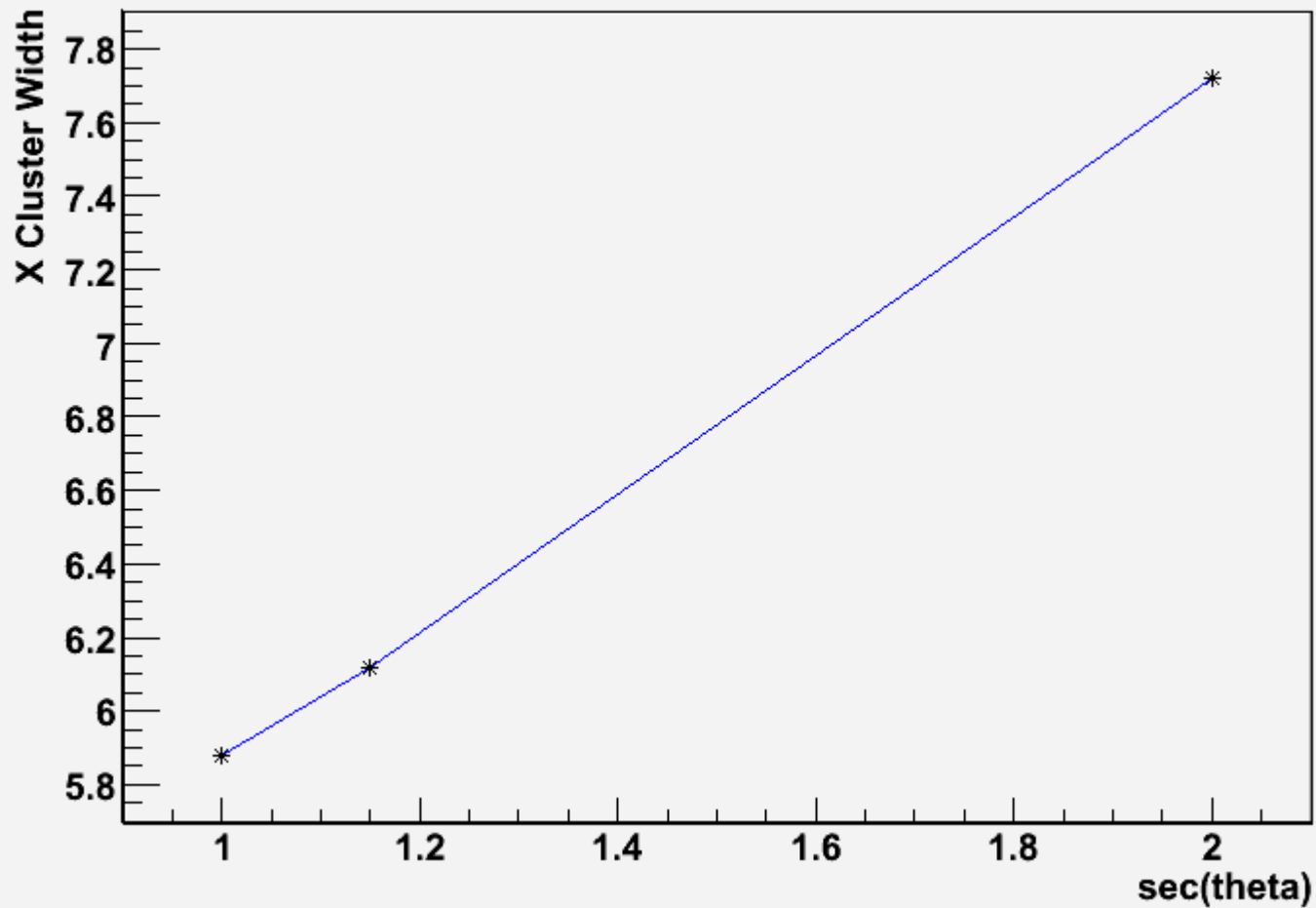


Some progress on Cluster Widths

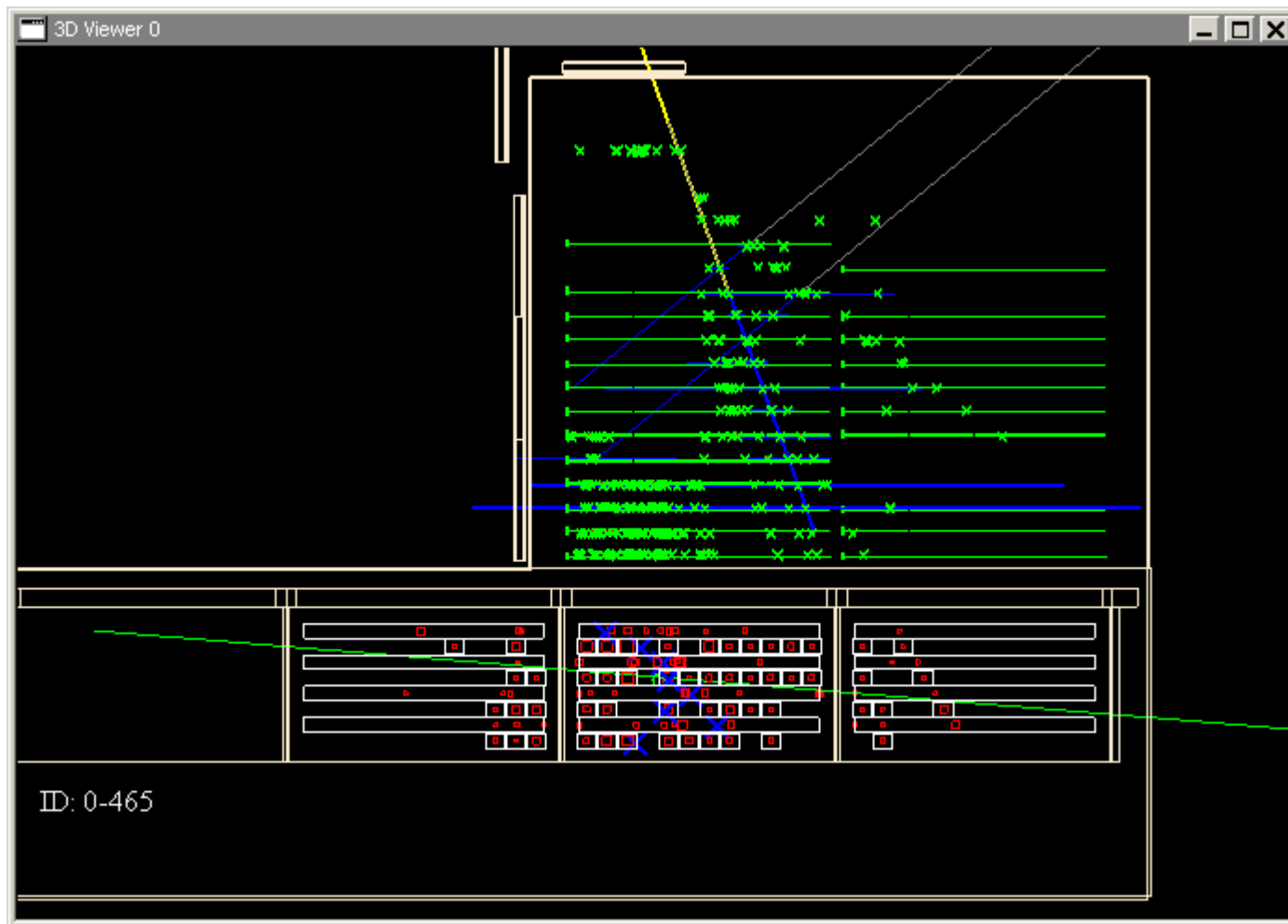
Leon R.
BT Meeting
9 Feb 2007

Previous Plot

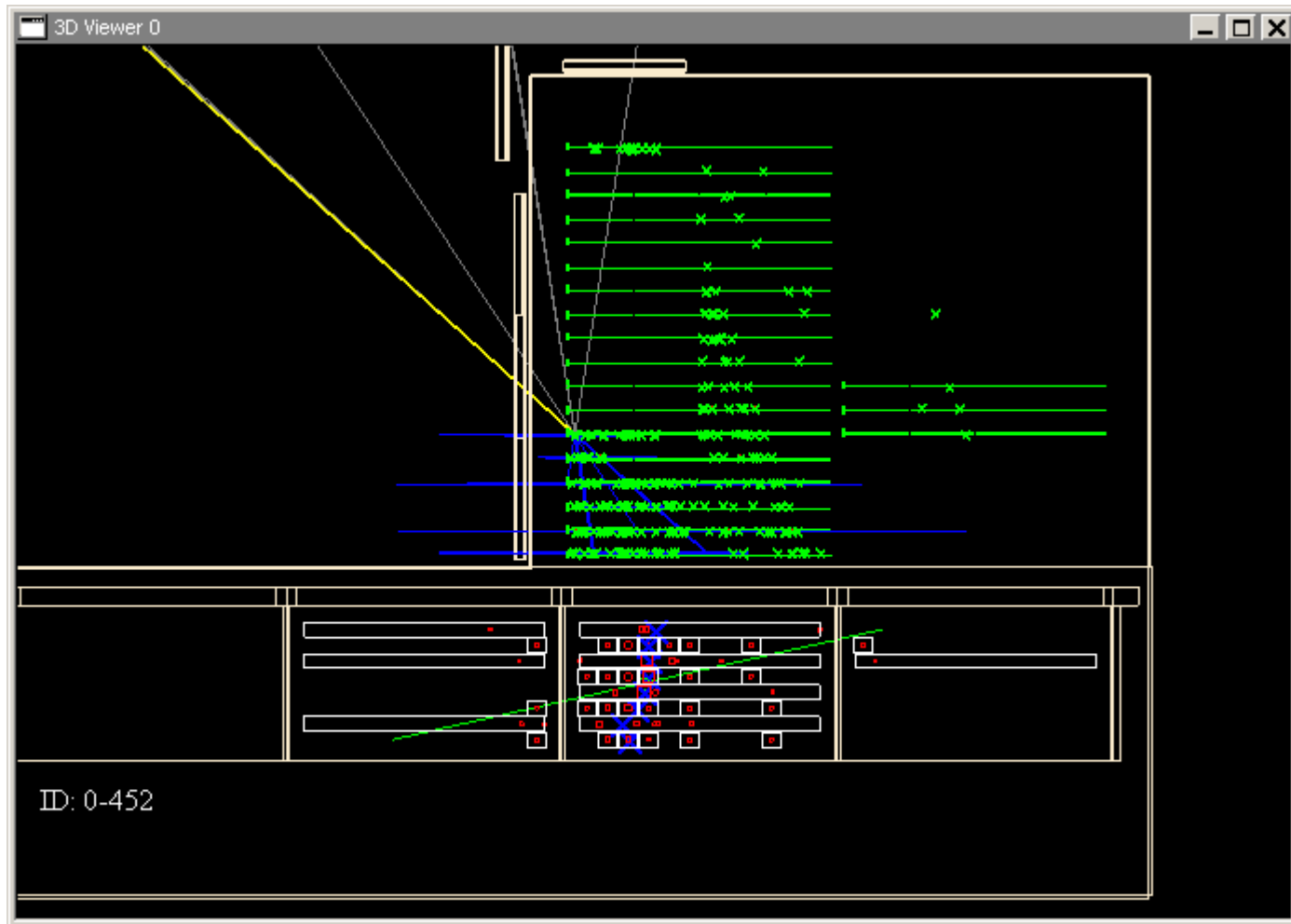
X Cluster Width vs $\sec(\theta)$



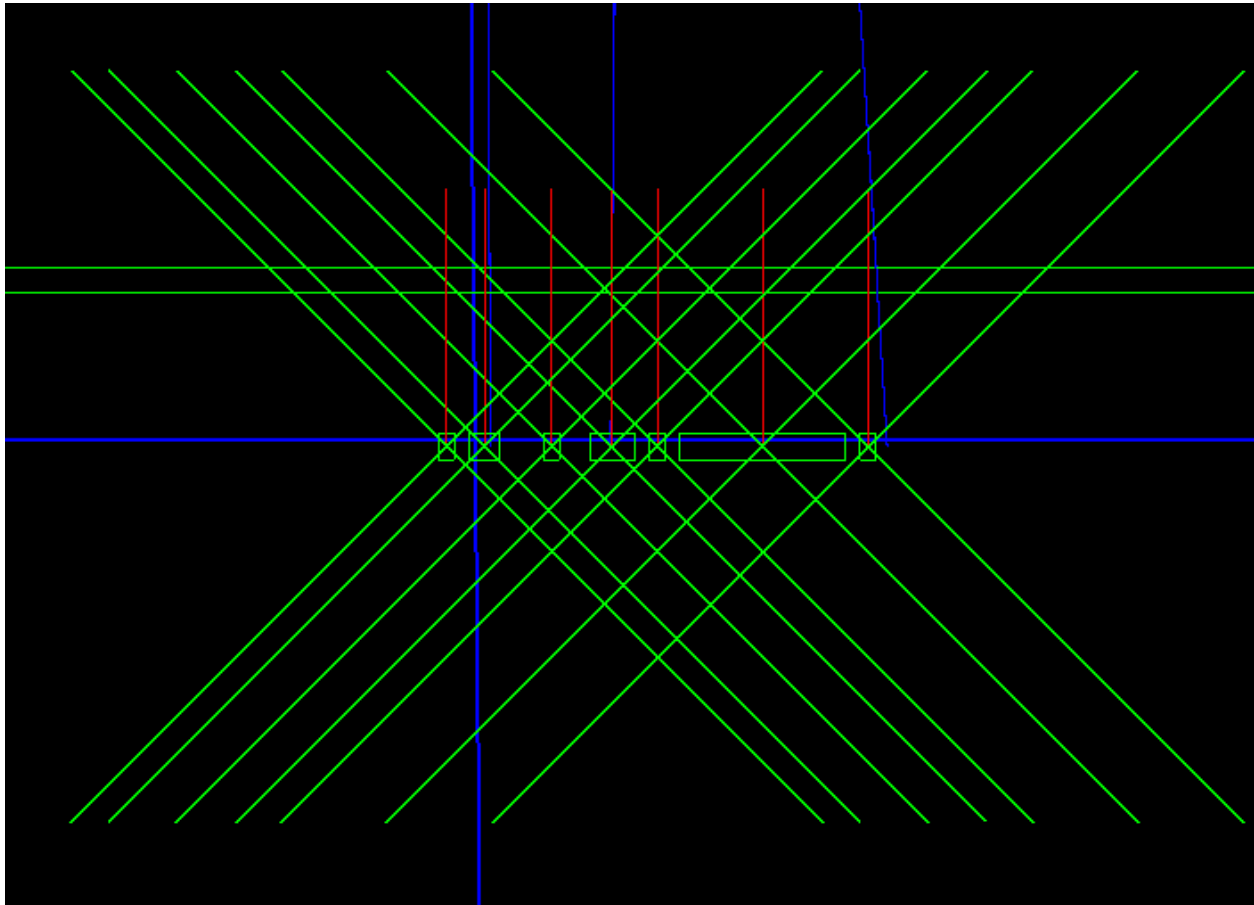
A Xenon Event



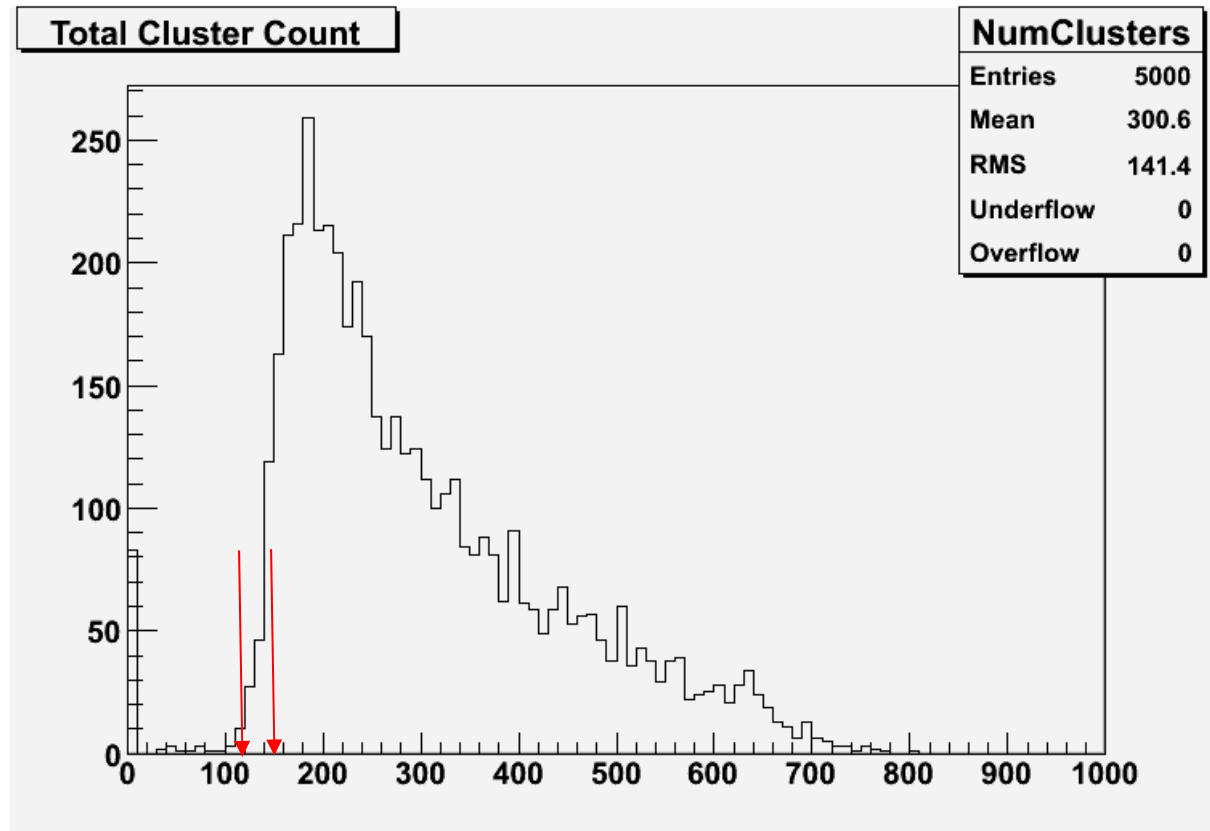
Another Xenon Event



Wide Cluster



First Look at Xenon

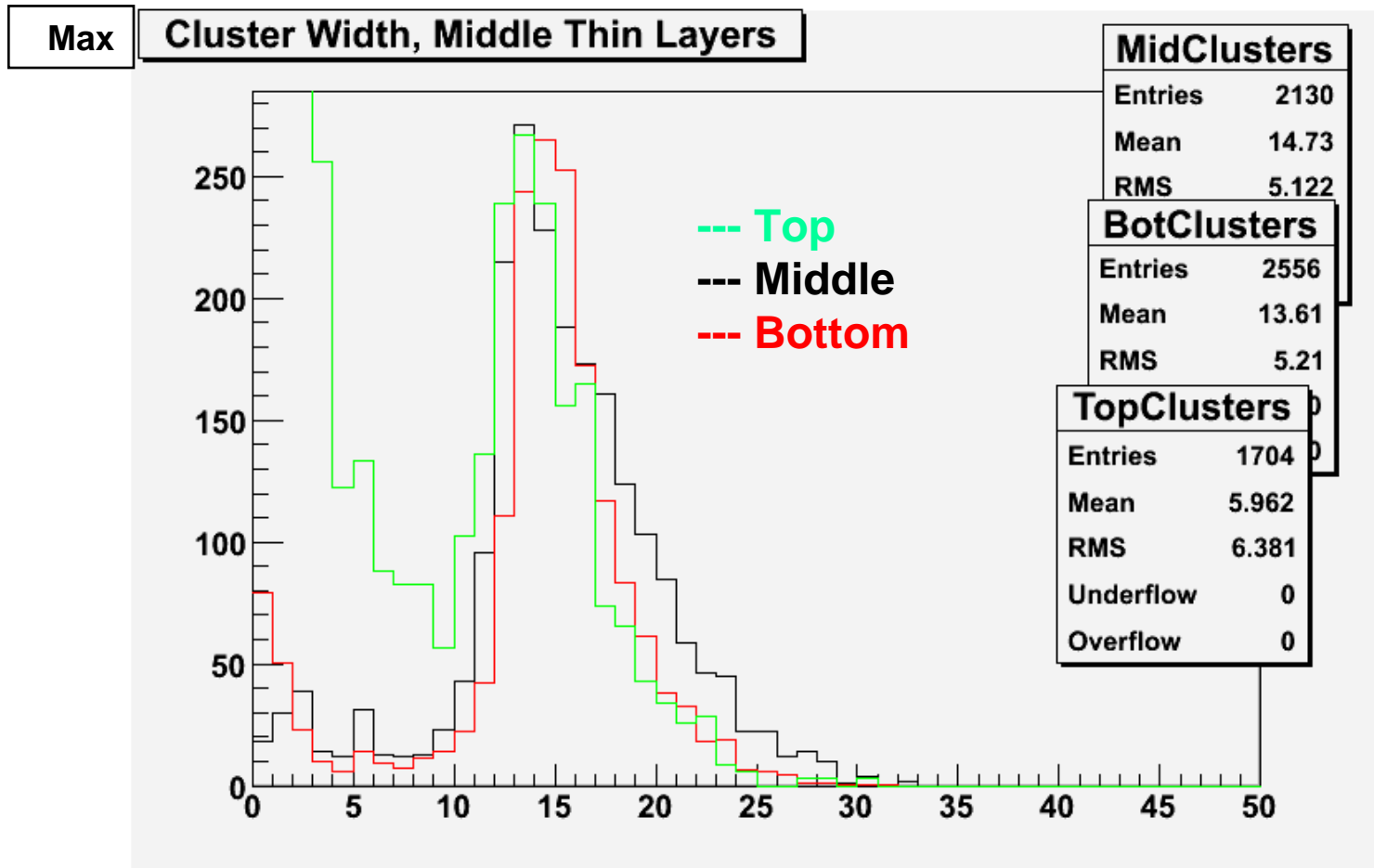


I assume that the “cleanest” events have tracks with the highest charge...

Method

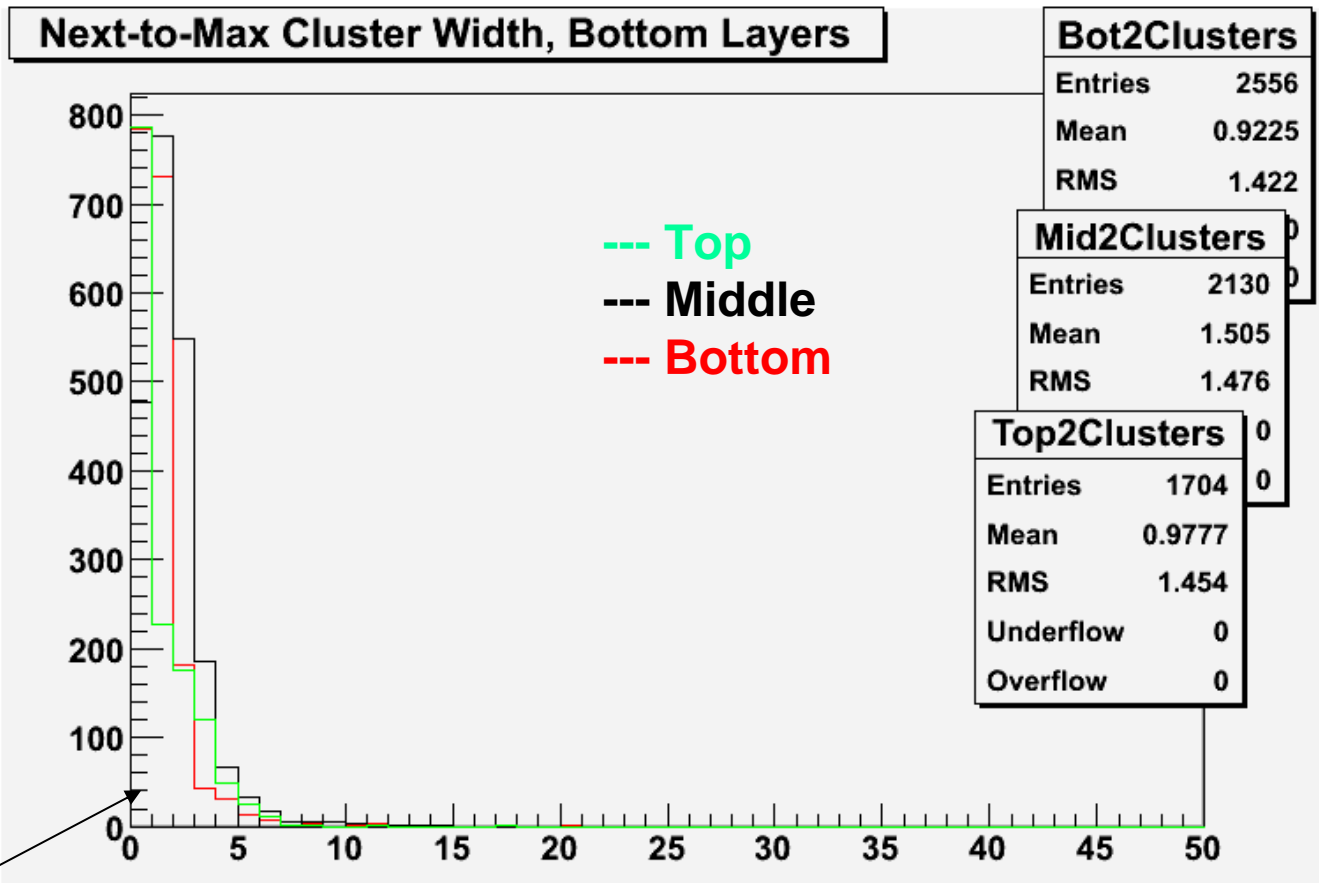
- Look at tower 2 only
- Pick events with between 100 and 150 clusters
- For each layer, record widest cluster
- If the width of the widest cluster in all the layers is three or less, reject event
- Plot maximum cluster widths by layer type:
 - thin top
 - thin middle
 - Bottom
- Do the same for the next-to-widest cluster

Widest Clusters



So let's call it 15...

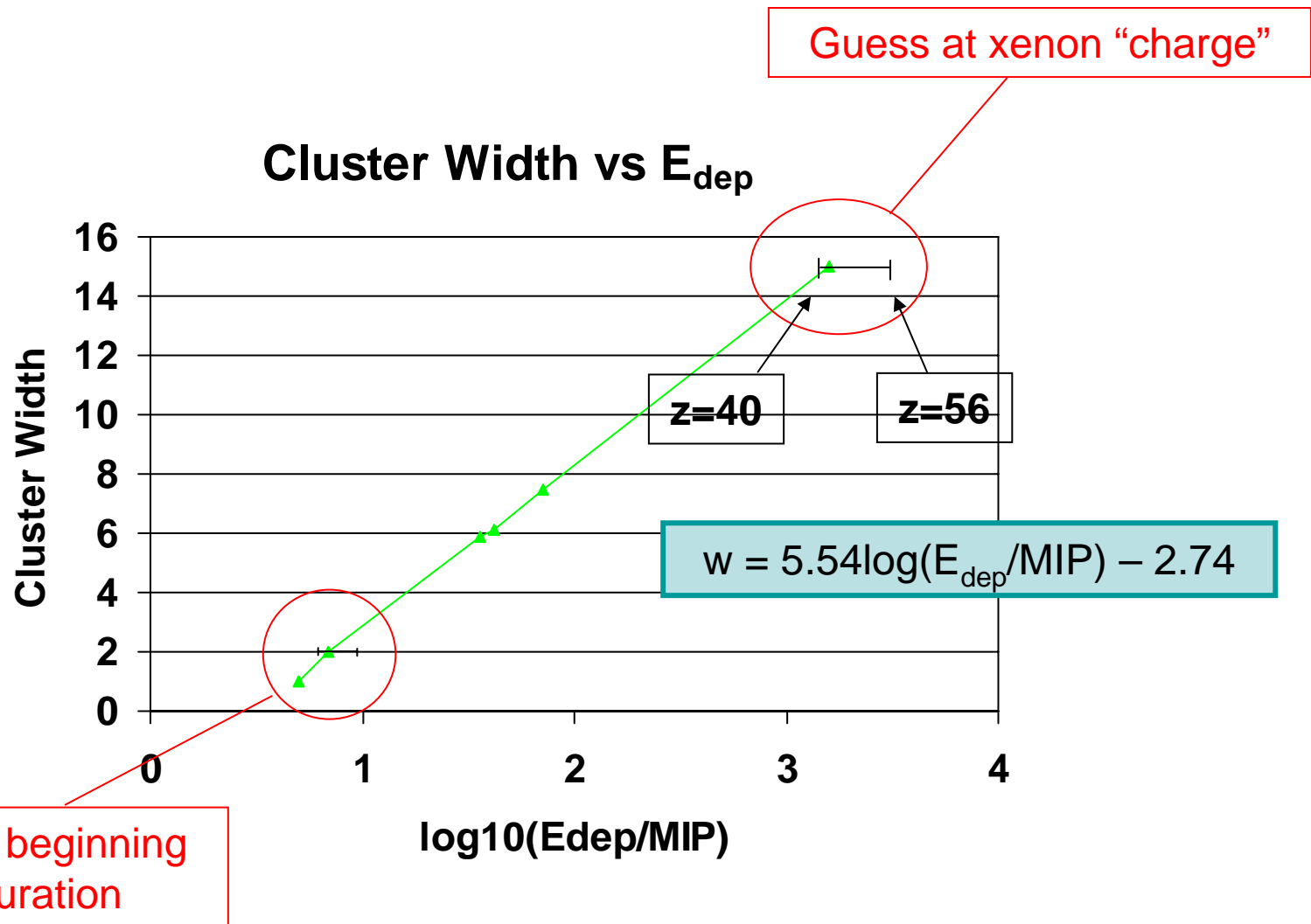
Next-to-widest Clusters



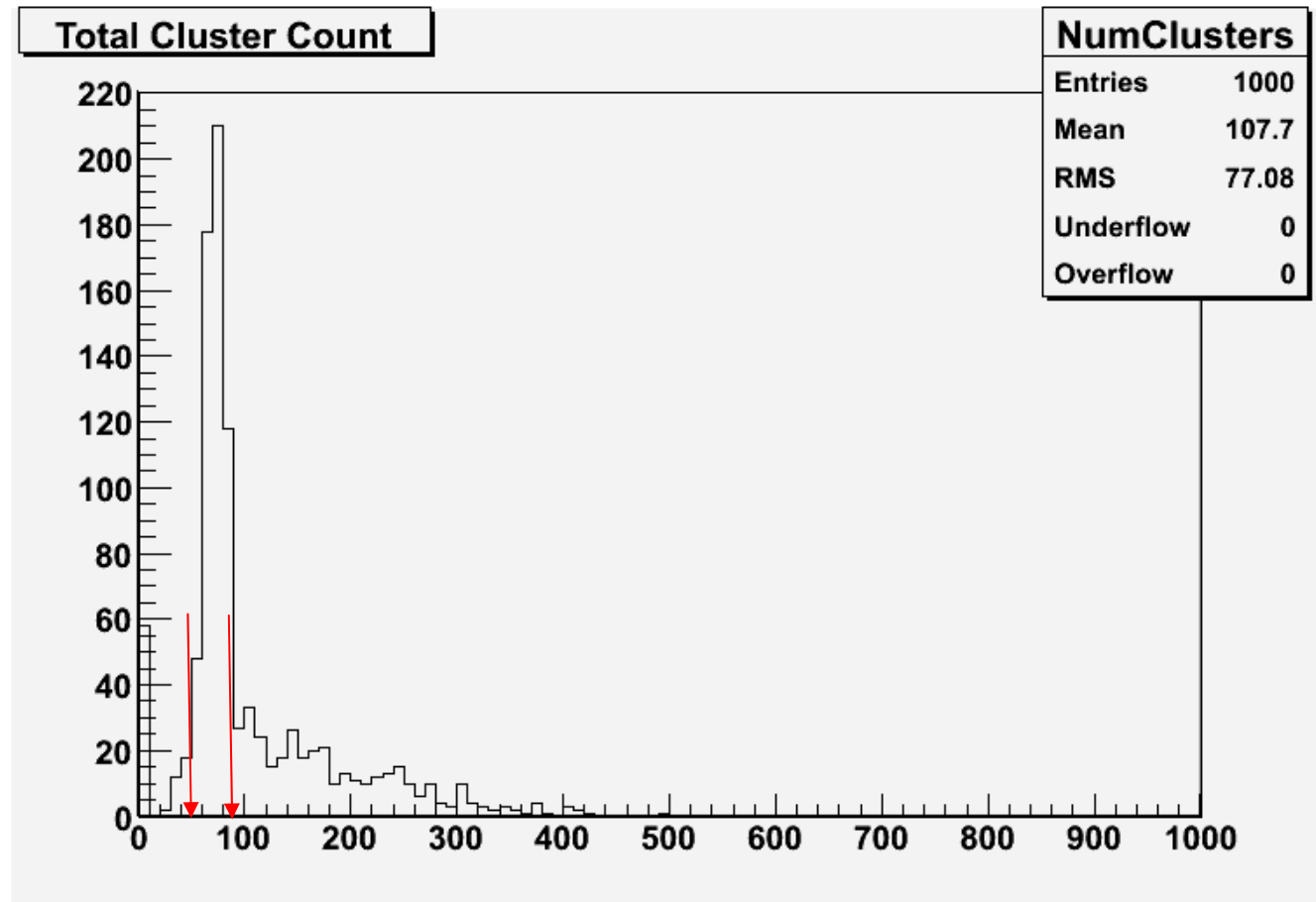
zero means no second cluster

These clusters are only a little wider than normal ones

First Stab at a Parameterization

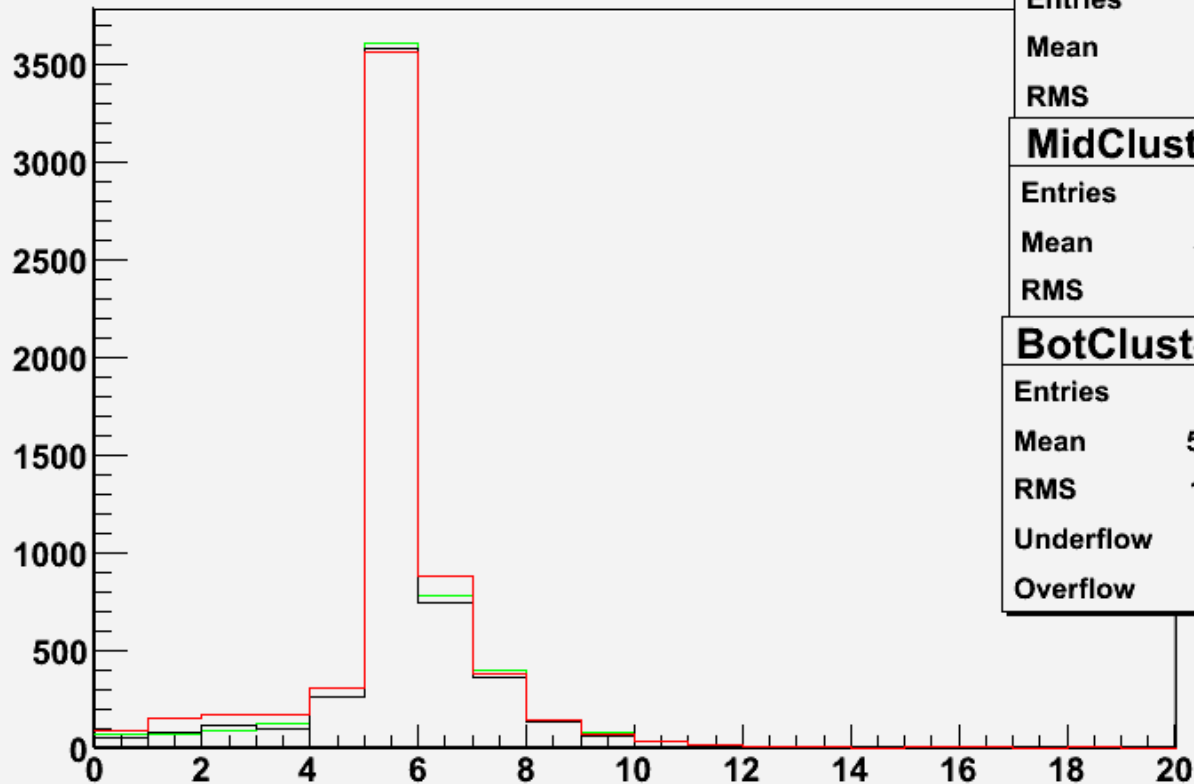


Same For Carbon (as Check)



Widest Clusters

Max Cluster Width, Top Thin Layers



TopClusters

Entries	4440
Mean	5.217
RMS	1.396

MidClusters

Entries	5550
Mean	5.203
RMS	1.393

BotClusters

Entries	6660
Mean	5.088
RMS	1.561
Underflow	0
Overflow	2