$\gamma + d = Pip + Pim + miss(n)$

Reconstruction version 1

A. No Cut applied. (Full data)

B. Cut on Confidence Level , Missing Energy, Missing Mass Squared, Vertex cut (beam), Beam Energy. (12 % of data)

C. Cut B + Coplanarity cut (12 % of data)

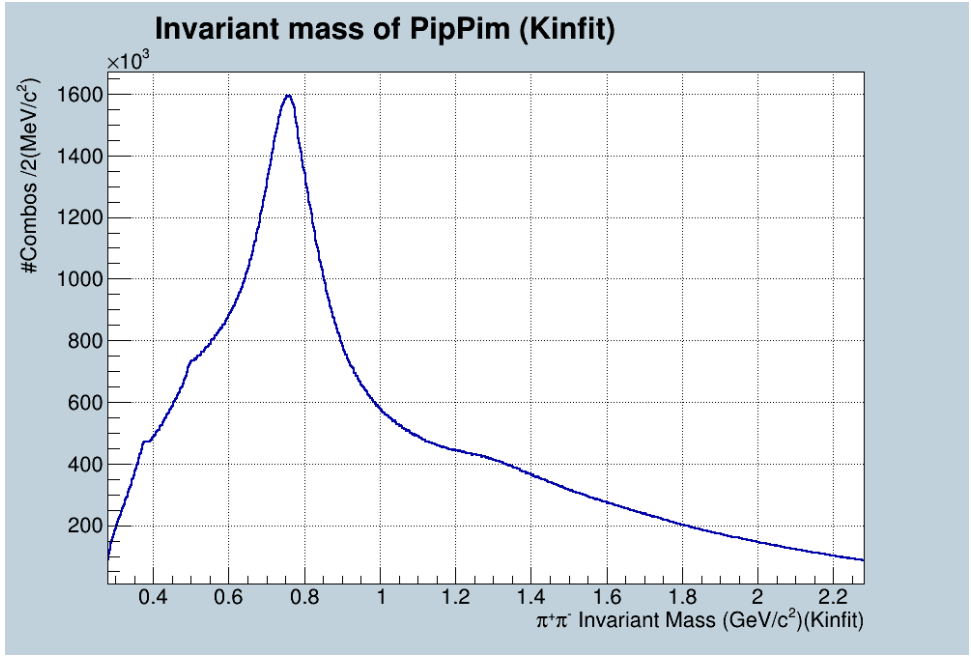
D. Cut B + Coplanarity cut + Invariant mass of pipproton and pimpiproton (12 % of data)

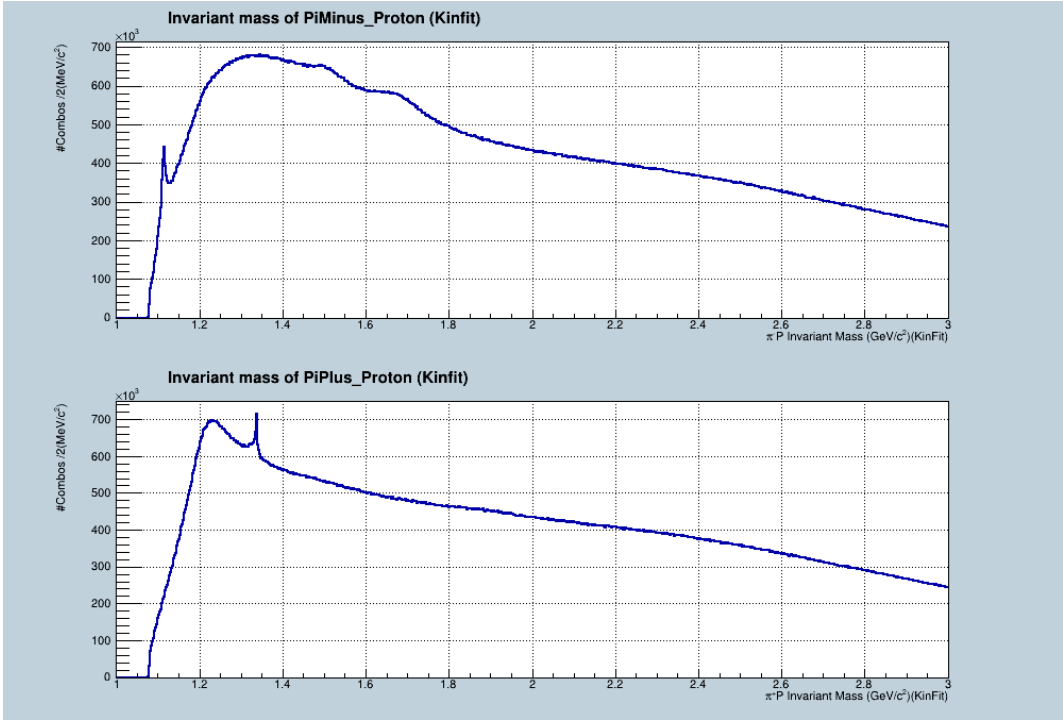
E. Cut B + Coplanarity cut + Invariant mass of pipproton and pimpiproton + |t| cut (Full data of Deuteron)

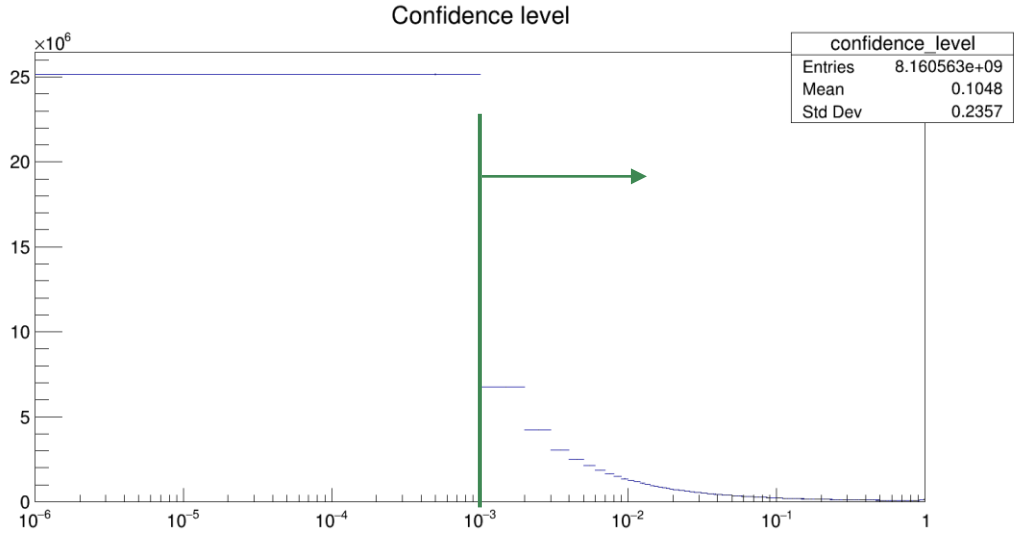
F. Cut B + Coplanarity cut + Invariant mass of pipproton and pimpiproton + |t| cut + |u| cut (Full data of Deuteron)

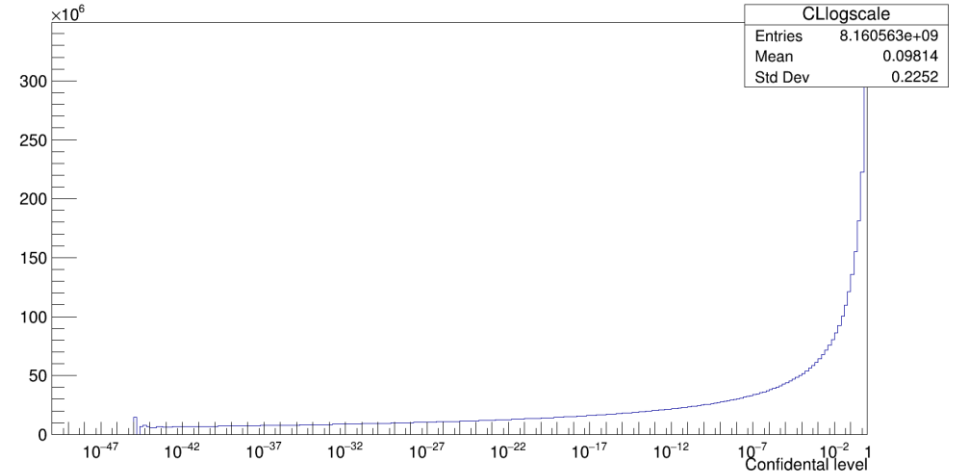
G. Cut B + Coplanarity cut + Invariant mass of pipproton and pimpiproton + |t| cut + ucut+ dE/dx cut (Full data of Deuteron)

A) Without any Cuts

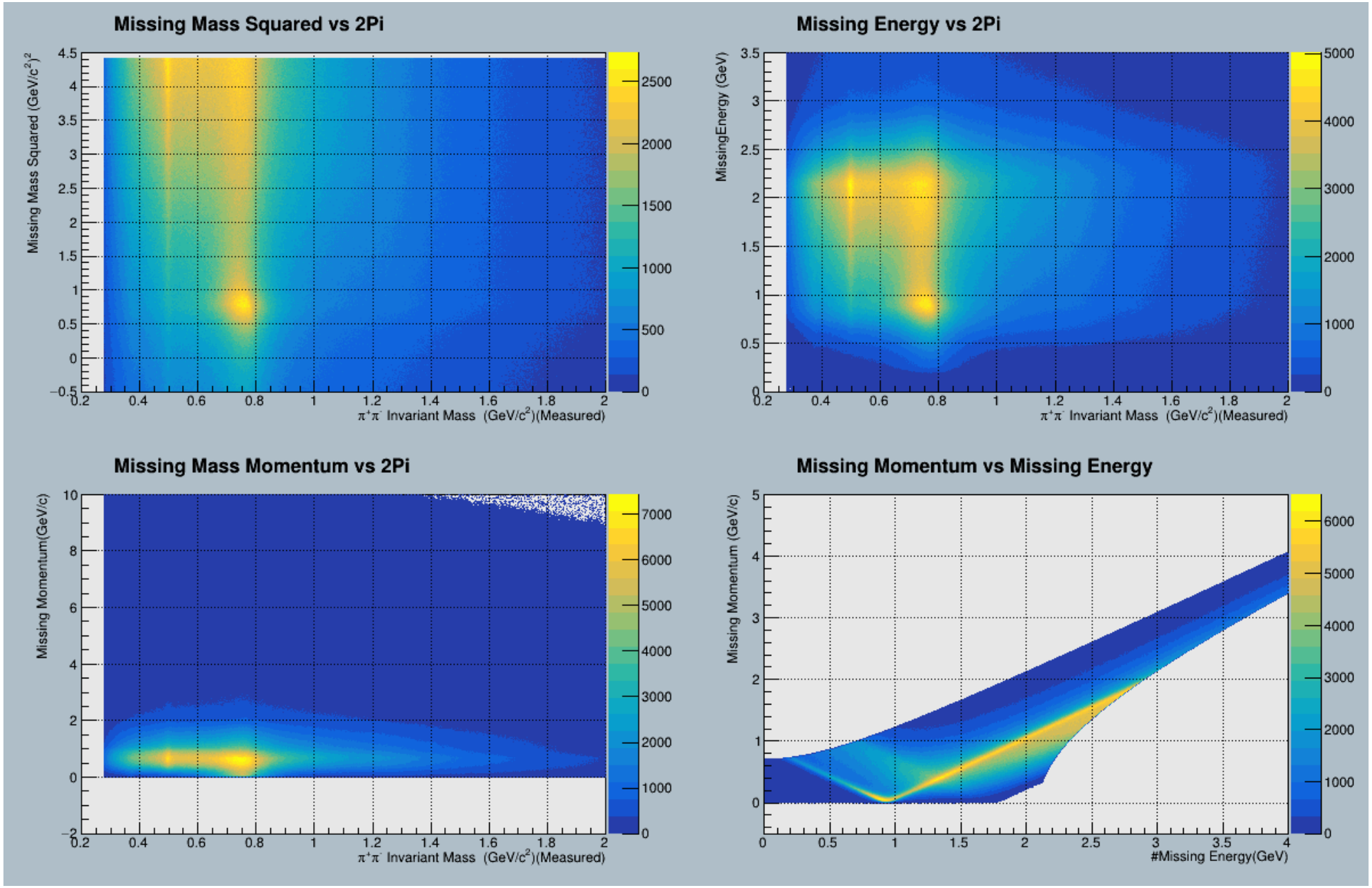




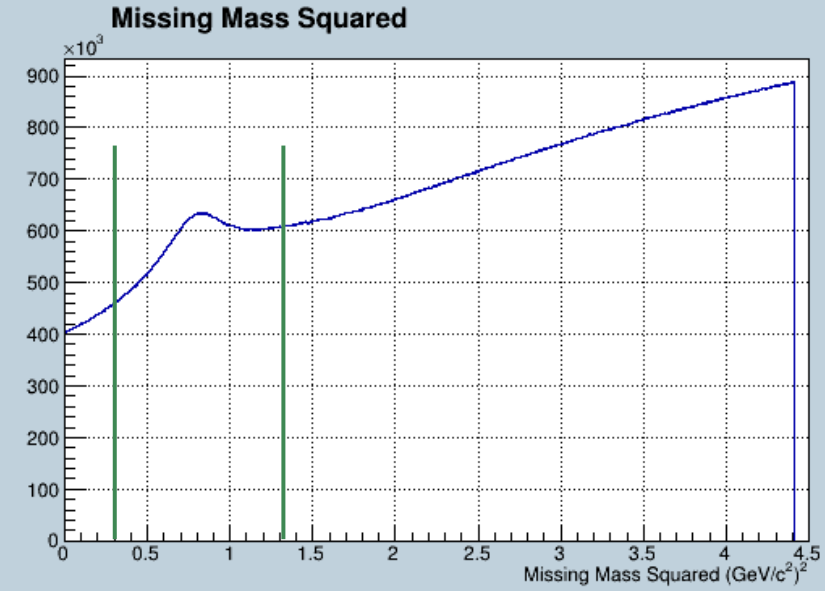


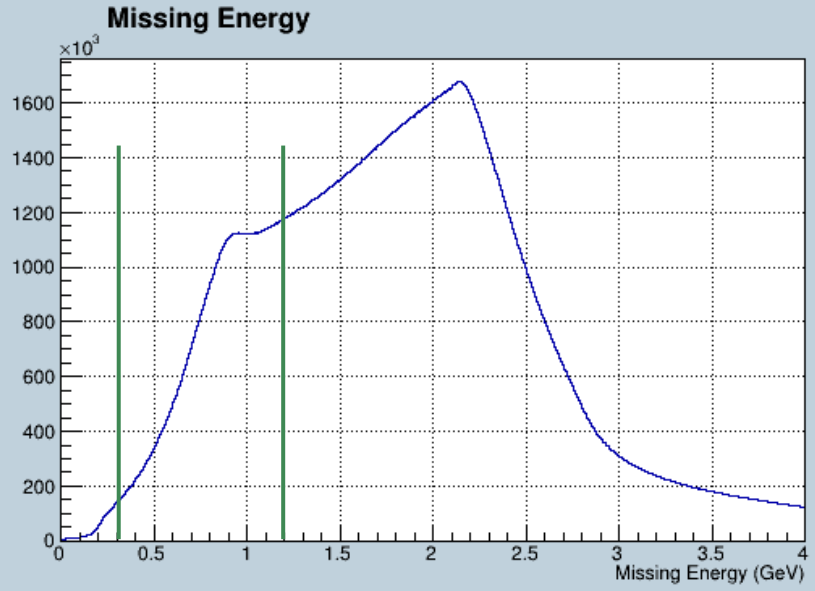


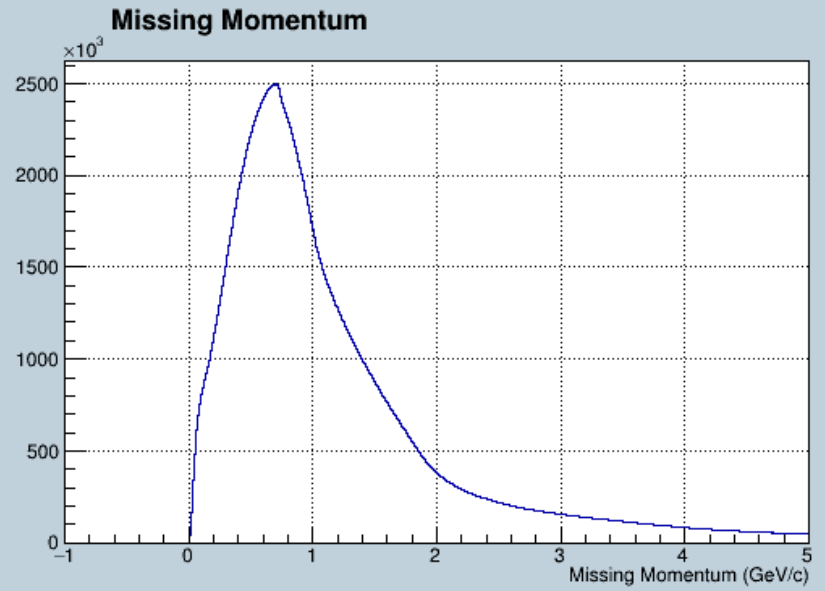
A) Without any Cuts

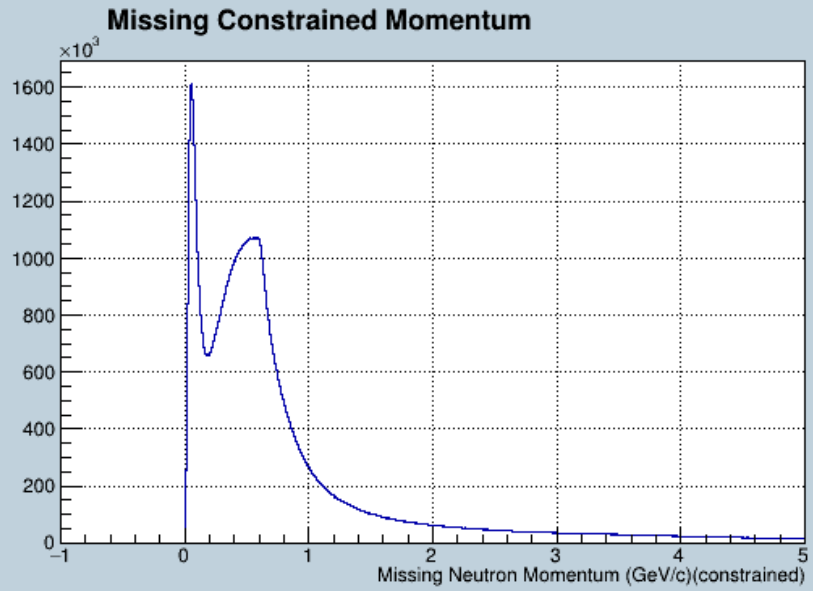


A) Without any Cuts









B) Cuts on CL ,ME ,MM2,BE,Vertex

List of Cuts applied

$0.3 < MM2 < 1.3$ (Missing Mass Squared)

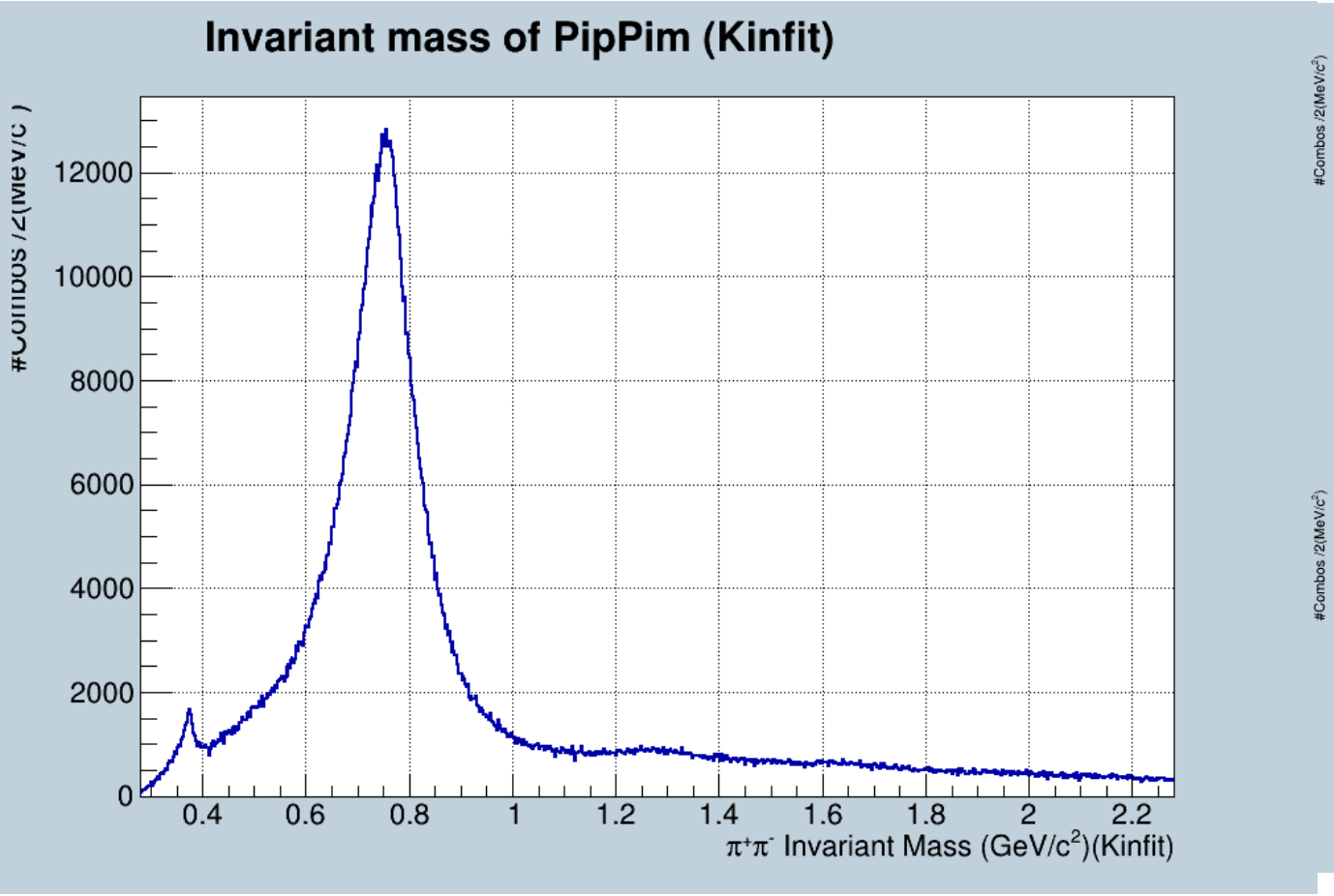
$0.3 < ME < 1.3$ (Missing Energy)

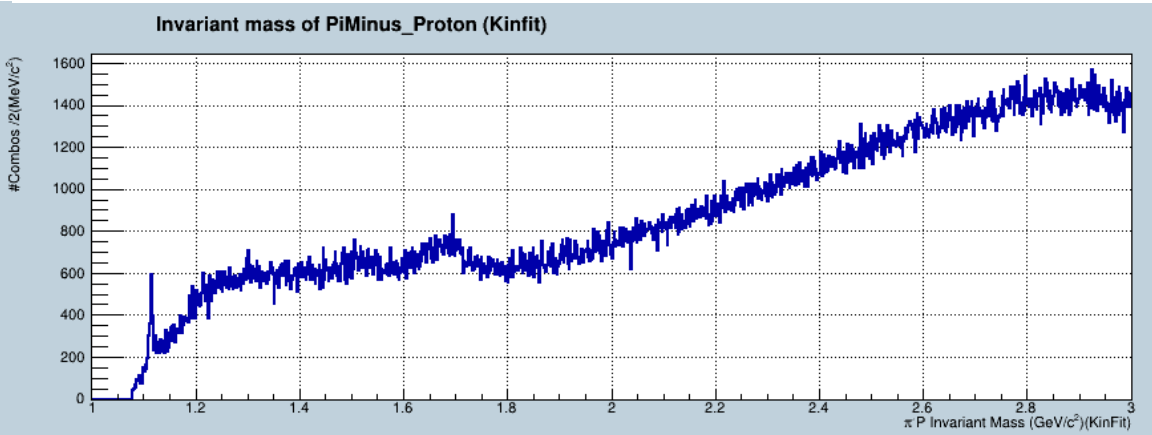
$C.L > 0.001$

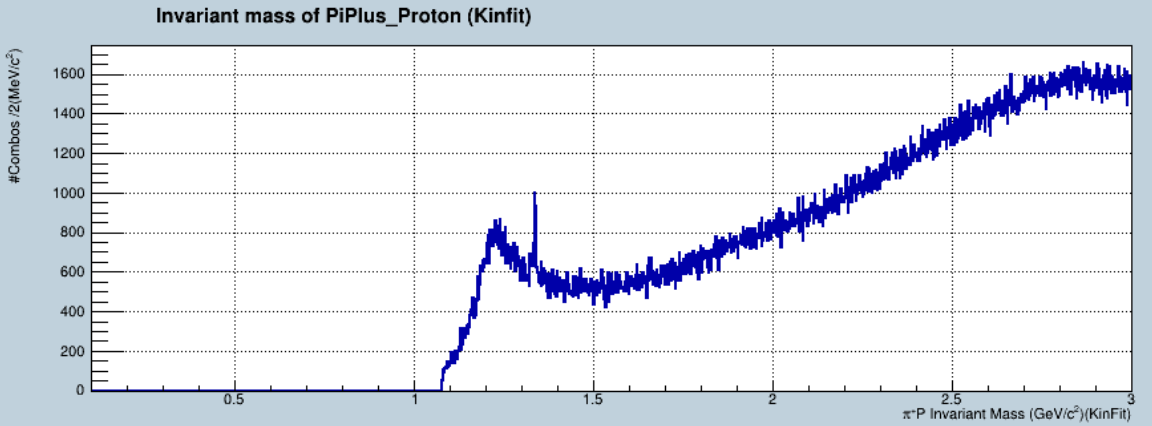
BeamEnergy > 6.5 GeV

52 cm < Zvertex < 78 cm

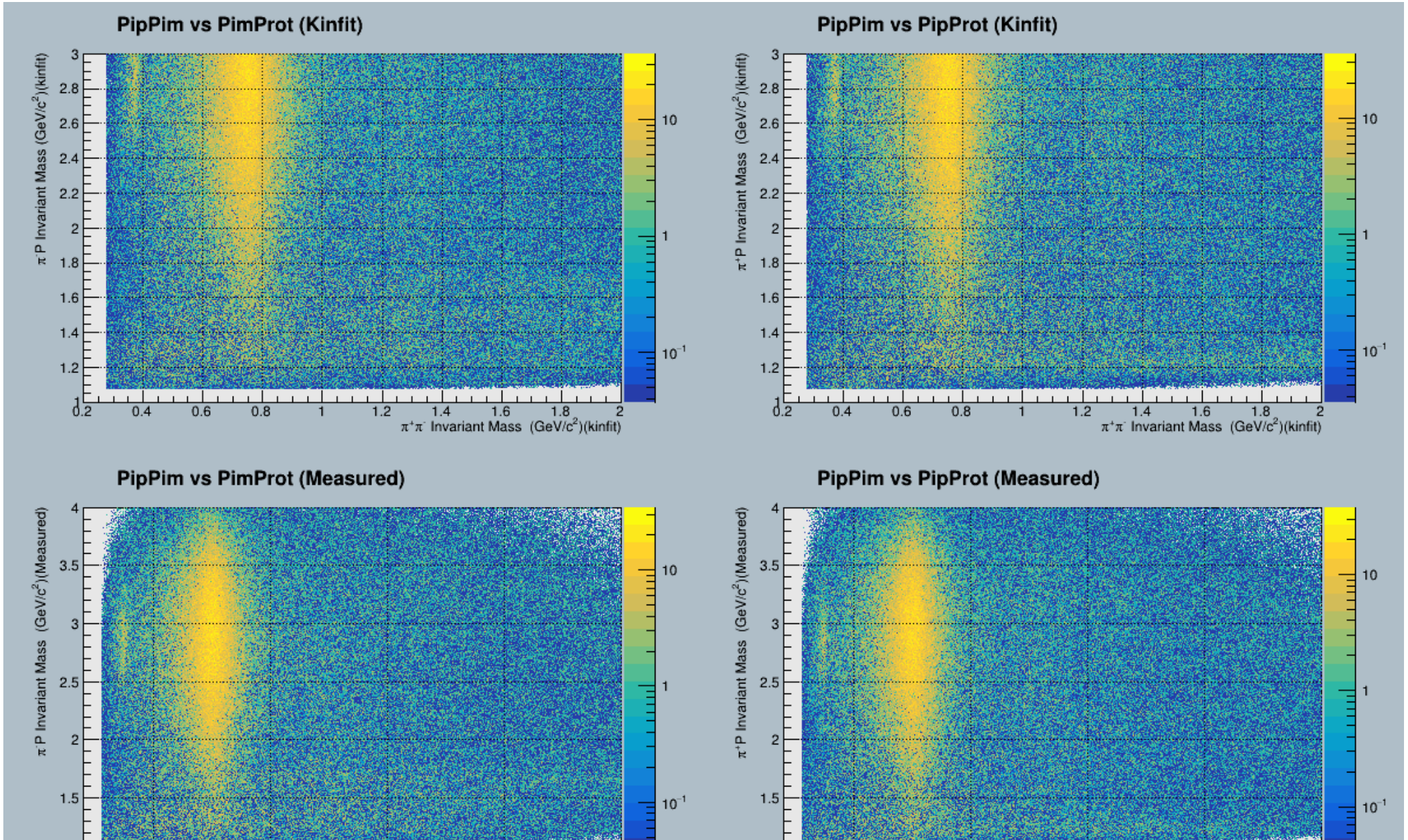
B) Cuts on CL ,ME ,MM2,BE,Vertex



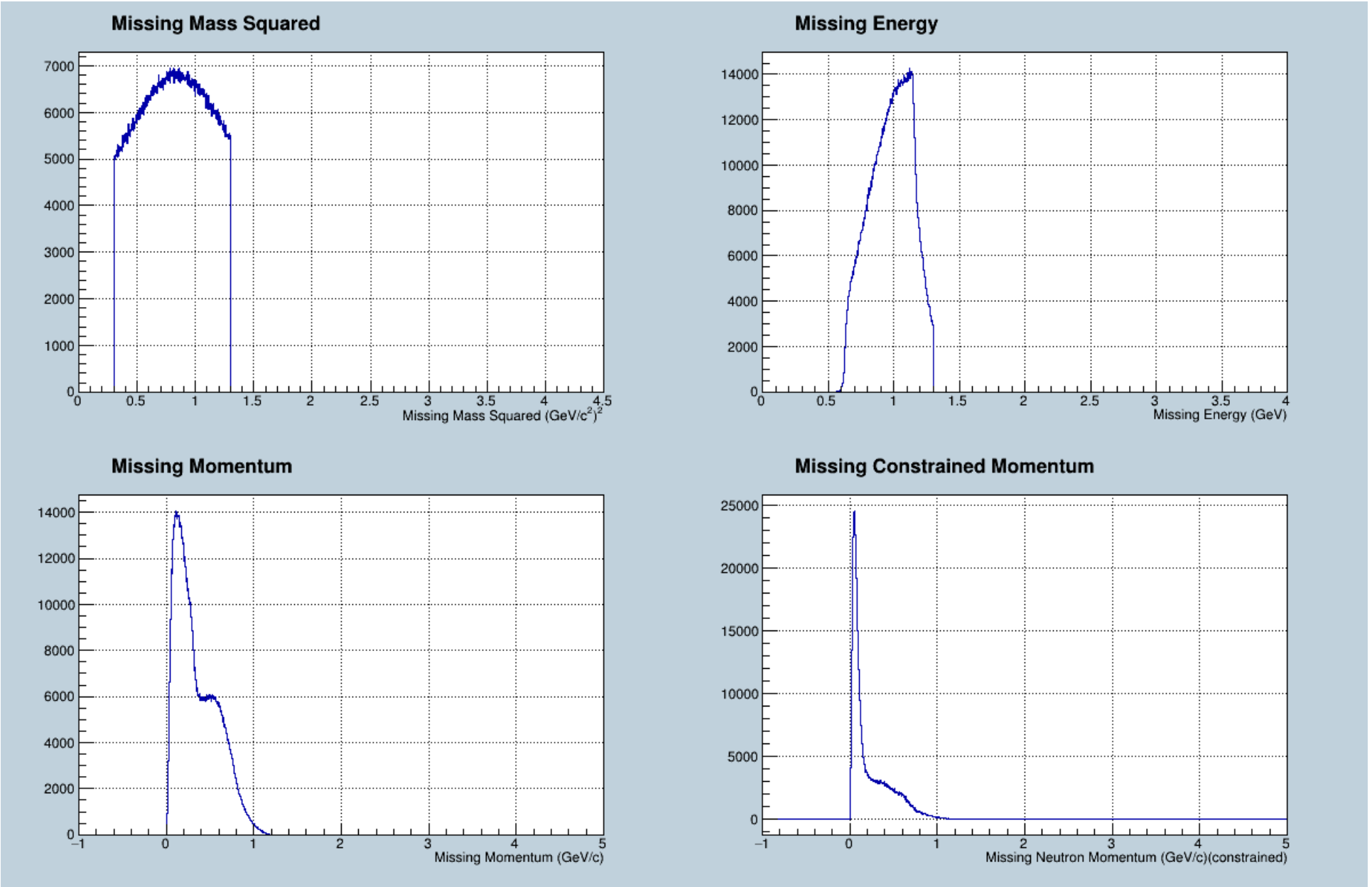




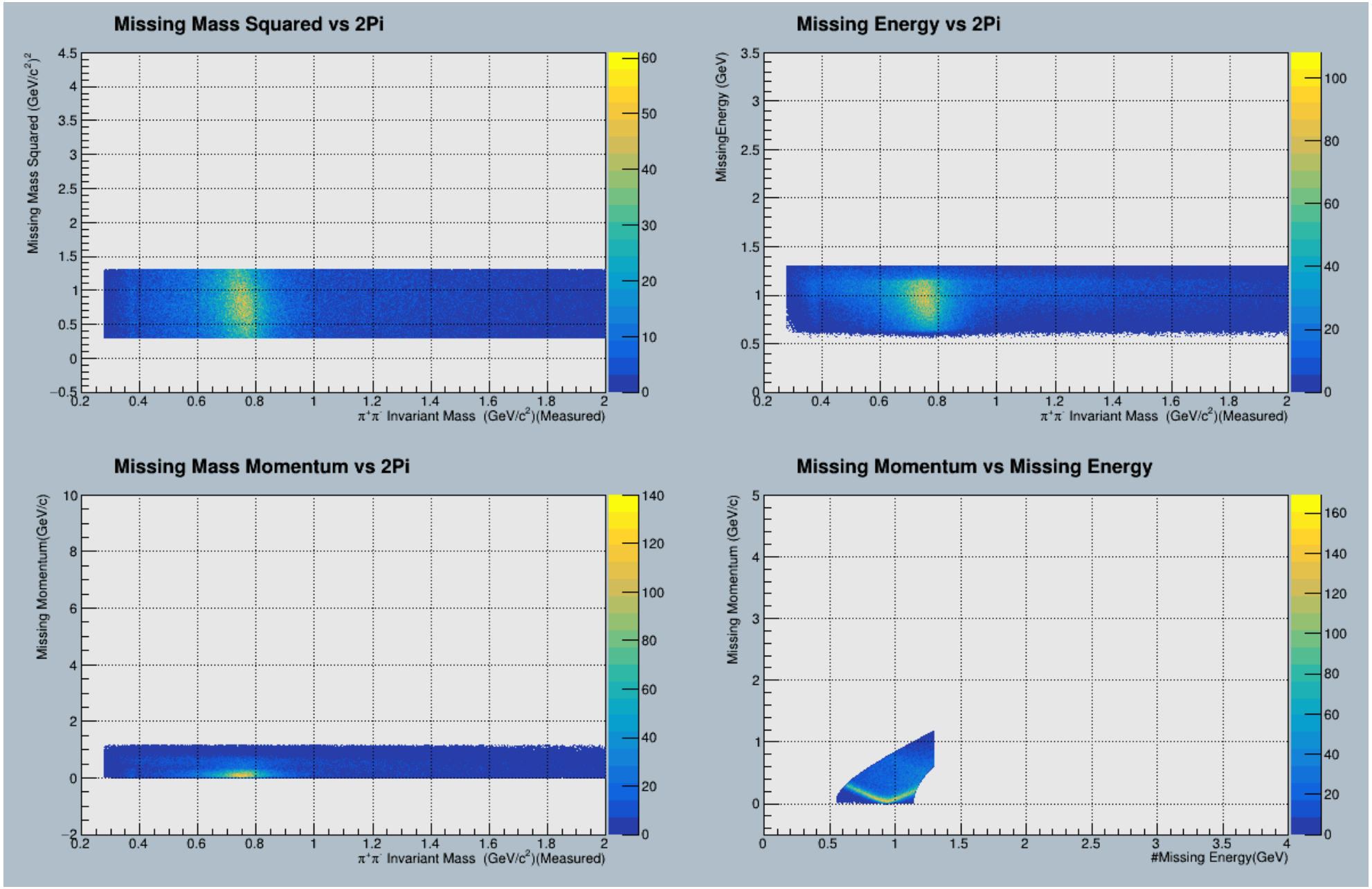
B) Cuts on CL ,ME ,MM2,BE,Vertex



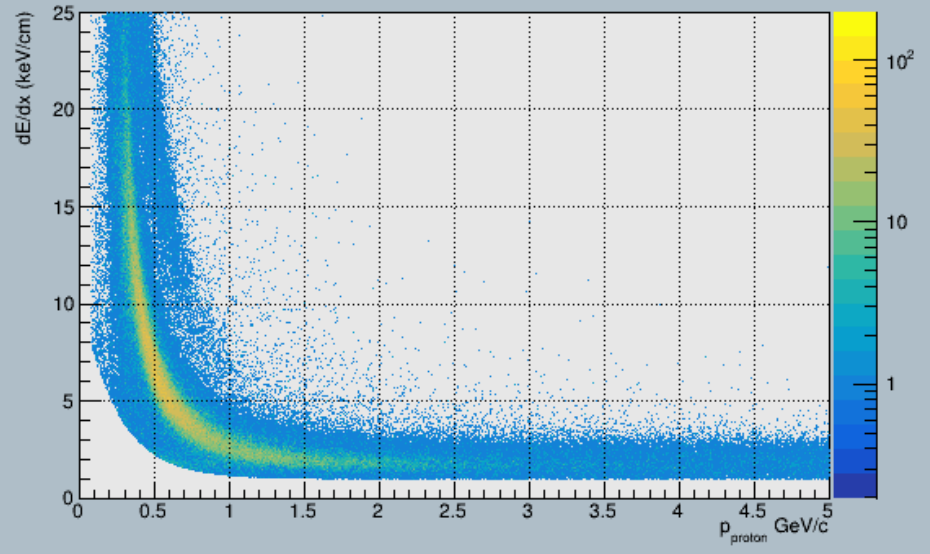
B) Cuts on CL ,ME ,MM2,BE,Vertex

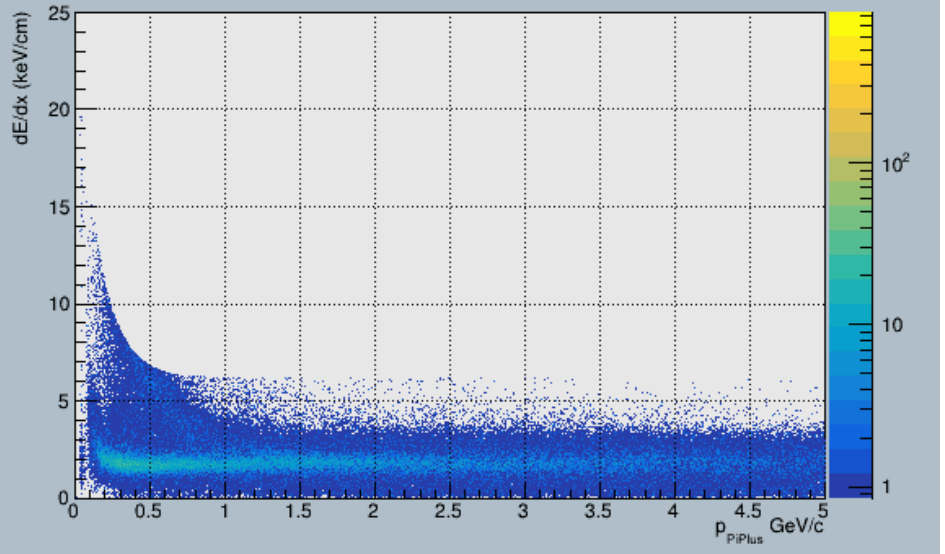


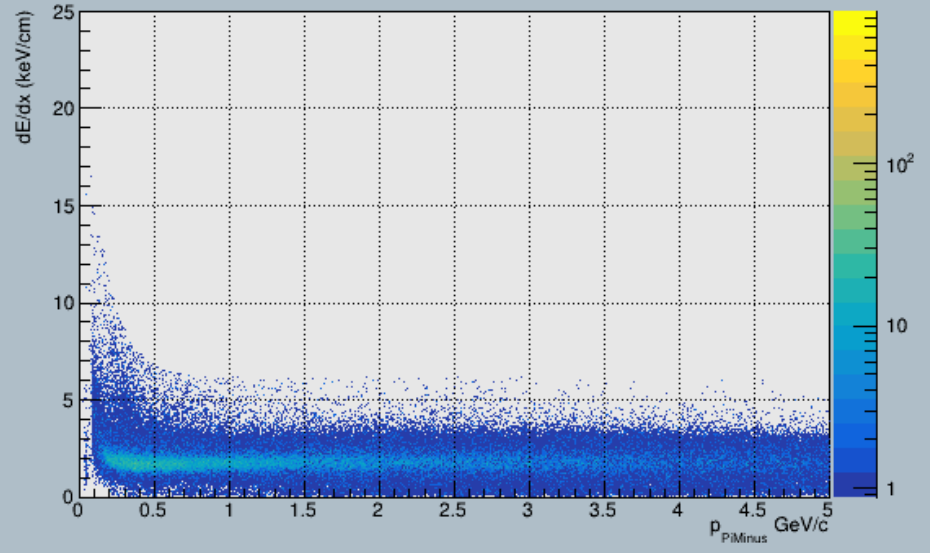
B) Cuts on CL ,ME ,MM2,BE,Vertex

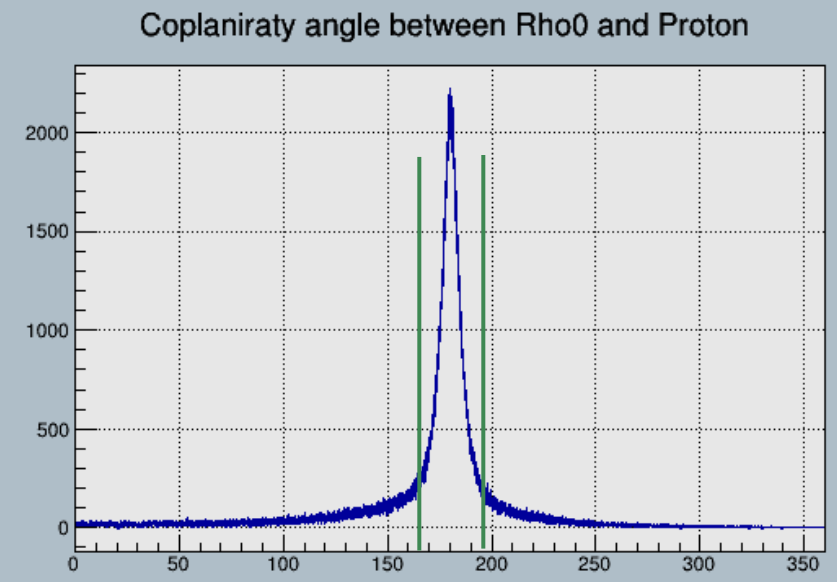


B) Cuts on CL ,ME ,MM2,BE,Vertex









C) Cuts B + Coplanarity

List of Cuts applied

0.3 < MM2 < 1.3(Missing Mass Squared)

0.3 < ME < 1.3(Missing Energy)

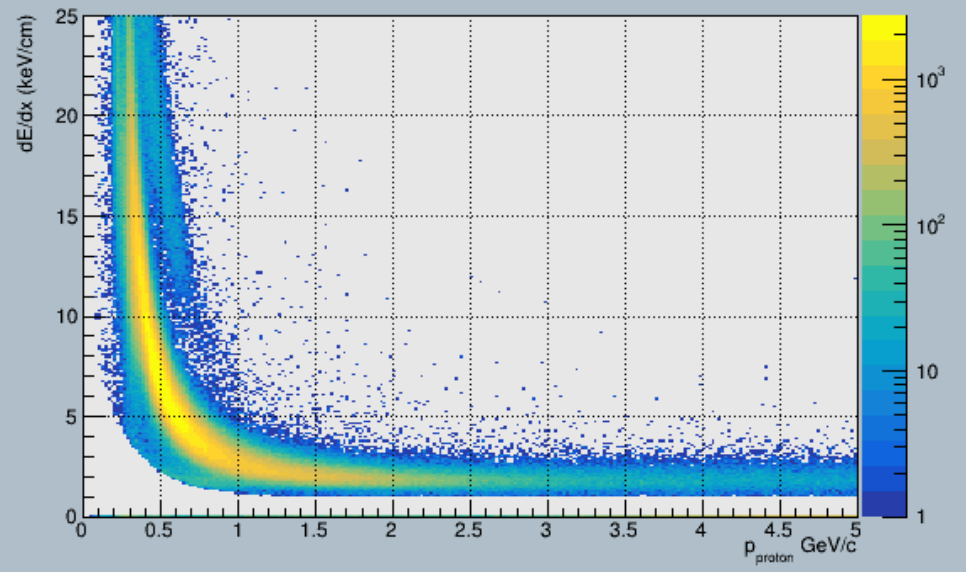
C.L > 0.001

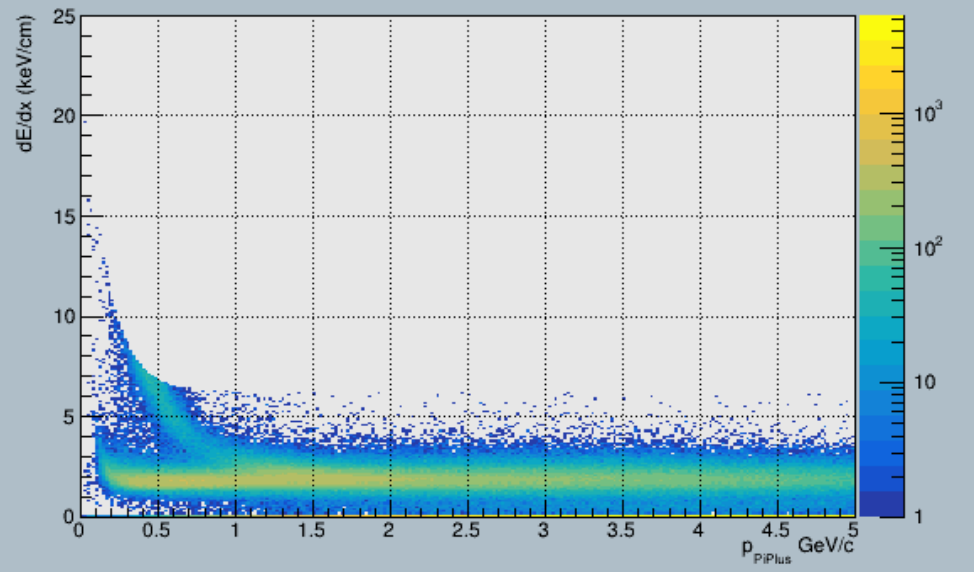
BeamEnergy > 6.5 GeV

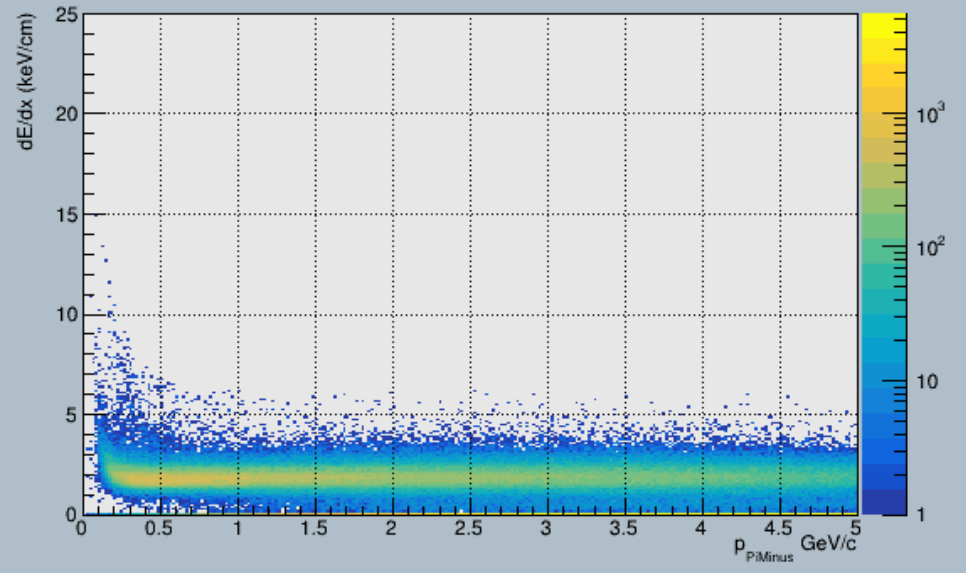
52 cm < Zvertex < 78 cm

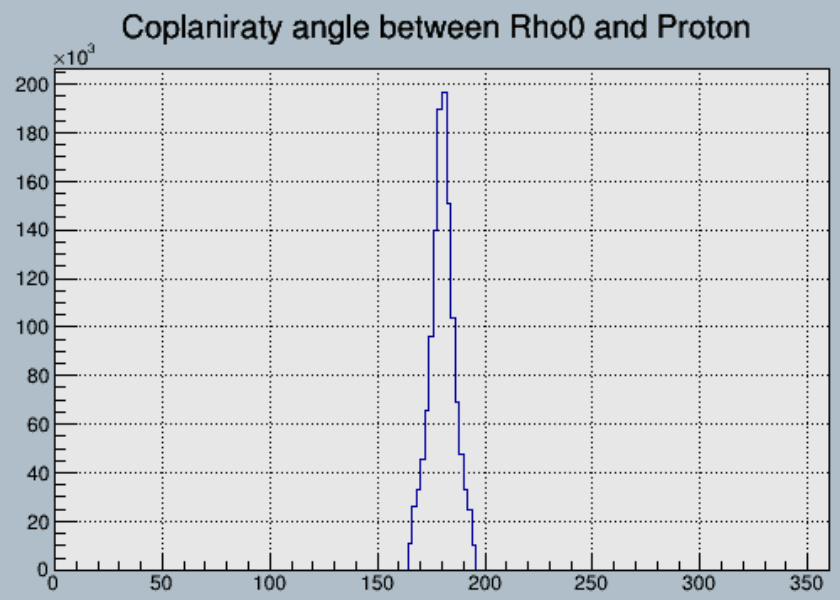
Coplanarity between Rho0 and Proton(165,195)

C) Cuts B + Coplanarity

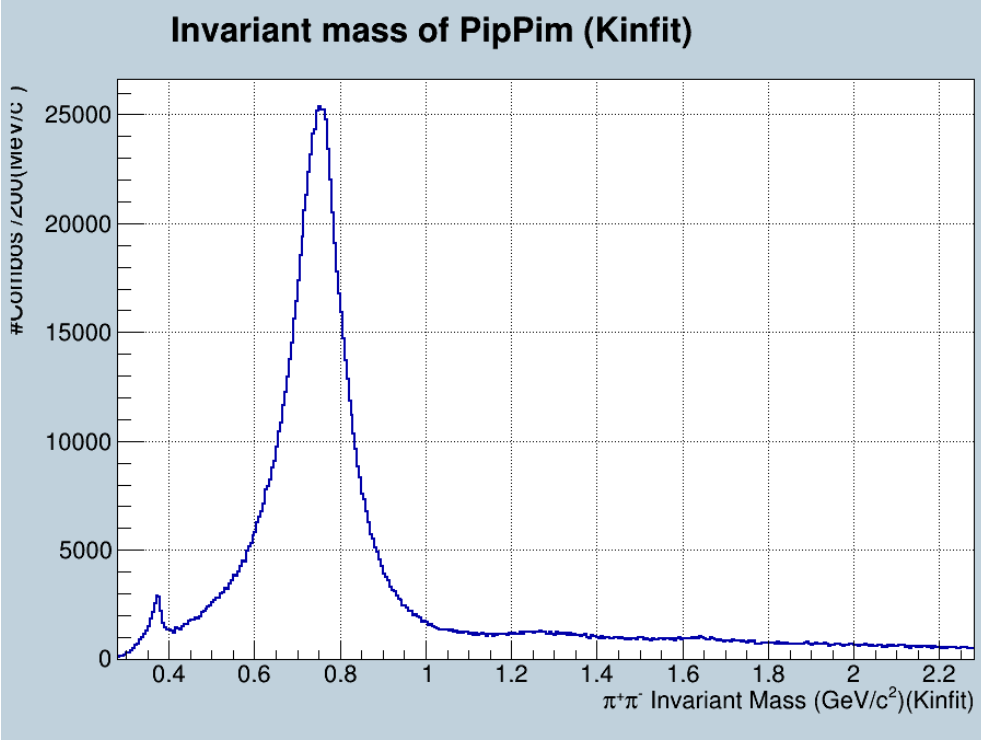


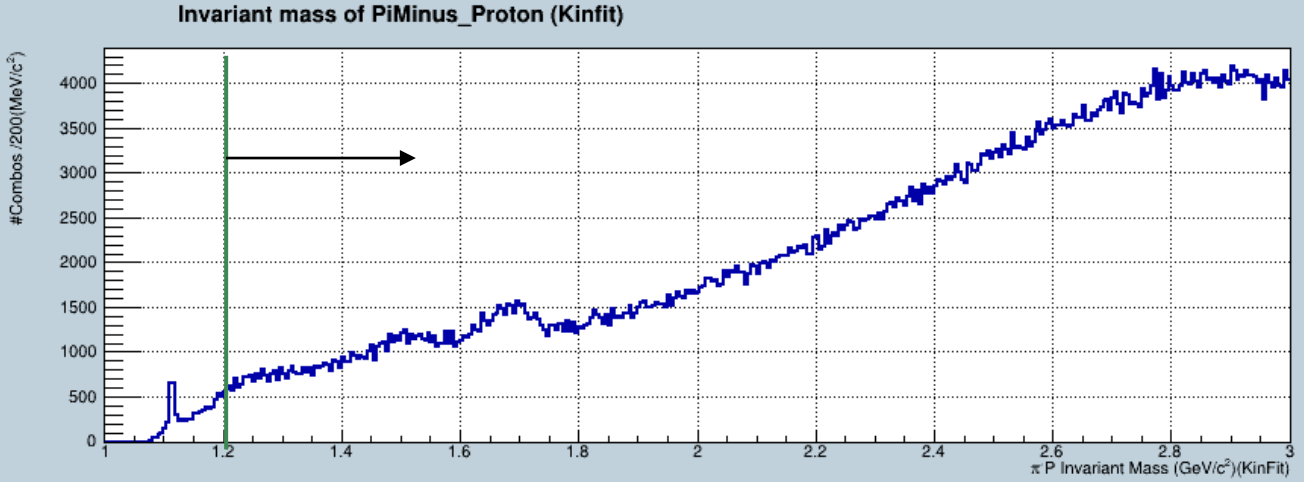


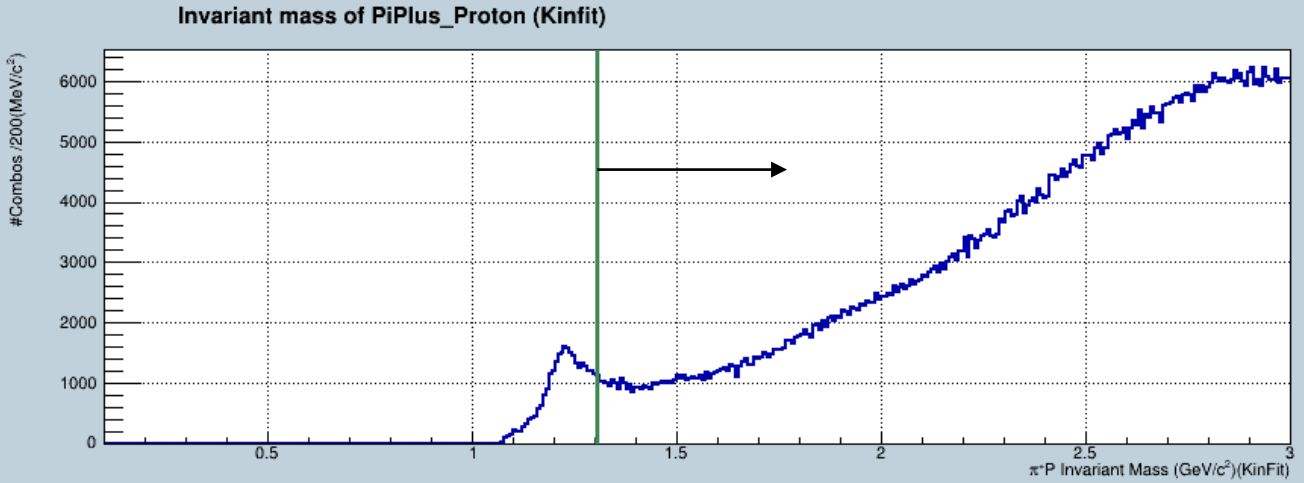




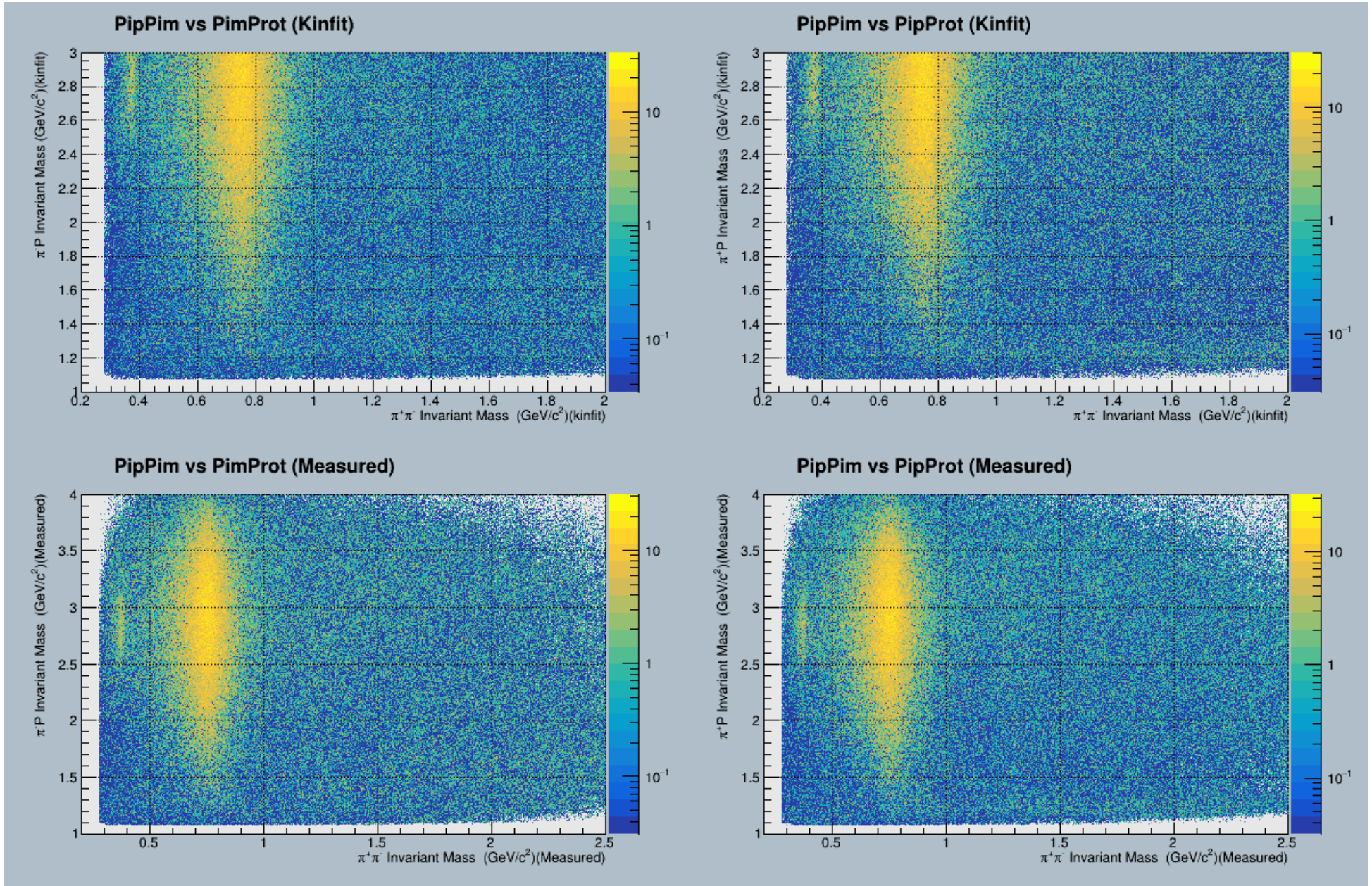
C) Cuts on CL ,ME ,MM2,BE,Vertex







C) Cuts B + Coplanarity



D) Cuts B + Coplanarity + Invariant mass of PipProton and PimProton

List of Cuts applied

0.3 < MM2 < 1.3(Missing Mass Squared)

0.3 < ME < 1.3(Missing Energy)

C.L > 0.001

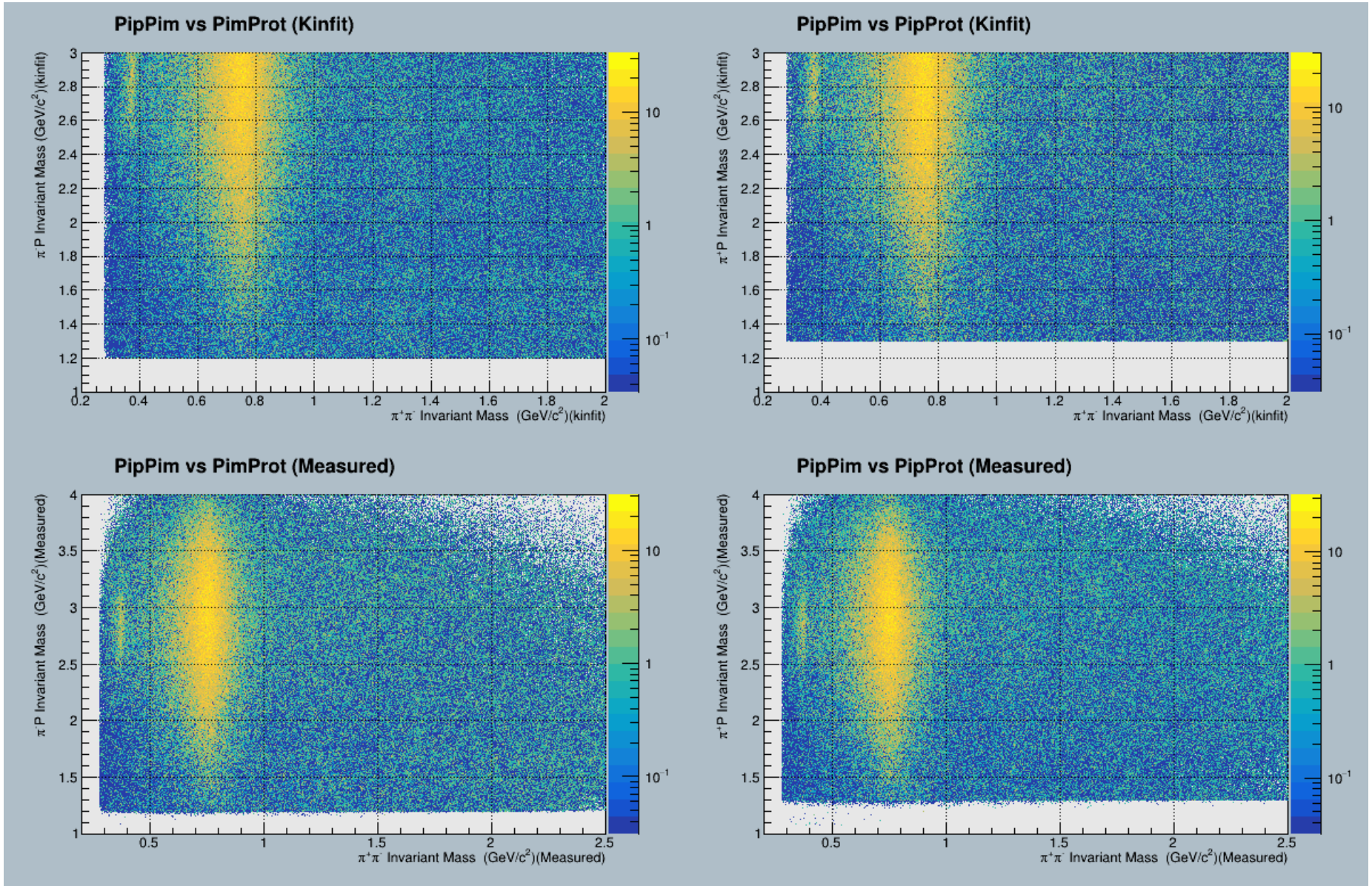
BeamEnergy > 6.5 GeV

52 cm < Zvertex < 78 cm

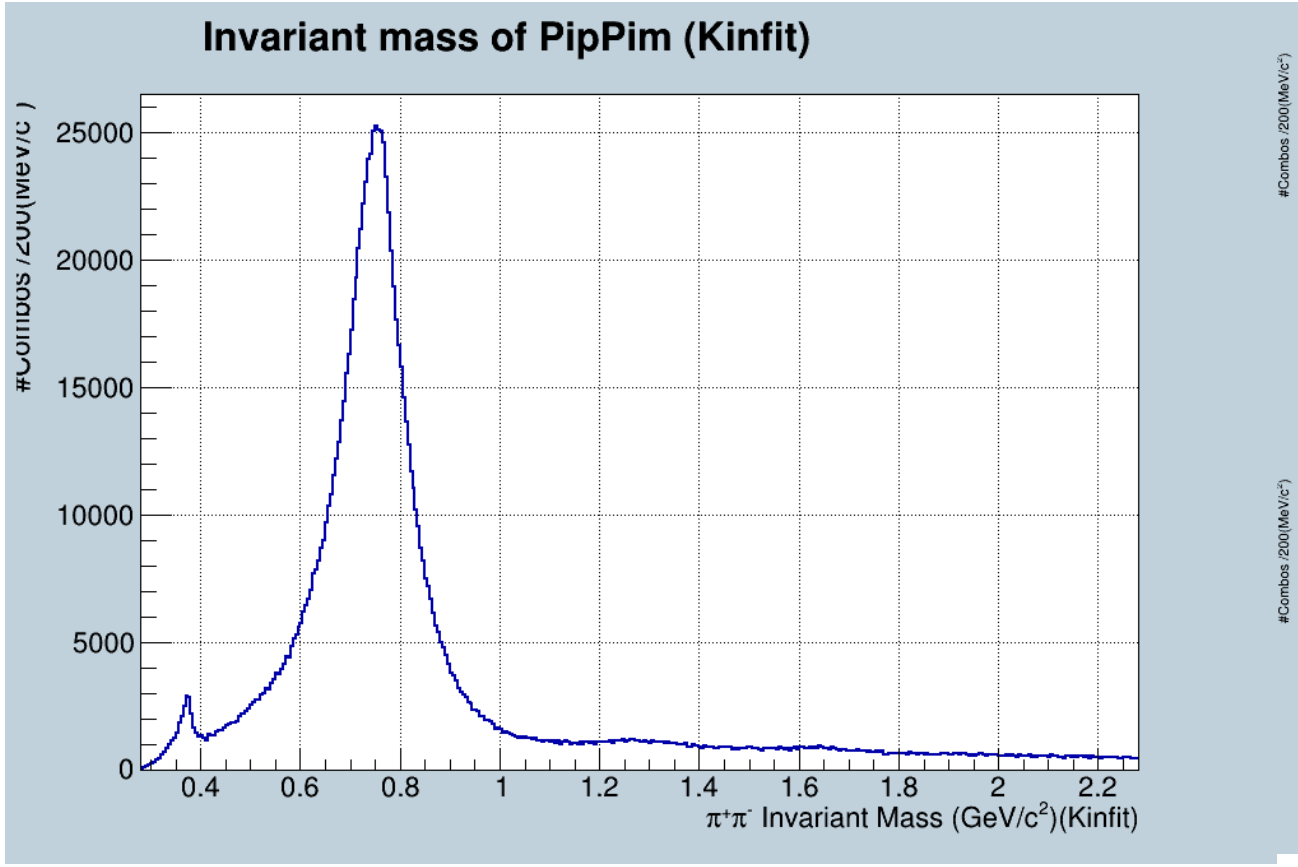
Coplanarity between Rho0 and Proton(165,195)

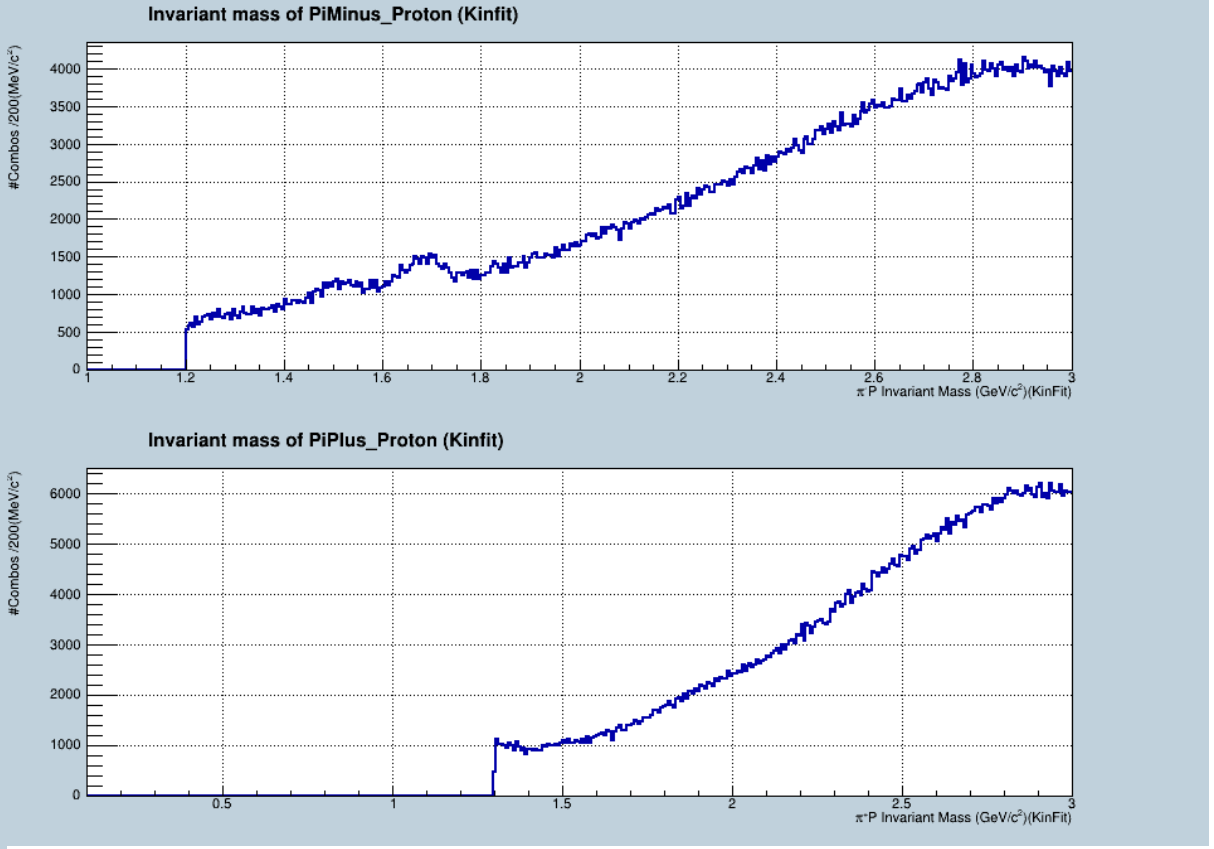
PipProt Invariant Mass < 1.3 && PimProt Invariant Mass 1.2

D) Cuts B + Coplanarity + Invariant mass of PipProton and PimProton



D) Cuts B + Coplanarity + Invariant mass of PipProton and PimProton





E) Cuts B + Coplanarity + Invariant mass of PipProton and PimProton and |t| cut

List of Cuts applied

0.3 < MM2 < 1.3(Missing Mass Squared)

0.3 < ME < 1.3(Missing Energy)

C.L > 0.001

BeamEnergy > 6.5 GeV

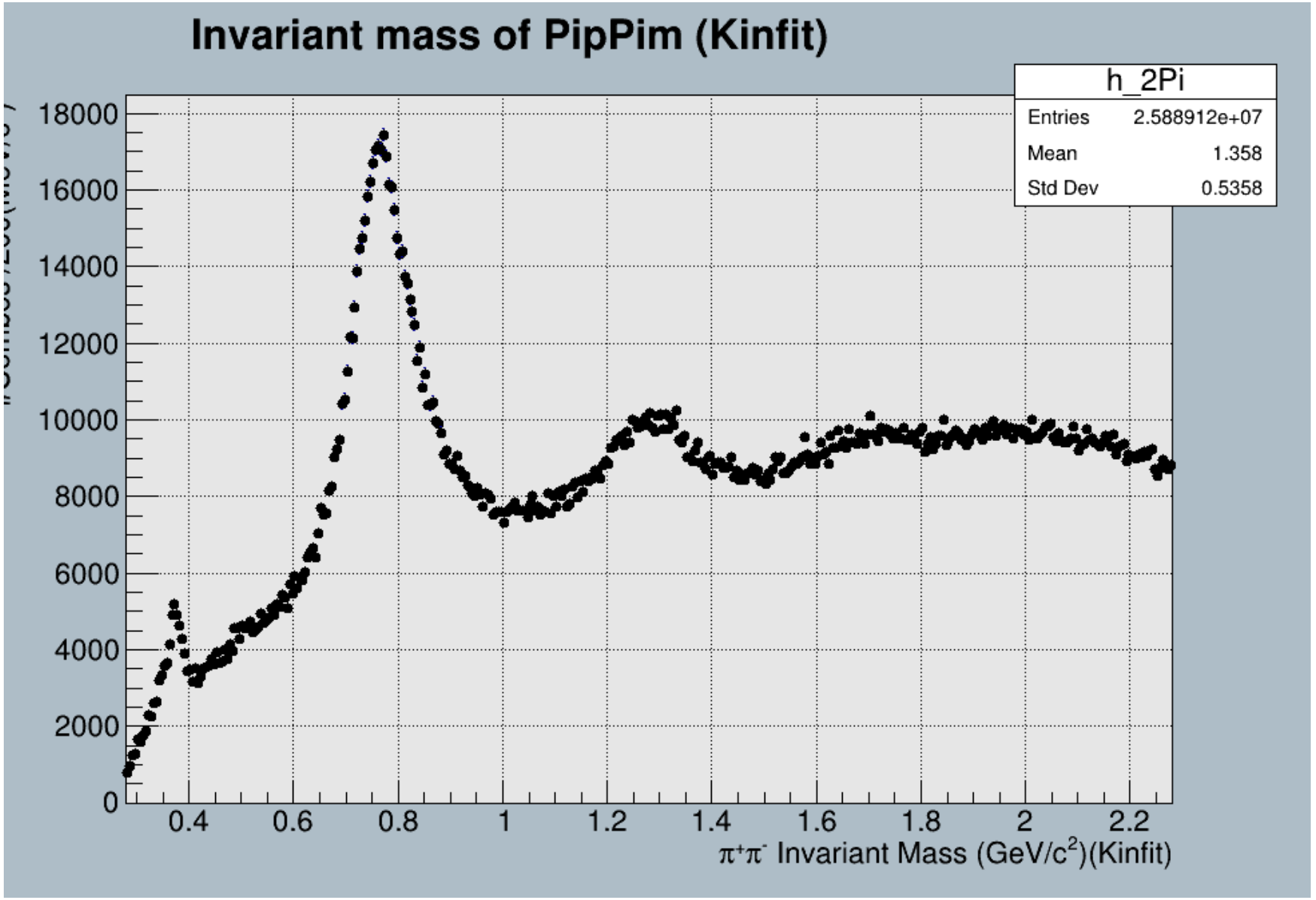
52 cm < Zvertex < 78 cm

Coplanarity between Rho0 and Proton(165,195)

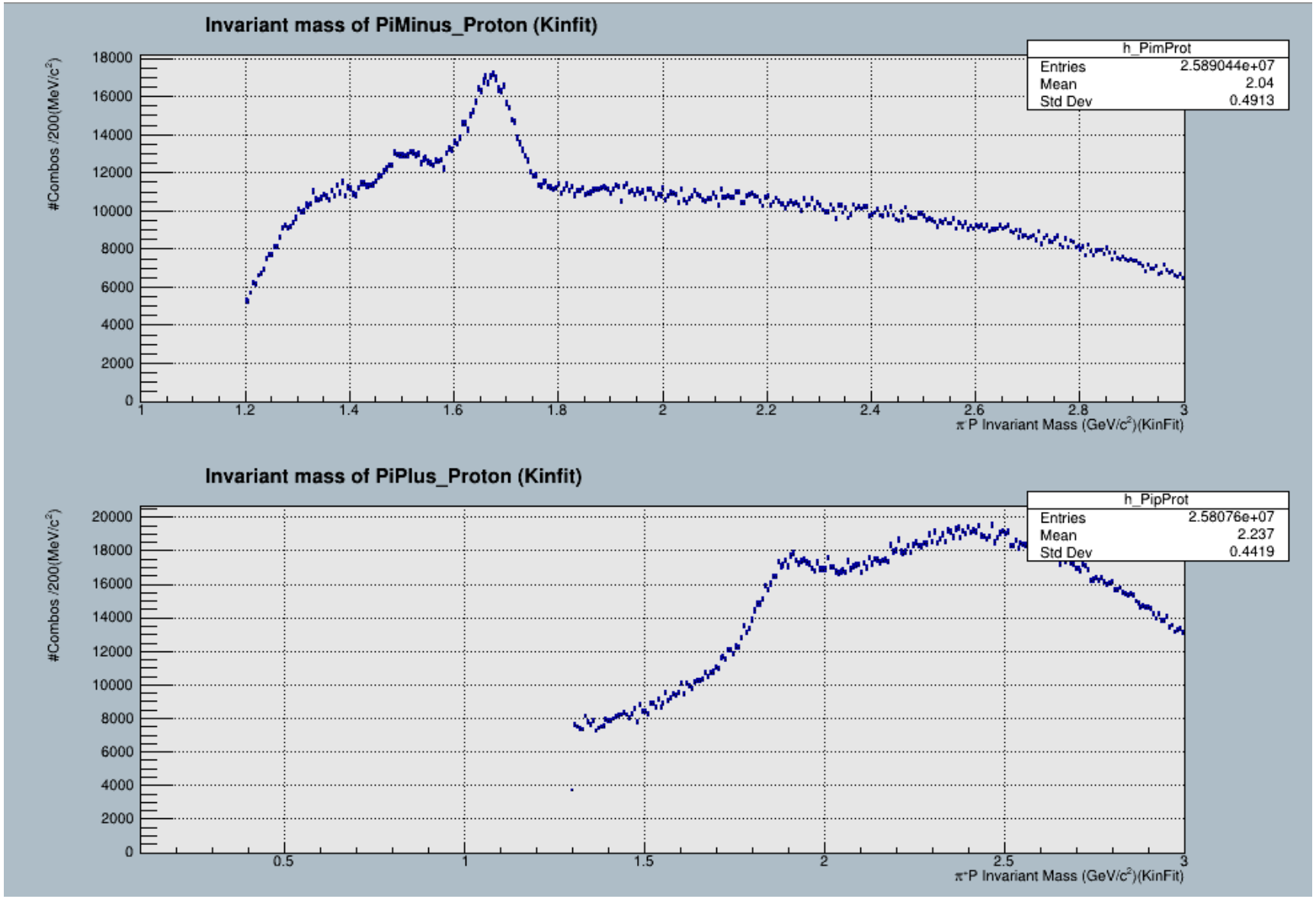
PipProt Invariant Mass < 1.3 && PimProt Invariant Mass 1.2

|t| >1

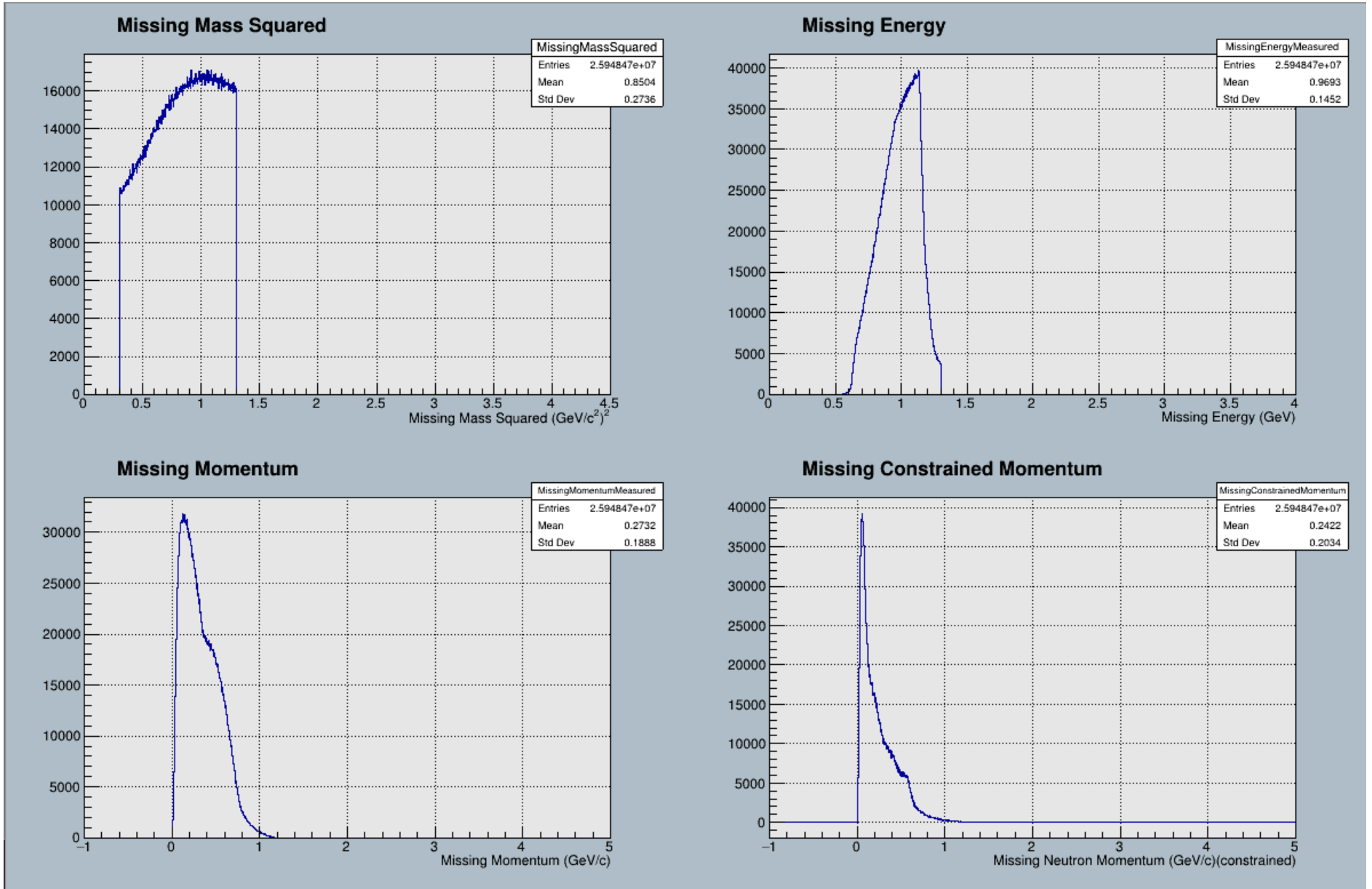
E) Cuts B + Coplanarity + Invariant mass of PipProton and PimProton and |t| cut



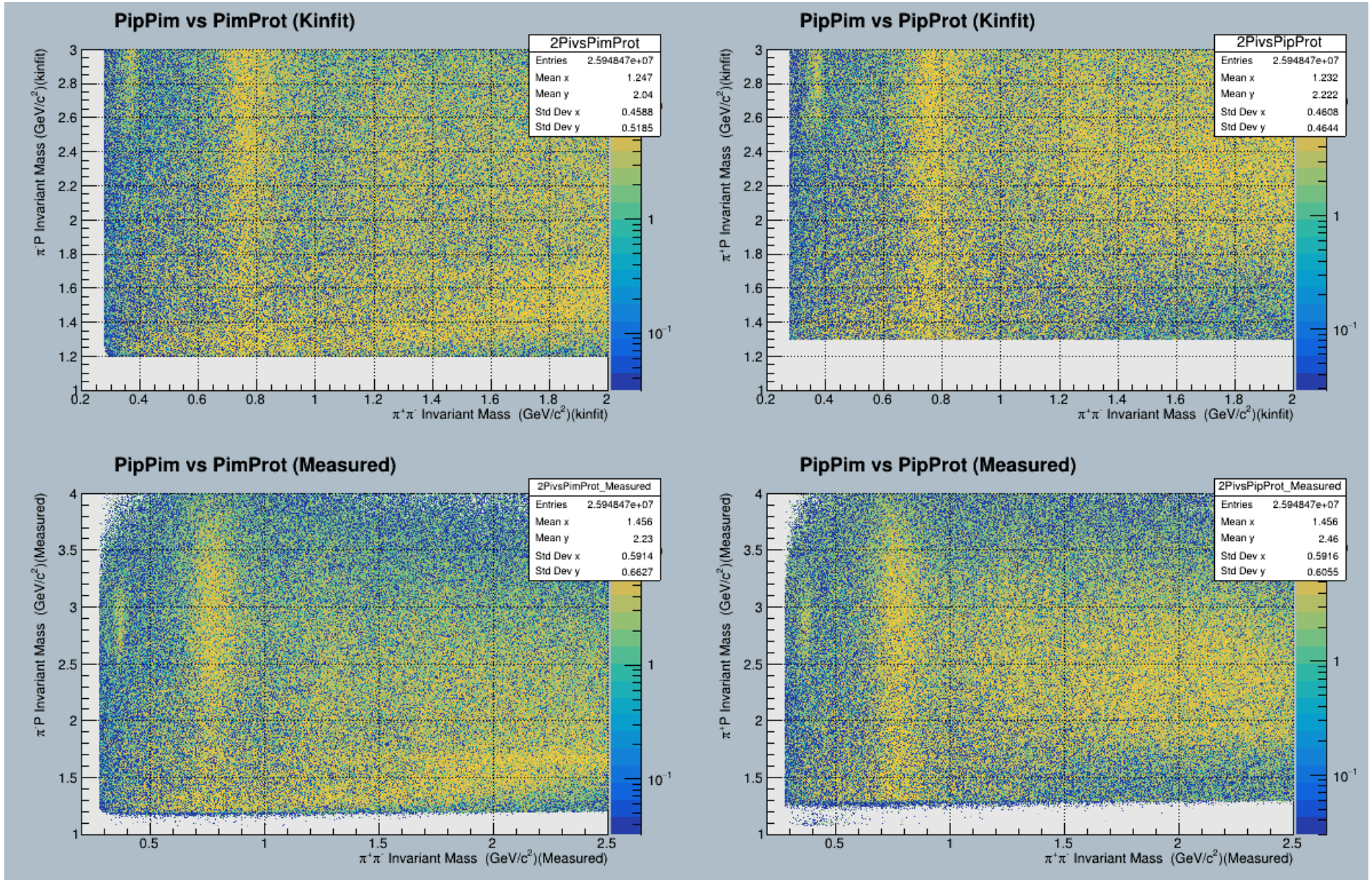
E) Cuts B + Coplanarity + Invariant mass of PipProton and PimProton and |t| cut



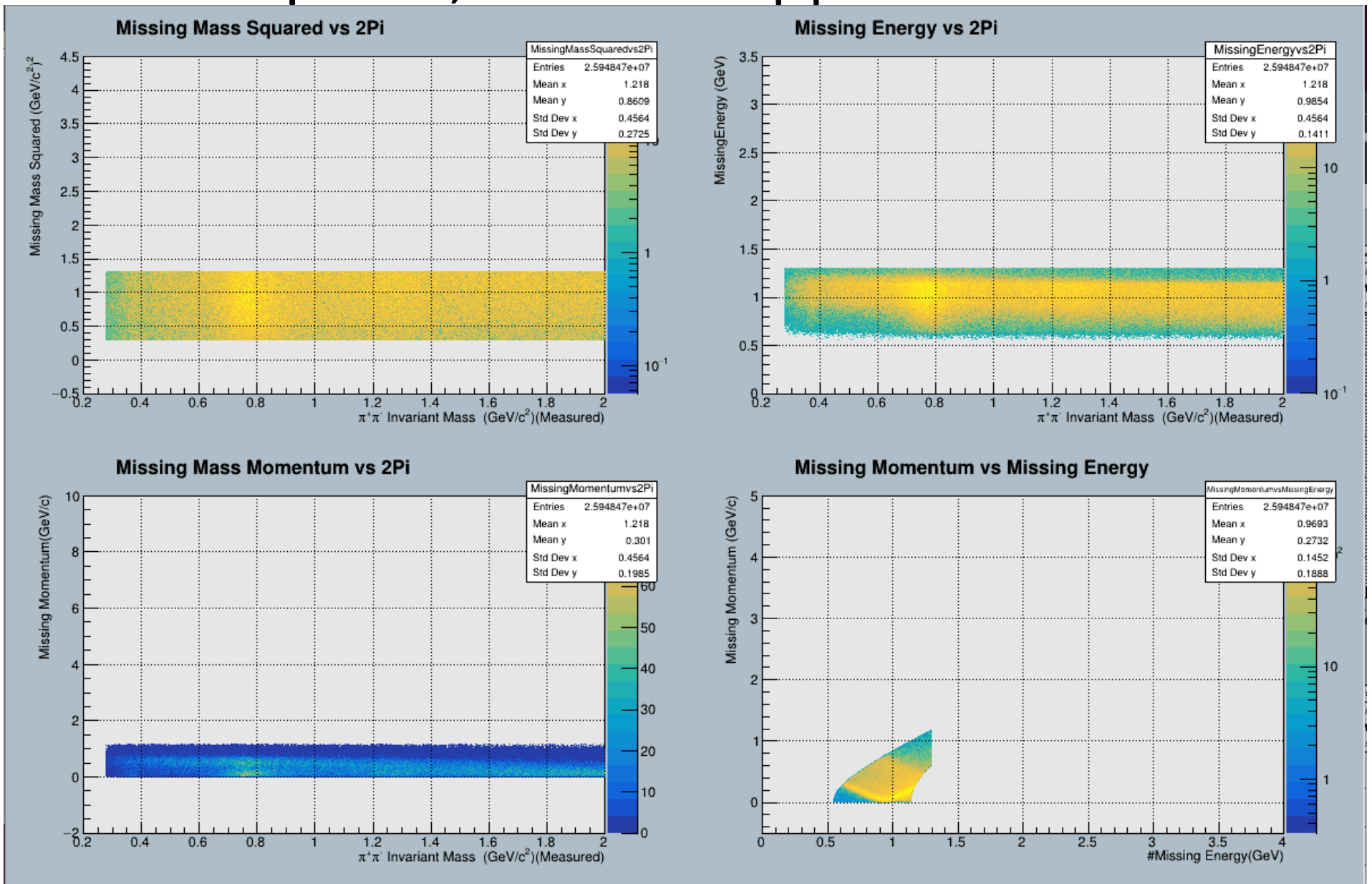
E) Cuts B + Coplanarity + Invariant mass of PipProton and PimProton and |t| cut



E) Cuts B + Coplanarity + Invariant mass of PipProton and PimProton and |t| cut



E) Cuts B + Coplanarity + Invariant mass of PipProton , PimProton and |t| cut



F) Cuts B + Coplanarity + Invariant mass of PipProton , PimProton ,|t| cut and |u| cut

List of Cuts applied

0.3 < MM2 < 1.3(Missing Mass Squared)

0.3 < ME < 1.3(Missing Energy)

C.L > 0.001

BeamEnergy > 6.5 GeV

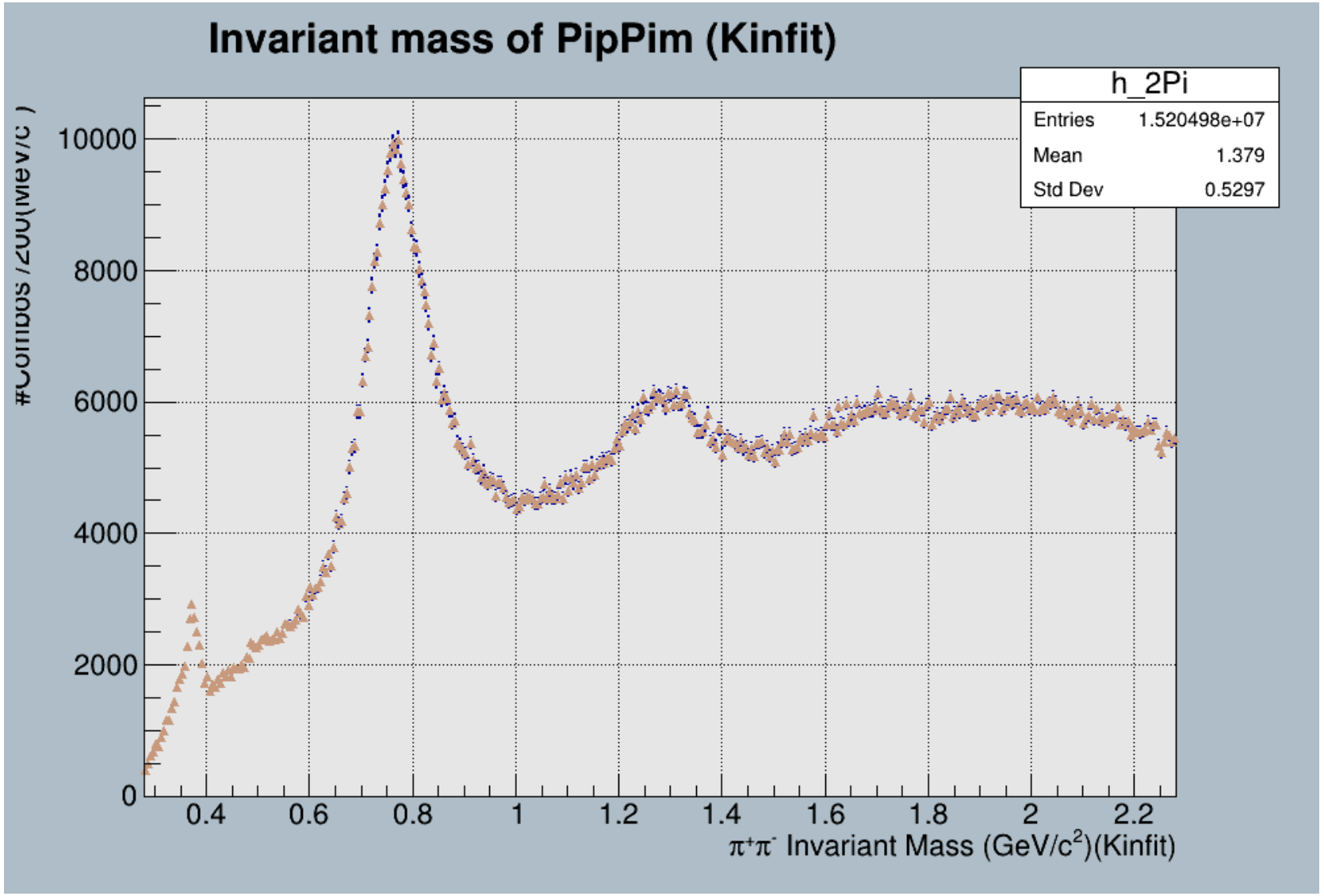
52 cm < Zvertex < 78 cm

Coplanarity between Rho0 and Proton(165,195)

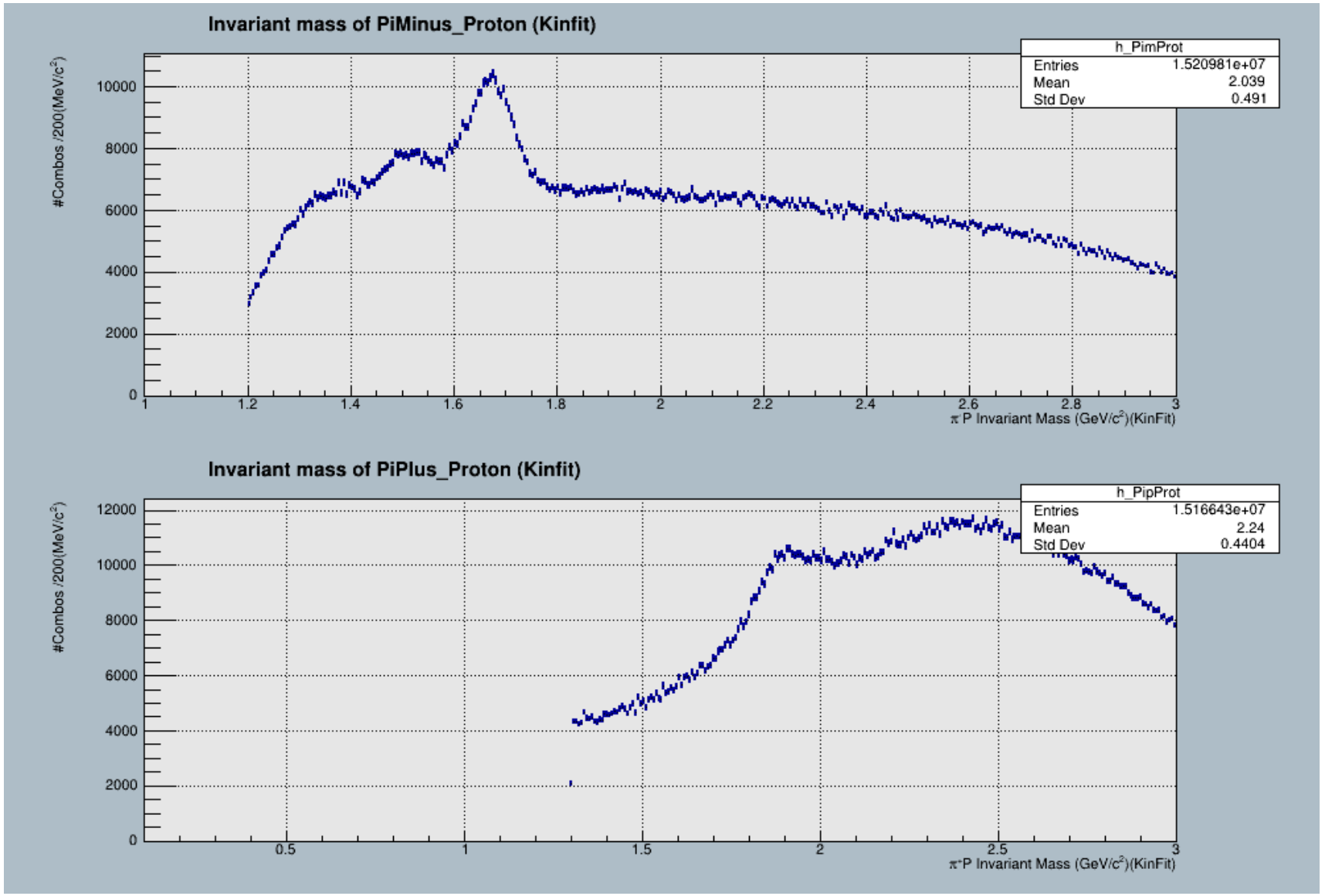
PipProt Invariant Mass < 1.3 && PimProt Invariant Mass 1.2

|t| >1 and |u| > 1

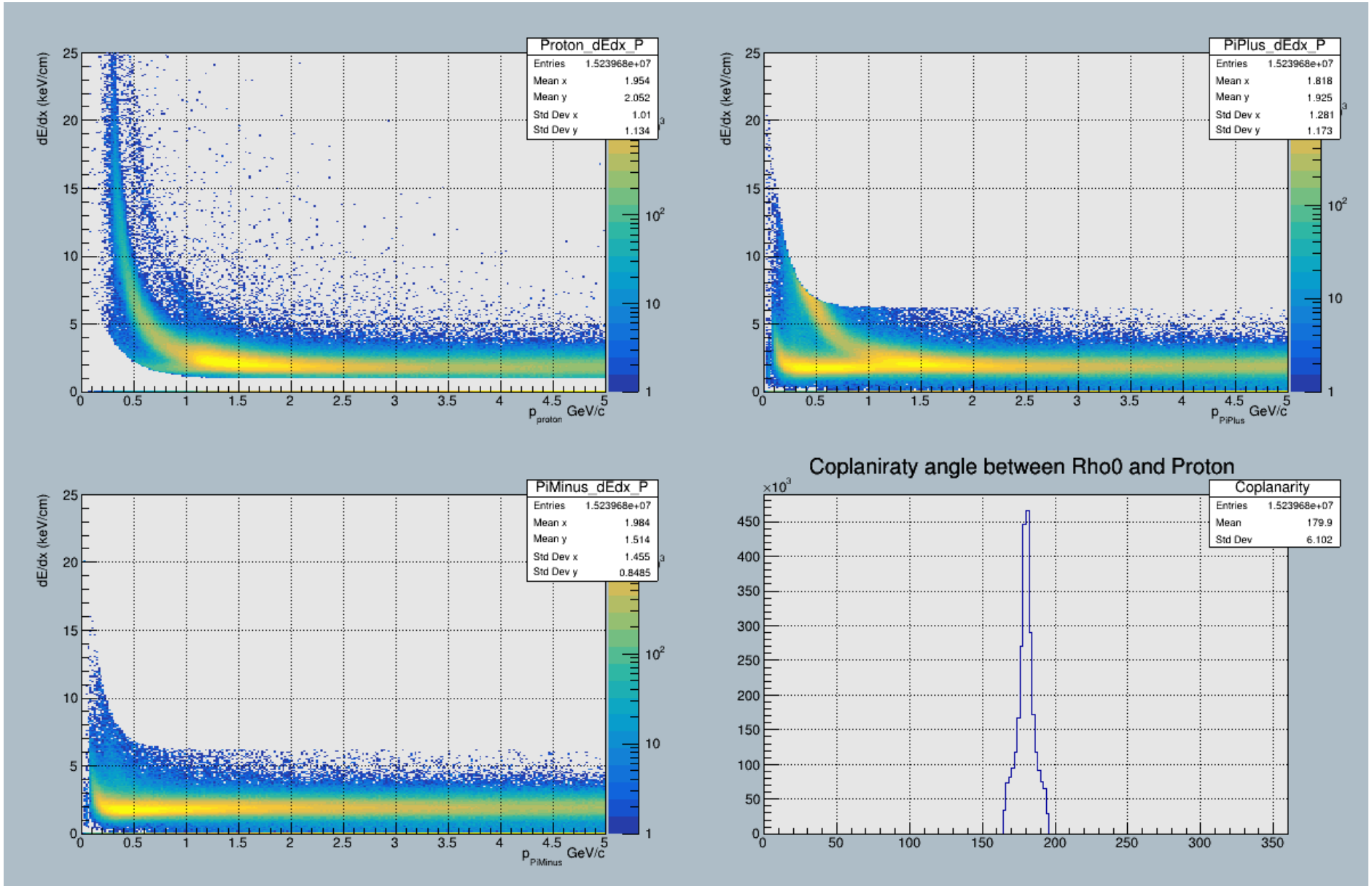
F) Cuts B + Coplanarity + Invariant mass of PipProton , PimProton , |t| cut and |u| cut



F) Cuts B + Coplanarity + Invariant mass of PipProton , PimProton ,|t| cut and |u| cut



F) Cuts B + Coplanarity + Invariant mass of PipProton , PimProton ,|t| cut and |u| cut



G) Cuts B + Coplanarity + Invariant mass of PipProton , PimProton ,|t| cut , |u| cut and dE/dx cut for pions

List of Cuts applied

0.3 < MM2 < 1.3(Missing Mass Squared)

0.3 < ME < 1.3(Missing Energy)

C.L > 0.001

BeamEnergy > 6.5 GeV

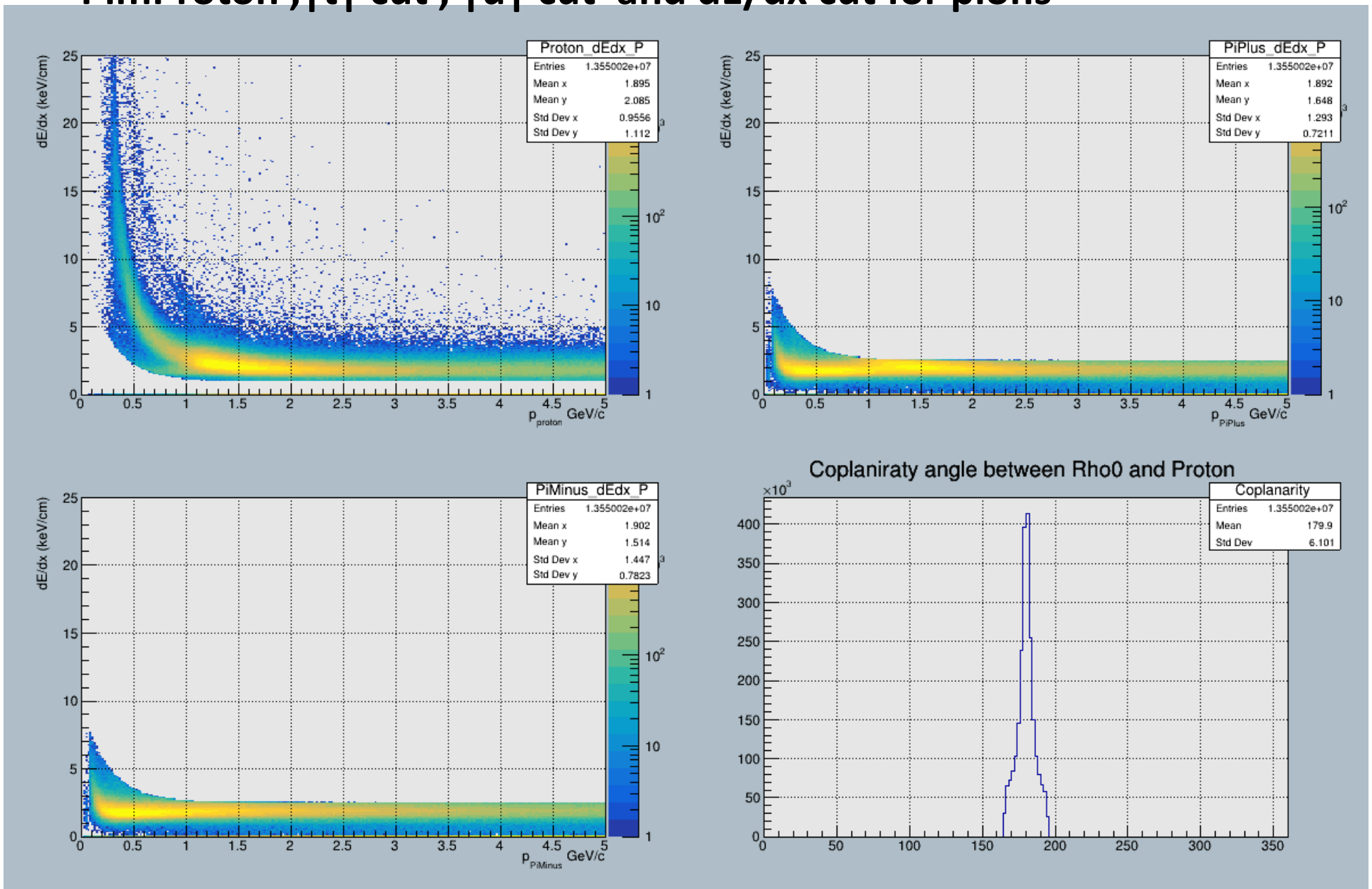
52 cm < Zvertex < 78 cm

Coplanarity between Rho0 and Proton(165,195)

PipProt Invariant Mass < 1.3 && PimProt Invariant Mass 1.2

|t| >1 ,|u| > 1 and tight cut on dE/dx of pions

G) Cuts B + Coplanarity + Invariant mass of PipProton , PimProton ,|t| cut , |u| cut and dE/dx cut for pions



H) CutsE , Cut F and cut G comparison for Inv. mass