K-Koto Meeting

2020/10/27

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Hadron & Nuclear Physics Lab

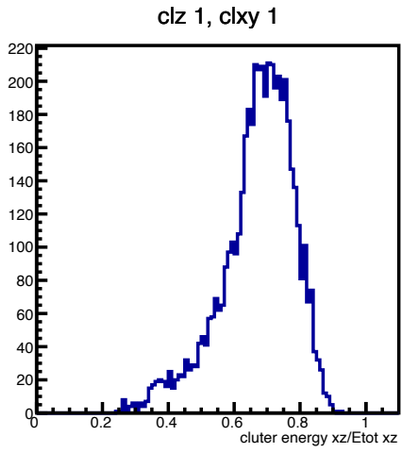
To Do List

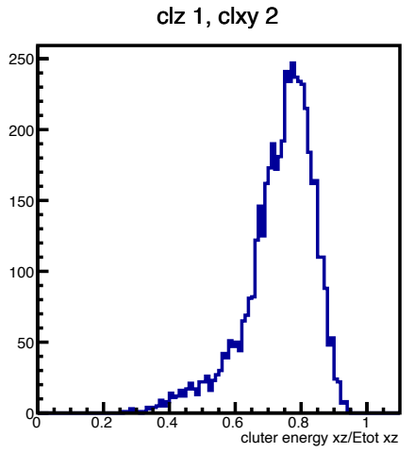
- 1mm Lead + 5mm Scintillator
  - 5mm Scintillator width
  - Clustering size(z, xy) effect …

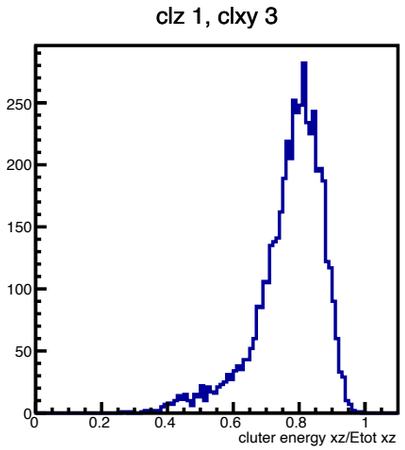
- Energy threshold effect
  - Energy distribution in cluster?
  - Number of hits distribution?

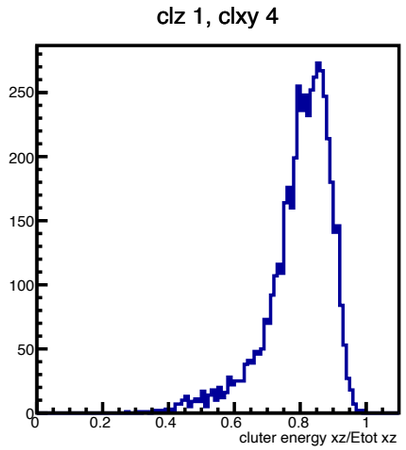
Cluster Energy Ratio (xz)

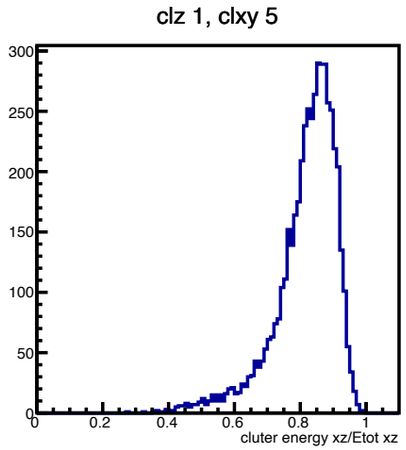
0 deg θ

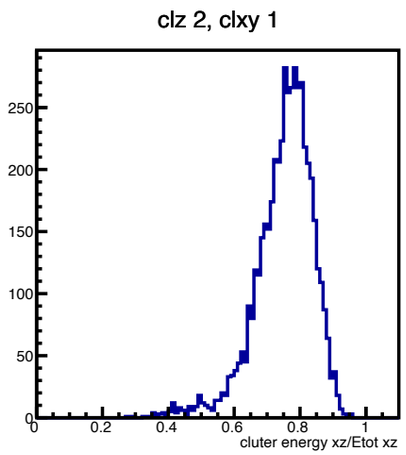


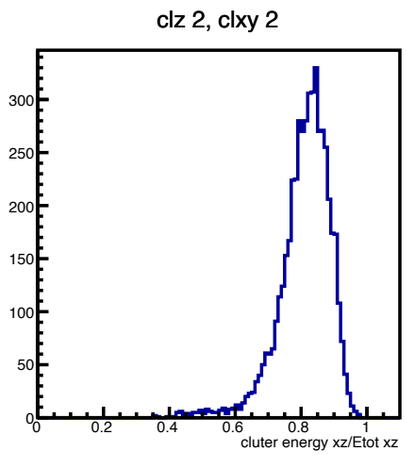


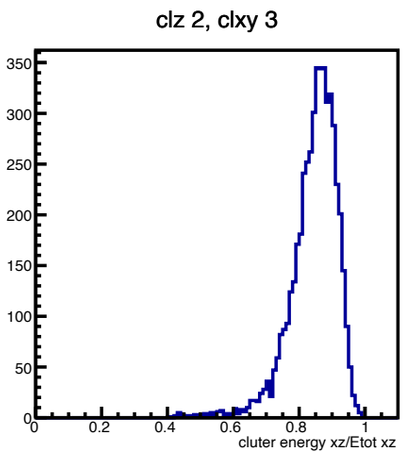


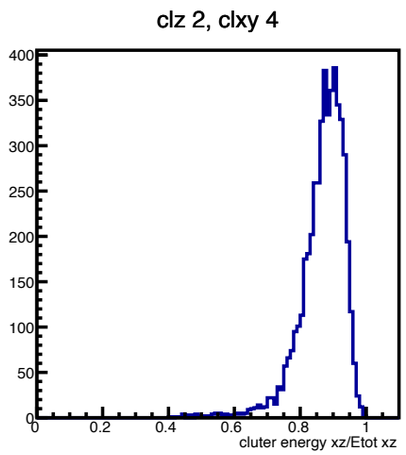


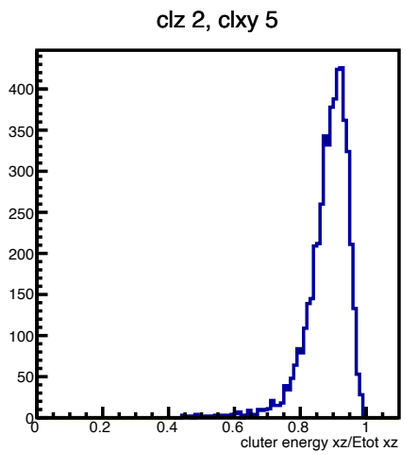


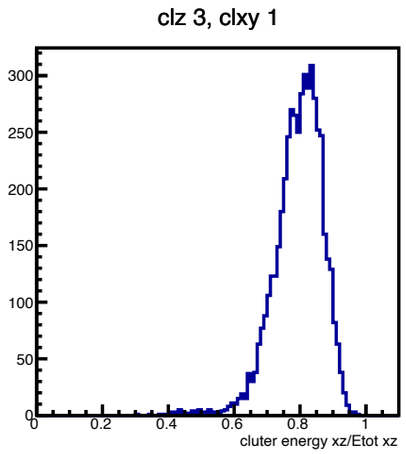


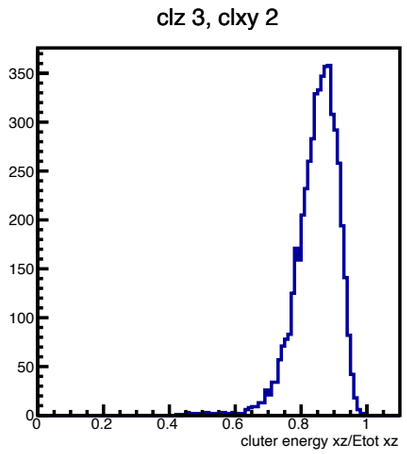


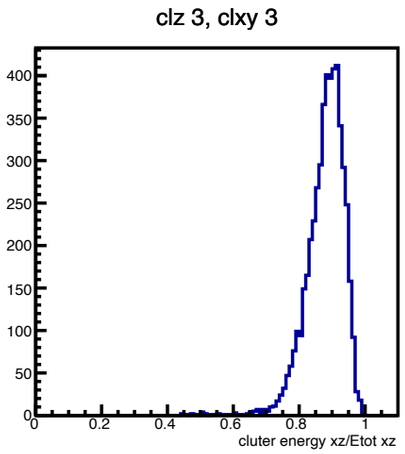


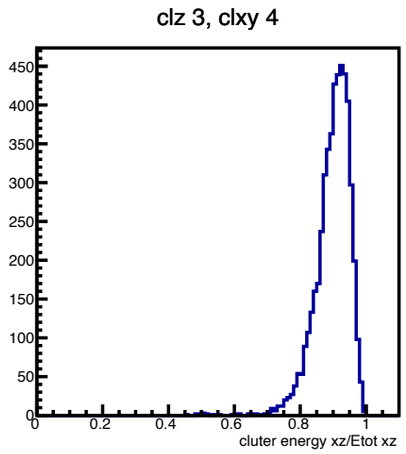


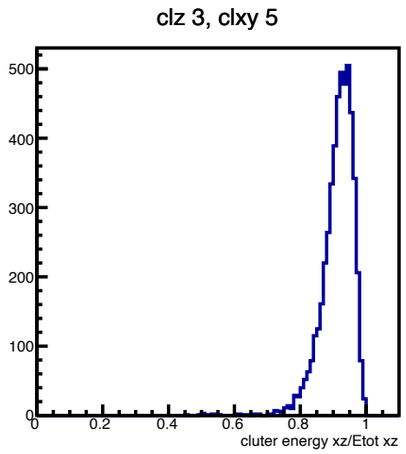






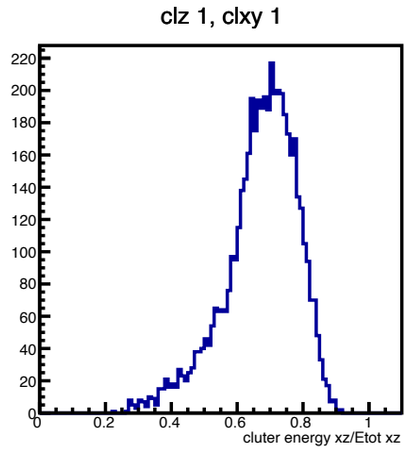


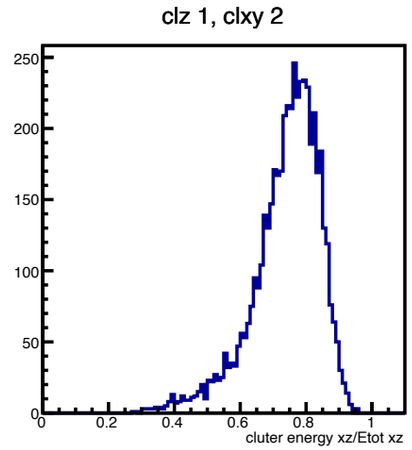


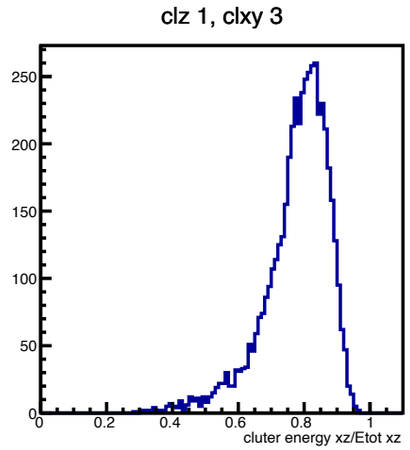


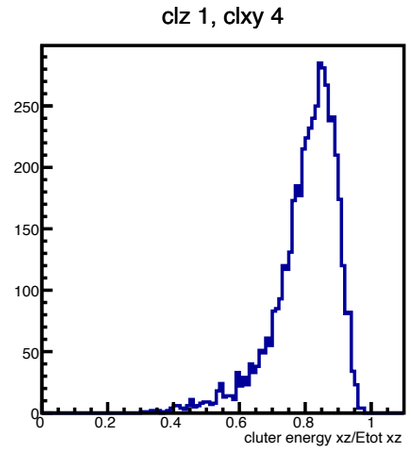
Cluster Energy Ratio (xz)

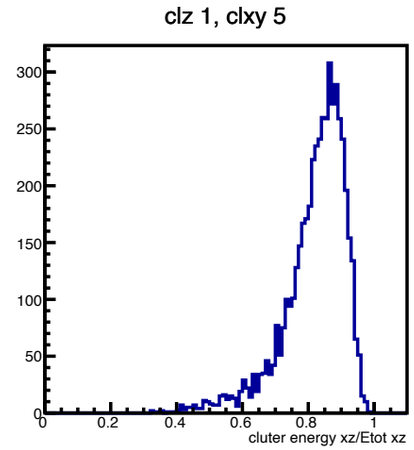
5 deg θ

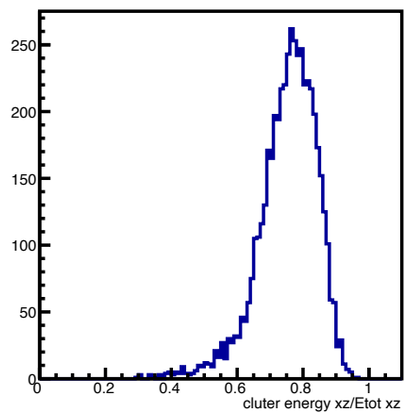


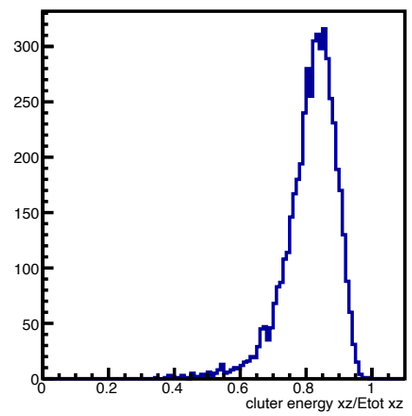


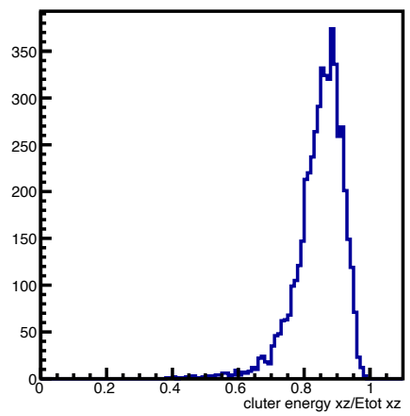


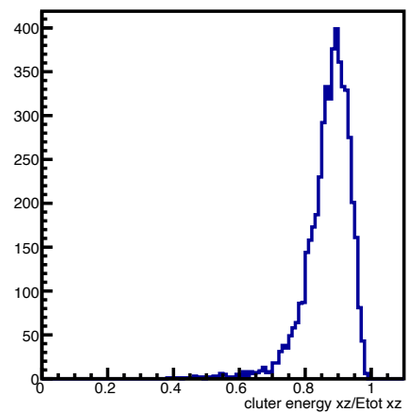


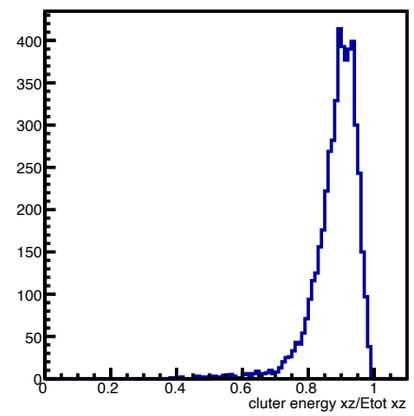


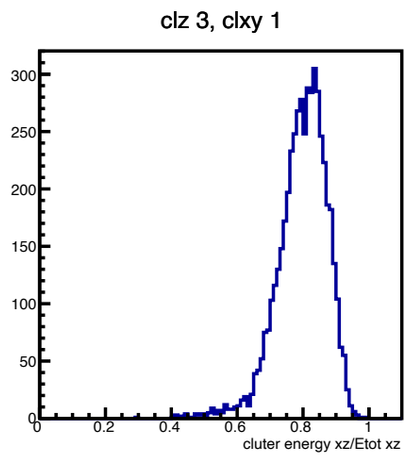


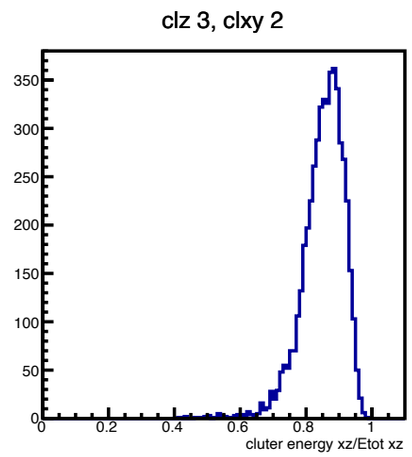


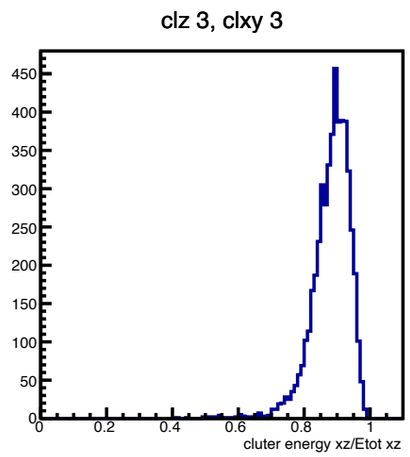


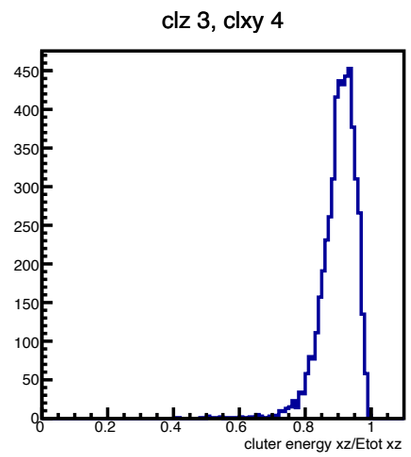


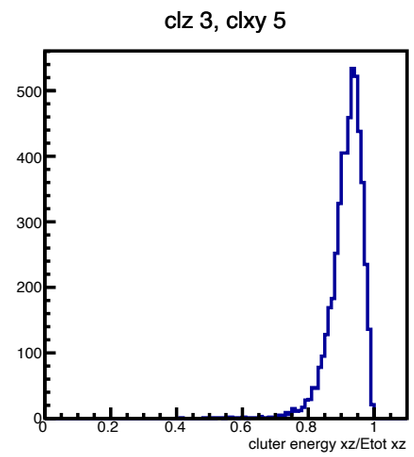






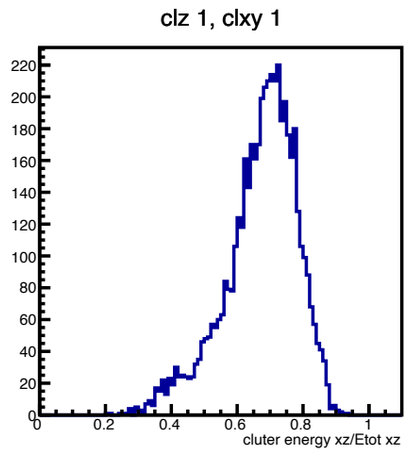


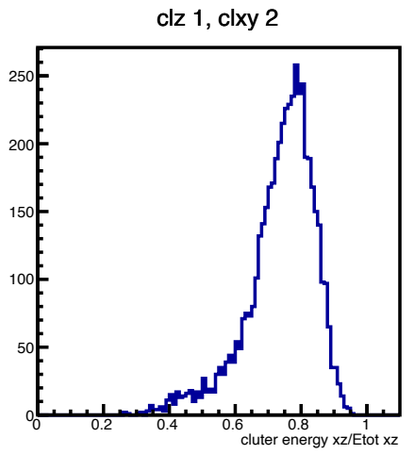


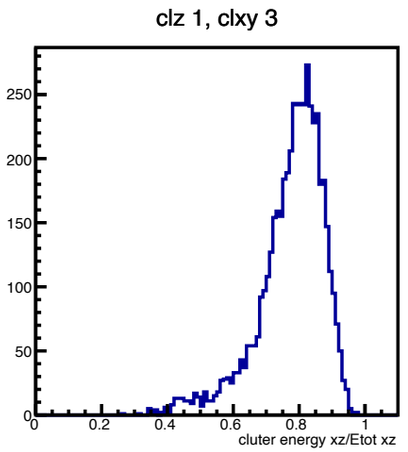


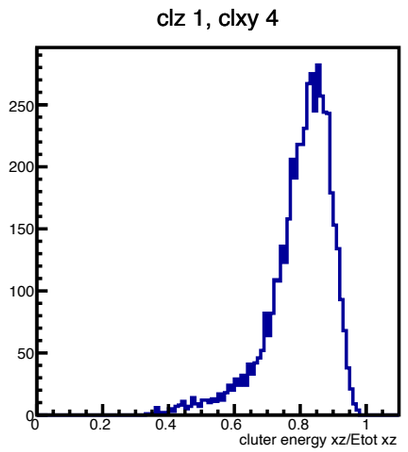
Cluster Energy Ratio (xz)

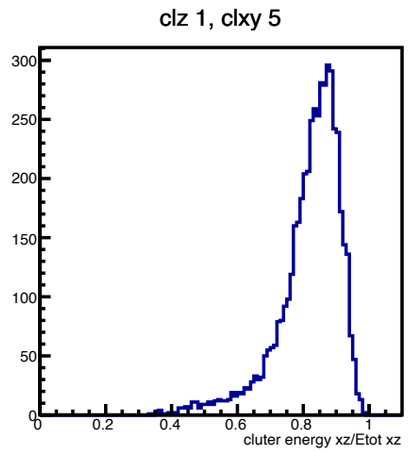
10 deg θ

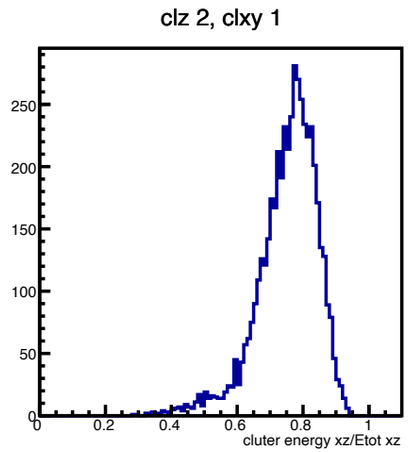


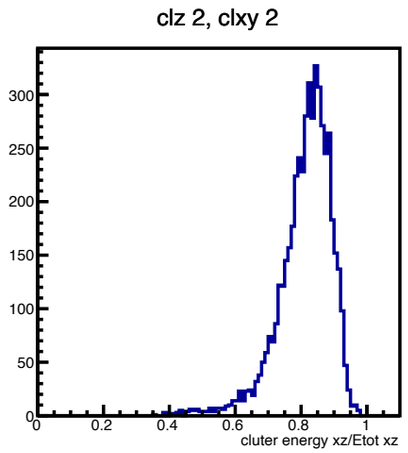


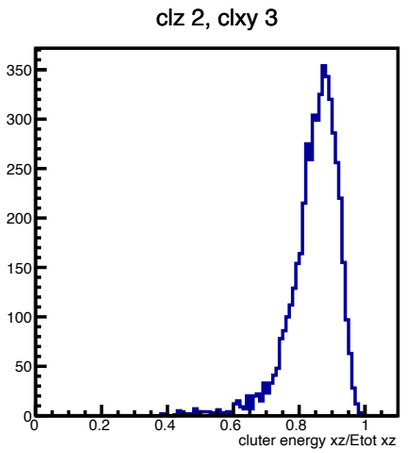


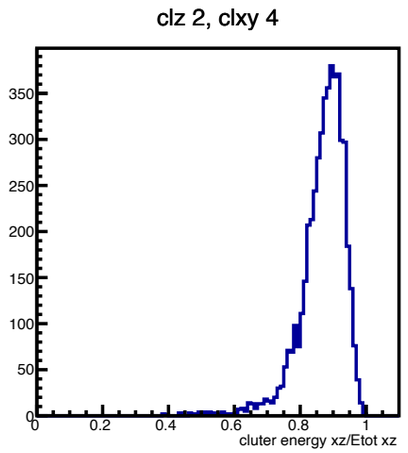


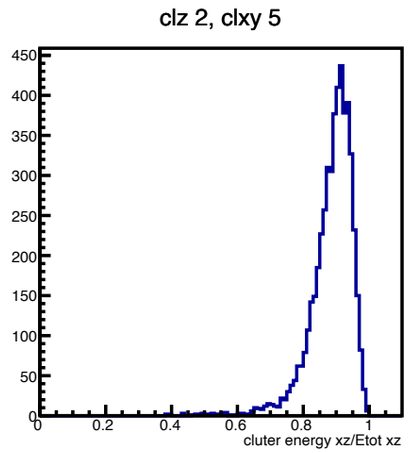


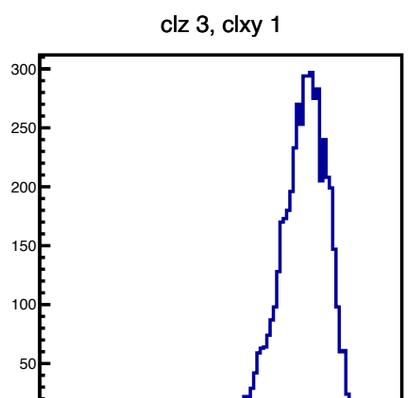


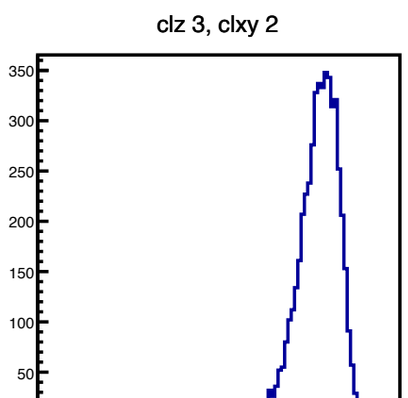


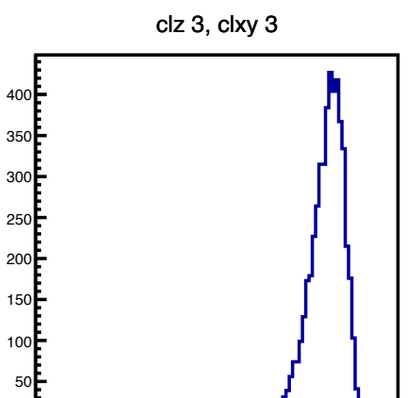


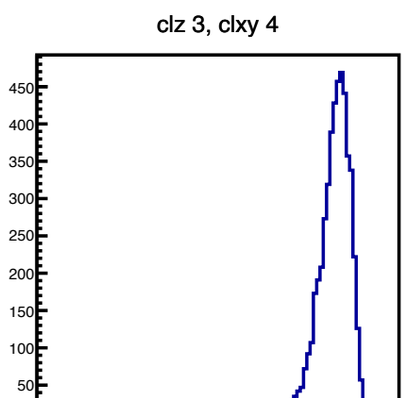


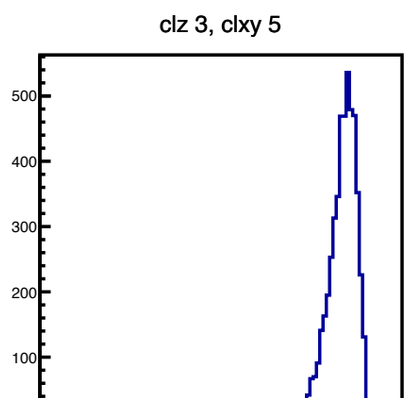






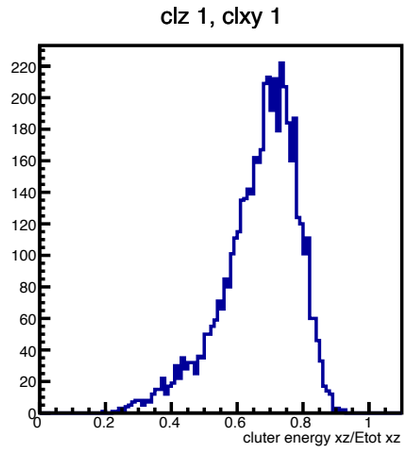


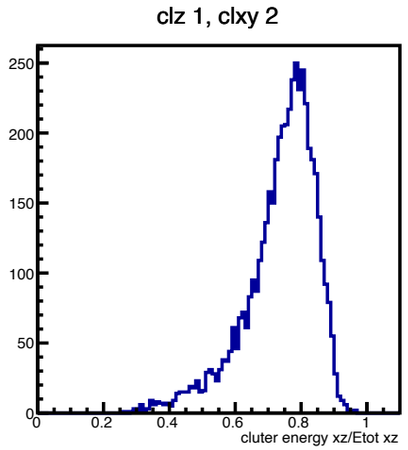


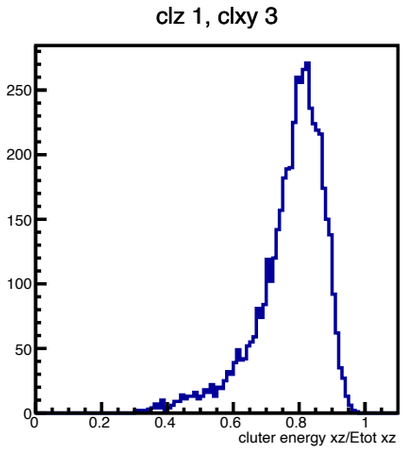


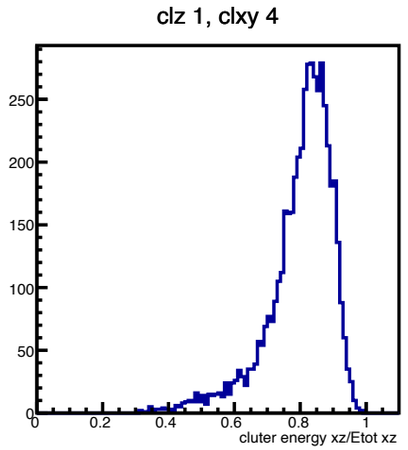
Cluster Energy Ratio (xz)

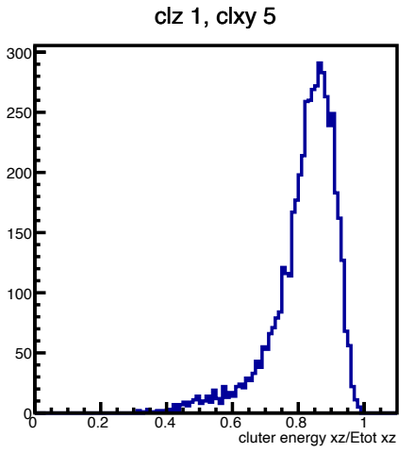
15 deg θ

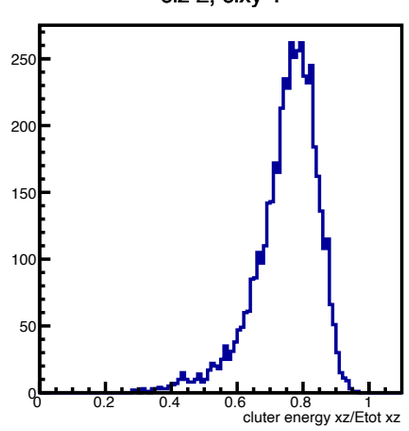


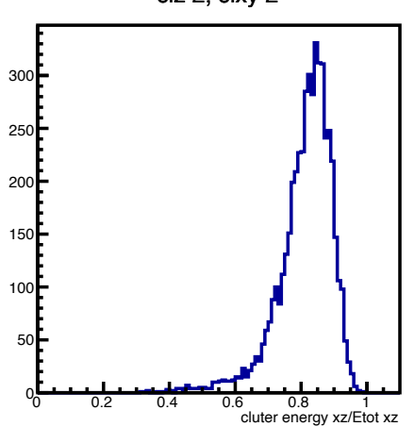


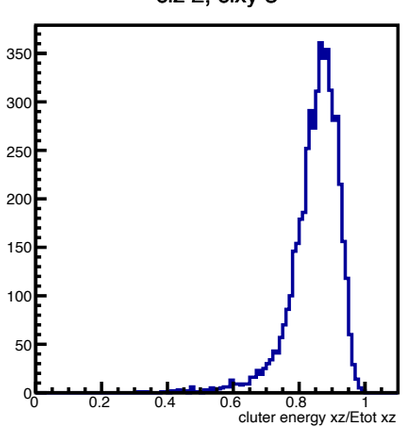


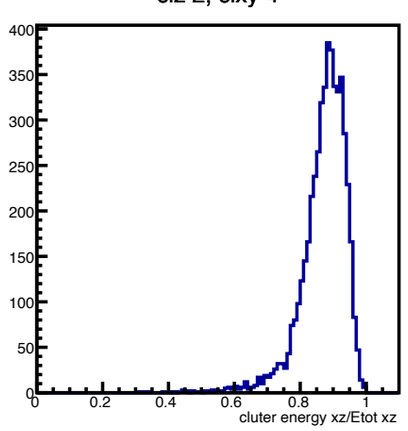


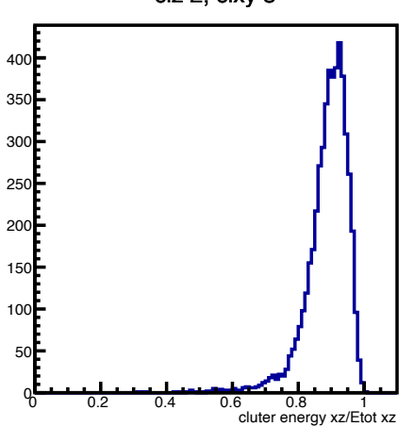


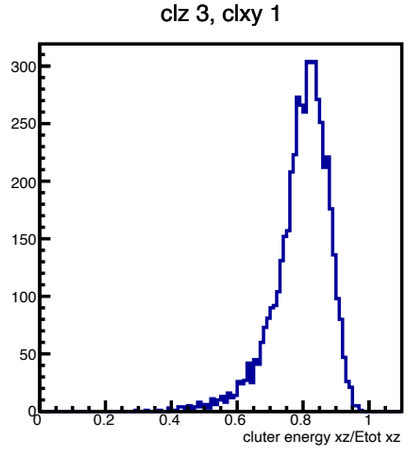


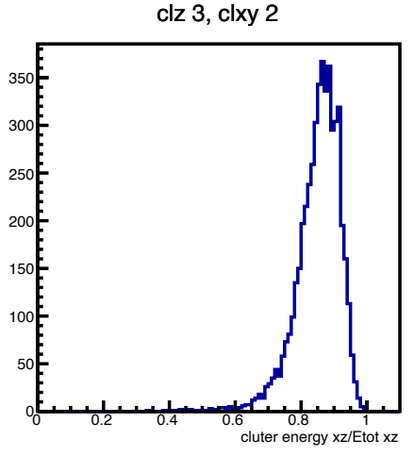


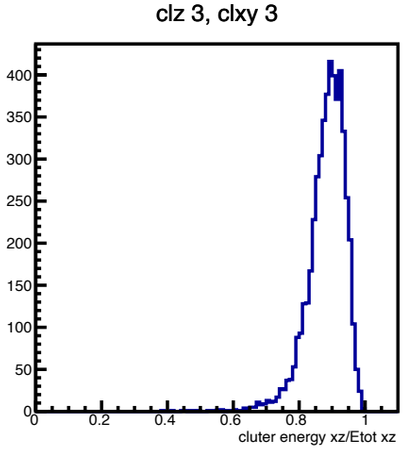


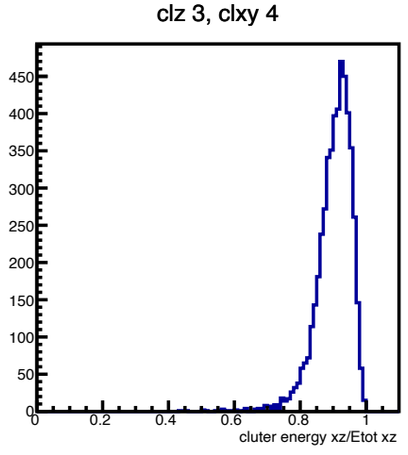


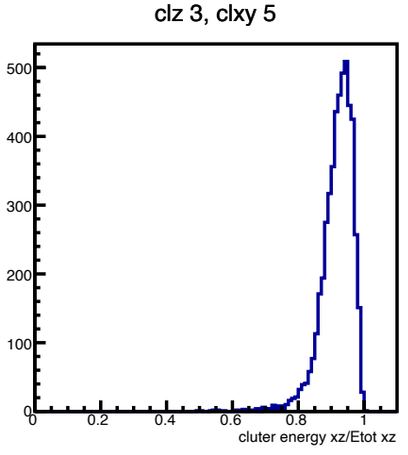






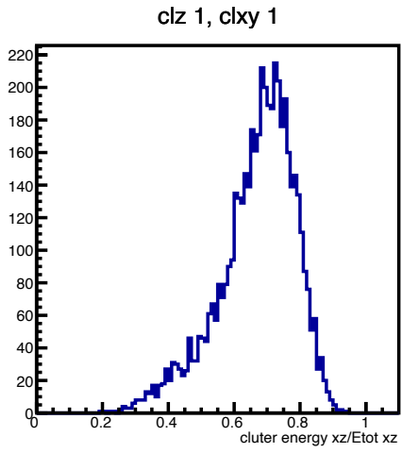


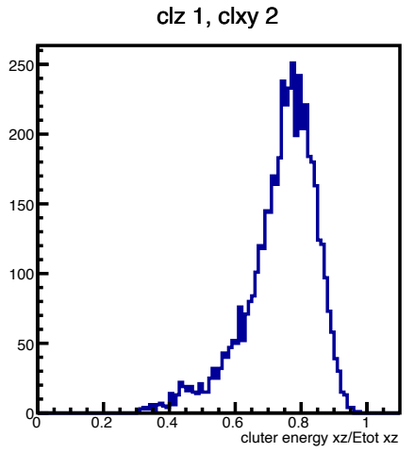


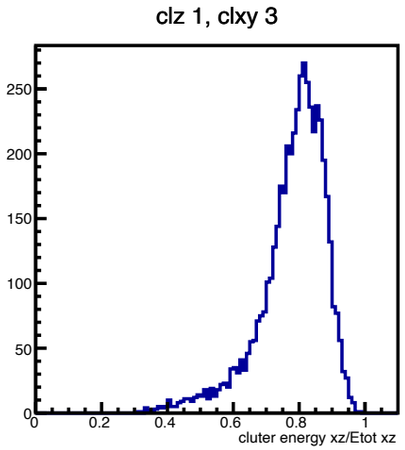


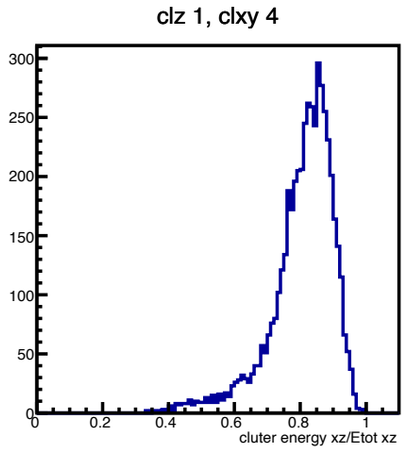
Cluster Energy Ratio (xz)

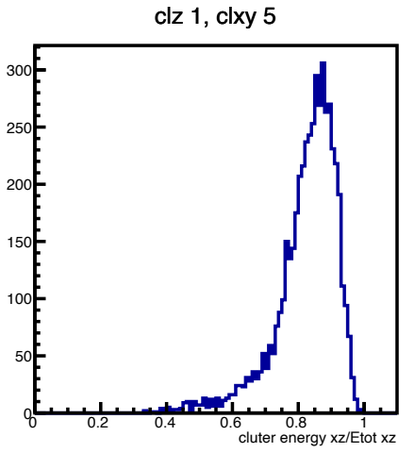
20 deg θ

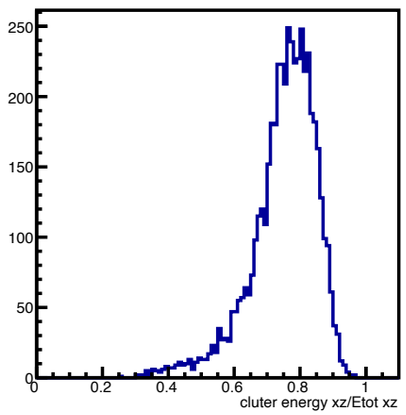


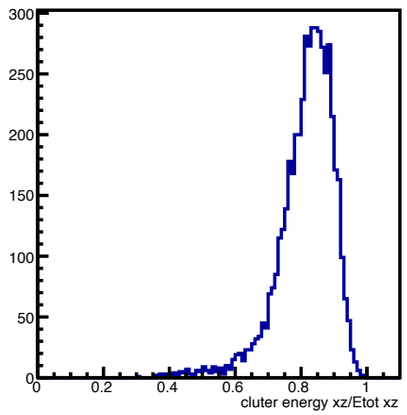


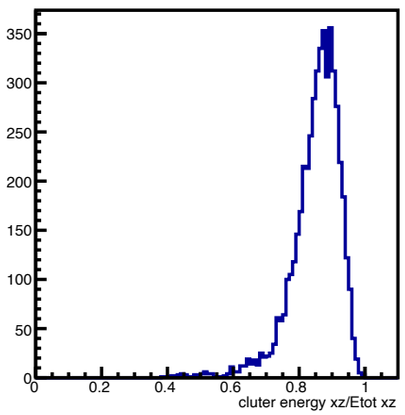


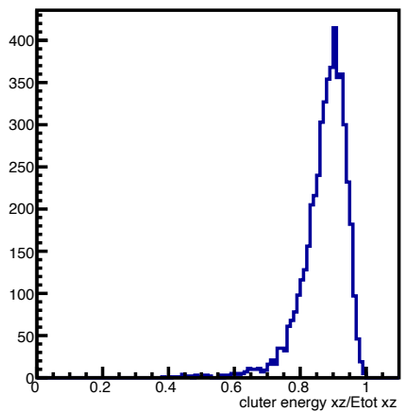


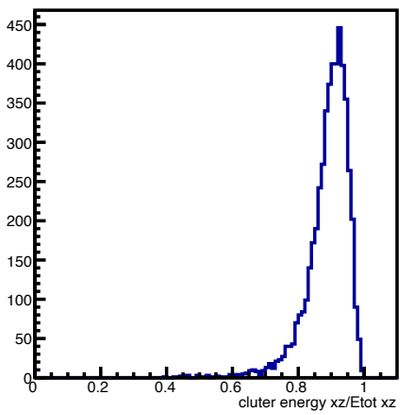


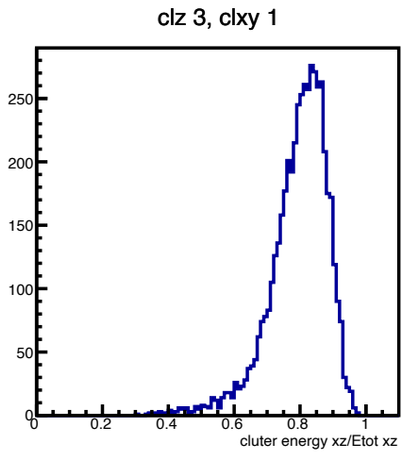


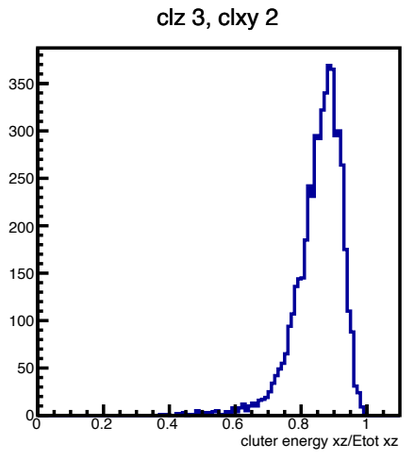


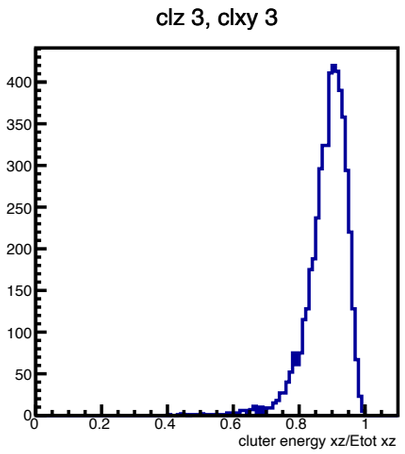


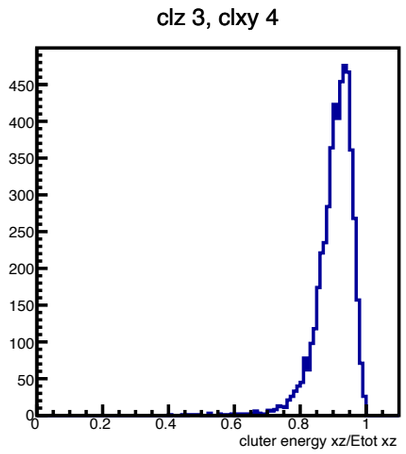


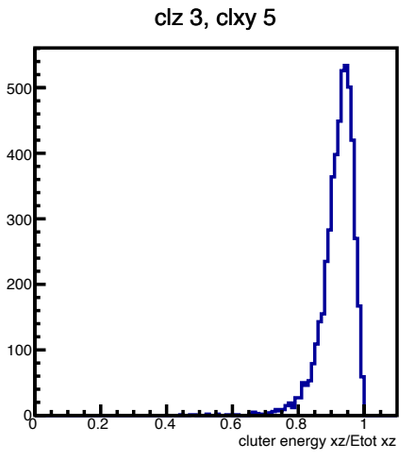






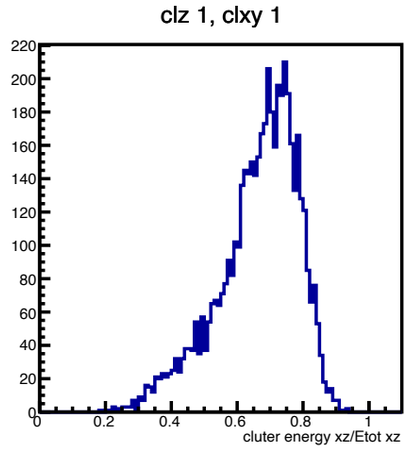


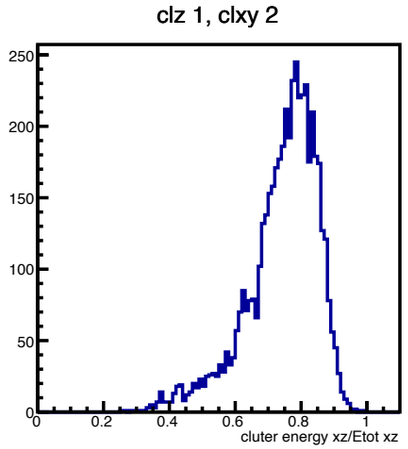


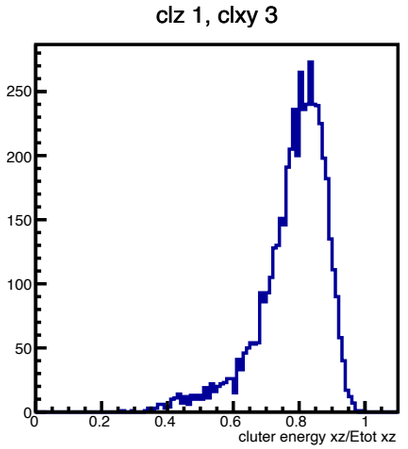


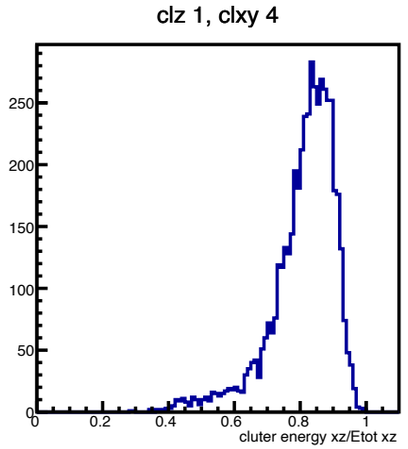
Cluster Energy Ratio (xz)

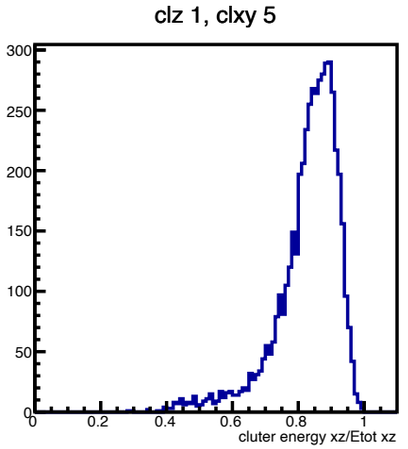
25 deg θ

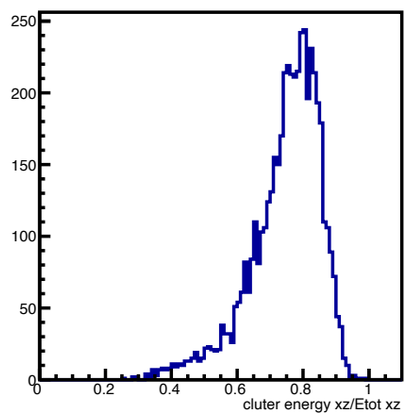


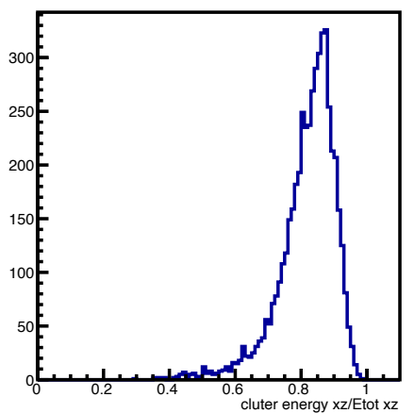


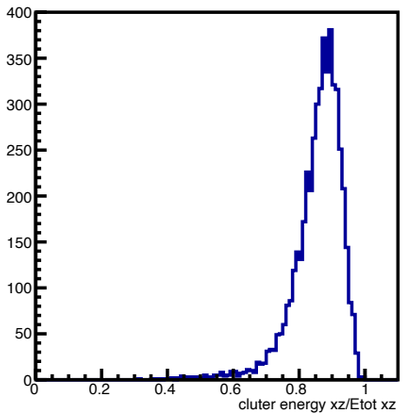


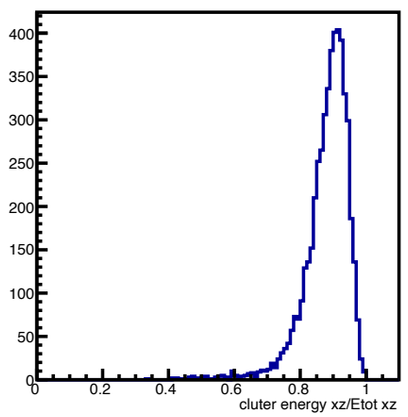


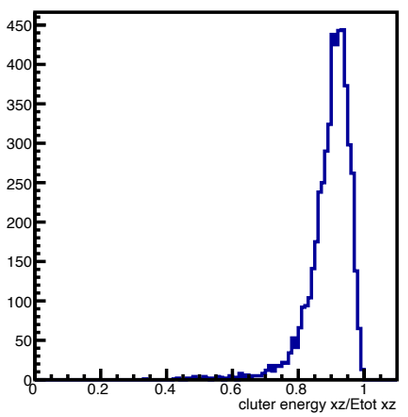


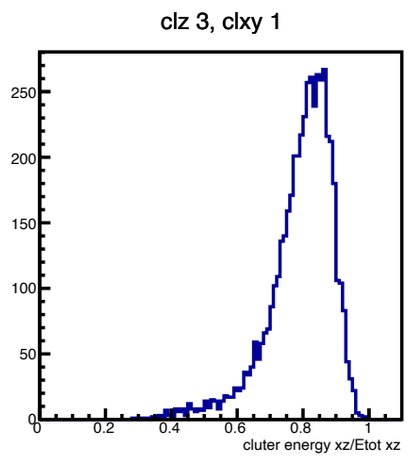


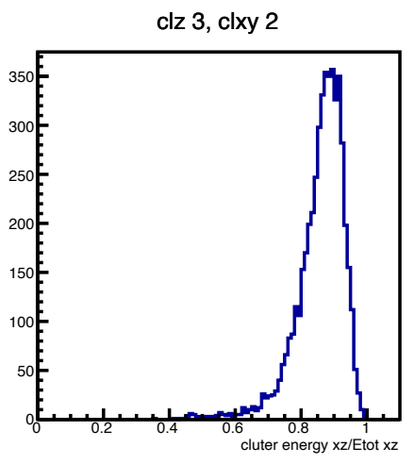


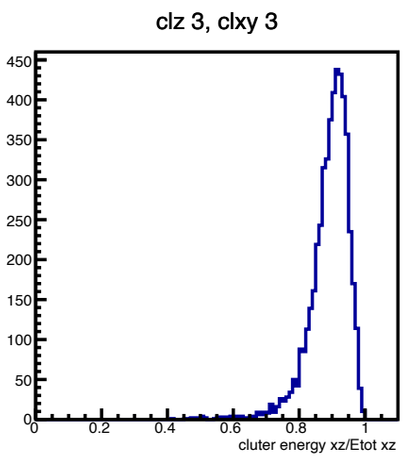


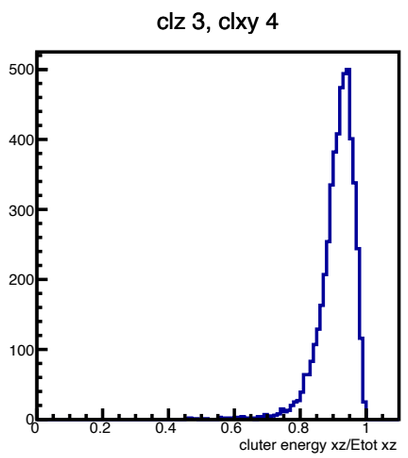


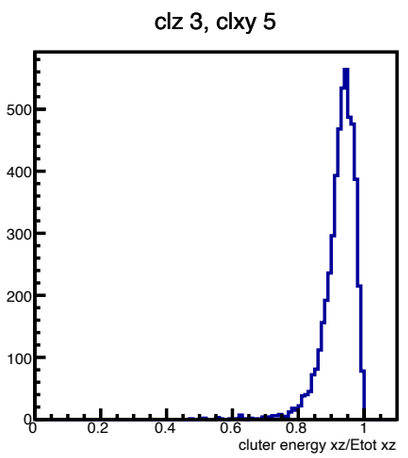






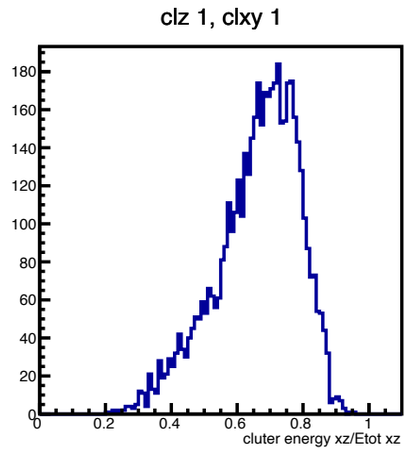


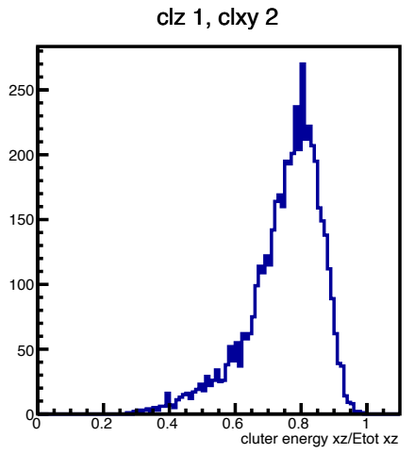


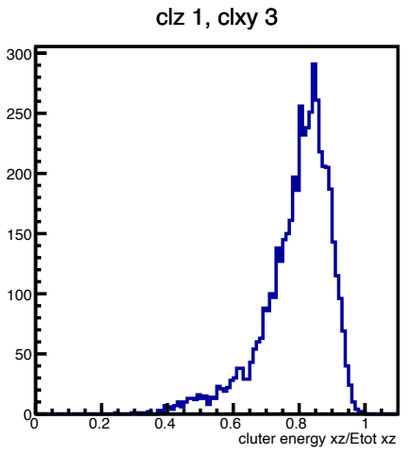


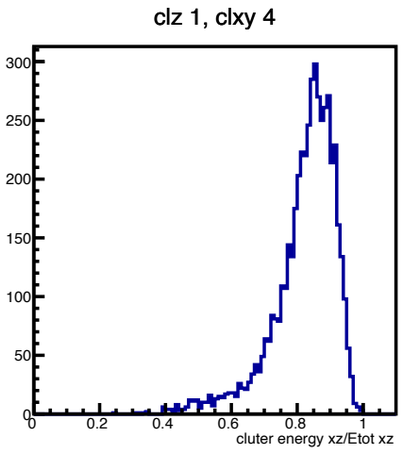
Cluster Energy Ratio (xz)

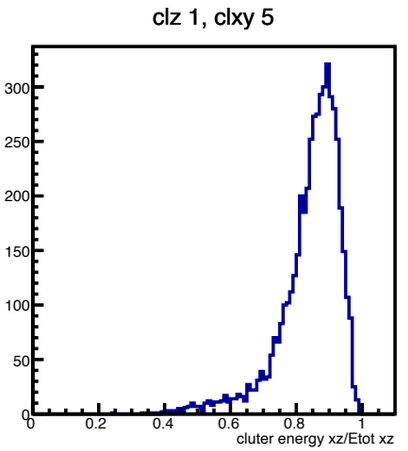
30 deg θ

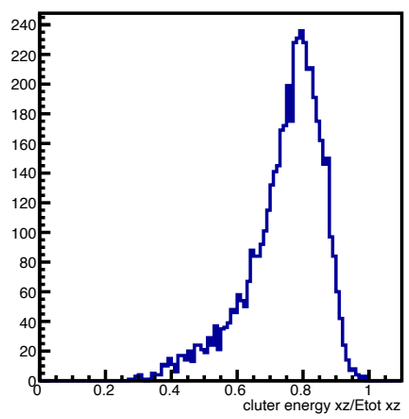


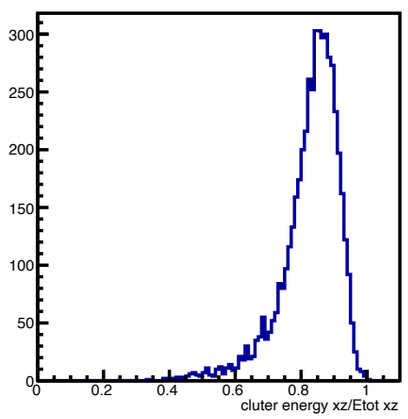


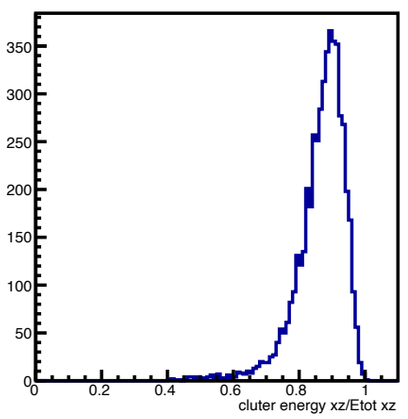


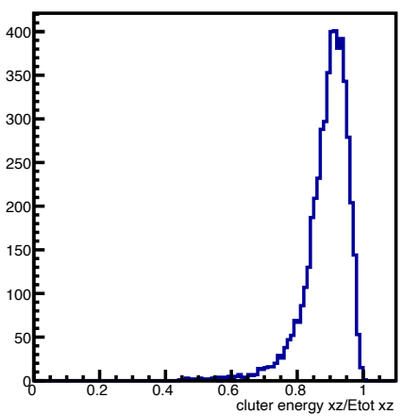


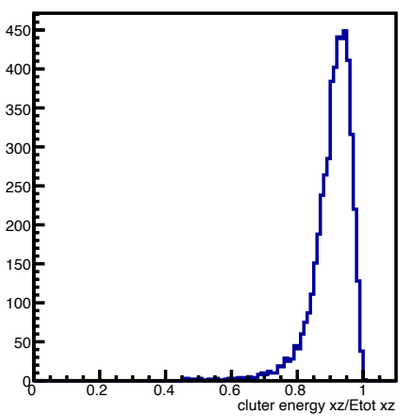


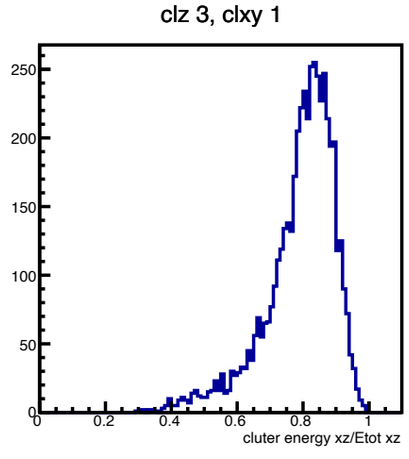


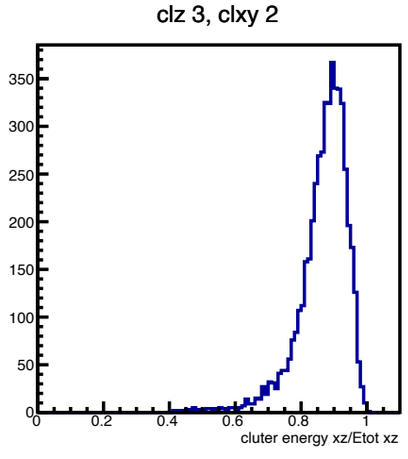


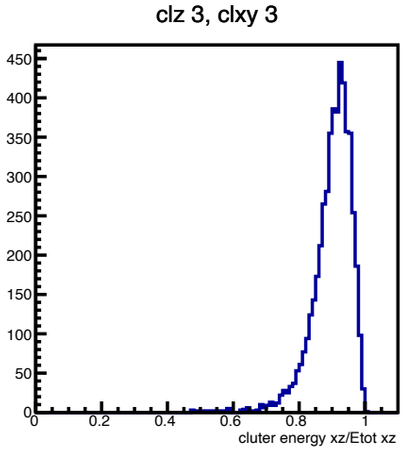


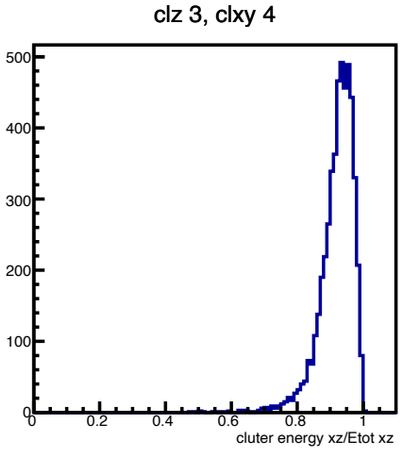


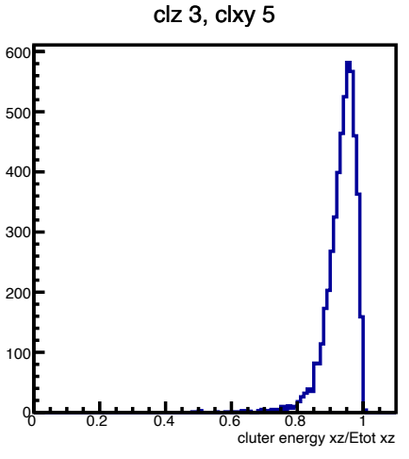






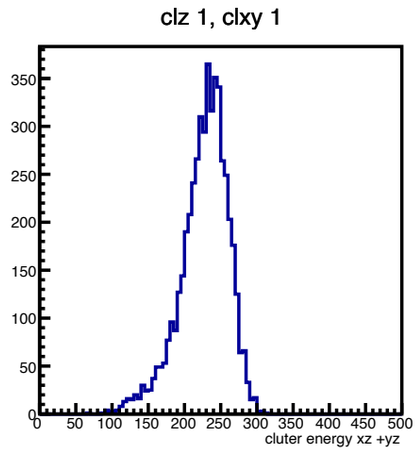


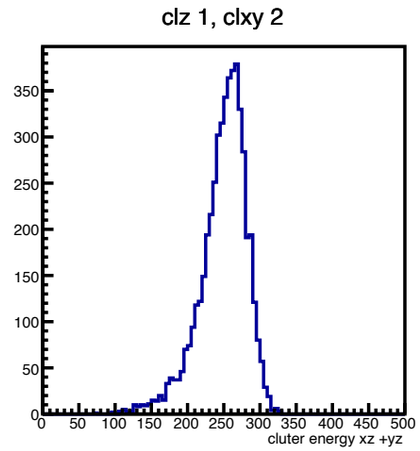


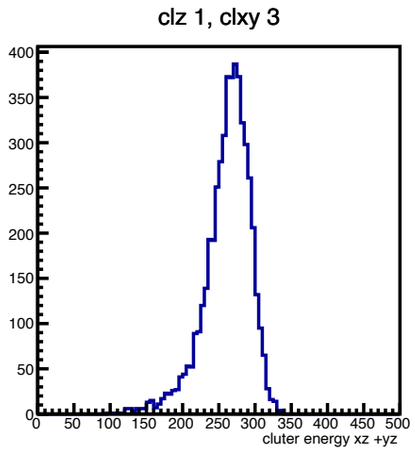


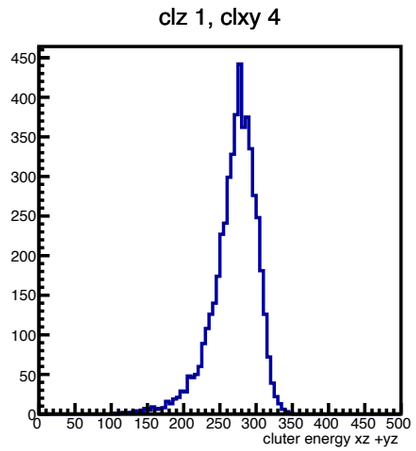
Cluster E_{total}

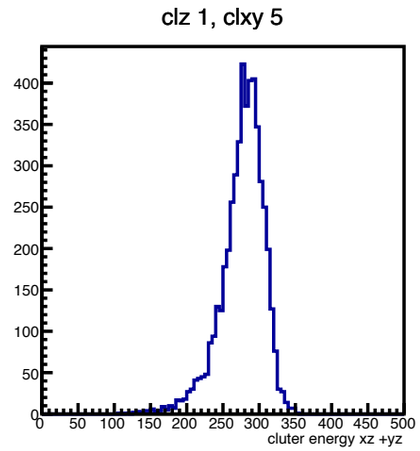
0 deg θ

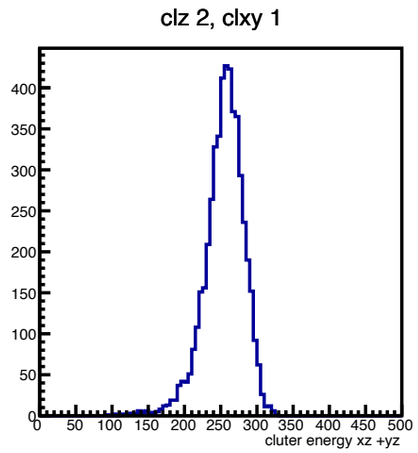


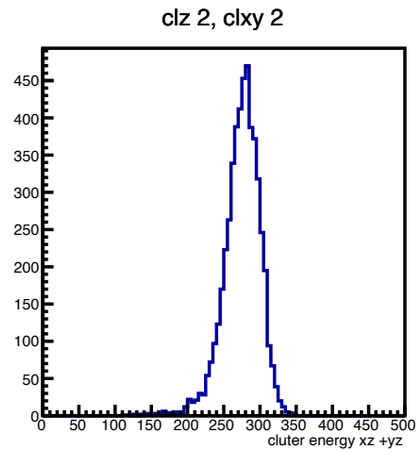


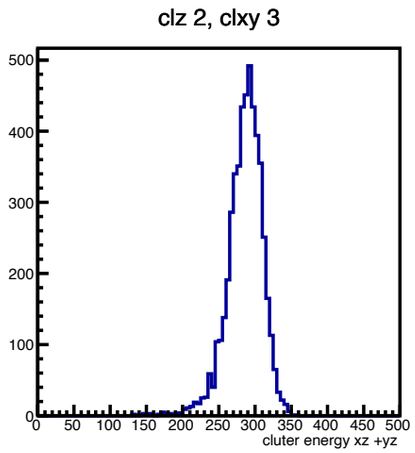


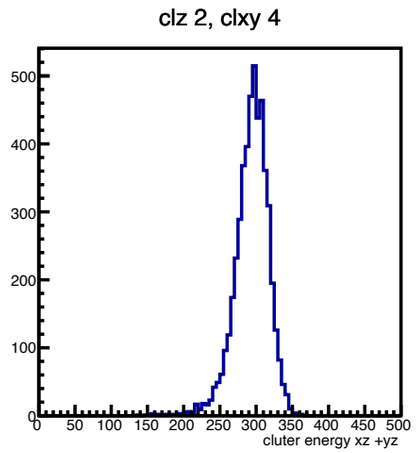


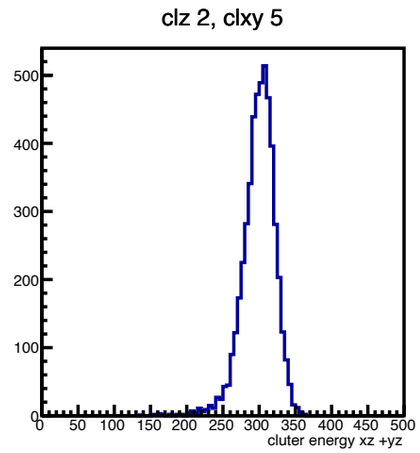


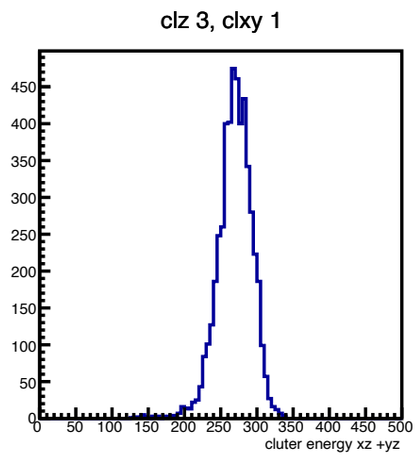


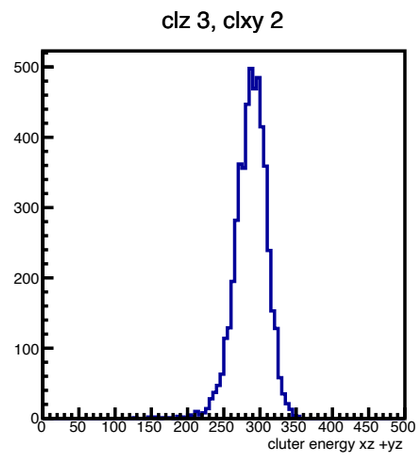


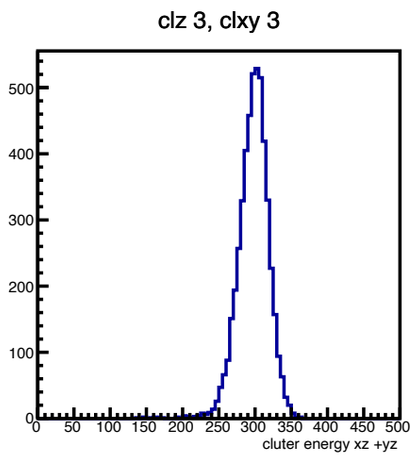


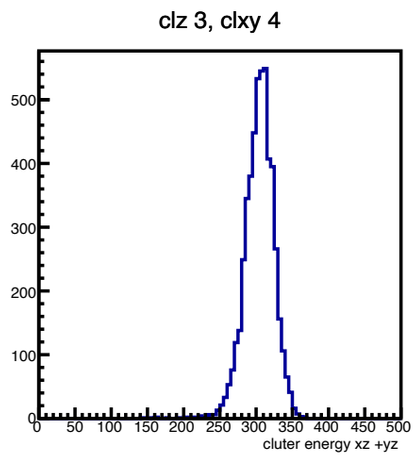


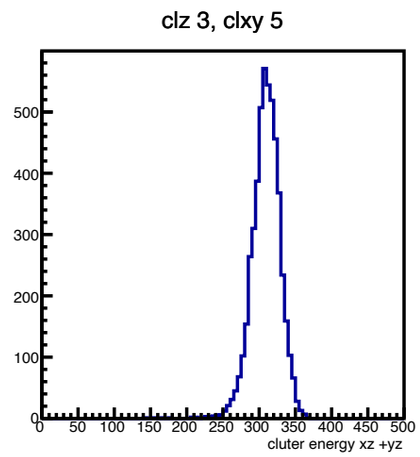






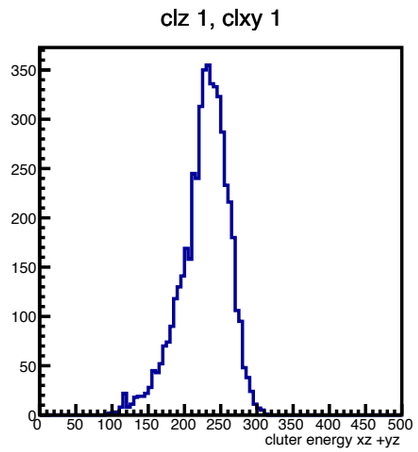


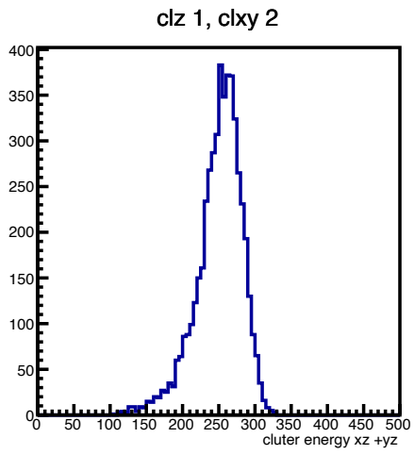


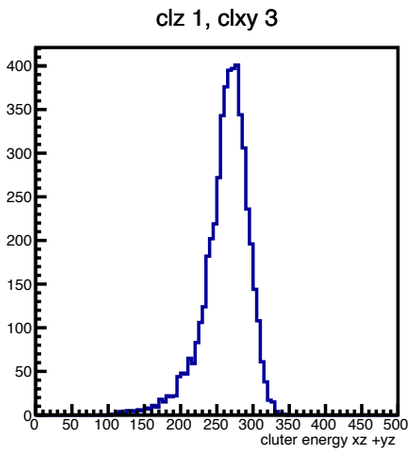


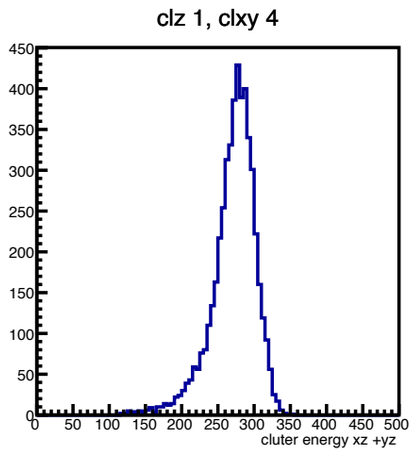
Cluster E_{total}

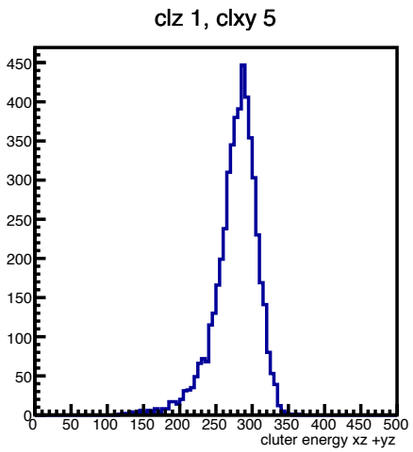
5 deg θ

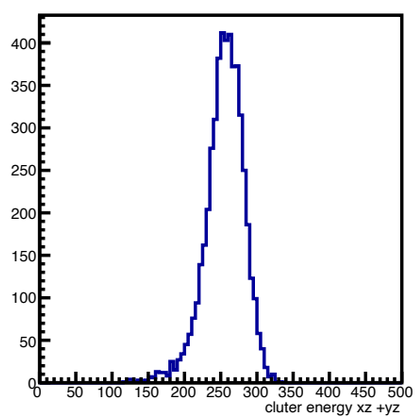


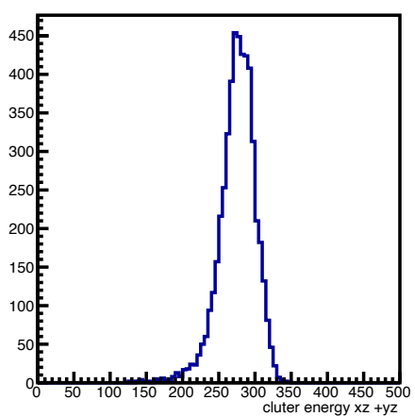


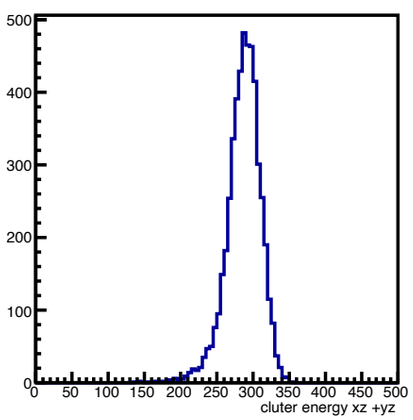


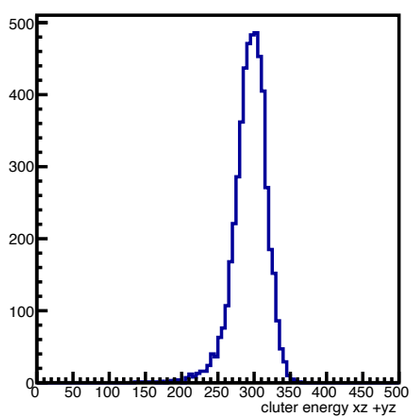


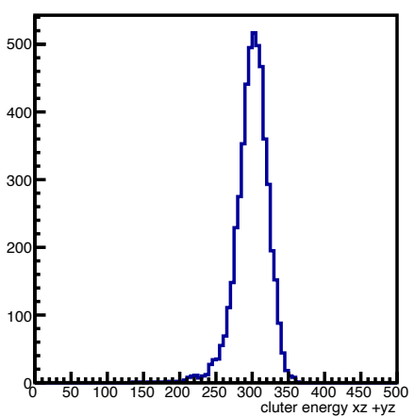


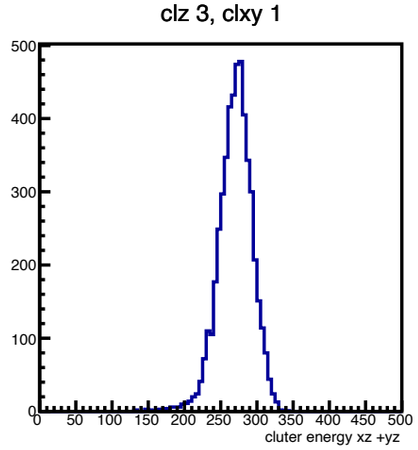


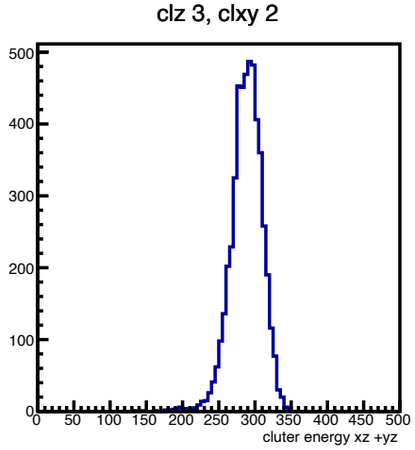


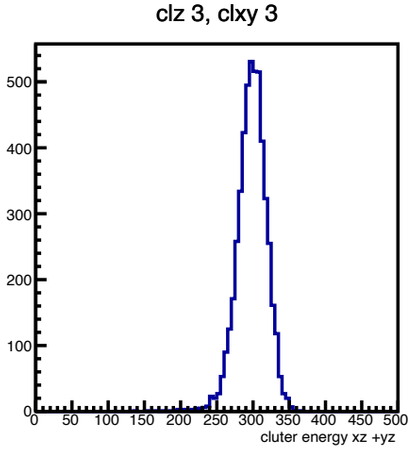


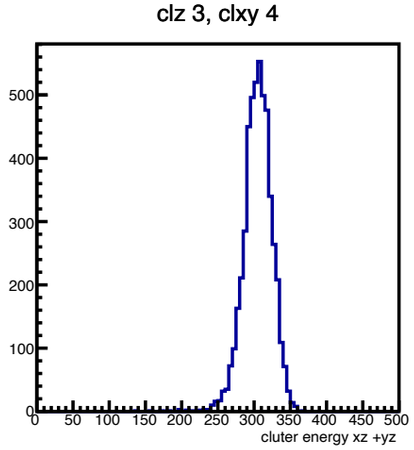


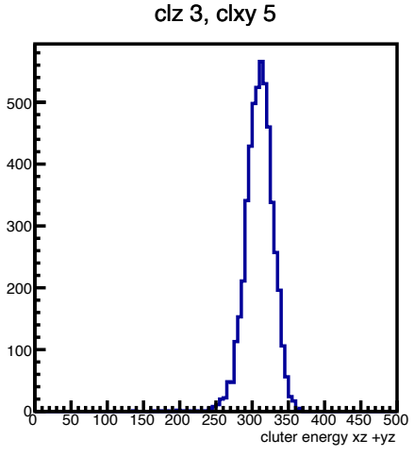






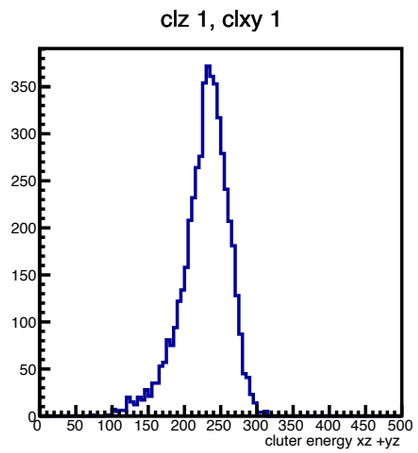


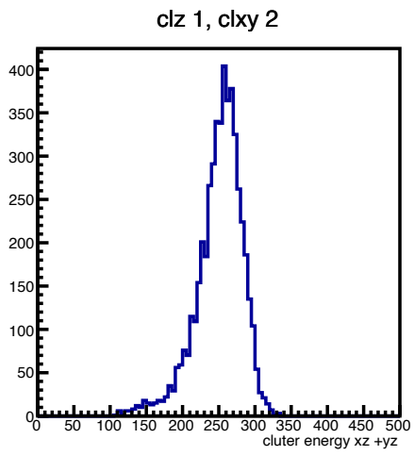


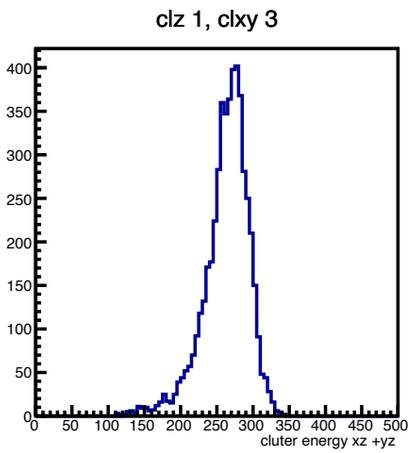


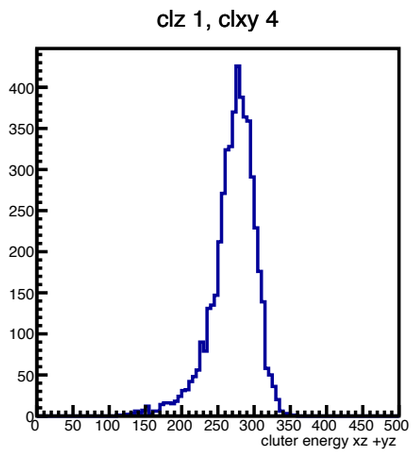
Cluster E_{total}

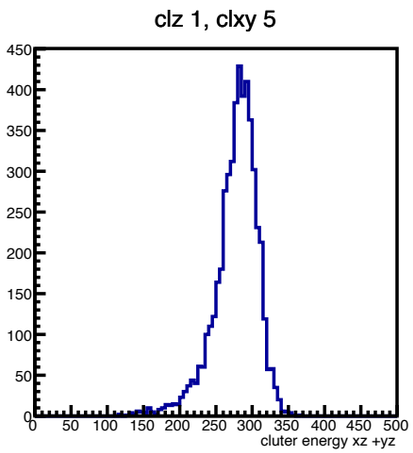
10 deg θ

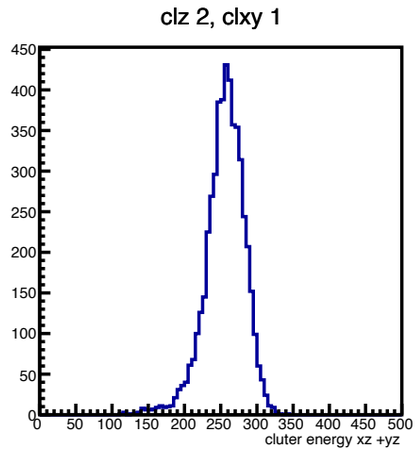


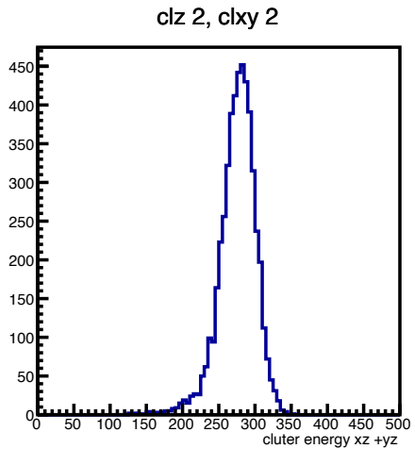


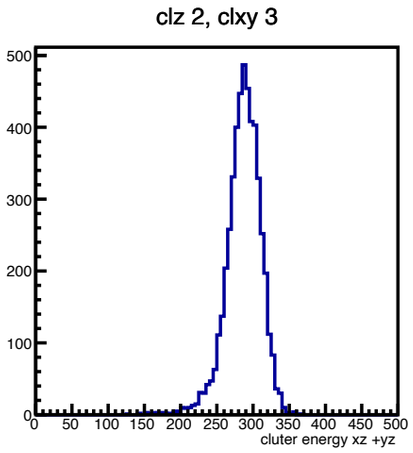


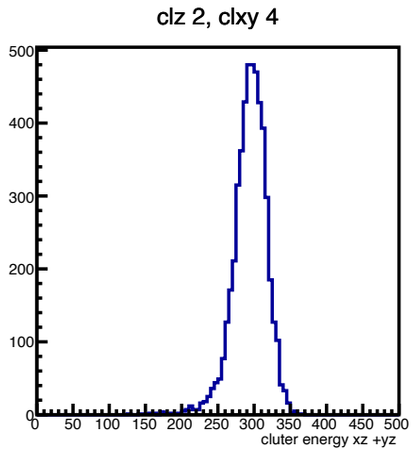


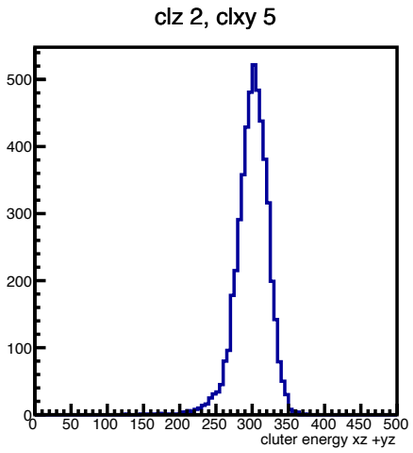


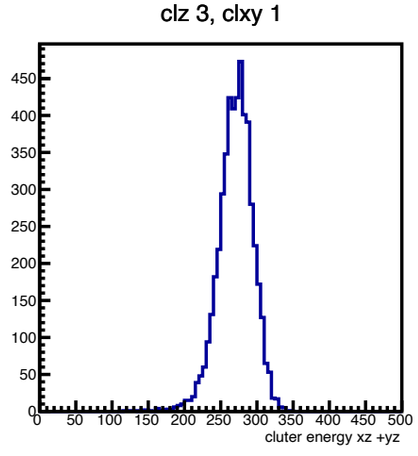


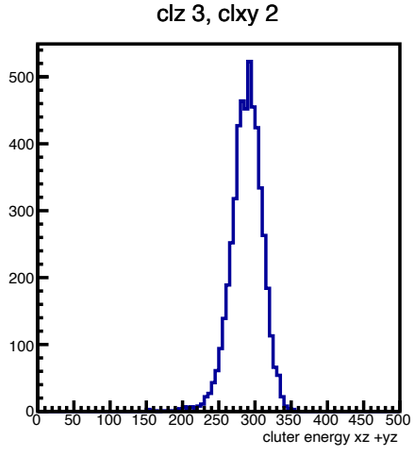


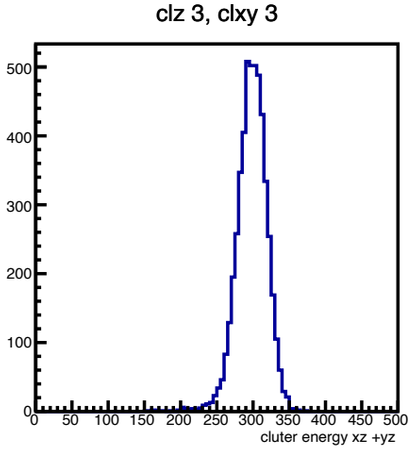


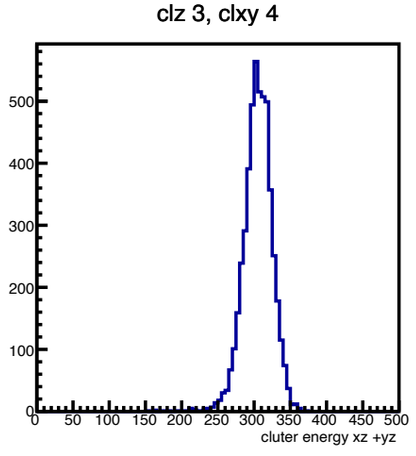


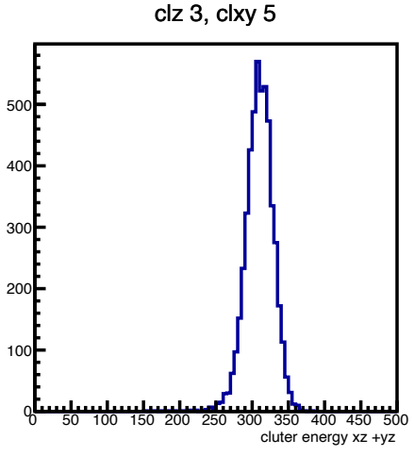






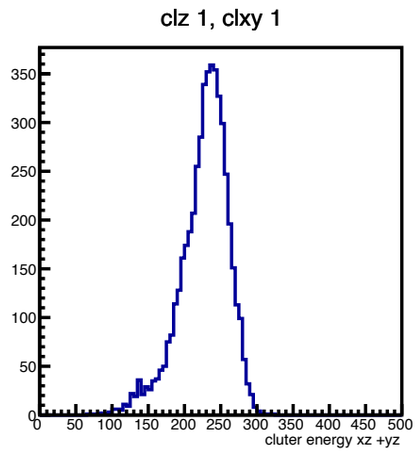


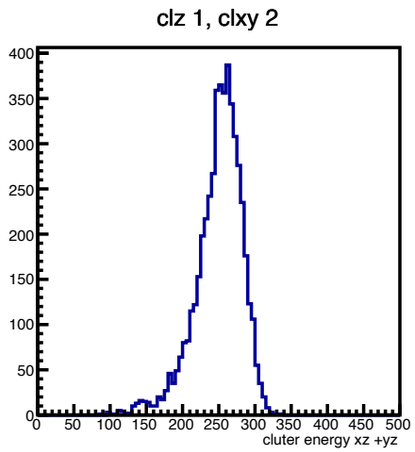


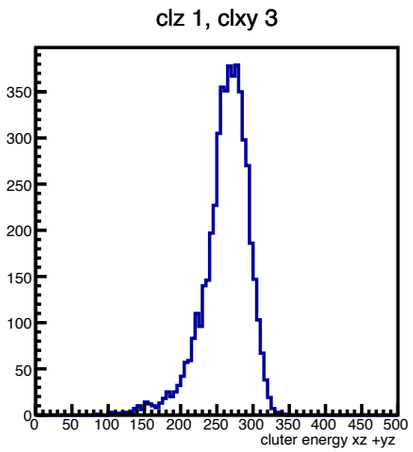


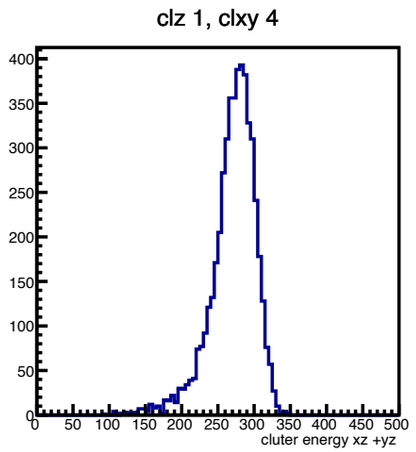
Cluster E_{total}

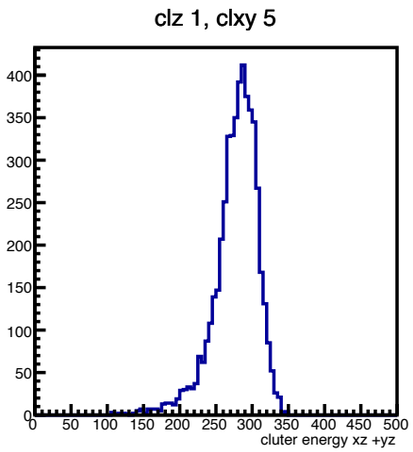
15 deg θ

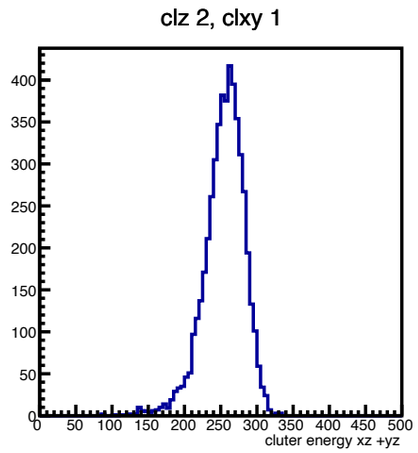


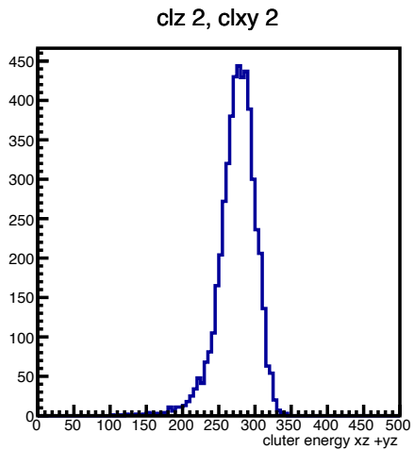


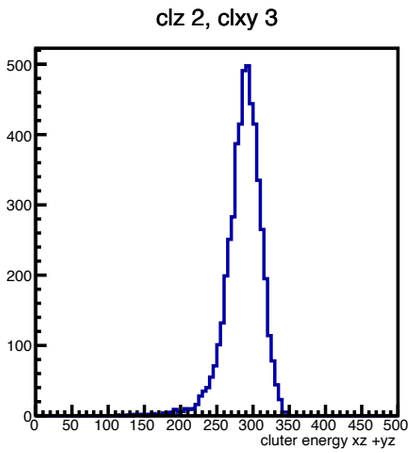


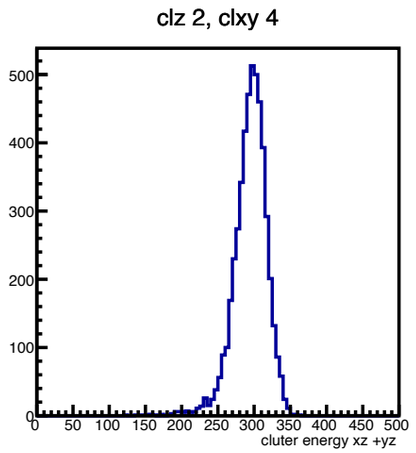


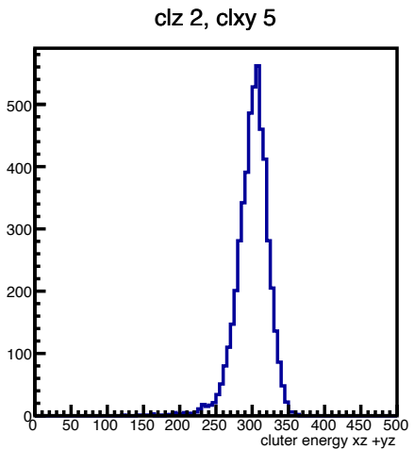


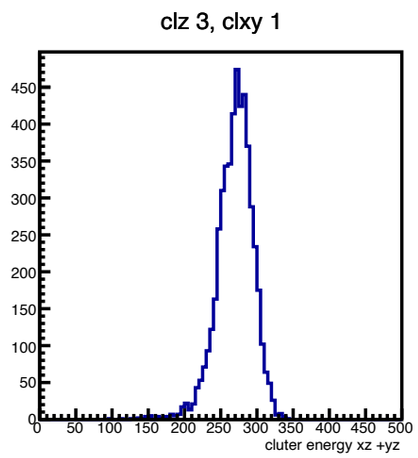


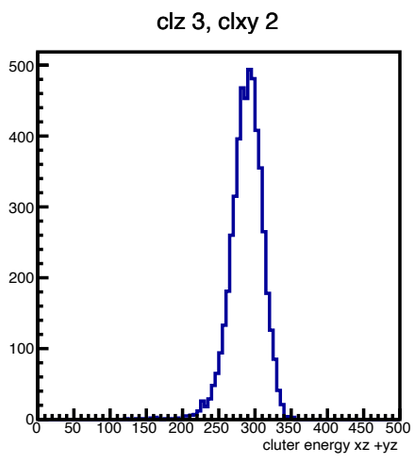


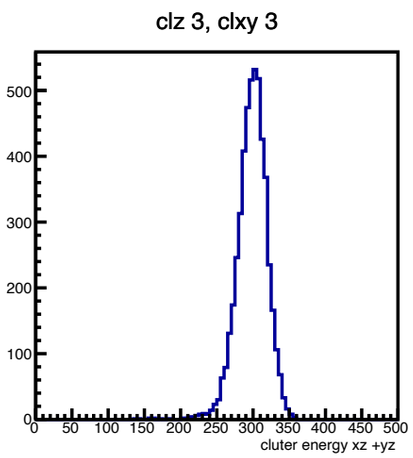


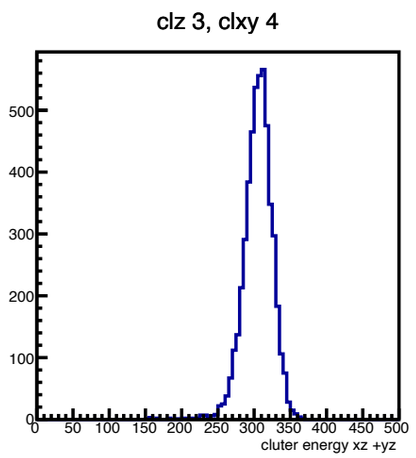


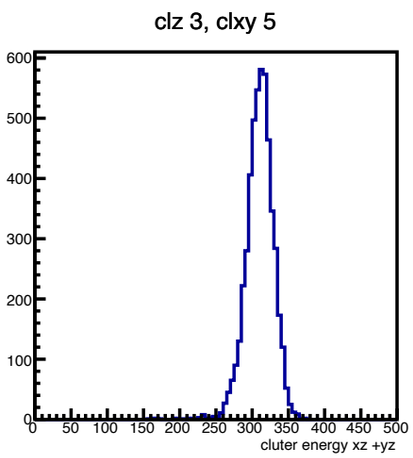






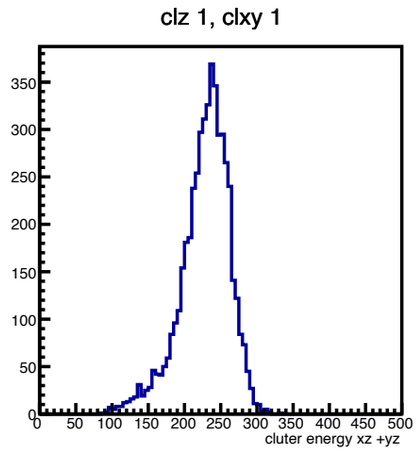


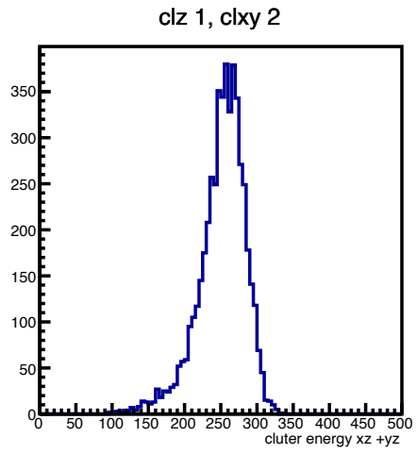


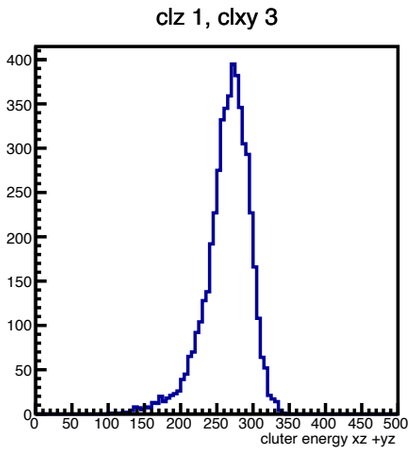


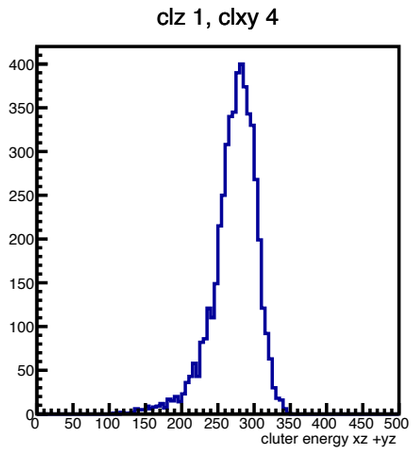
Cluster E_{total}

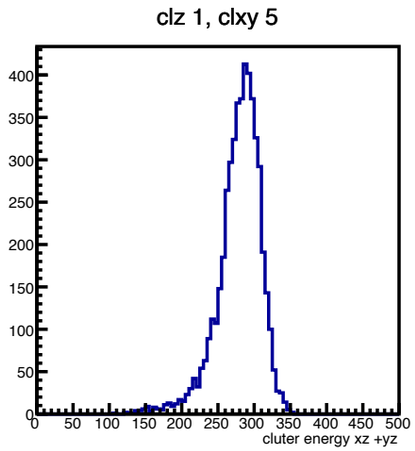
20 deg θ

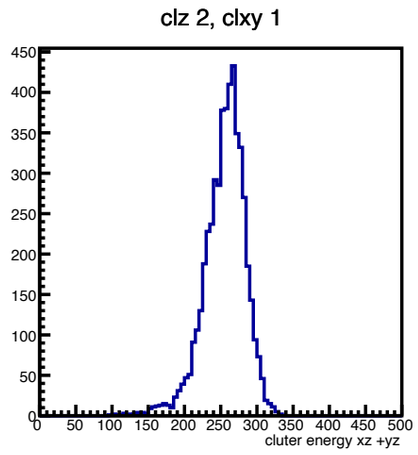


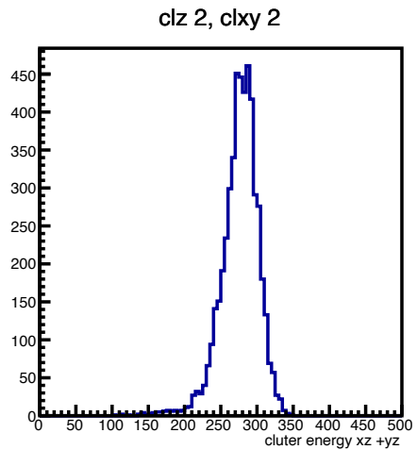


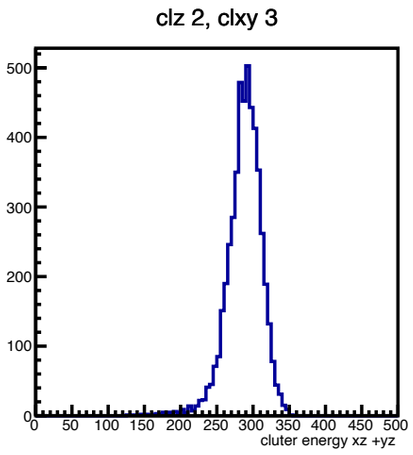


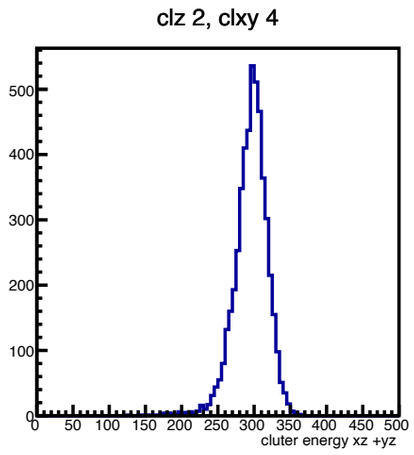


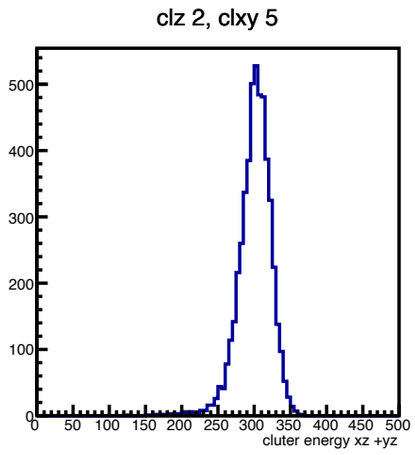


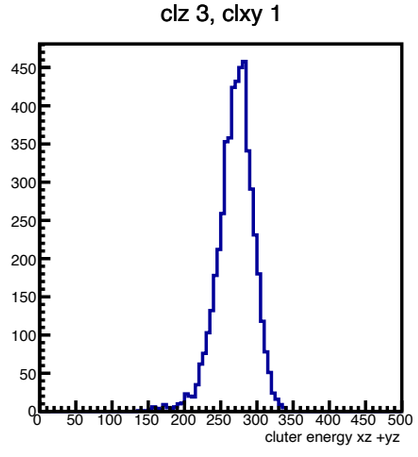


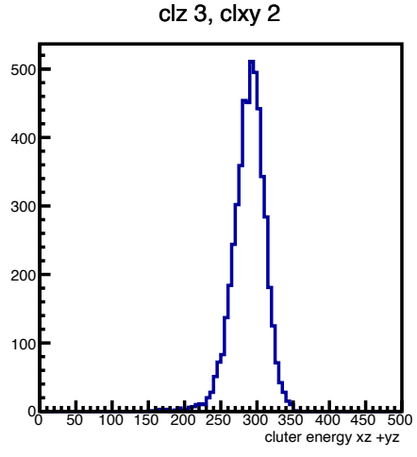


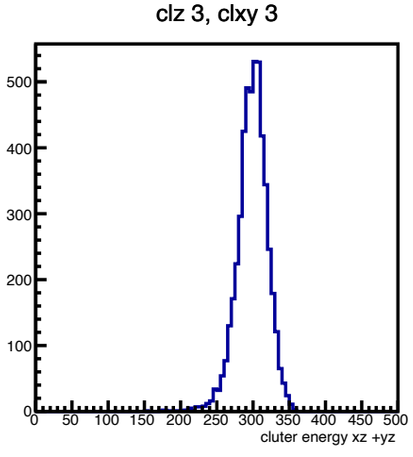


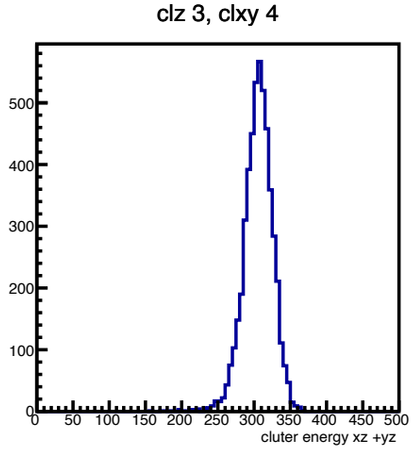


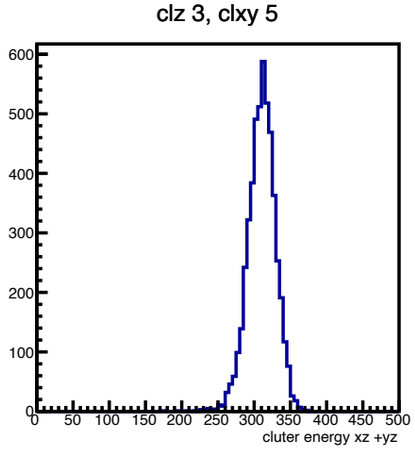






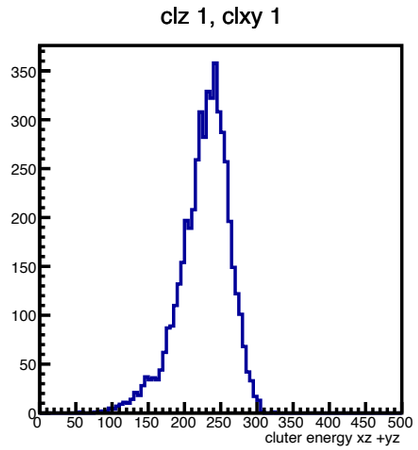


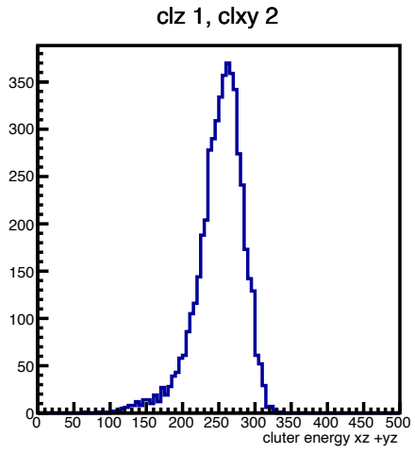


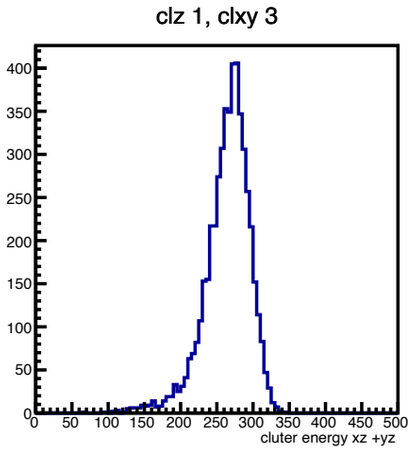


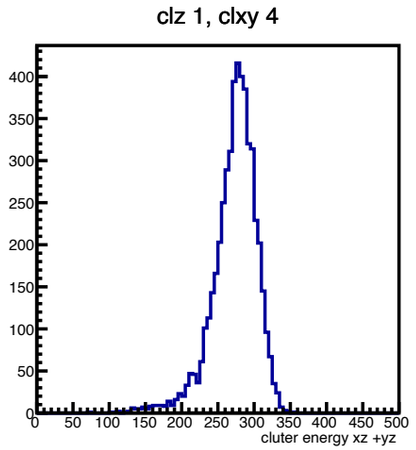
Cluster E_{total}

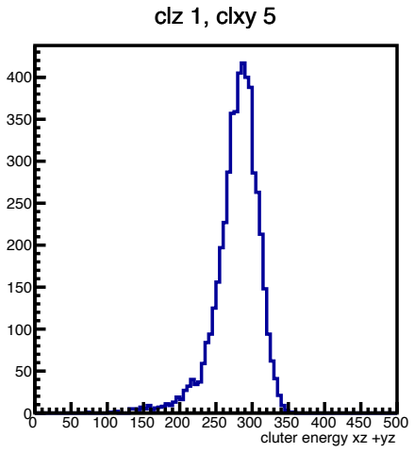
25 deg θ

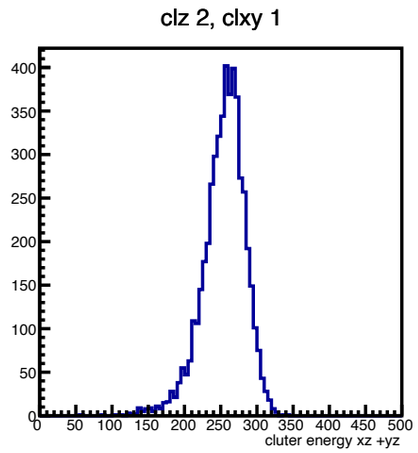


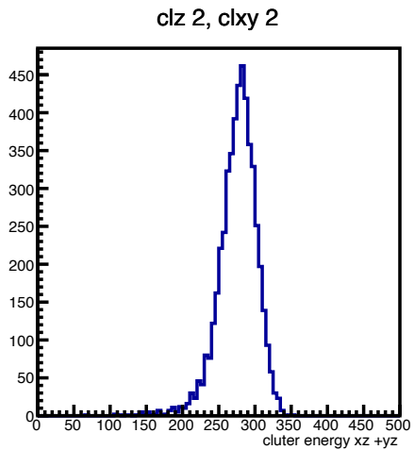


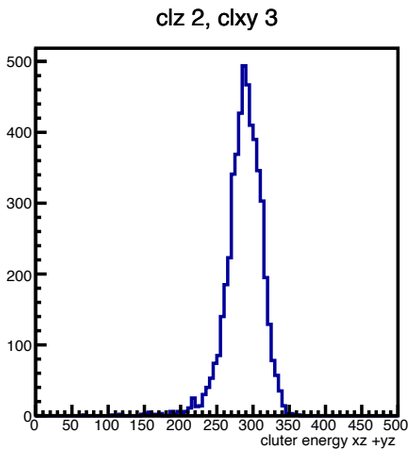


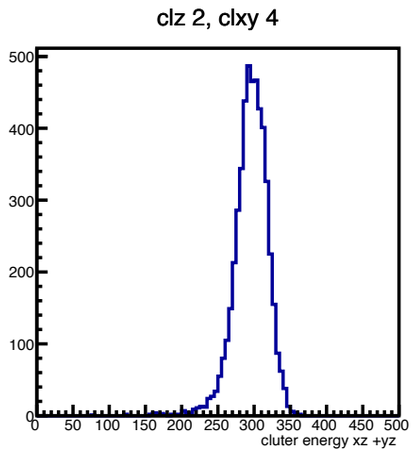


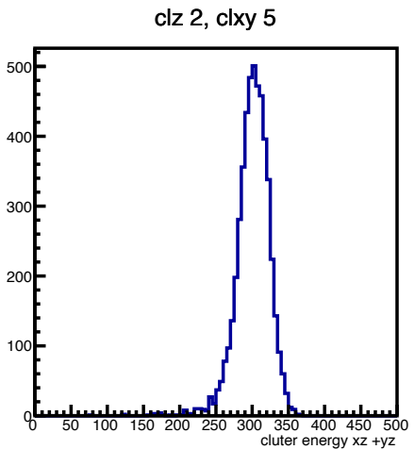


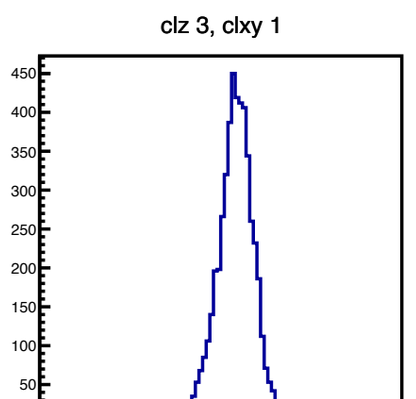


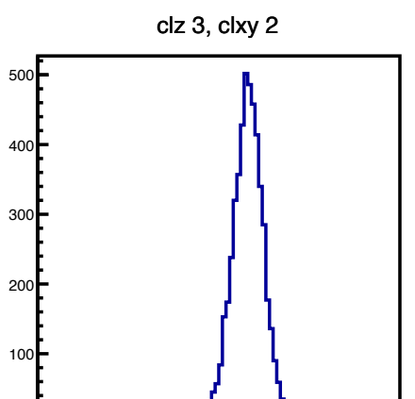


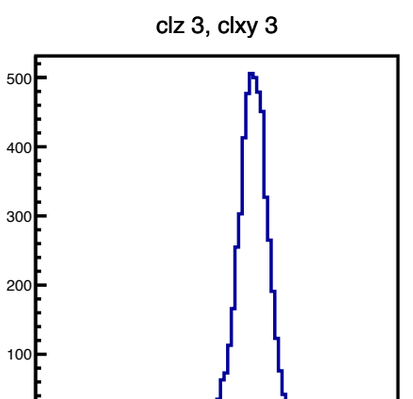


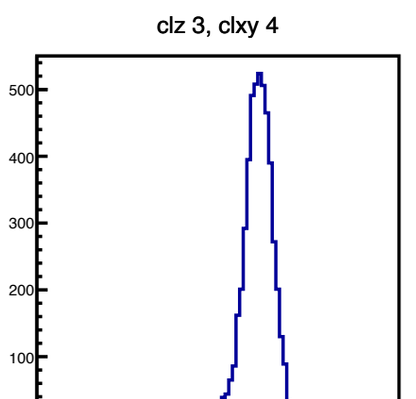


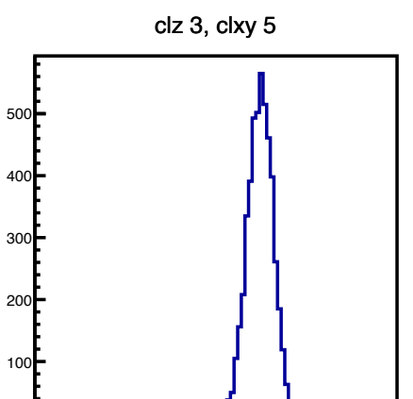






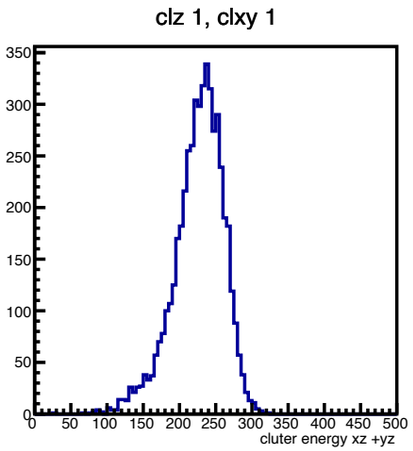


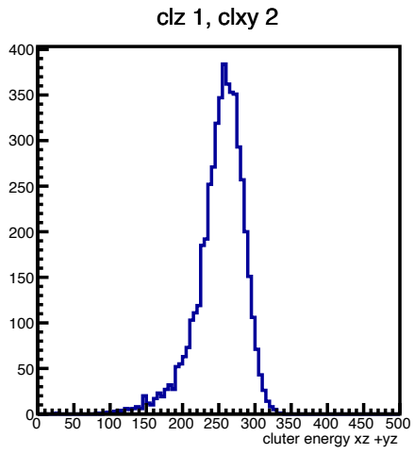


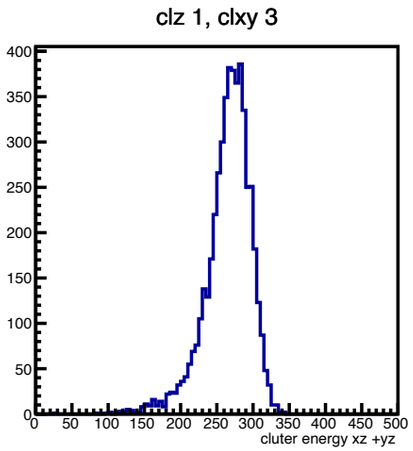


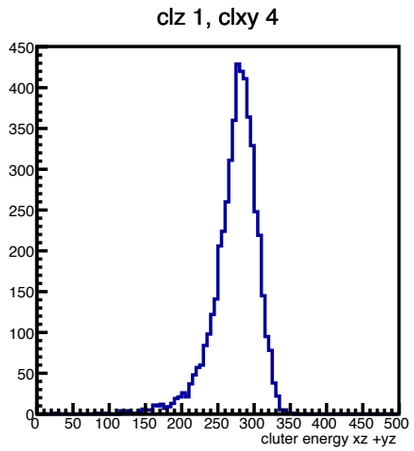
Cluster E_{total}

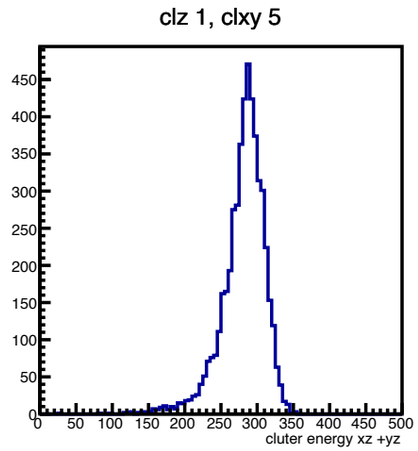
30 deg θ

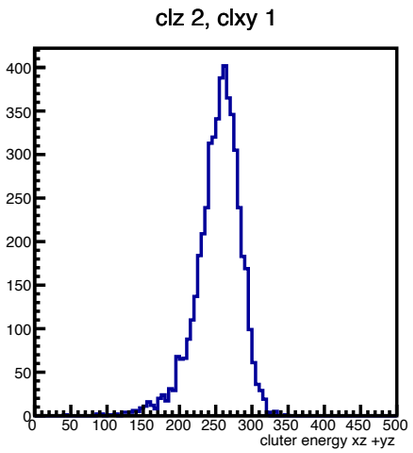


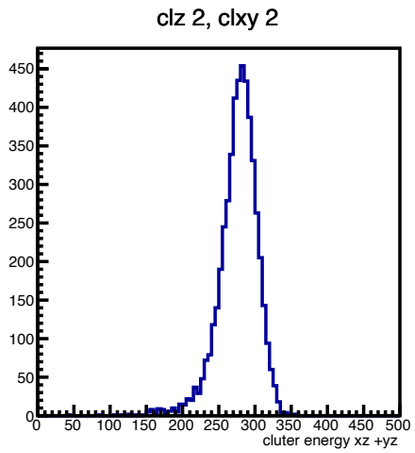


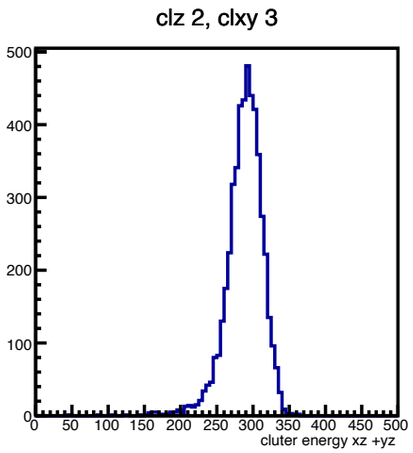


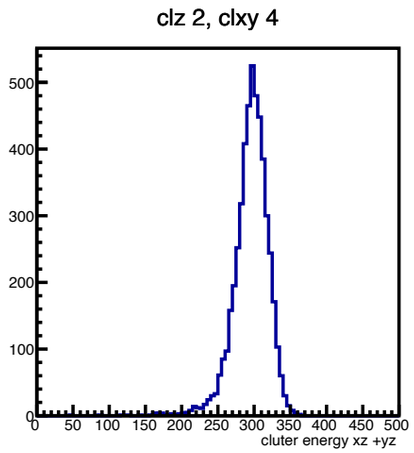


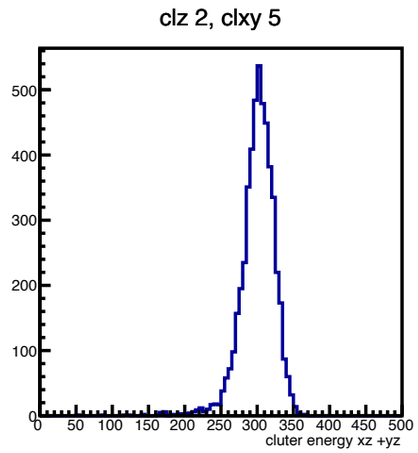


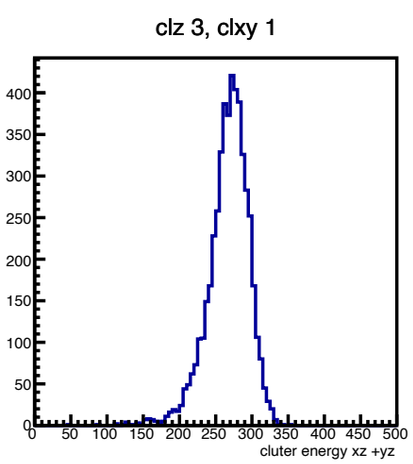


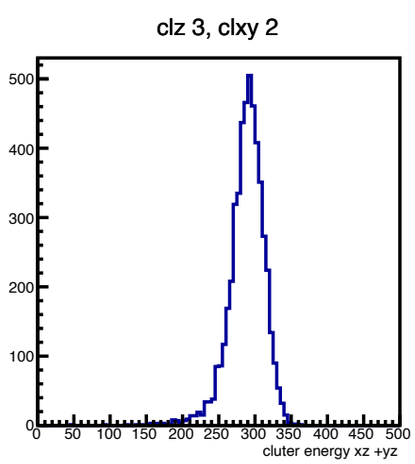


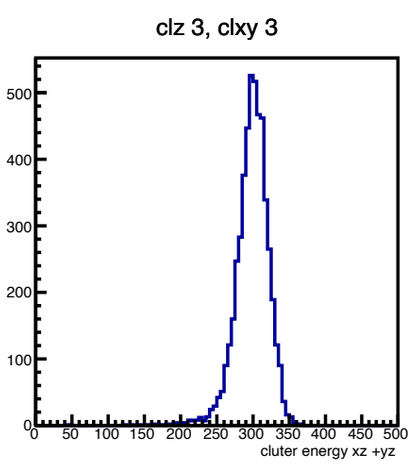


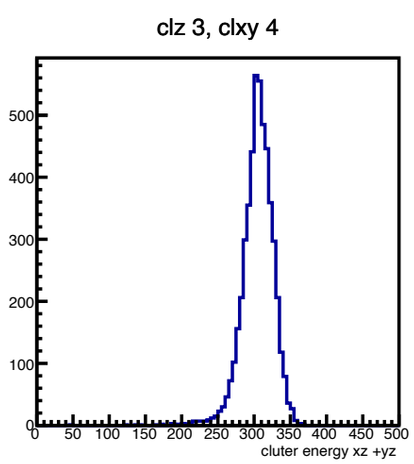


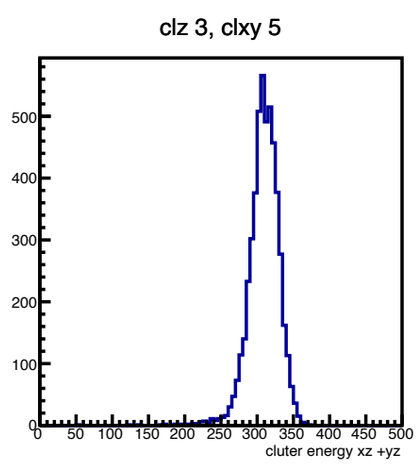






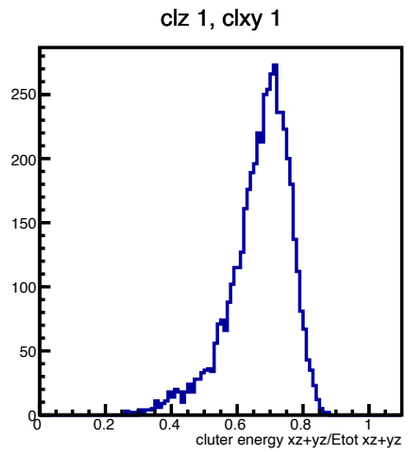


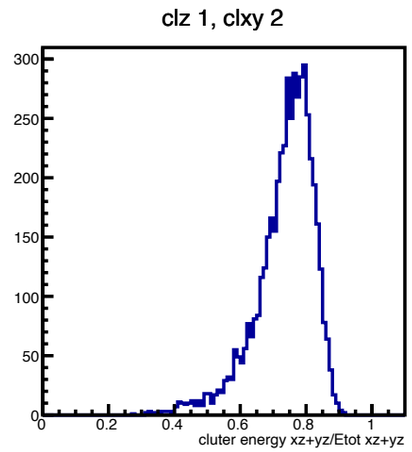


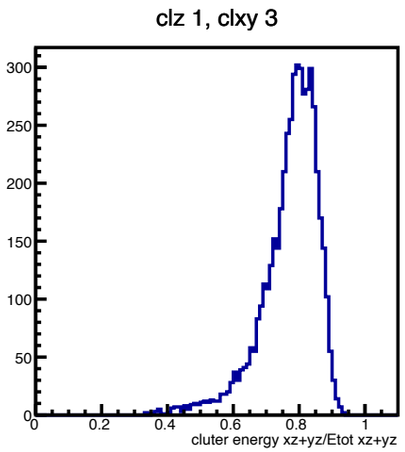


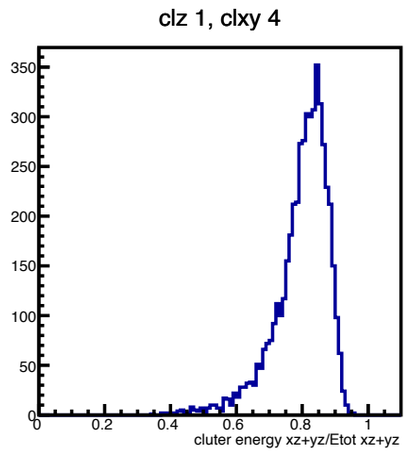
Cluster Energy Ratio (xz + yz)

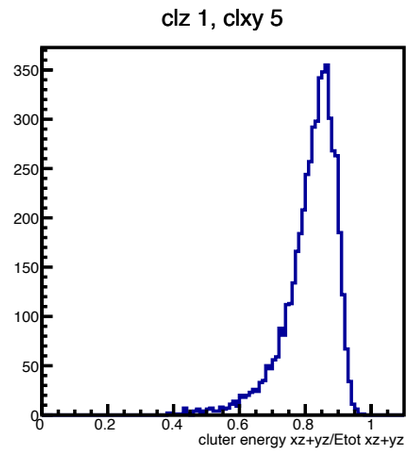
0 deg θ

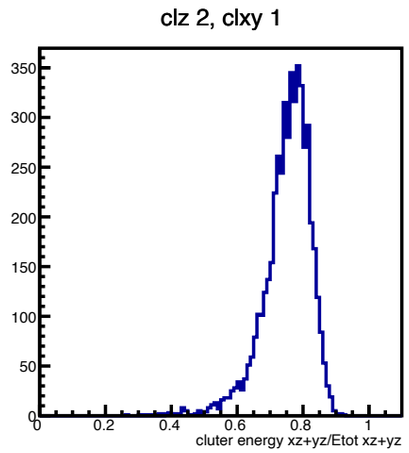


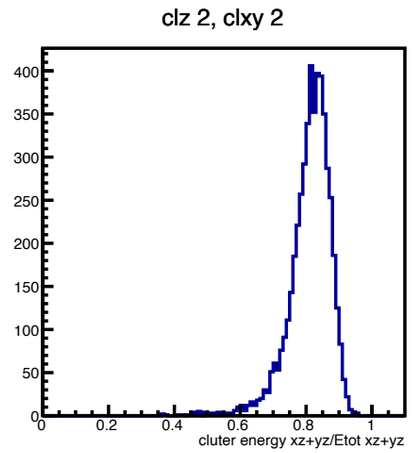


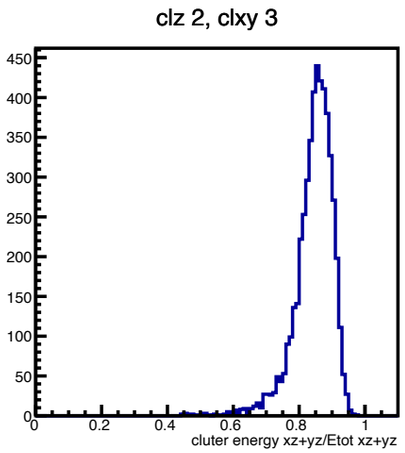


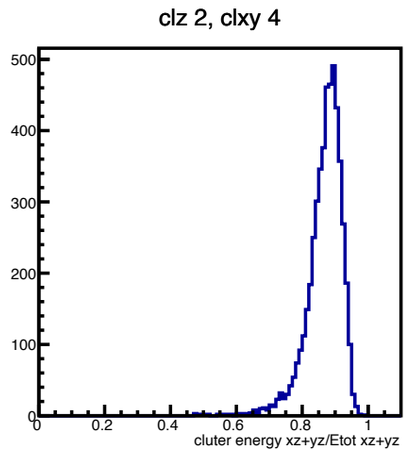


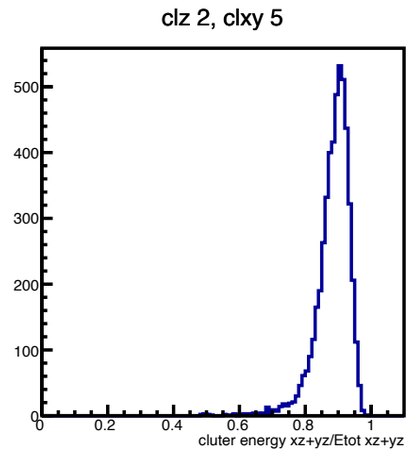


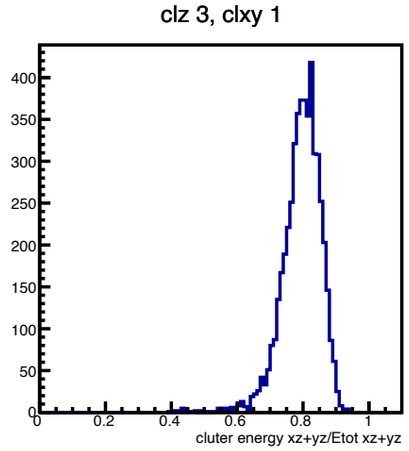


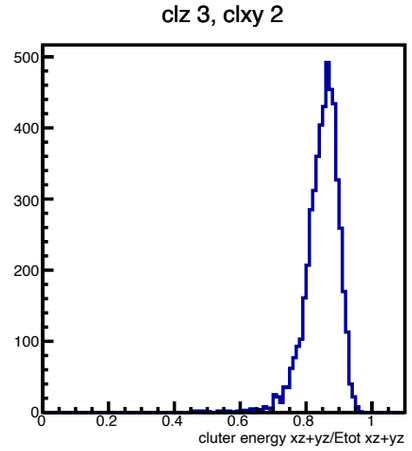


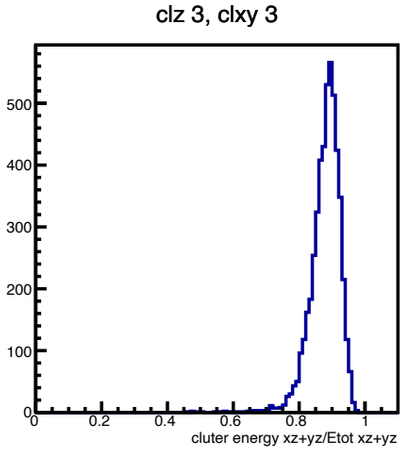


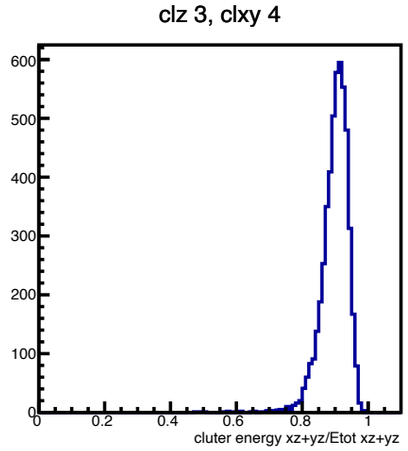


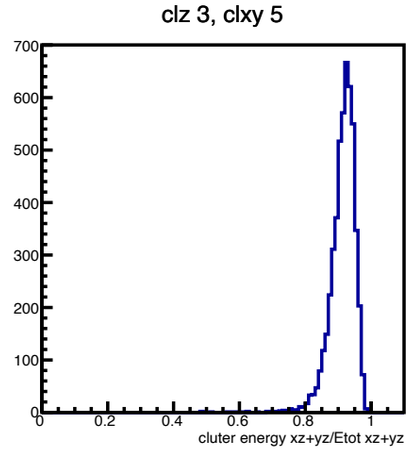






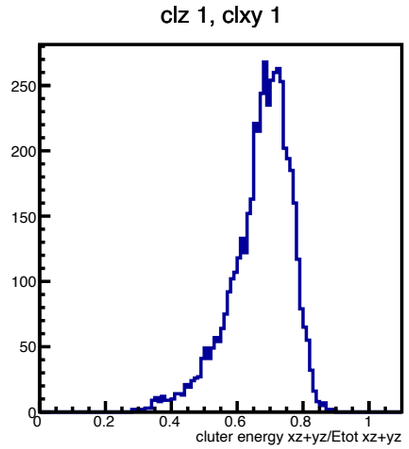


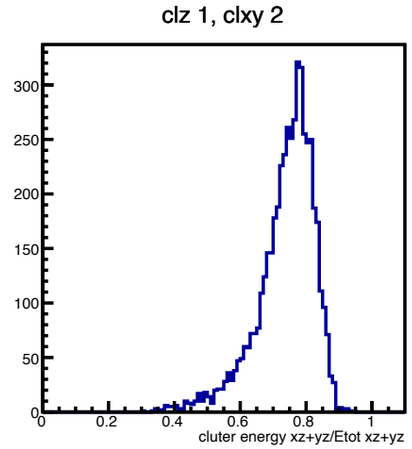


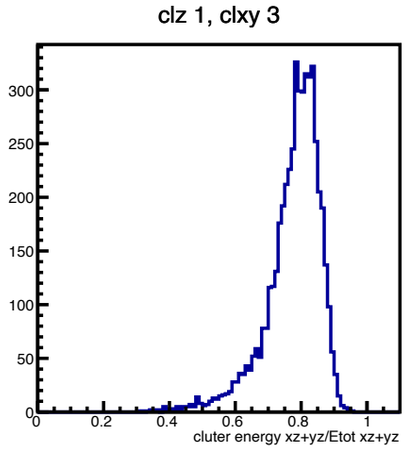


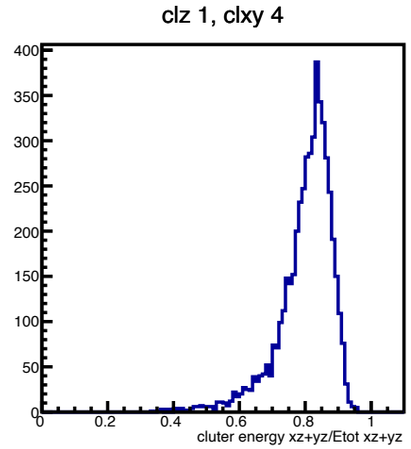
Cluster Energy Ratio (xz + yz)

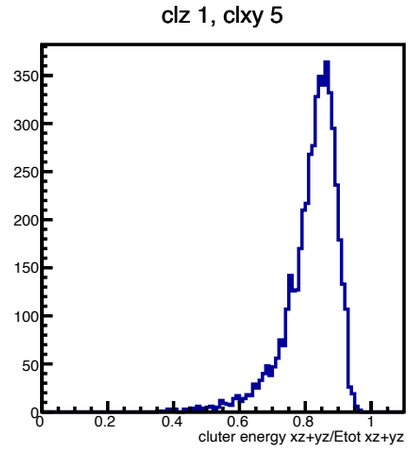
5 deg θ

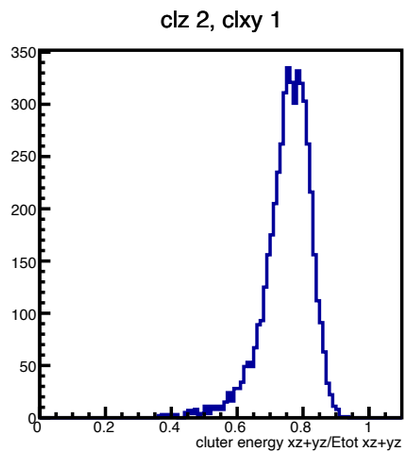


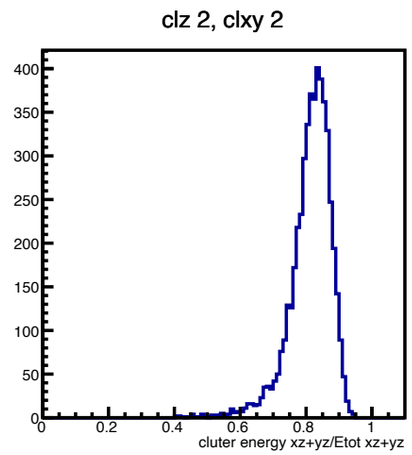


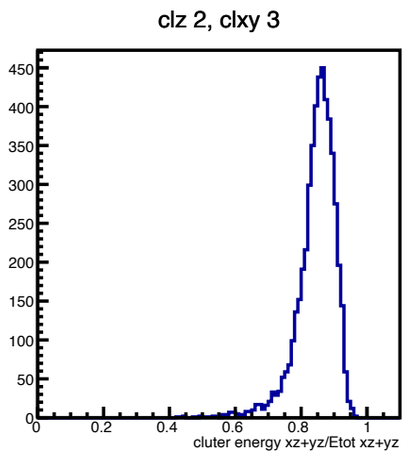


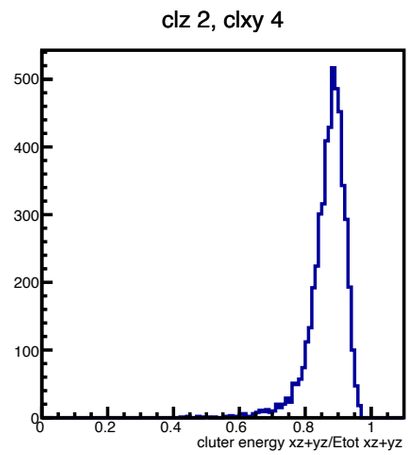


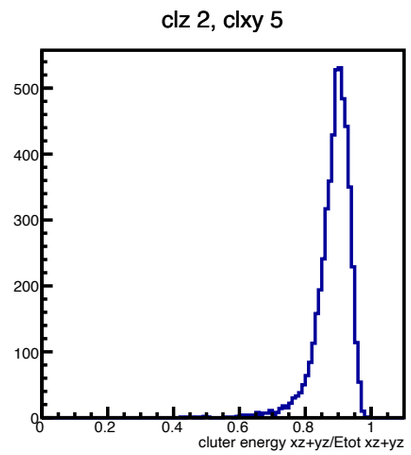


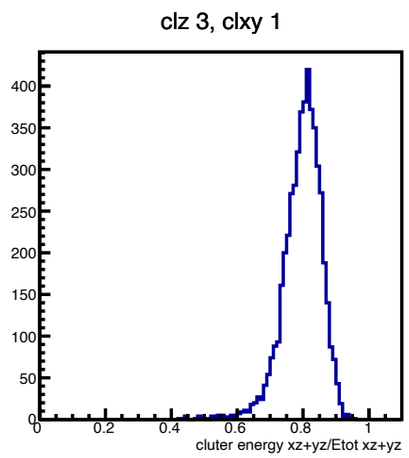


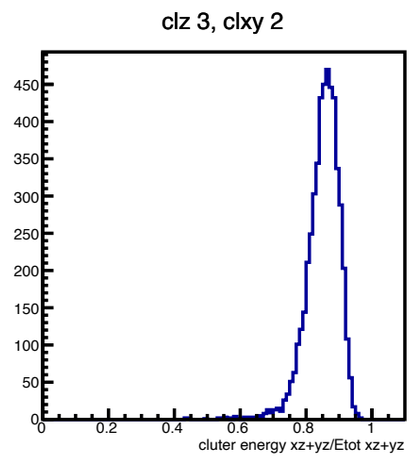


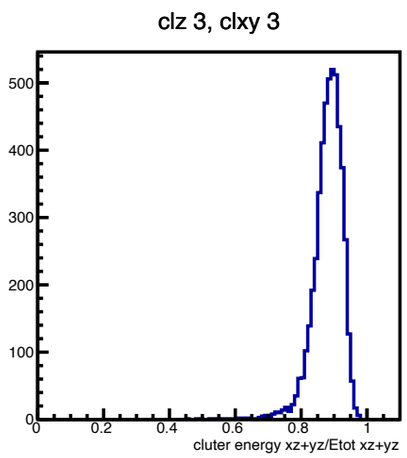


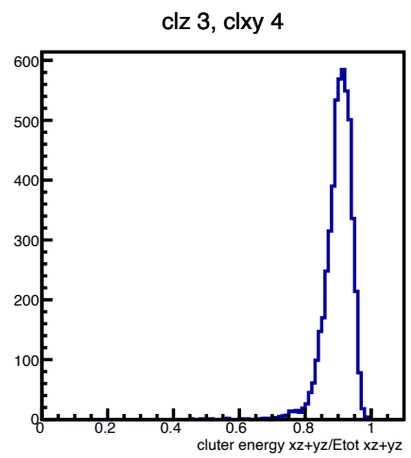


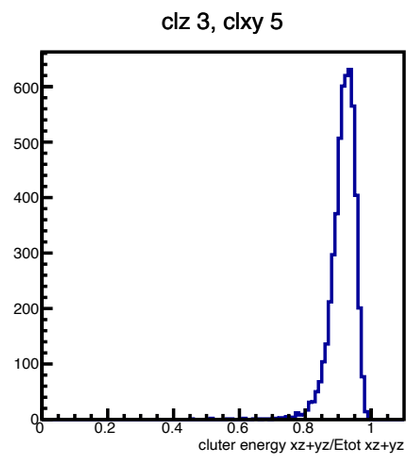








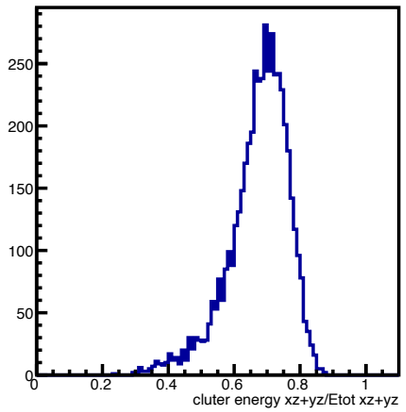




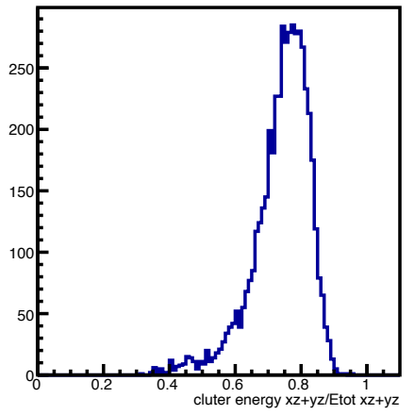
Cluster Energy Ratio (xz + yz)

10 deg θ

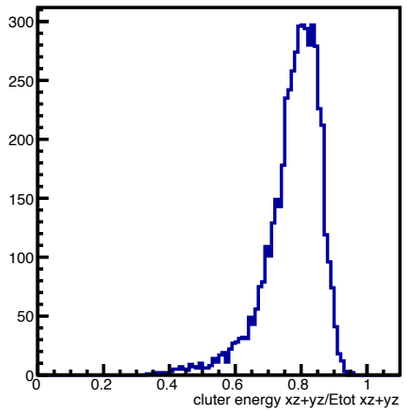
clz 1, clxy 1



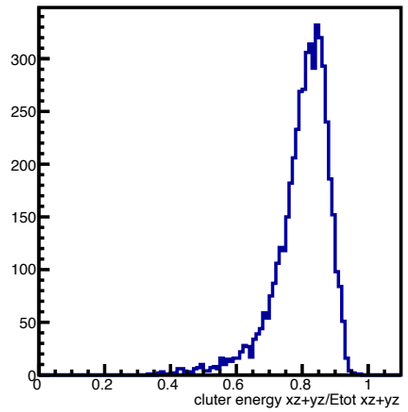
clz 1, clxy 2



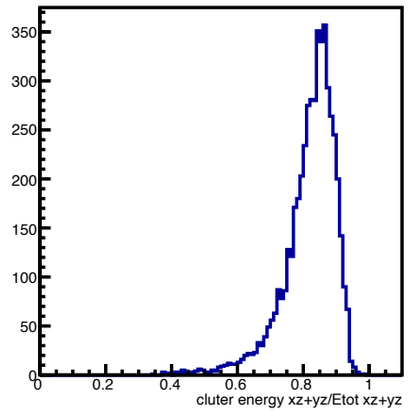
clz 1, clxy 3



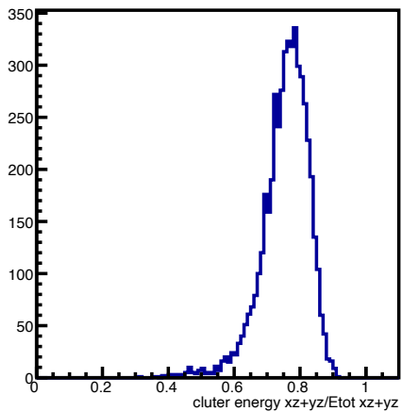
clz 1, clxy 4



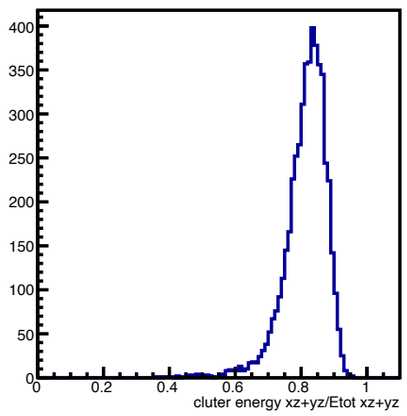
clz 1, clxy 5



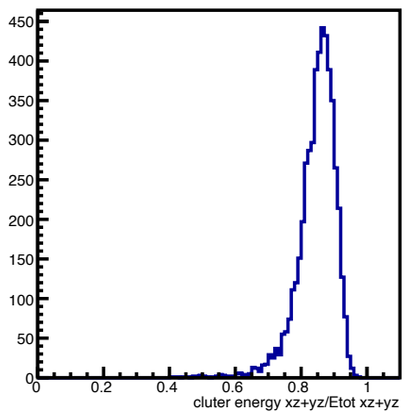
clz 2, clxy 1



clz 2, clxy 2



clz 2, clxy 3



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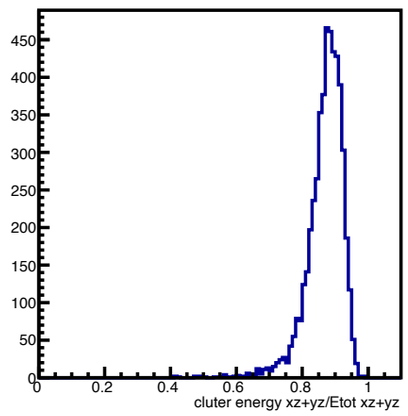

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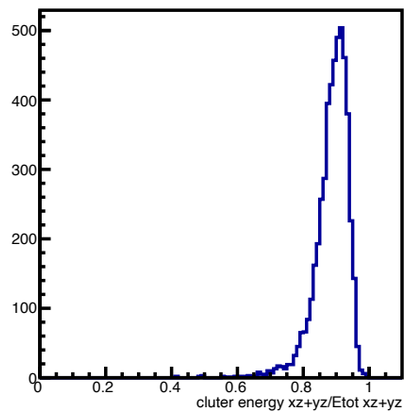
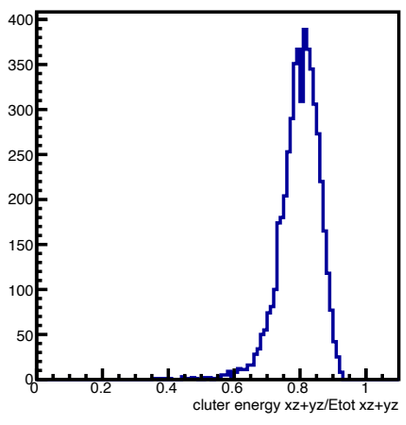


clz 3, clxy 1



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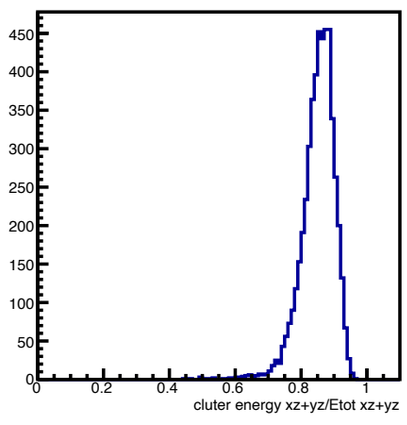
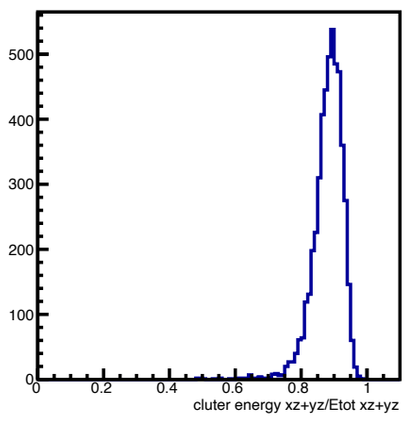


clz 3, clxy 3



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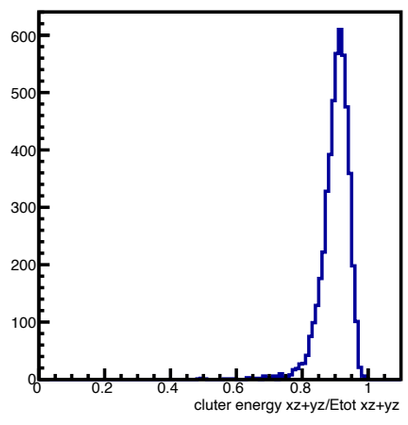
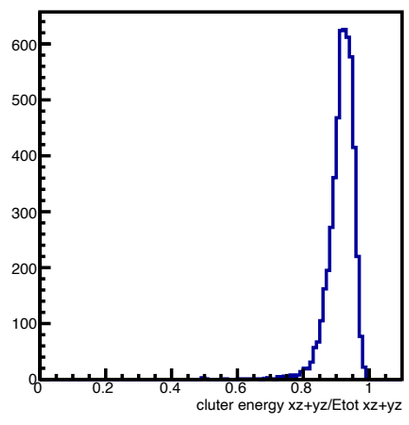
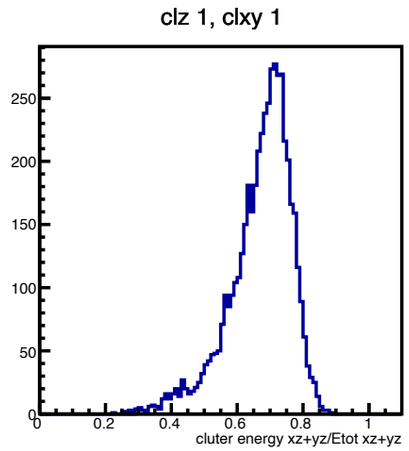


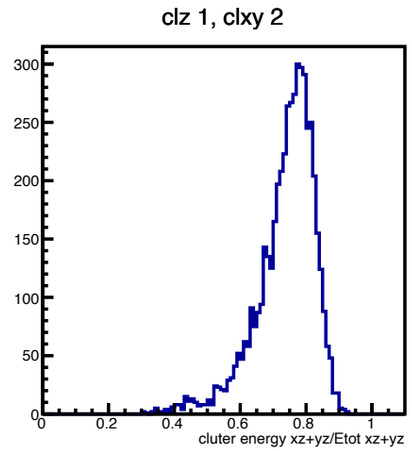
clz 3, clxy 5

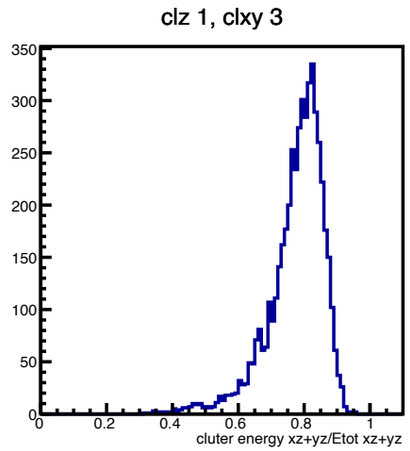


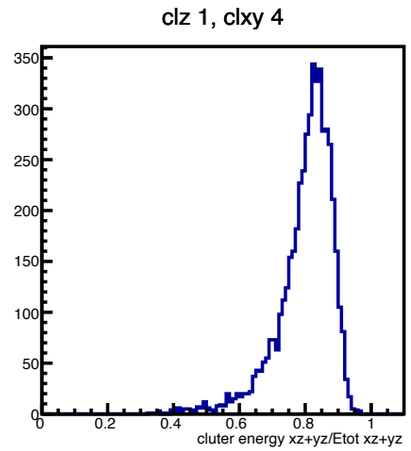
Cluster Energy Ratio (xz + yz)

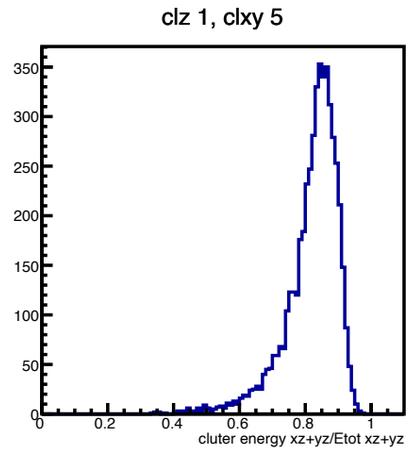
15 deg θ

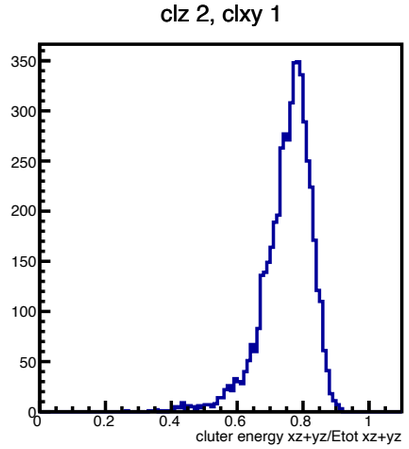


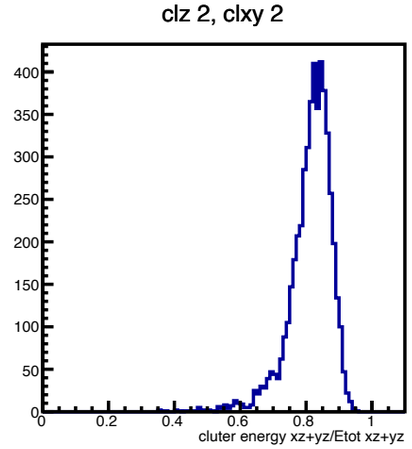


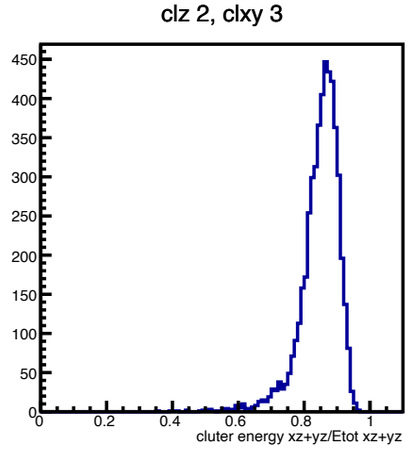


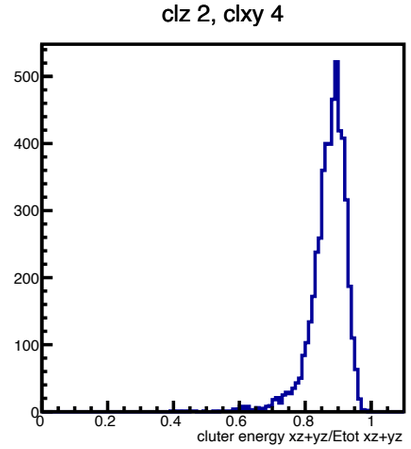


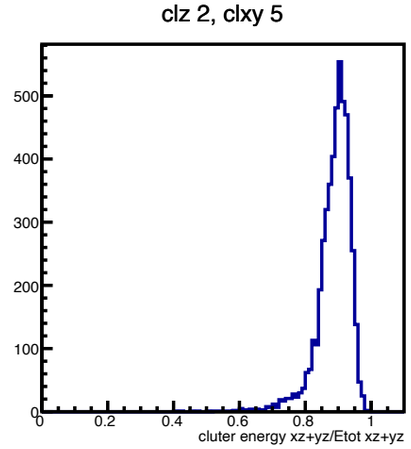


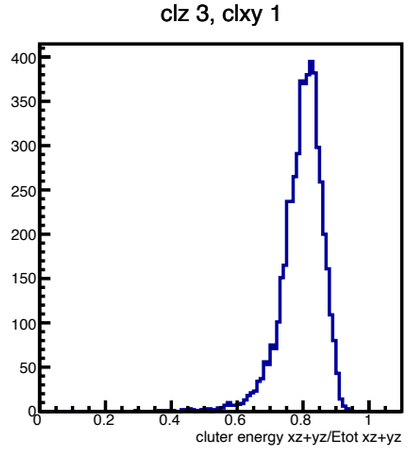


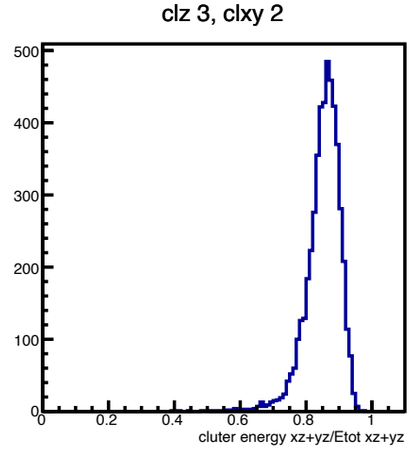


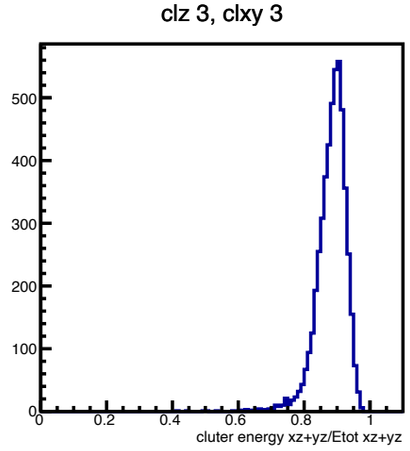


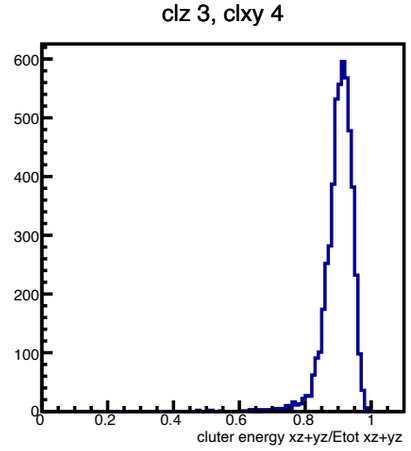


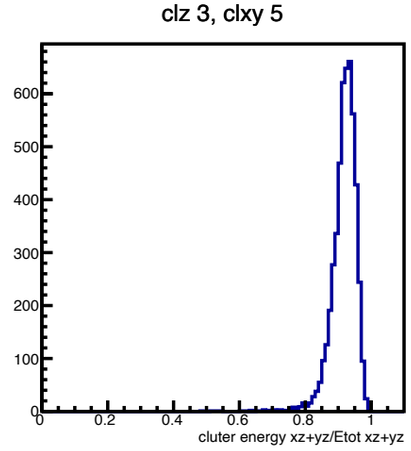






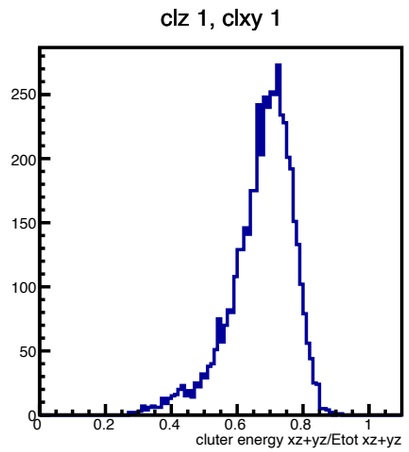


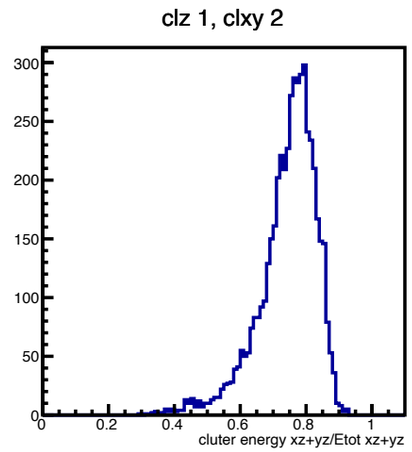


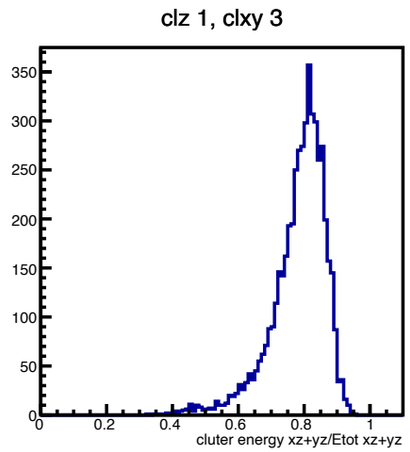


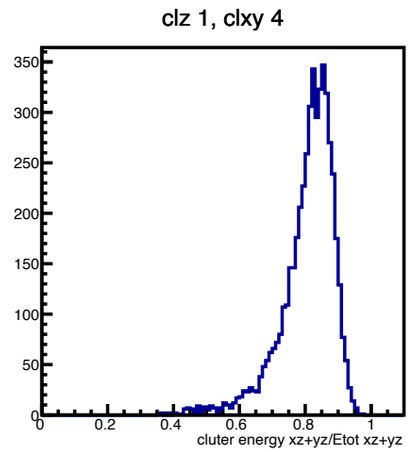
Cluster Energy Ratio (xz + yz)

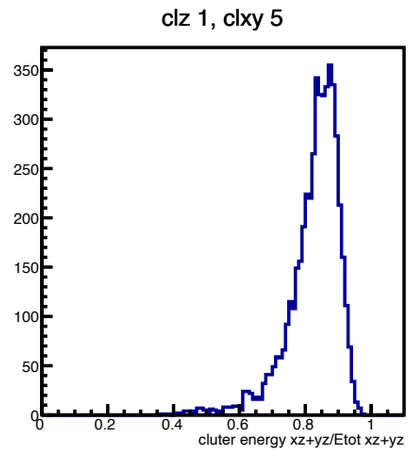
20 deg θ

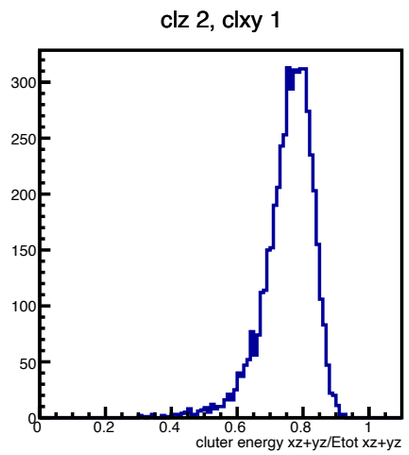


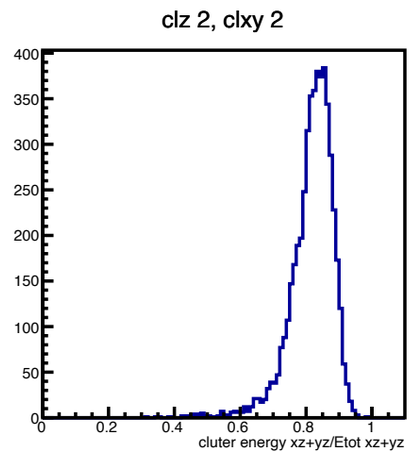


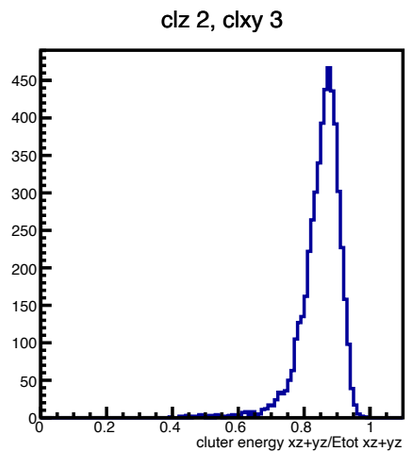


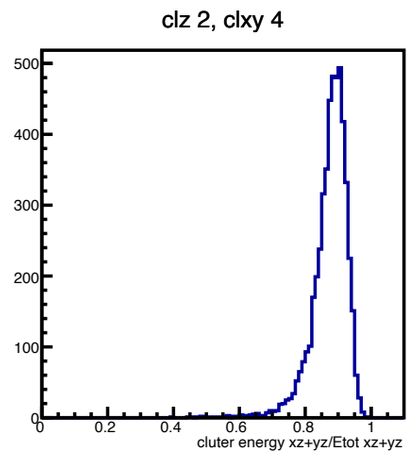


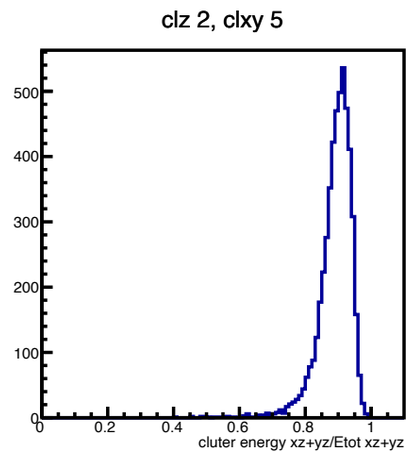


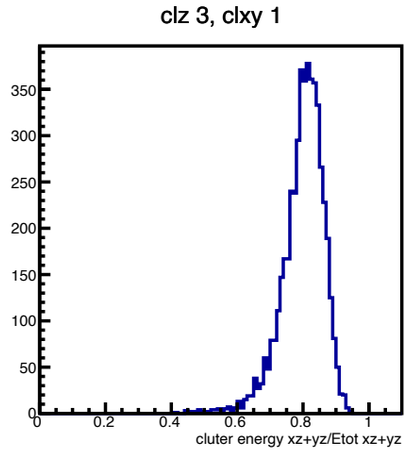


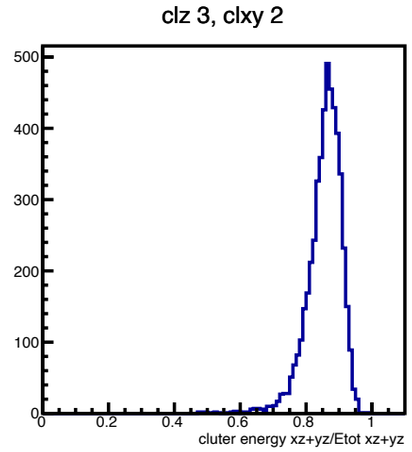


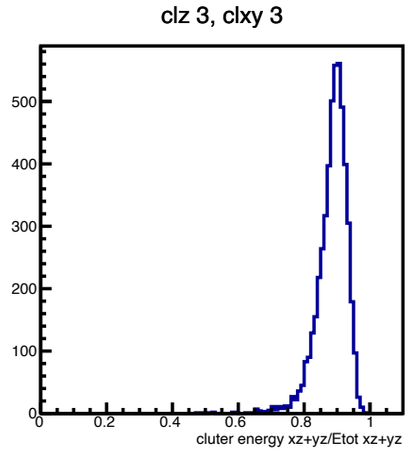


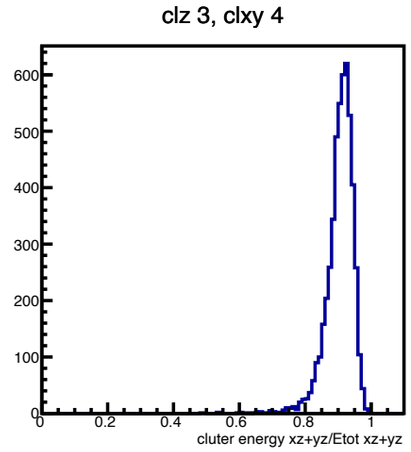


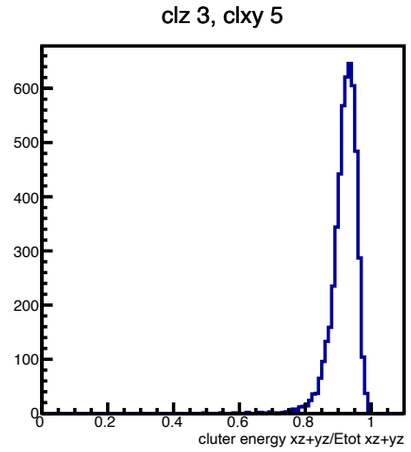






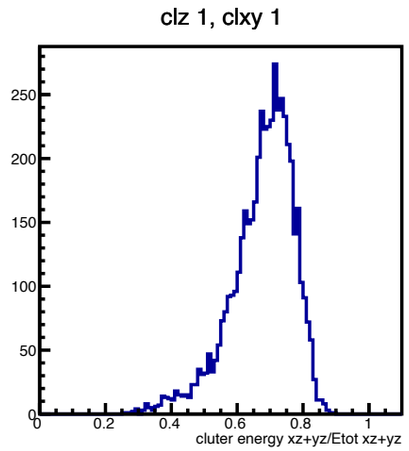


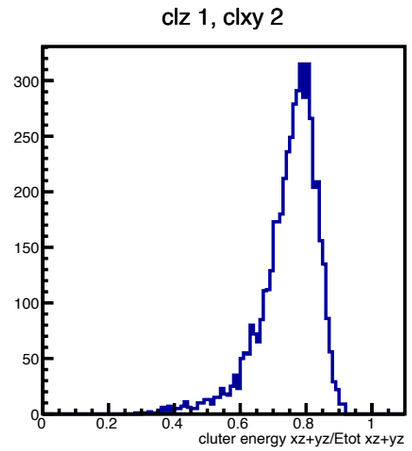


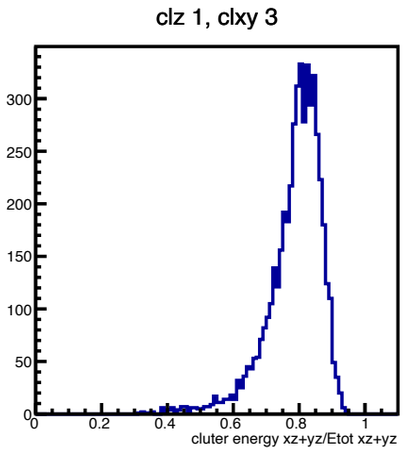


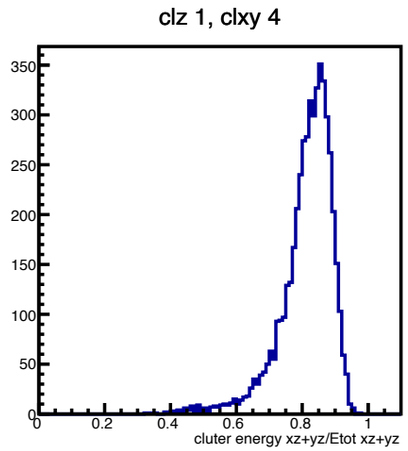
Cluster Energy Ratio (xz + yz)

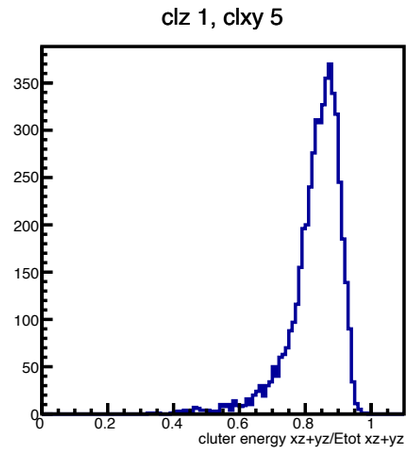
25 deg θ

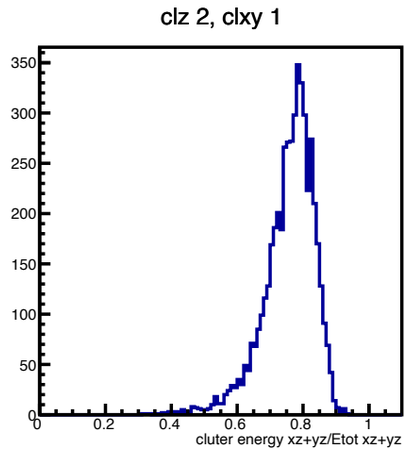


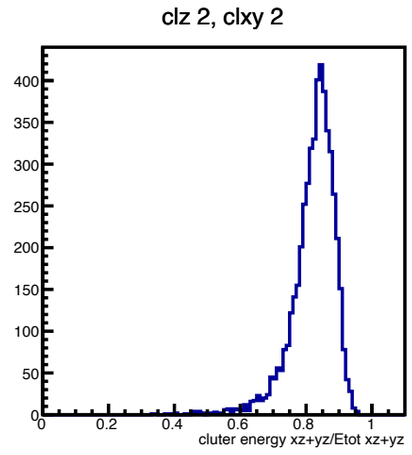


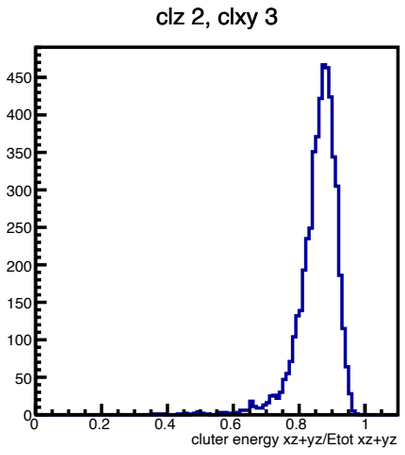


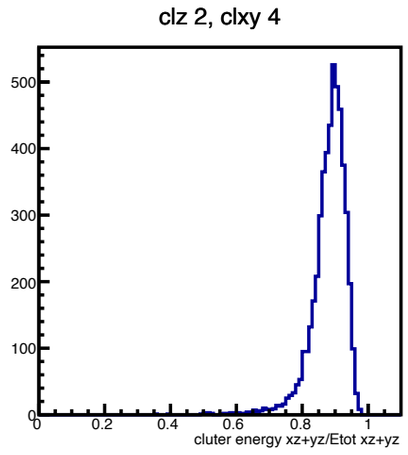


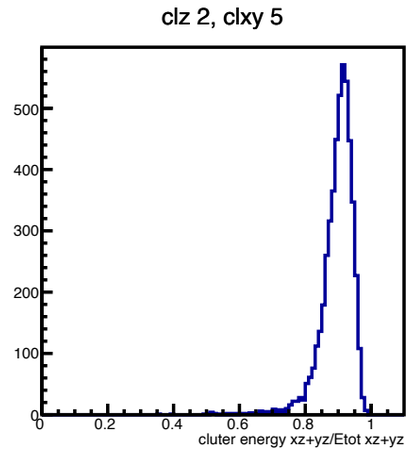


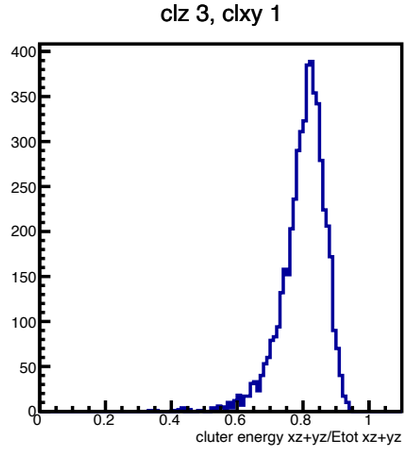


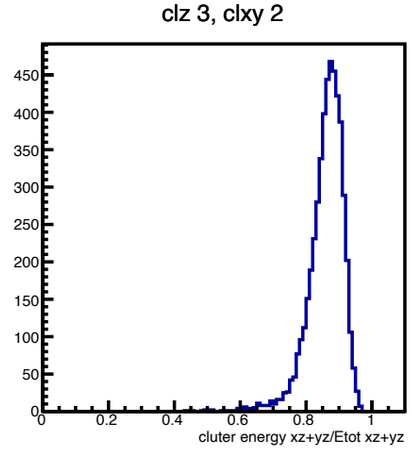


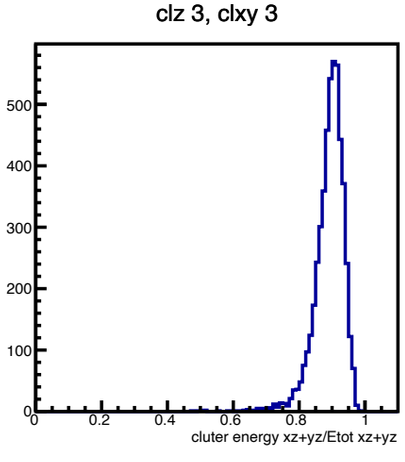


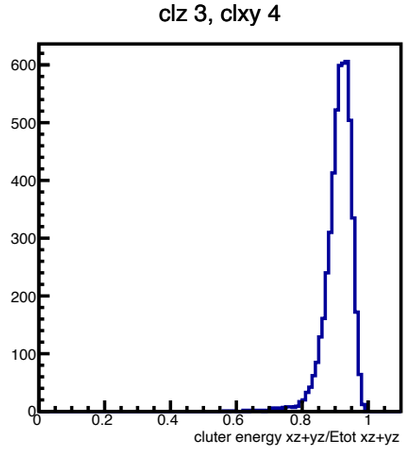


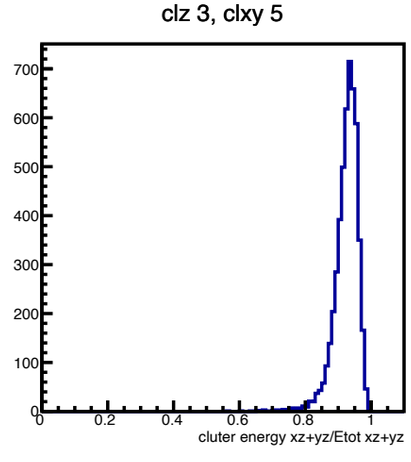






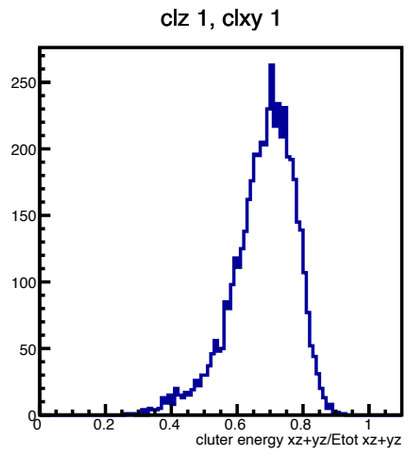


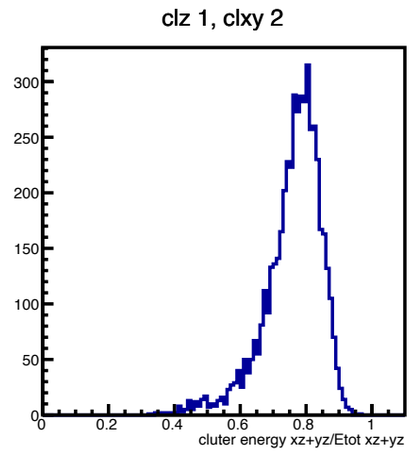


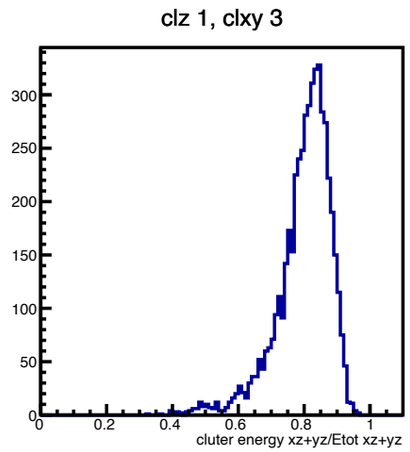


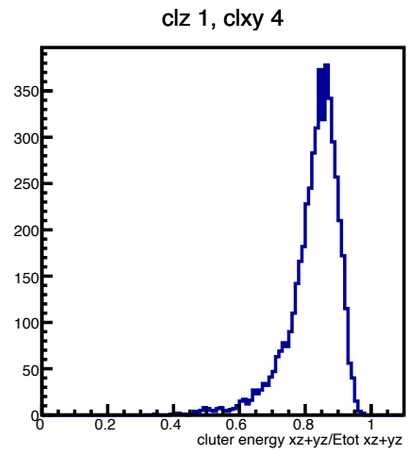
Cluster Energy Ratio (xz + yz)

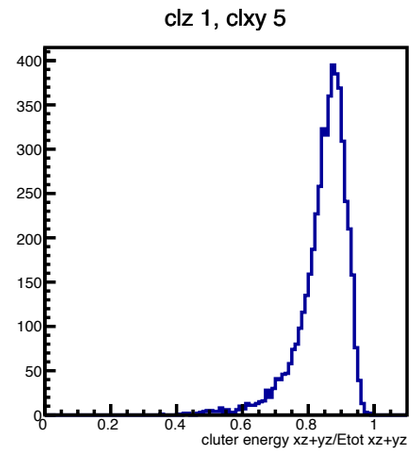
30 deg θ

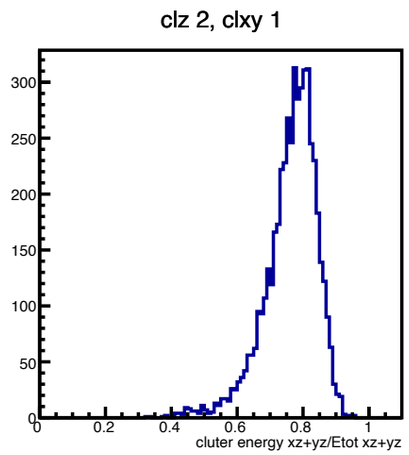


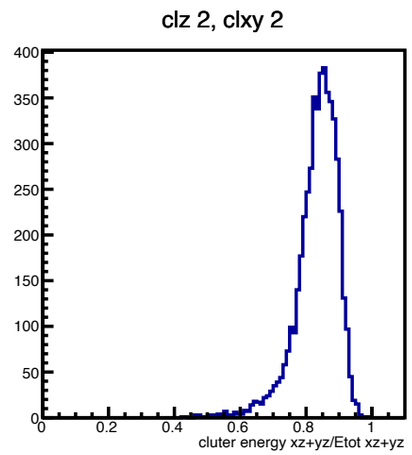


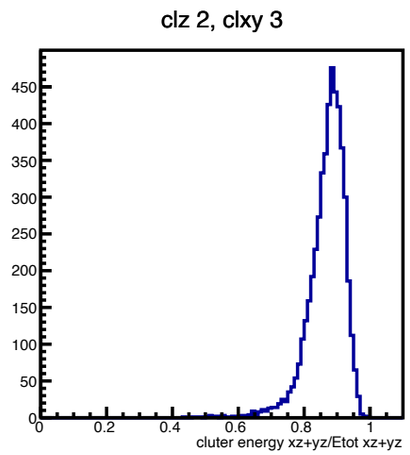


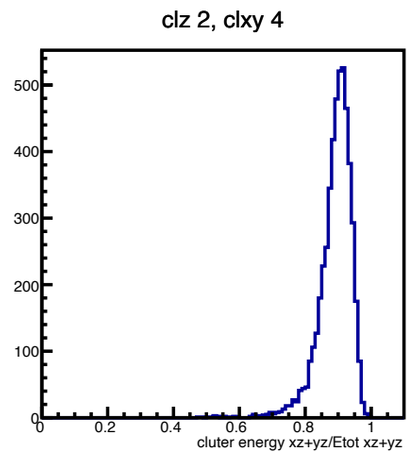


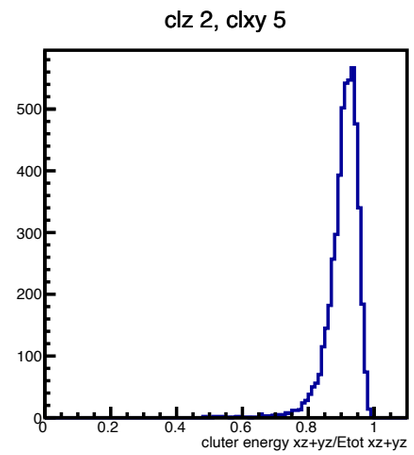


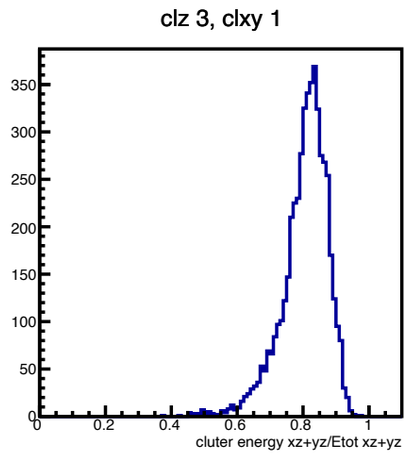


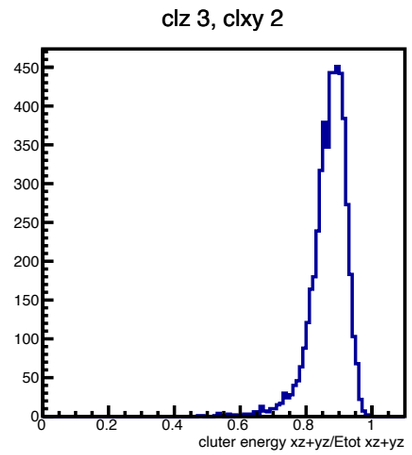


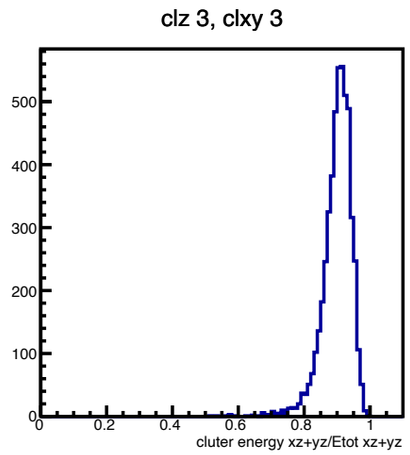


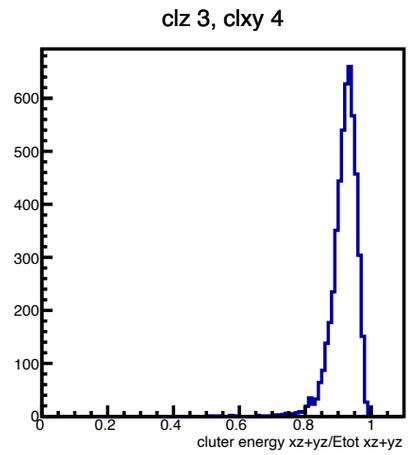


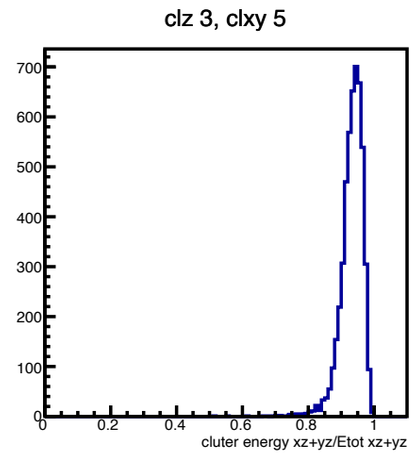






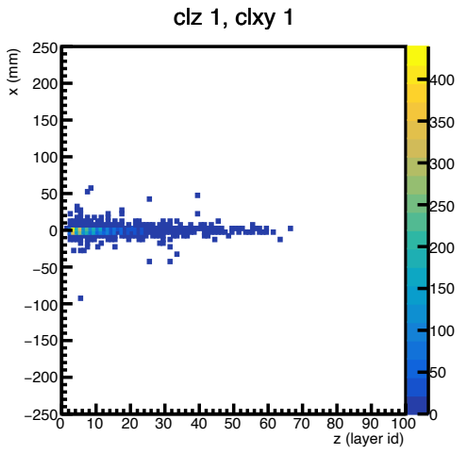


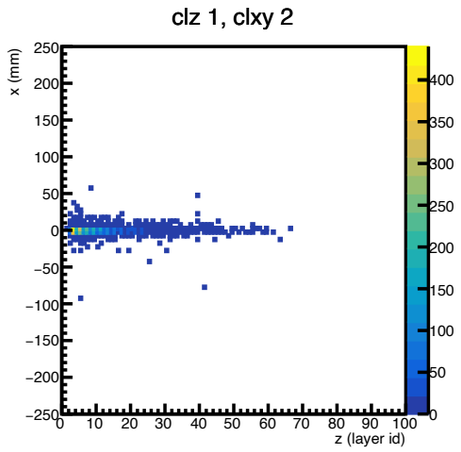


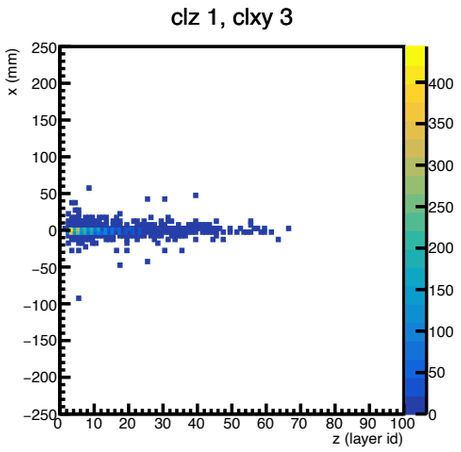


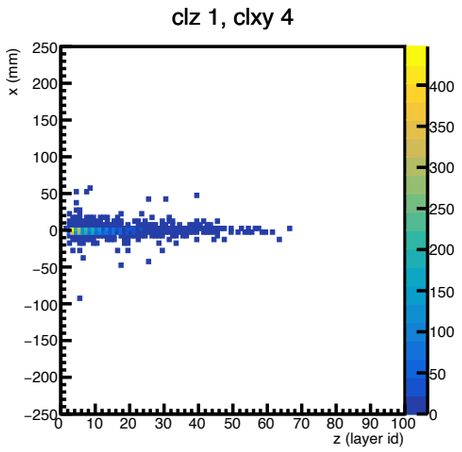
X0, Z0 Estimation

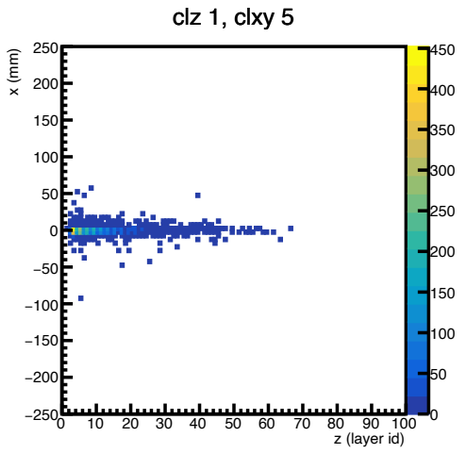
0 deg θ

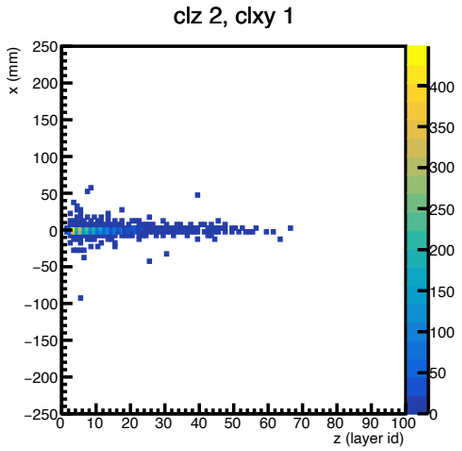


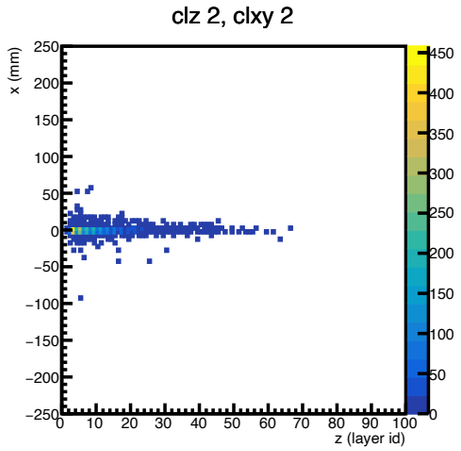


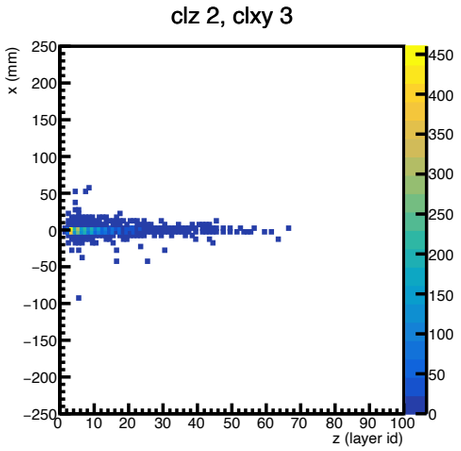


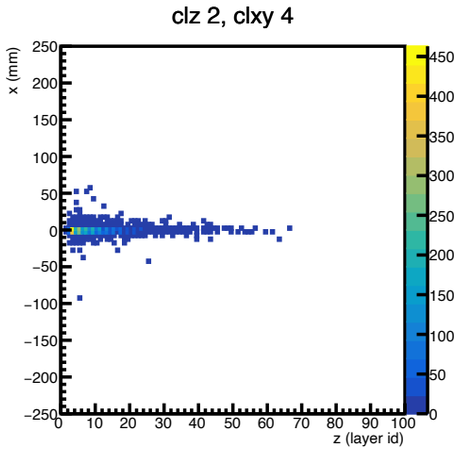


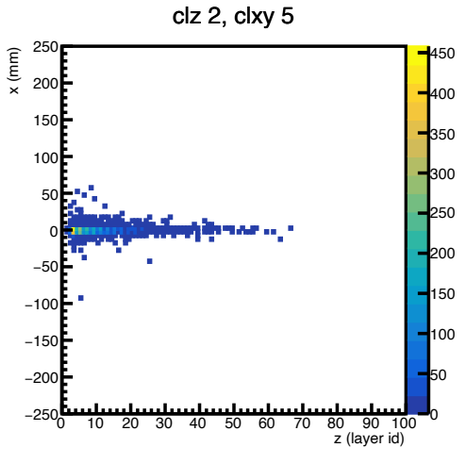


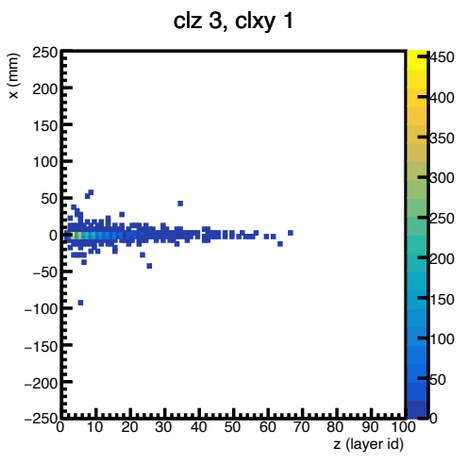


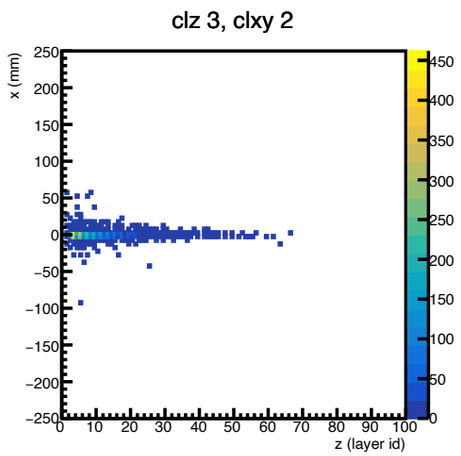


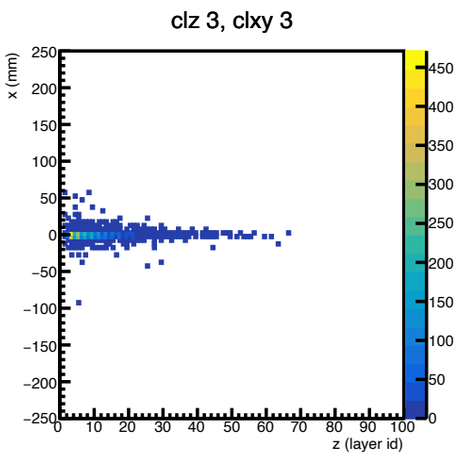


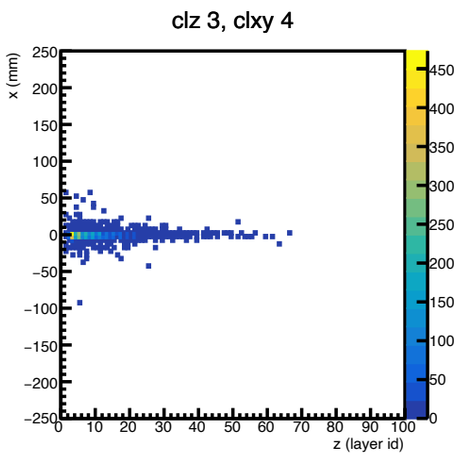


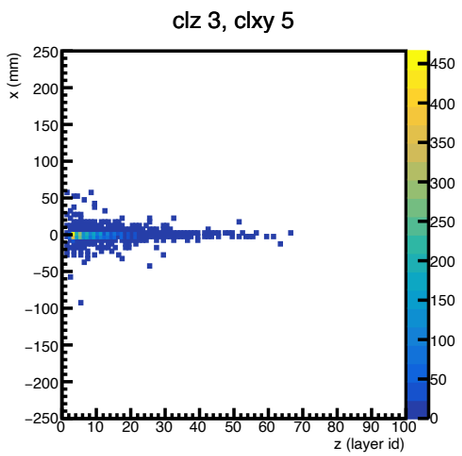






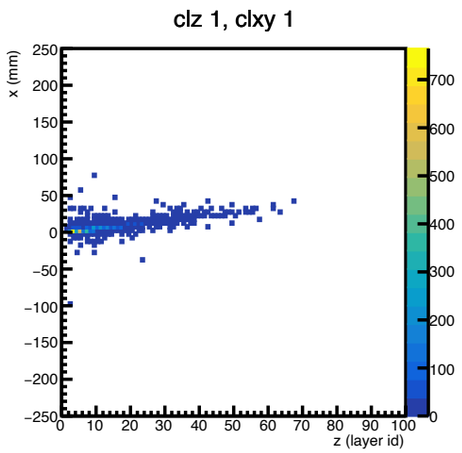


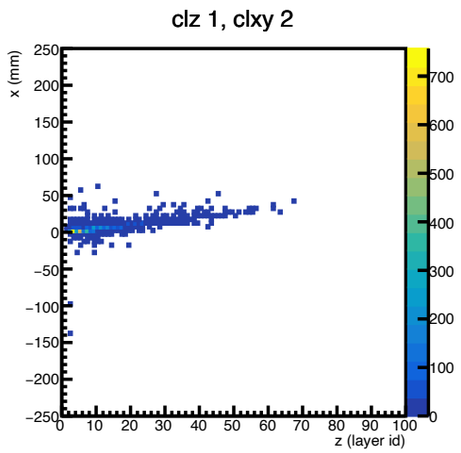


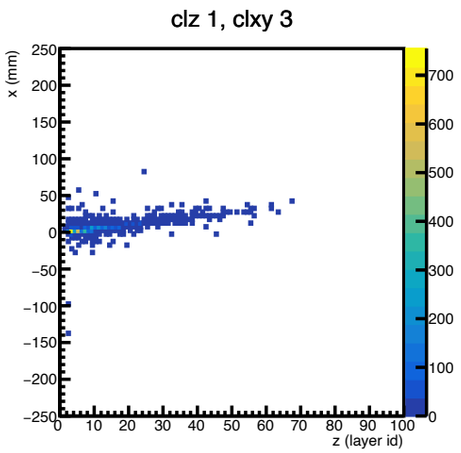


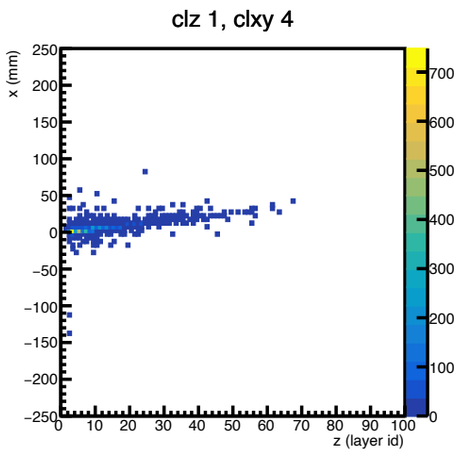
X0, Z0 Estimation

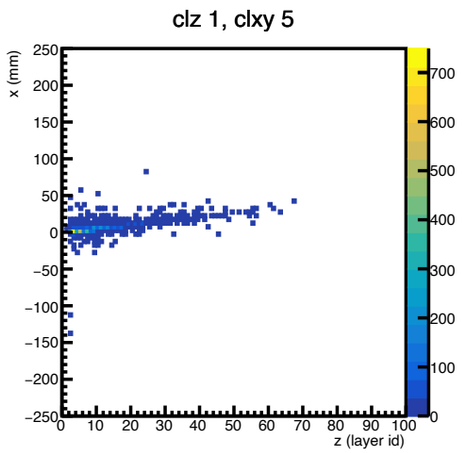
5 deg θ

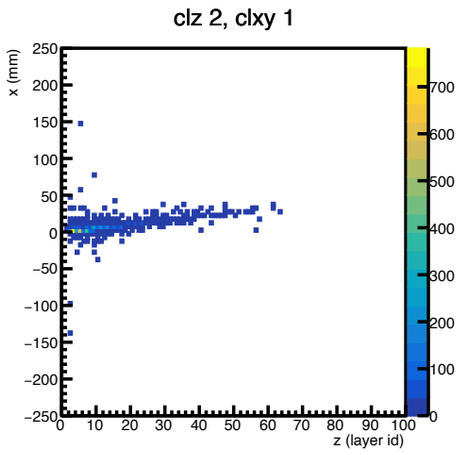


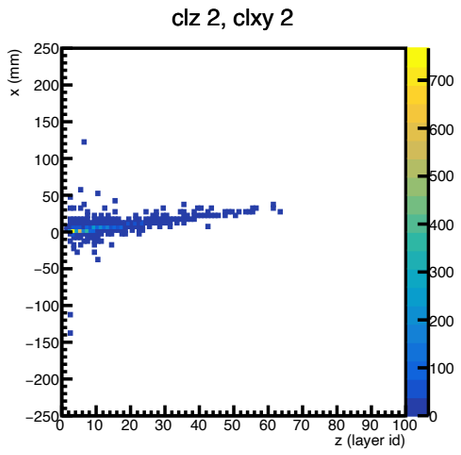


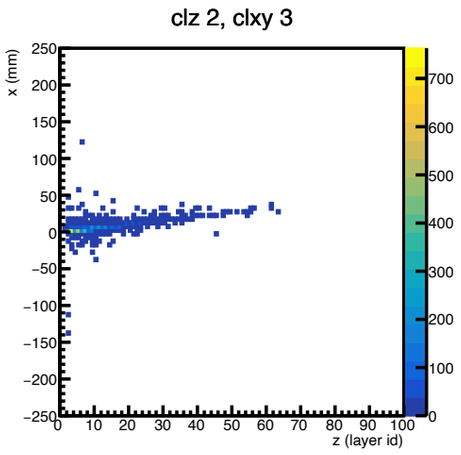


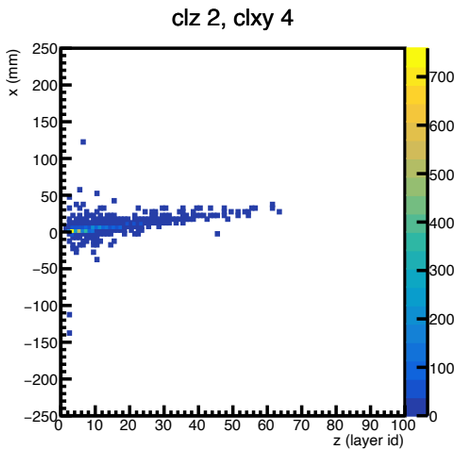


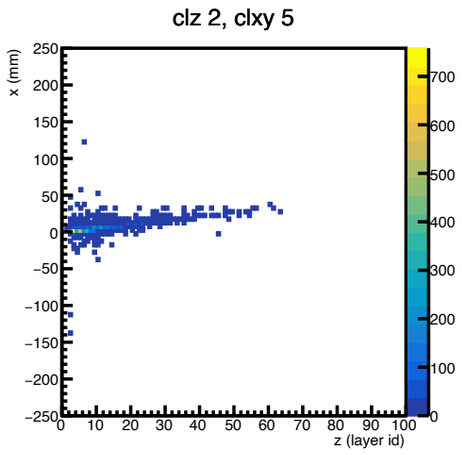


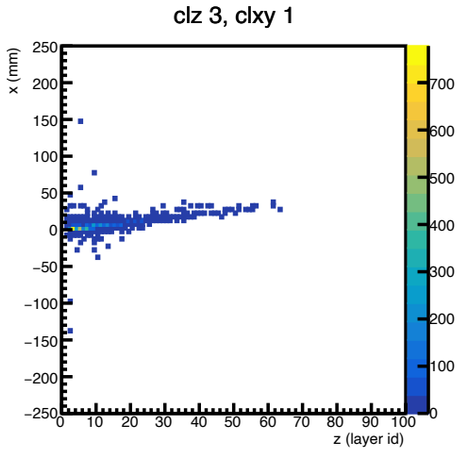


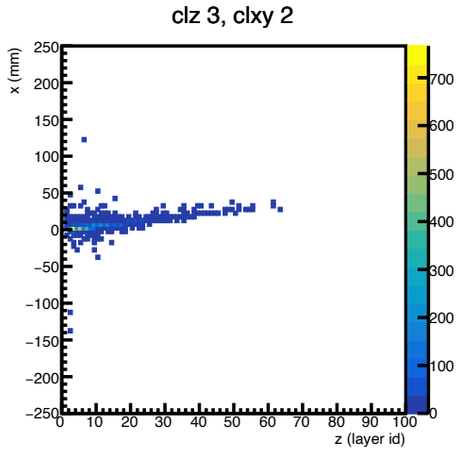


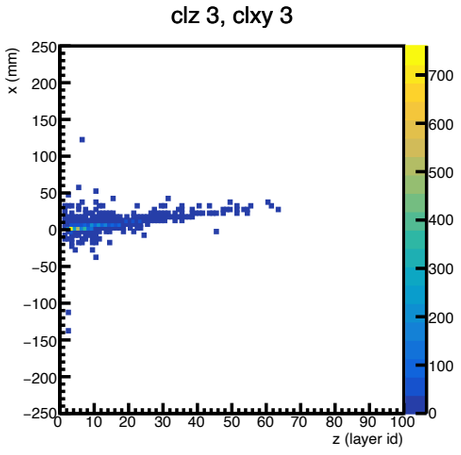


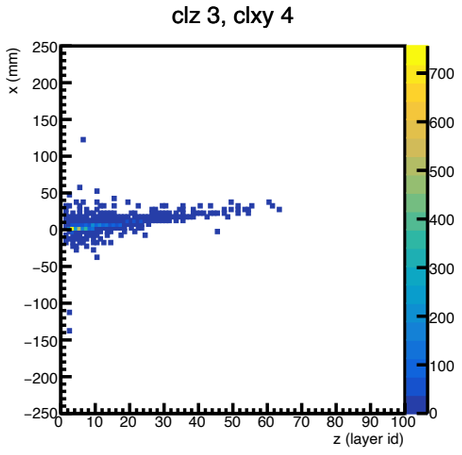


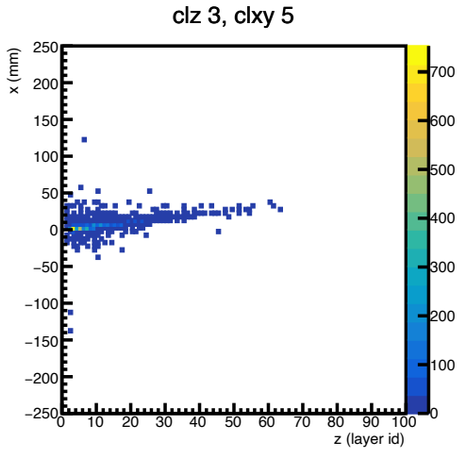








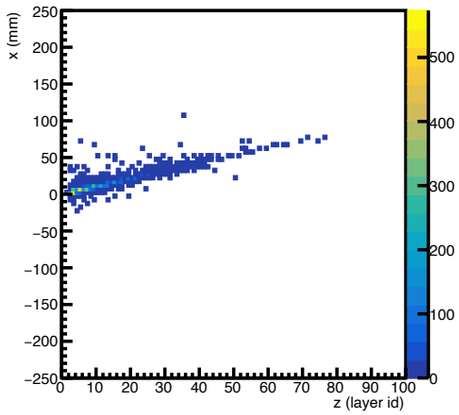




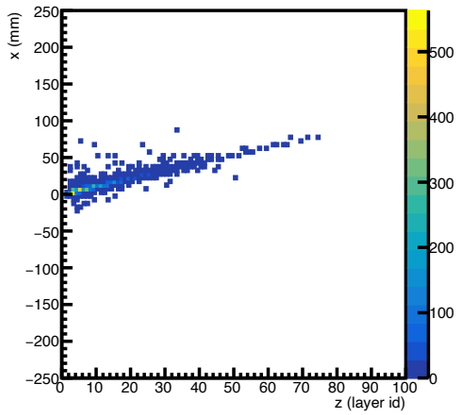
X0, Z0 Estimation

10 deg θ

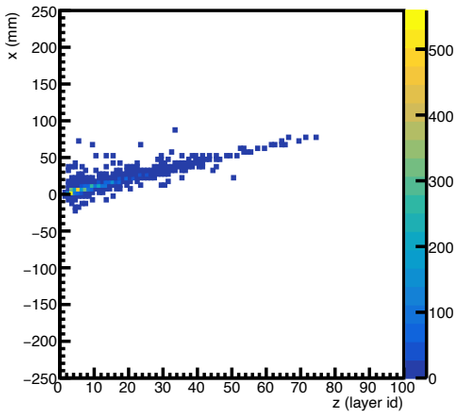
clz 1, clxy 1



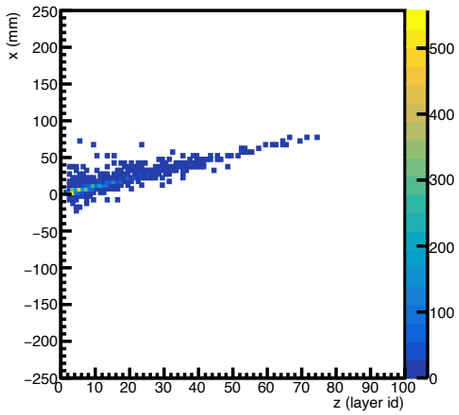
clz 1, clxy 2



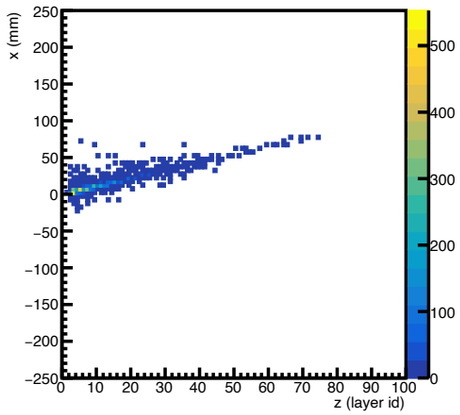
clz 1, clxy 3



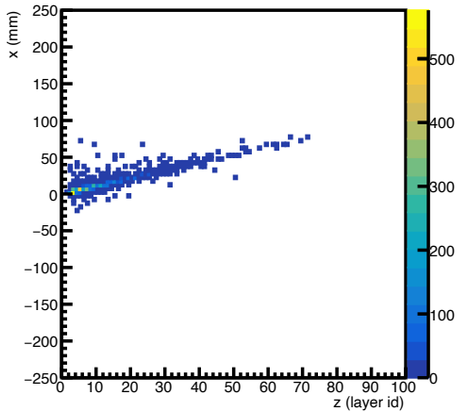
clz 1, clxy 4



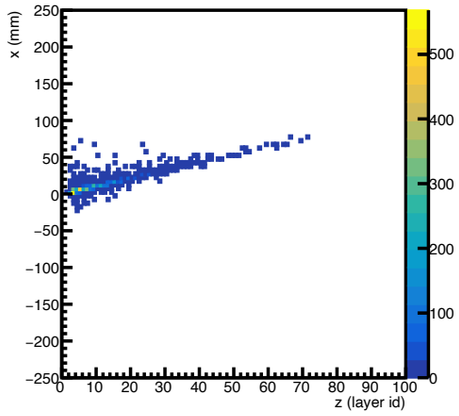
clz 1, clxy 5



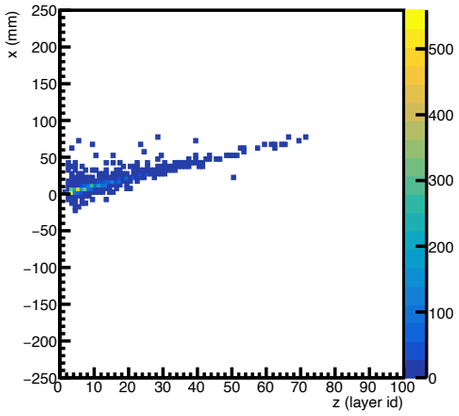
clz 2, clxy 1



clz 2, clxy 2



clz 2, clxy 3



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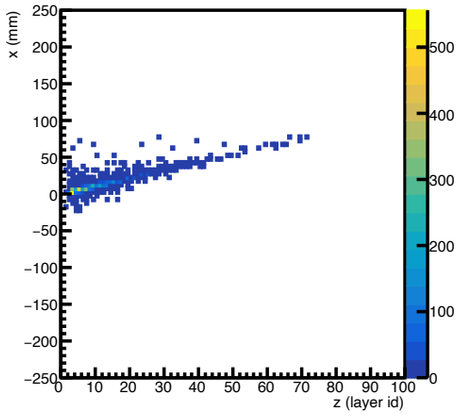

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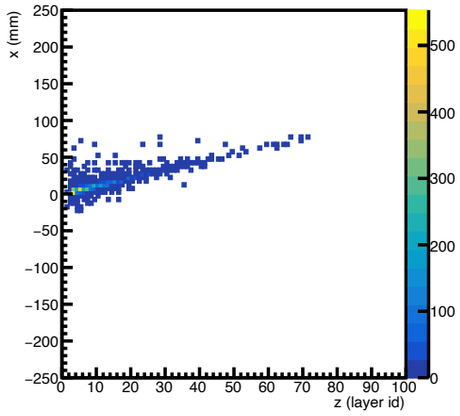
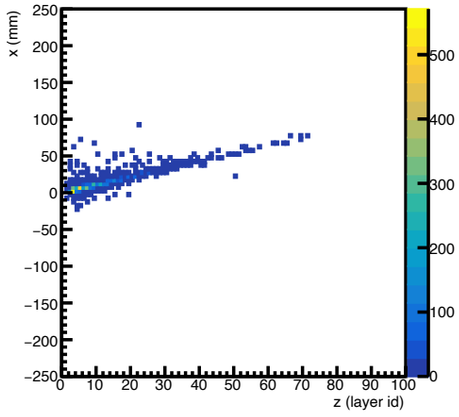
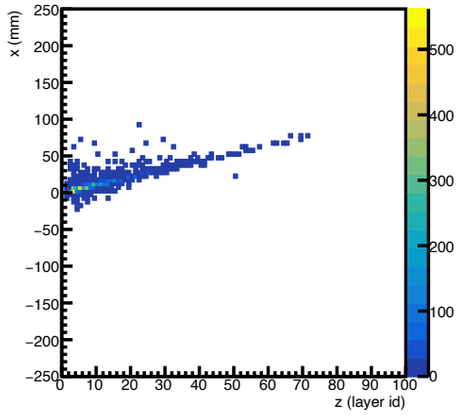


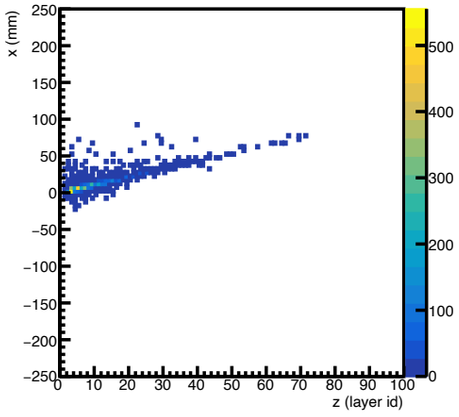
clz 3, clxy 1



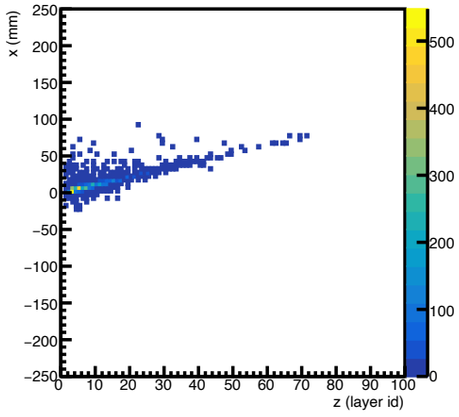
clz 3, clxy 2



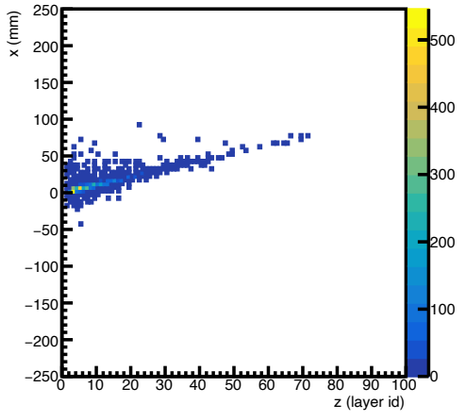
clz 3, clxy 3



clz 3, clxy 4

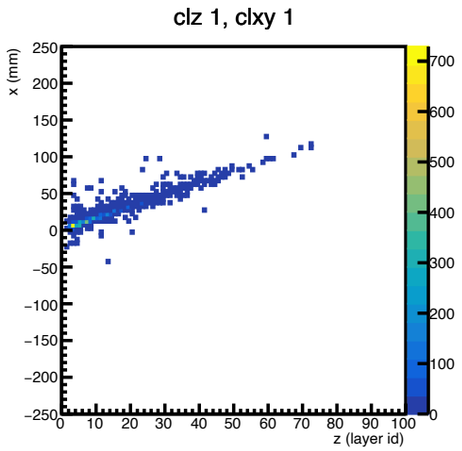


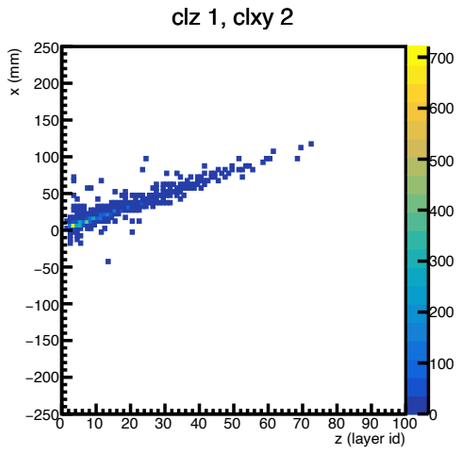
clz 3, clxy 5

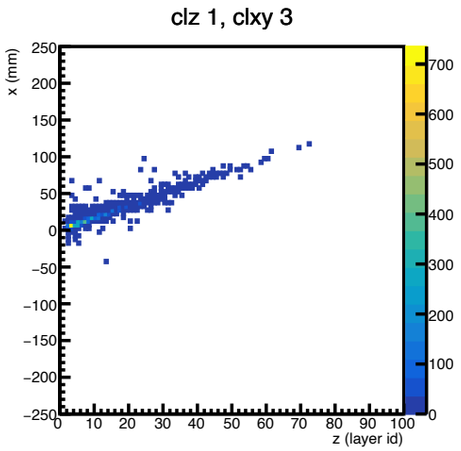


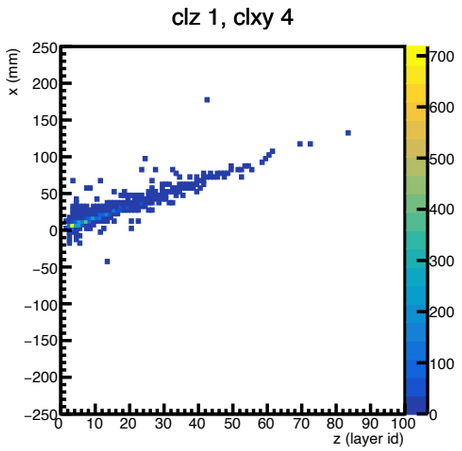
X0, Z0 Estimation

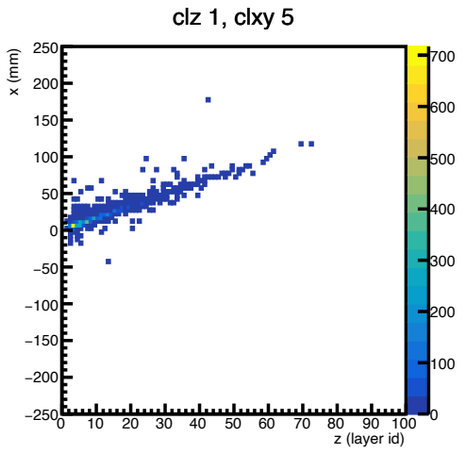
15 deg θ

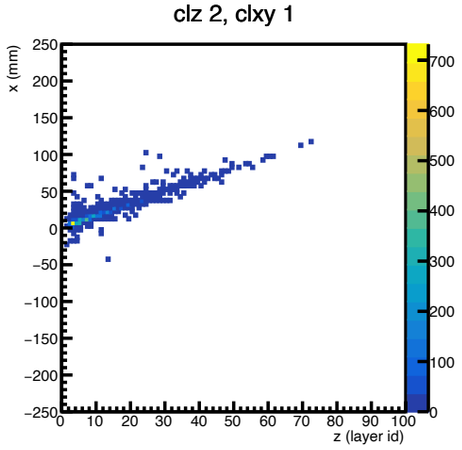


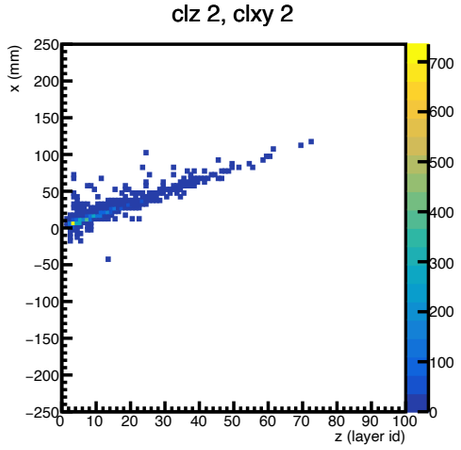


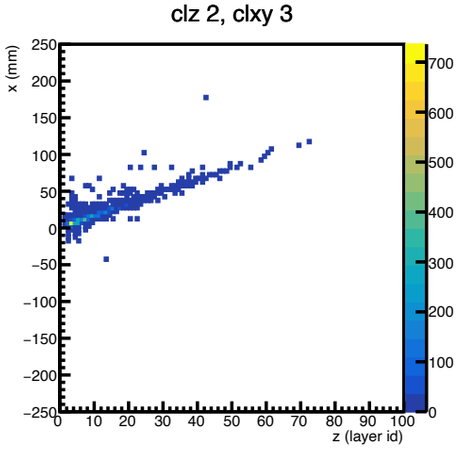


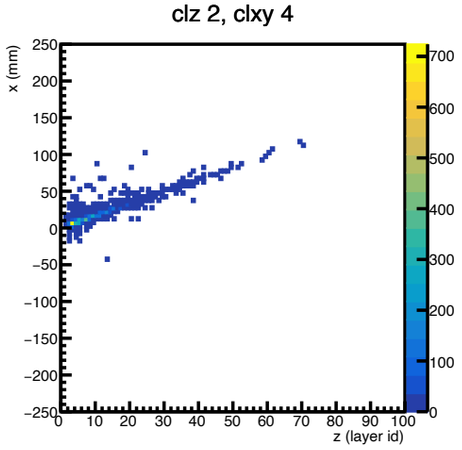


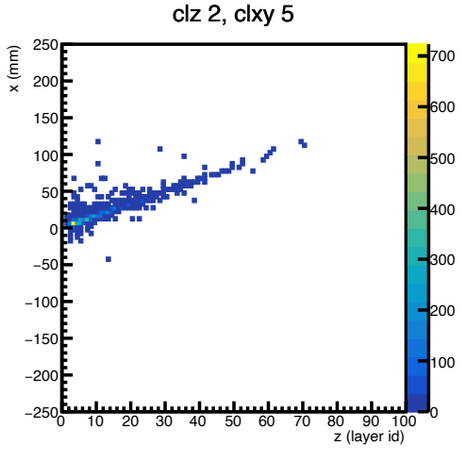


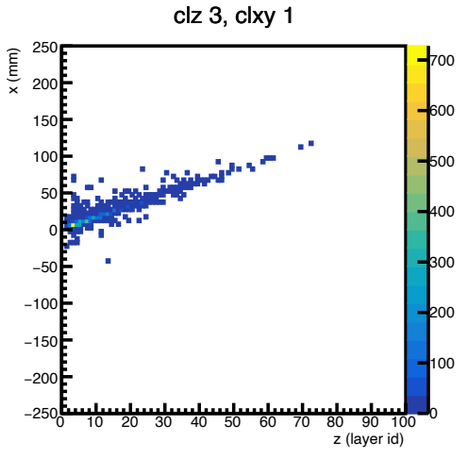


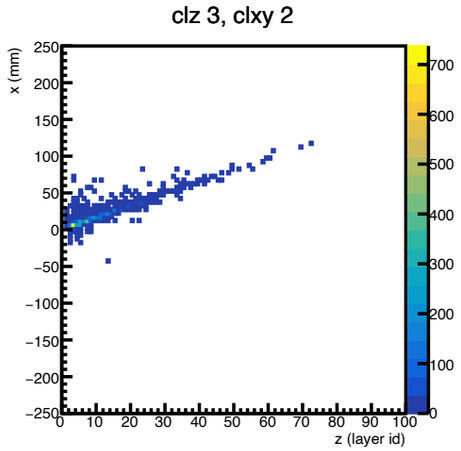


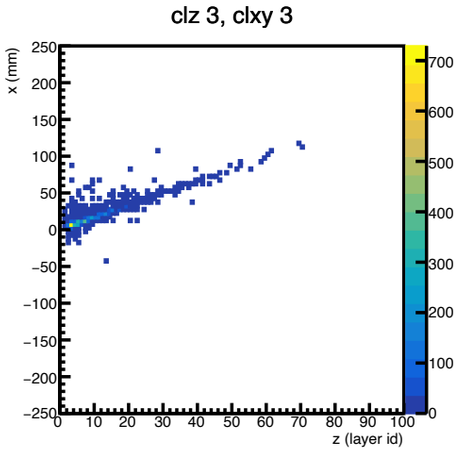


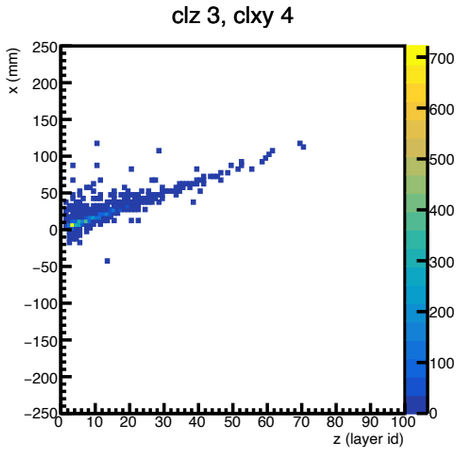


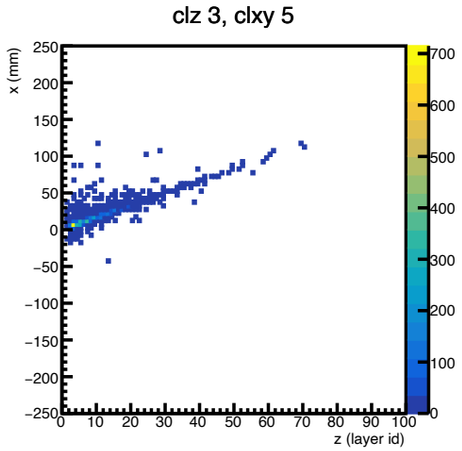






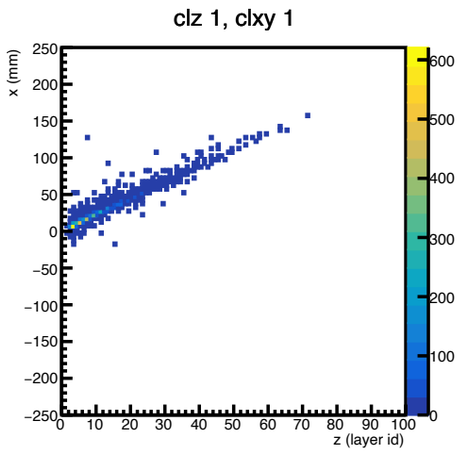


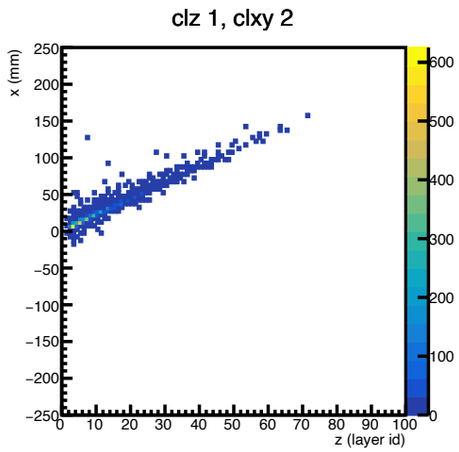


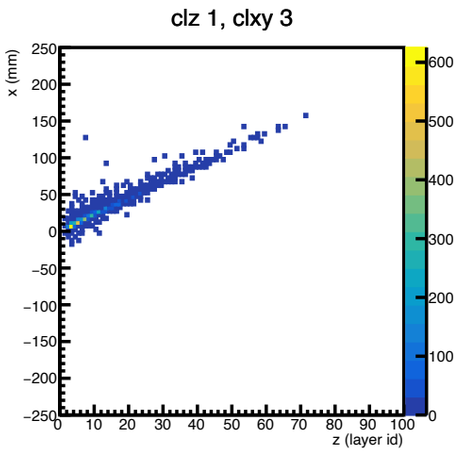


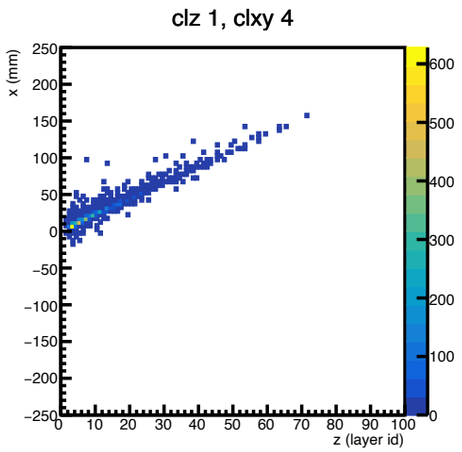
X0, Z0 Estimation

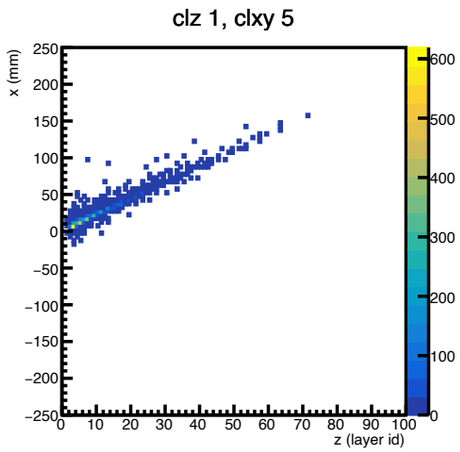
20 deg θ

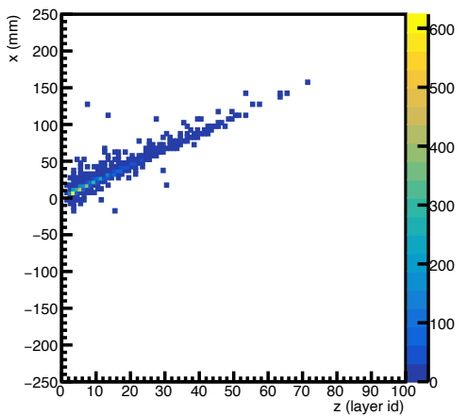


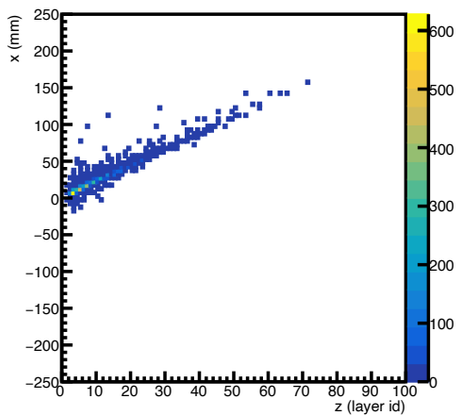


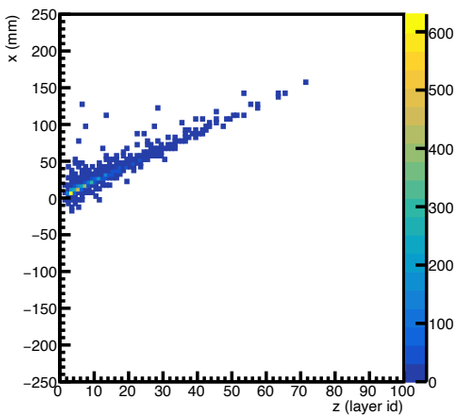


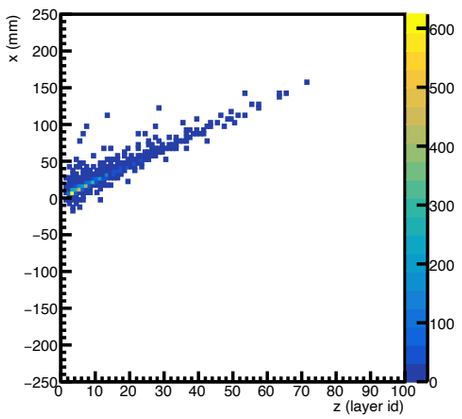


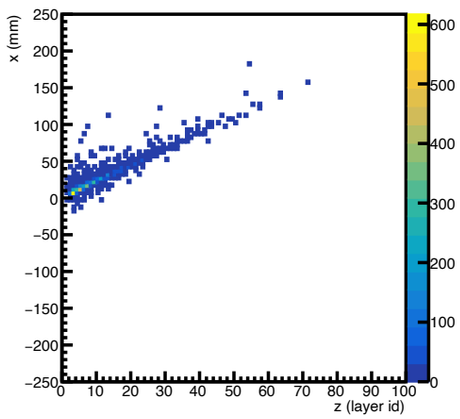


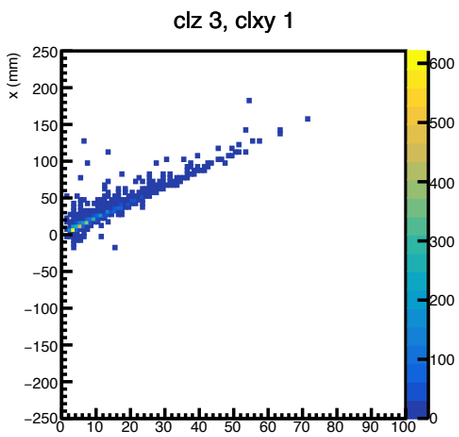


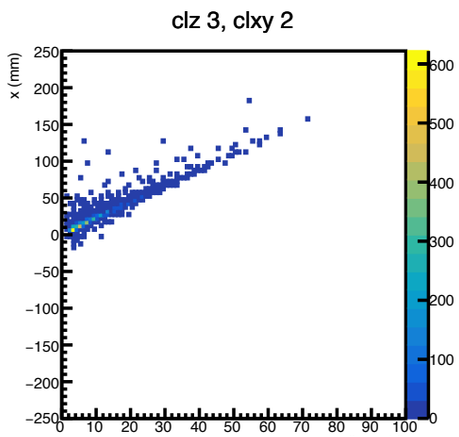


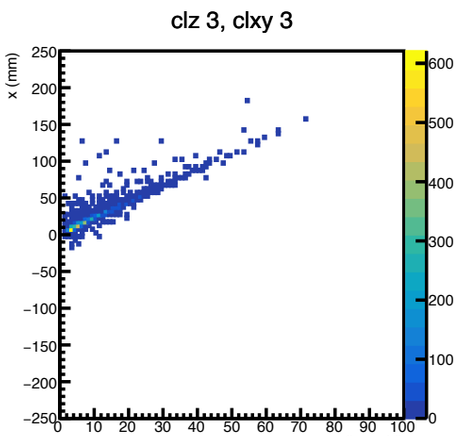


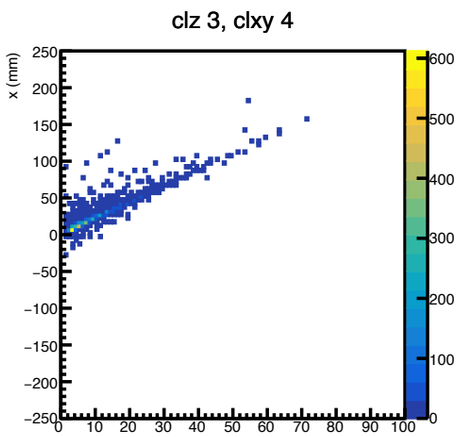


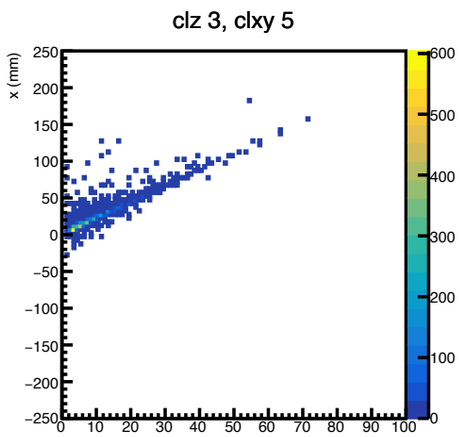






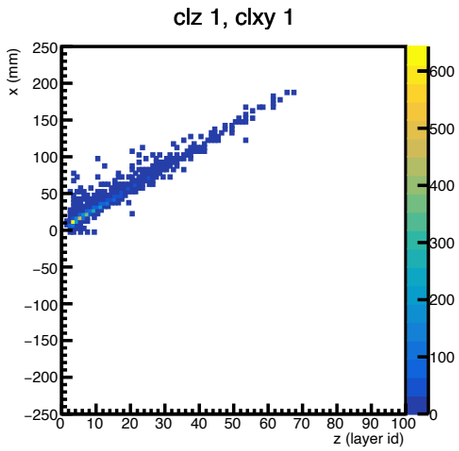


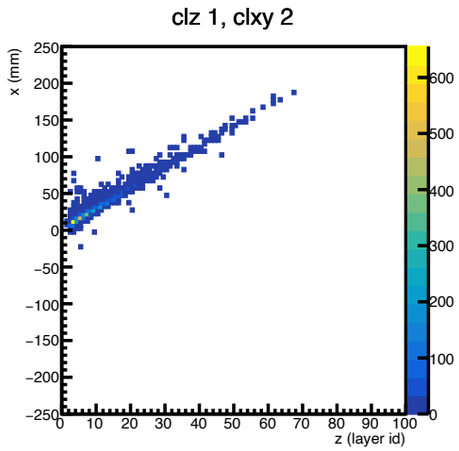


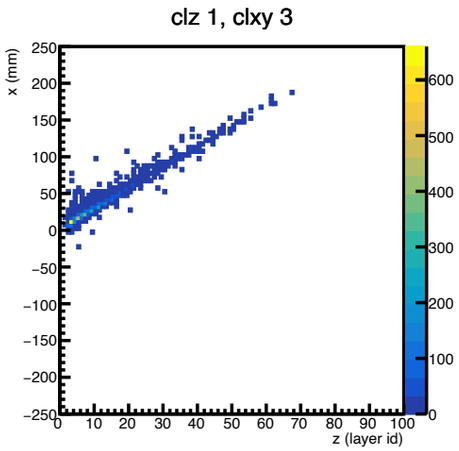


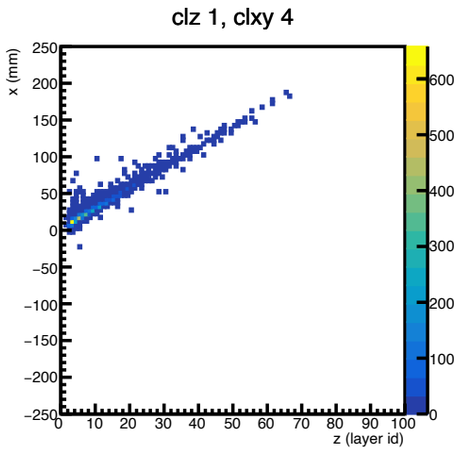
X0, Z0 Estimation

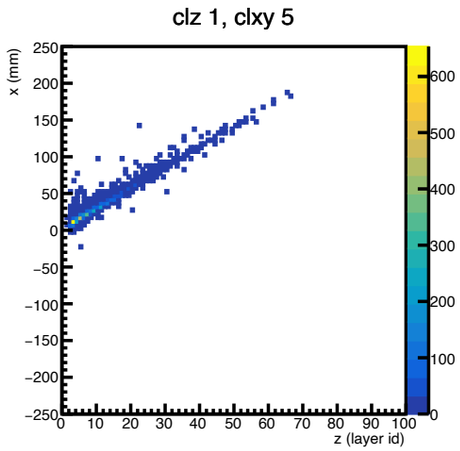
25 deg θ

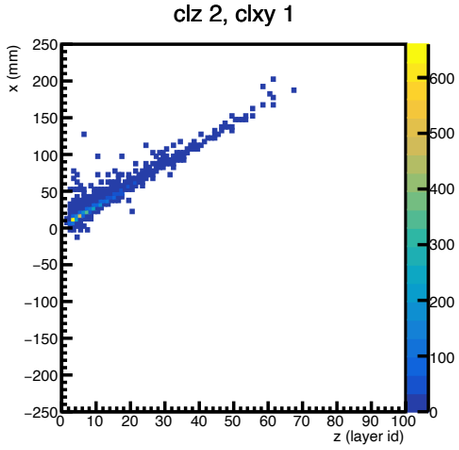


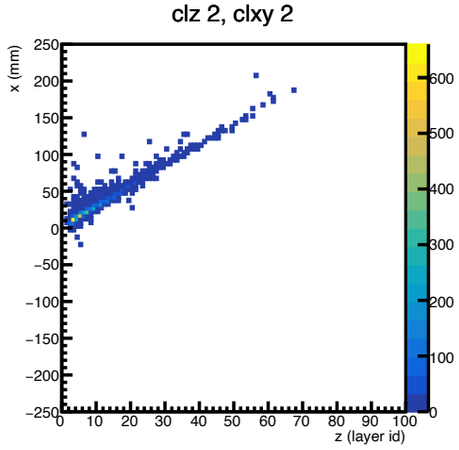


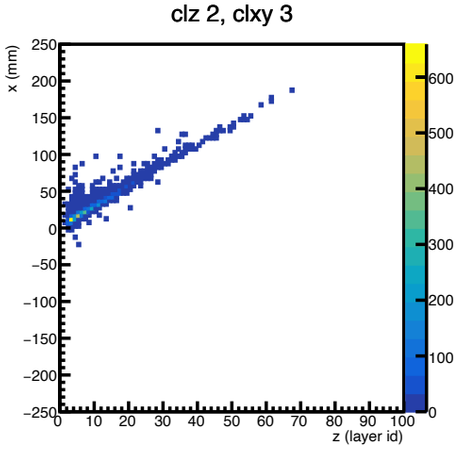


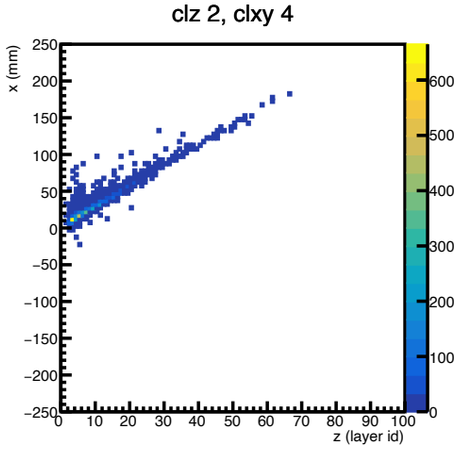


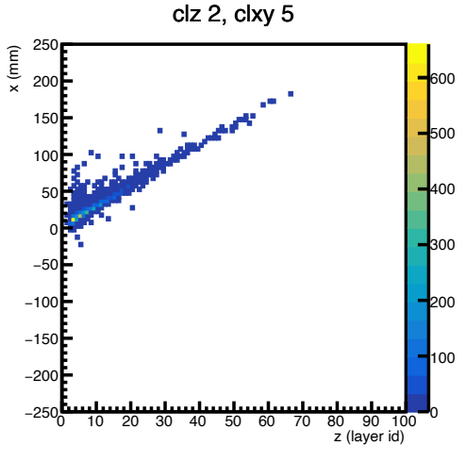


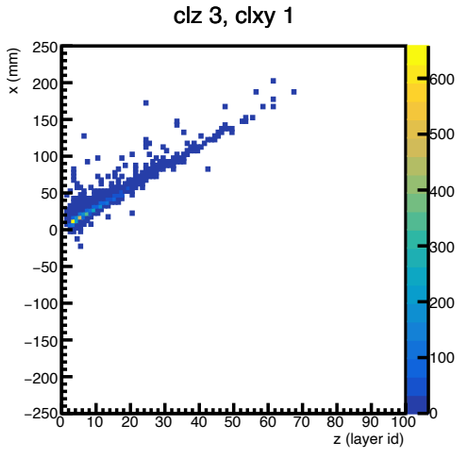


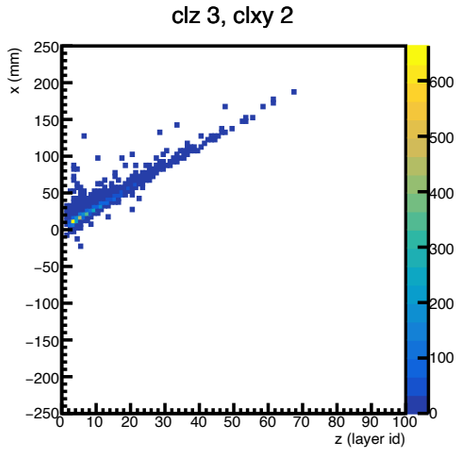


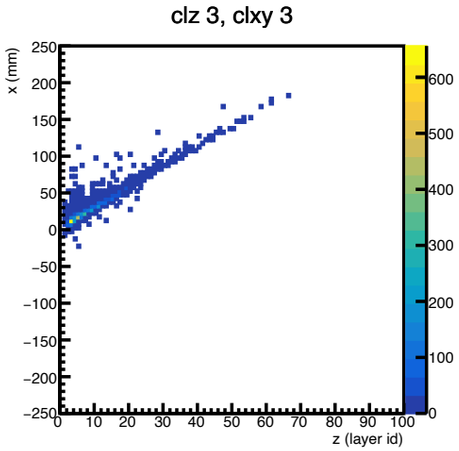


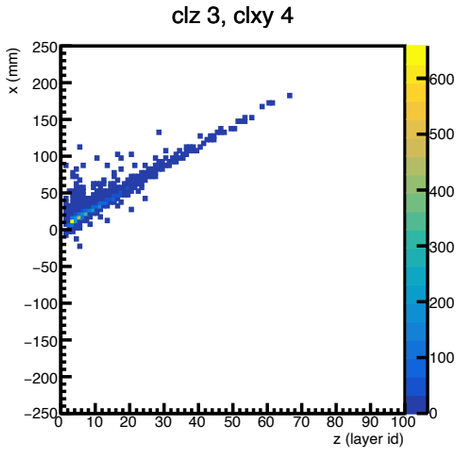


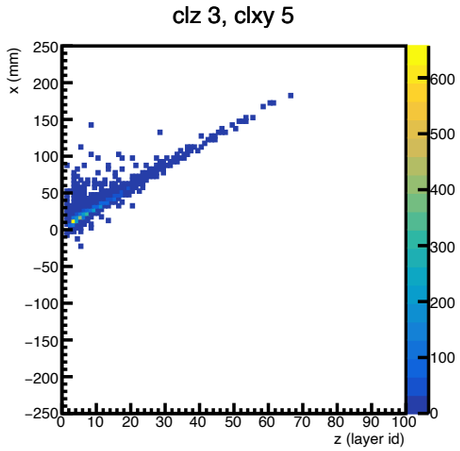


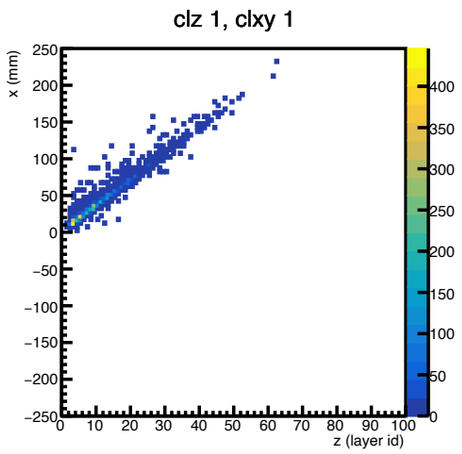
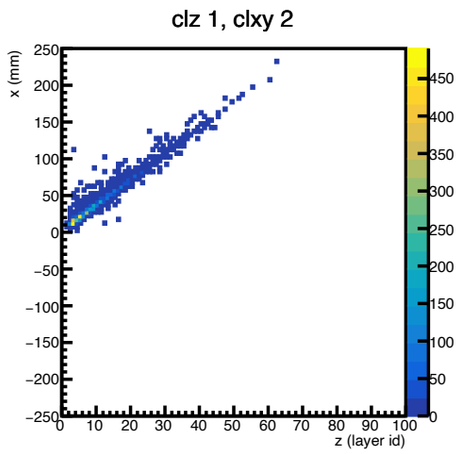
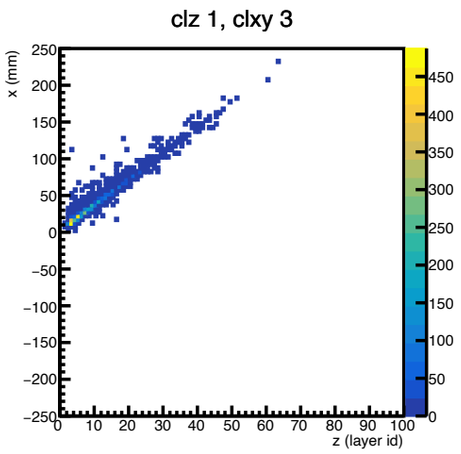
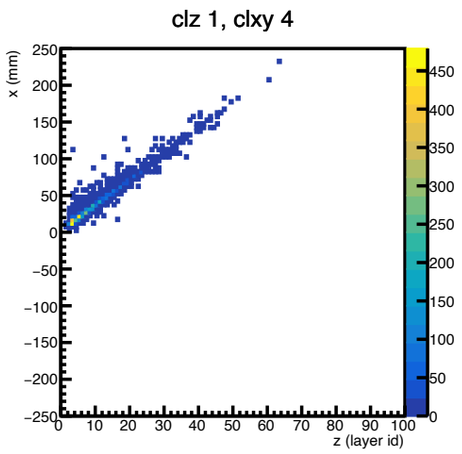
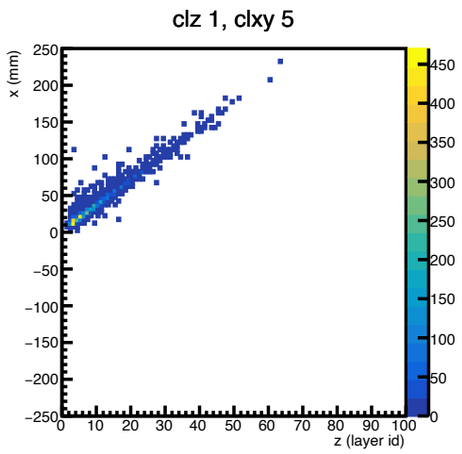
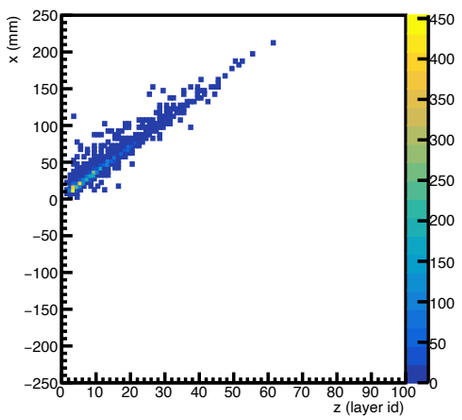
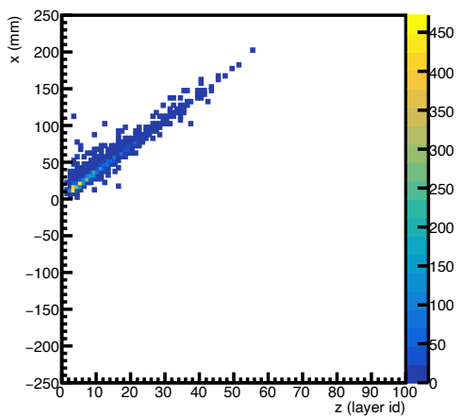
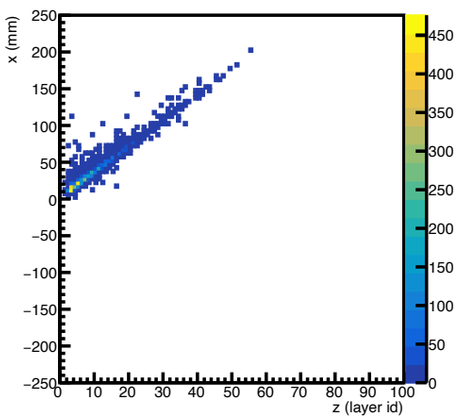
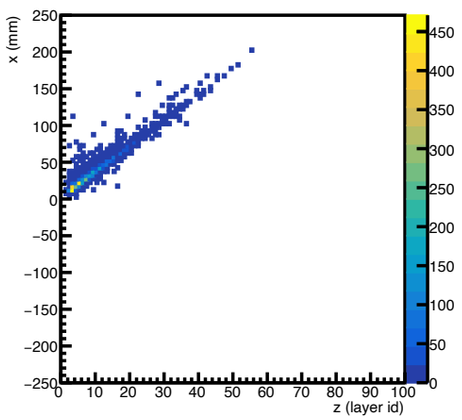
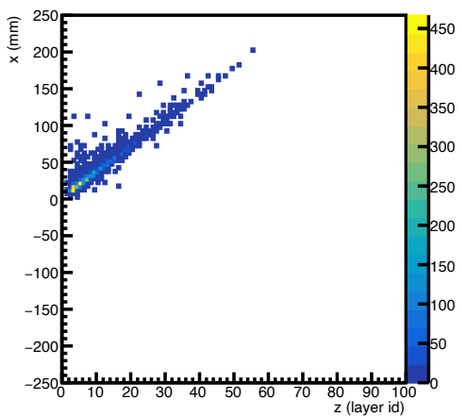
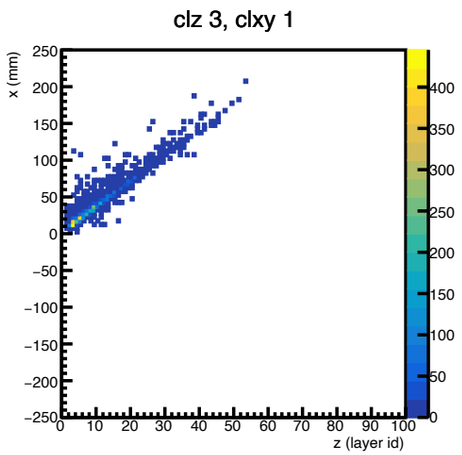
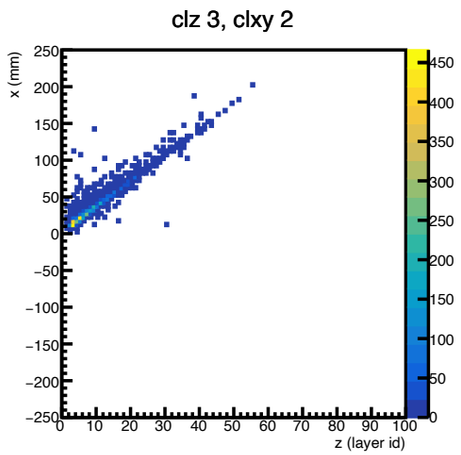
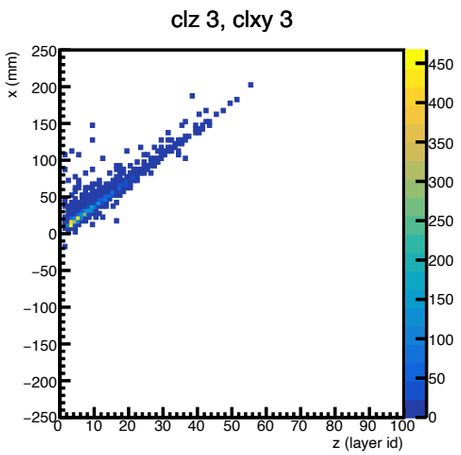
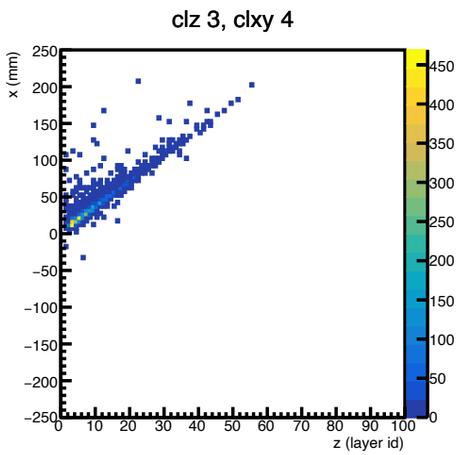
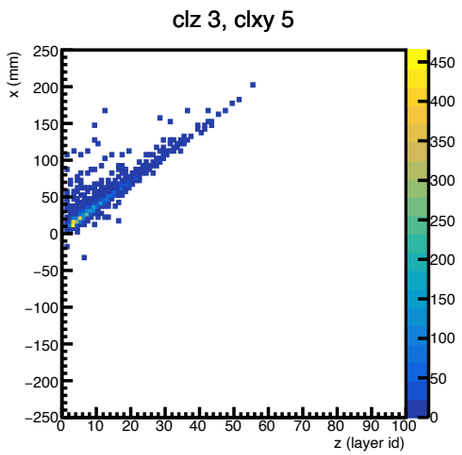










X0, Z0 Estimation

30 deg θ