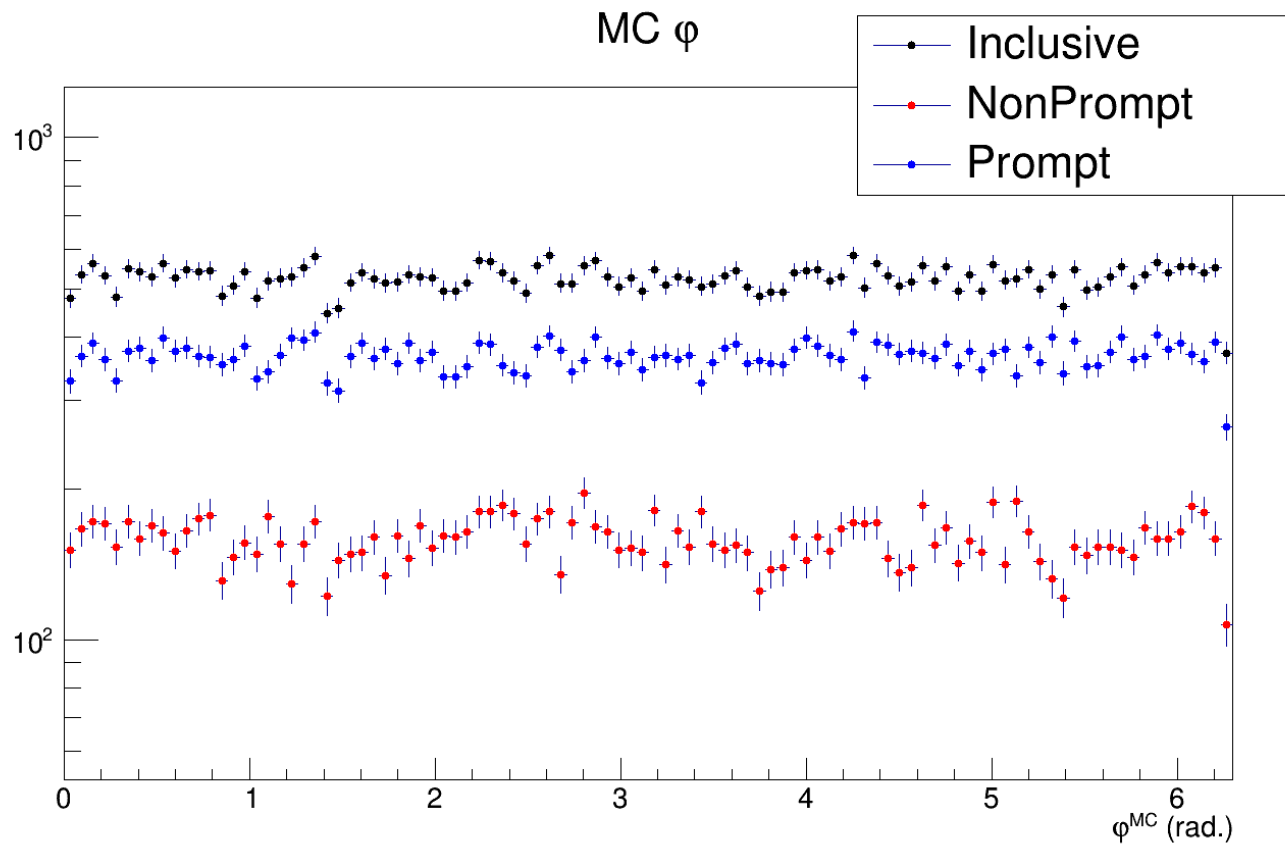


# J/psi in Monte Carlo Simulation (Tracks and mcTruth)

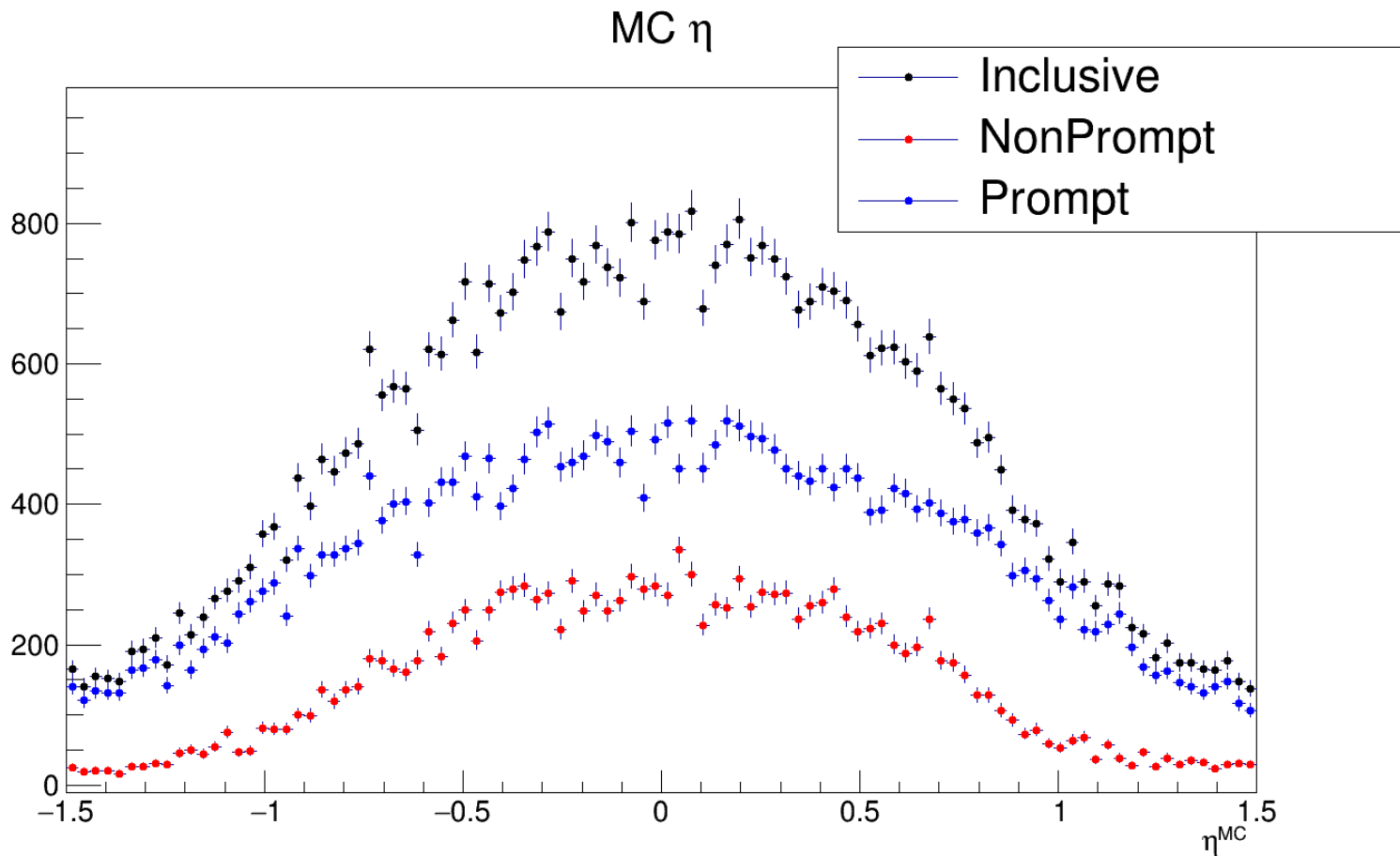
- Eta, phi, pT - Distributions of Inclusive, prompt & non-prompt
- **Runs:** 297413, 296934, 297441, 297481, 296935 (**LHC18r**)
- 0-10% - PbPb @ 5.02TeV --> 2M events (10 J/ψ per event)
- HIJING for Event generation
- Central Barrel - J/psi Injected
- EvtGen for nonprompt , 70% prompt, 30% nonprompt J/ψ  
(details taken from Xiaozhi's Note)

mcTruth

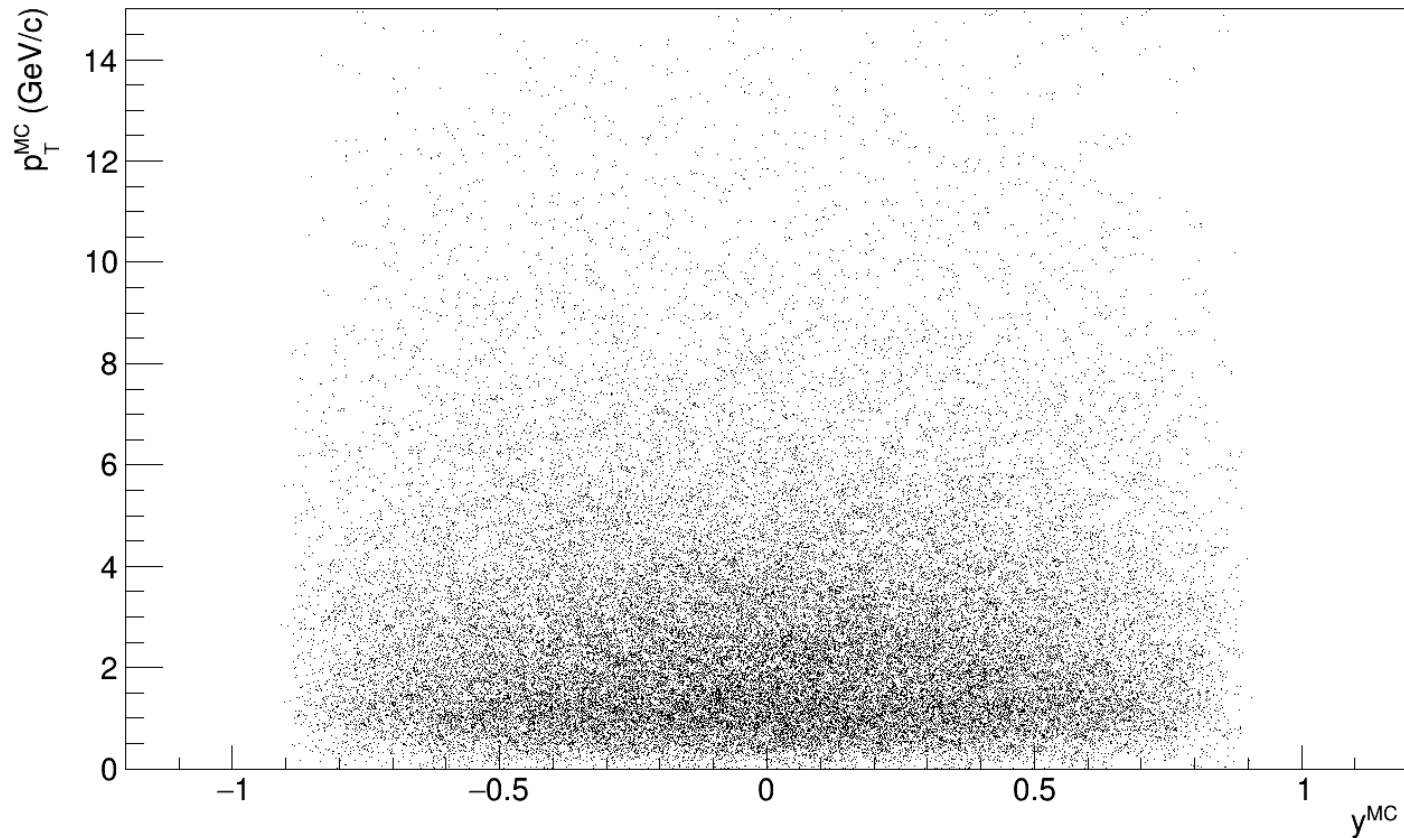
# mcTruth



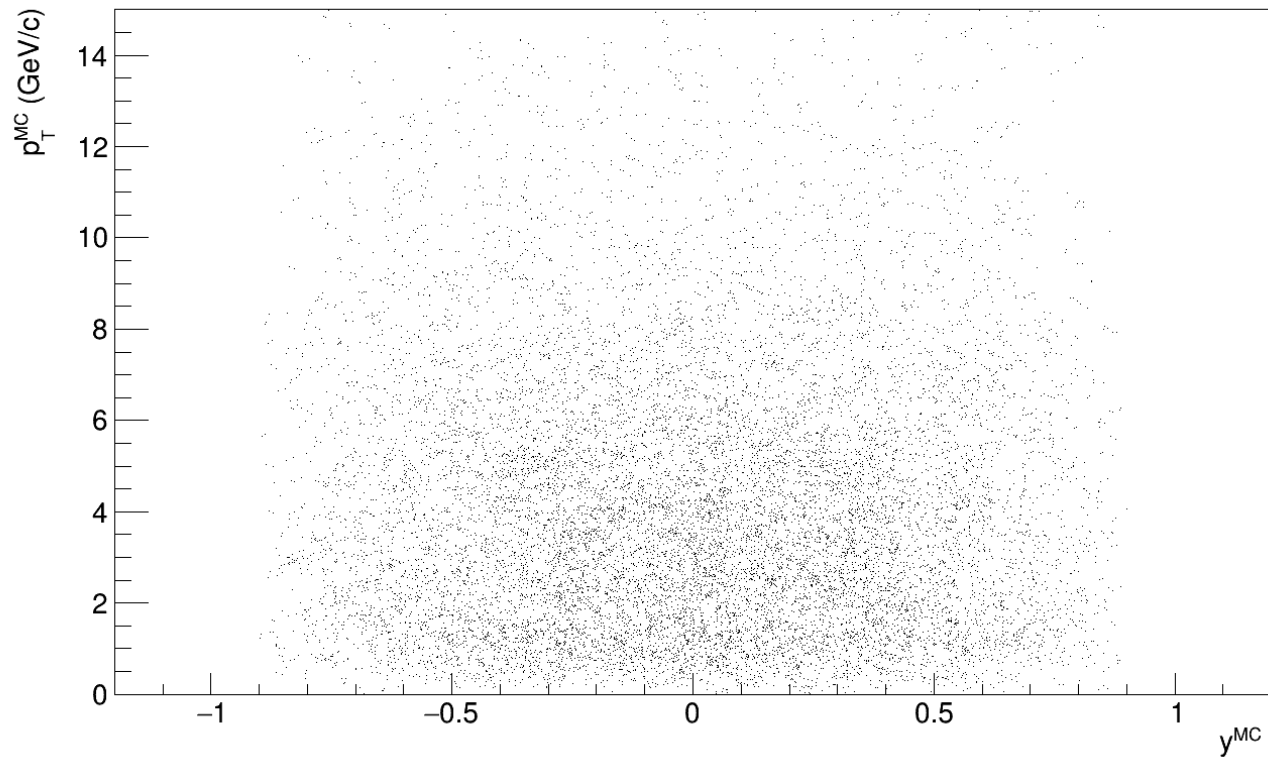
# mcTruth



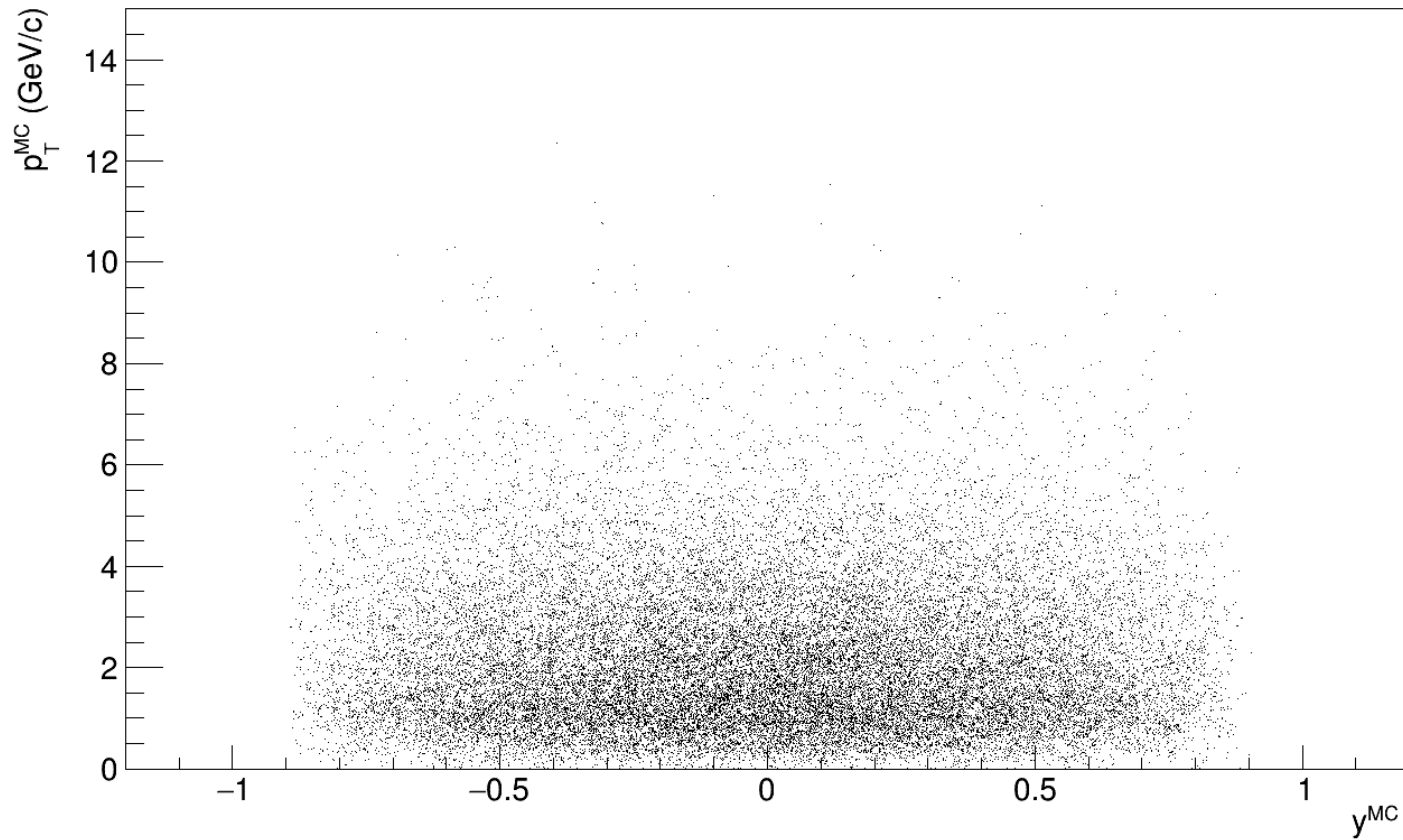
# Inclusive



# Non-Prompt



# Prompt

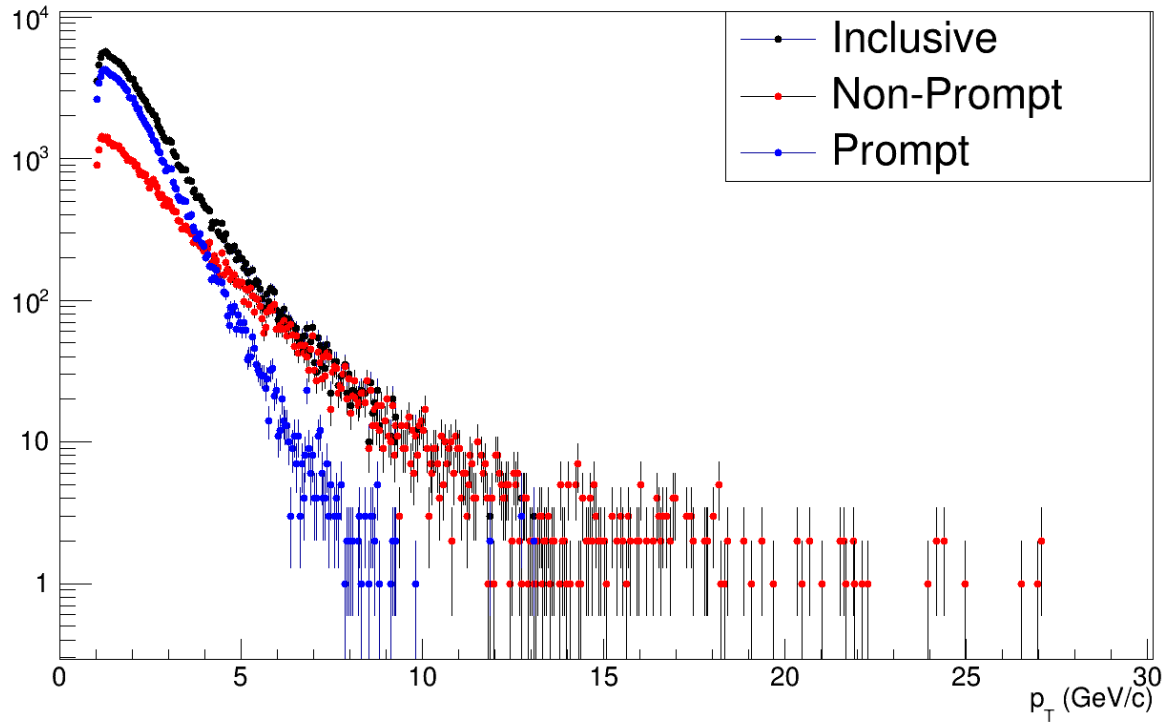


# Distributions From Reconstructed Tracks

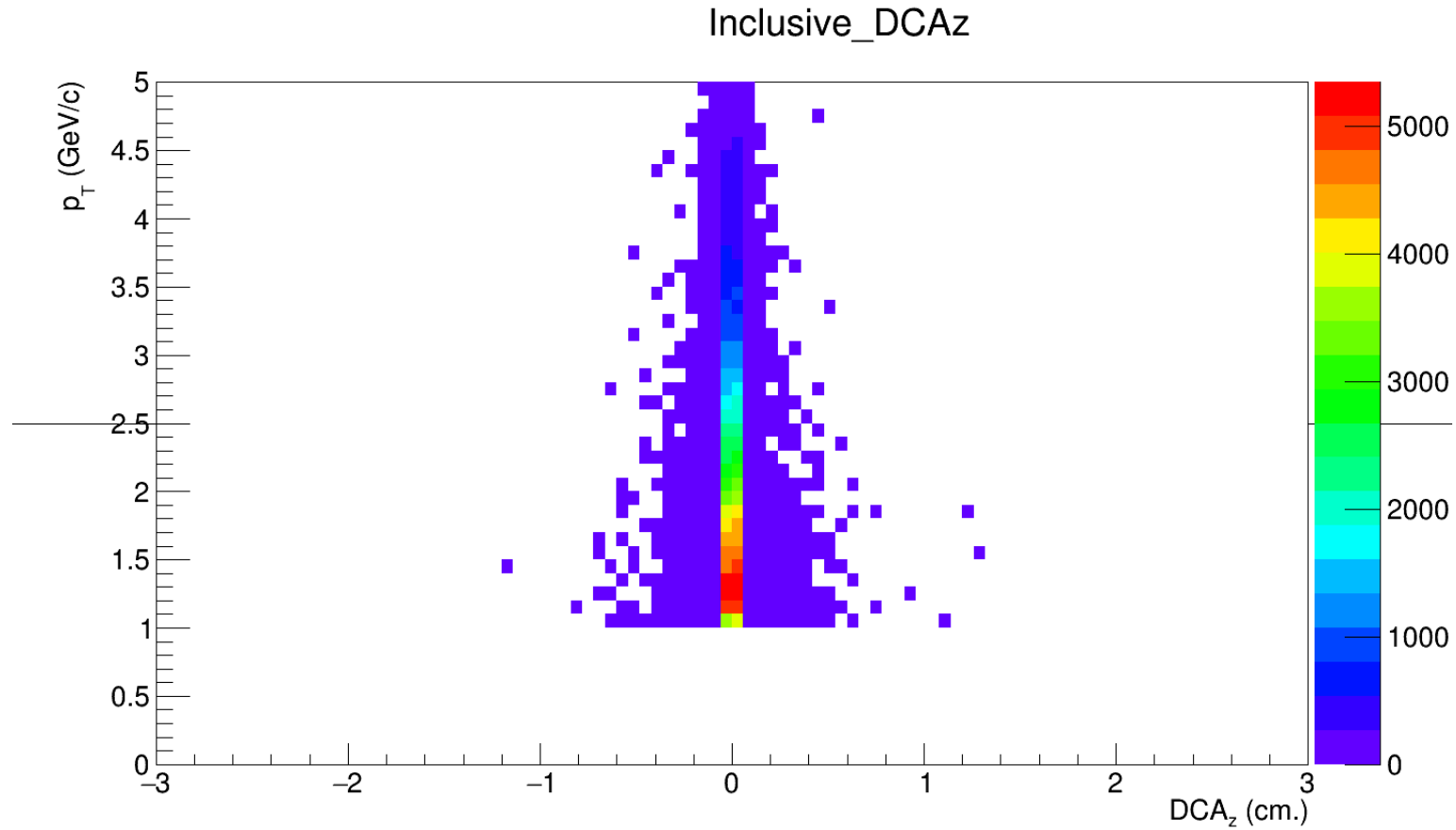


# Track\_standardCut\_TrueElectron

$p_T$  distribution

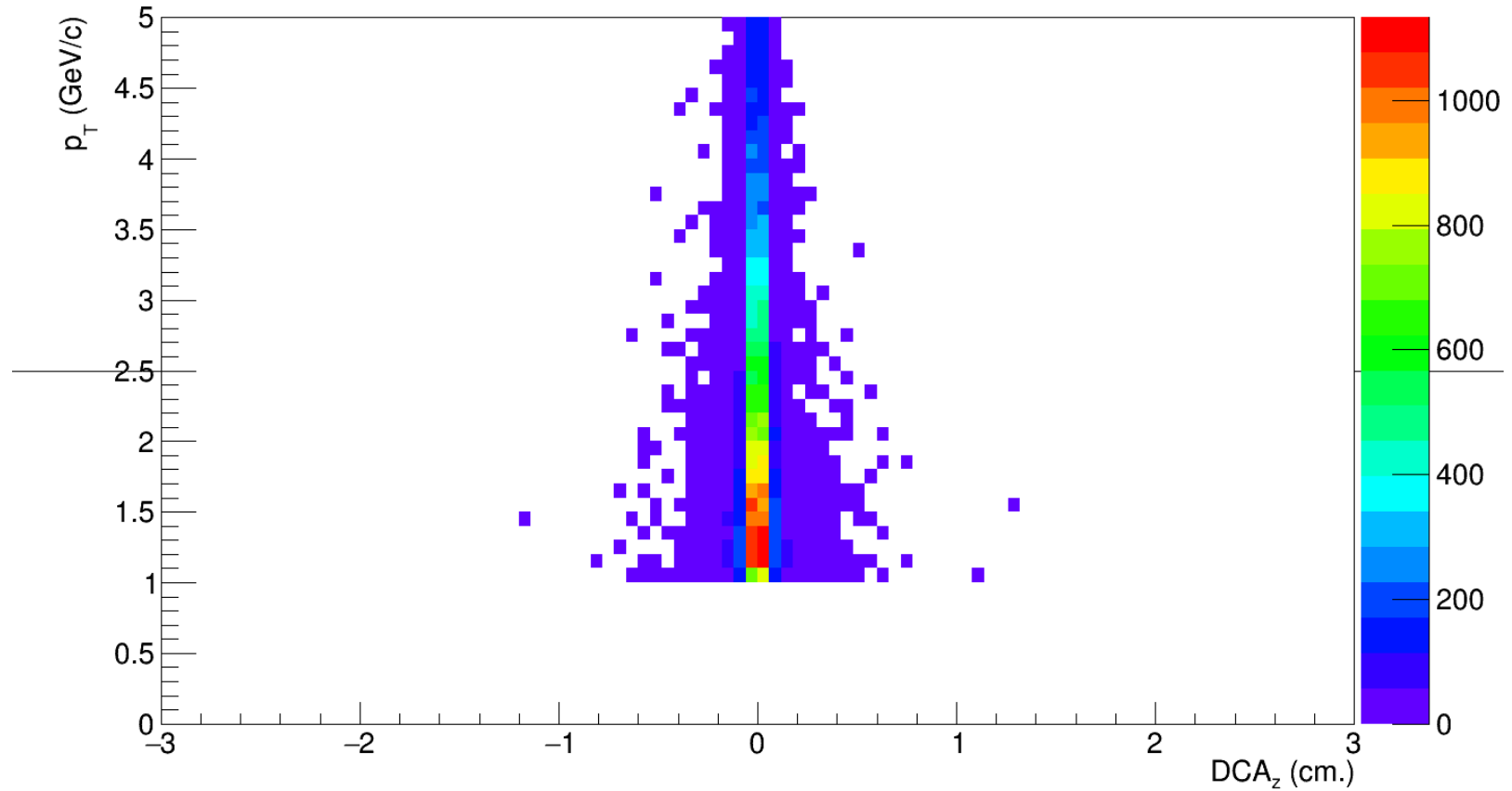


# Track\_standardCut\_TrueElectron

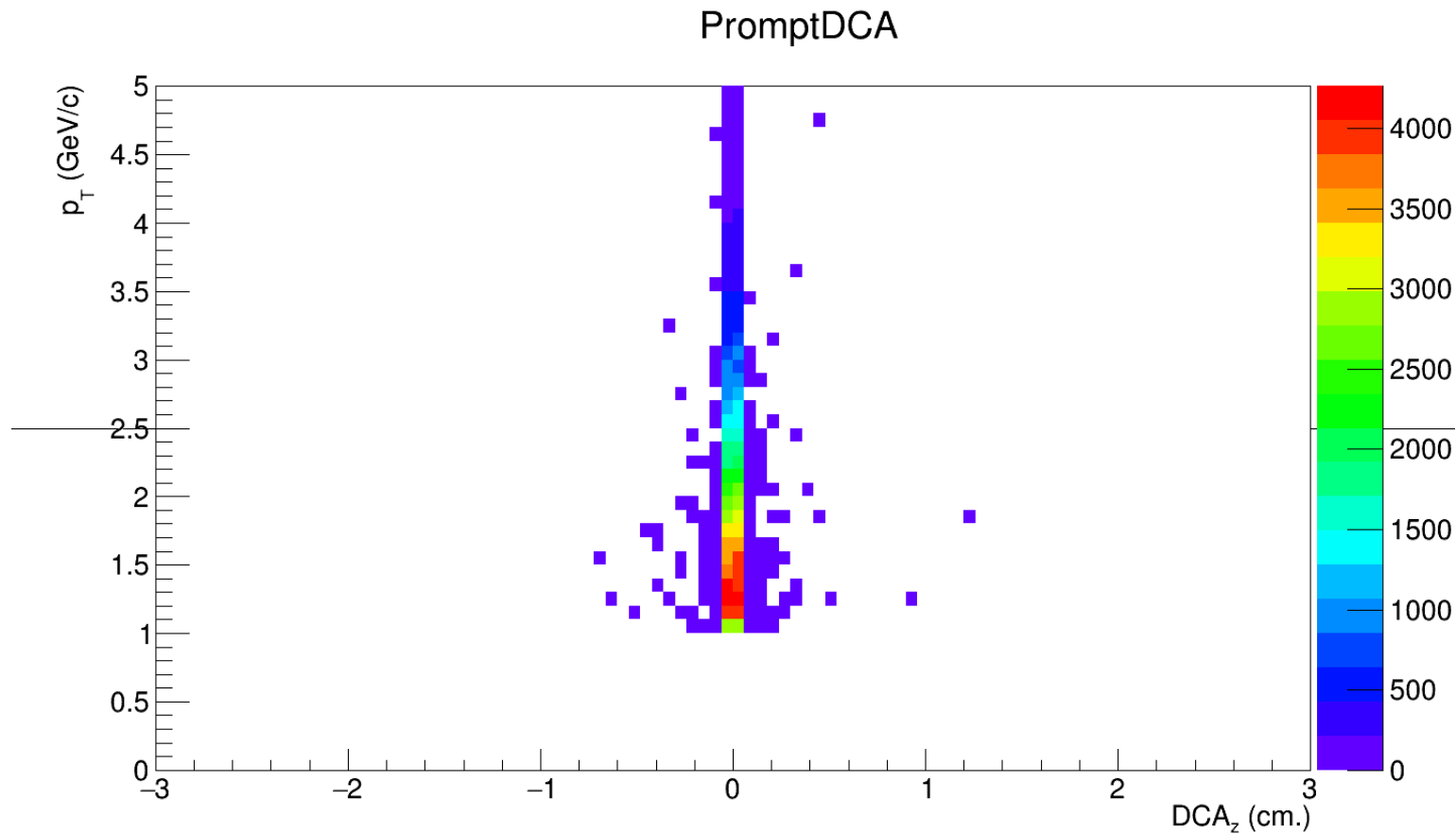


# Track\_standardCut\_TrueElectronNP

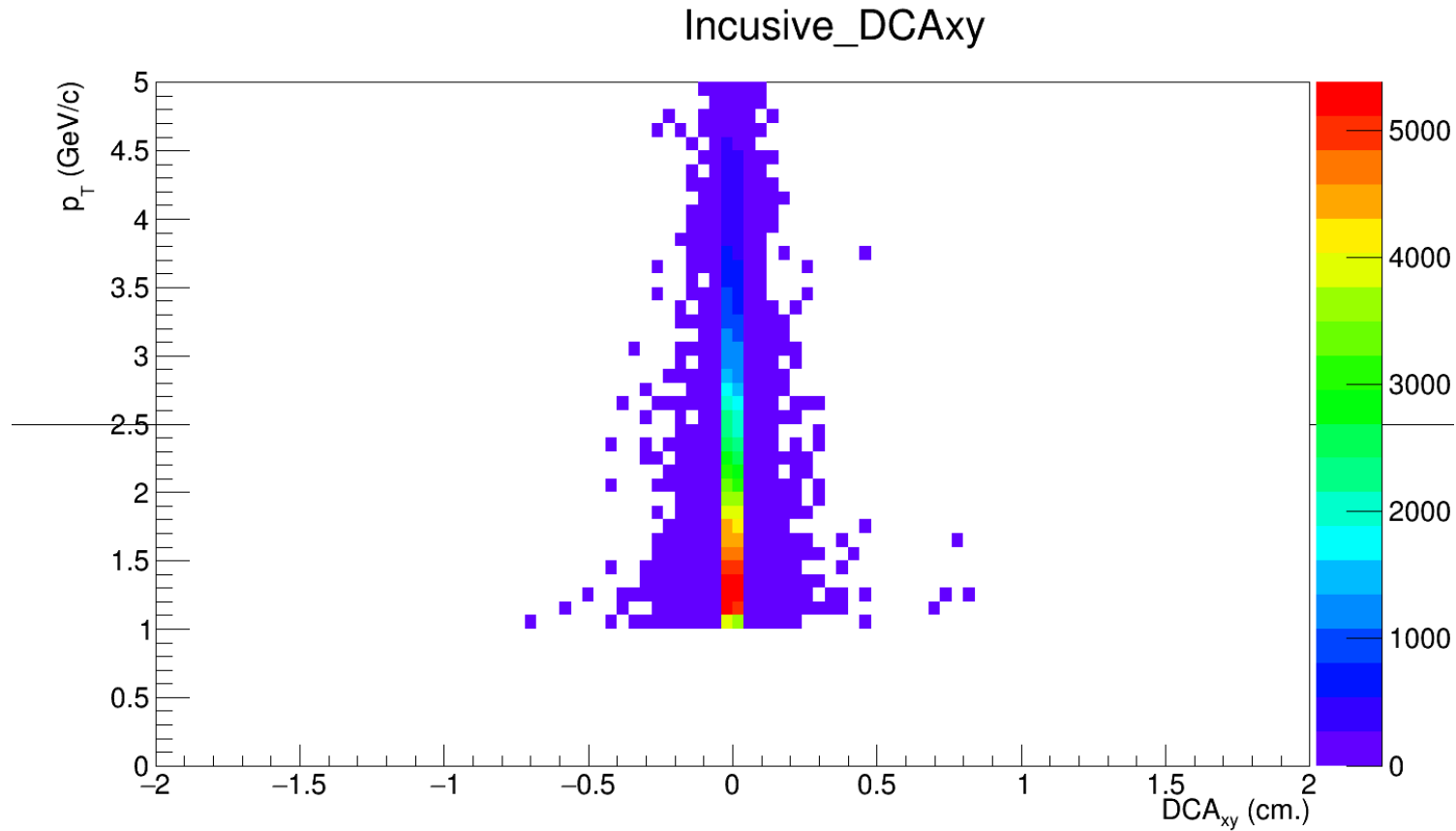
NonPromptDCAz



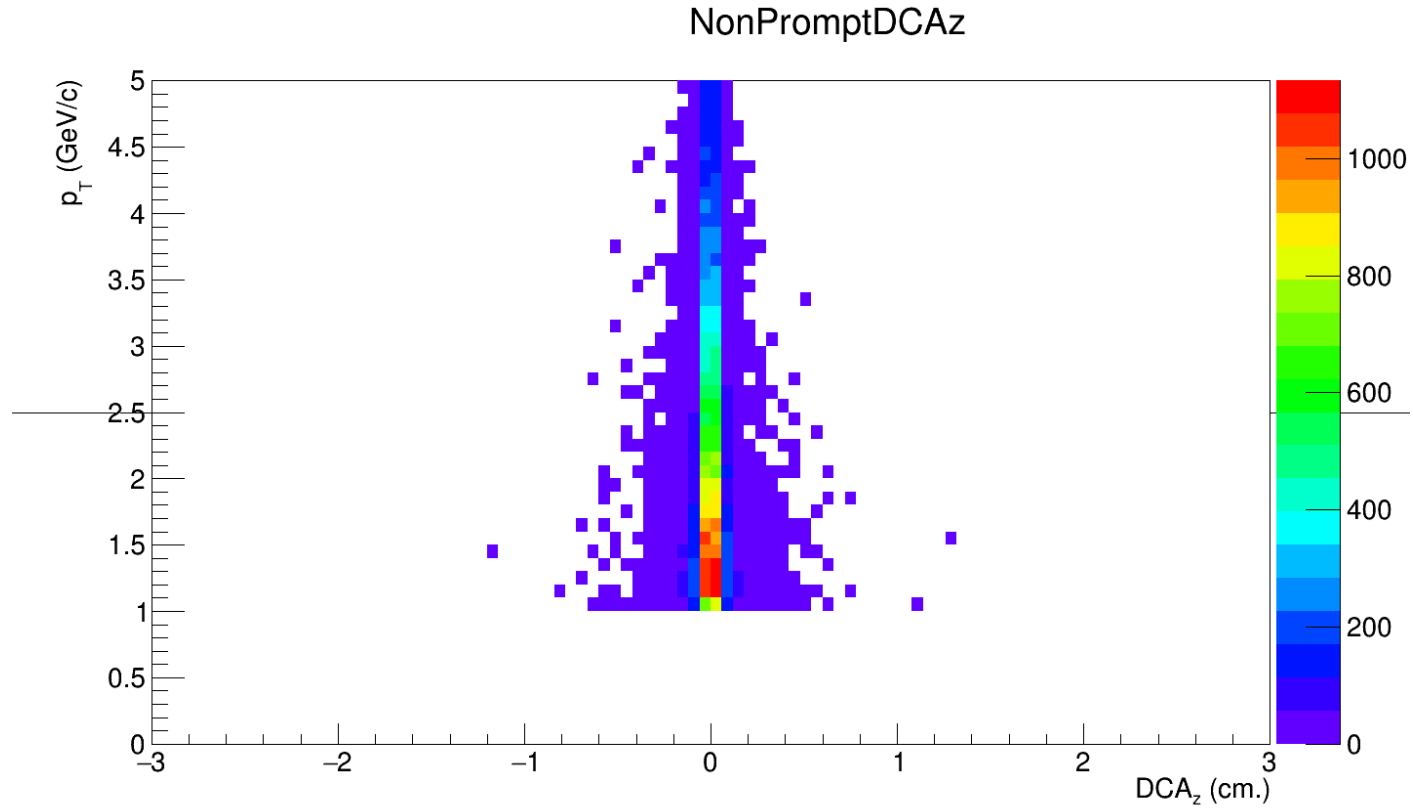
# Track\_standardCut\_TrueElectronPrompt



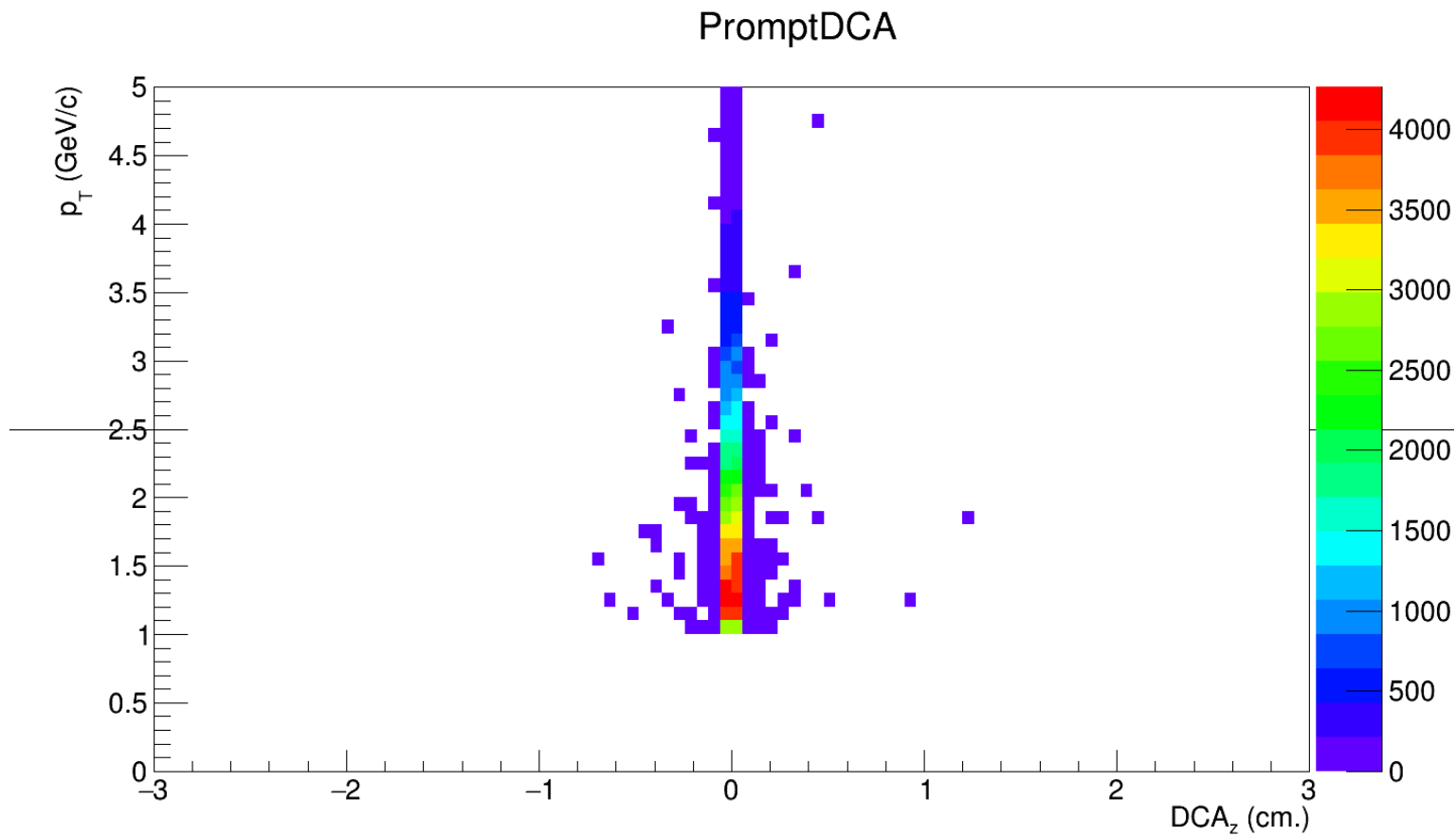
# Track\_standardCut\_TrueElectron



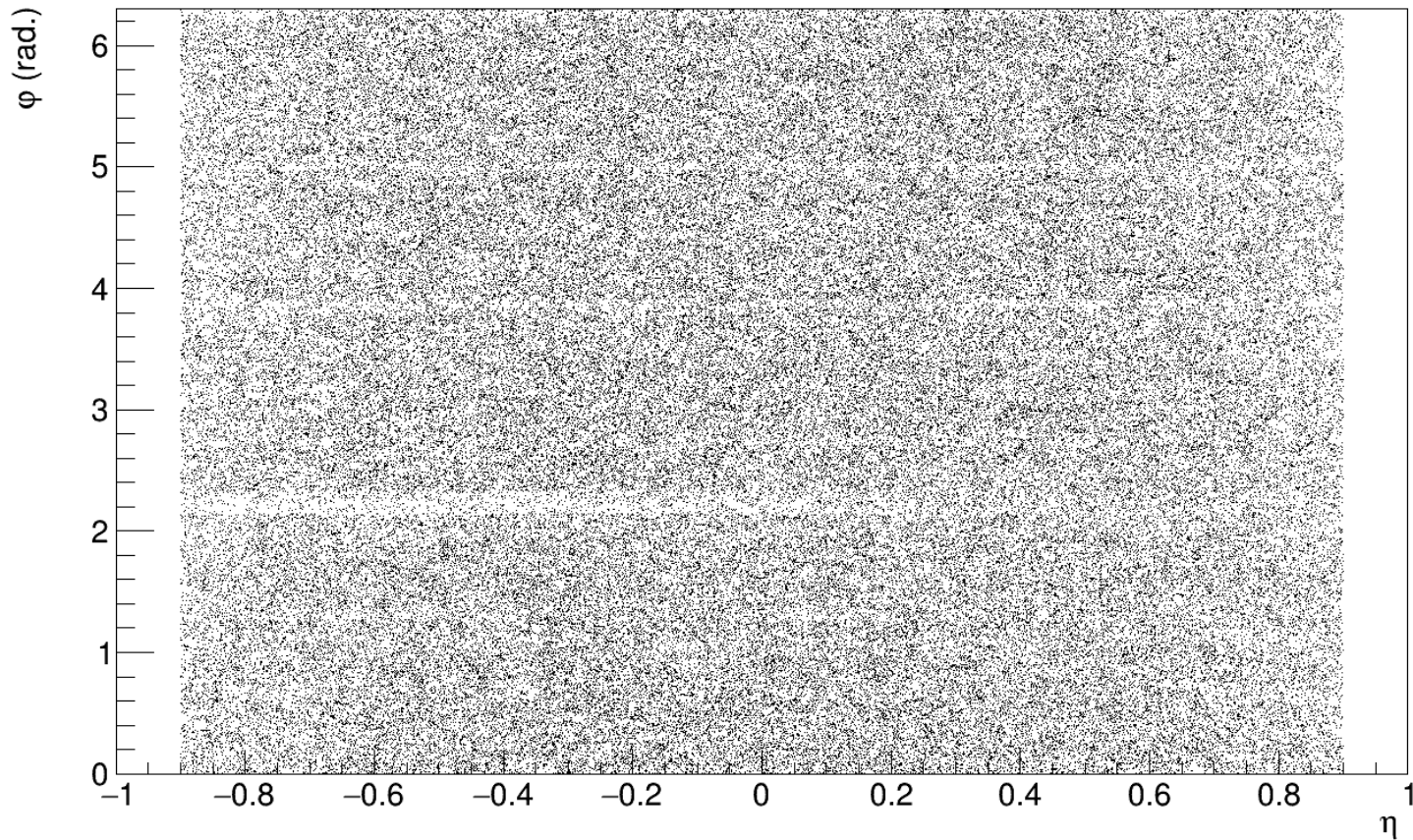
# Track\_standardCut\_TrueElectronNP



# Track\_standardCut\_TrueElectronPrompt

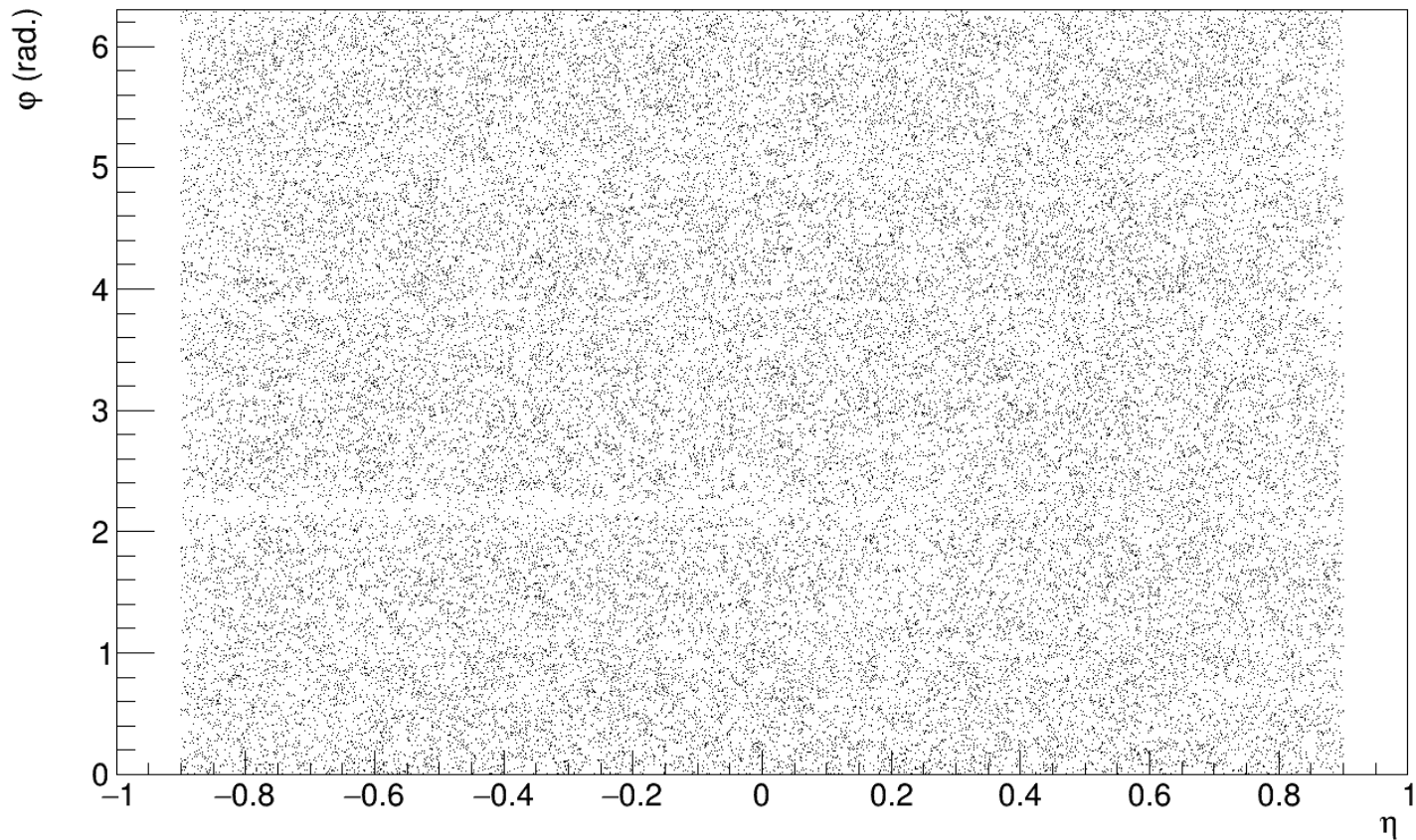


# Inclusive

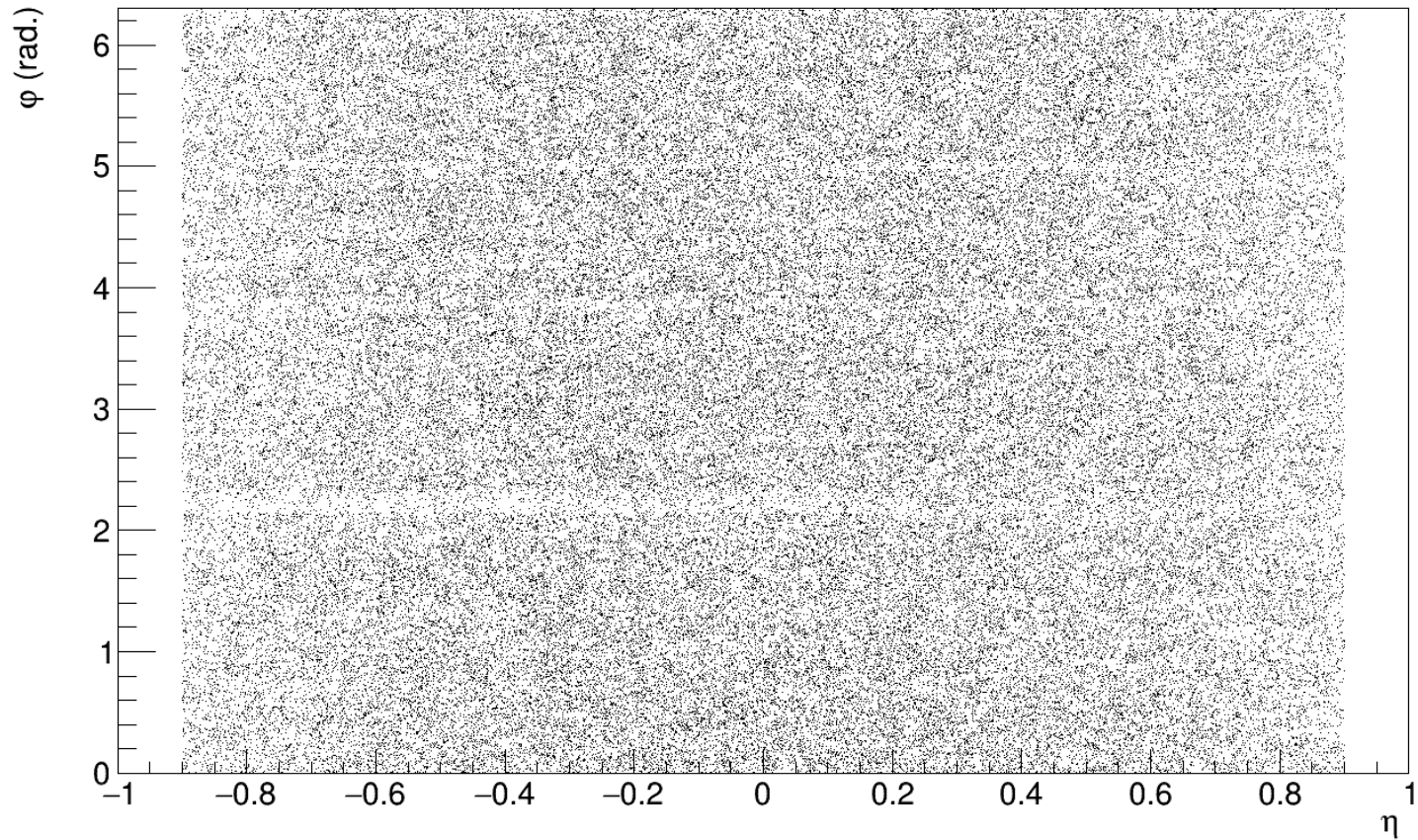




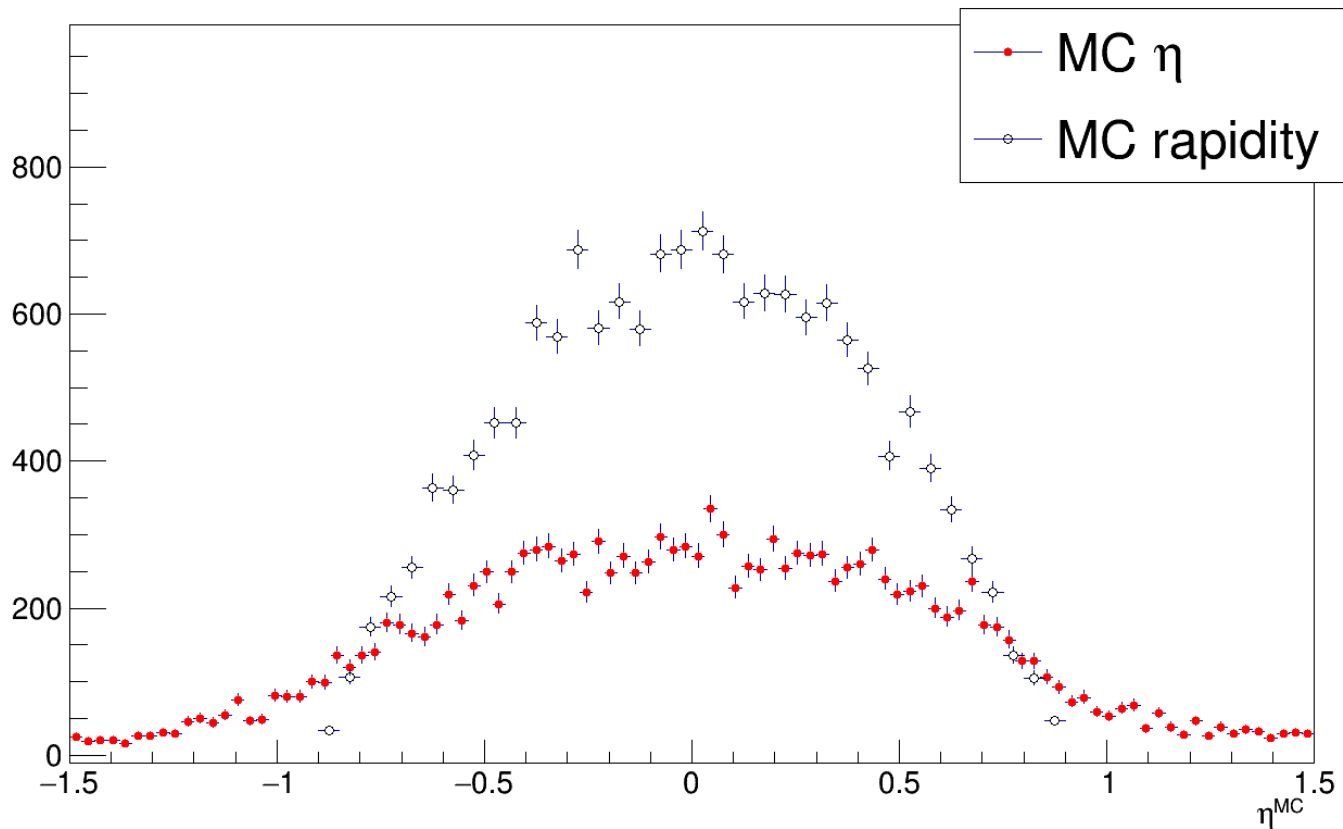
# Non-prompt



# Prompt



# Different distributions (in MC truth) ???



- There are more distributions, we can discuss them offline.

- To be done :
  - Same analysis for Data in given 5 Runs
  - To compare with simulated data