

# Results from Sirène

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WP2 meeting @ Paris

# Samples

- \* 100GeV (30 min or so running)

- \* 3000 events with 142010 hits

- \* 1000 events with 47311 hits - 45979 from Cherenkov ; 1332 from EM showers

- \* 500GeV (2hrs running 3000 events)

- \* 3000 events with 1396659 hits

- \* 1000 events with 466198 hits - 435697 from Cherenkov ; 30501 from EM showers

- \* 10TeV (2evts/1min)

- \* 3000 events with 3204253 hits

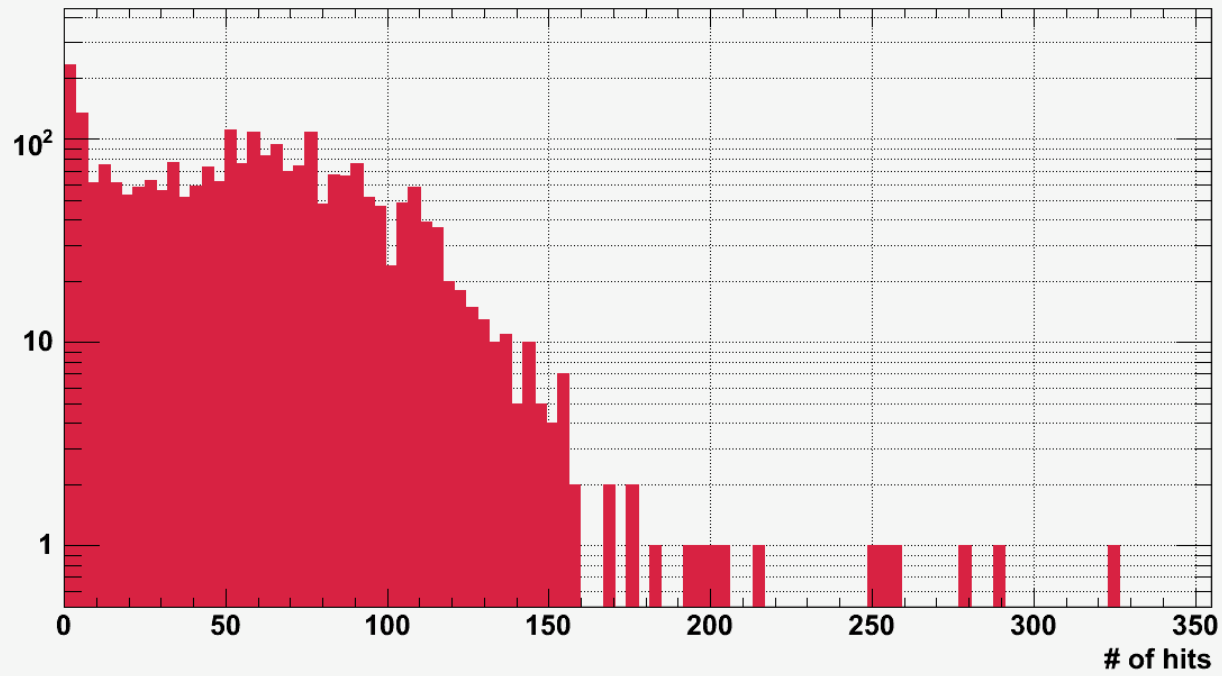
- \* 1000 events with 1116156 hits - 456139 from Cherenkov ; 660017 from EM showers

# Some Distributions

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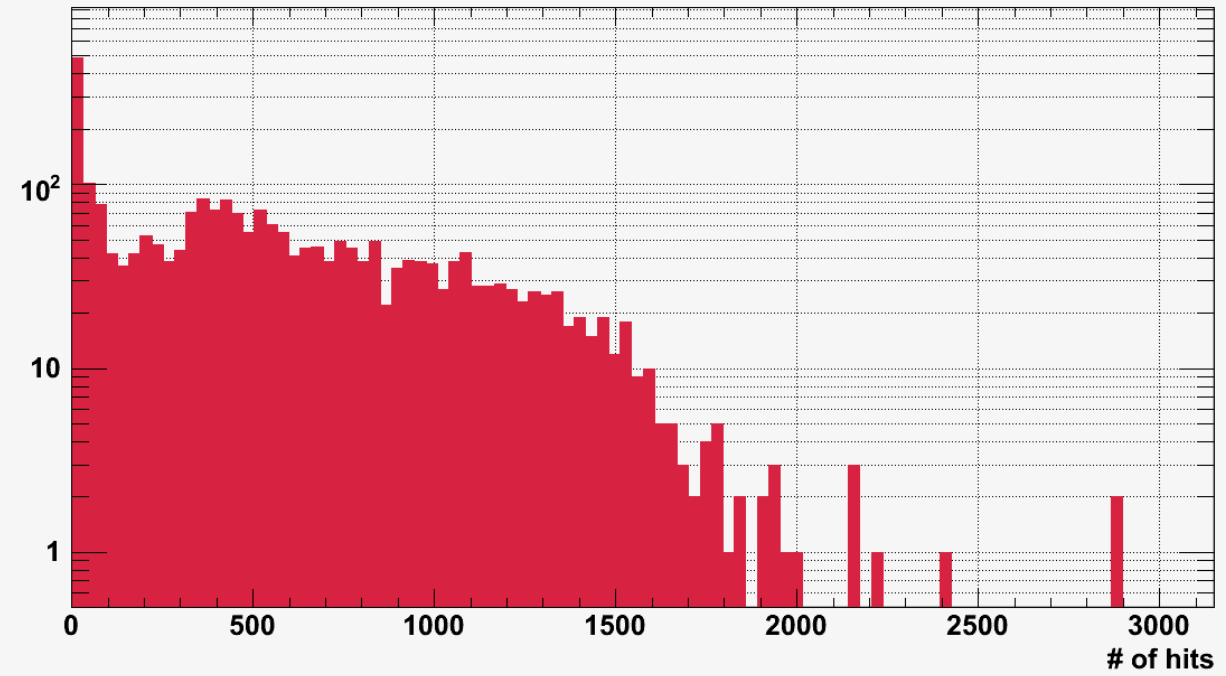
# Number of hits per events

# of hits



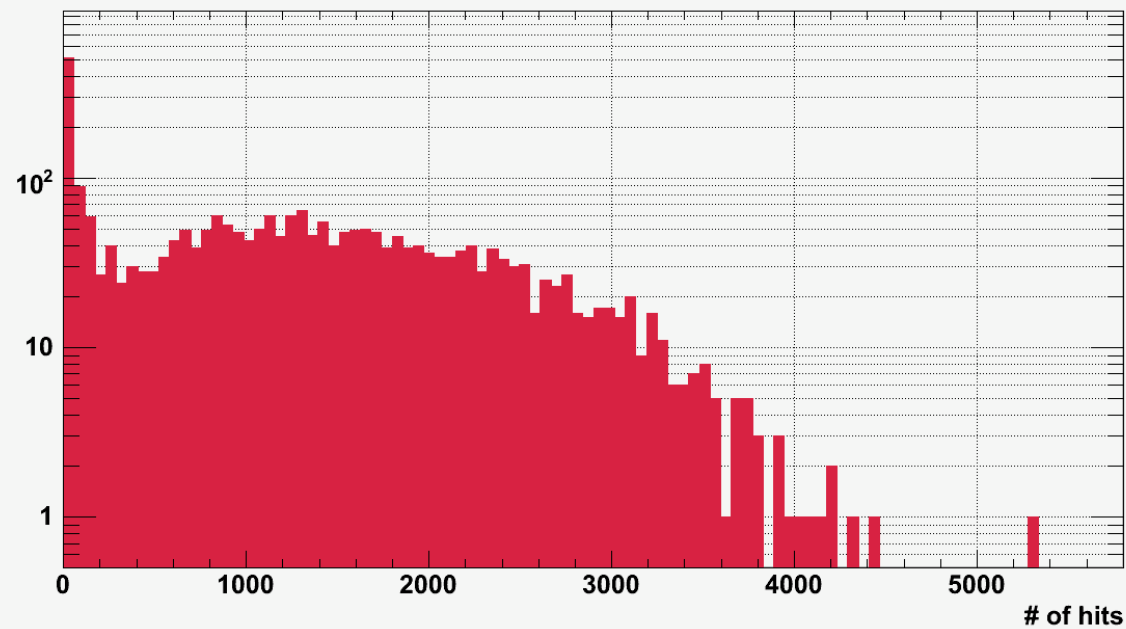
100 GeV sample

# of hits



500 GeV sample

# of hits

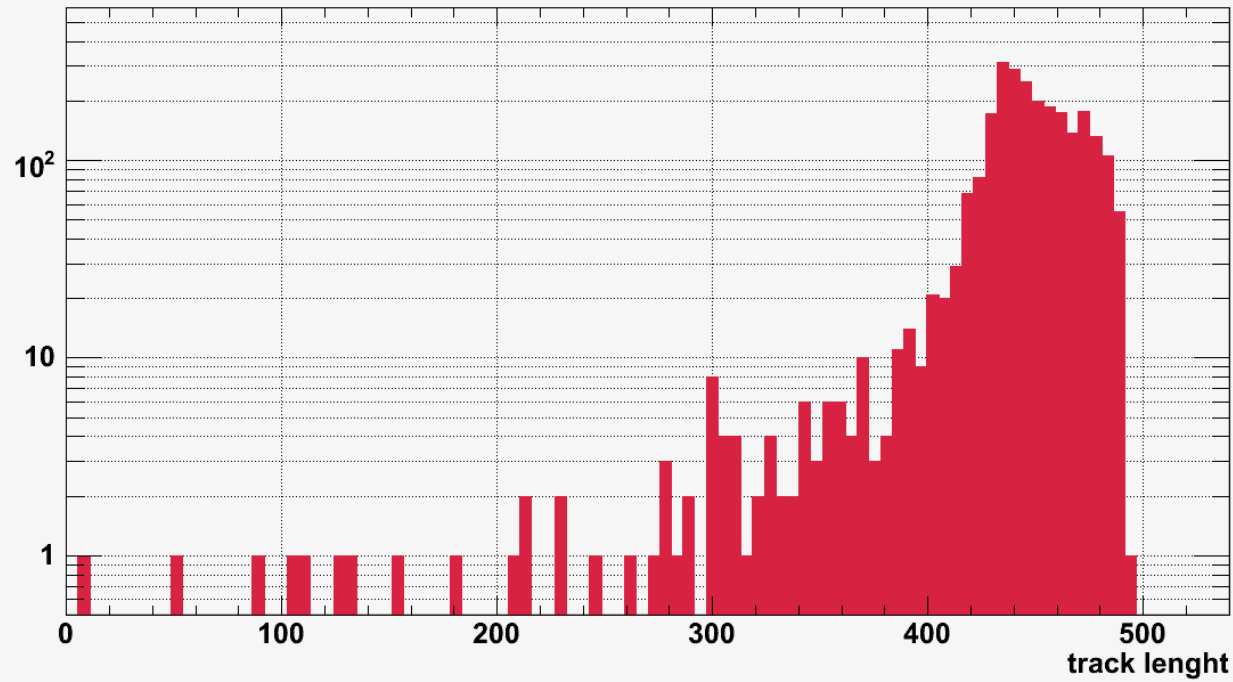


10 TeV sample

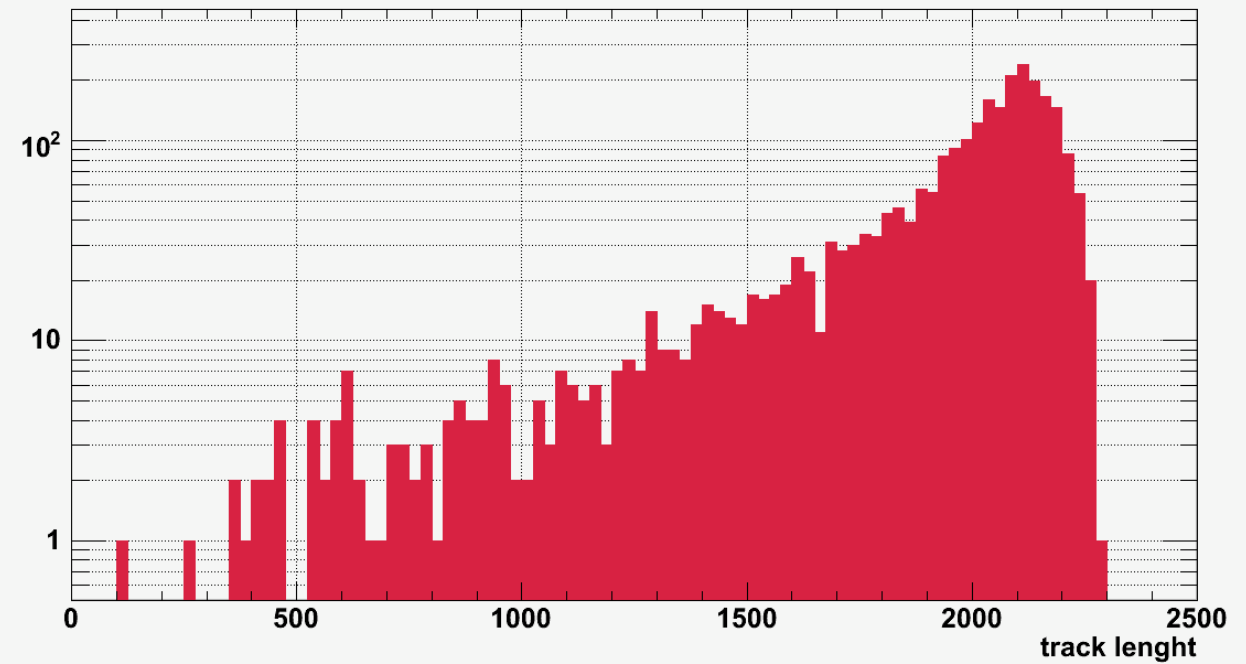


# Track Length

Track Length



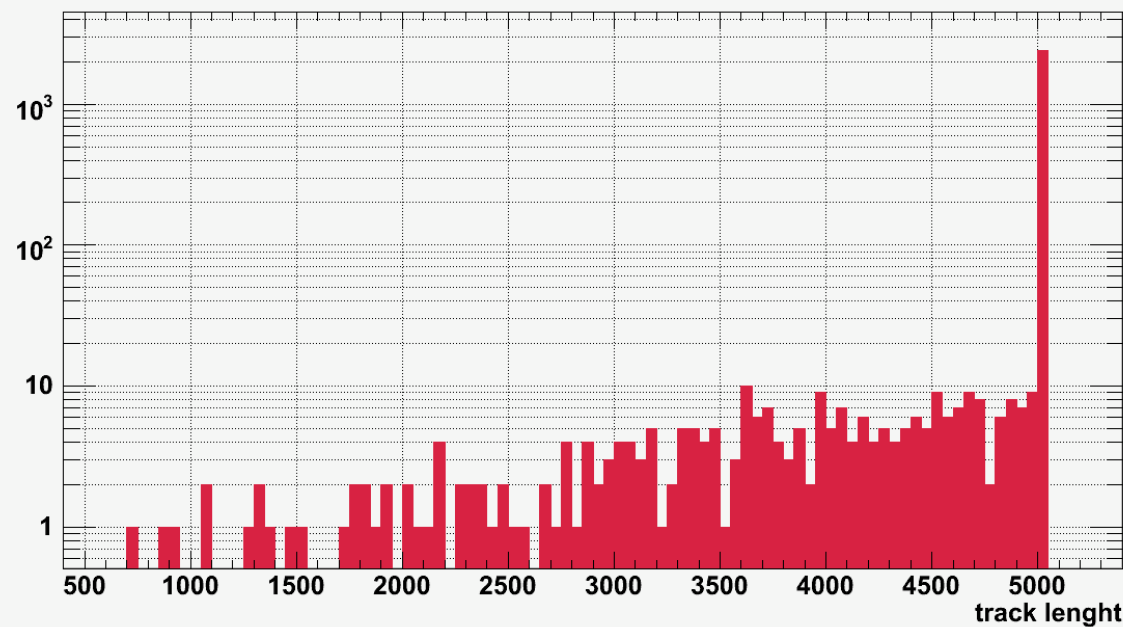
Track Length



100 GeV sample

500 GeV sample

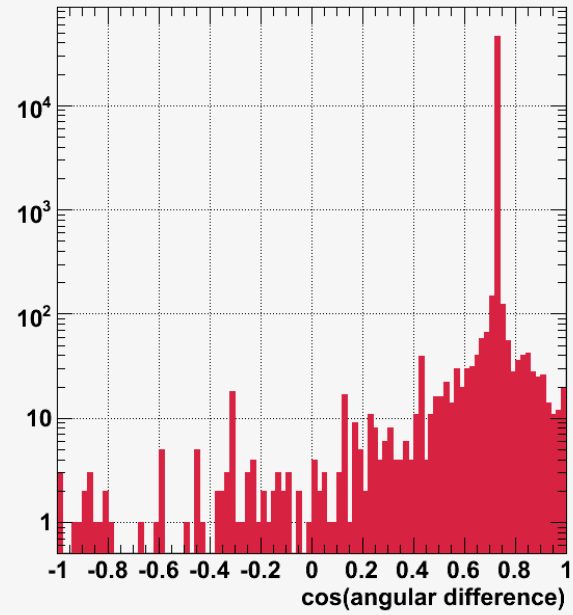
Track Length



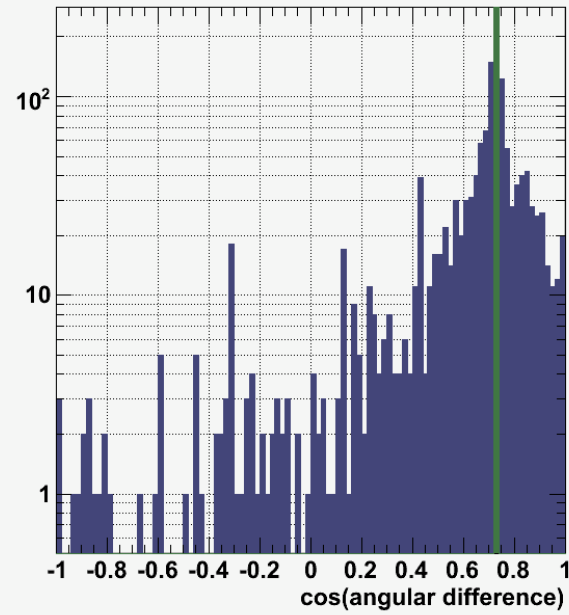
10 TeV sample

# Track X Hit Information

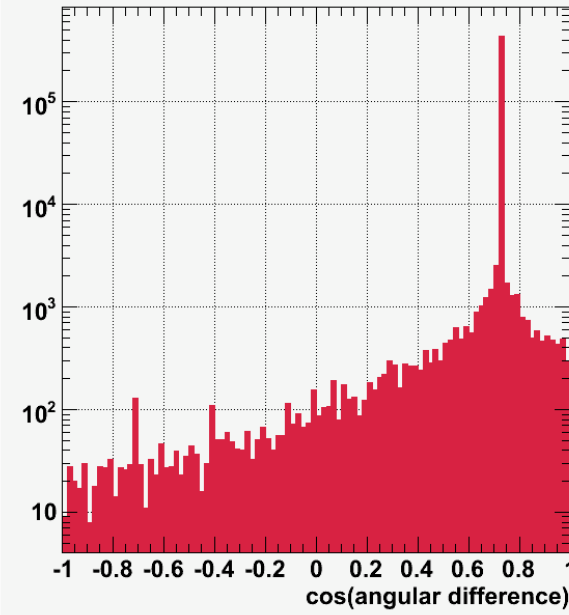
cos(angular difference between track and hit)



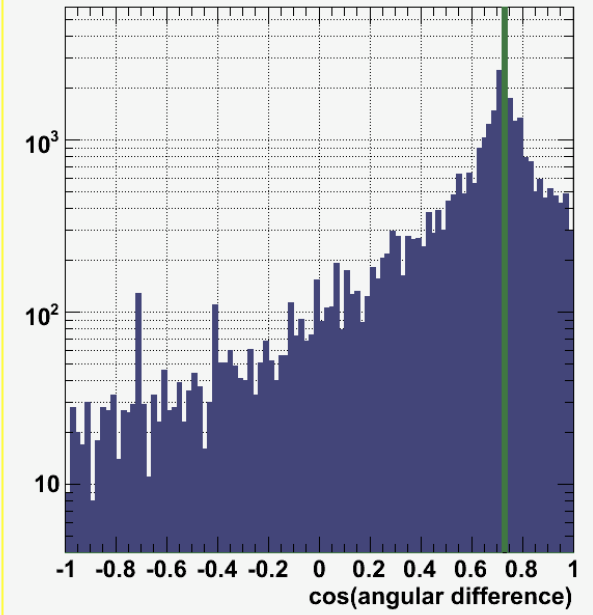
cos(angular difference between track and hit)



cos(angular difference between track and hit)

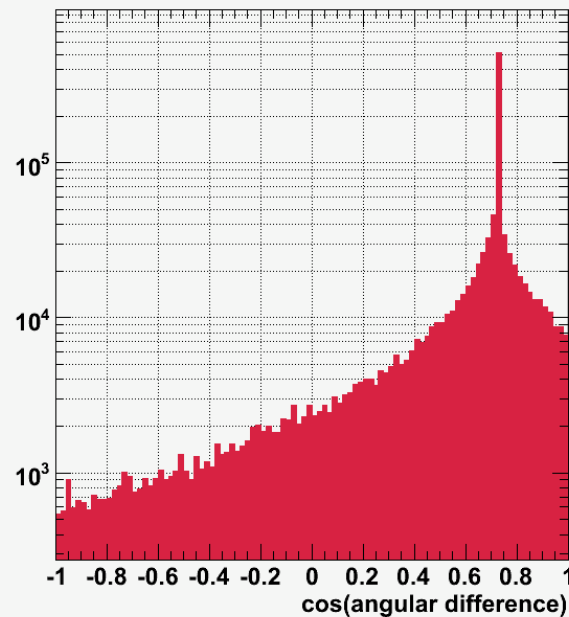


cos(angular difference between track and hit)

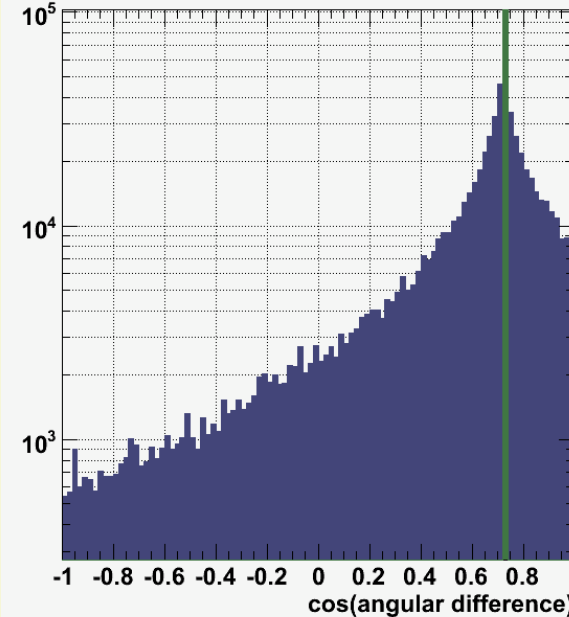


100 GeV sample

cos(angular difference between track and hit)



cos(angular difference between track and hit)

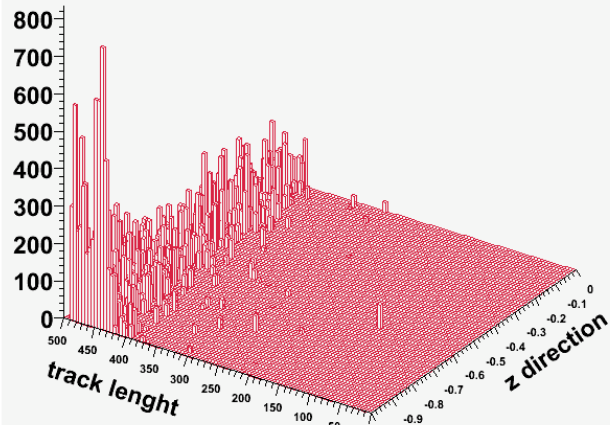


500 GeV sample

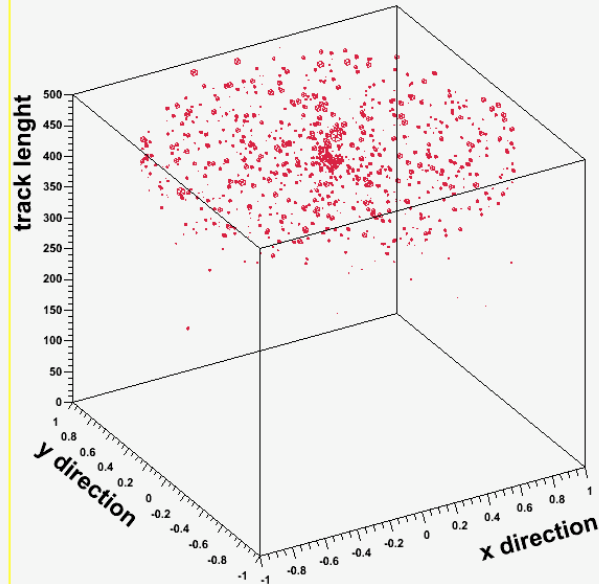
10 TeV sample

# Track and Position

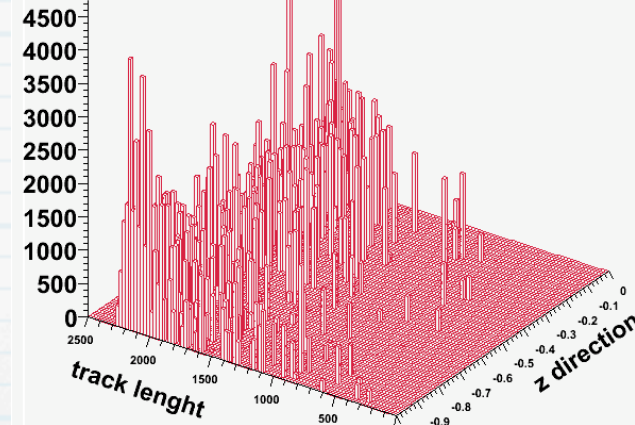
z direction X track length



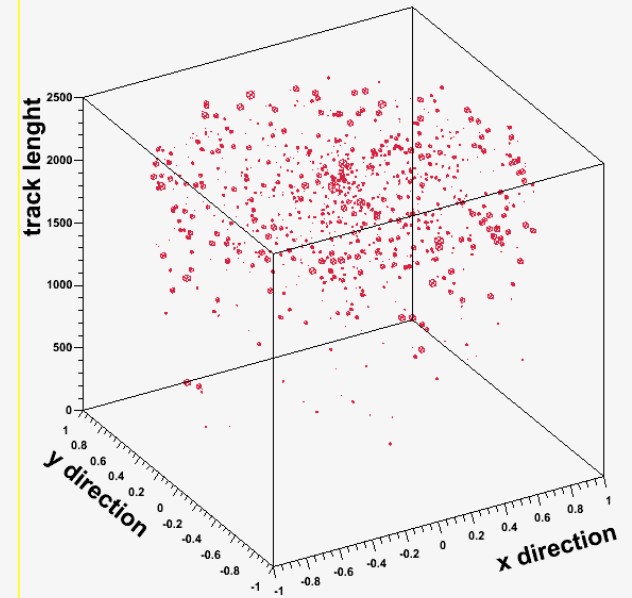
dx X dy X track length



z direction X track length

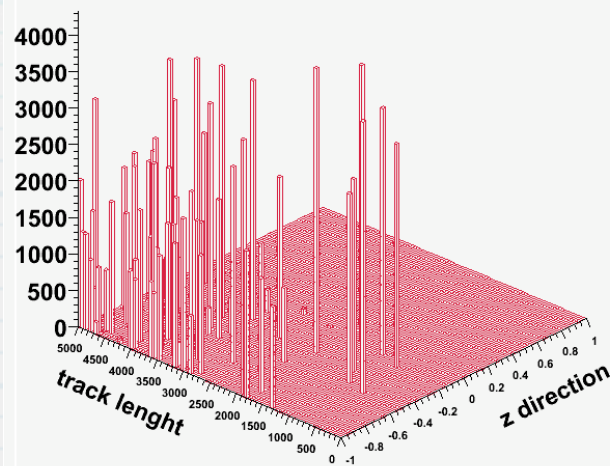


dx X dy X track length

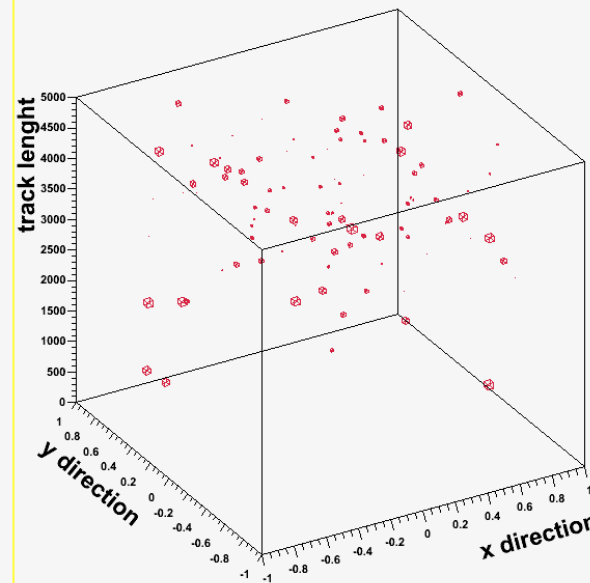


100 GeV sample

z direction X track length



dx X dy X track length

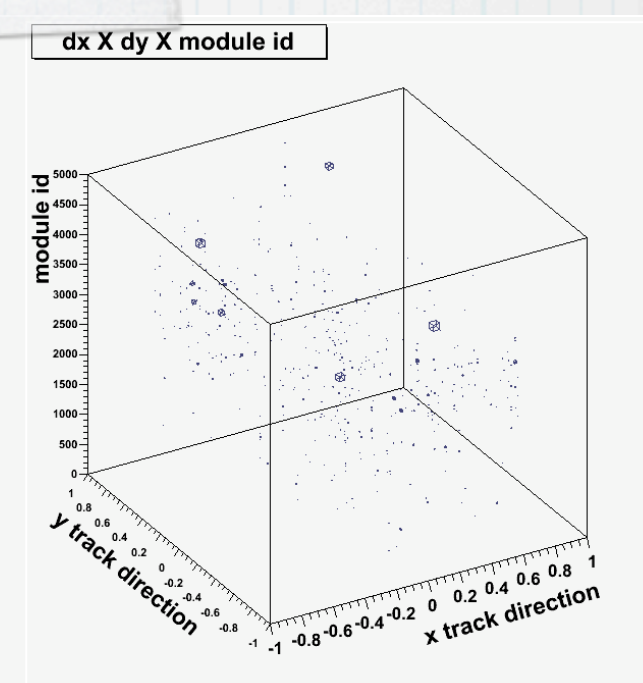
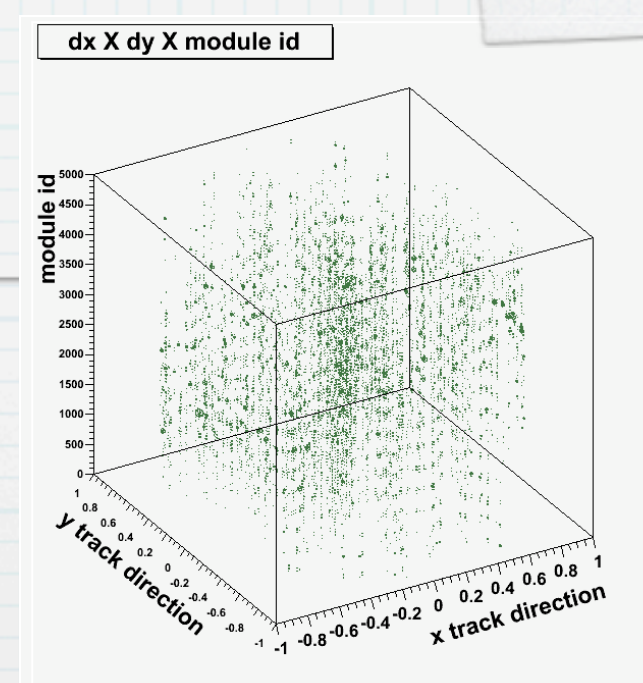
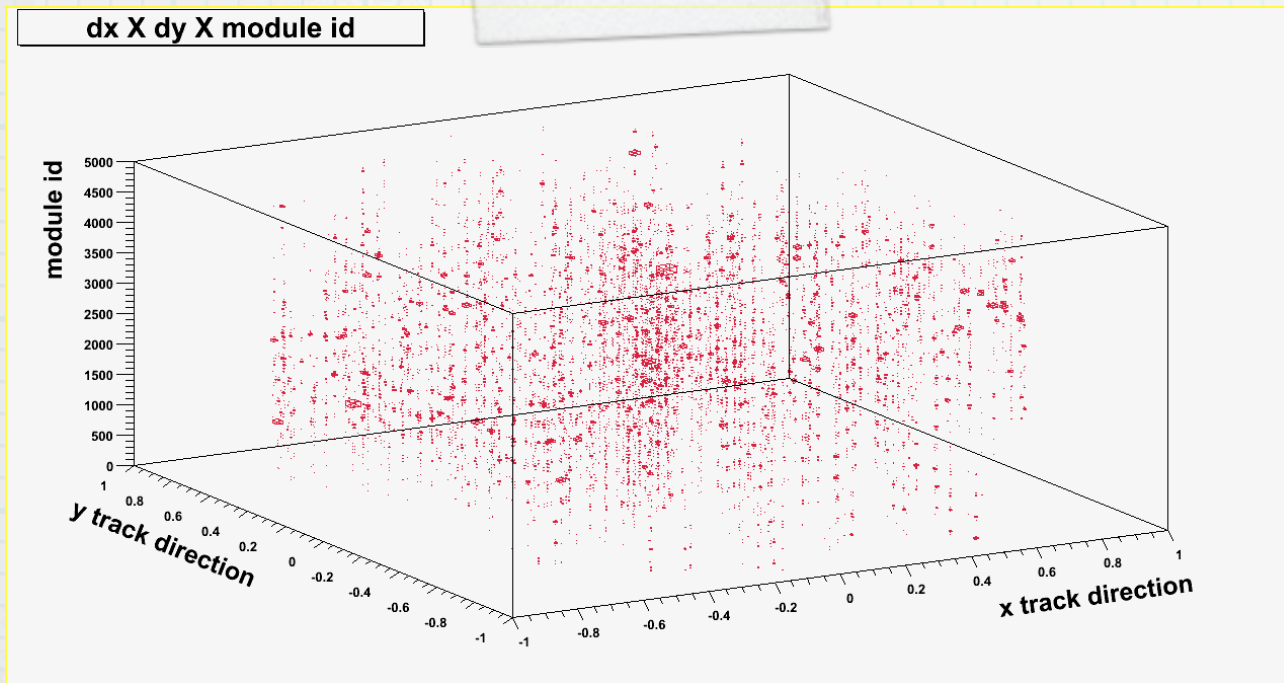
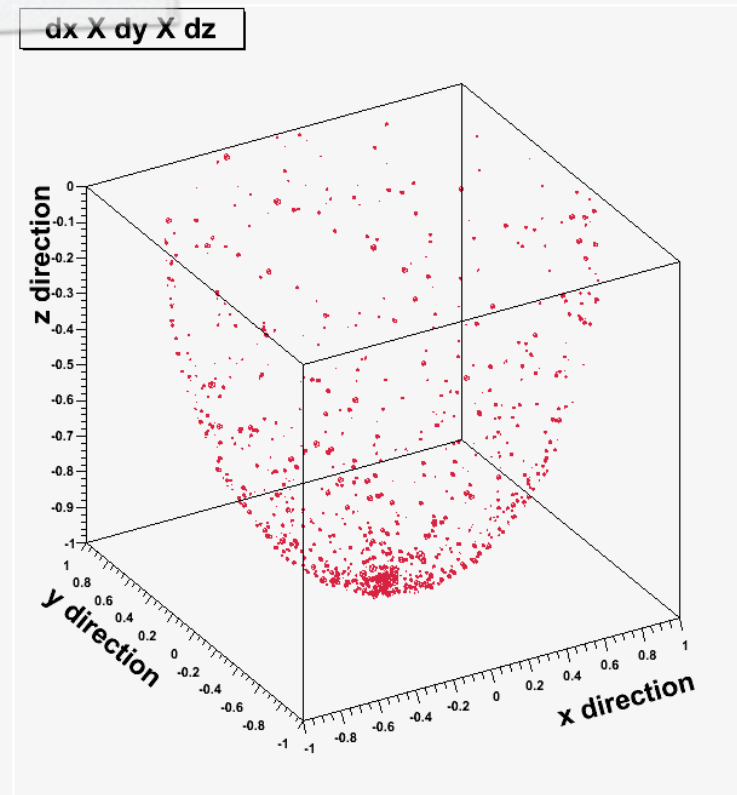
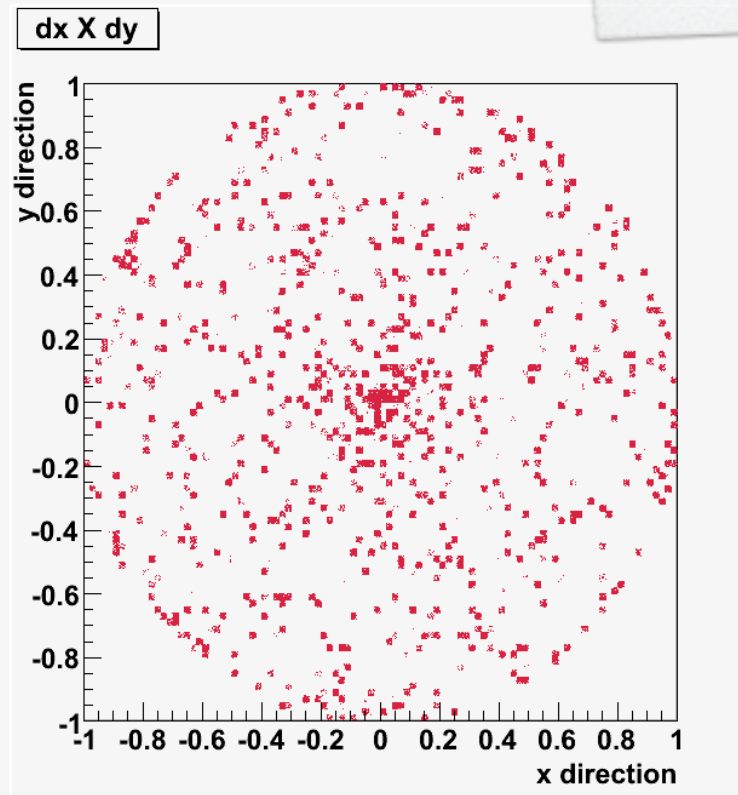


500 GeV sample

10 TeV sample

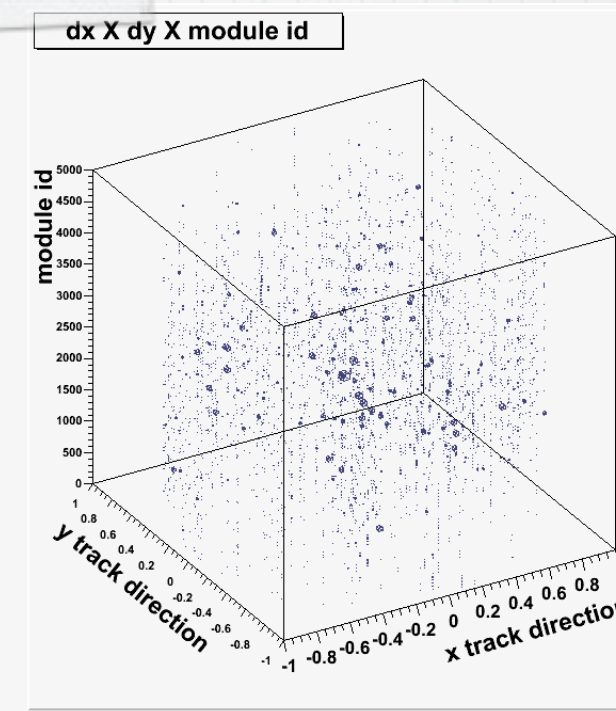
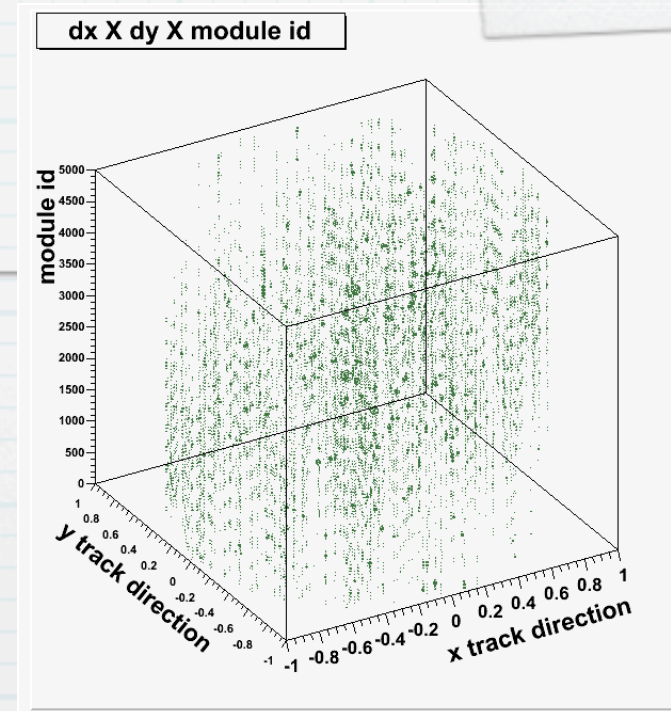
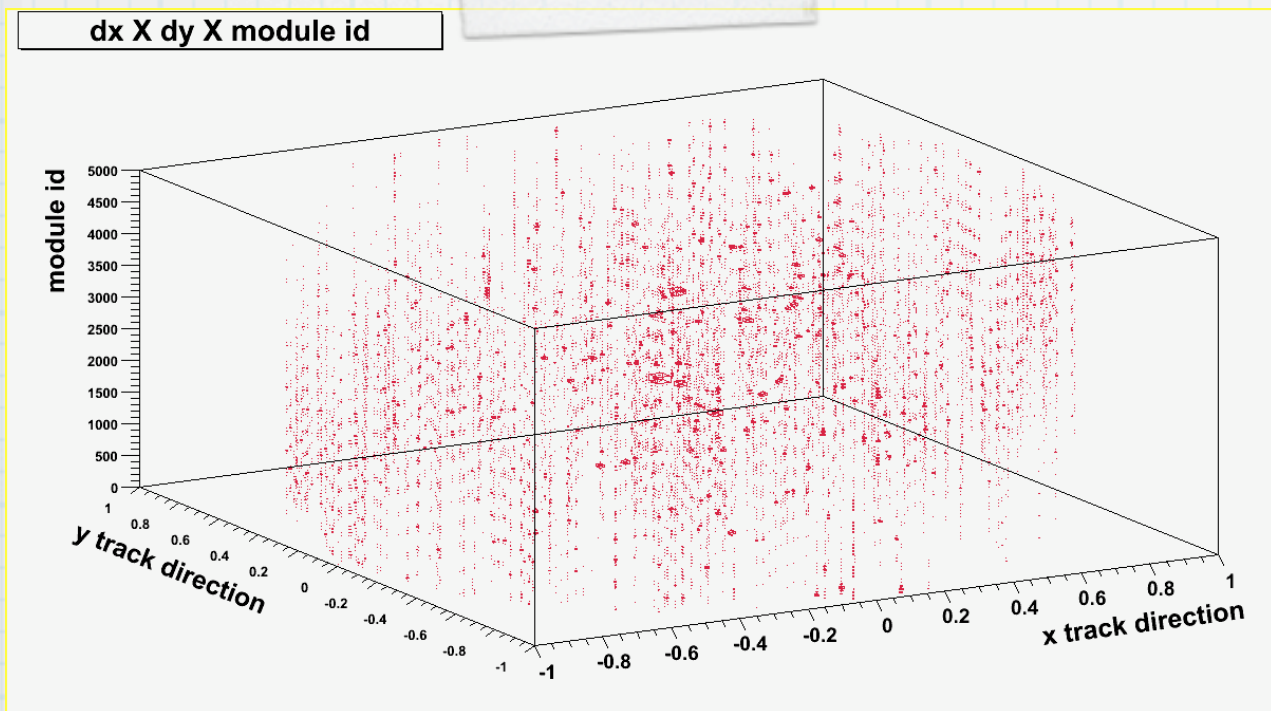
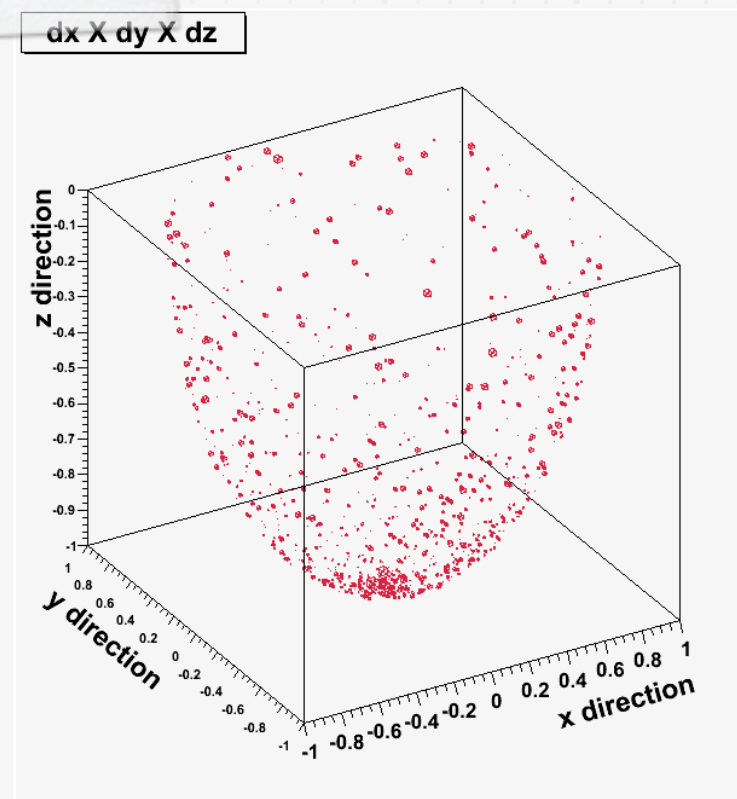
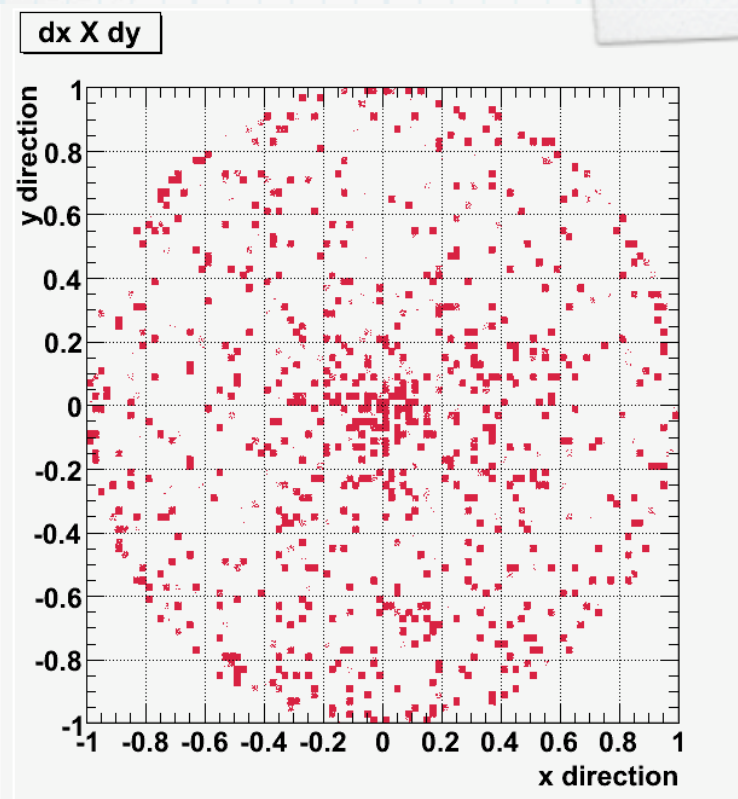


# Modules and Position - 100 GeV

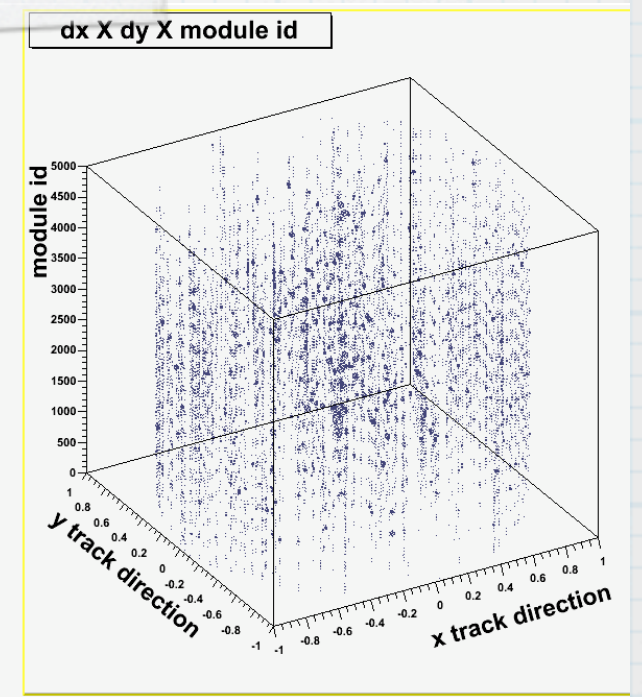
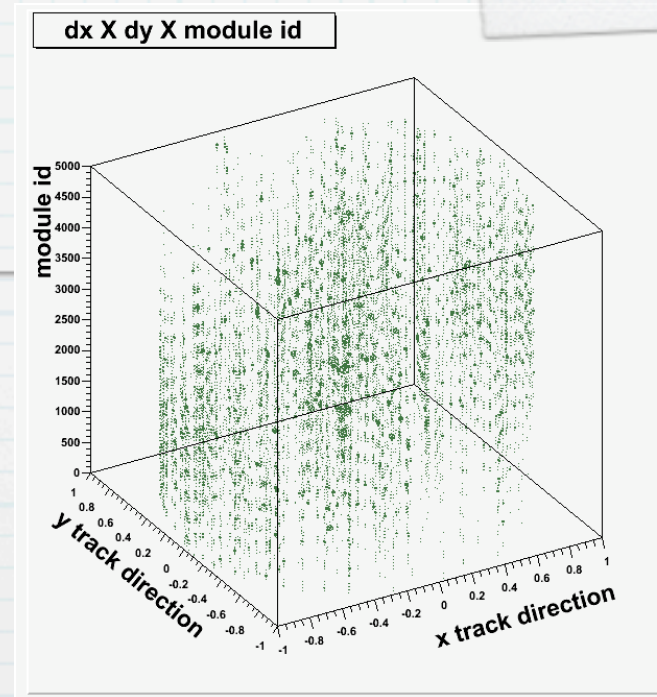
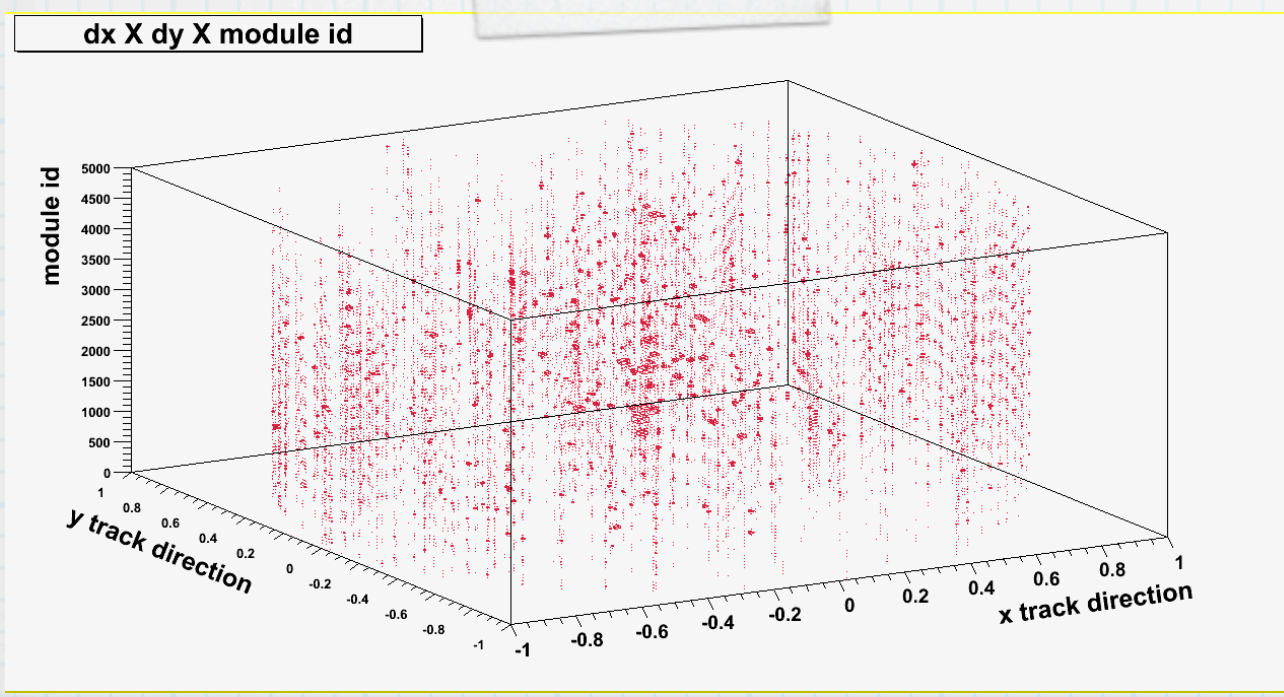
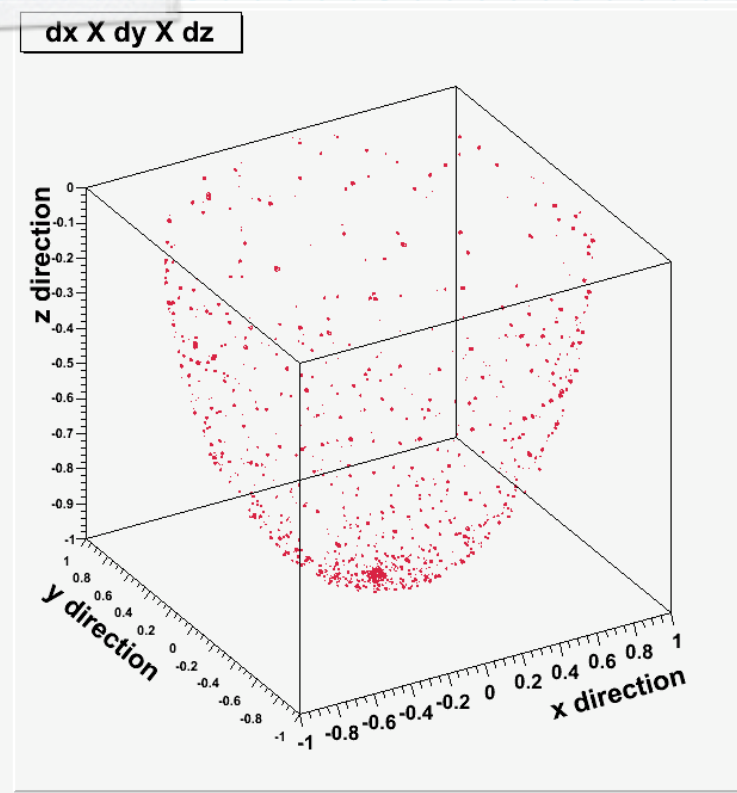
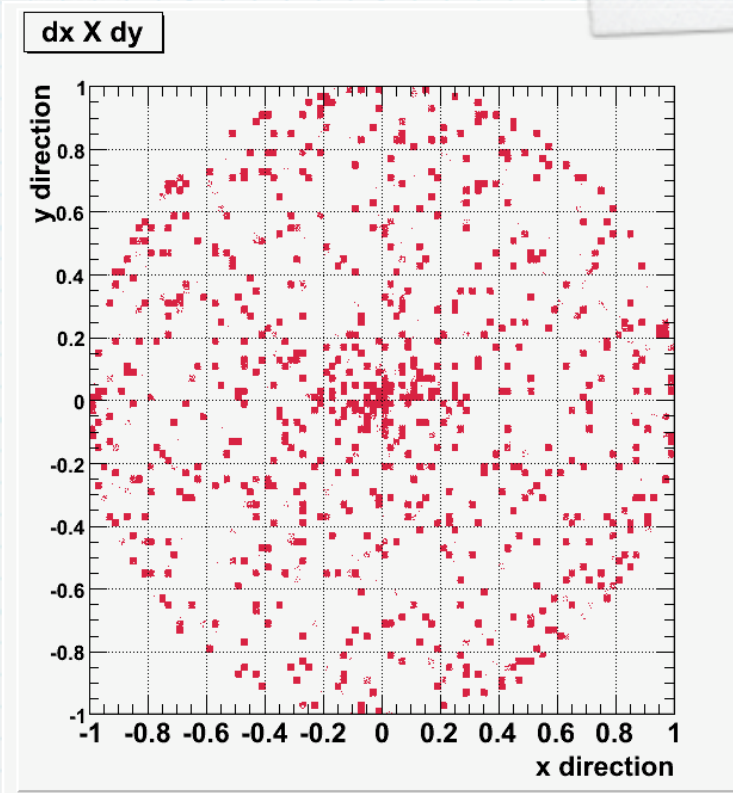




# Modules and Position - 500 GeV

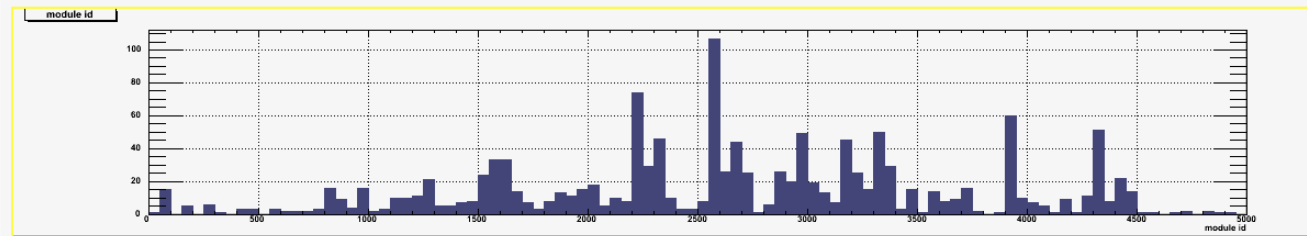
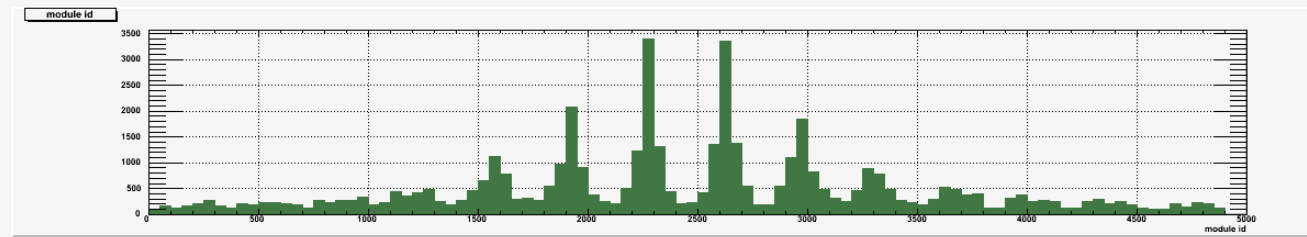
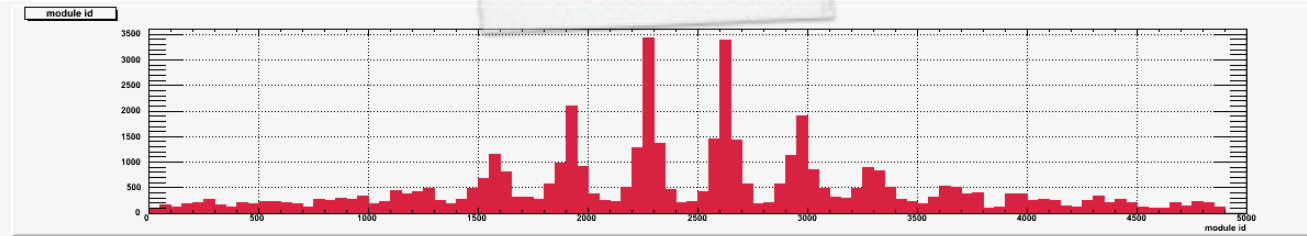


# Modules and Position - 10 TeV

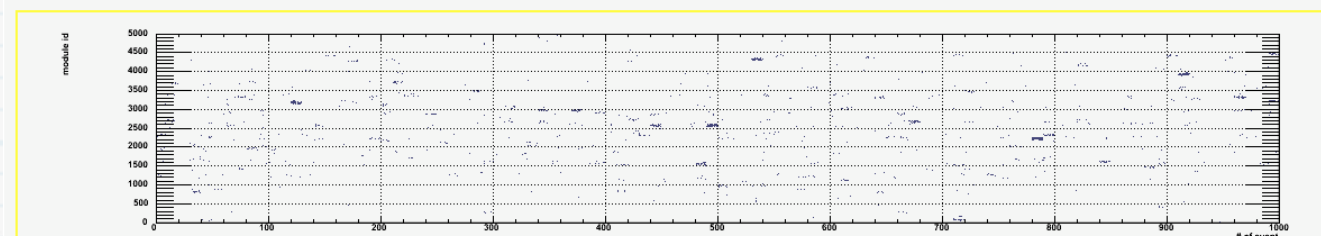
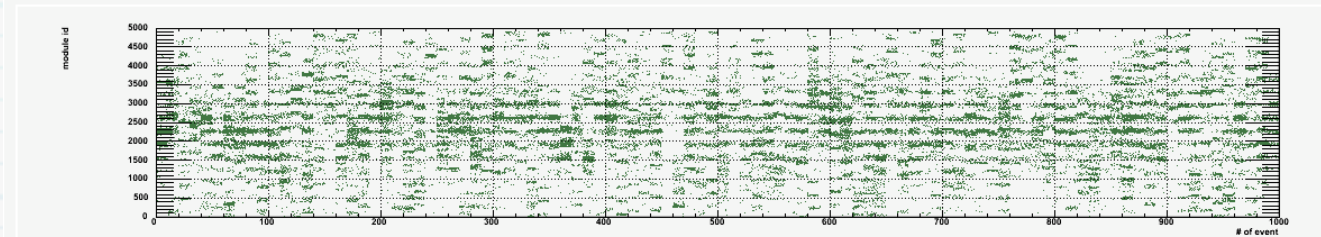
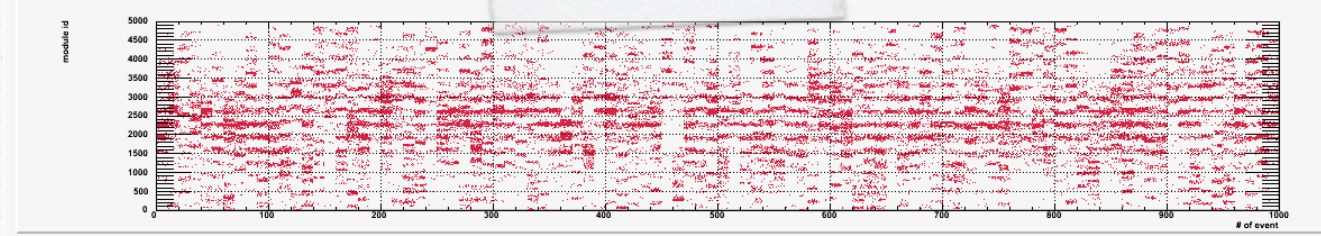




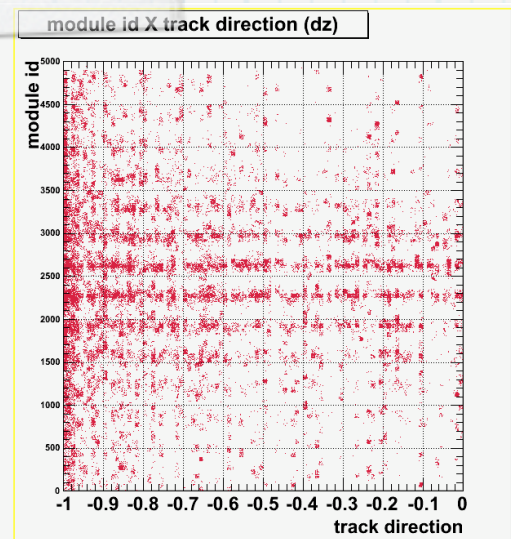
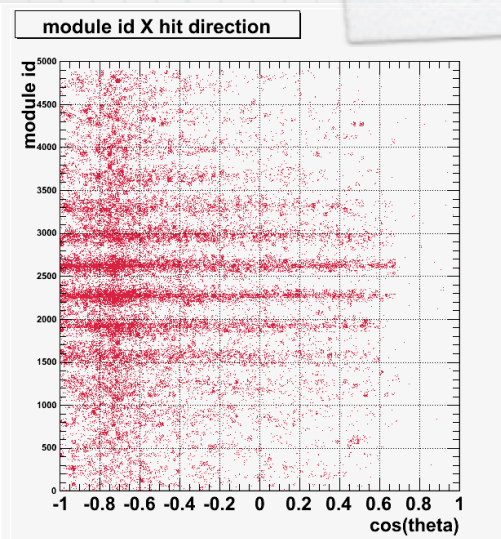
# Modules and Events - 100 GeV



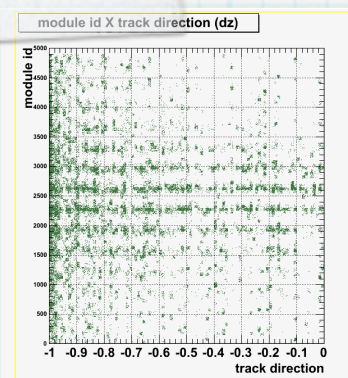
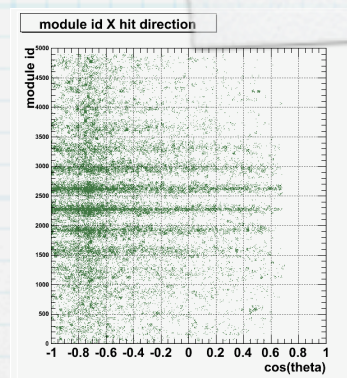
module id



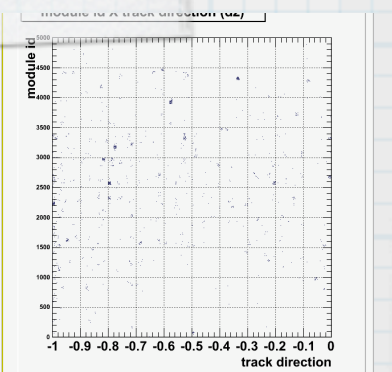
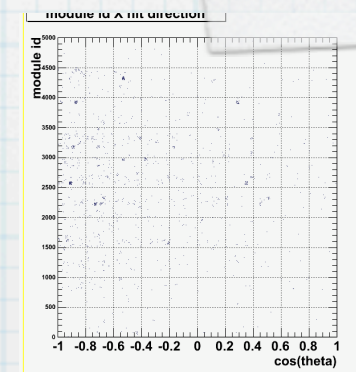
module in X # of events



module id X direction  
(hit & track)



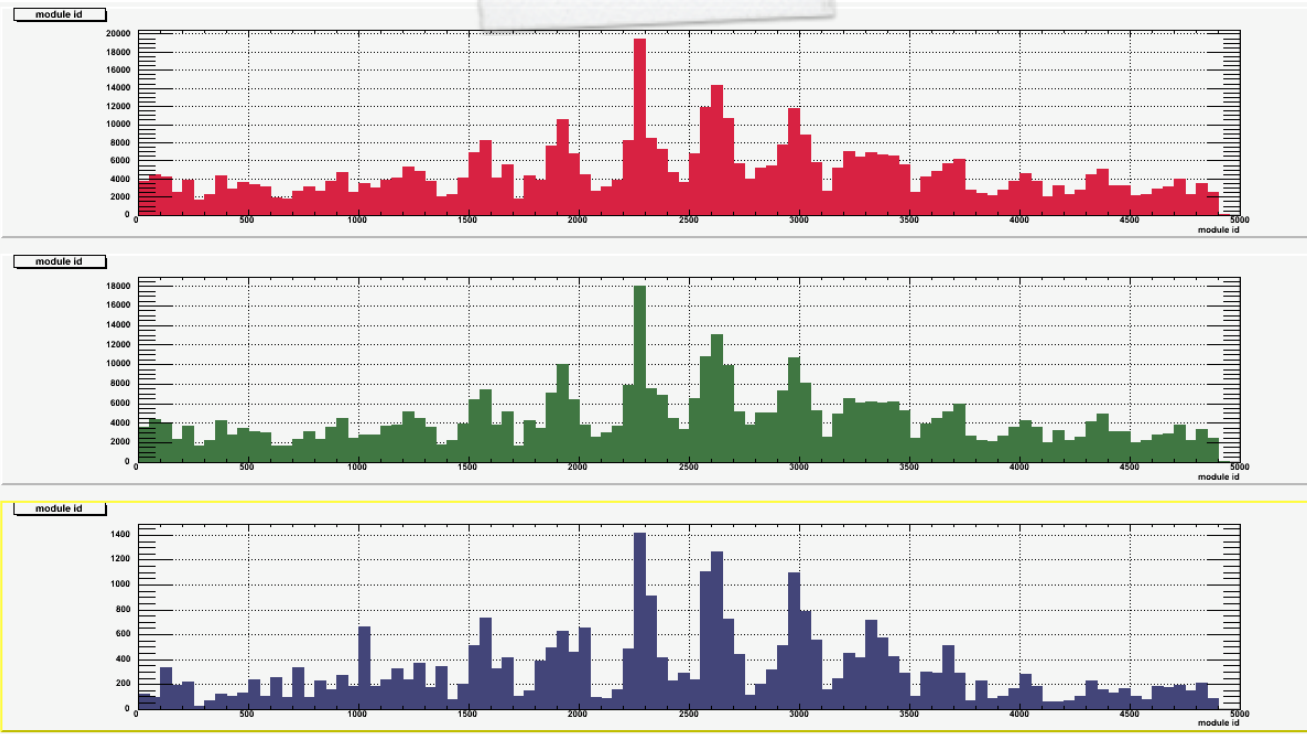
cherenkov hits



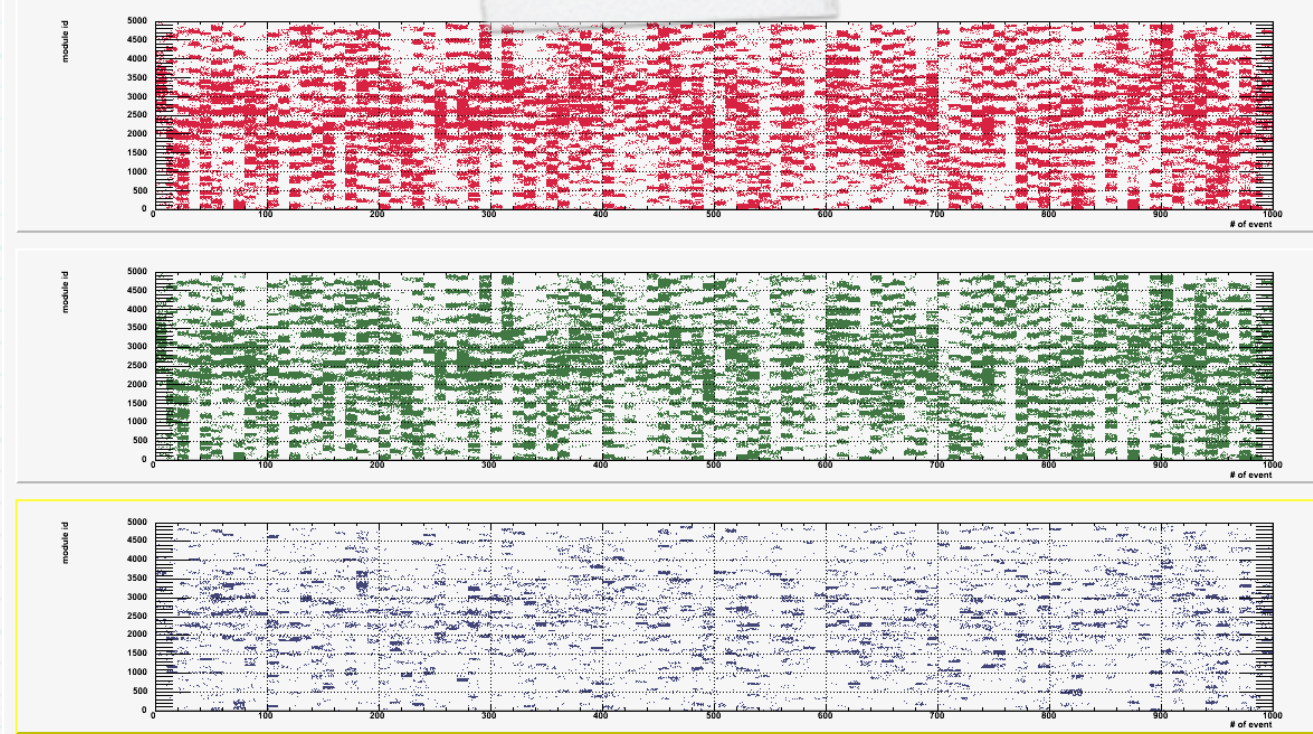
EM shower hits



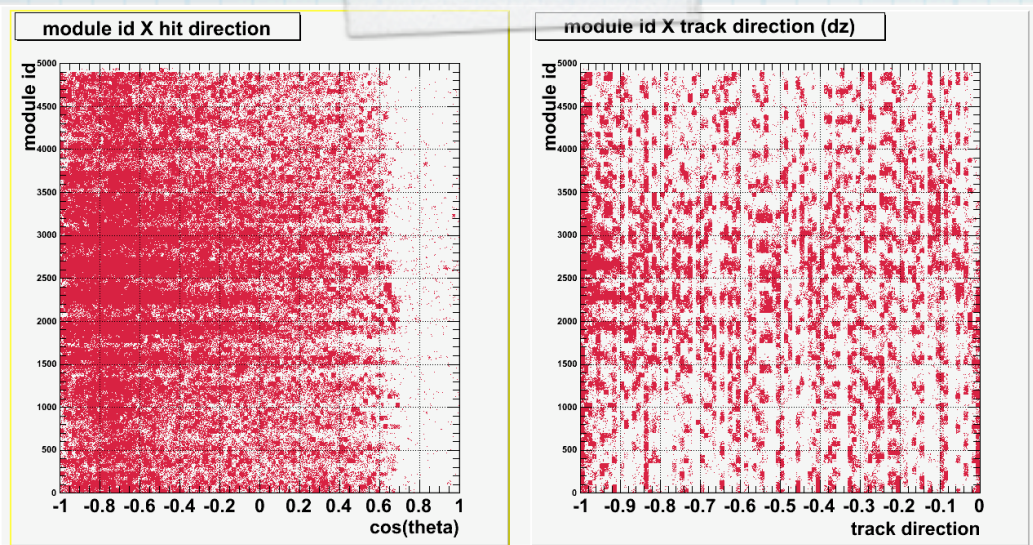
# Modules and Events - 500 GeV



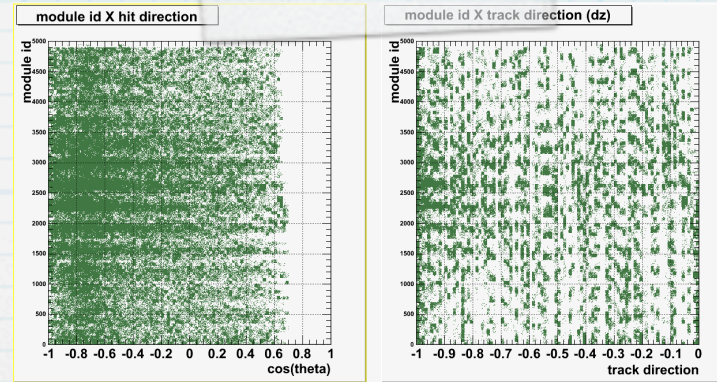
module id



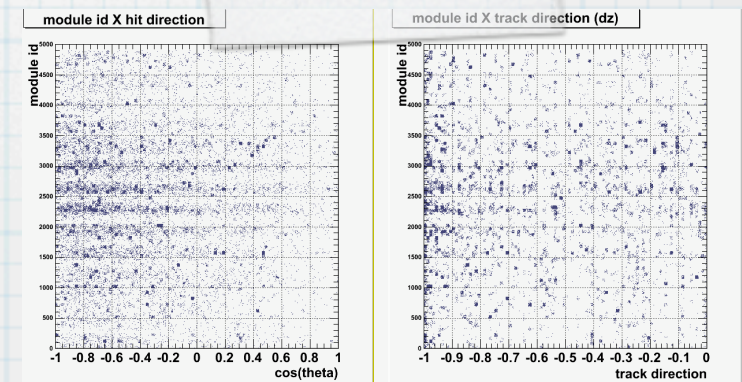
module in X # of events



module id X direction  
(hit & track)



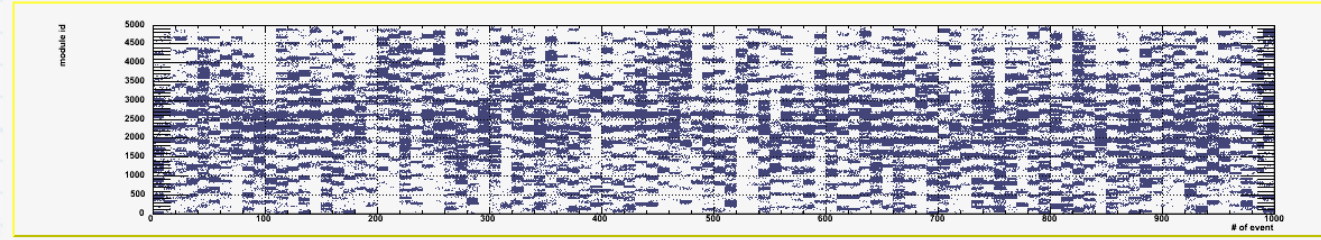
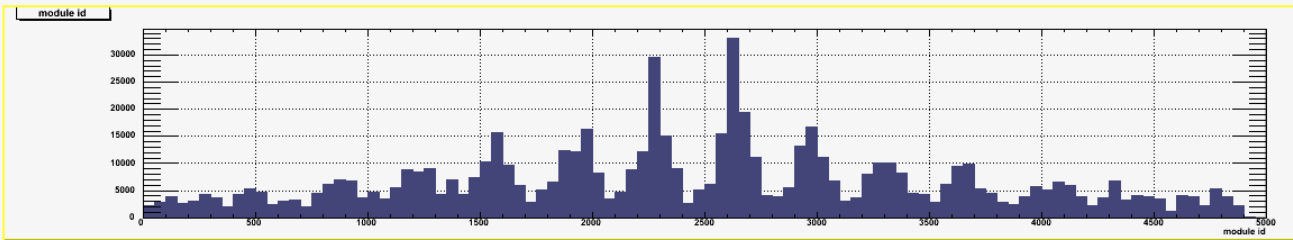
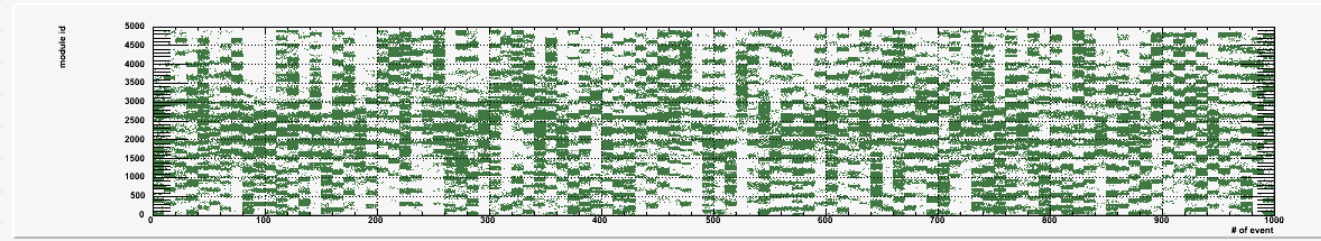
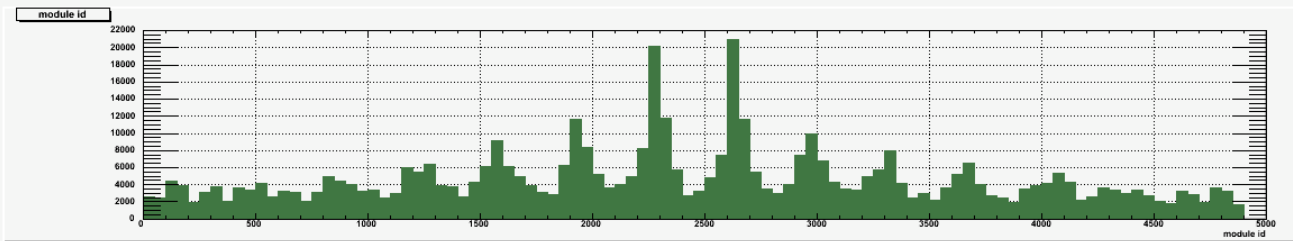
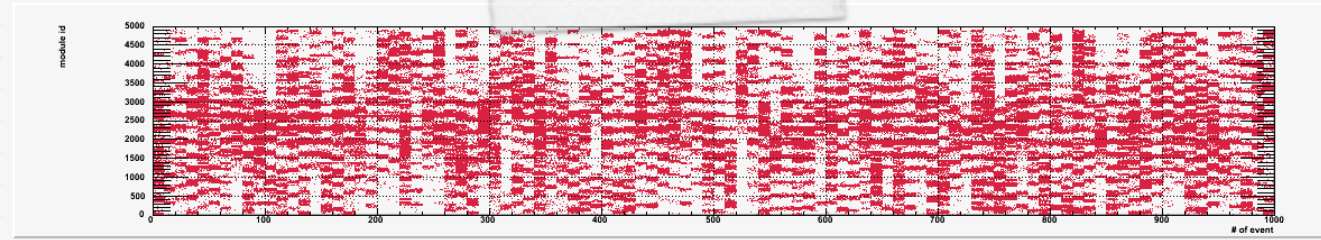
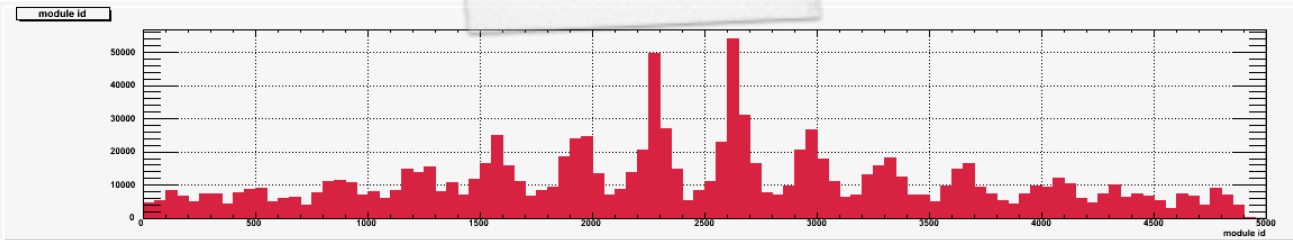
cherenkov hits



EM shower hits

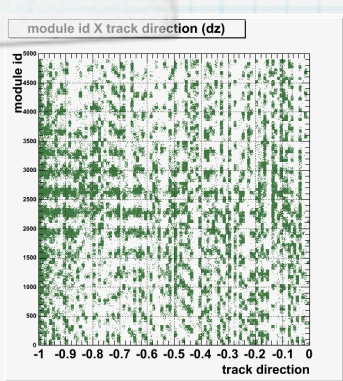
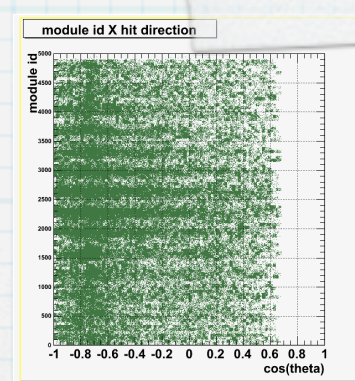
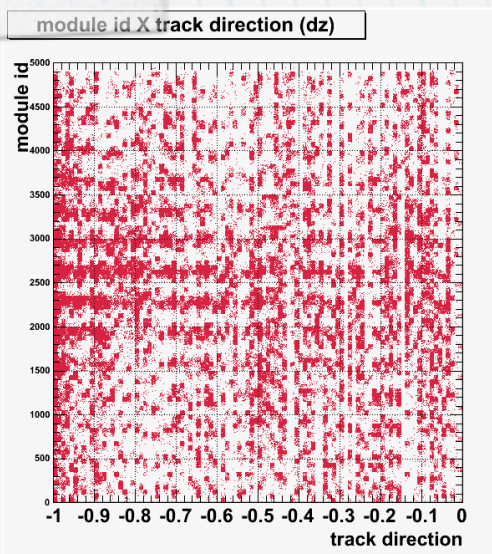
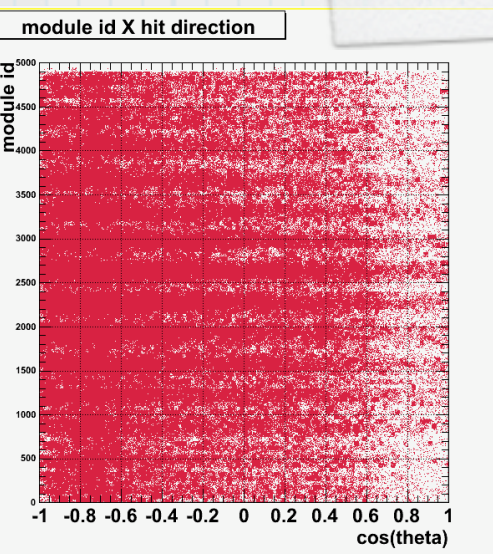


# Modules and Events - 10 TeV

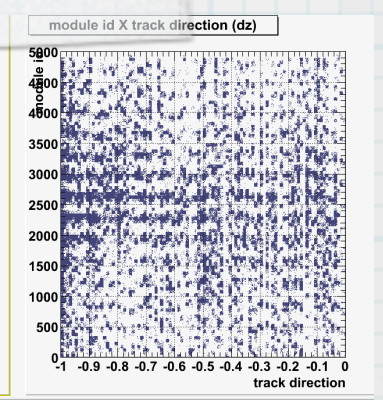
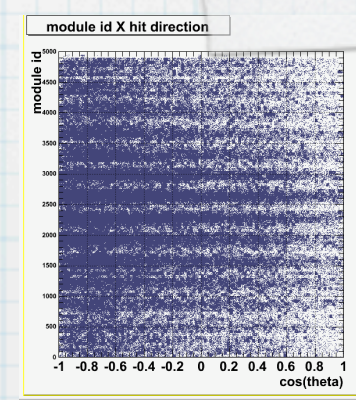


module id

module in X # of events



cherenkov hits



EM shower hits

module id X direction  
(hit & track)



# In Progress

- \* Implementation of Sirene (framework)
- \* Debugging of the SireneExtend
- \* SireneExtend as part of the framework