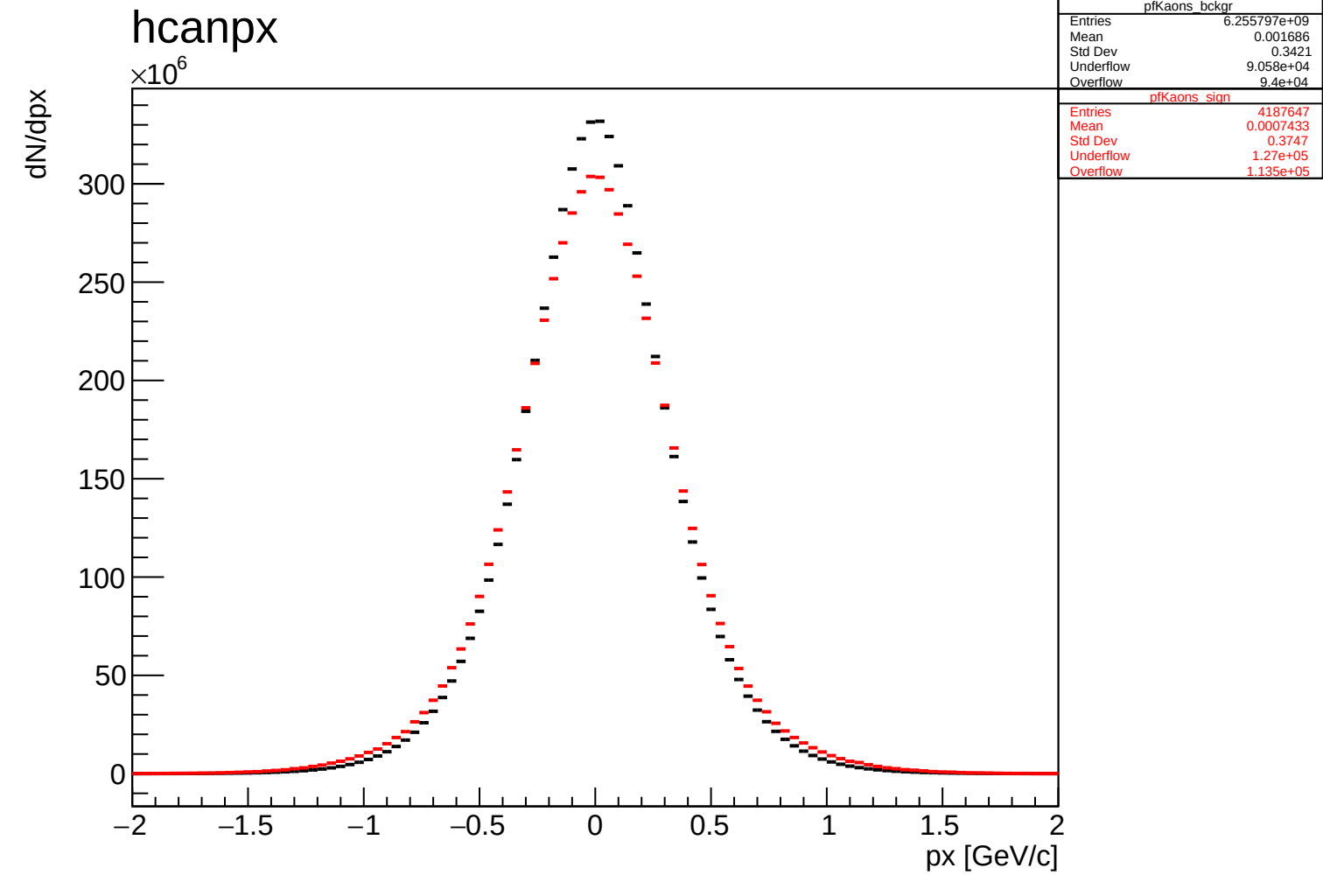
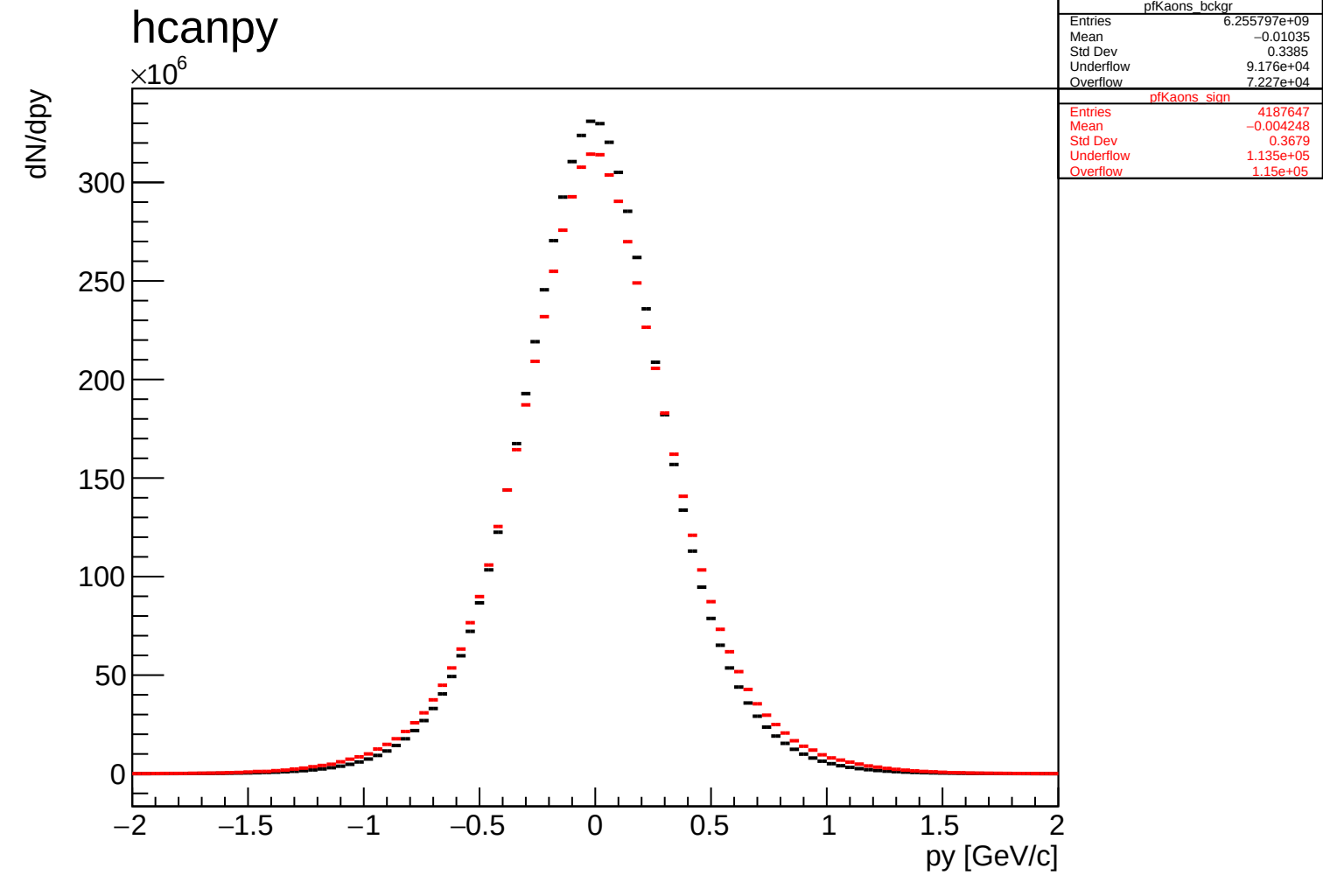
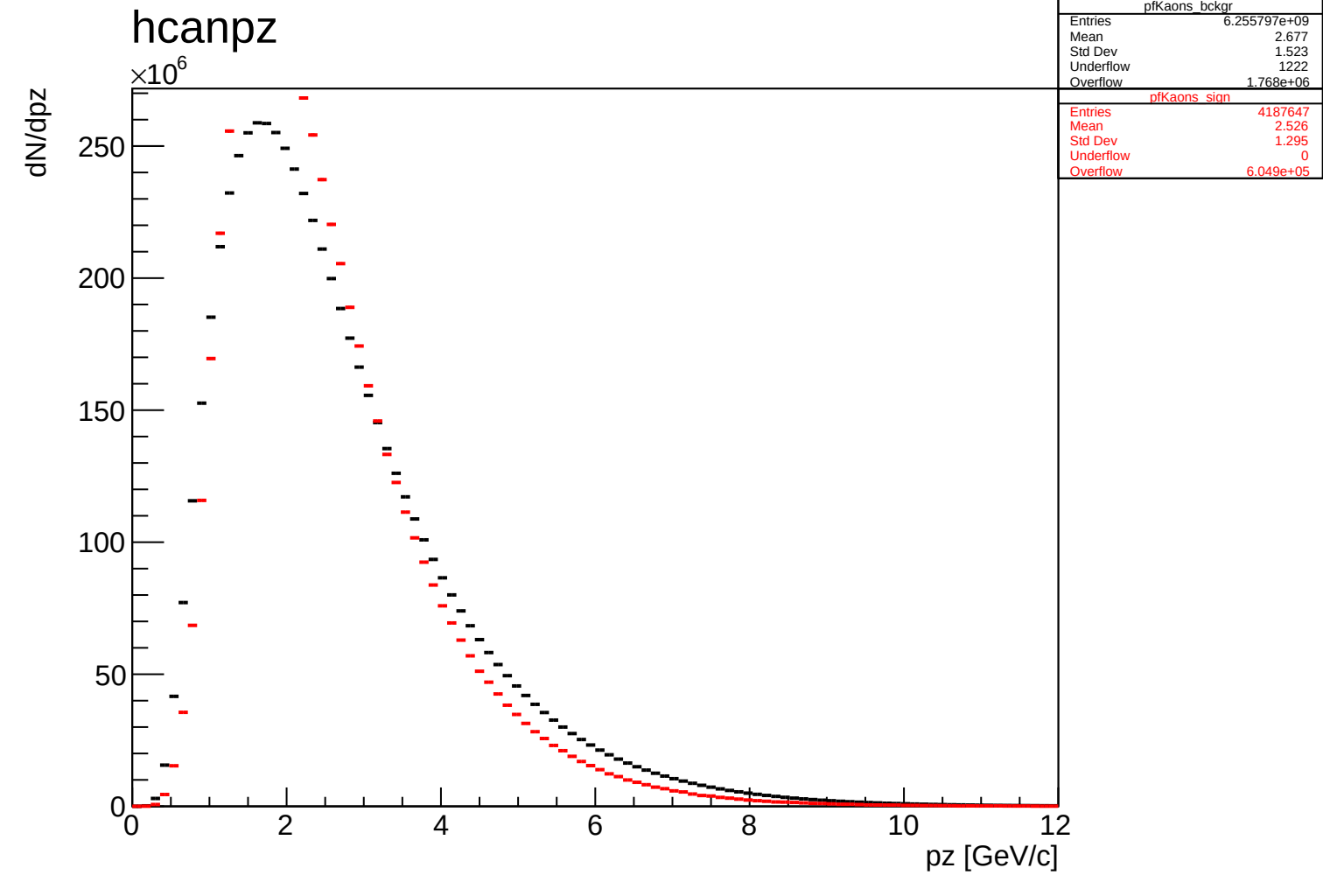
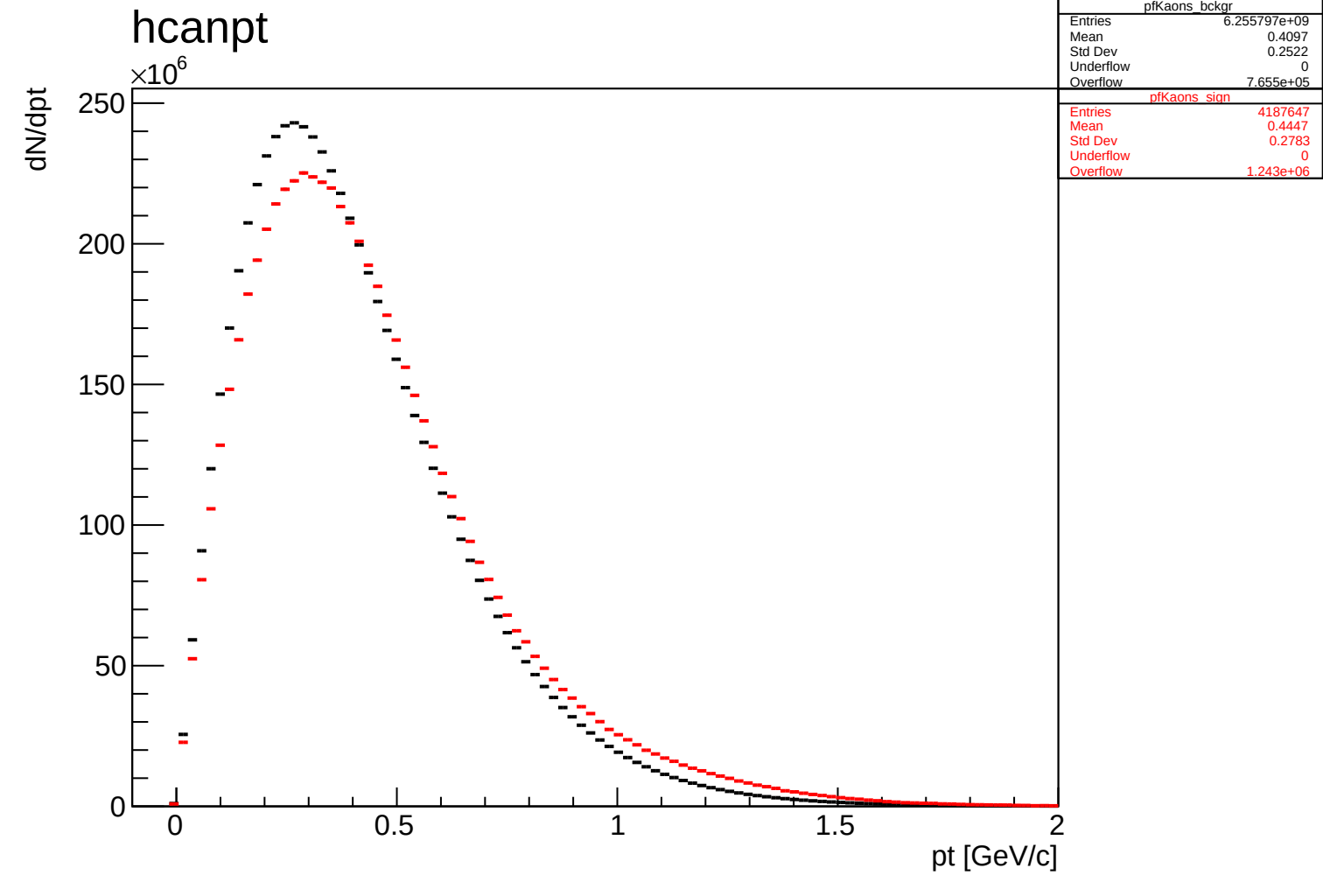
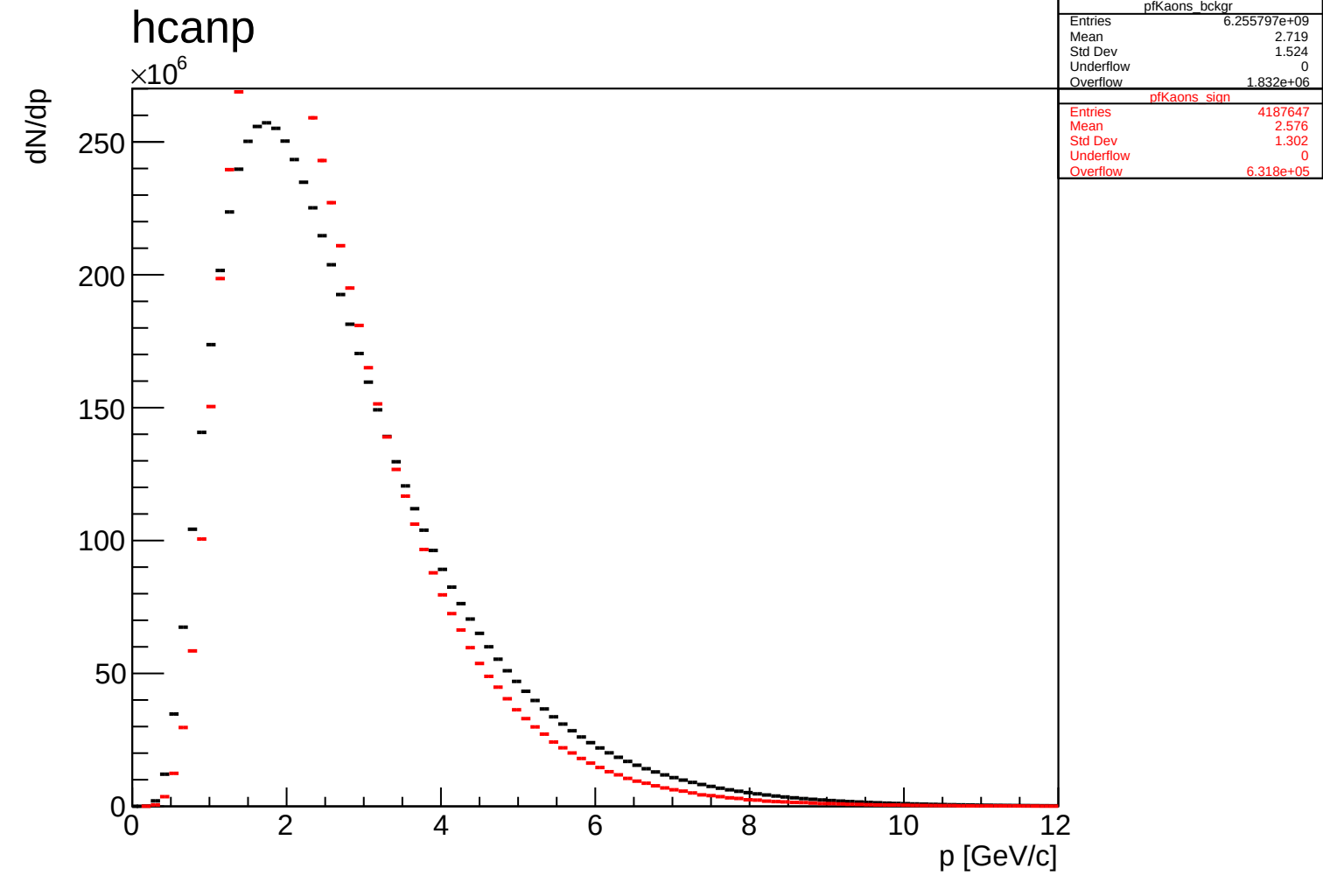
Comparing folder / of files:
comparison/pfKaons_bckgr.root (pfKaons_bckgr)
comparison/pfKaons_sign.root (pfKaons_sign)

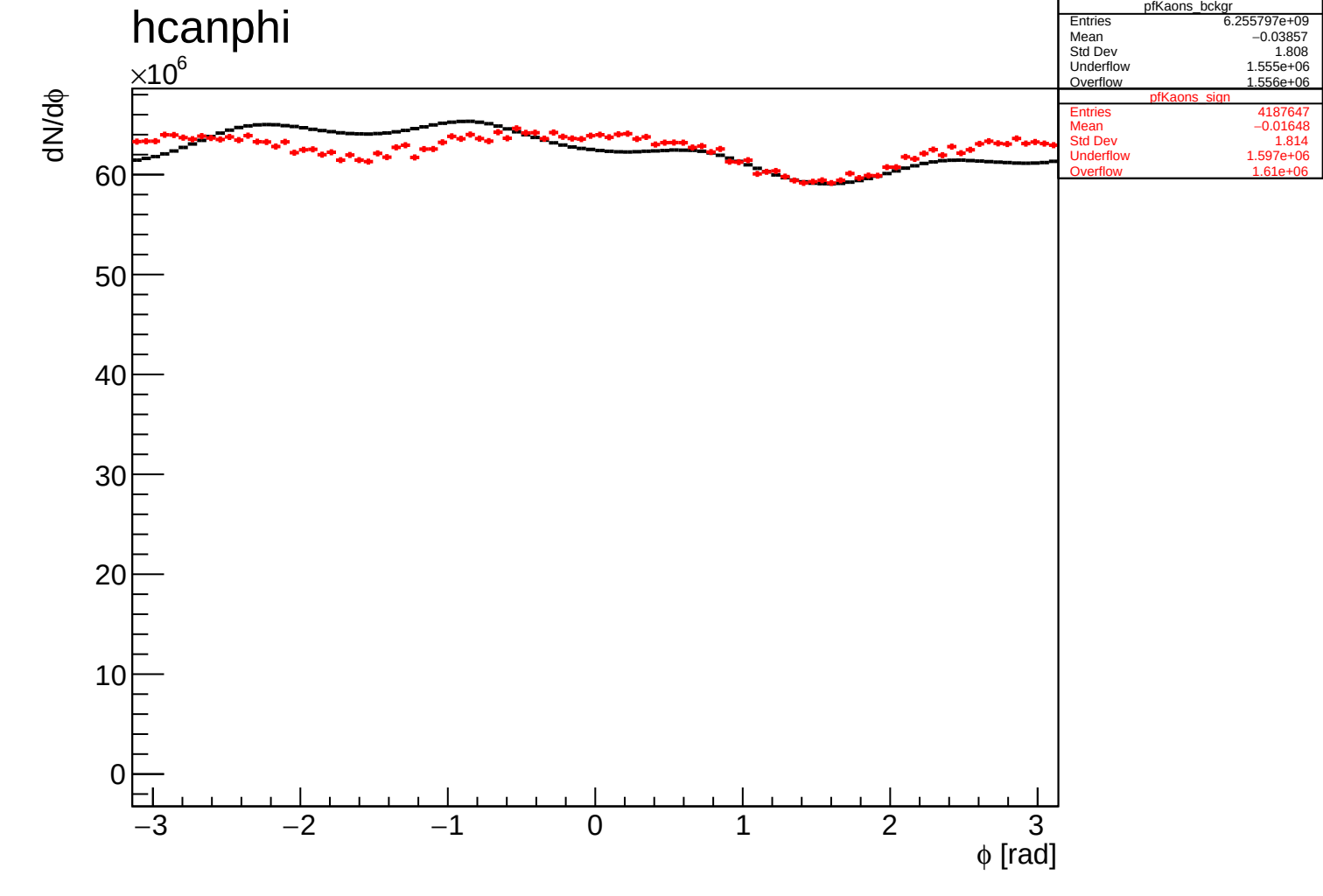

hcanpx
×10^6
dN/dpx
300
250
200
150
100
50
0
−2
−1.5
−1
−0.5
0
0.5
1
1.5
2
px [GeV/c]
pfKaons_bckgr
Entries 6.255797e+09
Mean 0.001686
Std Dev 0.3421
Underflow 9.058e+04
Overflow 9.4e+04
pfKaons_sign
Entries 4187647
Mean 0.0007433
Std Dev 0.3747
Underflow 1.27e+05
Overflow 1.135e+05

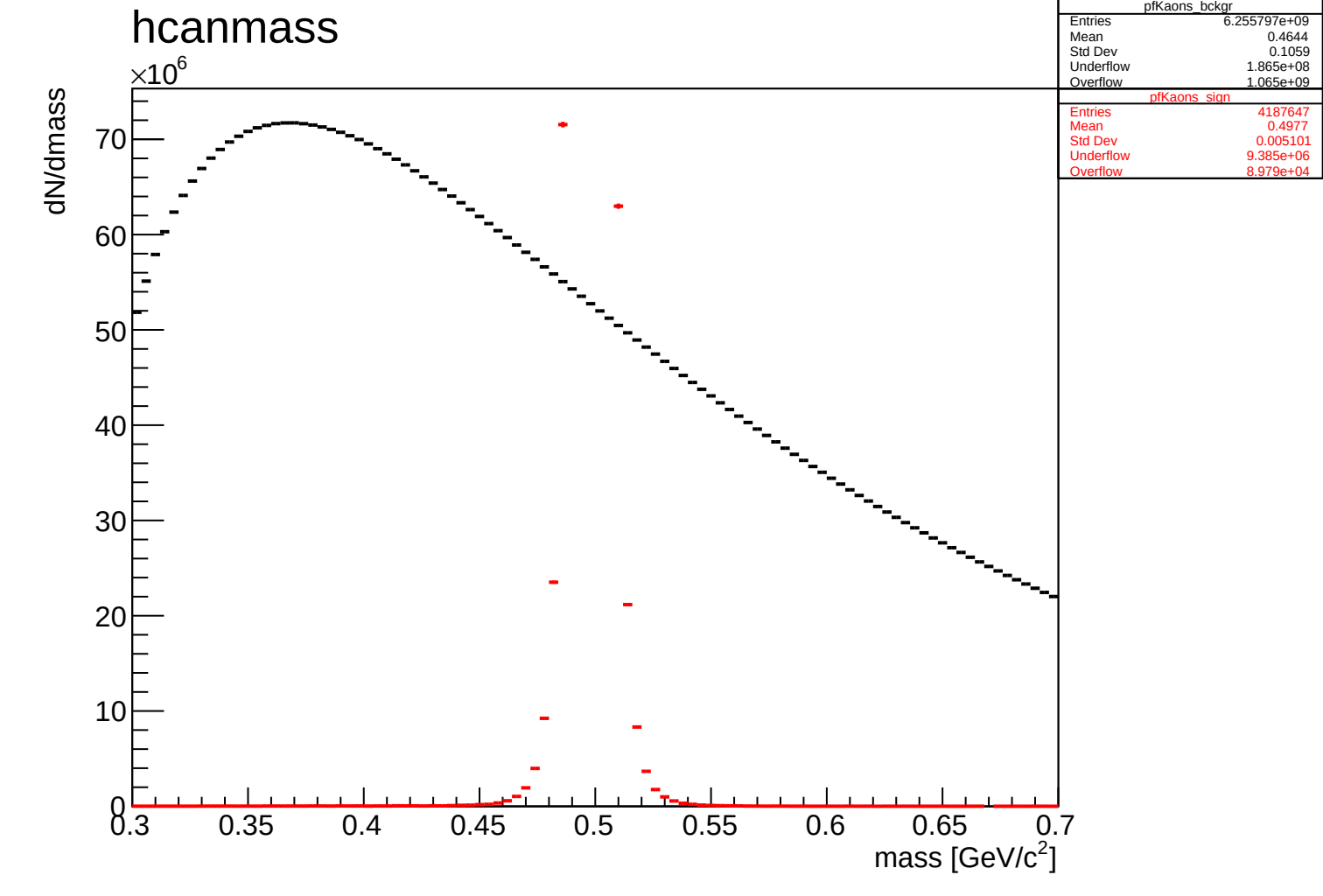

hcanpy
×10^6
dN/dpy
300
250
200
150
100
50
0
−2
−1.5
−1
−0.5
0
0.5
1
1.5
2
py [GeV/c]
pfKaons_bckgr
Entries 6.255797e+09
Mean −0.01035
Std Dev 0.3385
Underflow 9.176e+04
Overflow 7.227e+04
pfKaons_sign
Entries 4187647
Mean −0.004248
Std Dev 0.3679
Underflow 1.135e+05
Overflow 1.15e+05

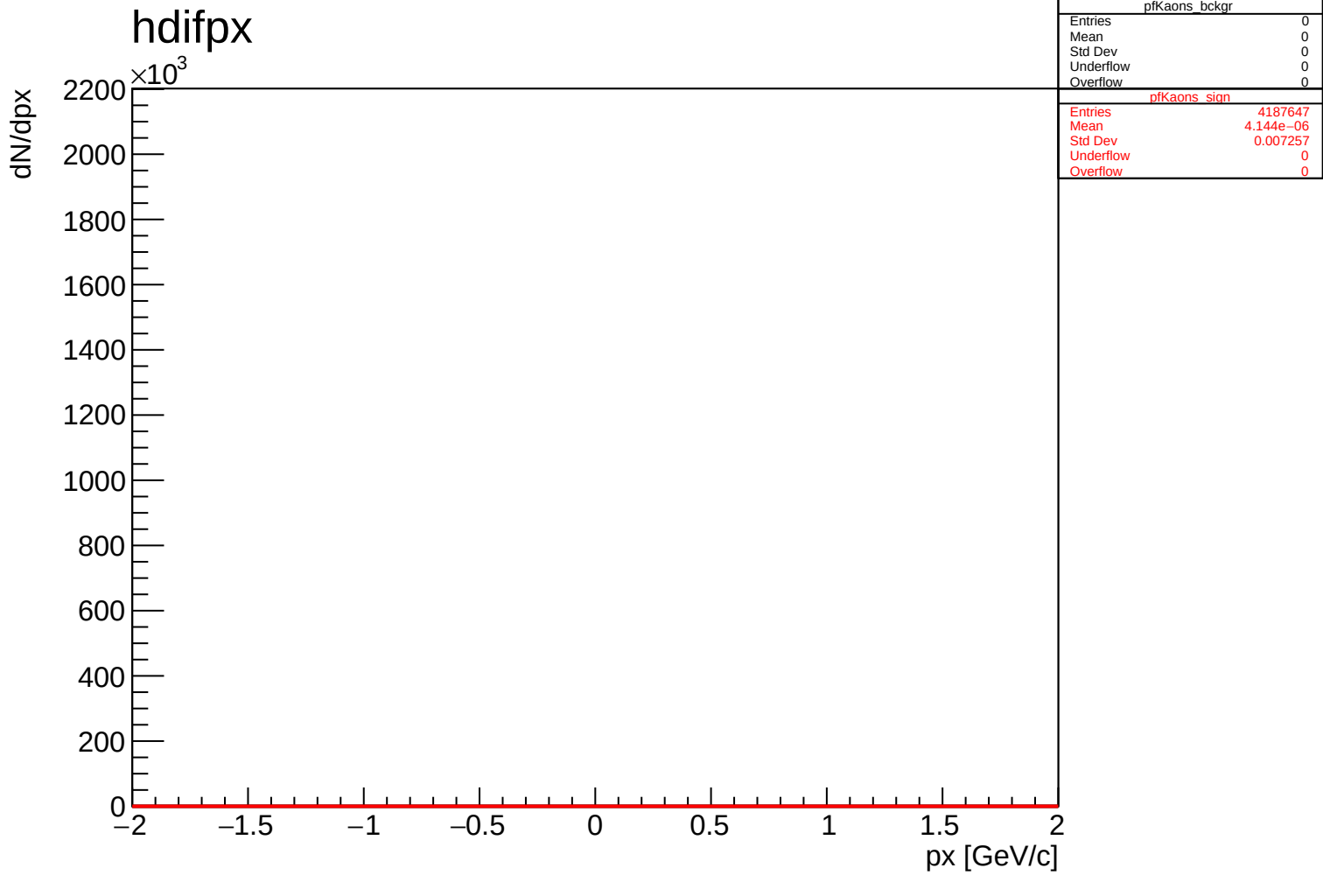

hcanpz
×10^6
dN/dpz
250
200
150
100
50
0
0
2
4
6
8
10
12
pz [GeV/c]
pfKaons_bckgr
Entries 6.255797e+09
Mean 2.677
Std Dev 1.523
Underflow 1222
Overflow 1.768e+06
pfKaons_sign
Entries 4187647
Mean 2.526
Std Dev 1.295
Underflow 0
Overflow 6.049e+05

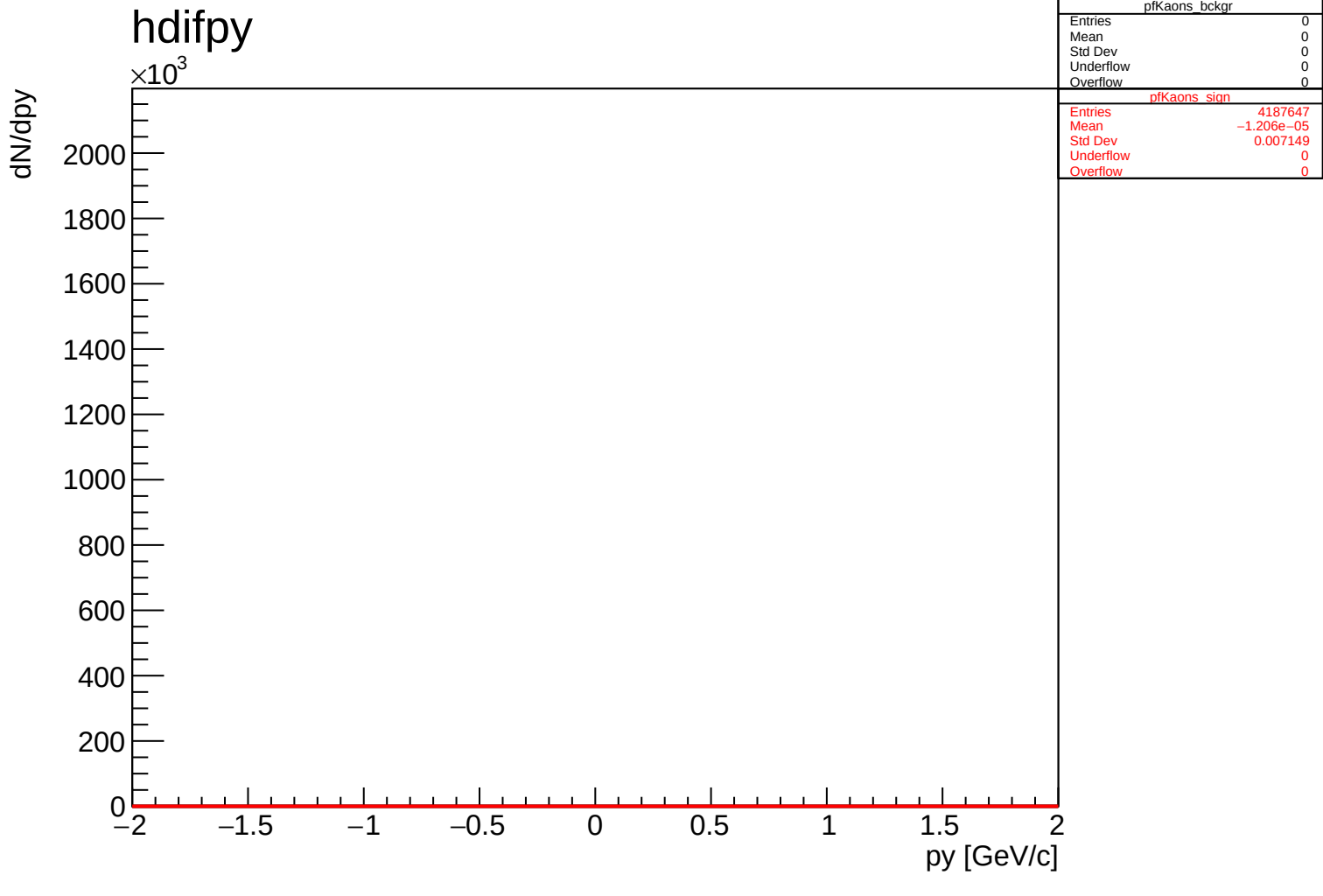

hcanpt
×10^6
dN/dpt
250
200
150
100
50
0
0
0.5
1
1.5
2
pt [GeV/c]
pfKaons_bckgr
Entries 6.255797e+09
Mean 0.4097
Std Dev 0.2522
Underflow 0
Overflow 7.655e+05
pfKaons_sign
Entries 4187647
Mean 0.4447
Std Dev 0.2783
Underflow 0
Overflow 1.243e+06

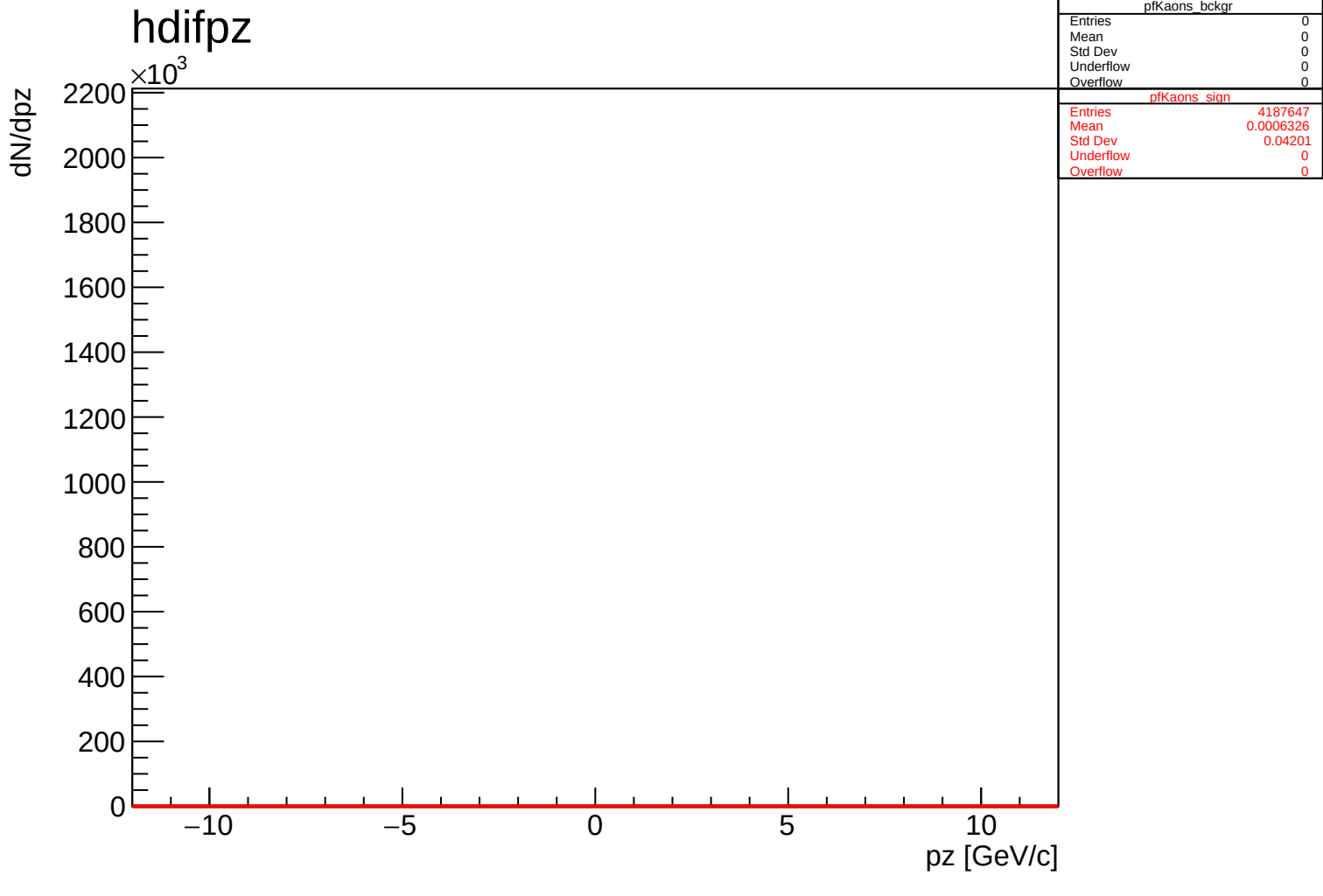

hcanp
×10^6
dN/dp
250
200
150
100
50
0
0
2
4
6
8
10
12
p [GeV/c]
pfKaons_bckgr
Entries 6.255797e+09
Mean 2.719
Std Dev 1.524
Underflow 0
Overflow 1.832e+06
pfKaons_sign
Entries 4187647
Mean 2.576
Std Dev 1.302
Underflow 0
Overflow 6.318e+05

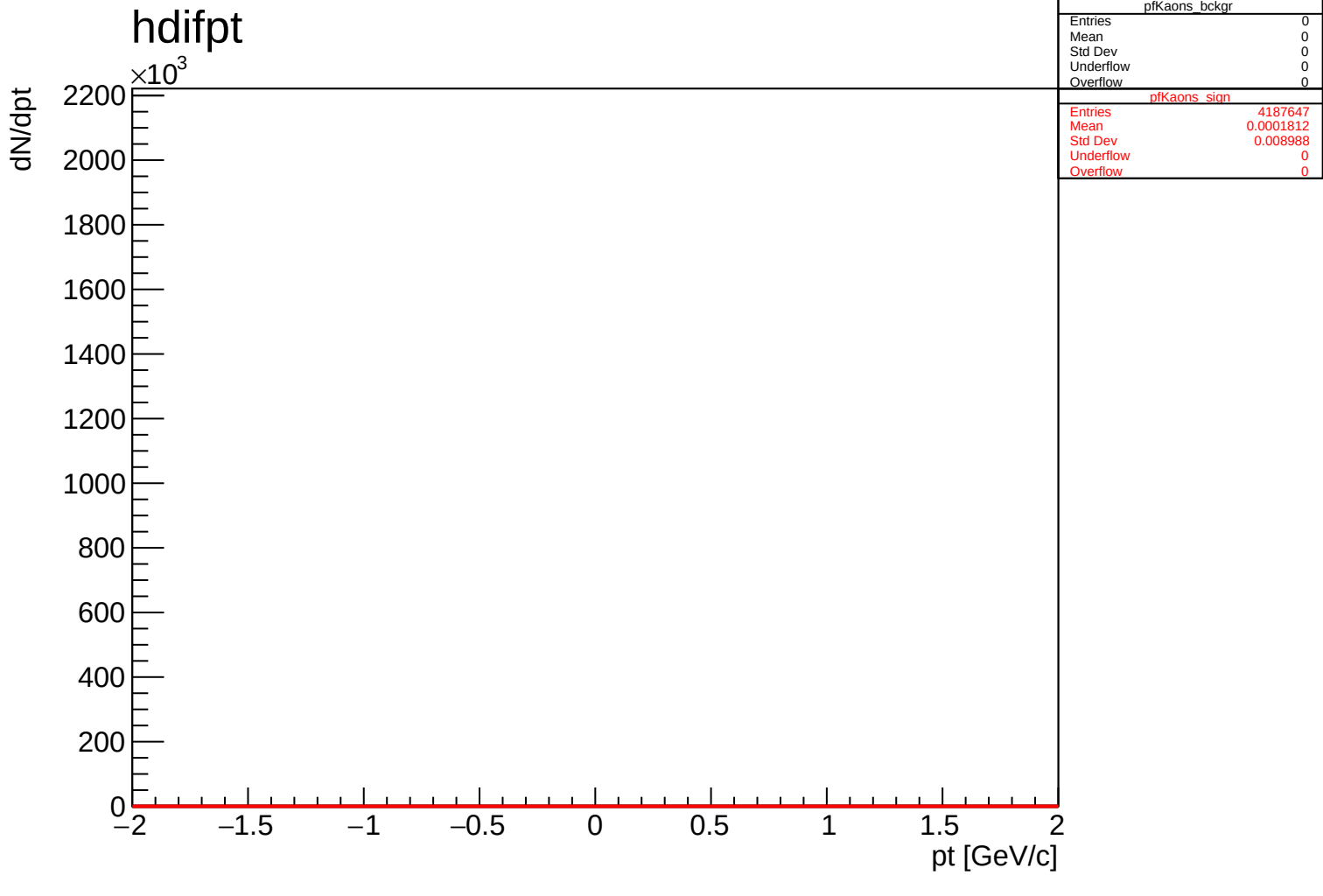

hcanphi
×10^6
dN/dϕ
60
50
40
30
20
10
0
−3
−2
−1
0
1
2
3
ϕ [rad]
pfKaons_bckgr
Entries 6.255797e+09
Mean −0.03857
Std Dev 1.808
Underflow 1.555e+06
Overflow 1.556e+06
pfKaons_sign
Entries 4187647
Mean −0.01648
Std Dev 1.814
Underflow 1.597e+06
Overflow 1.61e+06

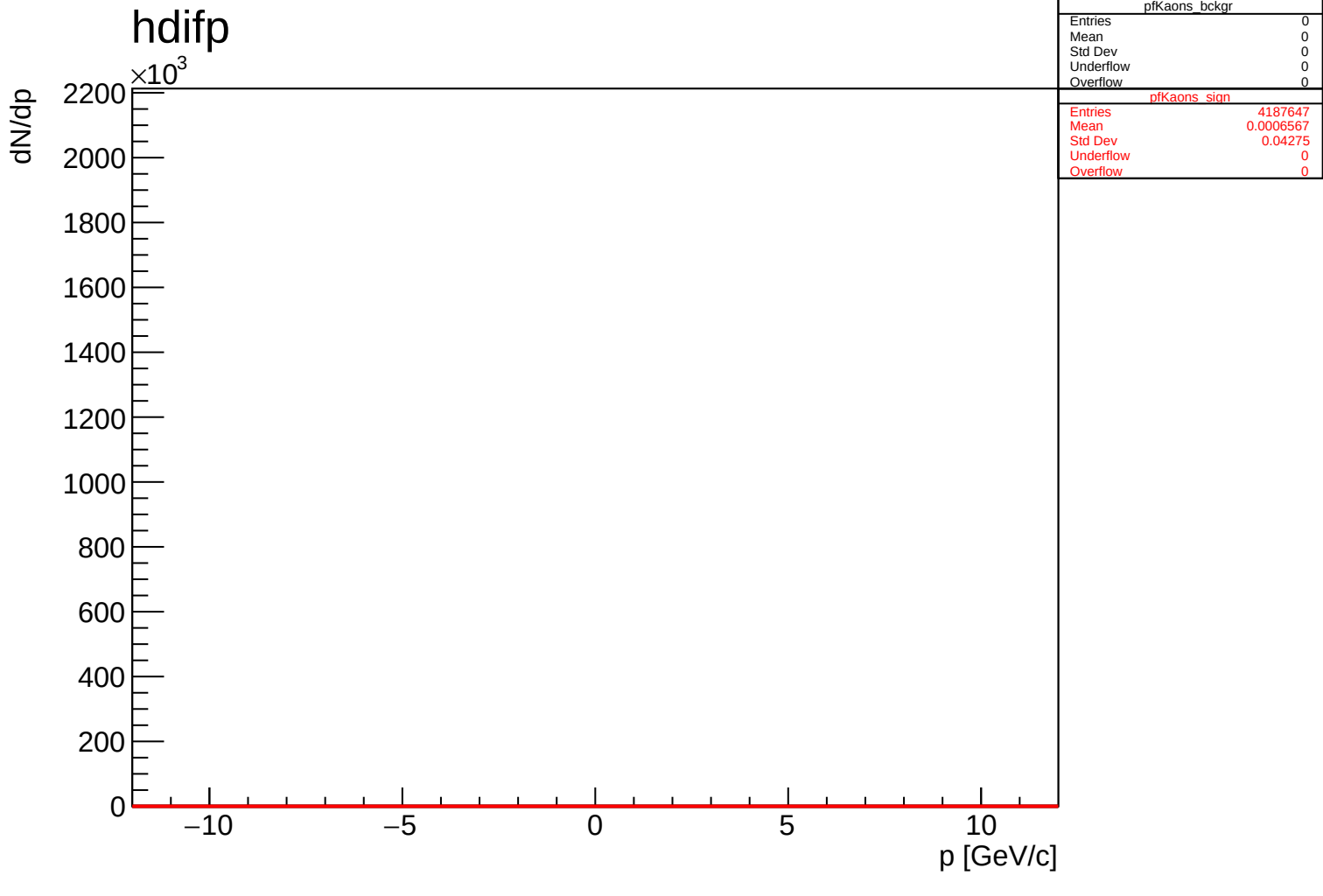

hcanmass
×10^6
dN/dmass
70
60
50
40
30
20
10
0
0.3
0.35
0.4
0.45
0.5
0.55
0.6
0.65
0.7
mass [GeV/c^2]
pfKaons_bckgr
Entries 6.255797e+09
Mean 0.4644
Std Dev 0.1059
Underflow 1.865e+08
Overflow 1.065e+09
pfKaons_sign
Entries 4187647
Mean 0.4977
Std Dev 0.005101
Underflow 9.385e+06
Overflow 8.979e+04


hdifpx
pfKaons_bckgr
Entries 0
Mean 0
Std Dev 0
Underflow 0
Overflow 0
pfKaons_sign
Entries 4187647
Mean 4.144e−06
Std Dev 0.007257
Underflow 0
Overflow 0
dN/dpx
×10^3
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
−2
−1.5
−1
−0.5
0
0.5
1
1.5
2
px [GeV/c]

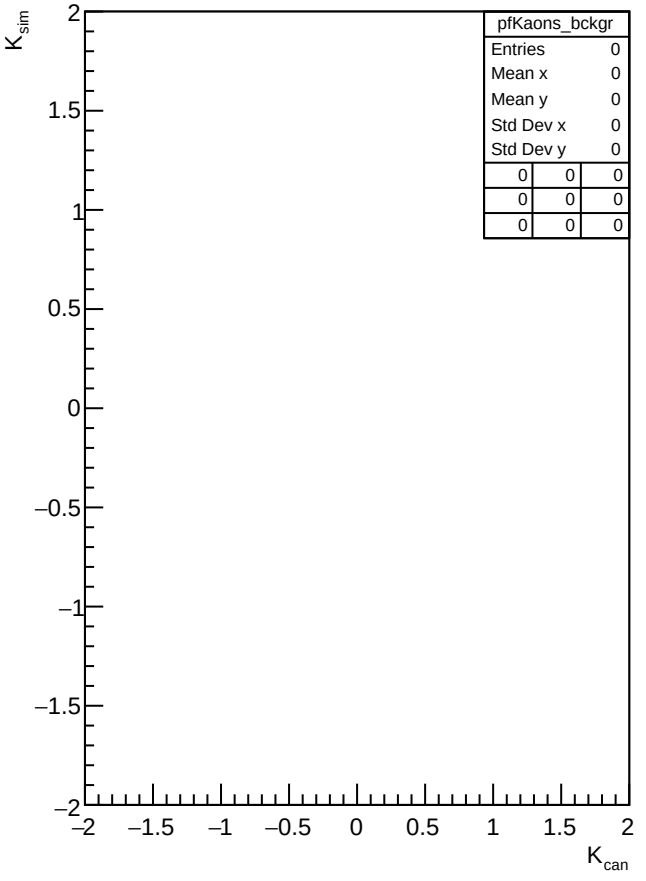

hdifpy
pfKaons_bckgr
Entries 0
Mean 0
Std Dev 0
Underflow 0
Overflow 0
pfKaons_sign
Entries 4187647
Mean −1.206e−05
Std Dev 0.007149
Underflow 0
Overflow 0
×10^3
dN/dpy
2000
1800
1600
1400
1200
1000
800
600
400
200
0
−2
−1.5
−1
−0.5
0
0.5
1
1.5
2
py [GeV/c]

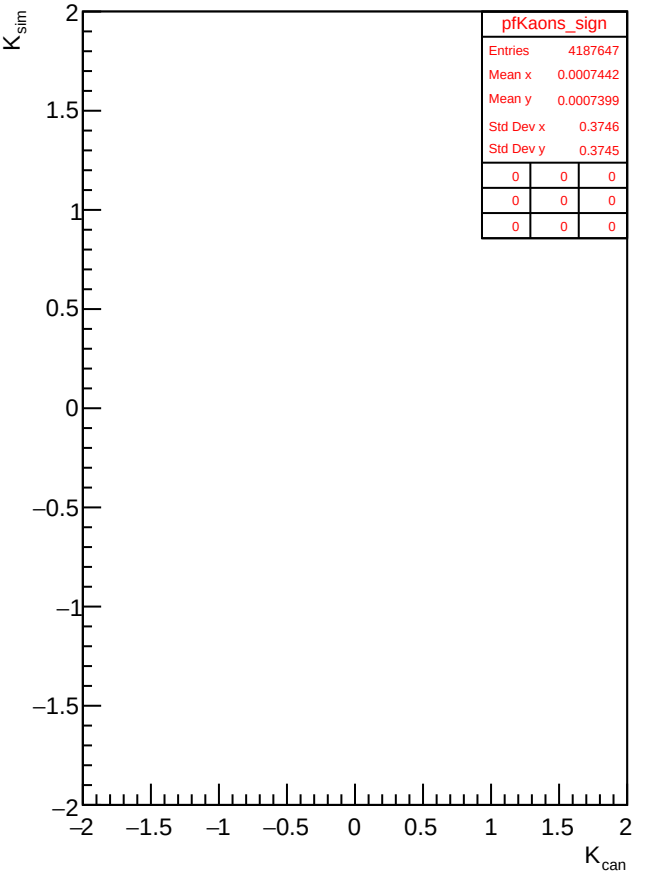

hdifpz
×10^3
dN/dpz
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
−10
−5
0
5
10
pz [GeV/c]
pfKaons_bckgr
Entries 0
Mean 0
Std Dev 0
Underflow 0
Overflow 0
pfKaons_sign
Entries 4187647
Mean 0.0006326
Std Dev 0.04201
Underflow 0
Overflow 0


hdifpt
×10^3
dN/dpt
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
−2
−1.5
−1
−0.5
0
0.5
1
1.5
2
pt [GeV/c]
pfKaons_bckgr
Entries 0
Mean 0
Std Dev 0
Underflow 0
Overflow 0
pfKaons_sign
Entries 4187647
Mean 0.0001812
Std Dev 0.008988
Underflow 0
Overflow 0

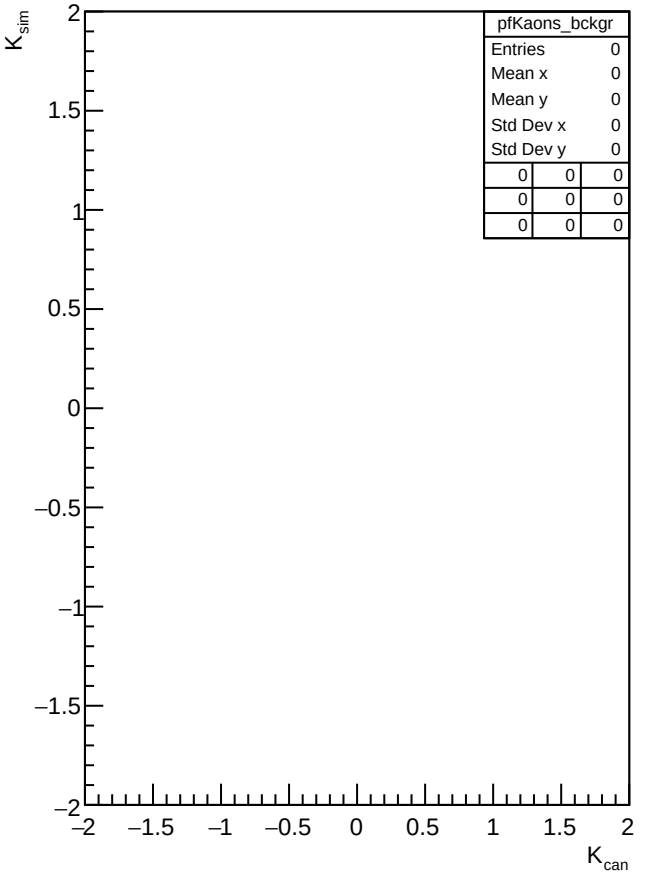

hdifp
×10^3
dN/dp
2200
2000
1800
1600
1400
1200
1000
800
600
400
200
0
−10
−5
0
5
10
p [GeV/c]
pfKaons_bckgr
Entries 0
Mean 0
Std Dev 0
Underflow 0
Overflow 0
pfKaons_sign
Entries 4187647
Mean 0.0006567
Std Dev 0.04275
Underflow 0
Overflow 0

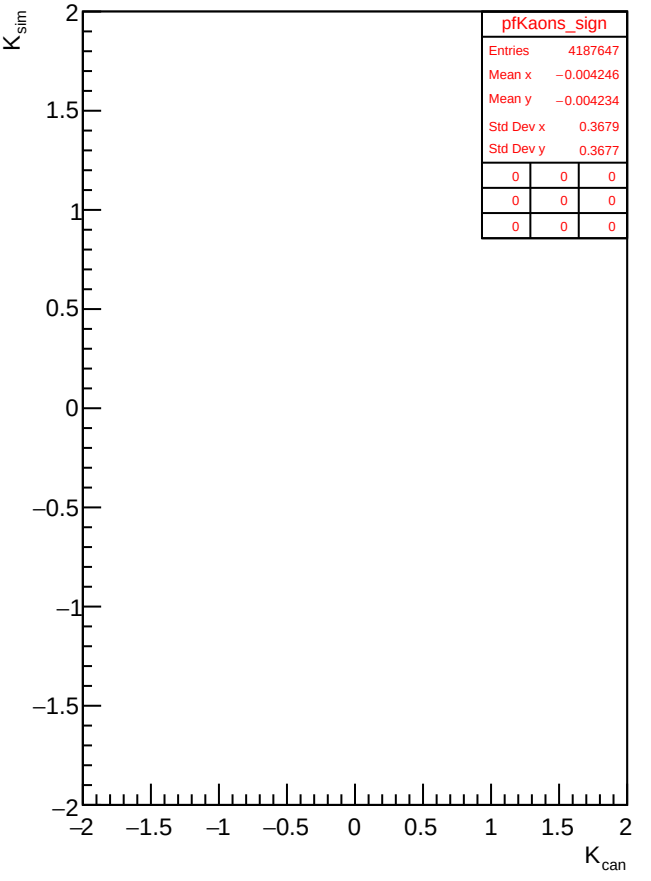
hcorpx


pfKaons_bckgr
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
K_sim
K_can

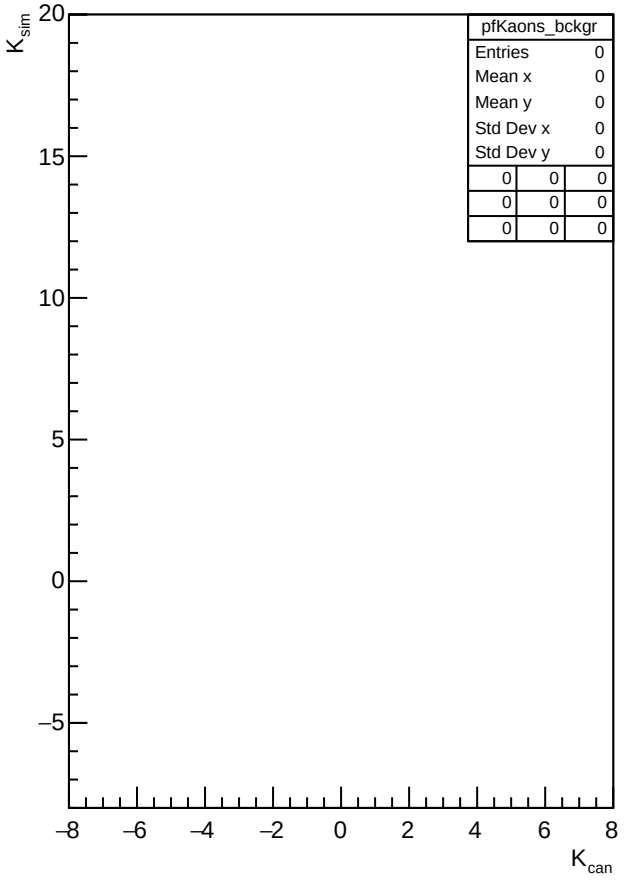

pfKaons_sign
Entries 4187647
Mean x 0.0007442
Mean y 0.0007399
Std Dev x 0.3746
Std Dev y 0.3745
K_sim
K_can

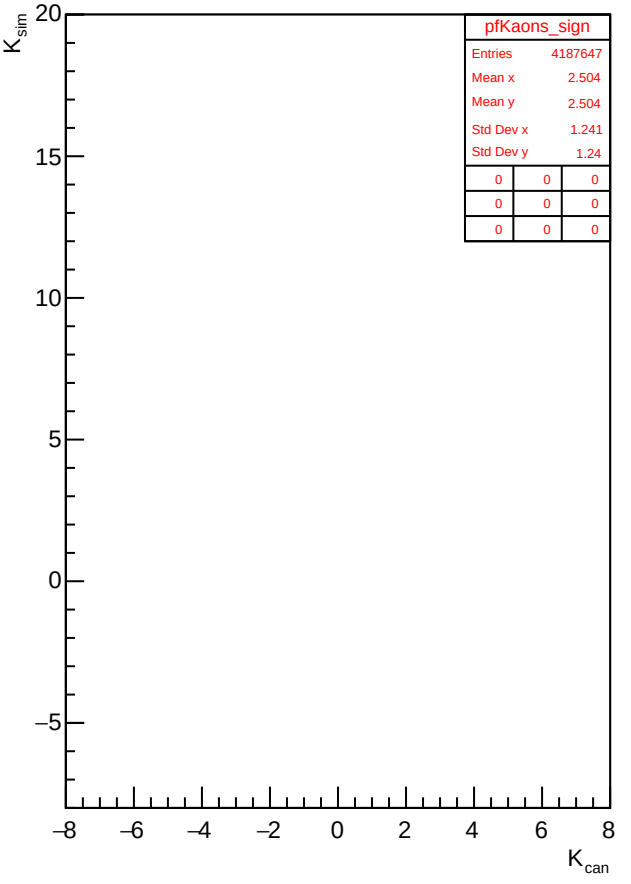
hcorpy


pfKaons_bckgr
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
K_sim
K_can

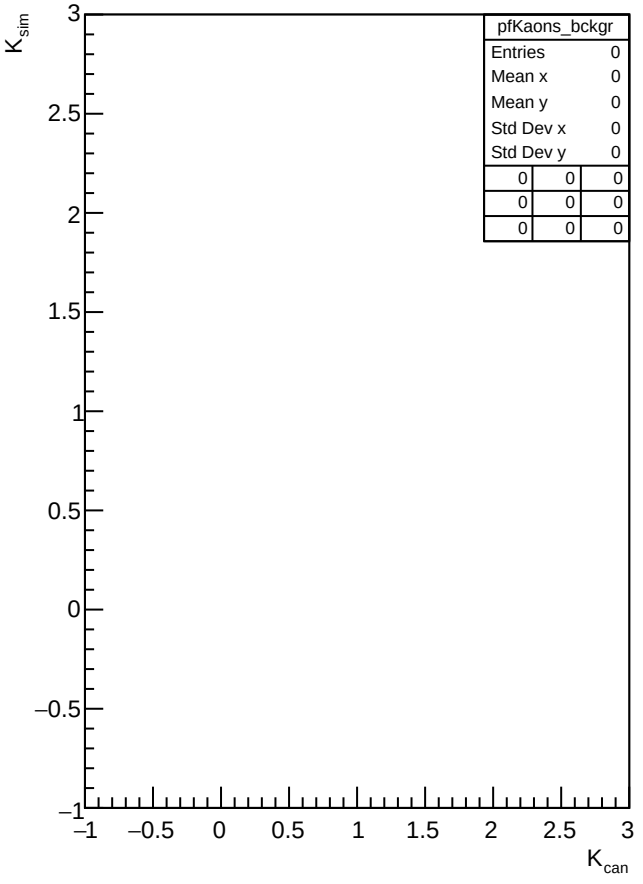

pfKaons_sign
Entries 4187647
Mean x −0.004246
Mean y −0.004234
Std Dev x 0.3679
Std Dev y 0.3677
K_sim
K_can

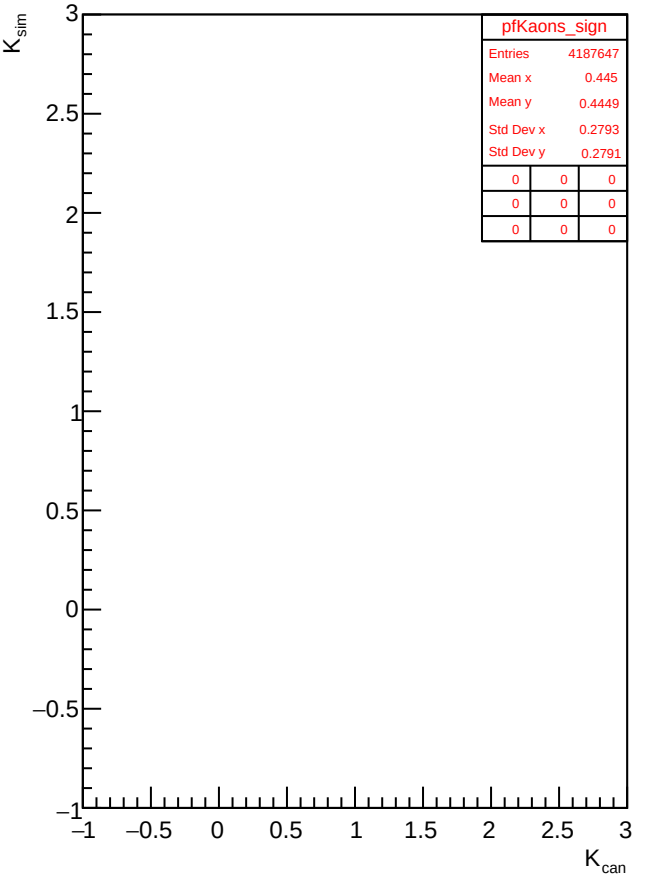
hcorpz


pfKaons_bckgr
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
0 0 0
0 0 0
0 0 0
K_sim
K_can
20
15
10
5
0
−5
−8
−6
−4
−2
0
2
4
6
8

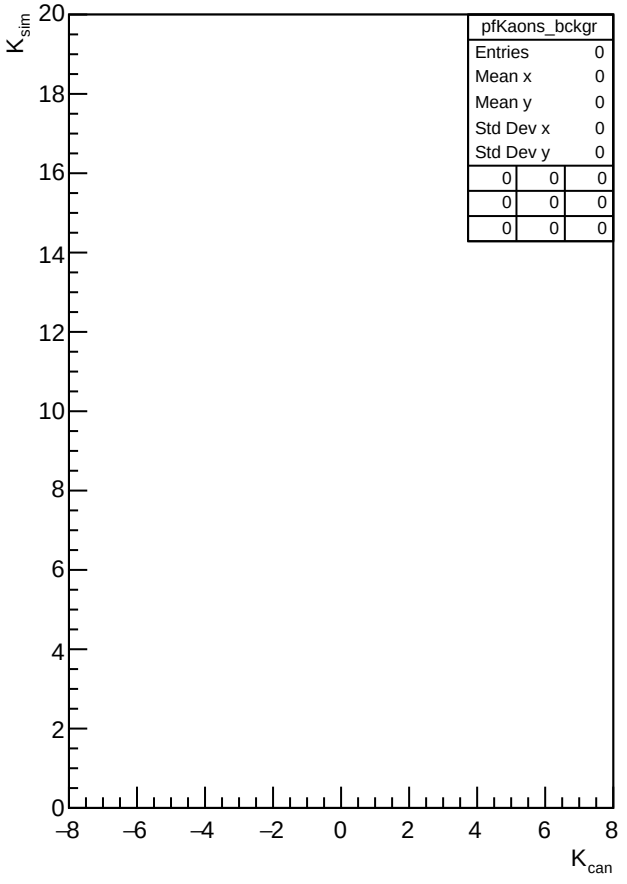

pfKaons_sign
Entries 4187647
Mean x 2.504
Mean y 2.504
Std Dev x 1.241
Std Dev y 1.24
0 0 0
0 0 0
0 0 0
K_sim
K_can
20
15
10
5
0
−5
−8
−6
−4
−2
0
2
4
6
8

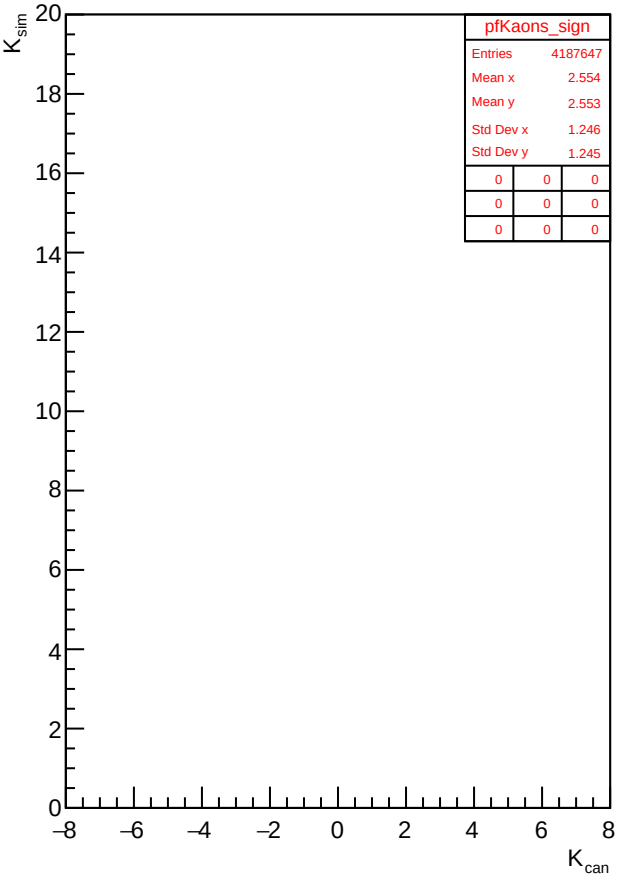
hcorpt


pfKaons_bckgr
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
K_sim
K_can

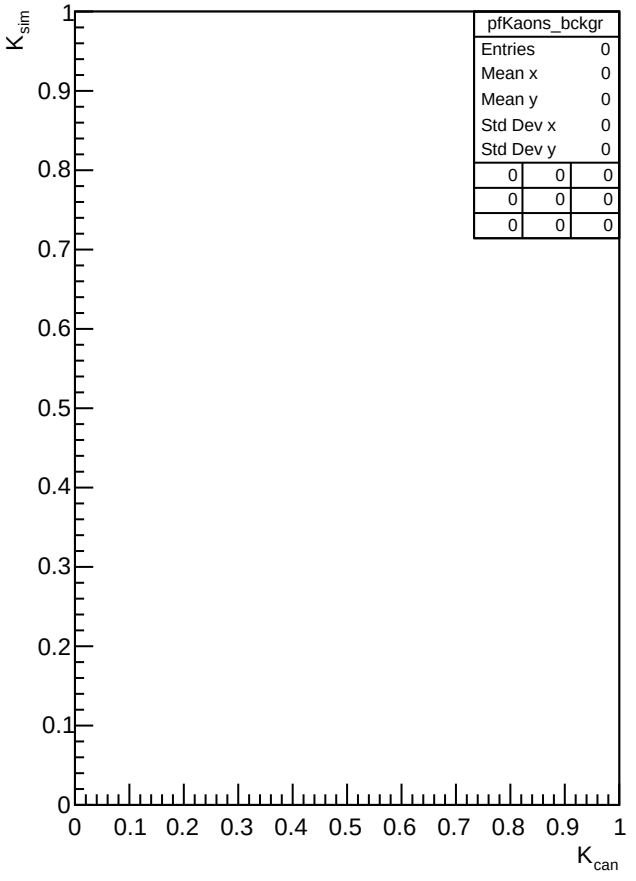

pfKaons_sign
Entries 4187647
Mean x 0.445
Mean y 0.4449
Std Dev x 0.2793
Std Dev y 0.2791
K_sim
K_can

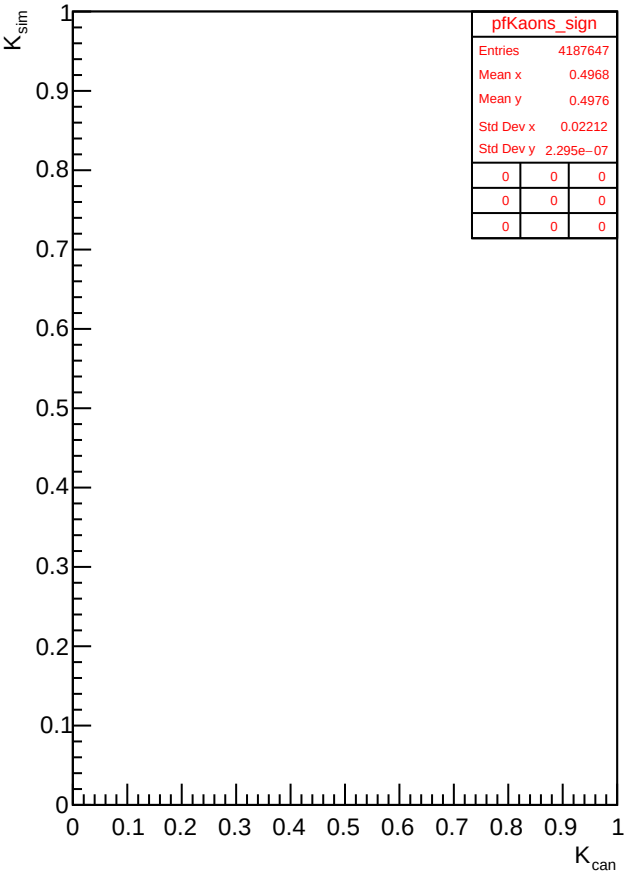
hcorp

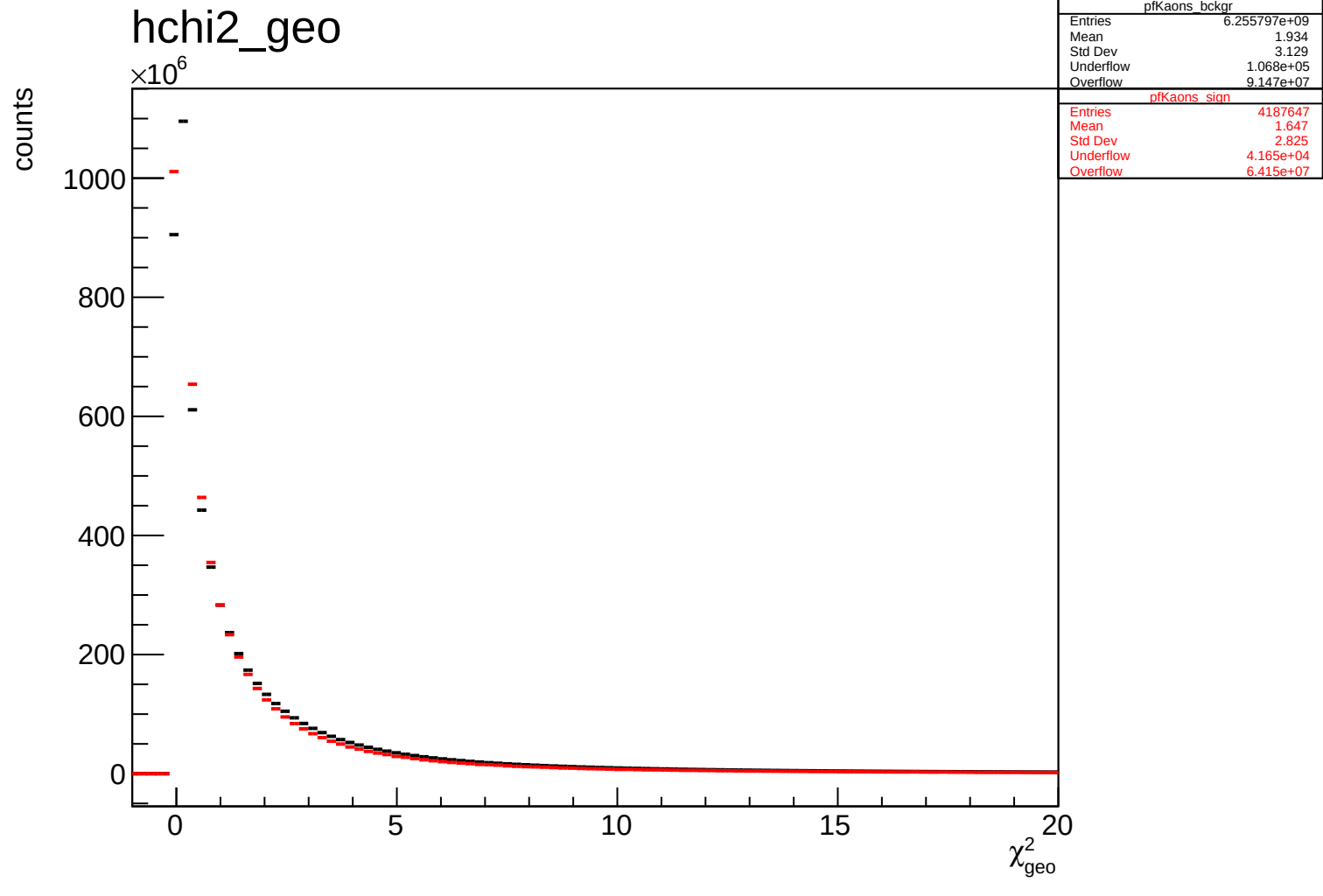

pfKaons_bckgr
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
0 0 0
0 0 0
0 0 0
K_sim
K_can
0 2 4 6 8 10 12 14 16 18 20
–8 –6 –4 –2 0 2 4 6 8

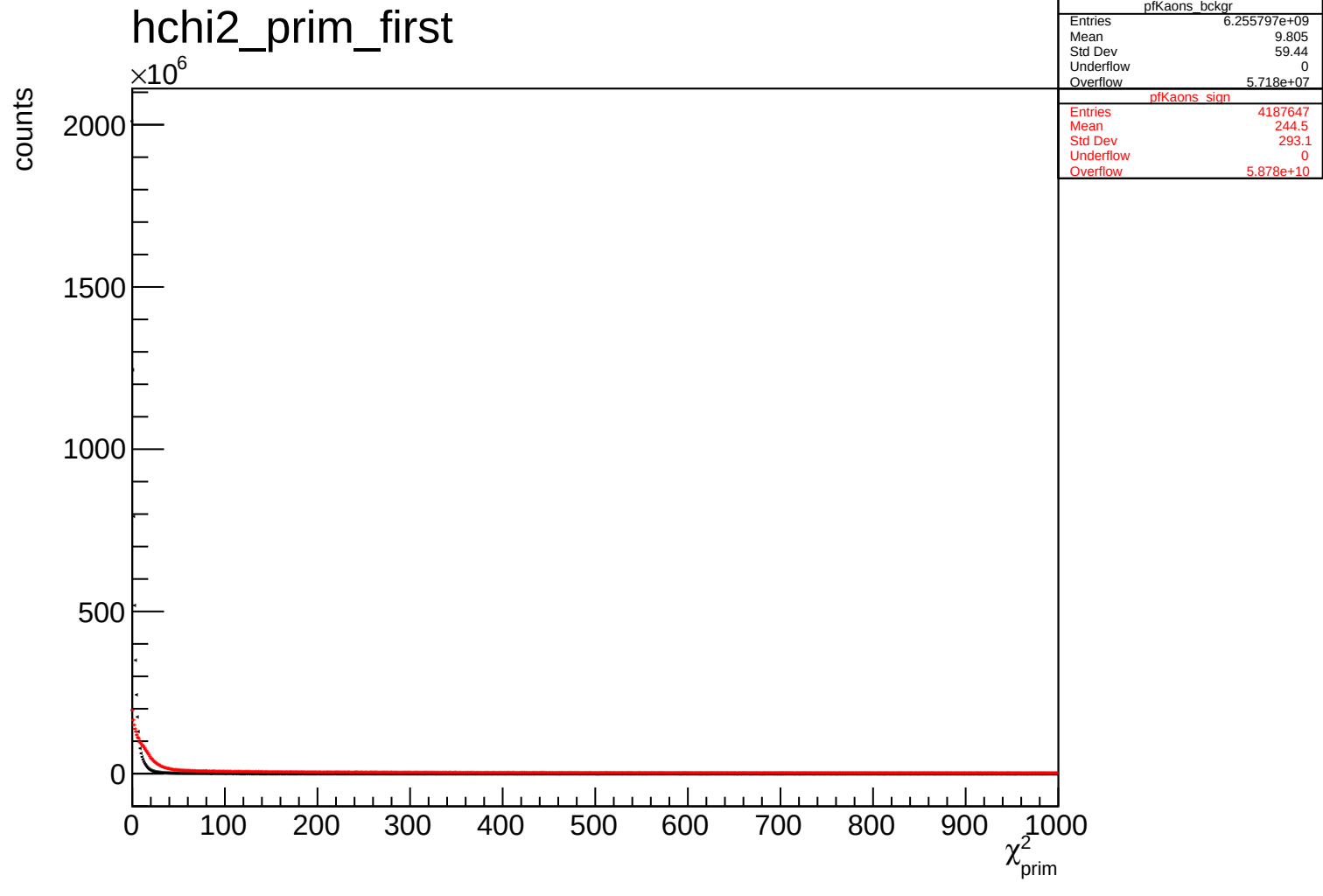

pfKaons_sign
Entries 4187647
Mean x 2.554
Mean y 2.553
Std Dev x 1.246
Std Dev y 1.245
0 0 0
0 0 0
0 0 0
K_sim
K_can
0 2 4 6 8 10 12 14 16 18 20
–8 –6 –4 –2 0 2 4 6 8

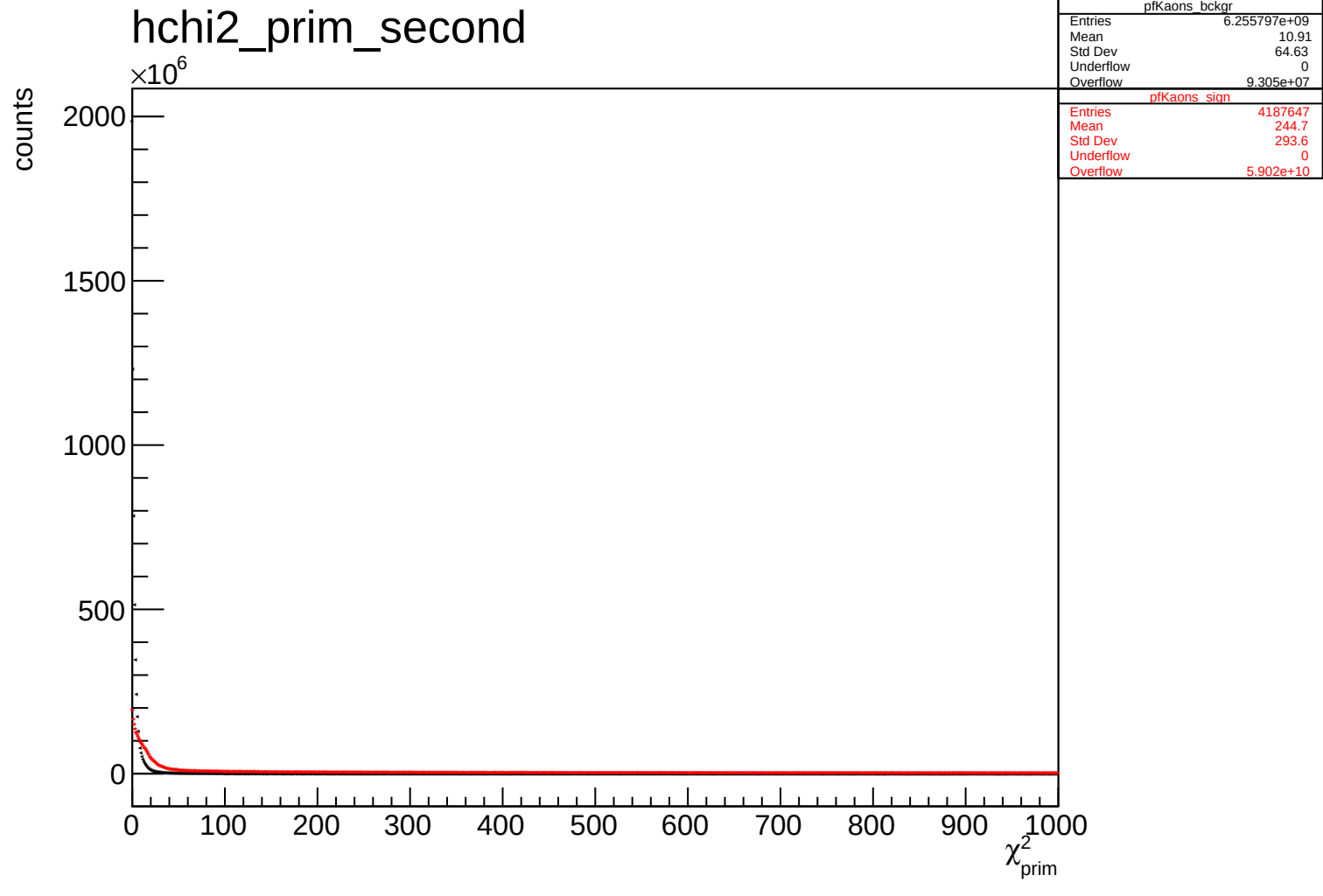
hcormass

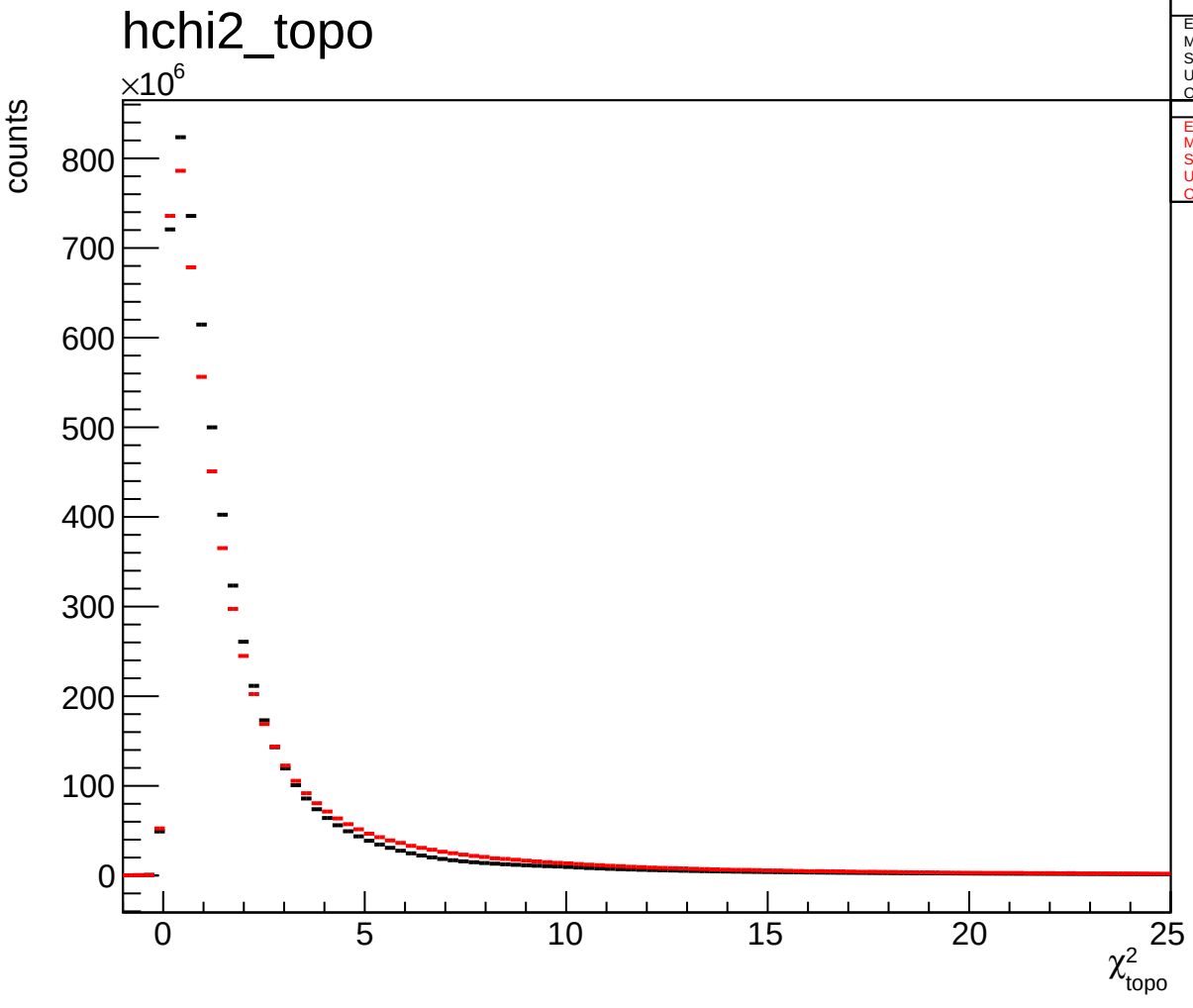

pfKaons_bckgr
Entries 0
Mean x 0
Mean y 0
Std Dev x 0
Std Dev y 0
K_sim
K_can

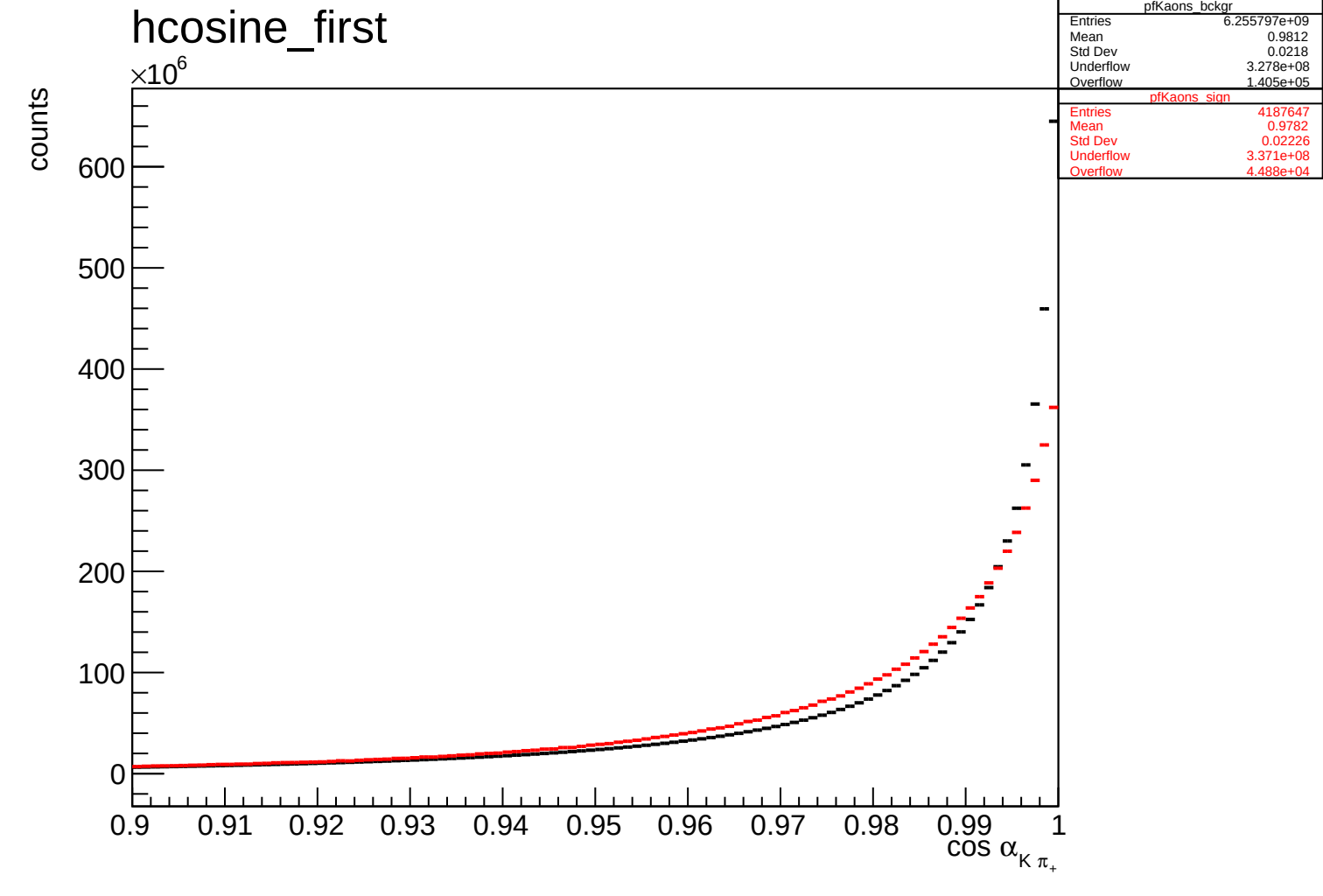

pfKaons_sign
Entries 4187647
Mean x 0.4968
Mean y 0.4976
Std Dev x 0.02212
Std Dev y 2.295e−07
K_sim
K_can

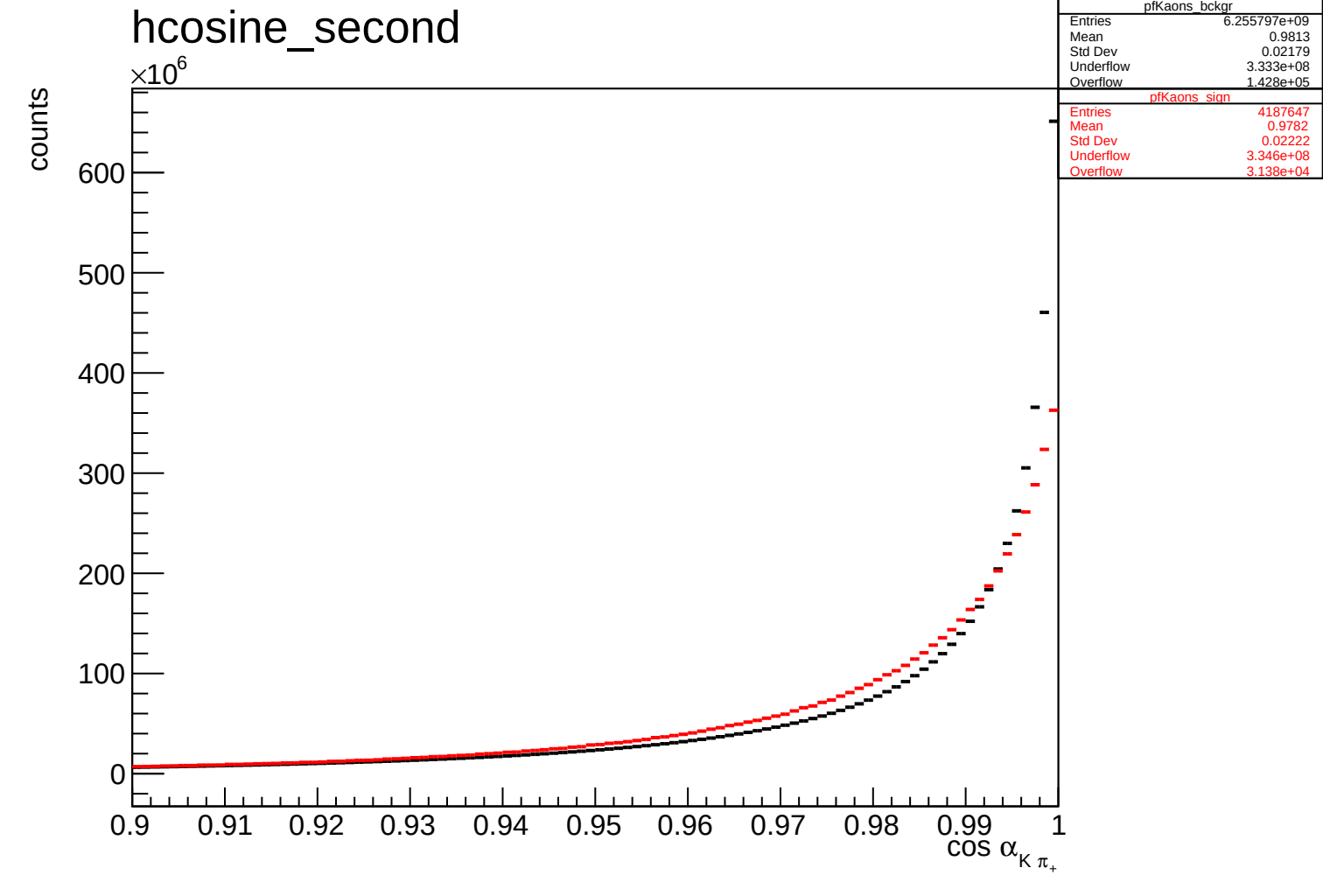

hchi2_geo
×10^6
counts
1000
800
600
400
200
0
0
5
10
15
20
χ²geo
pfKaons_bckgr
Entries 6.255797e+09
Mean 1.934
Std Dev 3.129
Underflow 1.068e+05
Overflow 9.147e+07
pfKaons_sign
Entries 4187647
Mean 1.647
Std Dev 2.825
Underflow 4.165e+04
Overflow 6.415e+07

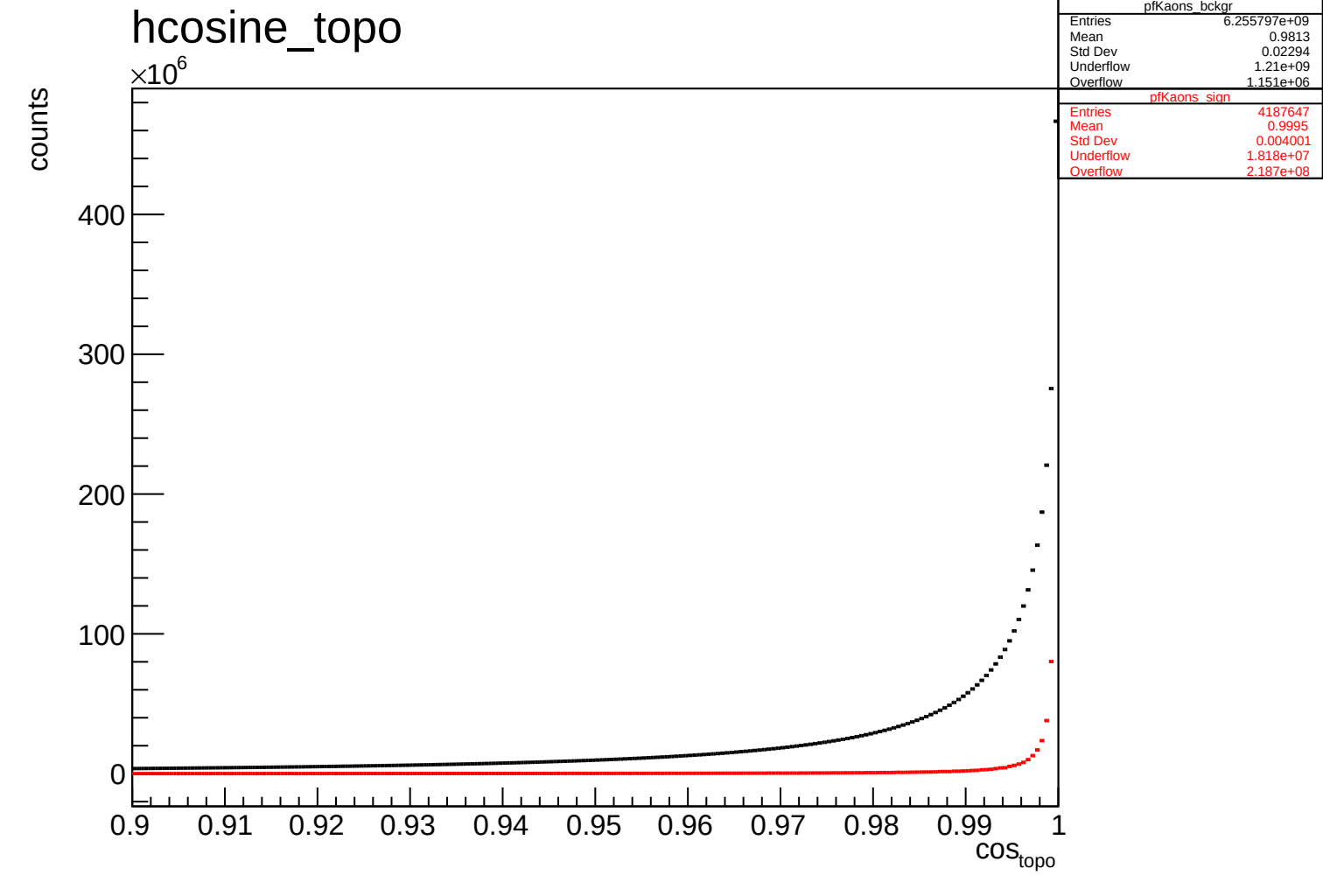

hchi2_prim_first
counts
×10^6
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
χ²prim
pfKaons_bckgr
Entries 6.255797e+09
Mean 9.805
Std Dev 59.44
Underflow 0
Overflow 5.718e+07
pfKaons_sign
Entries 4187647
Mean 244.5
Std Dev 293.1
Underflow 0
Overflow 5.878e+10

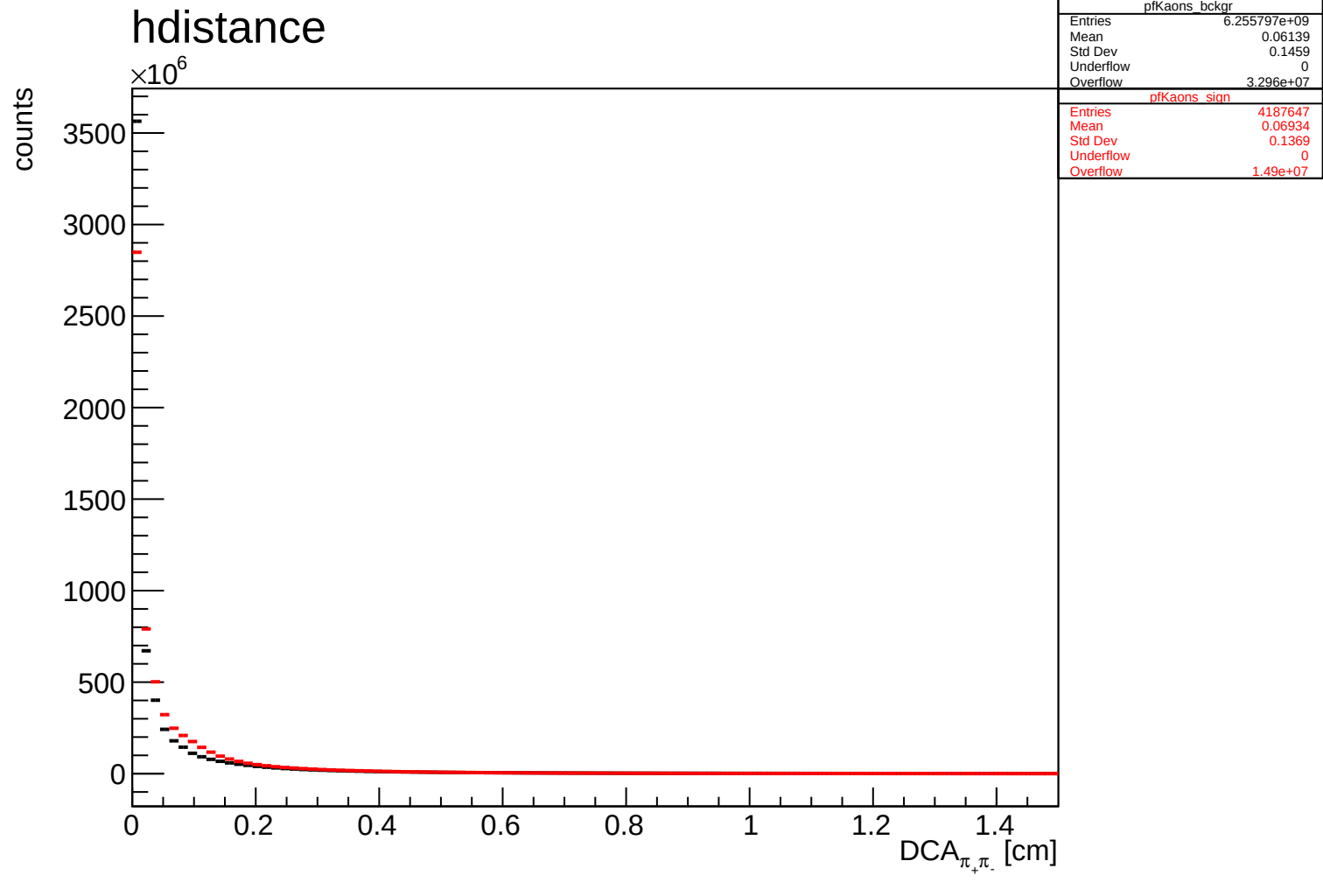

hchi2_prim_second
counts
×10^6
2000
1500
1000
500
0
0
100
200
300
400
500
600
700
800
900
1000
χ²prim
pfKaons_bckgr
Entries 6.255797e+09
Mean 10.91
Std Dev 64.63
Underflow 0
Overflow 9.305e+07
pfKaons_sign
Entries 4187647
Mean 244.7
Std Dev 293.6
Underflow 0
Overflow 5.902e+10

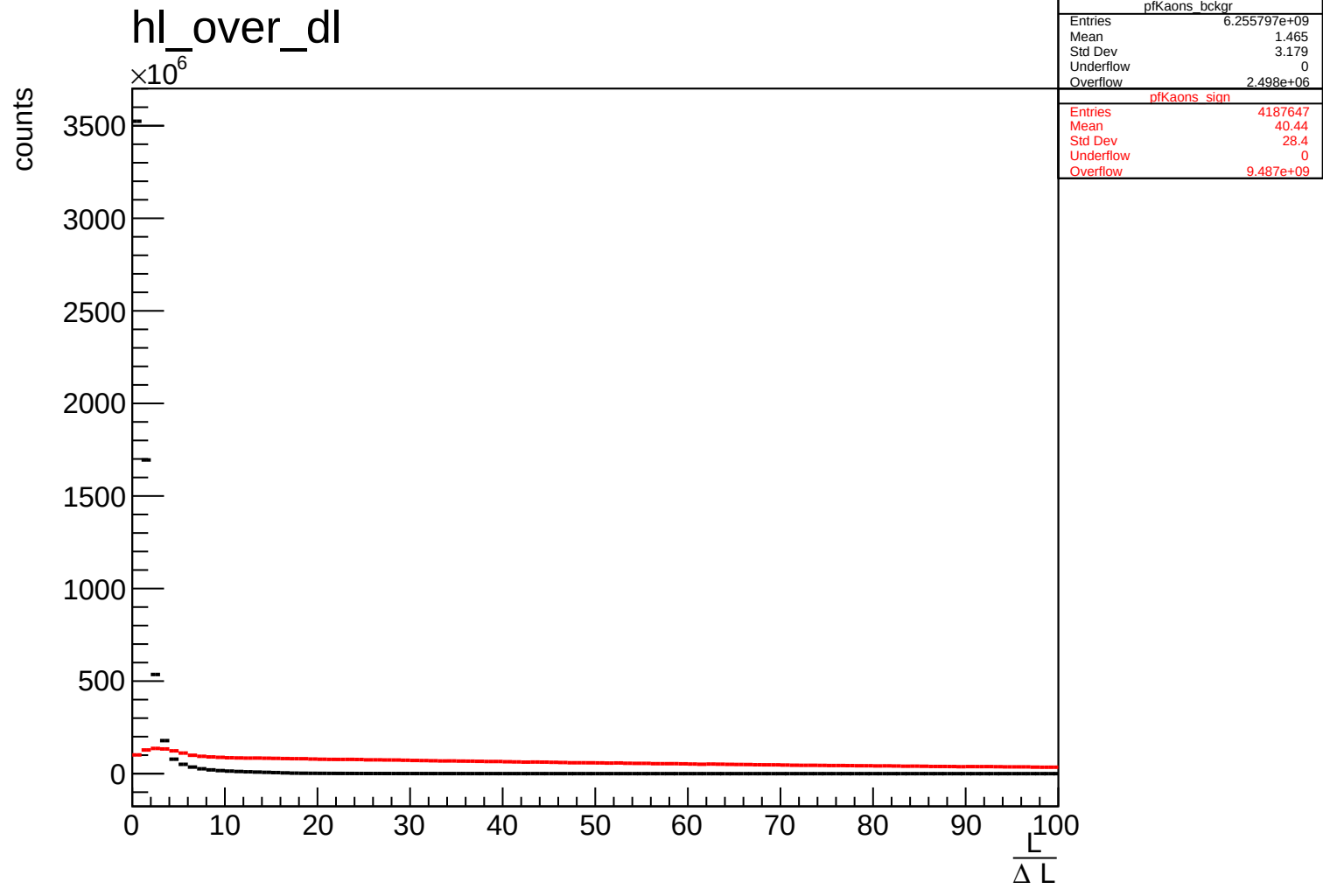

hchi2_topo
×10^6
counts
800
700
600
500
400
300
200
100
0
0
5
10
15
20
25
χ²topo
pfKaons_bckgr
Entries 6.255797e+09
Mean 2.12
Std Dev 3.069
Underflow 3.565e+06
Overflow 1.318e+08
pfKaons_sign
Entries 4187647
Mean 2.482
Std Dev 3.553
Underflow 2.763e+06
Overflow 1.403e+08


hcosine_first
×10^6
counts
600
500
400
300
200
100
0
0.9
0.91
0.92
0.93
0.94
0.95
0.96
0.97
0.98
0.99
1
cos α K π+
pfKaons_bckgr
Entries 6.255797e+09
Mean 0.9812
Std Dev 0.0218
Underflow 3.278e+08
Overflow 1.405e+05
pfKaons_sign
Entries 4187647
Mean 0.9782
Std Dev 0.02226
Underflow 3.371e+08
Overflow 4.488e+04

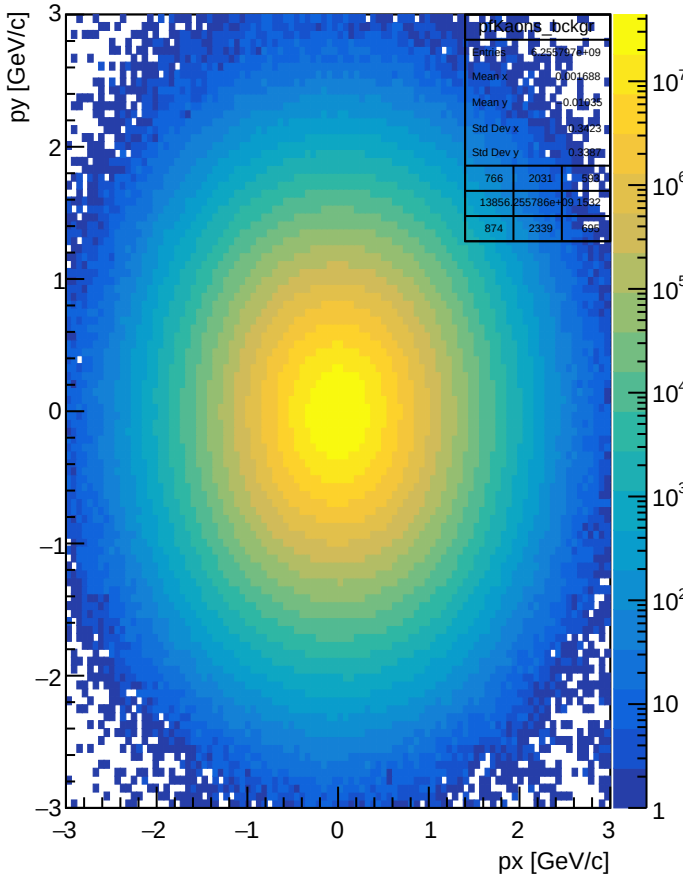

hcosine_second
×10^6
counts
600
500
400
300
200
100
0
0.9
0.91
0.92
0.93
0.94
0.95
0.96
0.97
0.98
0.99
1
cos α K π+
pfKaons_bckgr
Entries 6.255797e+09
Mean 0.9813
Std Dev 0.02179
Underflow 3.333e+08
Overflow 1.428e+05
pfKaons_sign
Entries 4187647
Mean 0.9782
Std Dev 0.02222
Underflow 3.346e+08
Overflow 3.138e+04


hcosine_topo
×10^6
counts
400
300
200
100
0
0.9
0.91
0.92
0.93
0.94
0.95
0.96
0.97
0.98
0.99
1
cos_topo
pfKaons_bckgr
Entries 6.255797e+09
Mean 0.9813
Std Dev 0.02294
Underflow 1.21e+09
Overflow 1.151e+06
pfKaons_sign
Entries 4187647
Mean 0.9995
Std Dev 0.004001
Underflow 1.818e+07
Overflow 2.187e+08

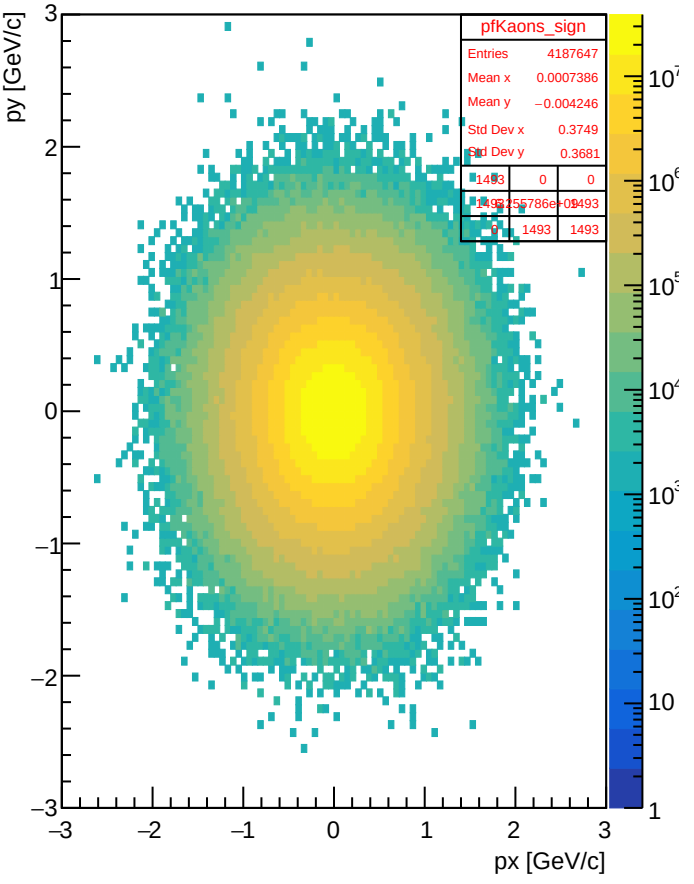

hdistance
×10^6
counts
3500
3000
2500
2000
1500
1000
500
0
0
0.2
0.4
0.6
0.8
1
1.2
1.4
DCA_π+π- [cm]
pfKaons_bckgr
Entries 6.255797e+09
Mean 0.06139
Std Dev 0.1459
Underflow 0
Overflow 3.296e+07
pfKaons_sign
Entries 4187647
Mean 0.06934
Std Dev 0.1369
Underflow 0
Overflow 1.49e+07


hl_over_dl
×10^6
counts
3500
3000
2500
2000
1500
1000
500
0
0
10
20
30
40
50
60
70
80
90
100
L / Δ L
pfKaons_bckgr
Entries 6.255797e+09
Mean 1.465
Std Dev 3.179
Underflow 0
Overflow 2.498e+06
pfKaons_sign
Entries 4187647
Mean 40.44
Std Dev 28.4
Underflow 0
Overflow 9.487e+09

hcorr_px_py

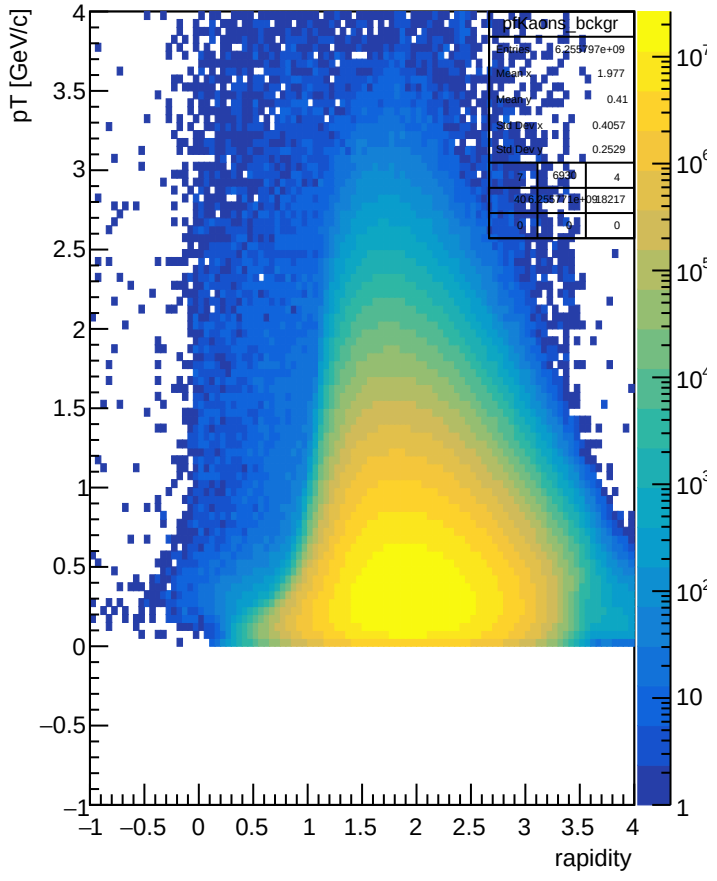


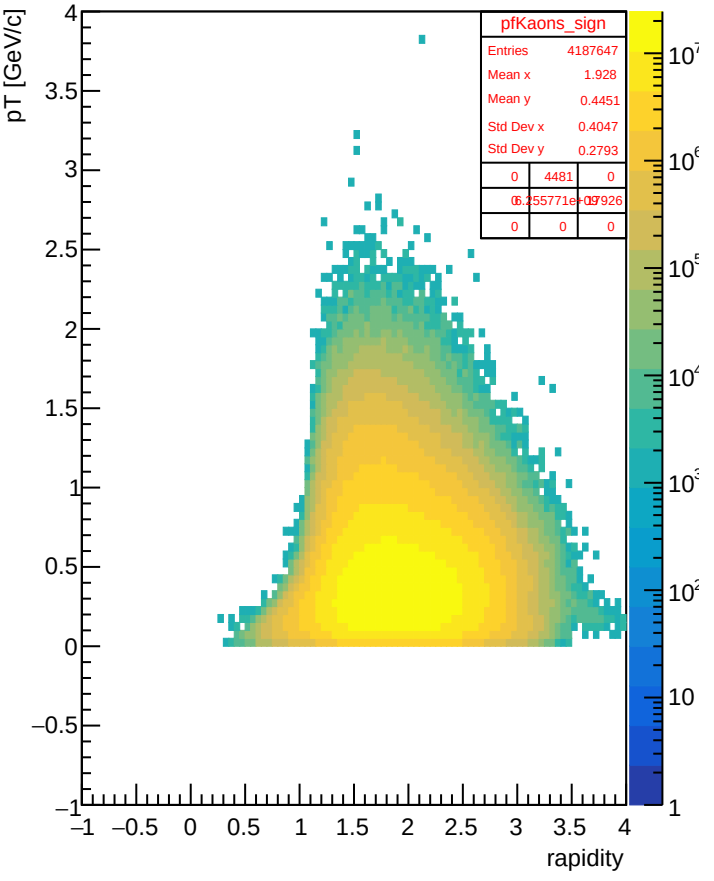
pfKaons_bckgr
Entries 6.2597078+09
Mean x 0.001688
Mean y 0.01935
Std Dev x 0.3423
Std Dev y 0.3387
766 2031 599
13856.255786e+09 1532
874 2339 695
py [GeV/c]
px [GeV/c]



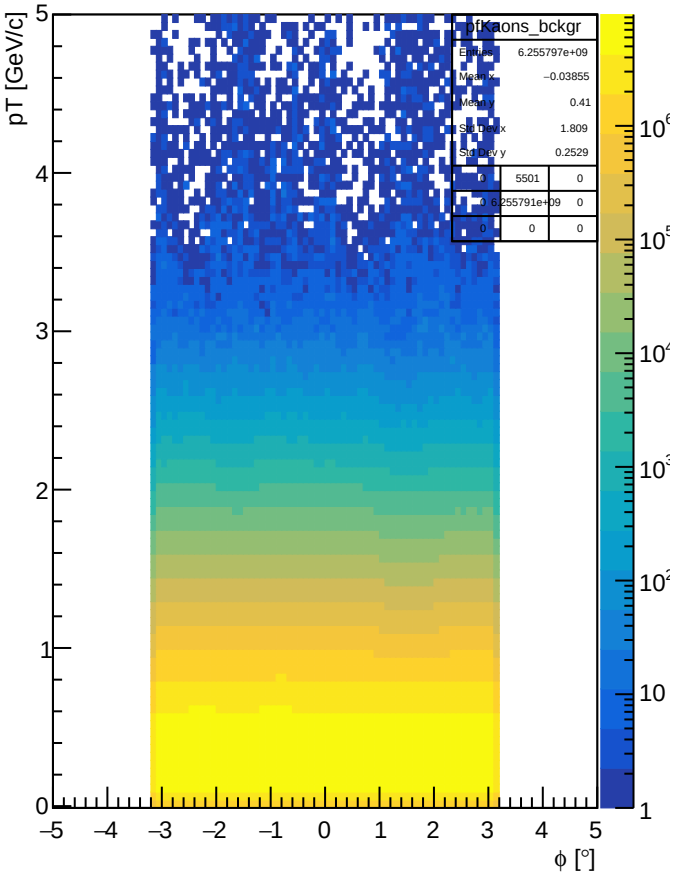
pfKaons_sign
Entries 4187647
Mean x 0.0007386
Mean y −0.004246
Std Dev x 0.3749
Std Dev y 0.3681
1493 0 0
1493.255786e+09 1493
0 1493 1493
py [GeV/c]
px [GeV/c]

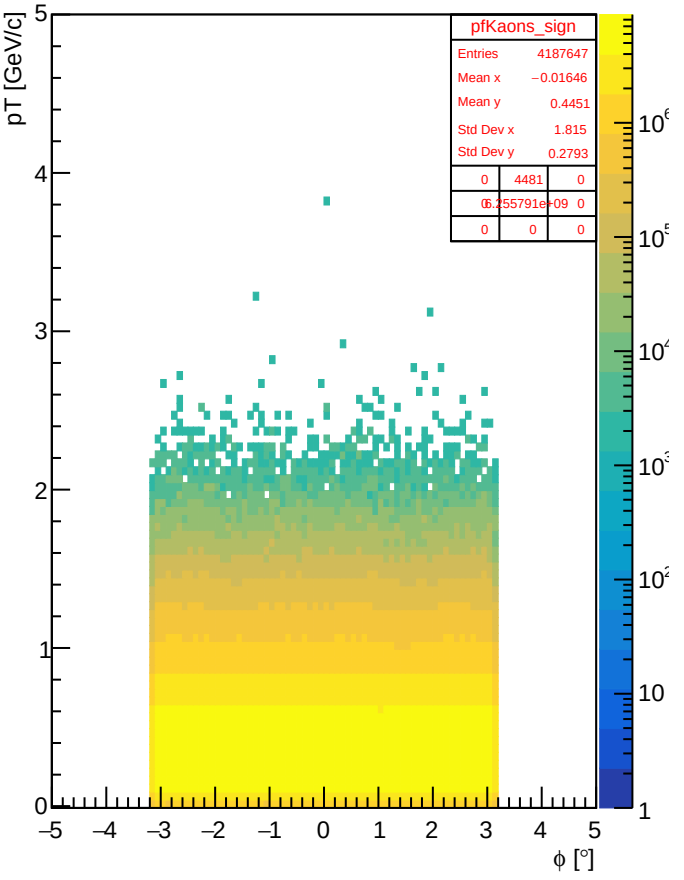
hcorr_rap_pt


pfKaons_bckgr
Entries 6.255797e+09
Mean x 1.977
Mean y 0.41
Std Dev x 0.4057
Std Dev y 0.2529
pT [GeV/c]
rapidity


pfKaons_sign
Entries 4187647
Mean x 1.928
Mean y 0.4451
Std Dev x 0.4047
Std Dev y 0.2793
pT [GeV/c]
rapidity

hcorr_phi_pt


pfKaons_bckgr
Entries 6.255797e+09
Mean x −0.03855
Mean y 0.41
Std Dev x 1.809
Std Dev y 0.2529
pT [GeV/c]
ϕ [°]


pfKaons_sign
Entries 4187647
Mean x −0.01646
Mean y 0.4451
Std Dev x 1.815
Std Dev y 0.2793
pT [GeV/c]
ϕ [°]

Comparing folder / of files:
comparison/pfKaons_bckgr.root (pfKaons_bckgr)
comparison/pfKaons_sign.root (pfKaons_sign)

The end!