

Photon Reduction

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Photon Yield

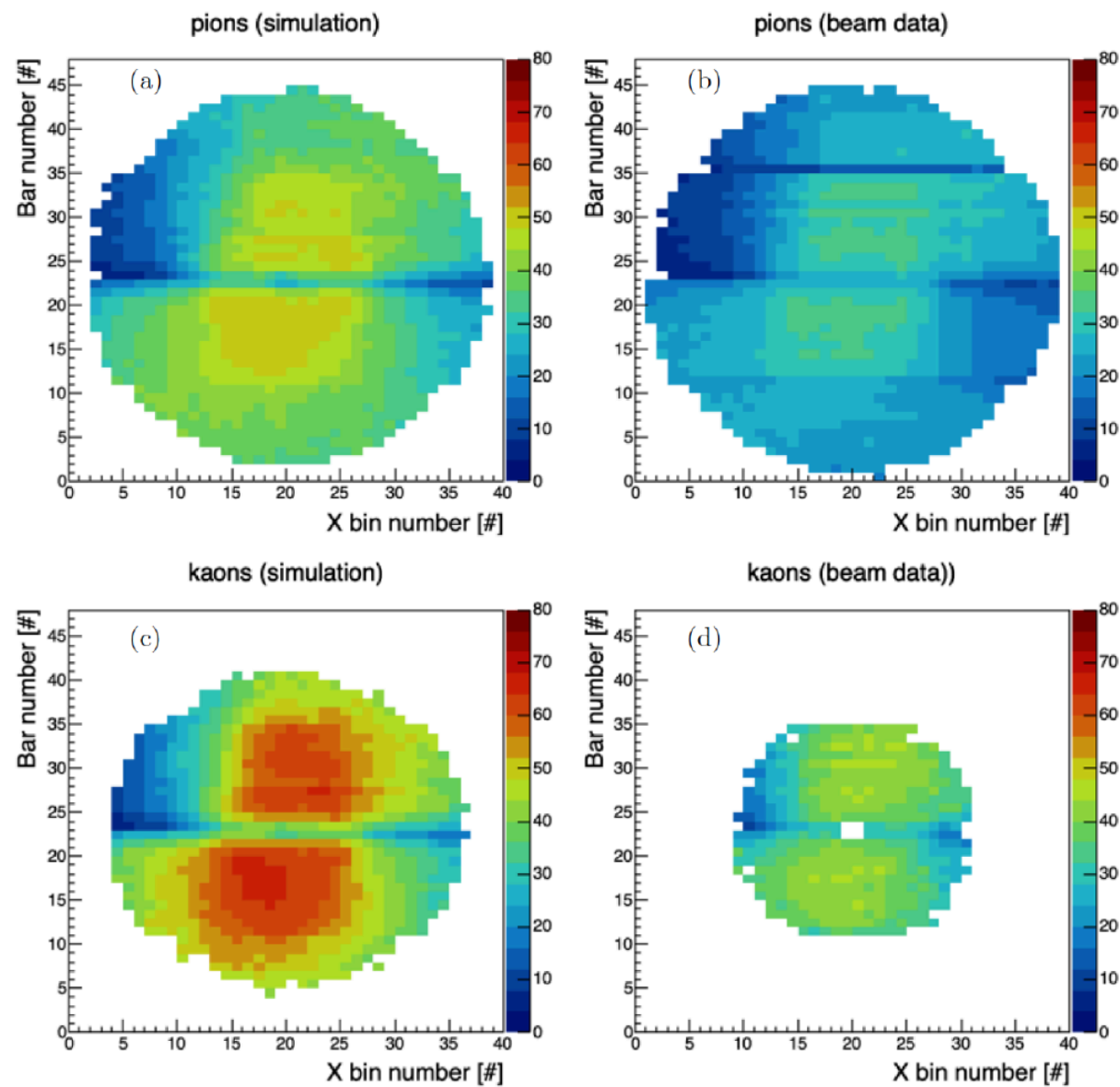


Figure 2.14: Photon yield maps for pions and kaons identified through the ρ and ϕ reactions at (3-3.5) GeV/ c momentum. (a) pion tracks simulation, (b) pion tracks beam data, (c) Kaon tracks simulation, (b) kaon tracks beam data.

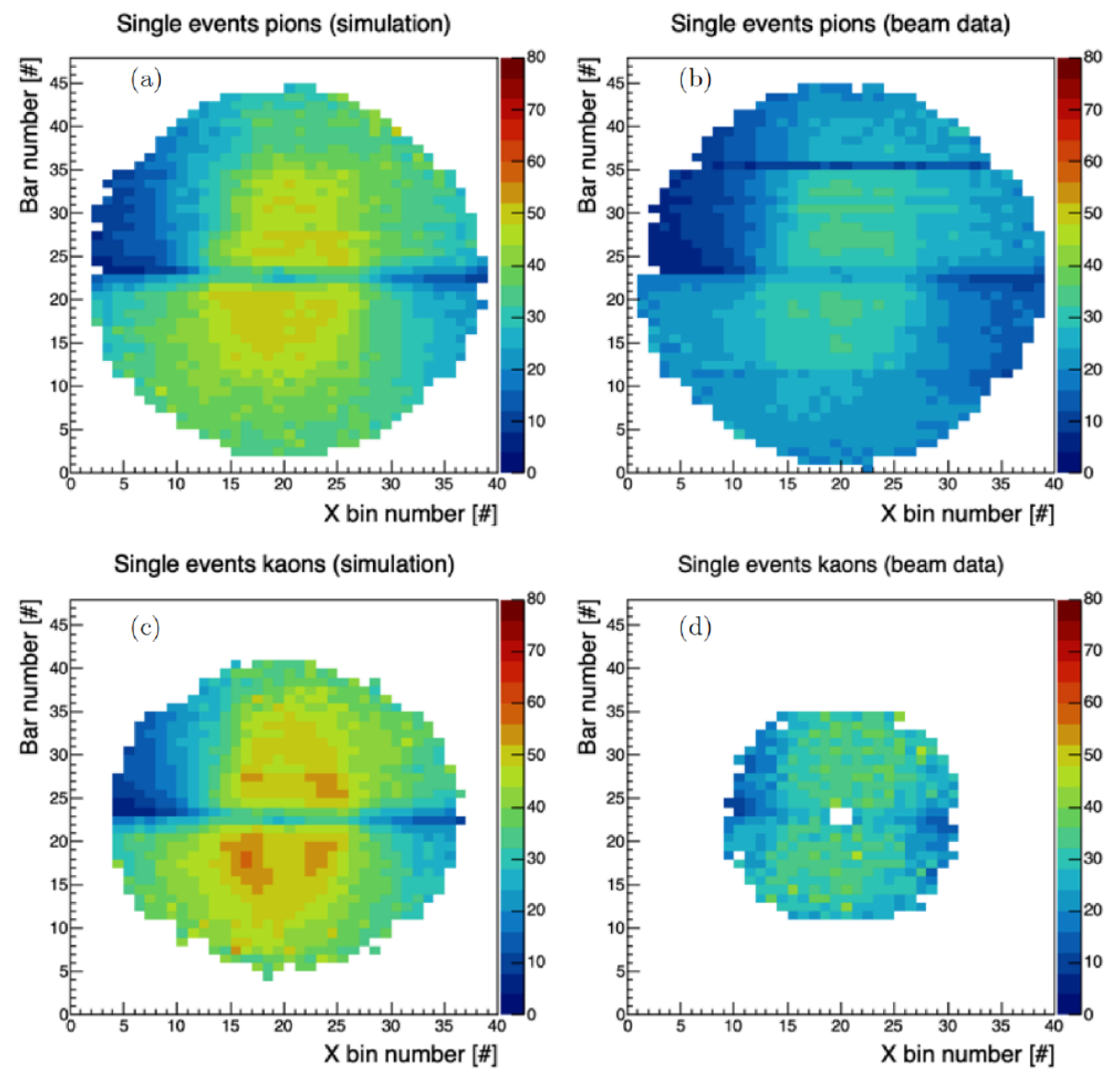
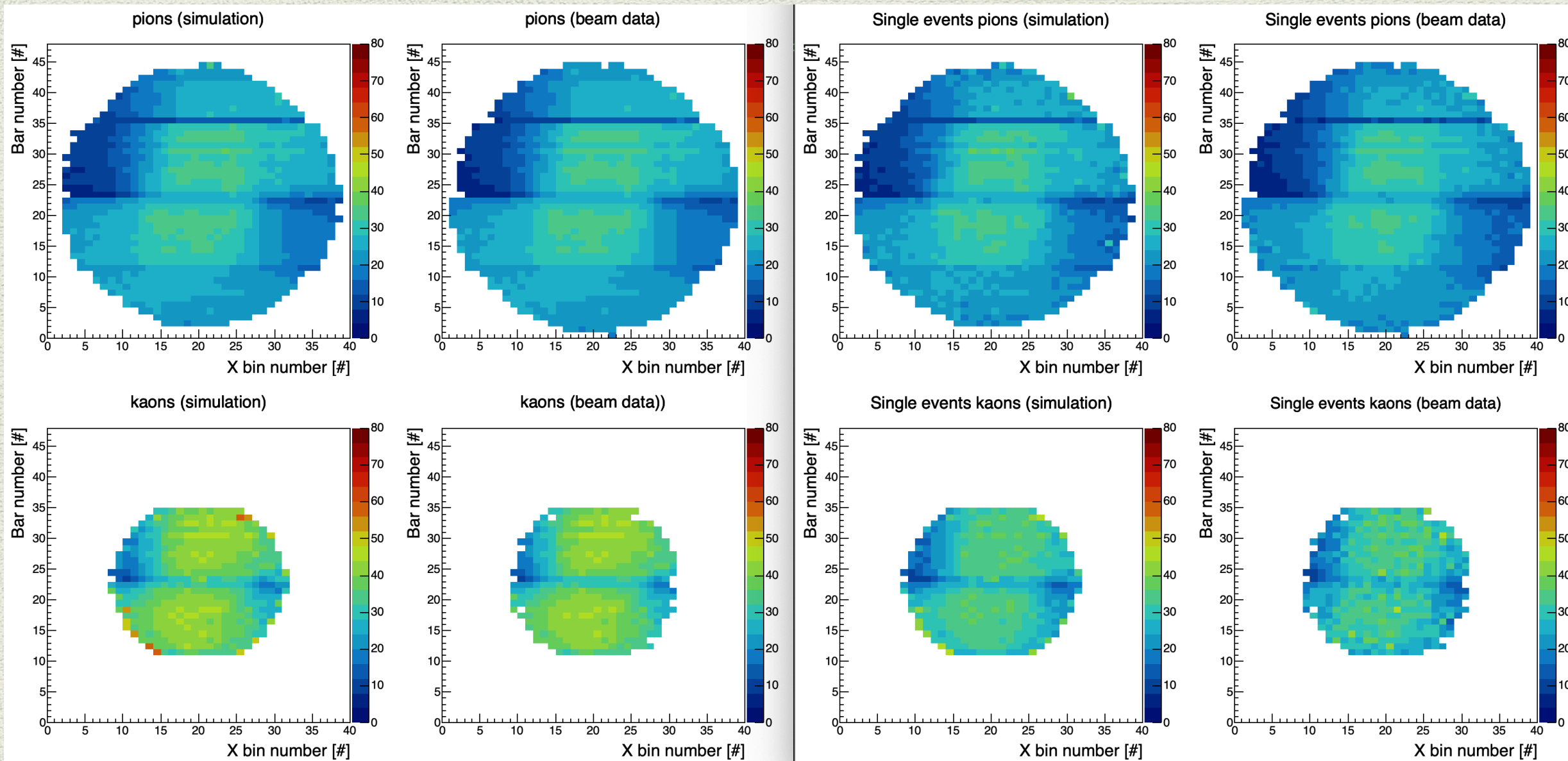
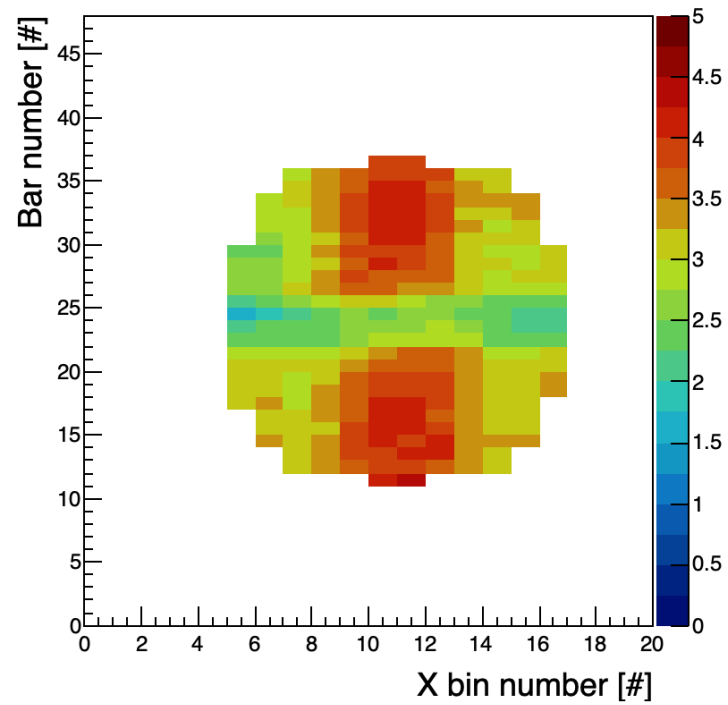


Figure 2.15: Photon yield maps for pions and kaons identified through the ρ and ϕ reactions at (3-3.5) GeV/ c momentum using events that have single track at the DIRC wall. (a) pion tracks simulation, (b) pion tracks beam data, (c) Kaon tracks simulation and (d) kaon tracks beam data.

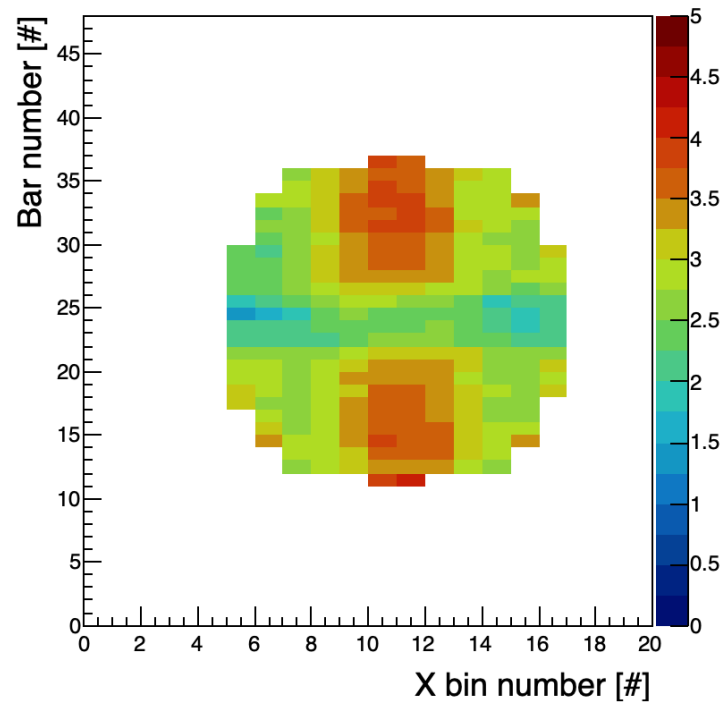


Kaon/Pion Separation (cut solution)

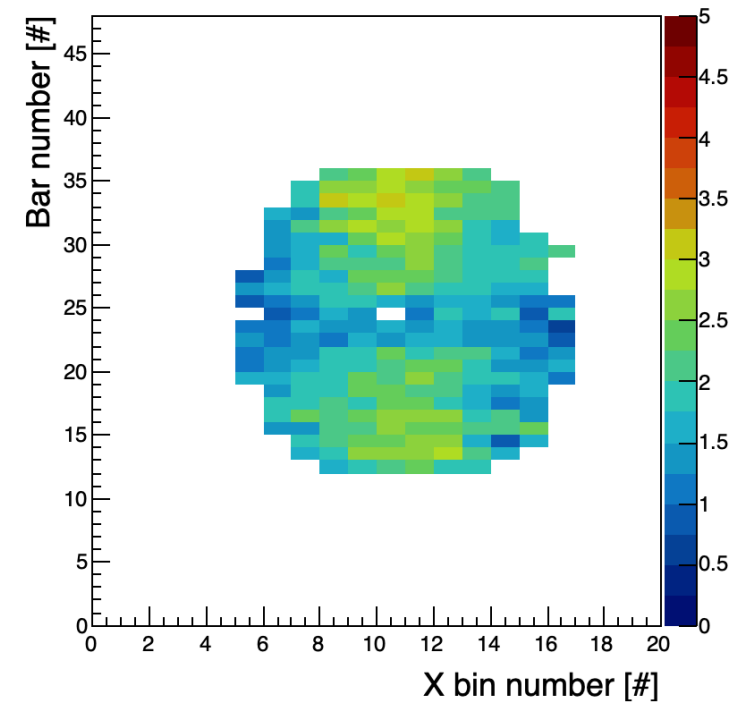
π/k separation at [3-3.5] GeV/c Geant4



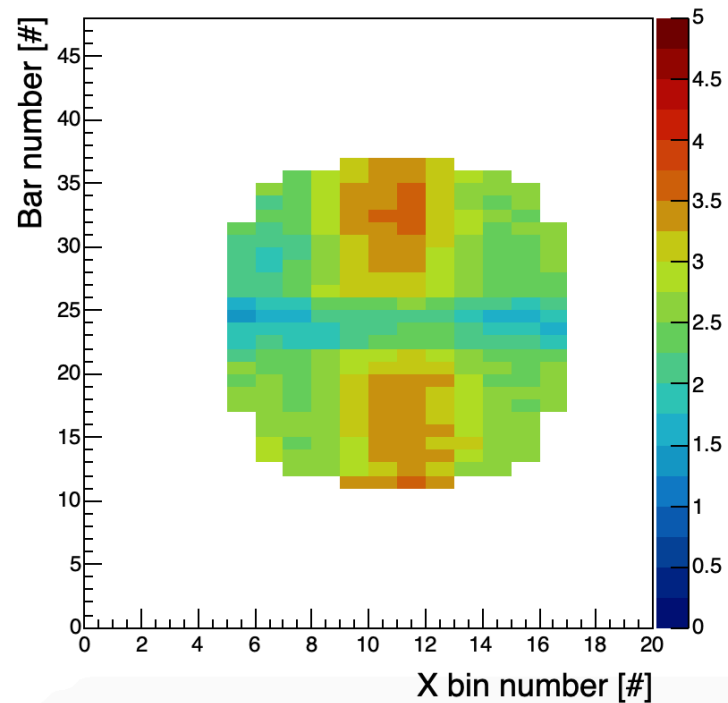
π/k separation at [3-3.5] GeV/c Geant4 (yield cut)



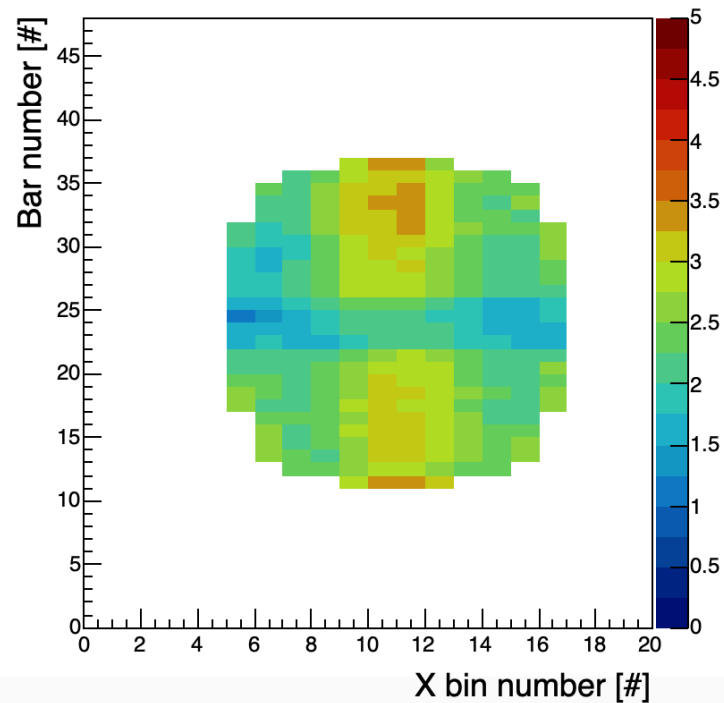
π/k separation at [3-3.5] GeV/c beam data



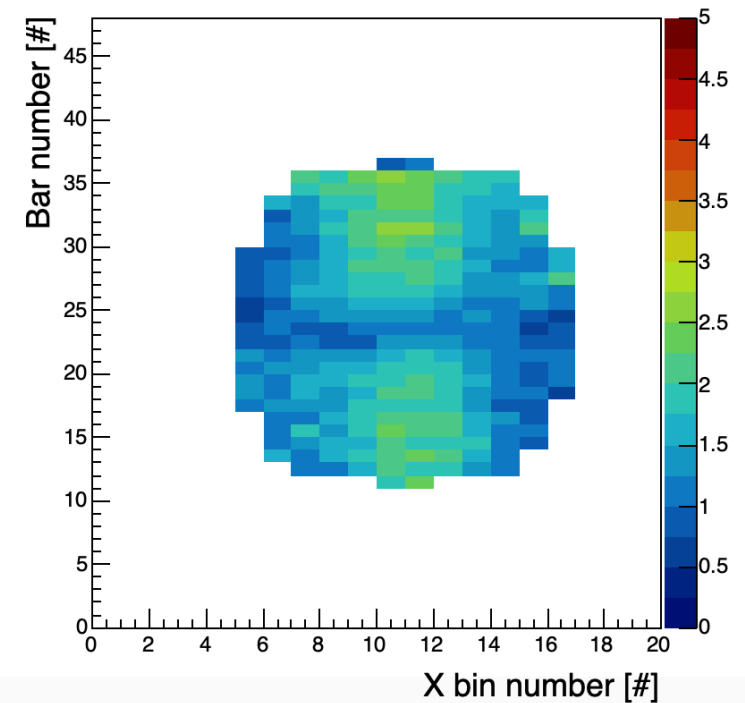
π/k separation at [3.5-4] GeV/c Geant4



π/k separation at [3.5-4] GeV/c Geant4 (yield cut)

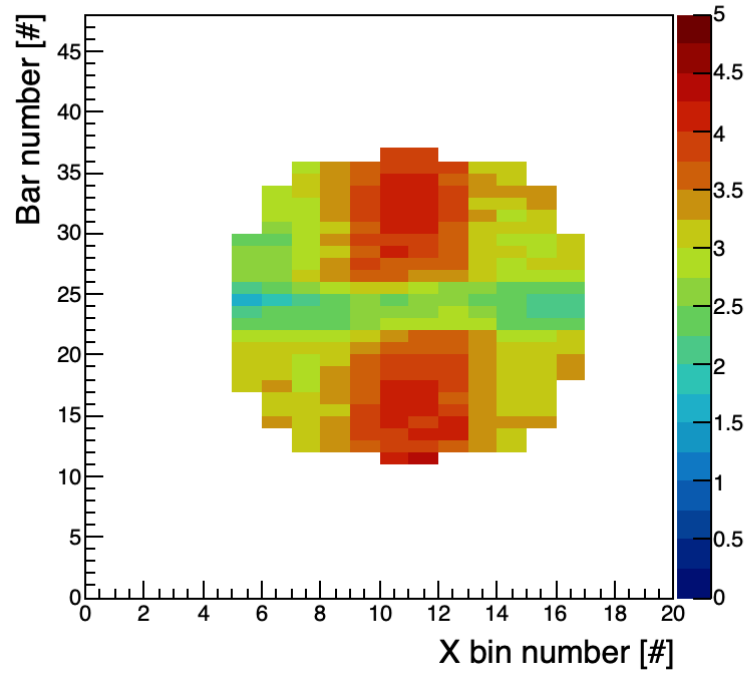


π/k separation at [3.5-4] GeV/c beam data

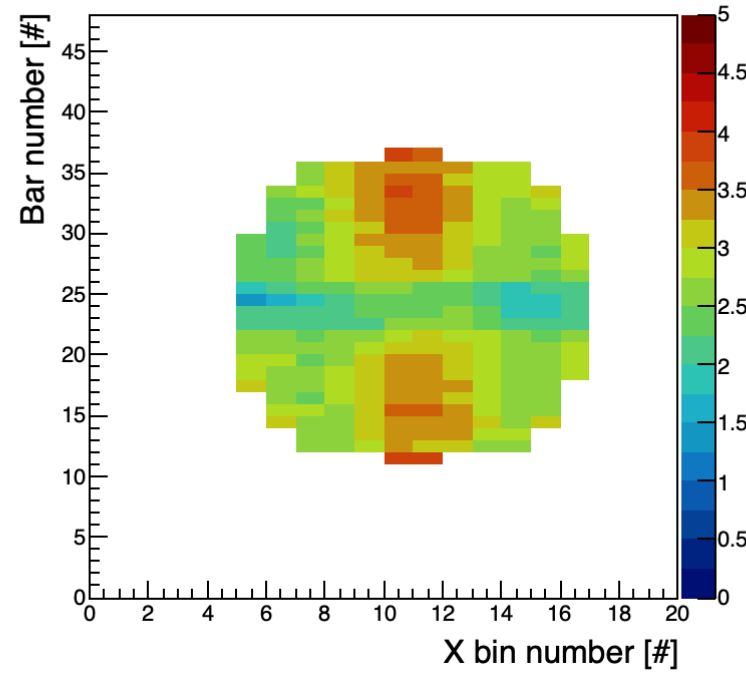


Kaon/Pion Separation (cut photons)

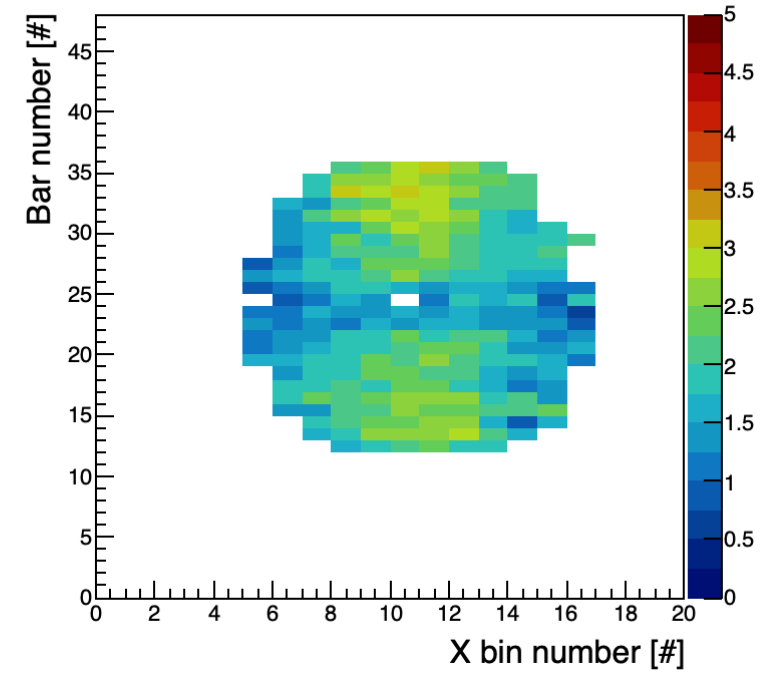
π/k separation at [3-3.5] GeV/c Geant4



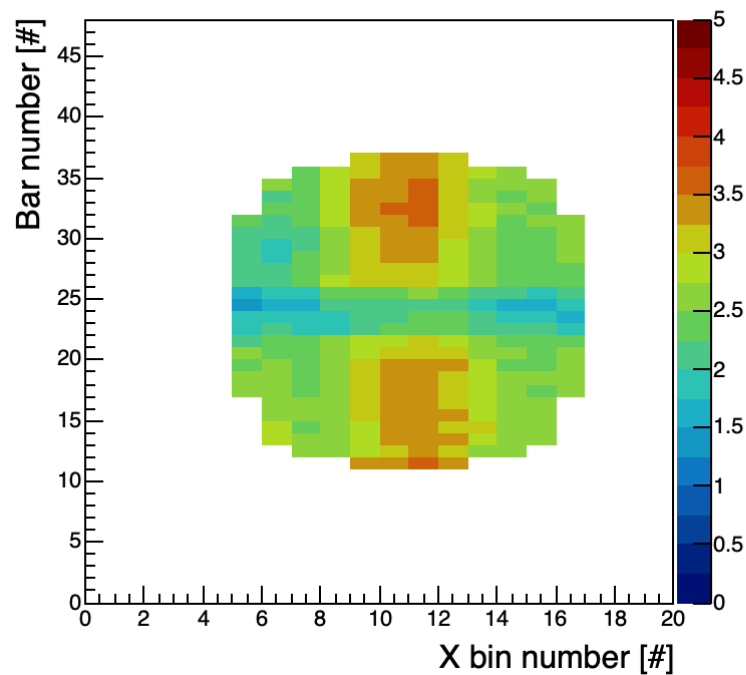
π/k separation at [3-3.5] GeV/c Geant4 (yield cut)



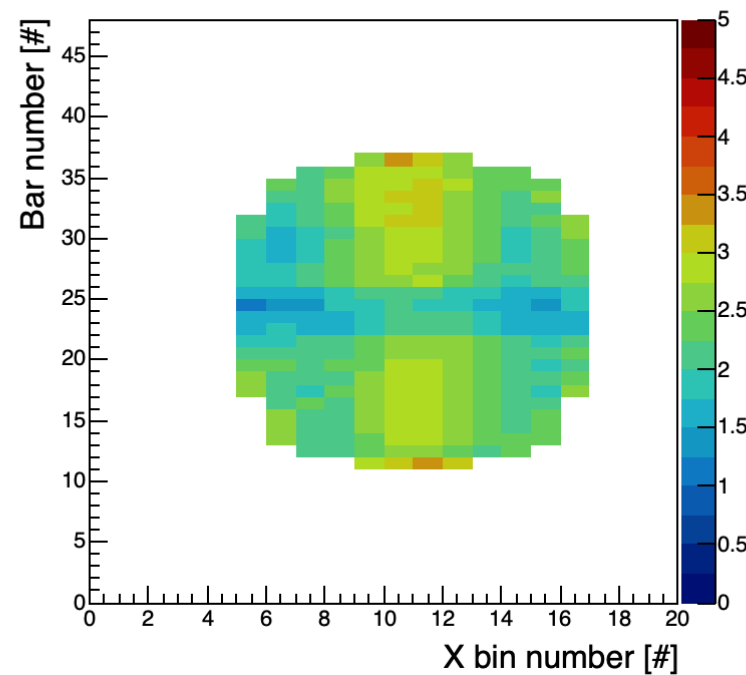
π/k separation at [3-3.5] GeV/c beam data



π/k separation at [3.5-4] GeV/c Geant4



π/k separation at [3.5-4] GeV/c Geant4 (yield cut)



π/k separation at [3.5-4] GeV/c beam data

