

# Angular & Energy Distributions

Ch. Finck on behalf of D. Juliani

**Vertex Cluster Size**

**Mass**

**Efficiencies**

**Angular Distribution**

**Energy Distribution**

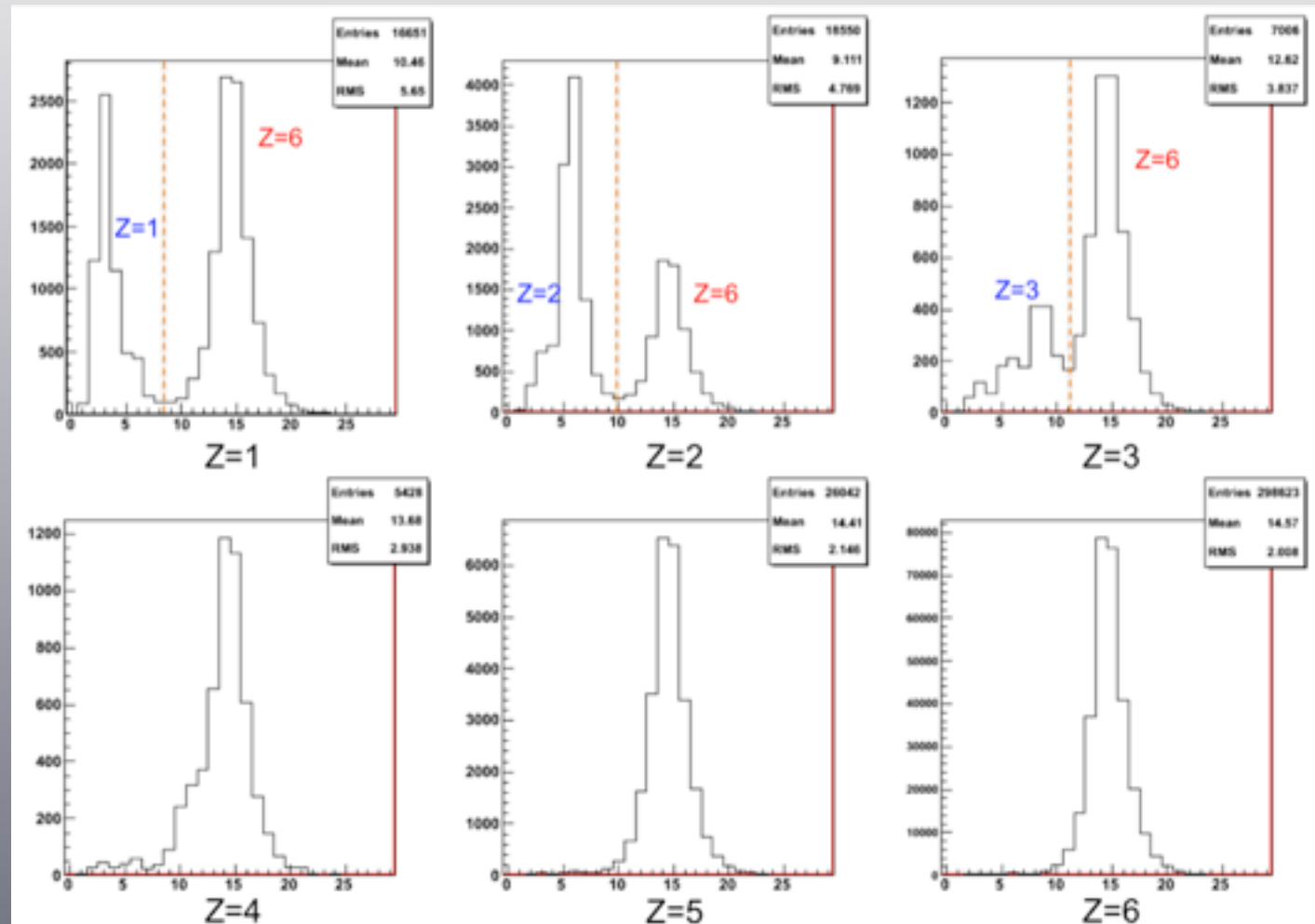
**Distribution  $Z = 1$**

**Conclusion**

# Vertex Cluster Size (i)

• Clusters size vs charge (ToF)

- no cuts

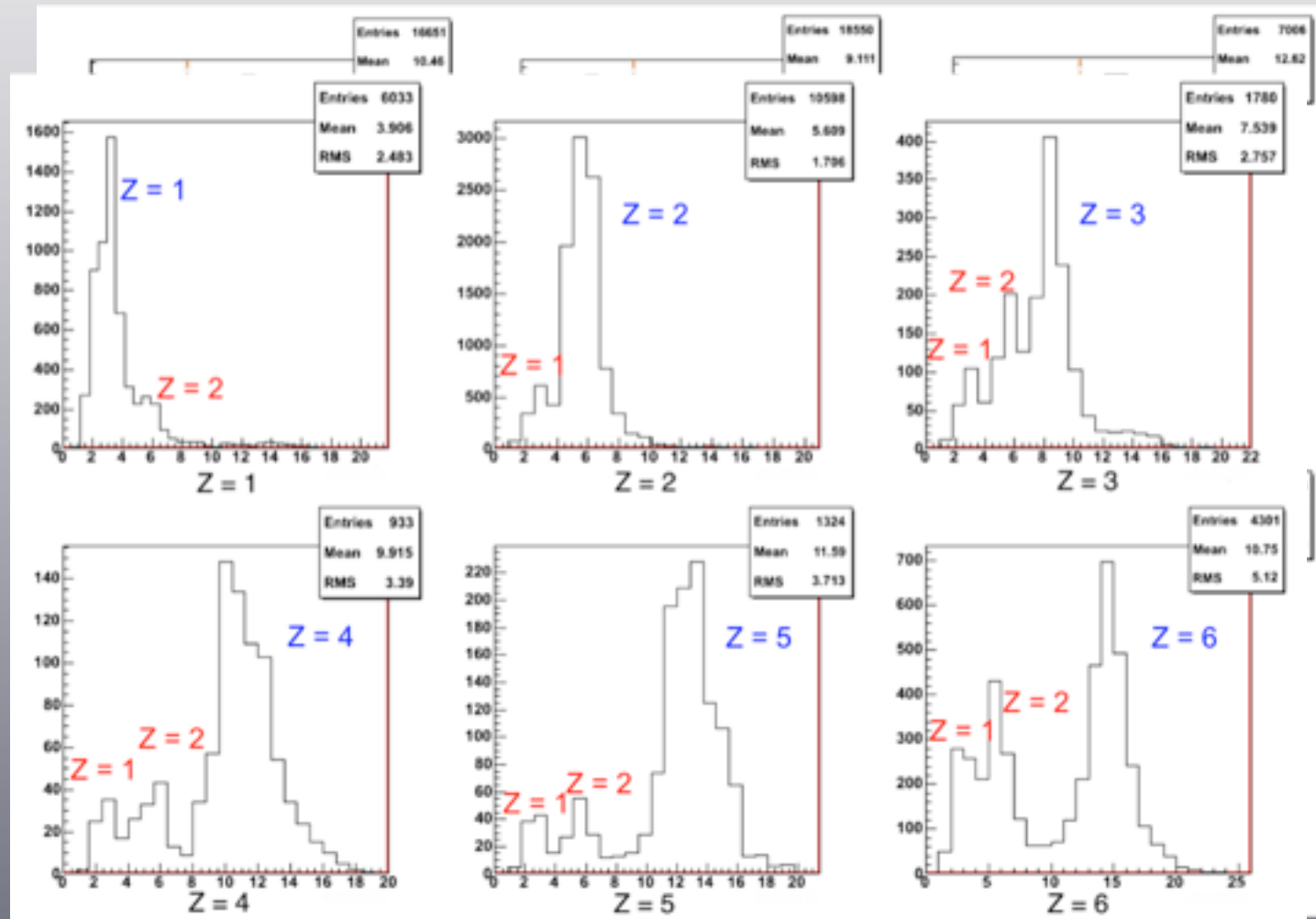


# Vertex Cluster Size (i)

• Clusters size vs charge (ToF)

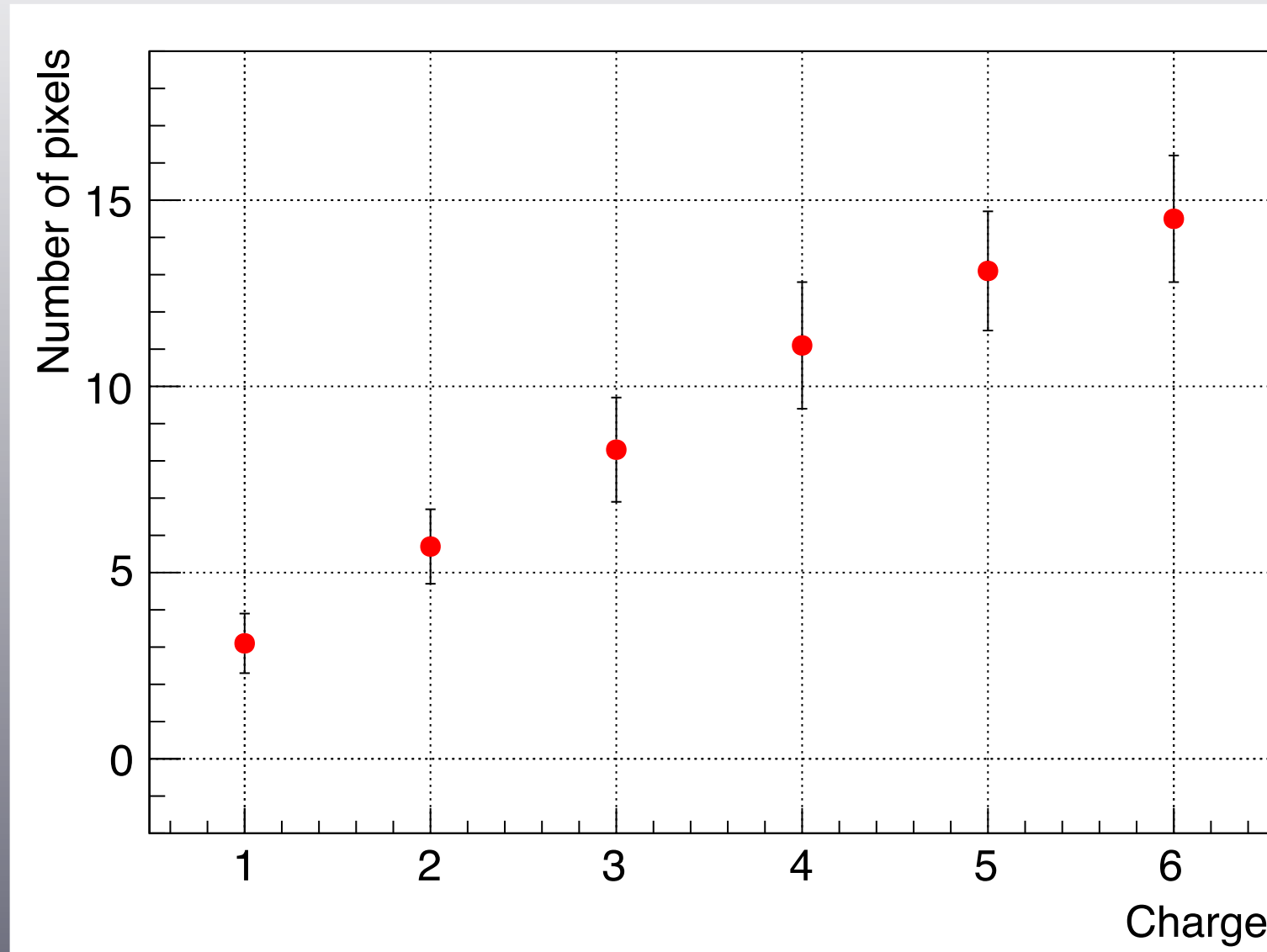
- no cuts

- with cut  $nTracks > 1$



# Vertex Cluster Size (ii)

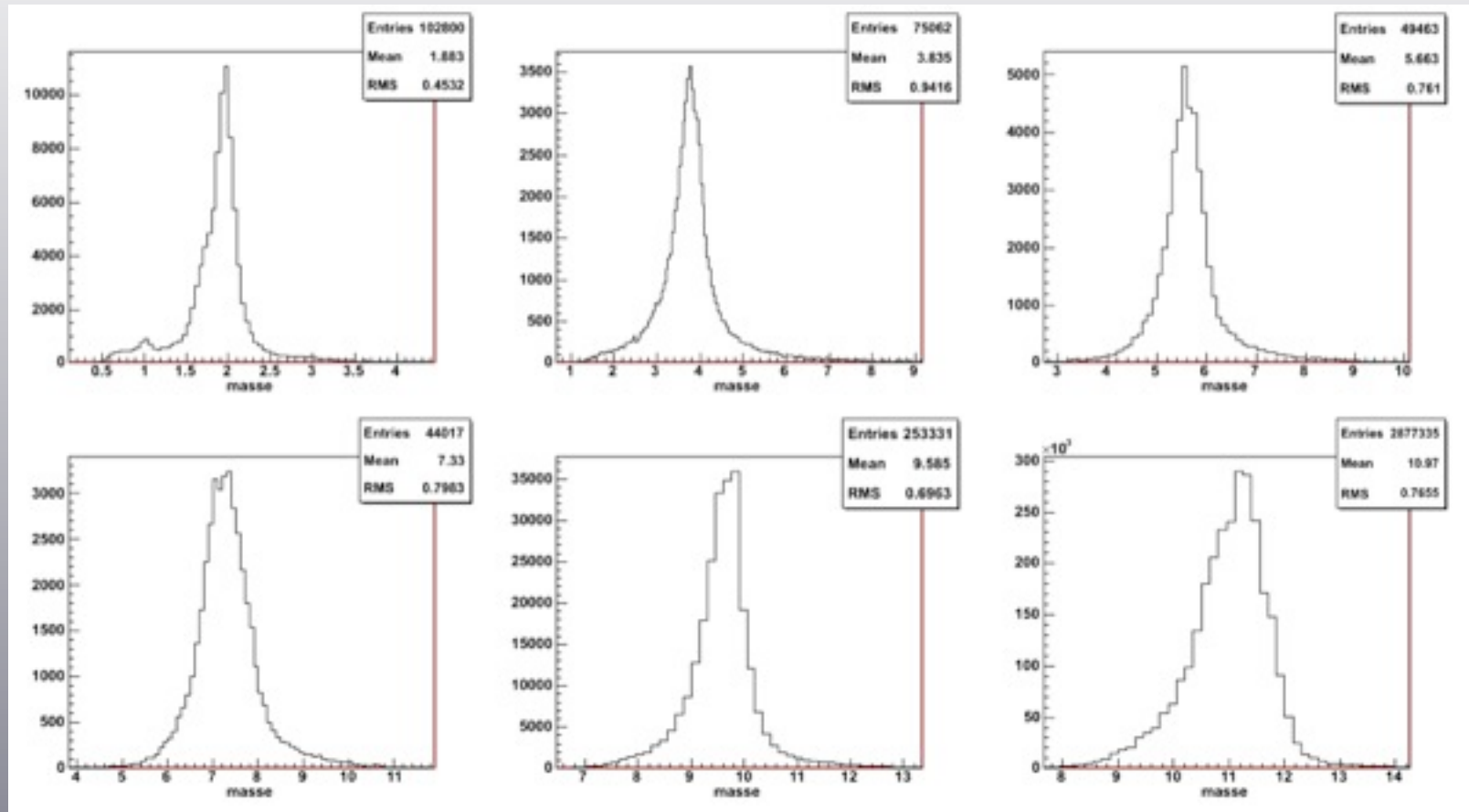
Cluster size vs charge



# Mass Distribution

• Global reconstruction:

- no cut

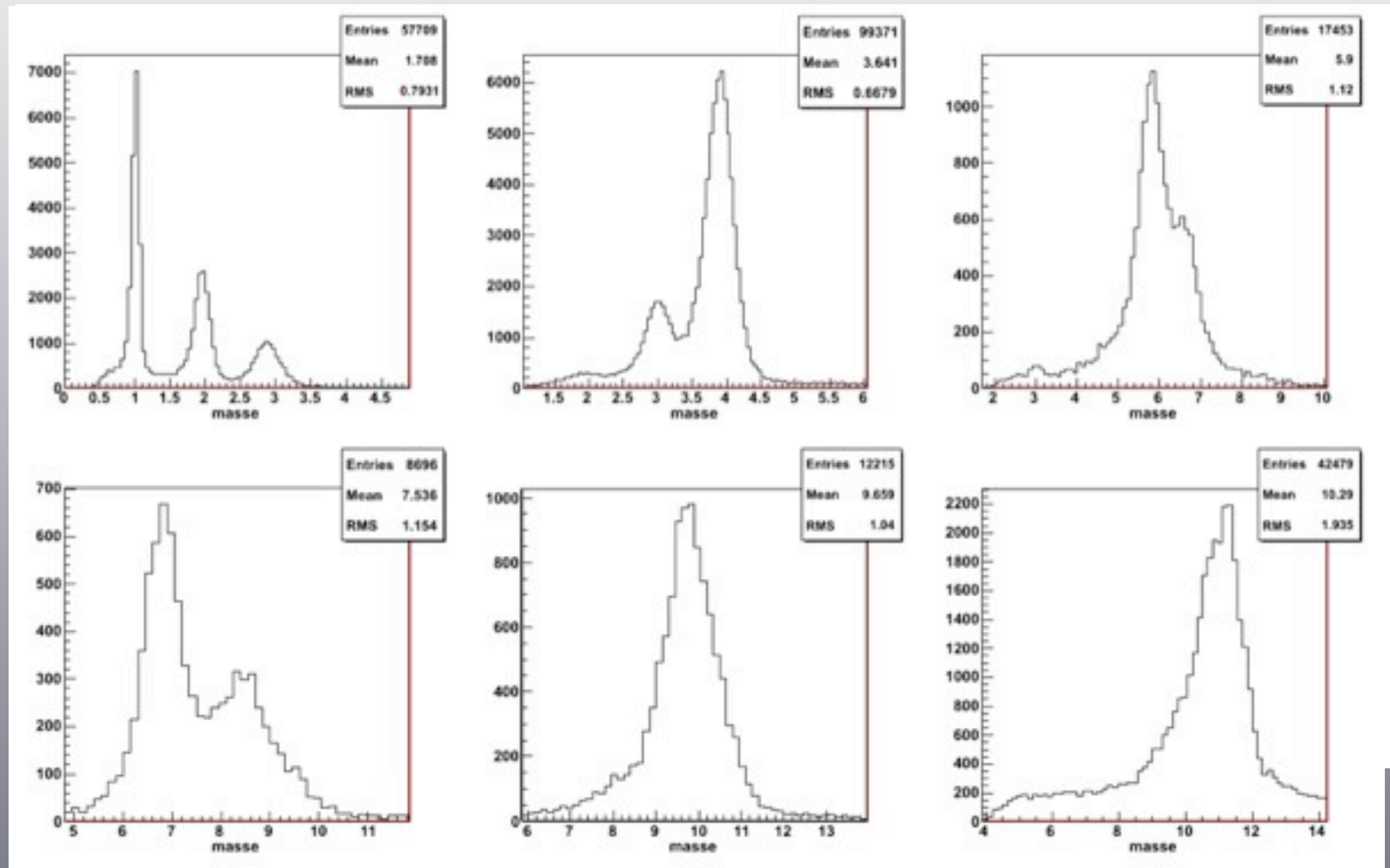


# Mass Distribution

• Global reconstruction:

- no cut

- nTracks > 1



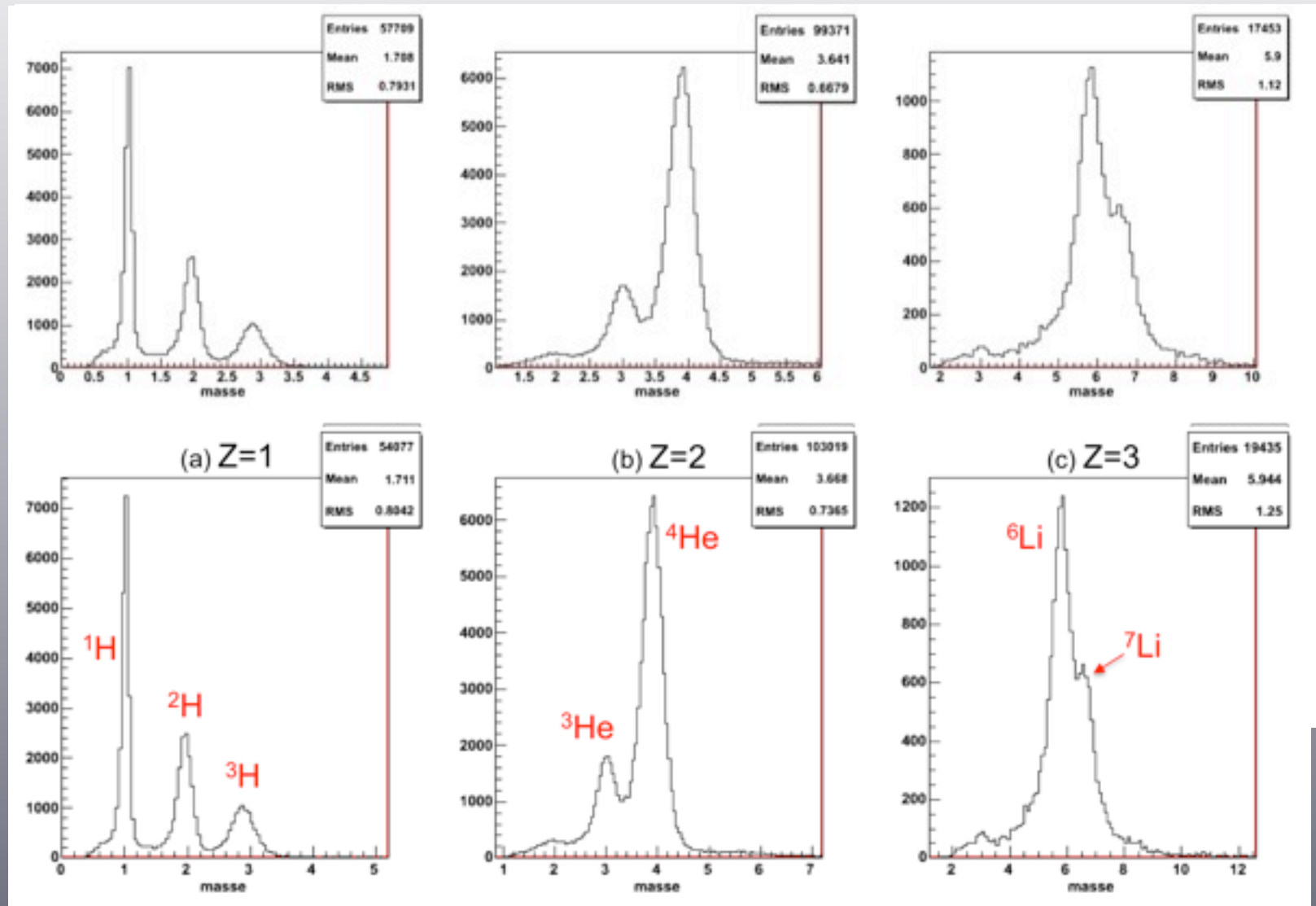
# Mass Distribution

• Global reconstruction:

- no cut

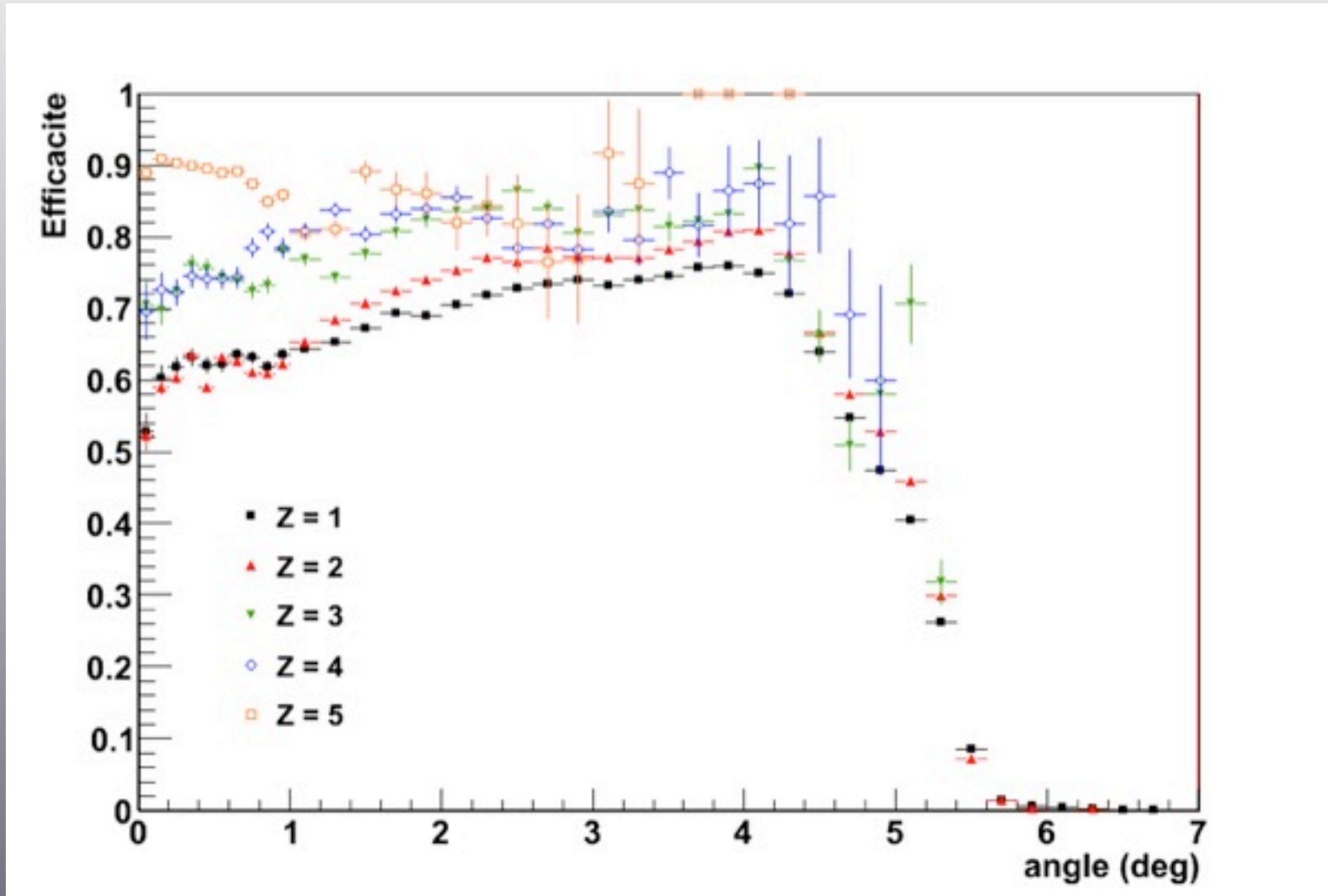
- nTracks > 1

- Cut cluster



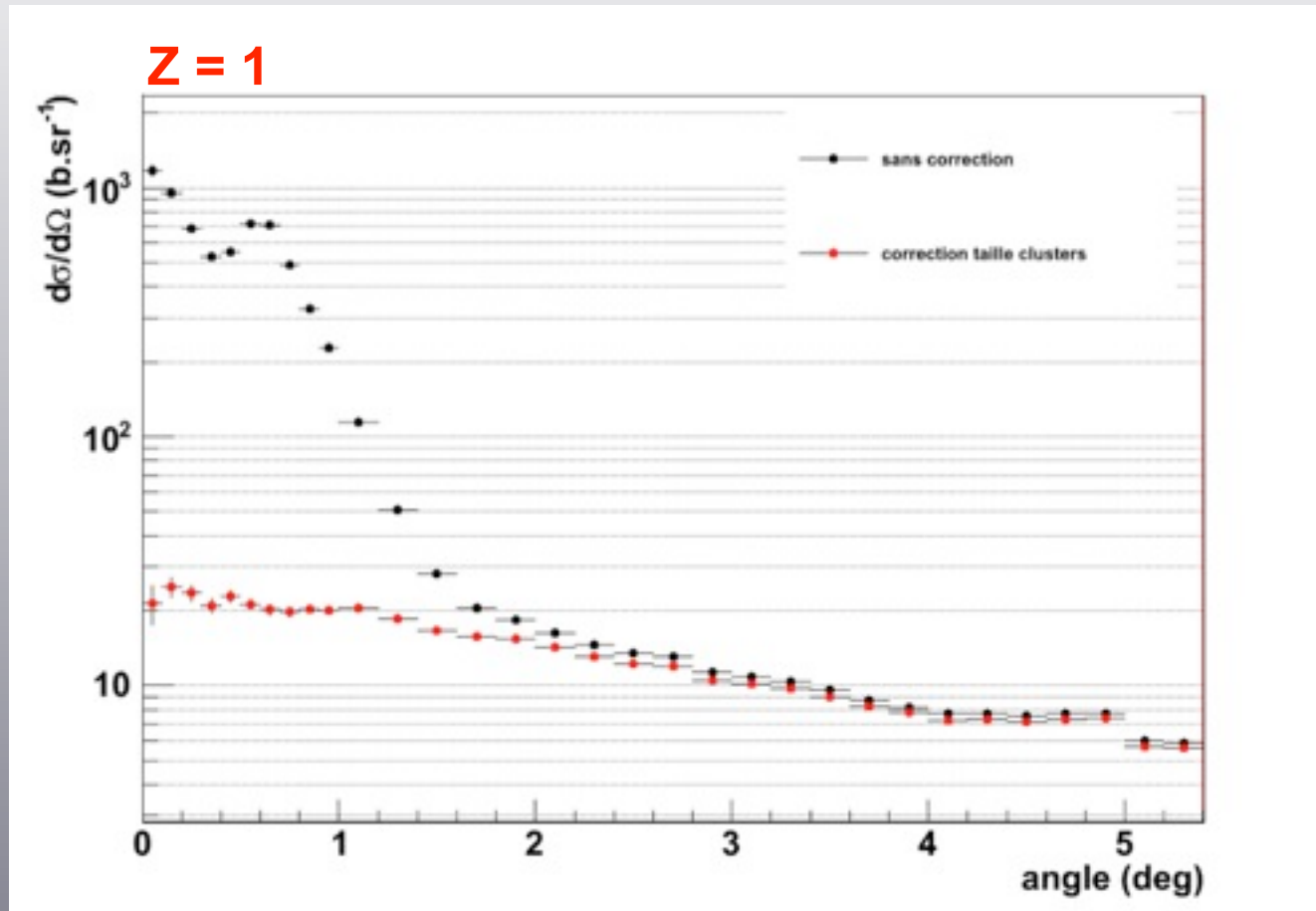
# Efficiencies

versus angle  $Z = 1 - 5$



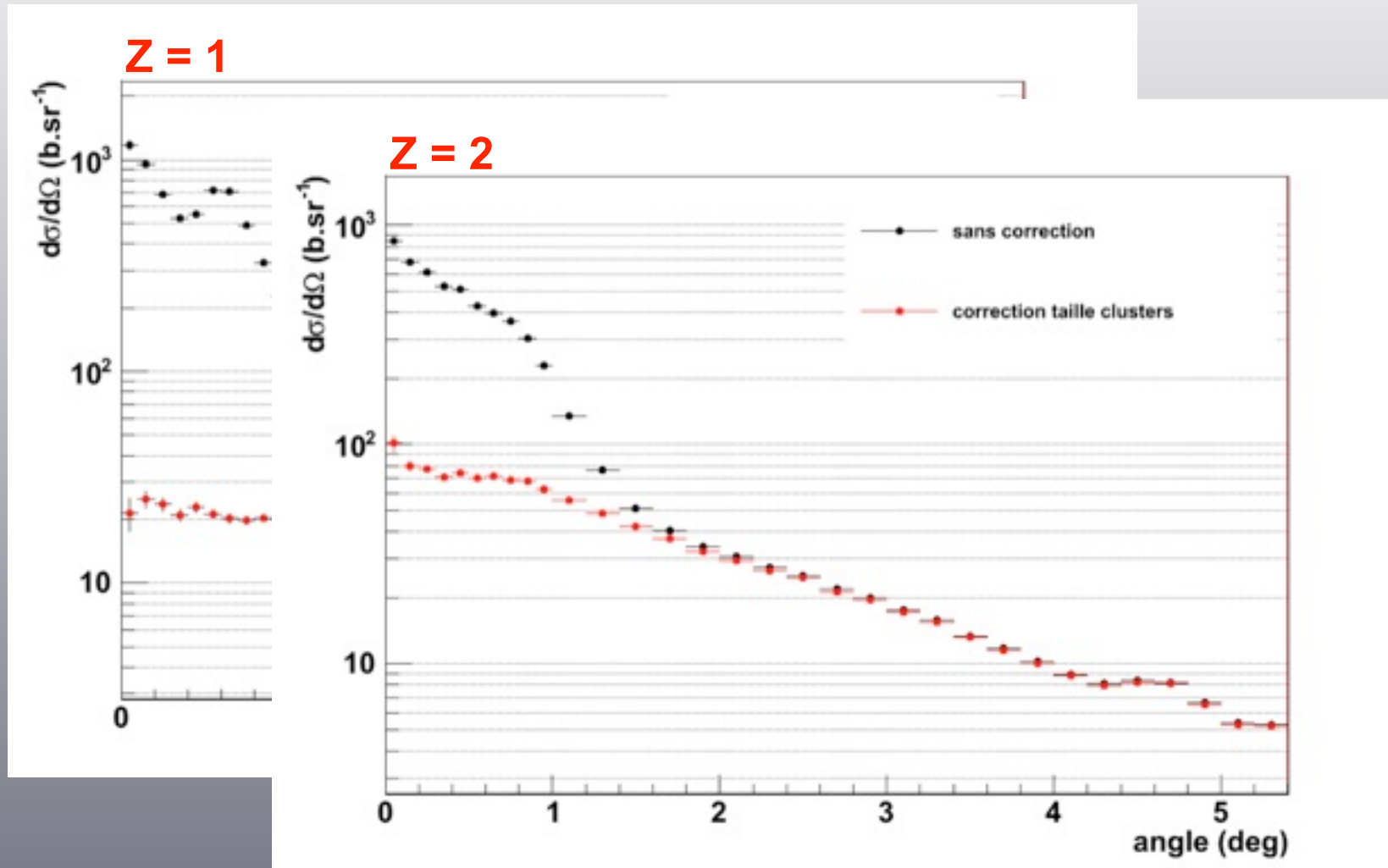
# Angular Distribution (i)

• Distribution for  $Z = 1-3$  w/o and with cut (cluster size)



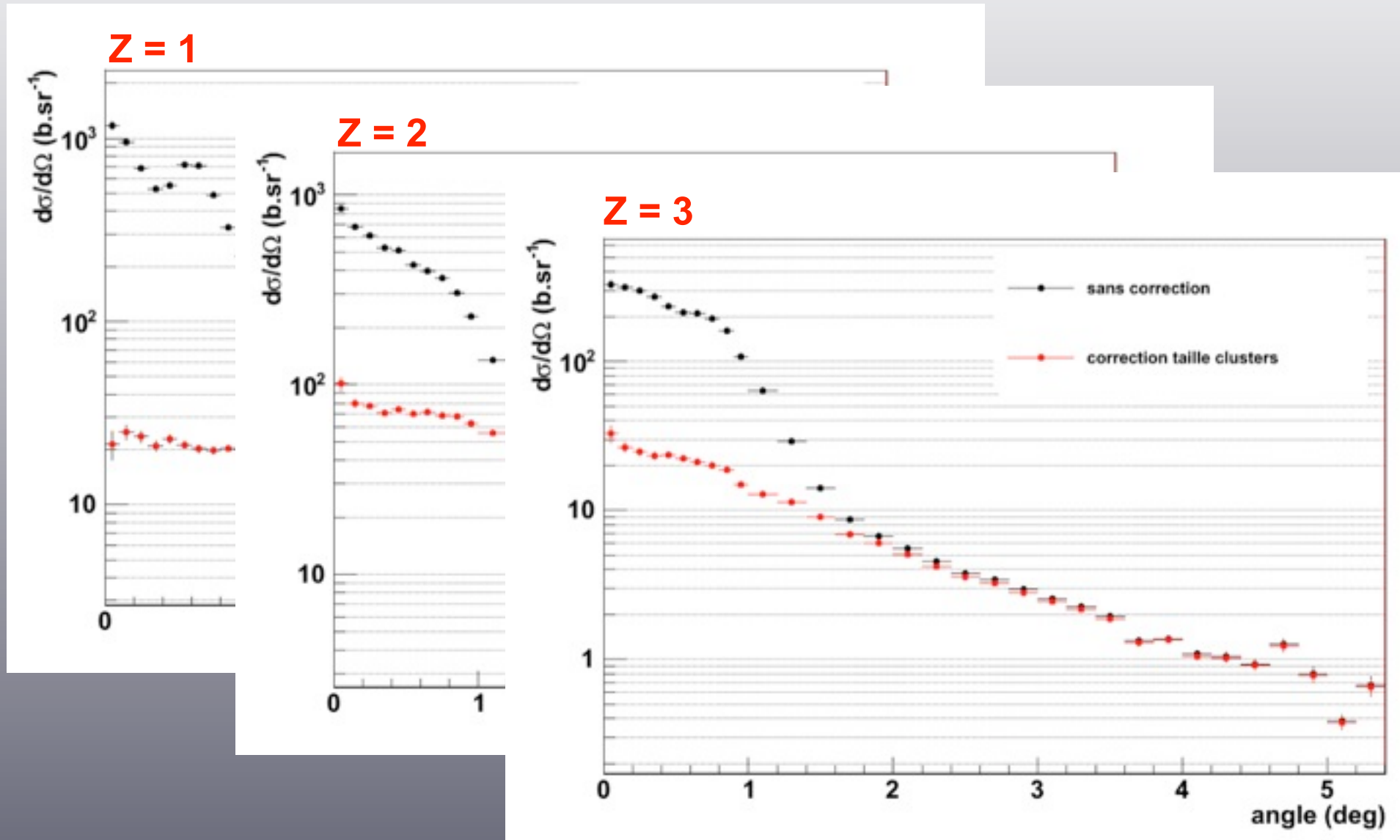
# Angular Distribution (i)

• Distribution for  $Z = 1-3$  w/o and with cut (cluster size)



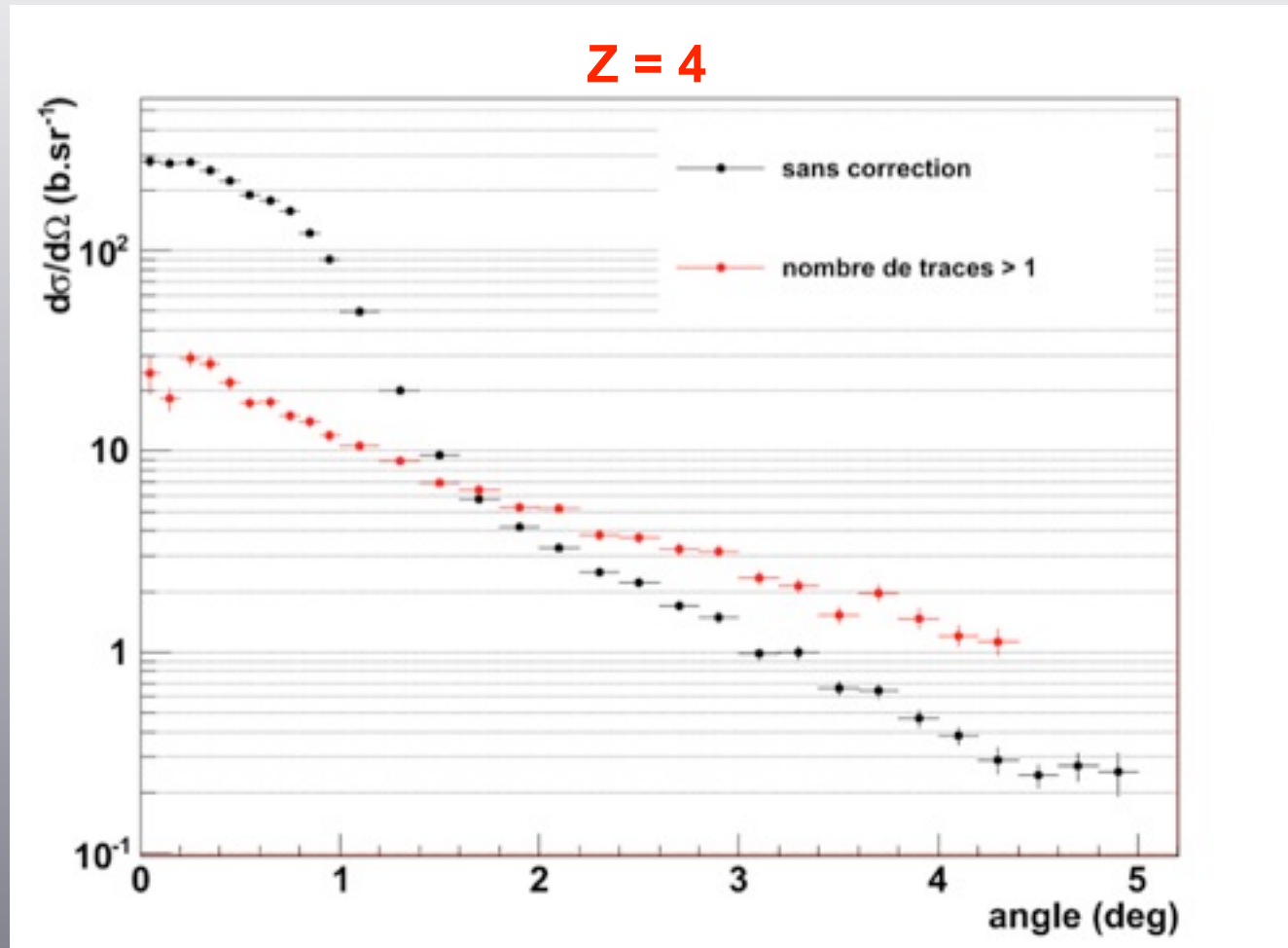
# Angular Distribution (i)

• Distribution for  $Z = 1-3$  w/o and with cut (cluster size)



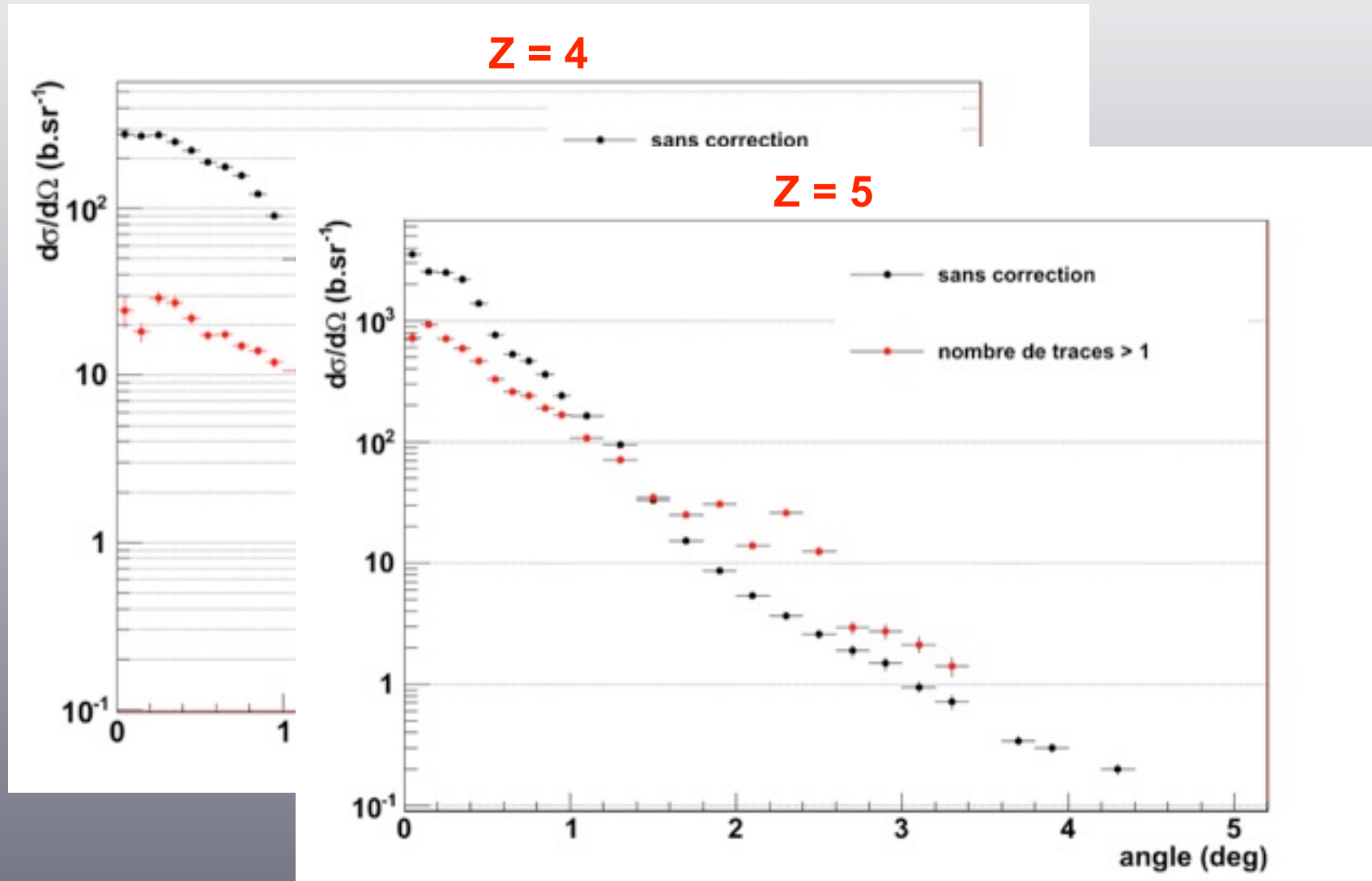
# Angular Distribution (ii)

• Distribution for  $Z = 4, 5$  w/o and with cut (nTracks)



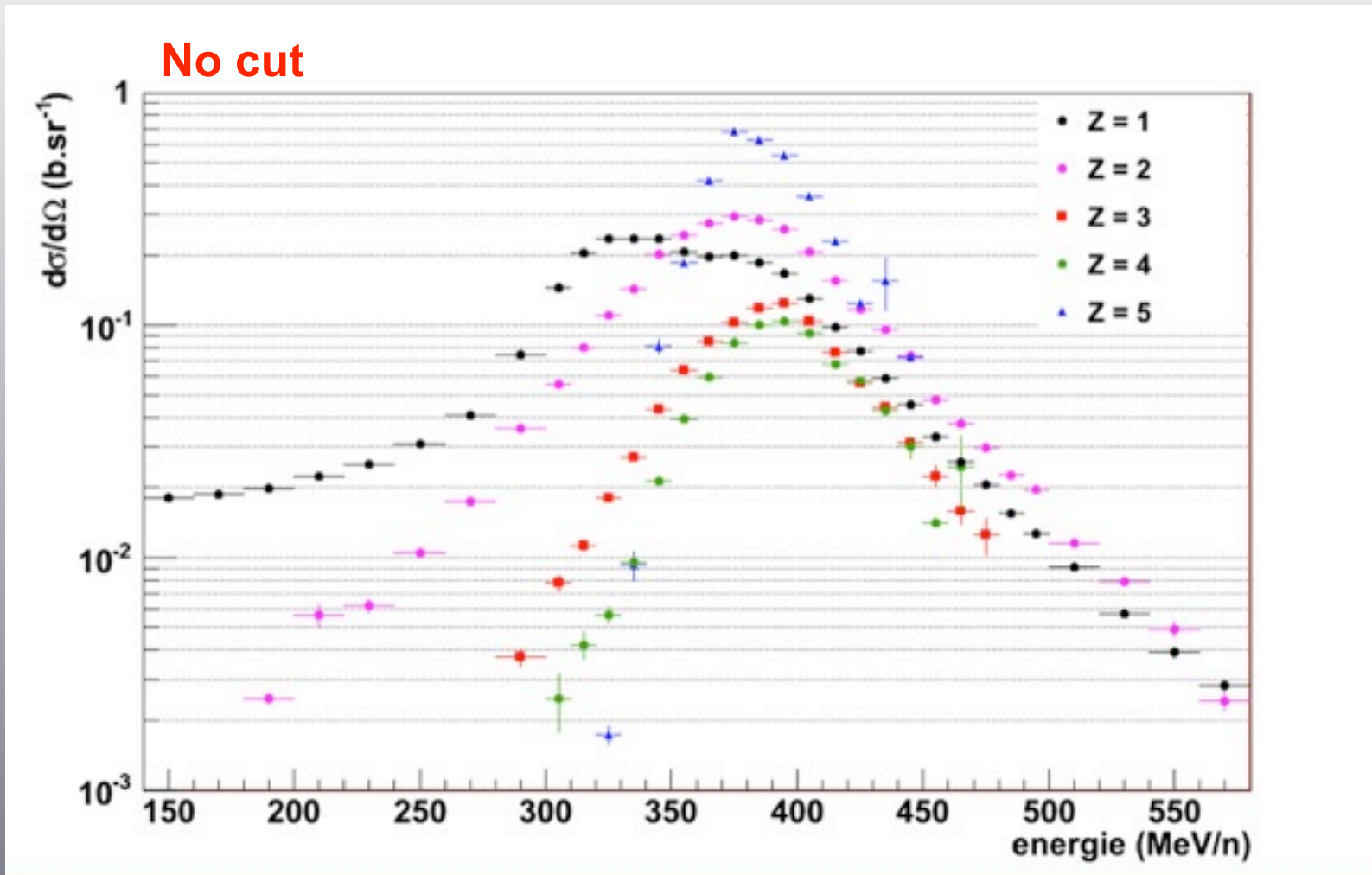
# Angular Distribution (ii)

• Distribution for  $Z = 4, 5$  w/o and with cut (nTracks)



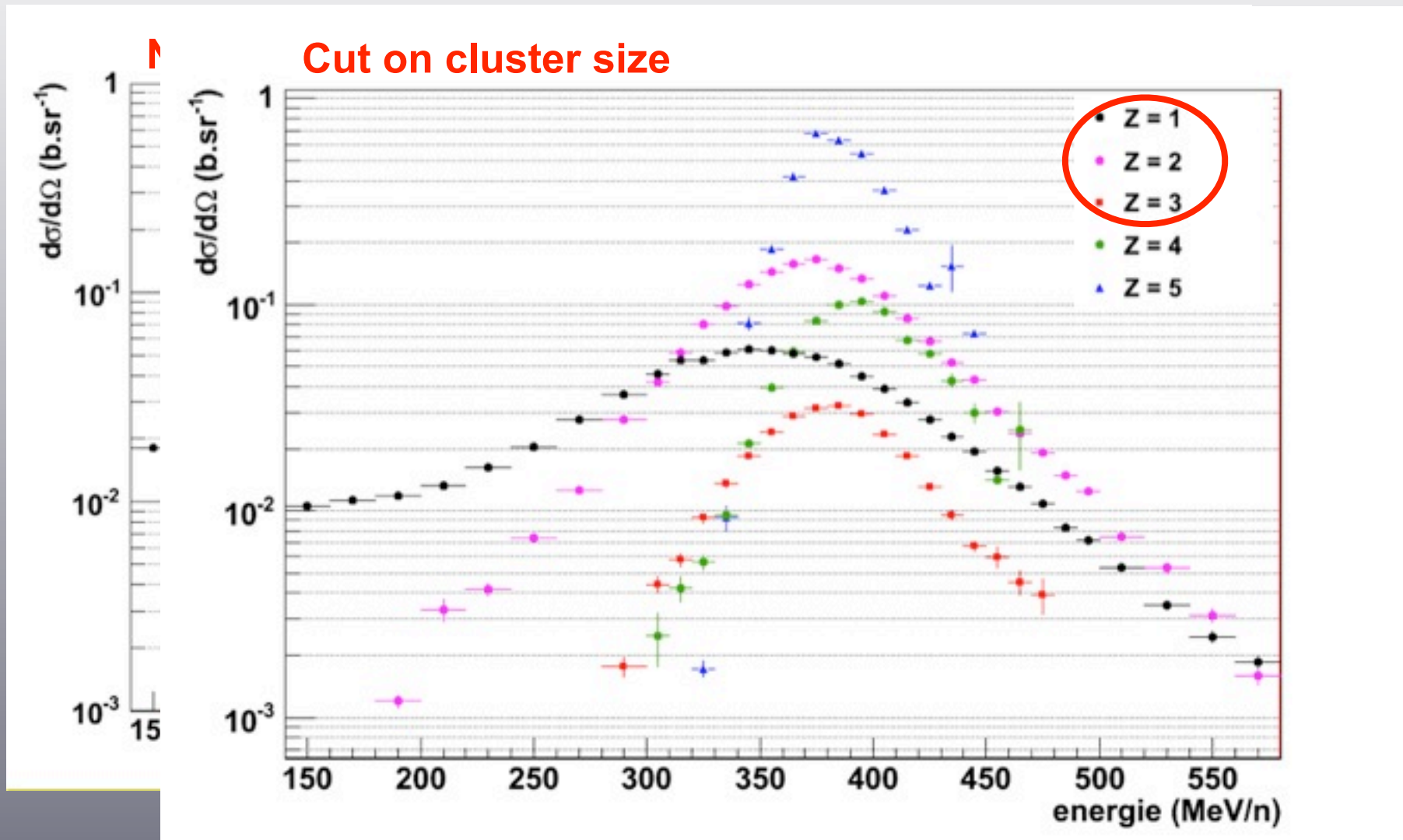
# Energy Distribution

• Distribution for all charges w/o and with cut (cluster size and nTracks)



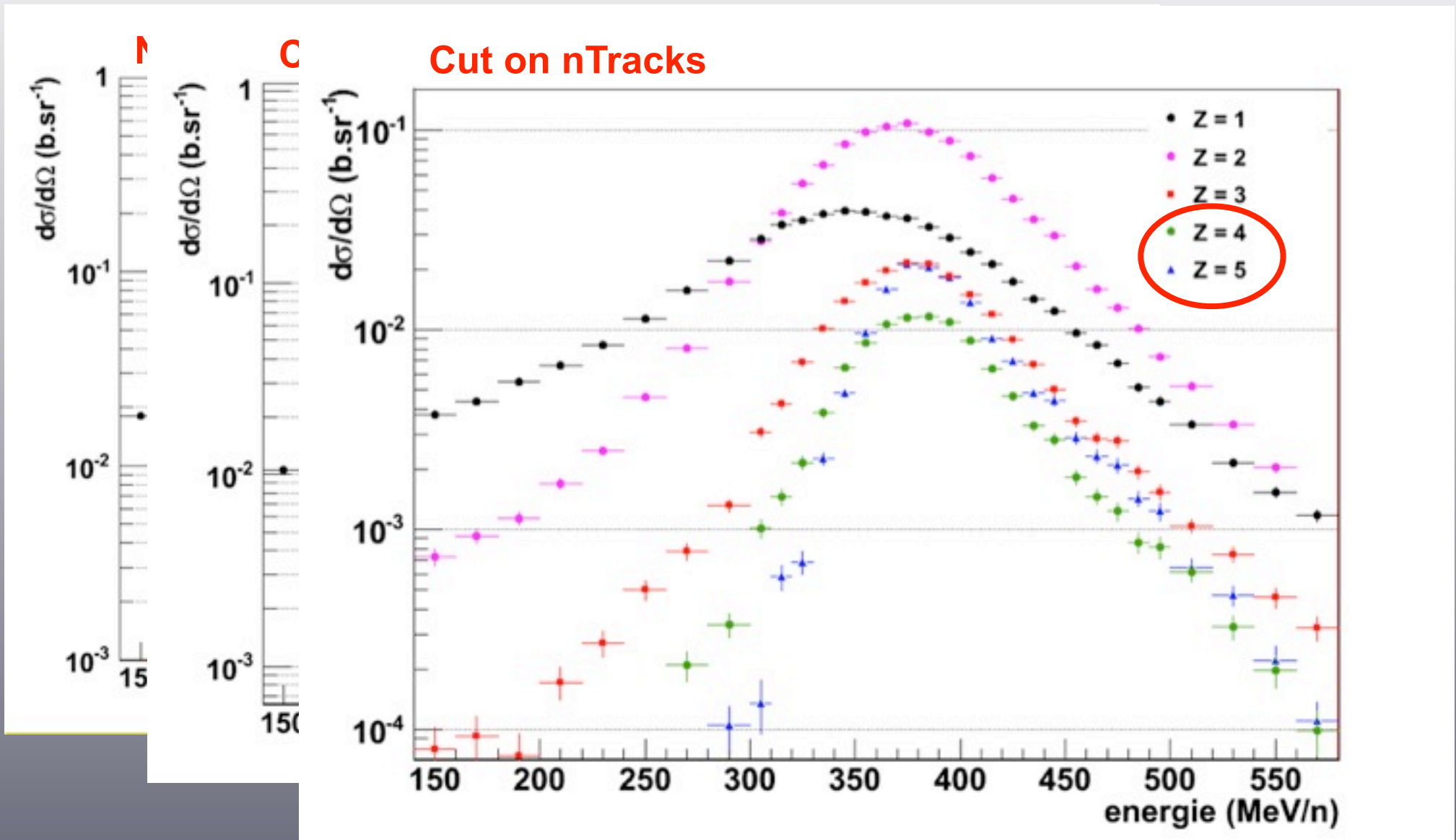
# Energy Distribution

• Distribution for all charges w/o and with cut (cluster size and nTracks)



# Energy Distribution

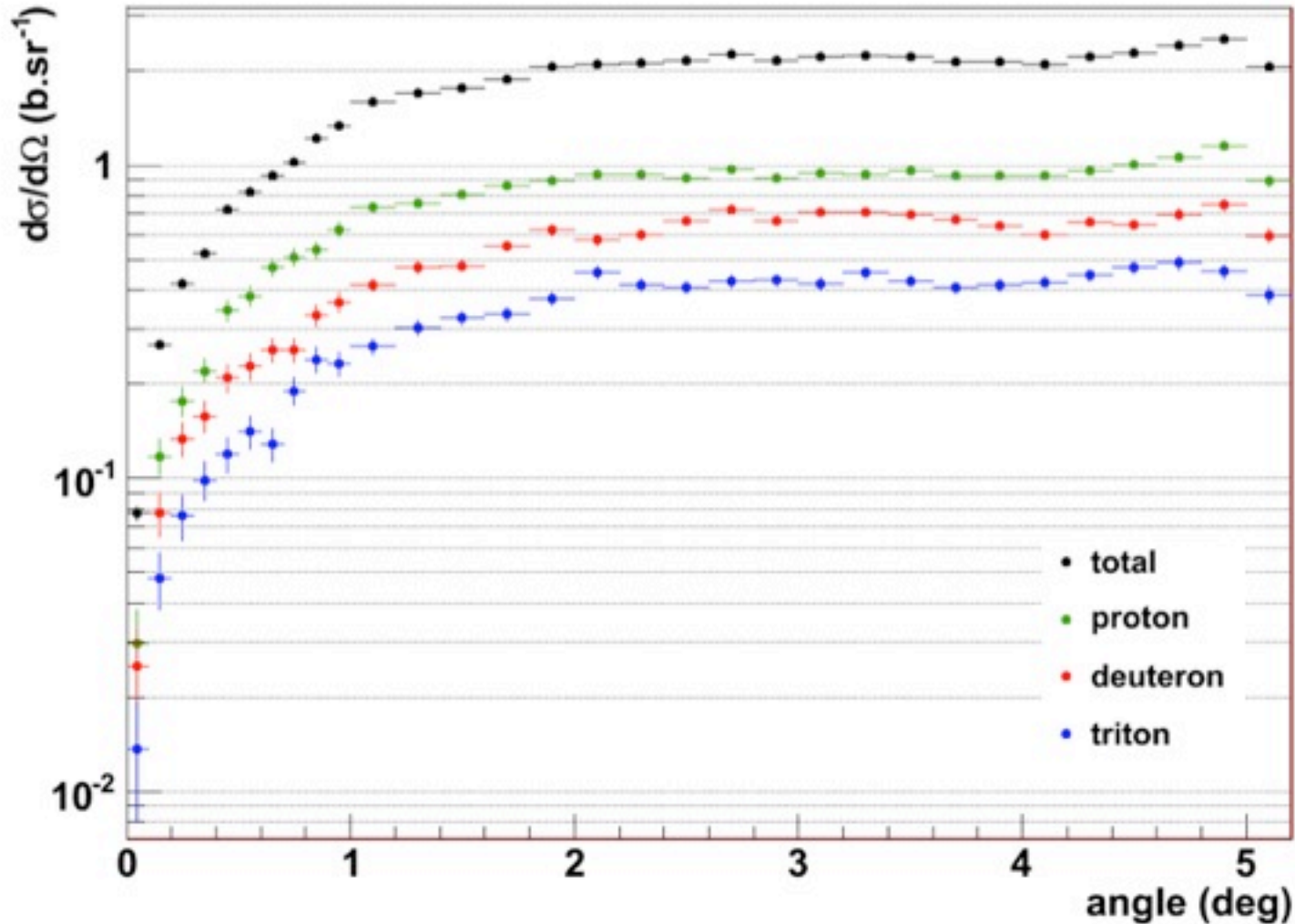
• Distribution for all charges w/o and with cut (cluster size and nTracks)



# Angular & Energy Distribution Z = 1

• Distribution for proton, deuterium & tritium

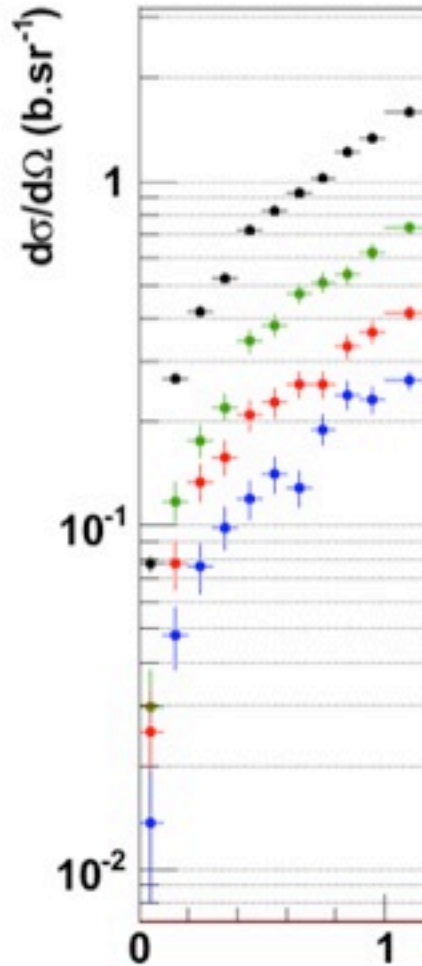
## Angular Distribution



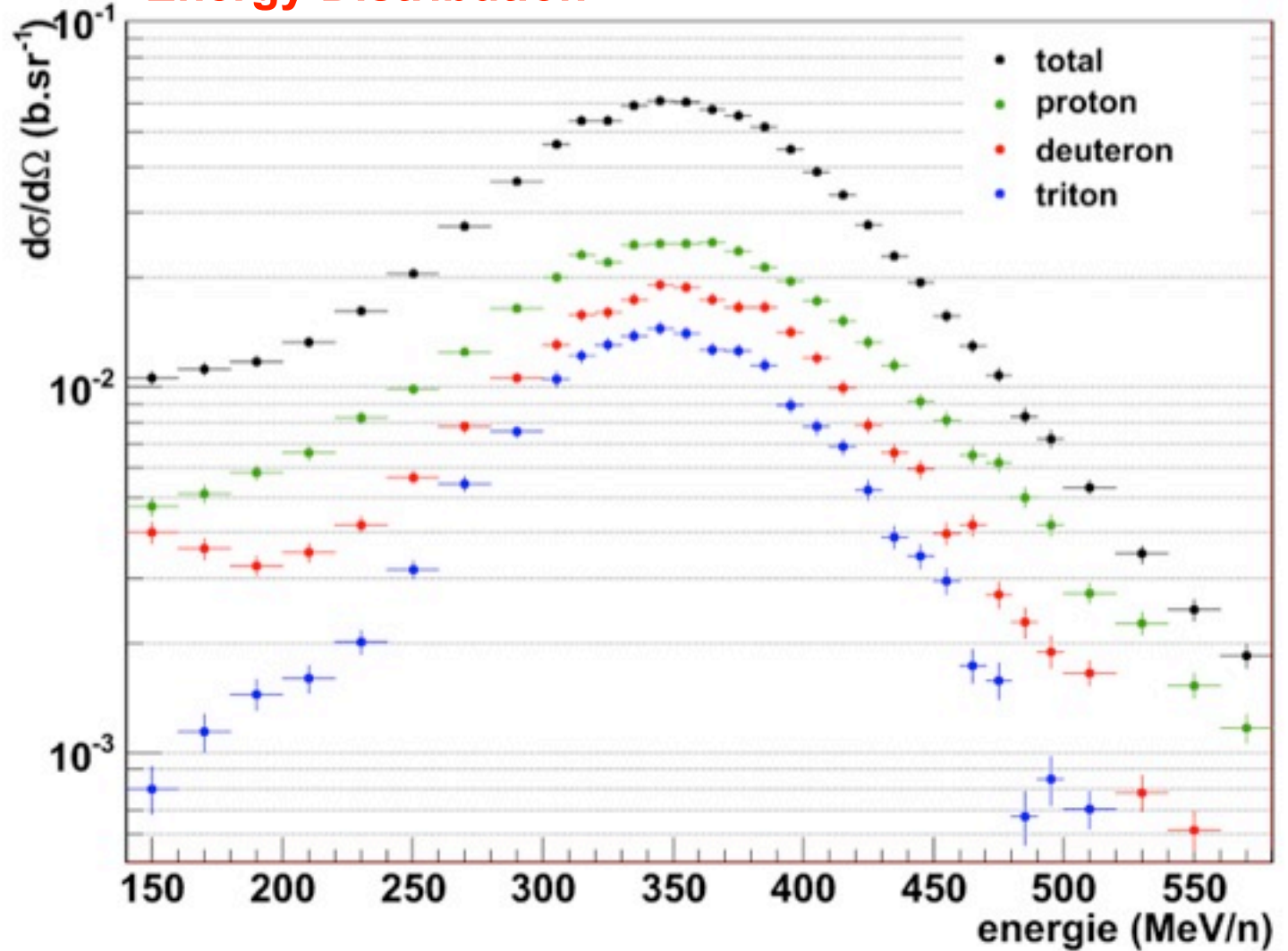
# Angular & Energy Distribution Z = 1

• Distribution for proton, deuterium & tritium

Angular Di



Energy Distribution



# Conclusions

- First (attempt) for angular & energy distributions (with cuts)
- Evaluate correctly cuts on efficiency (response function and pileup)
- Get rid of charge pollution (especially carbon) !
- Estimation of systematic errors (long term) including dead maps