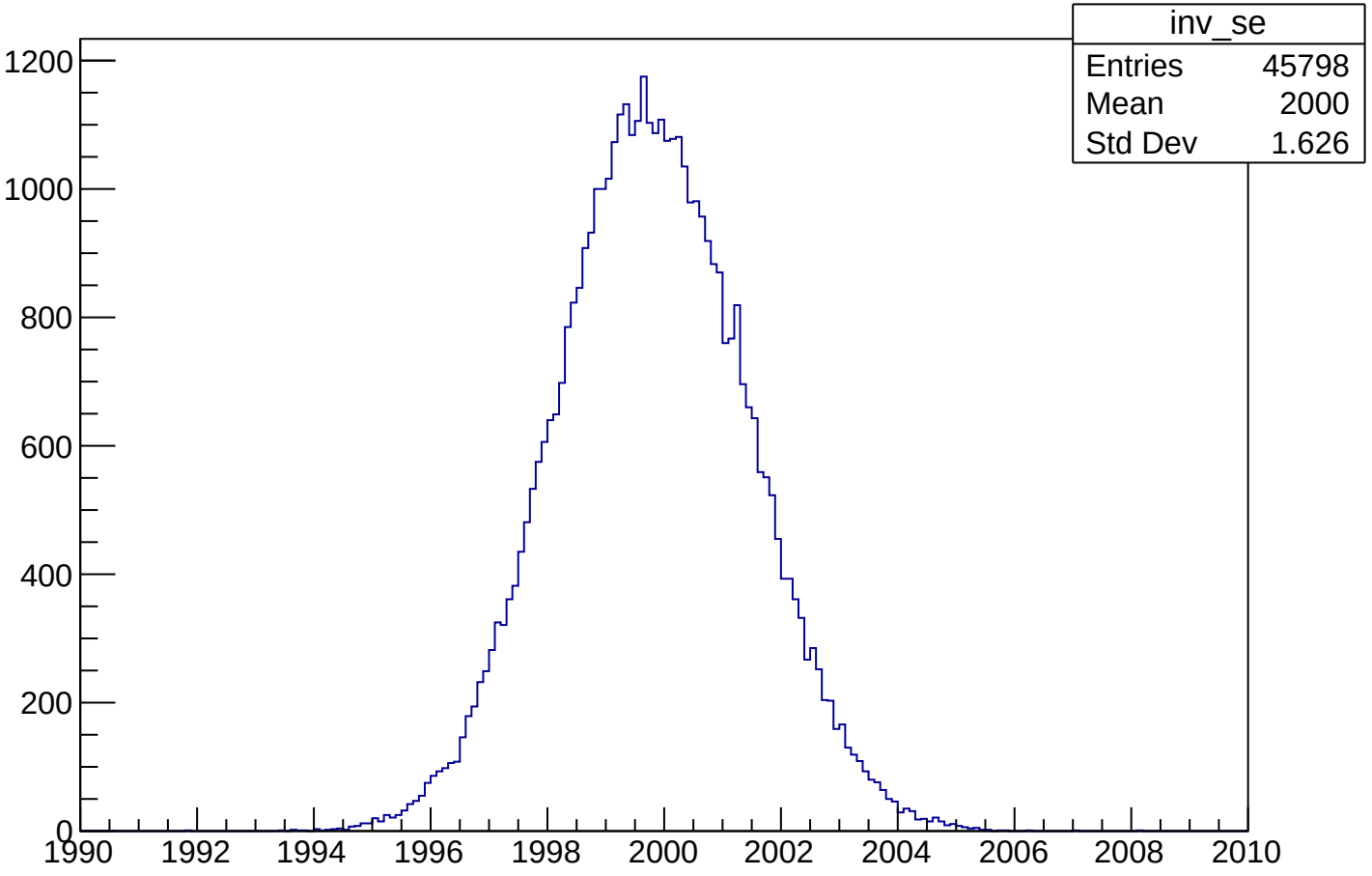
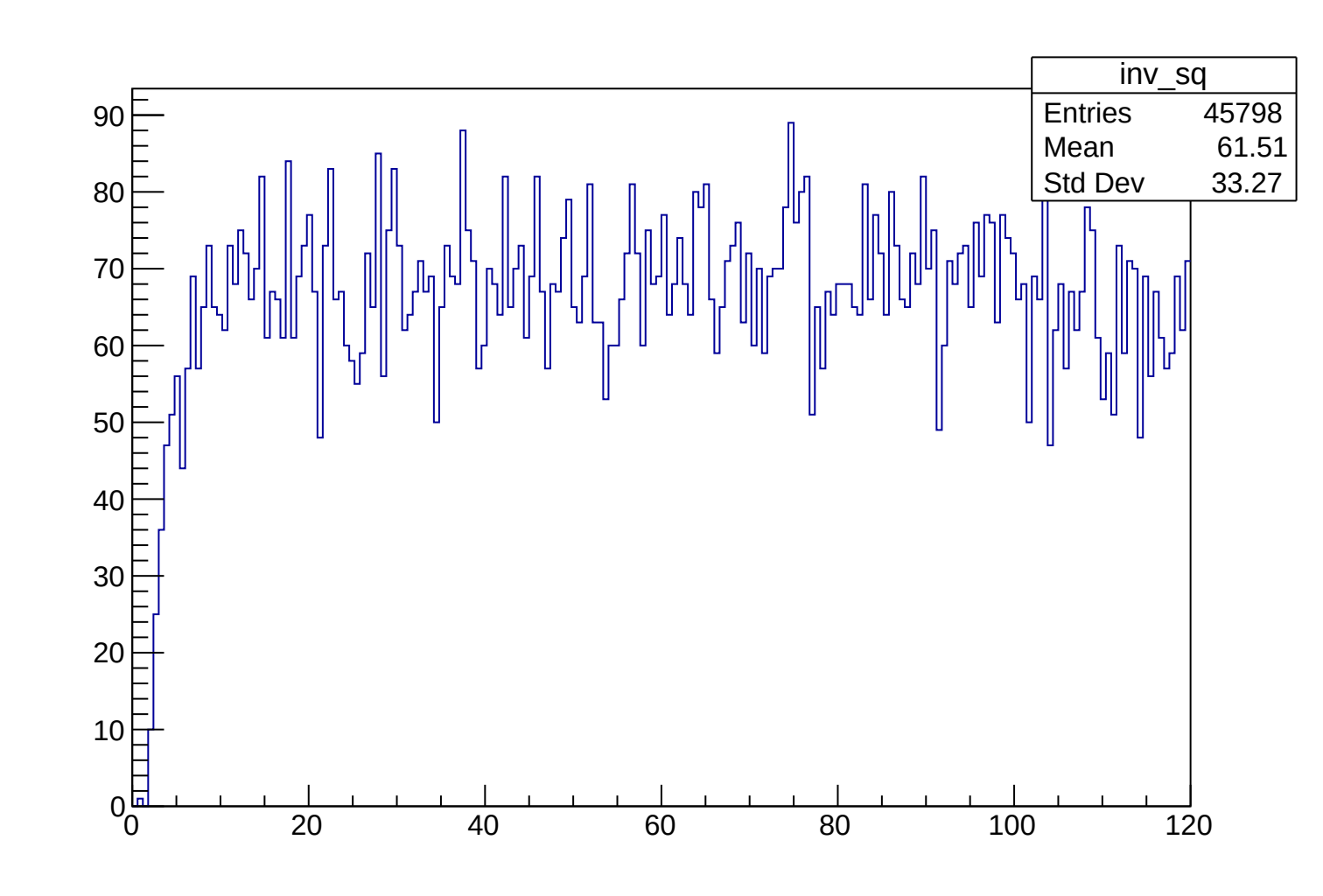
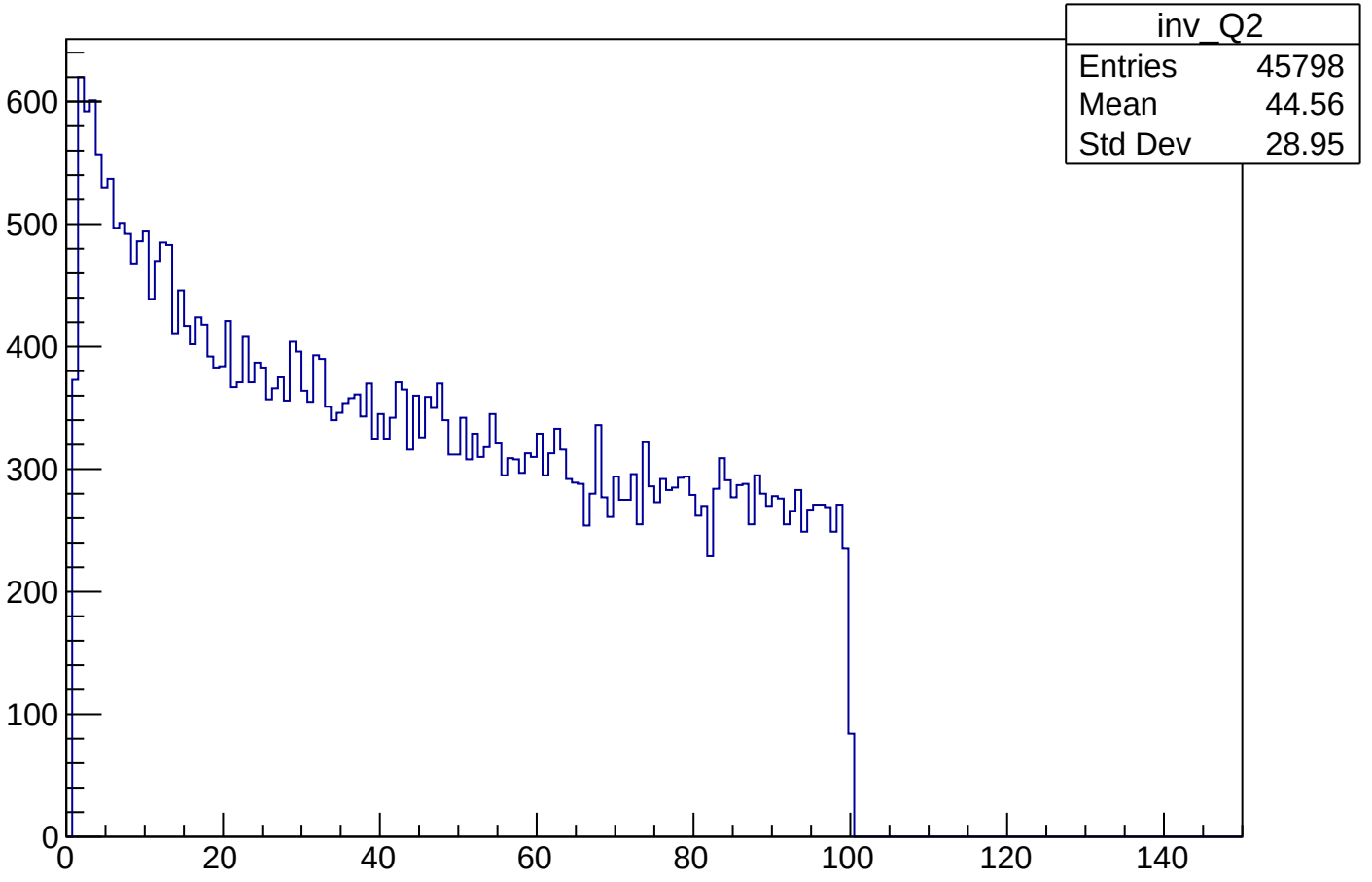
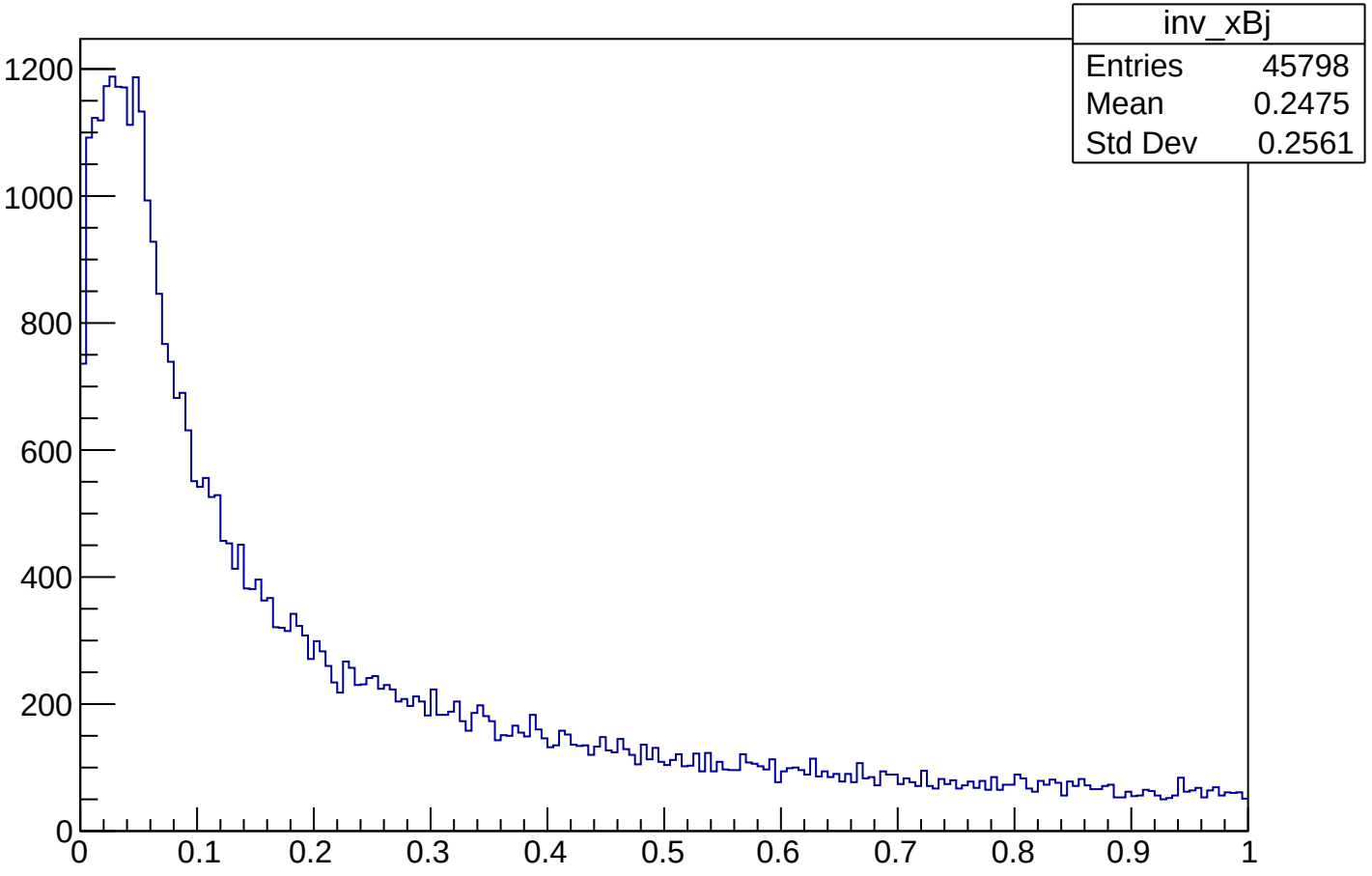
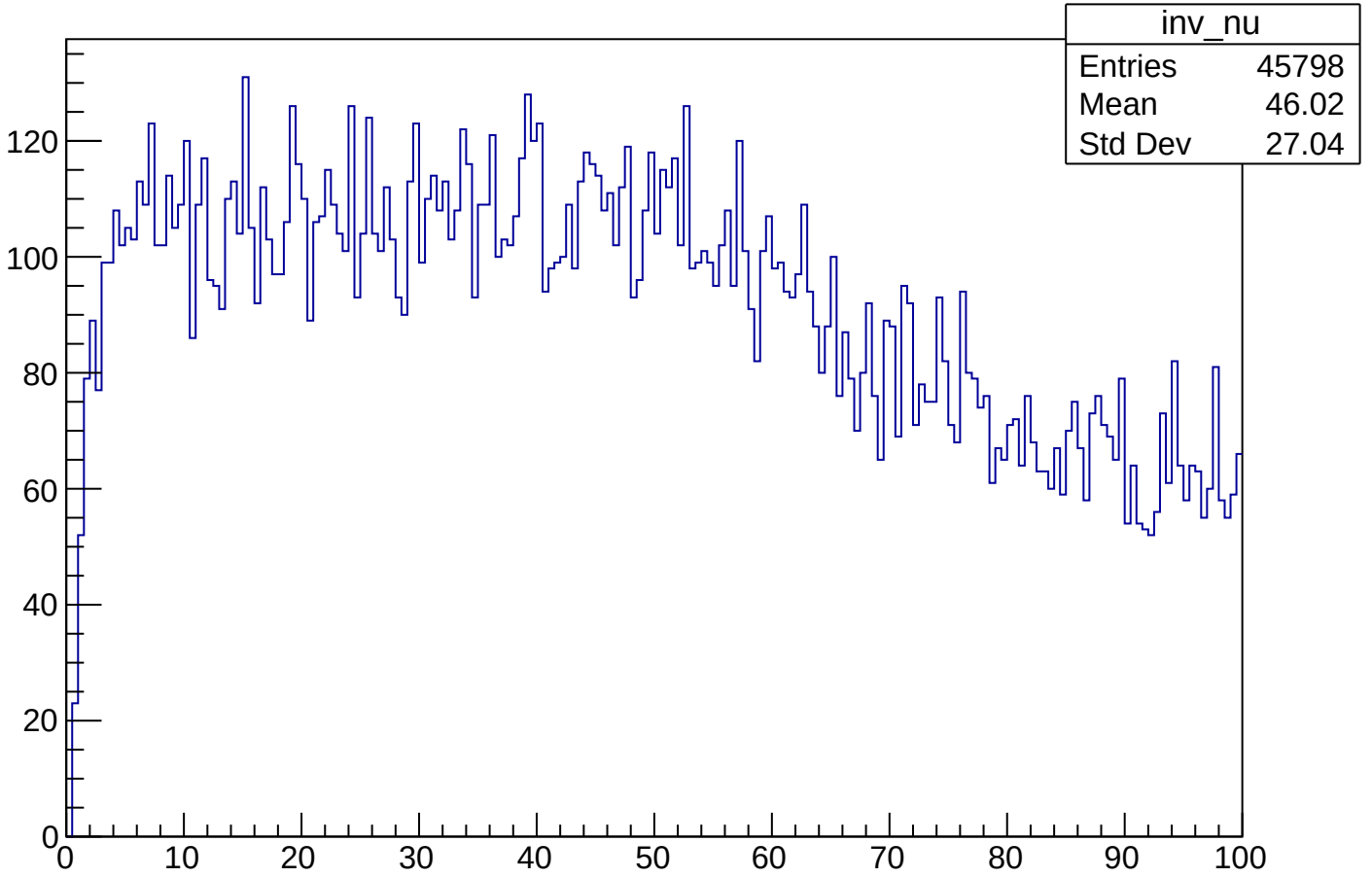
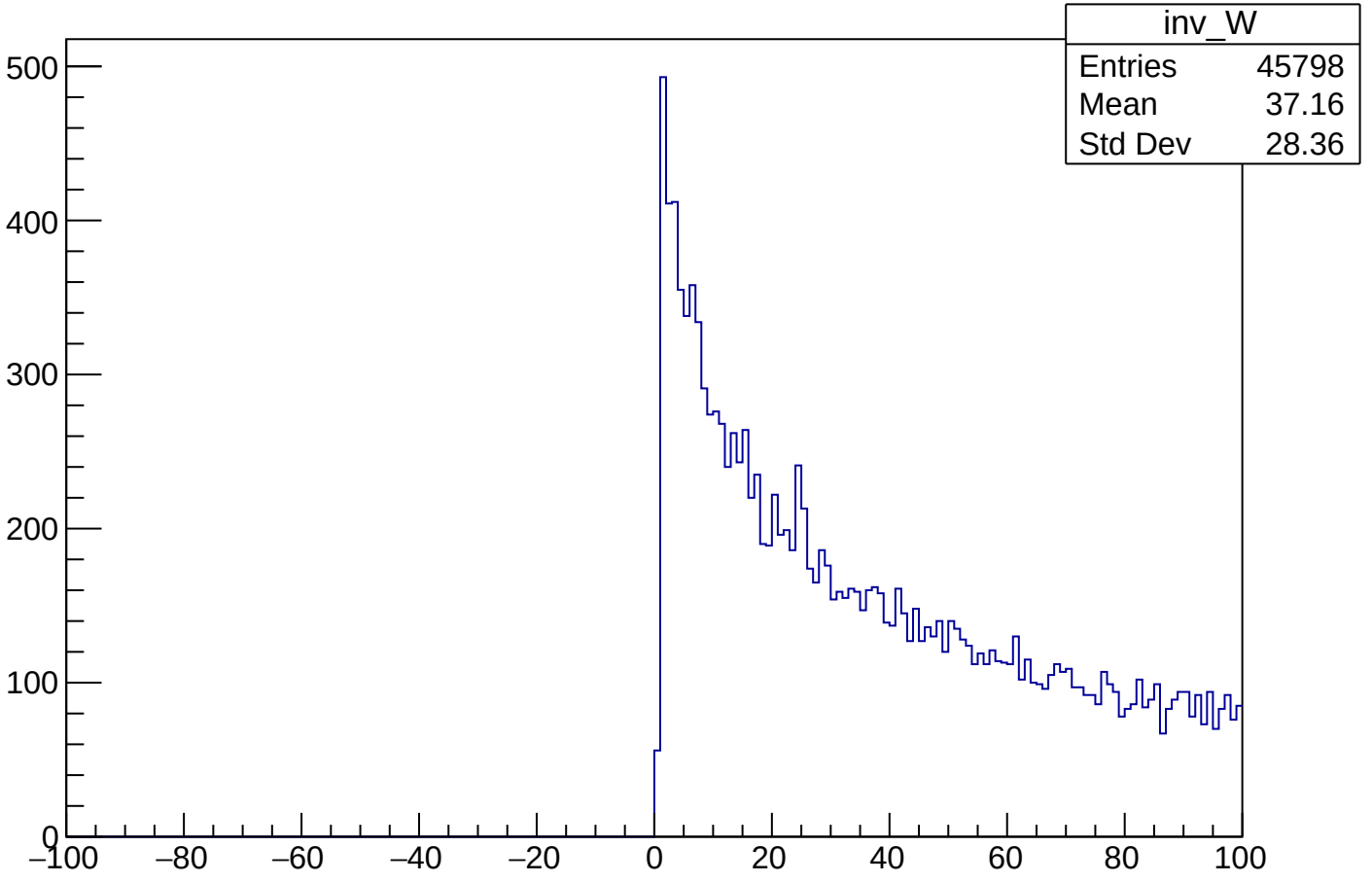

inv_se
Entries 45798
Mean 2000
Std Dev 1.626
1200
1000
800
600
400
200
0
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010

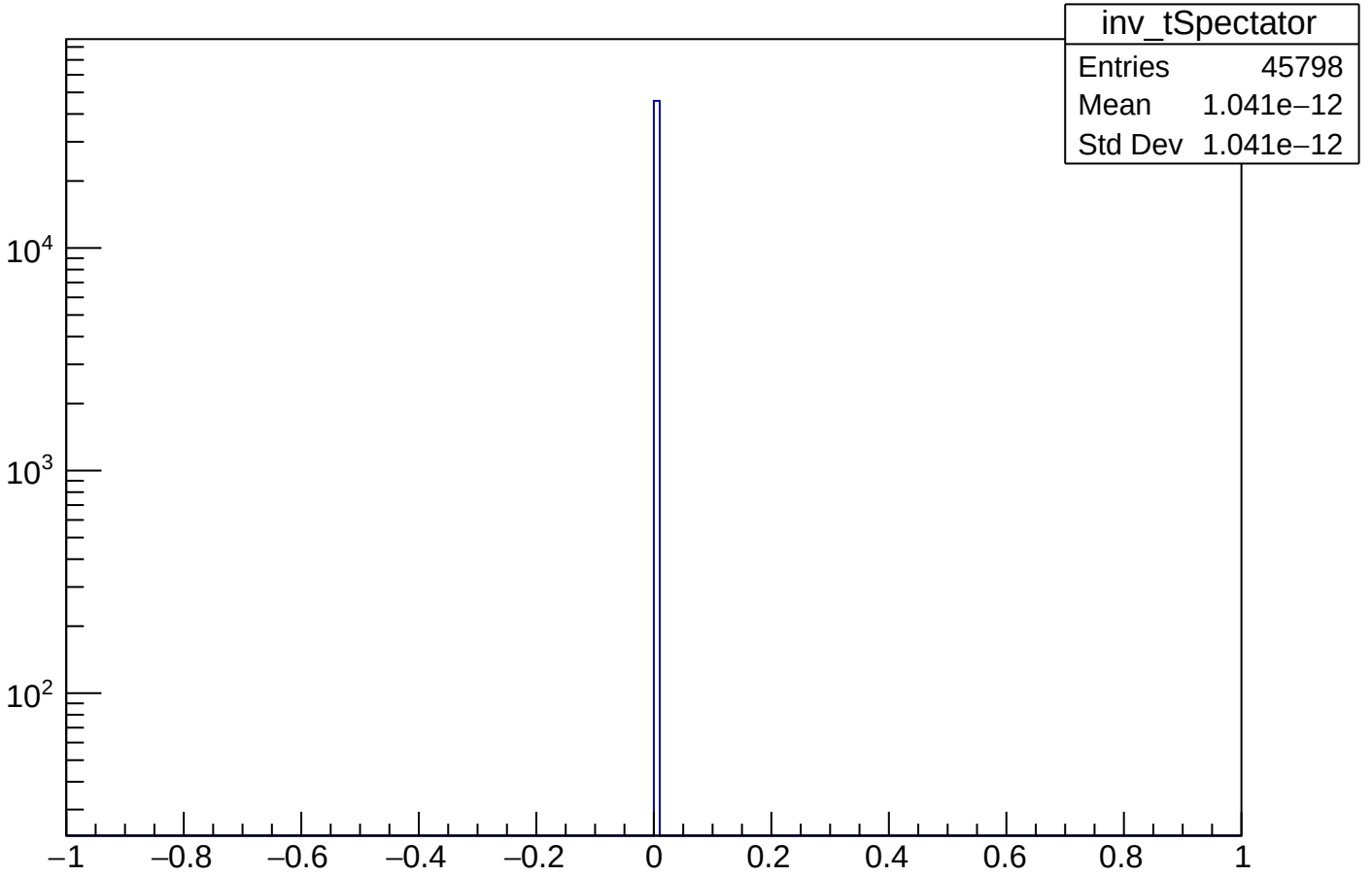

inv_sq
Entries 45798
Mean 61.51
Std Dev 33.27
0
10
20
30
40
50
60
70
80
90
0
20
40
60
80
100
120

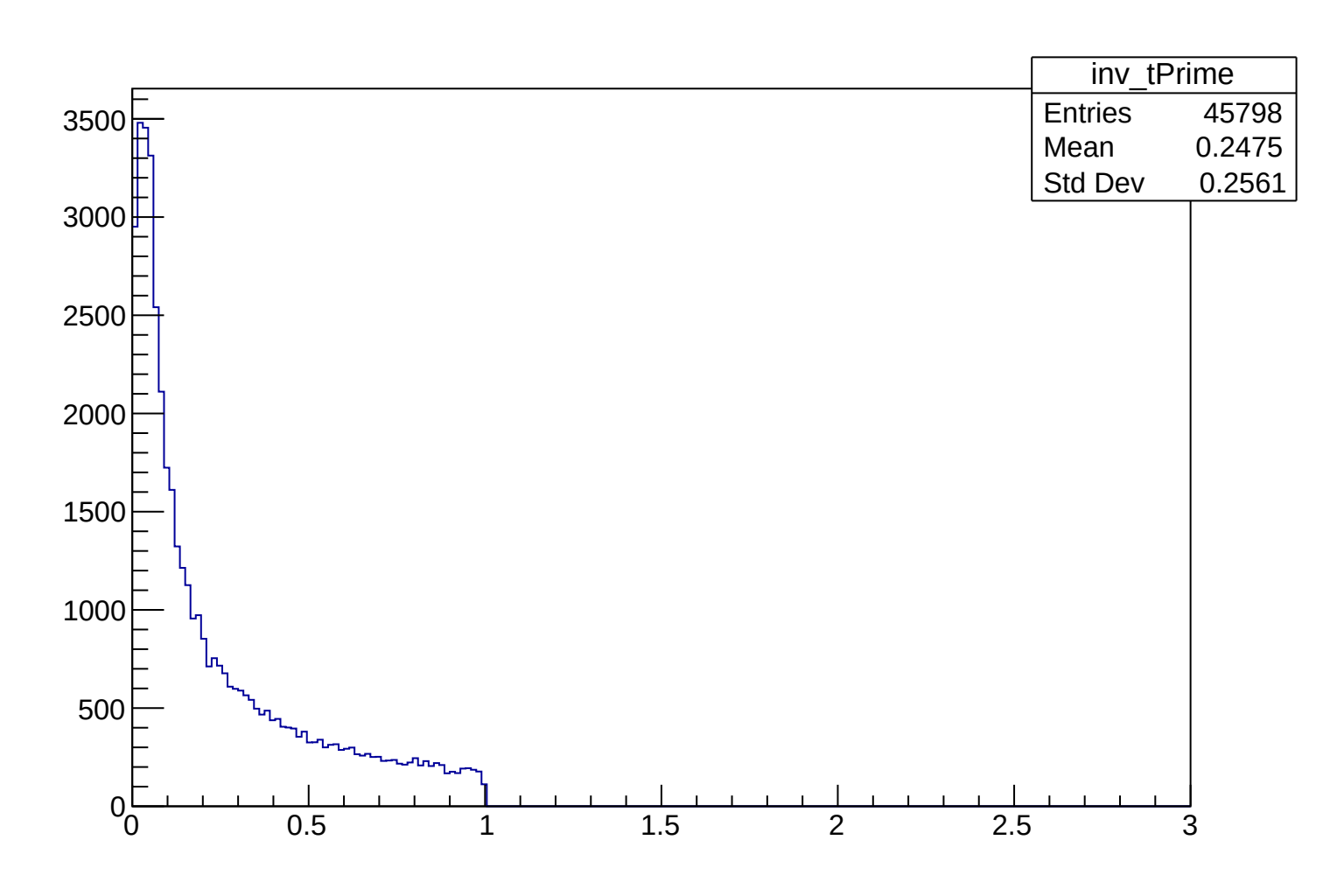

inv_Q2
Entries 45798
Mean 44.56
Std Dev 28.95
600
500
400
300
200
100
0
0
20
40
60
80
100
120
140

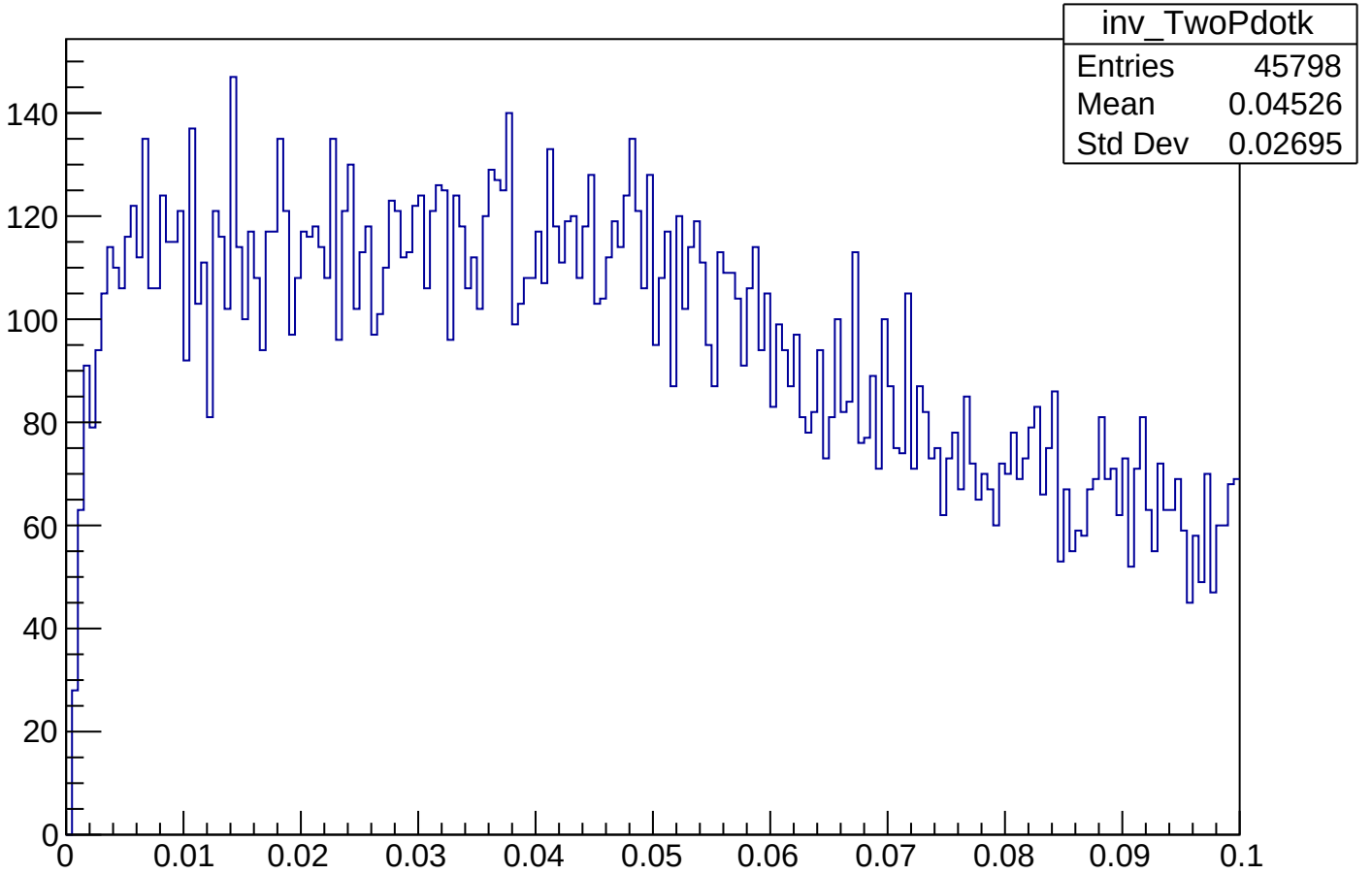

inv_xBj
Entries 45798
Mean 0.2475
Std Dev 0.2561
1200
1000
800
600
400
200
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1

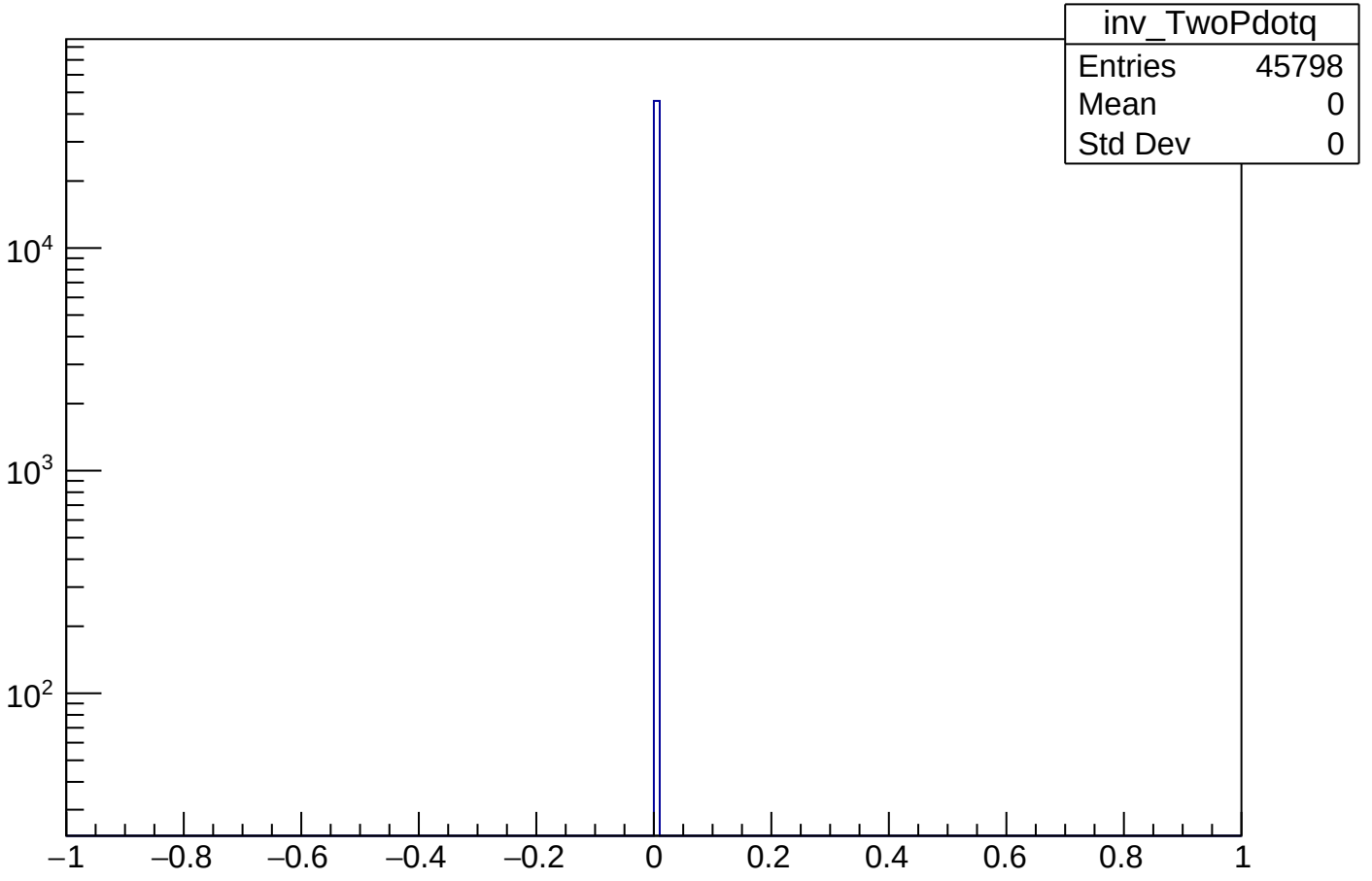

inv_nu
Entries 45798
Mean 46.02
Std Dev 27.04
0
20
40
60
80
100
120
0
10
20
30
40
50
60
70
80
90
100

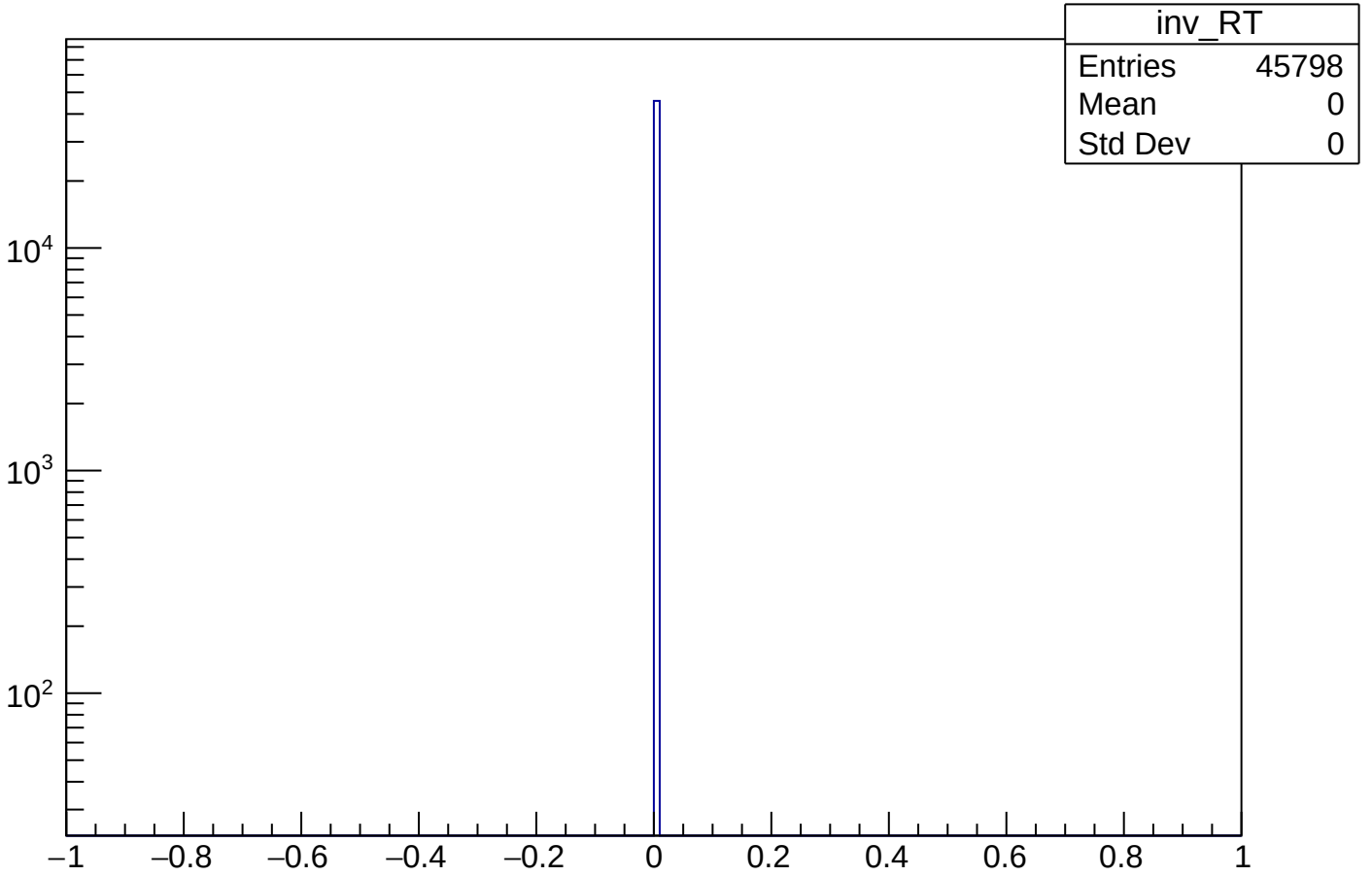

inv_W
Entries 45798
Mean 37.16
Std Dev 28.36
500
400
300
200
100
0
−100
−80
−60
−40
−20
0
20
40
60
80
100

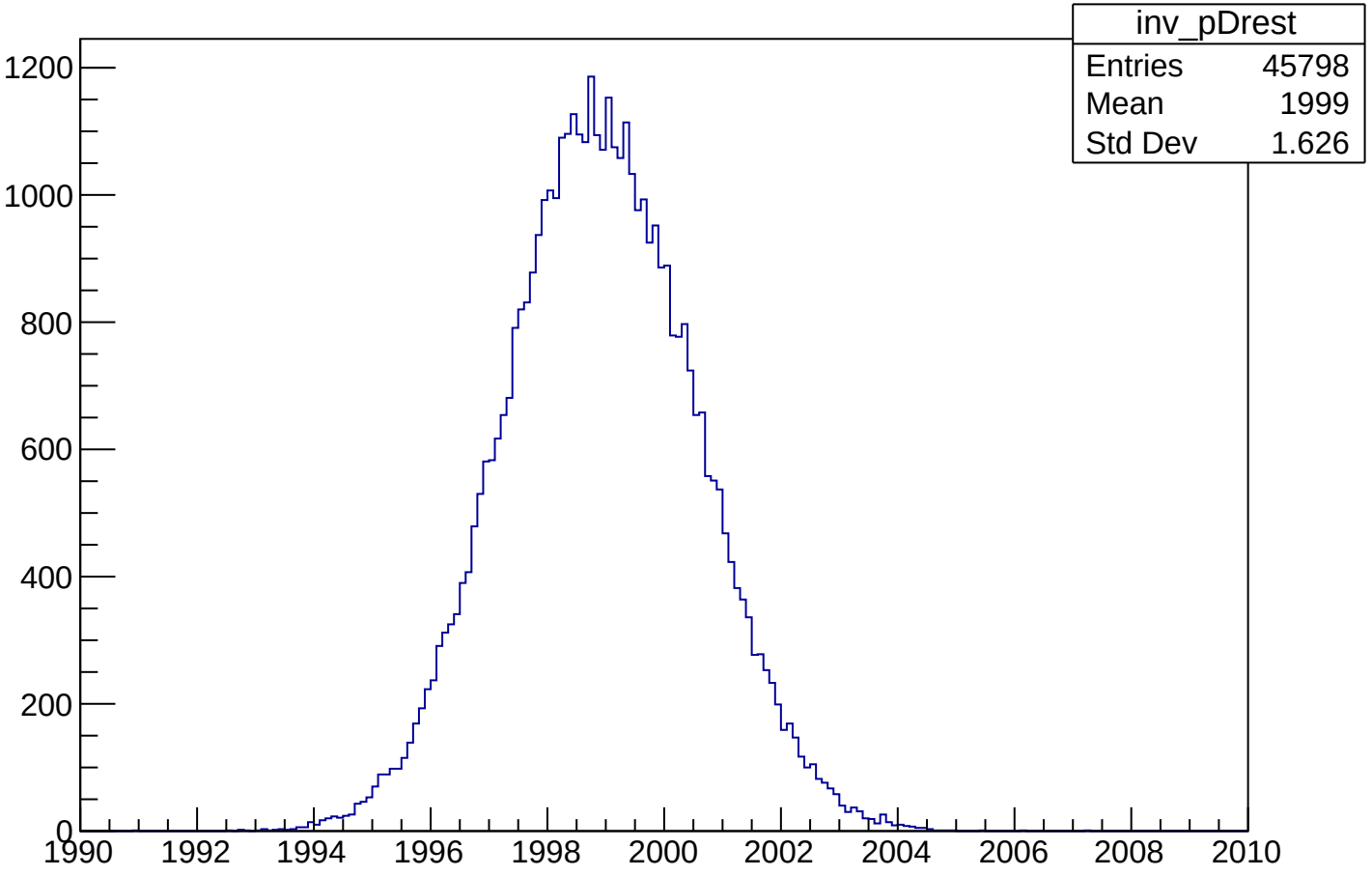

inv_tSpectator
Entries 45798
Mean 1.041e−12
Std Dev 1.041e−12
10^4
10^3
10^2
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1

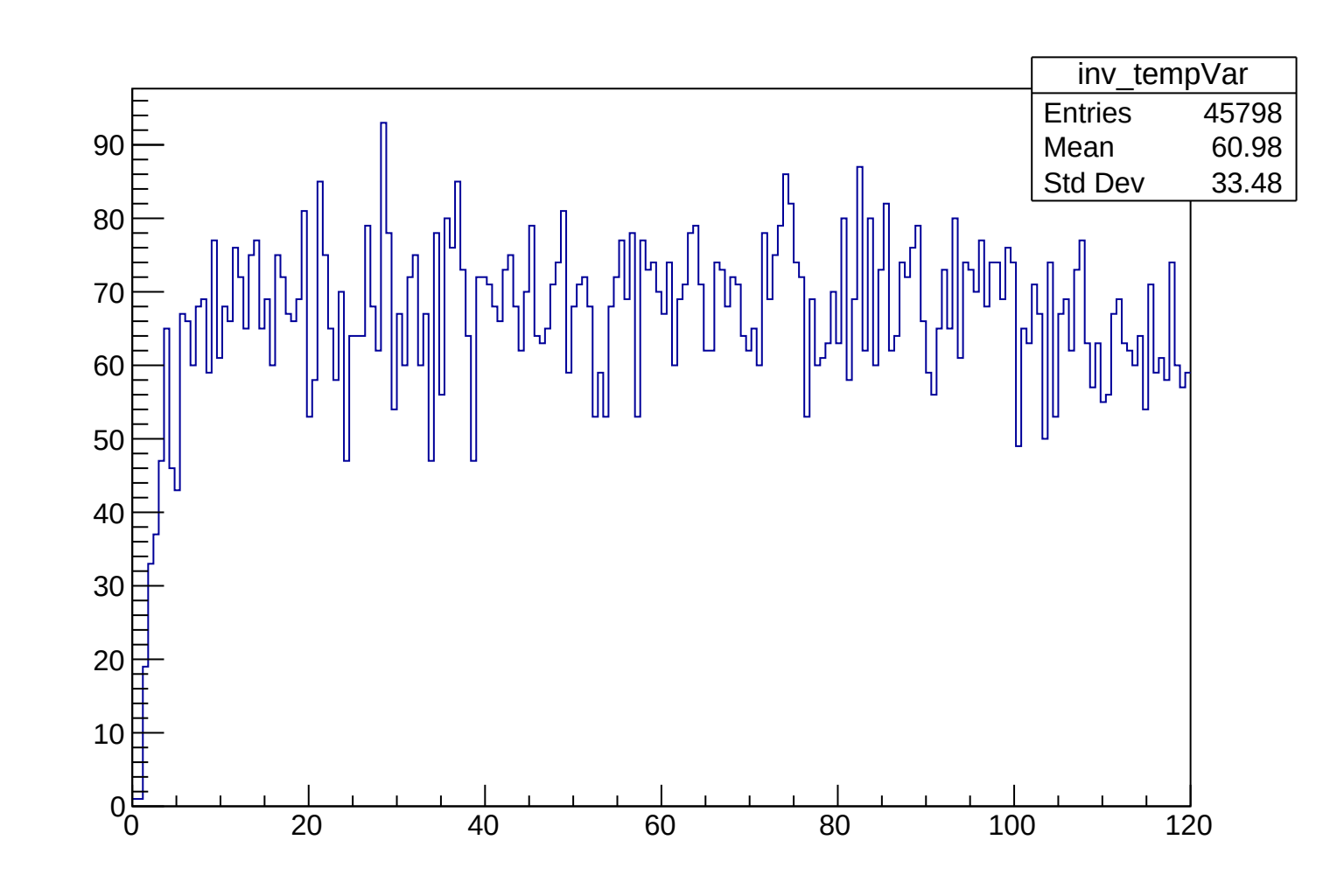

inv_tPrime
Entries 45798
Mean 0.2475
Std Dev 0.2561
3500
3000
2500
2000
1500
1000
500
0
0
0.5
1
1.5
2
2.5
3

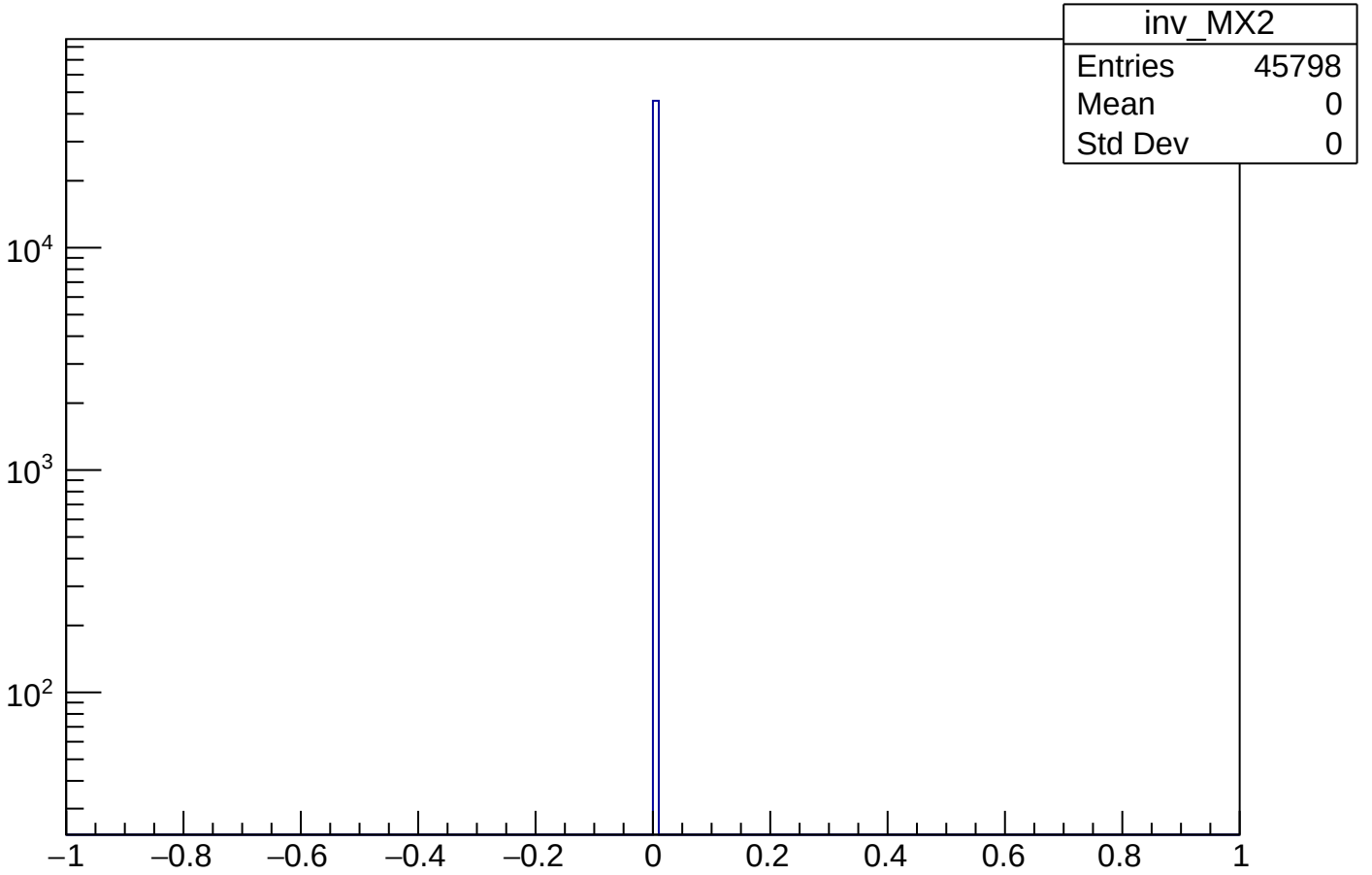

inv_TwoPdotk
Entries 45798
Mean 0.04526
Std Dev 0.02695
140
120
100
80
60
40
20
0
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.1

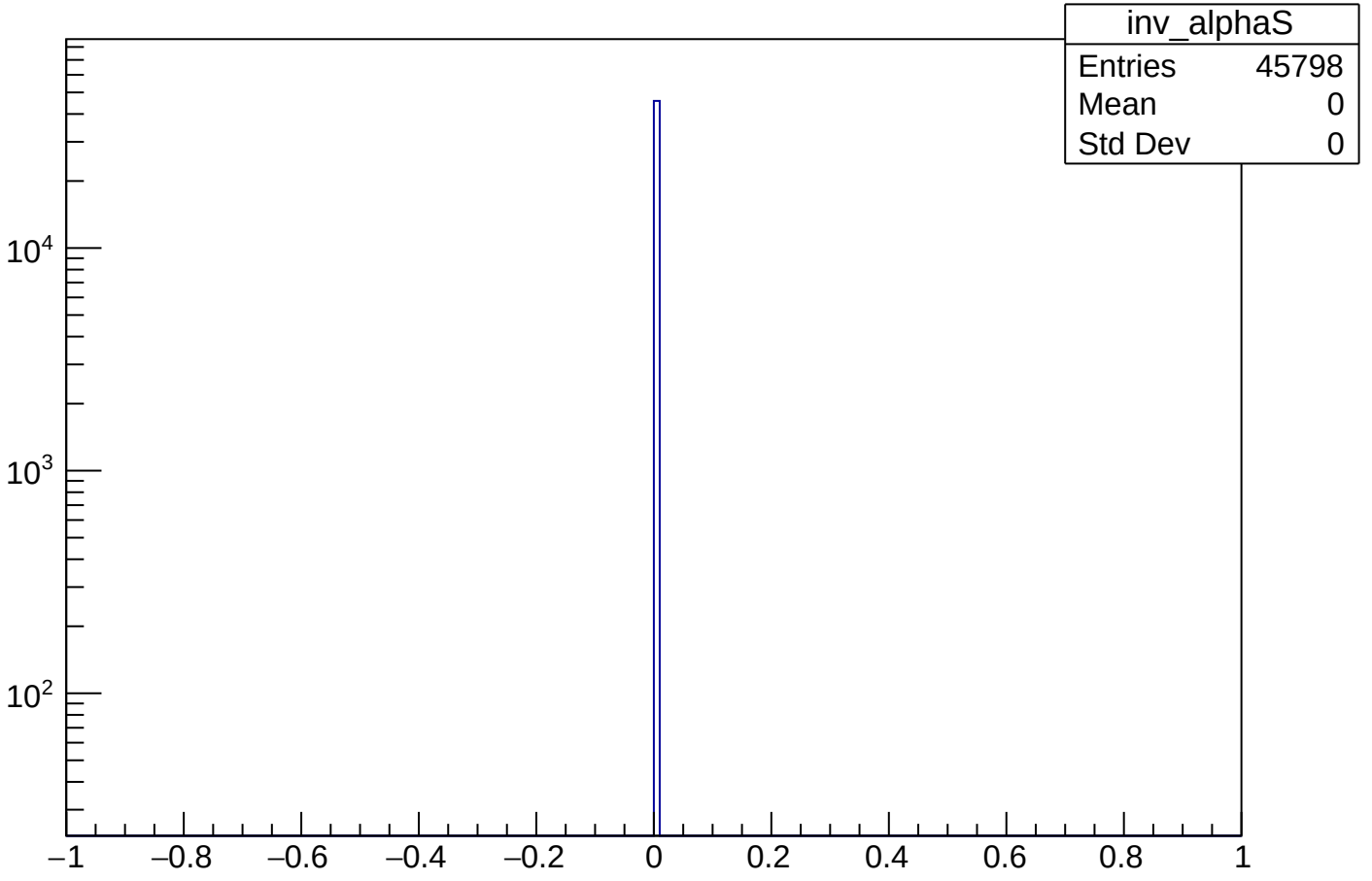

inv_TwoPdotq
Entries 45798
Mean 0
Std Dev 0
10^4
10^3
10^2
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1

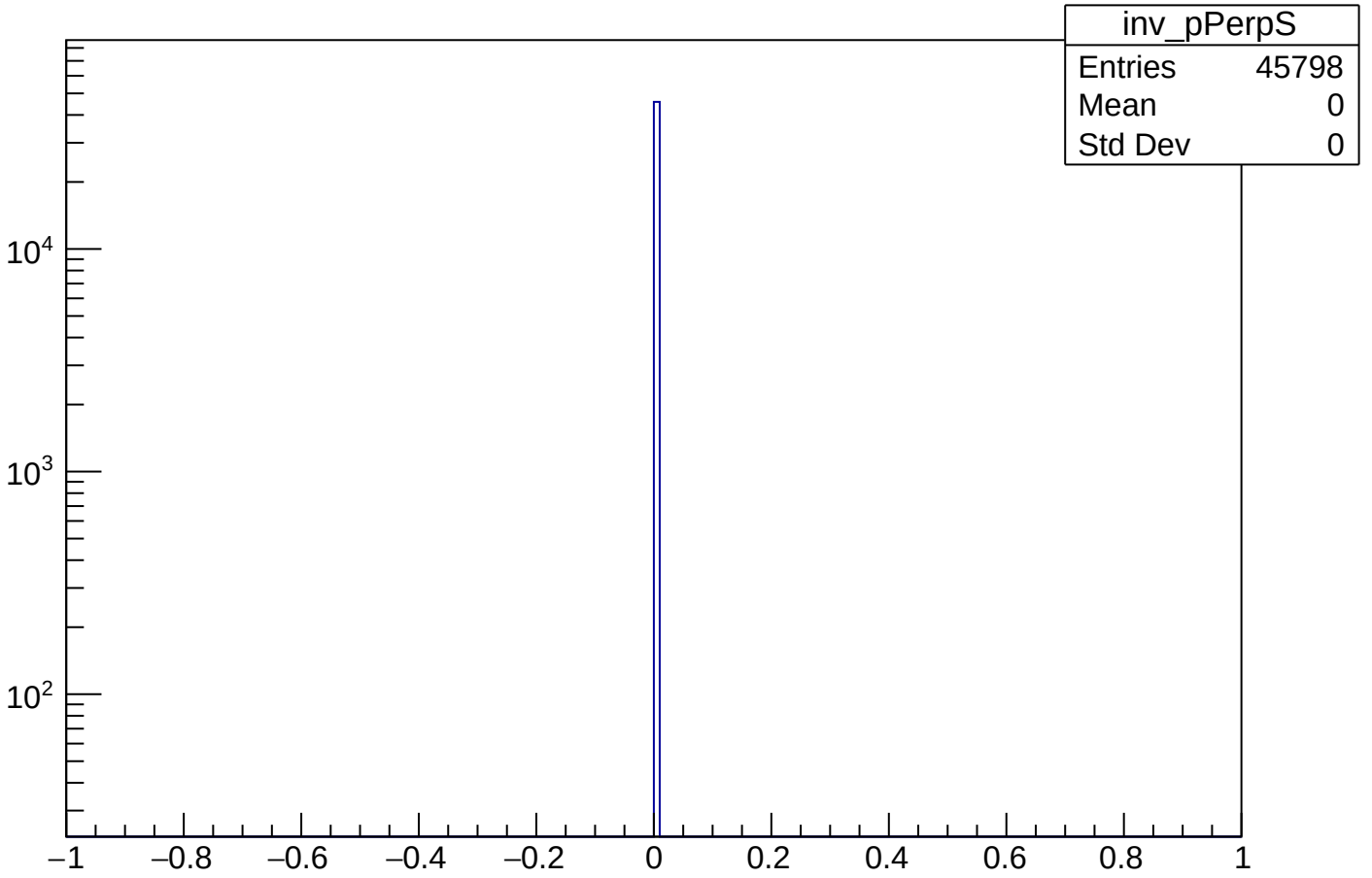

inv_RT
Entries 45798
Mean 0
Std Dev 0
10^4
10^3
10^2
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1

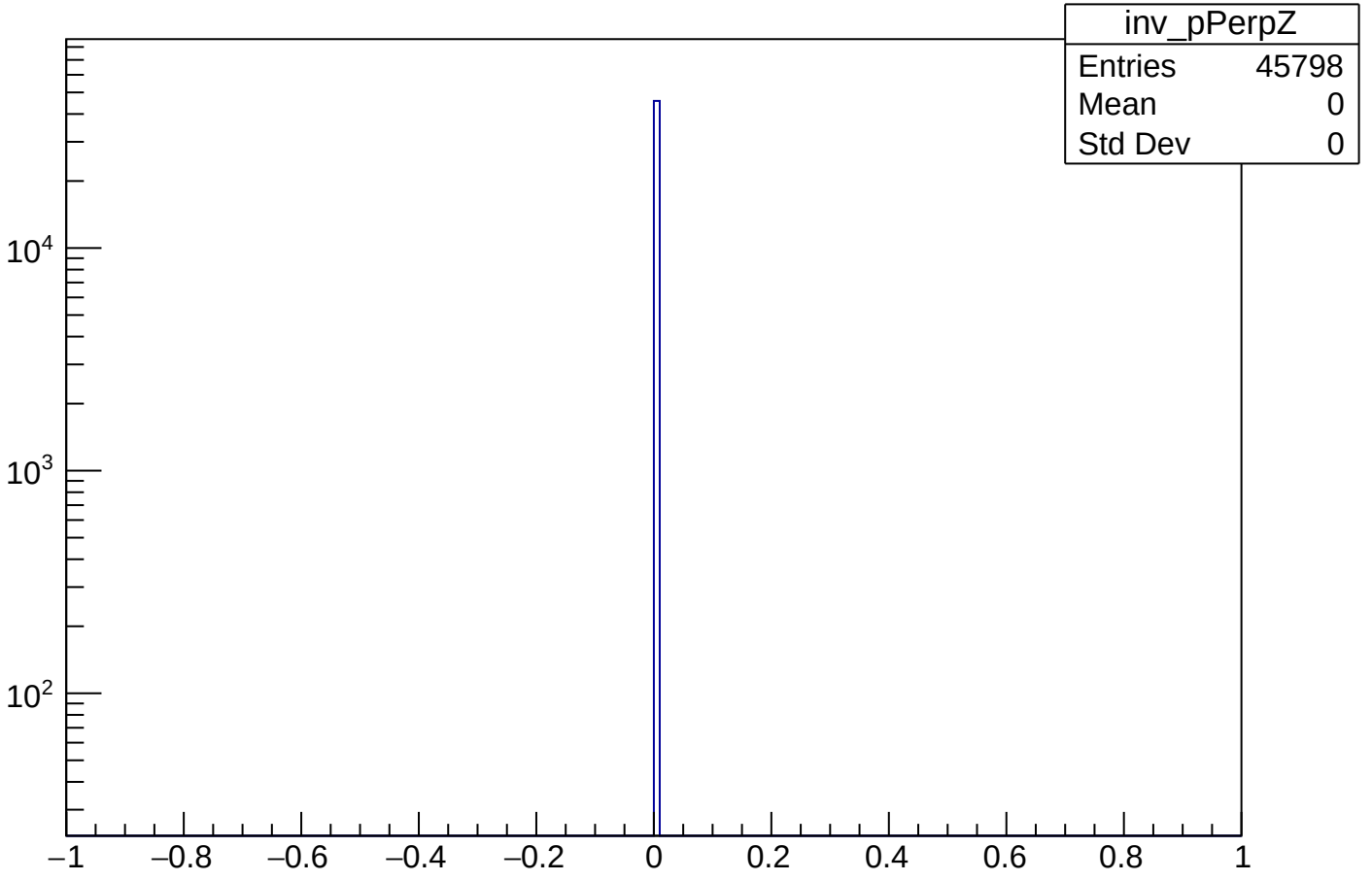

inv_pDrest
Entries 45798
Mean 1999
Std Dev 1.626
1200
1000
800
600
400
200
0
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010

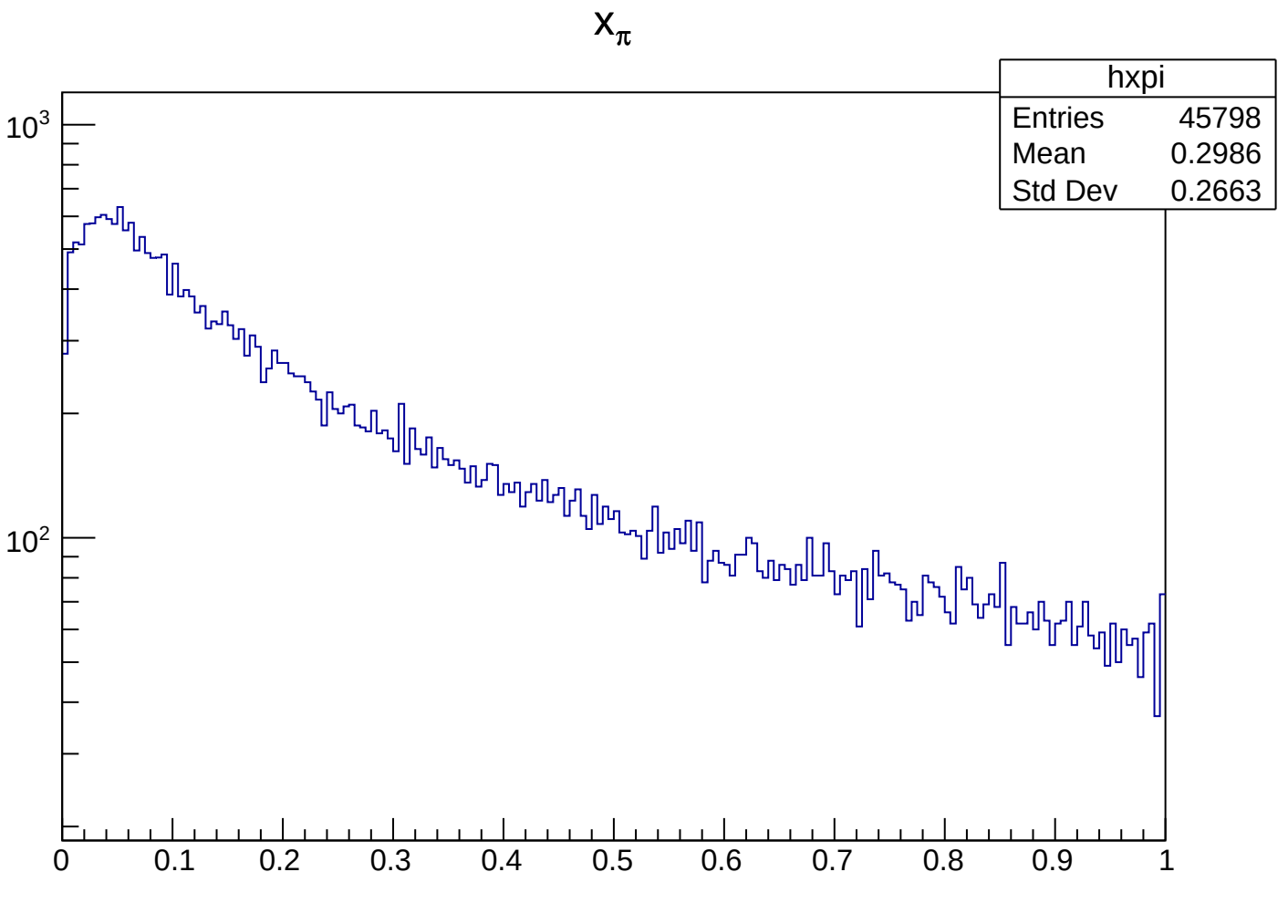

inv_tempVar
Entries 45798
Mean 60.98
Std Dev 33.48
0
10
20
30
40
50
60
70
80
90
0
20
40
60
80
100
120

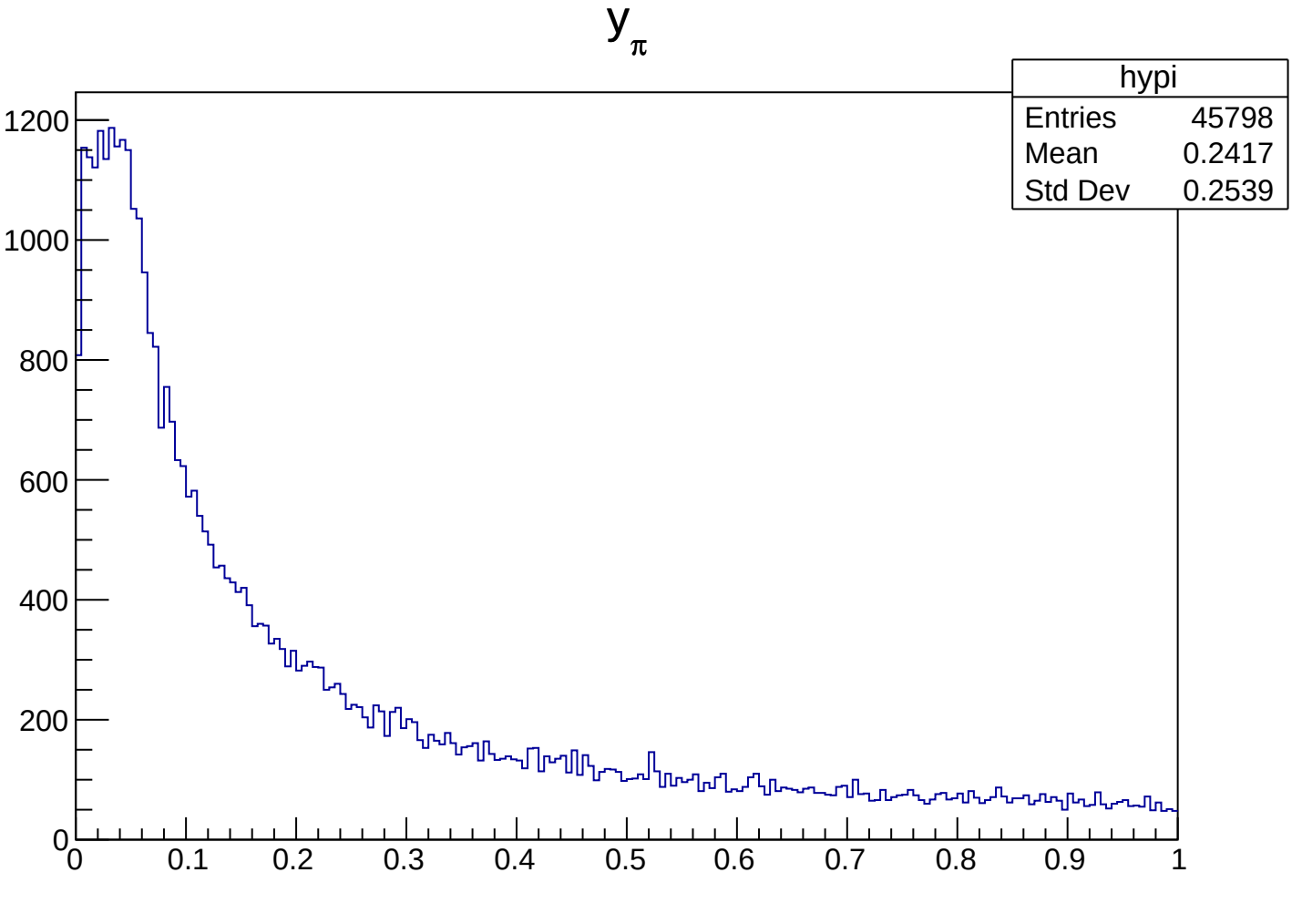

inv_MX2
Entries 45798
Mean 0
Std Dev 0
10^4
10^3
10^2
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1

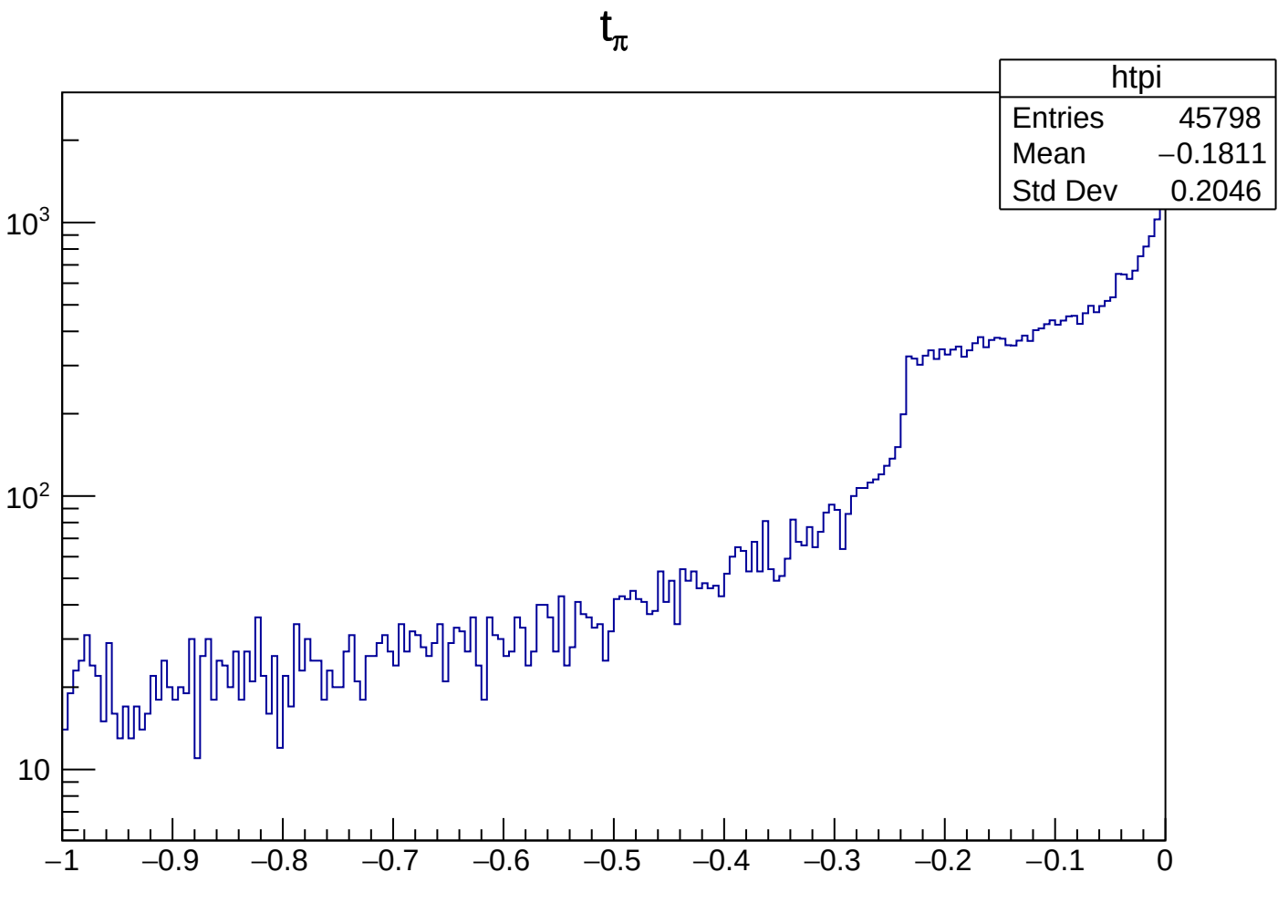

inv_alphaS
Entries 45798
Mean 0
Std Dev 0
10^4
10^3
10^2
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1

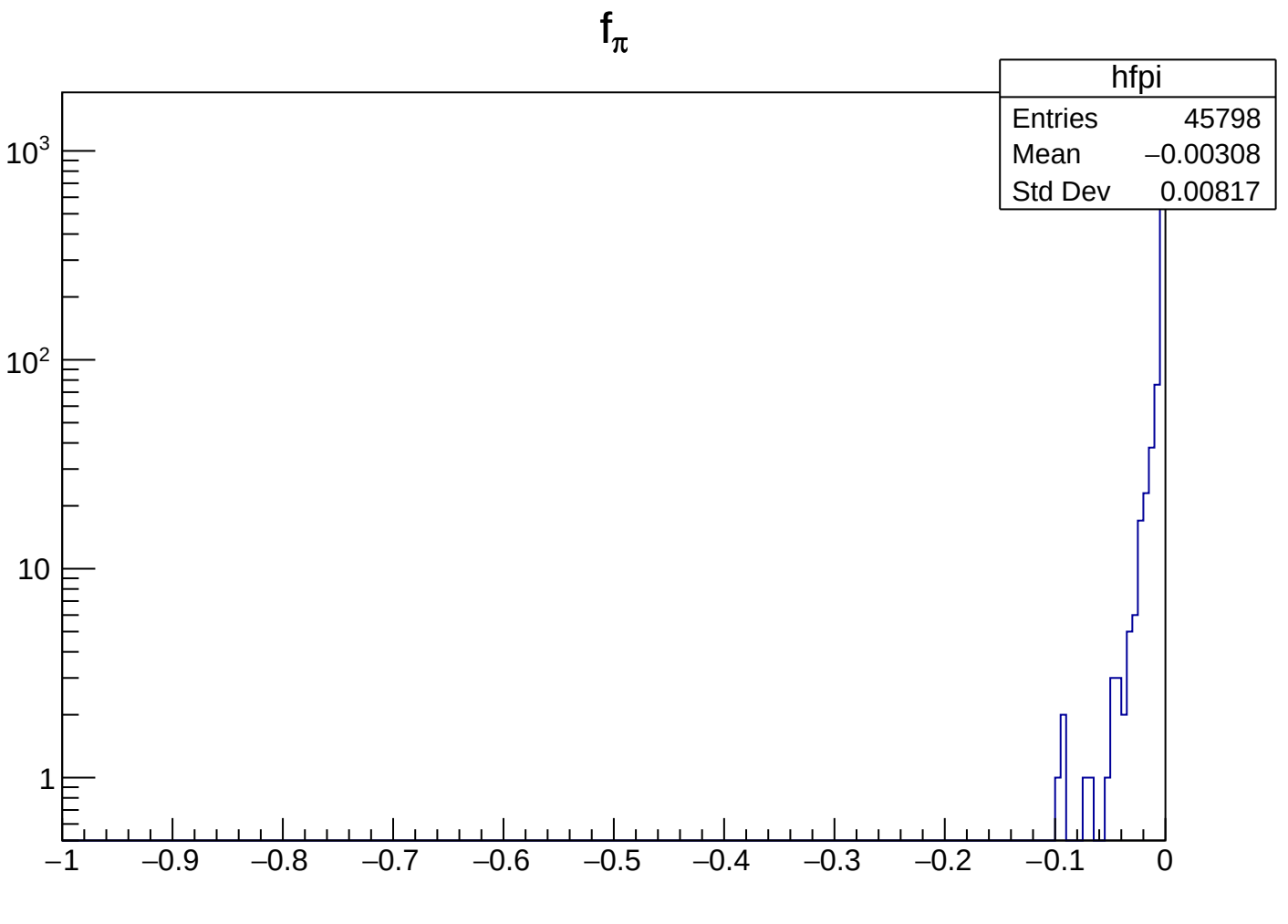

inv_pPerpS
Entries 45798
Mean 0
Std Dev 0
10^4
10^3
10^2
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1

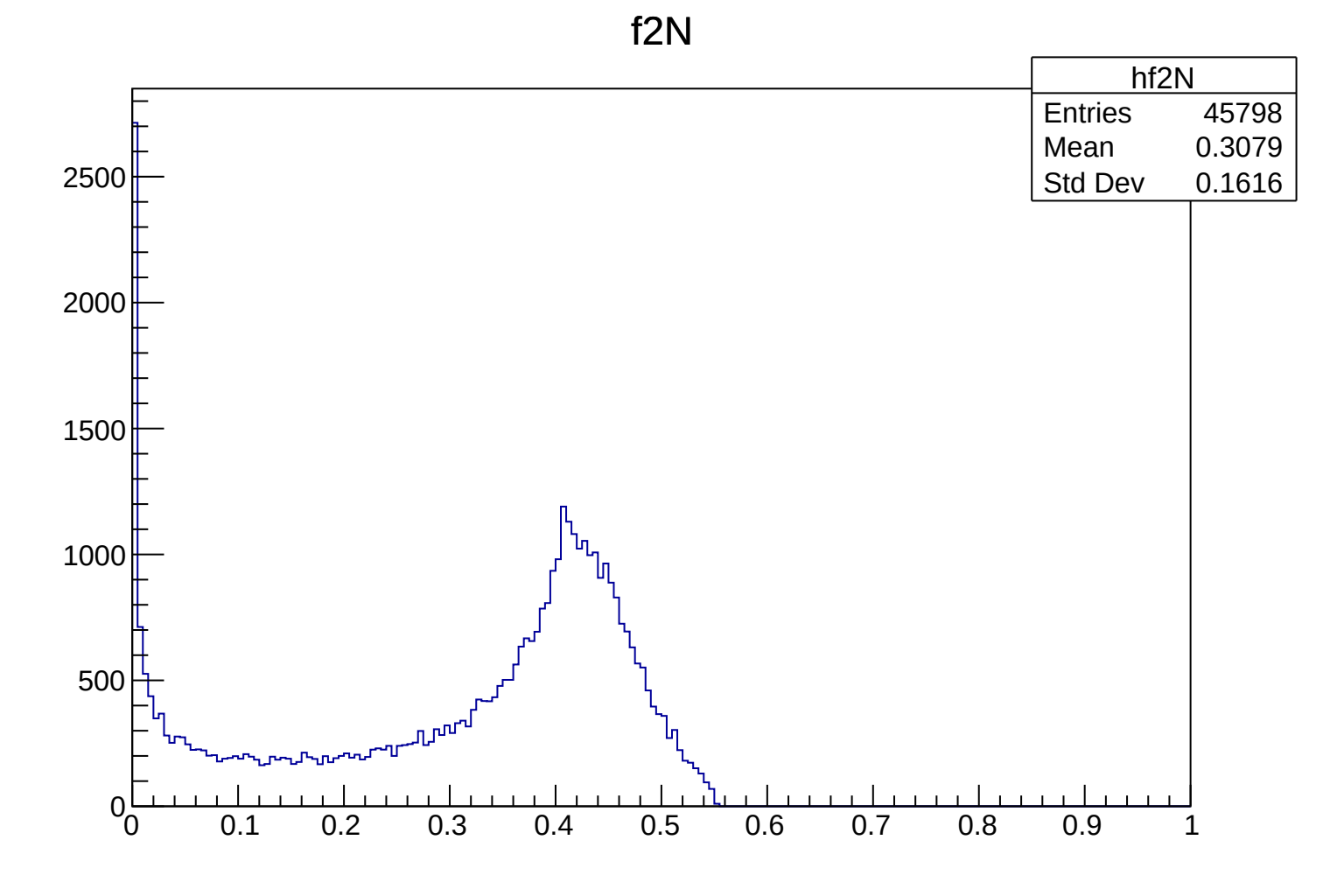

inv_pPerpZ
Entries 45798
Mean 0
Std Dev 0
10^4
10^3
10^2
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1

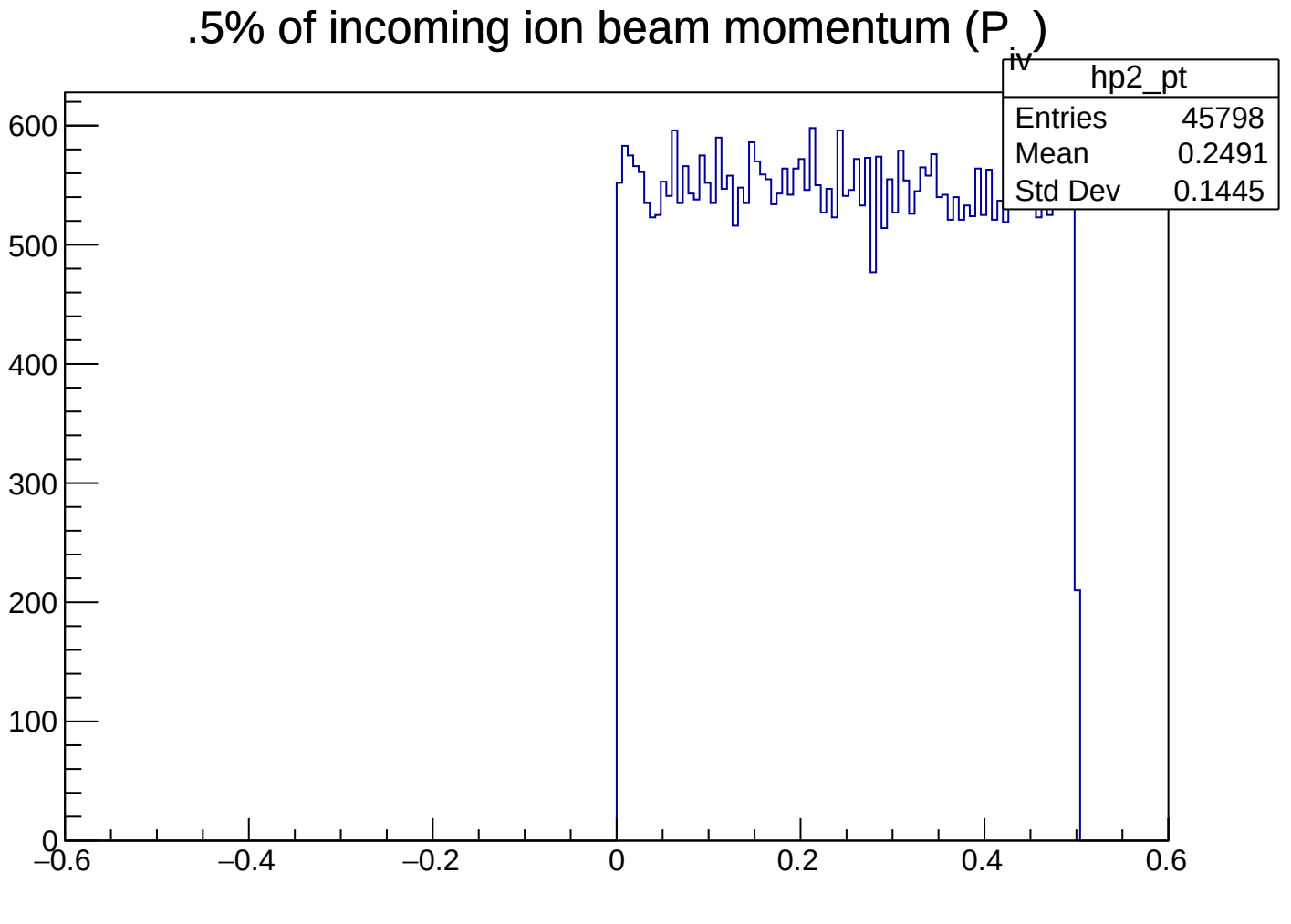

x_π
hxpi
Entries 45798
Mean 0.2986
Std Dev 0.2663
10^3
10^2
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1

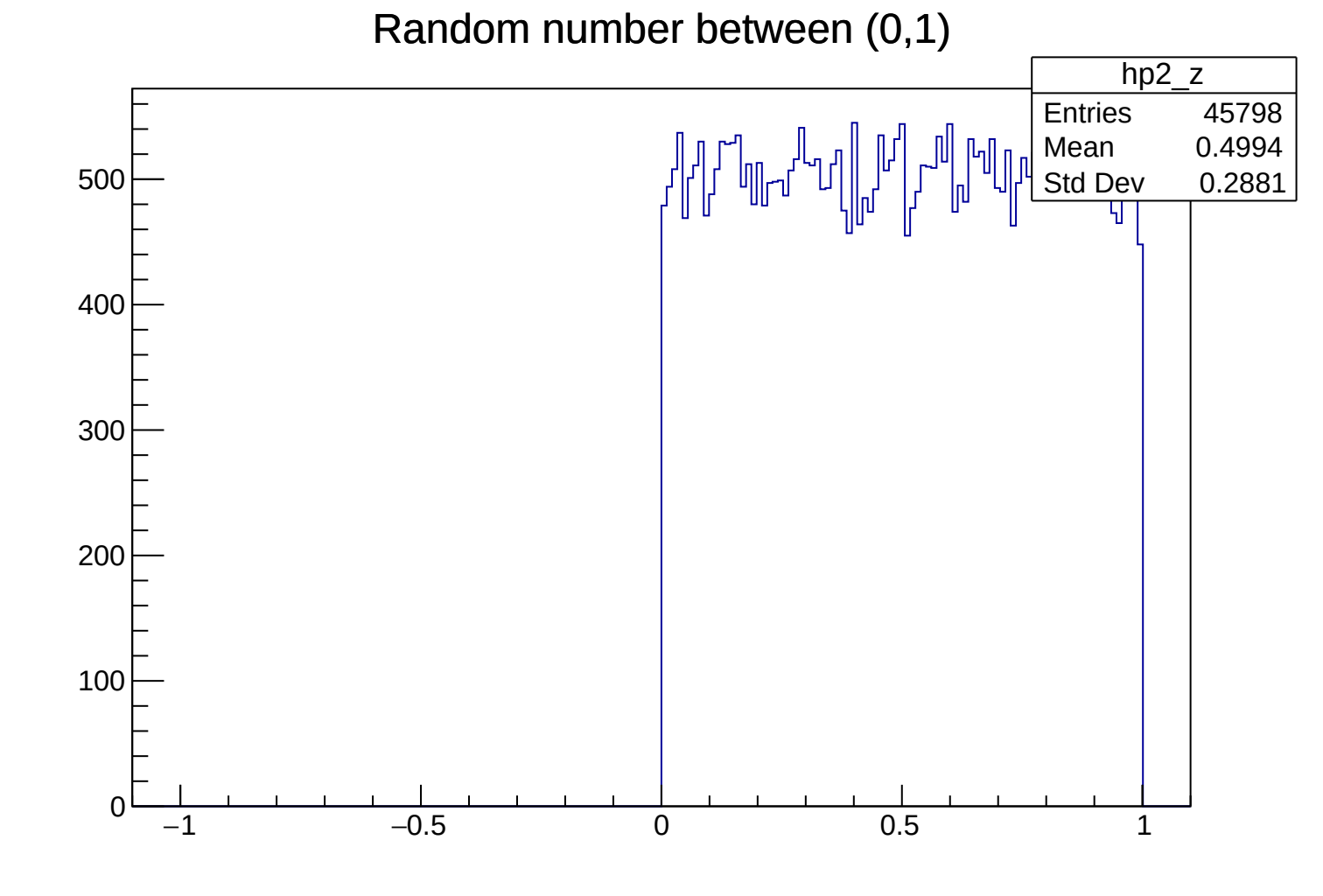

y_π
hypi
Entries 45798
Mean 0.2417
Std Dev 0.2539
1200
1000
800
600
400
200
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1

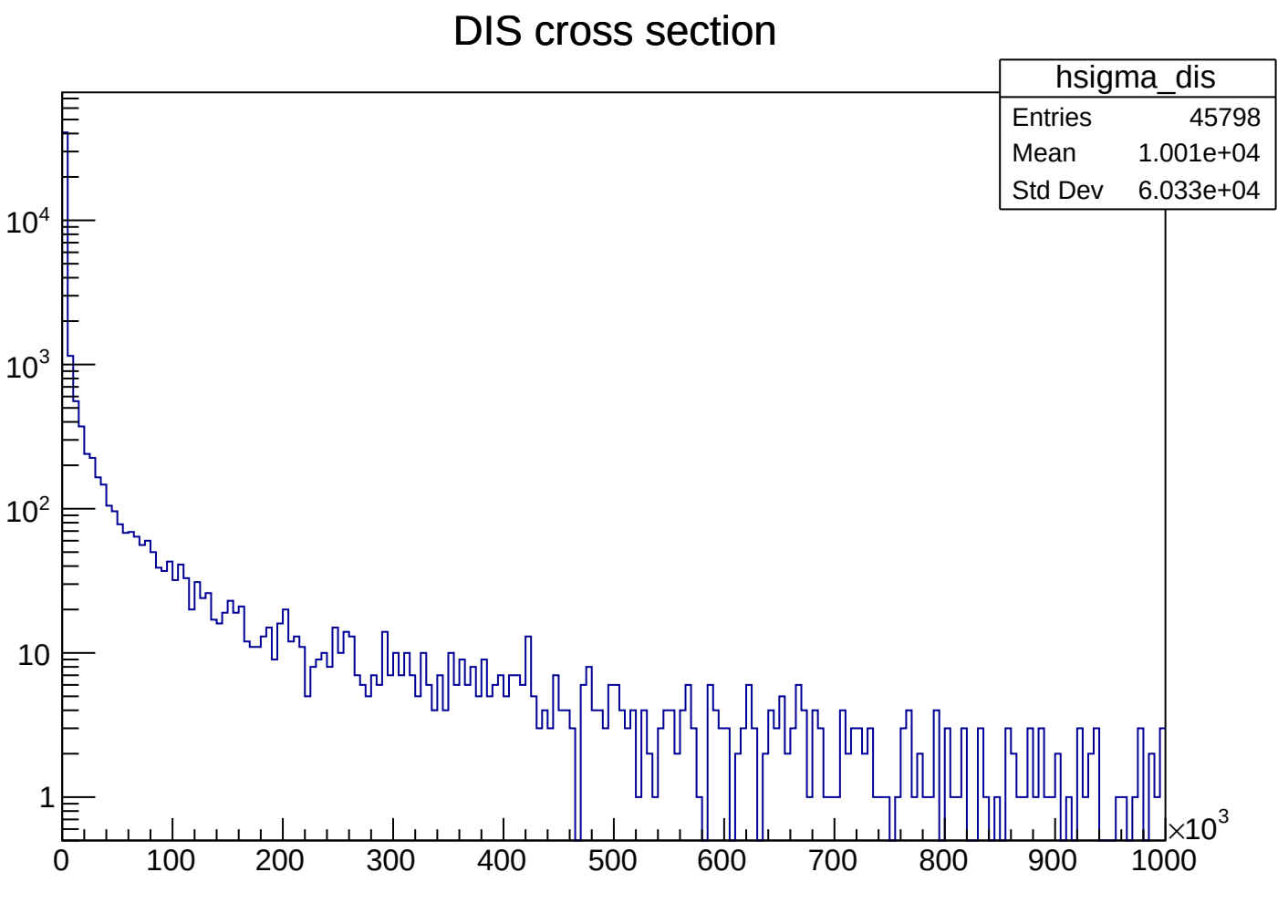

t_π
htpi
Entries 45798
Mean −0.1811
Std Dev 0.2046
10^3
10^2
10
−1
−0.9
−0.8
−0.7
−0.6
−0.5
−0.4
−0.3
−0.2
−0.1
0

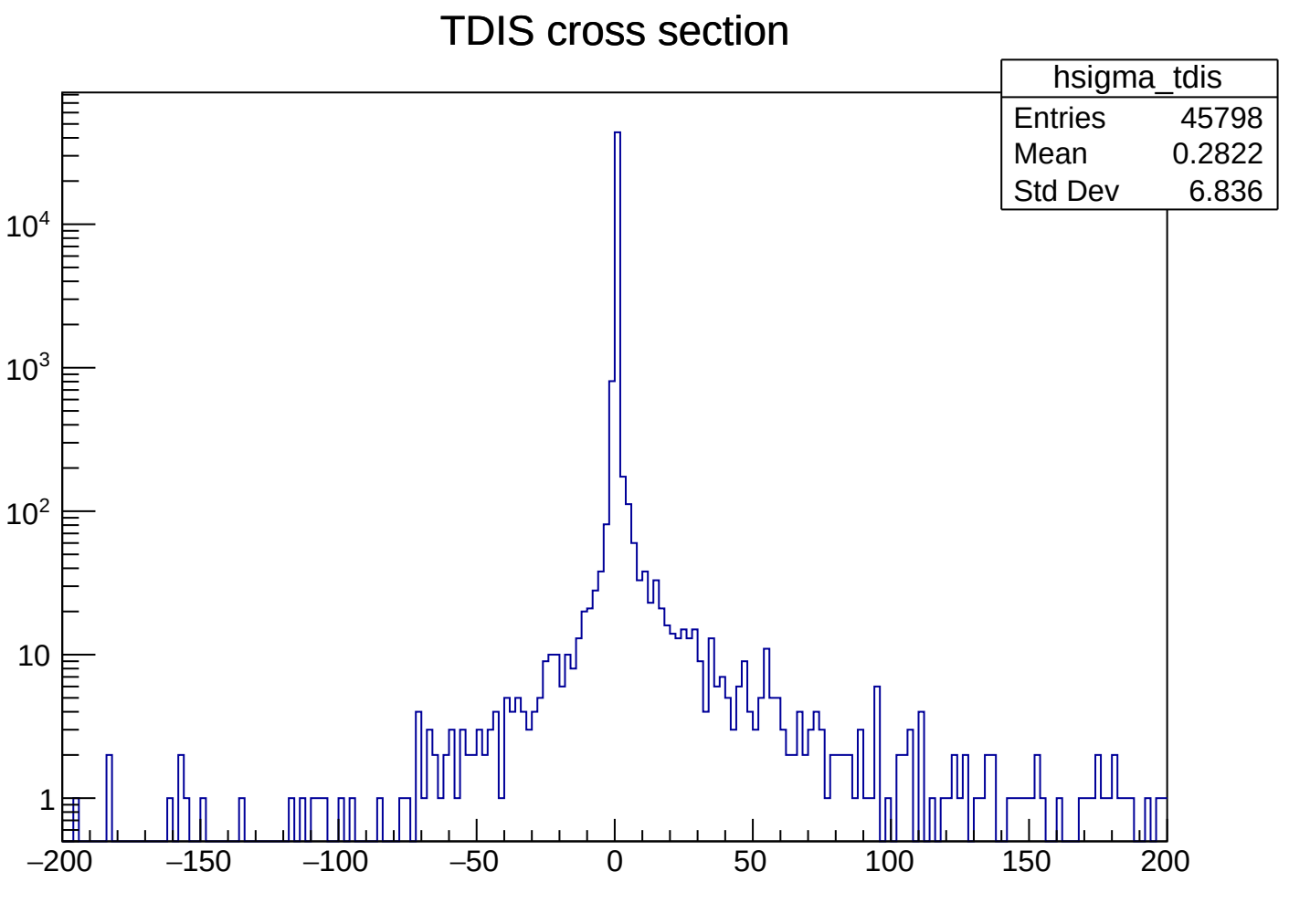

f_π
hfpi
Entries 45798
Mean −0.00308
Std Dev 0.00817
10^3
10^2
10
1
−1
−0.9
−0.8
−0.7
−0.6
−0.5
−0.4
−0.3
−0.2
−0.1
0

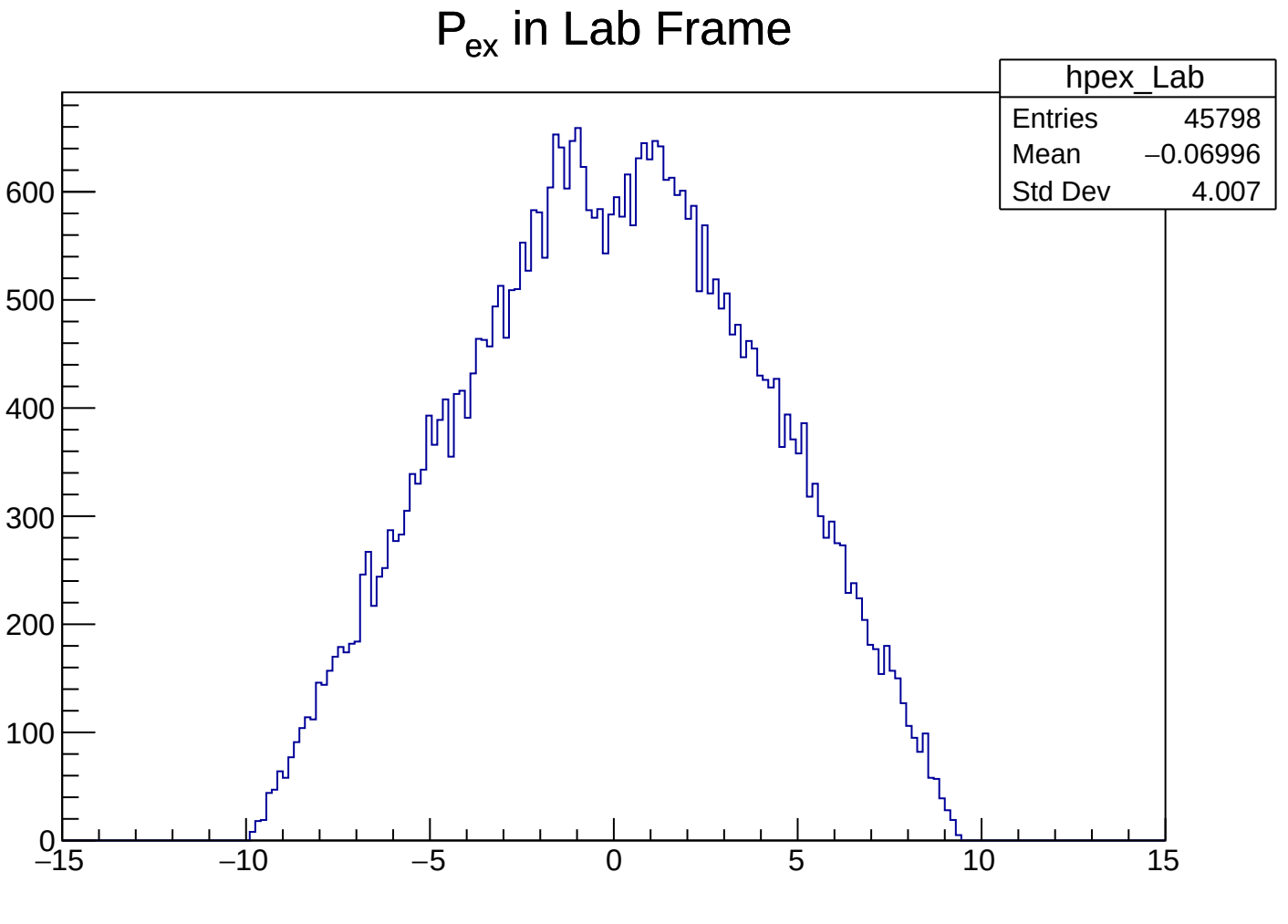

f2N
hf2N
Entries 45798
Mean 0.3079
Std Dev 0.1616
2500
2000
1500
1000
500
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1

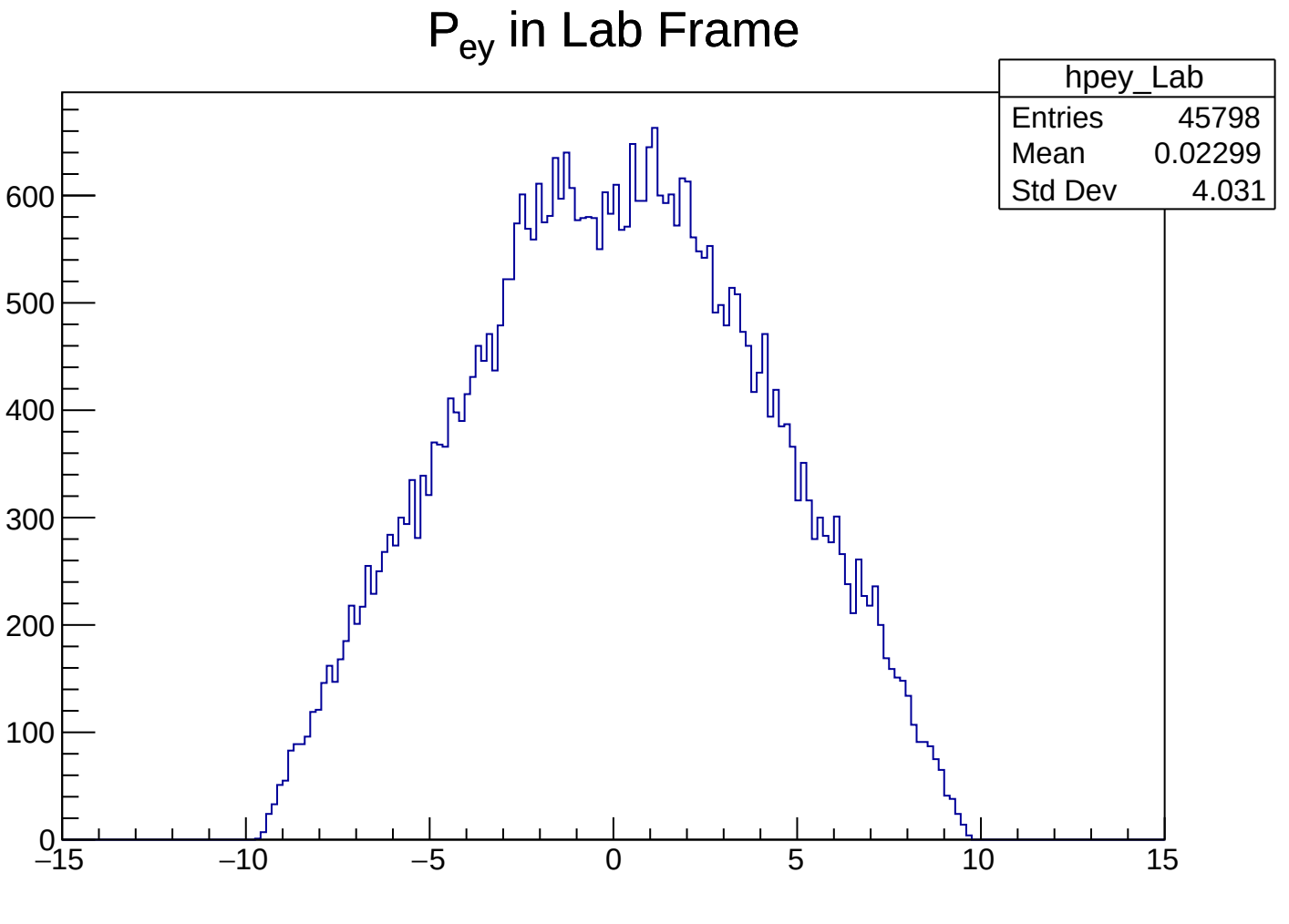

.5% of incoming ion beam momentum (P iv)
hp2_pt
Entries 45798
Mean 0.2491
Std Dev 0.1445
600
500
400
300
200
100
0
–0.6
–0.4
–0.2
0
0.2
0.4
0.6

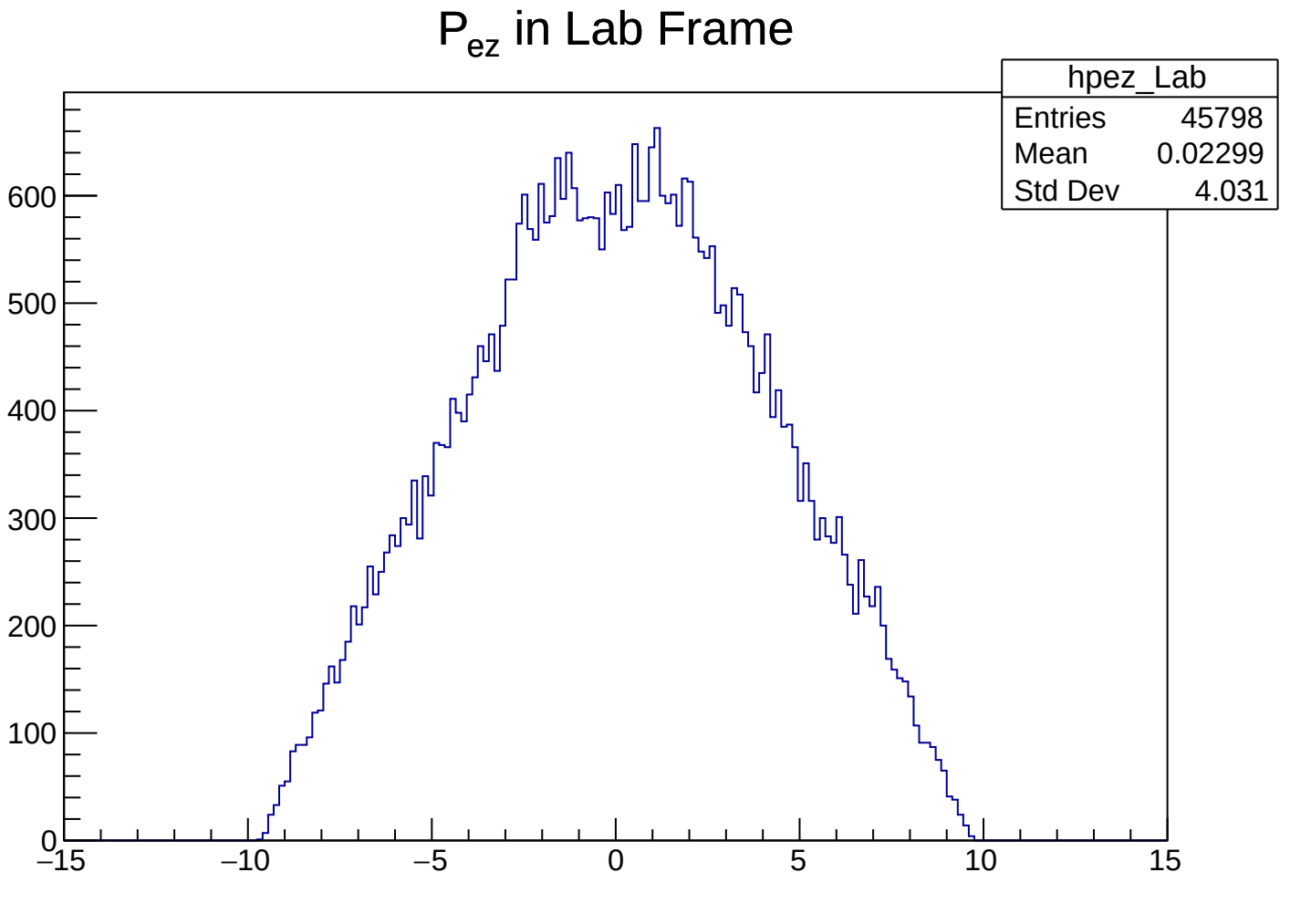

Random number between (0,1)
hp2_z
Entries 45798
Mean 0.4994
Std Dev 0.2881
500
400
300
200
100
0
−1
−0.5
0
0.5
1

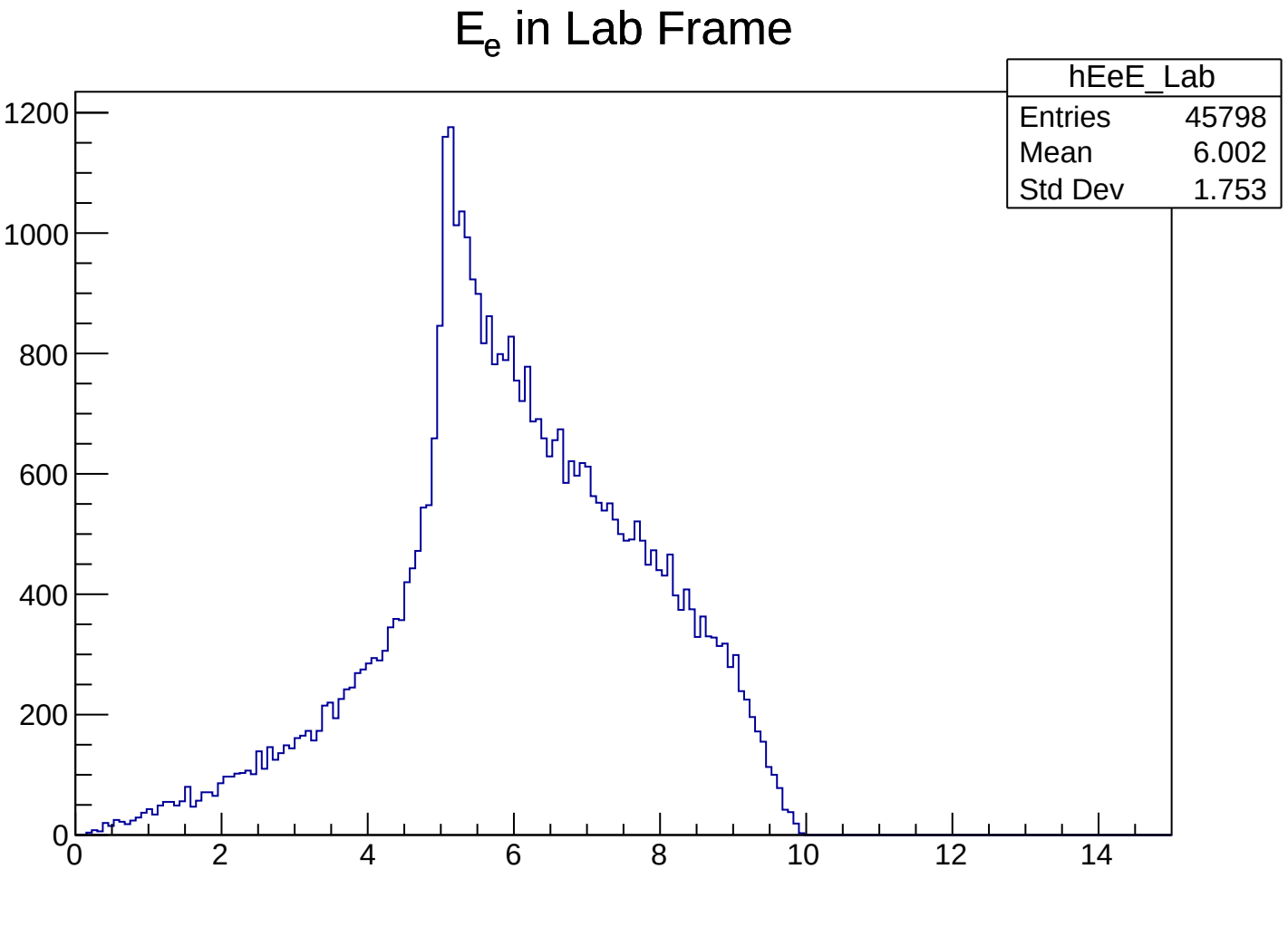

DIS cross section
hsigma_dis
Entries 45798
Mean 1.001e+04
Std Dev 6.033e+04
10^4
10^3
10^2
10
1
0
100
200
300
400
500
600
700
800
900
1000
$\times 10^3$

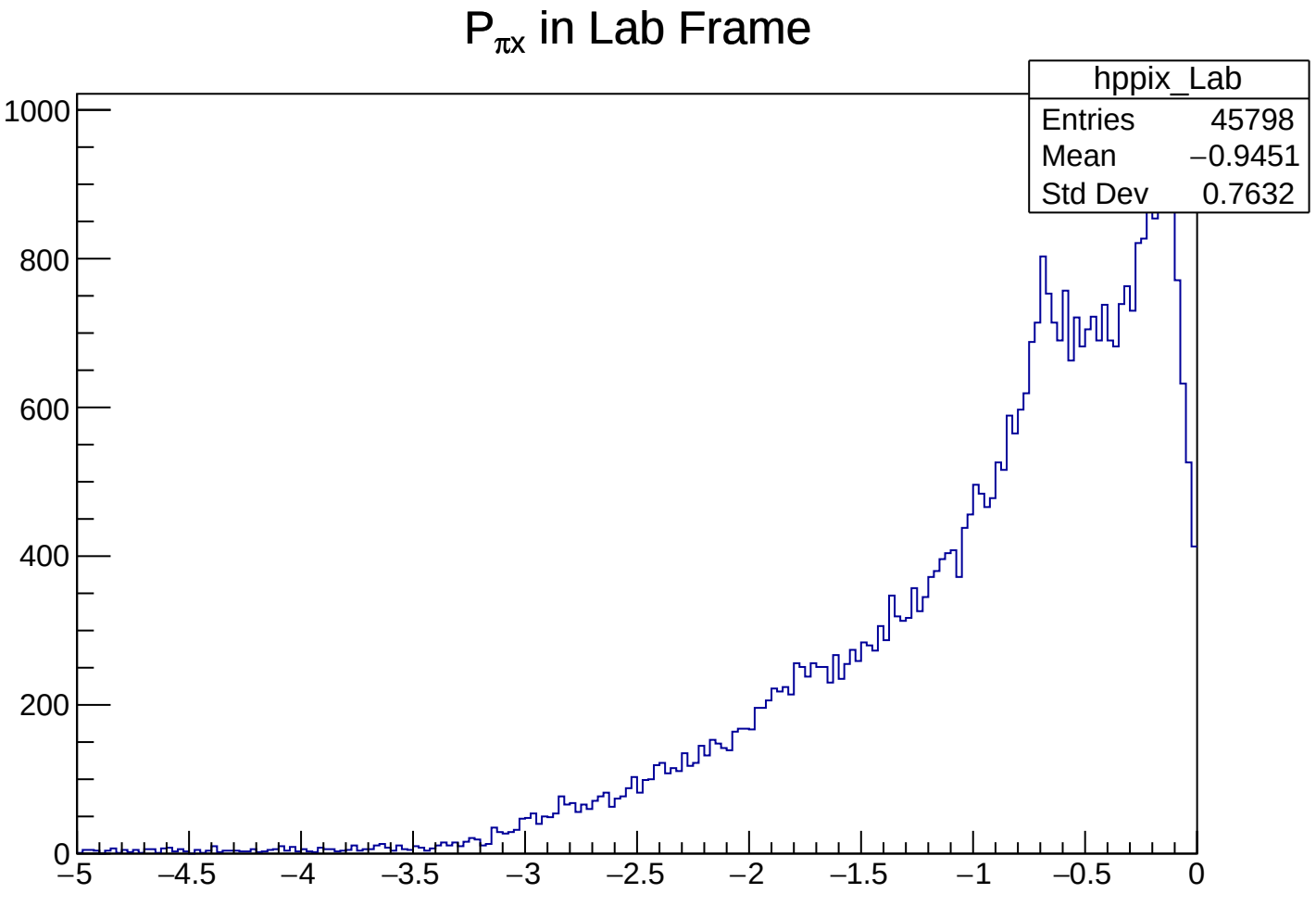

TDIS cross section
hsigma_tdis
Entries 45798
Mean 0.2822
Std Dev 6.836
10^4
10^3
10^2
10
1
−200
−150
−100
−50
0
50
100
150
200

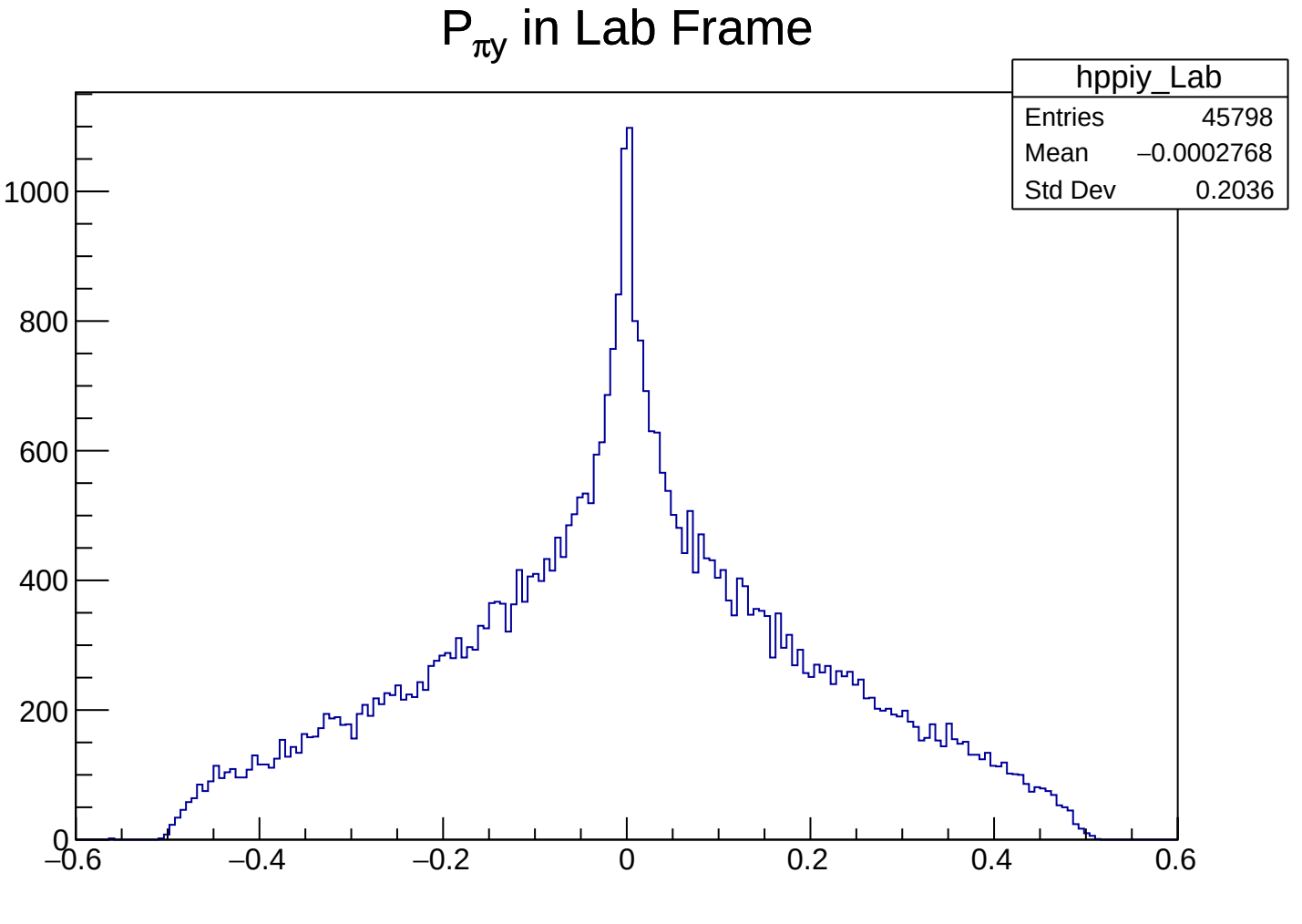

P_{ex} in Lab Frame
hpex_Lab
Entries 45798
Mean −0.06996
Std Dev 4.007
600
500
400
300
200
100
0
−15
−10
−5
0
5
10
15

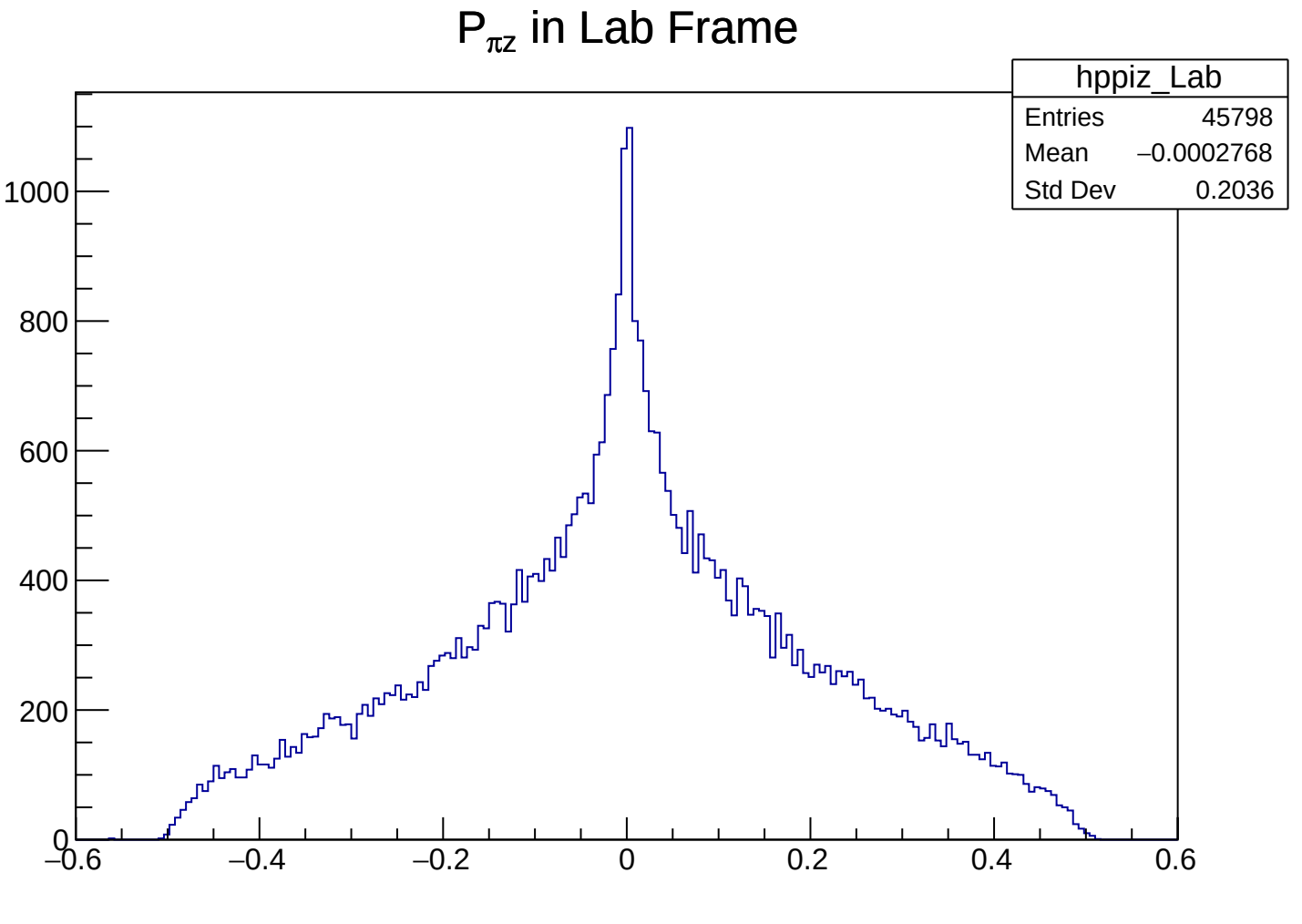

P_{ey} in Lab Frame
hpey_Lab
Entries 45798
Mean 0.02299
Std Dev 4.031
600
500
400
300
200
100
0
−15
−10
−5
0
5
10
15

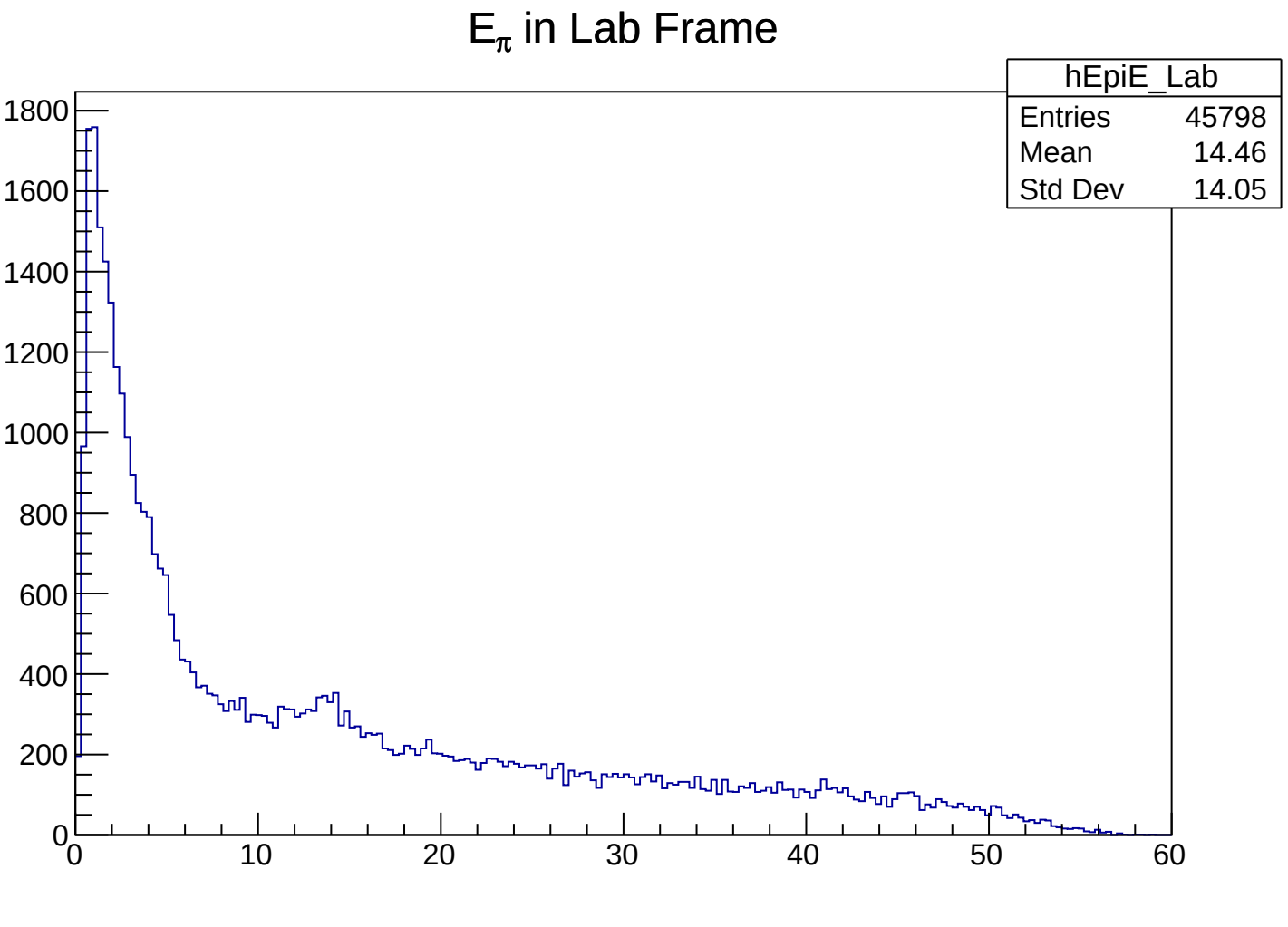

P_{ez} in Lab Frame
hpez_Lab
Entries 45798
Mean 0.02299
Std Dev 4.031
600
500
400
300
200
100
0
−15
−10
−5
0
5
10
15

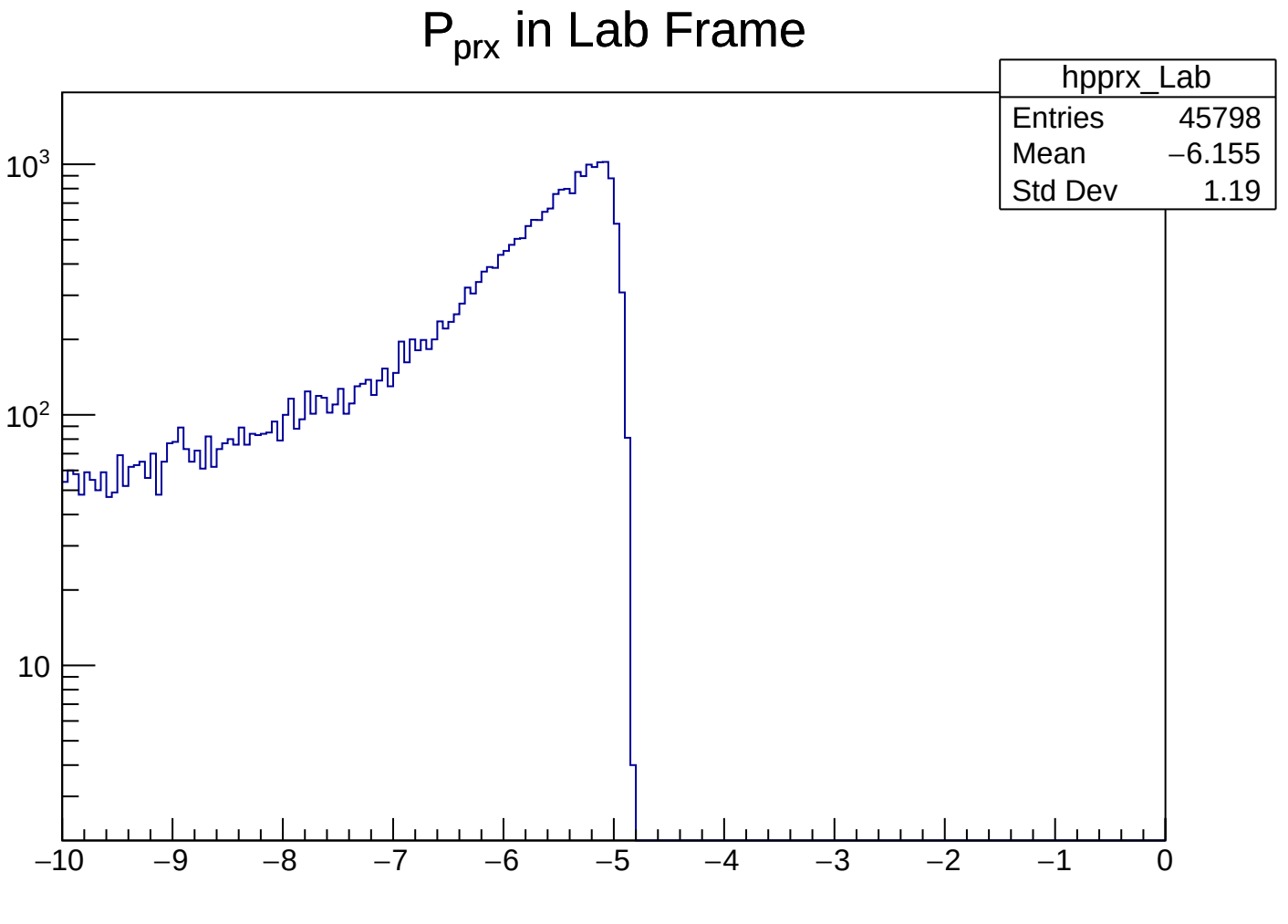

E_e in Lab Frame
hEeE_Lab
Entries 45798
Mean 6.002
Std Dev 1.753
1200
1000
800
600
400
200
0
0
2
4
6
8
10
12
14

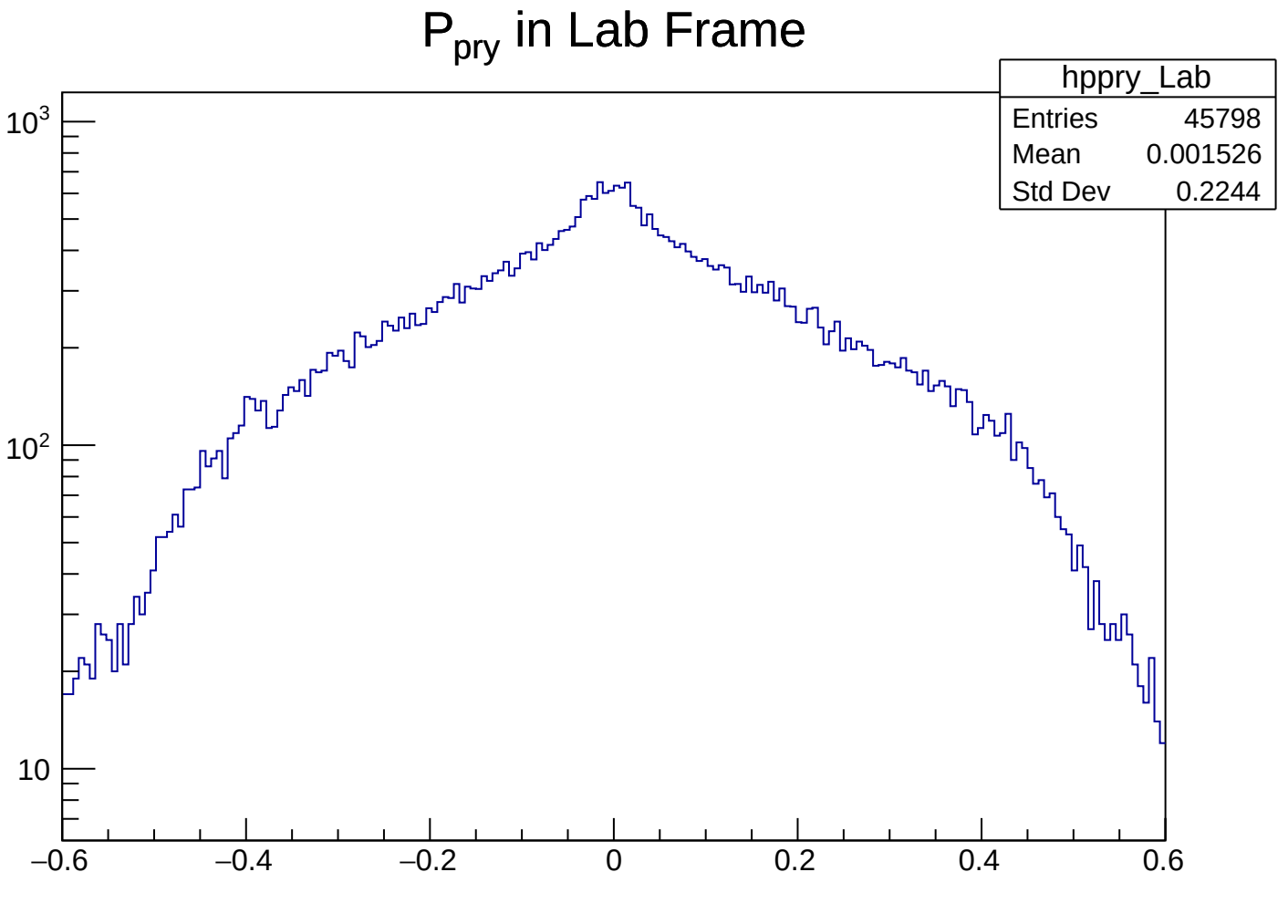

$P_{\pi x}$ in Lab Frame
hppix_Lab
Entries 45798
Mean −0.9451
Std Dev 0.7632
1000
800
600
400
200
0
−5
−4.5
−4
−3.5
−3
−2.5
−2
−1.5
−1
−0.5
0

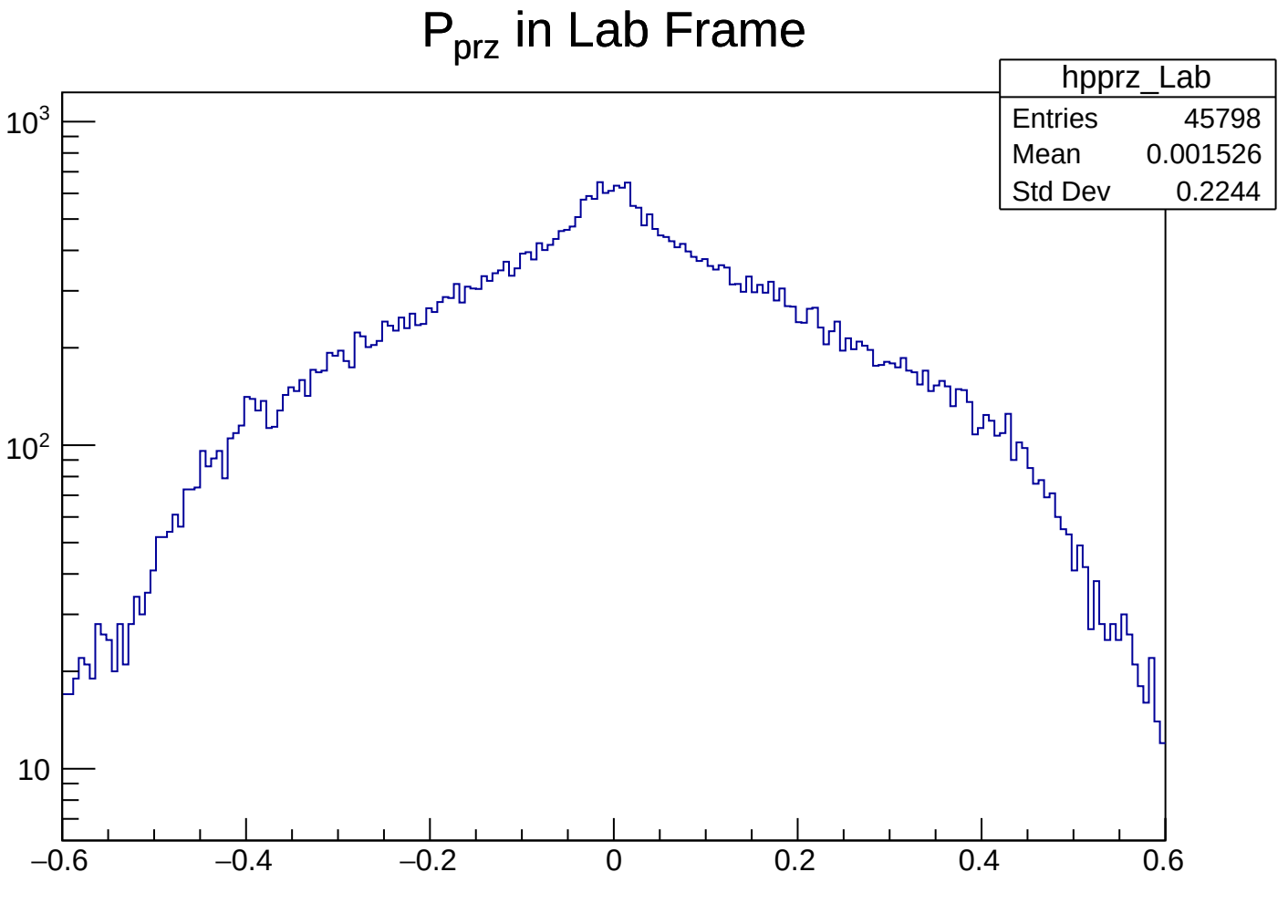

$P_{\pi y}$ in Lab Frame
hppiy_Lab
Entries 45798
Mean −0.0002768
Std Dev 0.2036
1000
800
600
400
200
0
−0.6
−0.4
−0.2
0
0.2
0.4
0.6

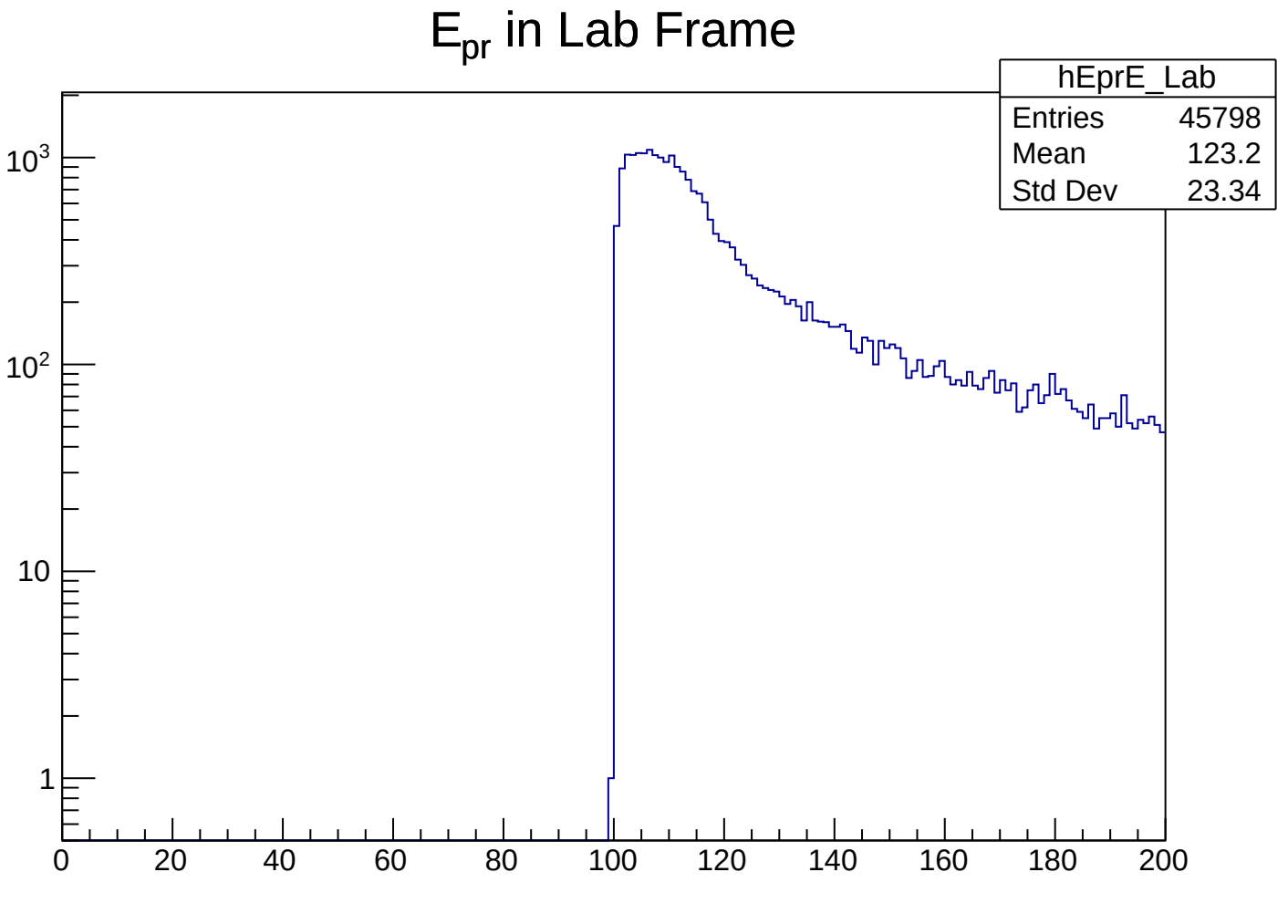

$P_{\pi z}$ in Lab Frame
hppiz_Lab
Entries 45798
Mean −0.0002768
Std Dev 0.2036
1000
800
600
400
200
0
−0.6
−0.4
−0.2
0
0.2
0.4
0.6

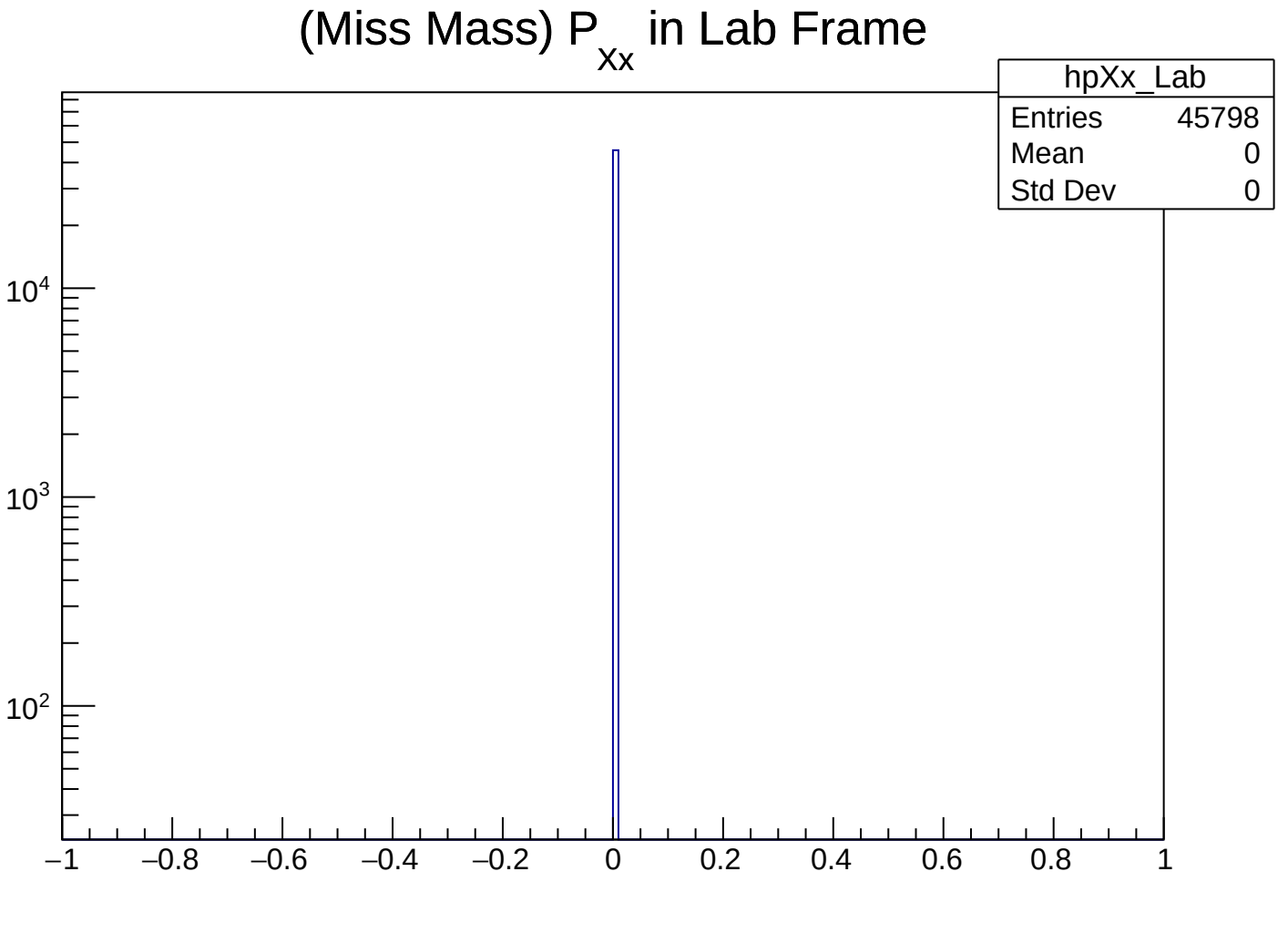

E_π in Lab Frame
hEpiE_Lab
Entries 45798
Mean 14.46
Std Dev 14.05
1800
1600
1400
1200
1000
800
600
400
200
0
0
10
20
30
40
50
60

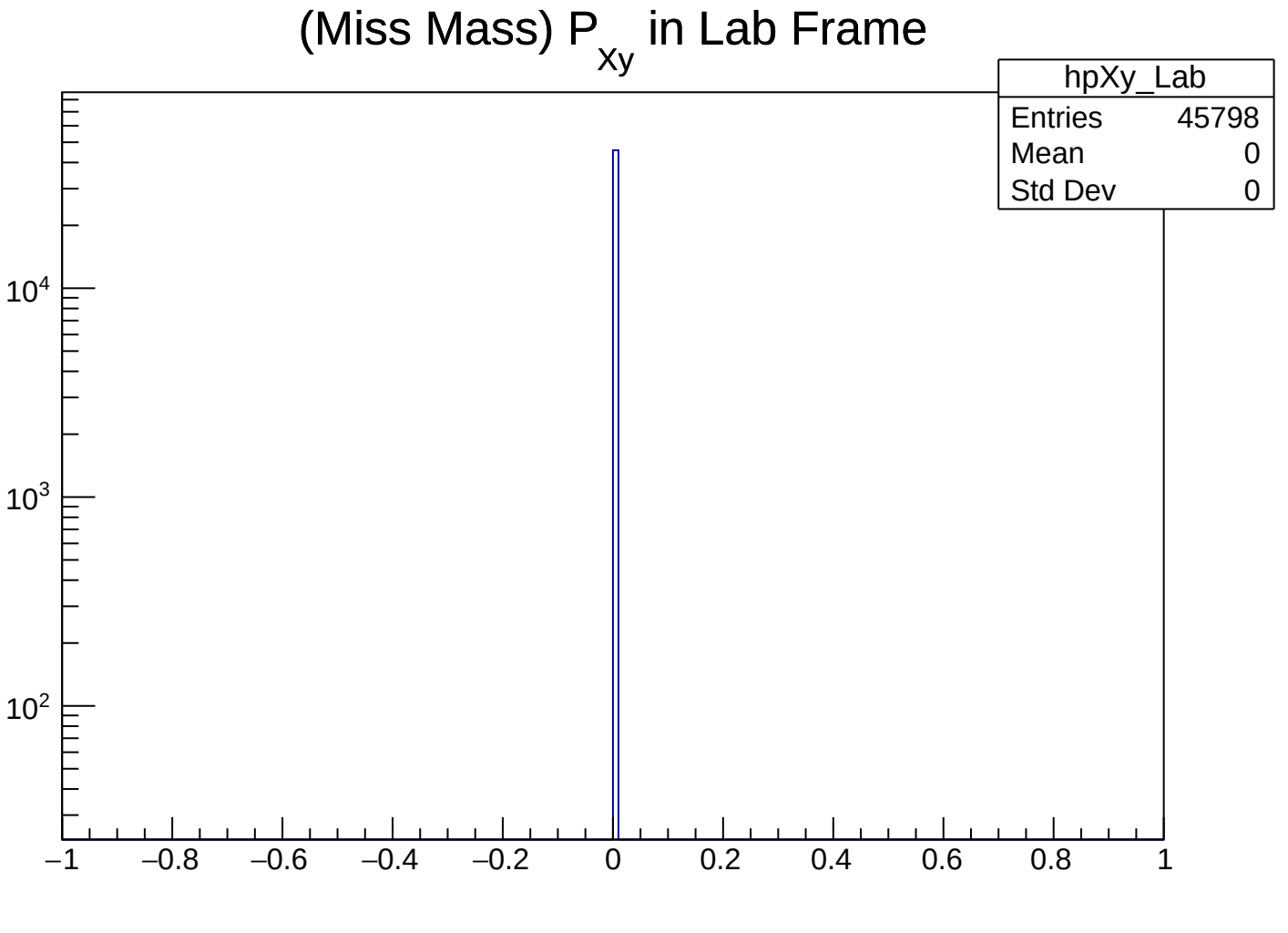

P prx in Lab Frame
hpprx_Lab
Entries 45798
Mean −6.155
Std Dev 1.19
10^3
10^2
10
−10
−9
−8
−7
−6
−5
−4
−3
−2
−1
0

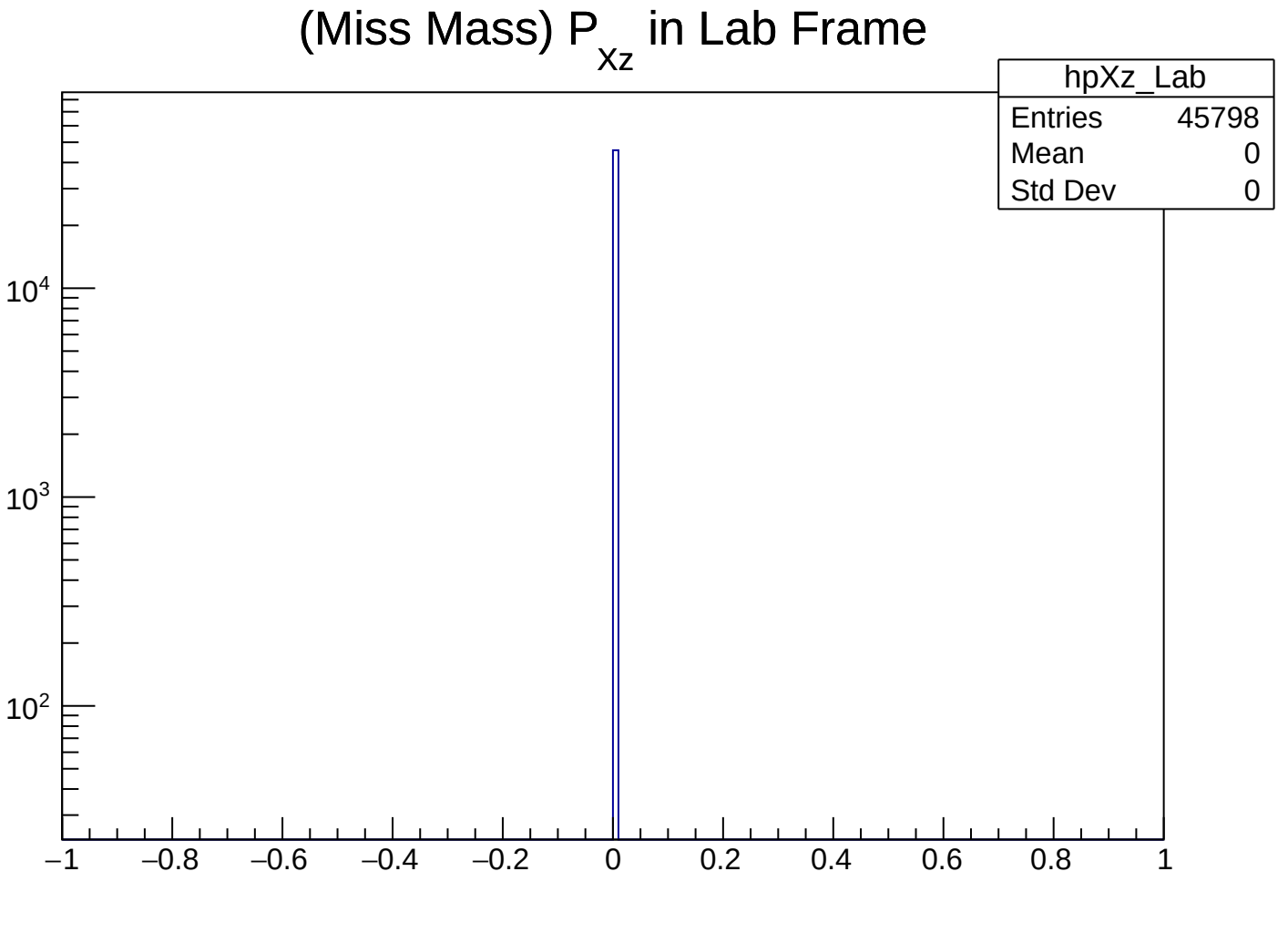

P_{pry} in Lab Frame
hppry_Lab
Entries 45798
Mean 0.001526
Std Dev 0.2244
10^3
10^2
10
–0.6
–0.4
–0.2
0
0.2
0.4
0.6

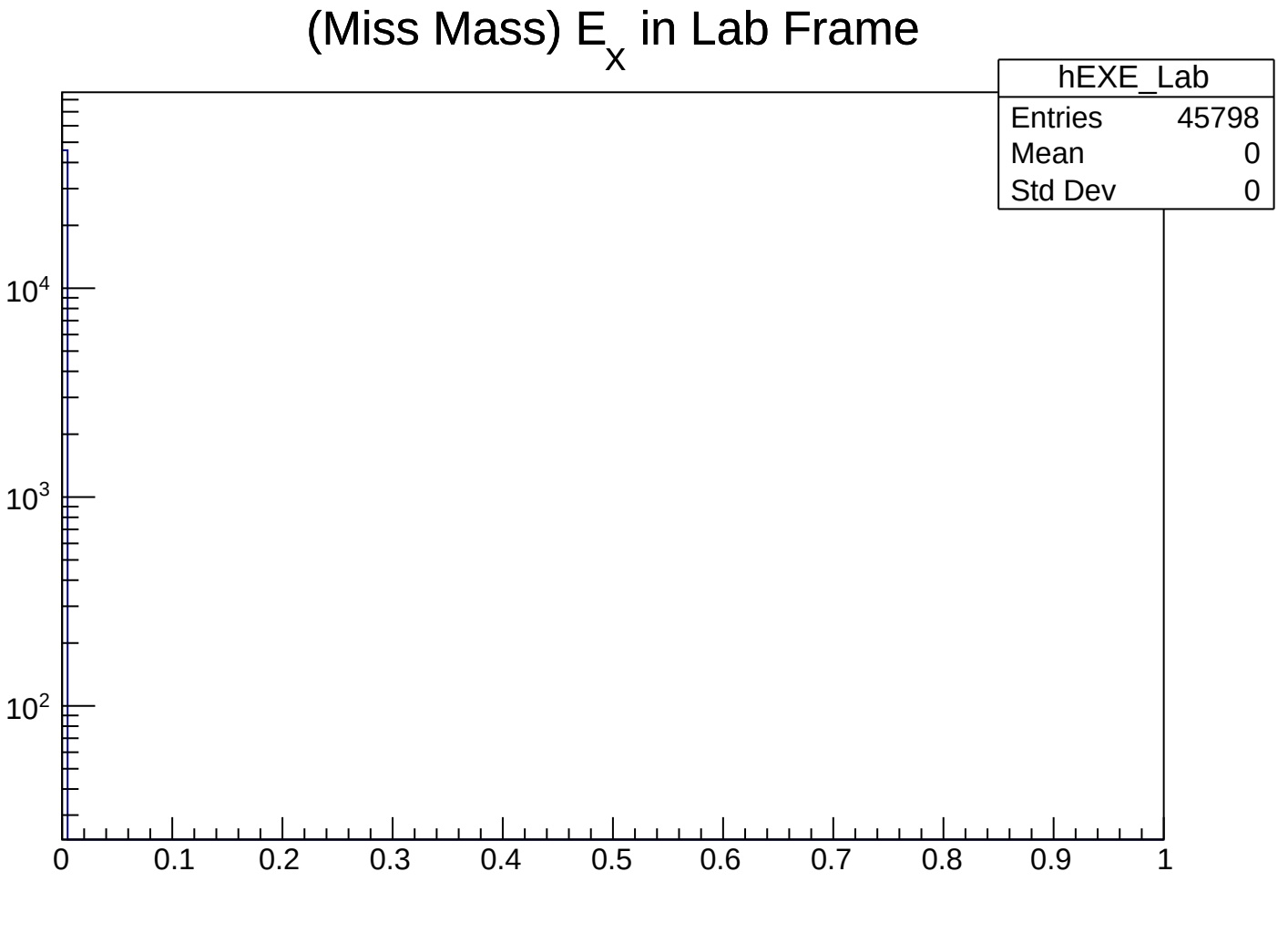

P_{prz} in Lab Frame
hpprz_Lab
Entries 45798
Mean 0.001526
Std Dev 0.2244
10^3
10^2
10
–0.6
–0.4
–0.2
0
0.2
0.4
0.6

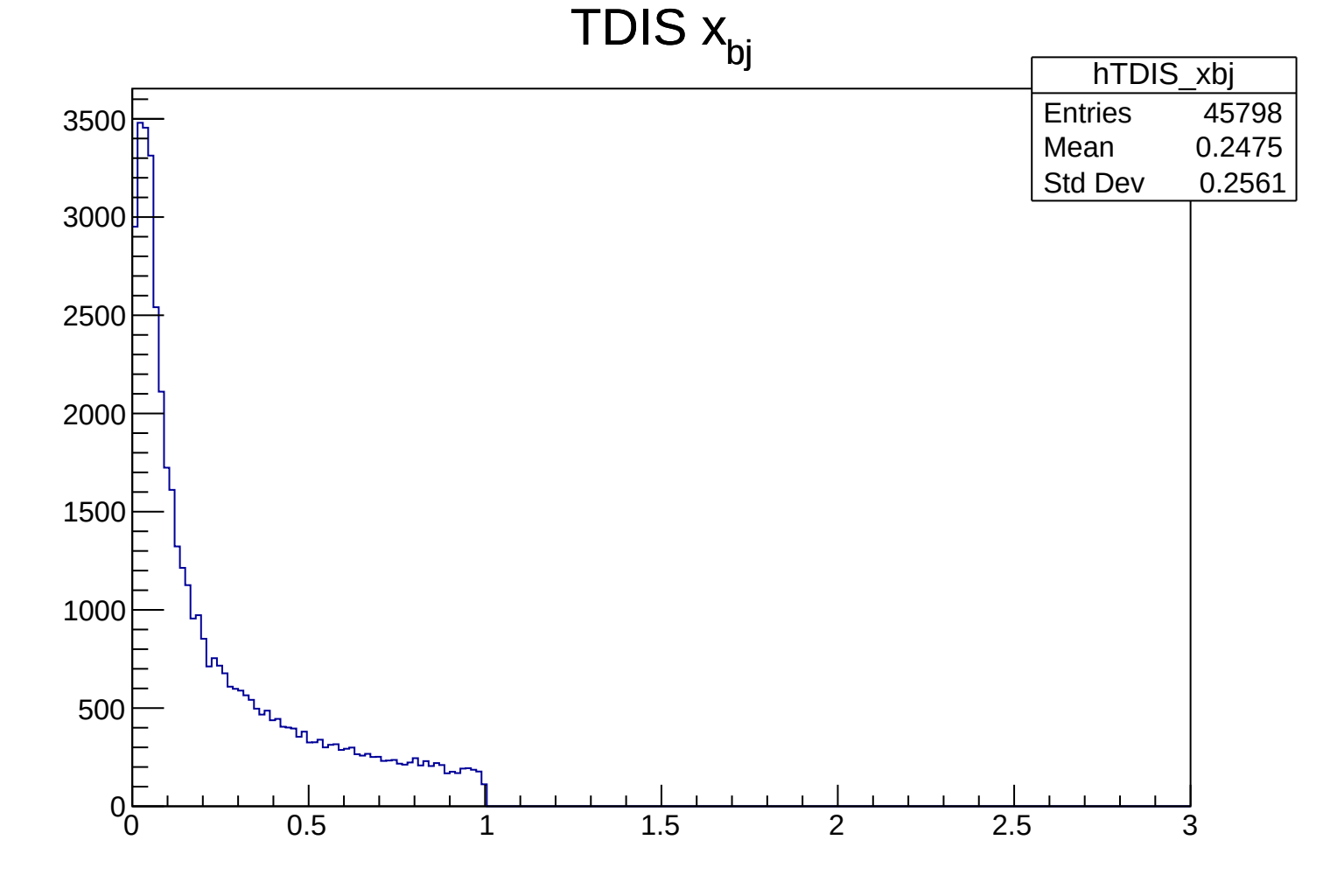

E_{pr} in Lab Frame
hEprE_Lab
Entries 45798
Mean 123.2
Std Dev 23.34
10^3
10^2
10
1
0
20
40
60
80
100
120
140
160
180
200

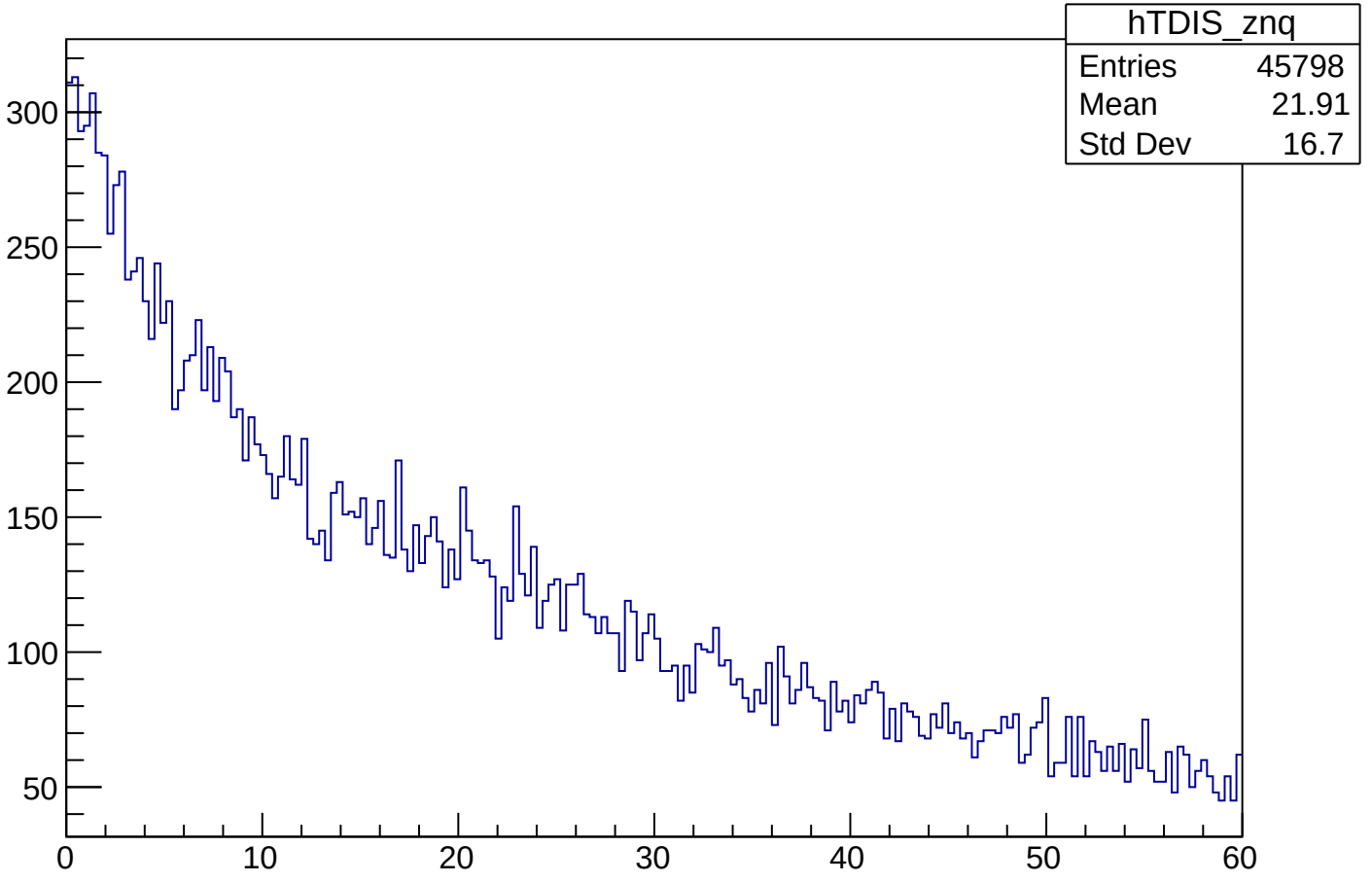

(Miss Mass) P Xx in Lab Frame
hpXx_Lab
Entries 45798
Mean 0
Std Dev 0
10^4
10^3
10^2
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1

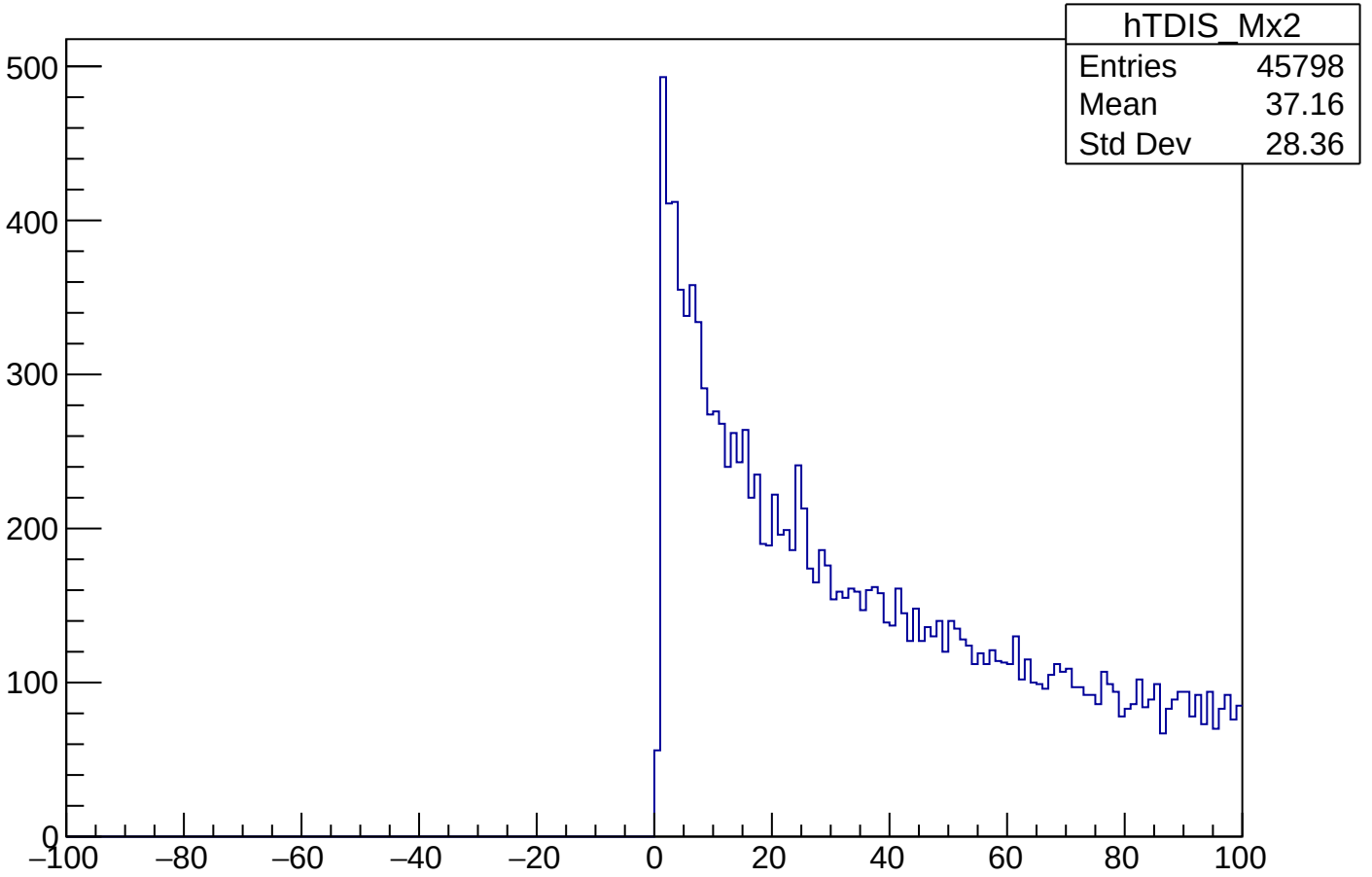

(Miss Mass) P Xy in Lab Frame
hpXy_Lab
Entries 45798
Mean 0
Std Dev 0
10^4
10^3
10^2
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1

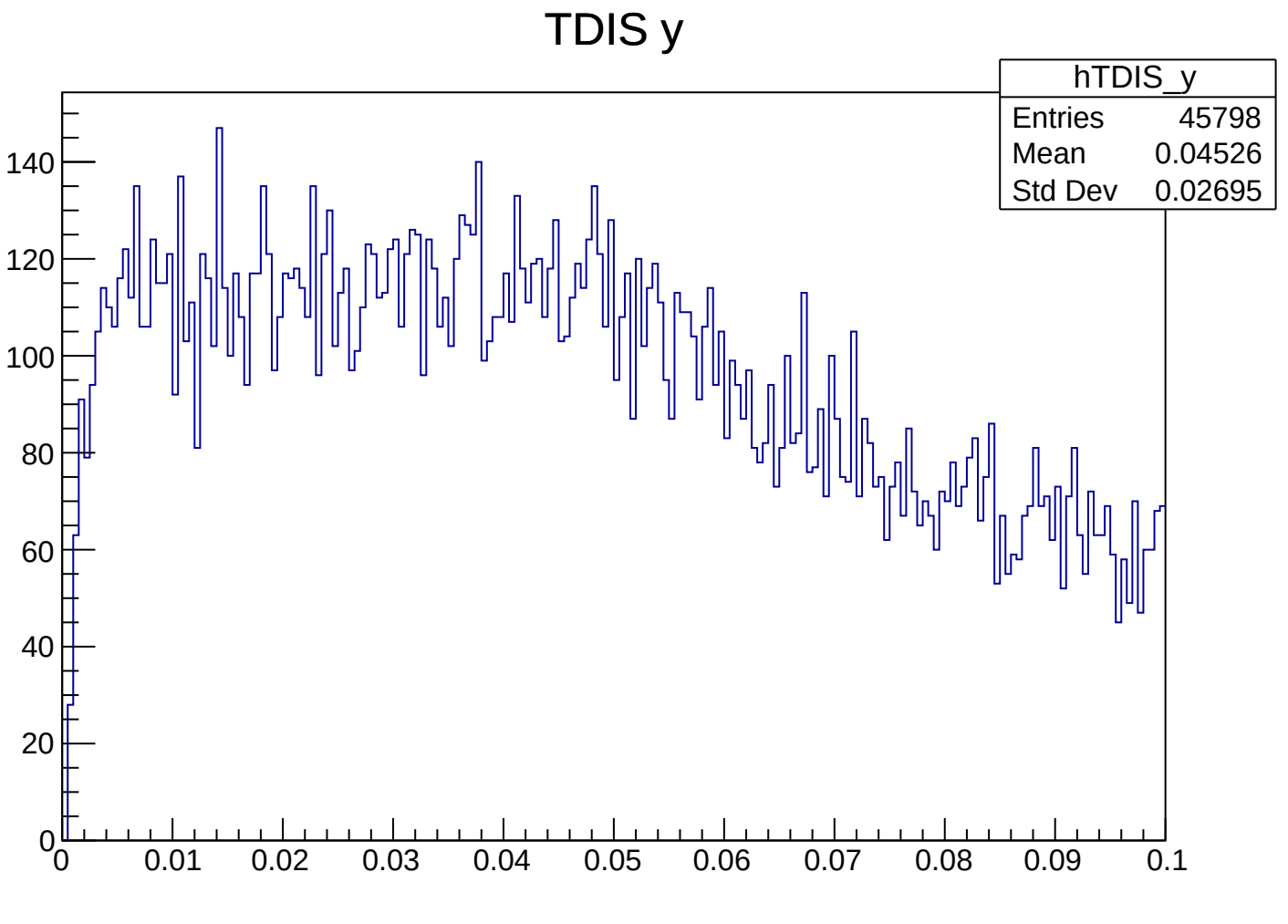

(Miss Mass) P Xz in Lab Frame
hpXz_Lab
Entries 45798
Mean 0
Std Dev 0
10^4
10^3
10^2
−1
−0.8
−0.6
−0.4
−0.2
0
0.2
0.4
0.6
0.8
1

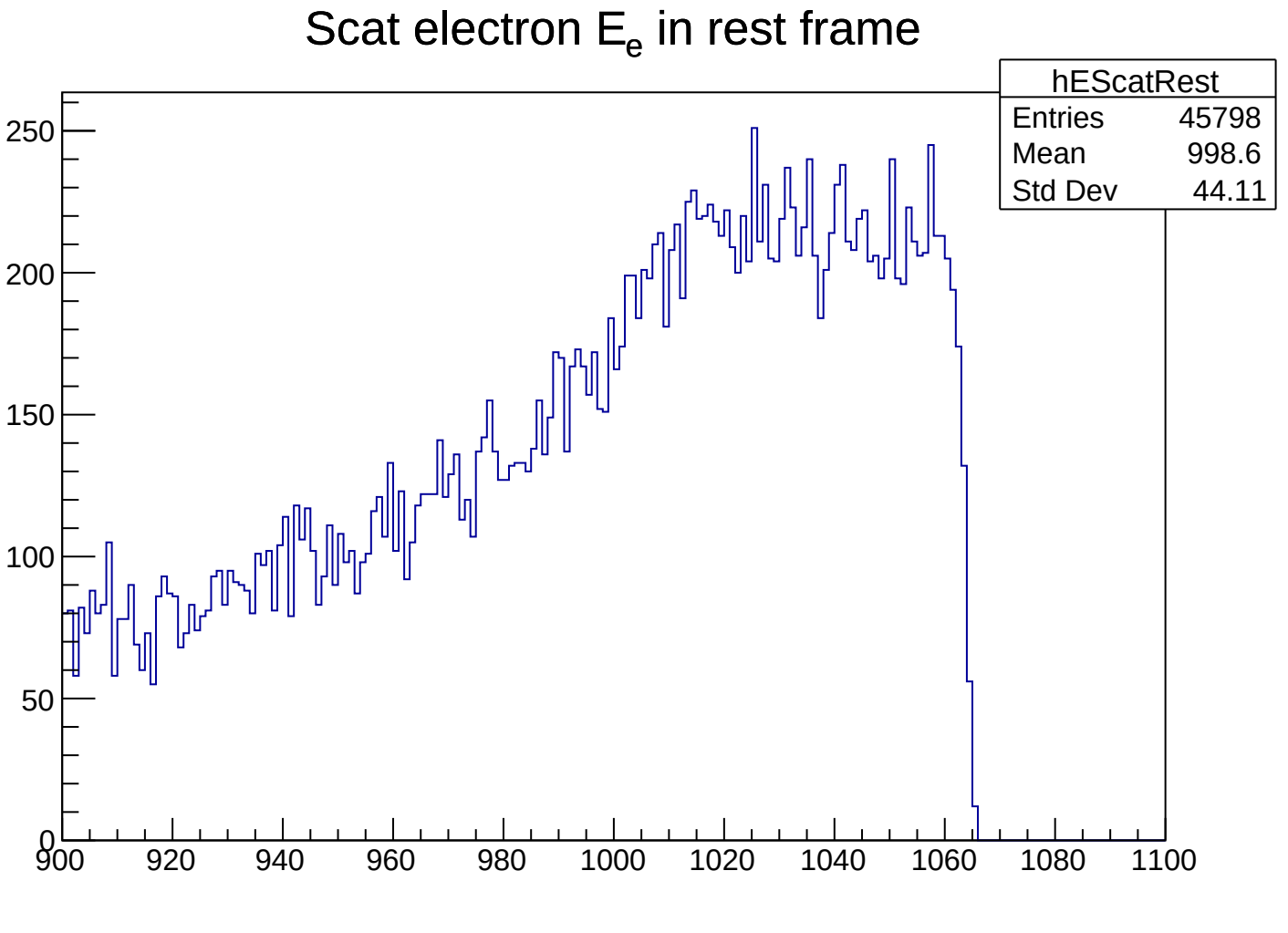

(Miss Mass) E_x in Lab Frame
hEXE_Lab
Entries 45798
Mean 0
Std Dev 0
10^4
10^3
10^2
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1

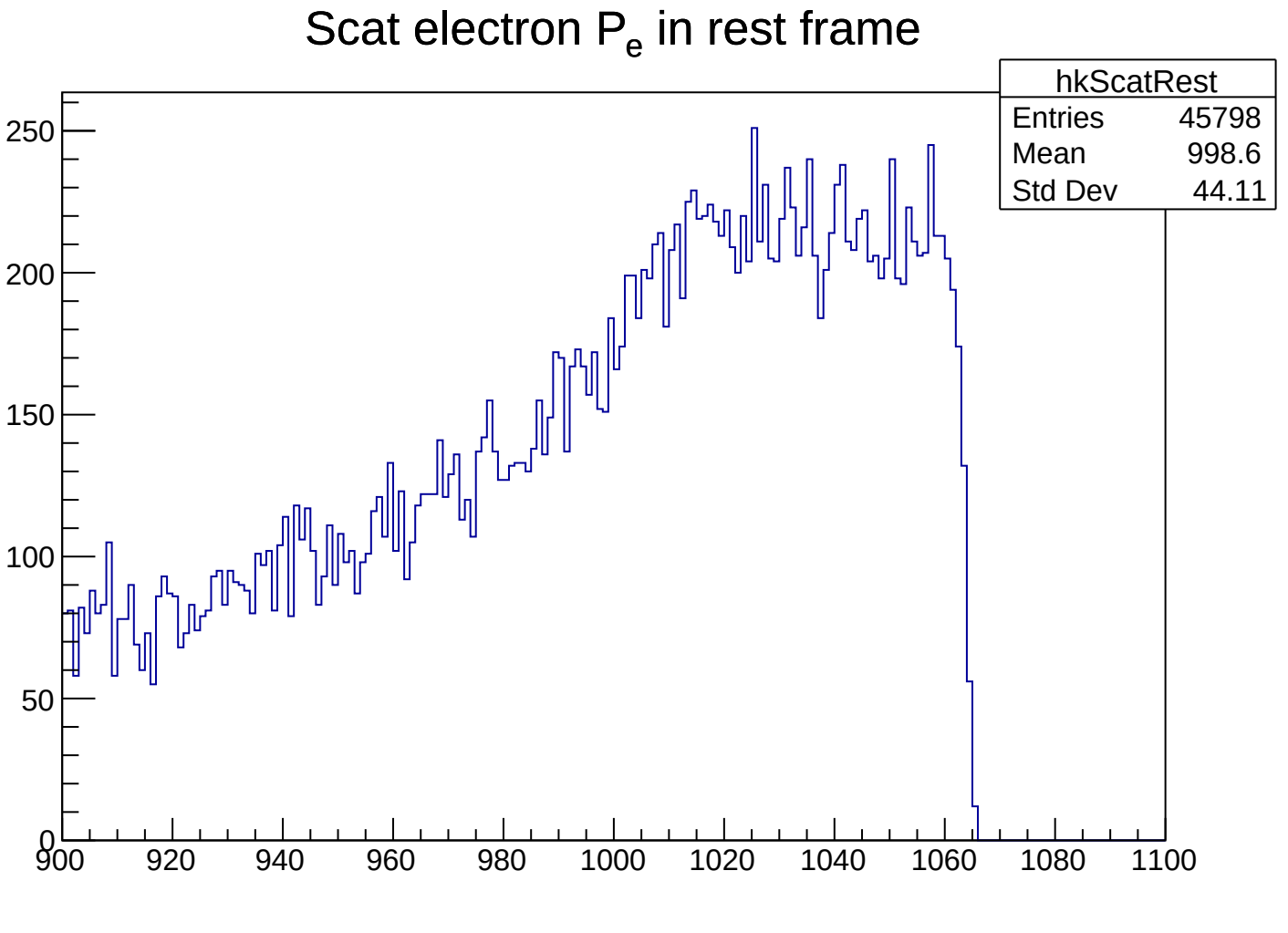

TDIS x_{bj}
hTDIS_xbj
Entries 45798
Mean 0.2475
Std Dev 0.2561
3500
3000
2500
2000
1500
1000
500
0
0
0.5
1
1.5
2
2.5
3

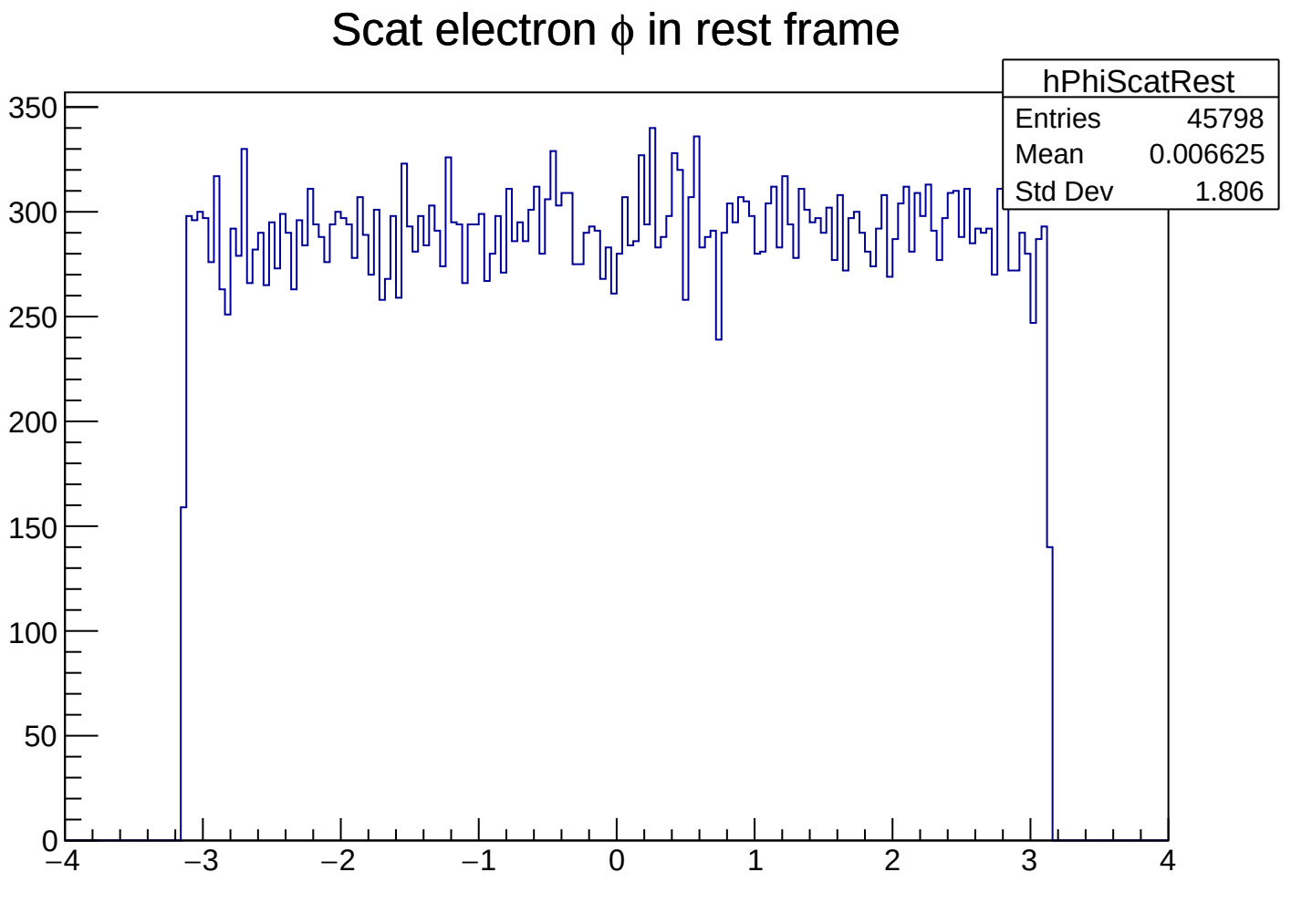

hTDIS_znq
Entries 45798
Mean 21.91
Std Dev 16.7
300
250
200
150
100
50
0
10
20
30
40
50
60

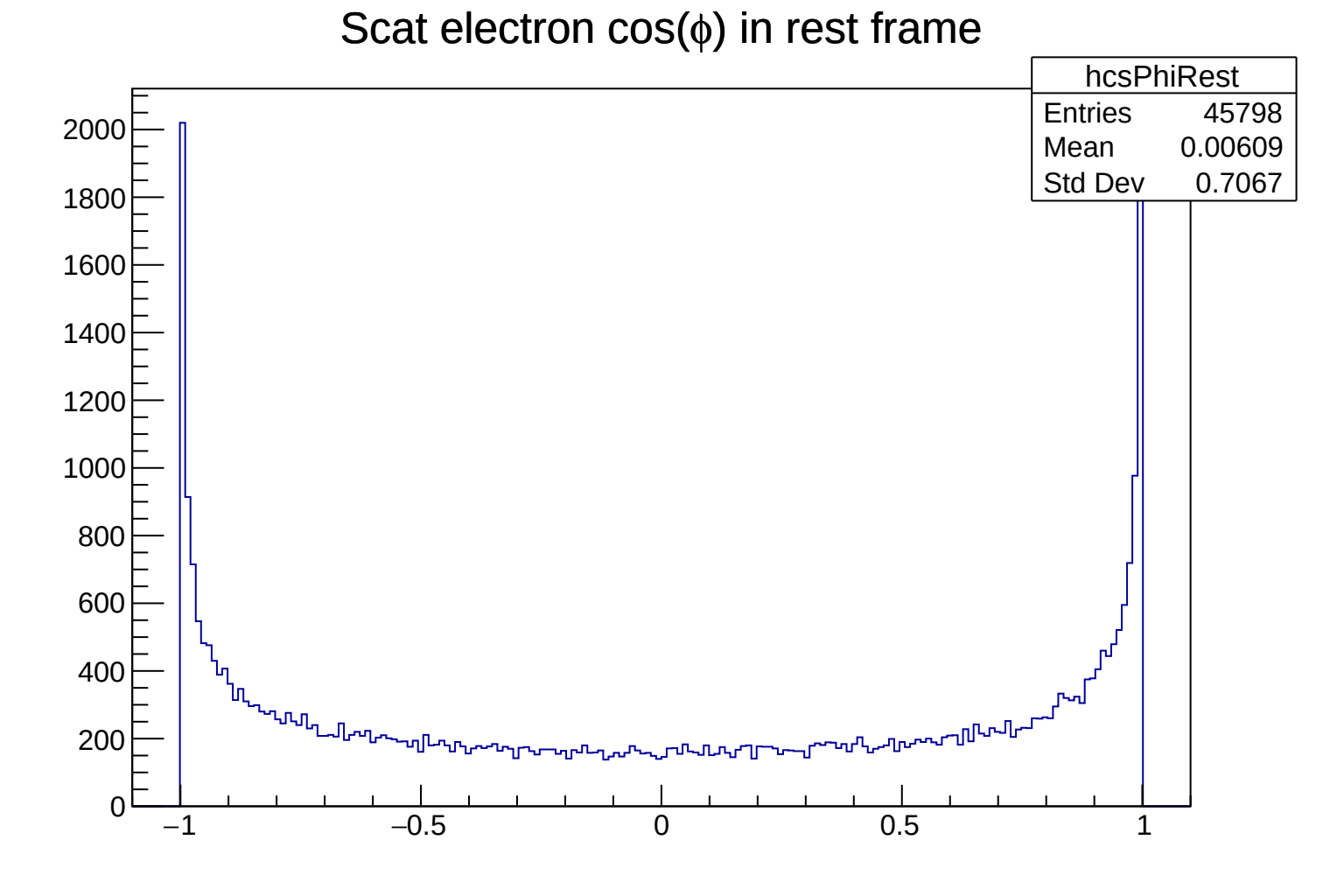

hTDIS_Mx2
Entries 45798
Mean 37.16
Std Dev 28.36
500
400
300
200
100
0
–100
–80
–60
–40
–20
0
20
40
60
80
100

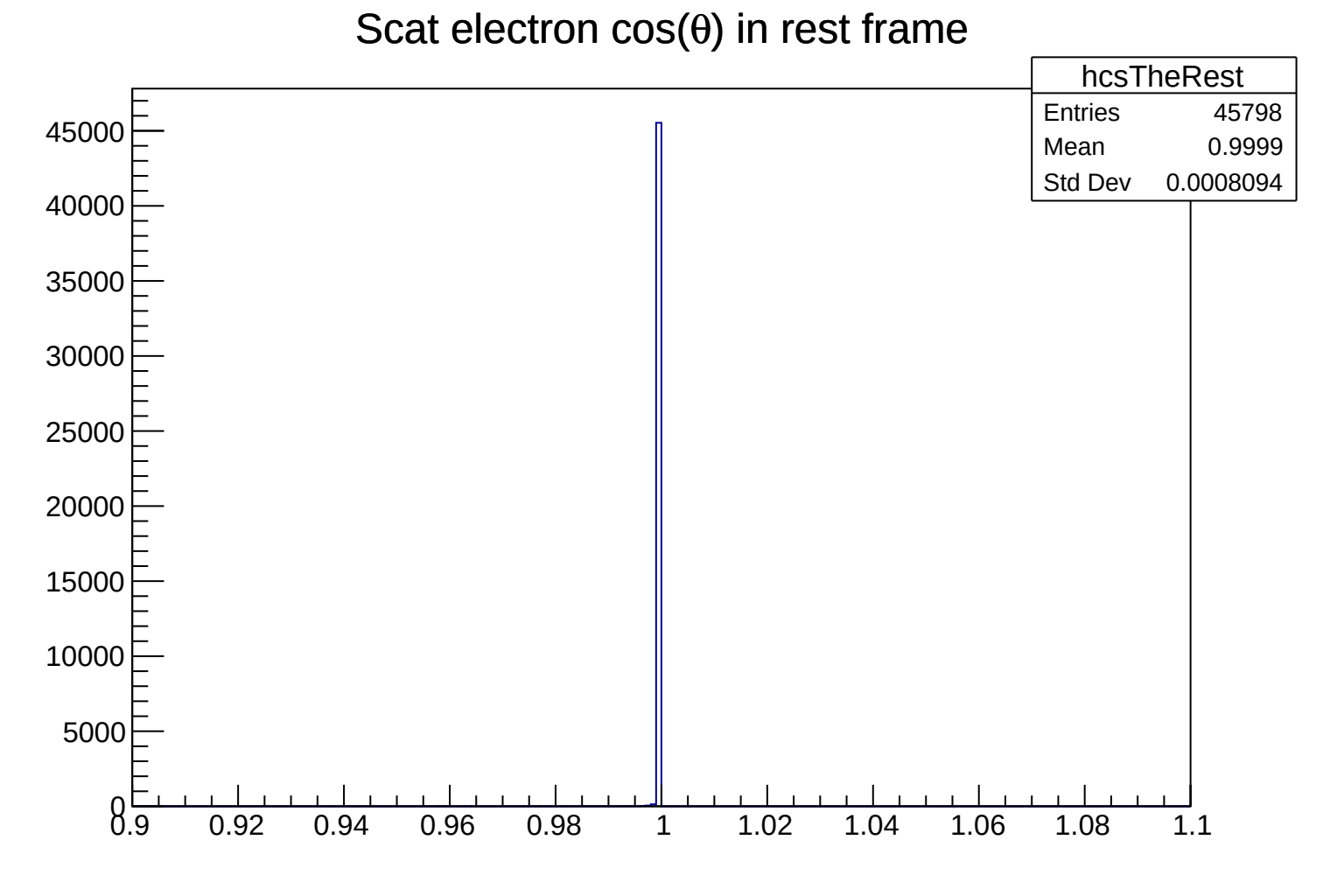

TDIS y
hTDIS_y
Entries 45798
Mean 0.04526
Std Dev 0.02695
140
120
100
80
60
40
20
0
0
0.01
0.02
0.03
0.04
0.05
0.06
0.07
0.08
0.09
0.1

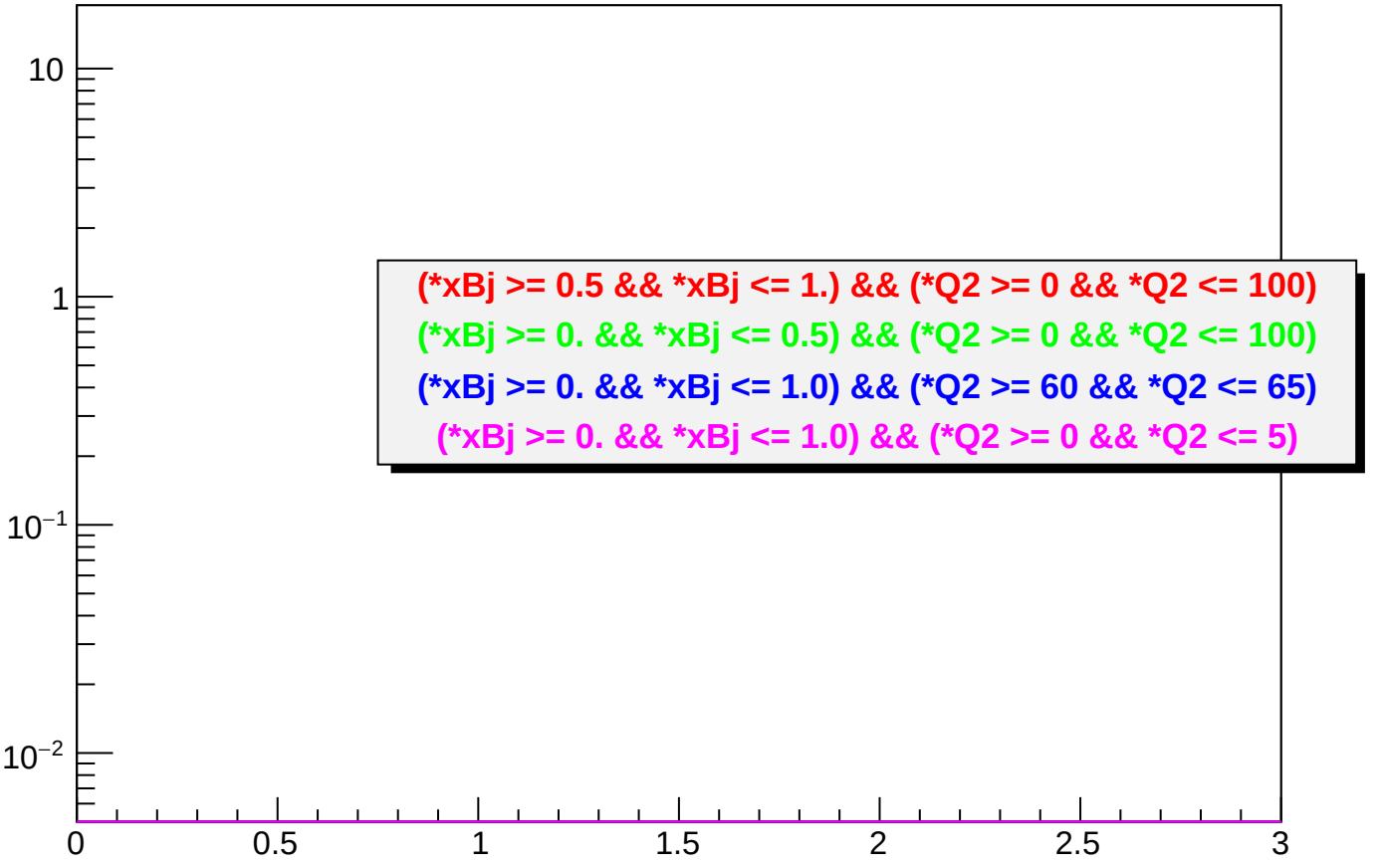

Scat electron E_e in rest frame
hEScatRest
Entries 45798
Mean 998.6
Std Dev 44.11
250
200
150
100
50
0
900
920
940
960
980
1000
1020
1040
1060
1080
1100

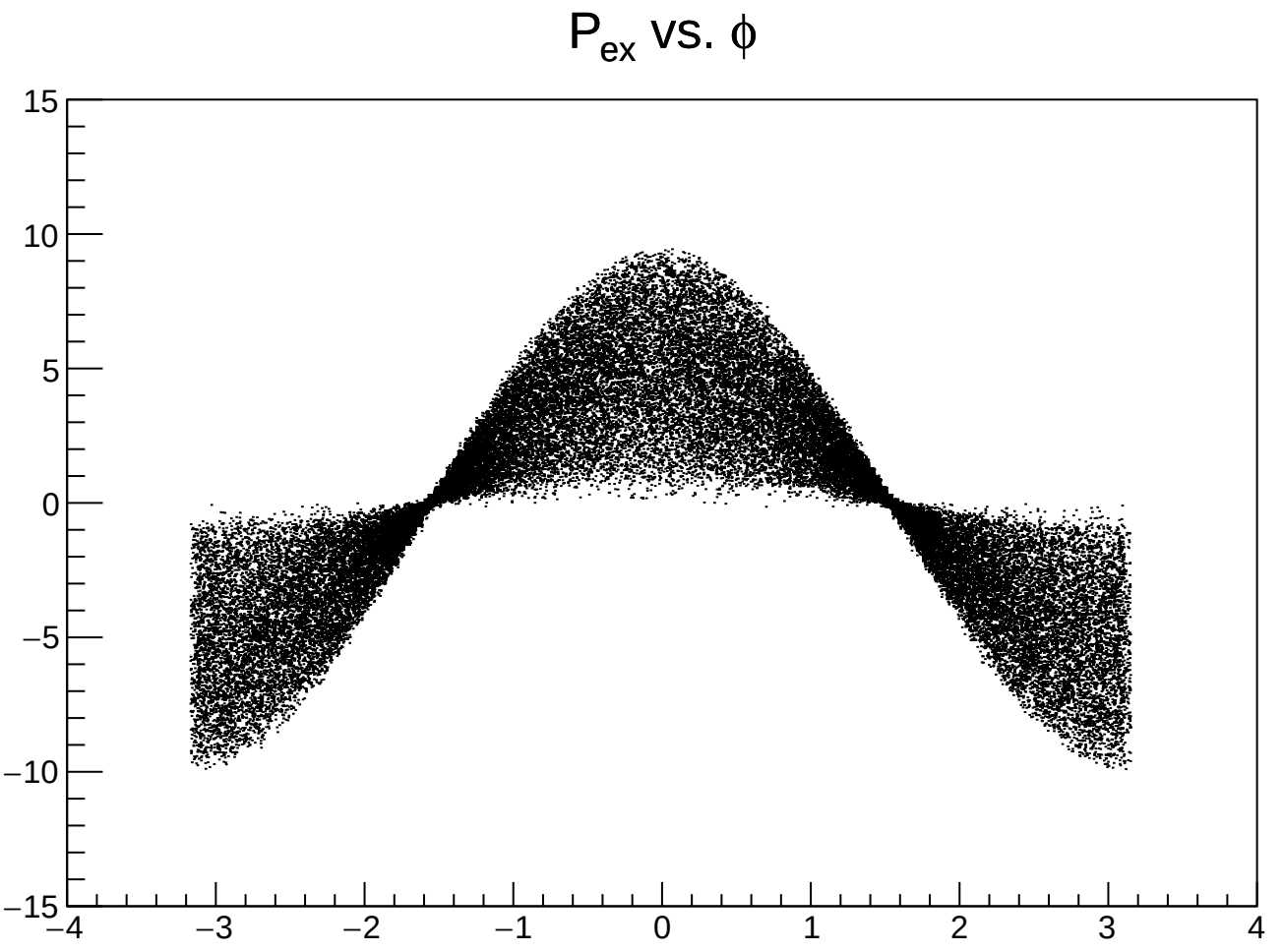

Scat electron P_e in rest frame
hkScatRest
Entries 45798
Mean 998.6
Std Dev 44.11
250
200
150
100
50
0
900
920
940
960
980
1000
1020
1040
1060
1080
1100

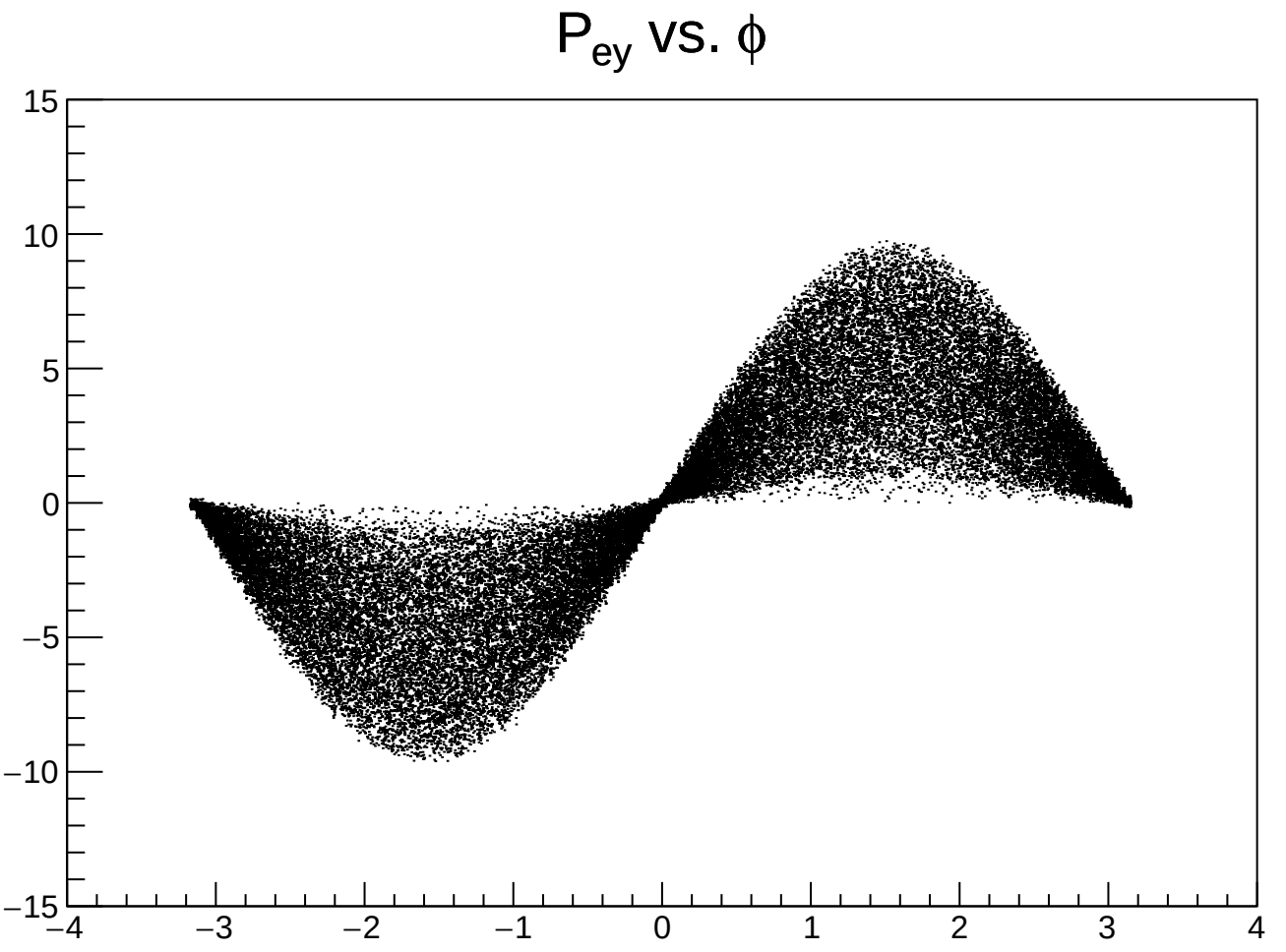

Scat electron ϕ in rest frame
hPhiScatRest
Entries 45798
Mean 0.006625
Std Dev 1.806
350
300
250
200
150
100
50
0
−4
−3
−2
−1
0
1
2
3
4

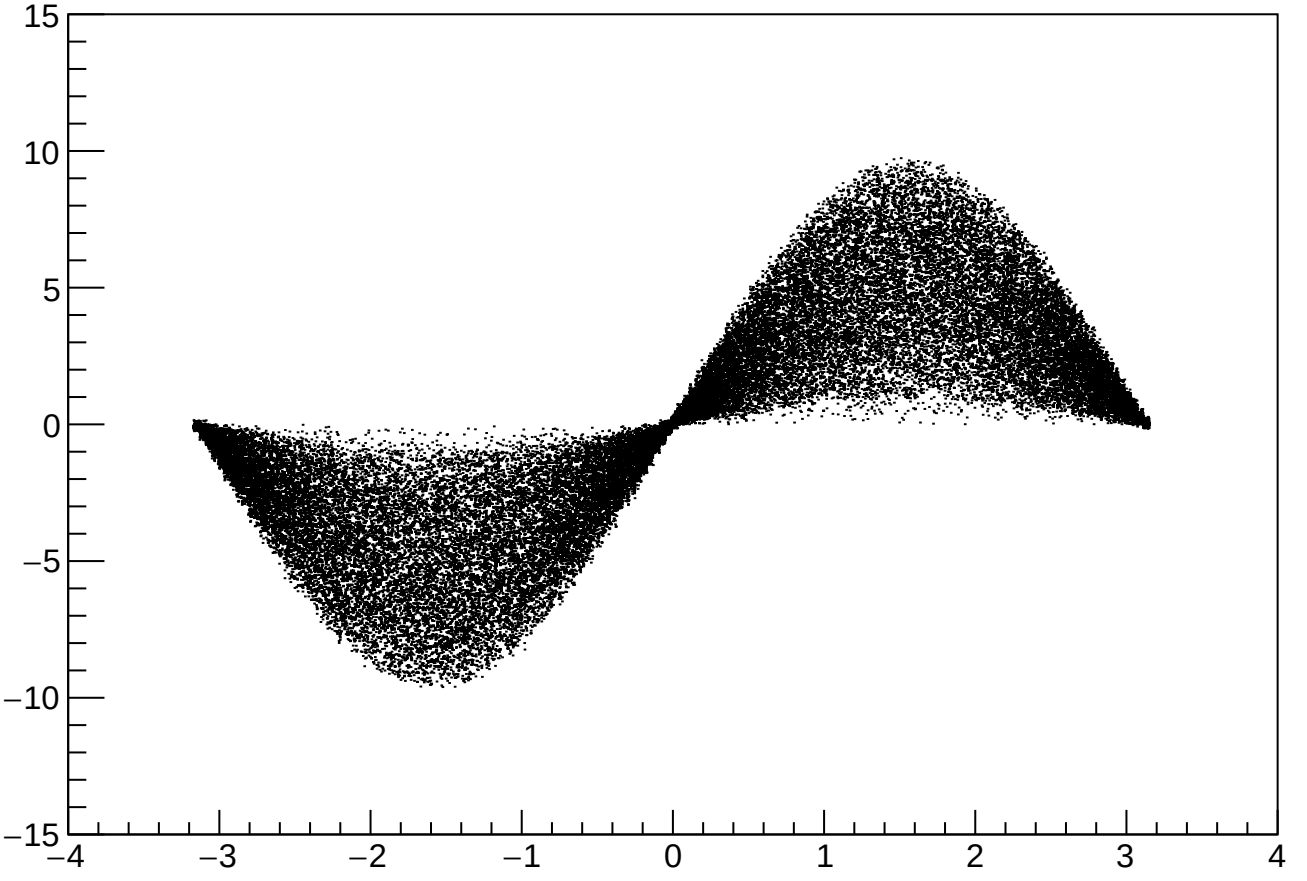

Scat electron cos(ϕ) in rest frame
hcsPhiRest
Entries 45798
Mean 0.00609
Std Dev 0.7067
2000
1800
1600
1400
1200
1000
800
600
400
200
0
−1
−0.5
0
0.5
1

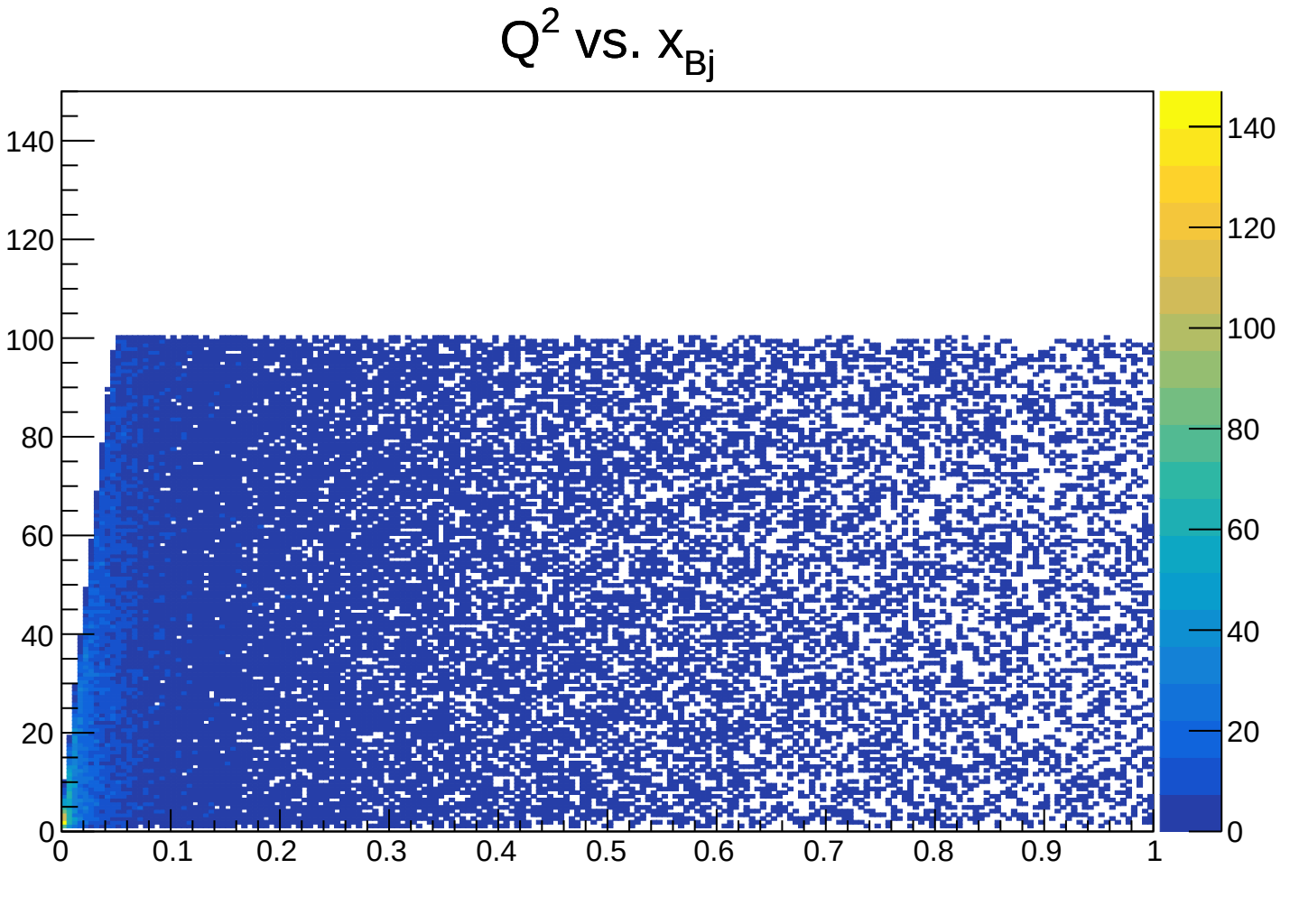

Scat electron cos(θ) in rest frame
hcsTheRest
Entries 45798
Mean 0.9999
Std Dev 0.0008094
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
0.9
0.92
0.94
0.96
0.98
1
1.02
1.04
1.06
1.08
1.1

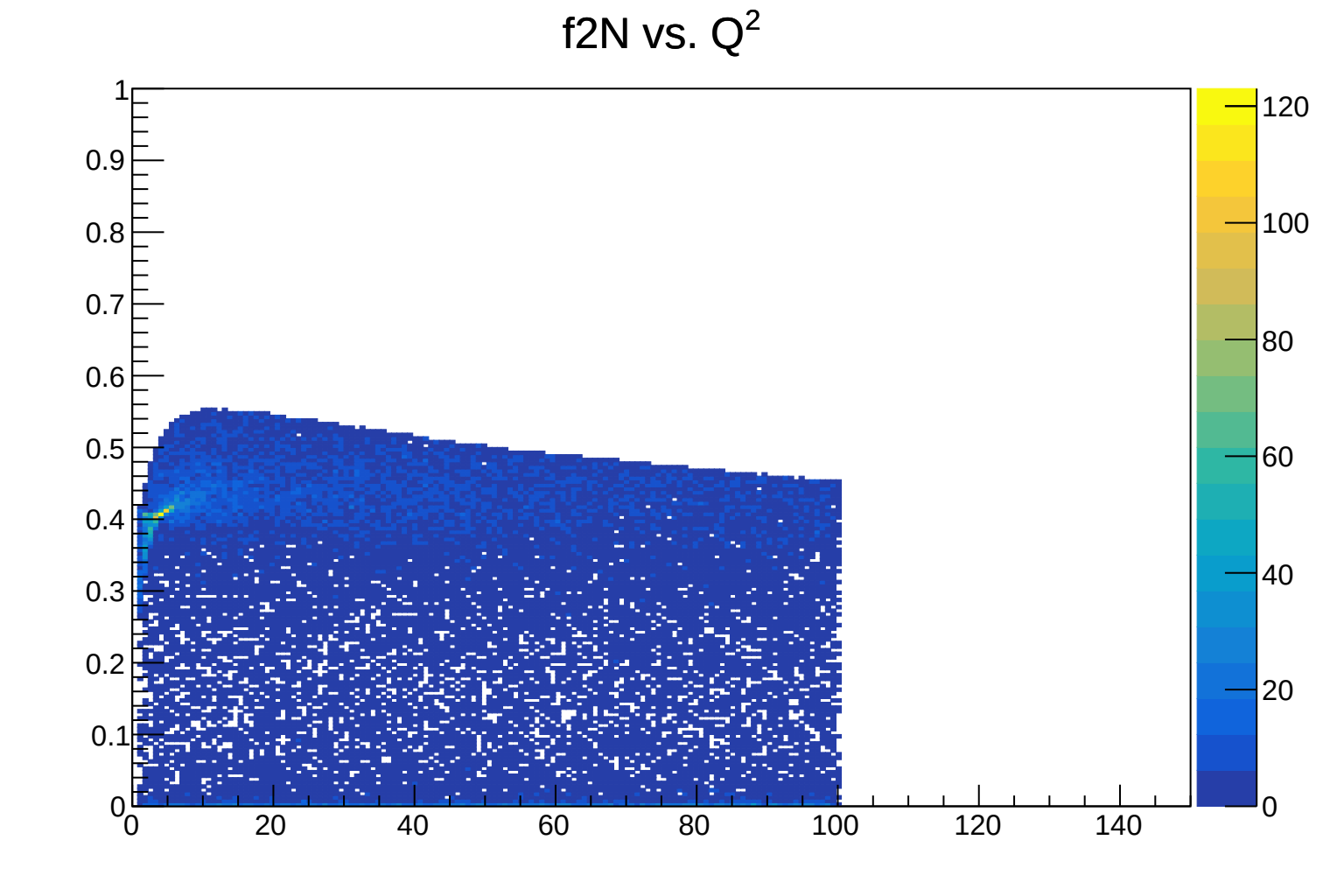

t binned in Q^2 and x_{Bj}
10
1
10^{-1}
10^{-2}
0
0.5
1
1.5
2
2.5
3
(*xBj >= 0.5 && *xBj <= 1.) && (*Q2 >= 0 && *Q2 <= 100)
(*xBj >= 0. && *xBj <= 0.5) && (*Q2 >= 0 && *Q2 <= 100)
(*xBj >= 0. && *xBj <= 1.0) && (*Q2 >= 60 && *Q2 <= 65)
(*xBj >= 0. && *xBj <= 1.0) && (*Q2 >= 0 && *Q2 <= 5)


P_{ex} vs. ϕ
15
10
5
0
−5
−10
−15
−4
−3
−2
−1
0
1
2
3
4


P_{ey} vs. ϕ
15
10
5
0
−5
−10
−15
−4
−3
−2
−1
0
1
2
3
4


P_{ez} vs. ϕ
15
10
5
0
−5
−10
−15
−4
−3
−2
−1
0
1
2
3
4


Q^2 vs. x_{Bj}
140
120
100
80
60
40
20
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
140
120
100
80
60
40
20
0


f2N vs. Q^2
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
20
40
60
80
100
120
140
120
100
80
60
40
20
0