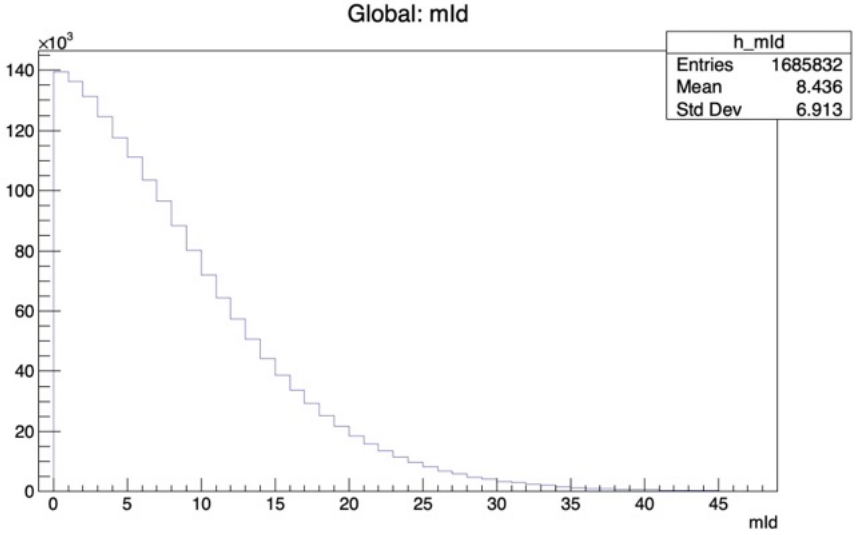
Run22 Fwd QA

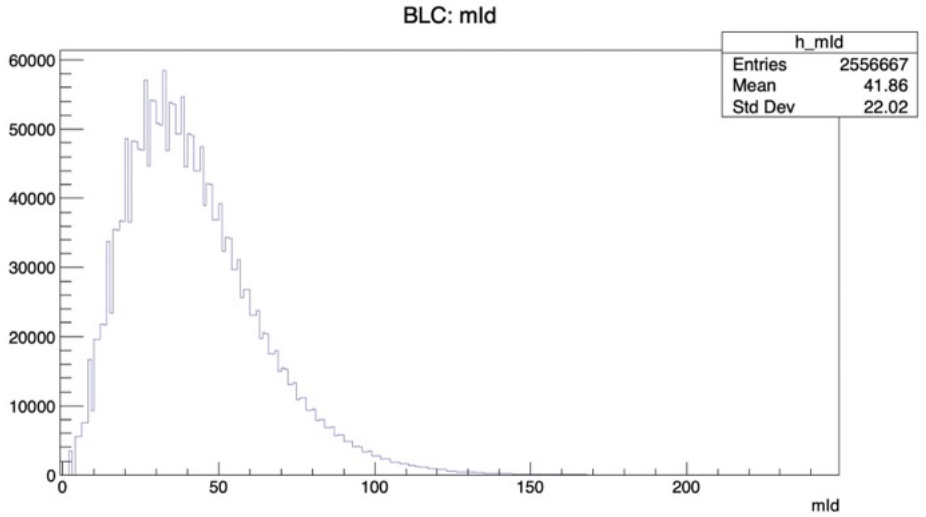
General Information

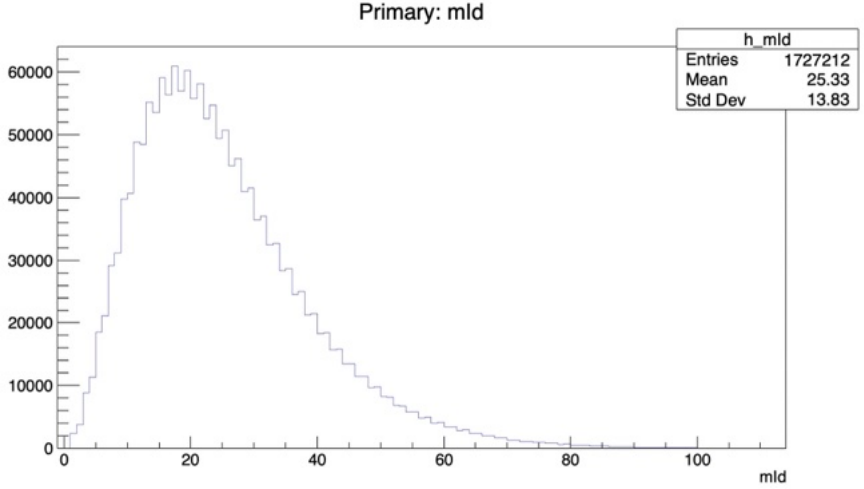
Dataset is Run22 pp500, these results are only for 100 PicoDsts so far

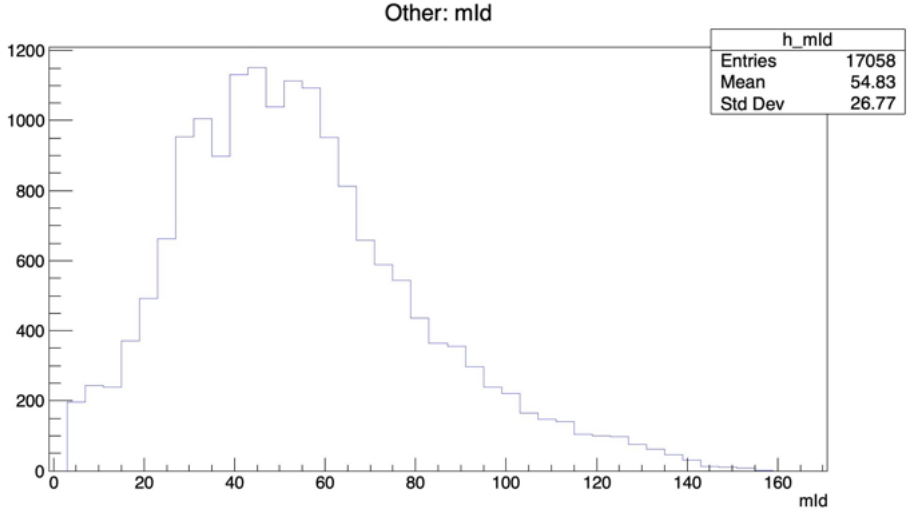
General cuts: status > 0 (fit converged)

For the plots showing pt, eta, phi, I also cut on primary vertex Z < 50 cm and nBTOFMatch >=2

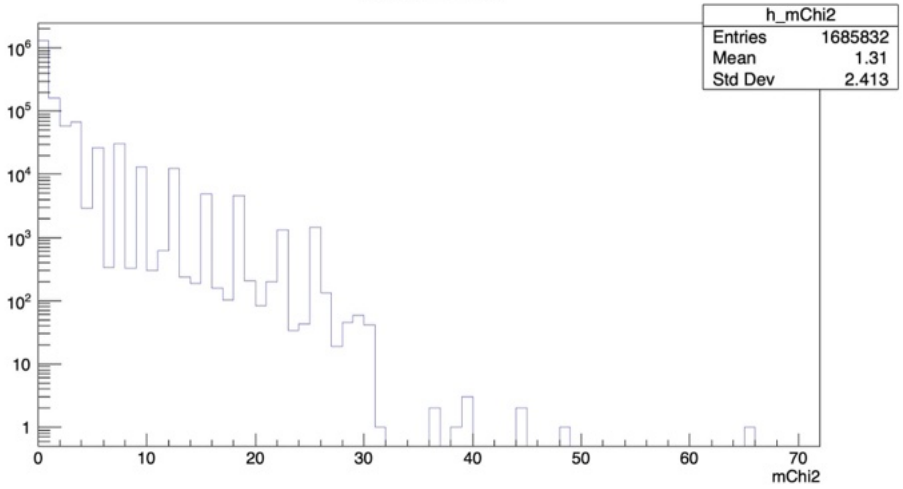

Global: mId
×10³
h_mId
Entries 1685832
Mean 8.436
Std Dev 6.913
mId


BLC: mId
h_mId
Entries 2556667
Mean 41.86
Std Dev 22.02
mId

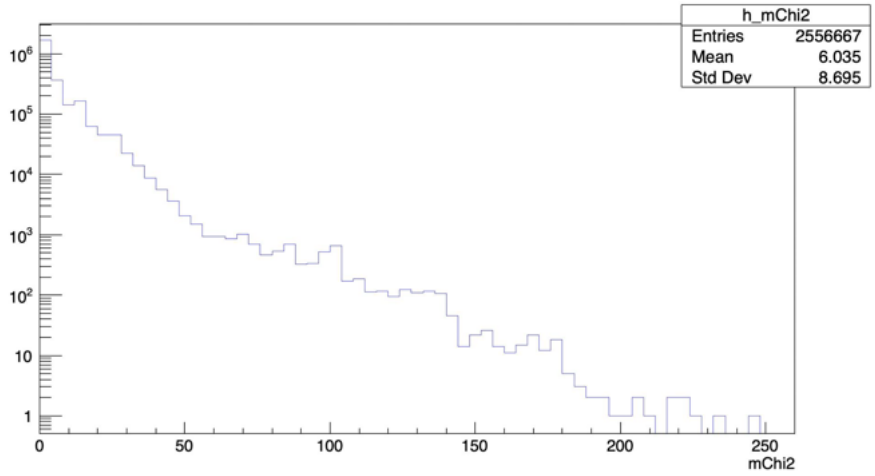

Primary: mId
h_mId
Entries 1727212
Mean 25.33
Std Dev 13.83
mId


Other: mId
h_mId
Entries 17058
Mean 54.83
Std Dev 26.77
mId

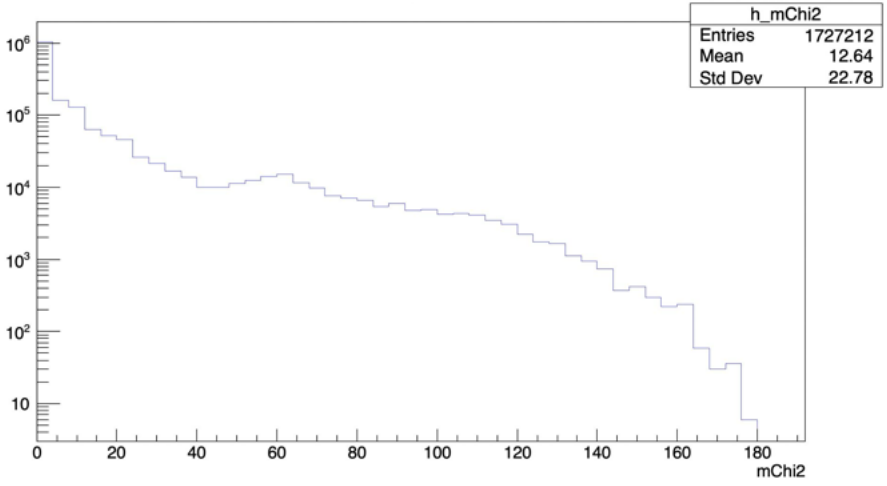
Global: mChi2



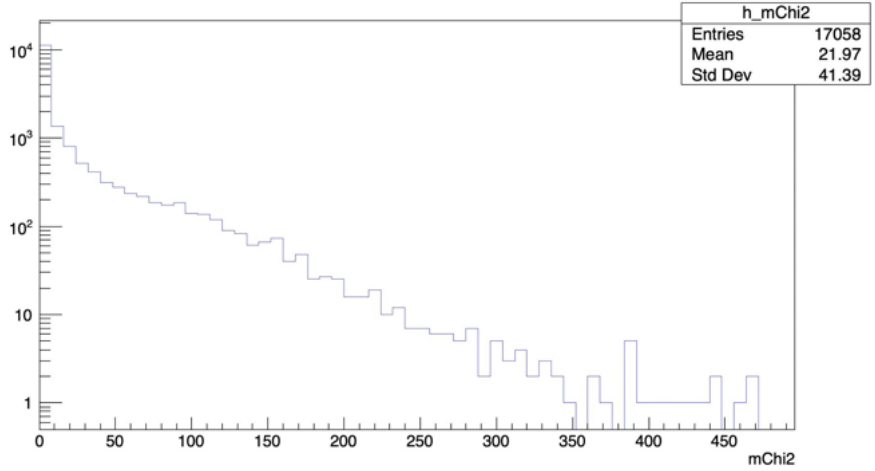
BLC: mChi2

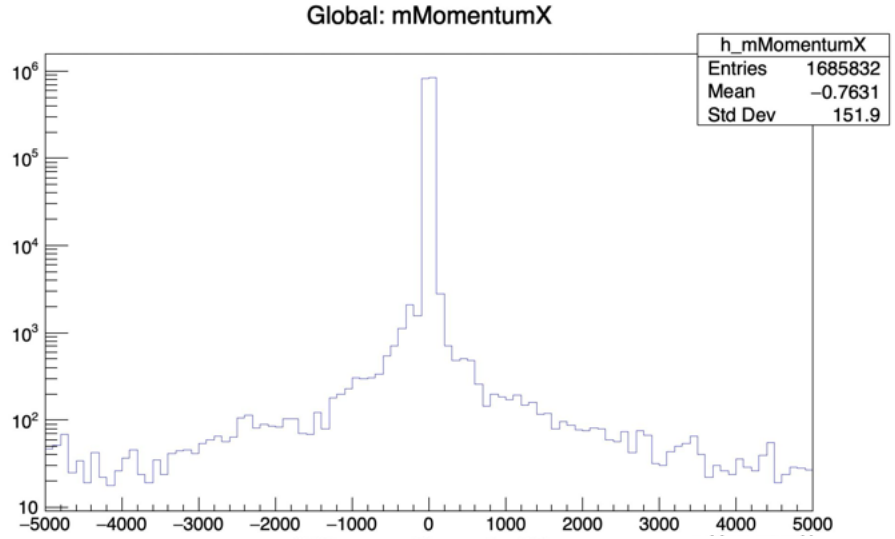


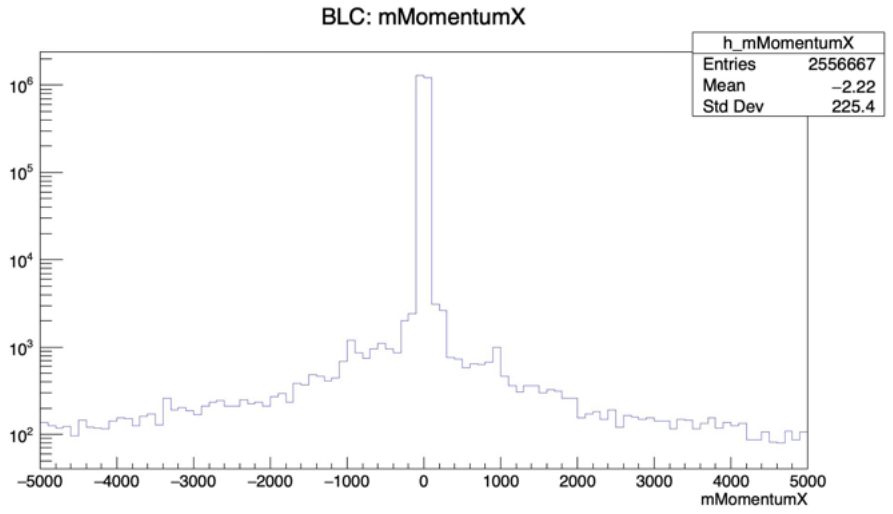
Primary: mChi2

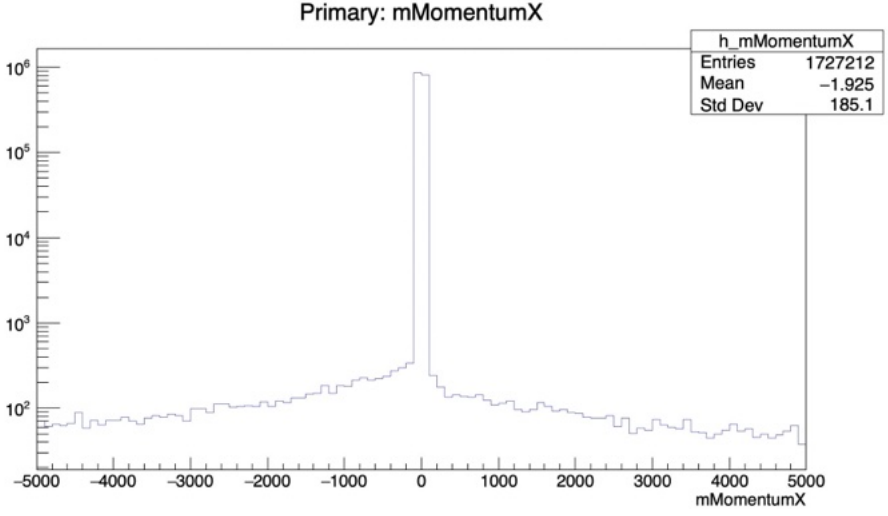


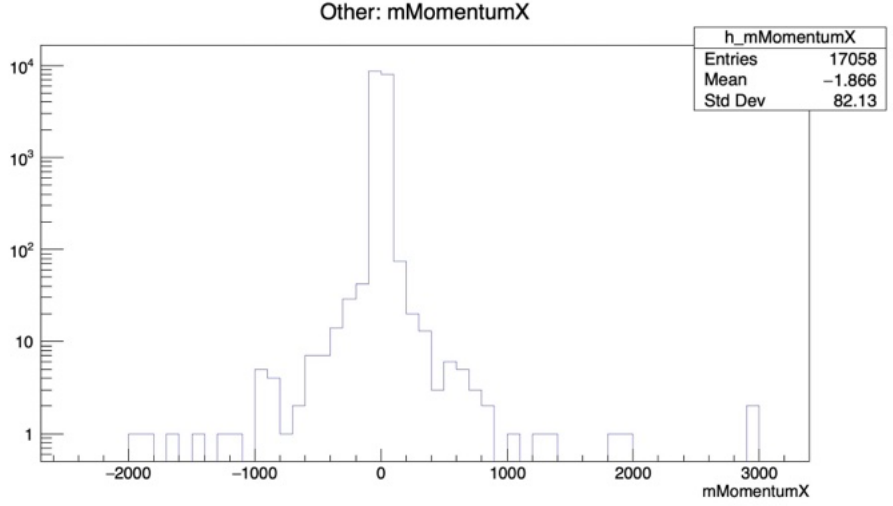
Other: mChi2

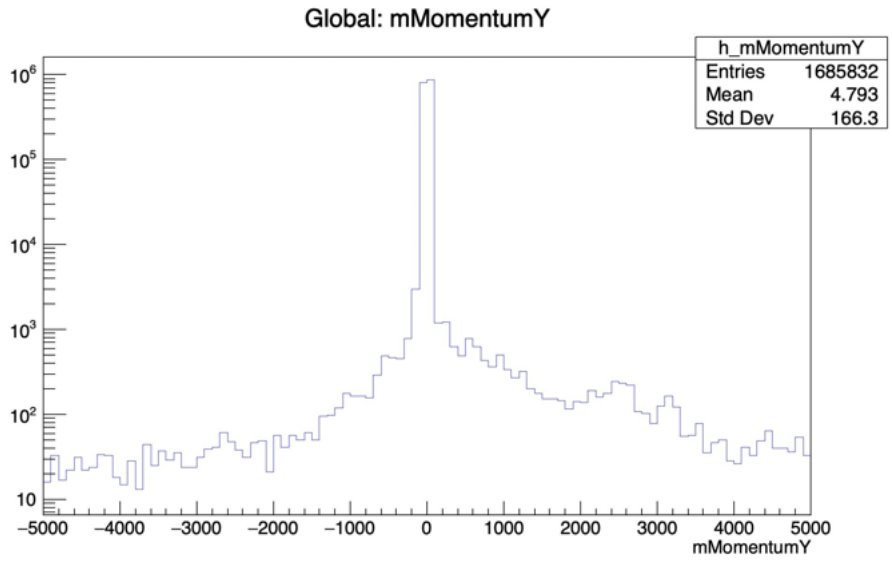


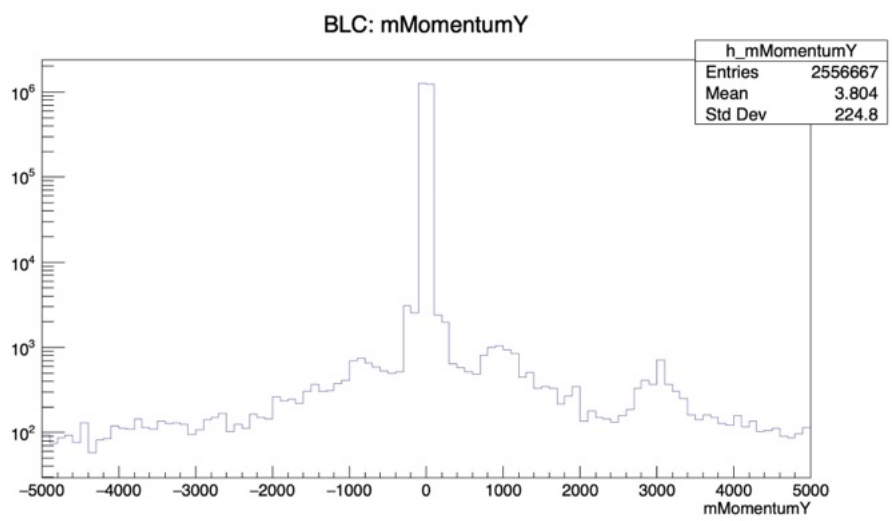

Global: mMomentumX
h_mMomentumX
Entries 1685832
Mean −0.7631
Std Dev 151.9

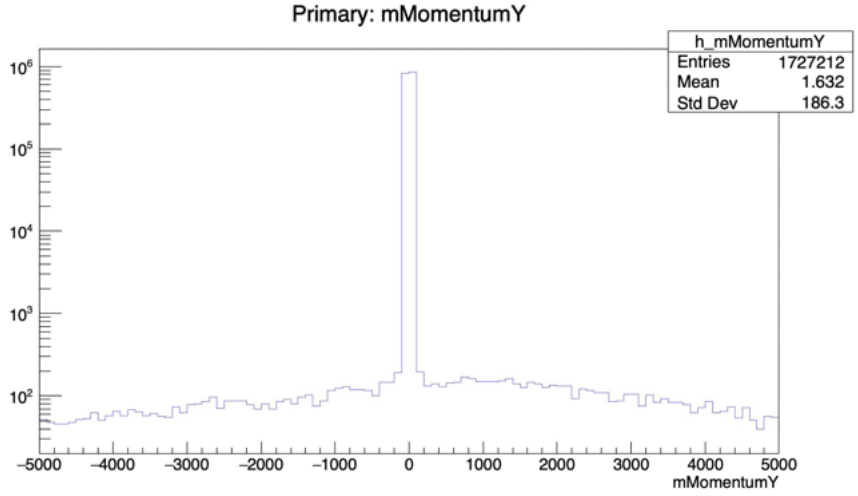

BLC: mMomentumX
h_mMomentumX
Entries 2556667
Mean −2.22
Std Dev 225.4
mMomentumX

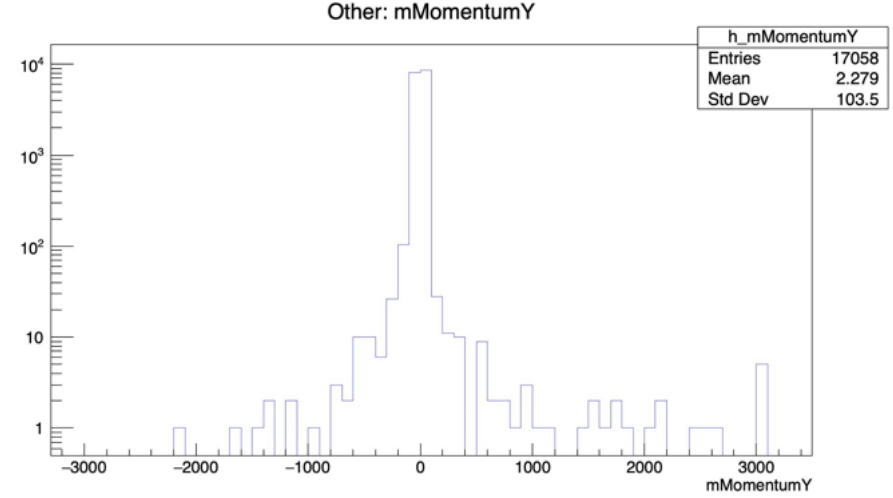

Primary: mMomentumX
h_mMomentumX
Entries 1727212
Mean −1.925
Std Dev 185.1
mMomentumX

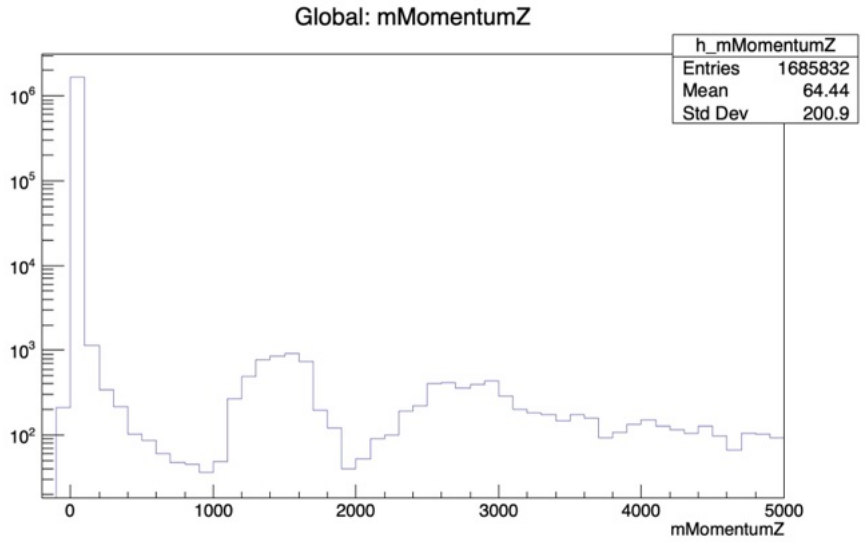

Other: mMomentumX
h_mMomentumX
Entries 17058
Mean −1.866
Std Dev 82.13
mMomentumX

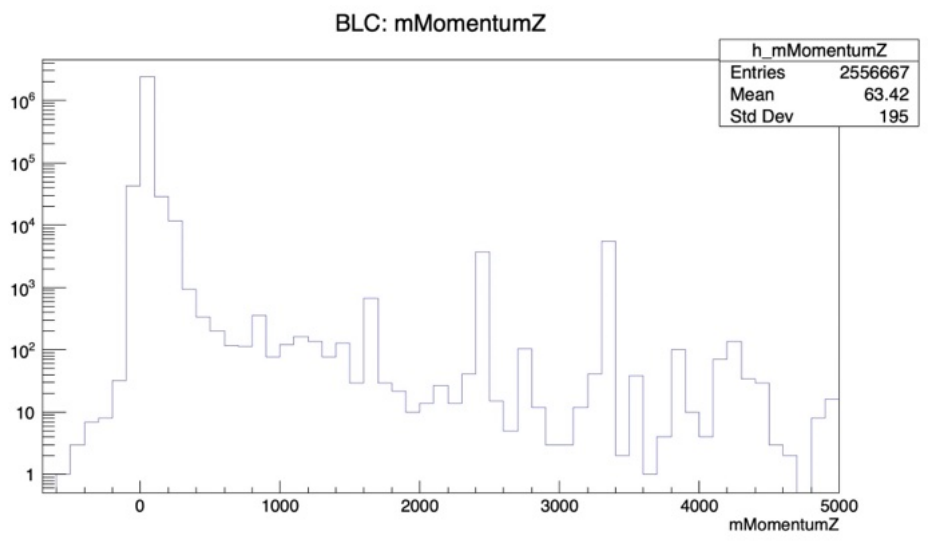

Global: mMomentumY
h_mMomentumY
Entries 1685832
Mean 4.793
Std Dev 166.3
mMomentumY

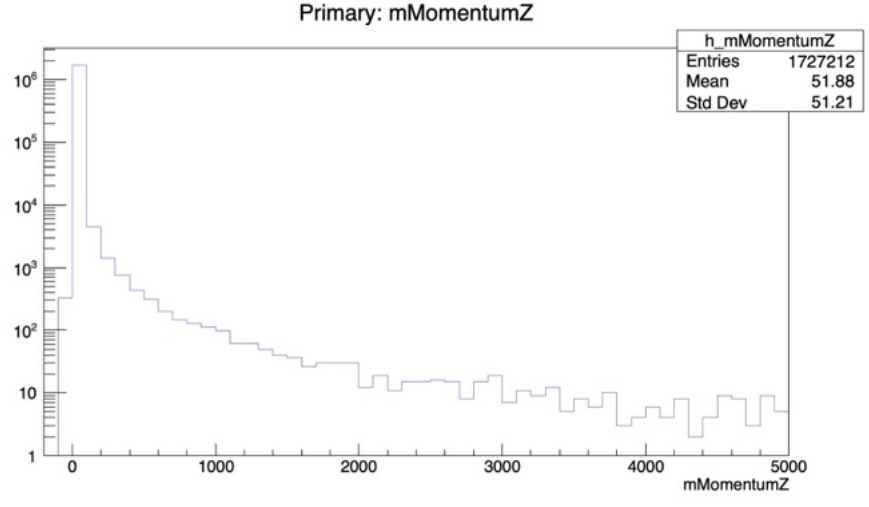

BLC: mMomentumY
h_mMomentumY
Entries 2556667
Mean 3.804
Std Dev 224.8
mMomentumY

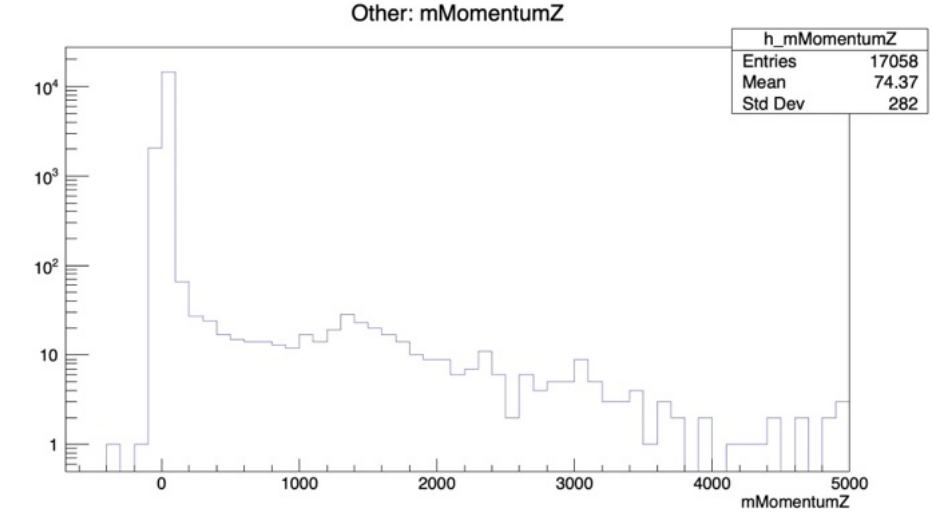

Primary: mMomentumY
h_mMomentumY
Entries 1727212
Mean 1.632
Std Dev 186.3
mMomentumY

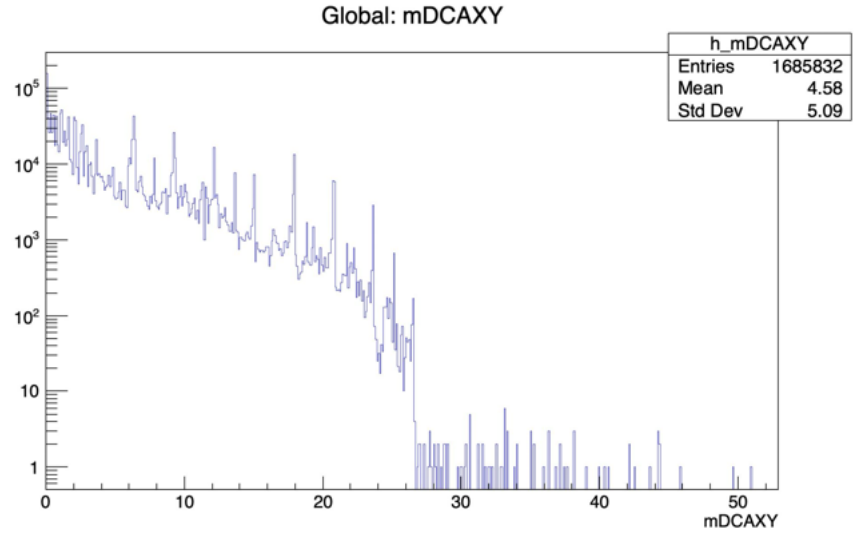

Other: mMomentumY
h_mMomentumY
Entries 17058
Mean 2.279
Std Dev 103.5
mMomentumY

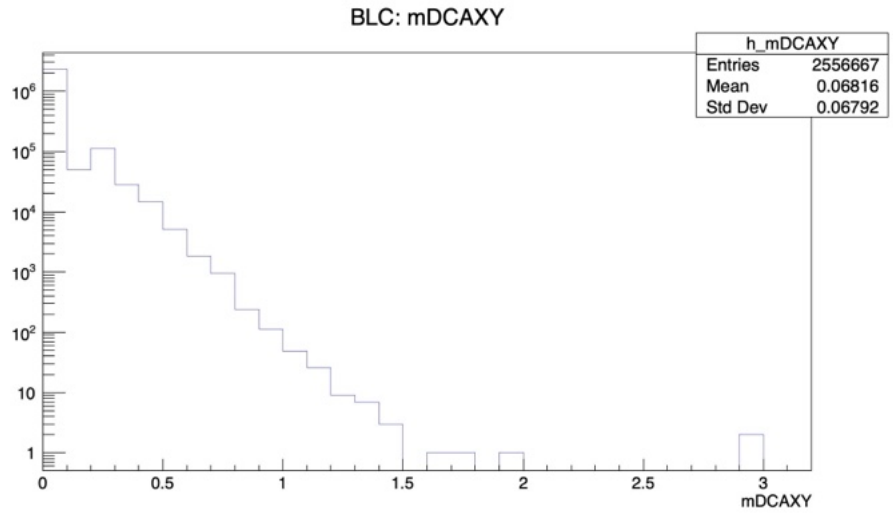

Global: mMomentumZ
h_mMomentumZ
Entries 1685832
Mean 64.44
Std Dev 200.9
mMomentumZ

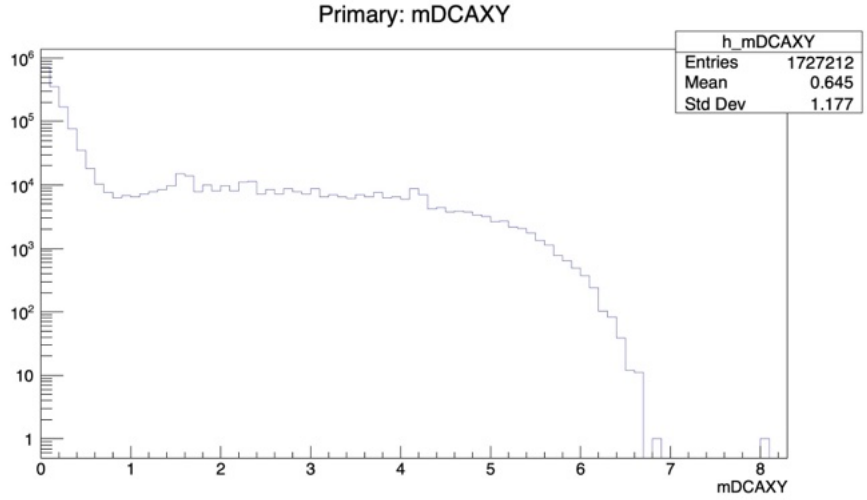

BLC: mMomentumZ
h_mMomentumZ
Entries 2556667
Mean 63.42
Std Dev 195
mMomentumZ

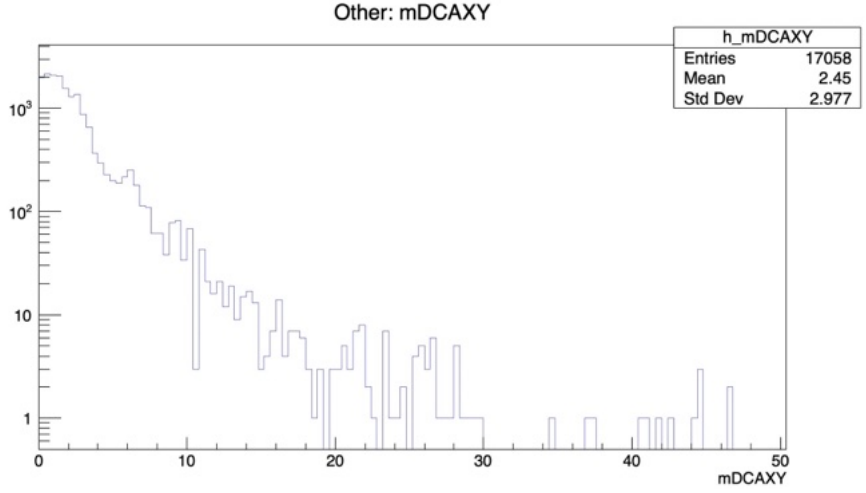

Primary: mMomentumZ
h_mMomentumZ
Entries 1727212
Mean 51.88
Std Dev 51.21
mMomentumZ

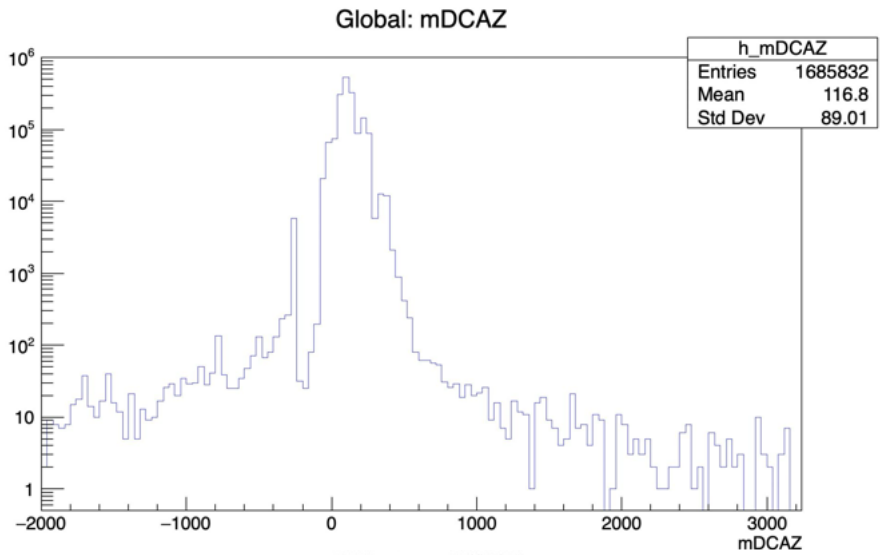

Other: mMomentumZ
h_mMomentumZ
Entries 17058
Mean 74.37
Std Dev 282
mMomentumZ

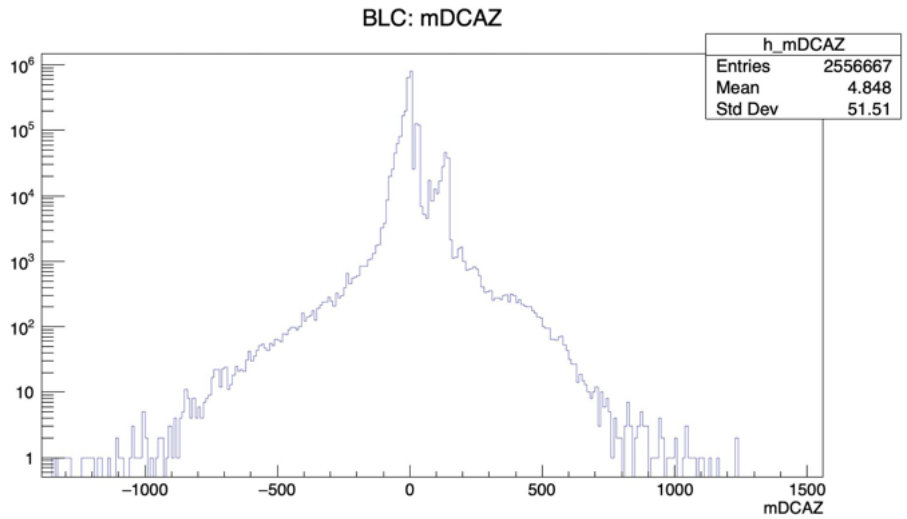

Global: mDCAXY
h_mDCAXY
Entries 1685832
Mean 4.58
Std Dev 5.09
mDCAXY

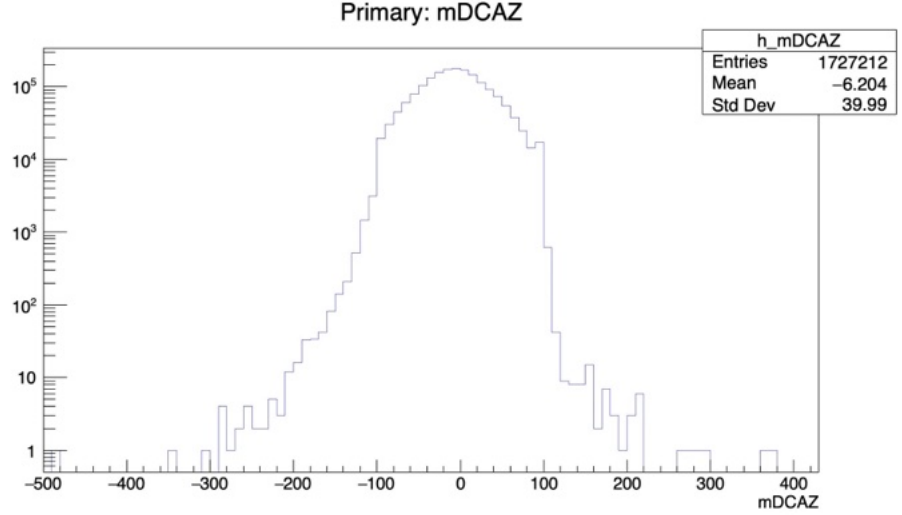

BLC: mDCAXY
h_mDCAXY
Entries 2556667
Mean 0.06816
Std Dev 0.06792
mDCAXY

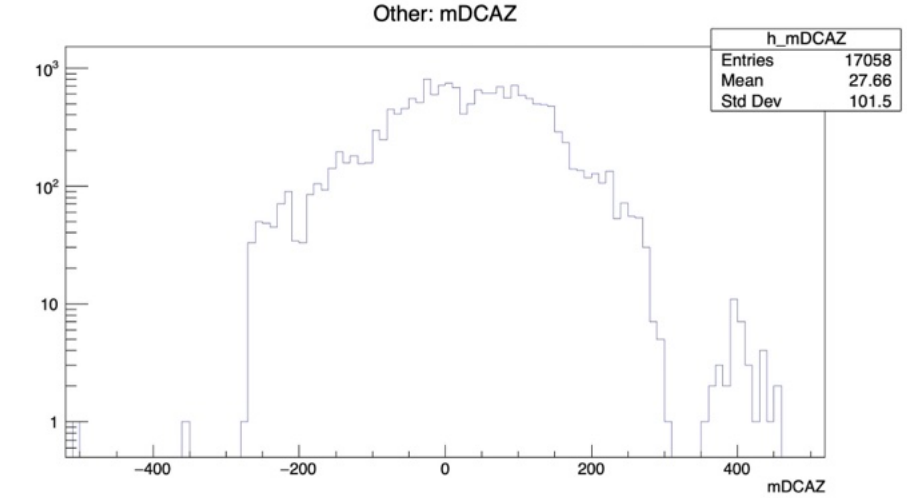

Primary: mDCAXY
h_mDCAXY
Entries 1727212
Mean 0.645
Std Dev 1.177
mDCAXY


Other: mDCAXY
h_mDCAXY
Entries 17058
Mean 2.45
Std Dev 2.977
mDCAXY

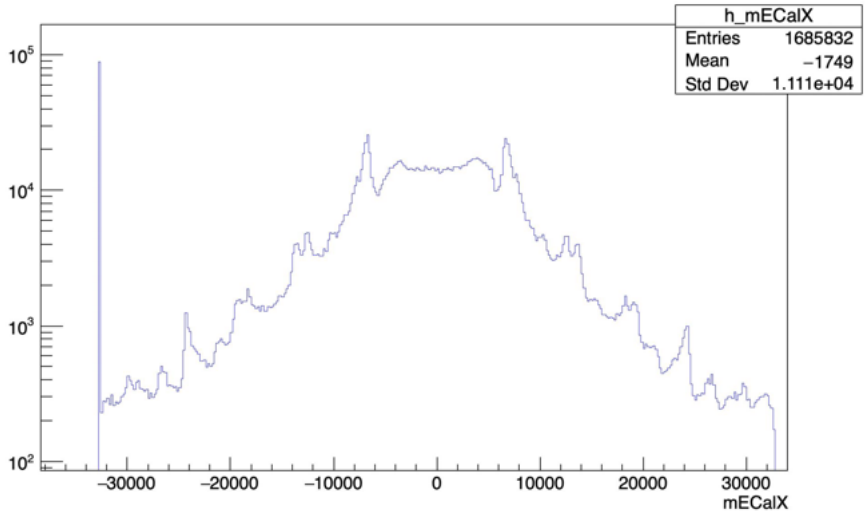

Global: mDCAZ
h_mDCAZ
Entries 1685832
Mean 116.8
Std Dev 89.01
mDCAZ


BLC: mDCAZ
h_mDCAZ
Entries 2556667
Mean 4.848
Std Dev 51.51
mDCAZ

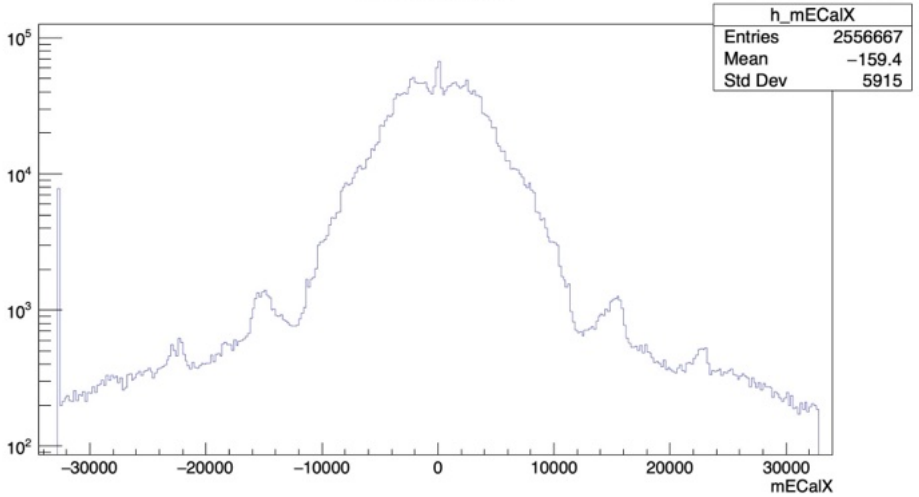

Primary: mDCAZ
h_mDCAZ
Entries 1727212
Mean −6.204
Std Dev 39.99
mDCAZ


Other: mDCAZ
h_mDCAZ
Entries 17058
Mean 27.66
Std Dev 101.5
mDCAZ

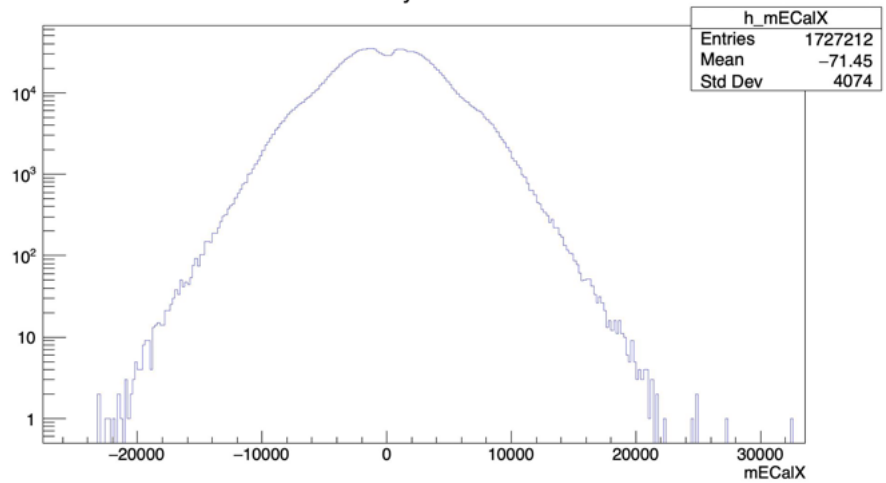
Global: mECalX



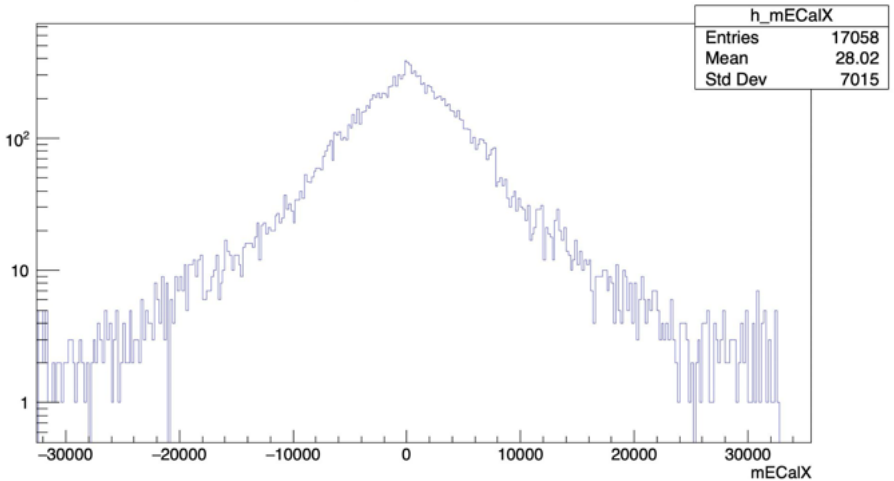
BLC: mECalX



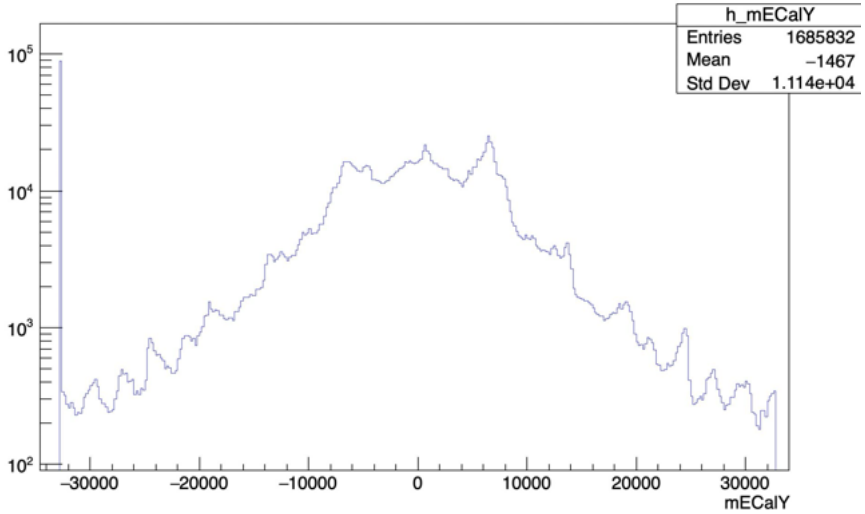
Primary: mECalX



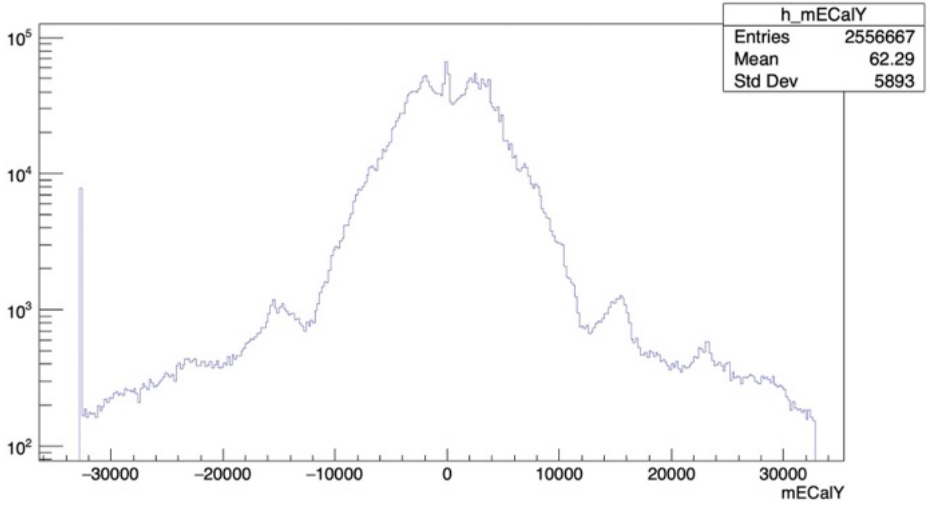
Other: mECalX



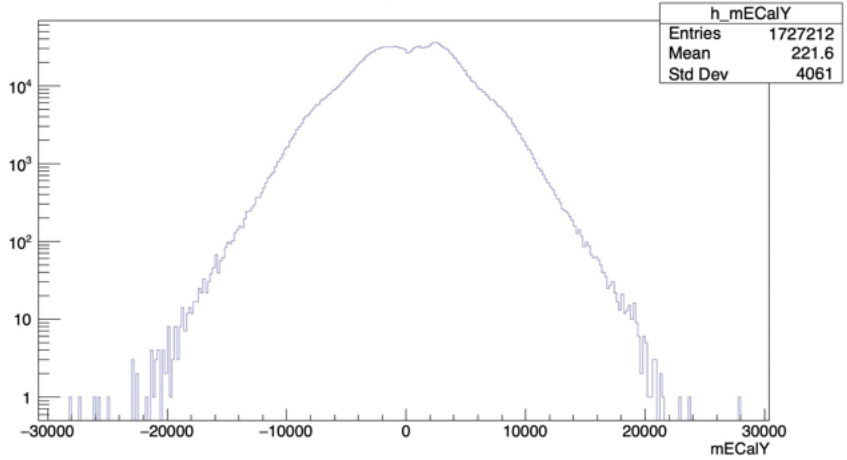
Global: mECalY



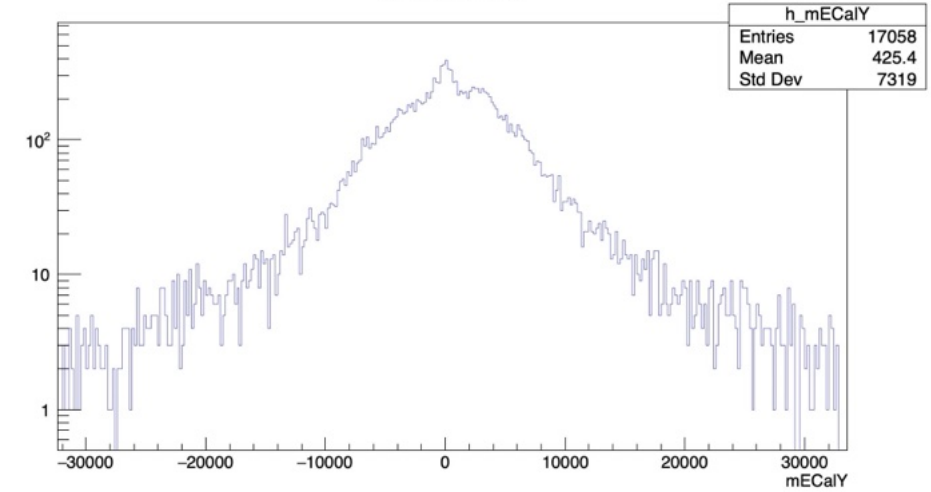
BLC: mECalY

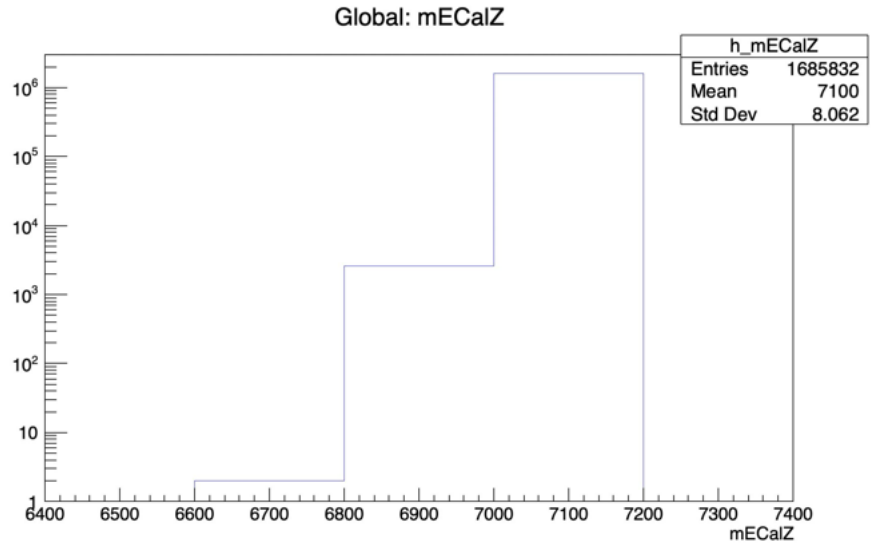


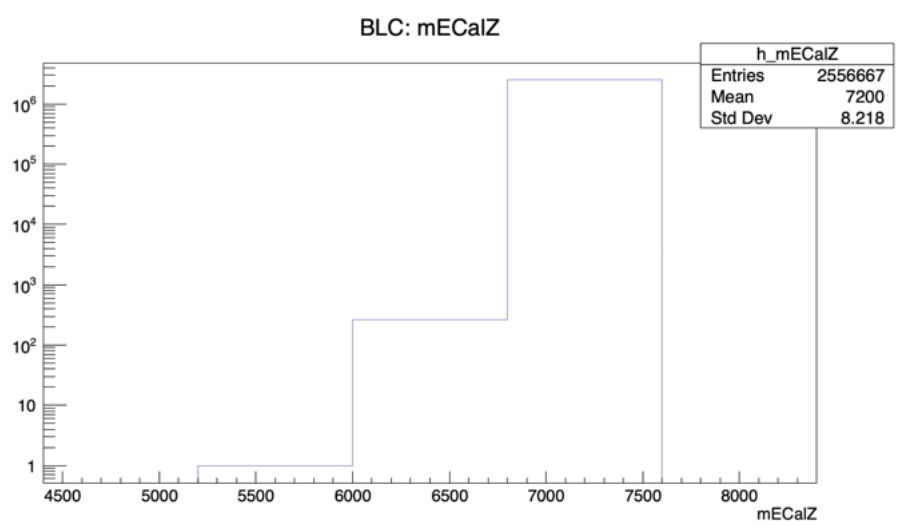
Primary: mECalY

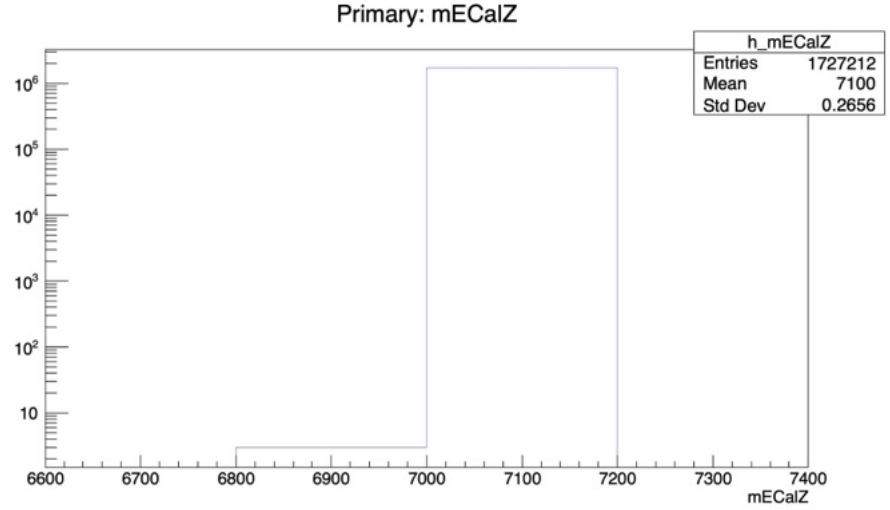


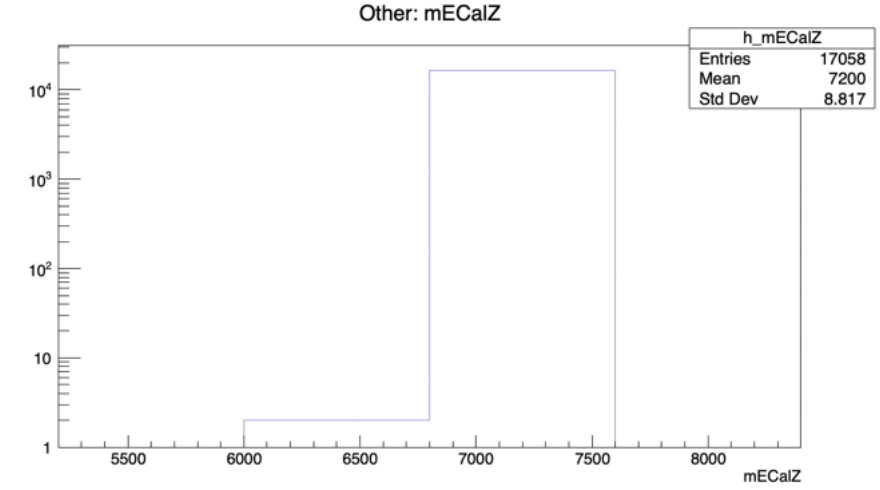
Other: mECalY

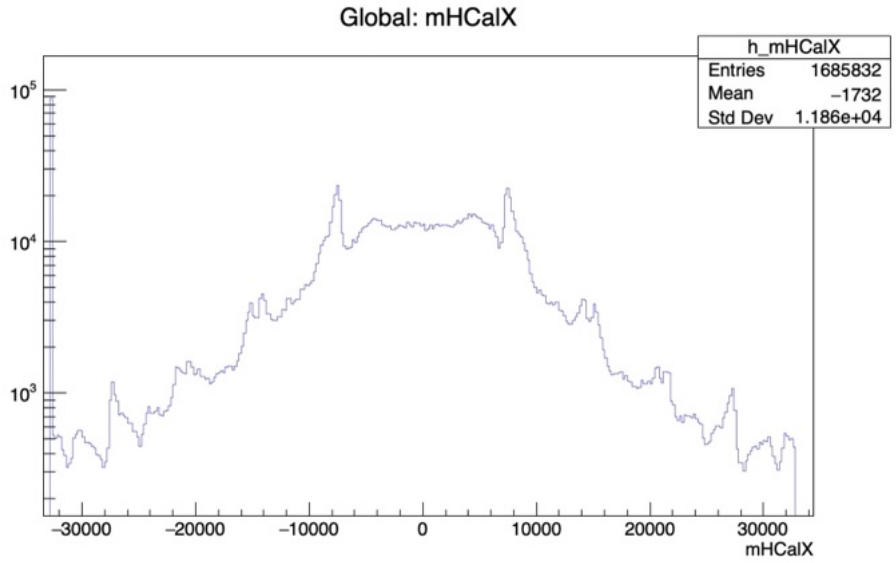


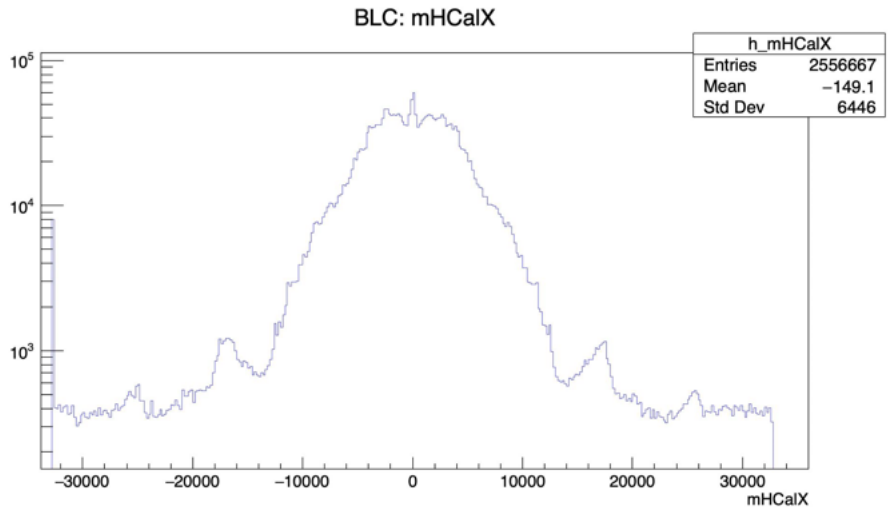

Global: mECalZ
h_mECalZ
Entries 1685832
Mean 7100
Std Dev 8.062
mECalZ

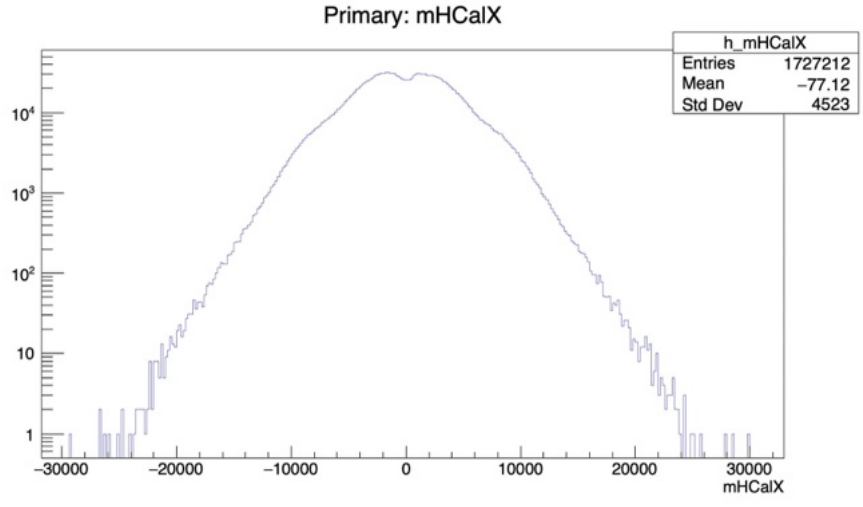

BLC: mECalZ
h_mECalZ
Entries 2556667
Mean 7200
Std Dev 8.218
mECalZ

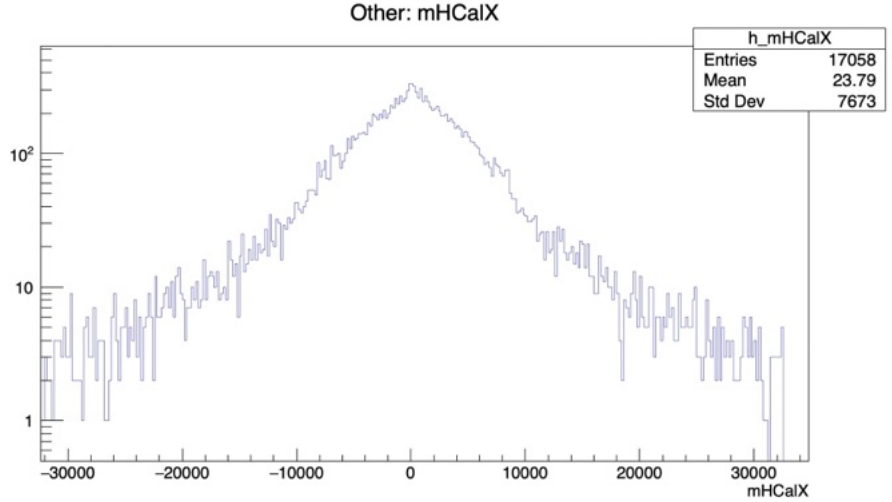

Primary: mECalZ
h_mECalZ
Entries 1727212
Mean 7100
Std Dev 0.2656
mECalZ

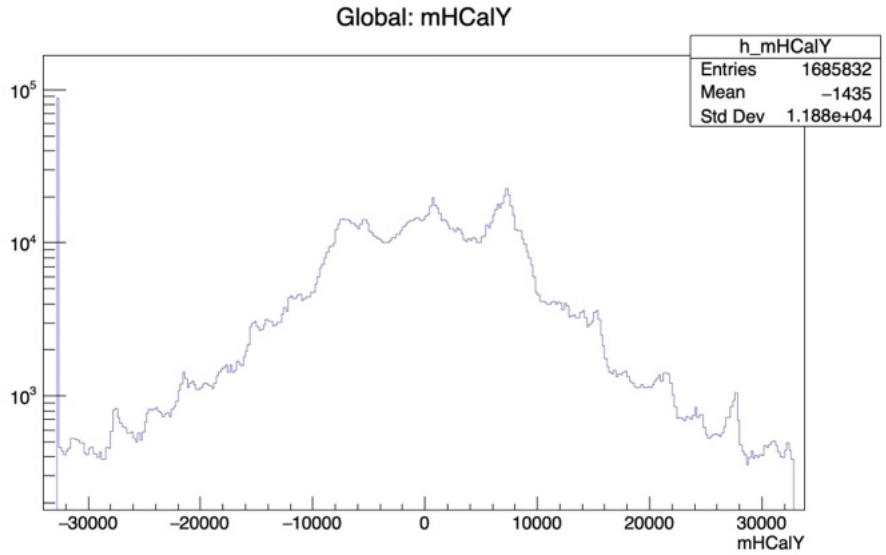

Other: mECalZ
h_mECalZ
Entries 17058
Mean 7200
Std Dev 8.817
mECalZ

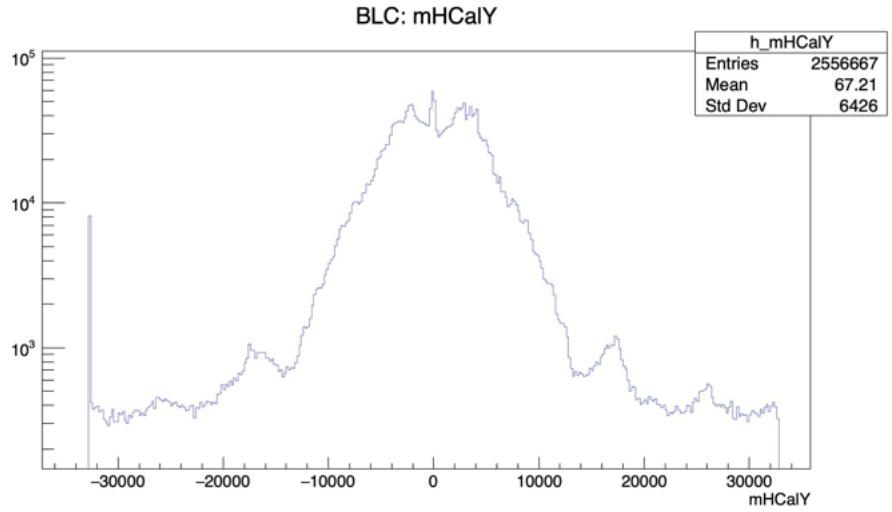

Global: mHCalX
h_mHCalX
Entries 1685832
Mean −1732
Std Dev 1.186e+04
mHCalX

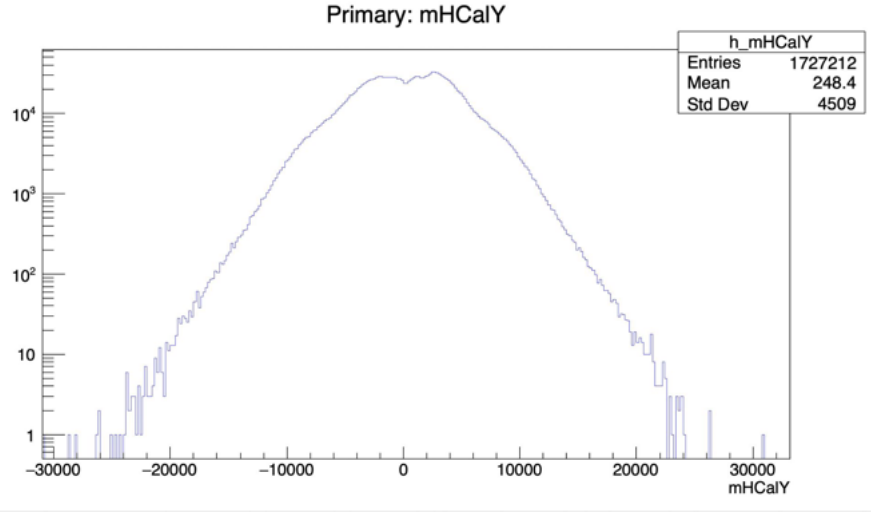

BLC: mHCalX
h_mHCalX
Entries 2556667
Mean −149.1
Std Dev 6446
mHCalX

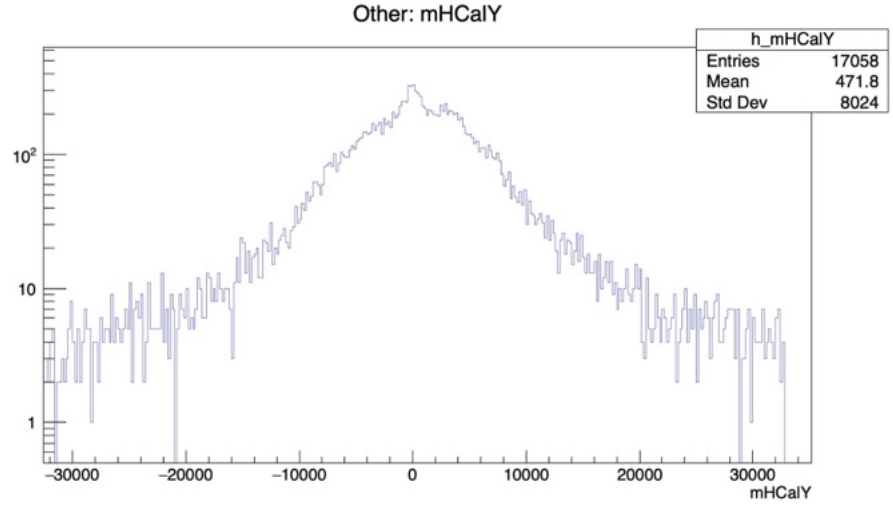

Primary: mHCalX
h_mHCalX
Entries 1727212
Mean −77.12
Std Dev 4523
mHCalX

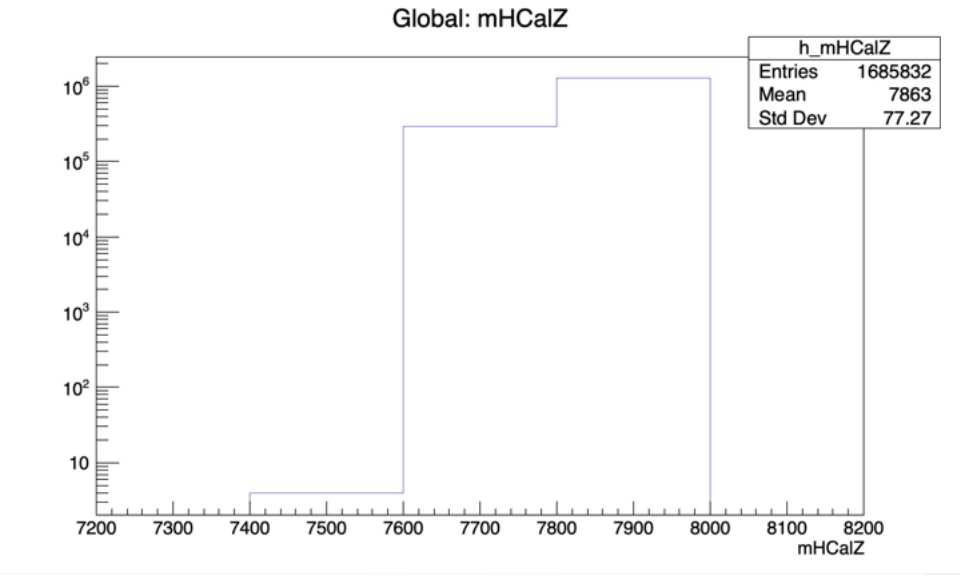

Other: mHCalX
h_mHCalX
Entries 17058
Mean 23.79
Std Dev 7673
mHCalX

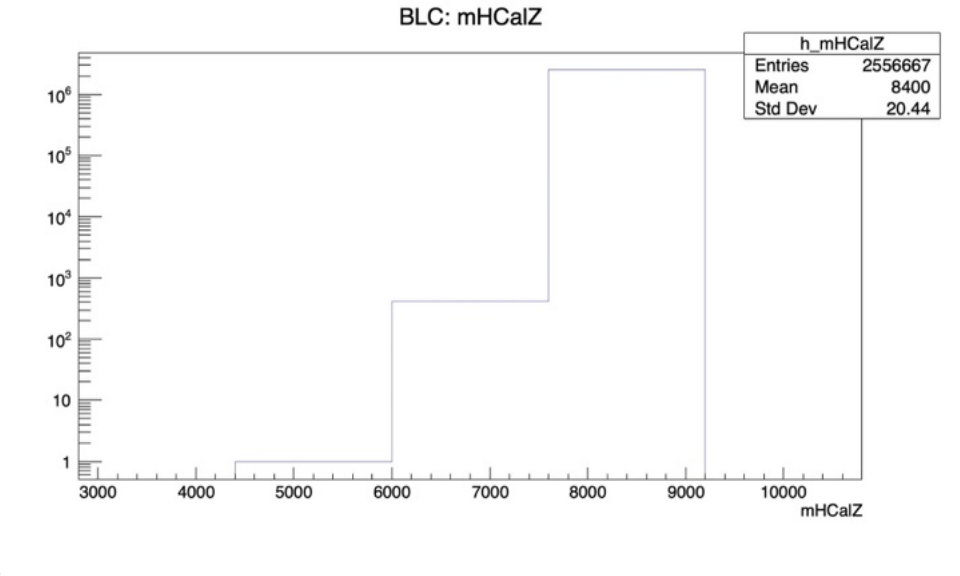

Global: mHCalY
h_mHCalY
Entries 1685832
Mean −1435
Std Dev 1.188e+04
mHCalY

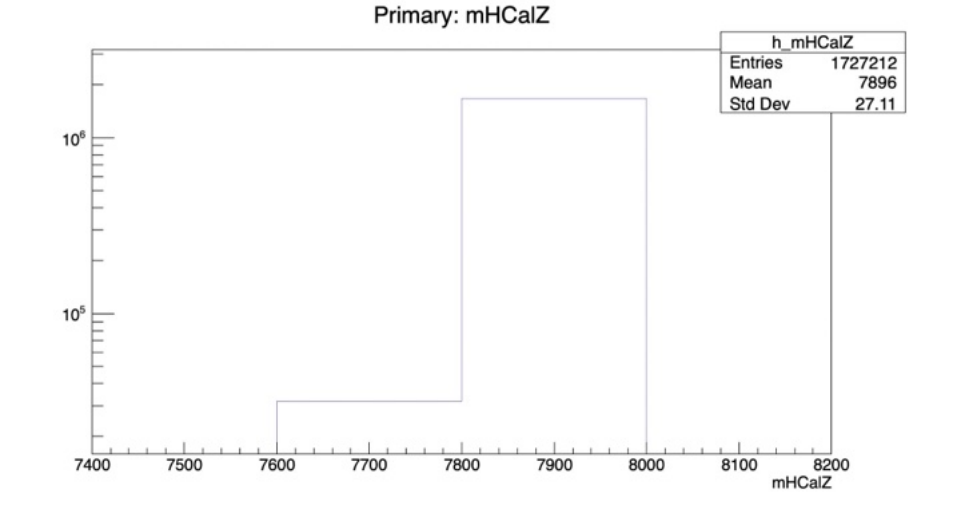

BLC: mHCalY
h_mHCalY
Entries 2556667
Mean 67.21
Std Dev 6426
mHCalY

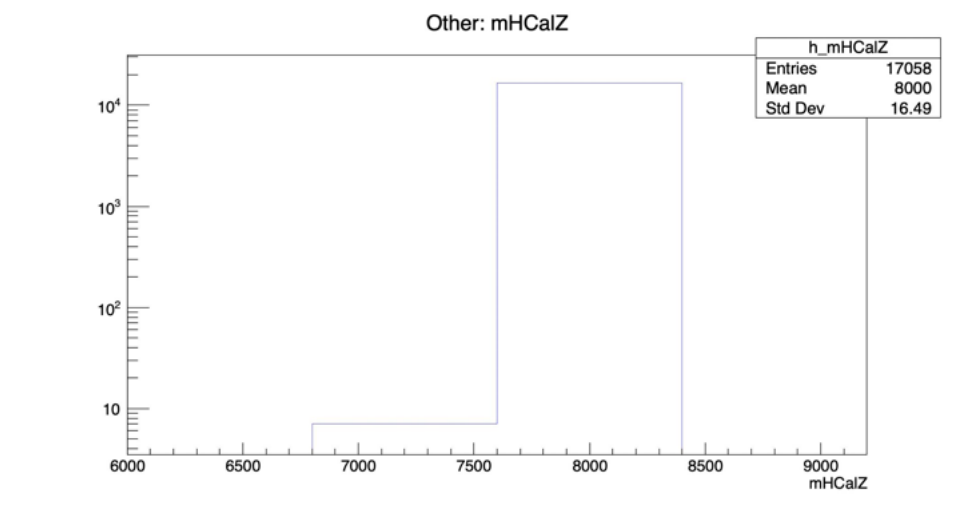

Primary: mHCalY
h_mHCalY
Entries 1727212
Mean 248.4
Std Dev 4509
mHCalY

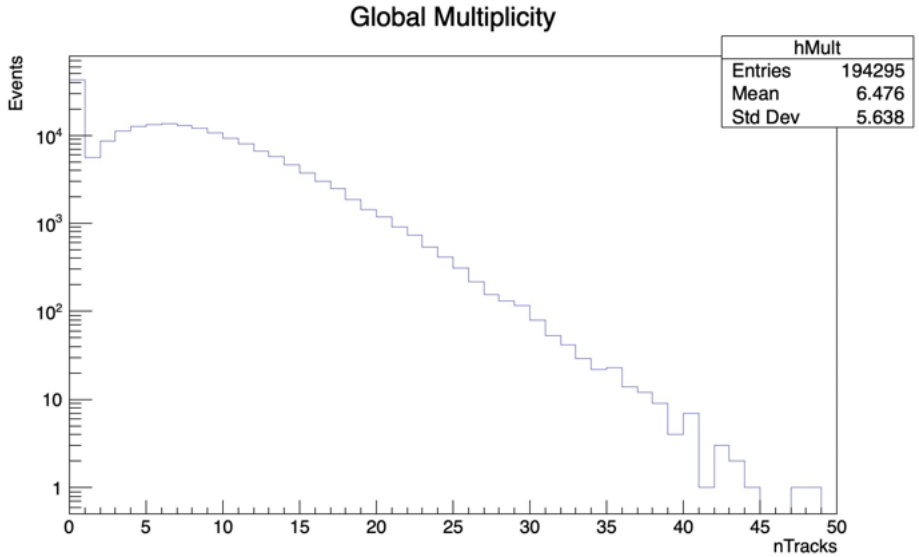

Other: mHCalY
h_mHCalY
Entries 17058
Mean 471.8
Std Dev 8024
mHCalY

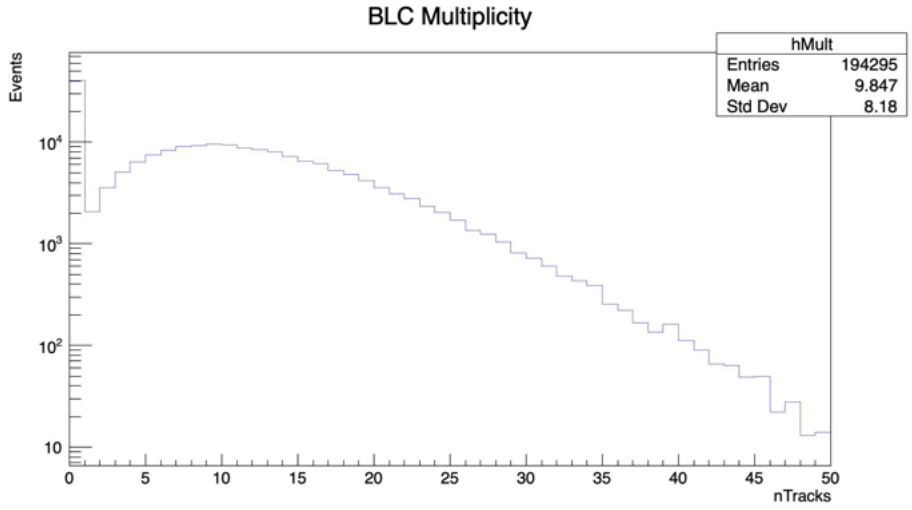

Global: mHCalZ
h_mHCalZ
Entries 1685832
Mean 7863
Std Dev 77.27
mHCalZ

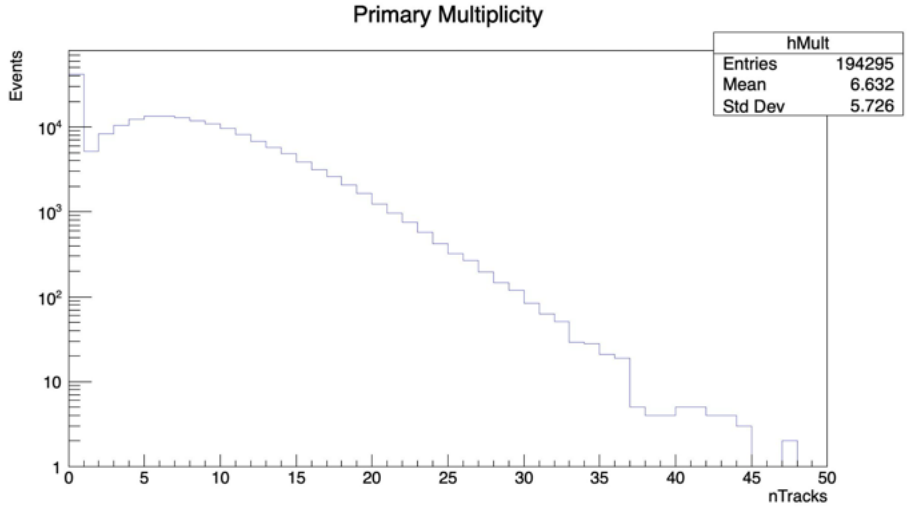

BLC: mHCalZ
h_mHCalZ
Entries 2556667
Mean 8400
Std Dev 20.44
mHCalZ

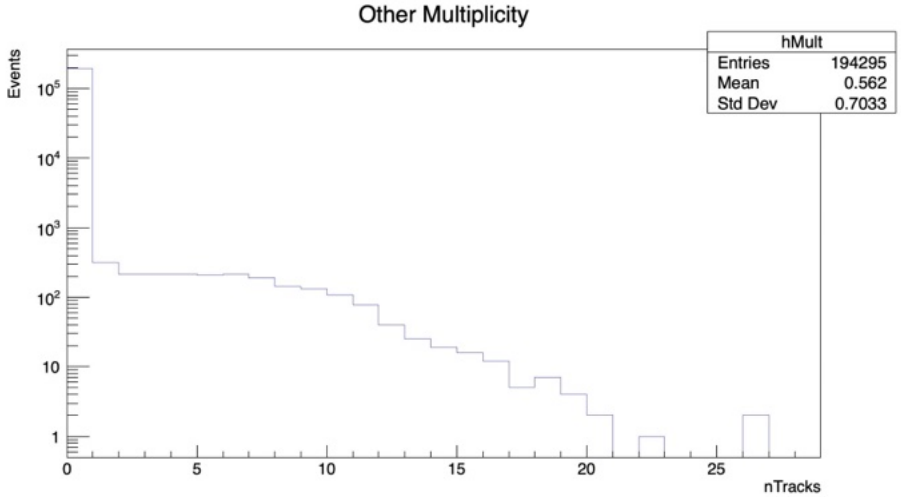

Primary: mHCalZ
h_mHCalZ
Entries 1727212
Mean 7896
Std Dev 27.11
mHCalZ


Other: mHCalZ
h_mHCalZ
Entries 17058
Mean 8000
Std Dev 16.49
mHCalZ

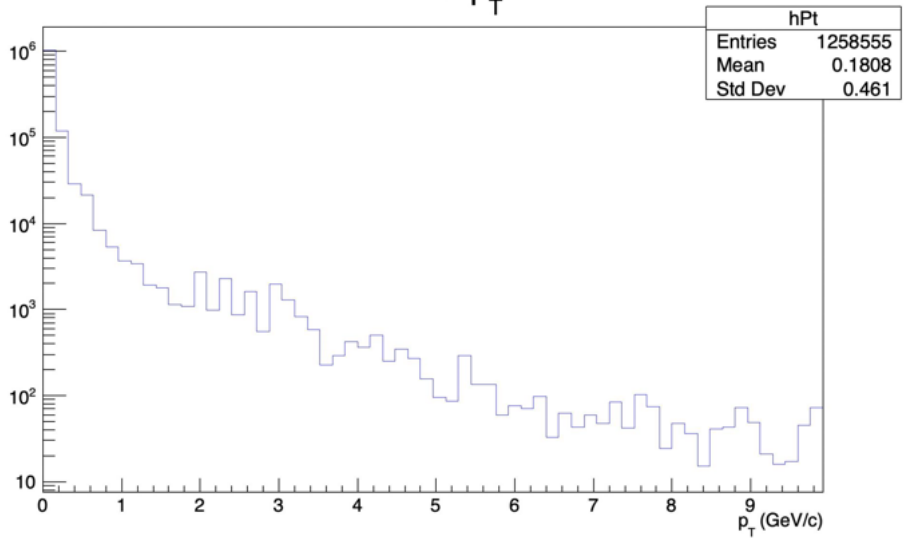

Global Multiplicity
hMult
Entries 194295
Mean 6.476
Std Dev 5.638
Events
nTracks


BLC Multiplicity
hMult
Entries 194295
Mean 9.847
Std Dev 8.18
Events
nTracks

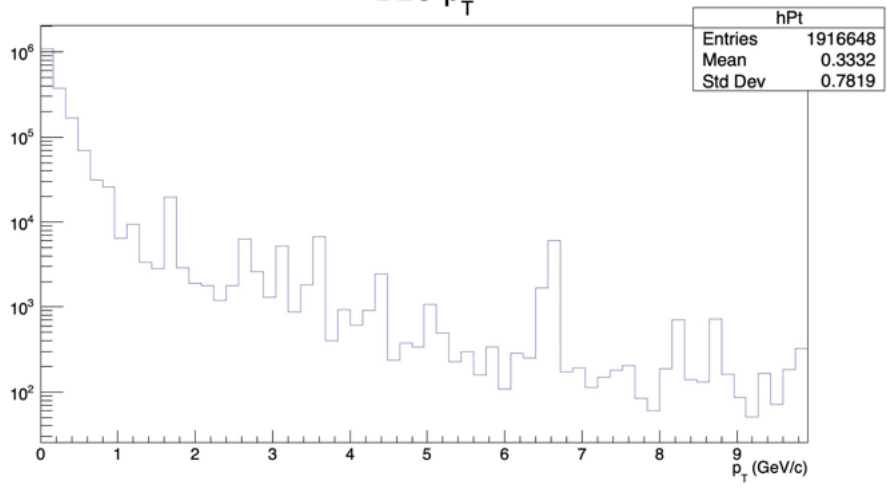

Primary Multiplicity
hMult
Entries 194295
Mean 6.632
Std Dev 5.726
Events
nTracks


Other Multiplicity
hMult
Entries 194295
Mean 0.562
Std Dev 0.7033
Events
nTracks

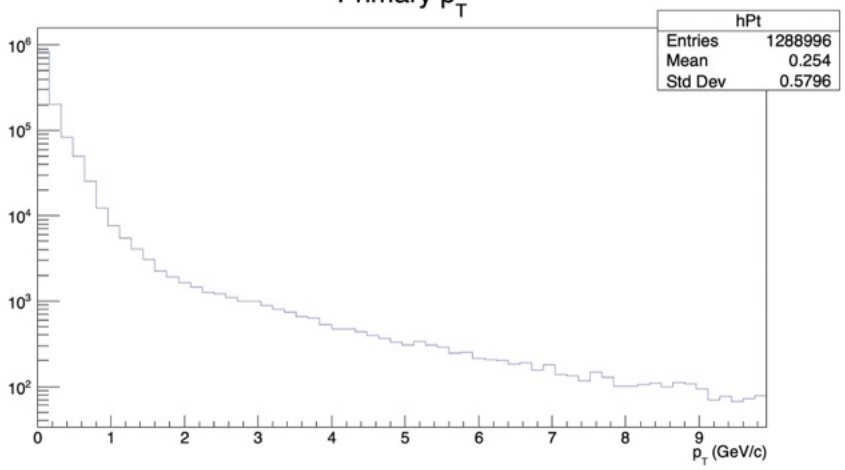
Global p_T



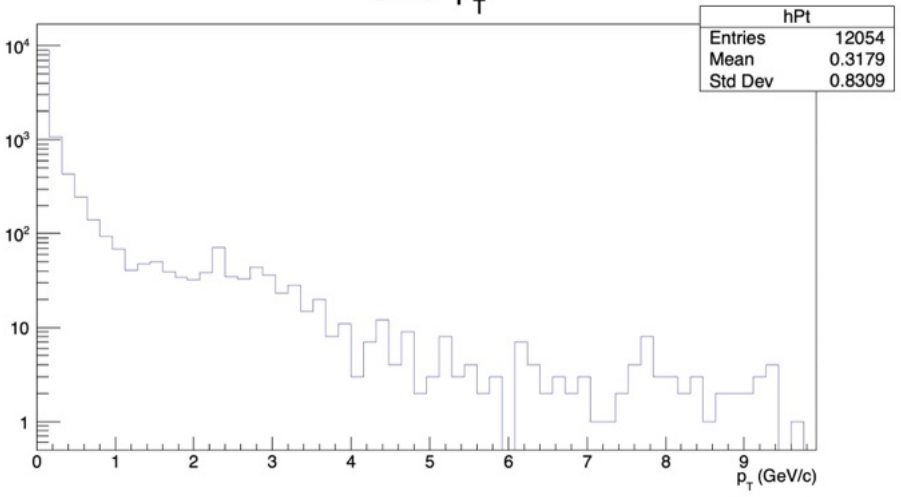
BLC p_T

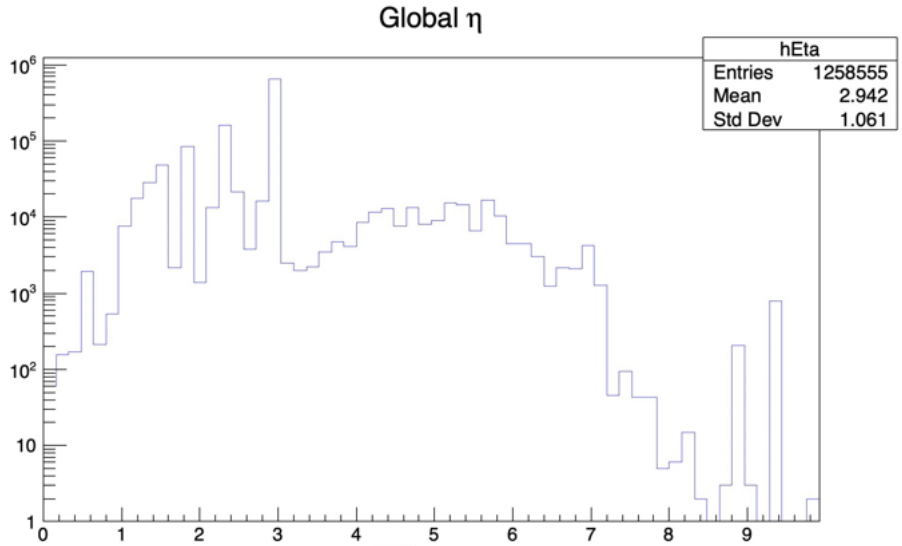


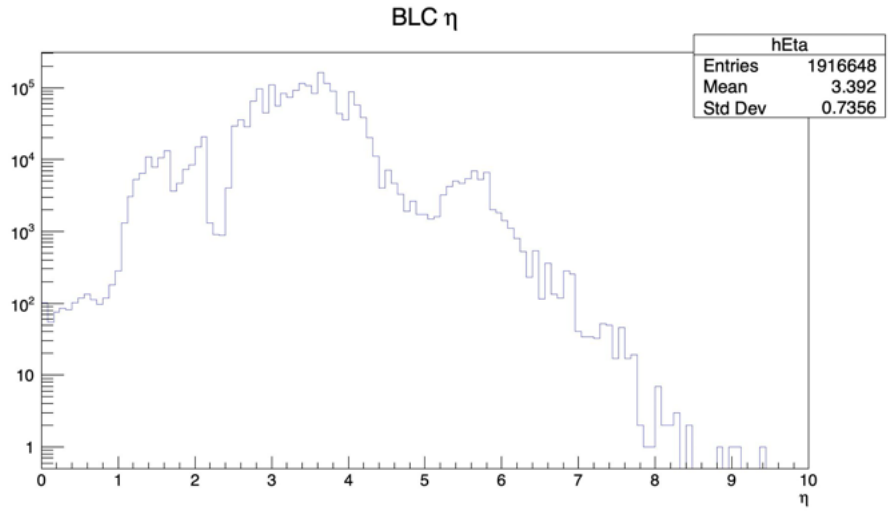
Primary p_T

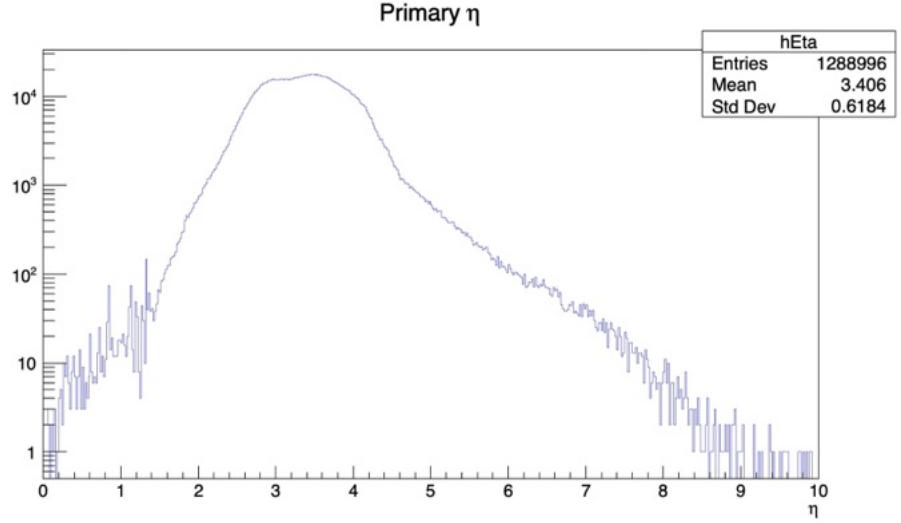


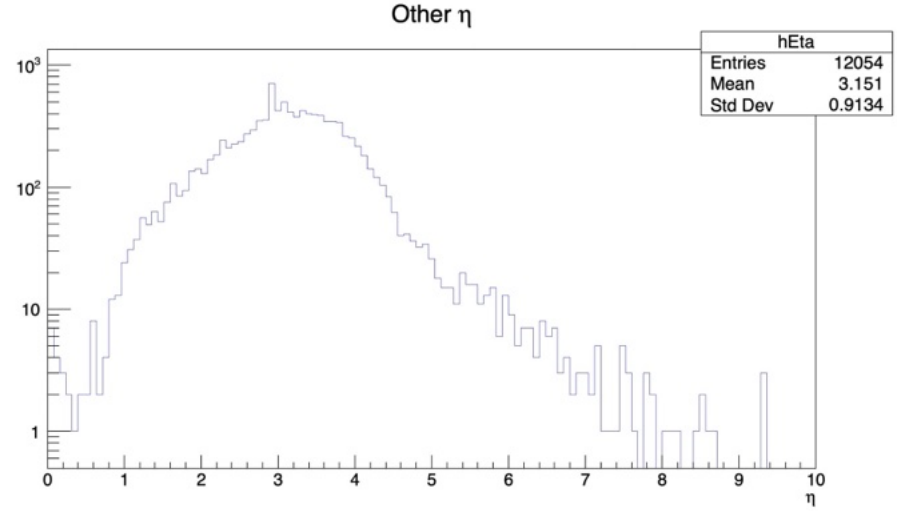
Other p_T

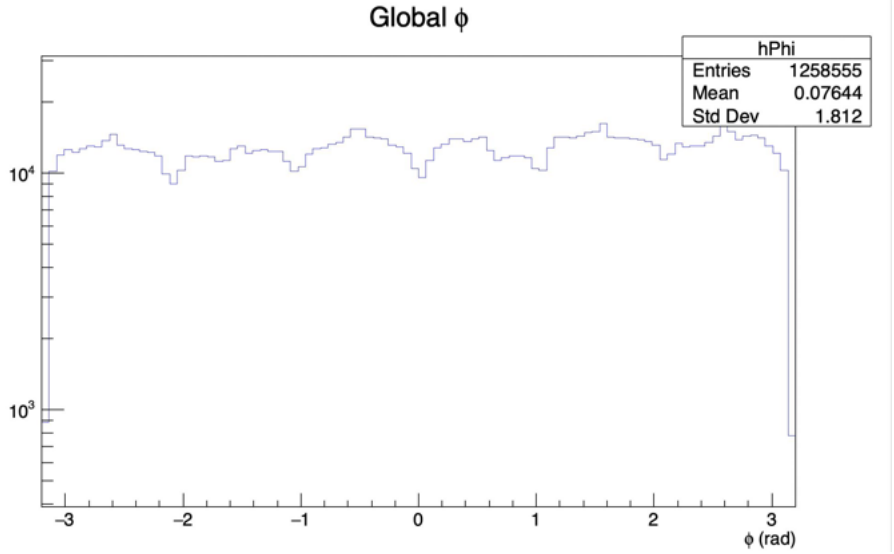


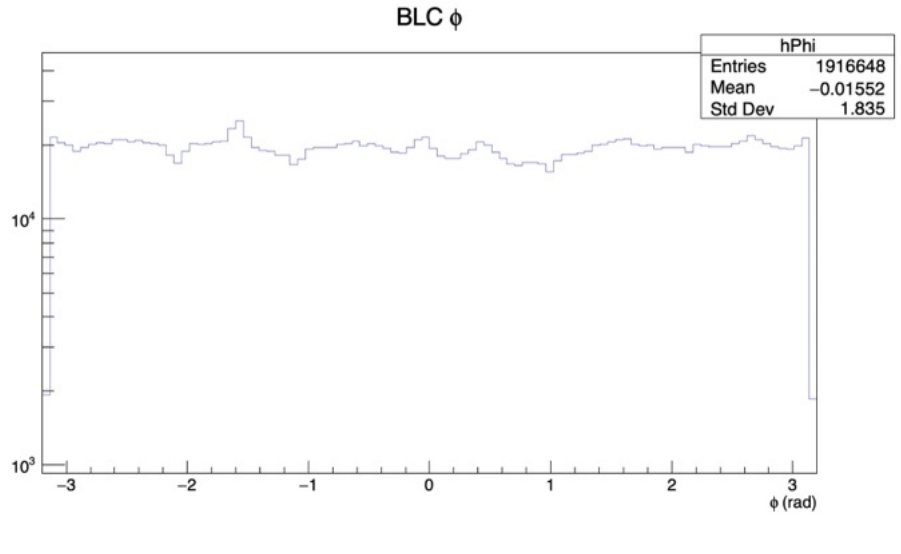

Global η
hEta
Entries 1258555
Mean 2.942
Std Dev 1.061

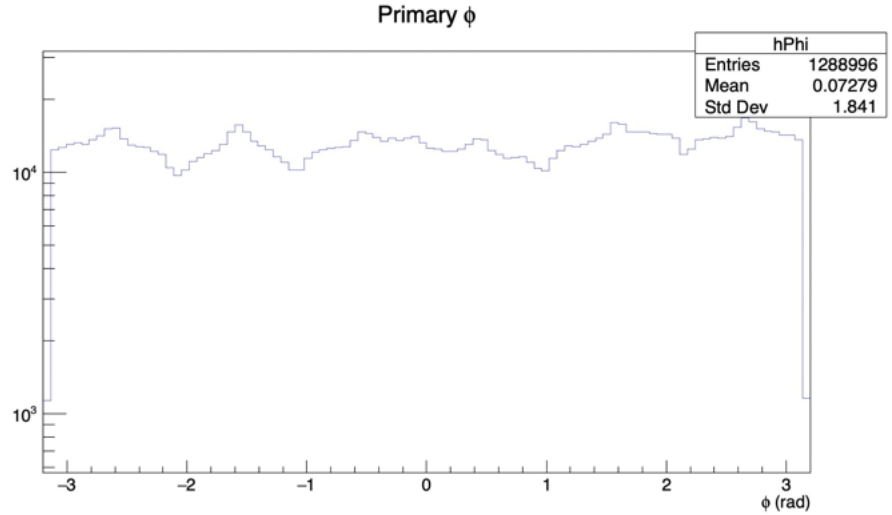

BLC η
hEta
Entries 1916648
Mean 3.392
Std Dev 0.7356
η

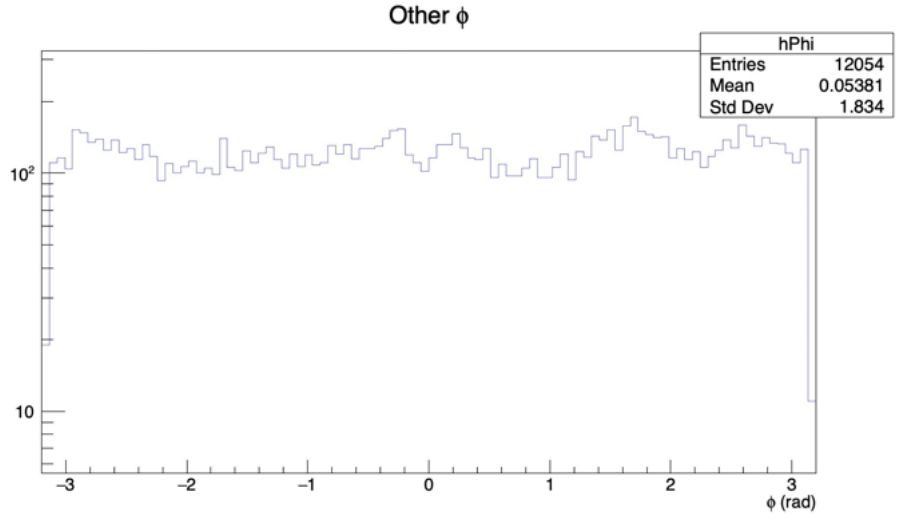

Primary η
hEta
Entries 1288996
Mean 3.406
Std Dev 0.6184
η


Other η
hEta
Entries 12054
Mean 3.151
Std Dev 0.9134
η


Global ϕ
hPhi
Entries 1258555
Mean 0.07644
Std Dev 1.812
10^4
10^3
−3 −2 −1 0 1 2 3
ϕ (rad)


BLC ϕ
hPhi
Entries 1916648
Mean −0.01552
Std Dev 1.835
10^4
10^3
−3 −2 −1 0 1 2 3
ϕ (rad)


Primary ϕ
hPhi
Entries 1288996
Mean 0.07279
Std Dev 1.841
10^4
10^3
−3 −2 −1 0 1 2 3
ϕ (rad)


Other ϕ
hPhi
Entries 12054
Mean 0.05381
Std Dev 1.834
10^2
10
−3 −2 −1 0 1 2 3
ϕ (rad)

Next steps

Run over all of the production

Fix the axis pre-scaling in the processing step directly

Add hit information (fcs, fst, stgc)?