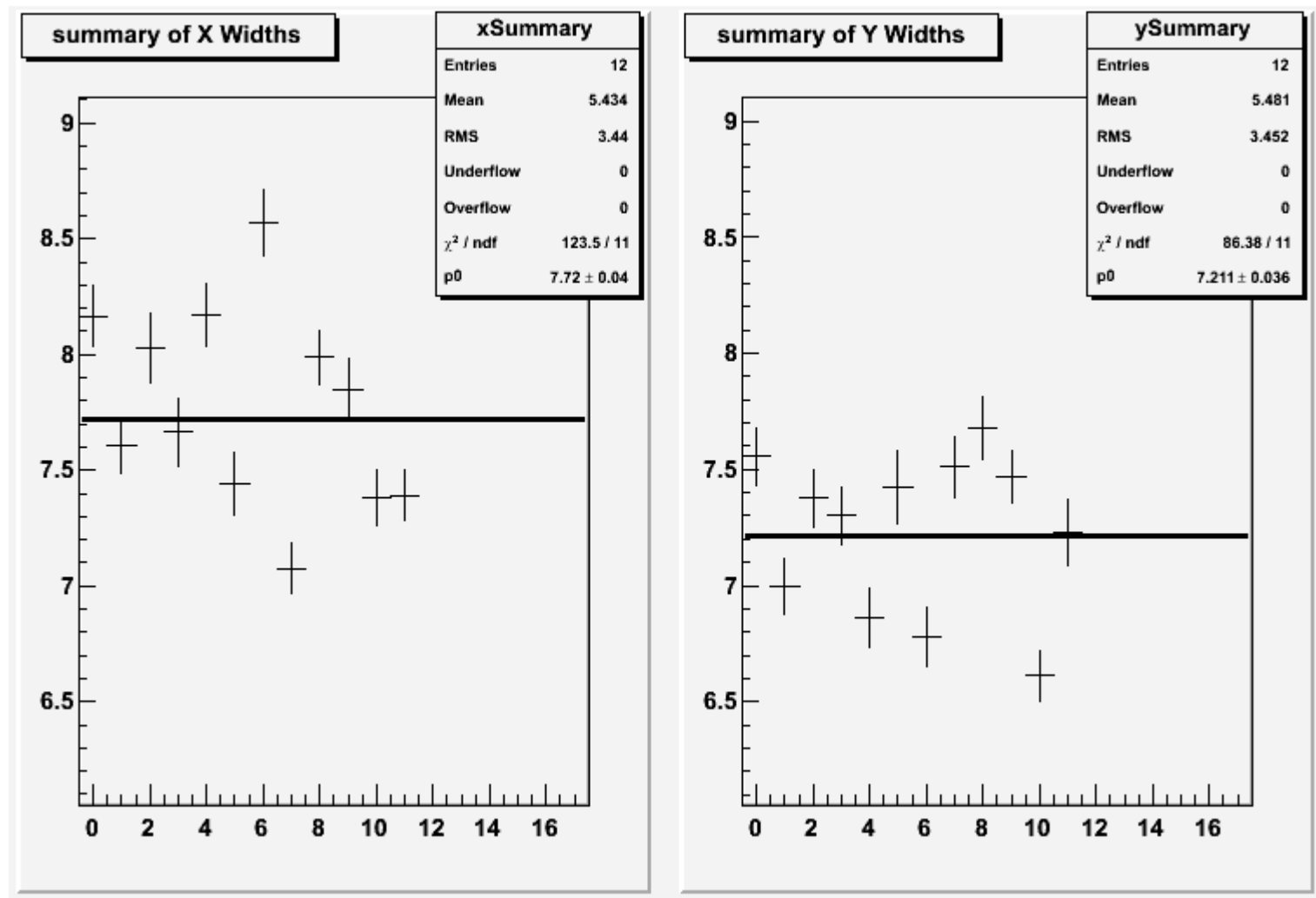


# Summary of Widths, 30° Run



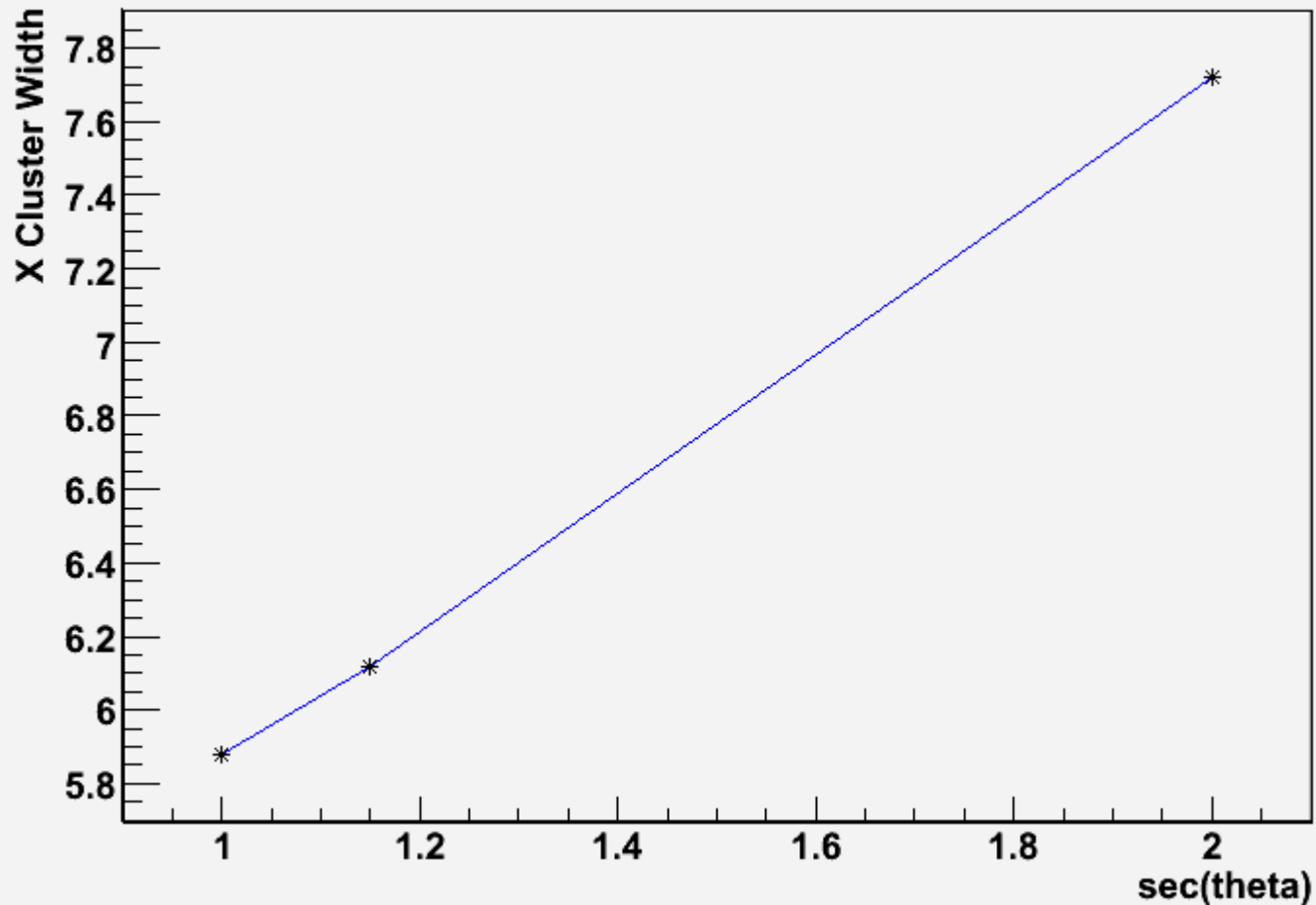


# Summary of Widths, 60° Run



# X Cluster Width vs Angle

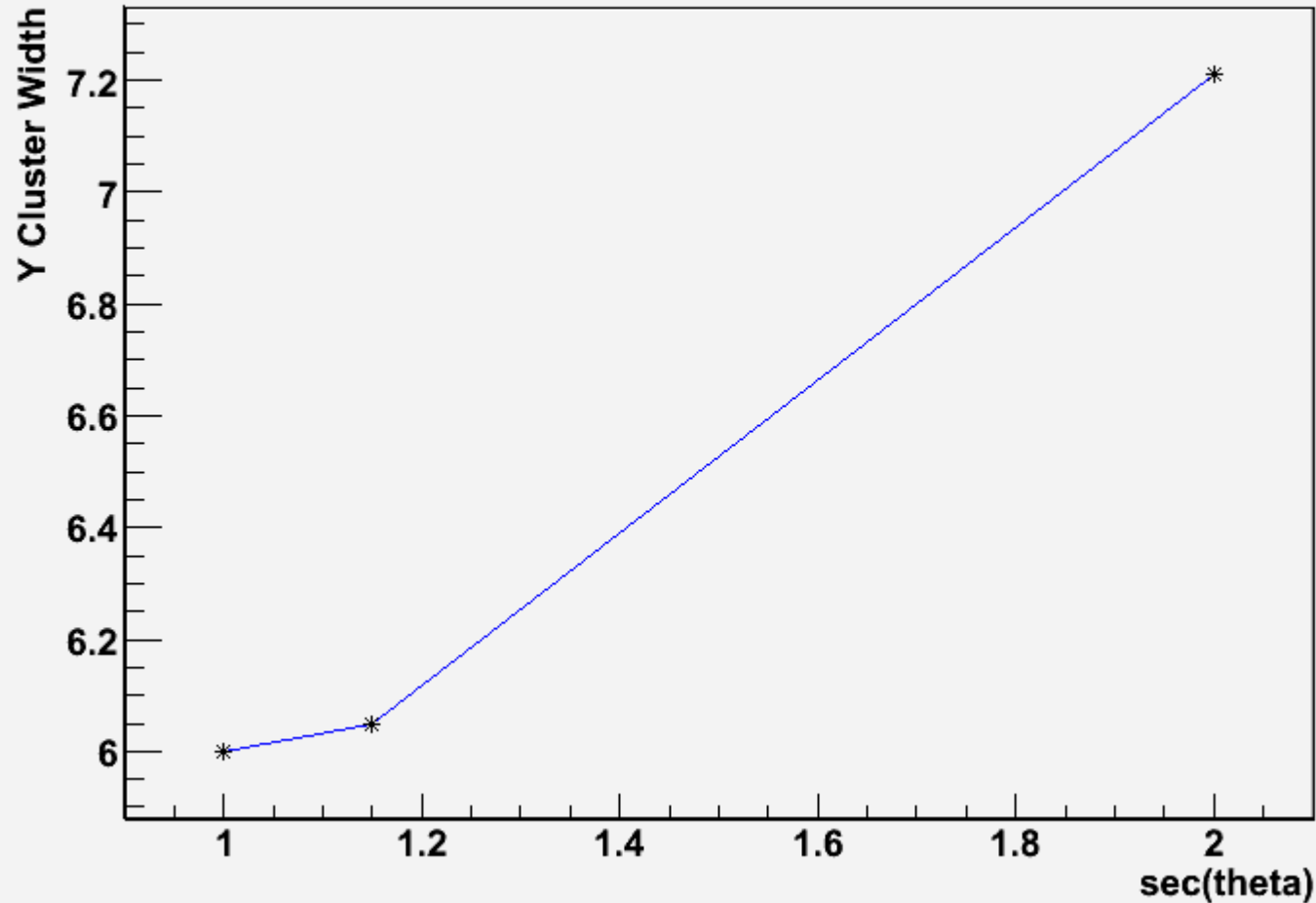
X Cluster Width vs  $\sec(\theta)$



Along x, energy deposit is in one strip and proportional to  $\sec(\theta)$

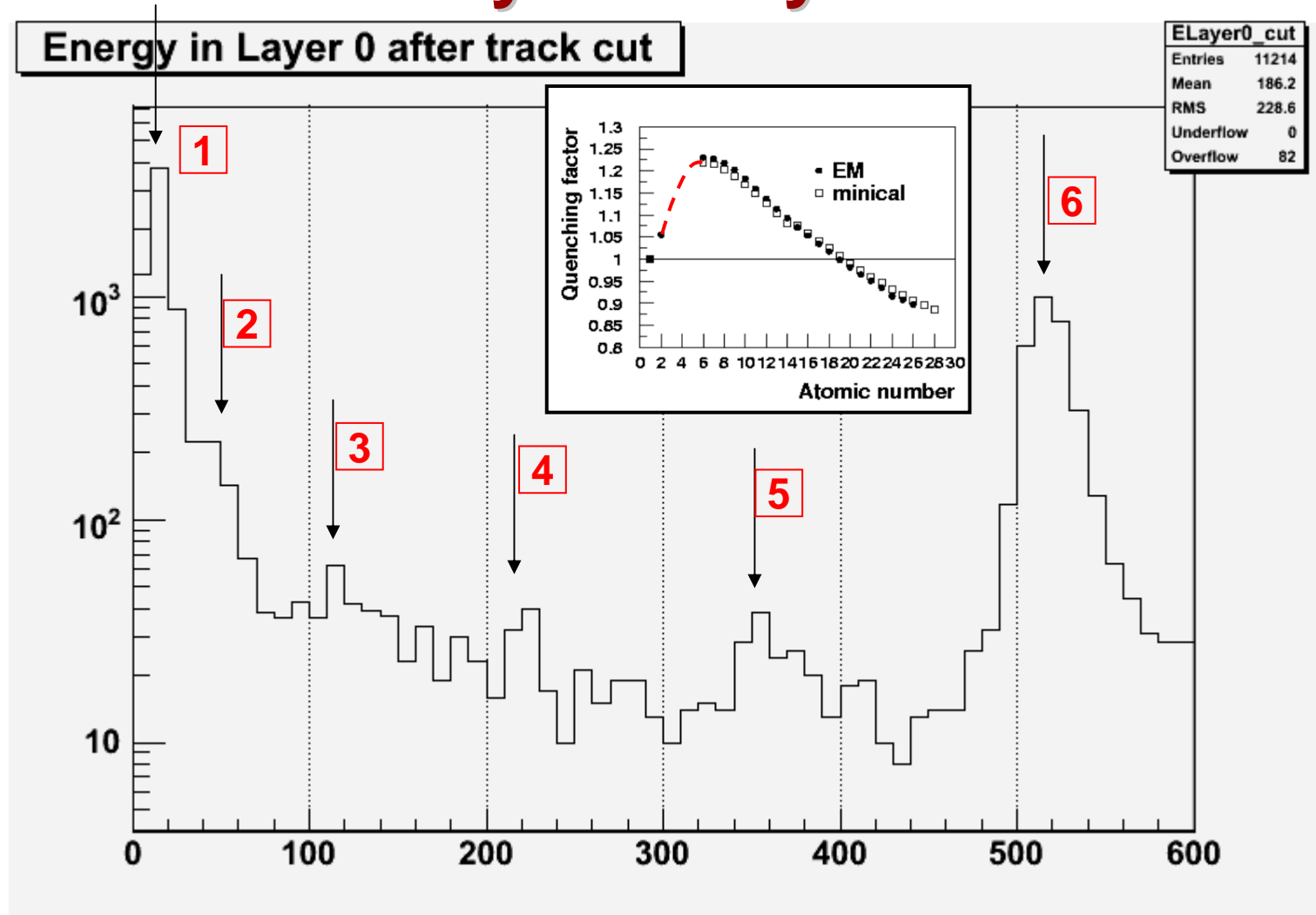
# Y Cluster Width vs Angle

Y Cluster Width vs  $\sec(\theta)$



Along  $y$ , energy deposit can be in several strips;  
dependence is more complicated.

# By the way...



Arrows show expected energy deposit for an ion of the indicated charge. (anti-quenching included)