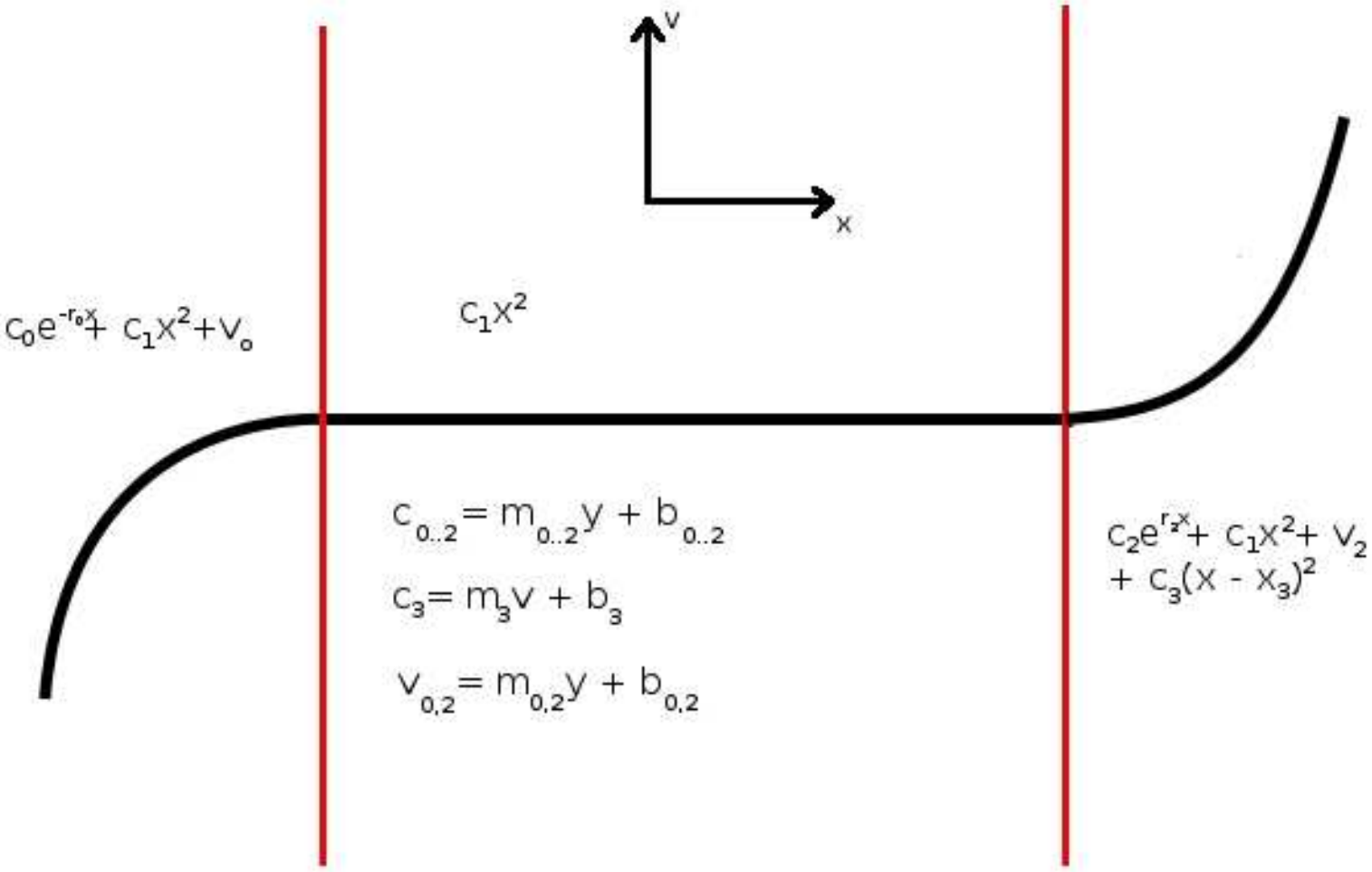
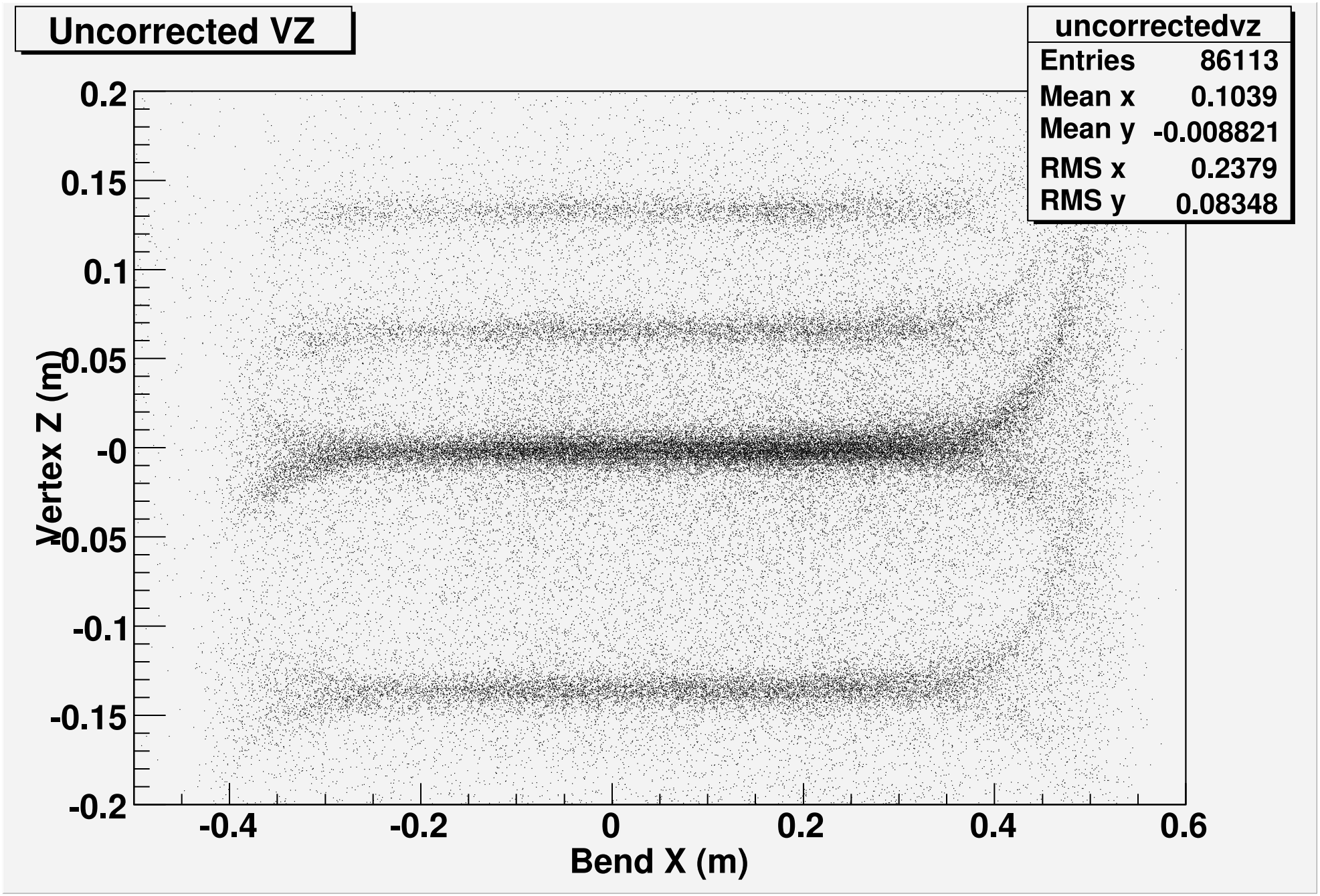
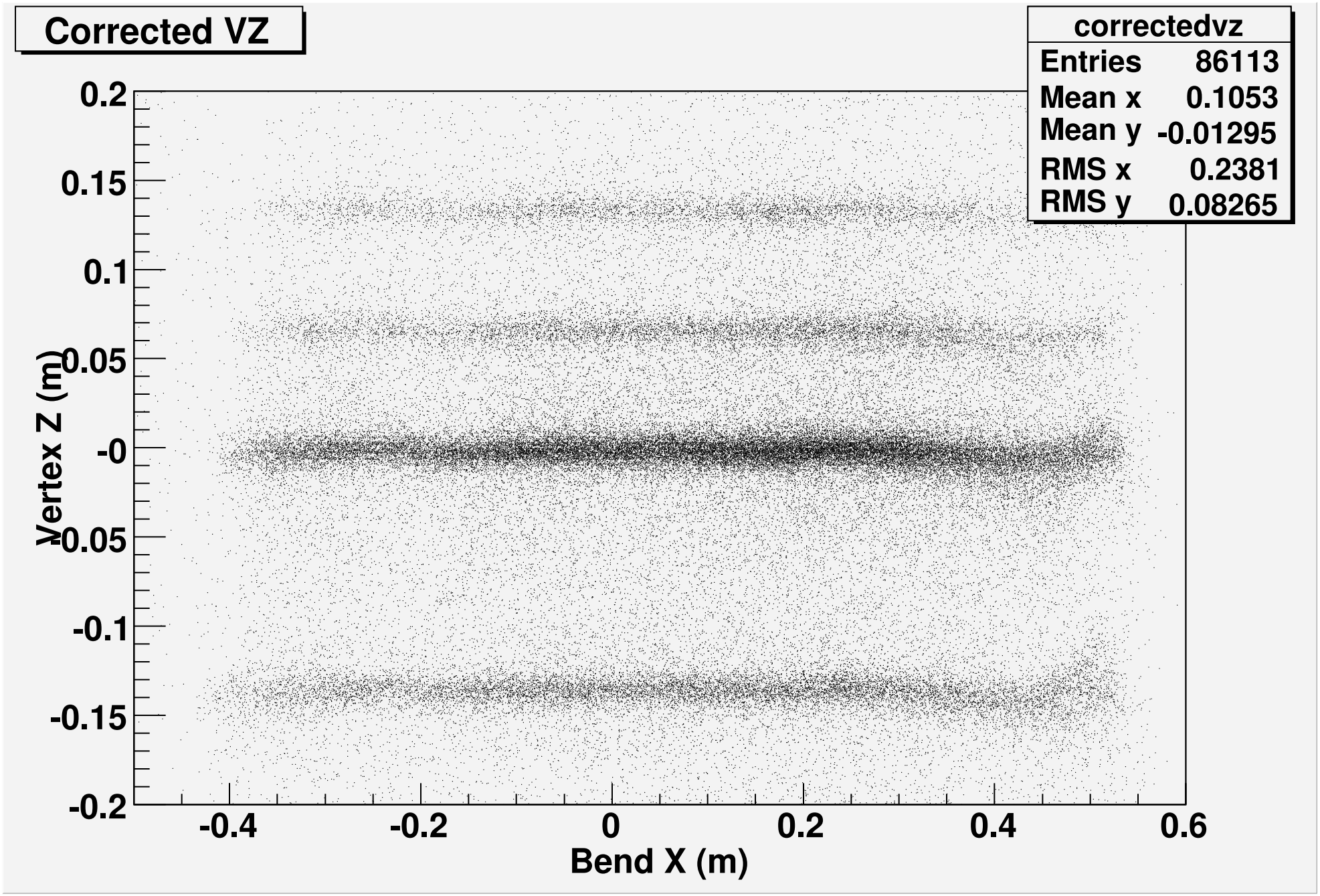
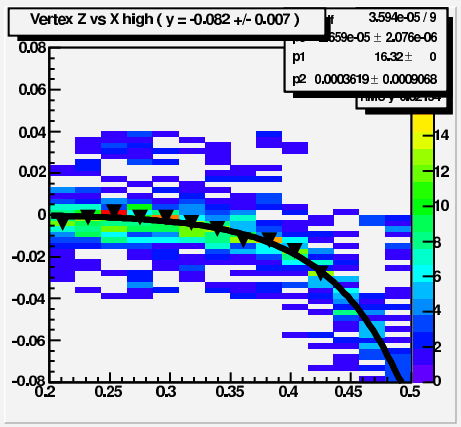
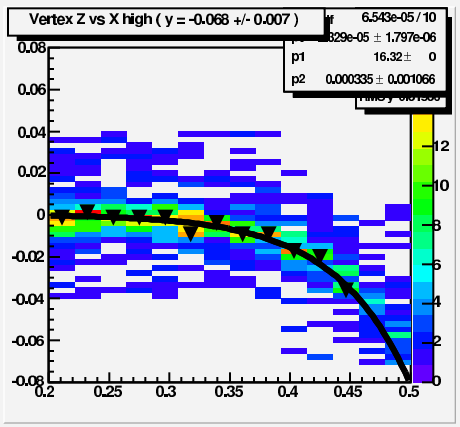
Vertex Correction Form

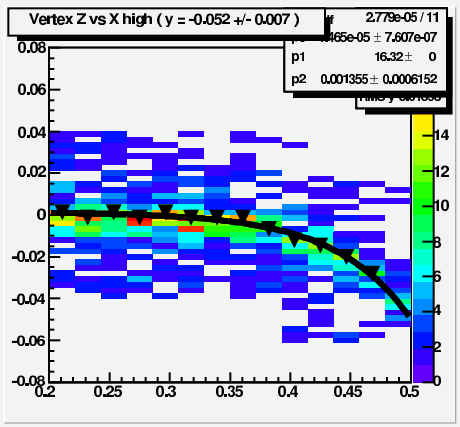


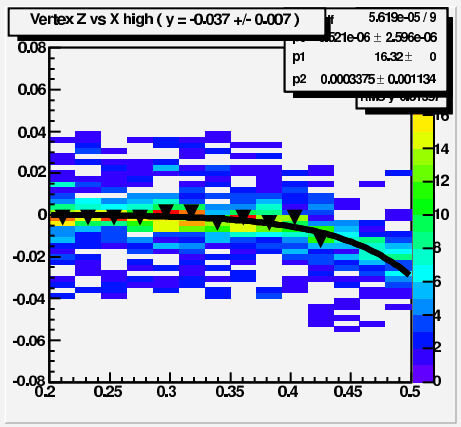

Uncorrected VZ
uncorrectedvz
Entries 86113
Mean x 0.1039
Mean y -0.008821
RMS x 0.2379
RMS y 0.08348
Vertex Z (m)
0.2
0.15
0.1
0.05
-0
0.05
-0.1
-0.15
-0.2
-0.4
-0.2
0
0.2
0.4
0.6
Bend X (m)

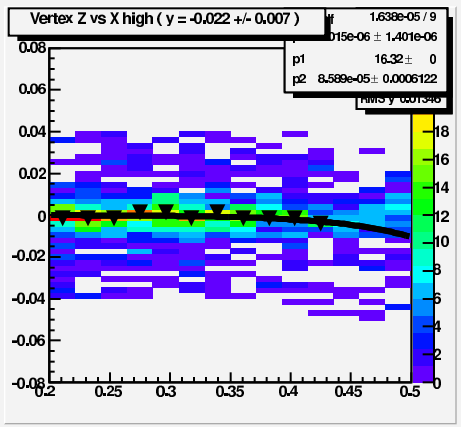

Corrected VZ
correctedvz
Entries 86113
Mean x 0.1053
Mean y -0.01295
RMS x 0.2381
RMS y 0.08265
Vertex Z (m)
0.2
0.15
0.1
0.05
-0
0.05
-0.1
-0.15
-0.2
-0.4
-0.2
0
0.2
0.4
0.6
Bend X (m)

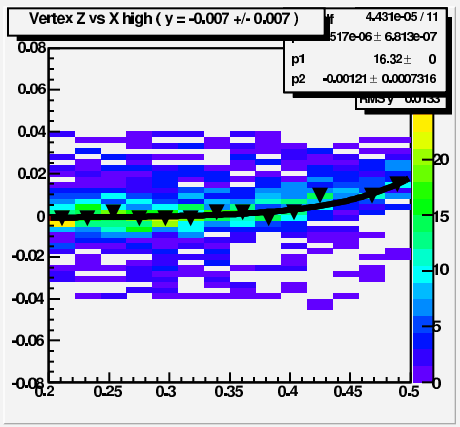

Vertex Z vs X high (y = -0.082 +/- 0.007)
p1 16.32 ± 0
p2 0.0003619 ± 0.0009068

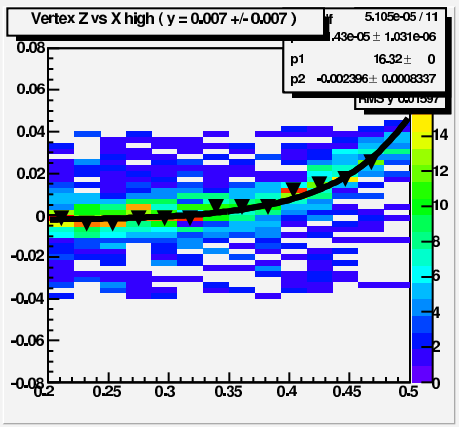

Vertex Z vs X high (y = -0.068 +/- 0.007)
p1 16.32 ± 0
p2 0.000335 ± 0.001066

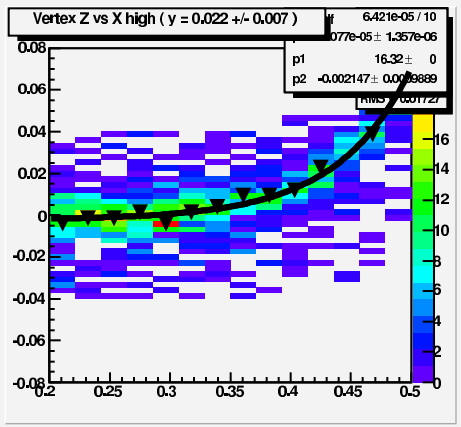

Vertex Z vs X high (y = -0.052 +/- 0.007)
p1 16.32 ± 0
p2 0.001355 ± 0.0006152

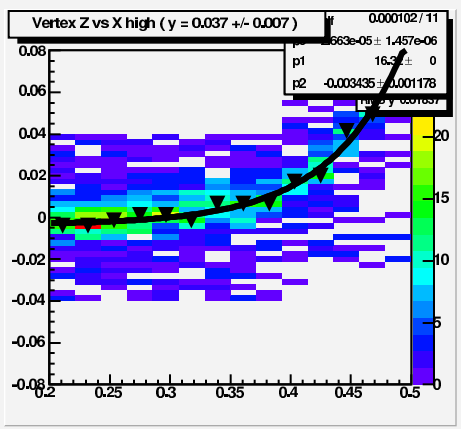

Vertex Z vs X high (y = -0.037 +/- 0.007)
p1 16.32 ± 0
p2 0.0003375 ± 0.001134

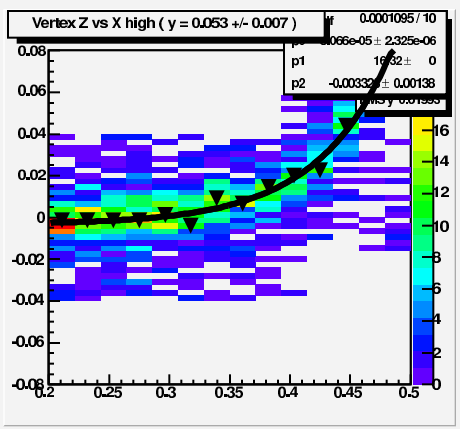

Vertex Z vs X high (y = -0.022 +/- 0.007)
p1 16.32 ± 0
p2 8.589e-05 ± 0.0006122

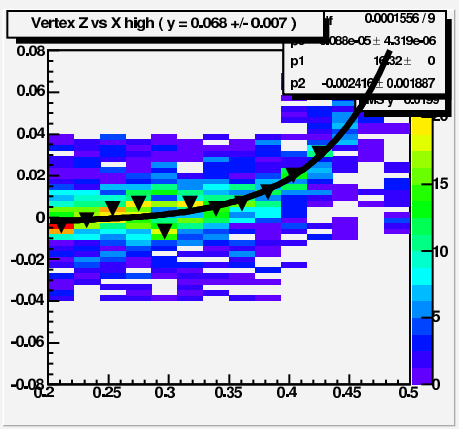

Vertex Z vs X high (y = -0.007 +/- 0.007)
p1 16.32 ± 0
p2 -0.00121 ± 0.0007316

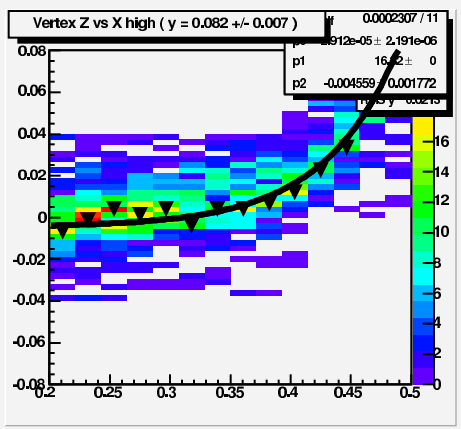

Vertex Z vs X high (y = 0.007 +/- 0.007)
p1 16.32 ± 0
p2 -0.002396 ± 0.0008337

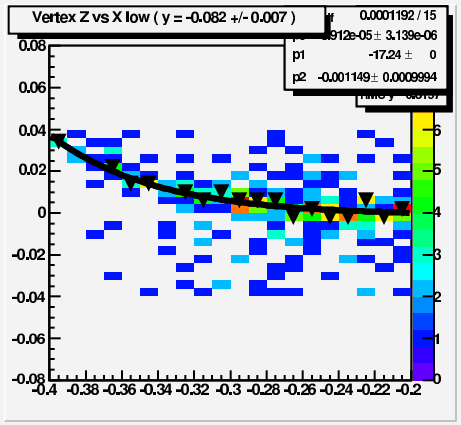

Vertex Z vs X high (y = 0.022 +/- 0.007)
p1 16.32 ± 0
p2 -0.002147 ± 0.0009889

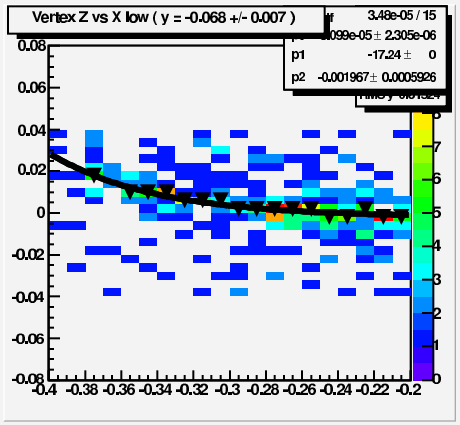

Vertex Z vs X high (y = 0.037 +/- 0.007)
p1 16.32 ± 0
p2 -0.003435 ± 0.001178

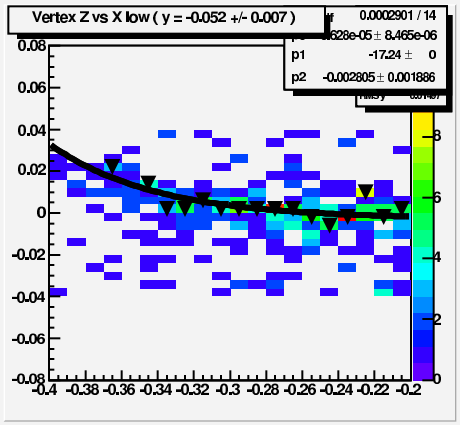

Vertex Z vs X high (y = 0.053 +/- 0.007)
p1 16.32 ± 0
p2 -0.003332 ± 0.00138

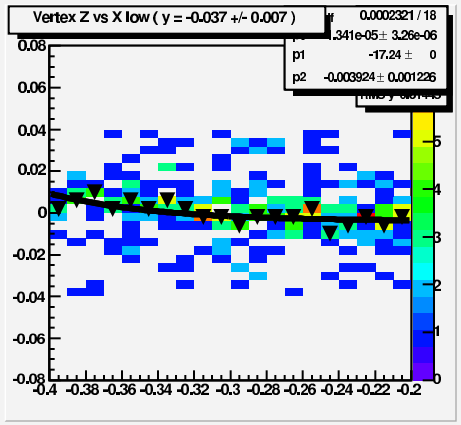

Vertex Z vs X high (y = 0.068 +/- 0.007)
p1 16.32 ± 0
p2 -0.002416 ± 0.001887

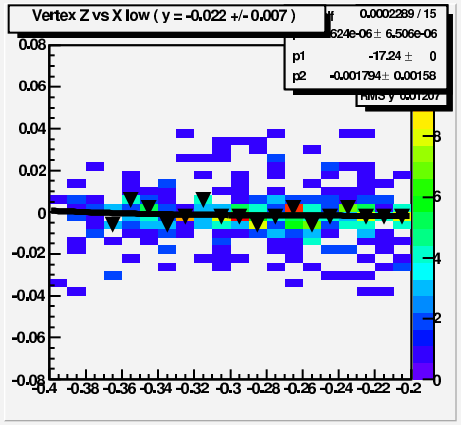

Vertex Z vs X high (y = 0.082 +/- 0.007)
p1 16.32 ± 0
p2 -0.004559 ± 0.001772

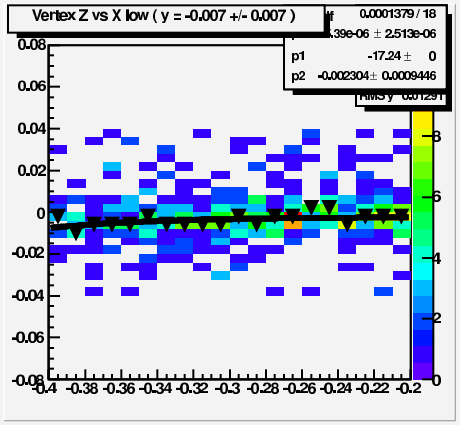

Vertex Z vs X low (y = -0.082 +/- 0.007)
p1 -17.24 ± 0
p2 -0.001149 ± 0.0009994

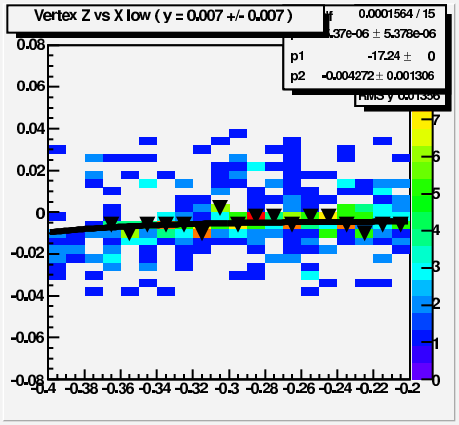

Vertex Z vs X low (y = -0.068 +/- 0.007)
p1 -17.24 ± 0
p2 -0.001967 ± 0.0005926

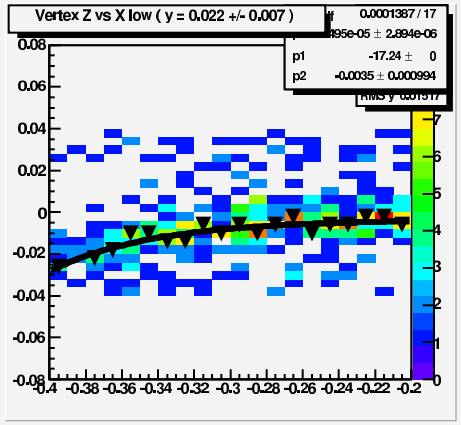

Vertex Z vs X low (y = -0.052 +/- 0.007)
p1 -17.24 ± 0
p2 -0.002805 ± 0.001886

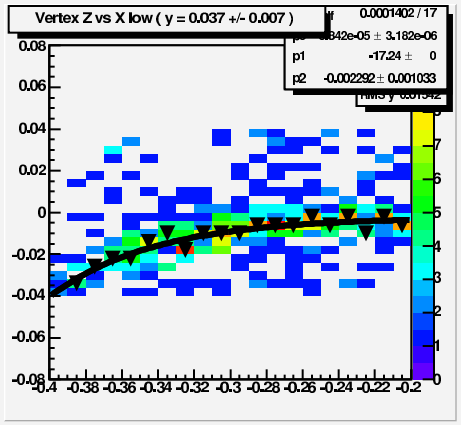

Vertex Z vs X low (y = -0.037 +/- 0.007)
p1 -17.24 ± 0
p2 -0.003924 ± 0.001226

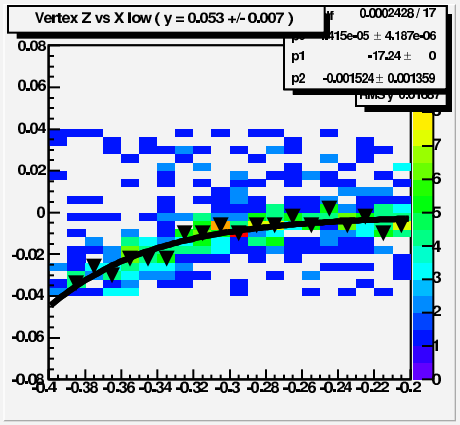

Vertex Z vs X low (y = -0.022 +/- 0.007)
p1 -17.24 ± 0
p2 -0.001794 ± 0.00158

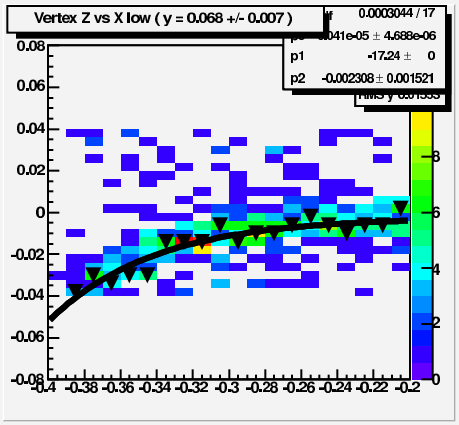

Vertex Z vs X low (y = -0.007 +/- 0.007)
p1 -17.24 ± 0
p2 -0.002304 ± 0.0009446

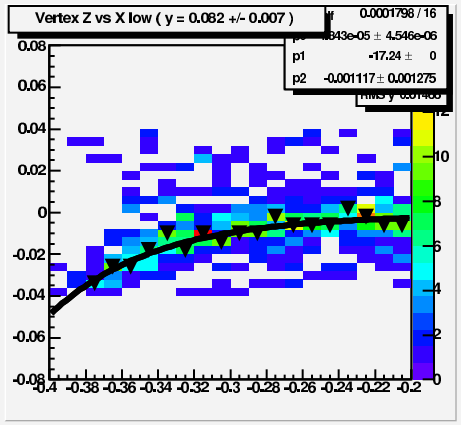

Vertex Z vs X low (y = 0.007 +/- 0.007)
p1 -17.24 ± 0
p2 -0.004272 ± 0.001306

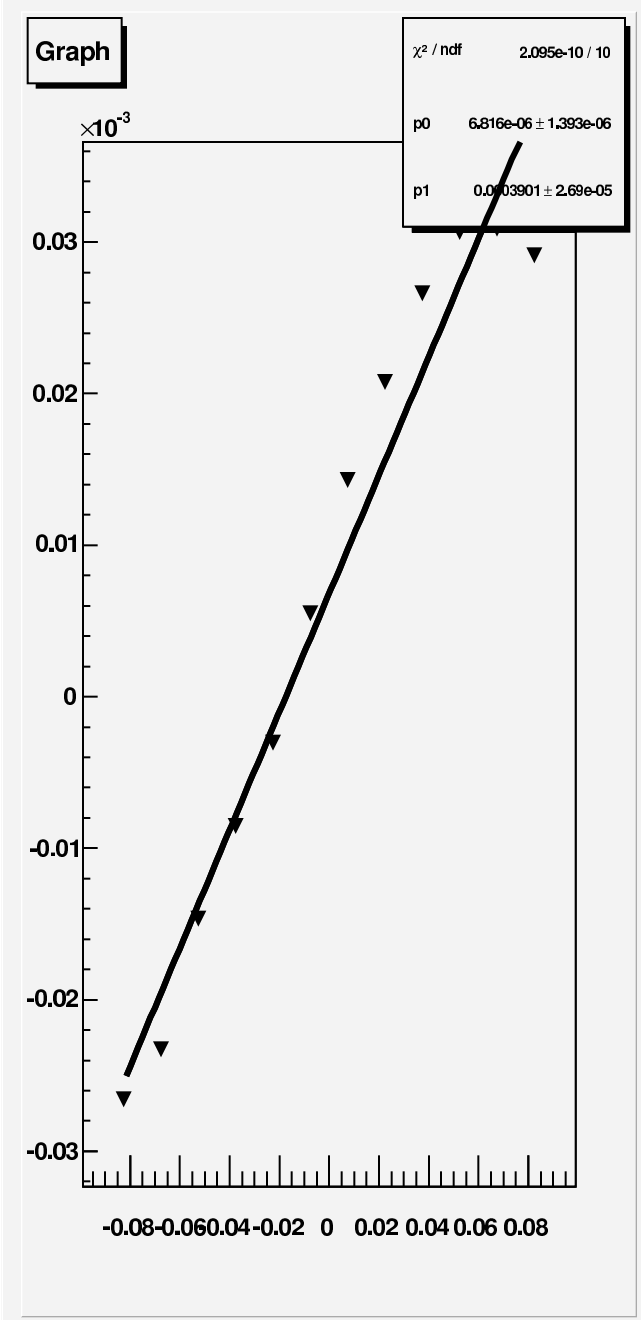

Vertex Z vs X low (y = 0.022 +/- 0.007)
p1 -17.24 ± 0
p2 -0.0035 ± 0.000994

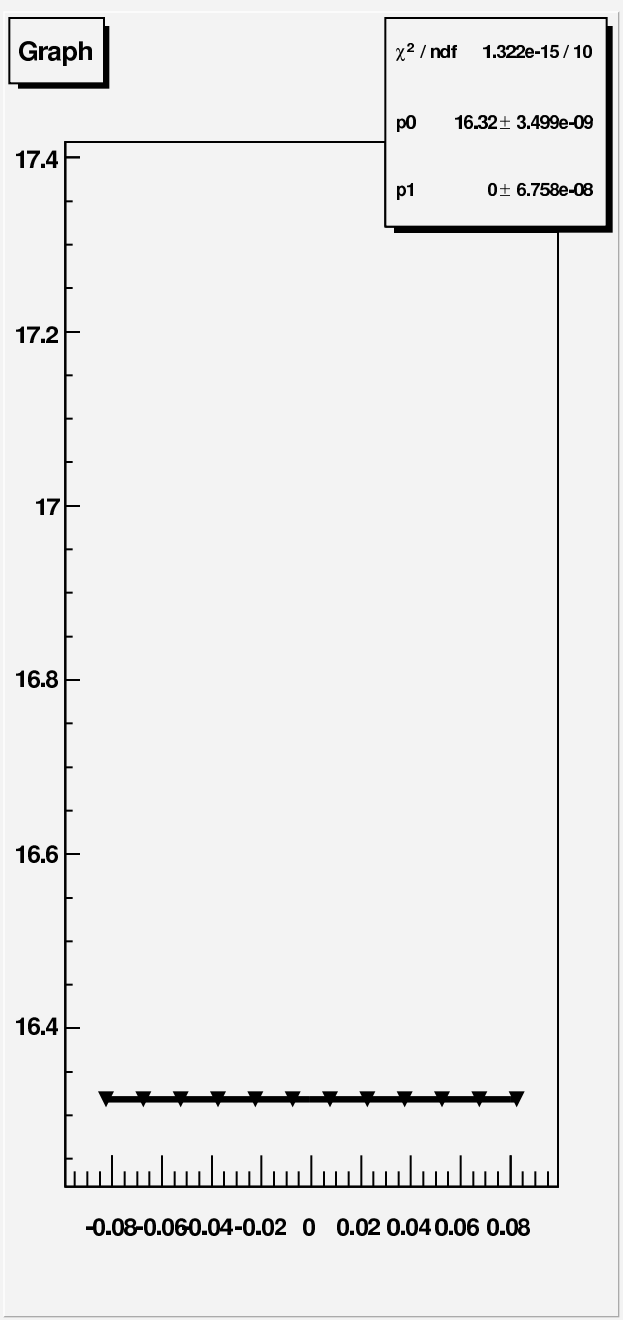

Vertex Z vs X low (y = 0.037 +/- 0.007)
p1 -17.24 ± 0
p2 -0.002292 ± 0.001033

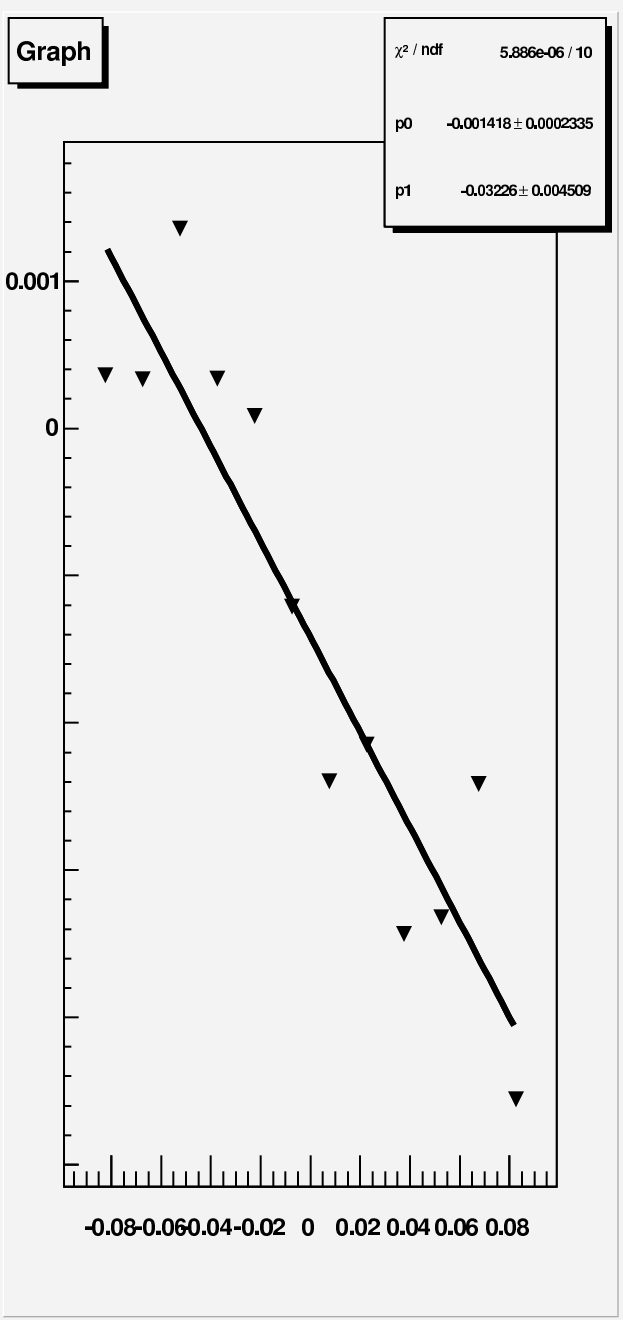

Vertex Z vs X low (y = 0.053 +/- 0.007)
p1 -17.24 ± 0
p2 -0.001524 ± 0.001359

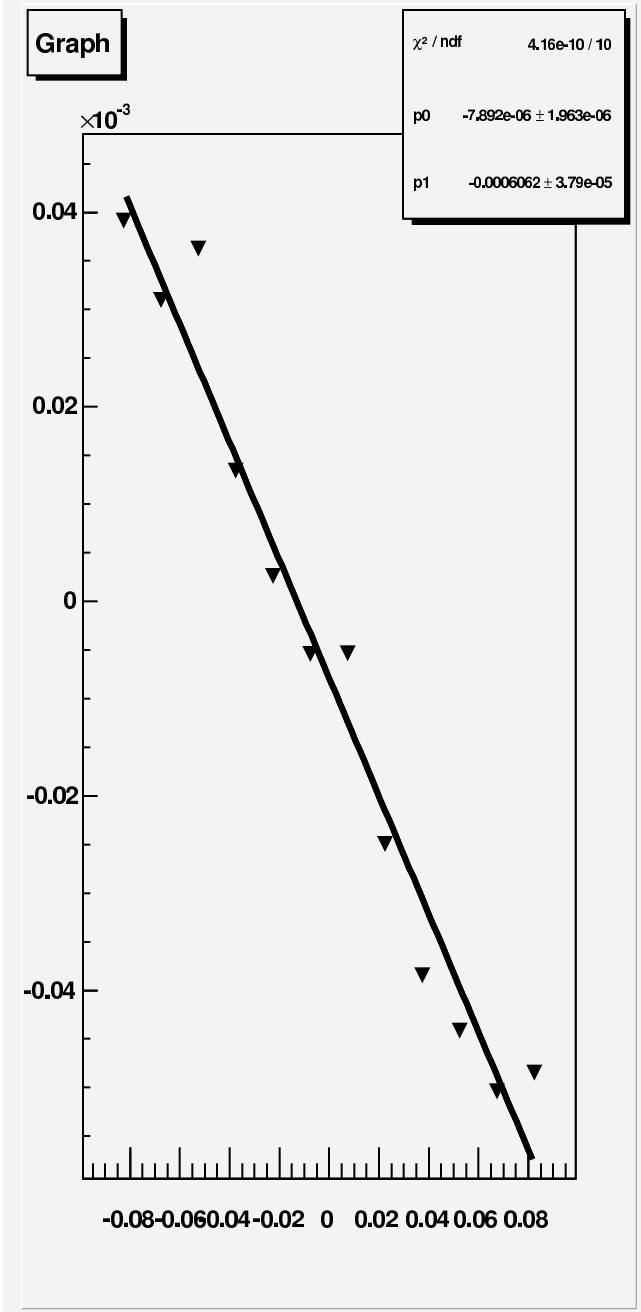

Vertex Z vs X low (y = 0.068 +/- 0.007)
p1 -17.24 ± 0
p2 -0.002308 ± 0.001521

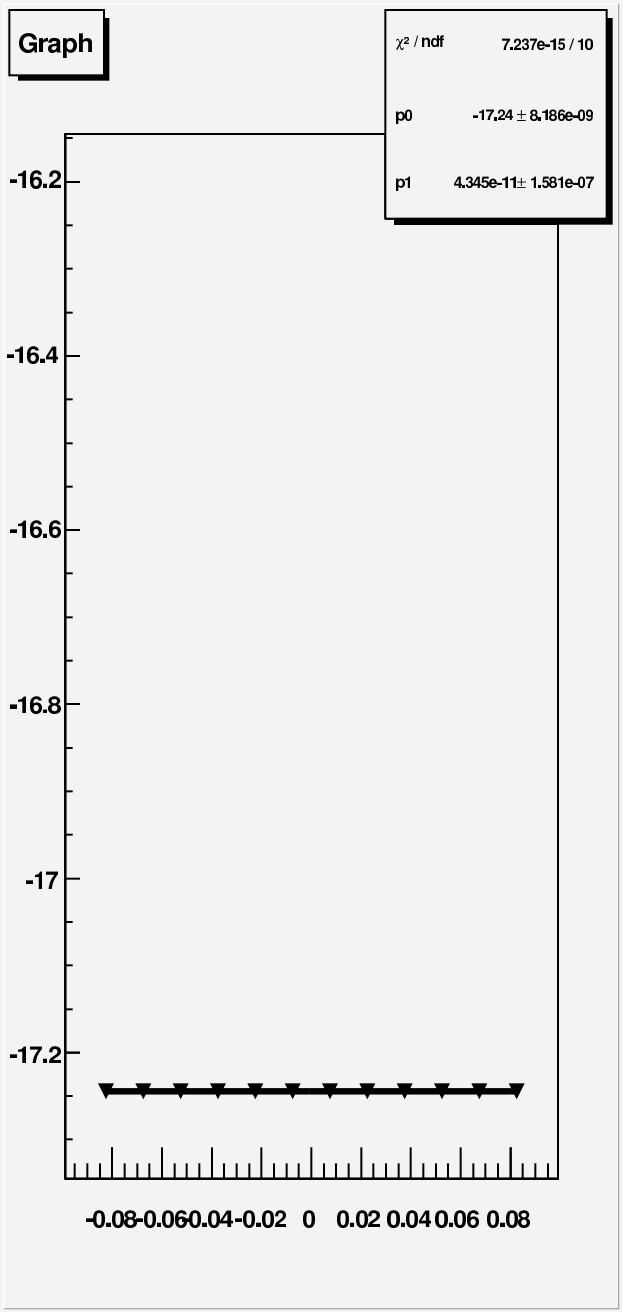

Vertex Z vs X low (y = 0.082 +/- 0.007)
p1 -17.24 ± 0
p2 -0.001117 ± 0.001275

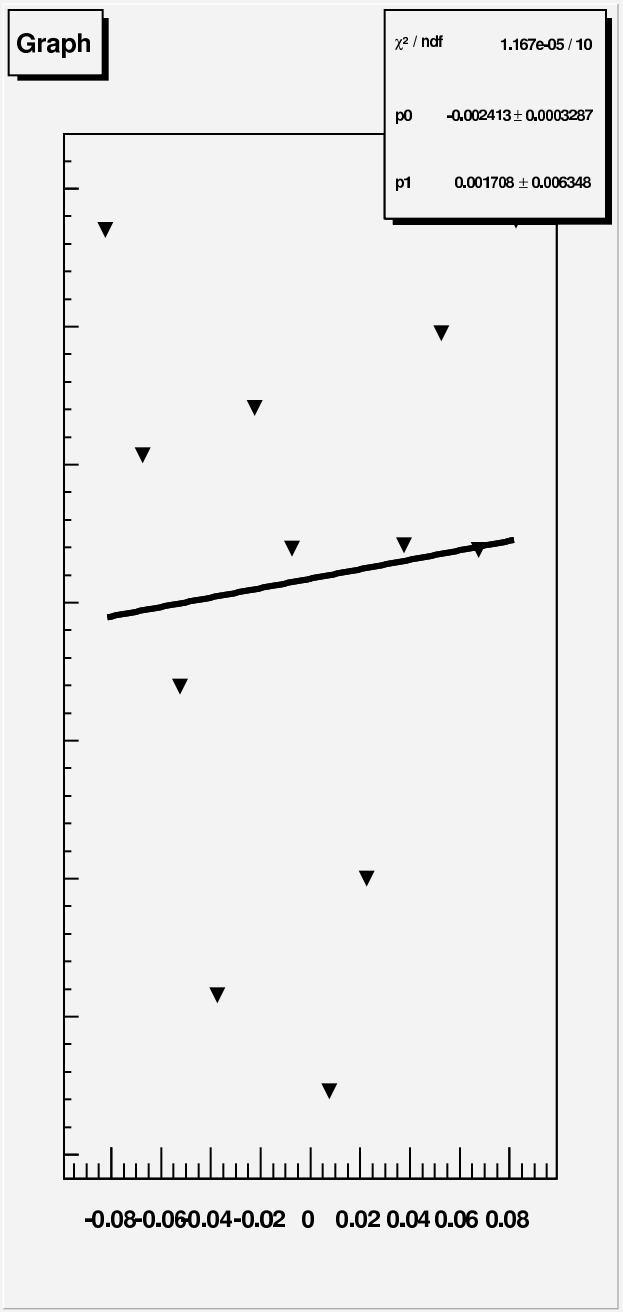

Graph
χ² / ndf 2.095e-10 / 10
p0 6.816e-06 ± 1.393e-06
p1 0.0003901 ± 2.69e-05
×10⁻³
0.03
0.02
0.01
0
-0.01
-0.02
-0.03
-0.08 -0.06 0.04 -0.02 0 0.02 0.04 0.06 0.08

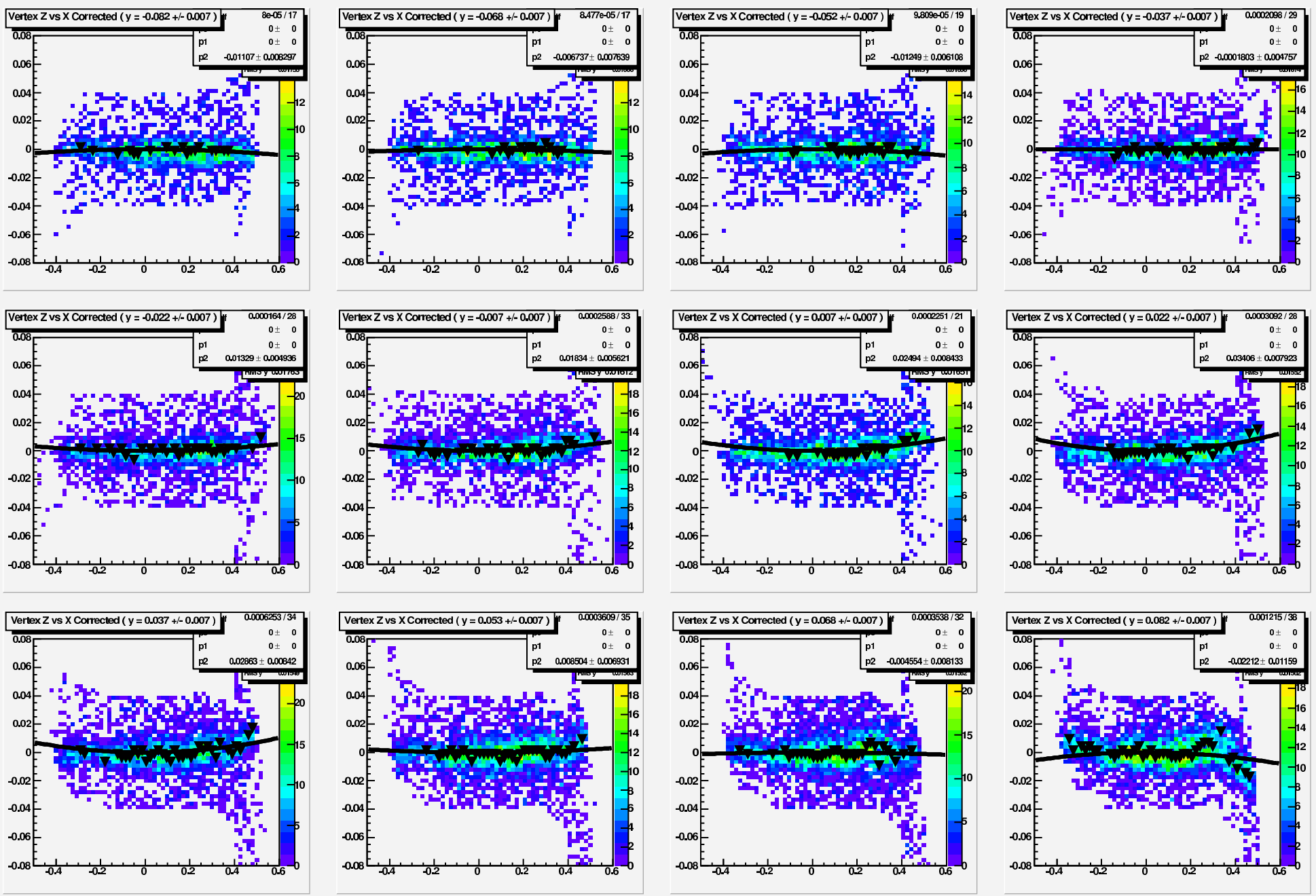

Graph
χ² / ndf 1.322e-15 / 10
p0 16.32 ± 3.499e-09
p1 0 ± 6.758e-08
17.4
17.2
17
16.8
16.6
16.4
-0.08 -0.06 0.04 -0.02 0 0.02 0.04 0.06 0.08

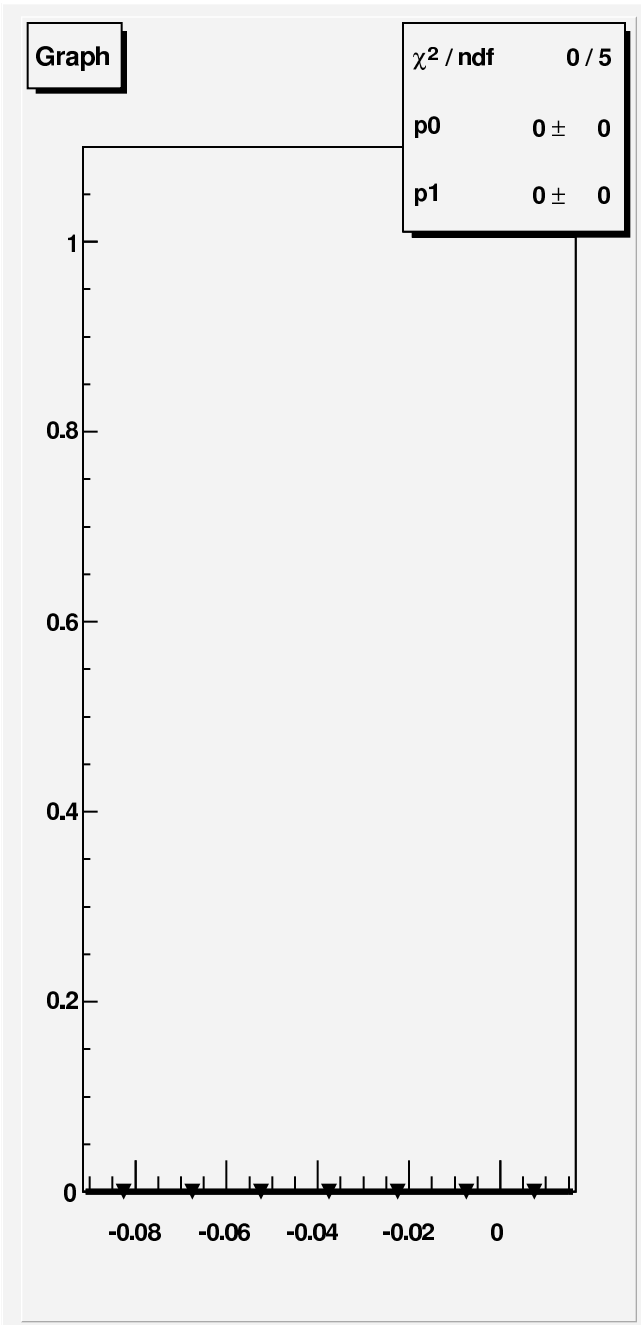

Graph
χ² / ndf 5.886e-06 / 10
p0 -0.001418 ± 0.0002335
p1 -0.03226 ± 0.004509
0.001
0
-0.08 -0.06 0.04 -0.02 0 0.02 0.04 0.06 0.08

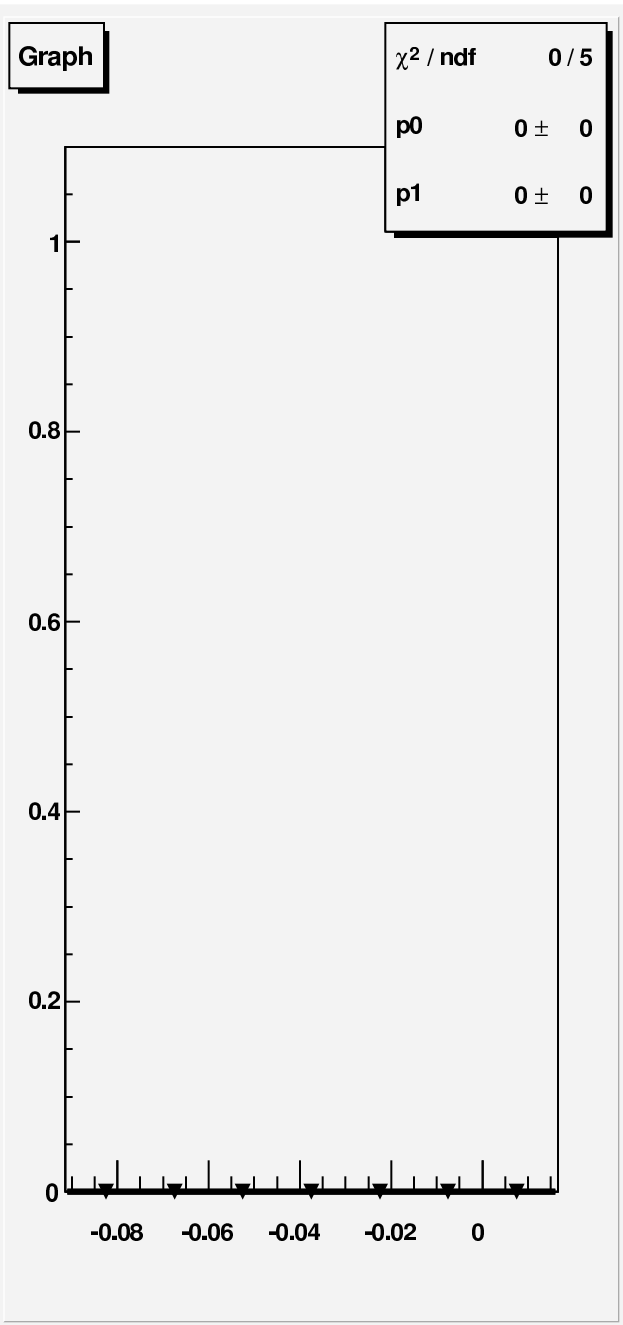

Graph
χ² / ndf 4.16e-10 / 10
p0 -7.892e-06 ± 1.963e-06
p1 -0.0006062 ± 3.79e-05
×10^-3
0.04
0.02
0
-0.02
-0.04
-0.08 -0.06 0.04 -0.02 0 0.02 0.04 0.06 0.08

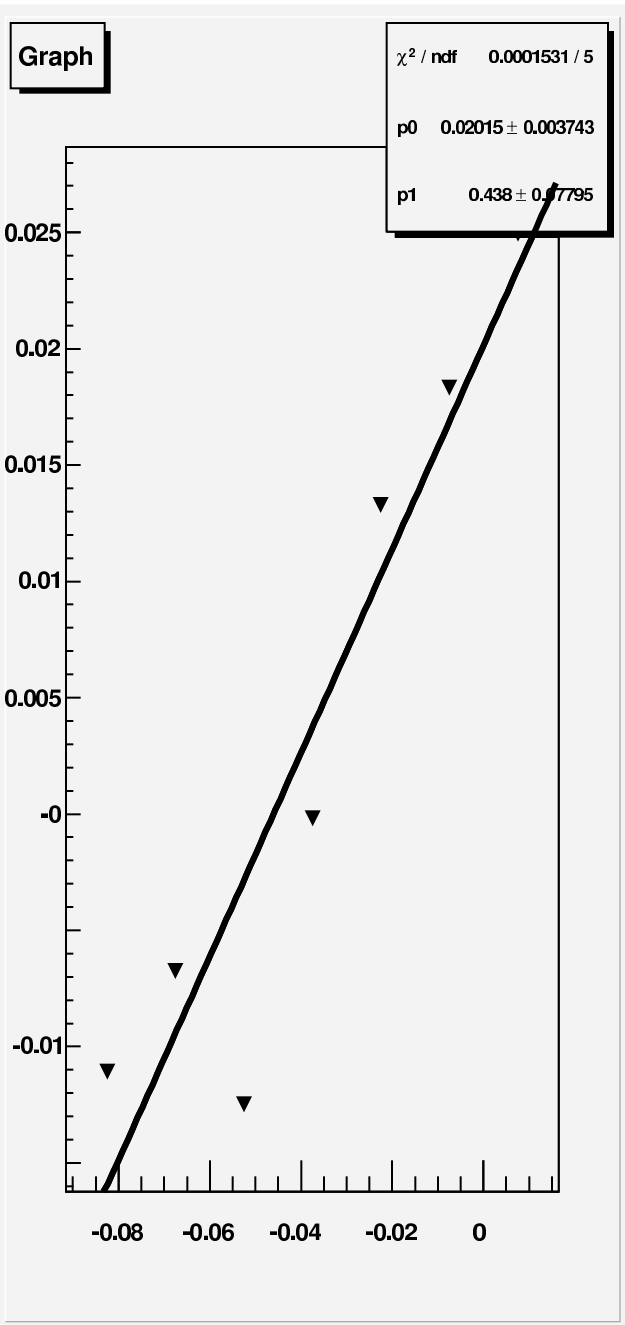

Graph
χ² / ndf 7.237e-15 / 10
p0 -17.24 ± 8.186e-09
p1 4.345e-11 ± 1.581e-07
-16.2
-16.4
-16.6
-16.8
-17
-17.2
-0.08 -0.06 0.04 -0.02 0 0.02 0.04 0.06 0.08

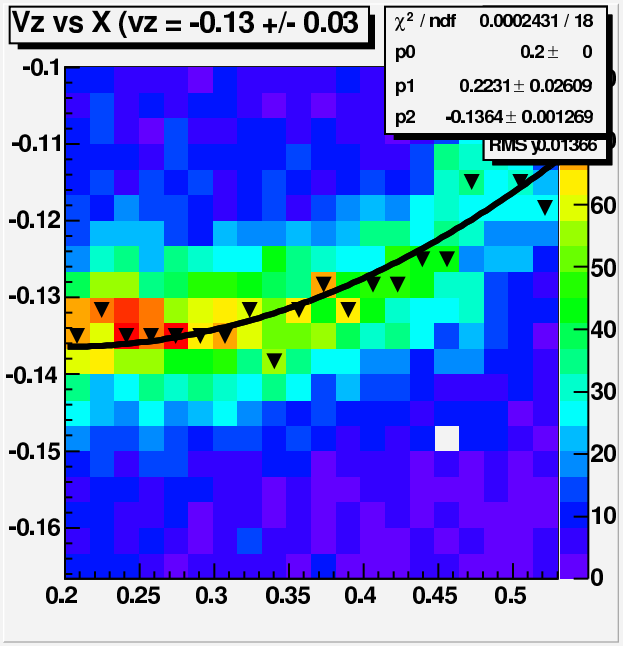

Graph
χ² / ndf 1.167e-05 / 10
p0 -0.002413 ± 0.0003287
p1 0.001708 ± 0.006348
-0.08 -0.06 0.04 -0.02 0 0.02 0.04 0.06 0.08

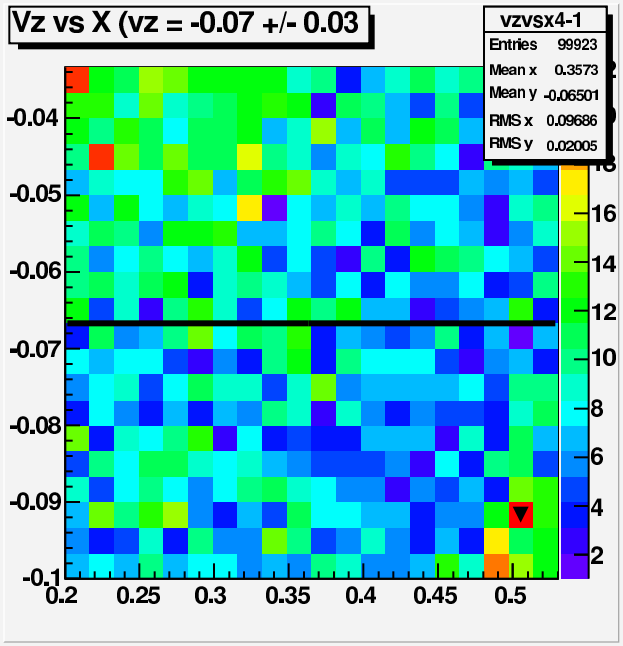

Vertex Z vs X Corrected (y = -0.082 +/- 0.007)
8e-05 / 17
p0 0 ± 0
p1 0 ± 0
p2 -0.01107 ± 0.008297
Vertex Z vs X Corrected (y = -0.068 +/- 0.007)
8.477e-05 / 17
p0 0 ± 0
p1 0 ± 0
p2 -0.006737 ± 0.007639
Vertex Z vs X Corrected (y = -0.052 +/- 0.007)
9.809e-05 / 19
p0 0 ± 0
p1 0 ± 0
p2 -0.01249 ± 0.006108
Vertex Z vs X Corrected (y = -0.037 +/- 0.007)
0.0002098 / 29
p0 0 ± 0
p1 0 ± 0
p2 -0.0001803 ± 0.004757
Vertex Z vs X Corrected (y = -0.022 +/- 0.007)
0.000164 / 28
p0 0 ± 0
p1 0 ± 0
p2 0.01329 ± 0.004936
Vertex Z vs X Corrected (y = -0.007 +/- 0.007)
0.0002588 / 33
p0 0 ± 0
p1 0 ± 0
p2 0.01834 ± 0.005621
Vertex Z vs X Corrected (y = 0.007 +/- 0.007)
0.0002251 / 21
p0 0 ± 0
p1 0 ± 0
p2 0.02494 ± 0.008433
Vertex Z vs X Corrected (y = 0.022 +/- 0.007)
0.0003092 / 28
p0 0 ± 0
p1 0 ± 0
p2 0.03406 ± 0.007923
Vertex Z vs X Corrected (y = 0.037 +/- 0.007)
0.0006253 / 34
p0 0 ± 0
p1 0 ± 0
p2 0.02863 ± 0.00842
Vertex Z vs X Corrected (y = 0.053 +/- 0.007)
0.0003609 / 35
p0 0 ± 0
p1 0 ± 0
p2 0.008504 ± 0.006931
Vertex Z vs X Corrected (y = 0.068 +/- 0.007)
0.0003538 / 32
p0 0 ± 0
p1 0 ± 0
p2 -0.004554 ± 0.008133
Vertex Z vs X Corrected (y = 0.082 +/- 0.007)
0.001215 / 38
p0 0 ± 0
p1 0 ± 0
p2 -0.02212 ± 0.01159

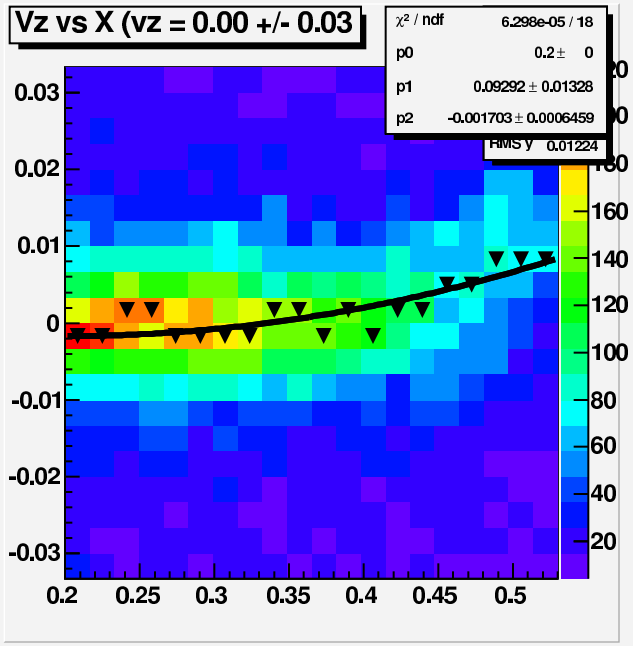

Graph
χ² / ndf 0 / 5
p0 0 ± 0
p1 0 ± 0
1
0.8
0.6
0.4
0.2
0
-0.08
-0.06
-0.04
-0.02
0

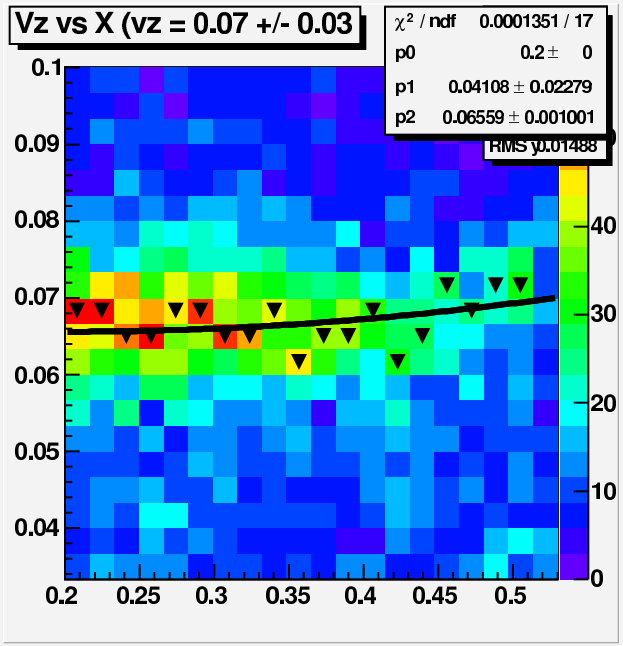

Graph
χ² / ndf 0 / 5
p0 0 ± 0
p1 0 ± 0
1
0.8
0.6
0.4
0.2
0
-0.08
-0.06
-0.04
-0.02
0

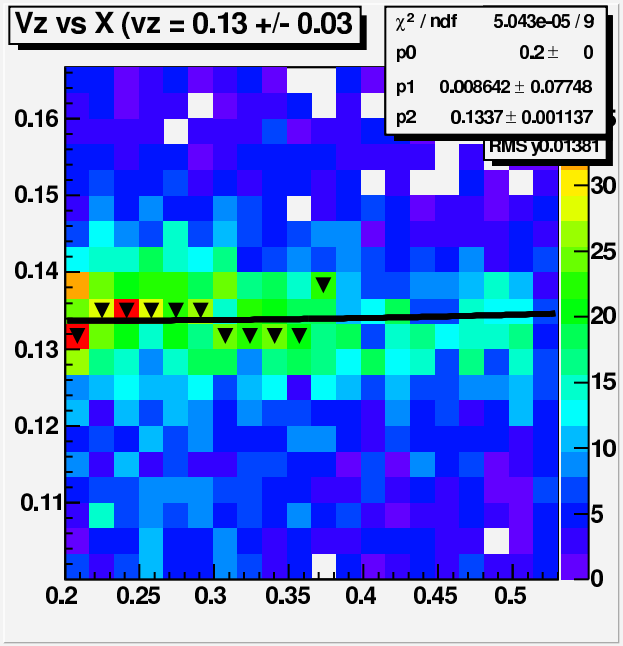

Graph
χ² / ndf 0.0001531 / 5
p0 0.02015 ± 0.003743
p1 0.438 ± 0.07795
0.025
0.02
0.015
0.01
0.005
-0
-0.01
-0.08
-0.06
-0.04
-0.02
0

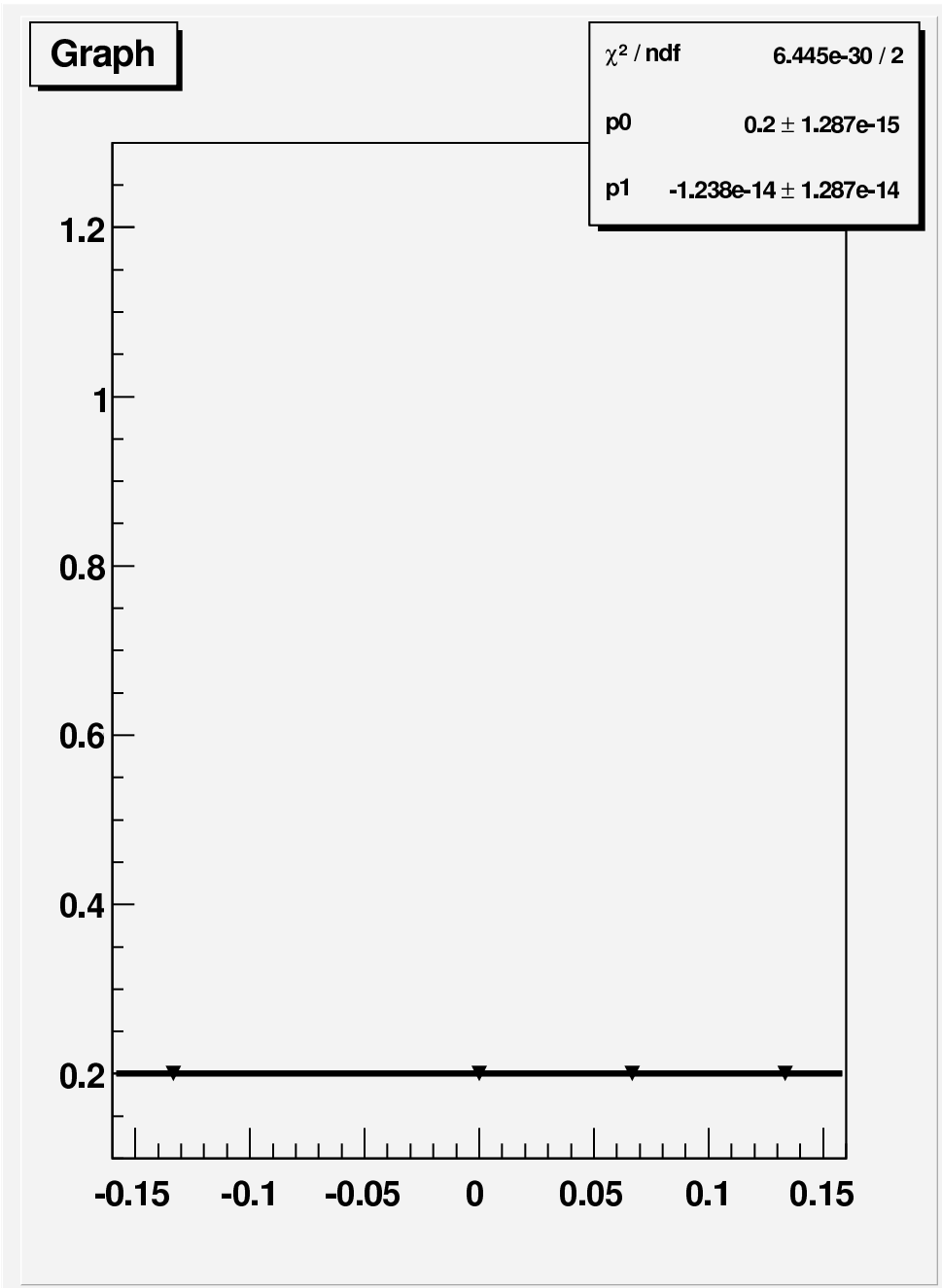

Vz vs X (vz = -0.13 +/- 0.03
χ² / ndf 0.0002431 / 18
p0 0.2 ± 0
p1 0.2231 ± 0.02609
p2 -0.1364 ± 0.001269
RMS y 0.01366

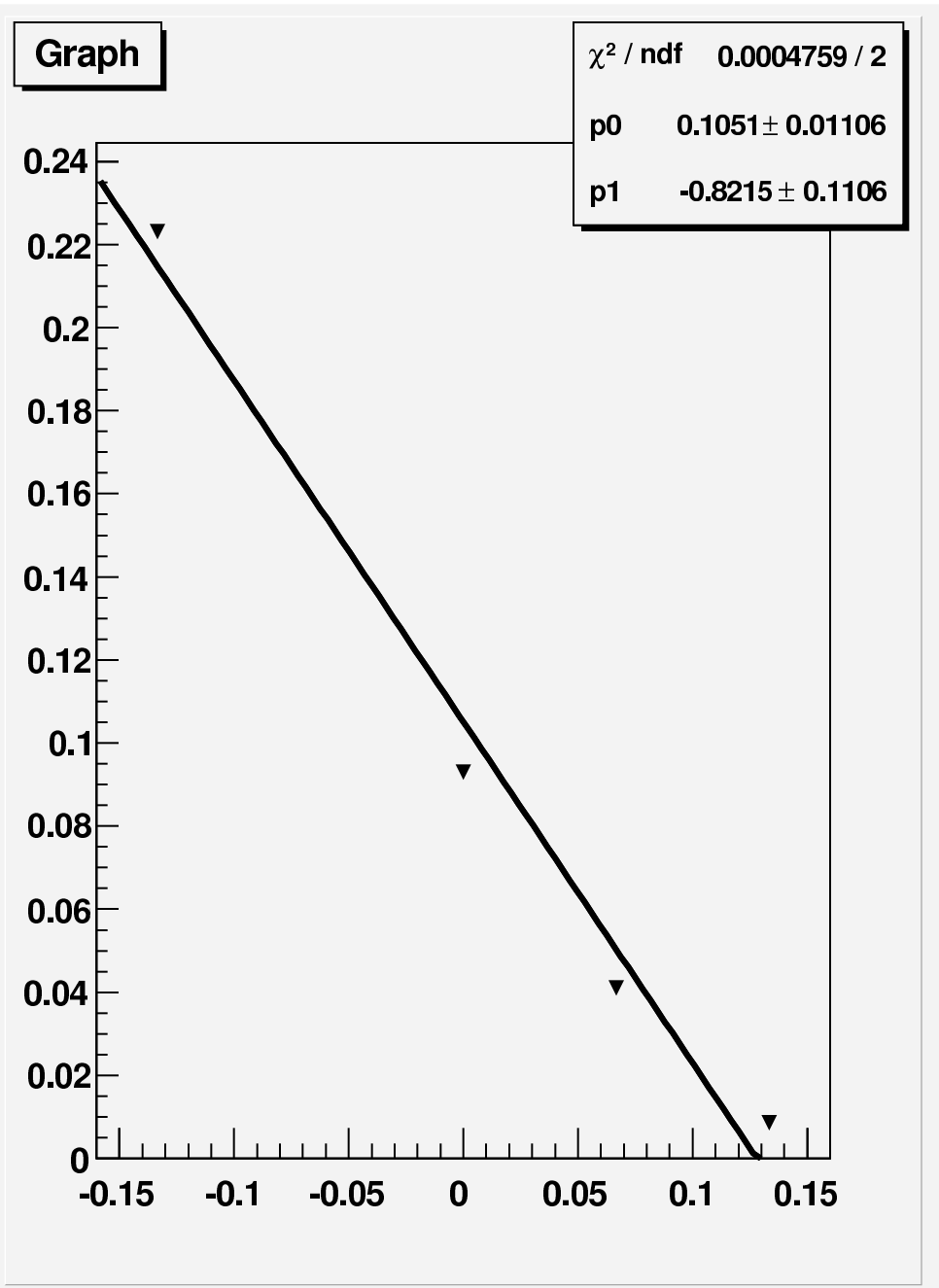

Vz vs X (vz = -0.07 +/- 0.03
vzvsx4-1
Entries 99923
Mean x 0.3573
Mean y -0.06501
RMS x 0.09686
RMS y 0.02005

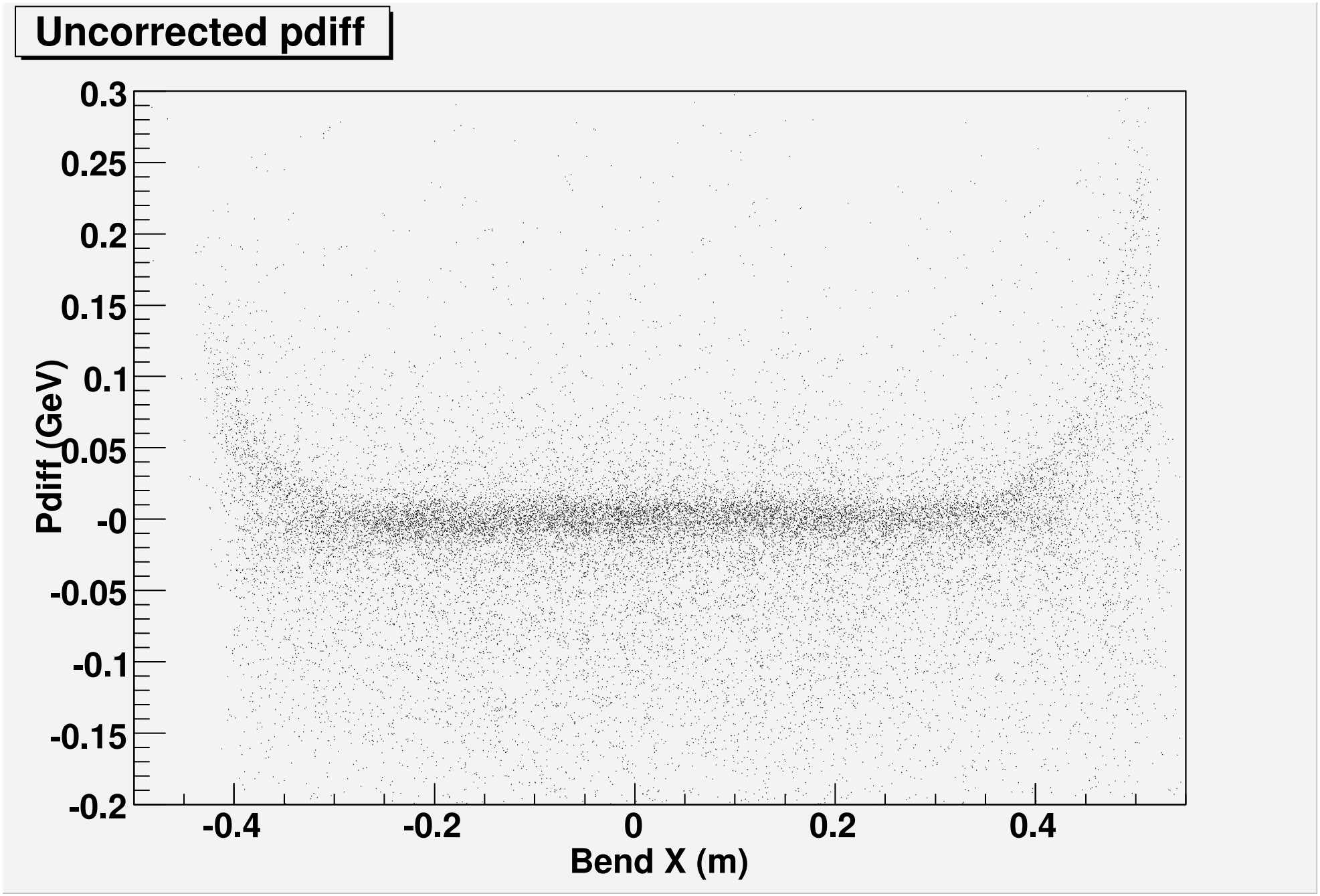

Vz vs X (vz = 0.00 +/- 0.03
χ² / ndf 6.298e-05 / 18
p0 0.2 ± 0
p1 0.09292 ± 0.01328
p2 -0.001703 ± 0.0006459
RMS y 0.01224

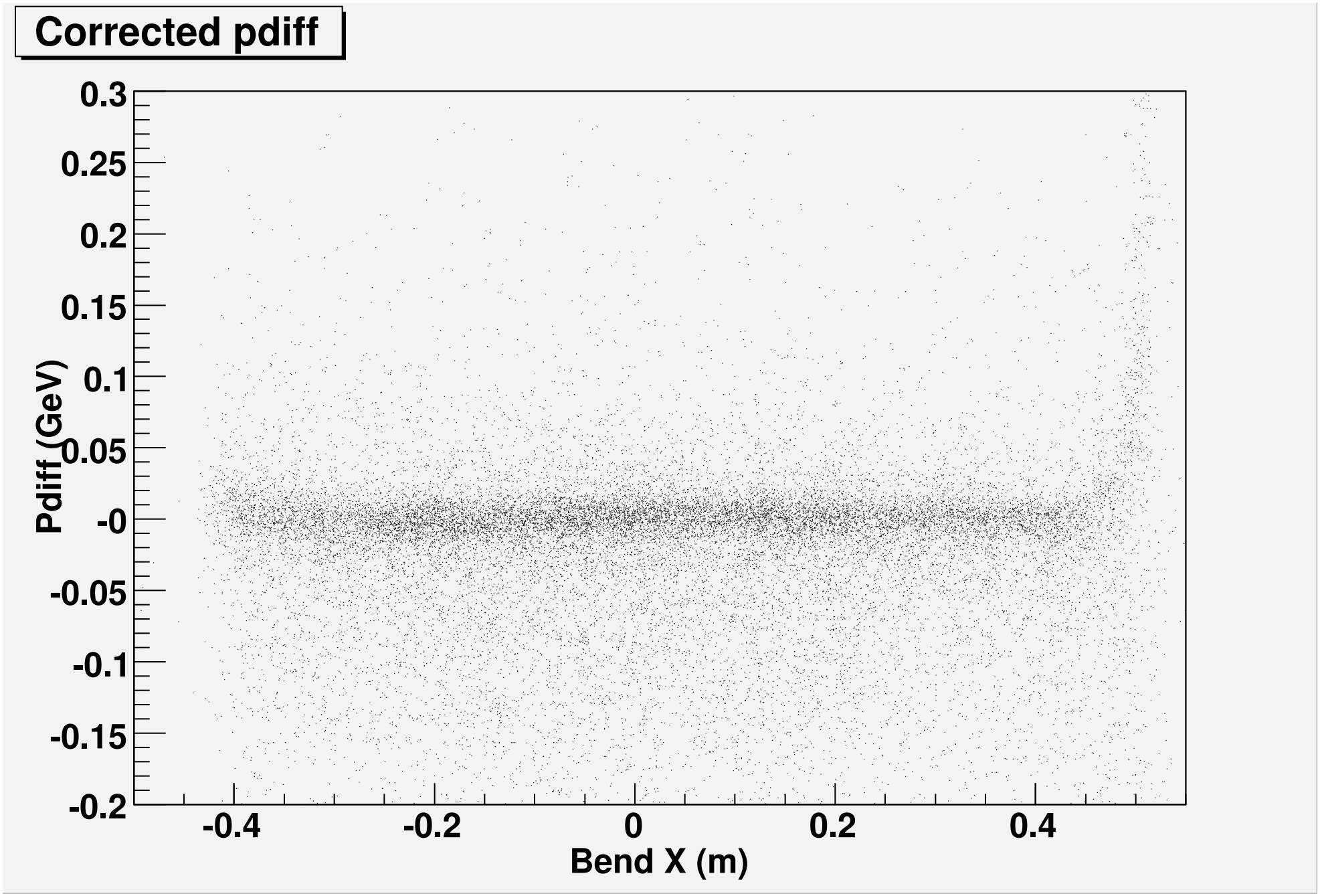

Vz vs X (vz = 0.07 +/- 0.03
χ² / ndf 0.0001351 / 17
p0 0.2 ± 0
p1 0.04108 ± 0.02279
p2 0.06559 ± 0.001001
RMS y 0.01488

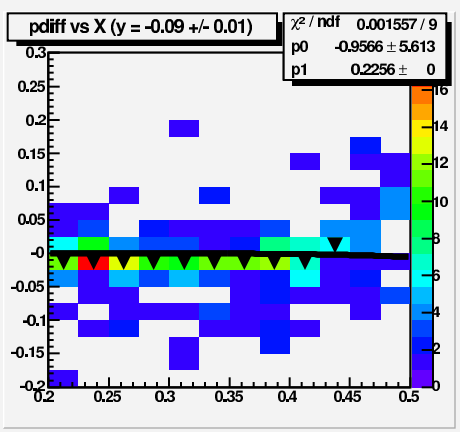

Vz vs X (vz = 0.13 +/- 0.03
χ² / ndf 5.043e-05 / 9
p0 0.2 ± 0
p1 0.008642 ± 0.07748
p2 0.1337 ± 0.001137
RMS y 0.01381

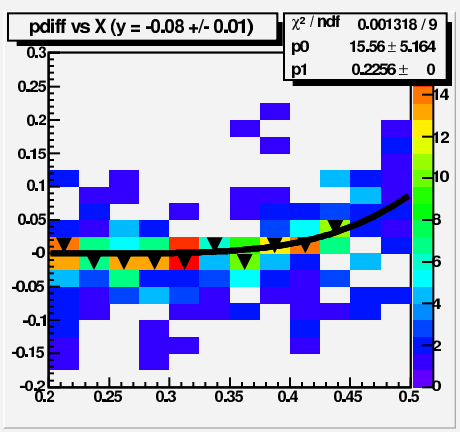

Graph
χ² / ndf 6.445e-30 / 2
p0 0.2 ± 1.287e-15
p1 -1.238e-14 ± 1.287e-14
1.2
1
0.8
0.6
0.4
0.2
-0.15
-0.1
-0.05
0
0.05
0.1
0.15

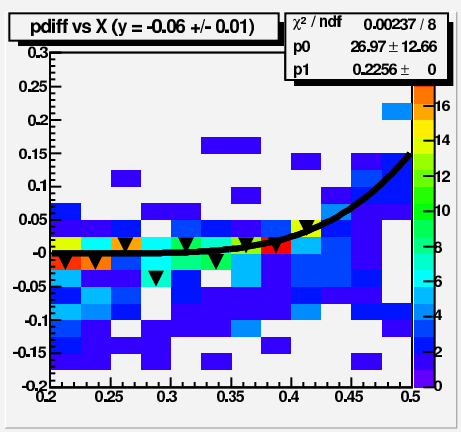

Graph
χ² / ndf 0.0004759 / 2
p0 0.1051 ± 0.01106
p1 -0.8215 ± 0.1106
0.24
0.22
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
-0.15
-0.1
-0.05
0
0.05
0.1
0.15

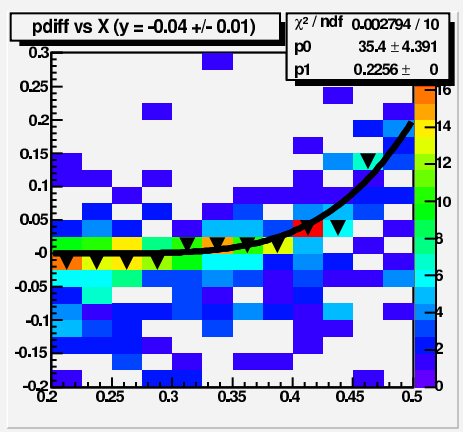

Uncorrected pdiff
0.3
0.25
0.2
0.15
0.1
0.05
-0
-0.05
-0.1
-0.15
-0.2
Pdiff (GeV)
-0.4
-0.2
0
0.2
0.4
Bend X (m)

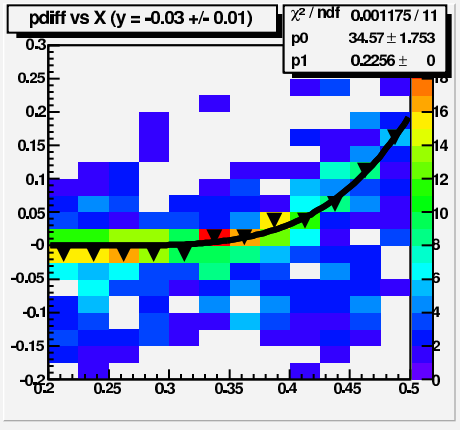

Corrected pdiff
0.3
0.25
0.2
0.15
0.1
0.05
-0
-0.05
-0.1
-0.15
-0.2
Pdiff (GeV)
-0.4
-0.2
0
0.2
0.4
Bend X (m)

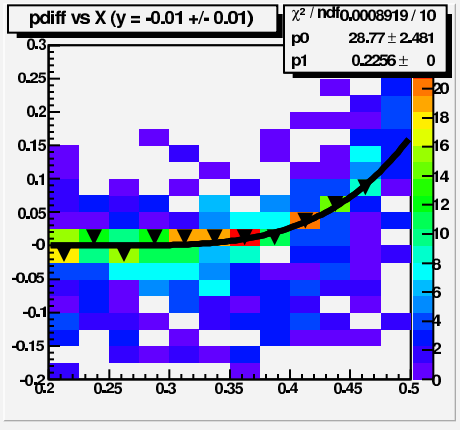

pdiff vs X (y = -0.09 +/- 0.01)
χ² / ndf 0.001557 / 9
p0 -0.9566 ± 5.613
p1 0.2256 ± 0

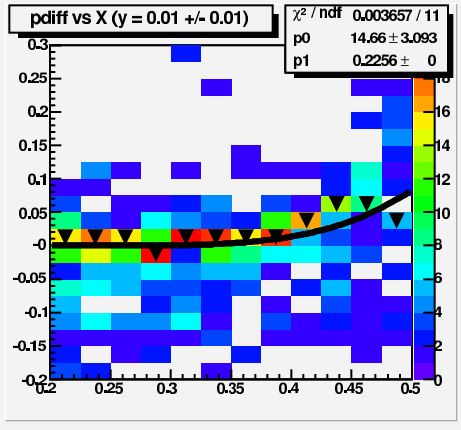

pdiff vs X (y = -0.08 +/- 0.01)
χ² / ndf 0.001318 / 9
p0 15.56 ± 5.164
p1 0.2256 ± 0

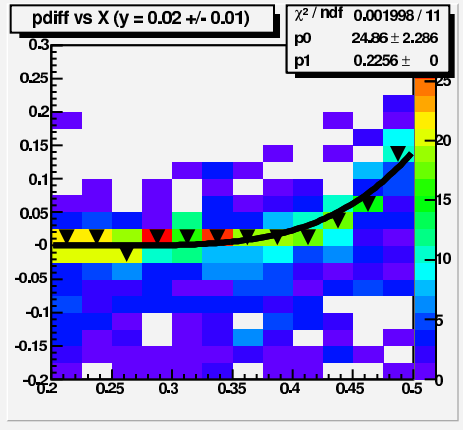

pdiff vs X (y = -0.06 +/- 0.01)
χ² / ndf 0.00237 / 8
p0 26.97 ± 12.66
p1 0.2256 ± 0

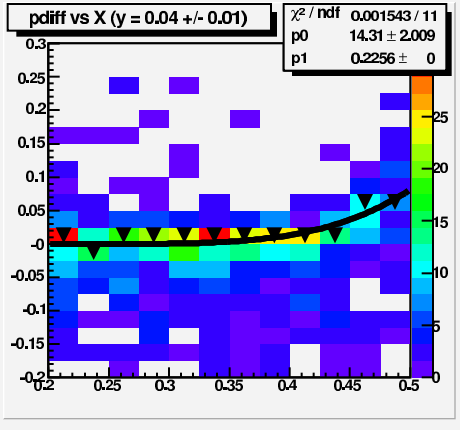

pdiff vs X (y = -0.04 +/- 0.01)
χ² / ndf 0.002794 / 10
p0 35.4 ± 4.391
p1 0.2256 ± 0

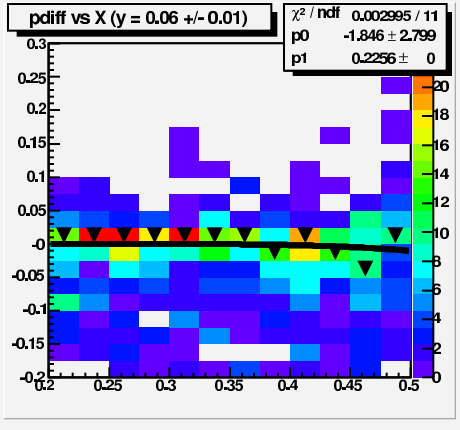

pdiff vs X (y = -0.03 +/- 0.01)
χ² / ndf 0.001175 / 11
p0 34.57 ± 1.753
p1 0.2256 ± 0

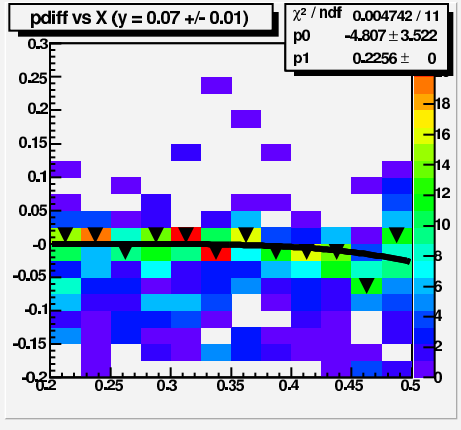

pdiff vs X (y = -0.01 +/- 0.01)
χ² / ndf 0.0008919 / 10
p0 28.77 ± 2.481
p1 0.2256 ± 0

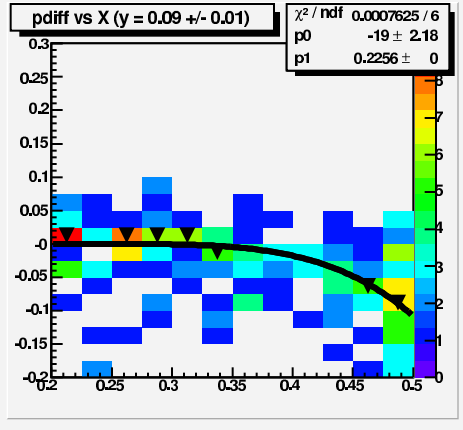

pdiff vs X (y = 0.01 +/- 0.01)
χ² / ndf 0.003657 / 11
p0 14.66 ± 3.093
p1 0.2256 ± 0

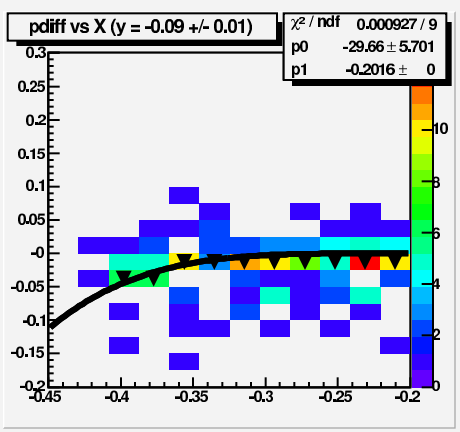

pdiff vs X (y = 0.02 +/- 0.01)
χ² / ndf 0.001998 / 11
p0 24.86 ± 2.286
p1 0.2256 ± 0

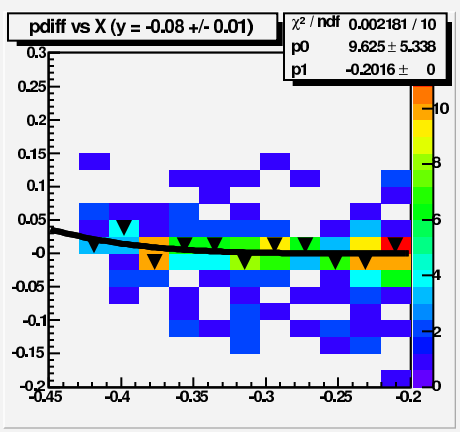

pdiff vs X (y = 0.04 +/- 0.01)
χ² / ndf 0.001543 / 11
p0 14.31 ± 2.009
p1 0.2256 ± 0

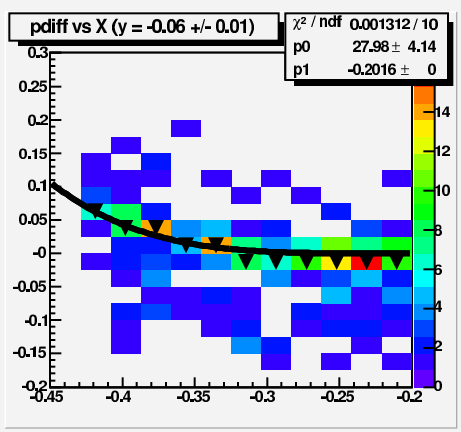

pdiff vs X (y = 0.06 +/- 0.01)
χ² / ndf 0.002995 / 11
p0 -1.846 ± 2.799
p1 0.2256 ± 0

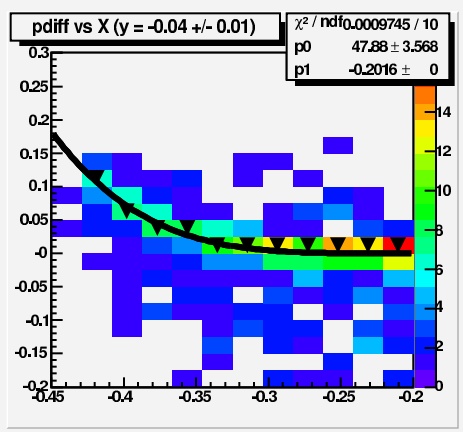

pdiff vs X (y = 0.07 +/- 0.01)
χ² / ndf 0.004742 / 11
p0 -4.807 ± 3.522
p1 0.2256 ± 0

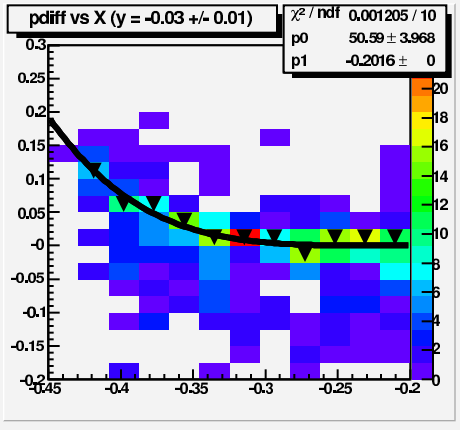

pdiff vs X (y = 0.09 +/- 0.01)
χ² / ndf 0.0007625 / 6
p0 -19 ± 2.18
p1 0.2256 ± 0

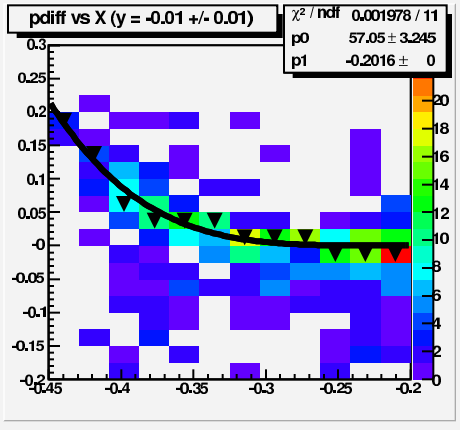

pdiff vs X (y = -0.09 +/- 0.01)
χ² / ndf 0.000927 / 9
p0 -29.66 ± 5.701
p1 -0.2016 ± 0

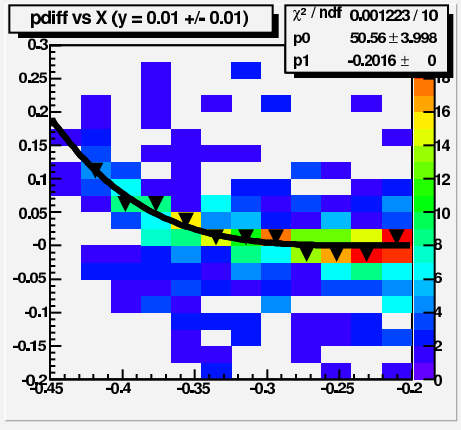

pdiff vs X (y = -0.08 +/- 0.01)
χ² / ndf 0.002181 / 10
p0 9.625 ± 5.338
p1 -0.2016 ± 0

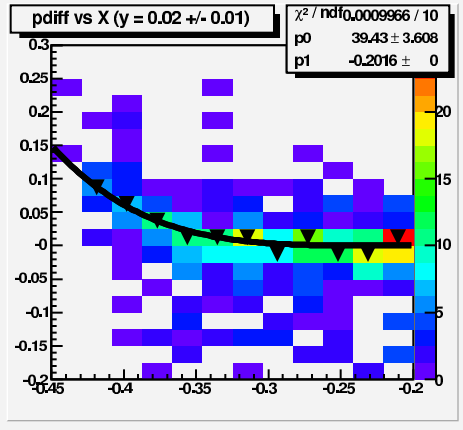

pdiff vs X (y = -0.06 +/- 0.01)
χ² / ndf 0.001312 / 10
p0 27.98 ± 4.14
p1 -0.2016 ± 0

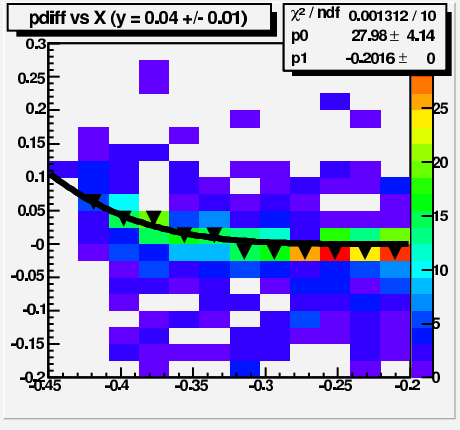

pdiff vs X (y = -0.04 +/- 0.01)
χ² / ndf 0.0009745 / 10
p0 47.88 ± 3.568
p1 -0.2016 ± 0

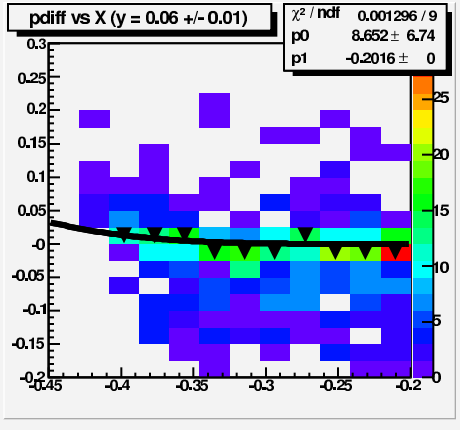

pdiff vs X (y = -0.03 +/- 0.01)
χ² / ndf 0.001205 / 10
p0 50.59 ± 3.968
p1 -0.2016 ± 0

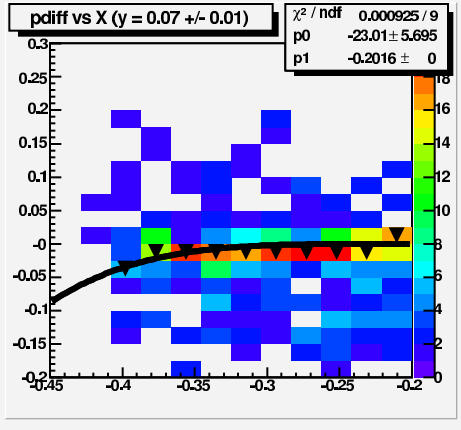

pdiff vs X (y = -0.01 +/- 0.01)
χ² / ndf 0.001978 / 11
p0 57.05 ± 3.245
p1 -0.2016 ± 0

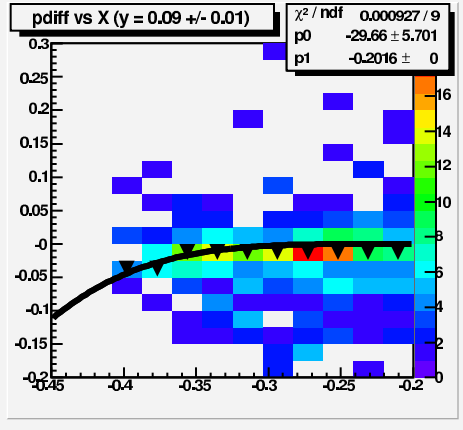

pdiff vs X (y = 0.01 +/- 0.01)
χ² / ndf 0.001223 / 10
p0 50.56 ± 3.998
p1 -0.2016 ± 0

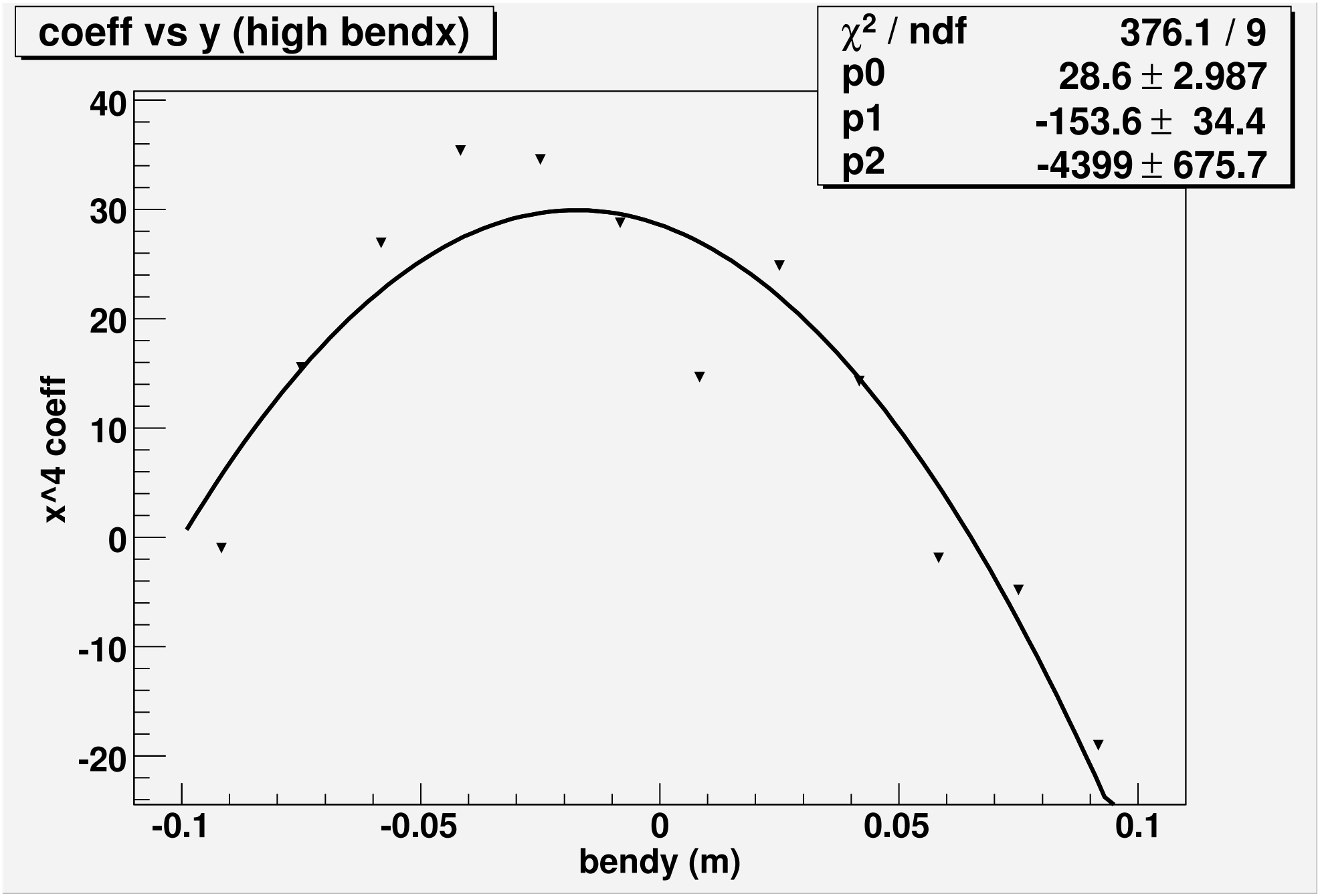

pdiff vs X (y = 0.02 +/- 0.01)
χ² / ndf 0.0009966 / 10
p0 39.43 ± 3.608
p1 -0.2016 ± 0

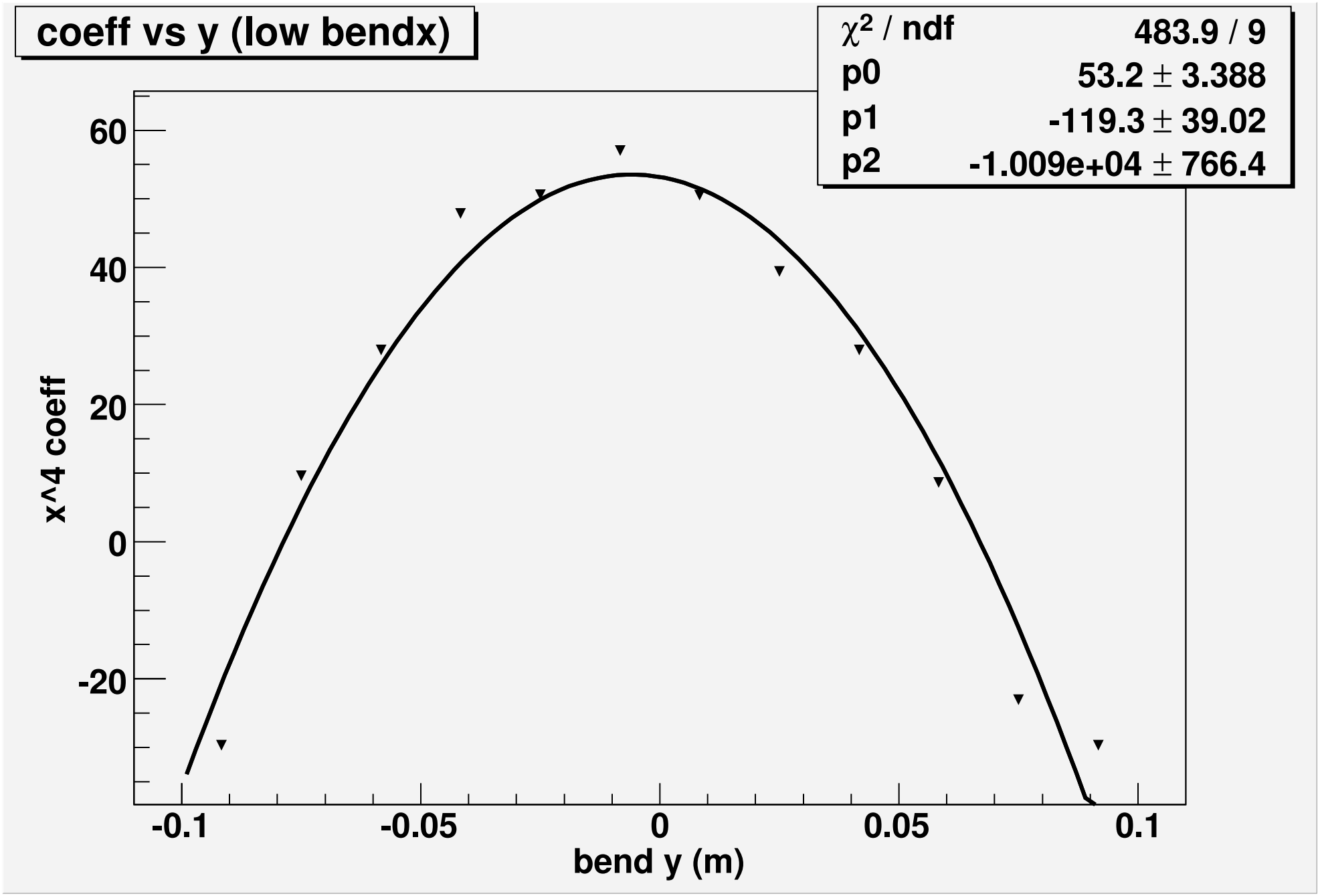

pdiff vs X (y = 0.04 +/- 0.01)
χ² / ndf 0.001312 / 10
p0 27.98 ± 4.14
p1 -0.2016 ± 0

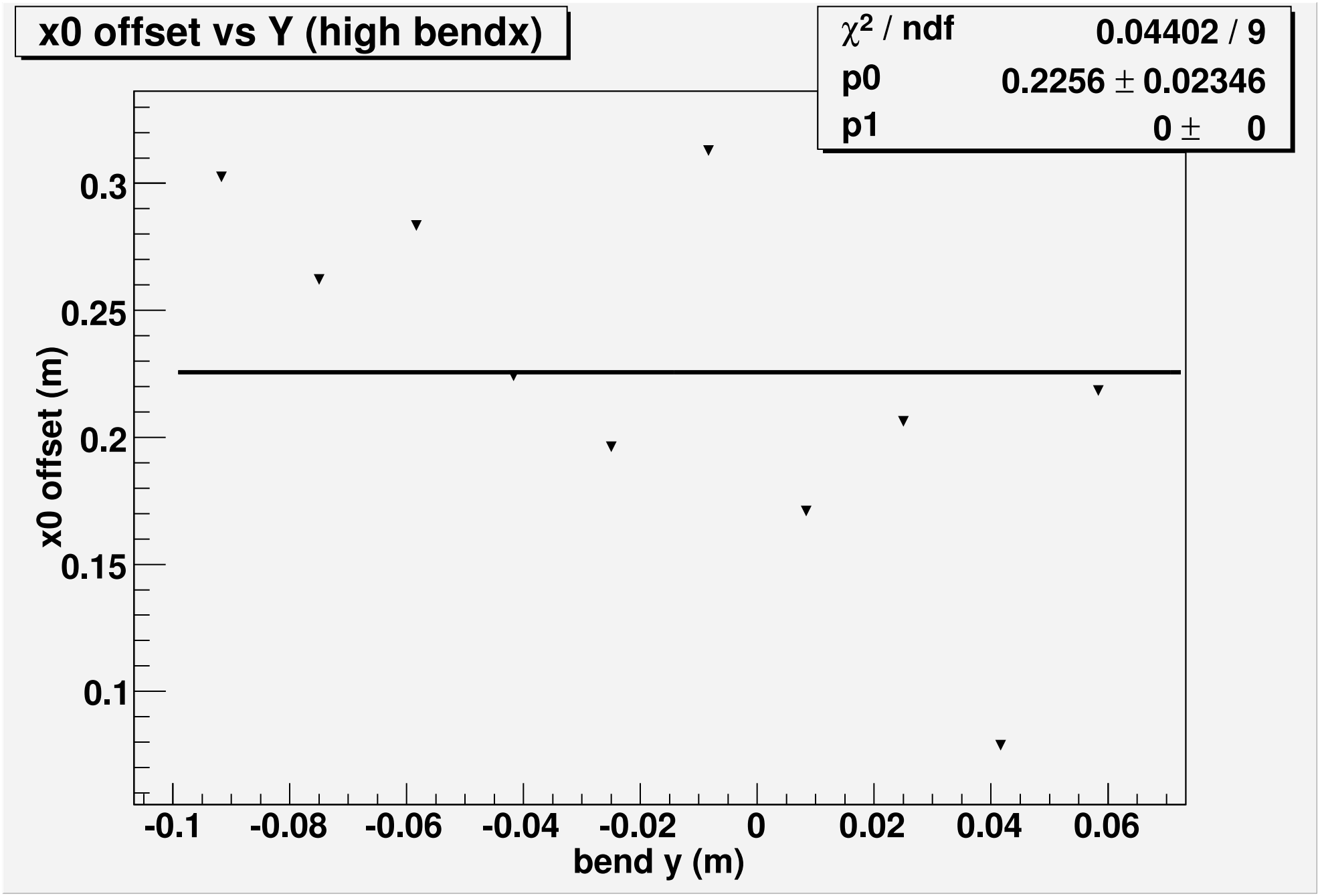

pdiff vs X (y = 0.06 +/- 0.01)
χ² / ndf 0.001296 / 9
p0 8.652 ± 6.74
p1 -0.2016 ± 0

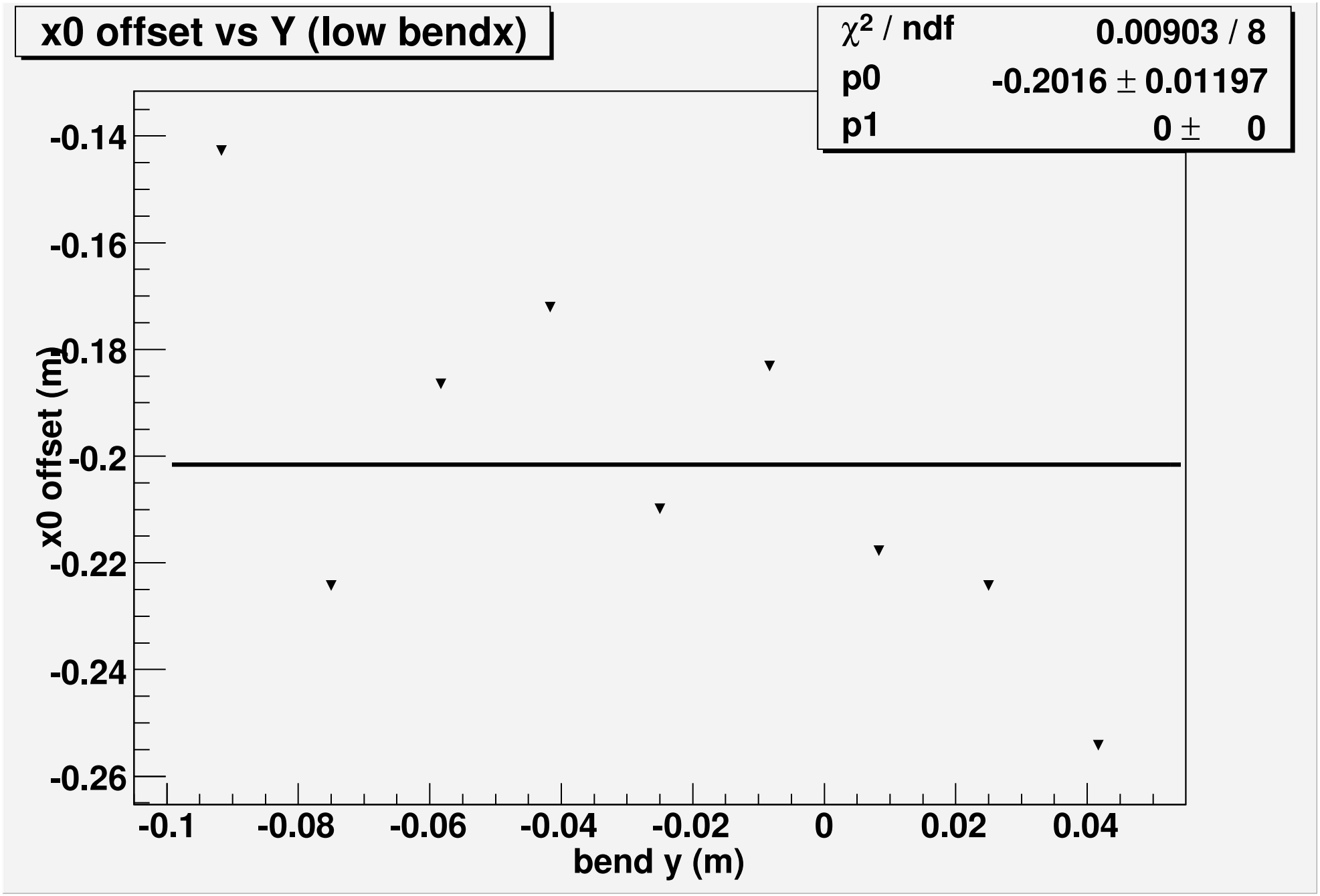

pdiff vs X (y = 0.07 +/- 0.01)
χ² / ndf 0.000925 / 9
p0 -23.01 ± 5.695
p1 -0.2016 ± 0


pdiff vs X (y = 0.09 +/- 0.01)
χ² / ndf 0.000927 / 9
p0 -29.66 ± 5.701
p1 -0.2016 ± 0


coeff vs y (high bendx)
χ² / ndf 376.1 / 9
p0 28.6 ± 2.987
p1 -153.6 ± 34.4
p2 -4399 ± 675.7
x^4 coeff
bendy (m)
40
30
20
10
0
-10
-20
-0.1
-0.05
0
0.05
0.1


coeff vs y (low bendx)
χ² / ndf 483.9 / 9
p0 53.2 ± 3.388
p1 -119.3 ± 39.02
p2 -1.009e+04 ± 766.4
60
40
20
0
-20
x^4 coeff
-0.1
-0.05
0
0.05
0.1
bend y (m)


x0 offset vs Y (high bendx)
χ² / ndf 0.04402 / 9
p0 0.2256 ± 0.02346
p1 0 ± 0
x0 offset (m)
0.3
0.25
0.2
0.15
0.1
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
0.06
bend y (m)


x0 offset vs Y (low bendx)
χ² / ndf 0.00903 / 8
p0 -0.2016 ± 0.01197
p1 0 ± 0
-0.14
-0.16
-0.18
-0.2
-0.22
-0.24
-0.26
x0 offset (m)
-0.1
-0.08
-0.06
-0.04
-0.02
0
0.02
0.04
bend y (m)