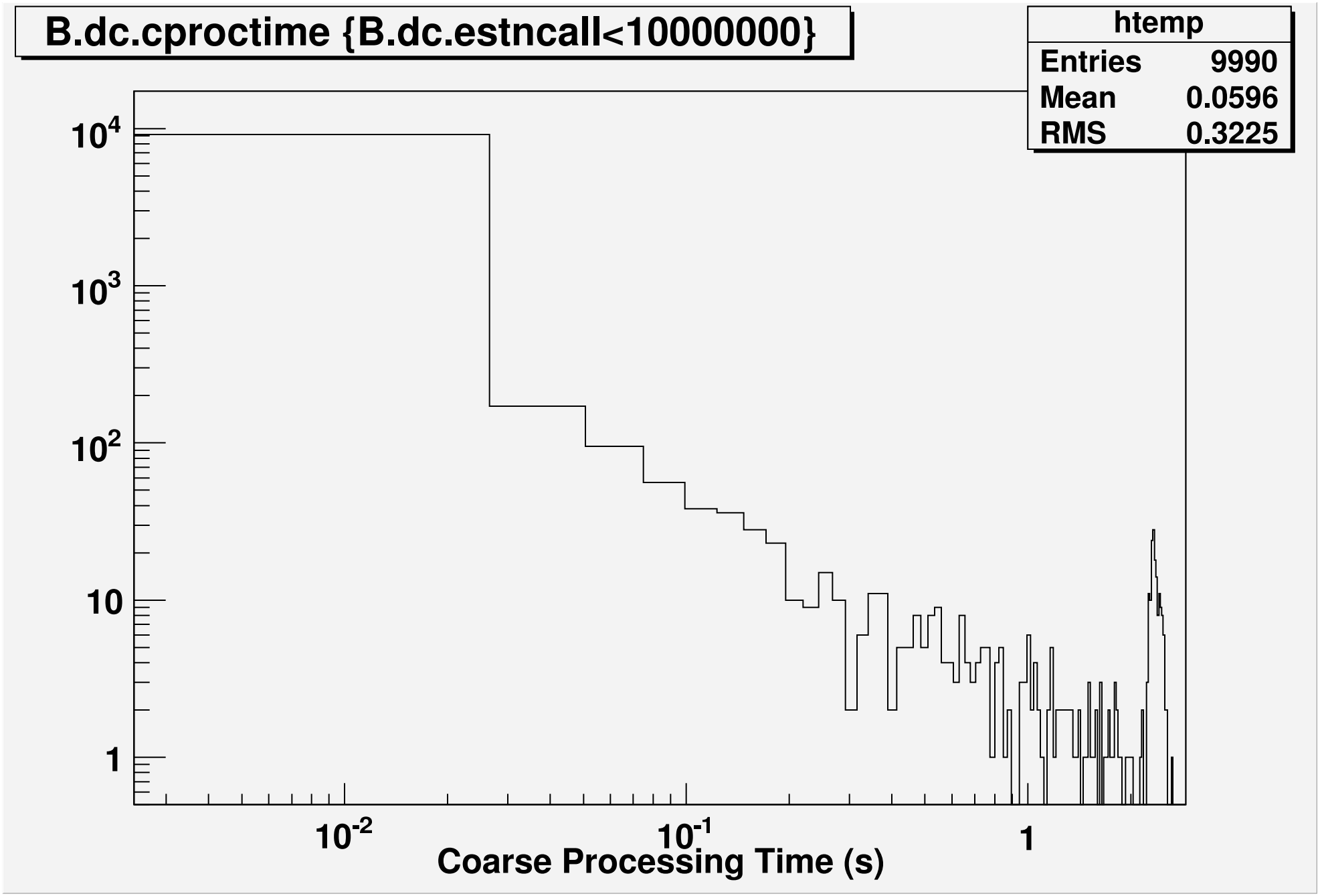
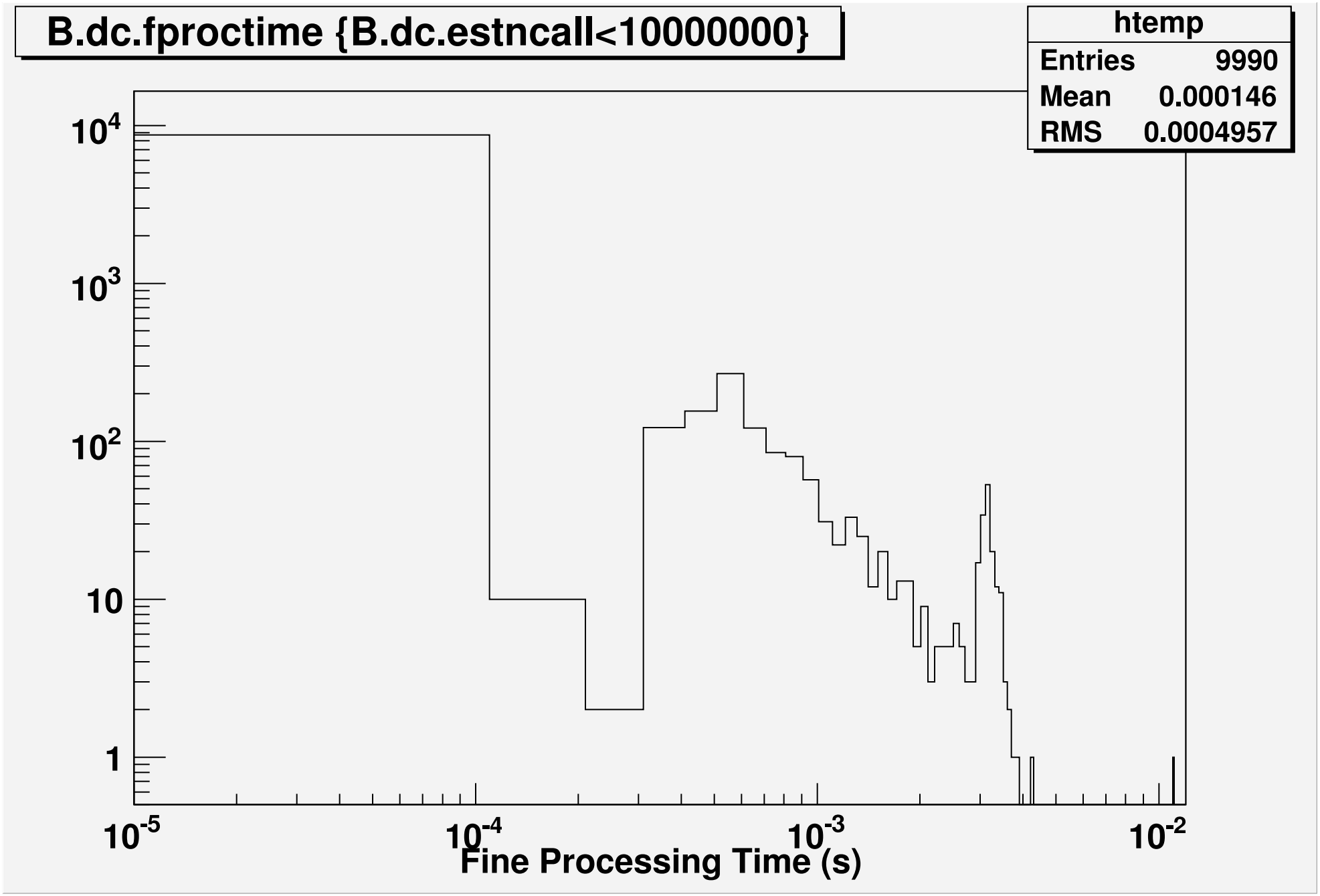
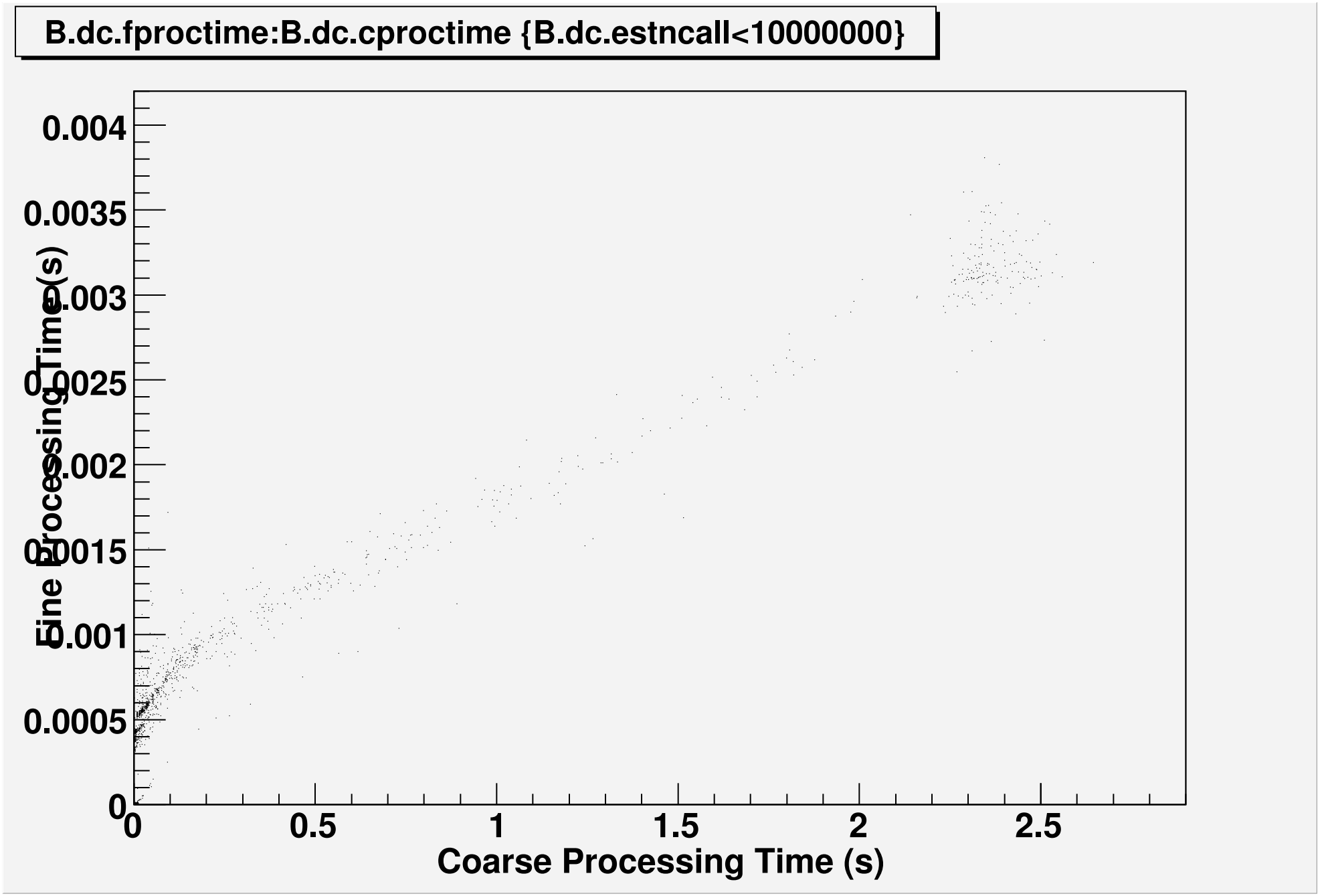
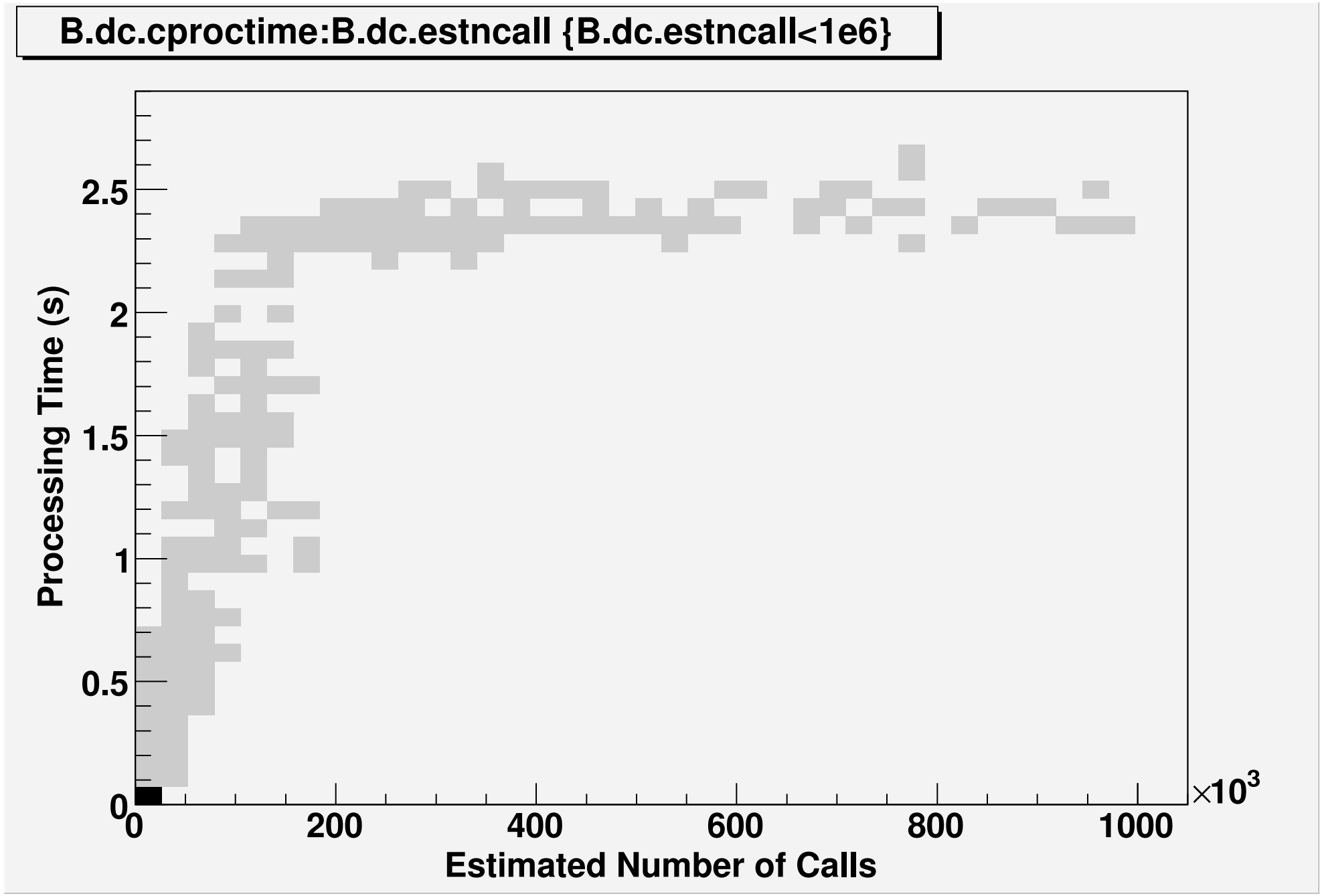
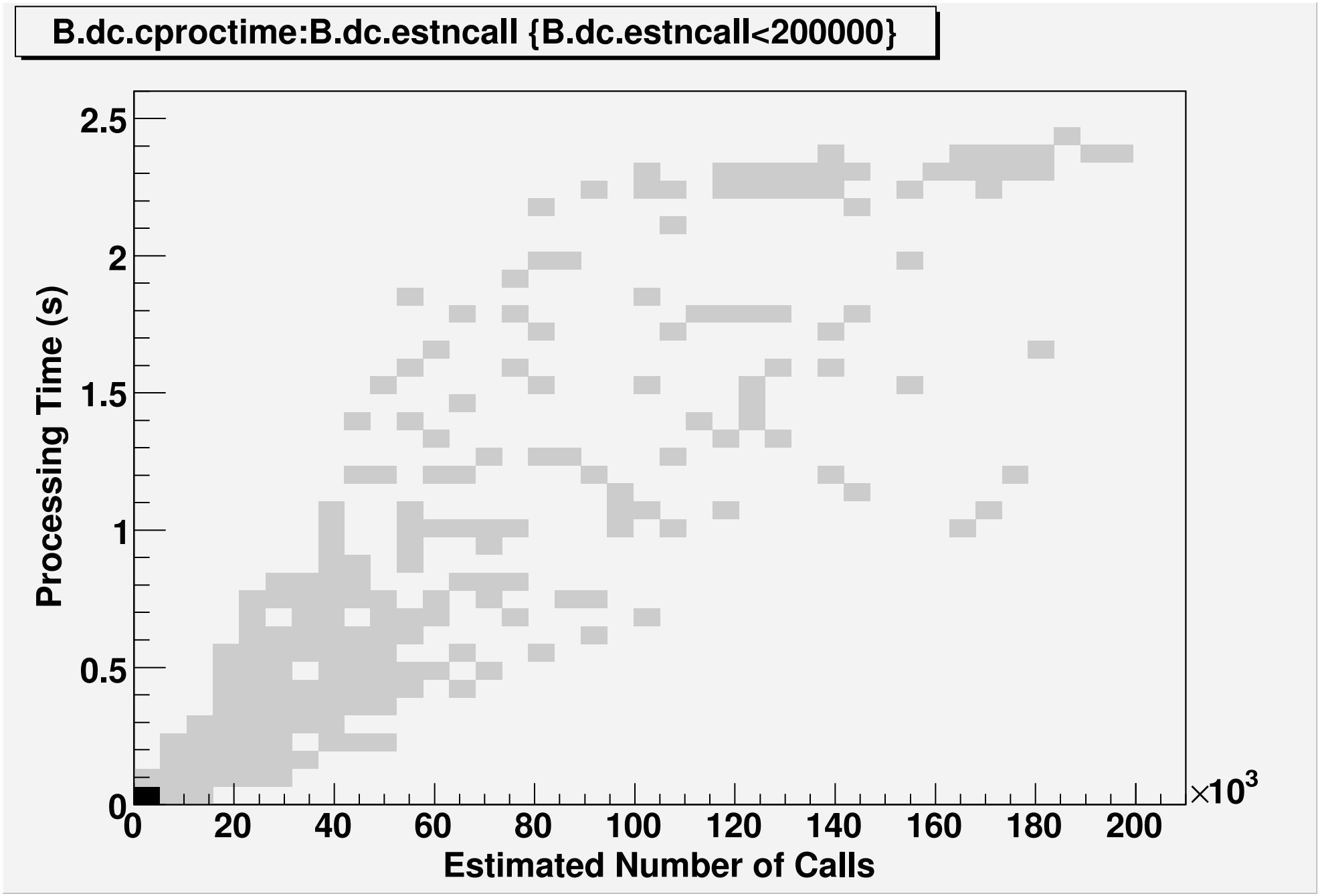
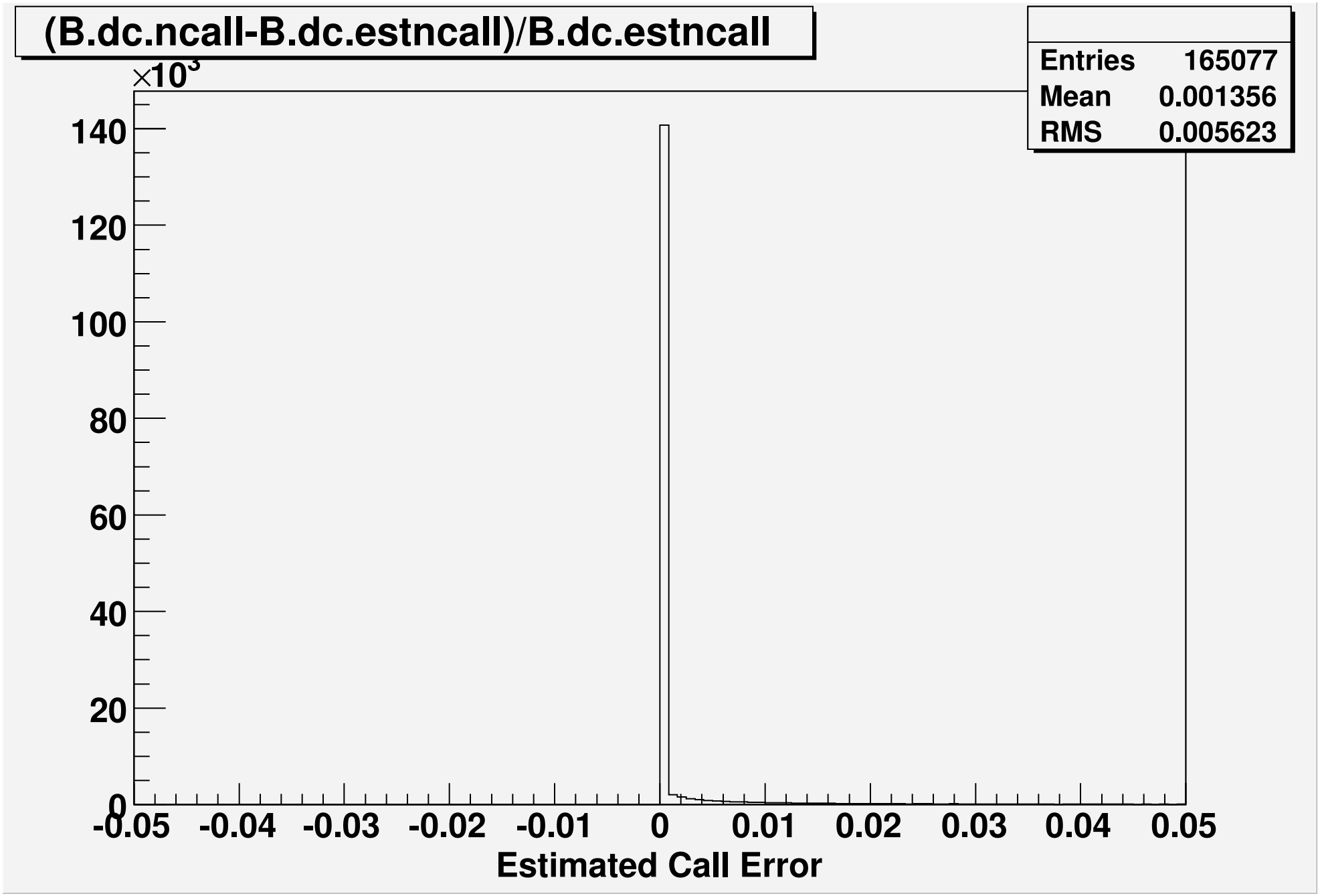

B.dc.cproctime {B.dc.estncall<10000000}
htemp
Entries 9990
Mean 0.0596
RMS 0.3225
10^4
10^3
10^2
10
1
10^-2
10^-1
1
Coarse Processing Time (s)

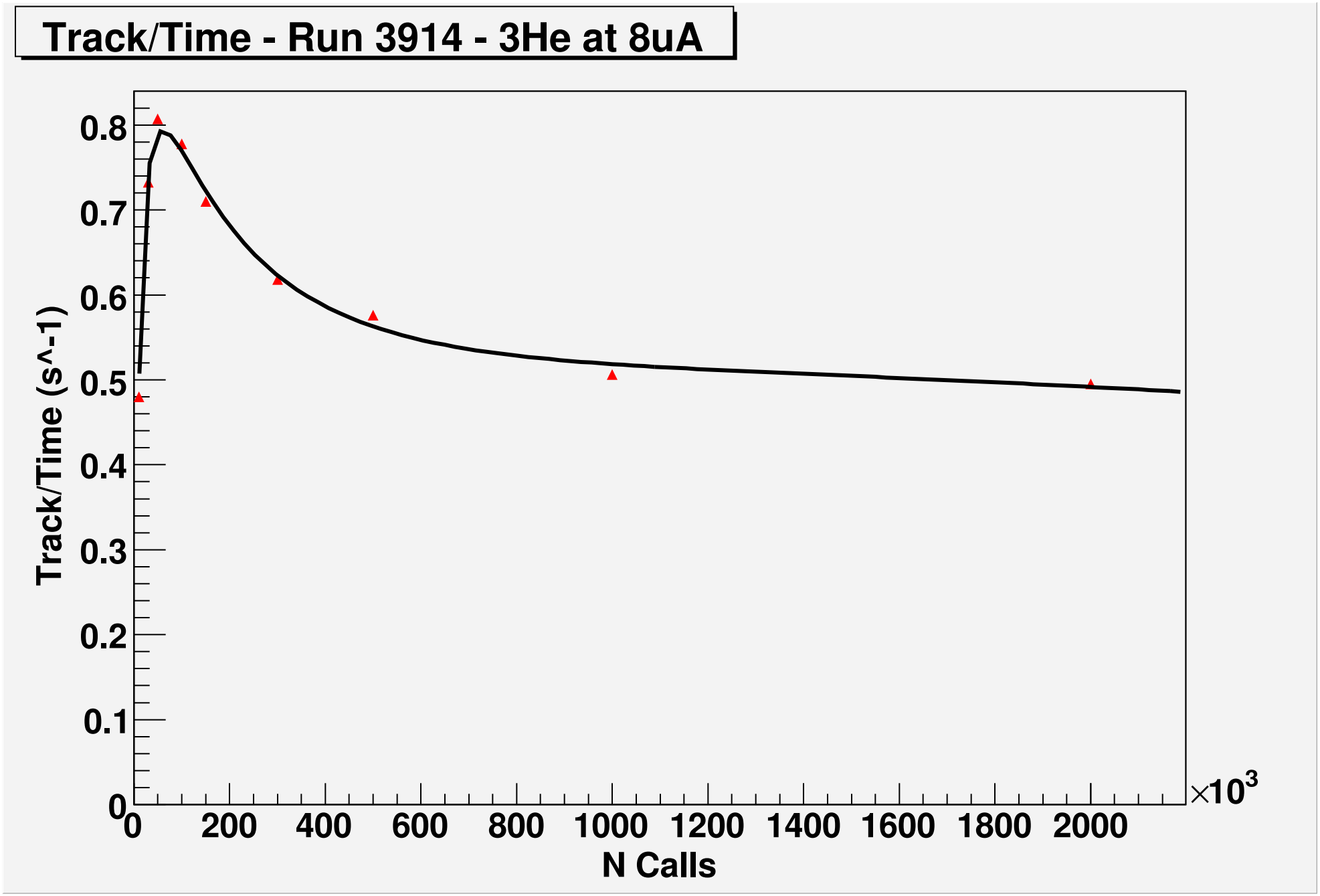

B.dc.fproctime {B.dc.estncall<10000000}
htemp
Entries 9990
Mean 0.000146
RMS 0.0004957
10^4
10^3
10^2
10
1
10^-5
10^-4
10^-3
10^-2
Fine Processing Time (s)

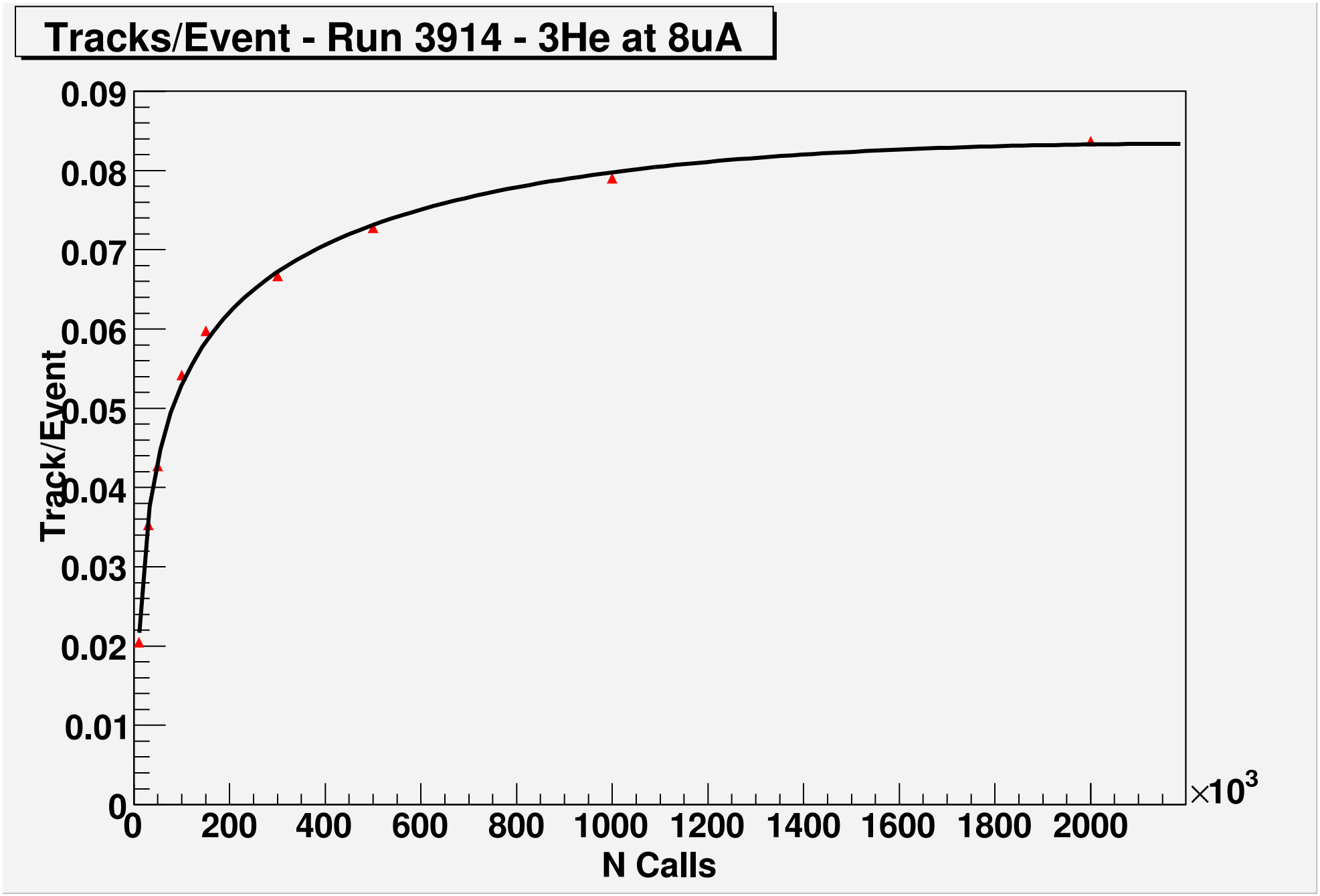

B.dc.fproctime:B.dc.cproctime {B.dc.estncall<10000000}
Fine Processing Time (s)
0.004
0.0035
0.003
0.0025
0.002
0.0015
0.001
0.0005
0
0
0.5
1
1.5
2
2.5
Coarse Processing Time (s)

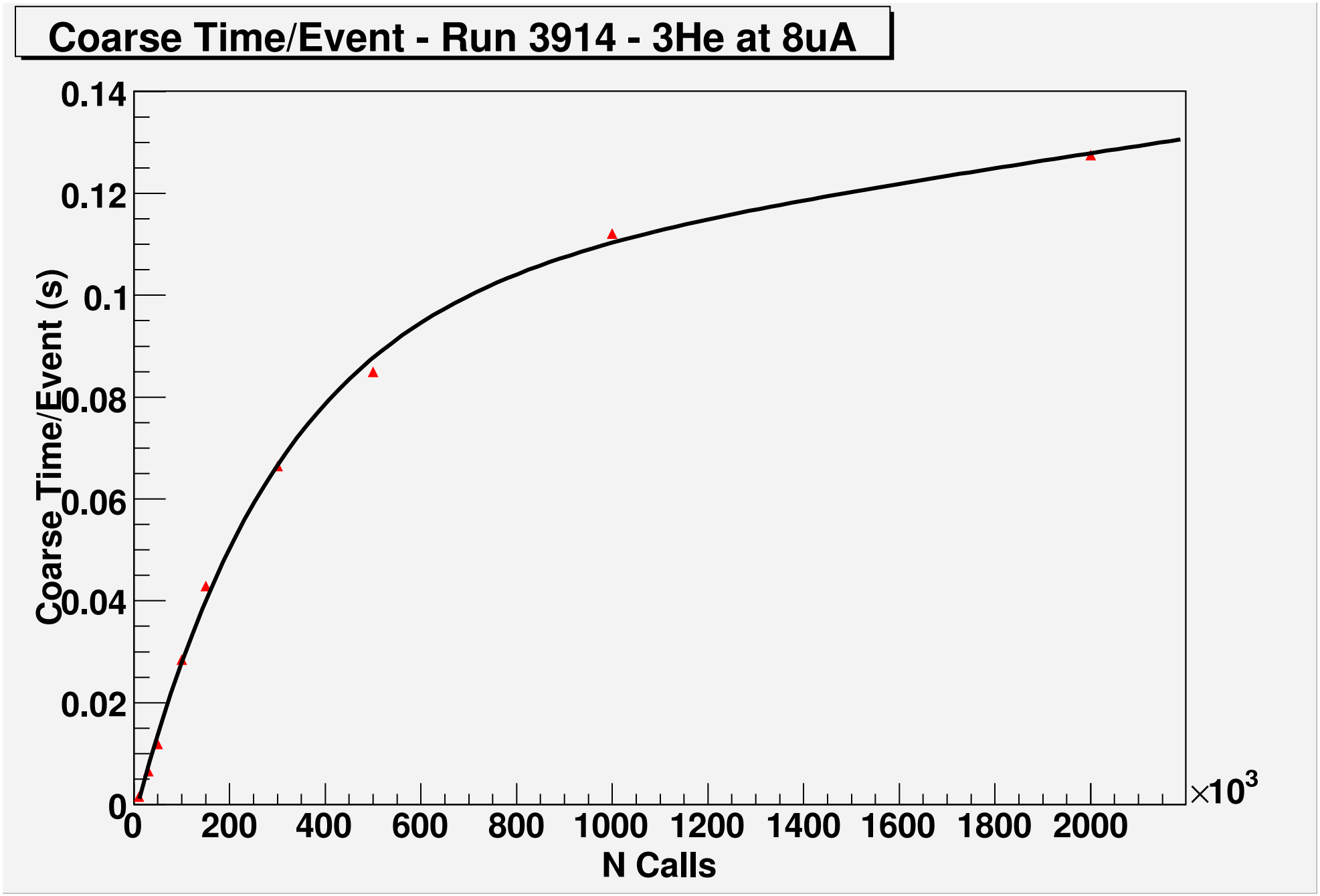

B.dc.cproctime:B.dc.estncall {B.dc.estncall<1e6}
Processing Time (s)
2.5
2
1.5
1
0.5
0
0
200
400
600
800
1000
×10^3
Estimated Number of Calls

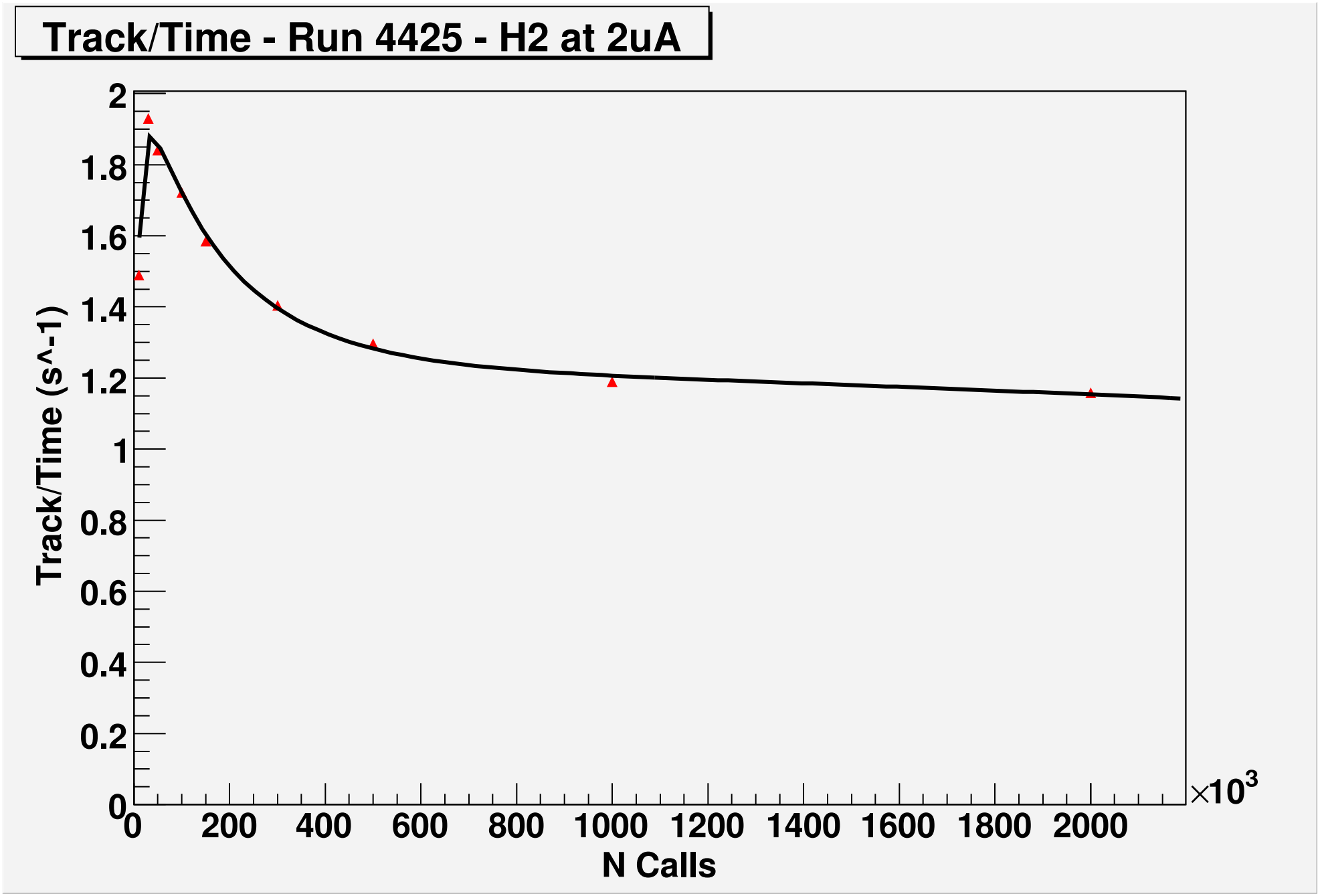

B.dc.cproctime:B.dc.estncall {B.dc.estncall<200000}
Processing Time (s)
2.5
2
1.5
1
0.5
0
0
20
40
60
80
100
120
140
160
180
200
×10^3
Estimated Number of Calls

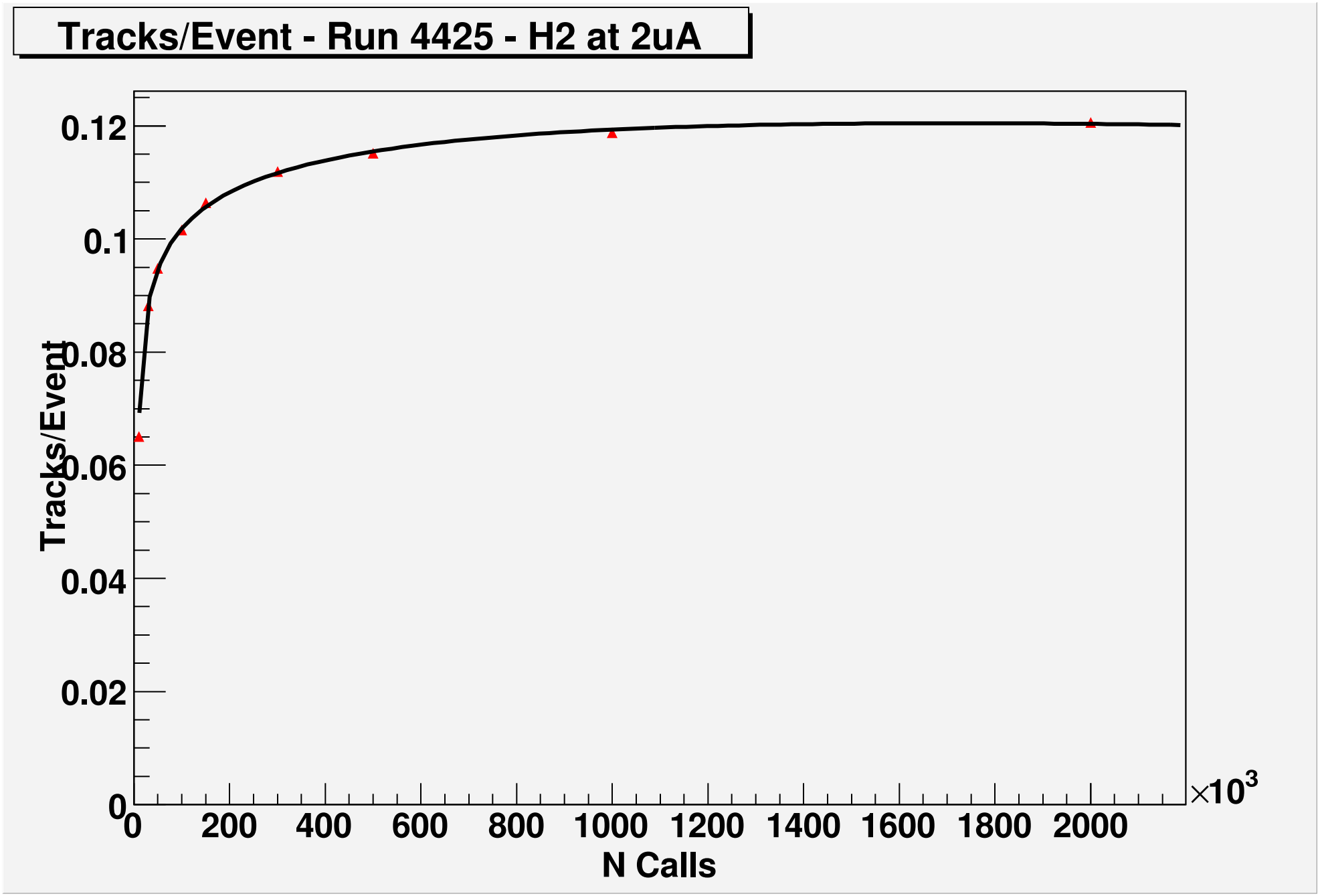

(B.dc.ncall-B.dc.estncall)/B.dc.estncall
Entries 165077
Mean 0.001356
RMS 0.005623
×10³
140
120
100
80
60
40
20
0
-0.05
-0.04
-0.03
-0.02
-0.01
0
0.01
0.02
0.03
0.04
0.05
Estimated Call Error

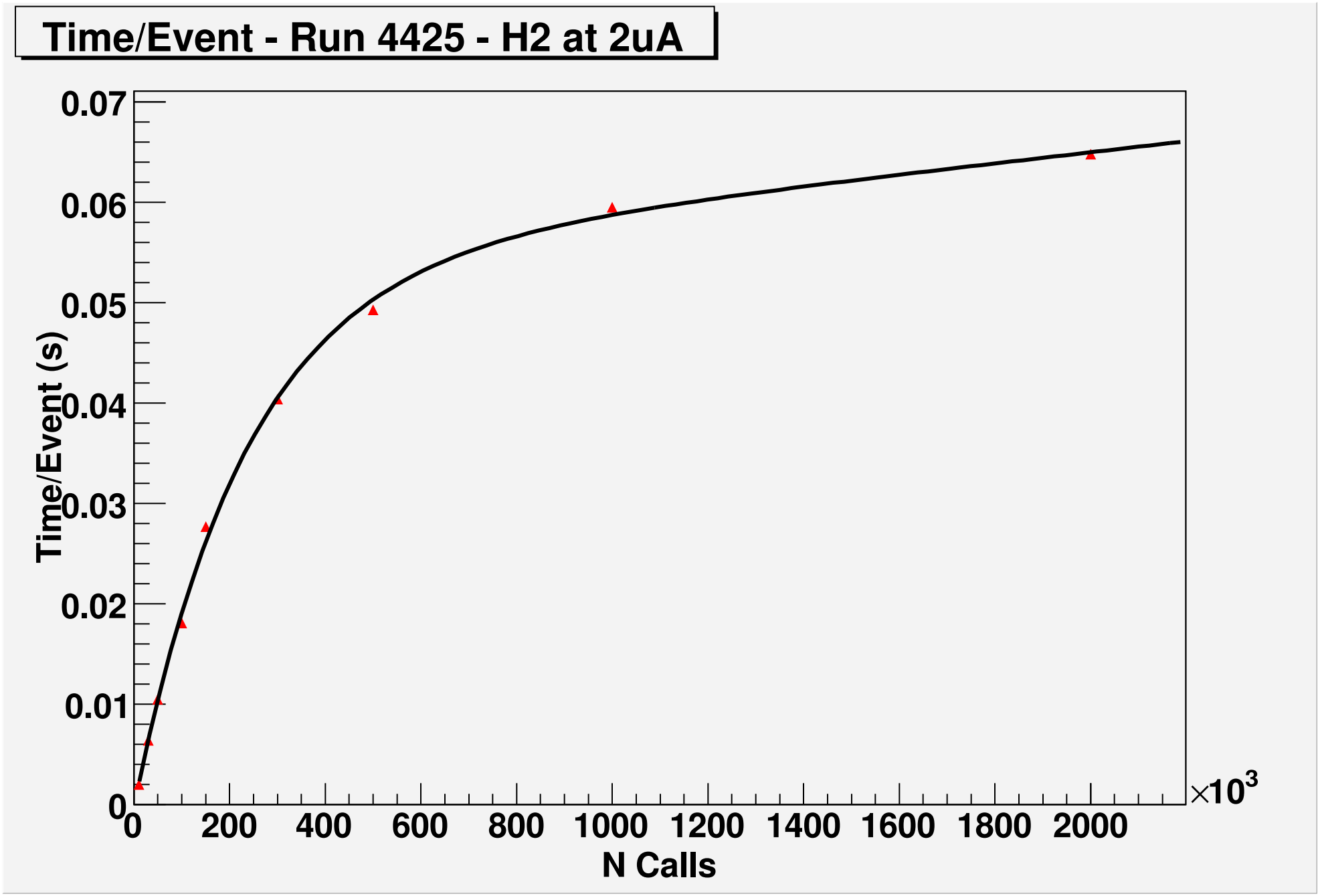

Track/Time - Run 3914 - 3He at 8uA
Track/Time (s^-1)
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000
×10^3
N Calls


Tracks/Event - Run 3914 - 3He at 8uA
Track/Event
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000
×10^3
N Calls

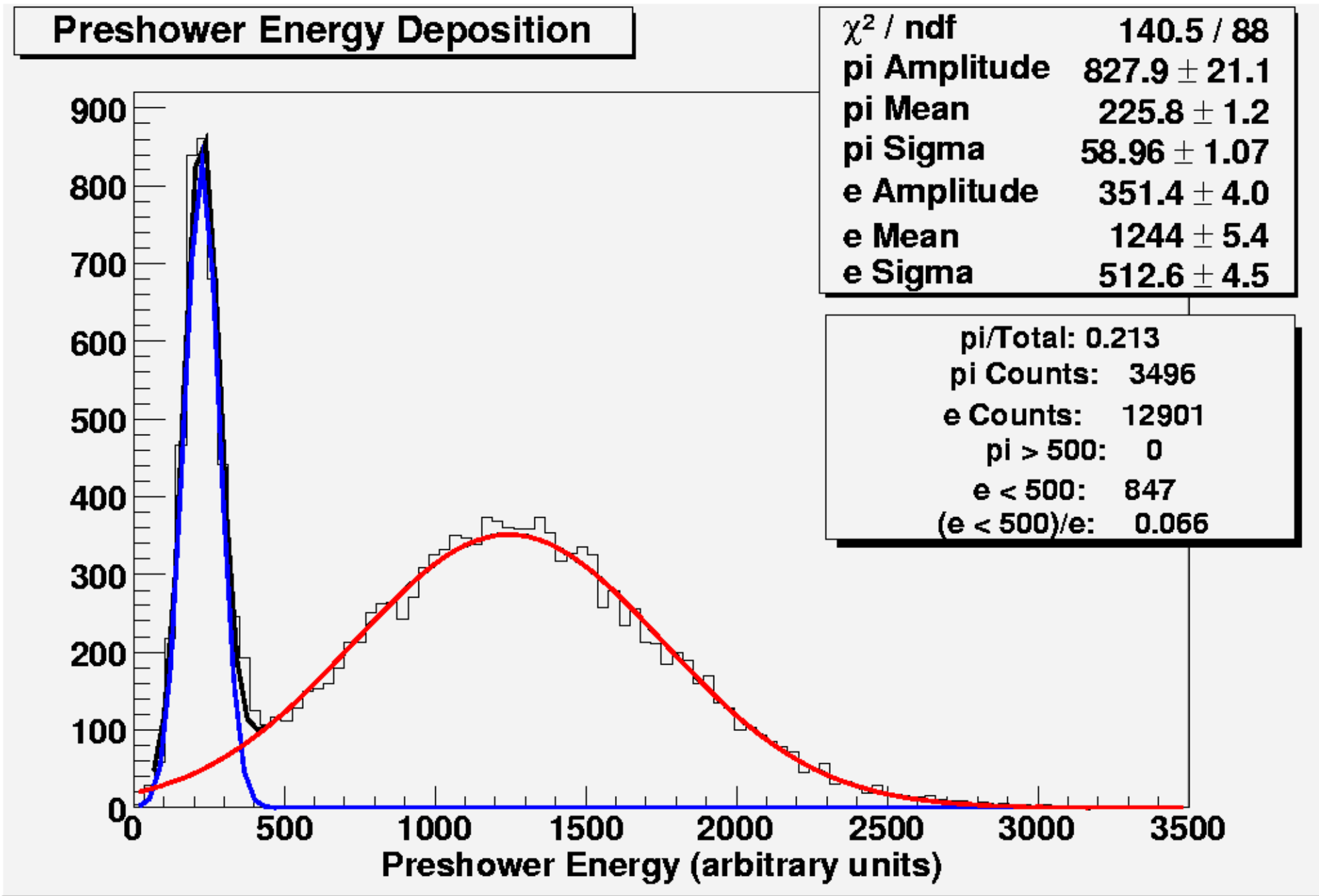

Coarse Time/Event - Run 3914 - 3He at 8uA
Coarse Time/Event (s)
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000
×10^3
N Calls

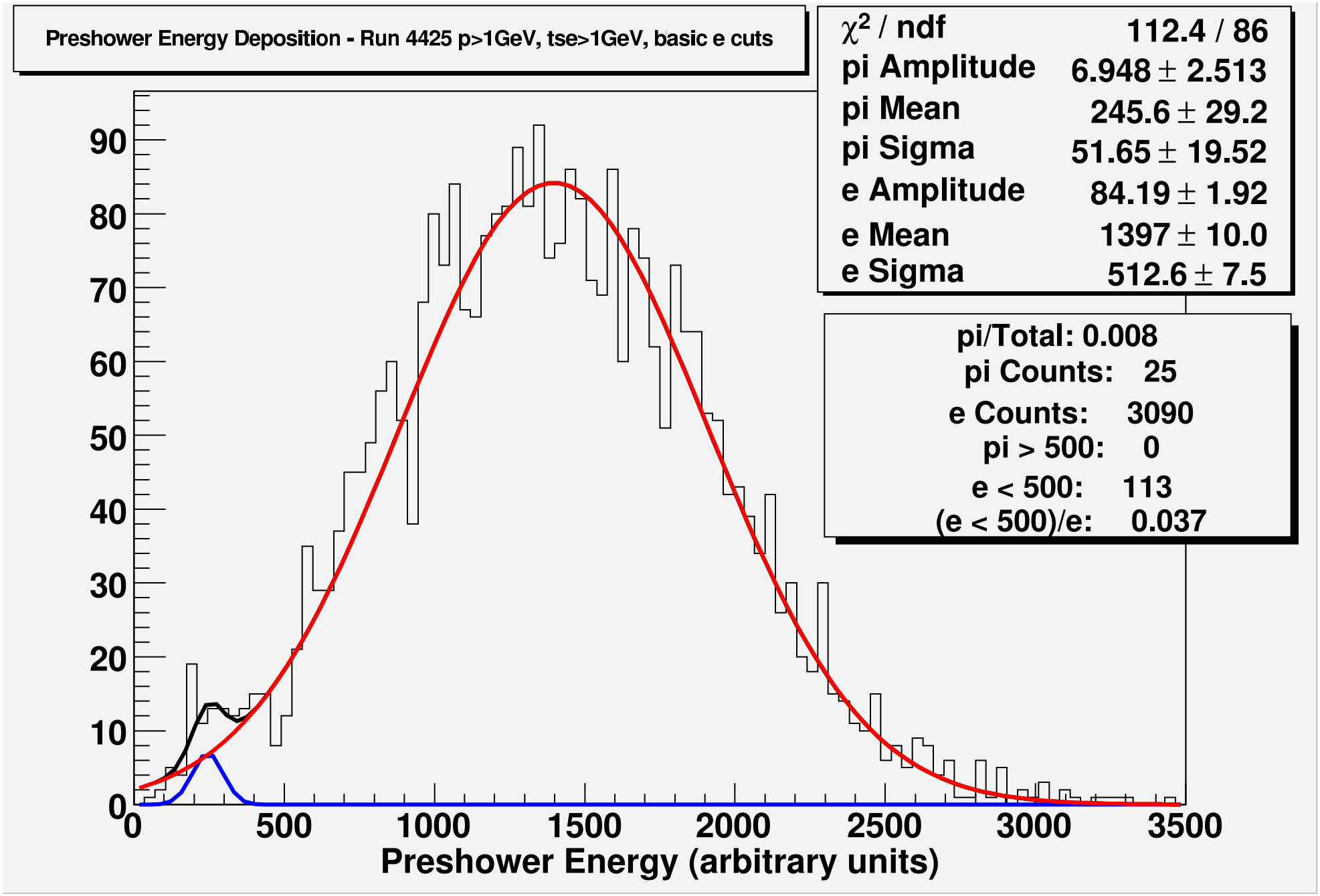

Track/Time - Run 4425 - H2 at 2uA
Track/Time (s^-1)
N Calls
×10^3
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
0
200
400
600
800
1000
1200
1400
1600
1800
2000

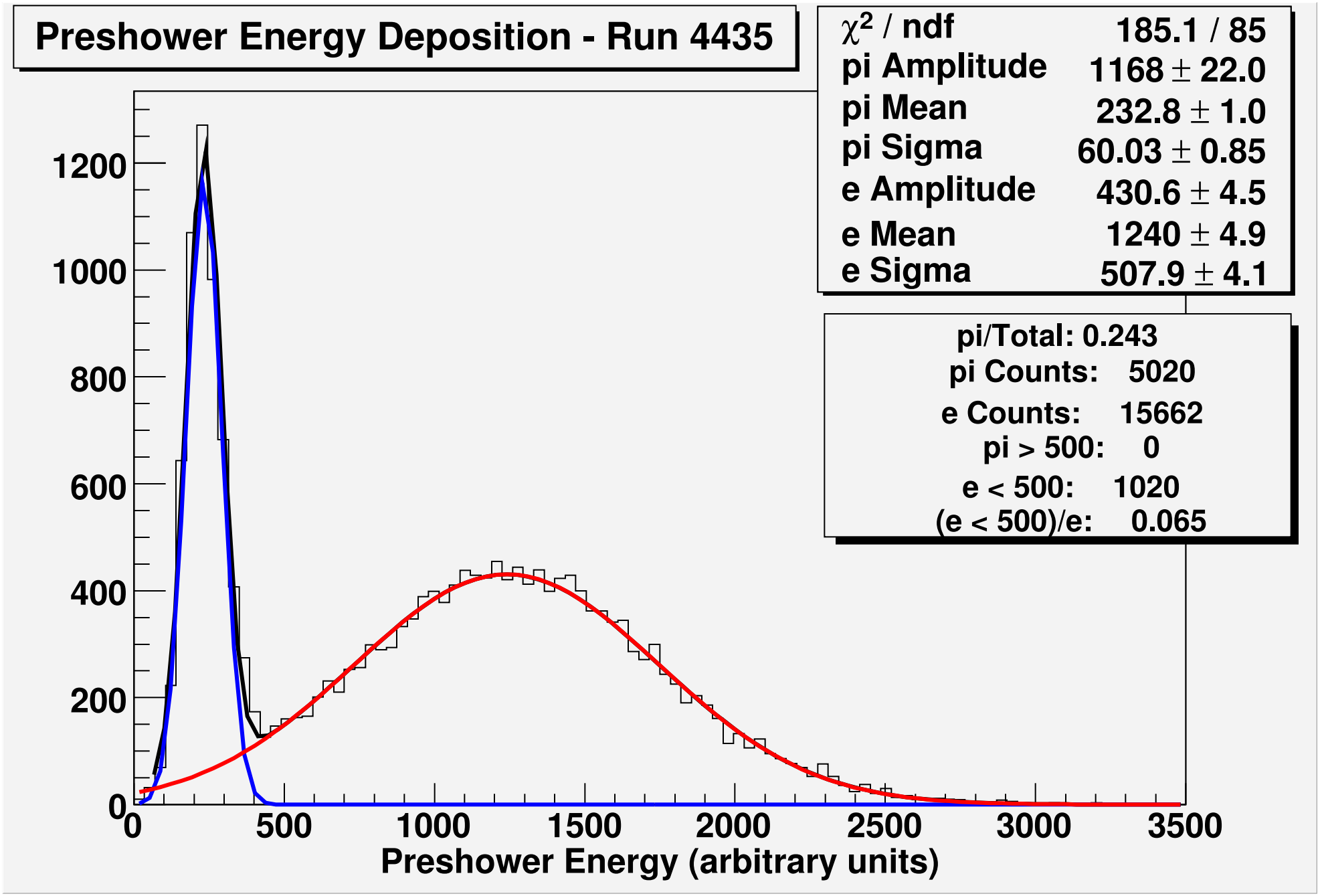

Tracks/Event - Run 4425 - H2 at 2uA
Tracks/Event
0.12
0.1
0.08
0.06
0.04
0.02
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000
×10^3
N Calls


Time/Event - Run 4425 - H2 at 2uA
Time/Event (s)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
0
200
400
600
800
1000
1200
1400
1600
1800
2000
×10^3
N Calls

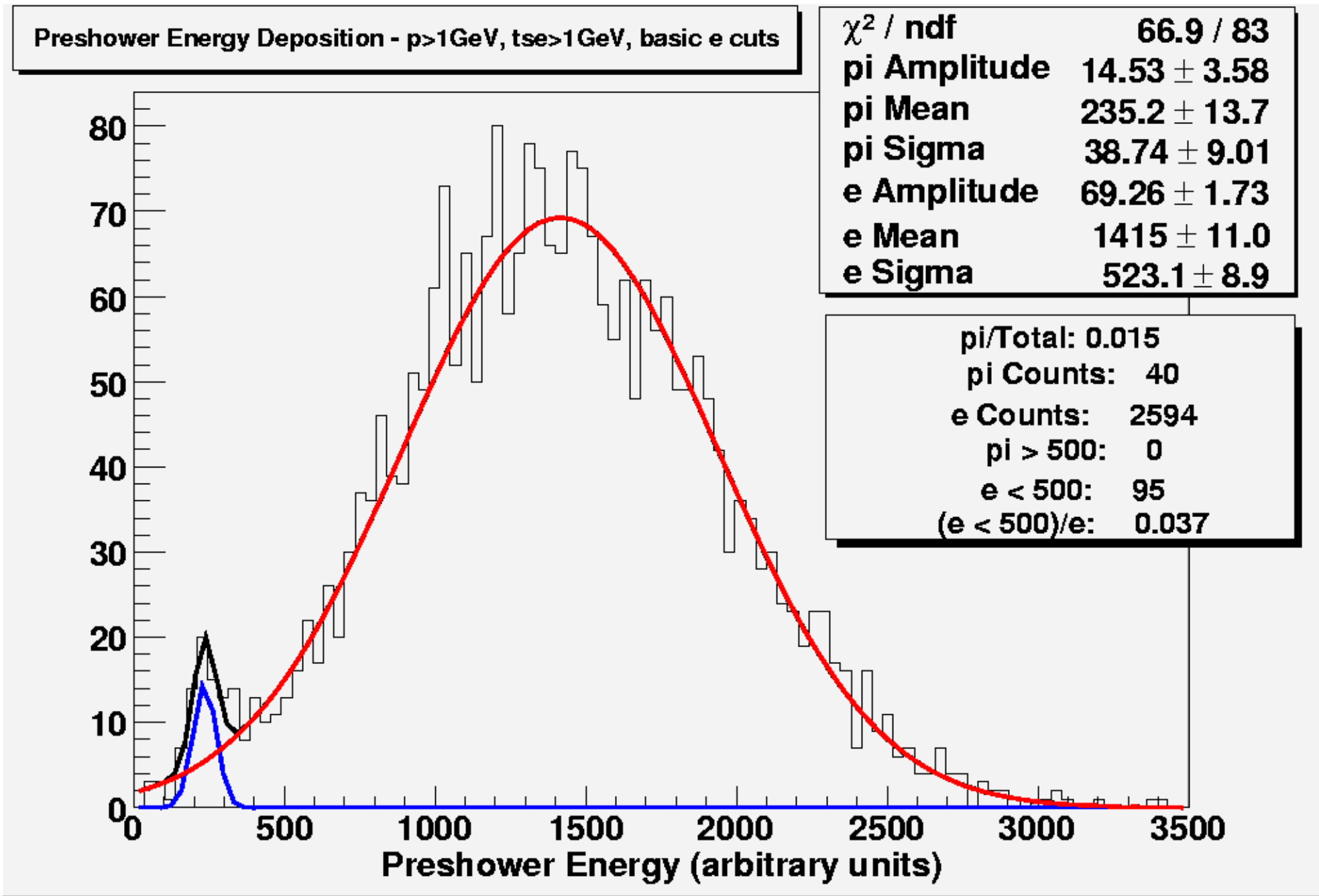
Run 4425 - H2


Preshower Energy Deposition
χ² / ndf 140.5 / 88
pi Amplitude 827.9 ± 21.1
pi Mean 225.8 ± 1.2
pi Sigma 58.96 ± 1.07
e Amplitude 351.4 ± 4.0
e Mean 1244 ± 5.4
e Sigma 512.6 ± 4.5
pi/Total: 0.213
pi Counts: 3496
e Counts: 12901
pi > 500: 0
e < 500: 847
(e < 500)/e: 0.066
900
800
700
600
500
400
300
200
100
0
0
500
1000
1500
2000
2500
3000
3500
Preshower Energy (arbitrary units)

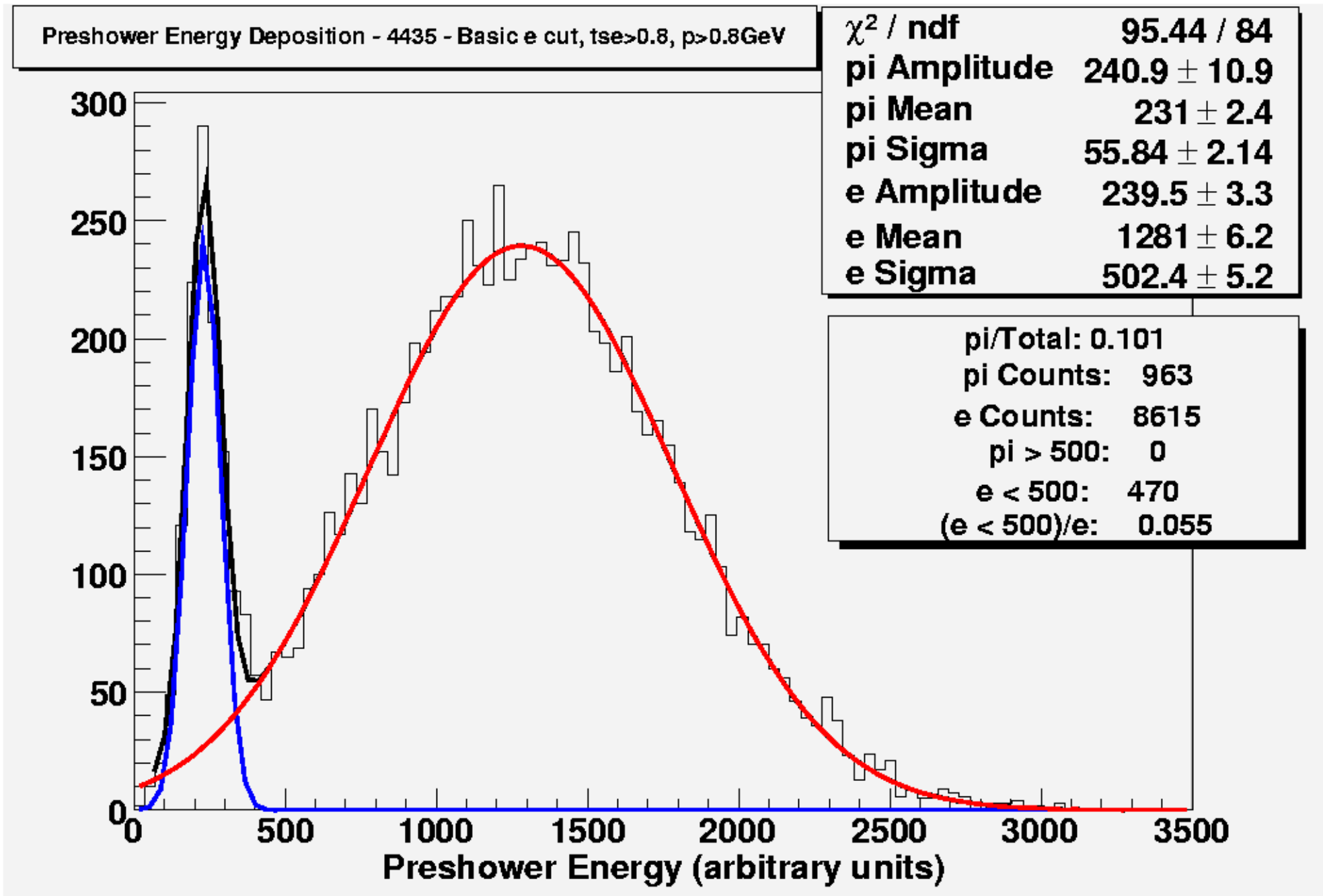

Preshower Energy Deposition - Run 4425 p>1GeV, tse>1GeV, basic e cuts
χ² / ndf 112.4 / 86
pi Amplitude 6.948 ± 2.513
pi Mean 245.6 ± 29.2
pi Sigma 51.65 ± 19.52
e Amplitude 84.19 ± 1.92
e Mean 1397 ± 10.0
e Sigma 512.6 ± 7.5
pi/Total: 0.008
pi Counts: 25
e Counts: 3090
pi > 500: 0
e < 500: 113
(e < 500)/e: 0.037
0
10
20
30
40
50
60
70
80
90
0
500
1000
1500
2000
2500
3000
3500
Preshower Energy (arbitrary units)


Preshower Energy Deposition - Run 4435
χ² / ndf 185.1 / 85
pi Amplitude 1168 ± 22.0
pi Mean 232.8 ± 1.0
pi Sigma 60.03 ± 0.85
e Amplitude 430.6 ± 4.5
e Mean 1240 ± 4.9
e Sigma 507.9 ± 4.1
pi/Total: 0.243
pi Counts: 5020
e Counts: 15662
pi > 500: 0
e < 500: 1020
(e < 500)/e: 0.065
0
200
400
600
800
1000
1200
0
500
1000
1500
2000
2500
3000
3500
Preshower Energy (arbitrary units)

Run 4435


Preshower Energy Deposition - p>1GeV, tse>1GeV, basic e cuts
χ² / ndf 66.9 / 83
pi Amplitude 14.53 ± 3.58
pi Mean 235.2 ± 13.7
pi Sigma 38.74 ± 9.01
e Amplitude 69.26 ± 1.73
e Mean 1415 ± 11.0
e Sigma 523.1 ± 8.9
pi/Total: 0.015
pi Counts: 40
e Counts: 2594
pi > 500: 0
e < 500: 95
(e < 500)/e: 0.037
0
10
20
30
40
50
60
70
80
0
500
1000
1500
2000
2500
3000
3500
Preshower Energy (arbitrary units)

Run 4435


Preshower Energy Deposition - 4435 - Basic e cut, tse>0.8, p>0.8GeV
χ² / ndf 95.44 / 84
pi Amplitude 240.9 ± 10.9
pi Mean 231 ± 2.4
pi Sigma 55.84 ± 2.14
e Amplitude 239.5 ± 3.3
e Mean 1281 ± 6.2
e Sigma 502.4 ± 5.2
pi/Total: 0.101
pi Counts: 963
e Counts: 8615
pi > 500: 0
e < 500: 470
(e < 500)/e: 0.055
300
250
200
150
100
50
0
0
500
1000
1500
2000
2500
3000
3500
Preshower Energy (arbitrary units)

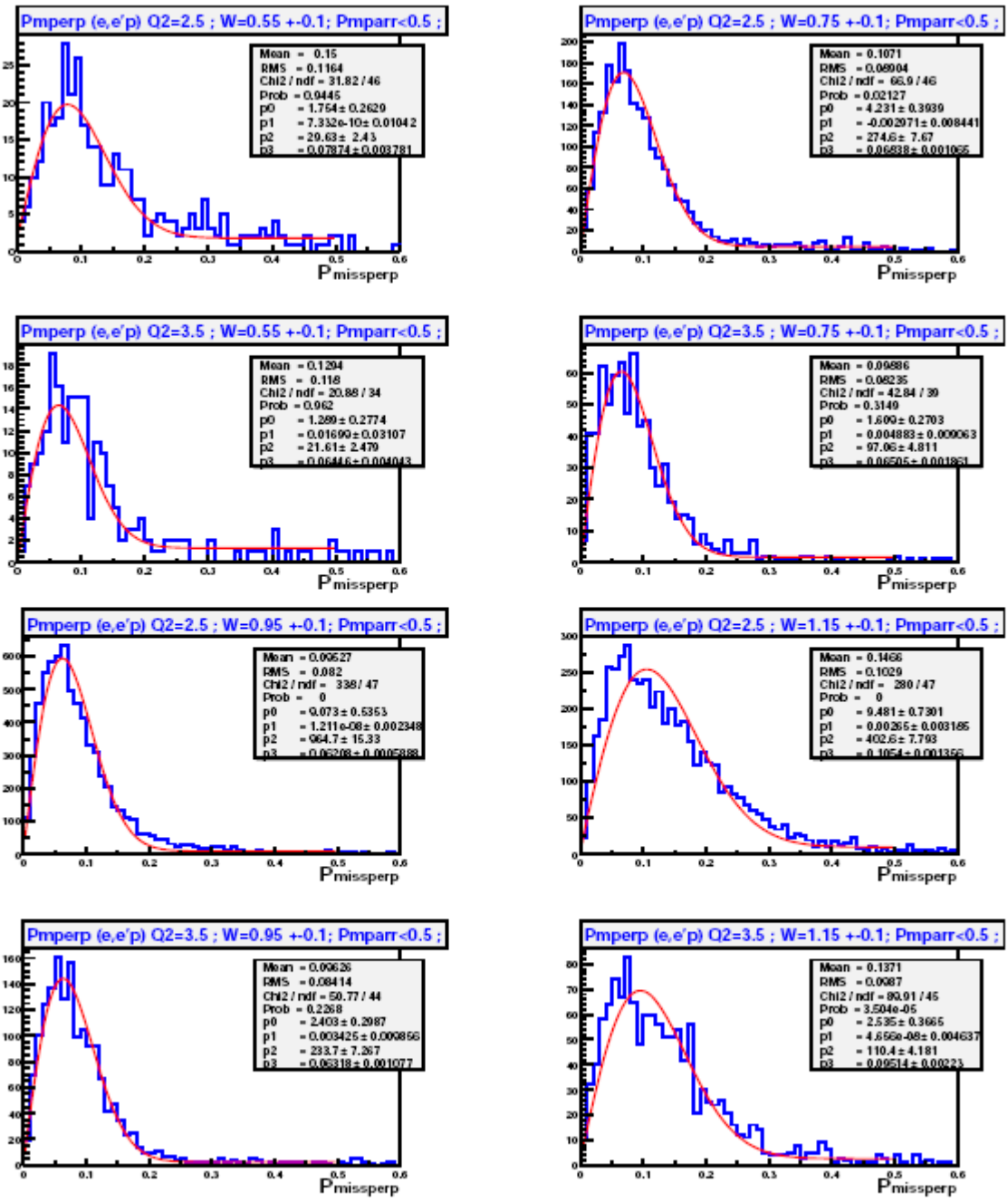
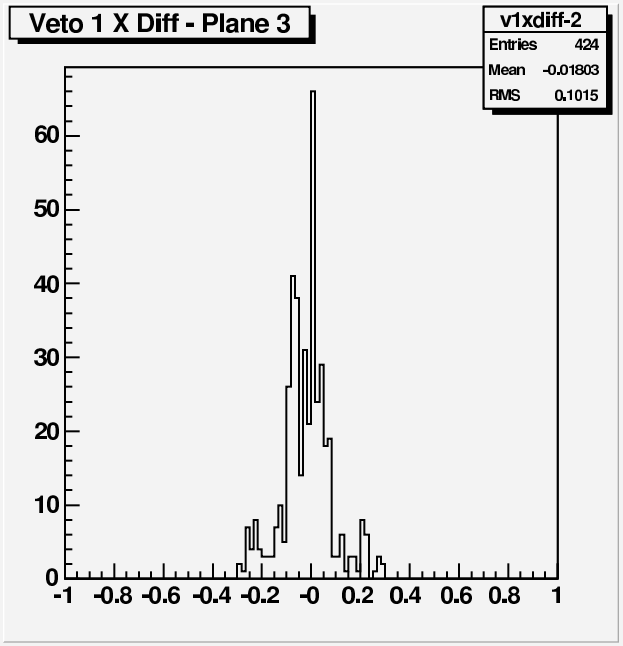
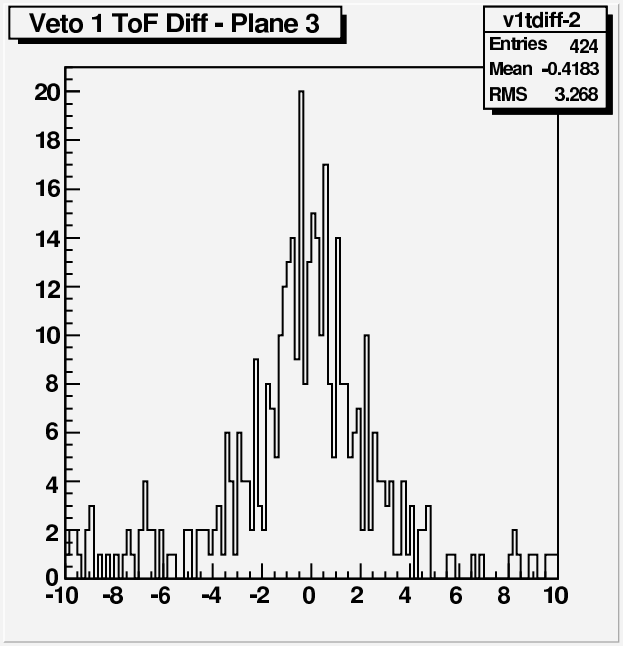
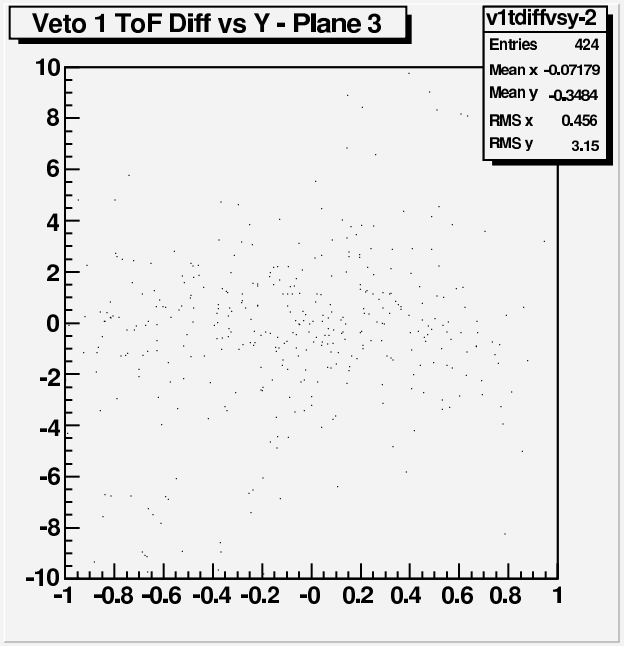
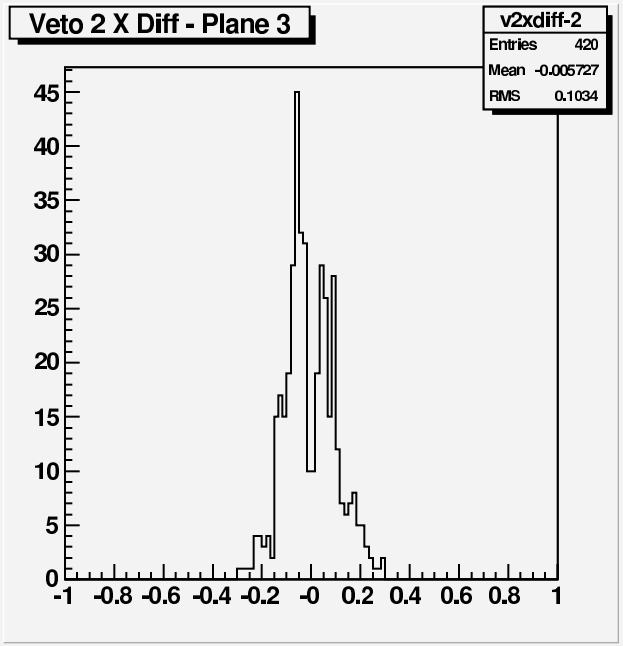


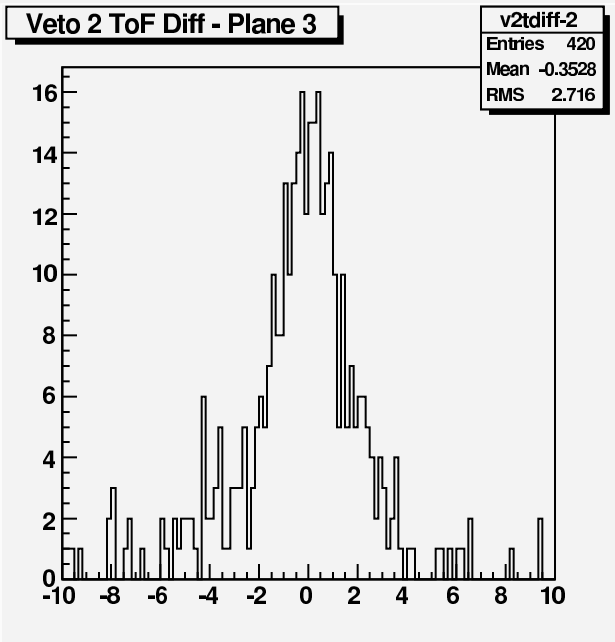
Figure 28: The fit of p_{mperp} distributions for four W ranges with the cut on p_{mpar} . The scales are in GeV/c.

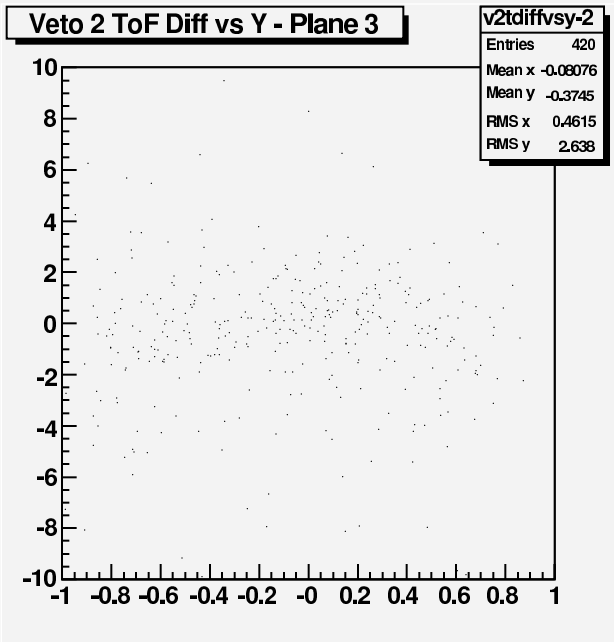

Veto 1 X Diff - Plane 3
v1xdiff-2
Entries 424
Mean -0.01803
RMS 0.1015

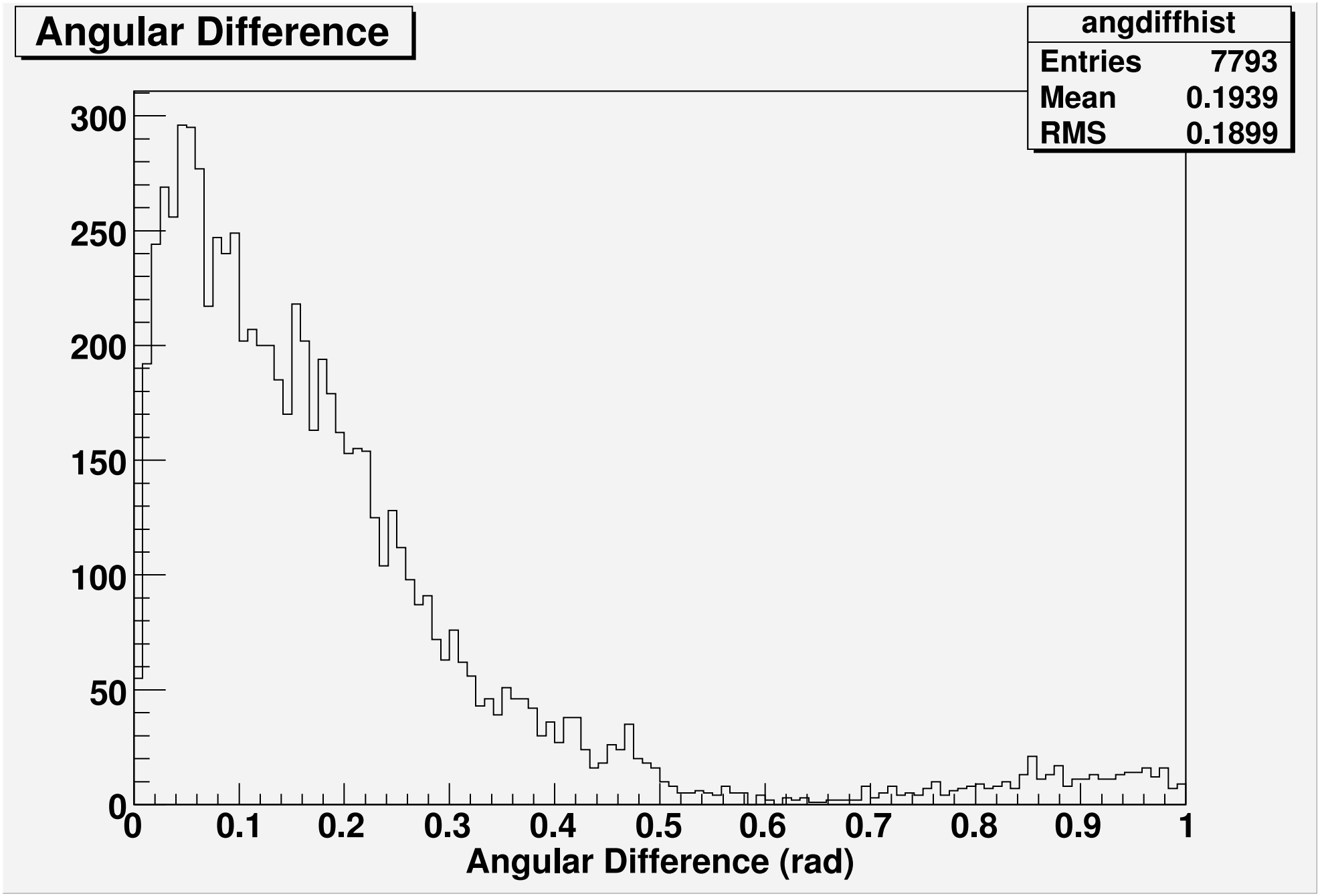

Veto 1 ToF Diff - Plane 3
v1tdiff-2
Entries 424
Mean -0.4183
RMS 3.268

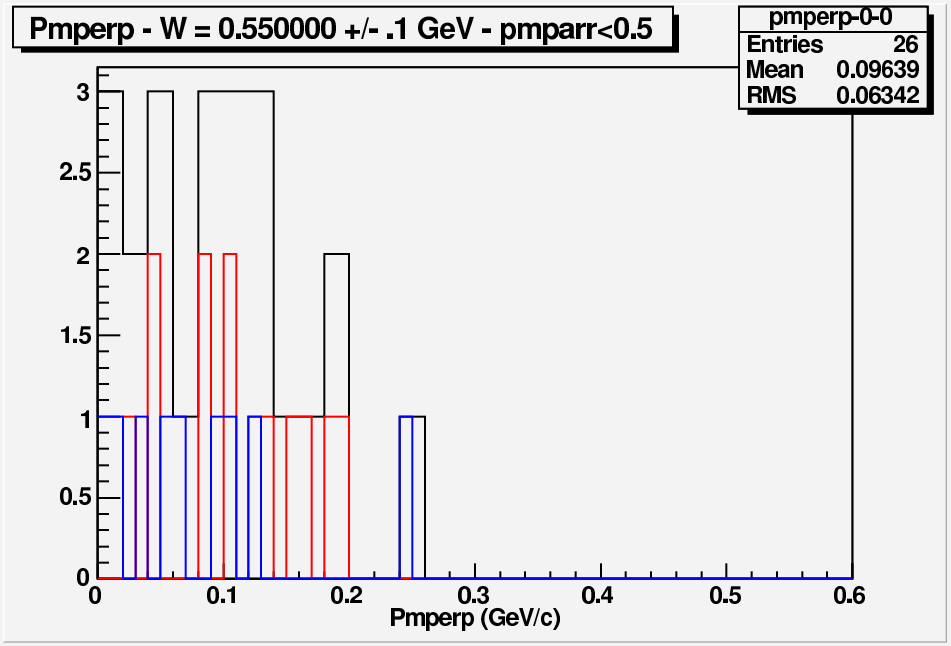

Veto 1 ToF Diff vs Y - Plane 3
v1tdiffvsy-2
Entries 424
Mean x -0.07179
Mean y -0.3484
RMS x 0.456
RMS y 3.15

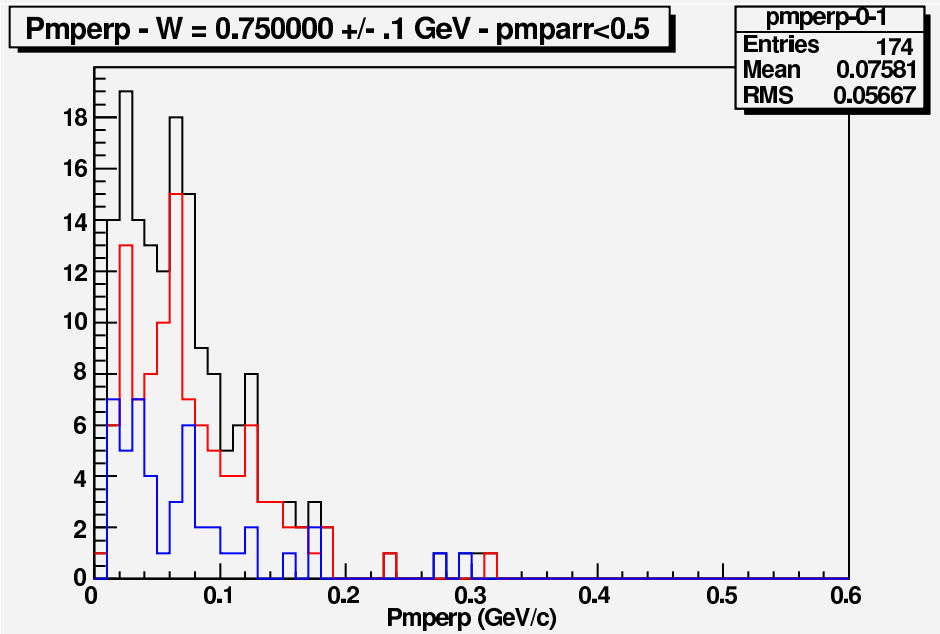

Veto 2 X Diff - Plane 3
v2xdiff-2
Entries 420
Mean -0.005727
RMS 0.1034

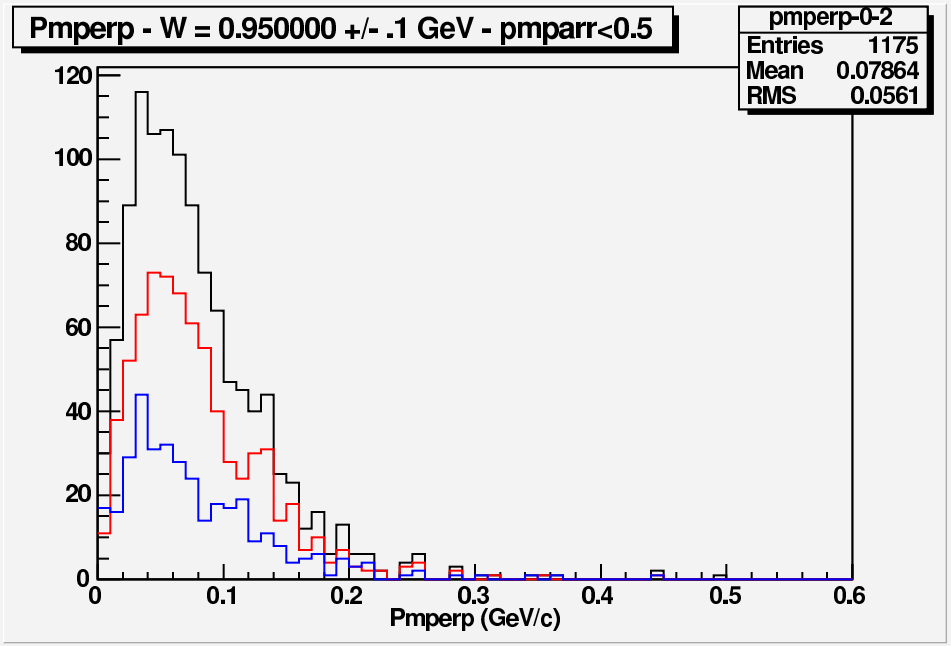

Veto 2 ToF Diff - Plane 3
v2tdiff-2
Entries 420
Mean -0.3528
RMS 2.716

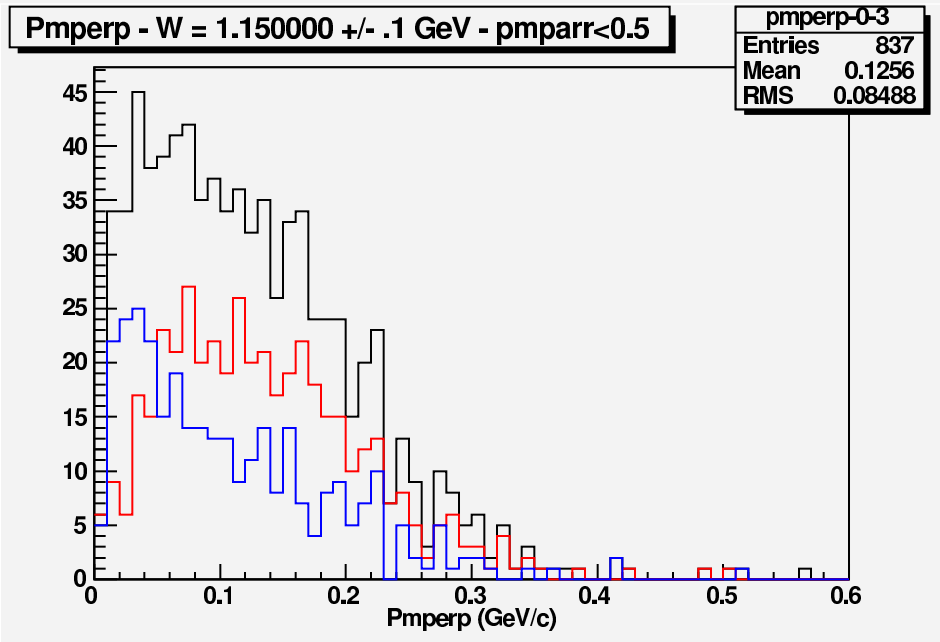

Veto 2 ToF Diff vs Y - Plane 3
v2tdiffvsy-2
Entries 420
Mean x -0.08076
Mean y -0.3745
RMS x 0.4615
RMS y 2.638

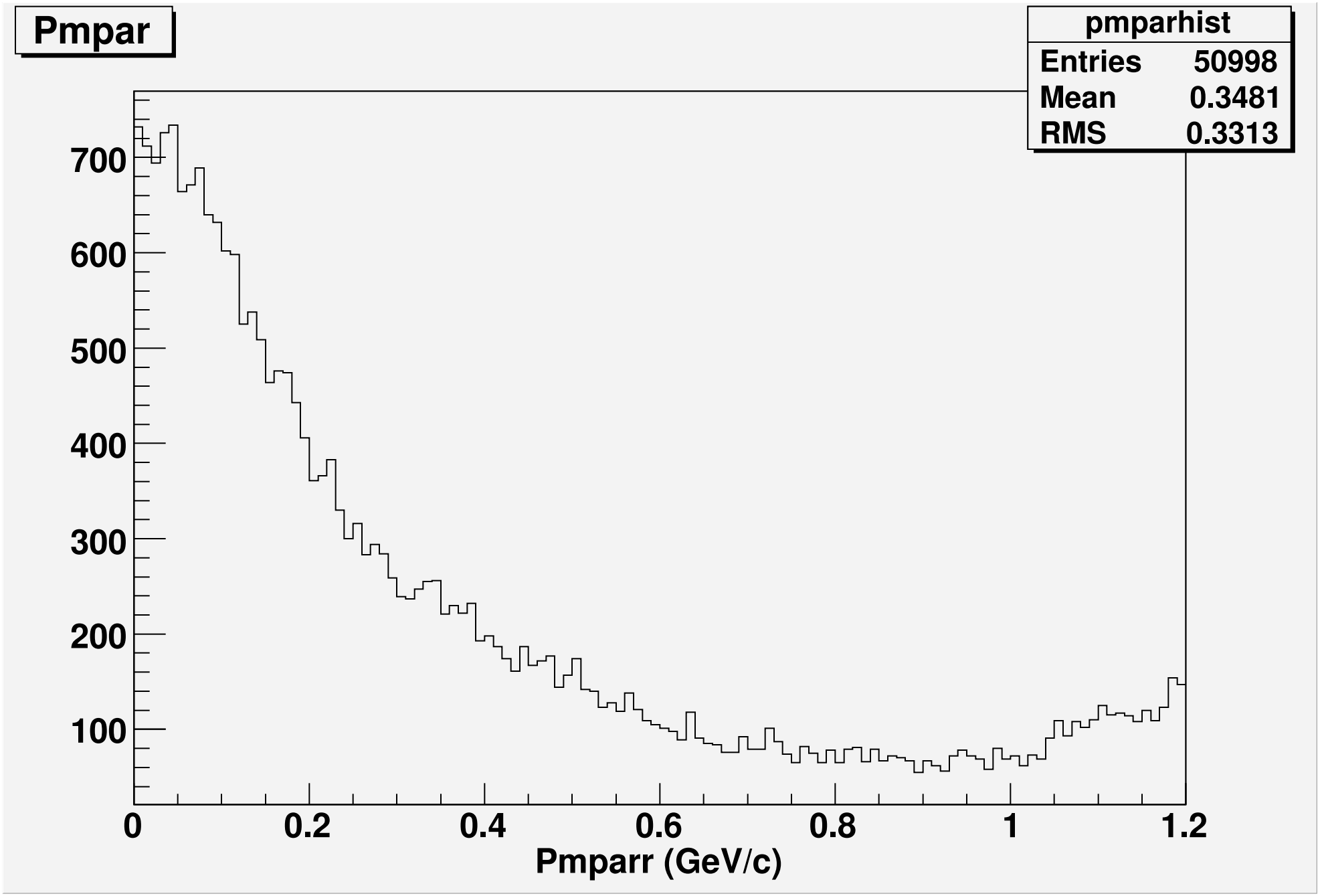

Angular Difference
angdiffhist
Entries 7793
Mean 0.1939
RMS 0.1899
300
250
200
150
100
50
0
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Angular Difference (rad)

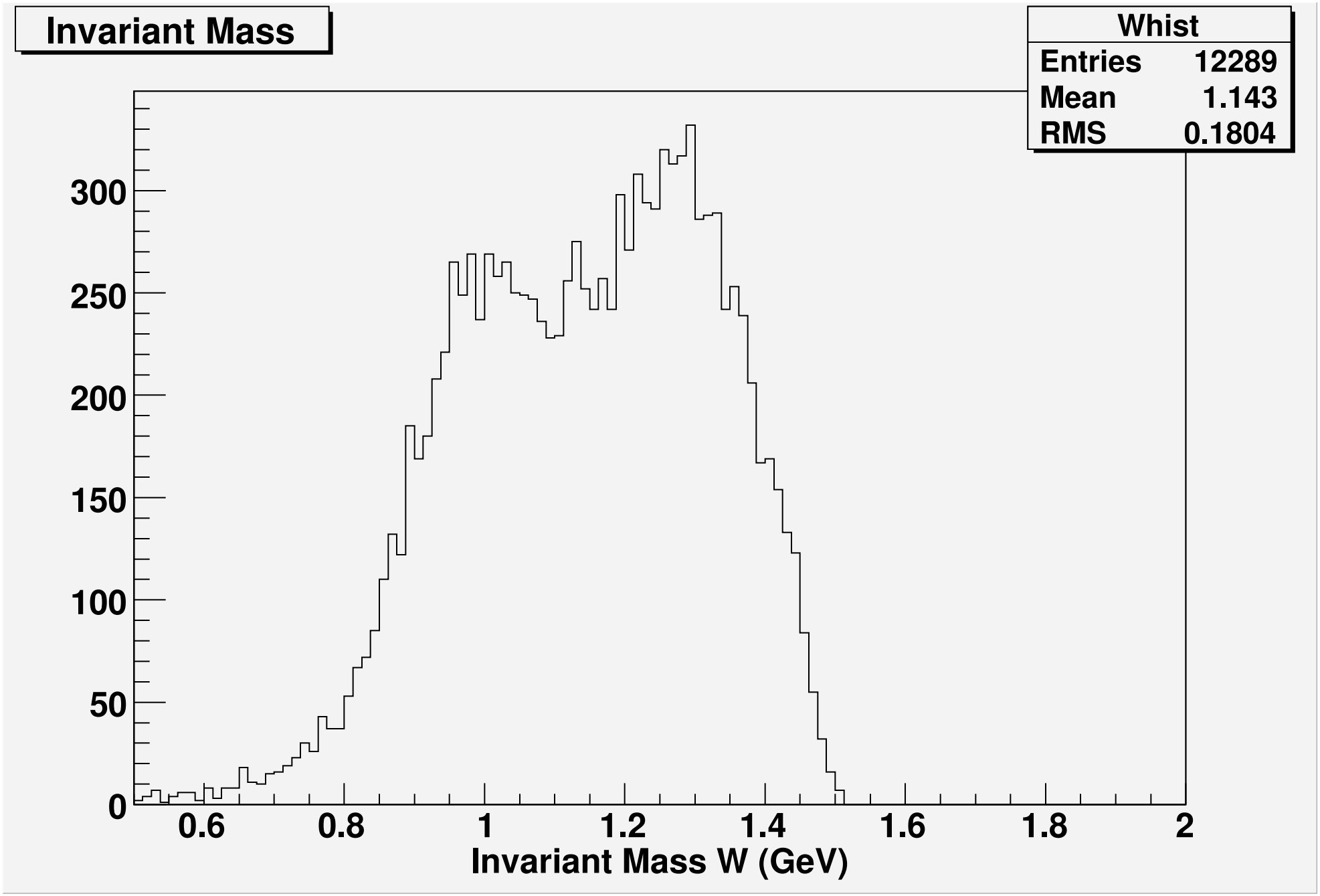

Pmperp - W = 0.550000 +/- .1 GeV - pmparr<0.5
pmperp-0-0
Entries 26
Mean 0.09639
RMS 0.06342
Pmperp (GeV/c)

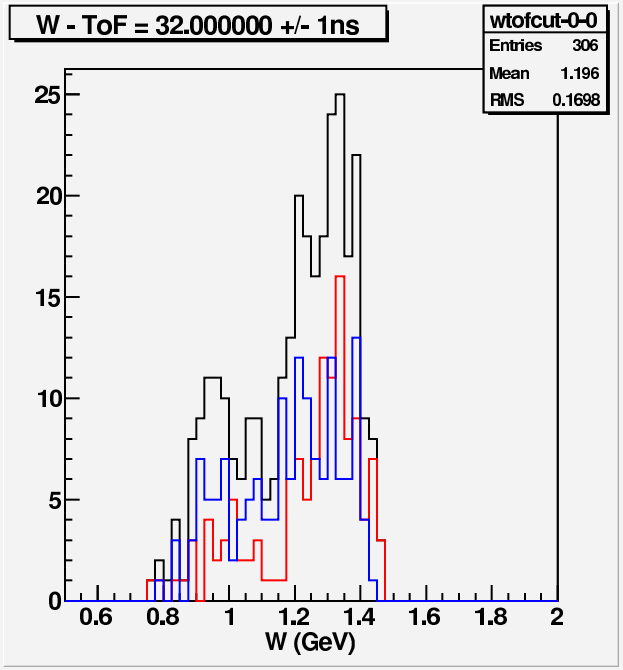

Pmperp - W = 0.750000 +/- .1 GeV - pmparr<0.5
pmperp-0-1
Entries 174
Mean 0.07581
RMS 0.05667
Pmperp (GeV/c)

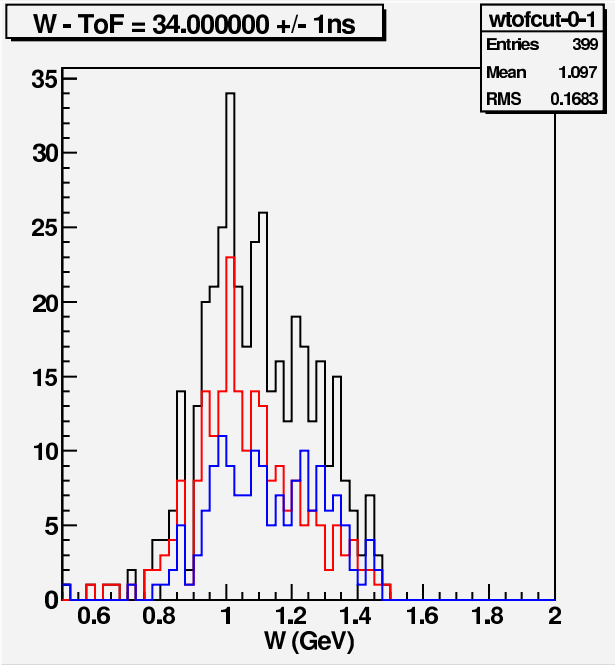

Pmperp - W = 0.950000 +/- .1 GeV - pmparr<0.5
pmperp-0-2
Entries 1175
Mean 0.07864
RMS 0.0561
Pmperp (GeV/c)

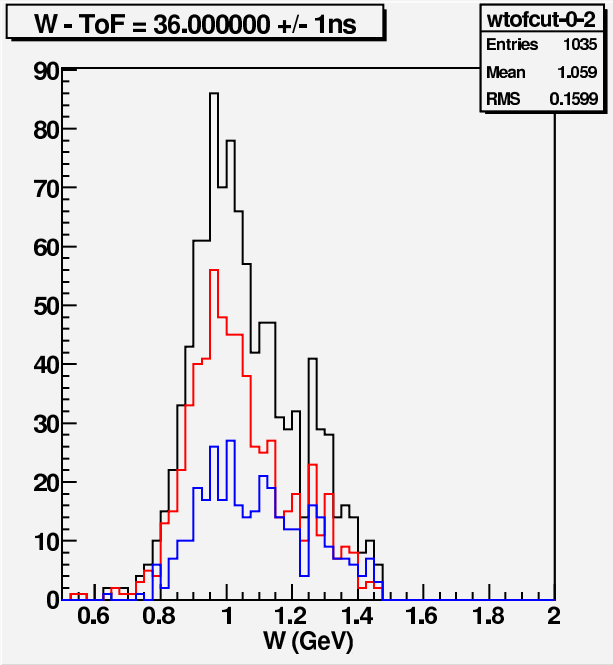

Pmperp - W = 1.150000 +/- .1 GeV - pmparr<0.5
pmperp-0-3
Entries 837
Mean 0.1256
RMS 0.08488
Pmperp (GeV/c)

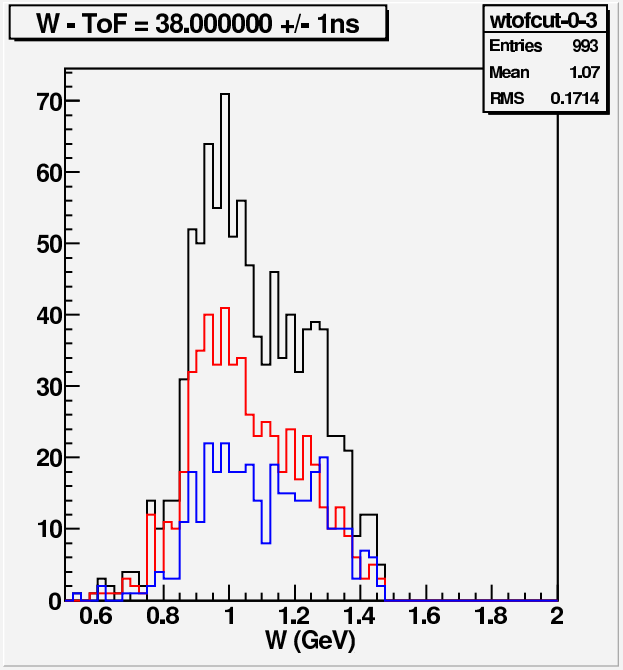

Pmpar
pmparhist
Entries 50998
Mean 0.3481
RMS 0.3313
700
600
500
400
300
200
100
0
0.2
0.4
0.6
0.8
1
1.2
Pmparr (GeV/c)

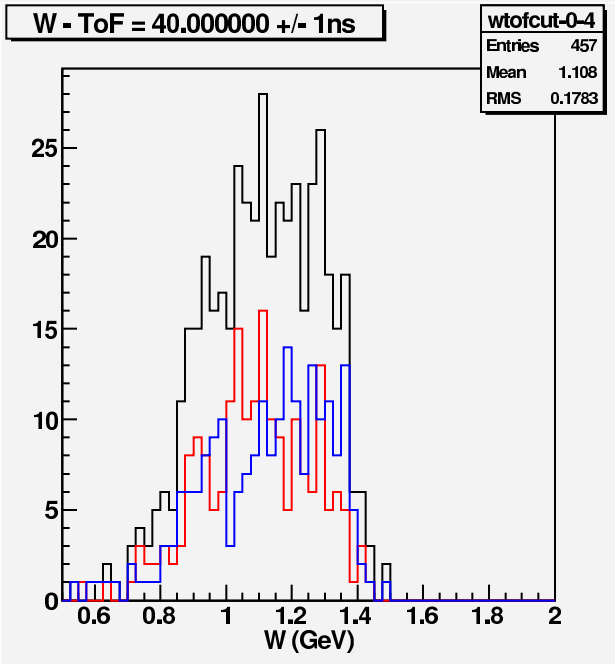

Invariant Mass
Whist
Entries 12289
Mean 1.143
RMS 0.1804
300
250
200
150
100
50
0
0.6
0.8
1
1.2
1.4
1.6
1.8
2
Invariant Mass W (GeV)

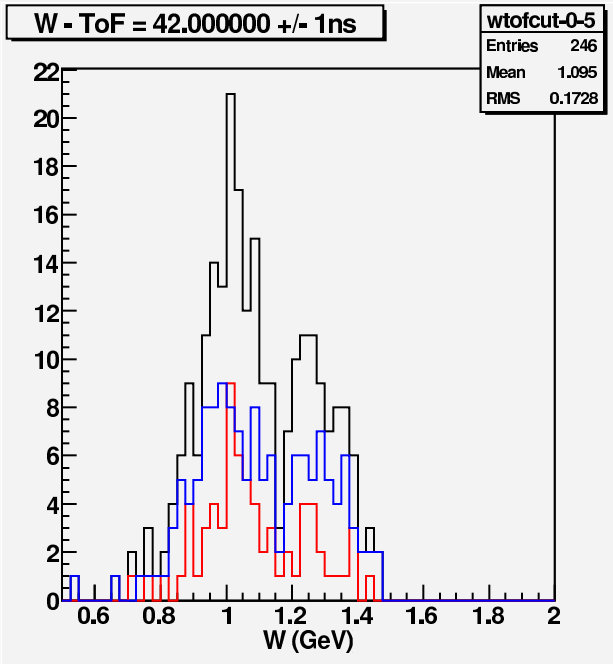

W - ToF = 32.000000 +/- 1ns
wtofcut-0-0
Entries 306
Mean 1.196
RMS 0.1698
W (GeV)


W - ToF = 34.000000 +/- 1ns
wtofcut-0-1
Entries 399
Mean 1.097
RMS 0.1683
W (GeV)


W - ToF = 36.000000 +/- 1ns
wtofcut-0-2
Entries 1035
Mean 1.059
RMS 0.1599
W (GeV)


W - ToF = 38.000000 +/- 1ns
wtofcut-0-3
Entries 993
Mean 1.07
RMS 0.1714
W (GeV)


W - ToF = 40.000000 +/- 1ns
wtofcut-0-4
Entries 457
Mean 1.108
RMS 0.1783
W (GeV)


W - ToF = 42.000000 +/- 1ns
wtofcut-0-5
Entries 246
Mean 1.095
RMS 0.1728
W (GeV)