

Start Counter Efficiency

Mahmoud Kamel

Paul's plugin cuts

Track requirements

dMinTrackingFOM = 5.73303E-7; // +/- 5 sigma

dMinNumTrackHits = 14; //e.g. 6 in CDC, 8 in

DMinHitRingsPerCDCSuperlayer = 3;

dMinHitPlanesPerFDCCPackage = 4;

dMaxVertexR = 1.0;

dCutAction_TrackHitPattern = new DCutAction_TrackHitPattern(NULL, dMinHitRingsPerCDCSuperlayer, dMinHitPlanesPerFDCCPackage);

//action initialize not necessary: is empty

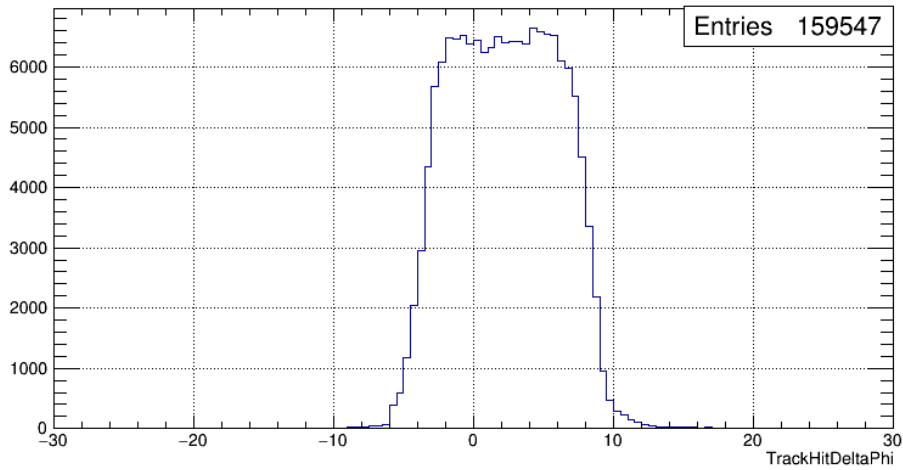
dMaxPIDDeltaTMap[SYS_BCAL] = 1.0;

dMaxPIDDeltaTMap[SYS_TOF] = 1.0;

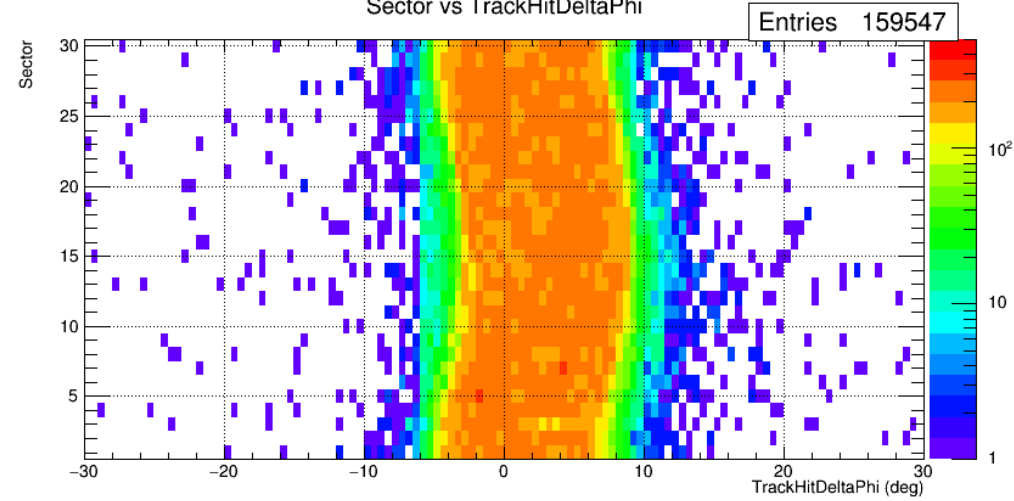
File: 11384_004

All Tracks

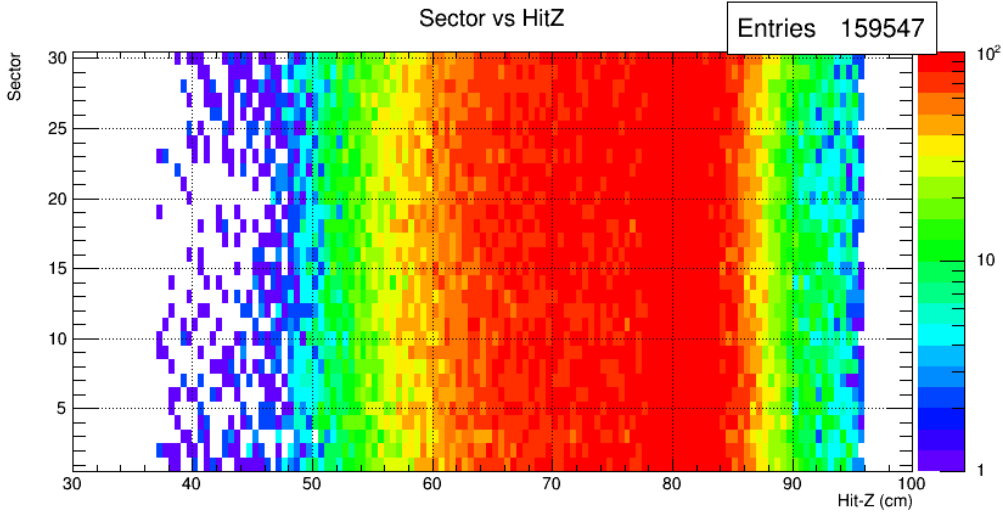
TrackHitDeltaPhi



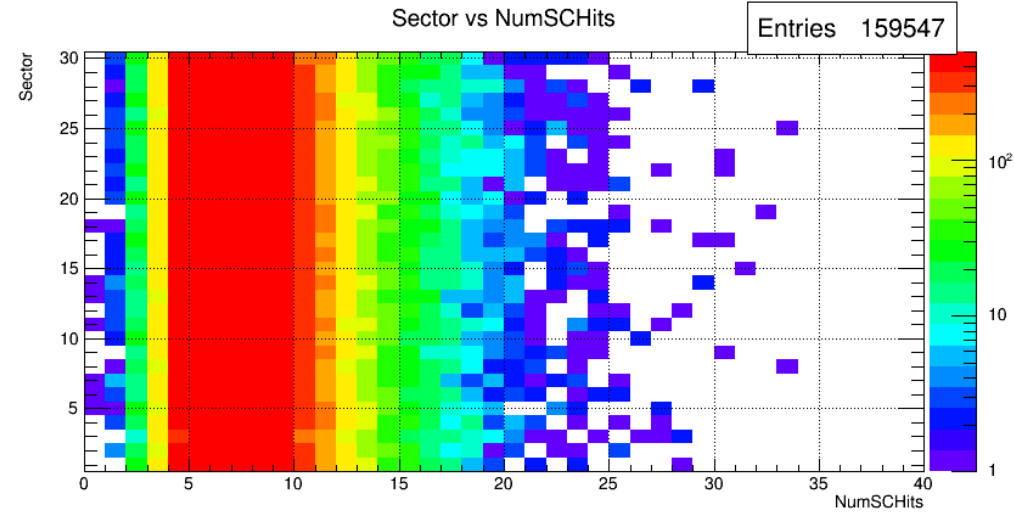
Sector vs TrackHitDeltaPhi



Sector vs HitZ

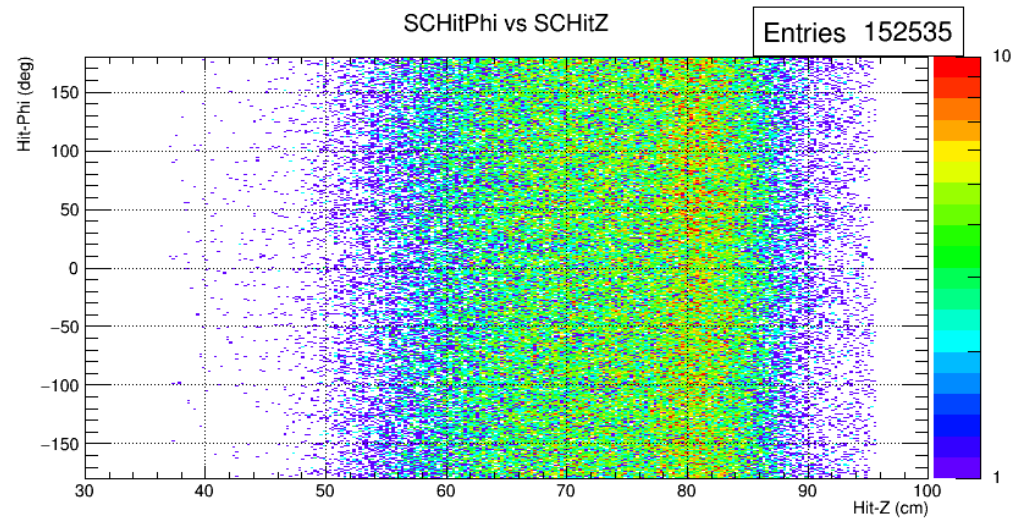
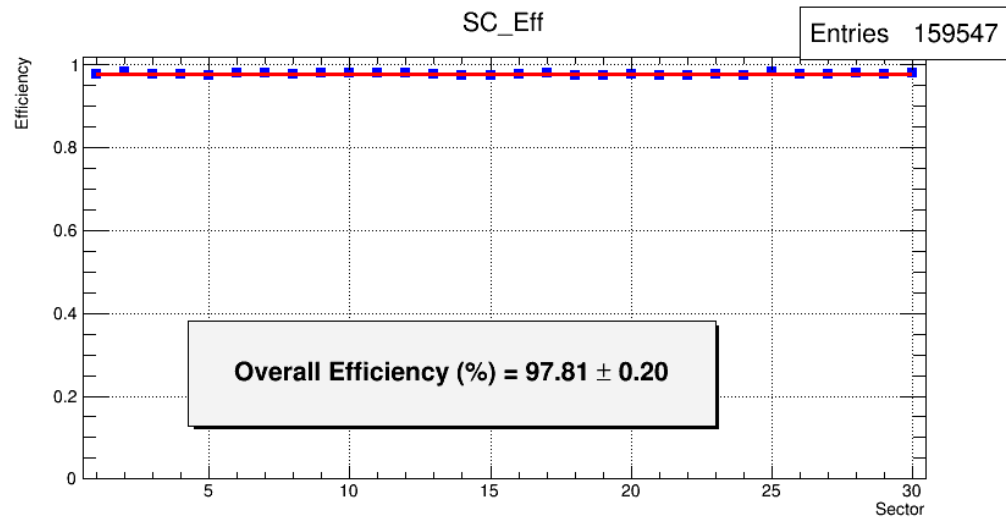
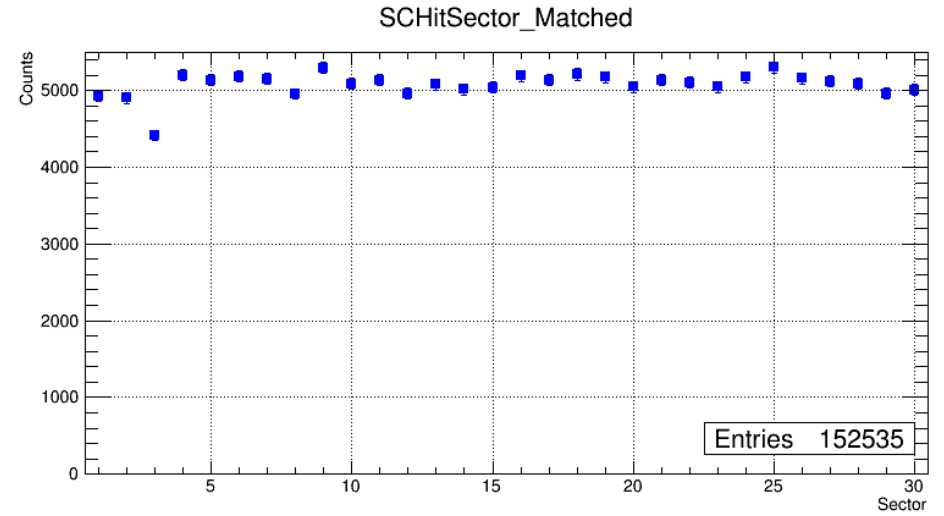
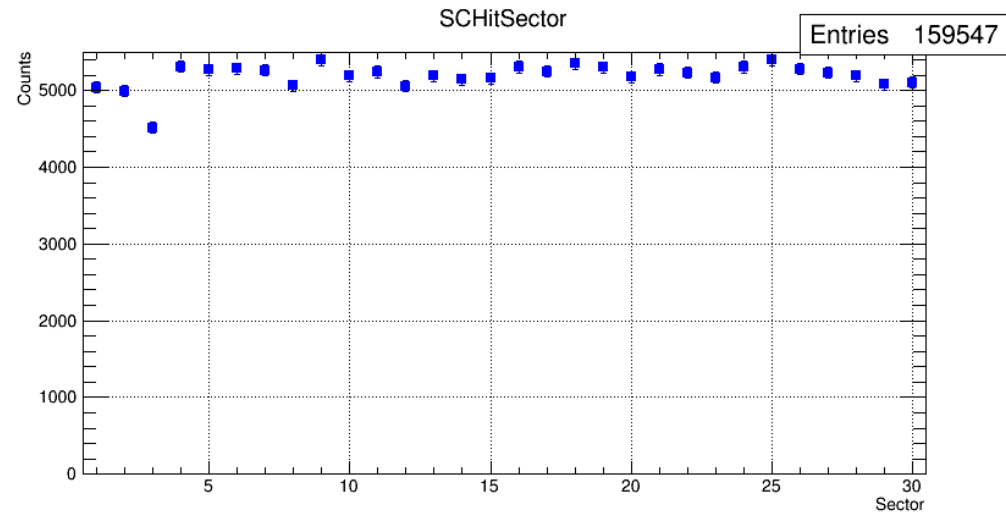


Sector vs NumSCHits



File: 11384_004

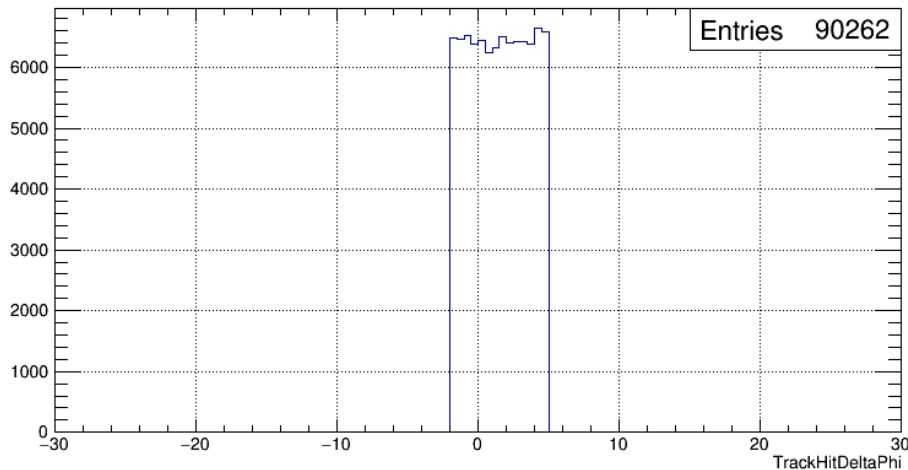
SC_Eff for all tracks



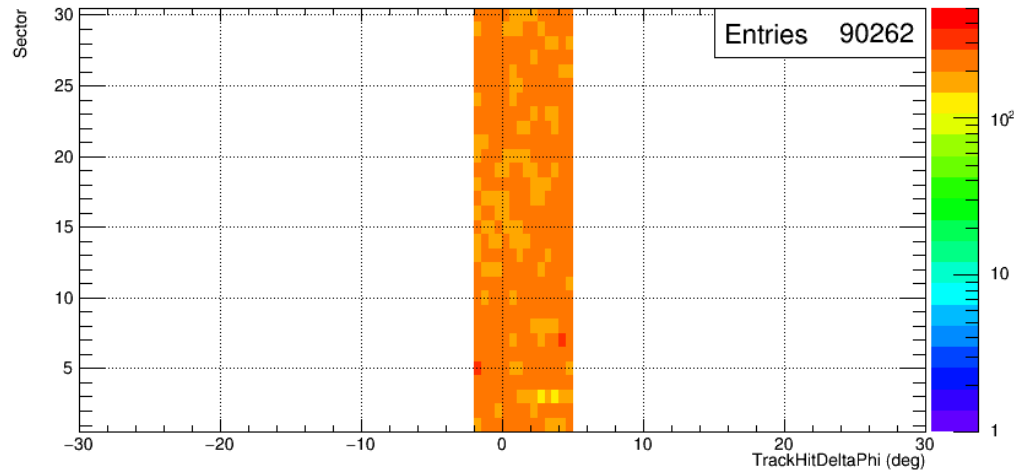
DeltaPhiCut to all Tracks

$$-2 < \text{Deltaphi} < 5$$

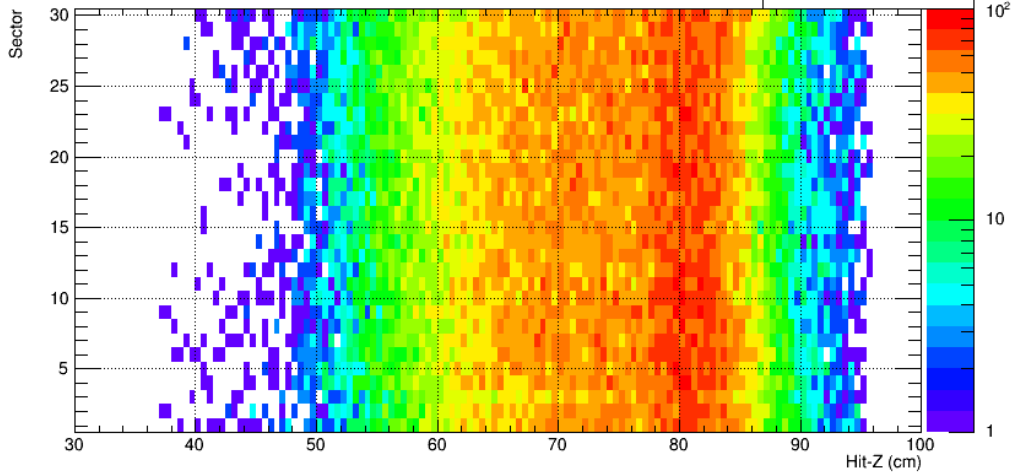
TrackHitDeltaPhi



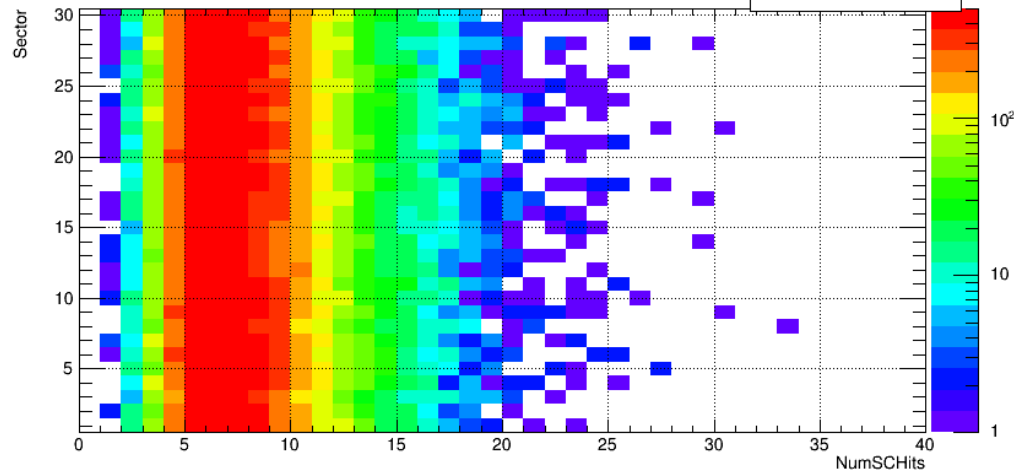
Sector vs TrackHitDeltaPhi



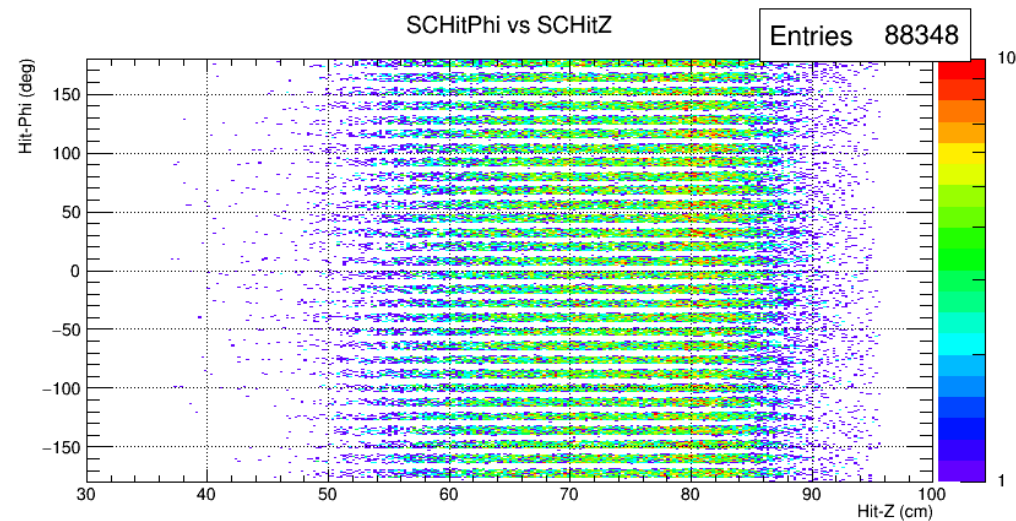
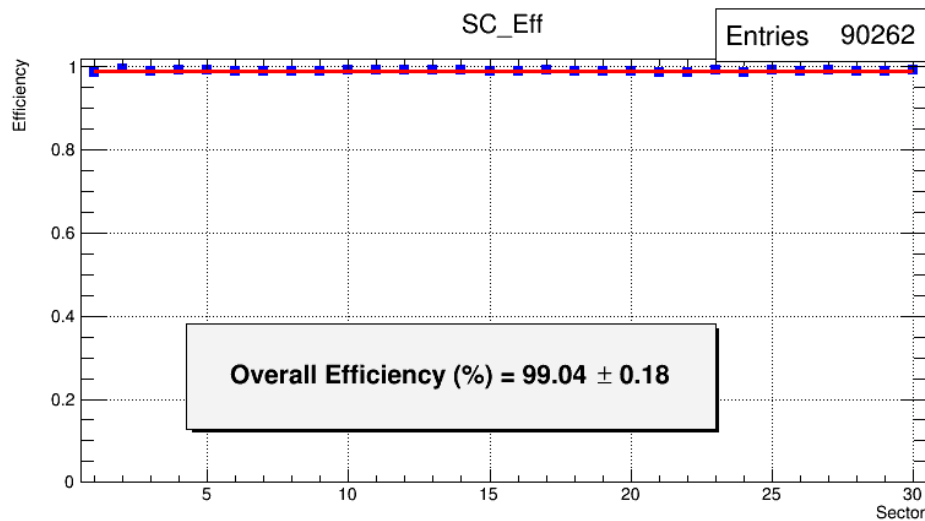
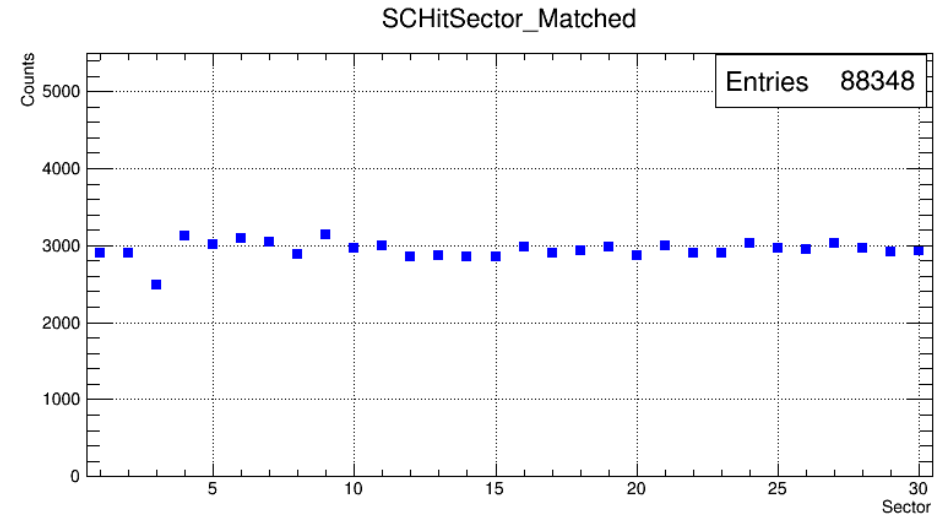
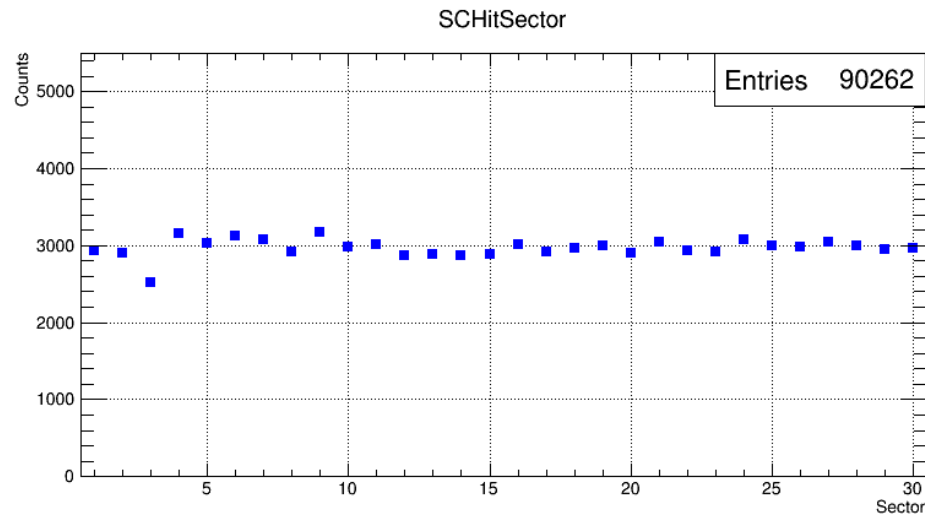
Sector vs HitZ



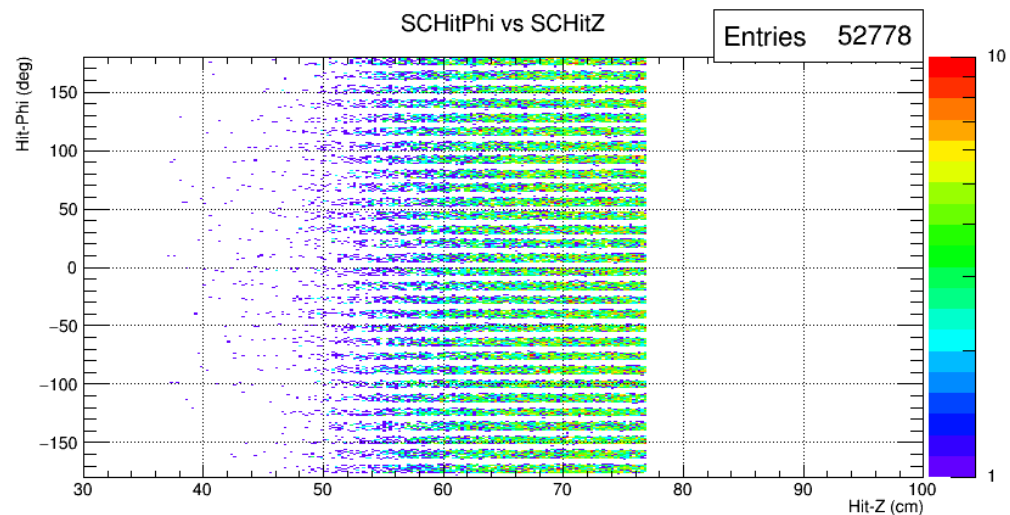
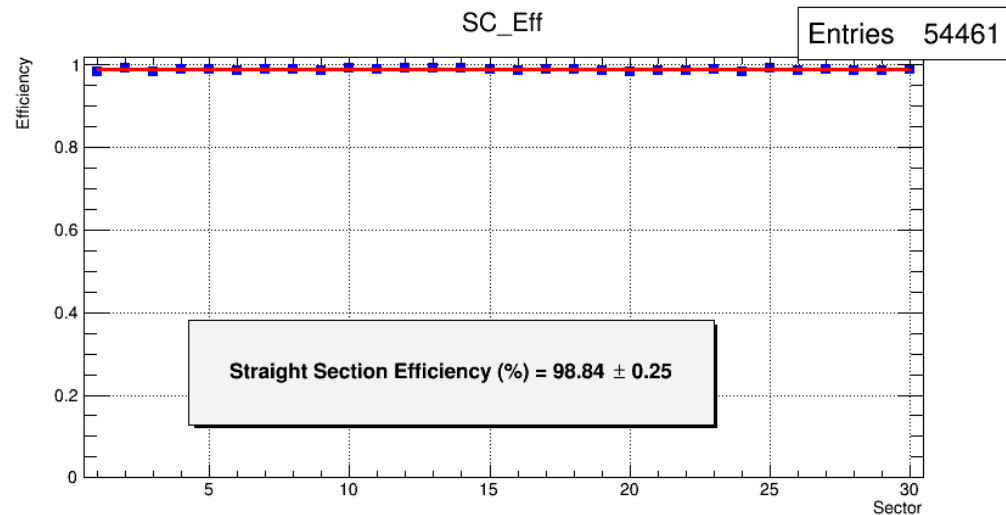
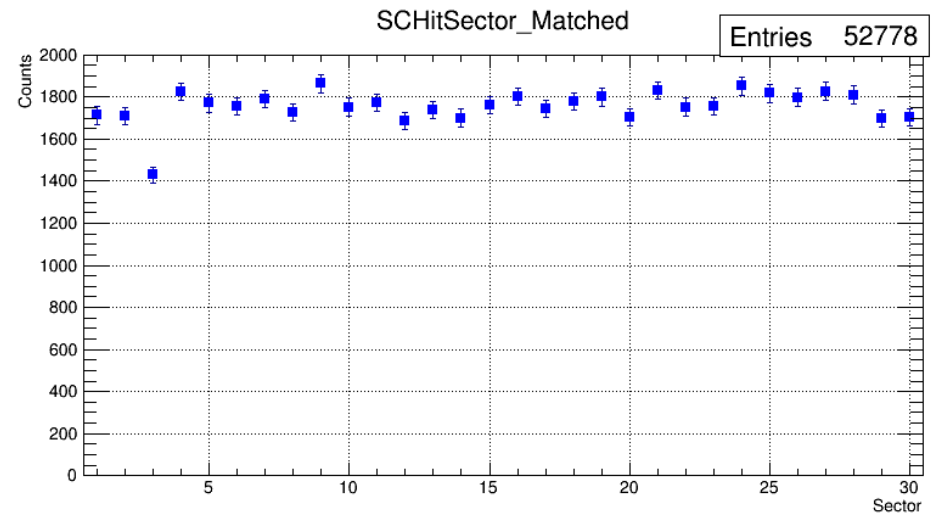
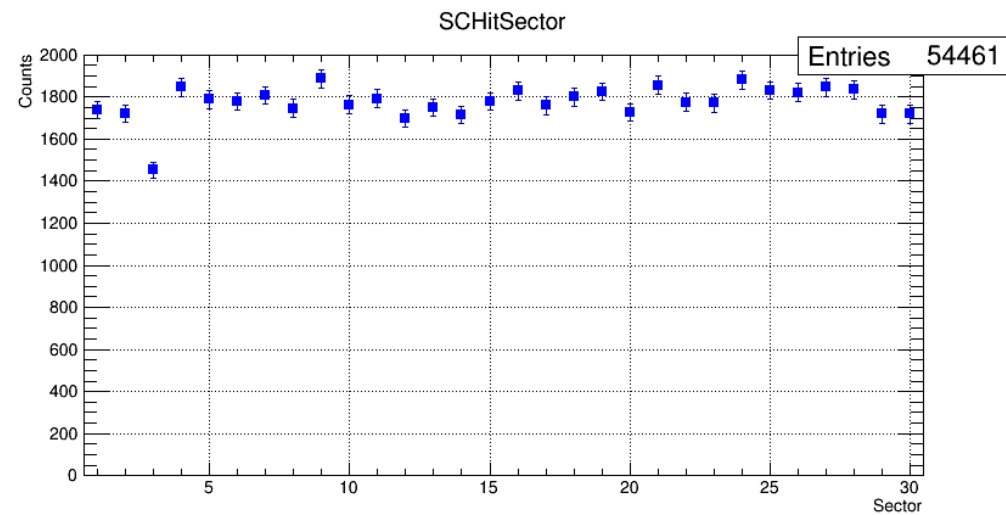
Sector vs NumSCHits



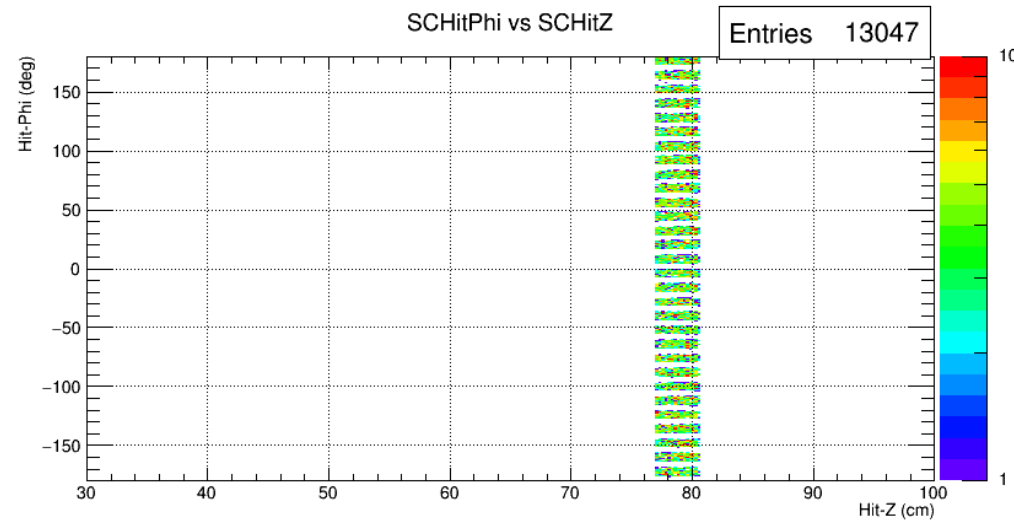
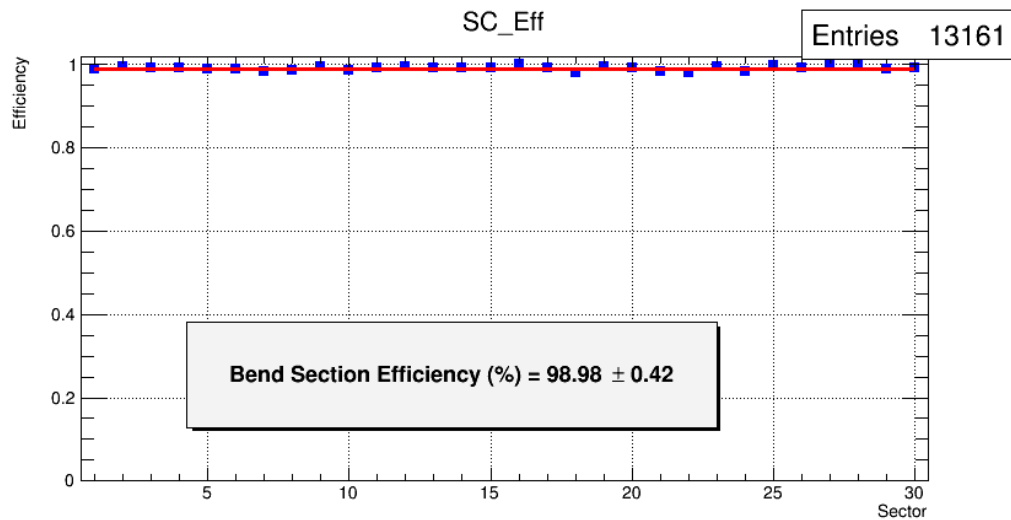
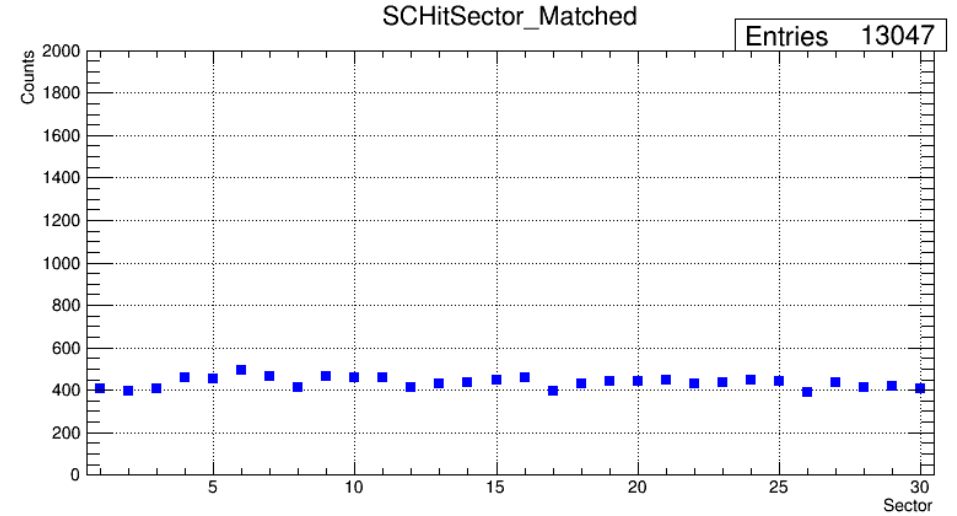
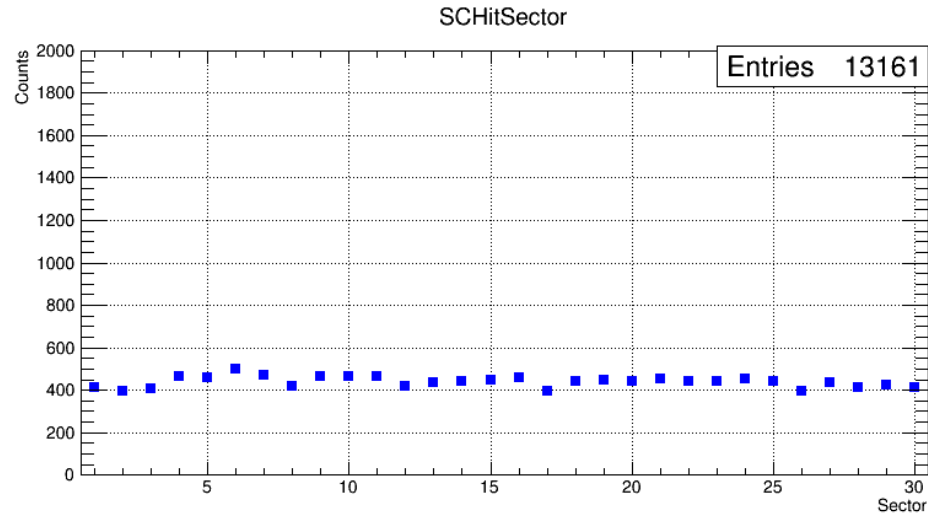
SC_Eff for all tracks with DeltaPhiCut



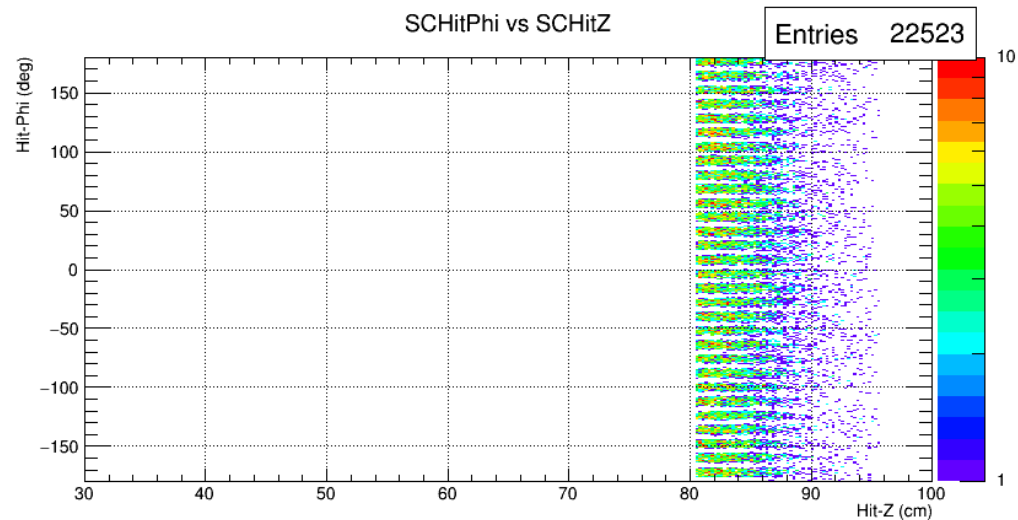
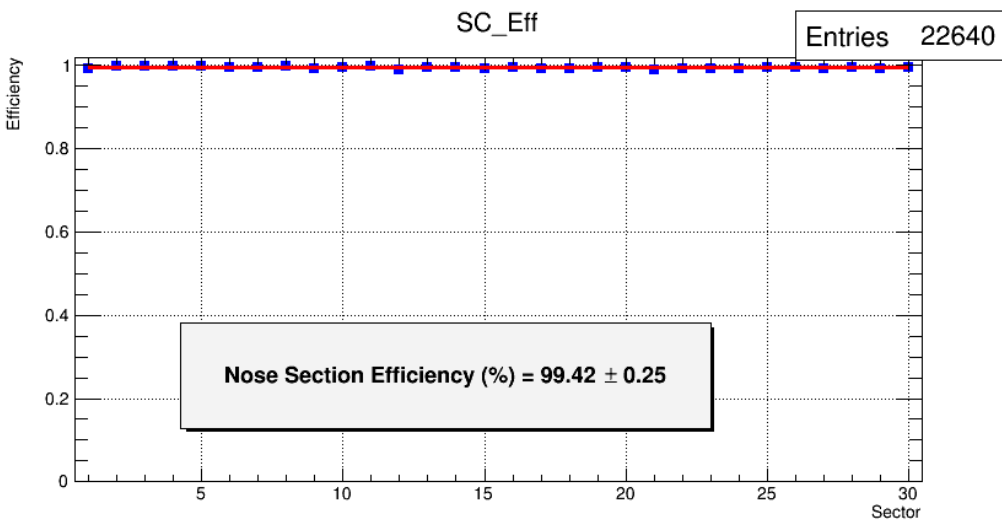
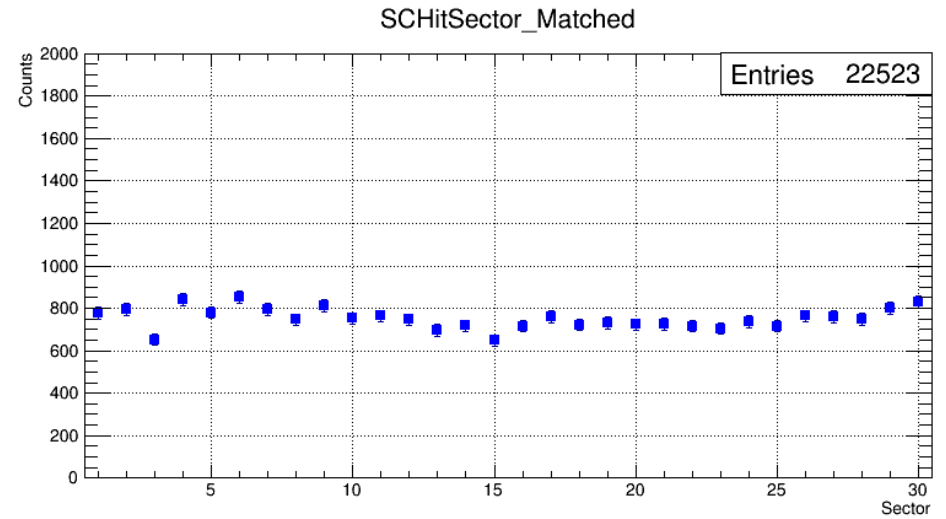
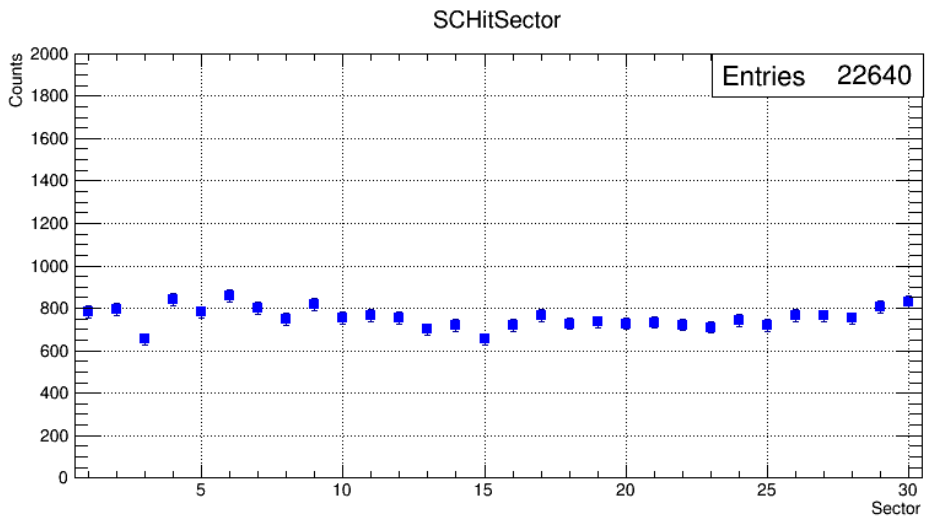
Straight Section Efficiency For All tracks With DeltaPhiCut



Bend Section Efficiency For All tracks With DeltaPhiCut



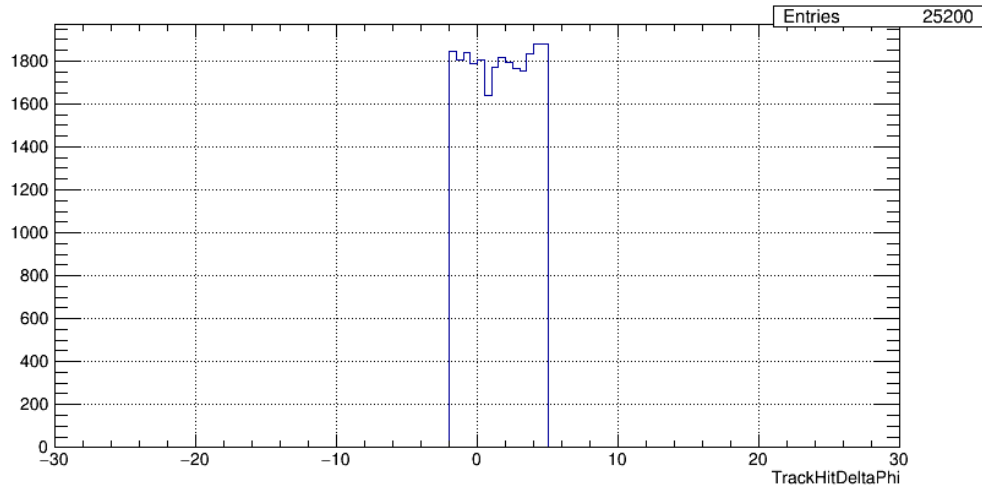
Nose Section Efficiency For All tracks With DeltaPhiCut



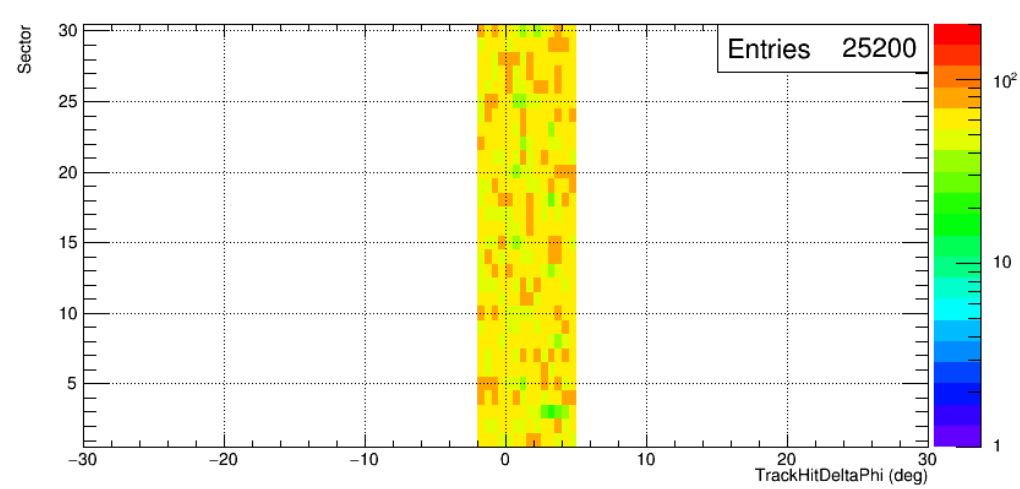
DeltaPhiCut to Proton Tracks

$$-2 < \text{Deltaphi} < 5$$

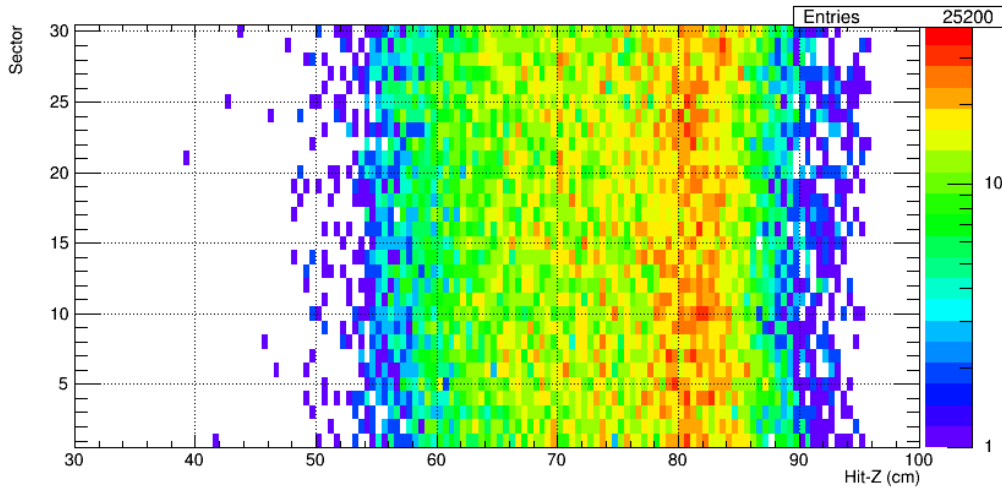
TrackHitDeltaPhi



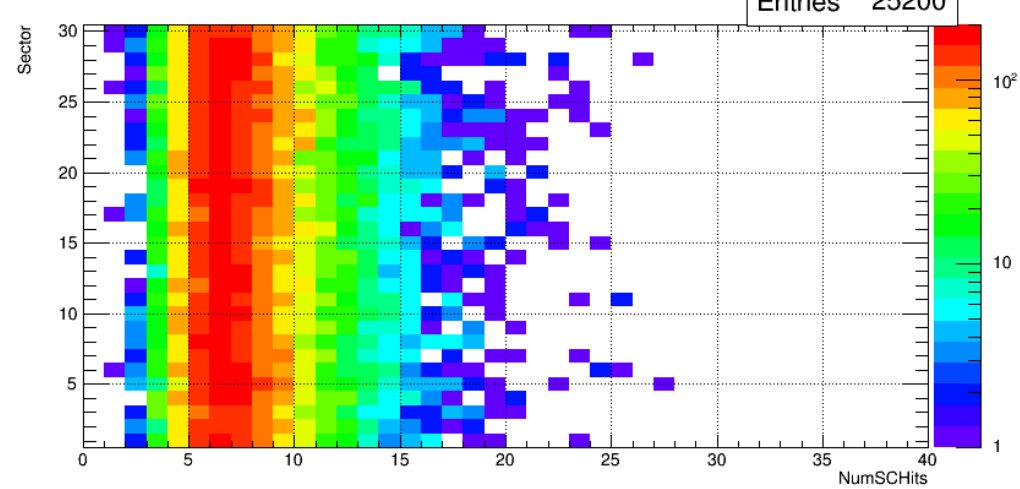
Sector vs TrackHitDeltaPhi



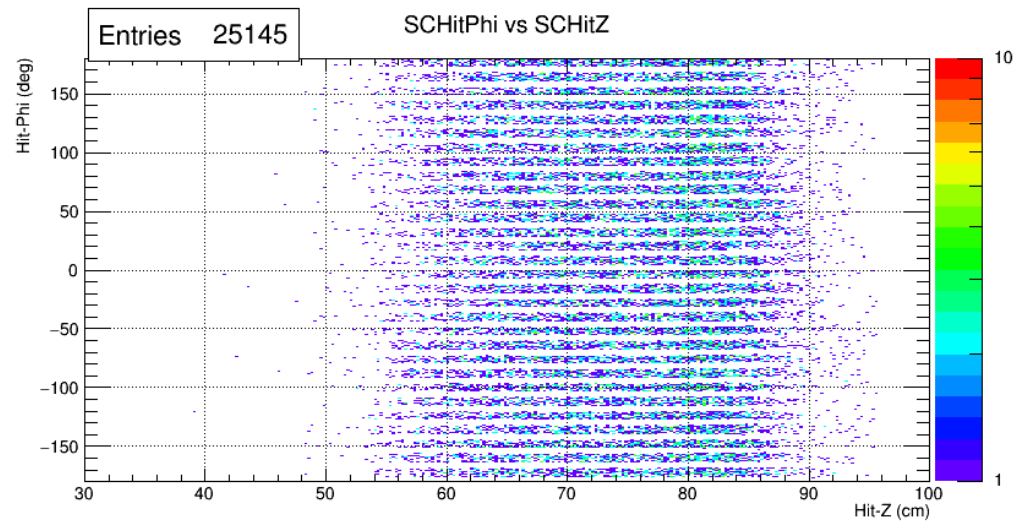
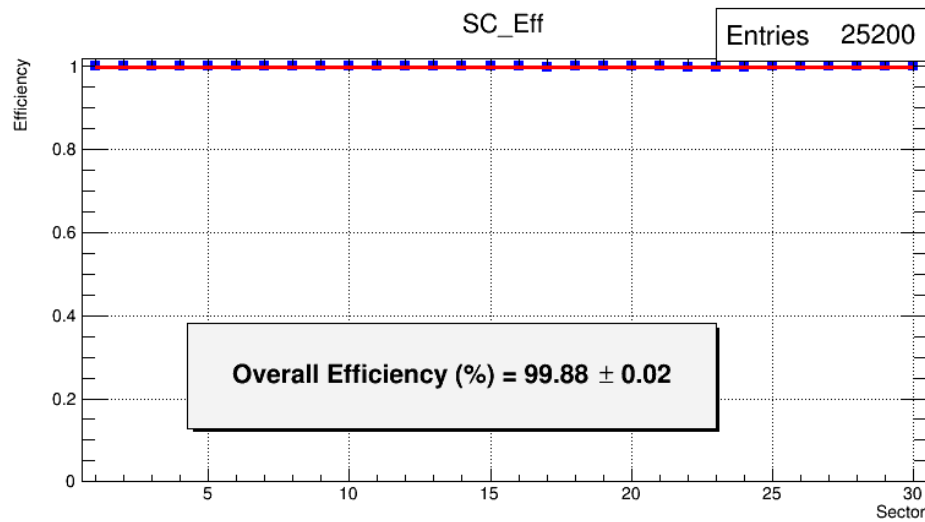
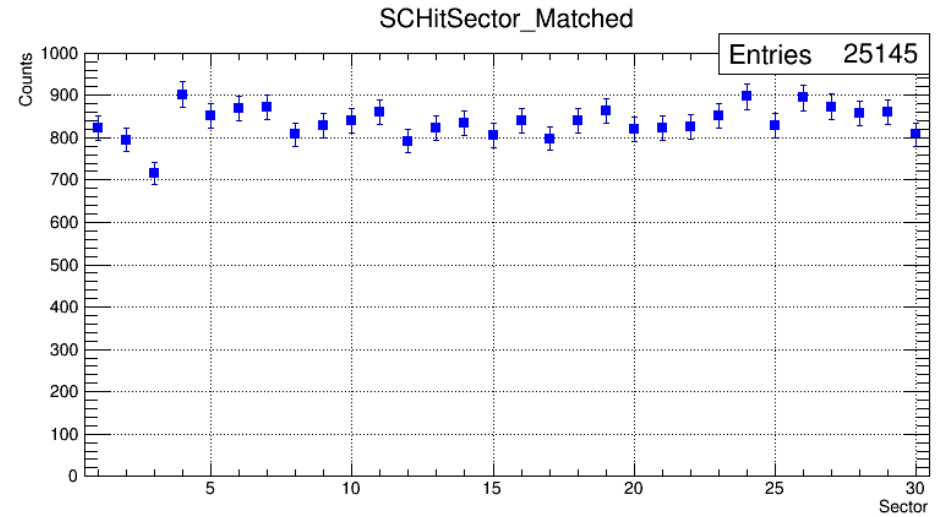
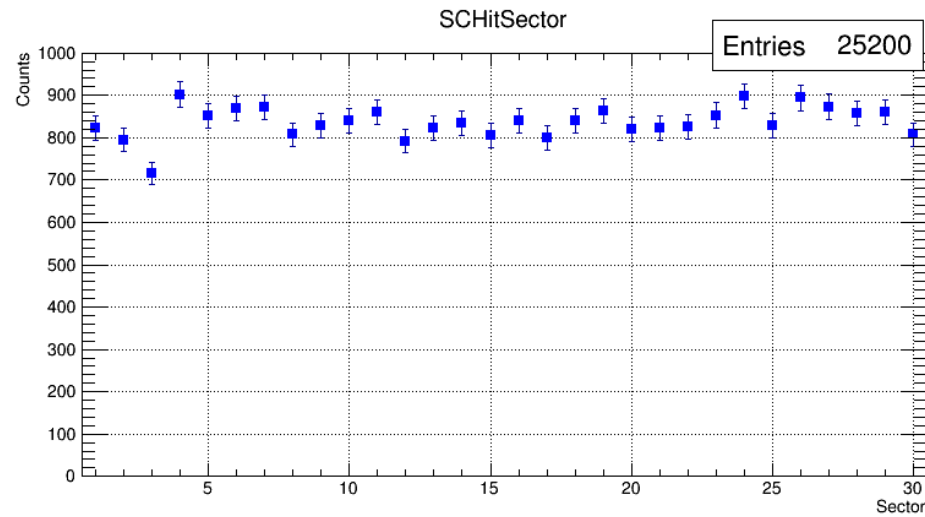
Sector vs HitZ



Sector vs NumSCHits



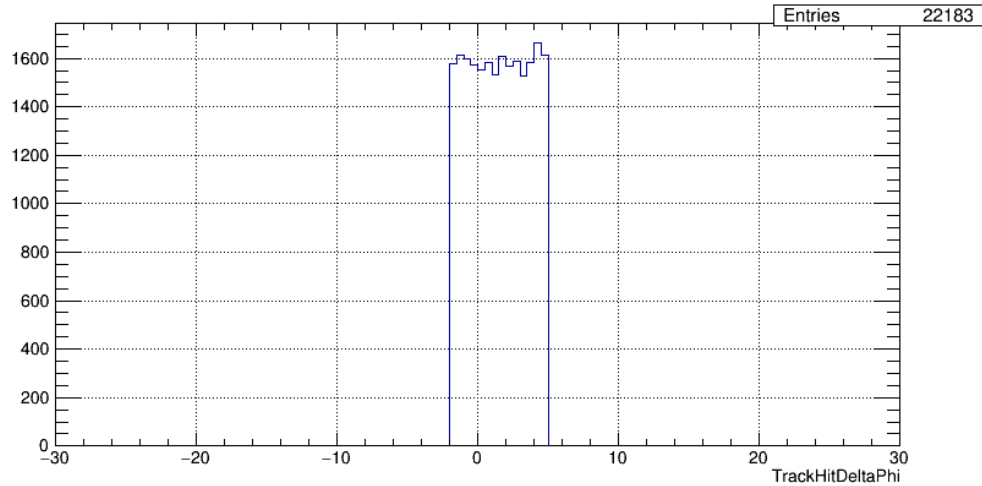
SC_Eff for Proton tracks with DeltaPhiCut



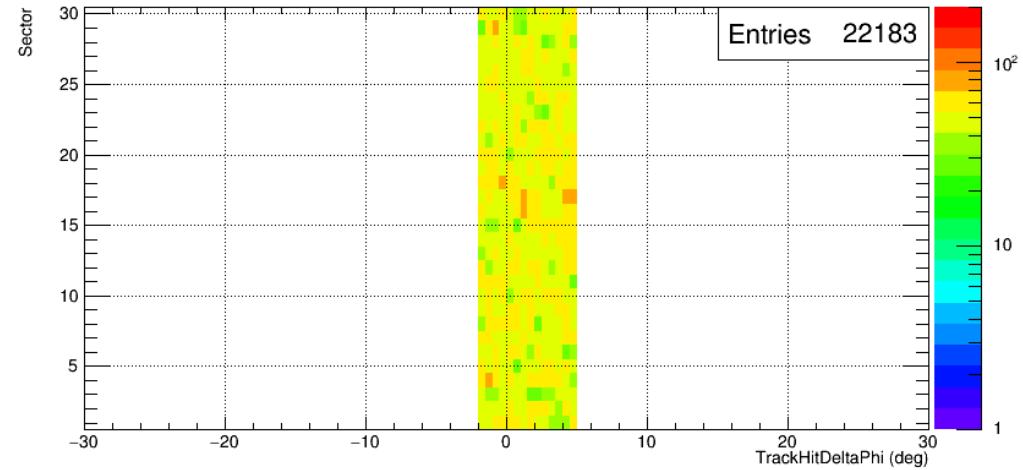
DeltaPhiCut to PiPlus Tracks

$$-2 < \text{Deltaphi} < 5$$

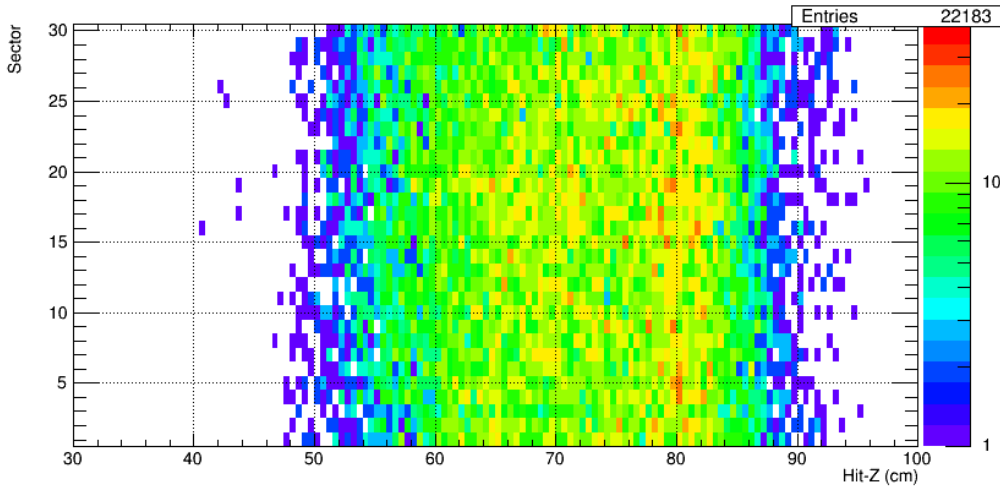
TrackHitDeltaPhi



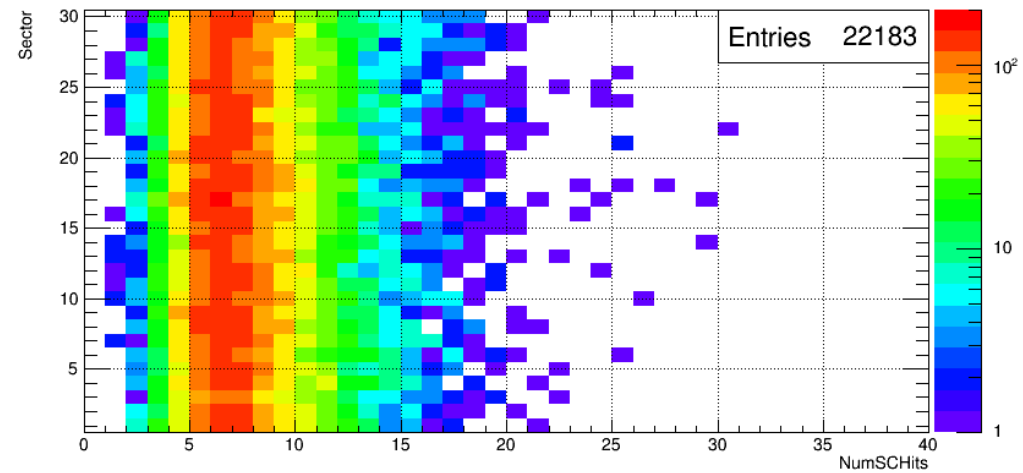
Sector vs TrackHitDeltaPhi



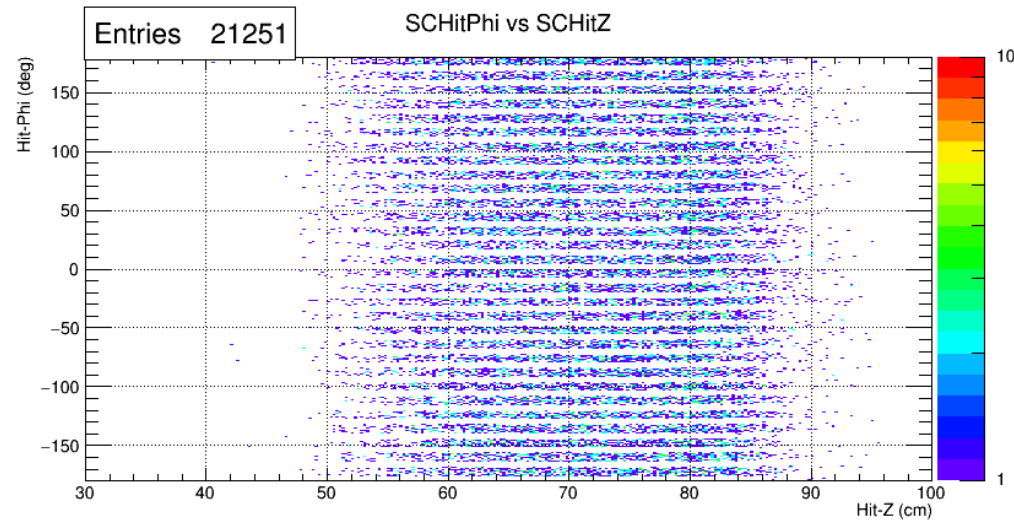
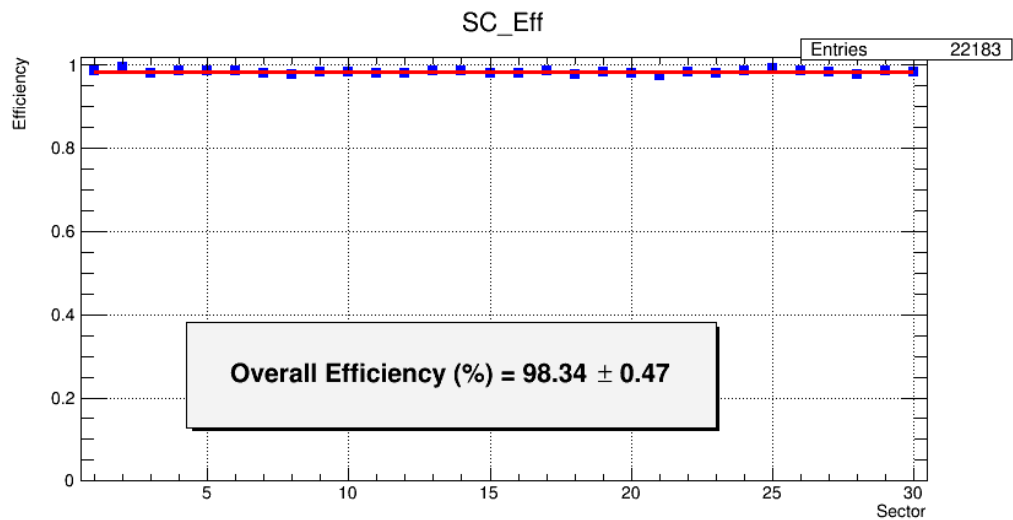
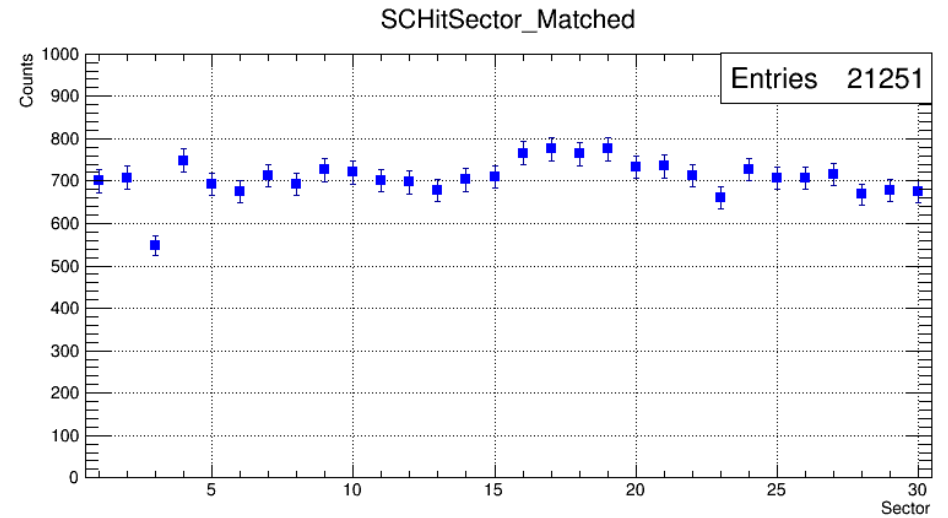
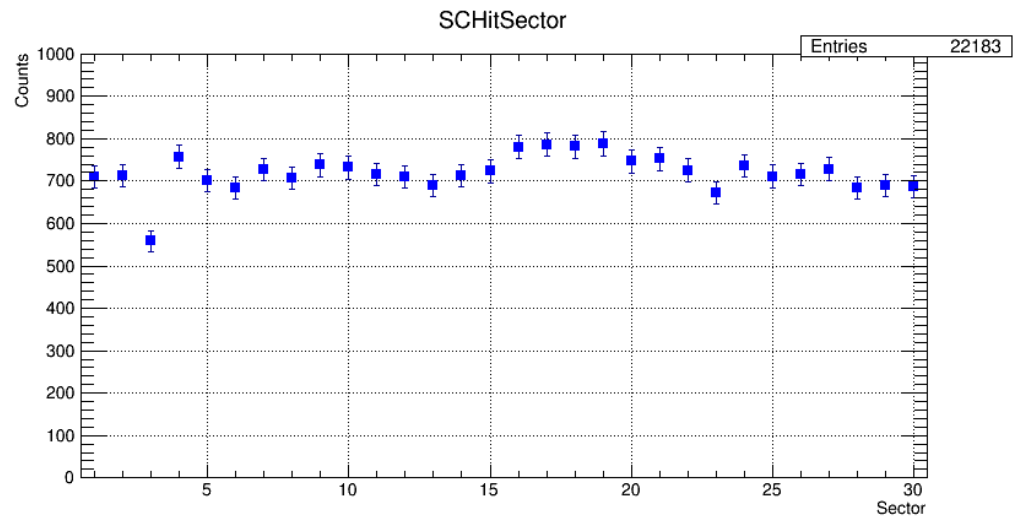
Sector vs HitZ



Sector vs NumSCHits



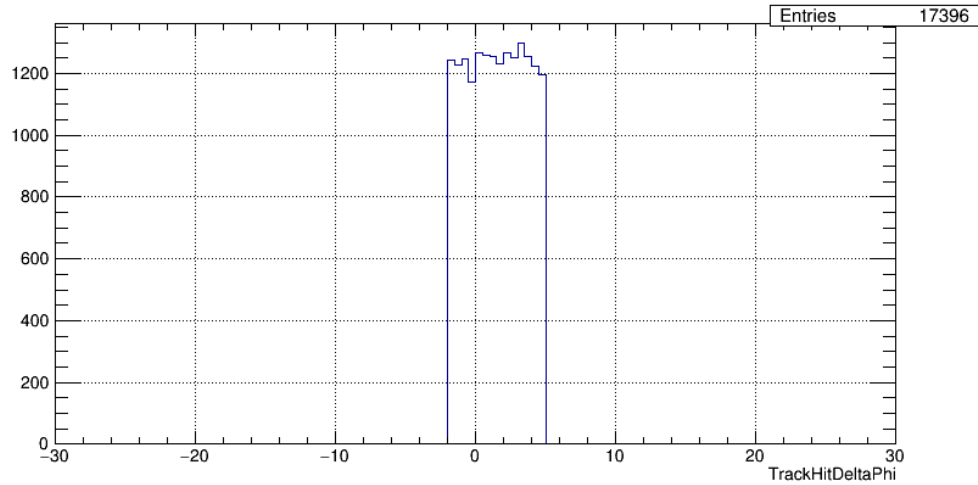
SC_Eff for PiPlus tracks with DeltaPhiCut



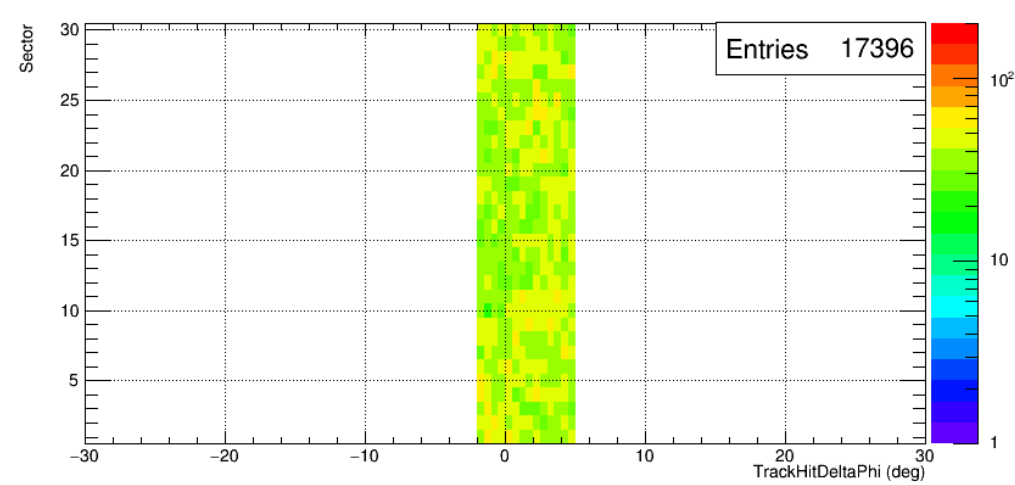
DeltaPhiCut to PiMinus Tracks

$-2 < \text{Deltaphi} < 5$

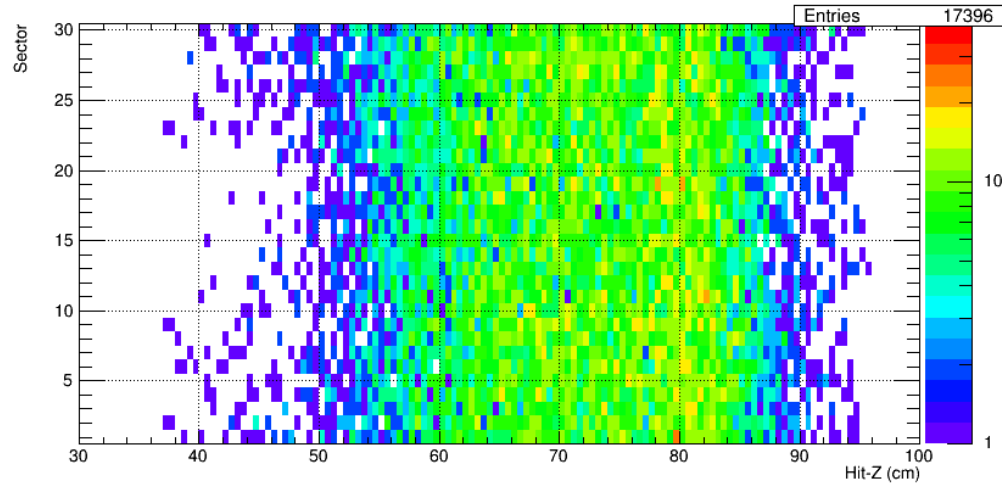
TrackHitDeltaPhi



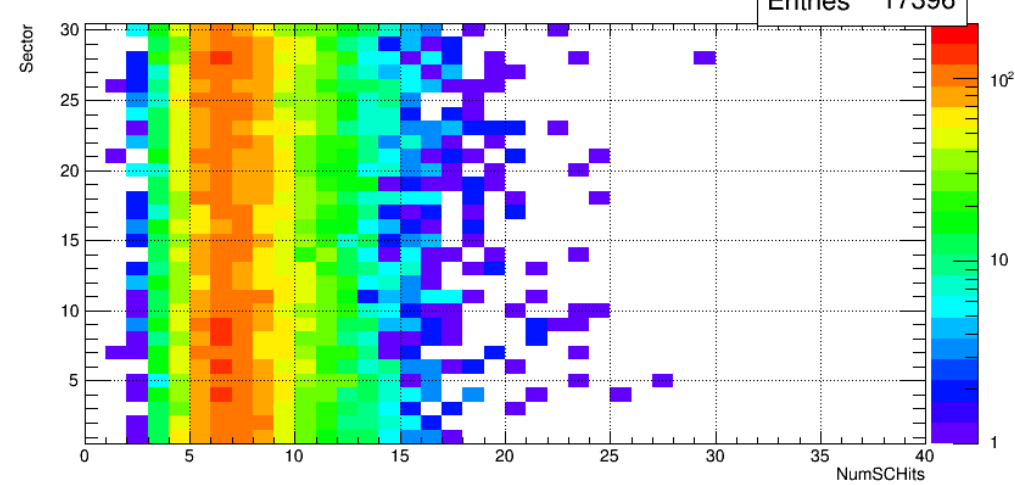
Sector vs TrackHitDeltaPhi



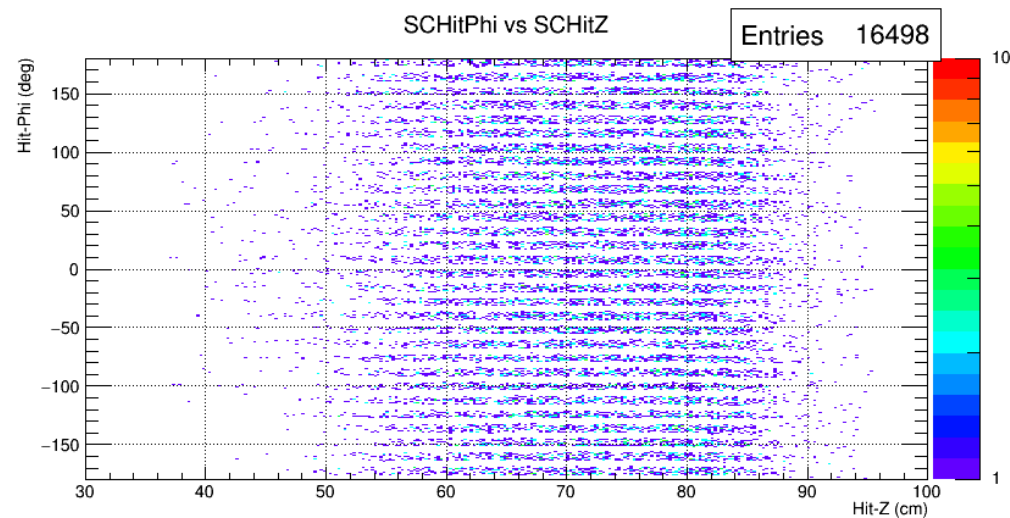
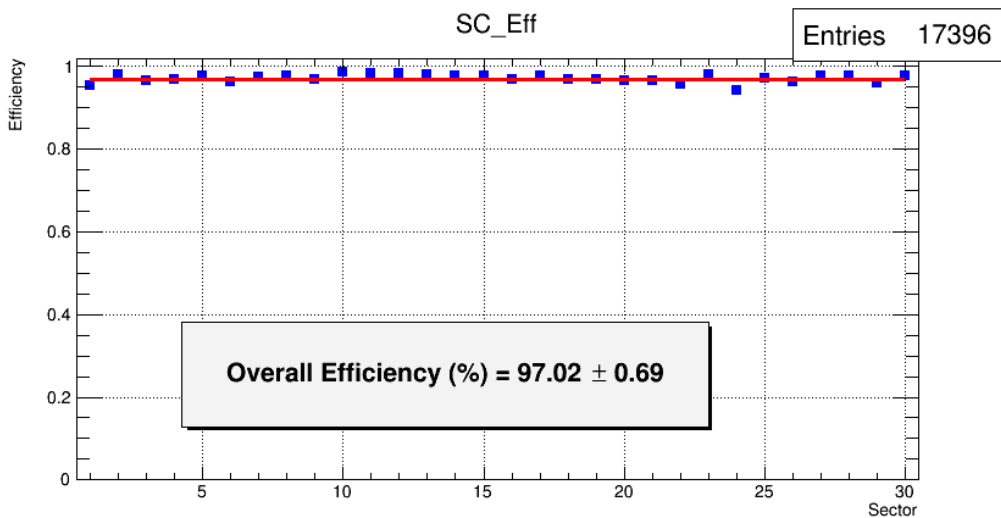
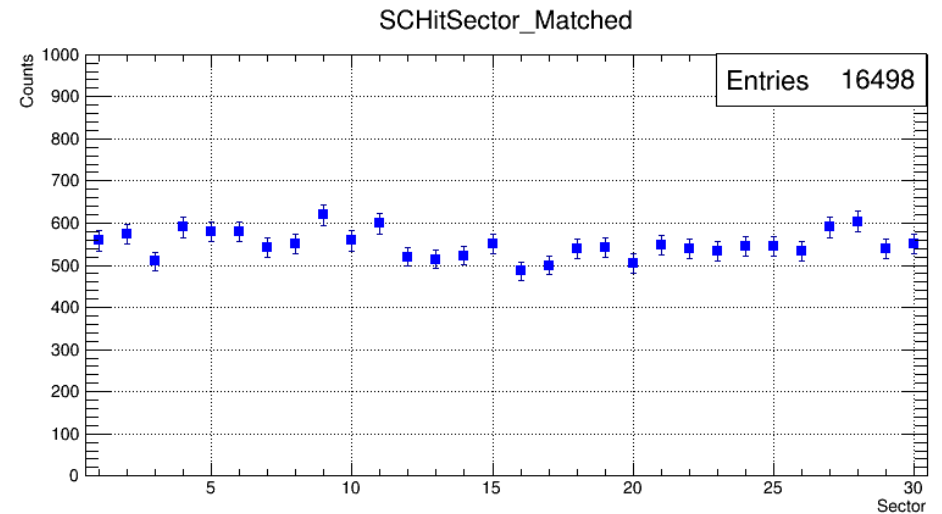
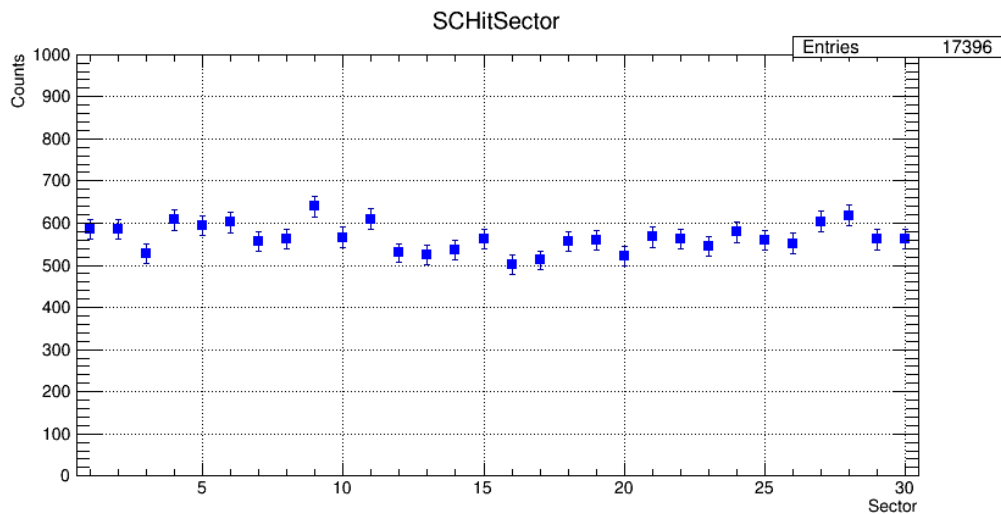
Sector vs HitZ



Sector vs NumSCHits



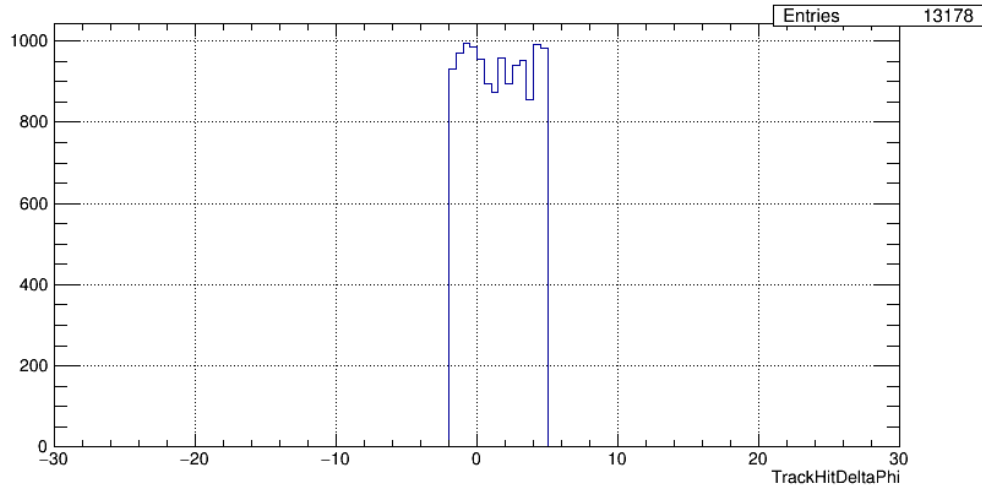
SC_Eff for PiMinus tracks with DeltaPhiCut



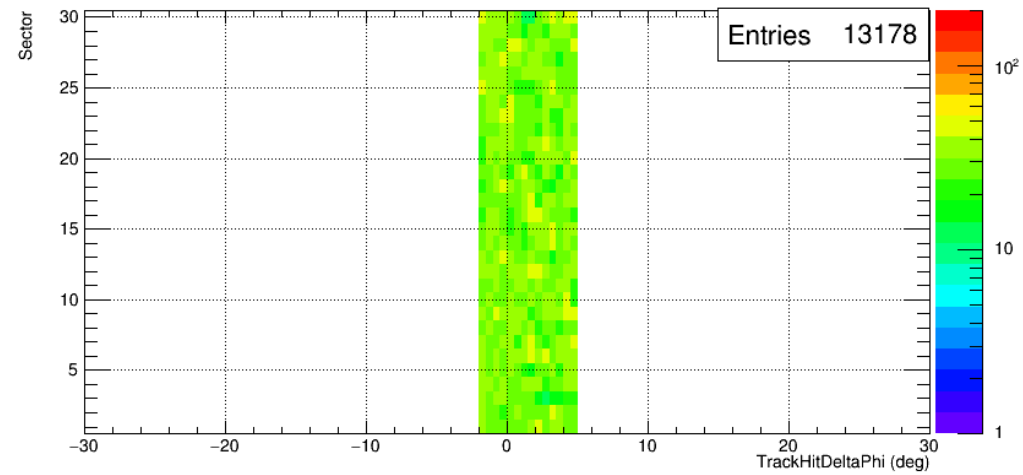
DeltaPhiCut to KPlus Tracks

$$-2 < \text{Deltaphi} < 5$$

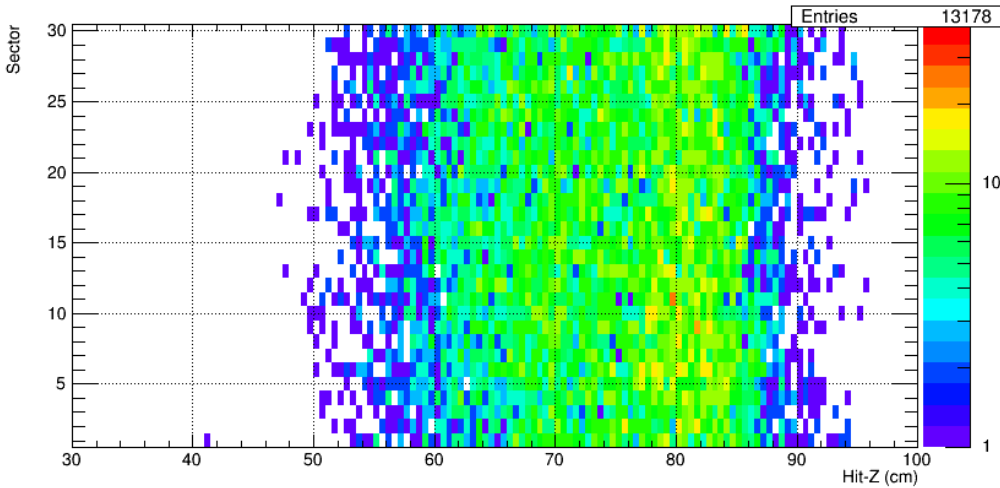
TrackHitDeltaPhi



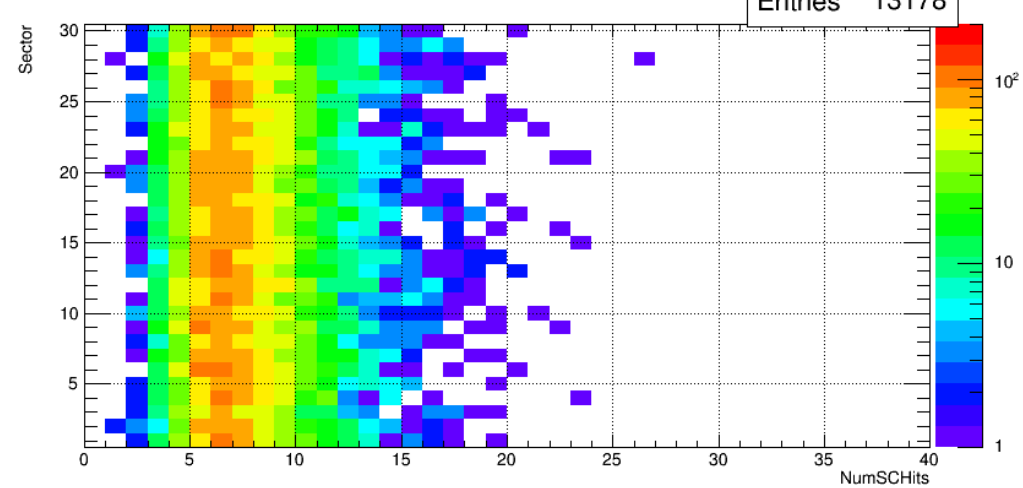
Sector vs TrackHitDeltaPhi



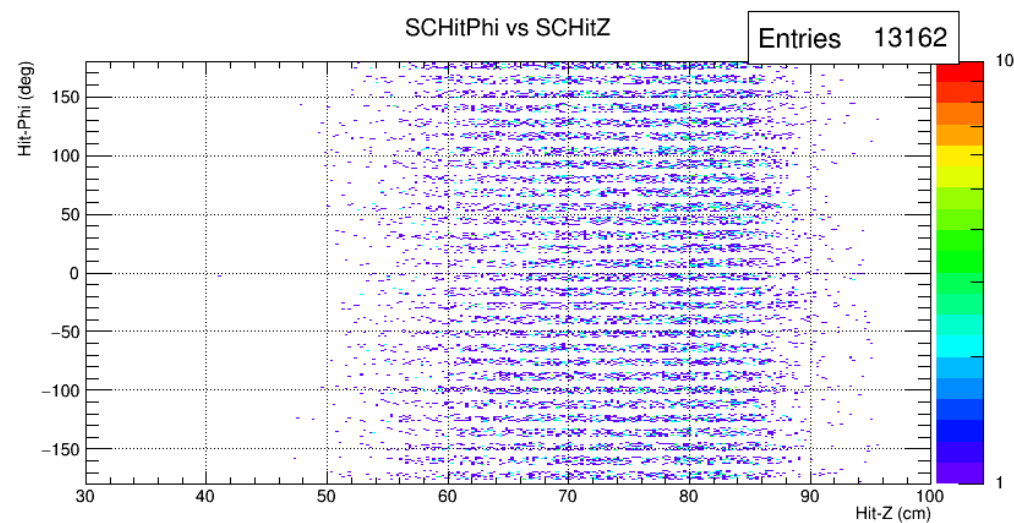
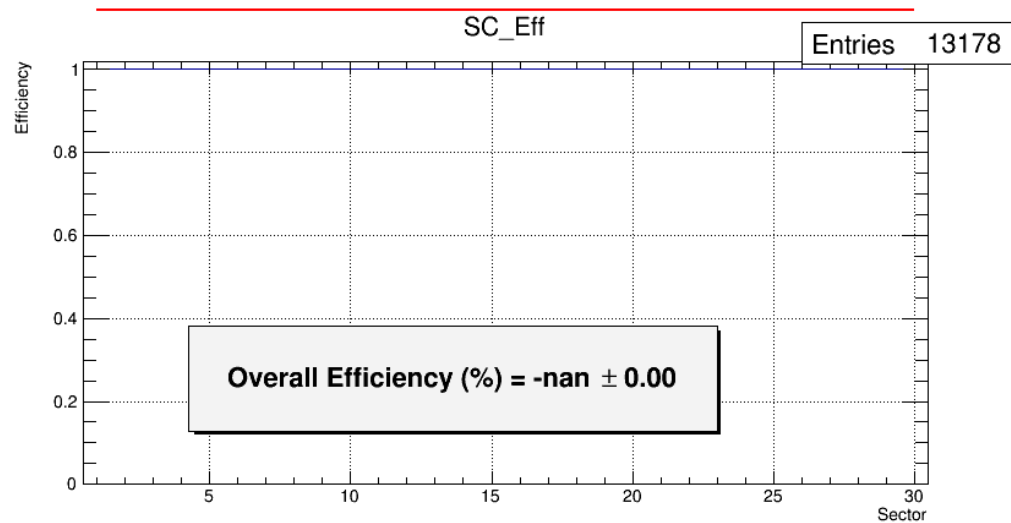
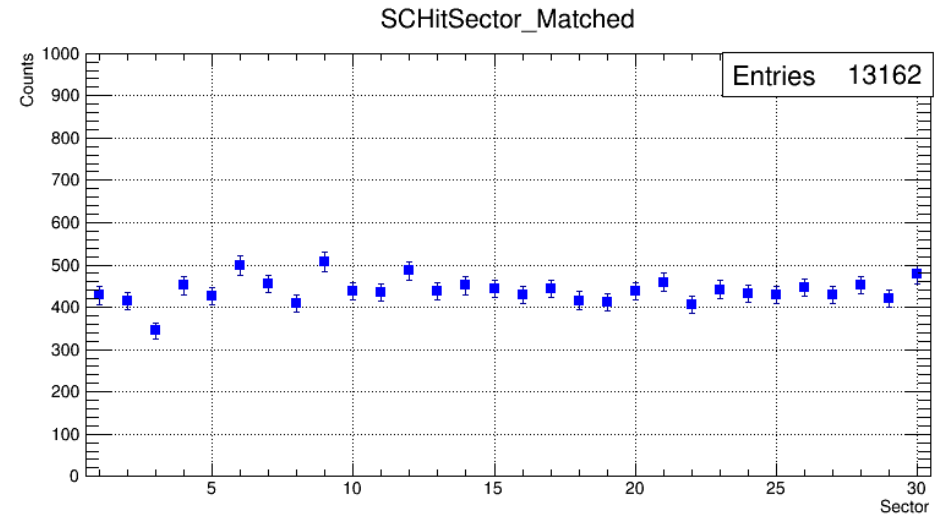
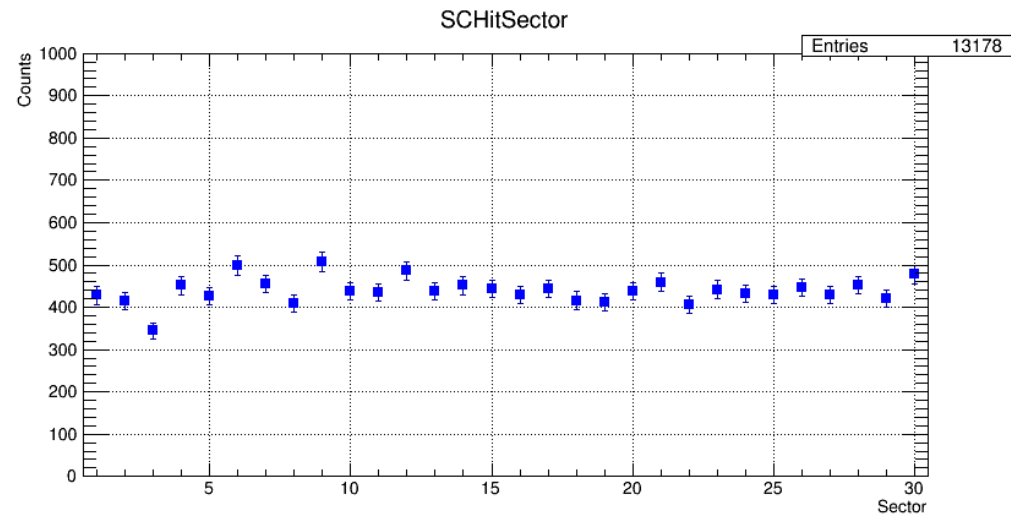
Sector vs HitZ



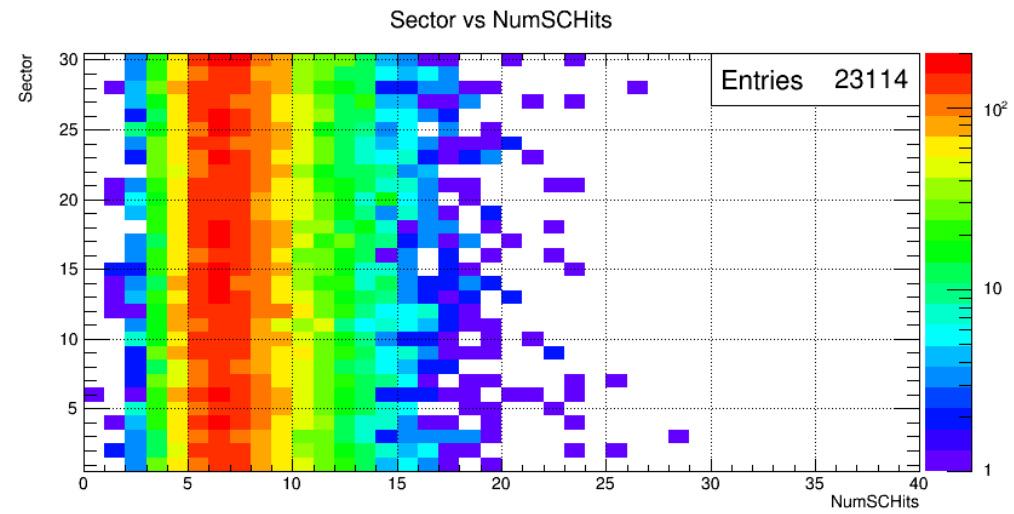
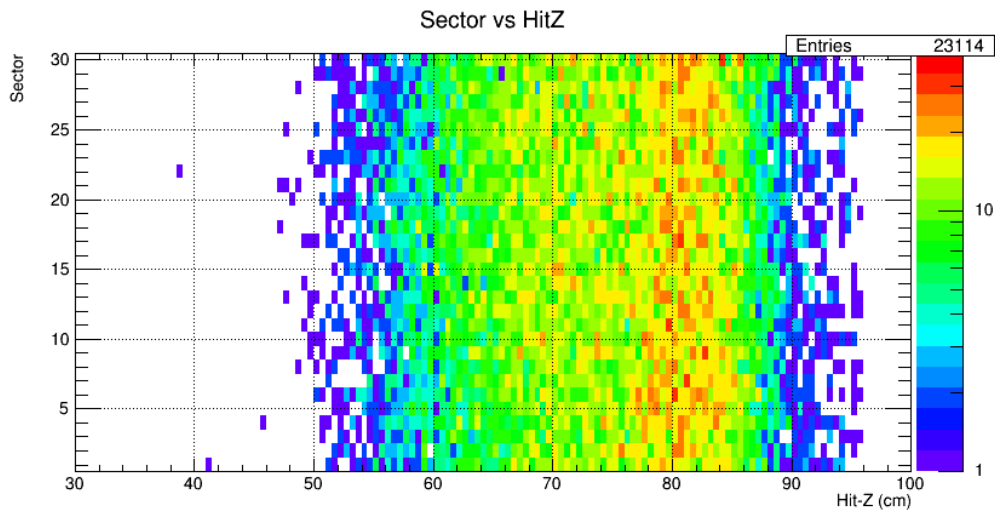
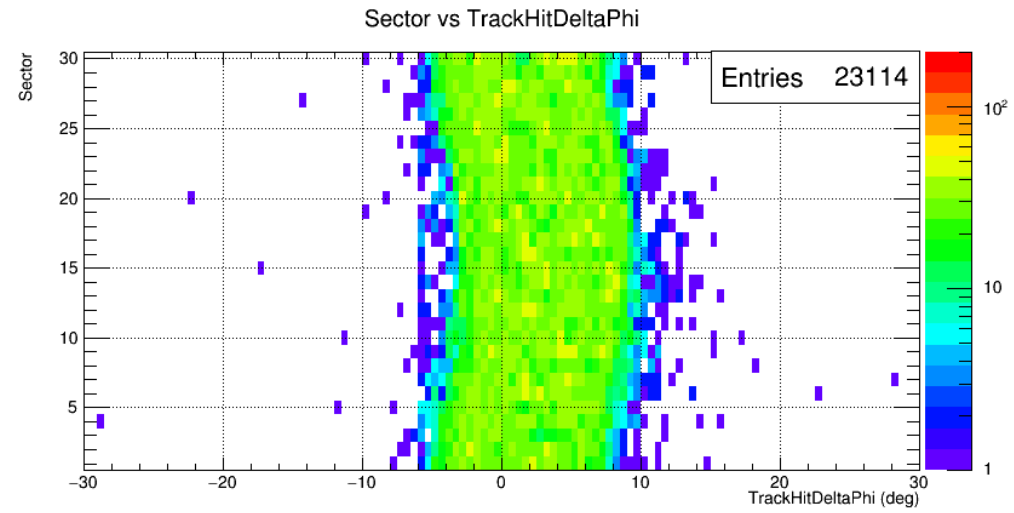
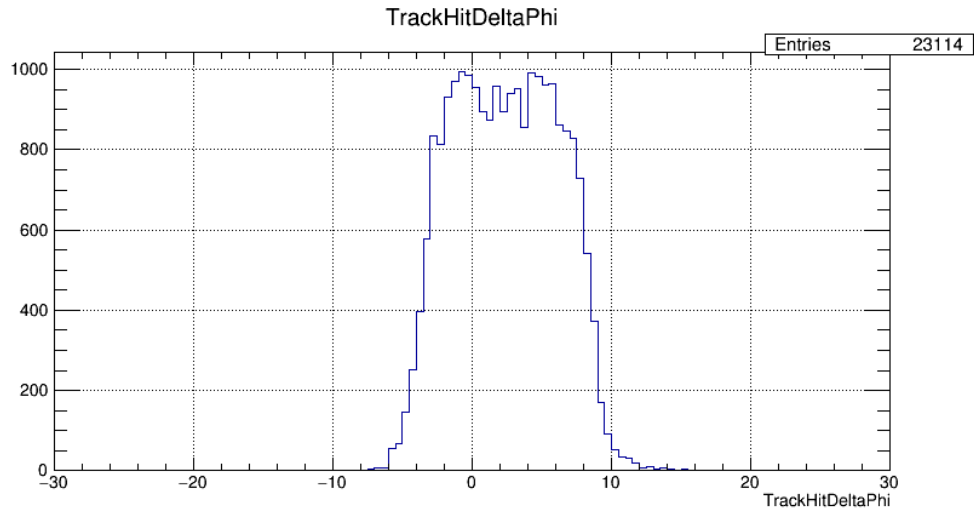
Sector vs NumSCHits



SC_Eff for KPlus tracks with DeltaPhiCut



All KPlus Tracks



SC_Eff for All KPlus tracks

