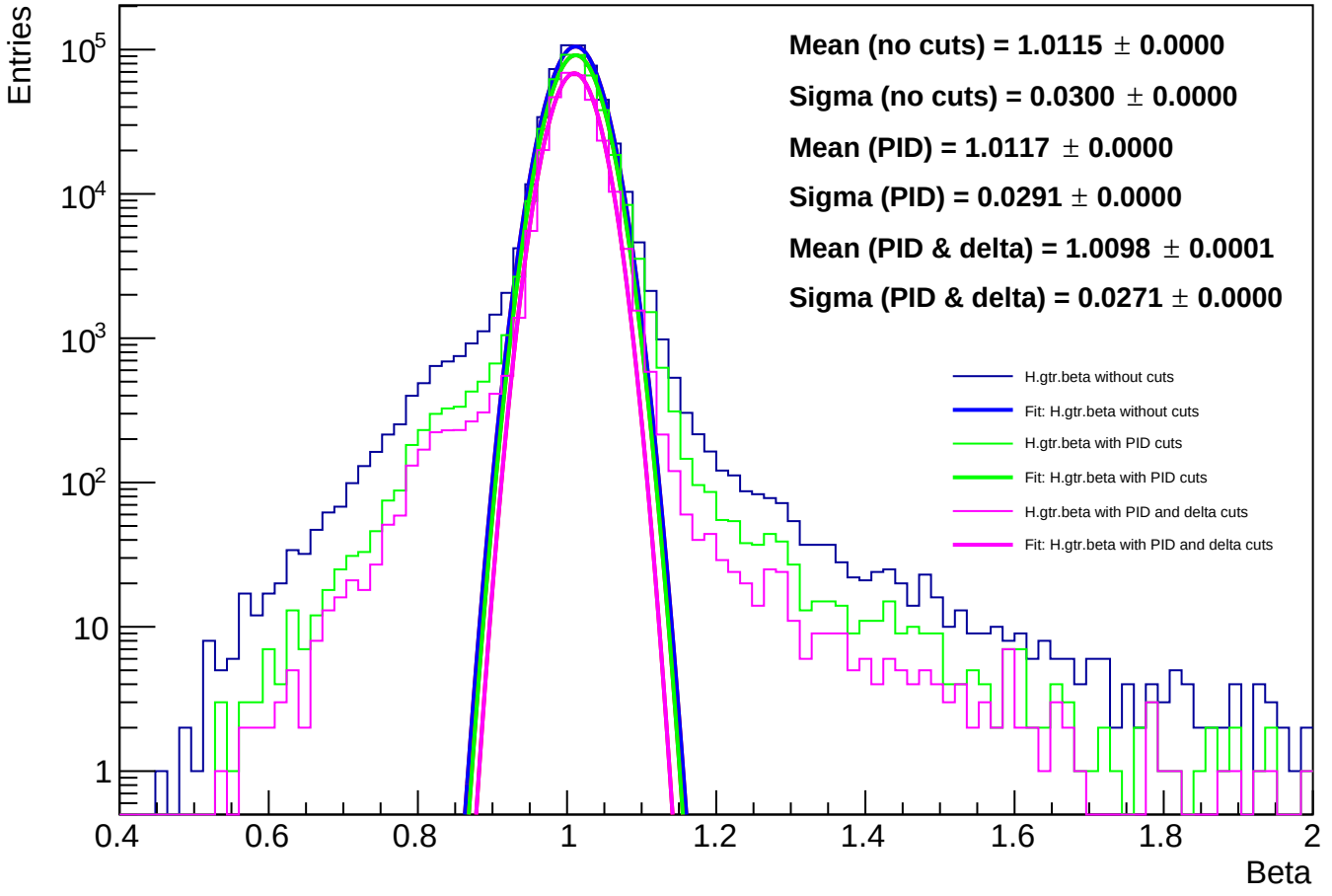
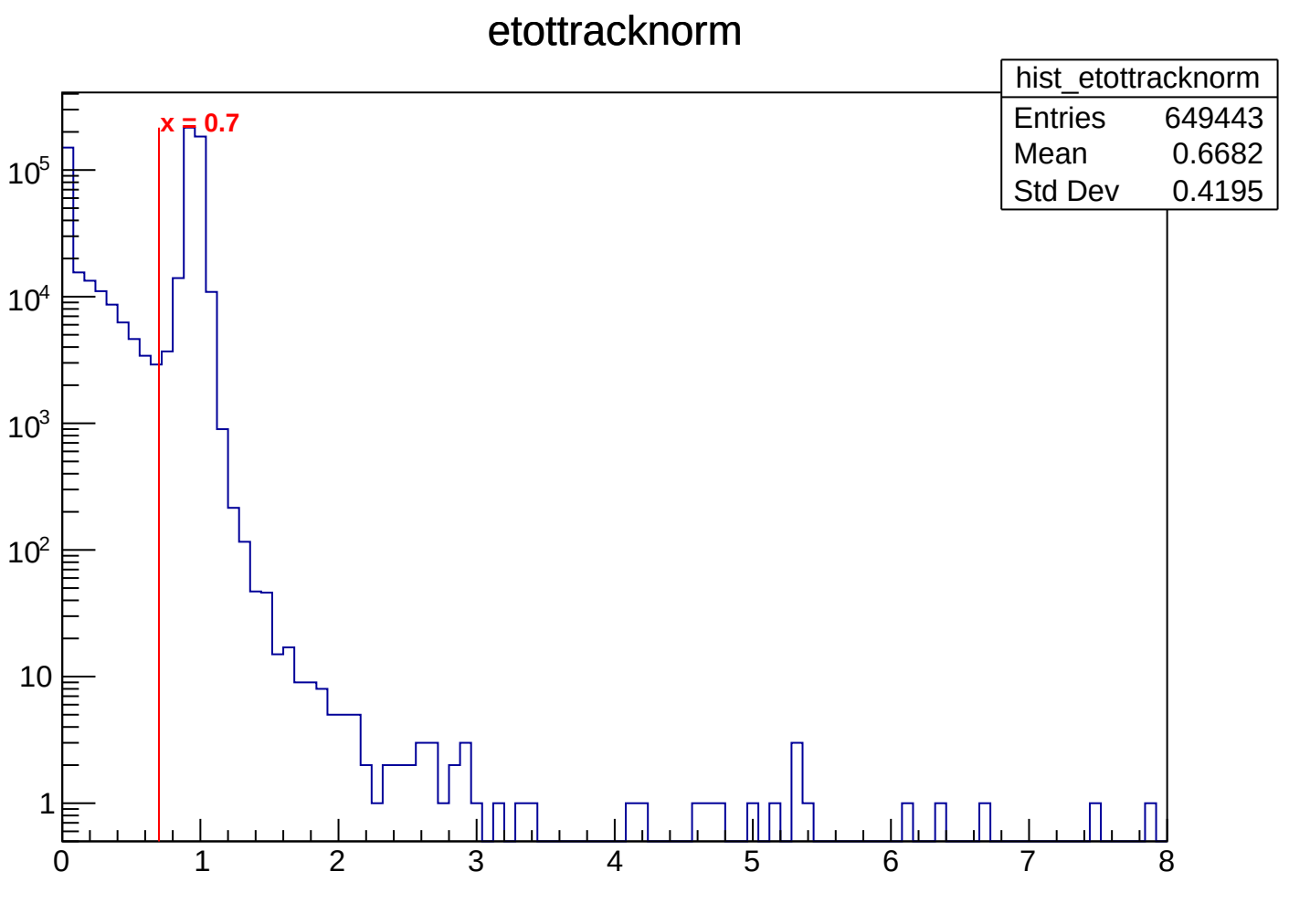
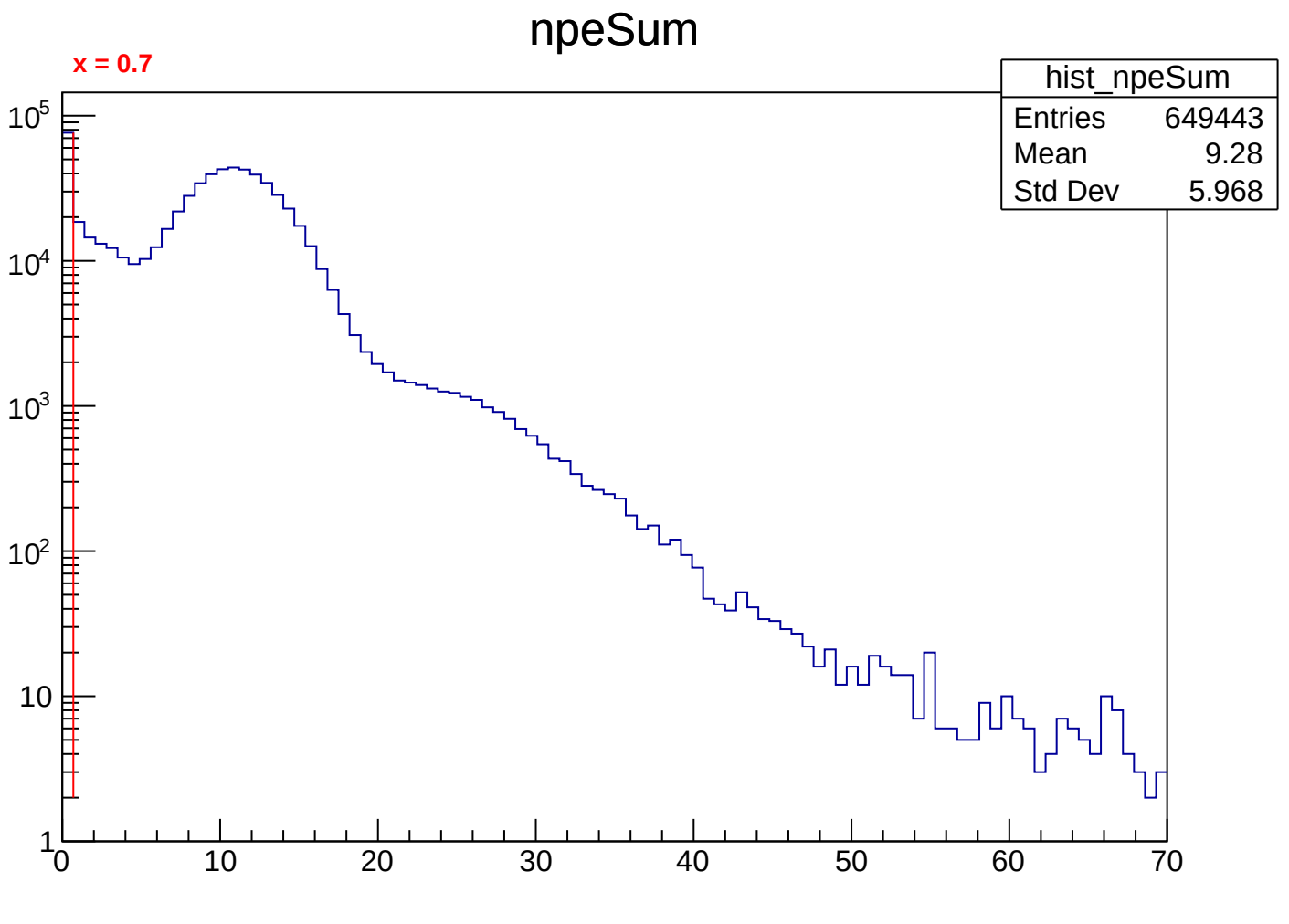
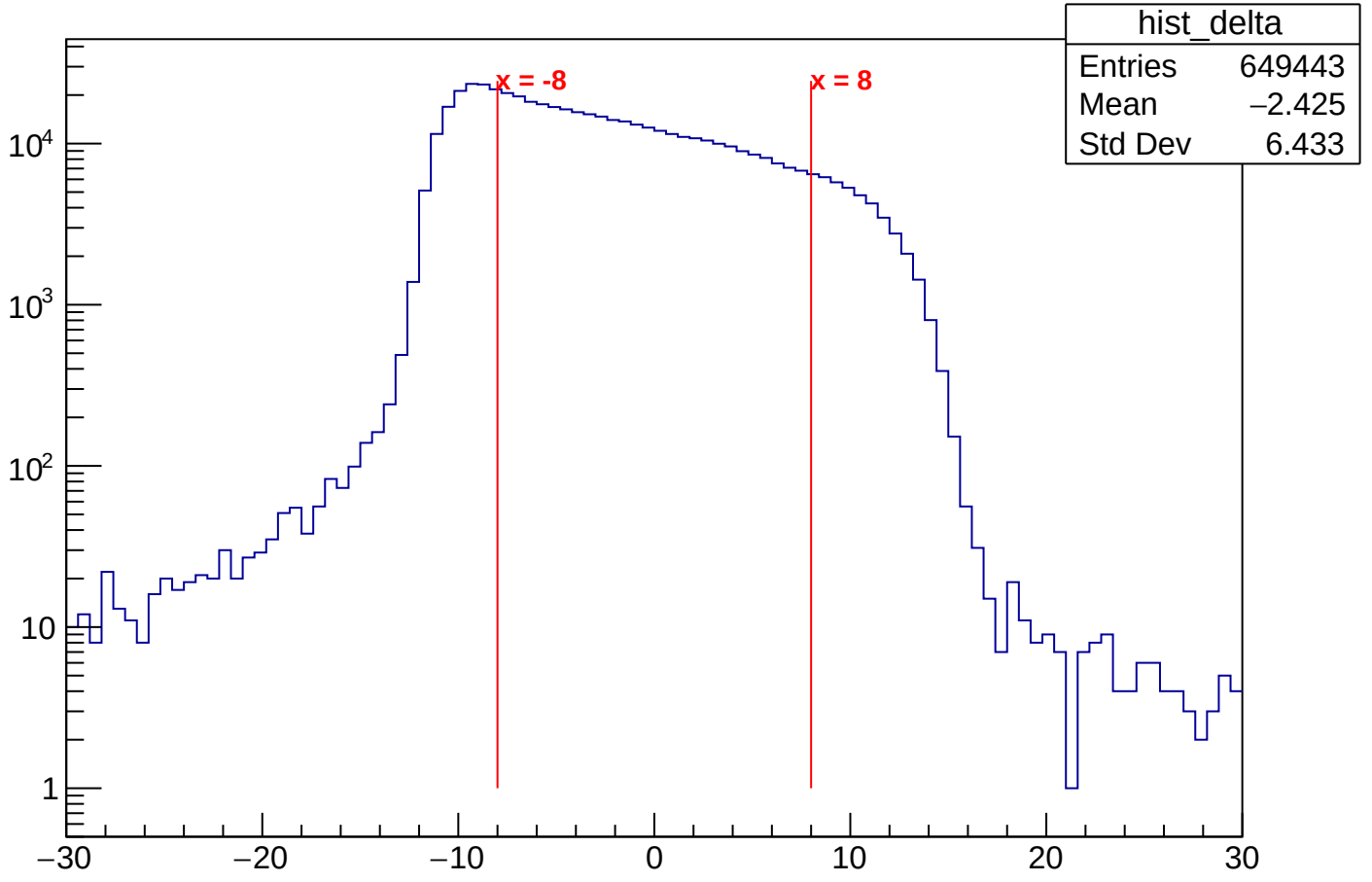
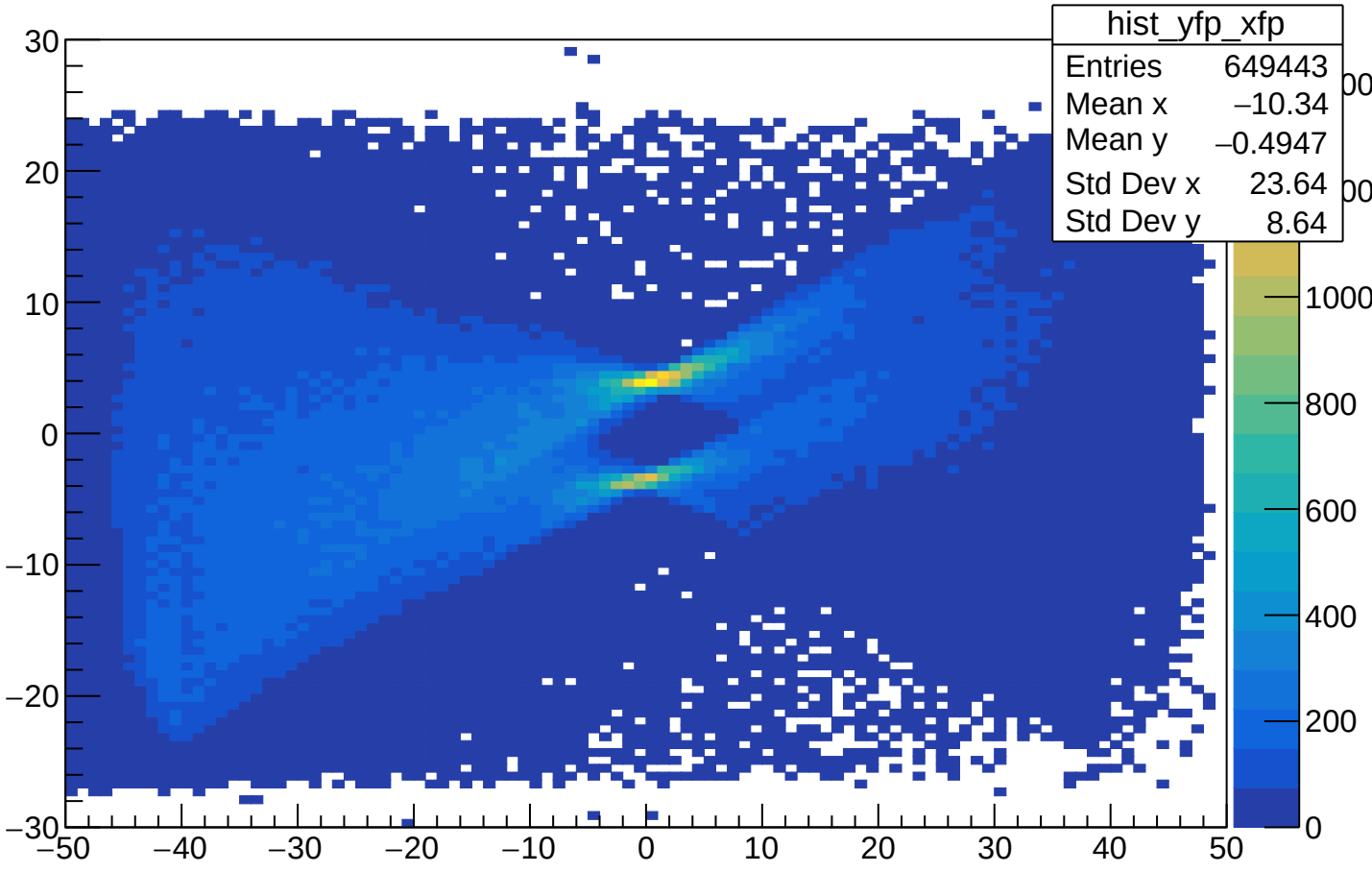
H.gtr.beta

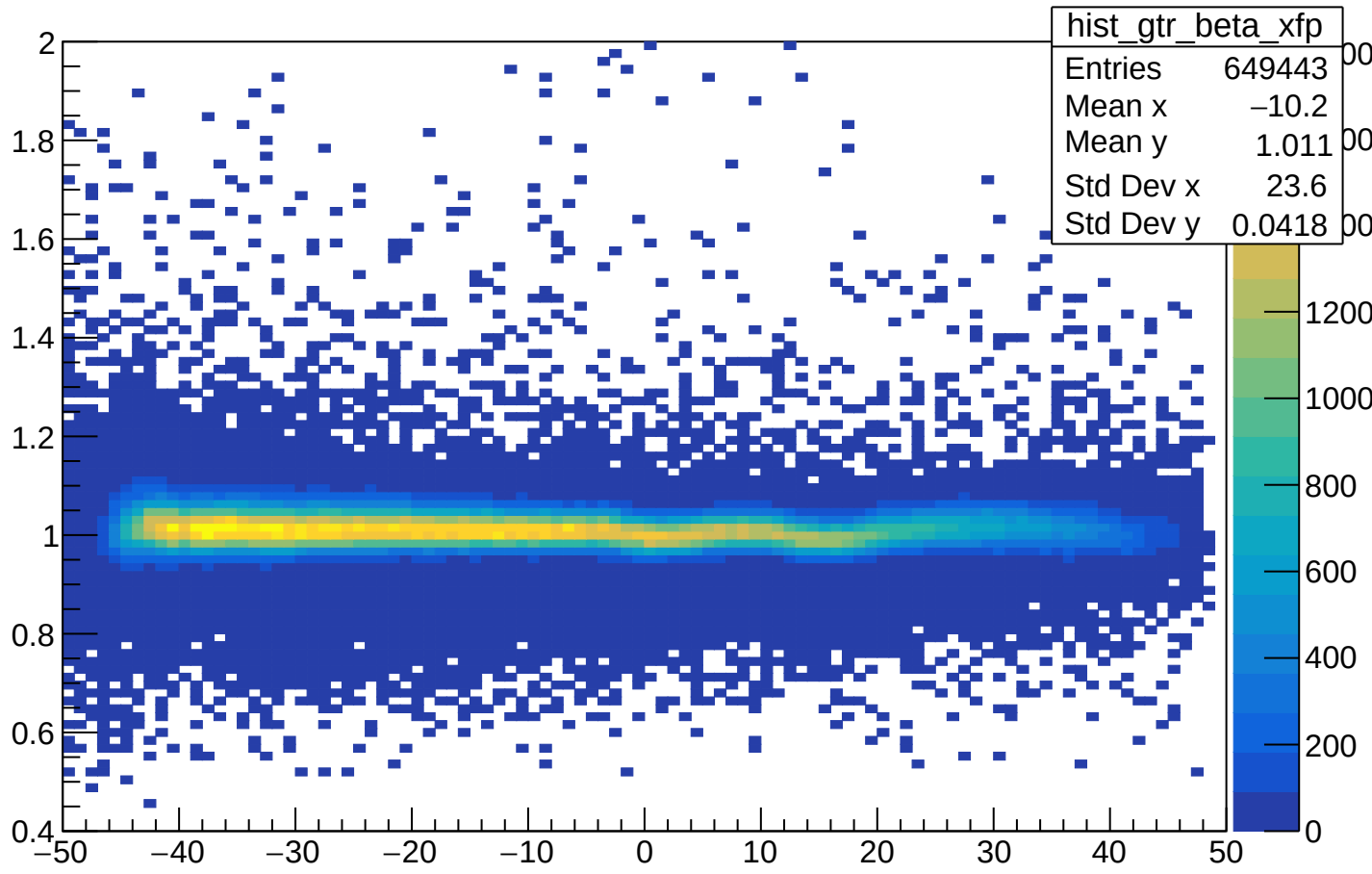

Entries
10^5
10^4
10^3
10^2
10
1
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
Beta
Mean (no cuts) = 1.0115 ± 0.0000
Sigma (no cuts) = 0.0300 ± 0.0000
Mean (PID) = 1.0117 ± 0.0000
Sigma (PID) = 0.0291 ± 0.0000
Mean (PID & delta) = 1.0098 ± 0.0001
Sigma (PID & delta) = 0.0271 ± 0.0000
H.gtr.beta without cuts
Fit: H.gtr.beta without cuts
H.gtr.beta with PID cuts
Fit: H.gtr.beta with PID cuts
H.gtr.beta with PID and delta cuts
Fit: H.gtr.beta with PID and delta cuts

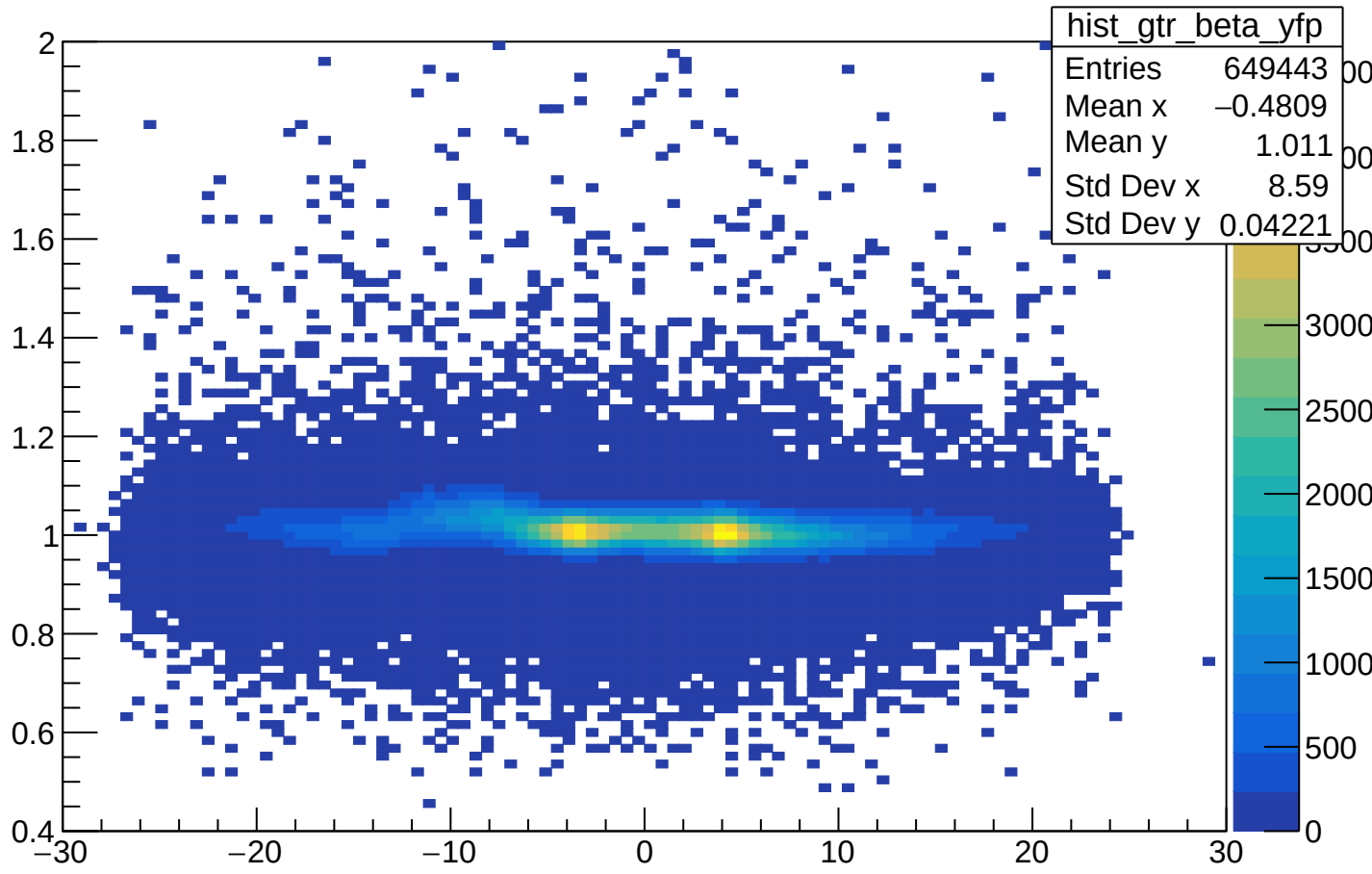

etottracknorm
hist_etottracknorm
Entries 649443
Mean 0.6682
Std Dev 0.4195
x = 0.7
10^5
10^4
10^3
10^2
10
1
0
1
2
3
4
5
6
7
8

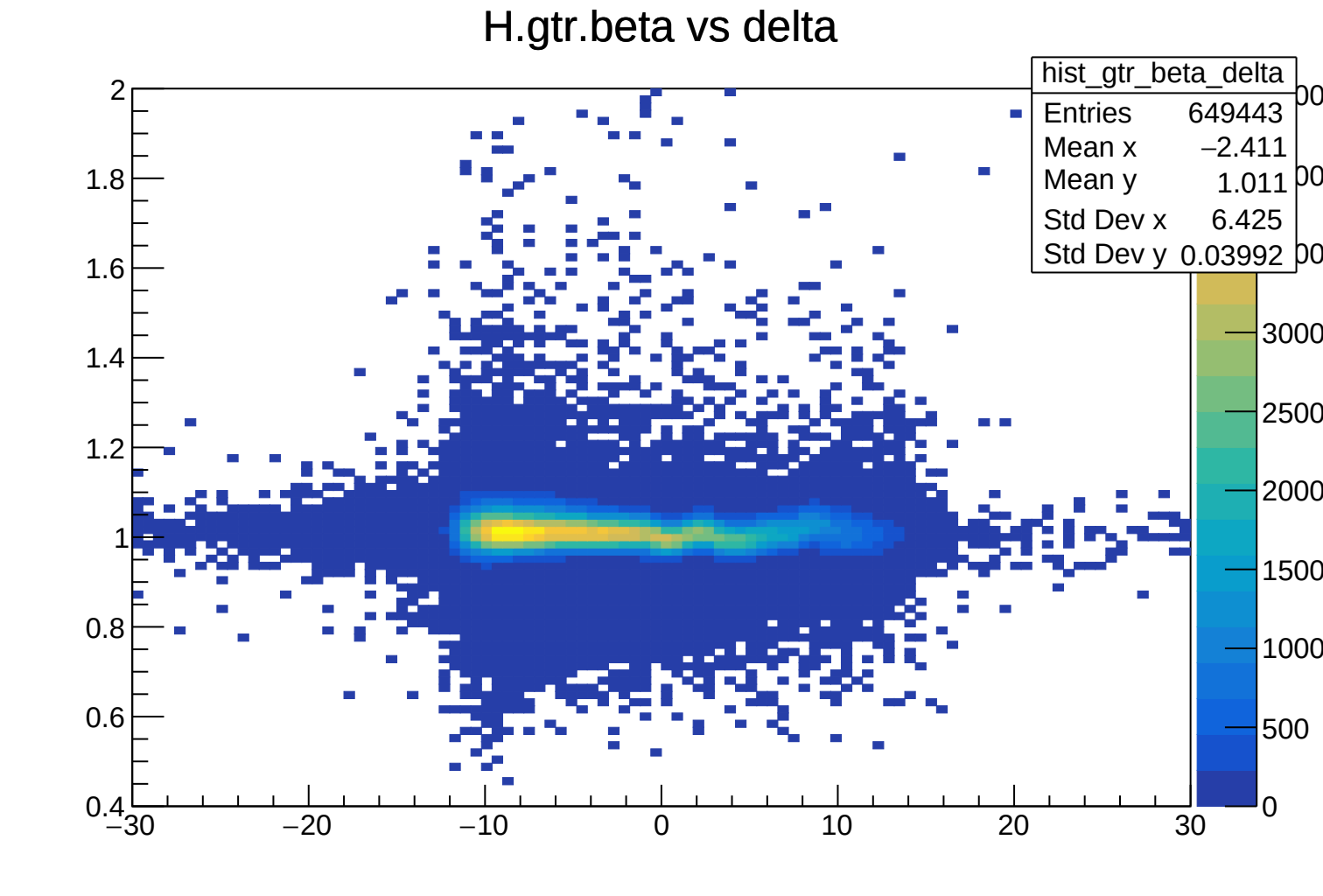

npeSum
x = 0.7
hist_npeSum
Entries 649443
Mean 9.28
Std Dev 5.968
10^5
10^4
10^3
10^2
10
1
0
10
20
30
40
50
60
70

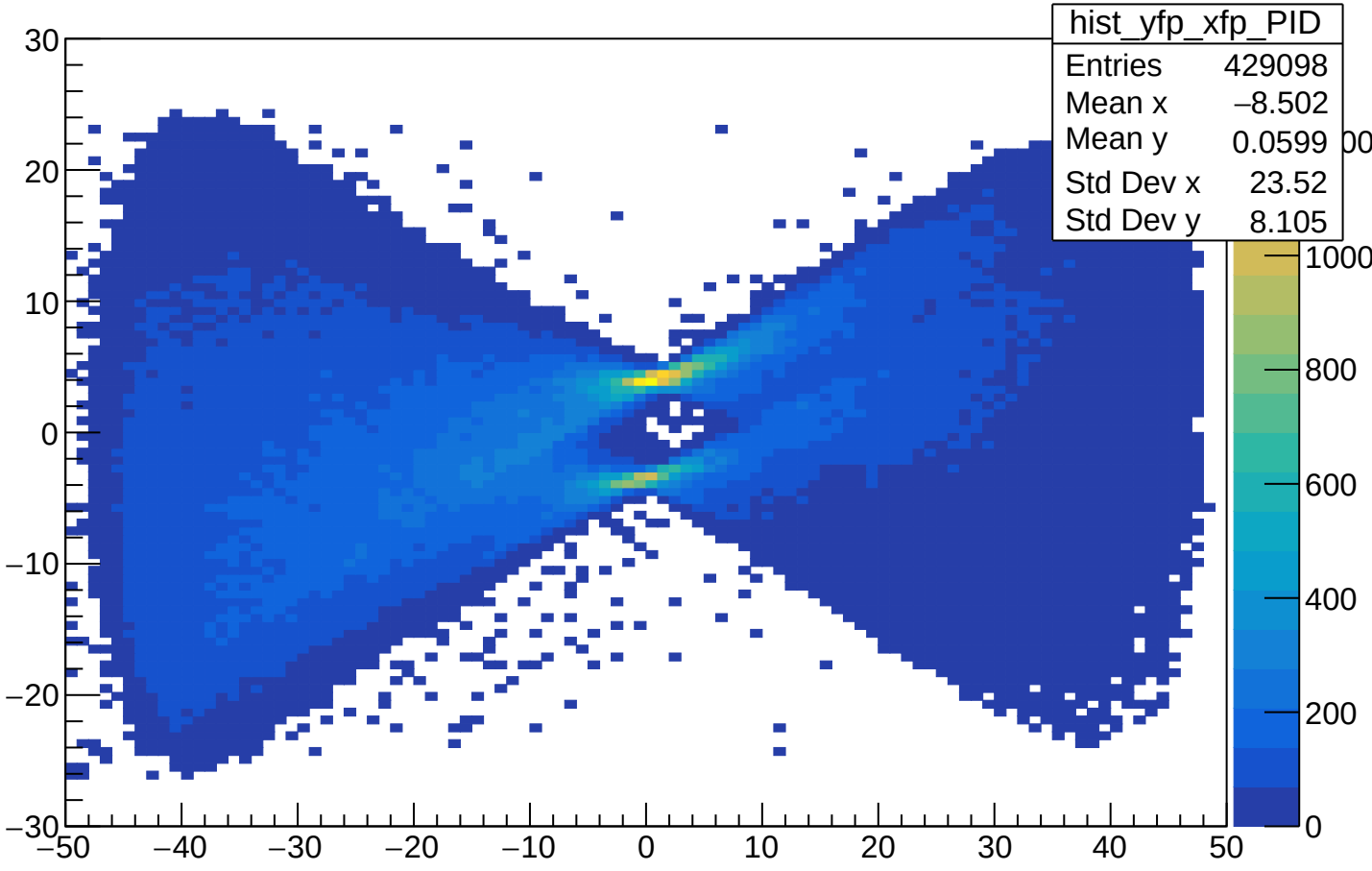

delta
hist_delta
Entries 649443
Mean −2.425
Std Dev 6.433
x = -8
x = 8
10^4
10^3
10^2
10
1
−30
−20
−10
0
10
20
30

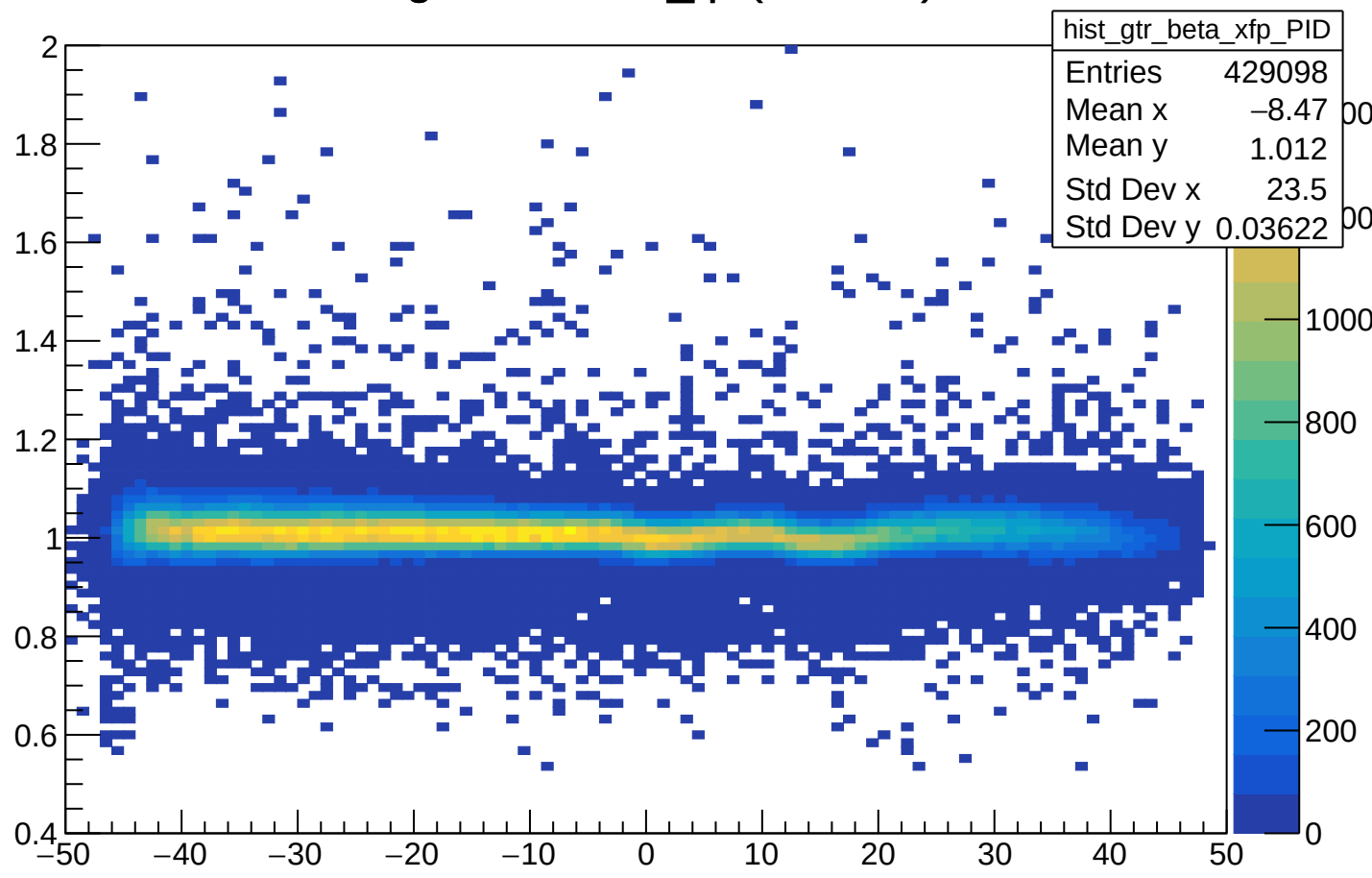

focal plane
hist_yfp_xfp
Entries 649443
Mean x −10.34
Mean y −0.4947
Std Dev x 23.64
Std Dev y 8.64
30
20
10
0
−10
−20
−30
−50
−40
−30
−20
−10
0
10
20
30
40
50
1000
800
600
400
200
0

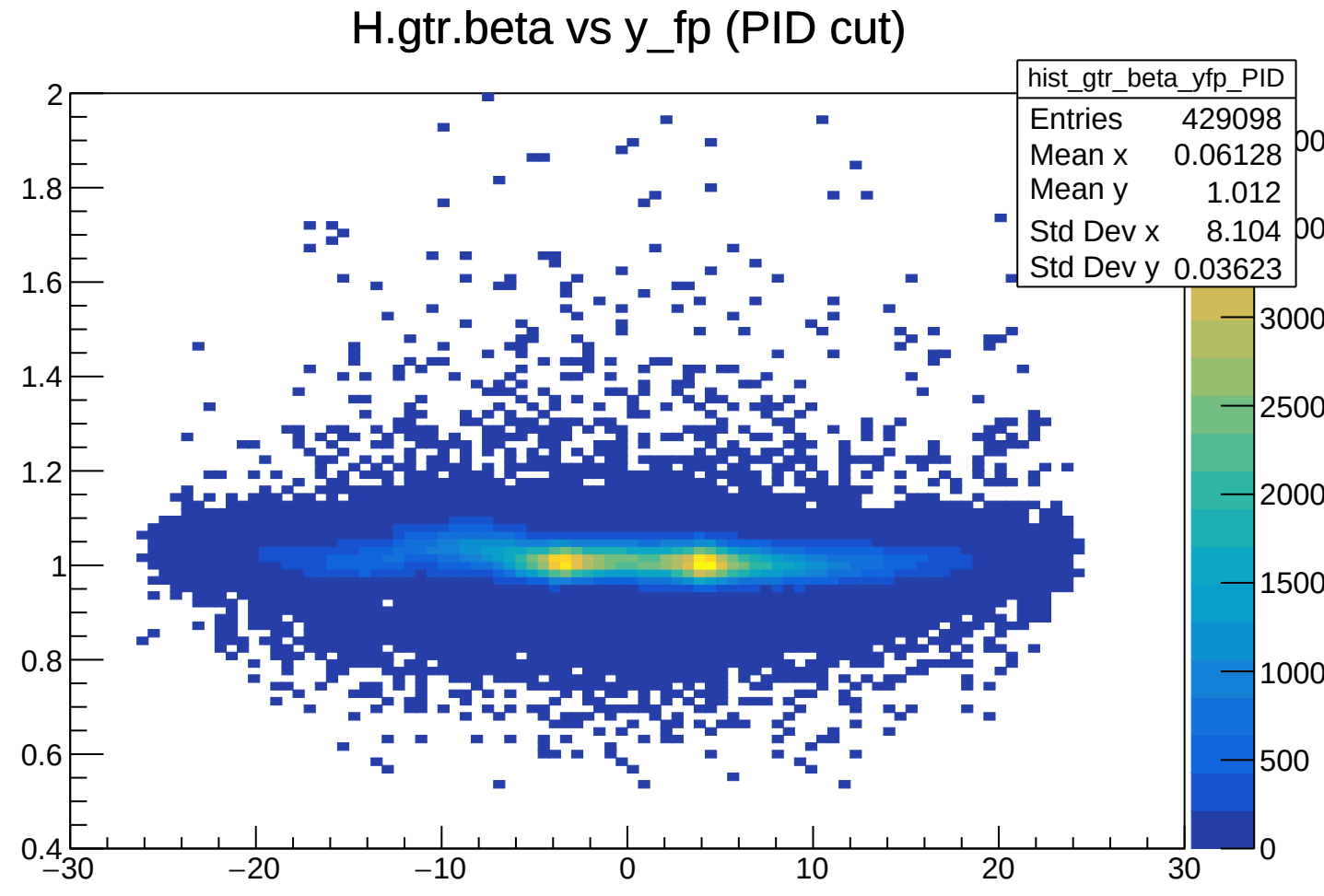

H.gtr.beta vs x_fp
hist_gtr_beta_xfp
Entries 649443
Mean x −10.2
Mean y 1.011
Std Dev x 23.6
Std Dev y 0.0418
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
−50
−40
−30
−20
−10
0
10
20
30
40
50
1200
1000
800
600
400
200
0

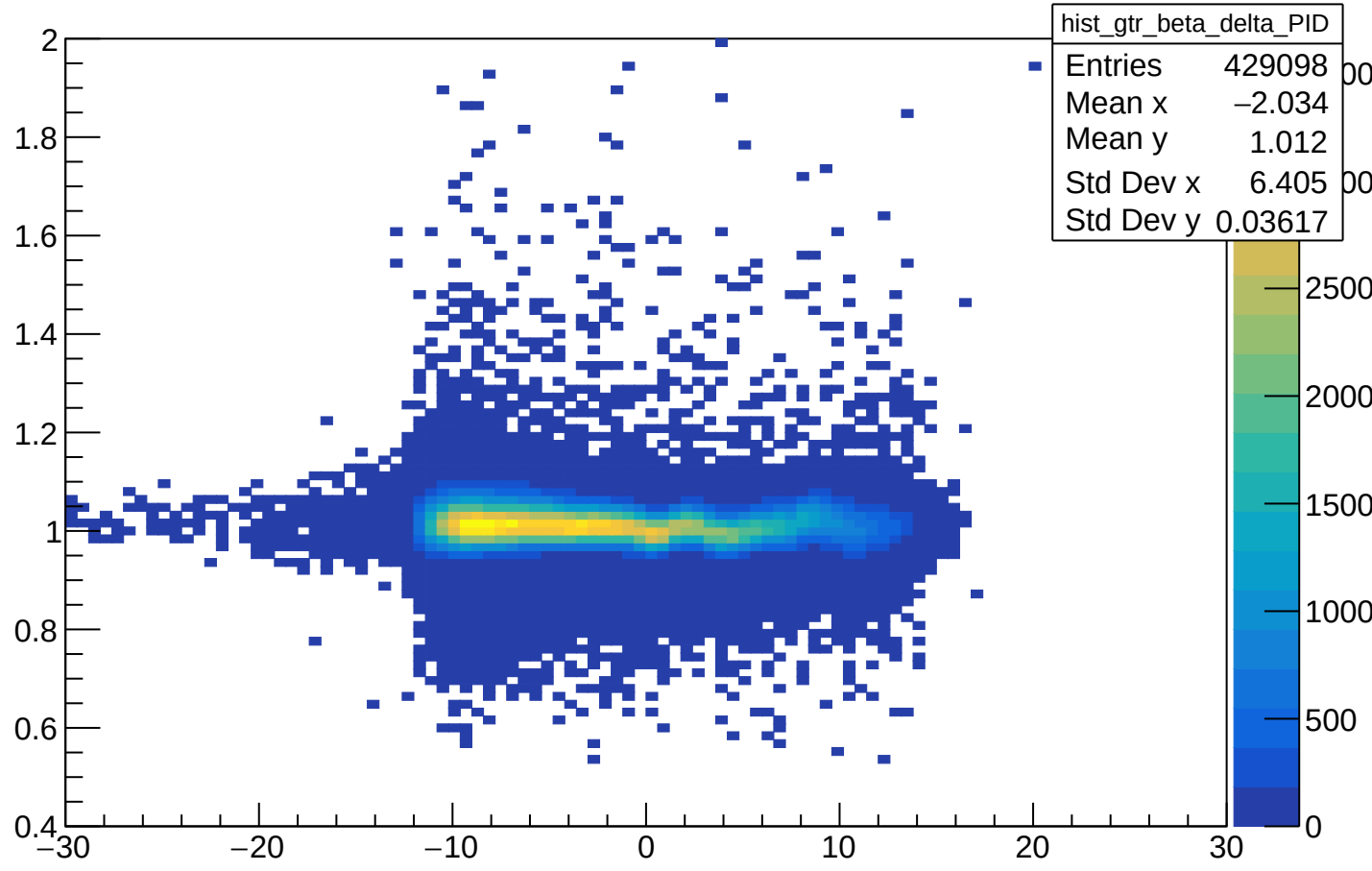

H.gtr.beta vs y_fp
hist_gtr_beta_yfp
Entries 649443
Mean x −0.4809
Mean y 1.011
Std Dev x 8.59
Std Dev y 0.04221
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
−30
−20
−10
0
10
20
30
3000
2500
2000
1500
1000
500
0

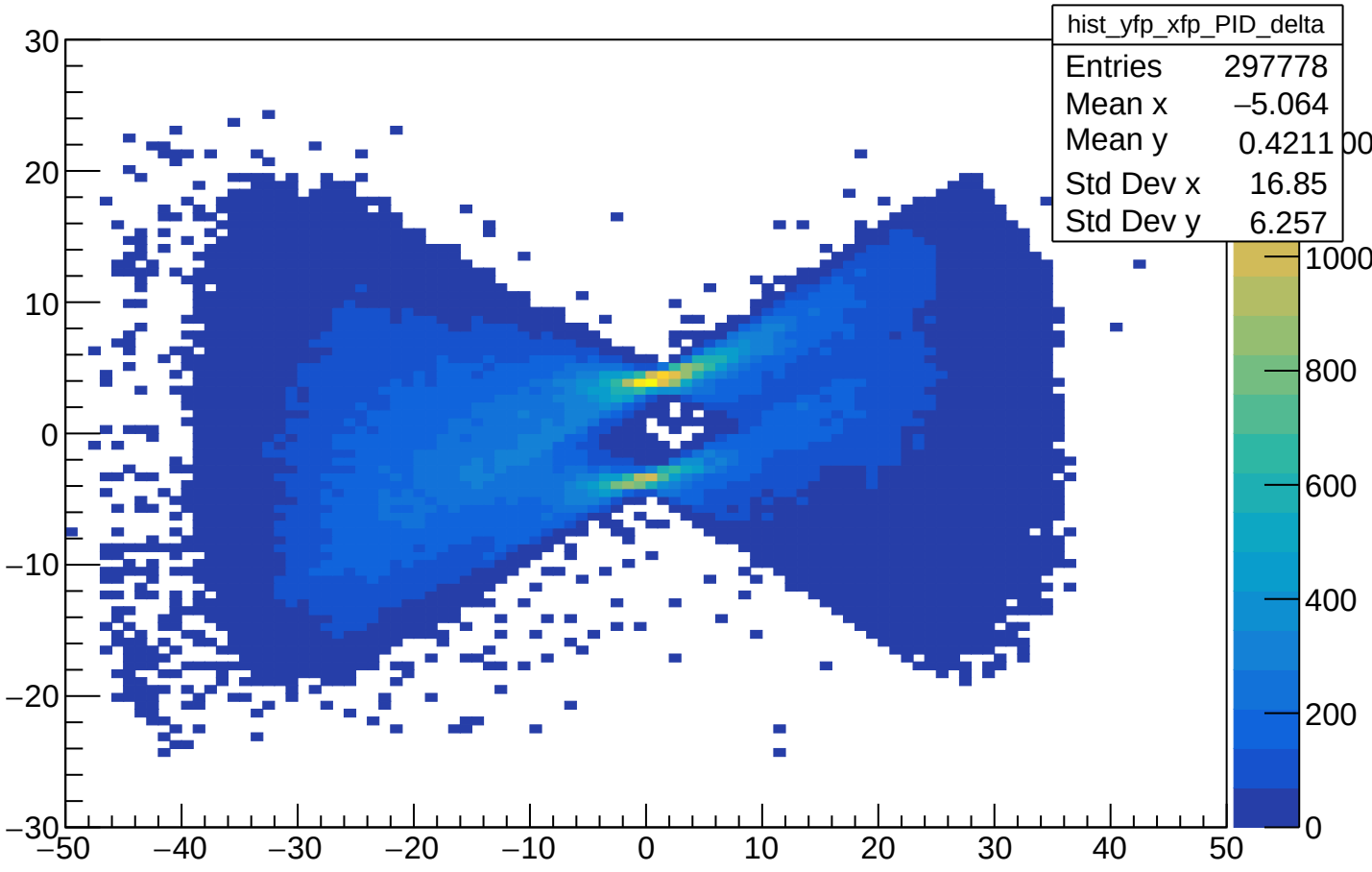

H.gtr.beta vs delta
hist_gtr_beta_delta
Entries 649443
Mean x −2.411
Mean y 1.011
Std Dev x 6.425
Std Dev y 0.03992
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
−30
−20
−10
0
10
20
30
3000
2500
2000
1500
1000
500
0

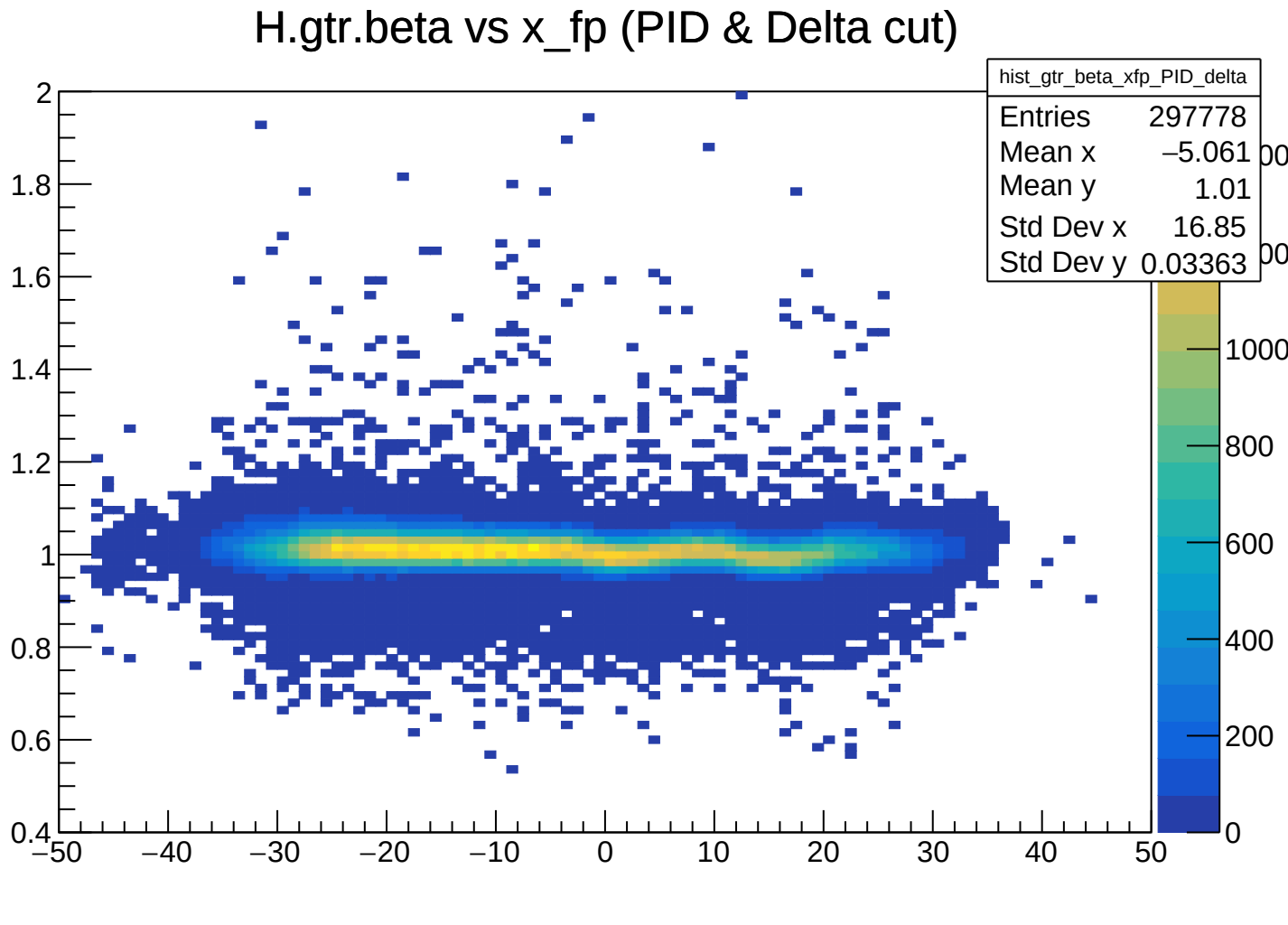

focal plane (PID cut)
hist_yfp_xfp_PID
Entries 429098
Mean x −8.502
Mean y 0.0599
Std Dev x 23.52
Std Dev y 8.105
30
20
10
0
−10
−20
−30
−50
−40
−30
−20
−10
0
10
20
30
40
50
1000
800
600
400
200
0

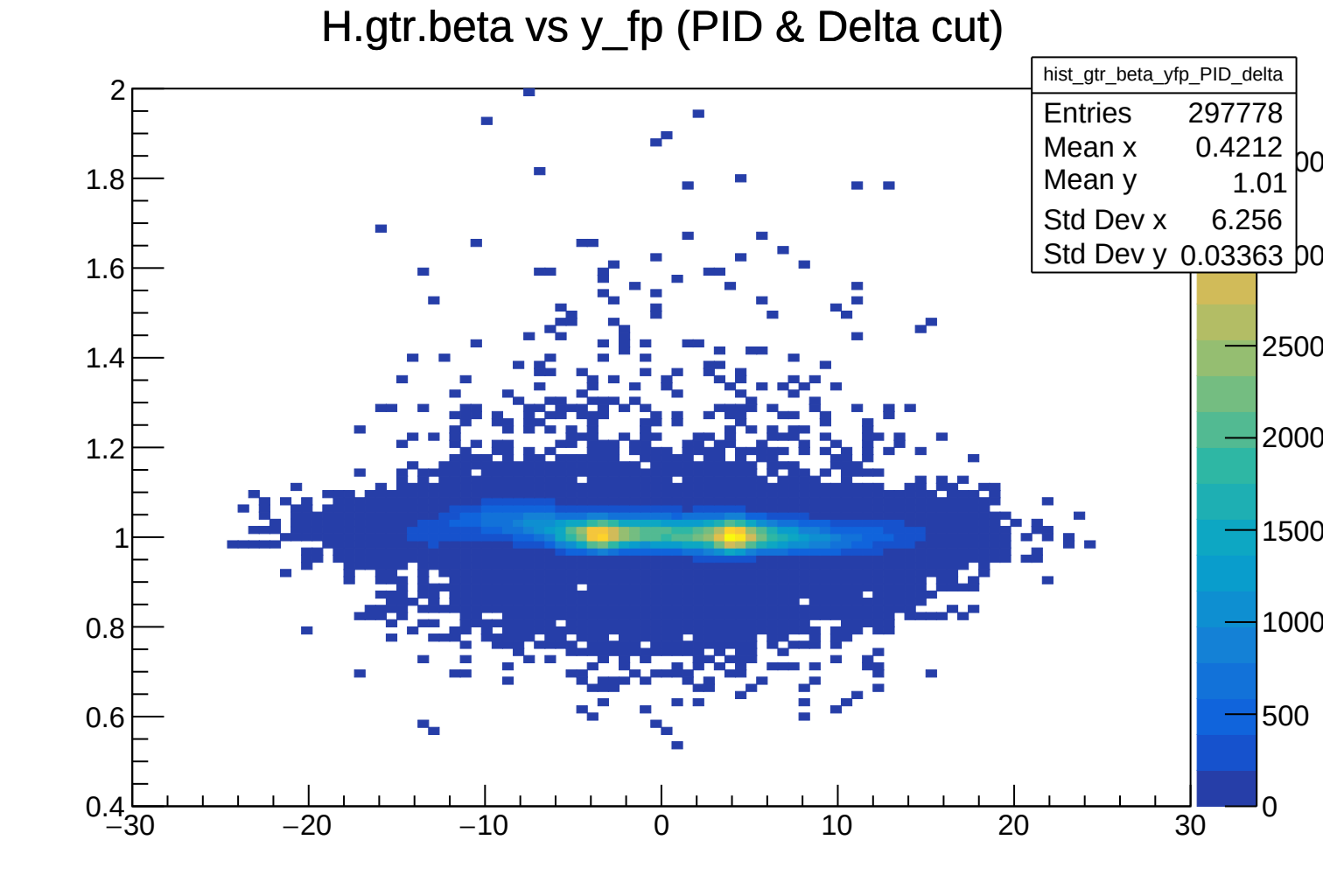

H.gtr.beta vs x_fp (PID cut)
hist_gtr_beta_xfp_PID
Entries 429098
Mean x −8.47
Mean y 1.012
Std Dev x 23.5
Std Dev y 0.03622
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
−50
−40
−30
−20
−10
0
10
20
30
40
50
1000
800
600
400
200
0

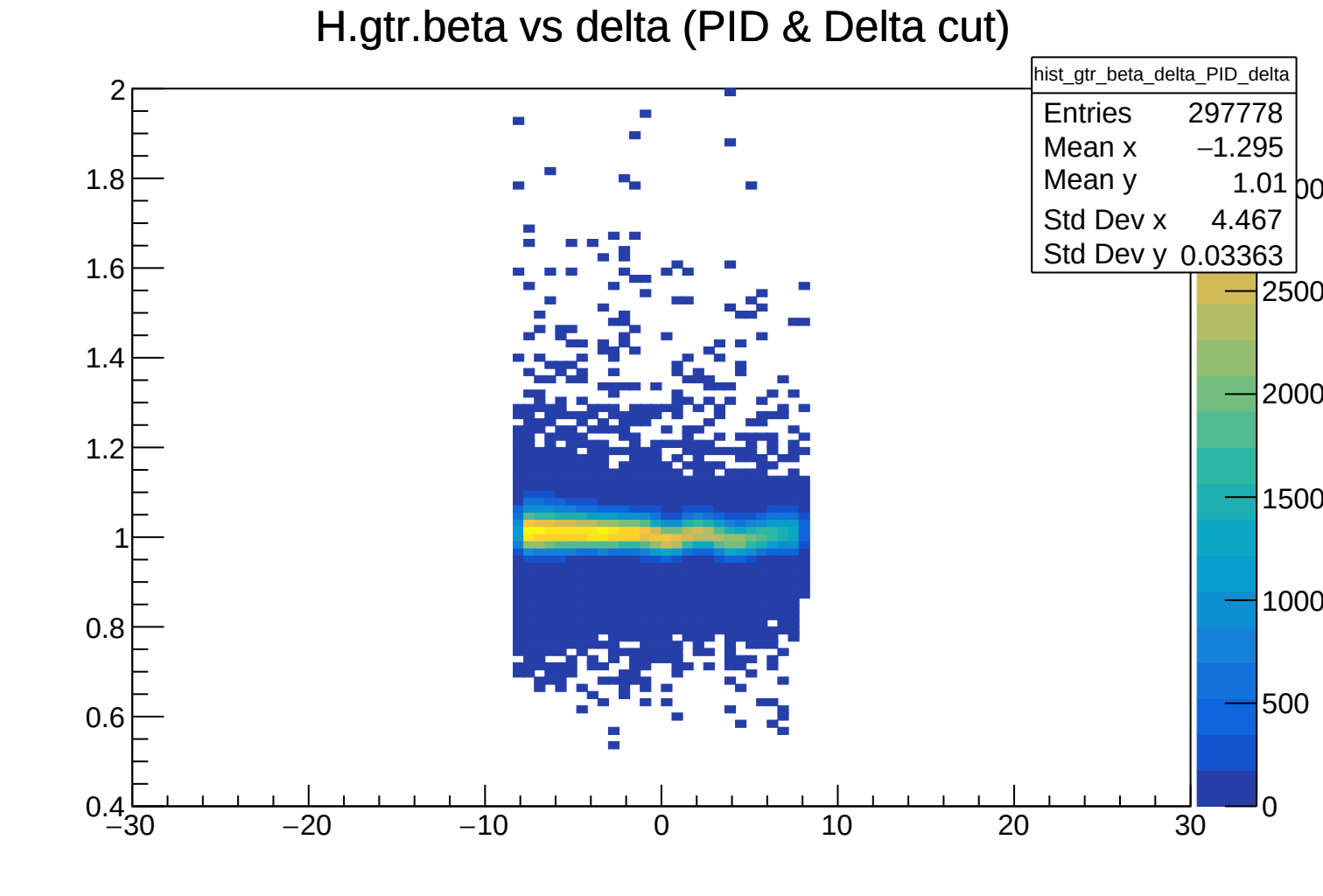

H.gtr.beta vs y_fp (PID cut)
hist_gtr_beta_yfp_PID
Entries 429098
Mean x 0.06128
Mean y 1.012
Std Dev x 8.104
Std Dev y 0.03623
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
−30
−20
−10
0
10
20
30
3000
2500
2000
1500
1000
500
0


H.gtr.beta vs delta (PID cut)
hist_gtr_beta_delta_PID
Entries 429098
Mean x −2.034
Mean y 1.012
Std Dev x 6.405
Std Dev y 0.03617
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
−30
−20
−10
0
10
20
30
2500
2000
1500
1000
500
0


focal plane (PID & Delta cut)
hist_yfp_xfp_PID_delta
Entries 297778
Mean x −5.064
Mean y 0.4211
Std Dev x 16.85
Std Dev y 6.257
30
20
10
0
−10
−20
−30
−50
−40
−30
−20
−10
0
10
20
30
40
50
1000
800
600
400
200
0


H.gtr.beta vs x_fp (PID & Delta cut)
hist_gtr_beta_xfp_PID_delta
Entries 297778
Mean x −5.061
Mean y 1.01
Std Dev x 16.85
Std Dev y 0.03363
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
−50
−40
−30
−20
−10
0
10
20
30
40
50
1000
800
600
400
200
0


H.gtr.beta vs y_fp (PID & Delta cut)
hist_gtr_beta_yfp_PID_delta
Entries 297778
Mean x 0.4212
Mean y 1.01
Std Dev x 6.256
Std Dev y 0.03363
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
−30
−20
−10
0
10
20
30
2500
2000
1500
1000
500
0


H.gtr.beta vs delta (PID & Delta cut)
hist_gtr_beta_delta_PID_delta
Entries 297778
Mean x −1.295
Mean y 1.01
Std Dev x 4.467
Std Dev y 0.03363
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
−30
−20
−10
0
10
20
30
2500
2000
1500
1000
500
0