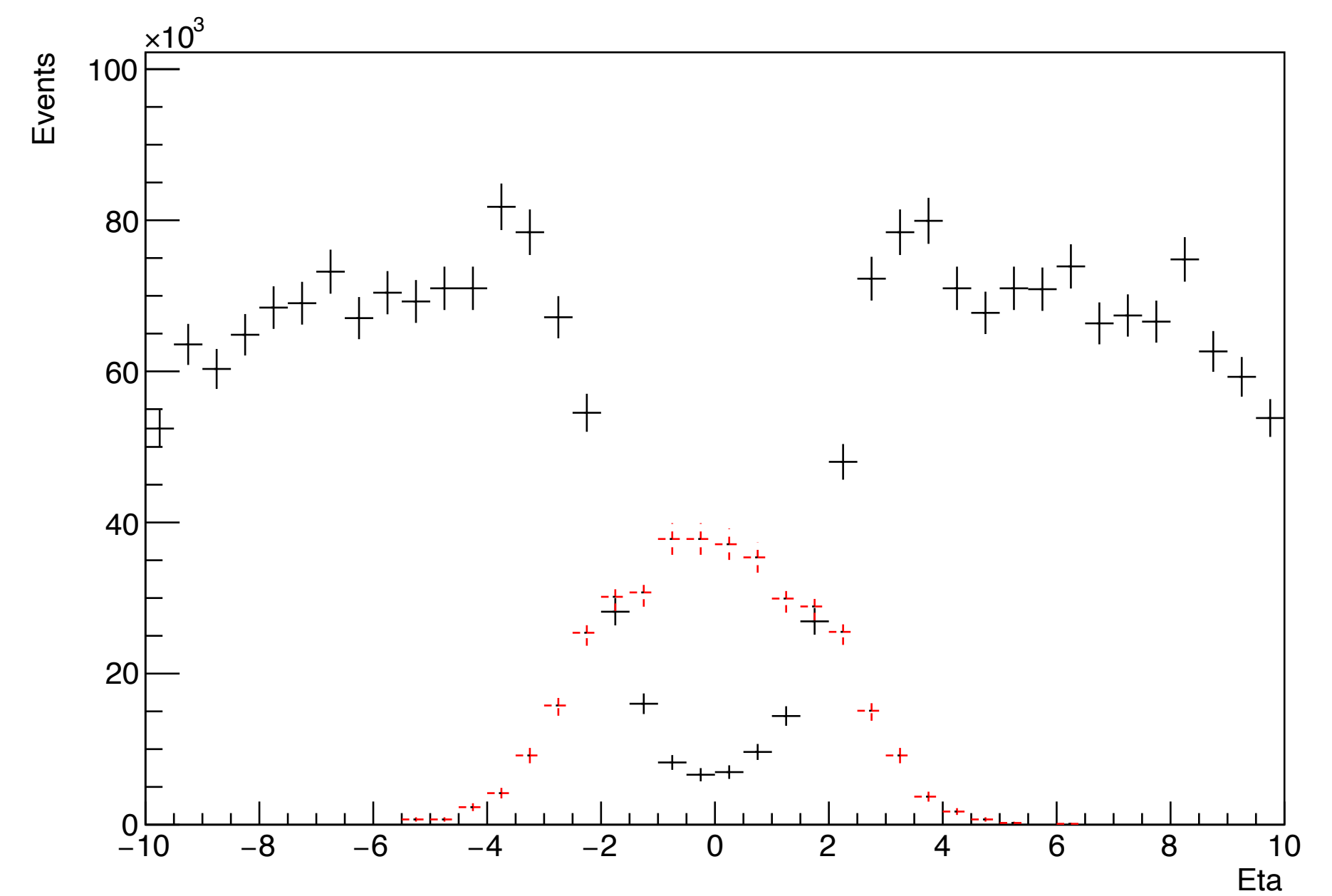
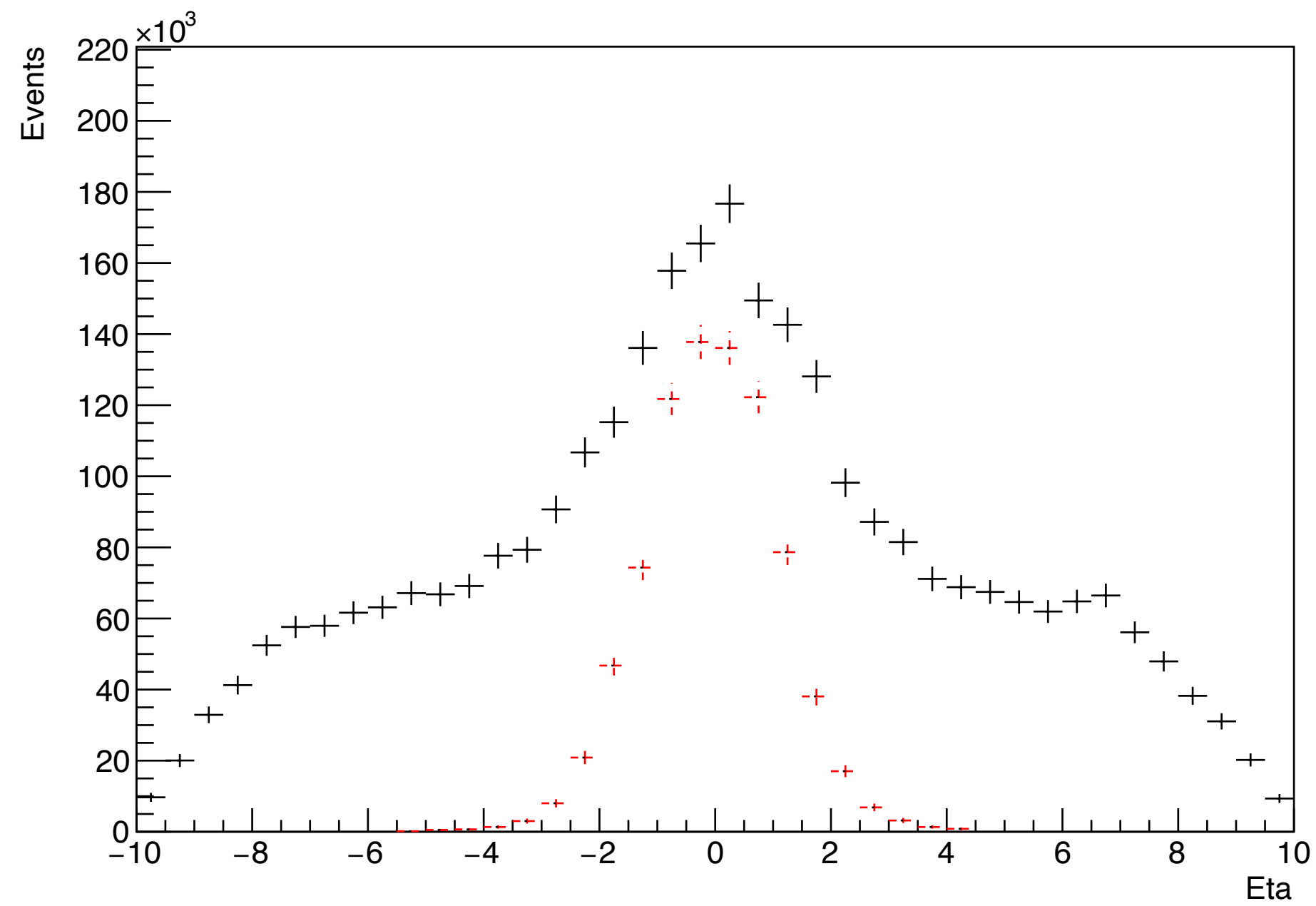
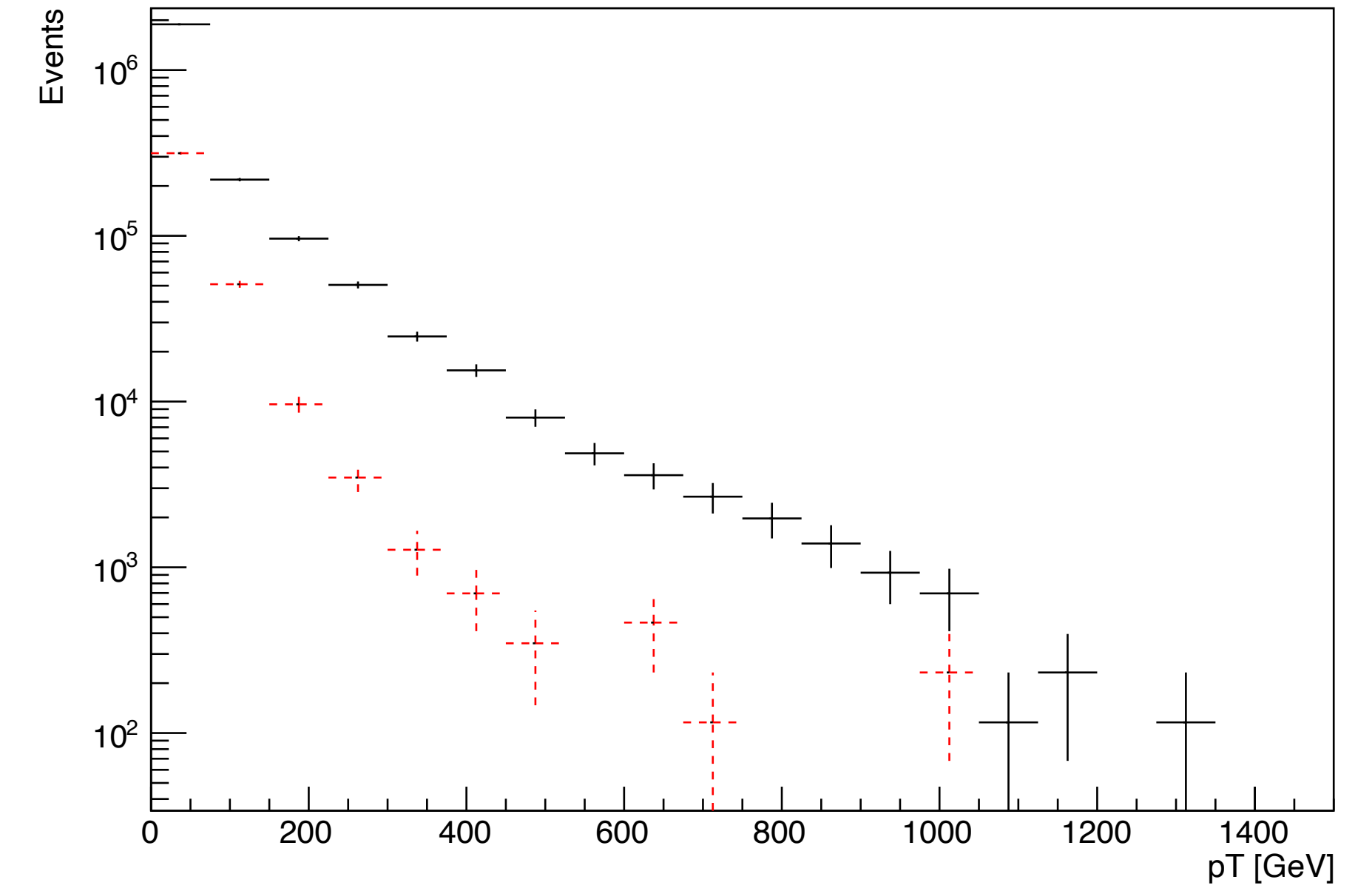
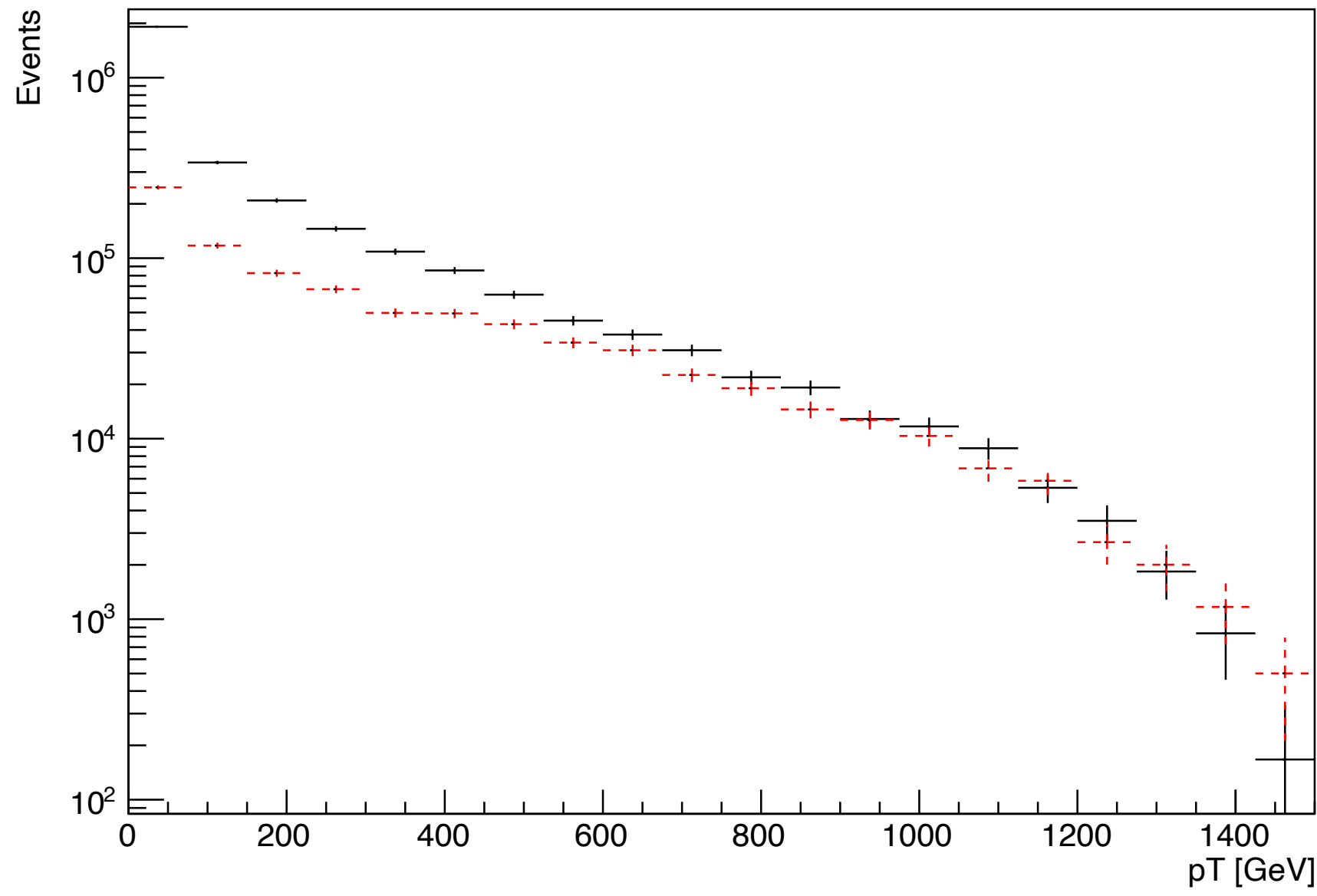


Muon Beam Remnants

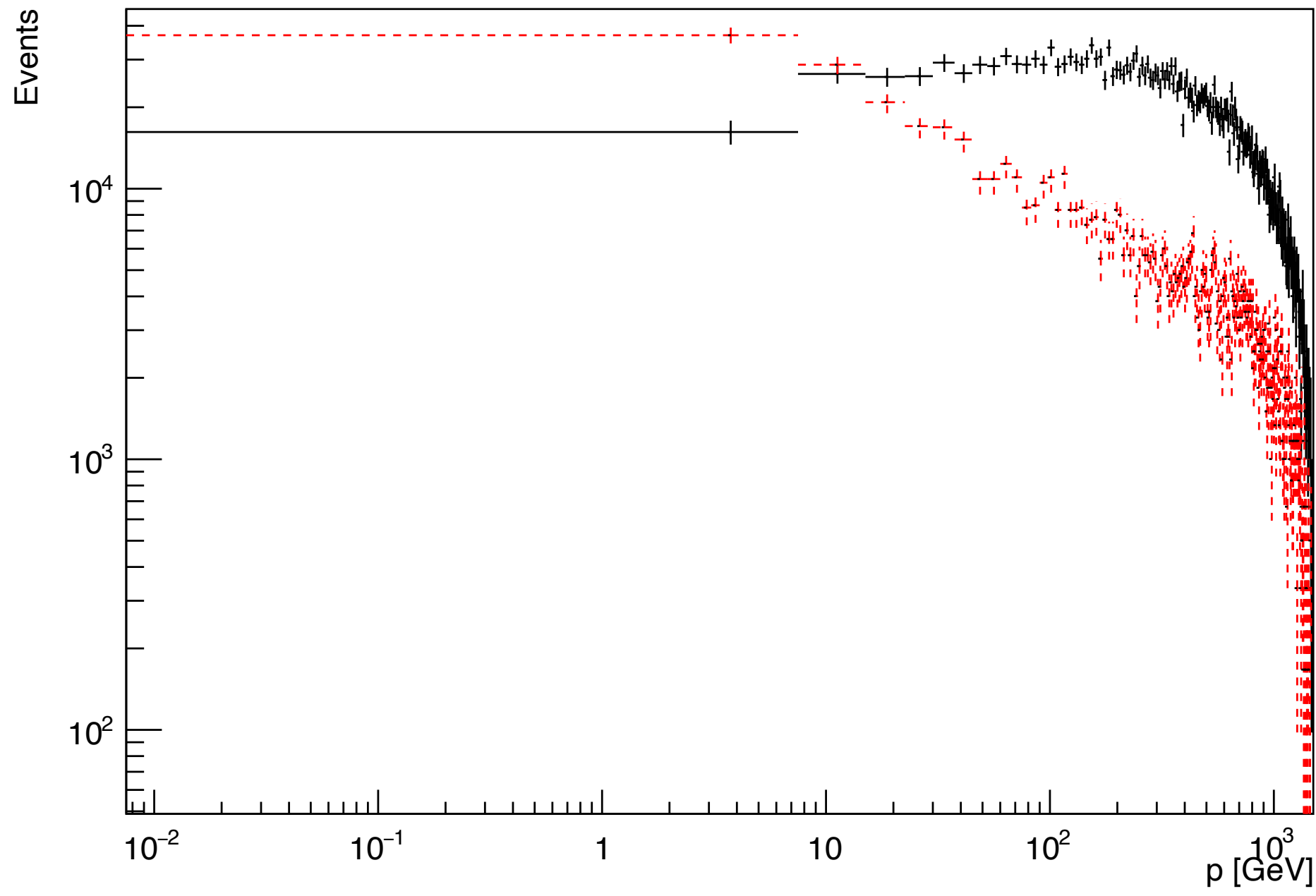
January 18th, 2022

3 TeV

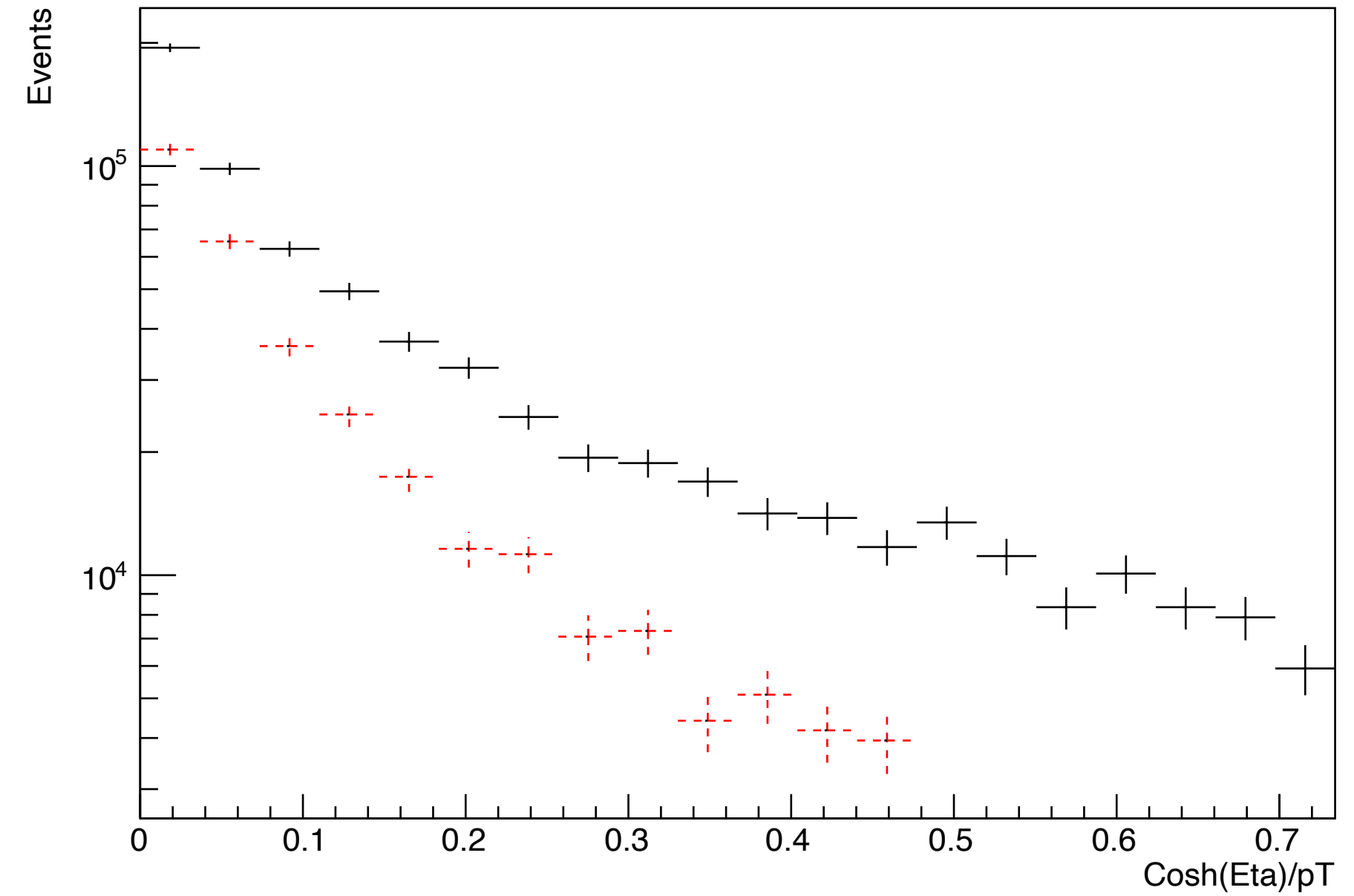
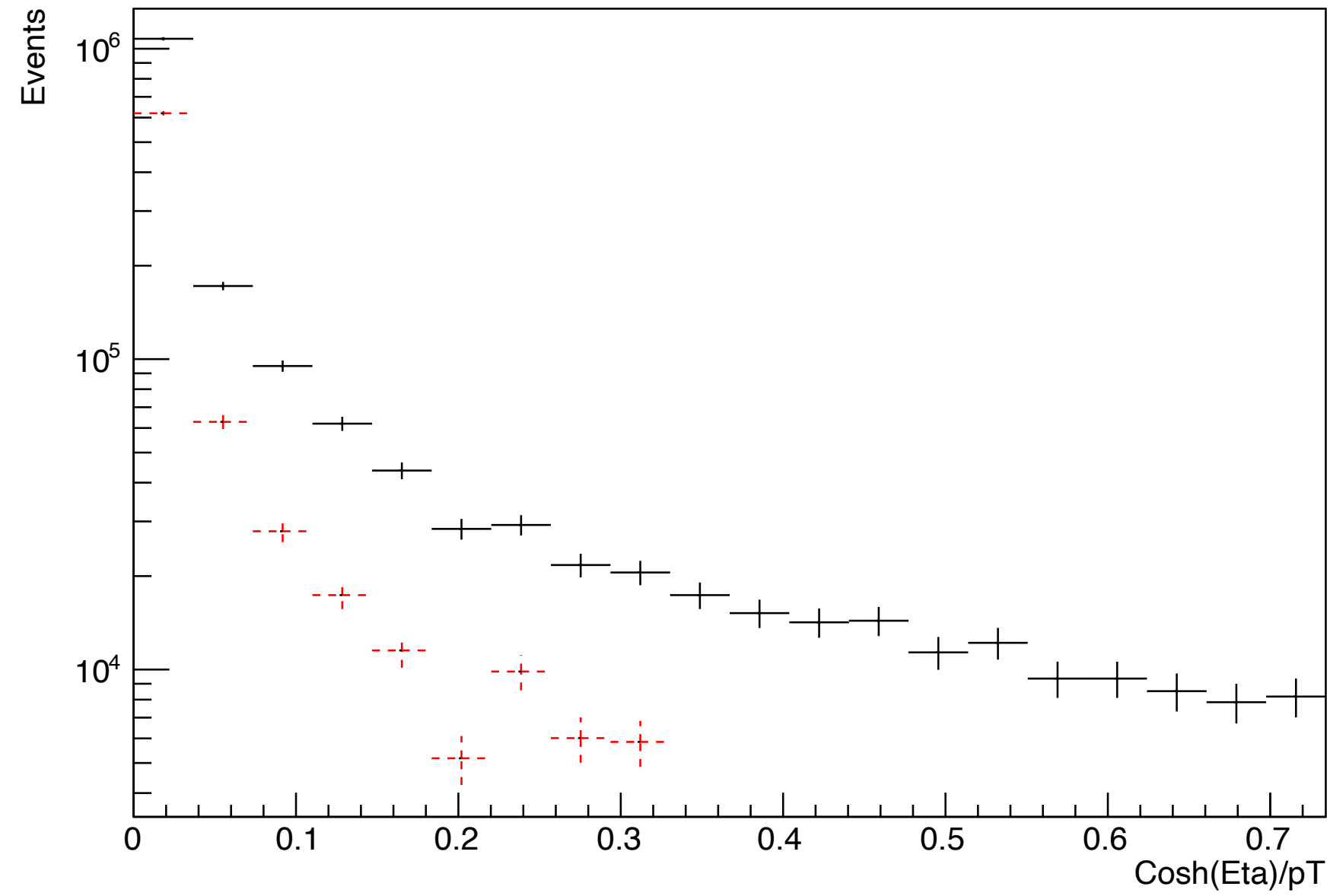
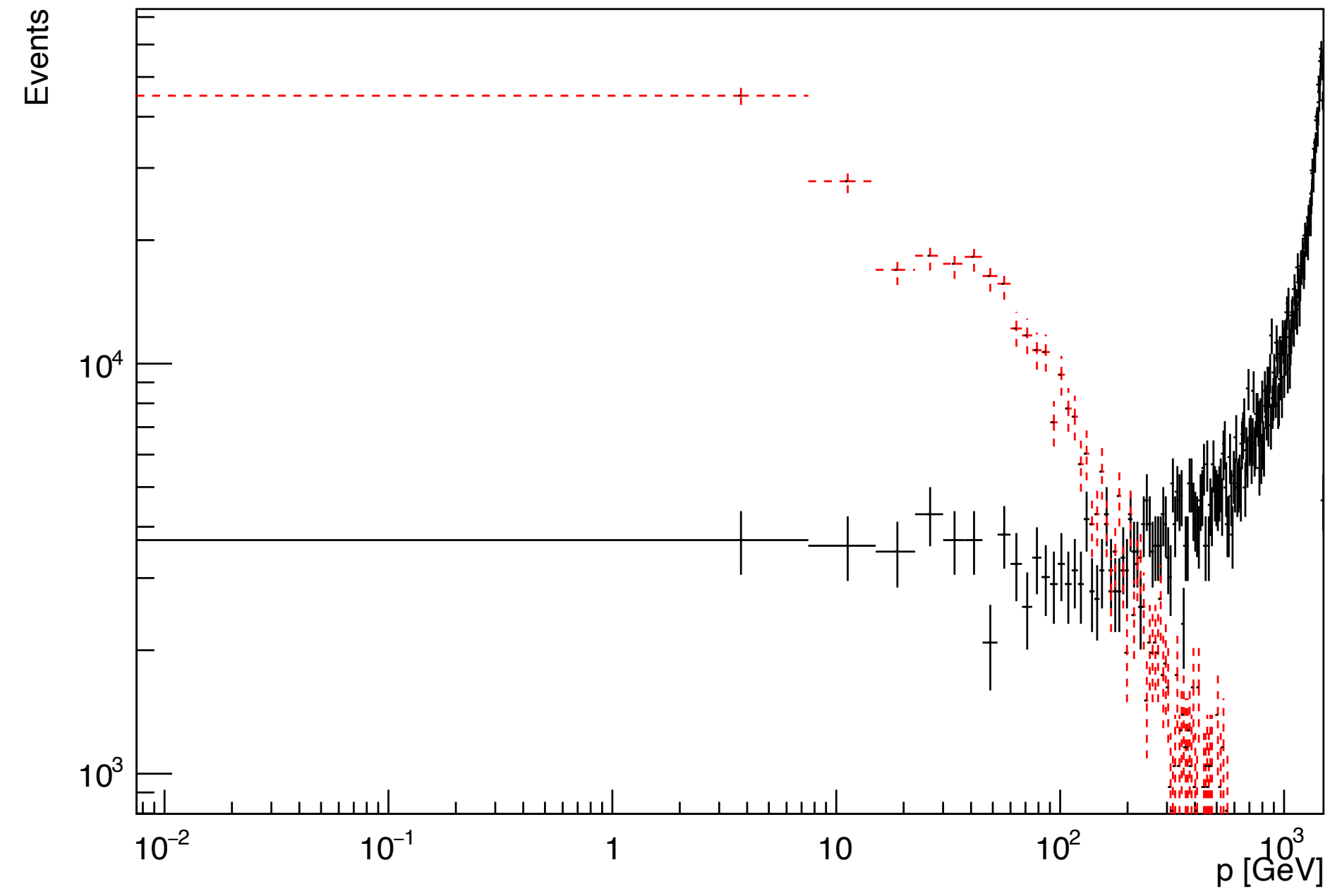
INT+QUAD (left) SM (right)
Beam Remnants (black)
Non-beam Remnants (red)



3 TeV

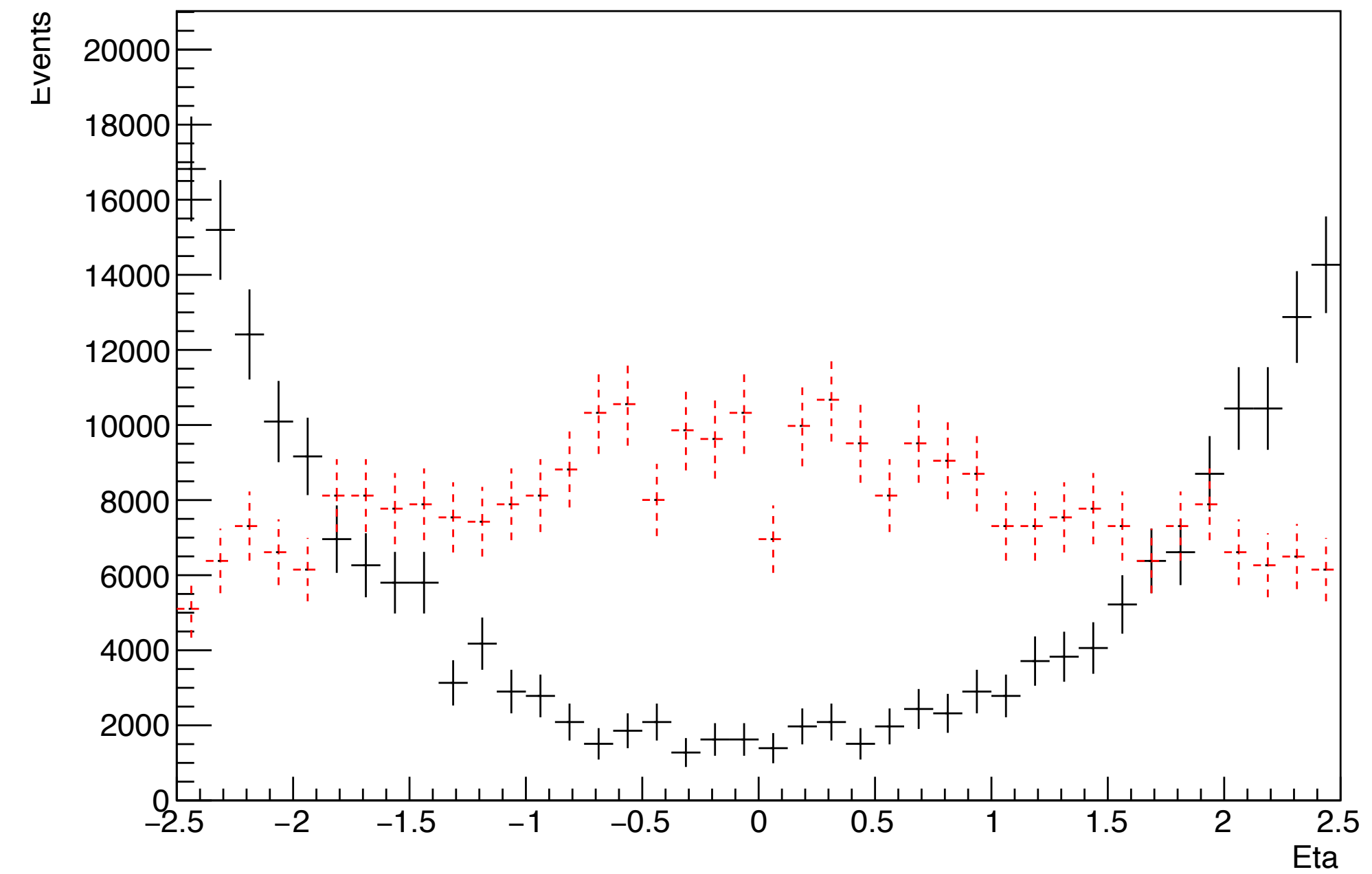
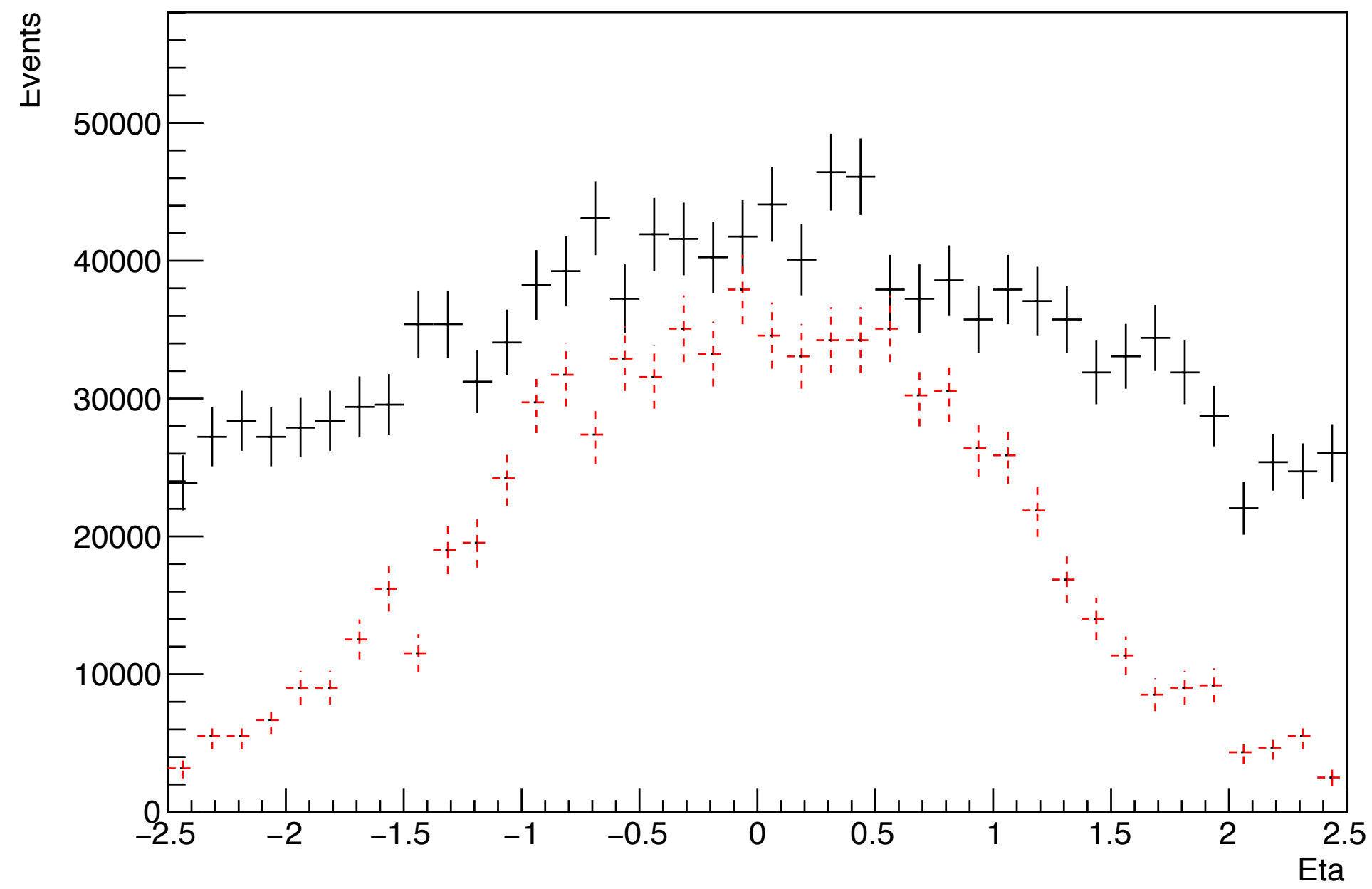
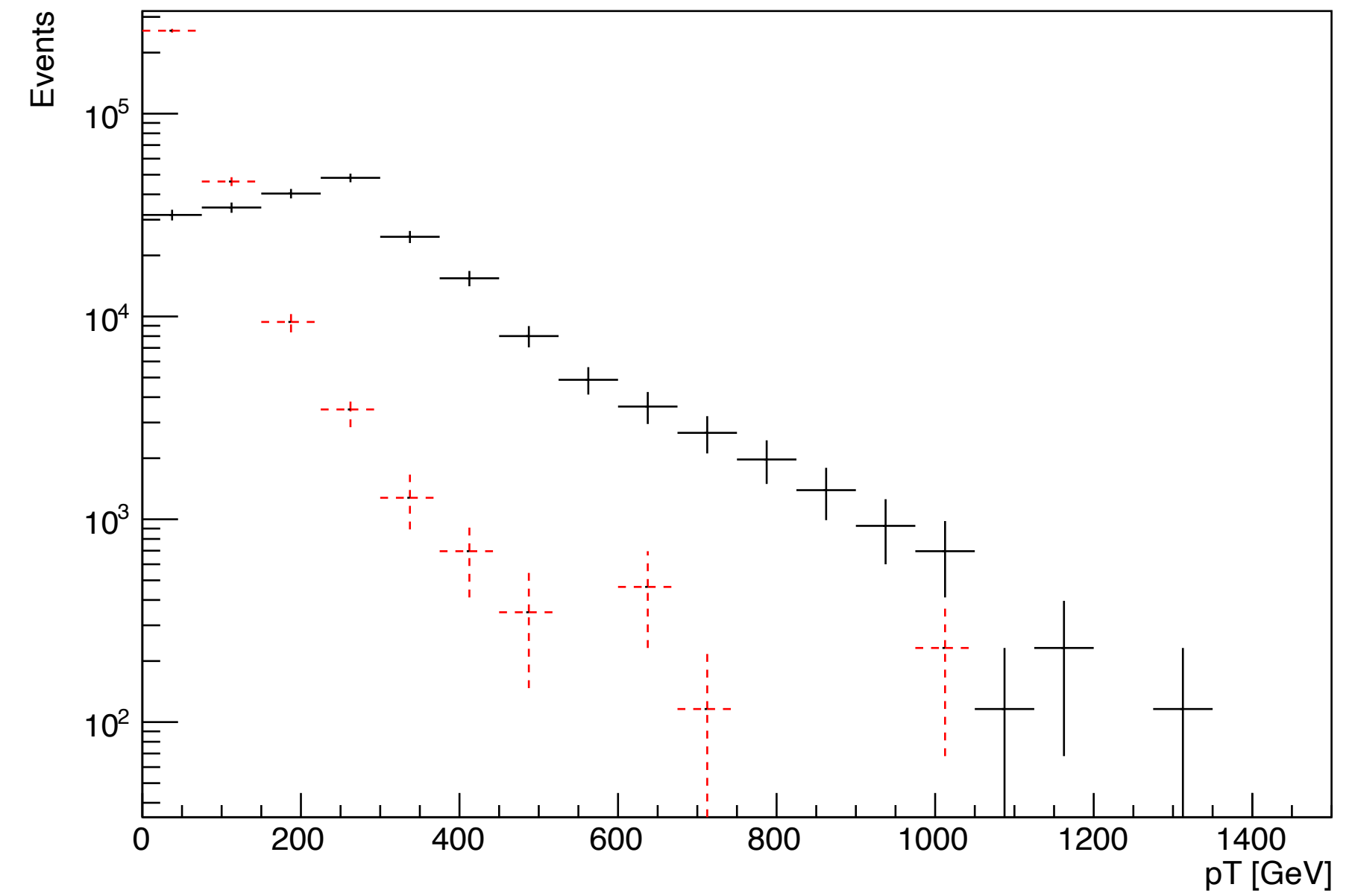
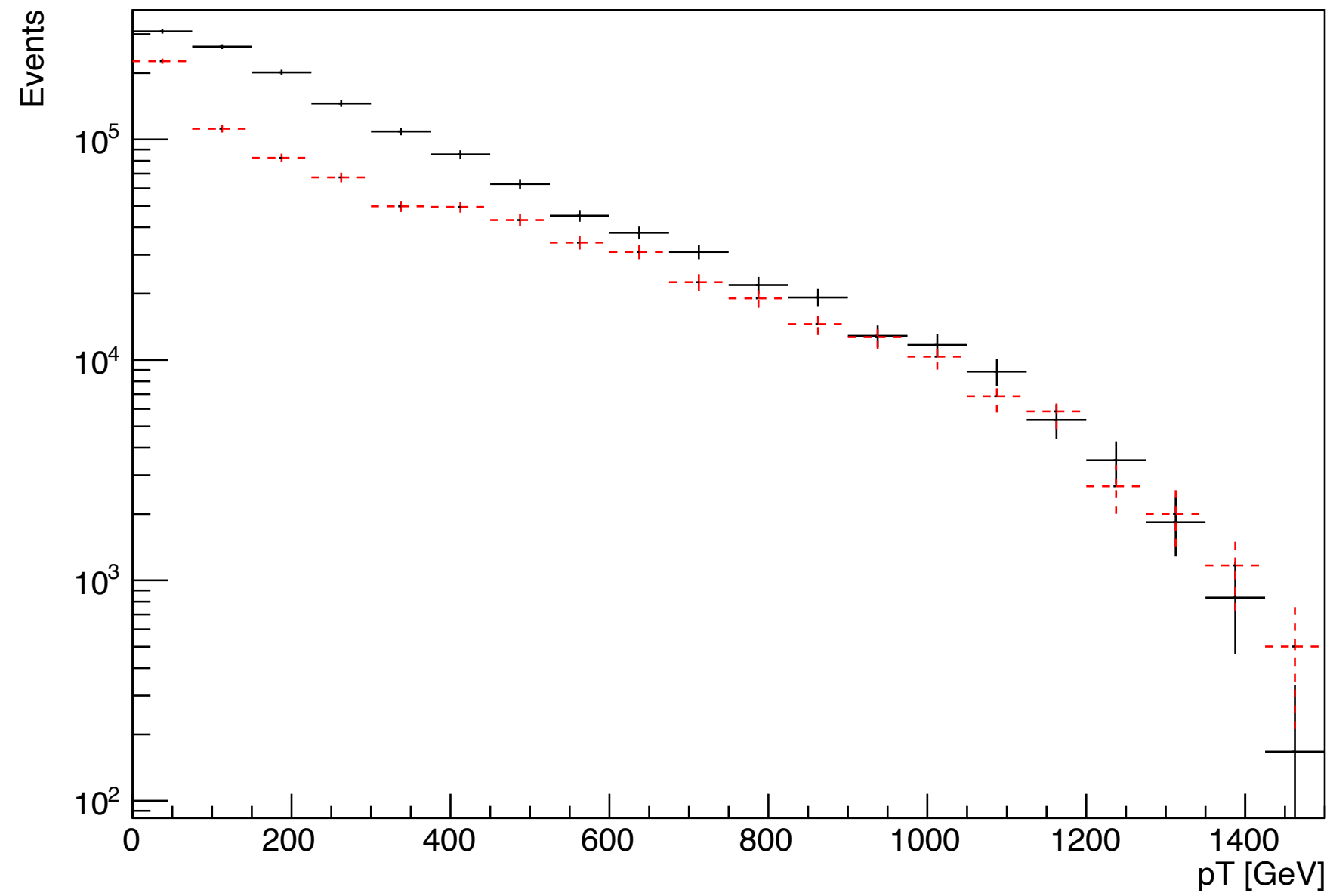


INT+QUAD (left) SM (right)
Beam Remnants (black)
Non-beam Remnants (red)



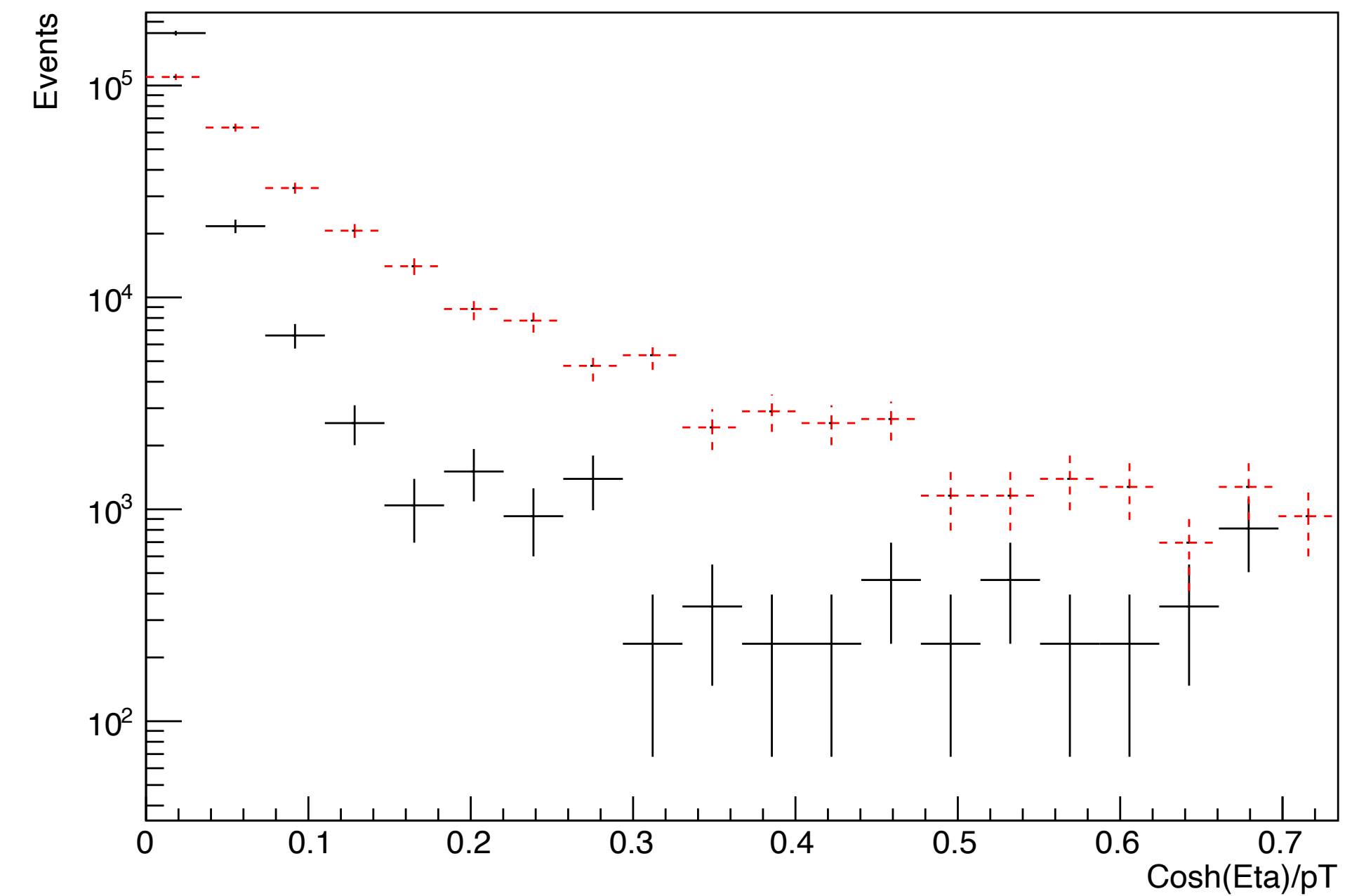
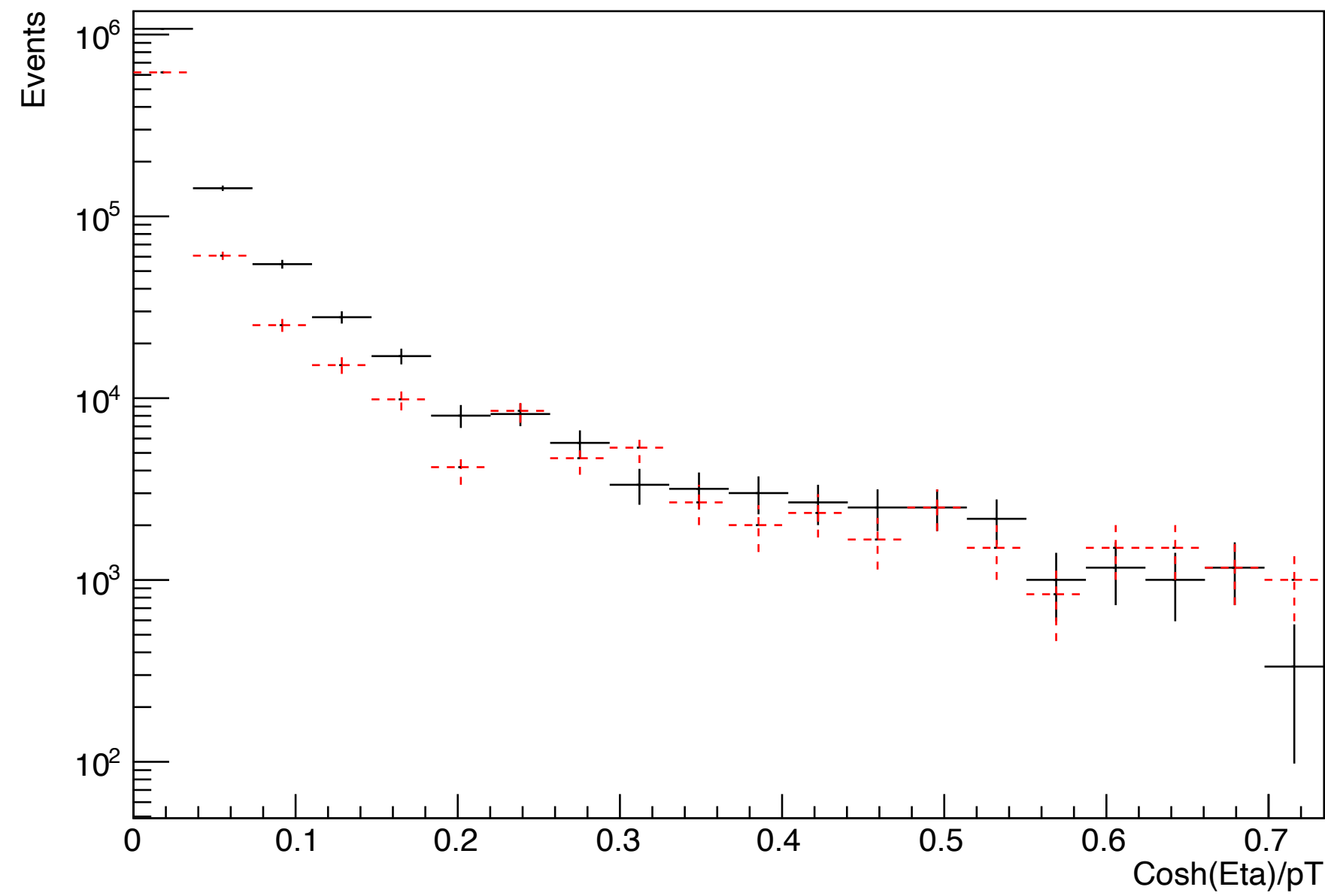
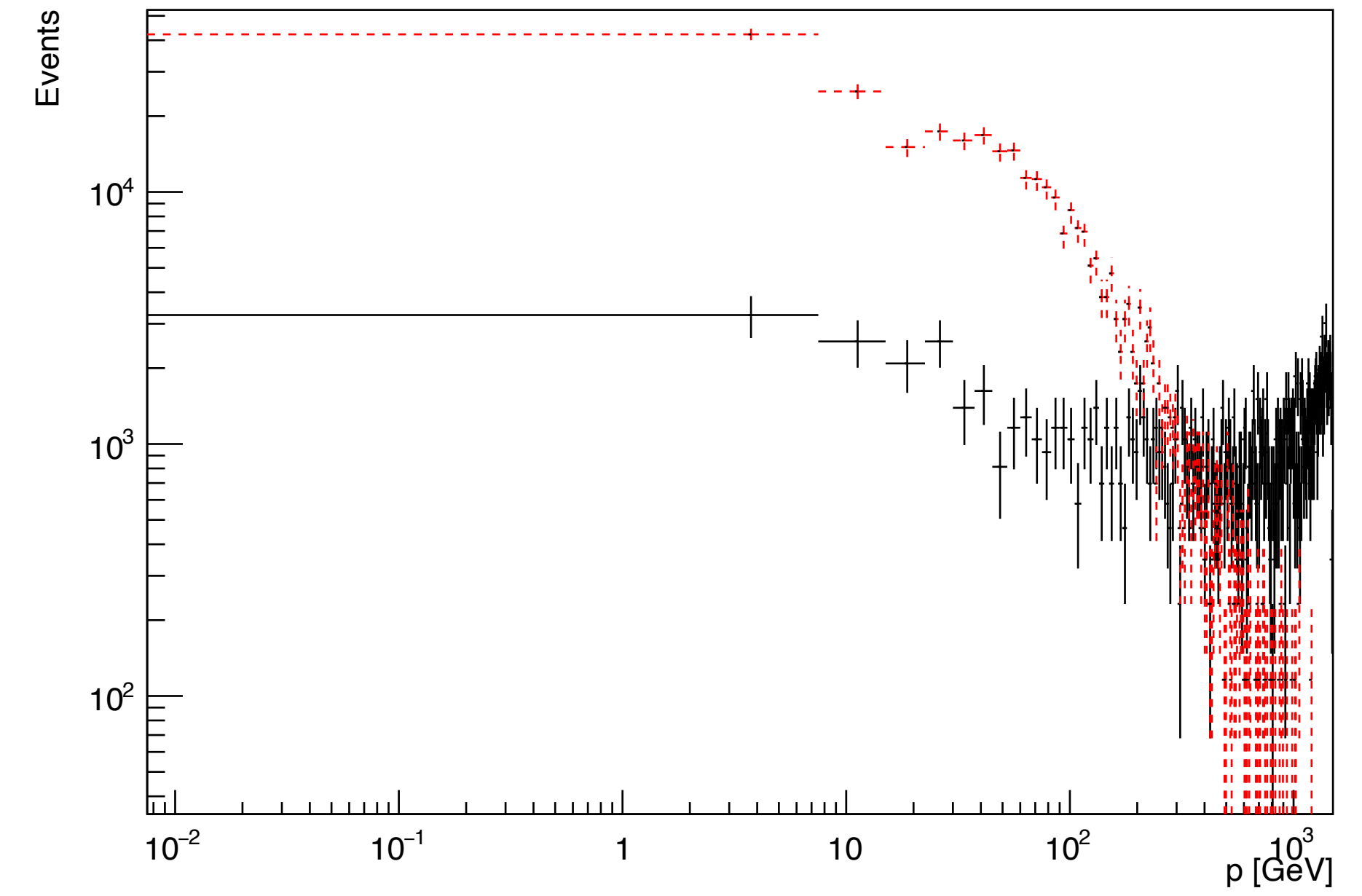
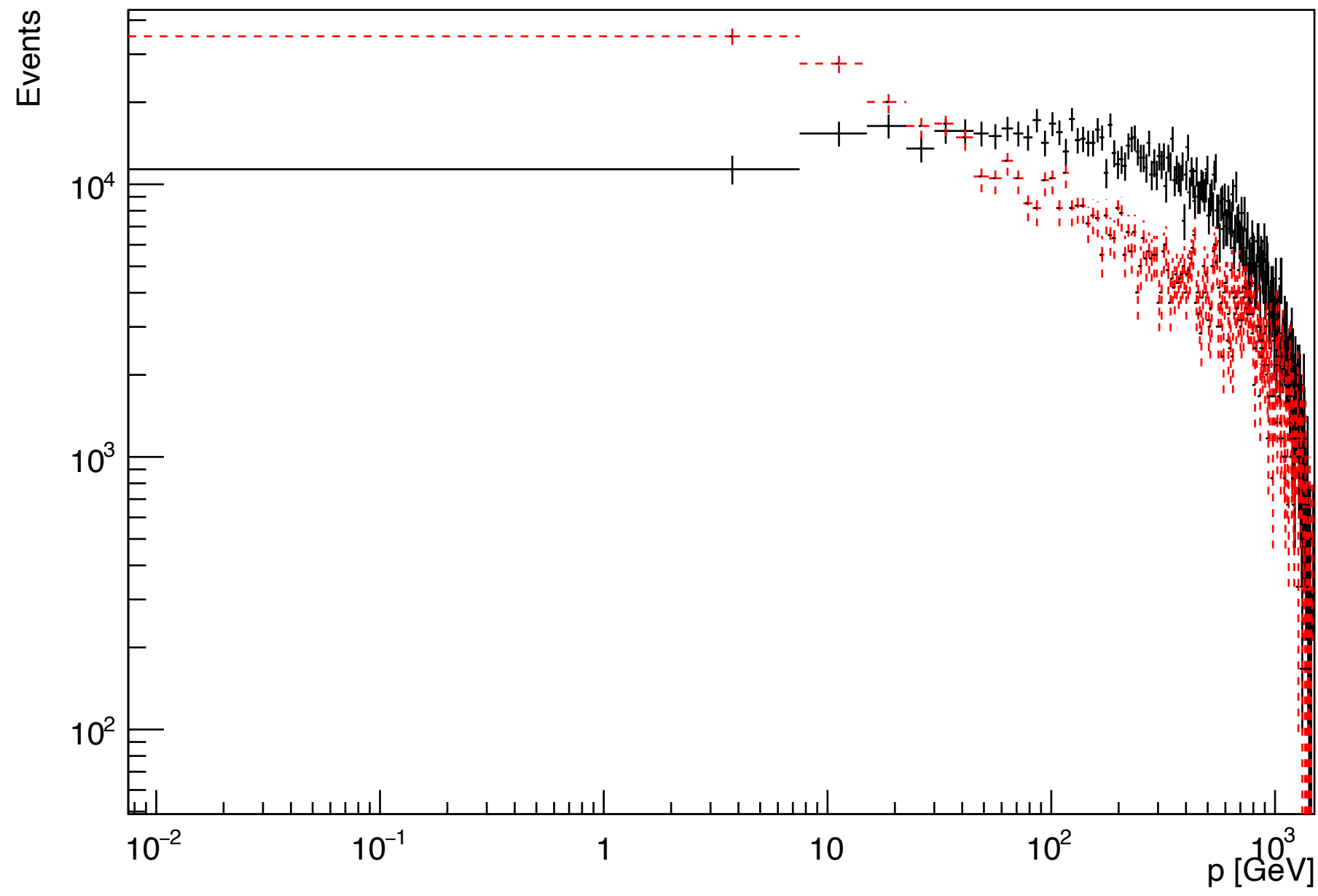
3 TeV Eta < 2.5

INT+QUAD (left) SM (right)
Beam Remnants (black)
Non-beam Remnants (red)



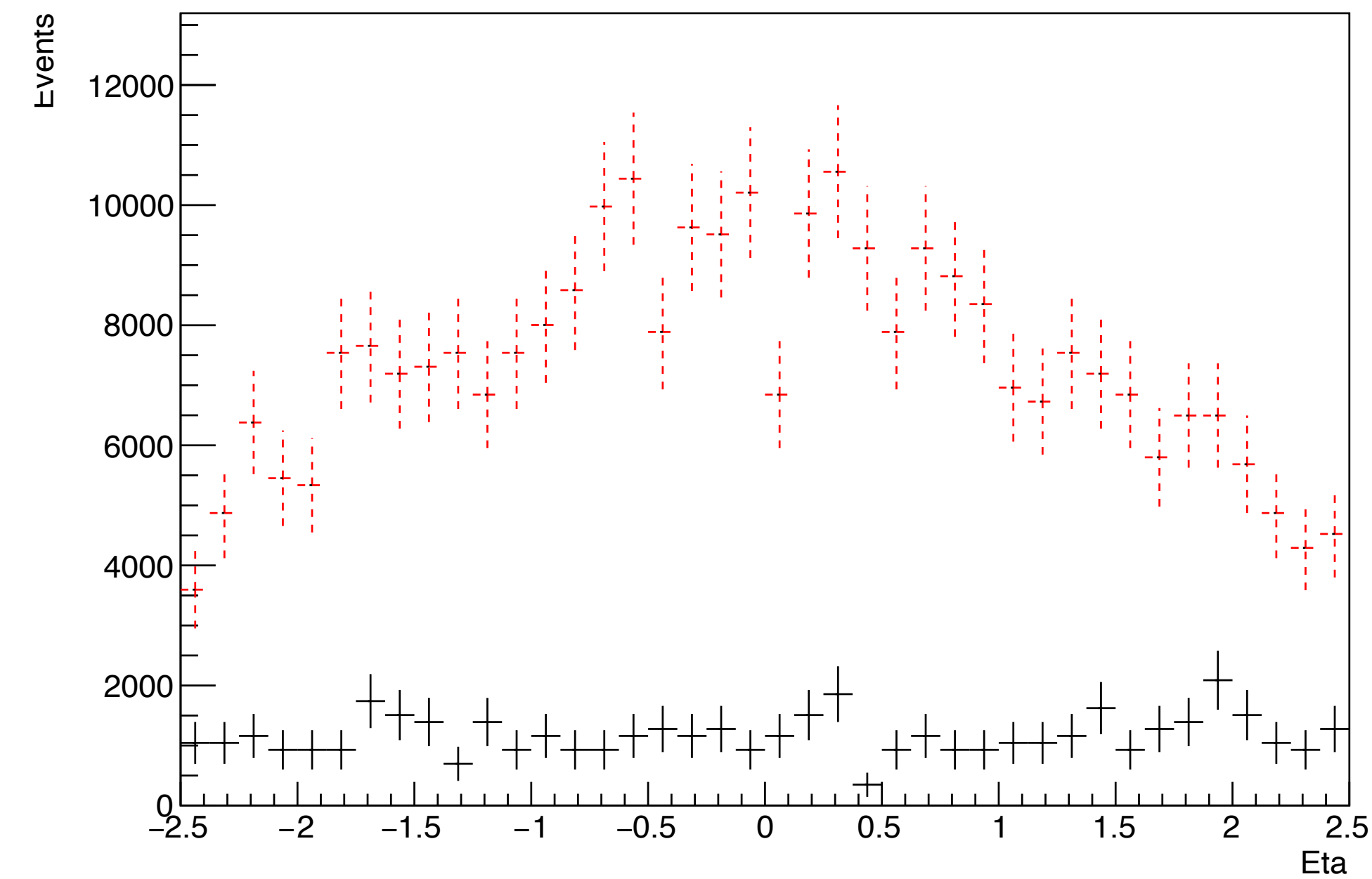
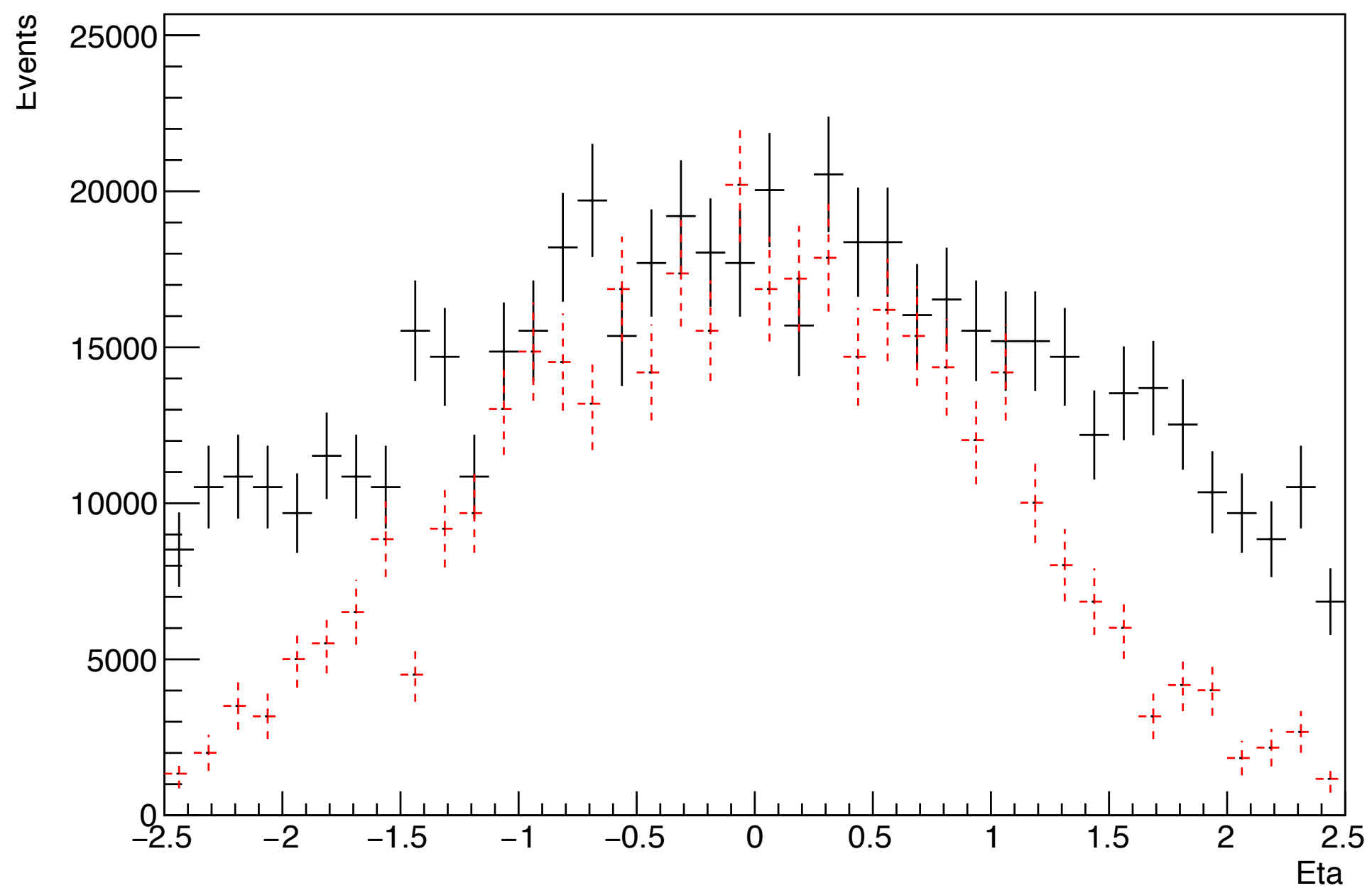
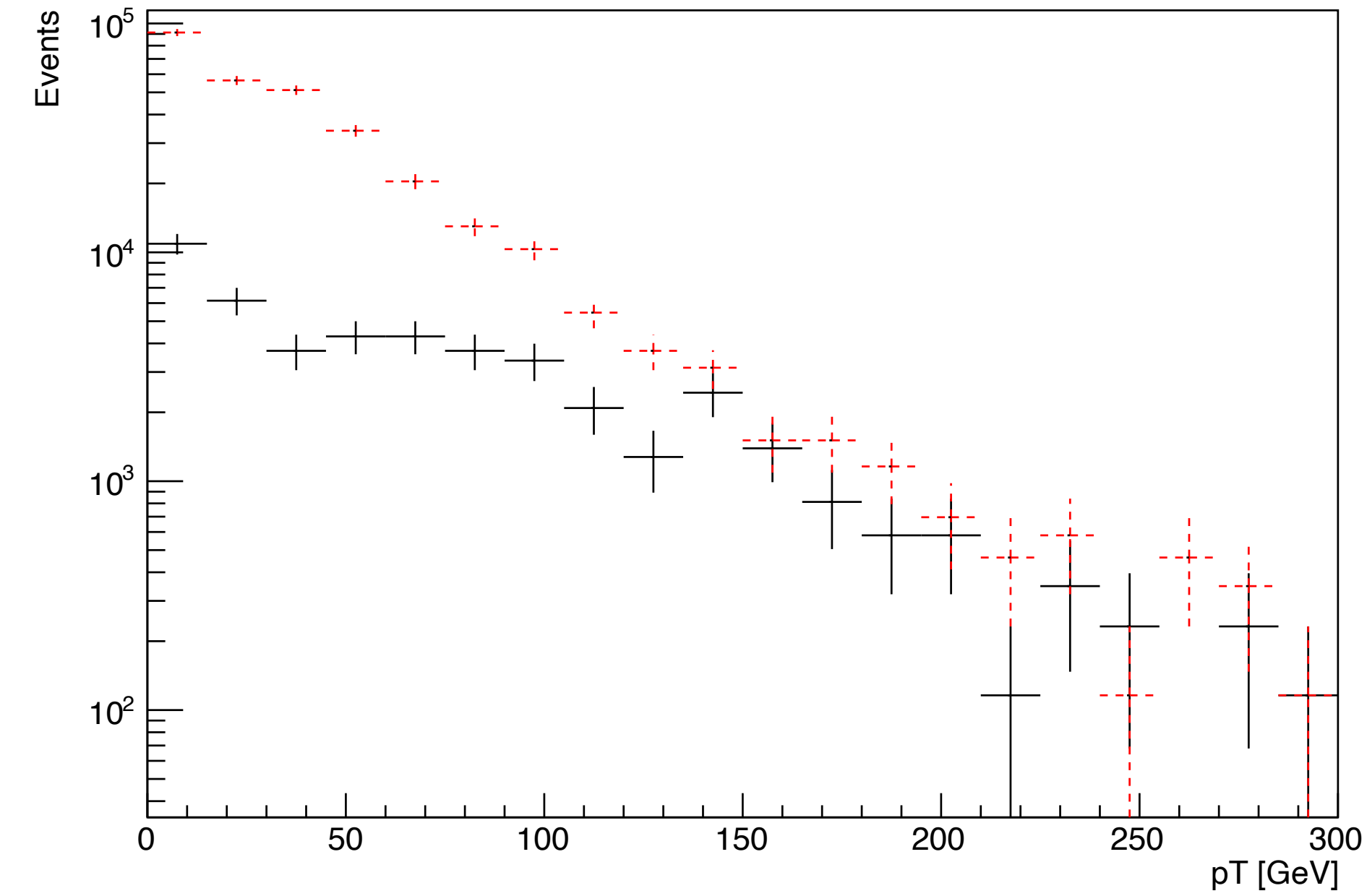
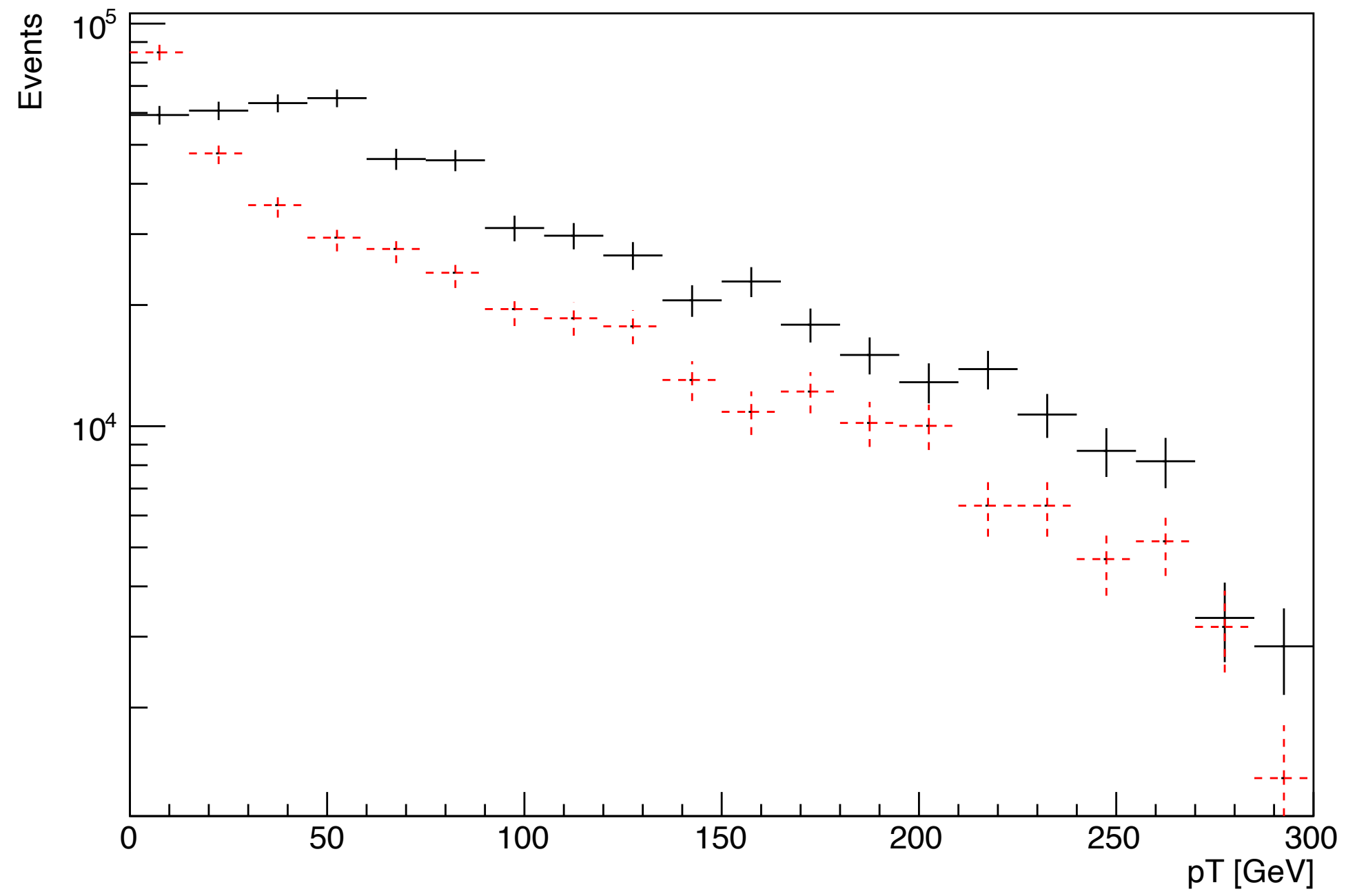
3 TeV Eta < 2.5

INT+QUAD (left) SM (right)
Beam Remnants (black)
Non-beam Remnants (red)



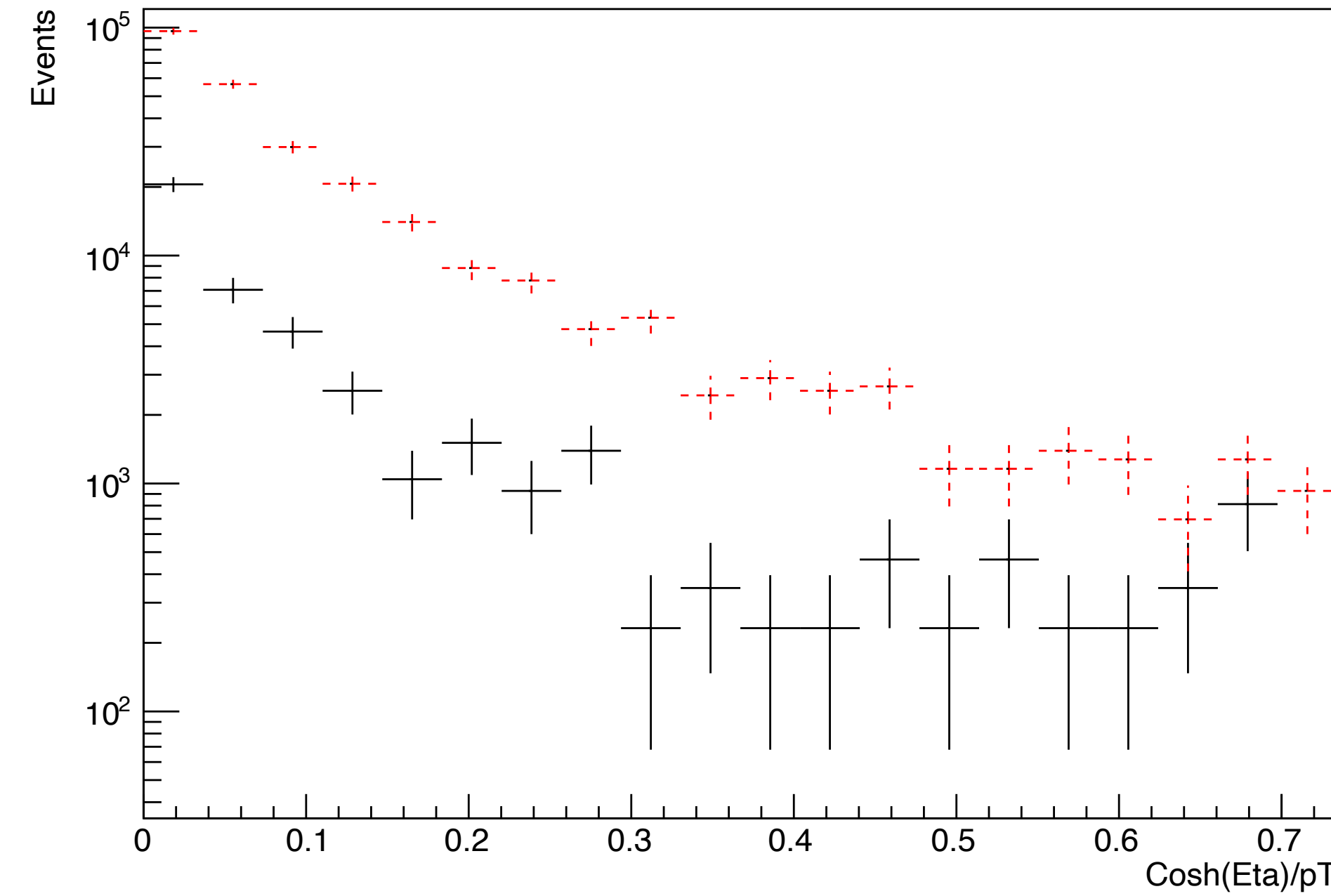
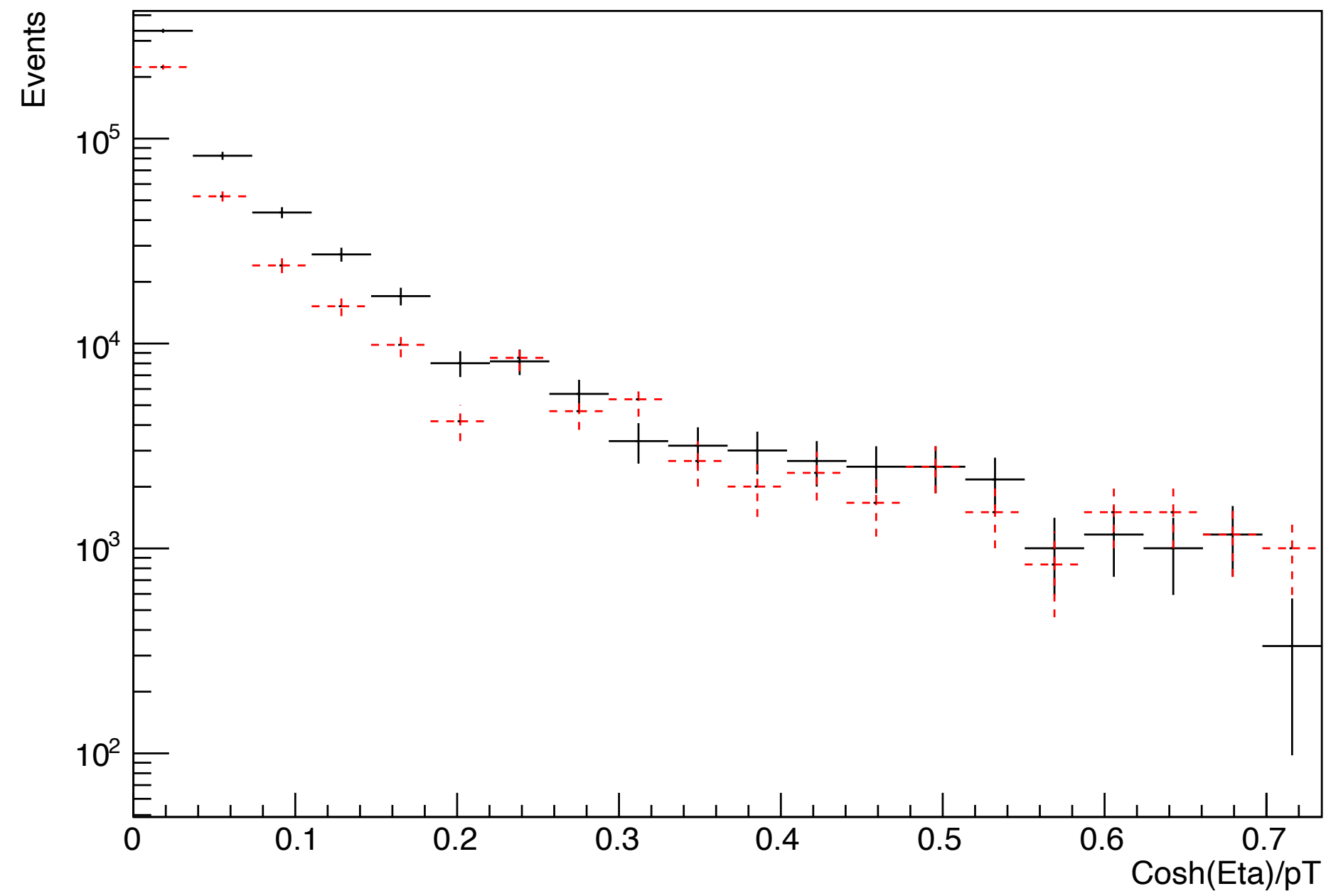
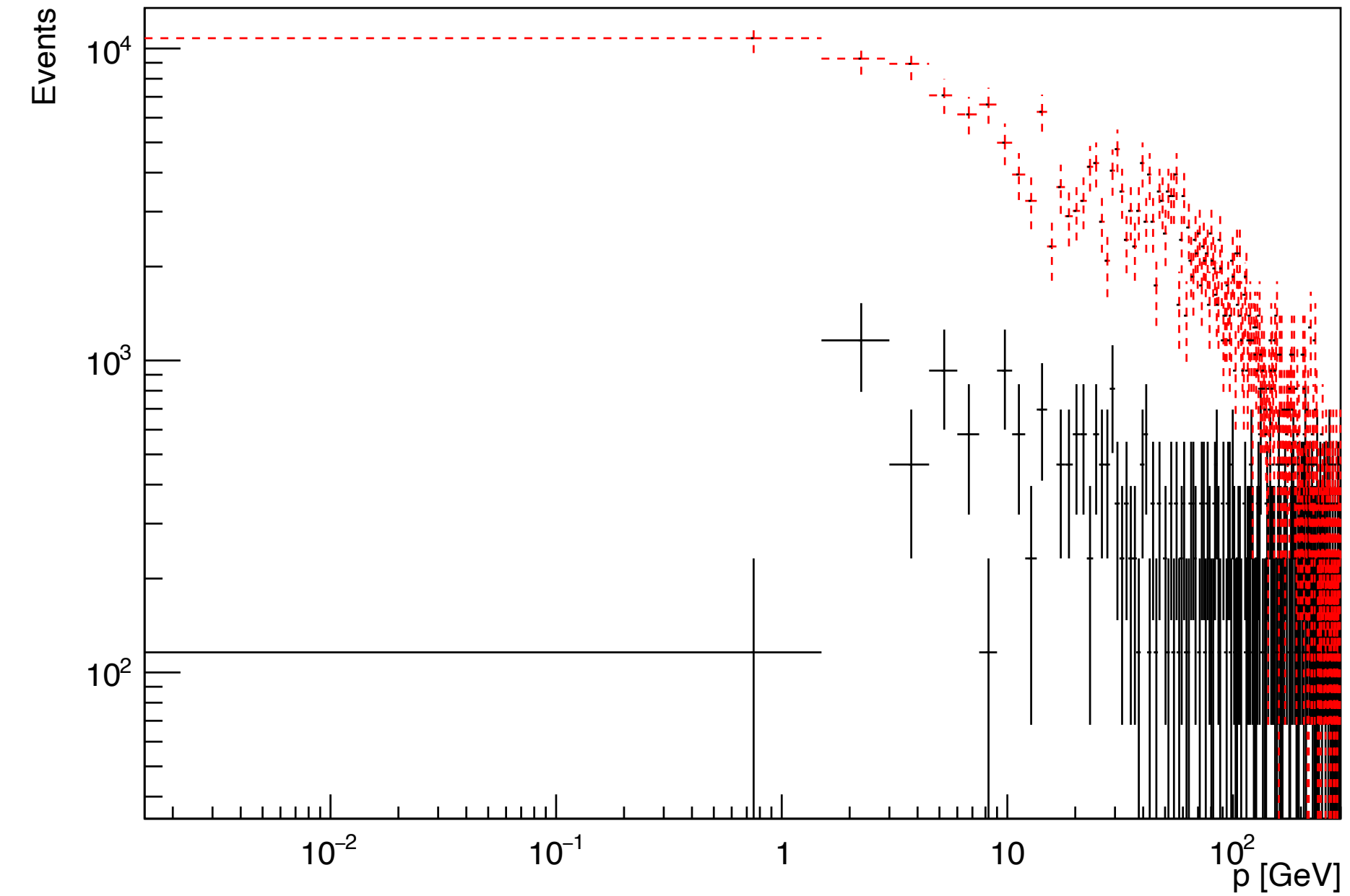
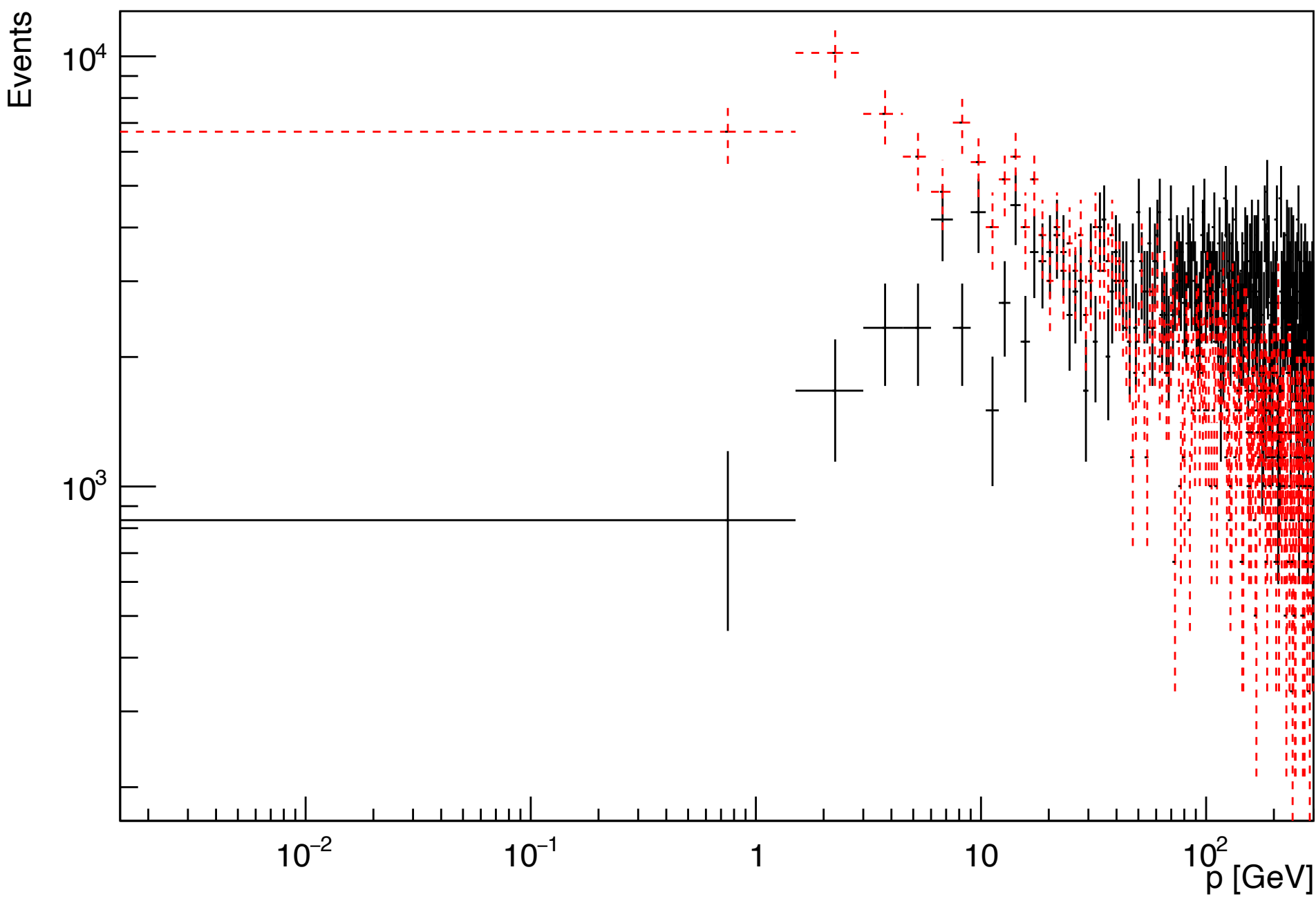
3 TeV Eta < 2.5 & P < 300 GeV

INT+QUAD (left) SM (right)
Beam Remnants (black)
Non-beam Remnants (red)



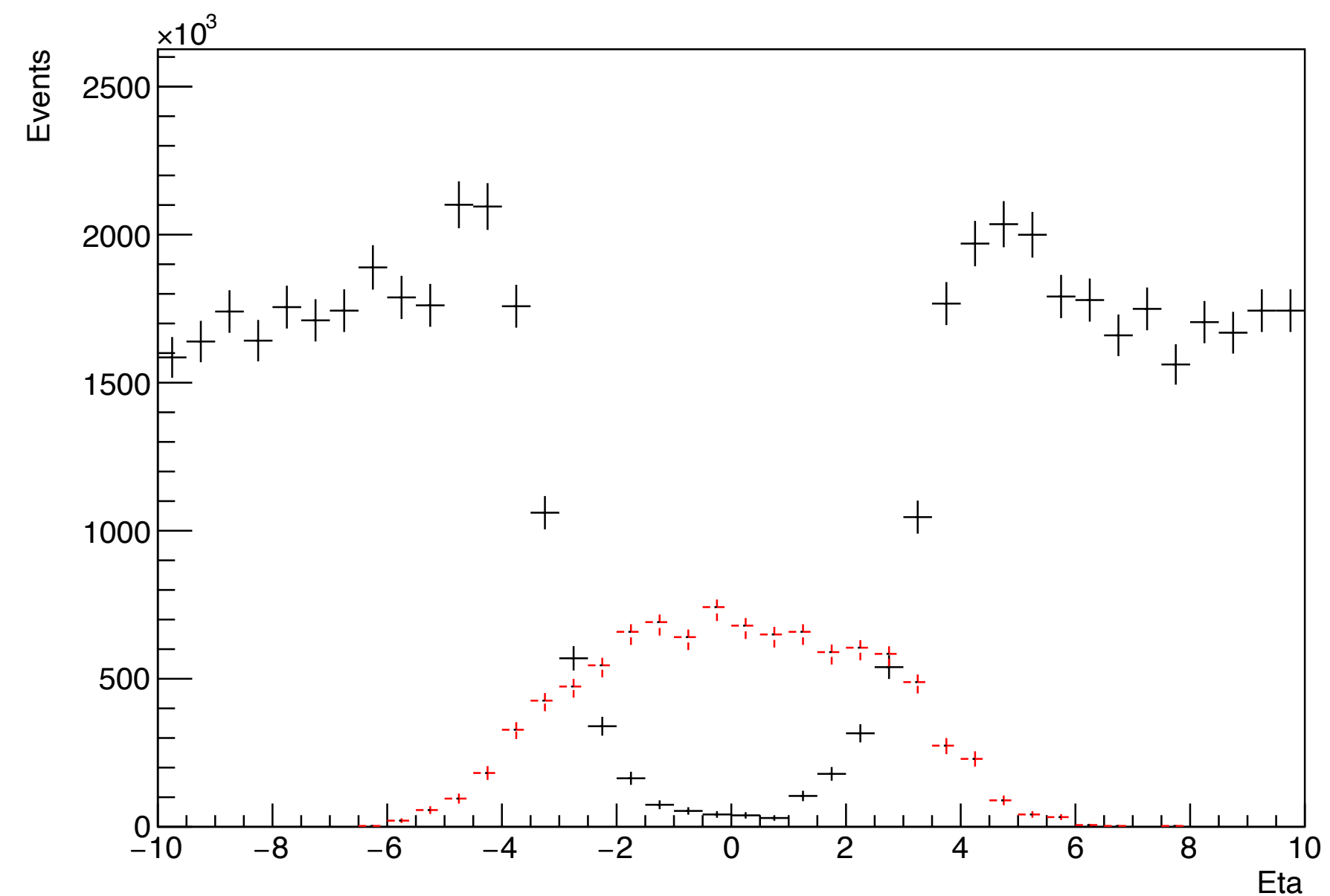
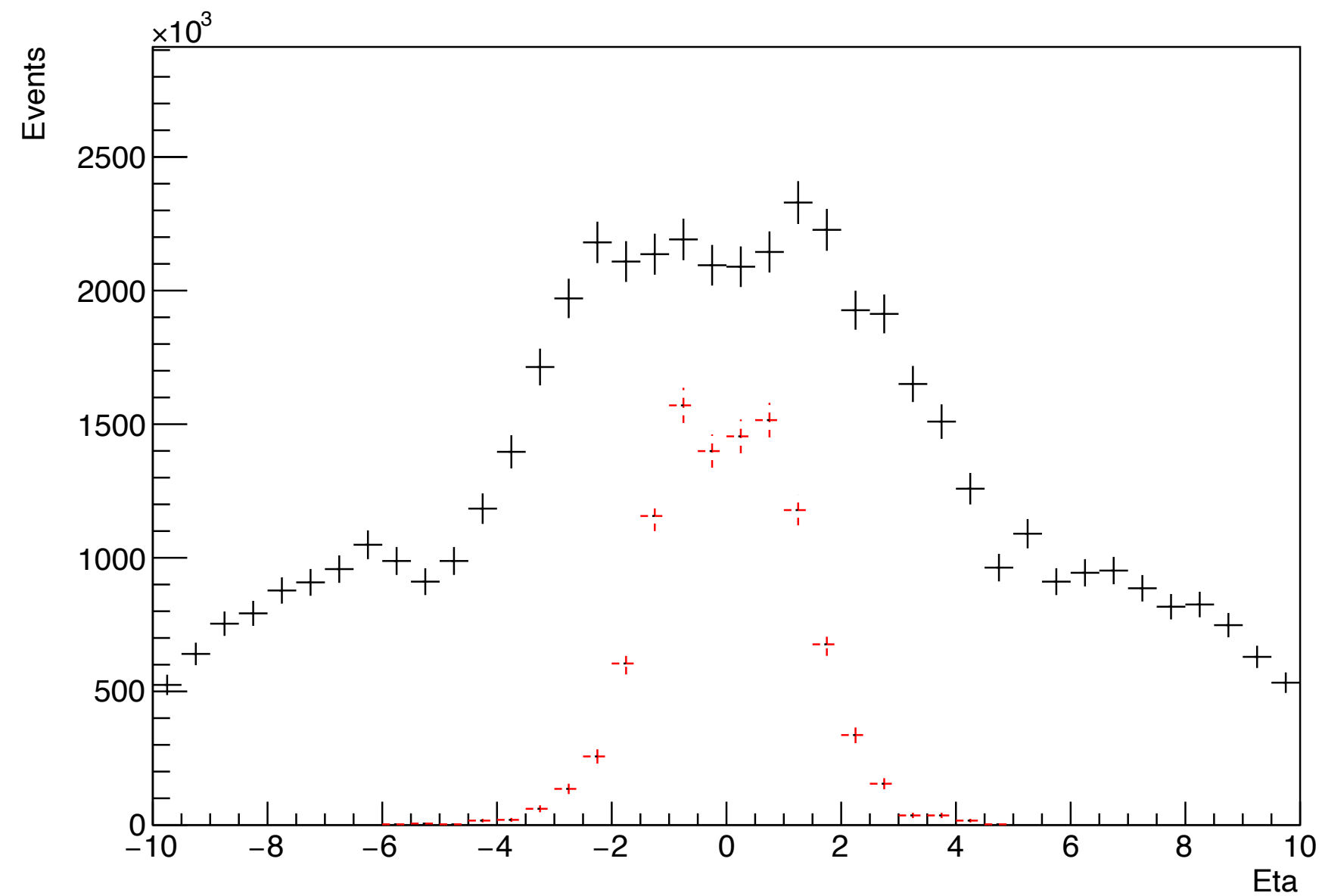
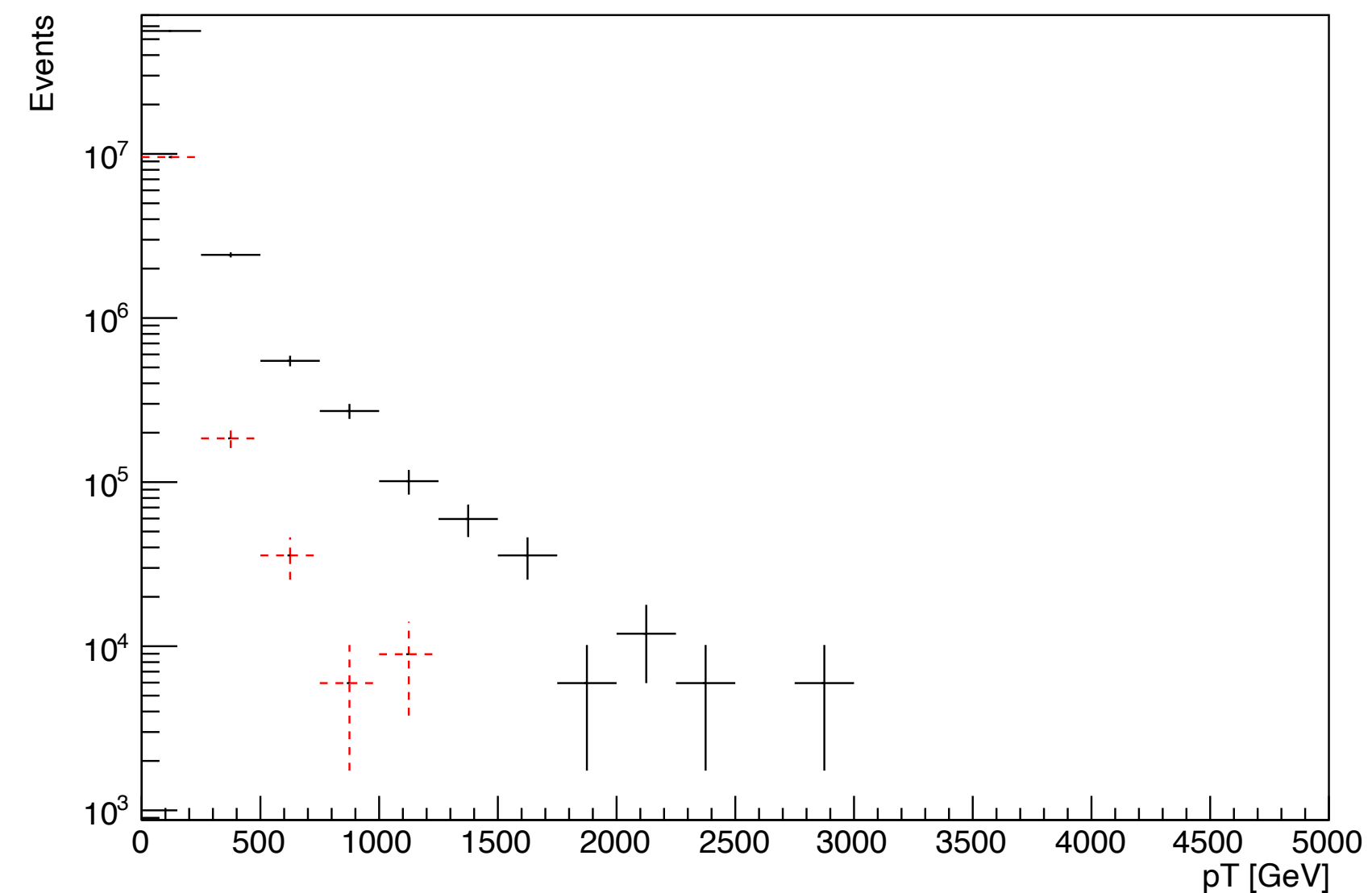
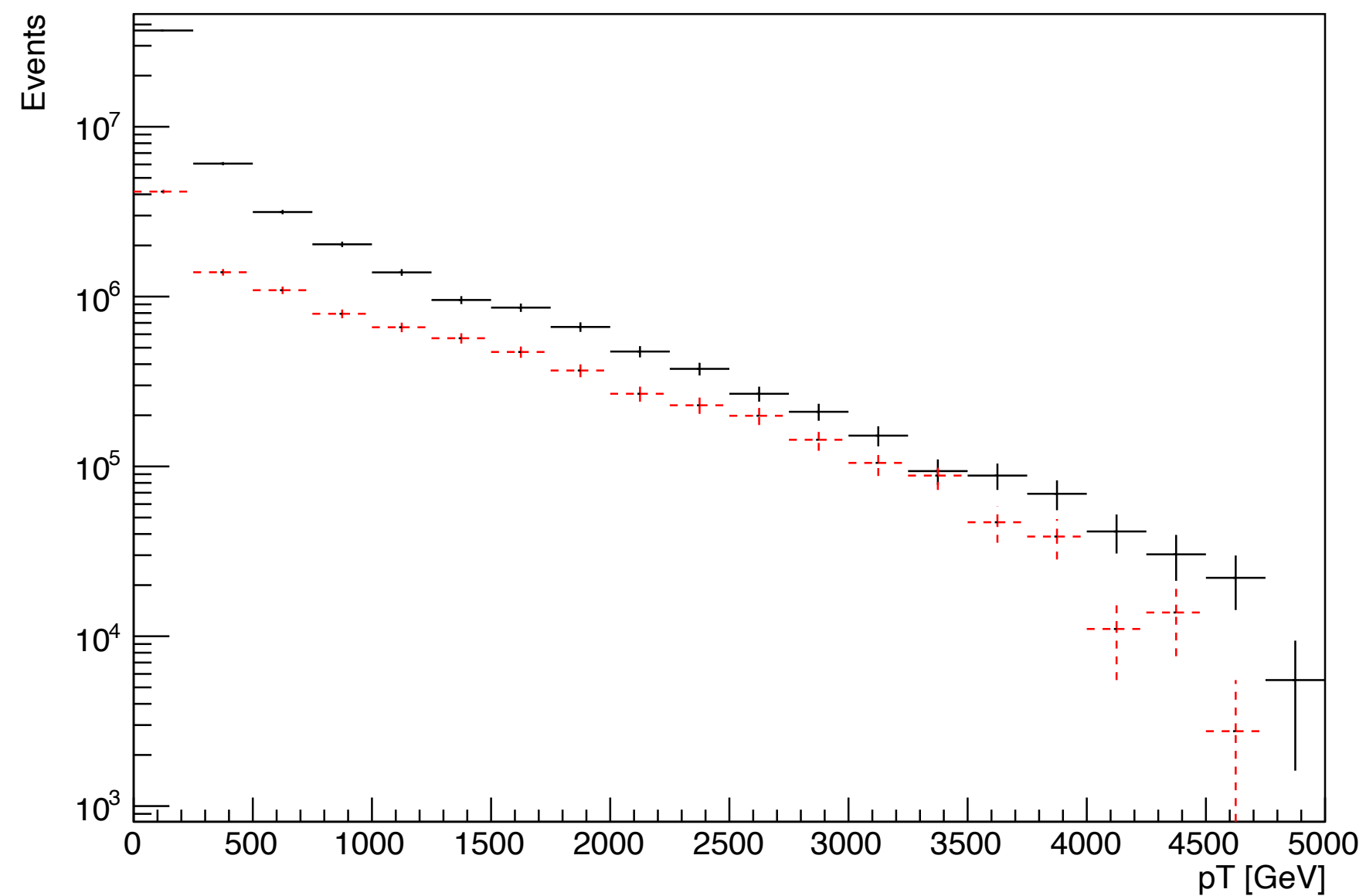
3 TeV Eta < 2.5 & P < 300 GeV

INT+QUAD (left) SM (right)
Beam Remnants (black)
Non-beam Remnants (red)



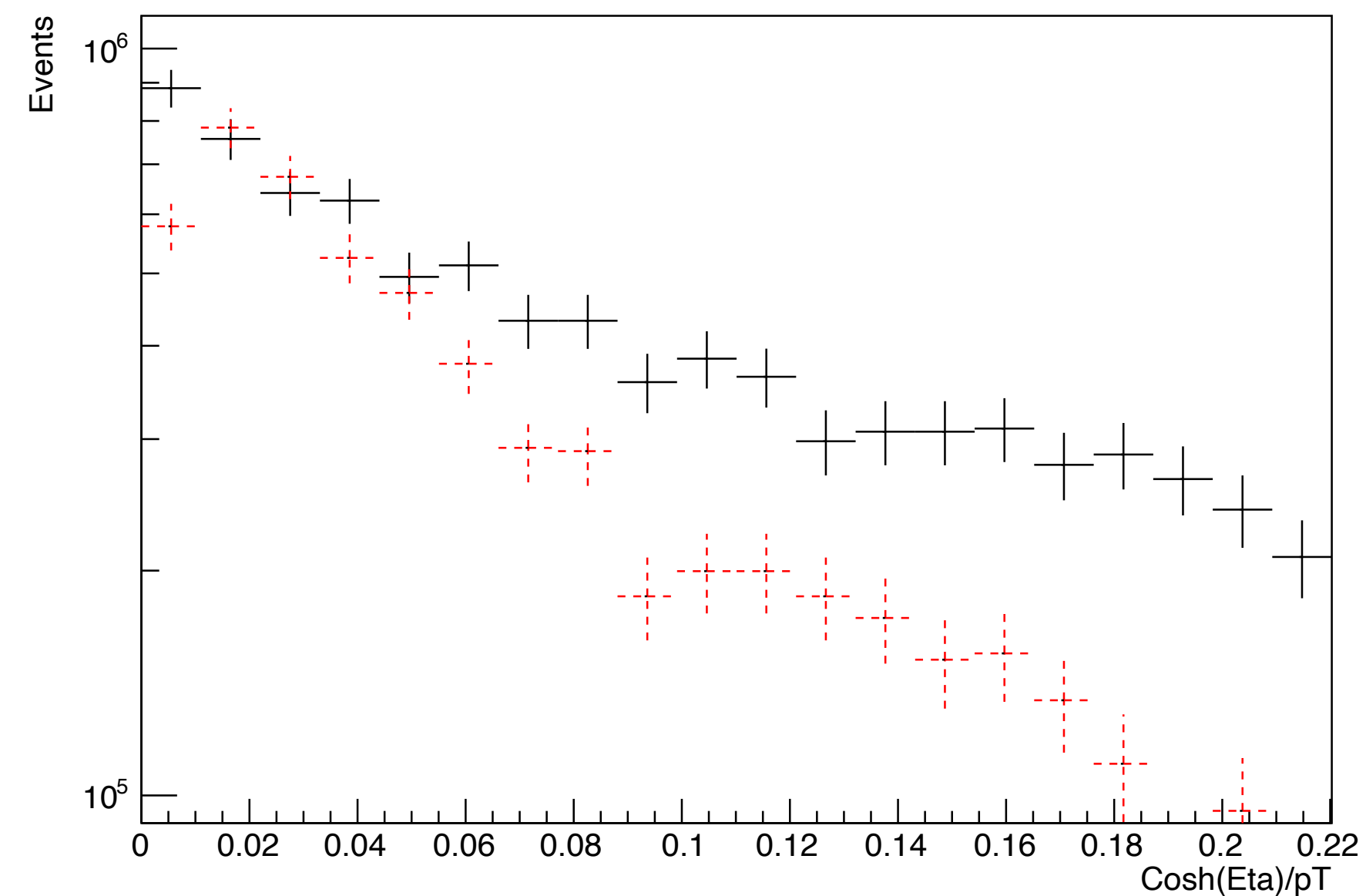
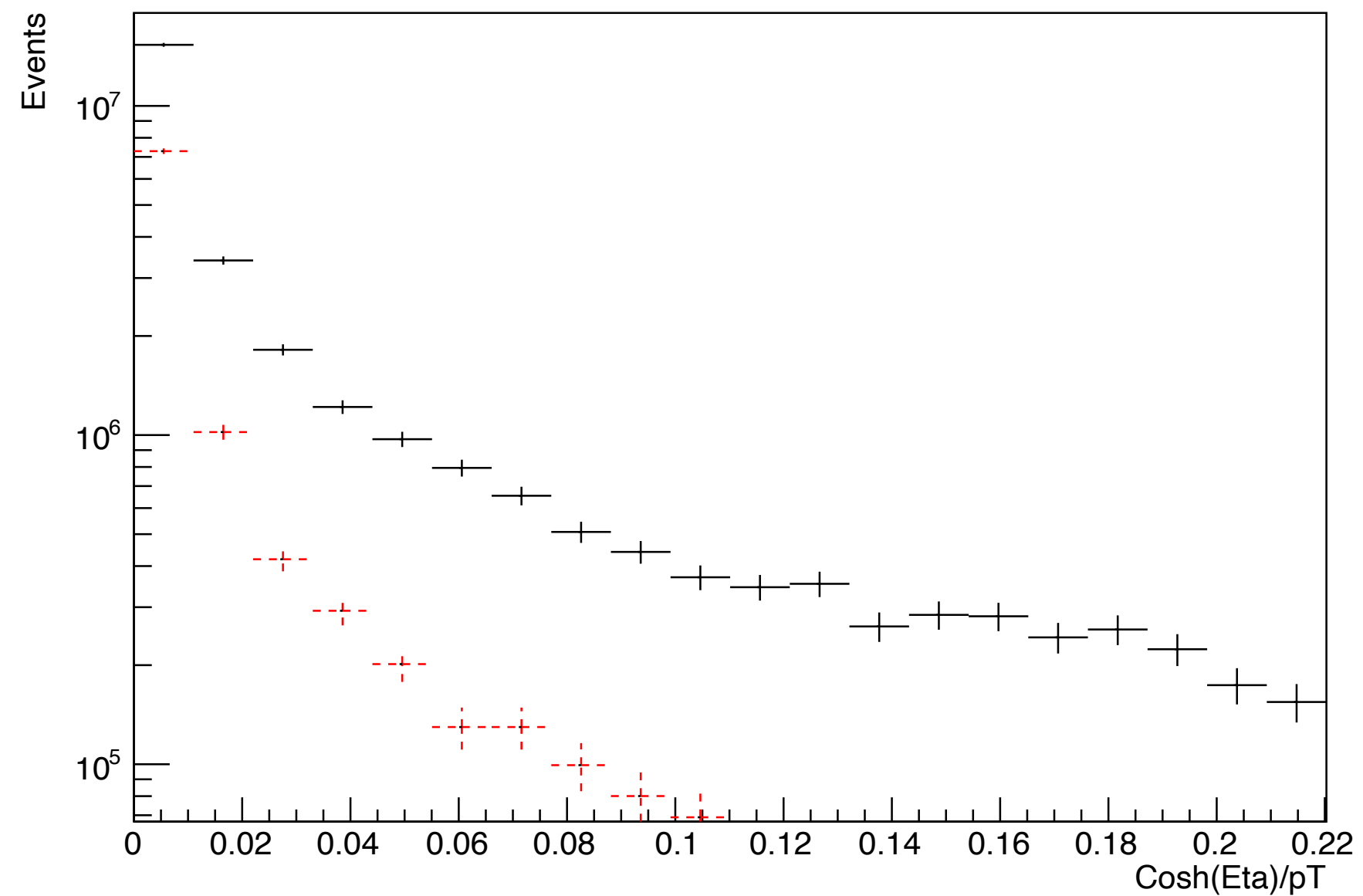
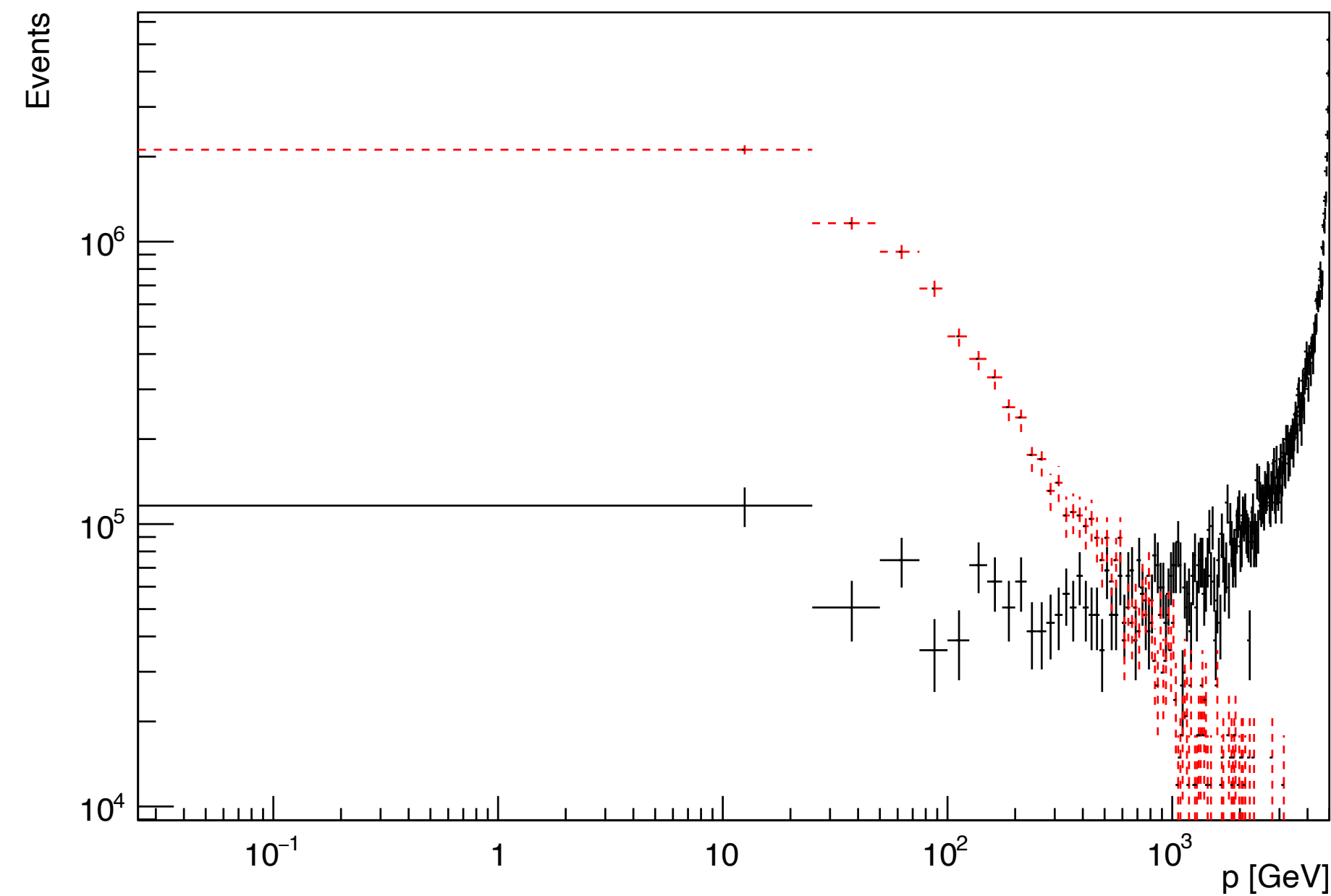
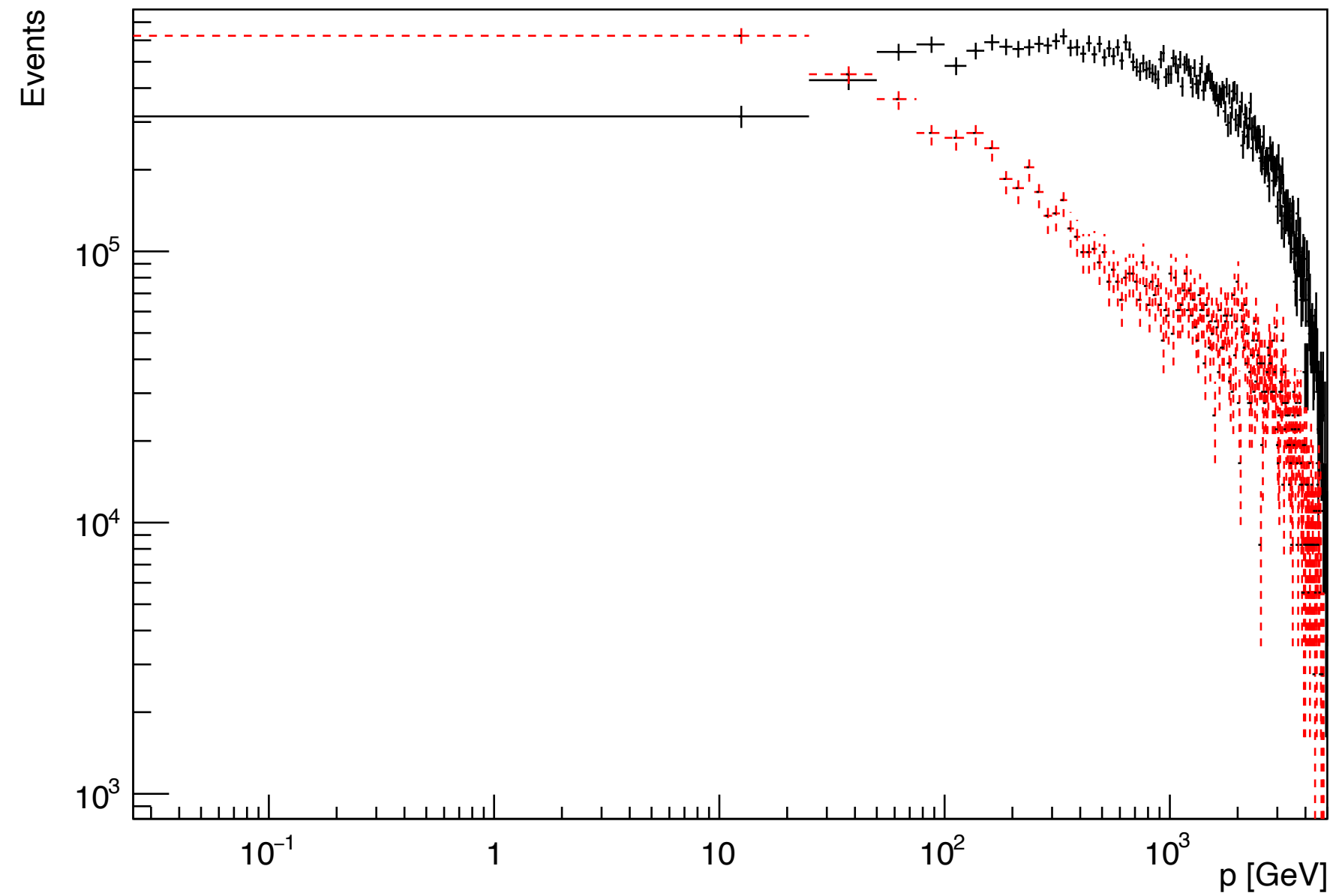
10 TeV

INT+QUAD (left) SM (right)
Beam Remnants (black)
Non-beam Remnants (red)



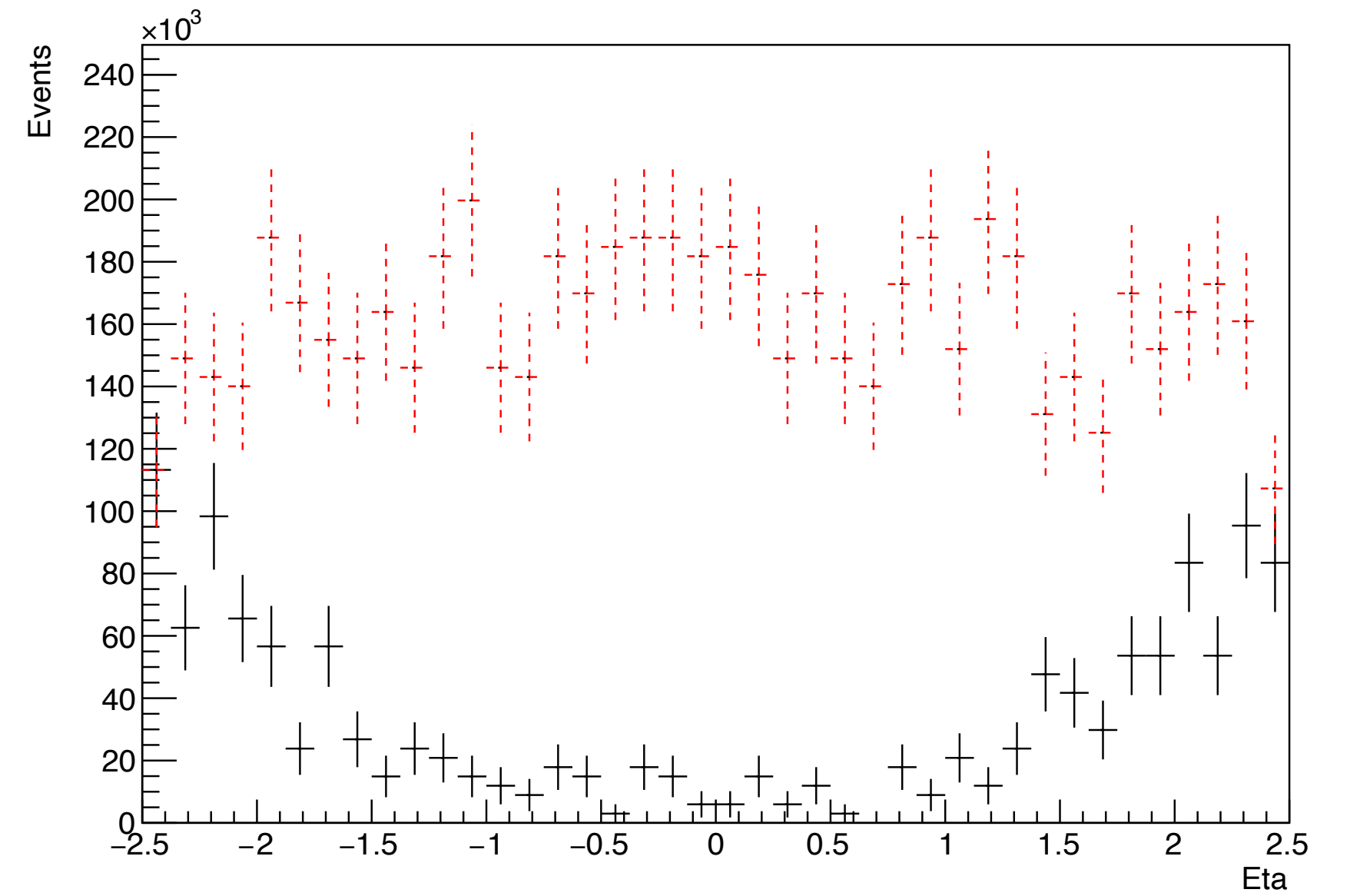
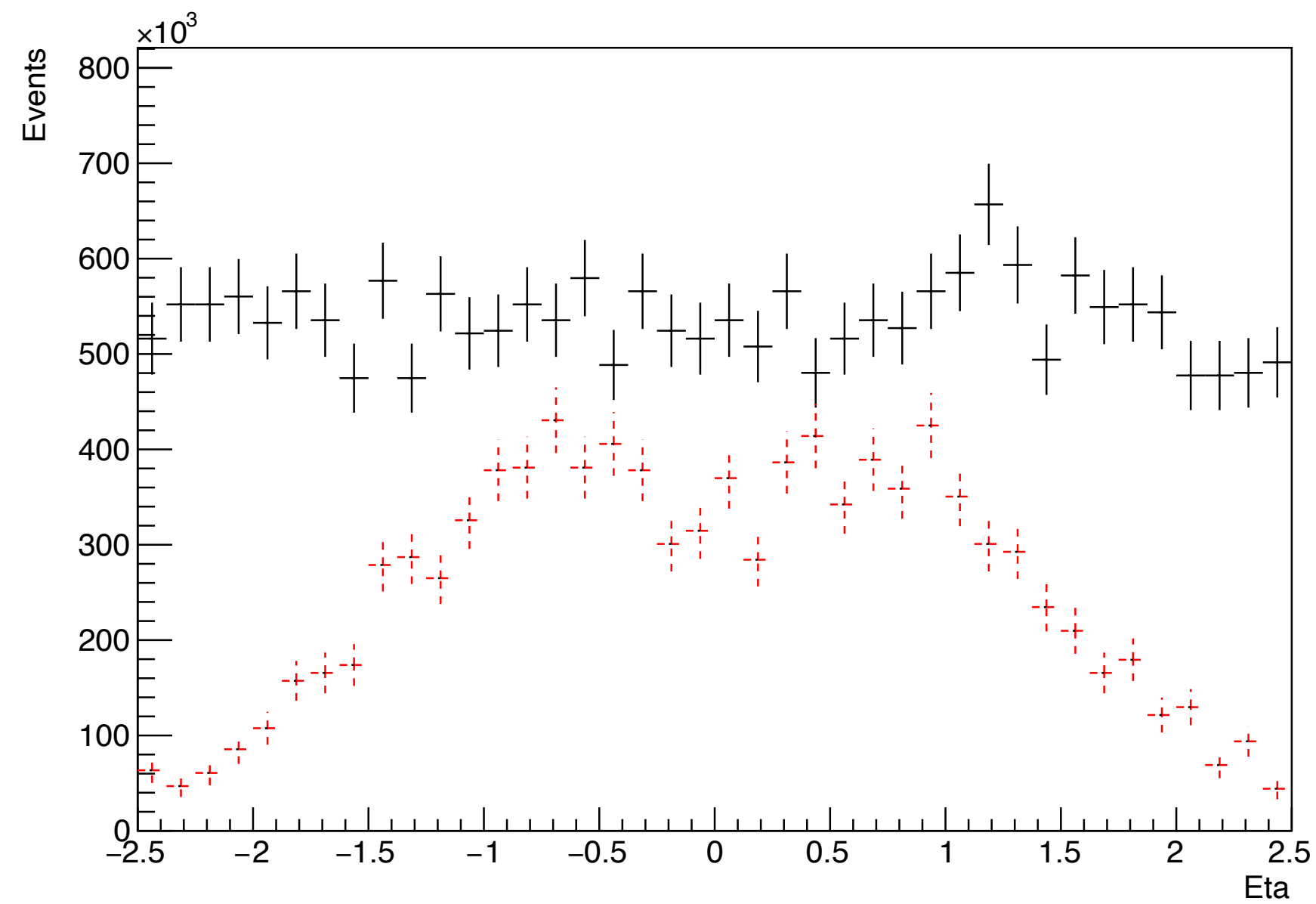
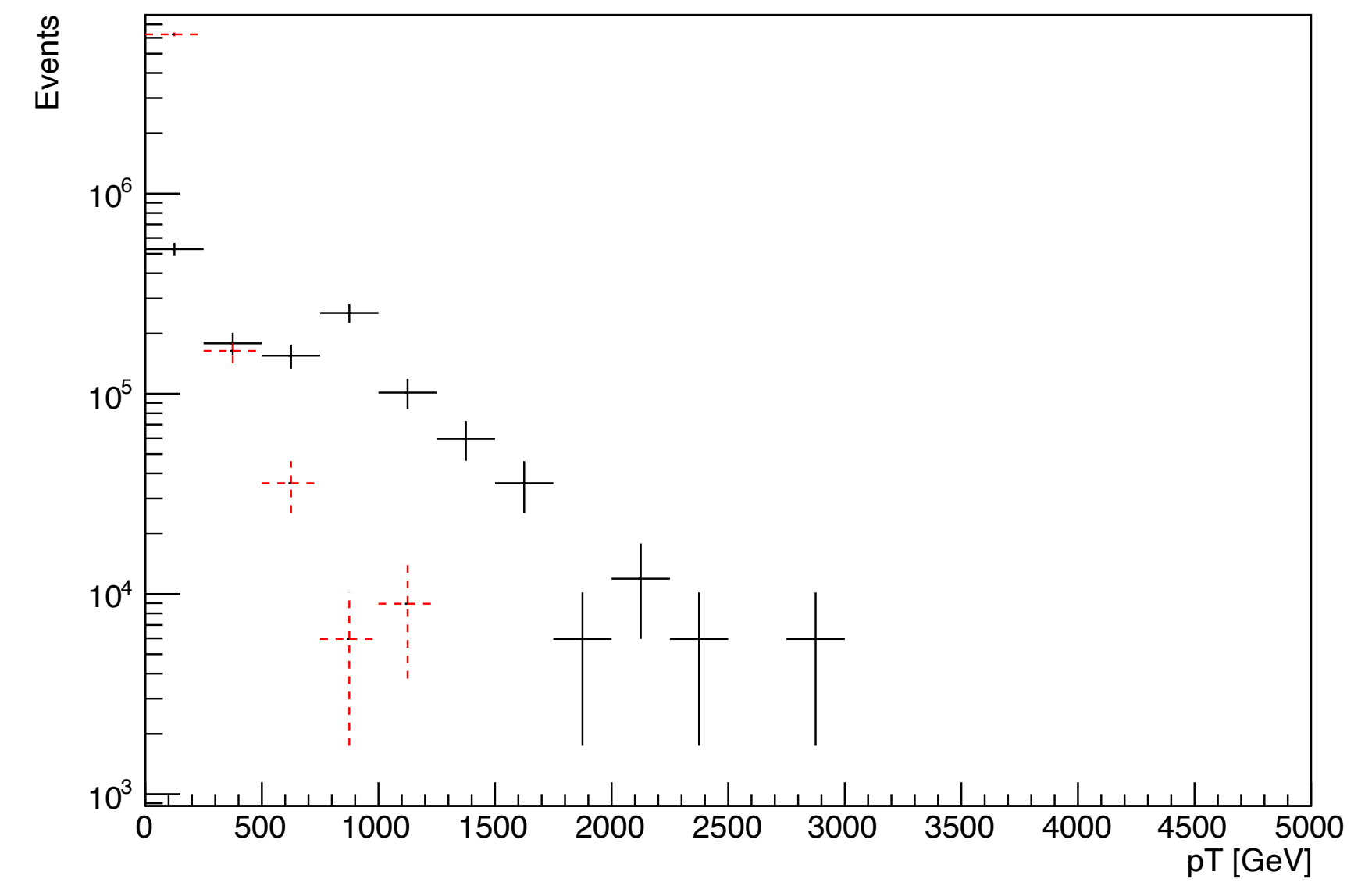
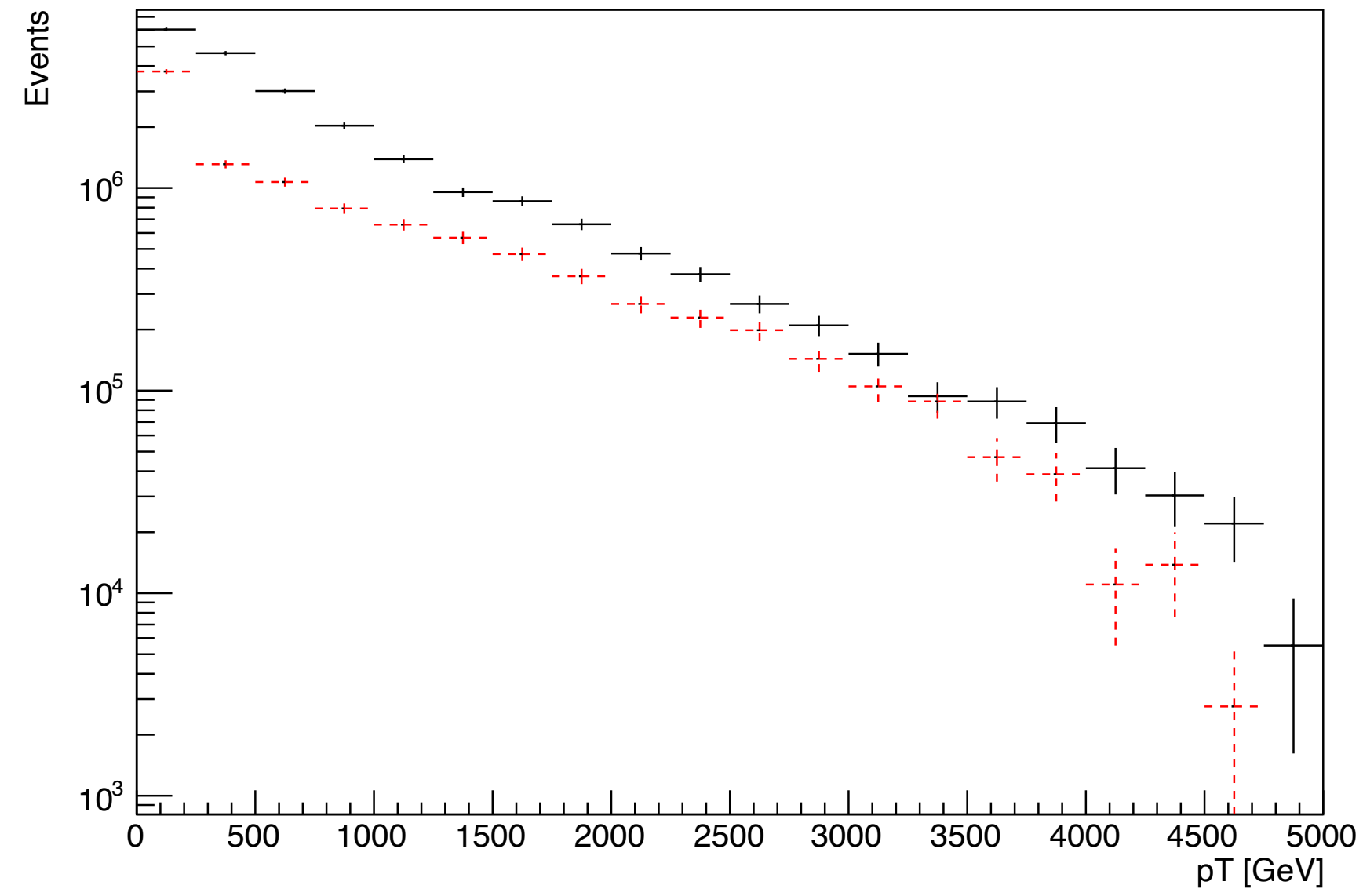
10 TeV

INT+QUAD (left) SM (right)
Beam Remnants (black)
Non-beam Remnants (red)



10 TeV Eta<2.5

INT+QUAD (left) SM (right)
Beam Remnants (black)
Non-beam Remnants (red)



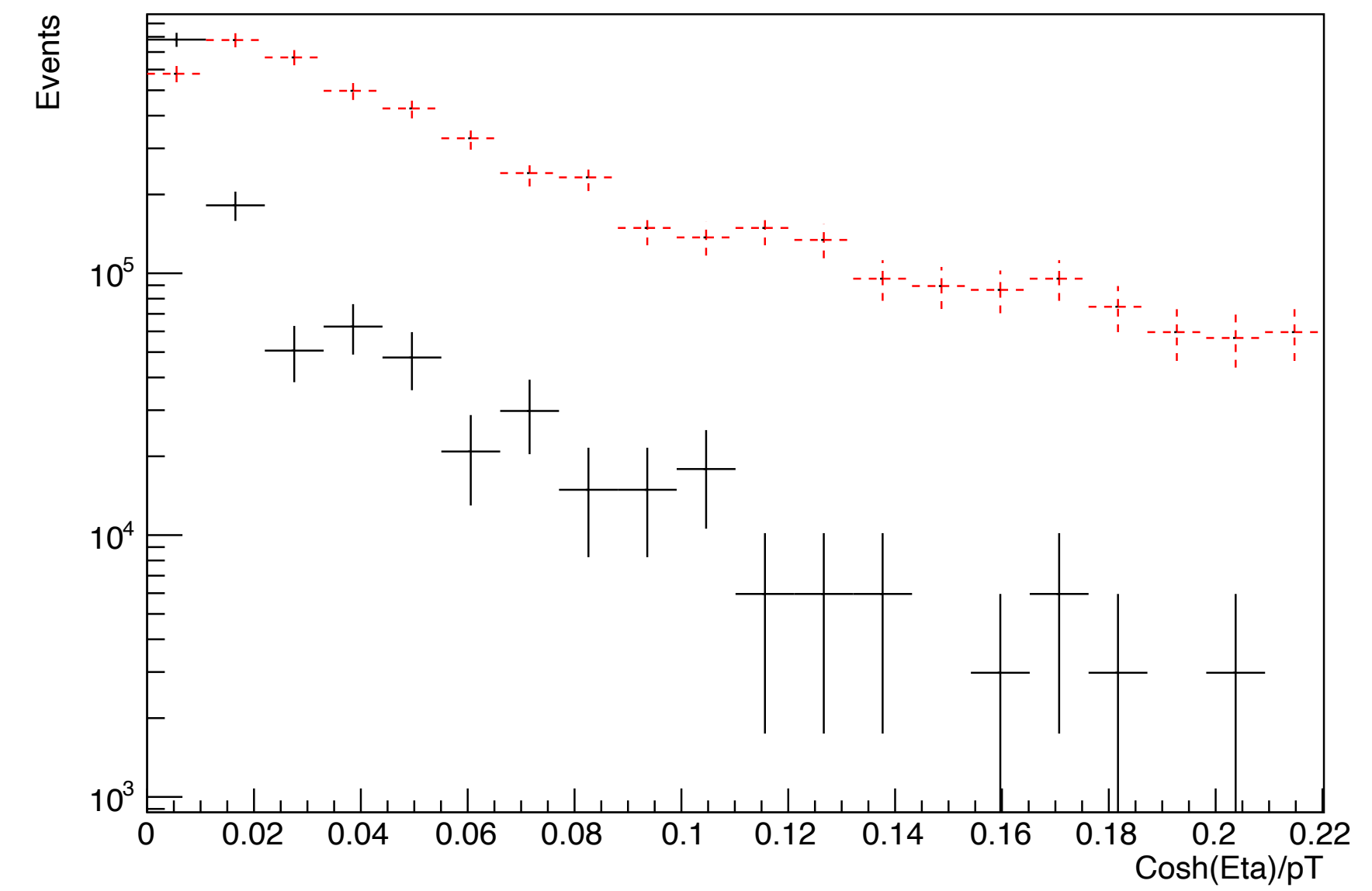
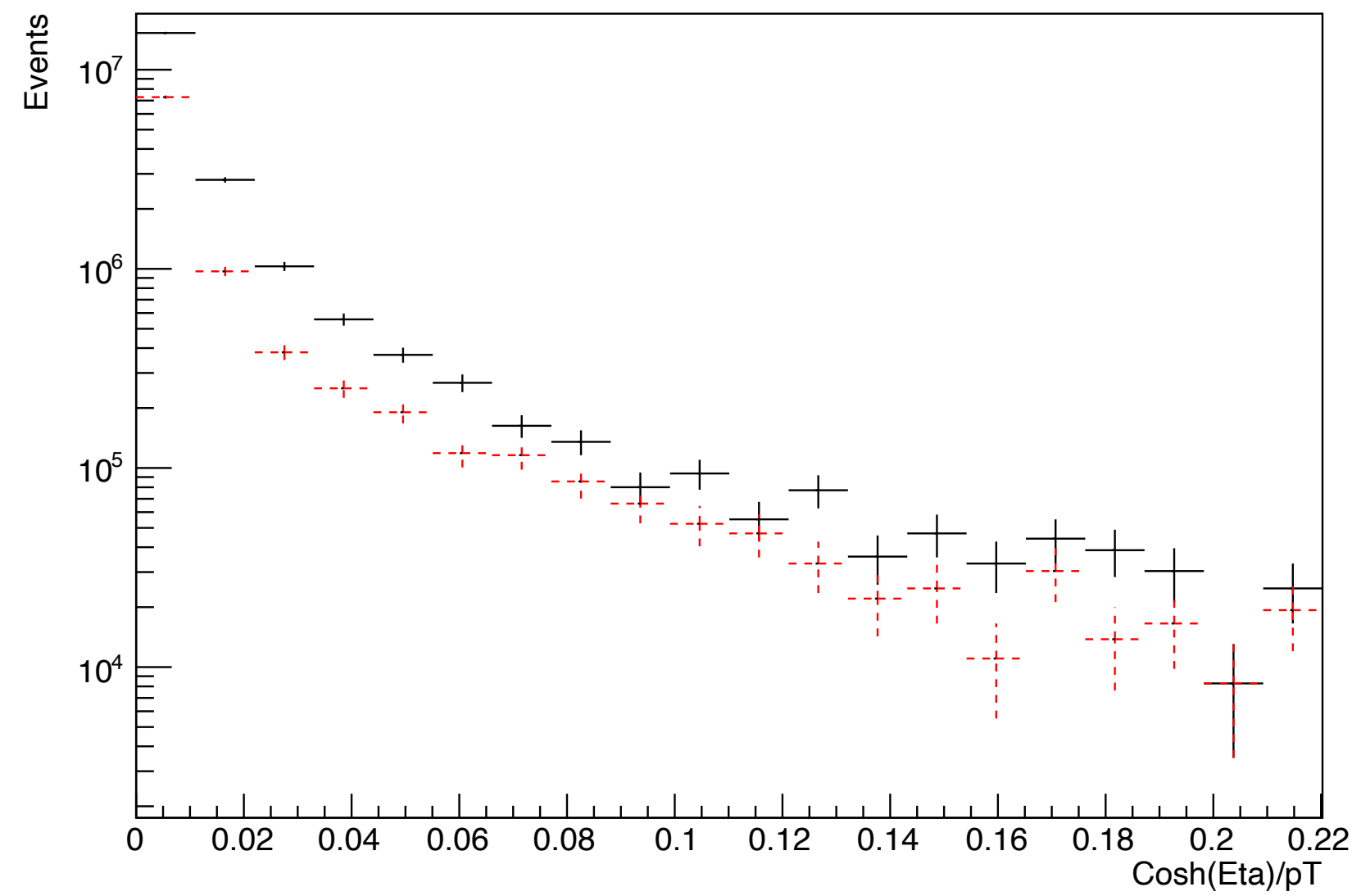
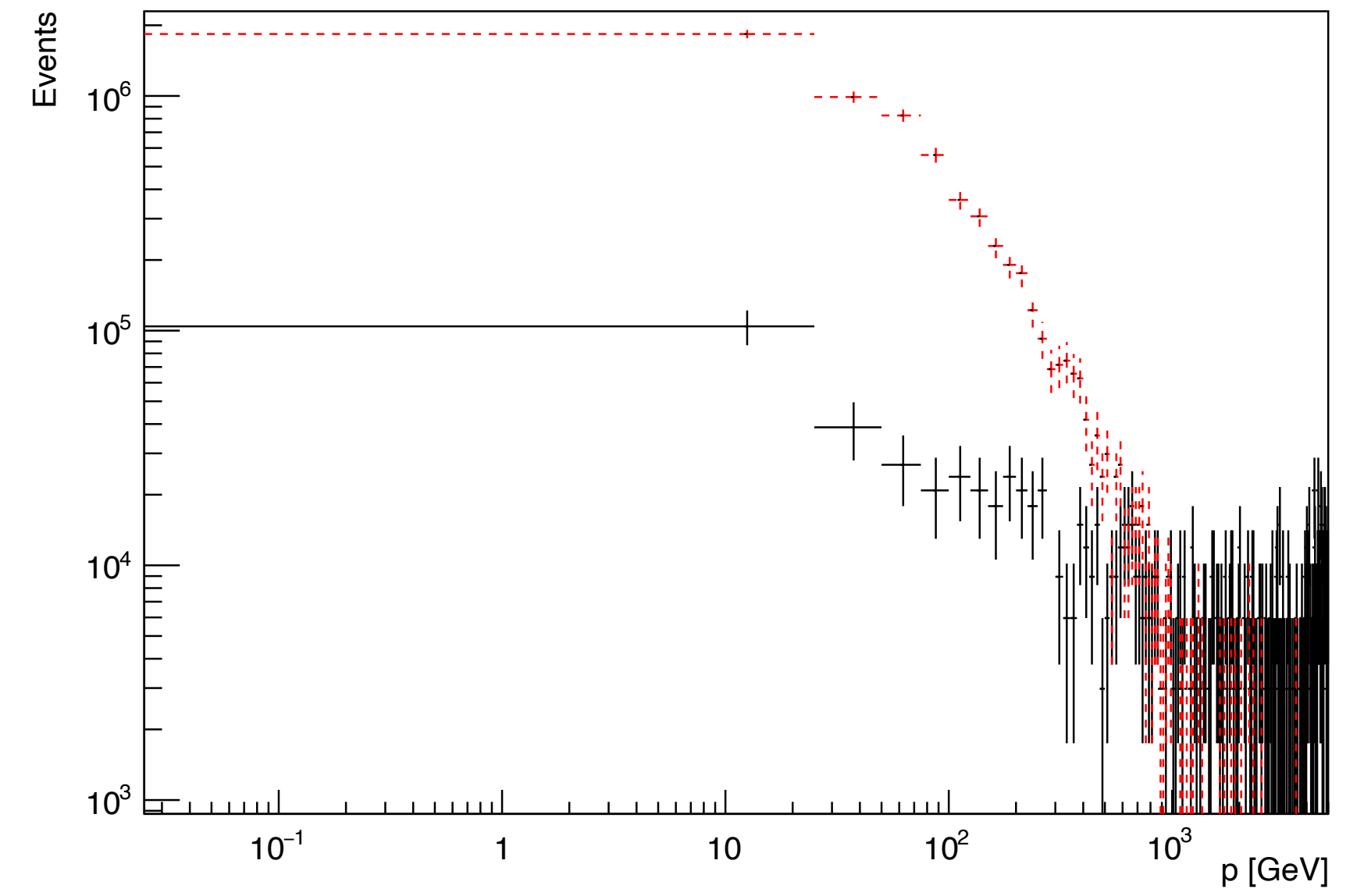
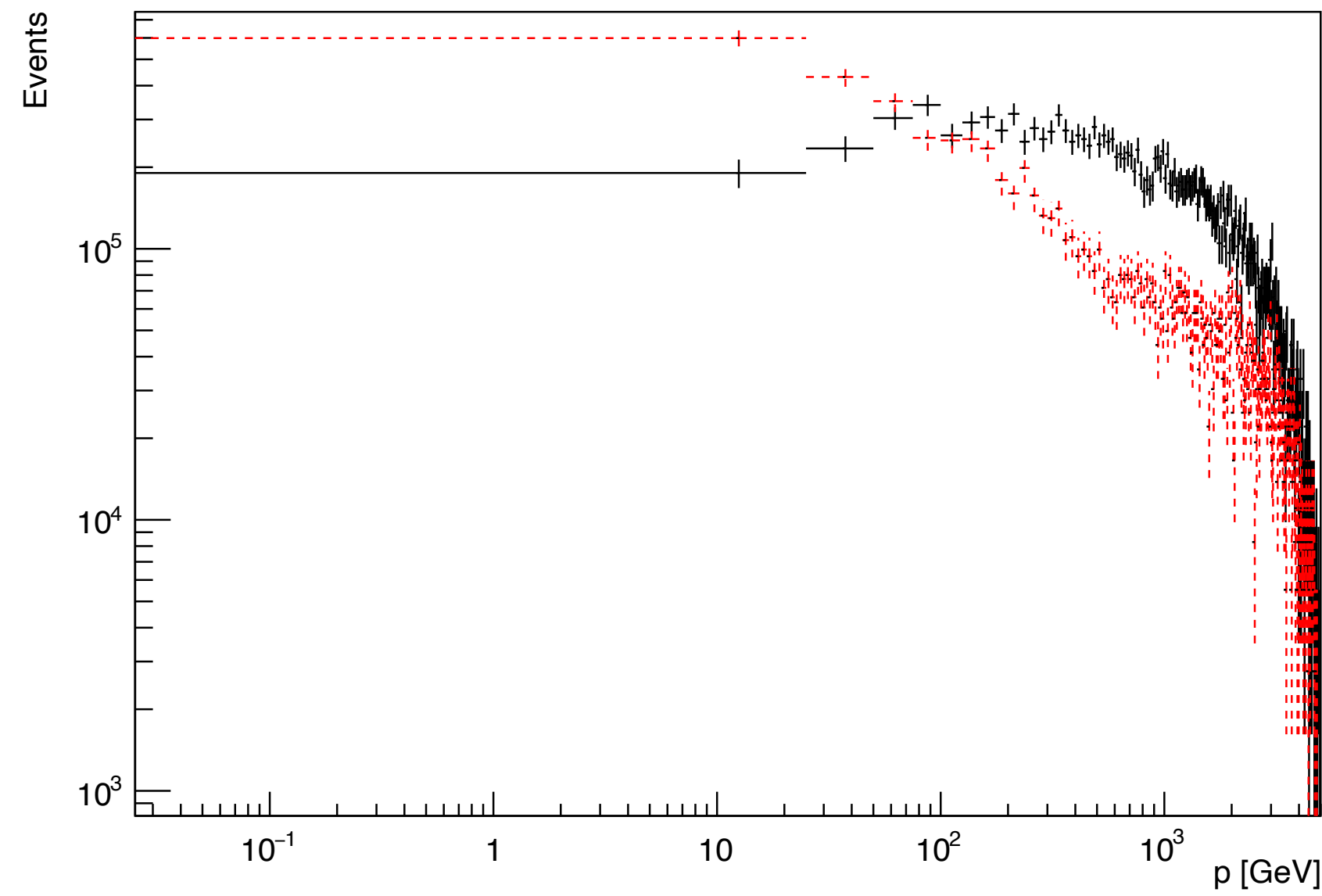
10 TeV

$\text{Eta} < 2.5$

INT+QUAD (left) SM (right)

Beam Remnants (black)

Non-beam Remnants (red)



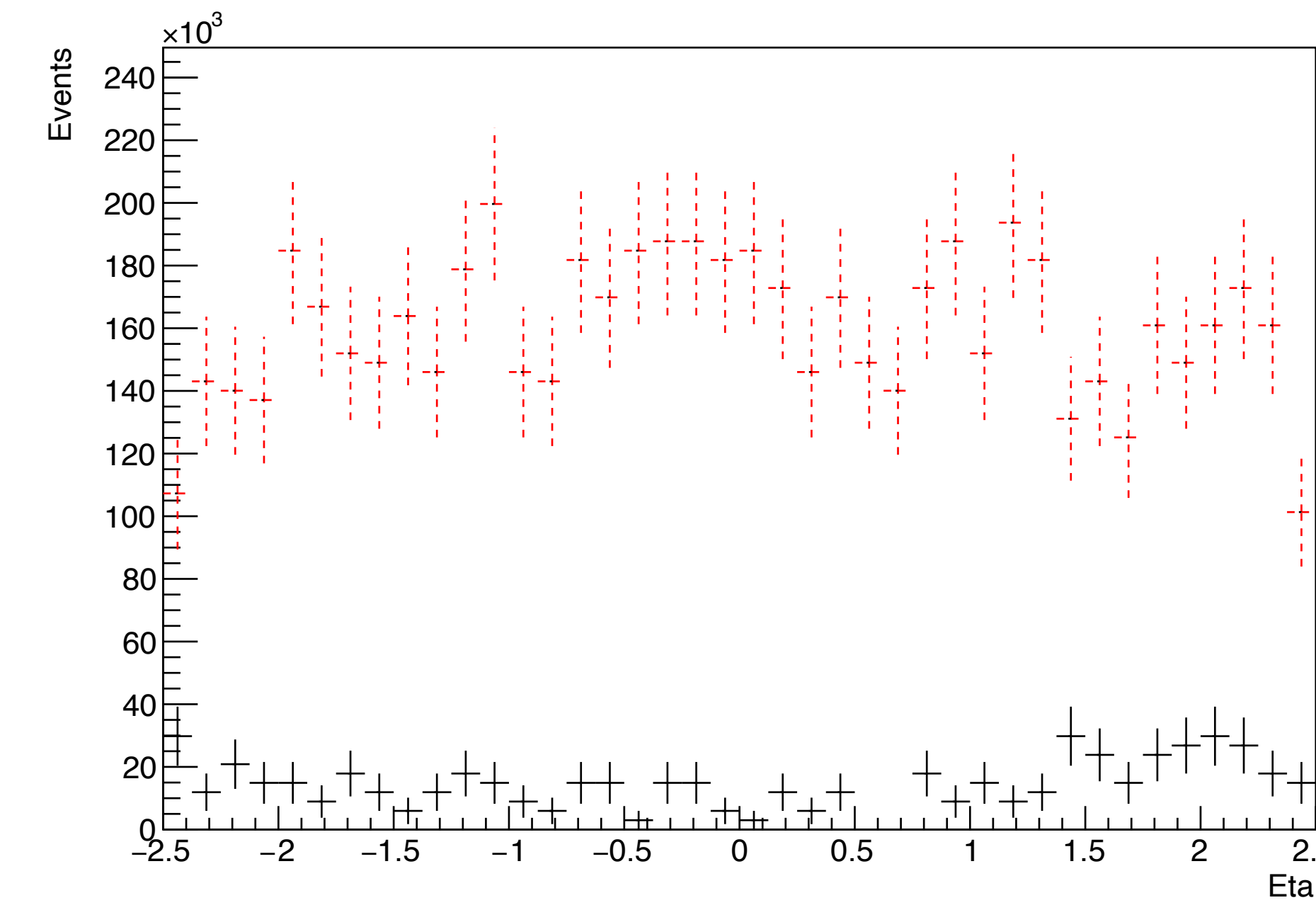
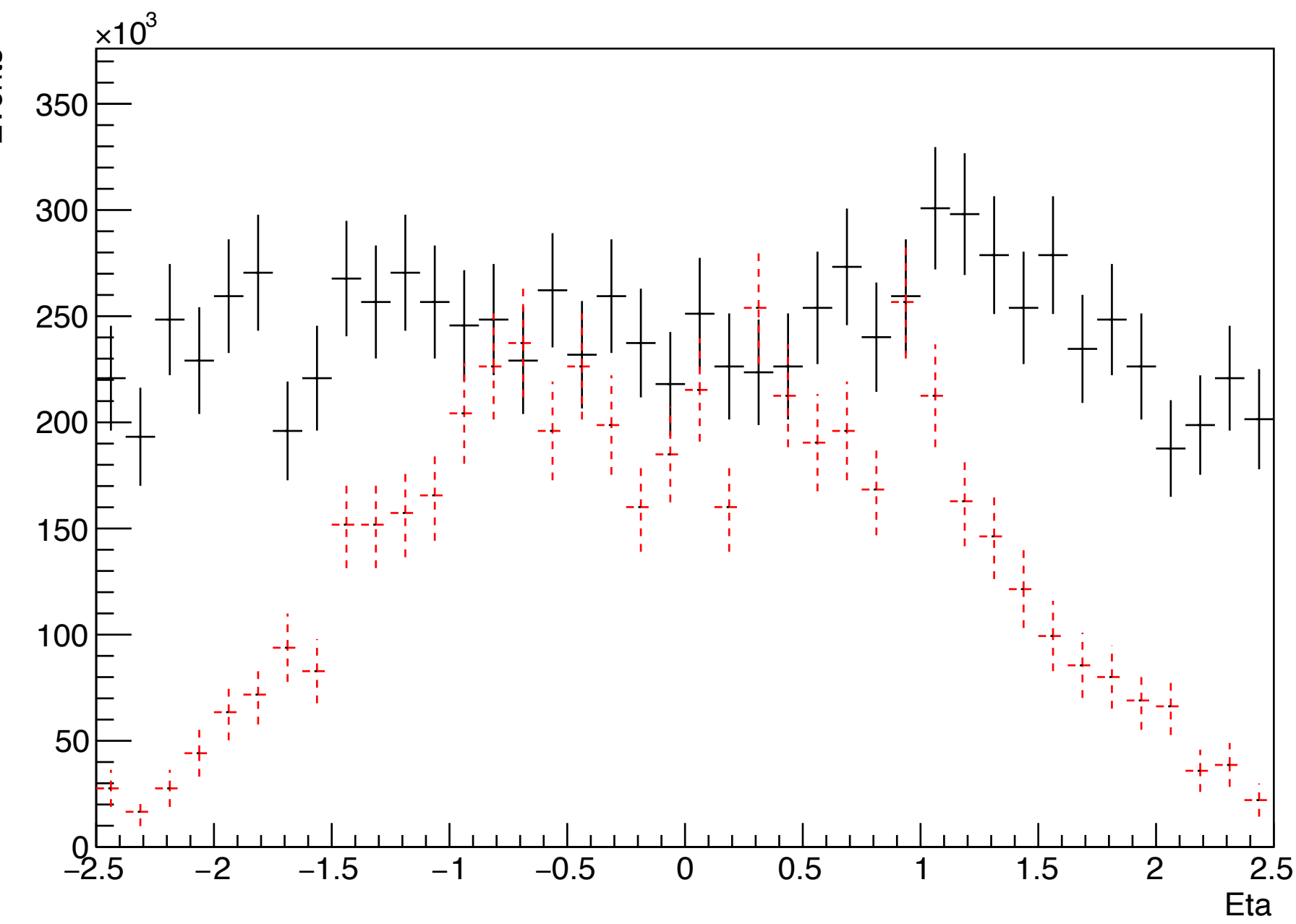
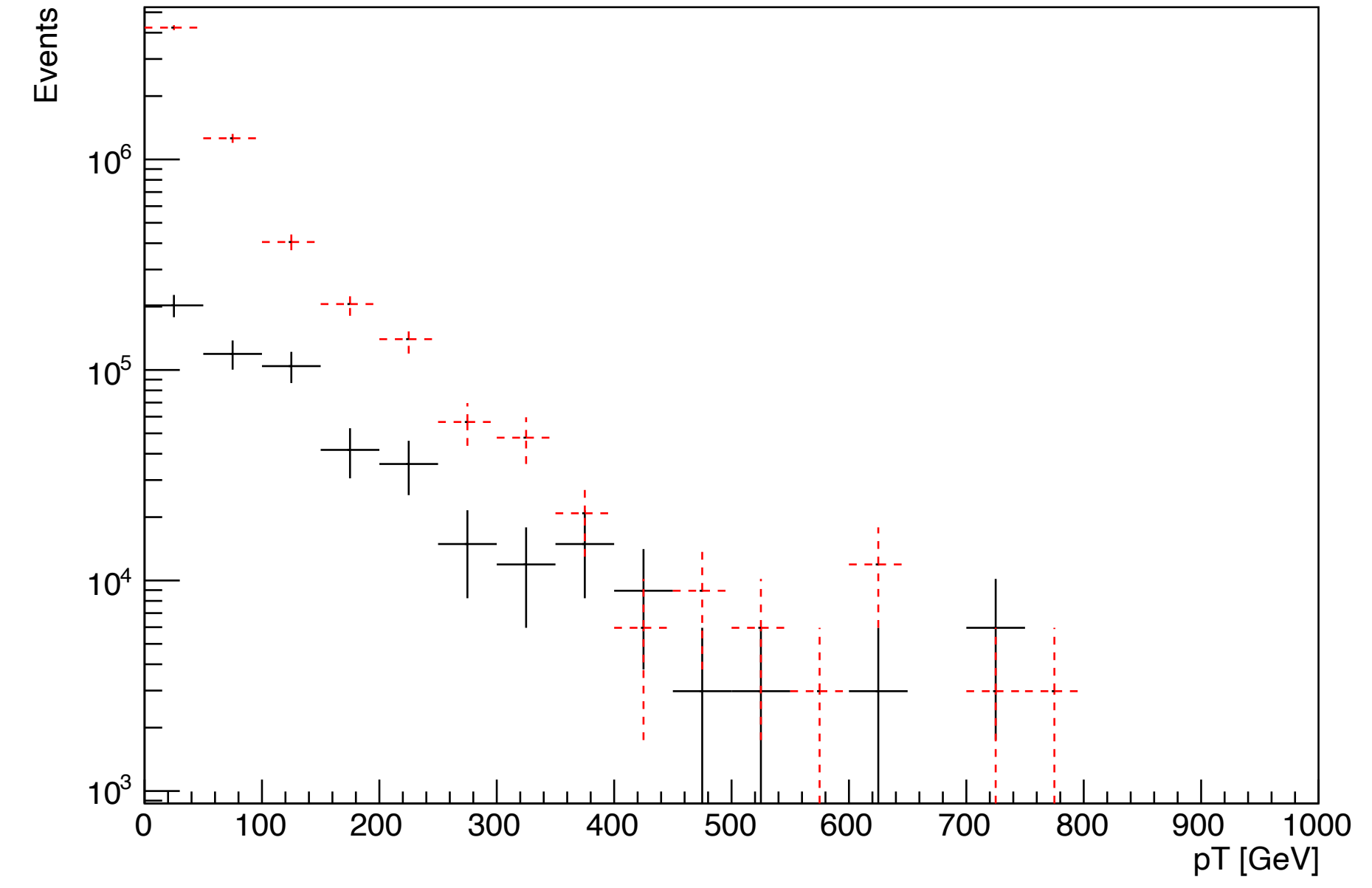
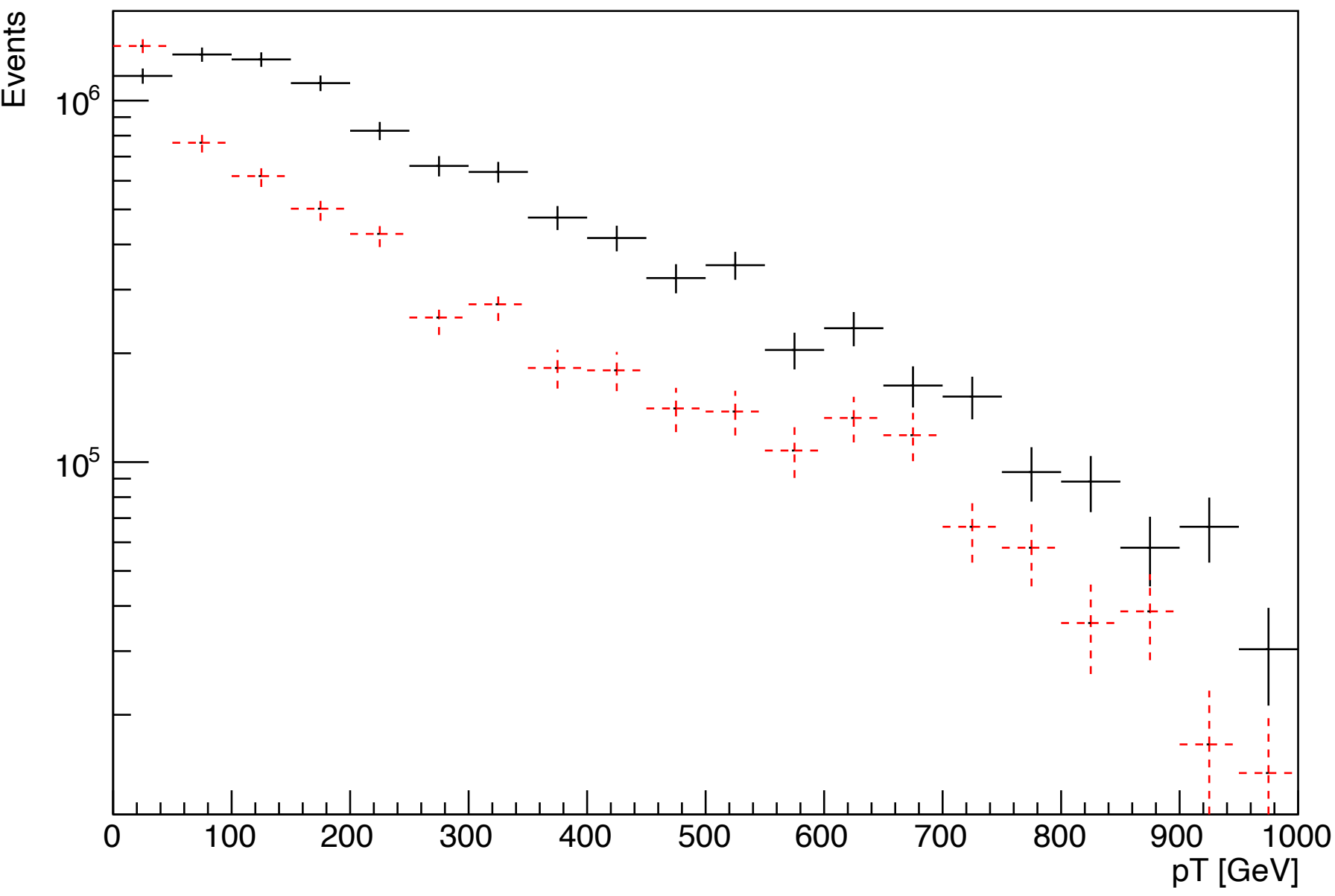
10 TeV

$\text{Eta} < 2.5$ & $P < 1$ TeV

INT+QUAD (left) SM (right)

Beam Remnants (black)

Non-beam Remnants (red)



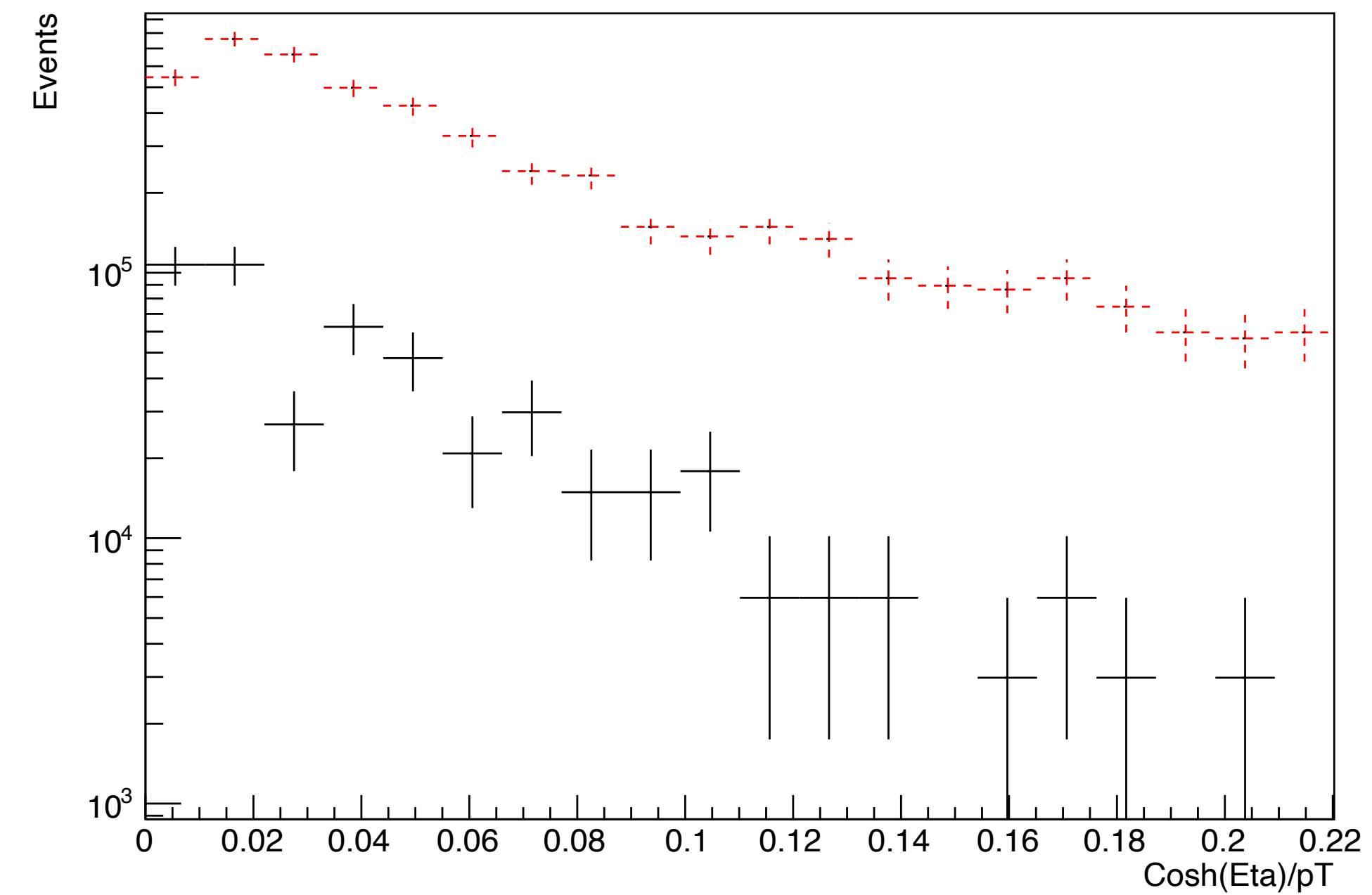
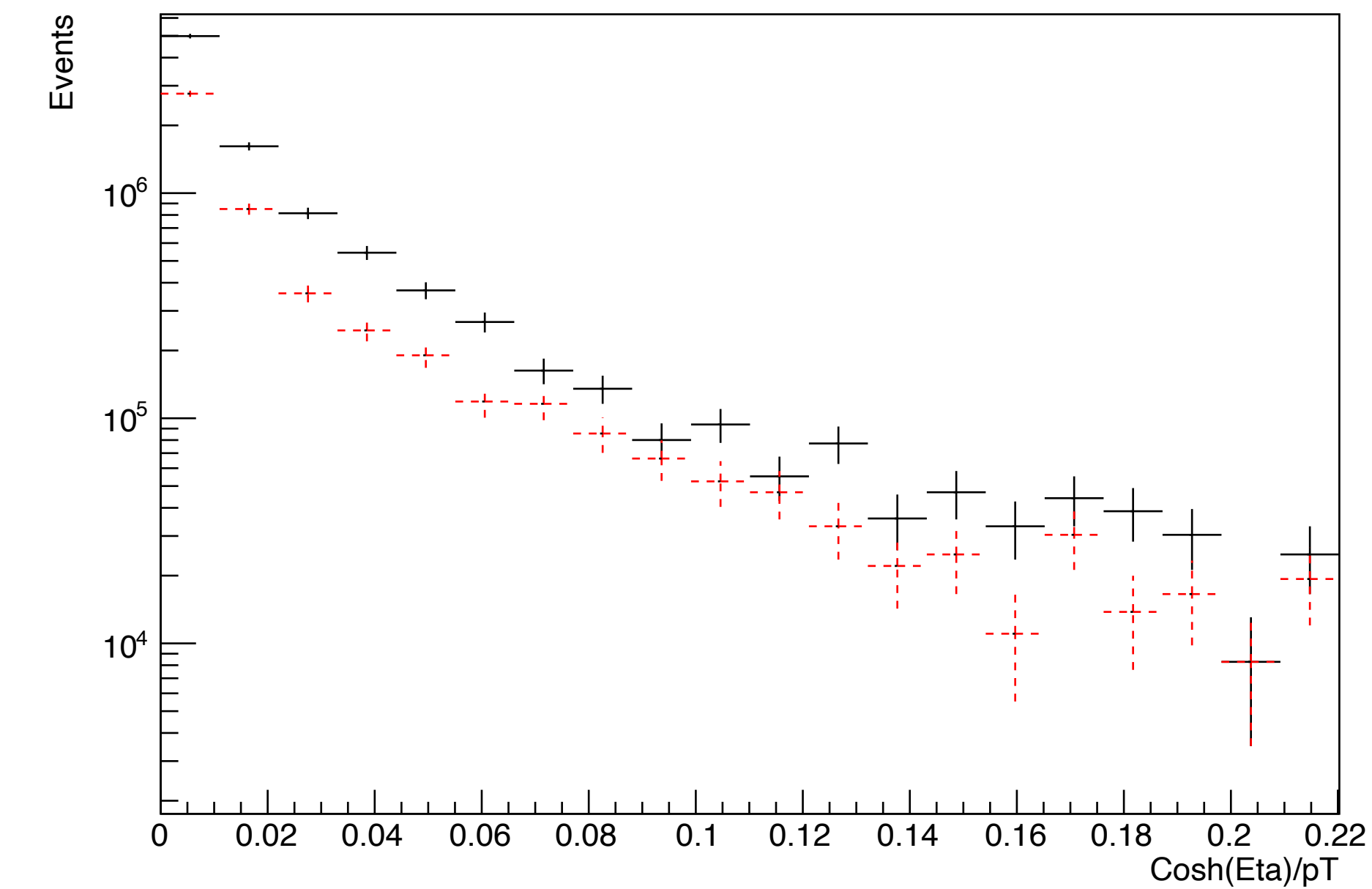
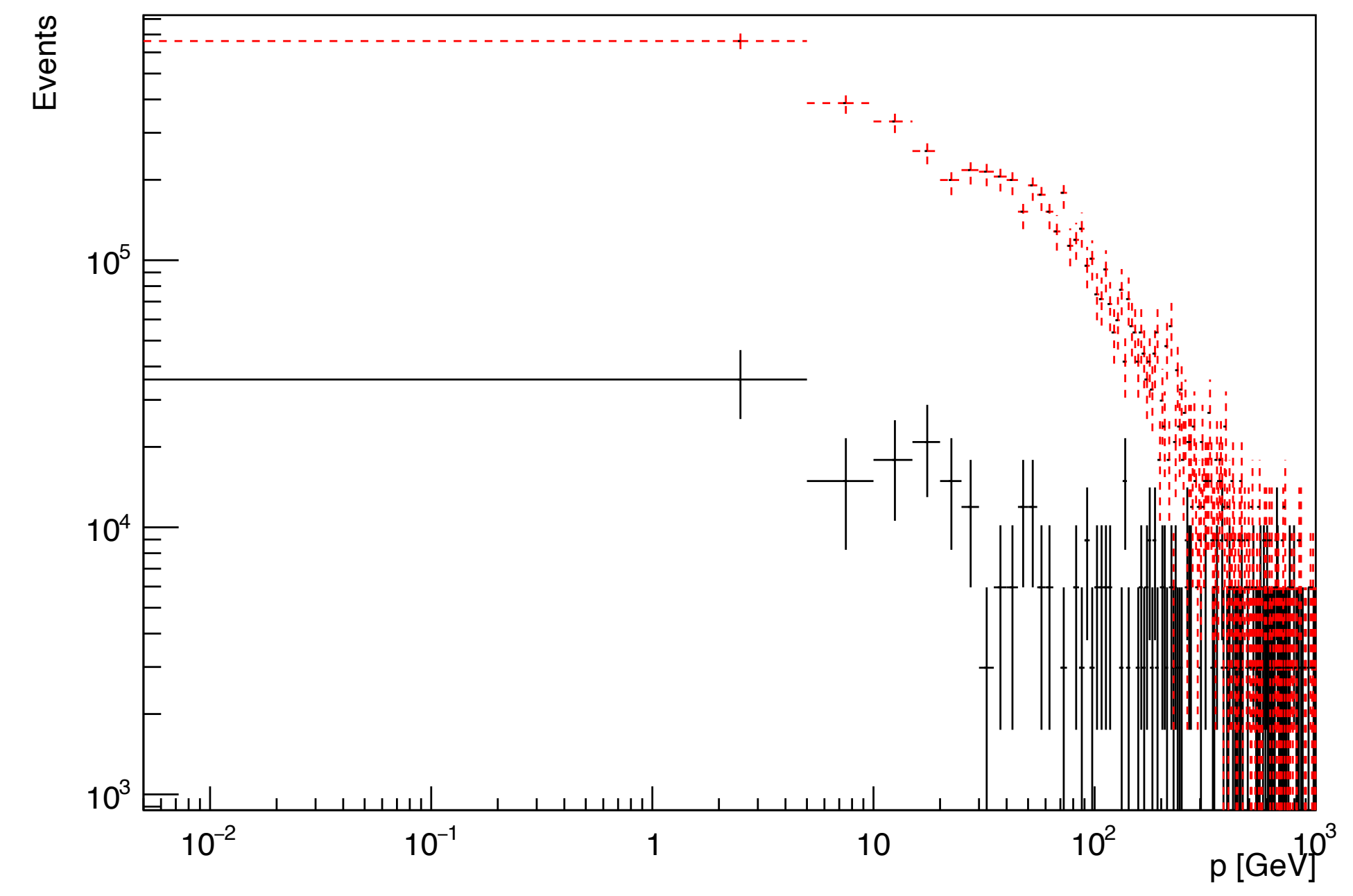
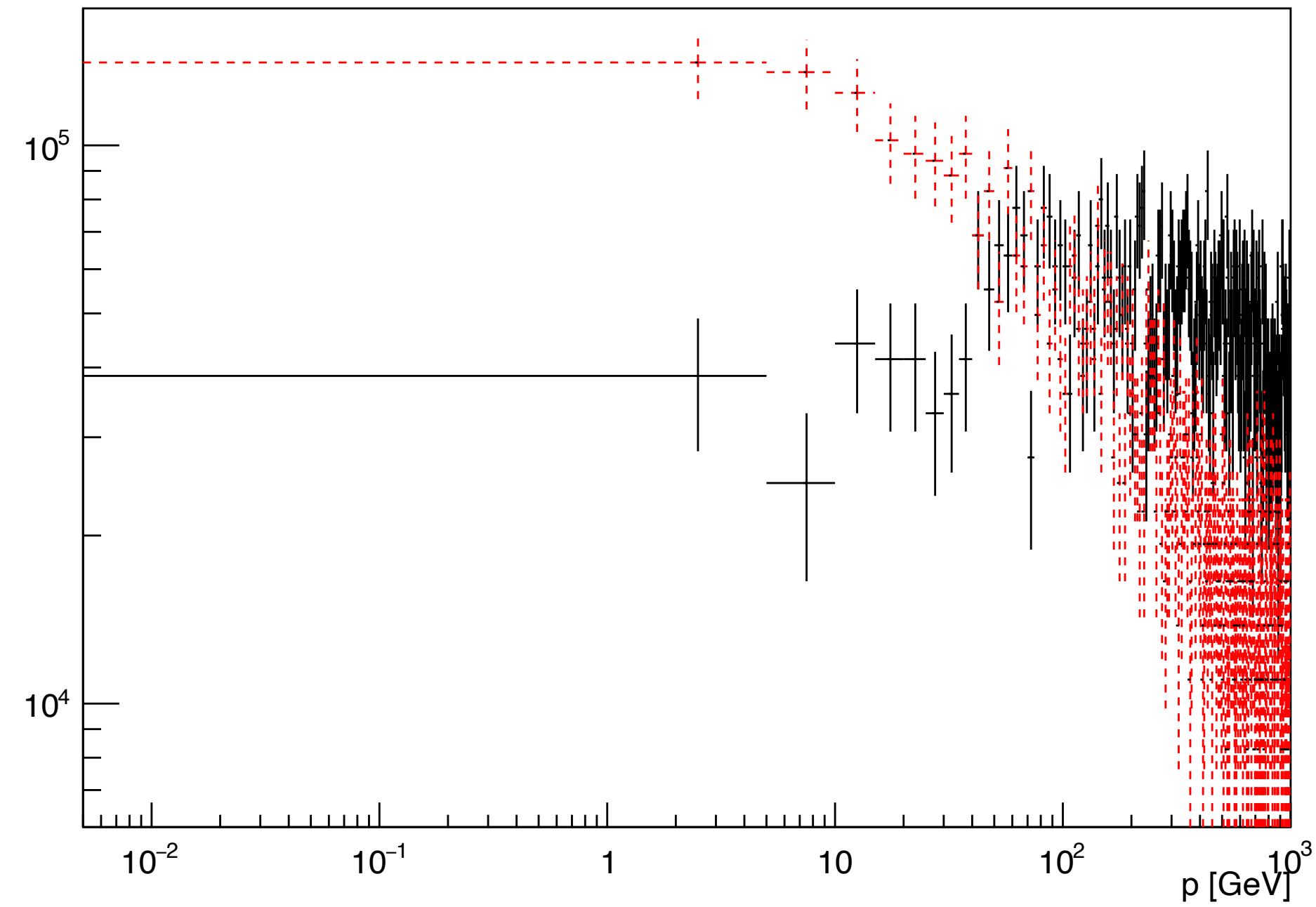
10 TeV

$\text{Eta} < 2.5$ & $P < 1$ TeV

INT+QUAD (left) SM (right)

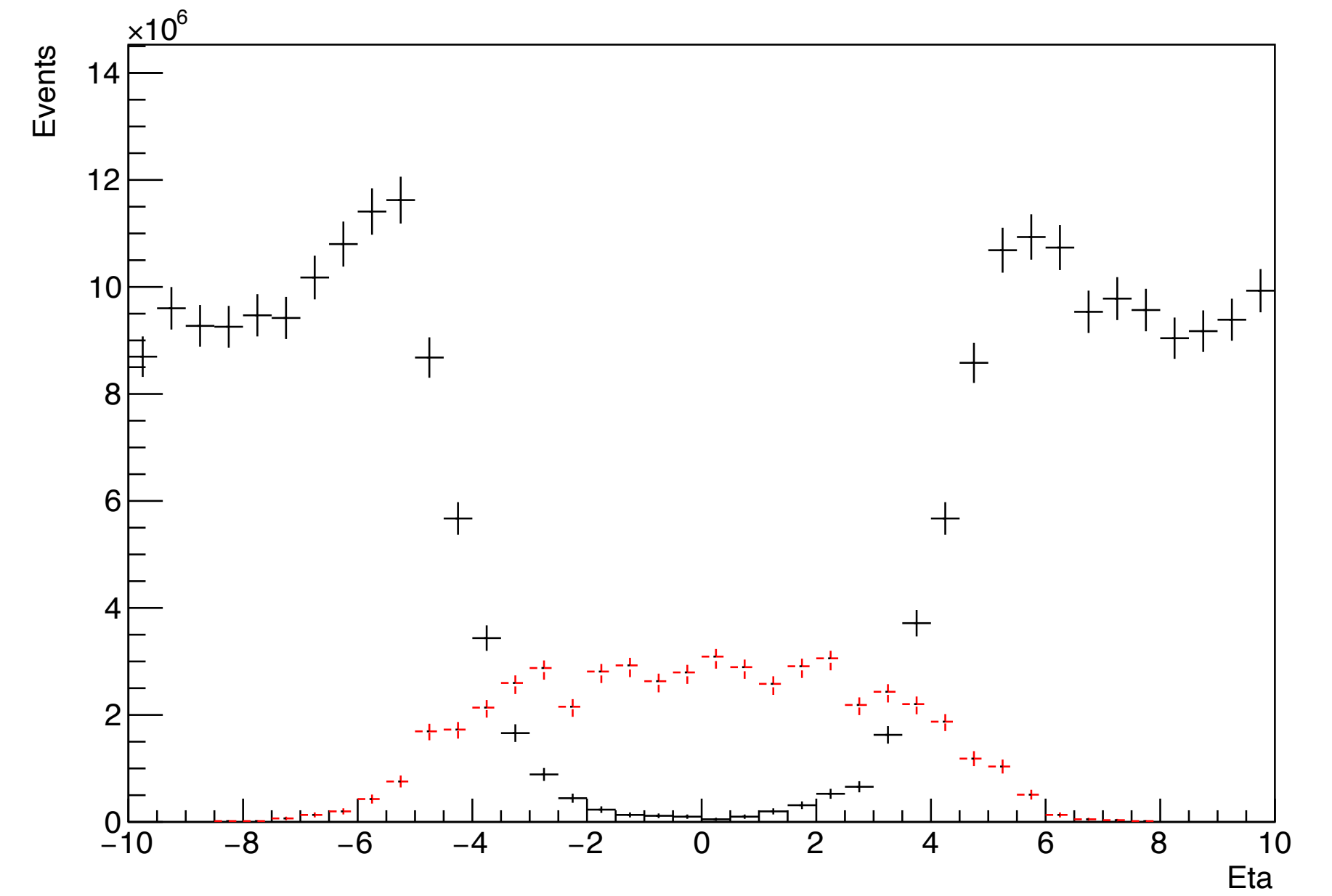
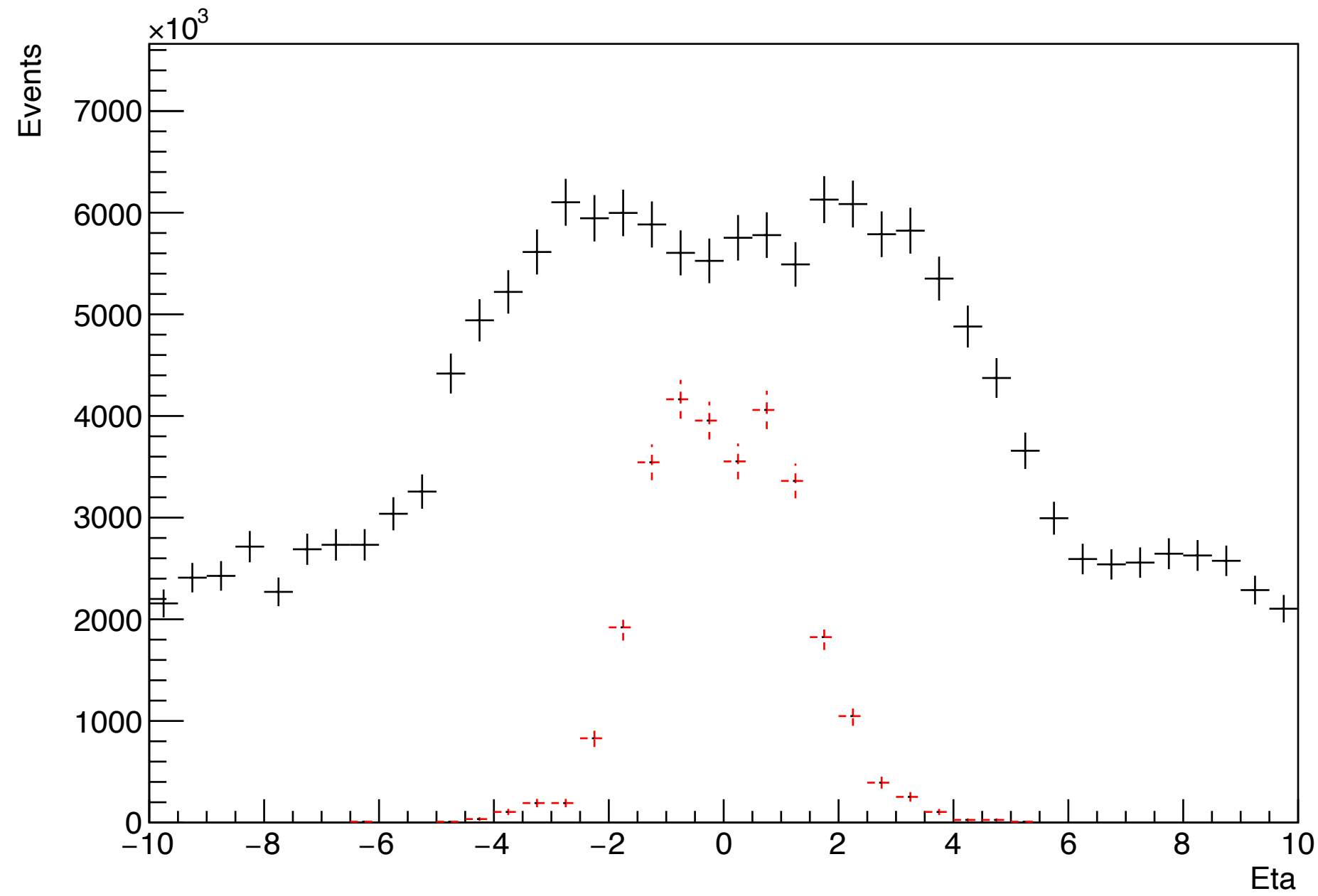
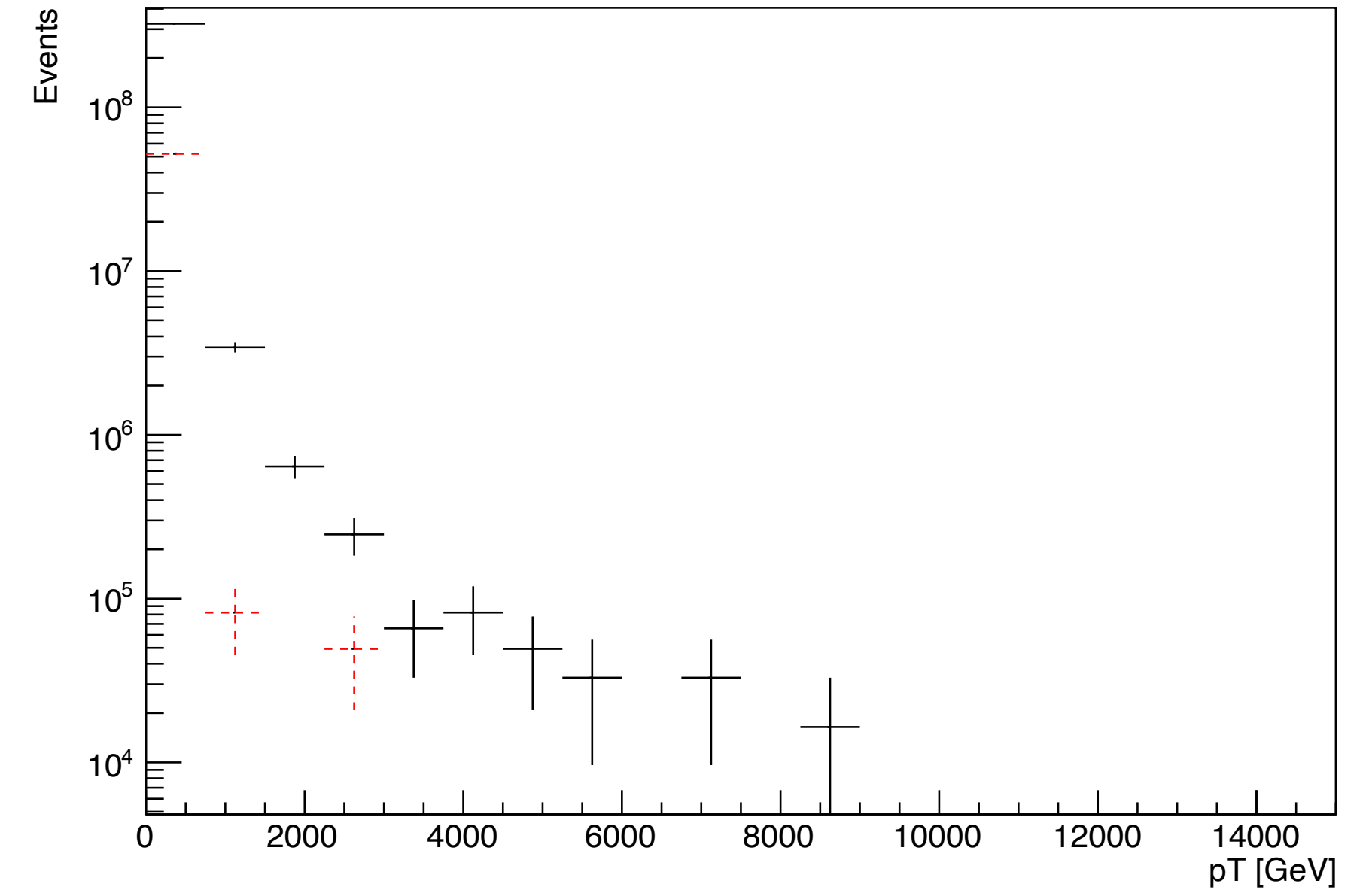
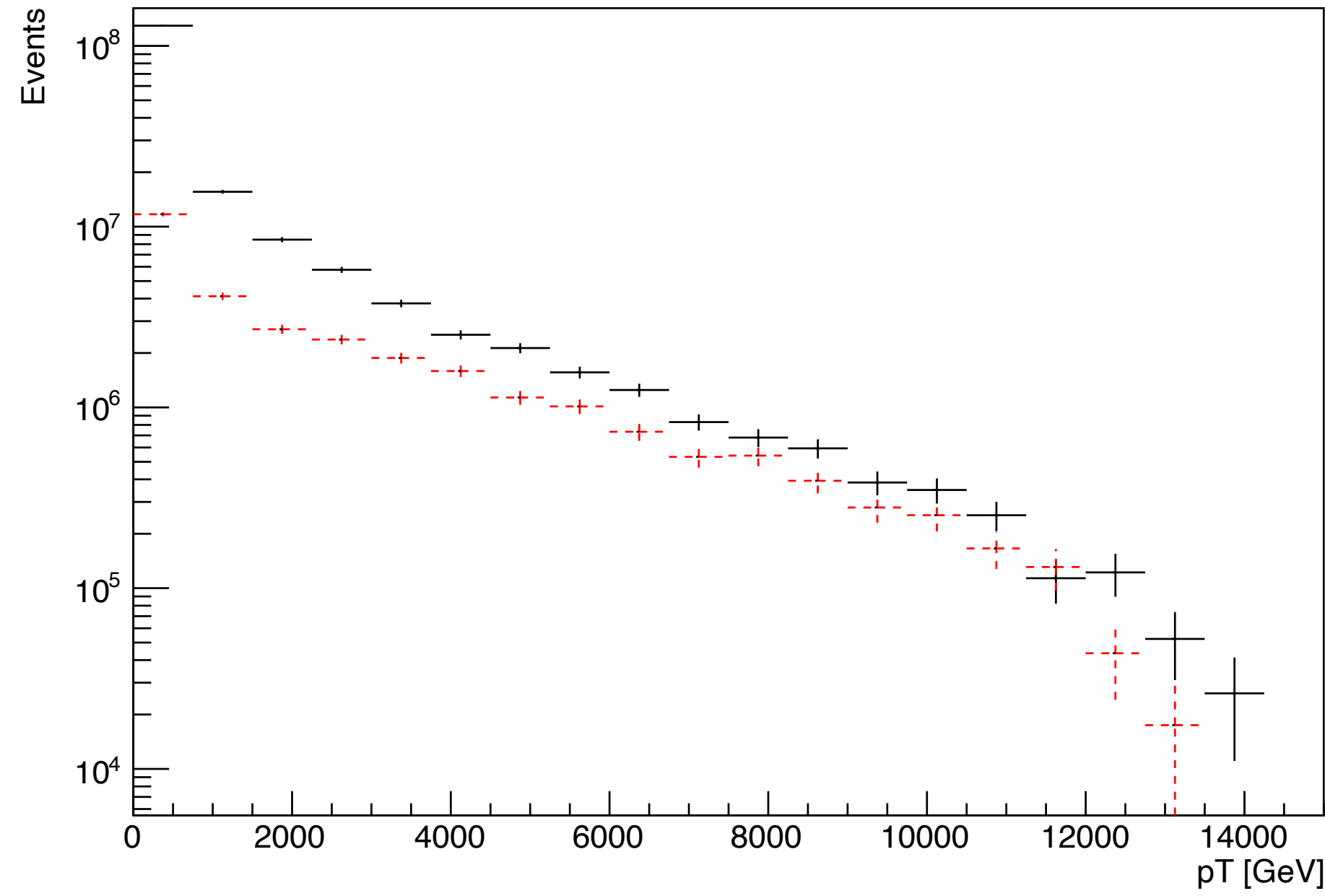
Beam Remnants (black)

Non-beam Remnants (red)



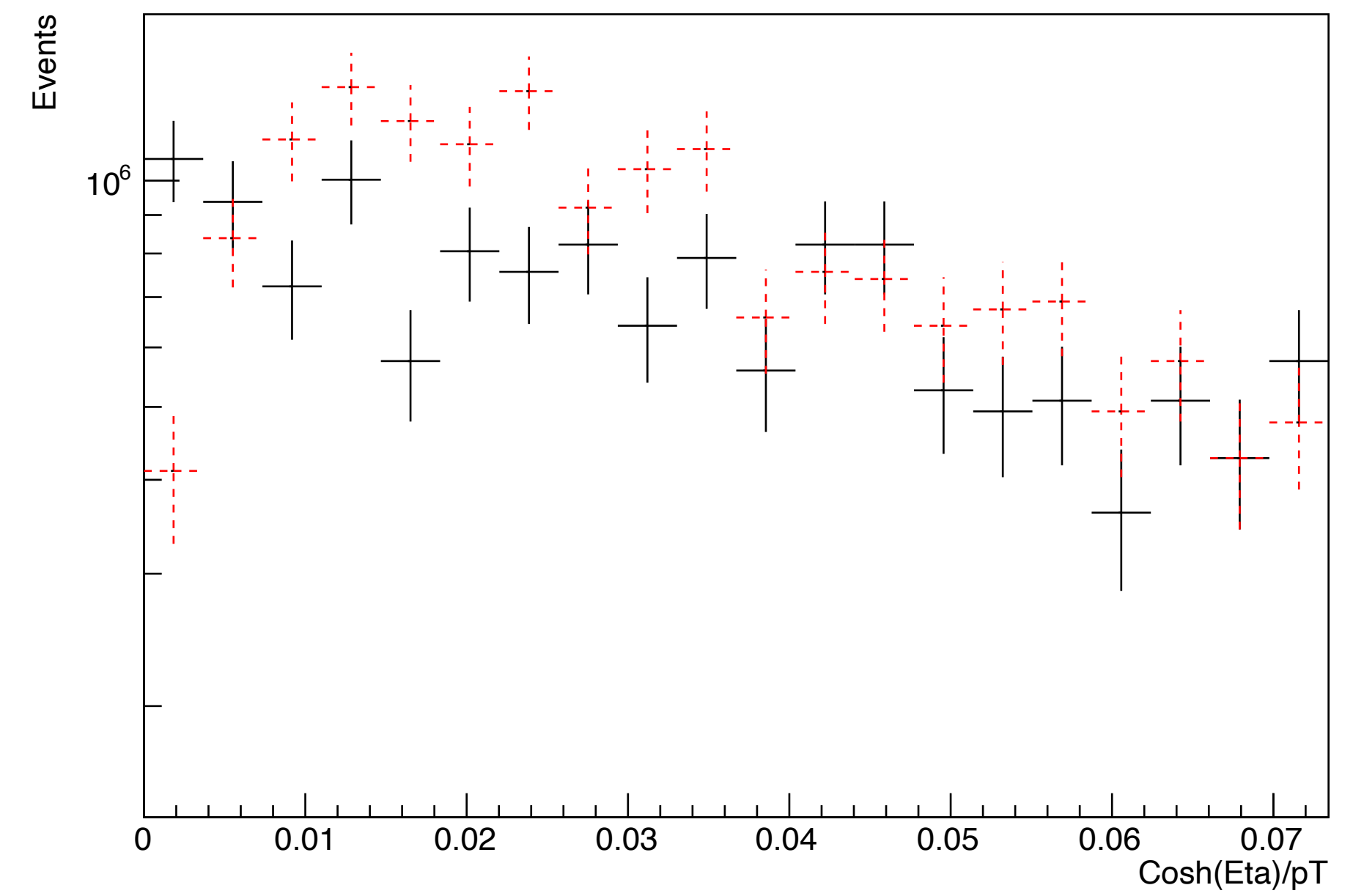
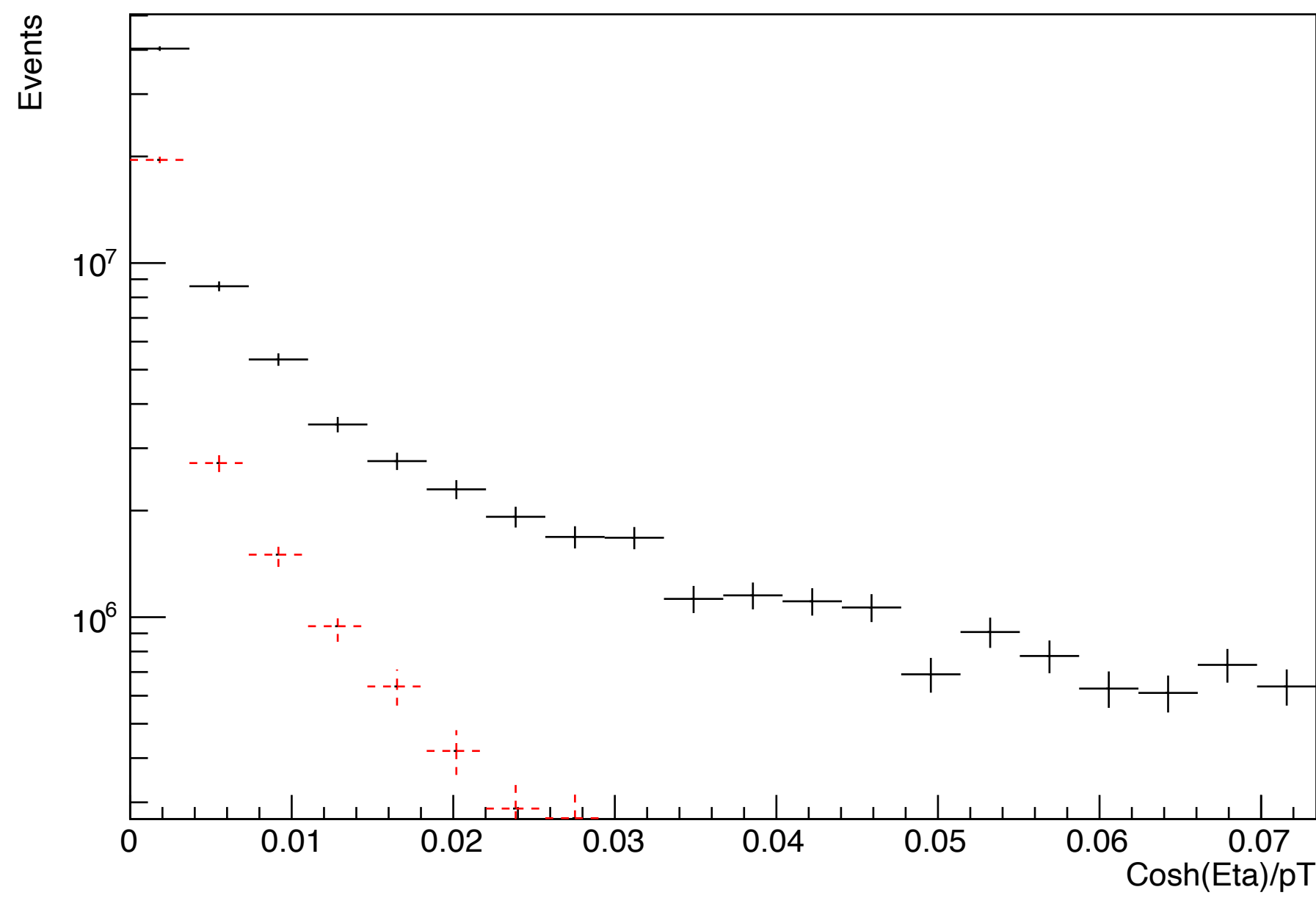
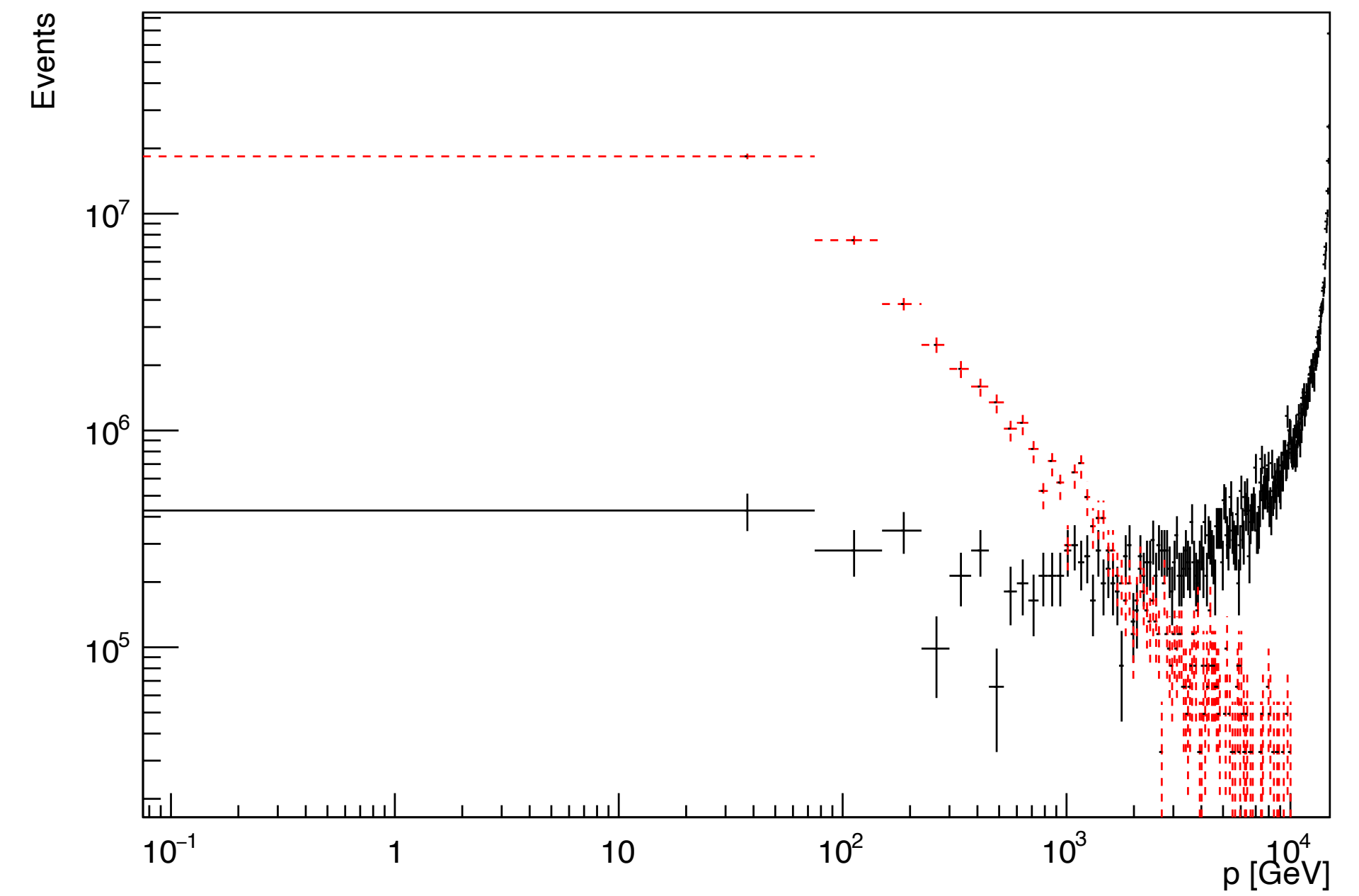
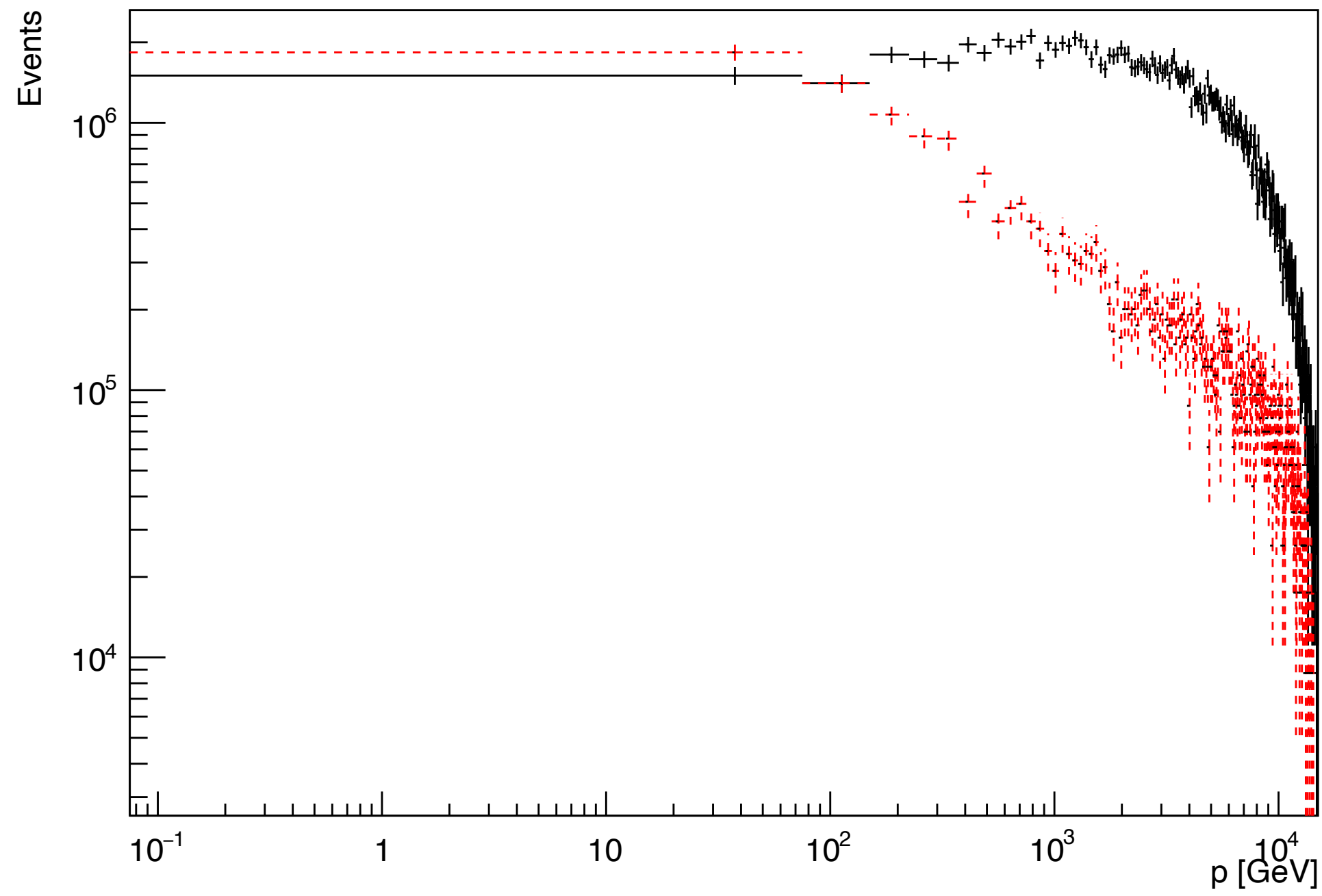
30 TeV

INT+QUAD (left) SM (right)
Beam Remnants (black)
Non-beam Remnants (red)



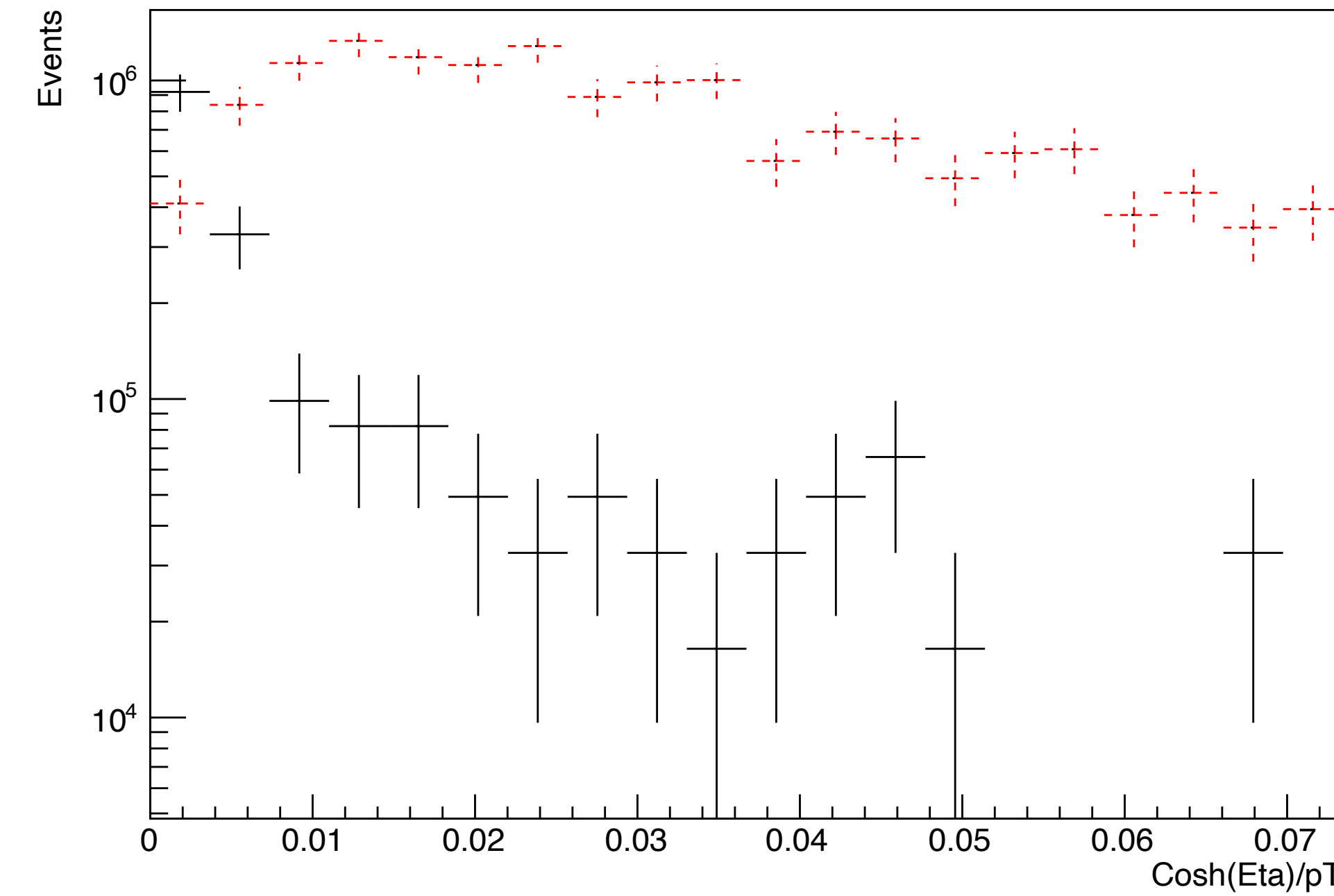
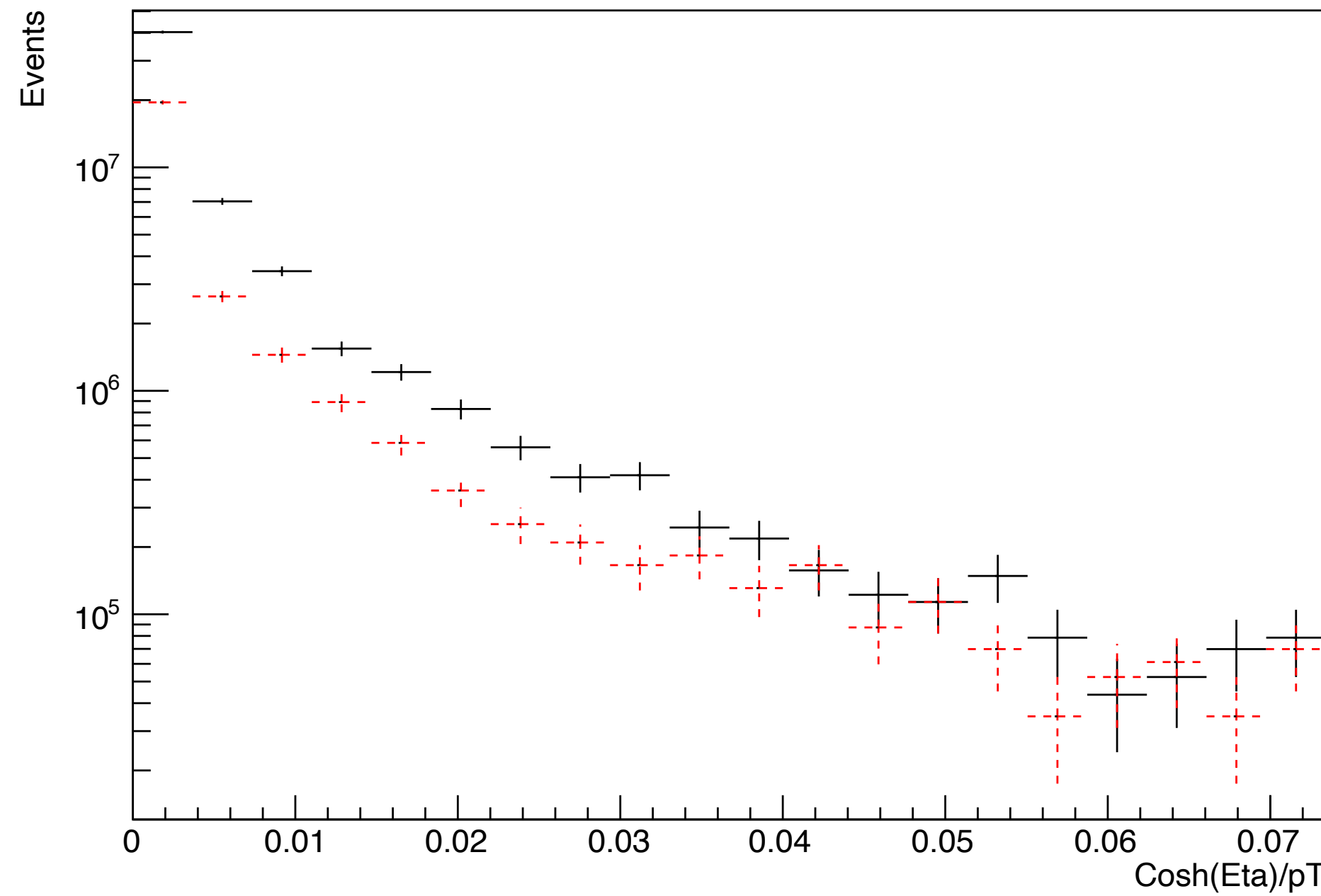
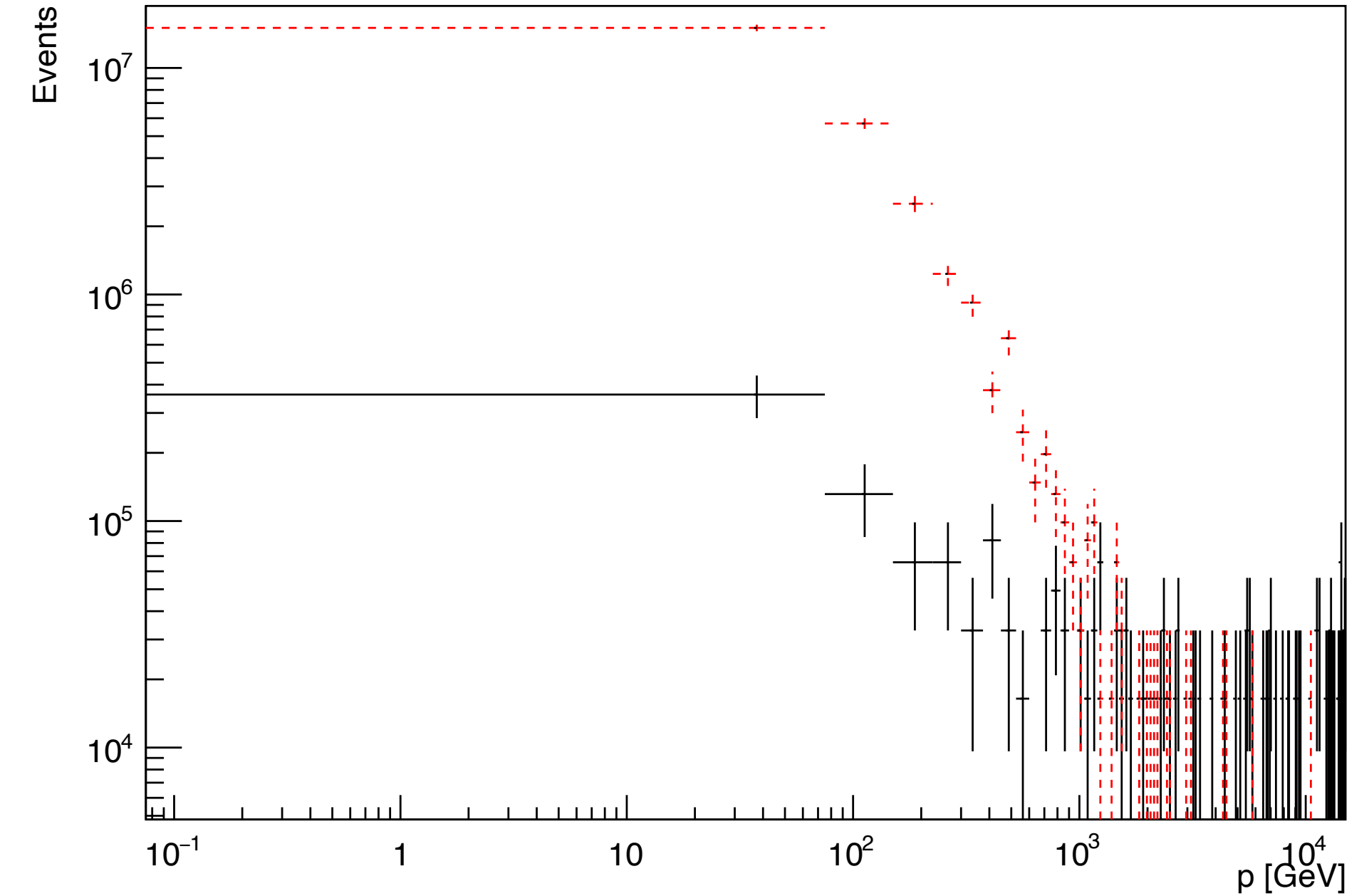
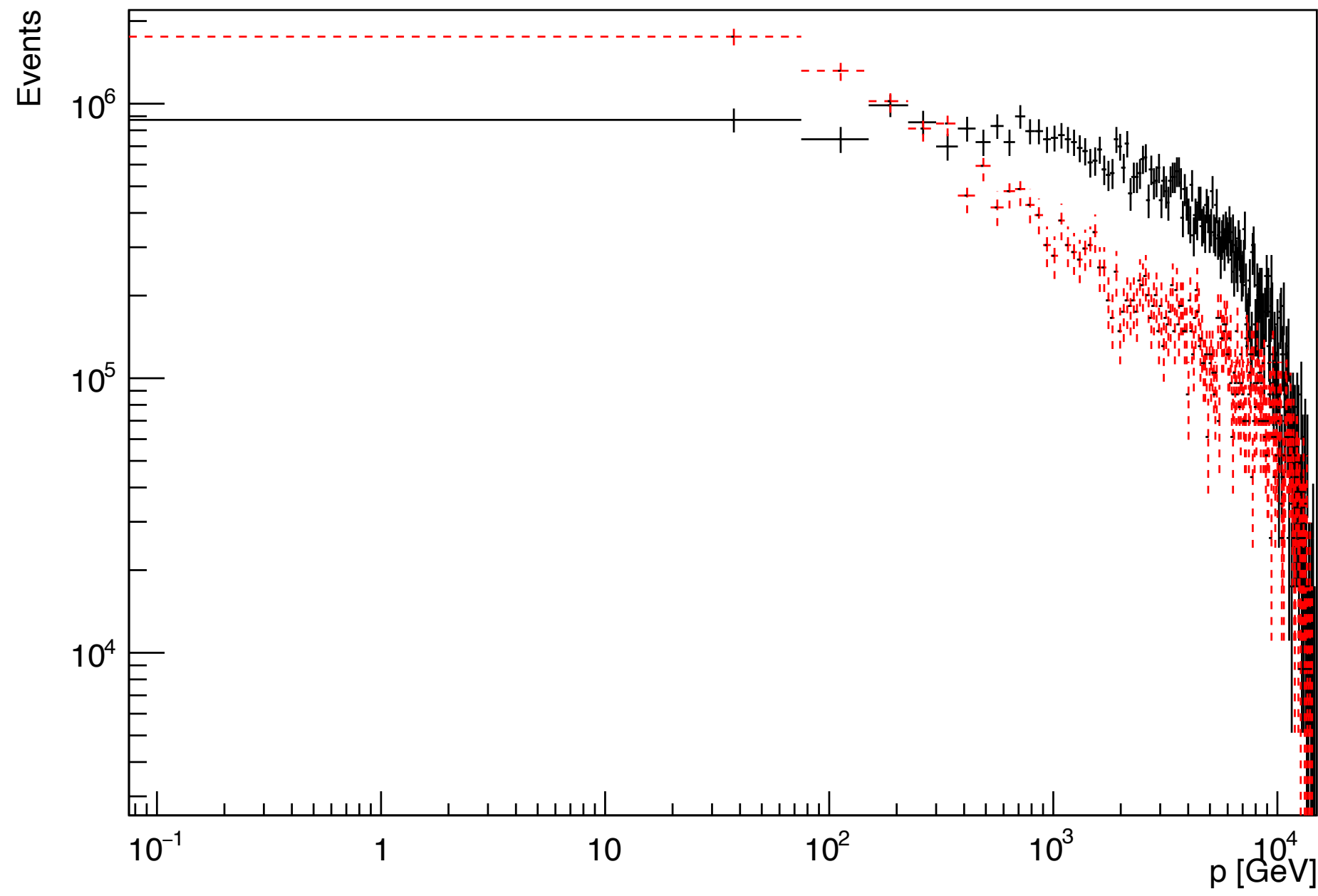
30 TeV

INT+QUAD (left) SM (right)
Beam Remnants (black)
Non-beam Remnants (red)



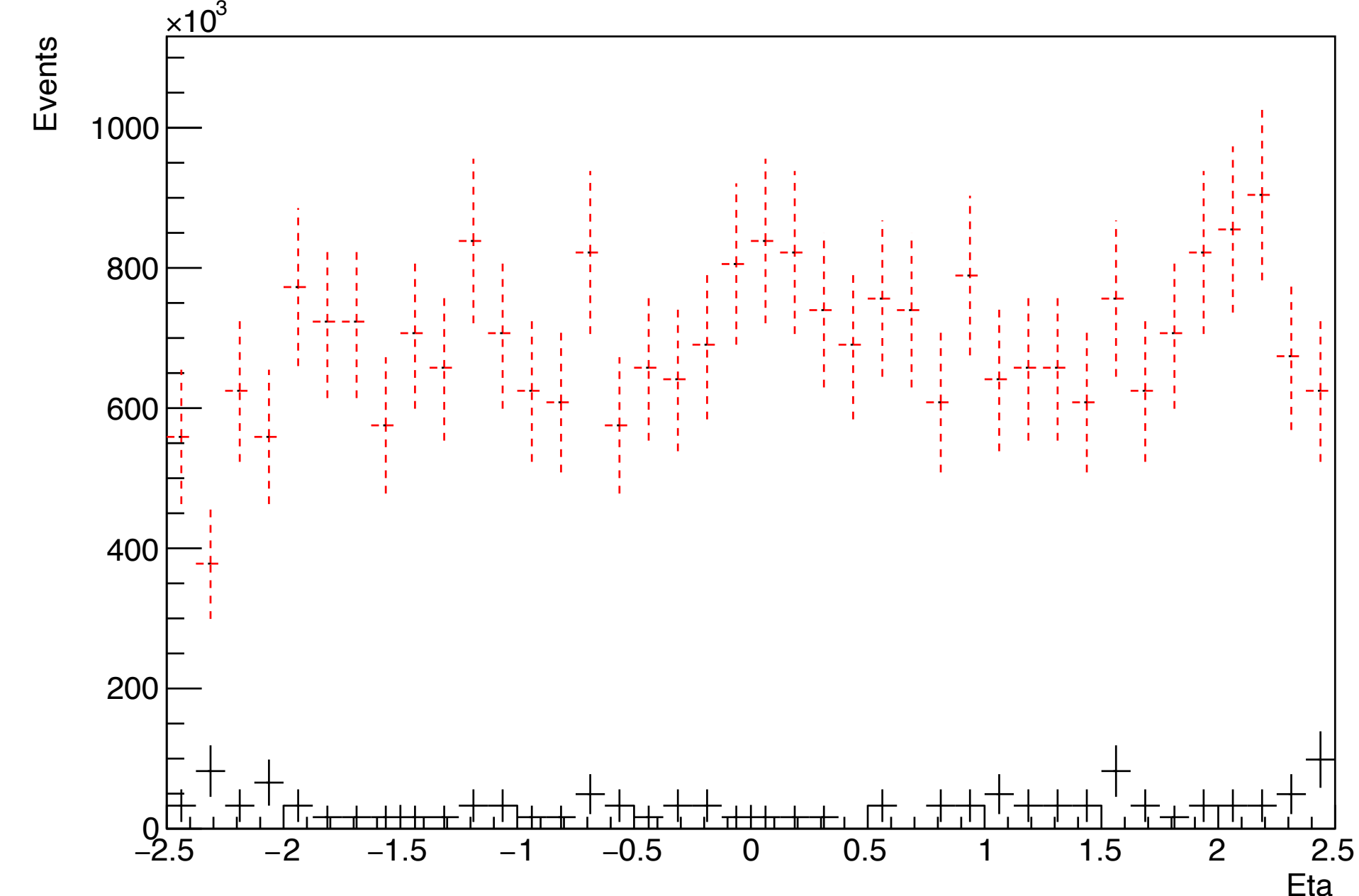
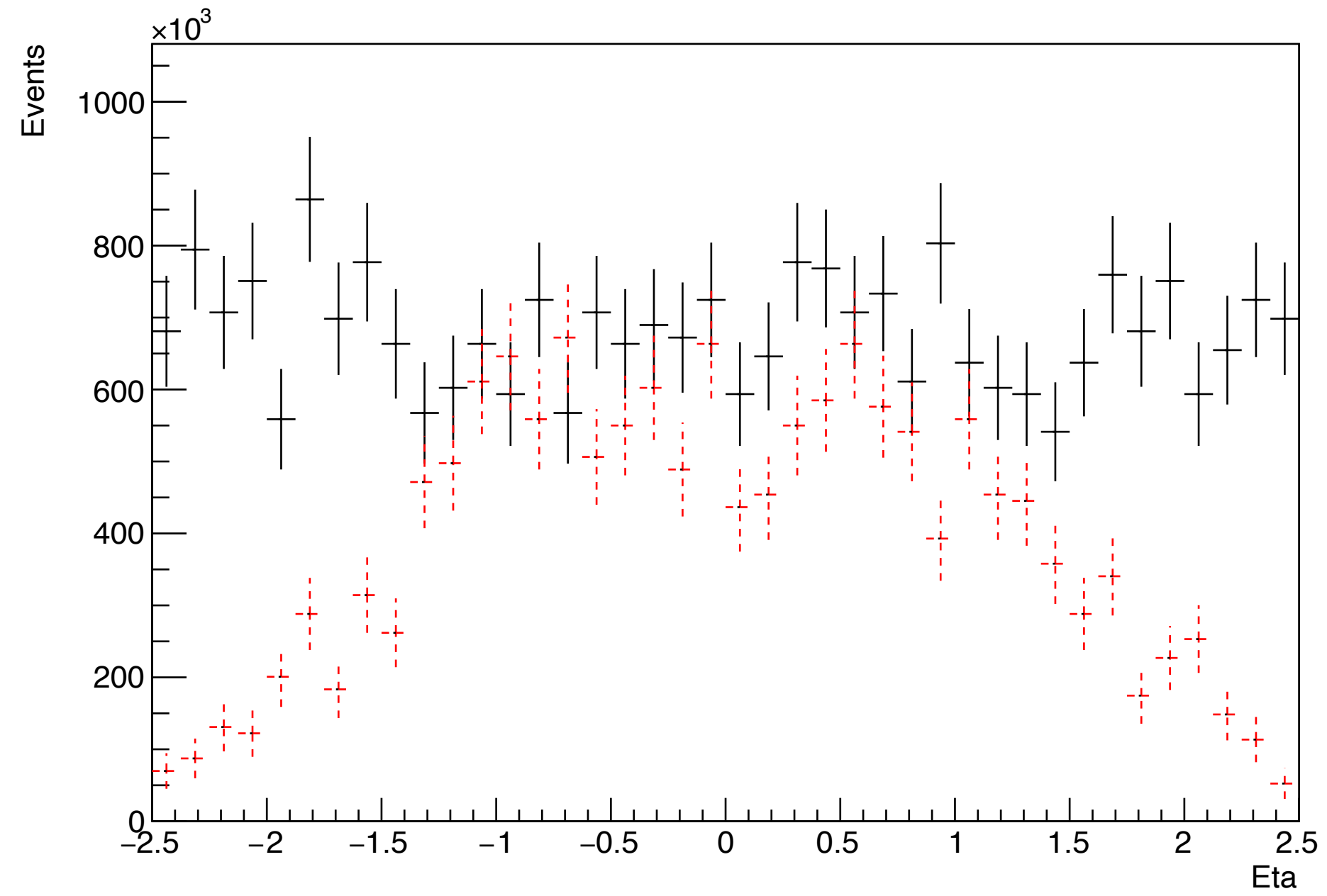
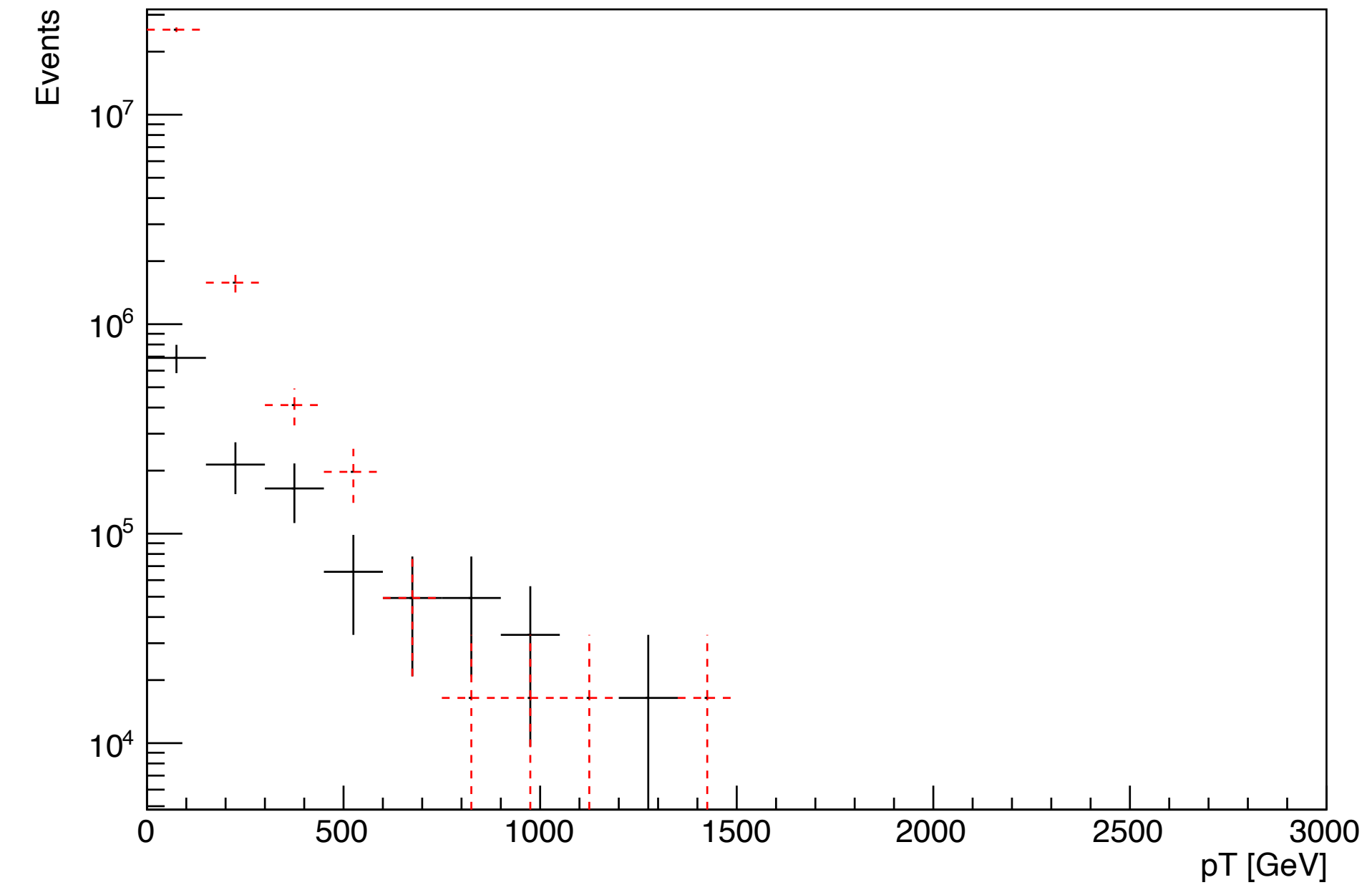
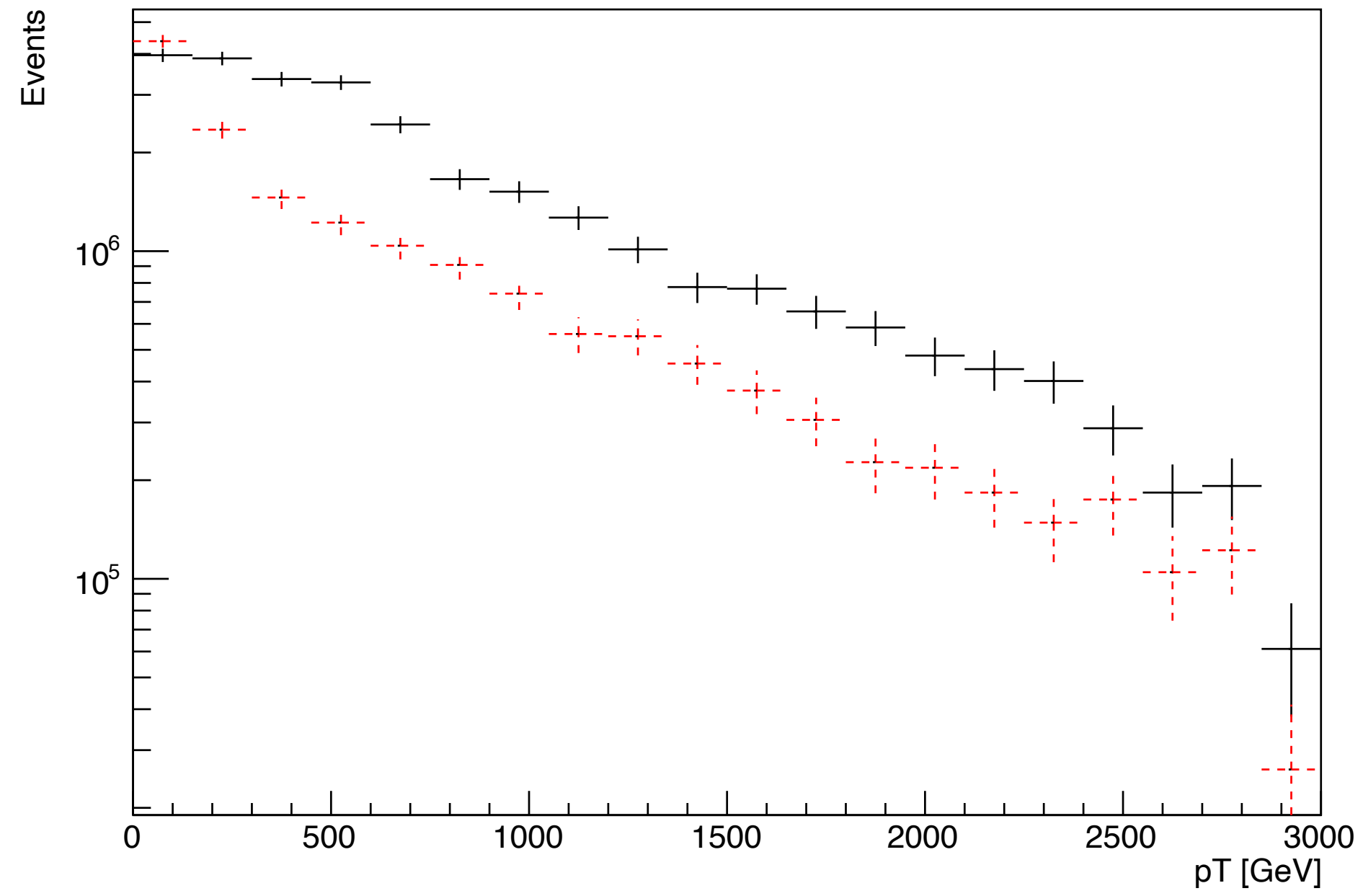
30 TeV Eta < 2.5

INT+QUAD (left) SM (right)
Beam Remnants (black)
Non-beam Remnants (red)



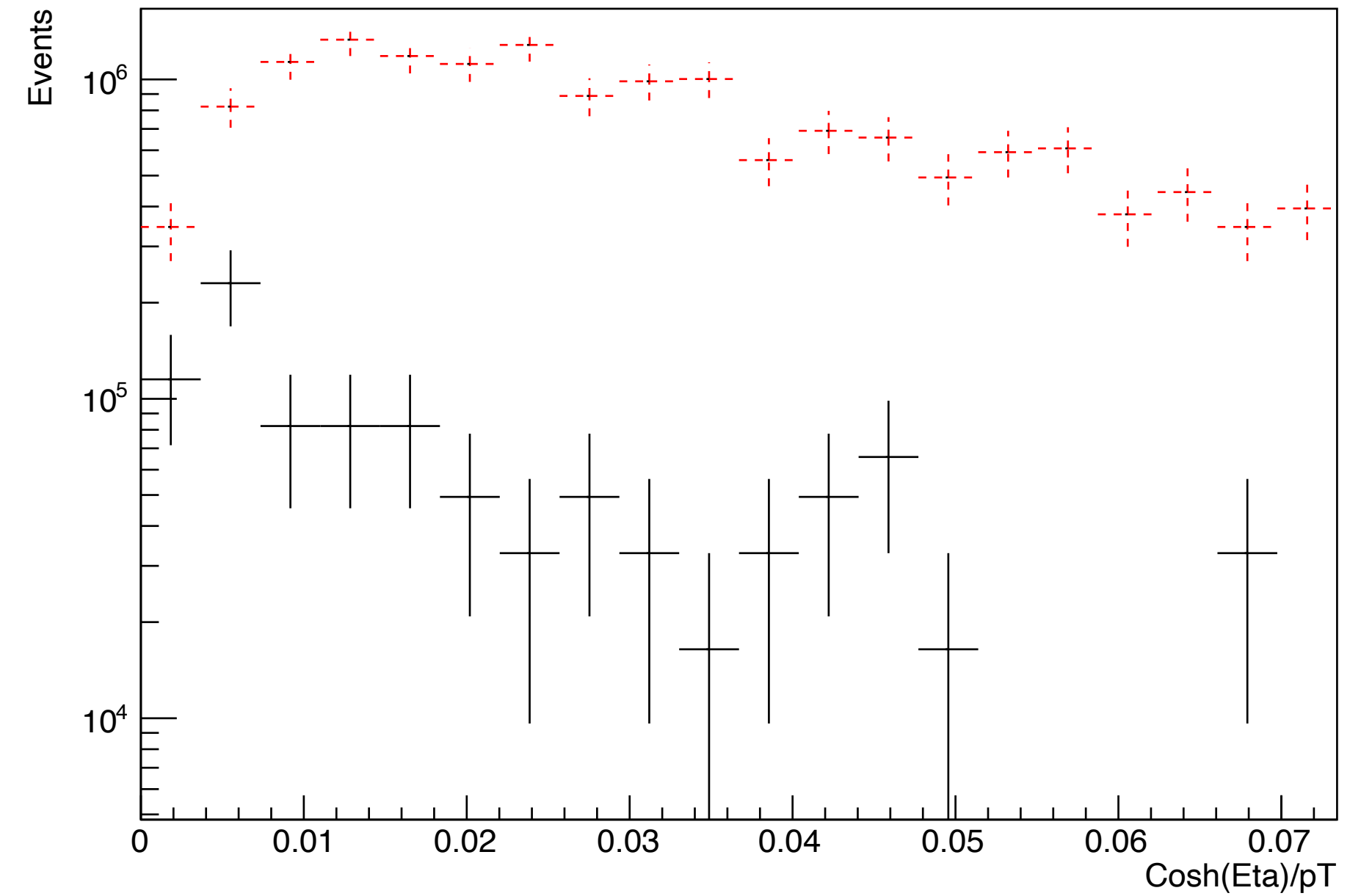
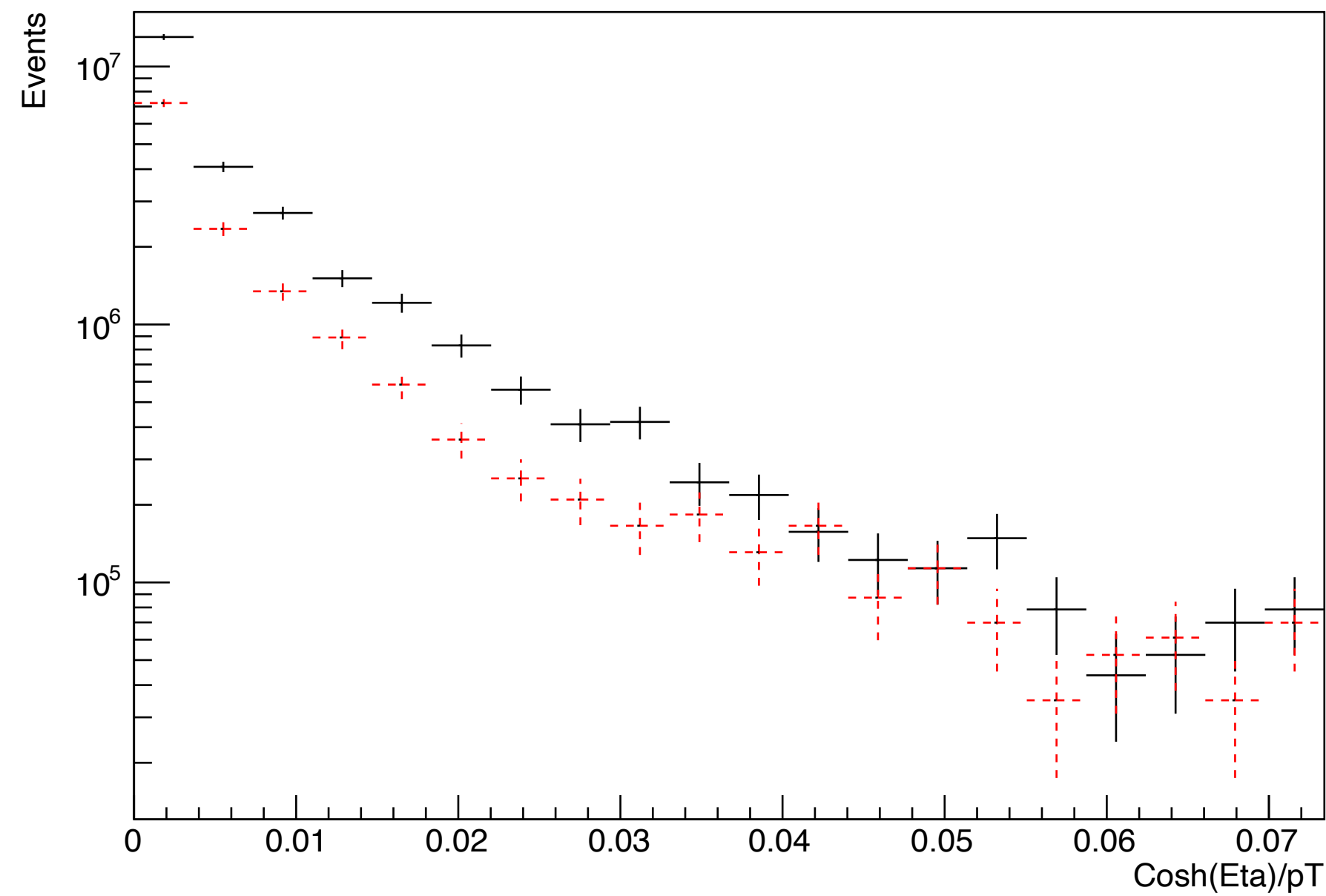
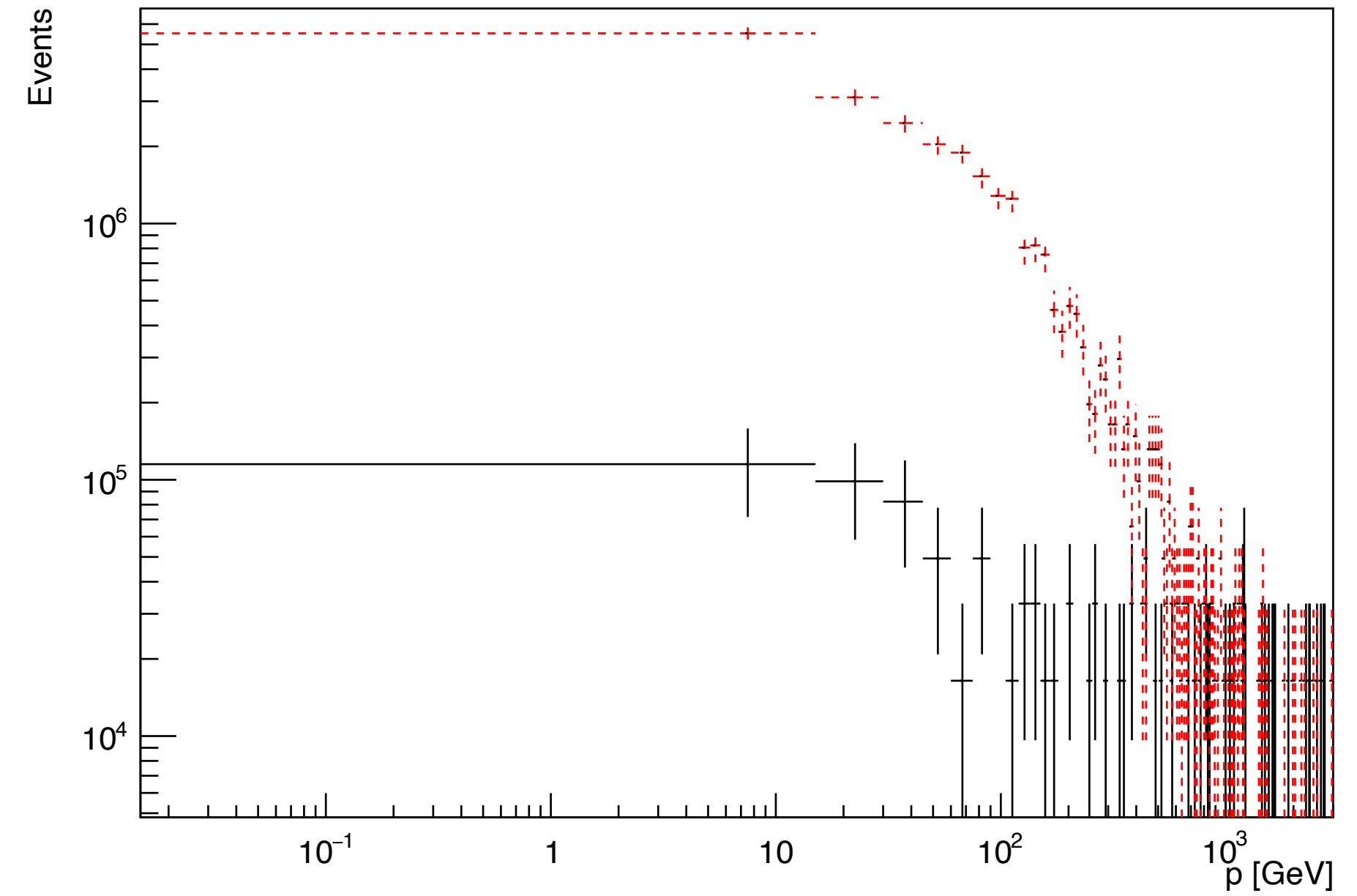
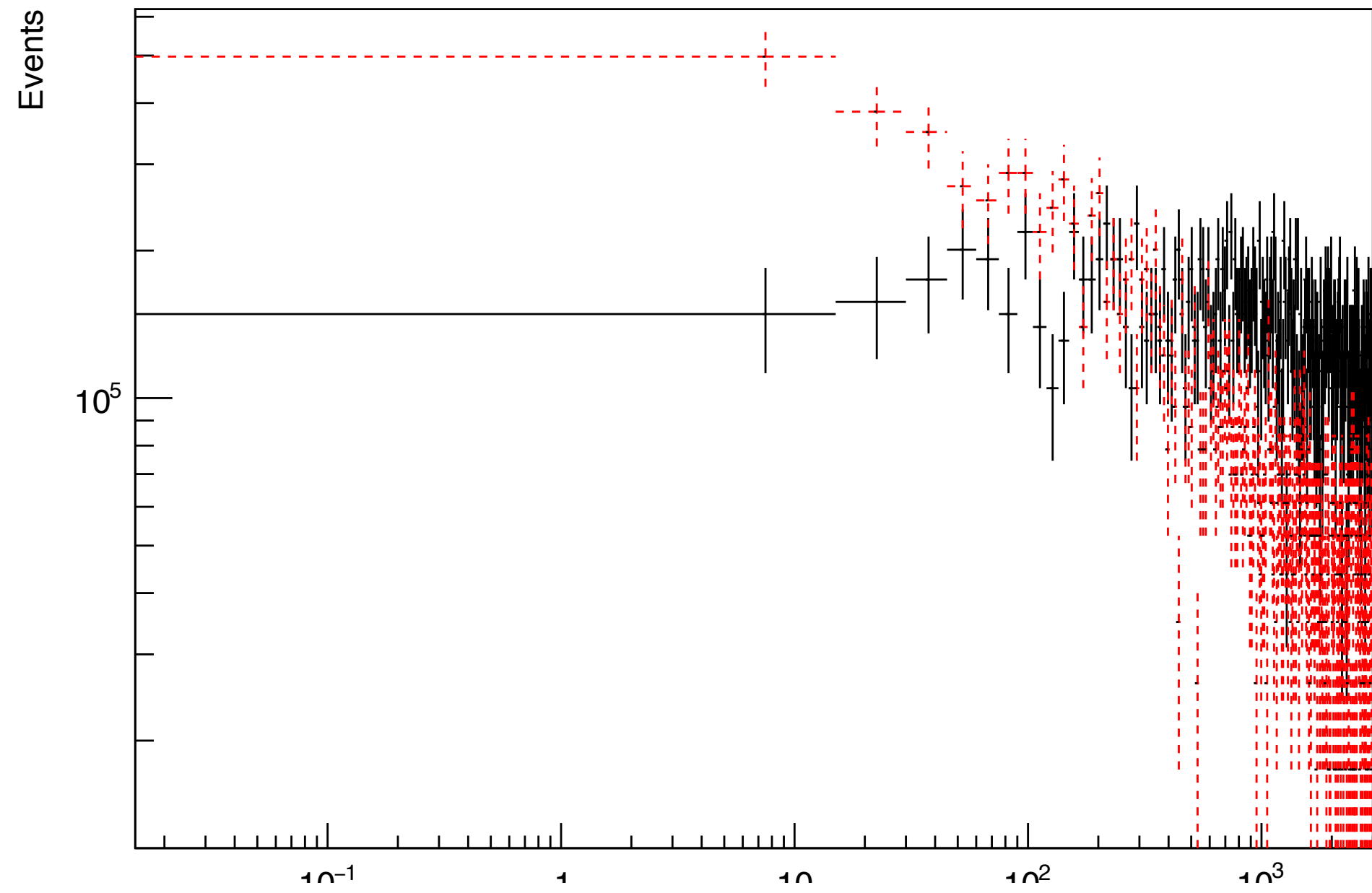
30 TeV Eta < 2.5 & P < 3 TeV

INT+QUAD (left) SM (right)
Beam Remnants (black)
Non-beam Remnants (red)



30 TeV Eta < 2.5 & P < 3 TeV

INT+QUAD (left) SM (right)
Beam Remnants (black)
Non-beam Remnants (red)

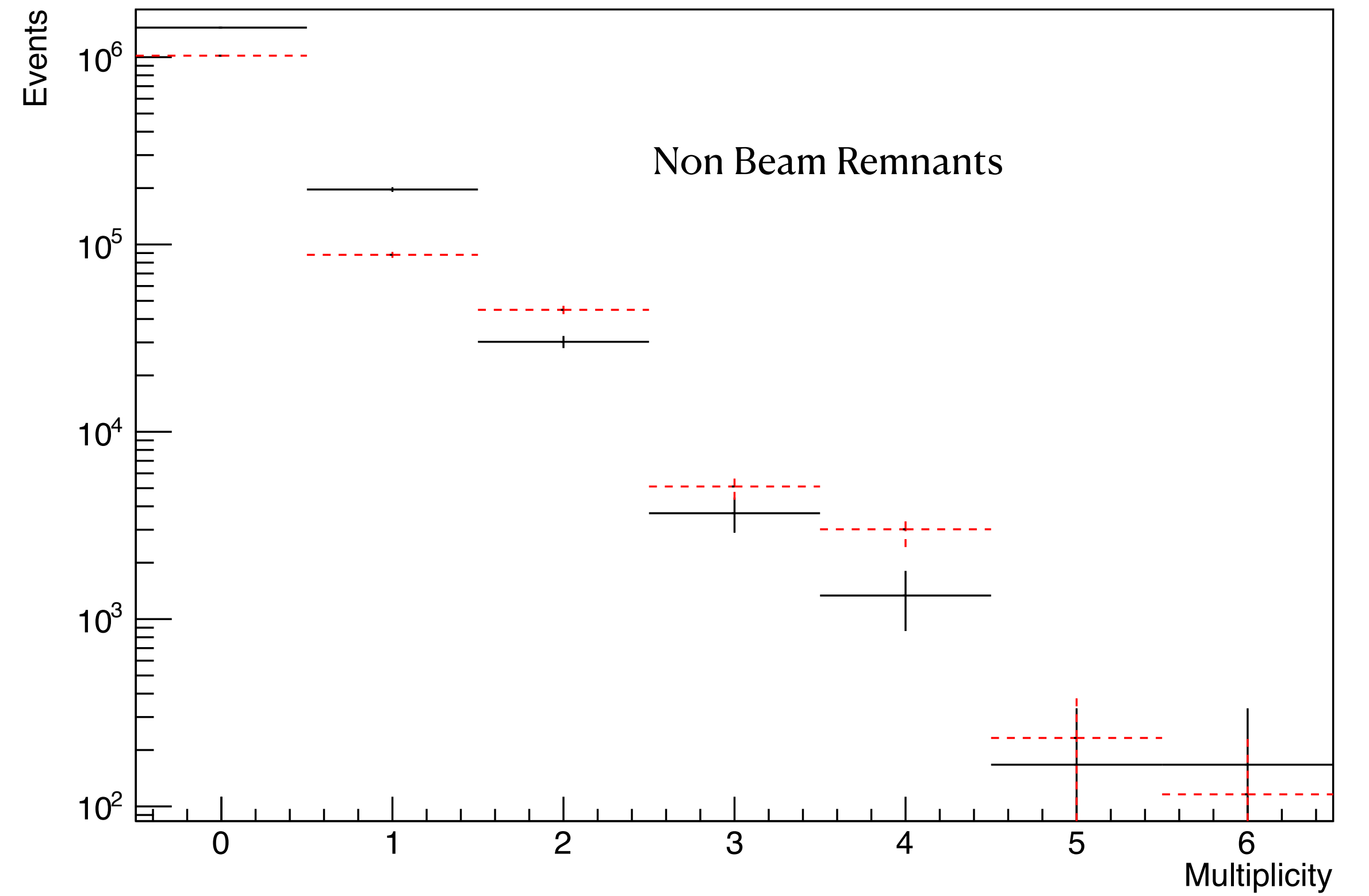
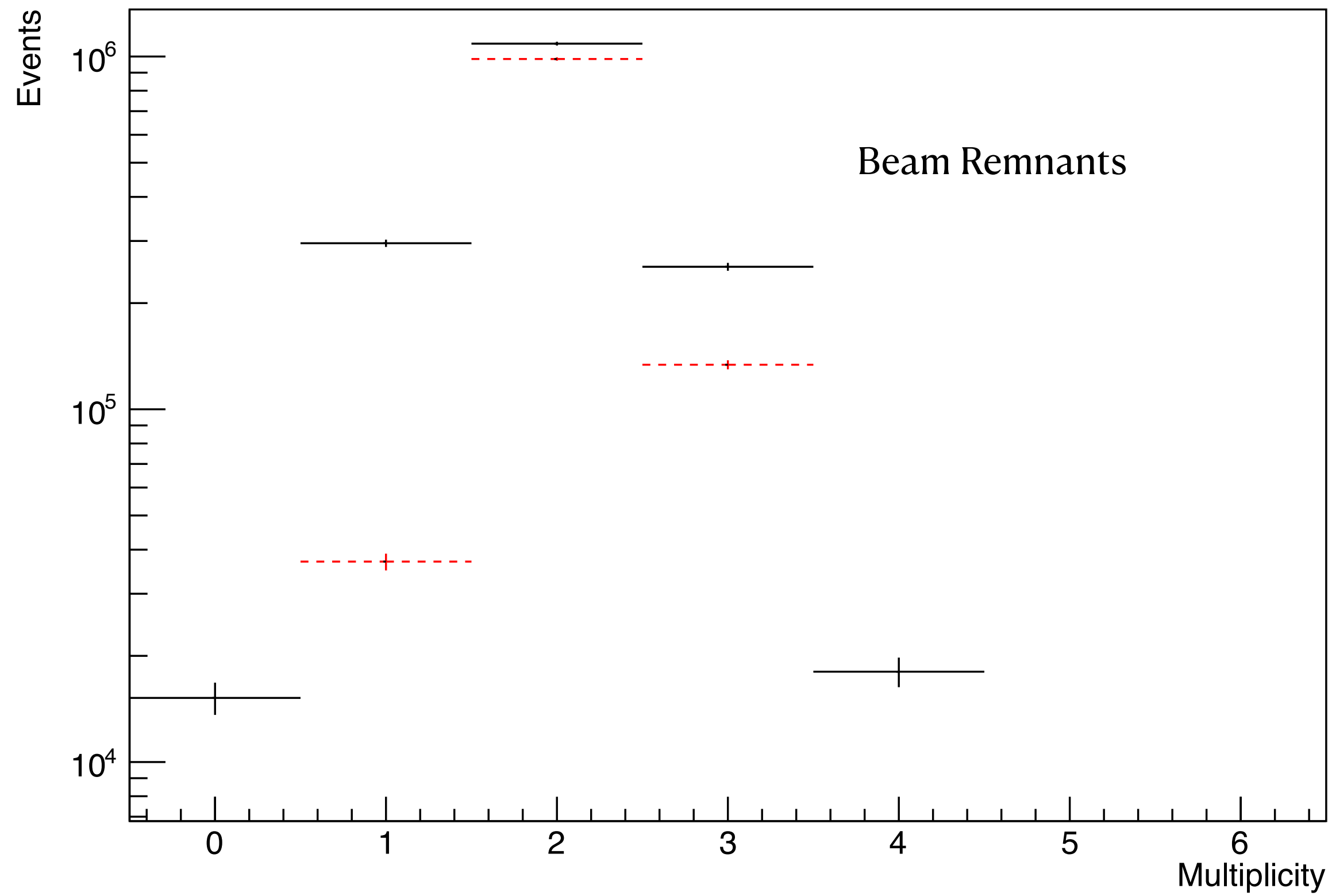


3 TeV

INT+QUAD (Black) SM (Red)

Beam Remnants = Any muon with momentum $> \sqrt{S}/30$ (left)

Non-beam Remnants = Any electron or muon with $\eta < 2$ and momentum $< \sqrt{S}/30$ (right)

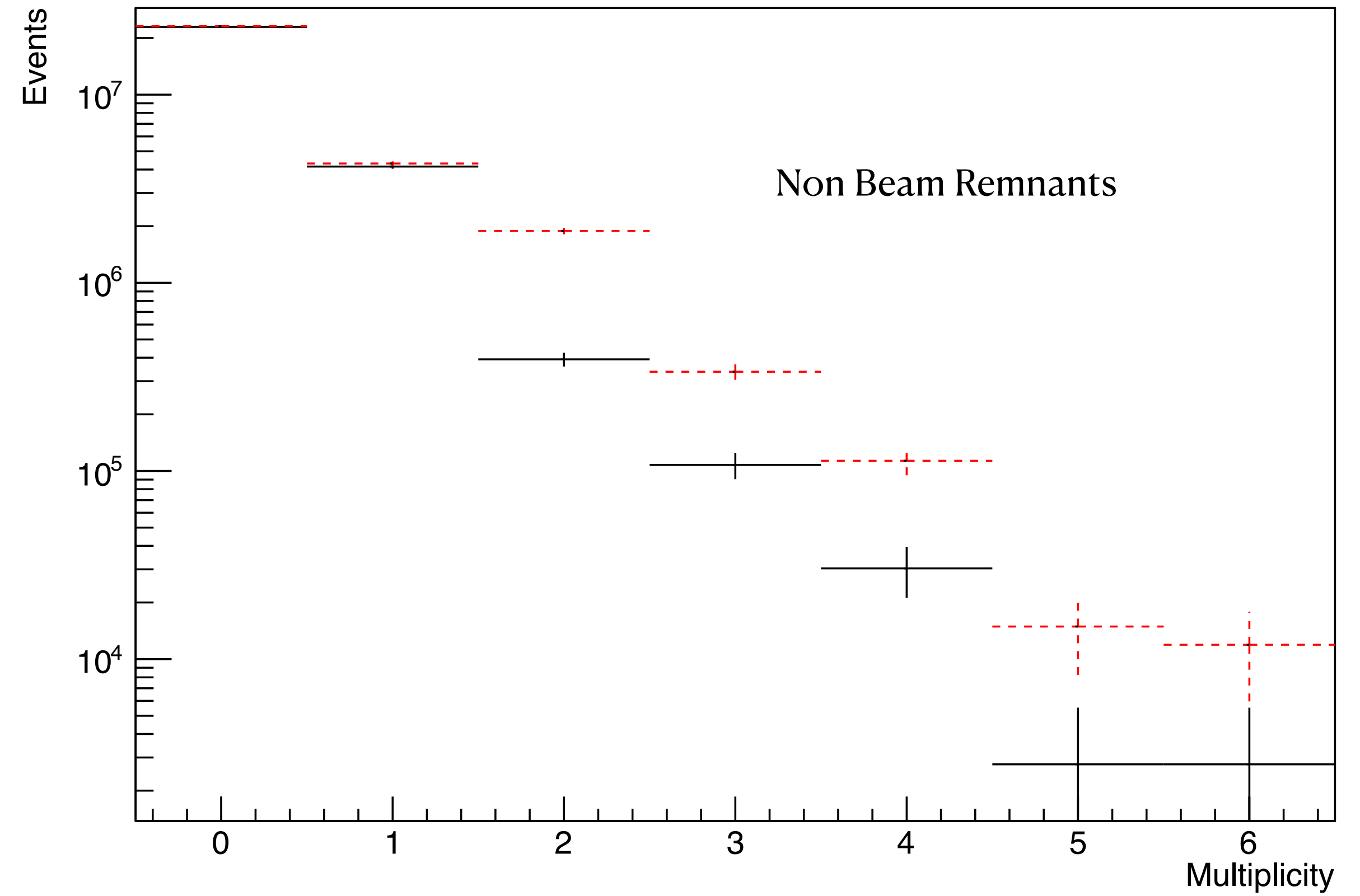
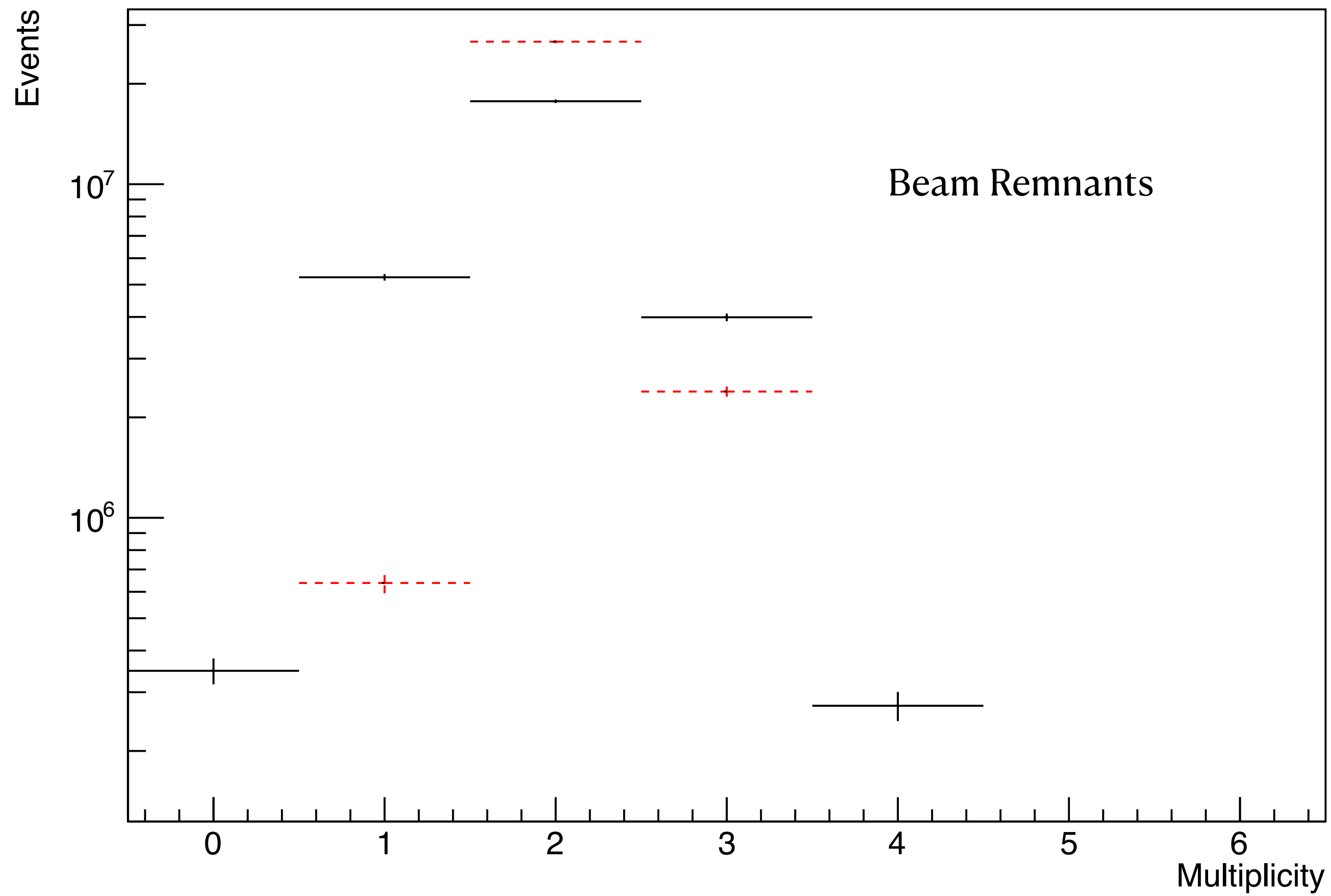


10 TeV

INT+QUAD (Black) SM (Red)

Beam Remnants = Any muon with momentum > sqrt(S)/30 (left)

Non-beam Remnants = Any electron or muon with eta < 2 and momentum < sqrt(S)/30 (right)



30 TeV

INT+QUAD (Black) SM (Red)

Beam Remnants = Any muon with momentum > sqrt(S)/30 (left)

Non-beam Remnants = Any electron or muon with eta < 2 and momentum < sqrt(S)/30 (right)

