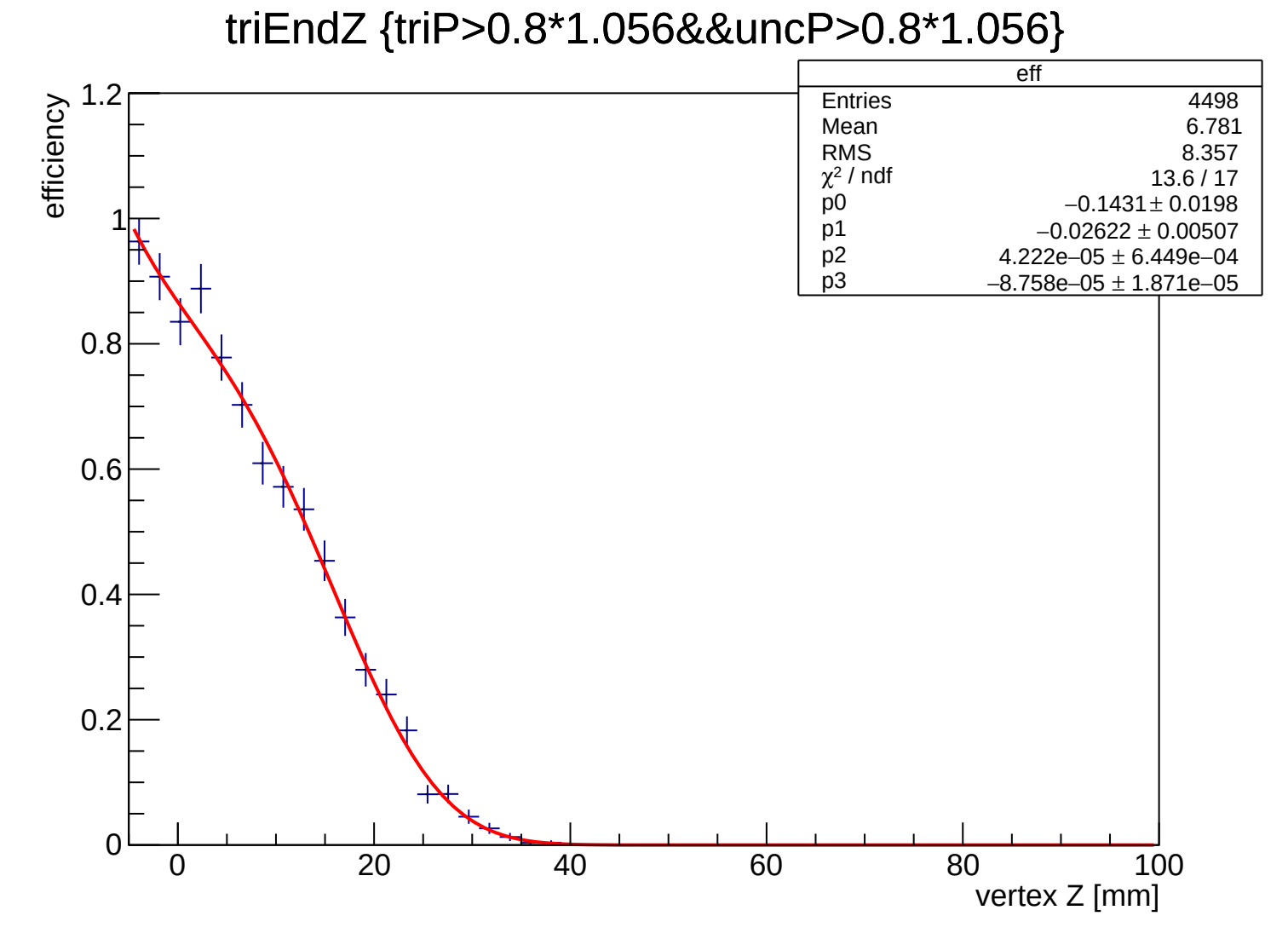
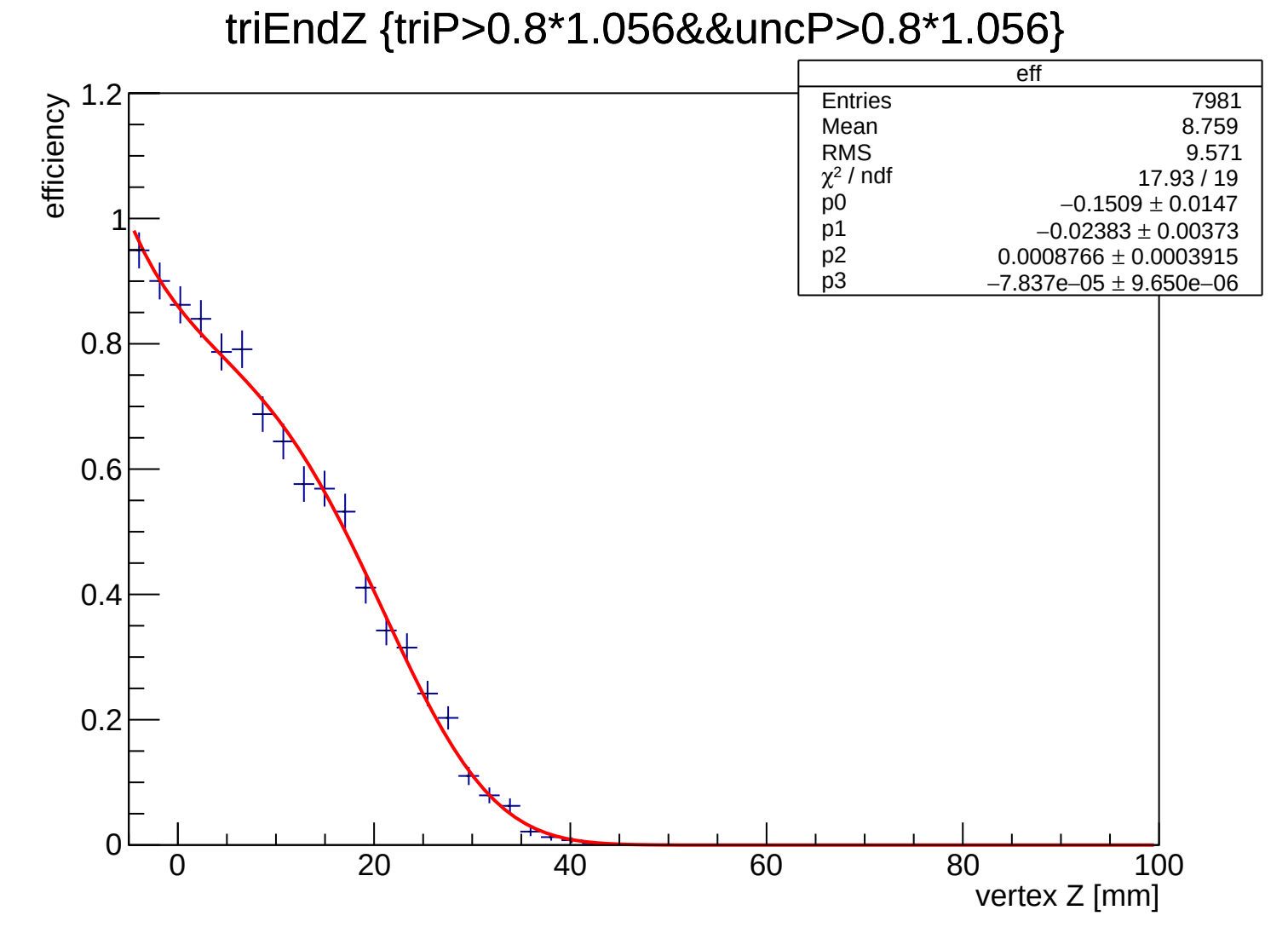
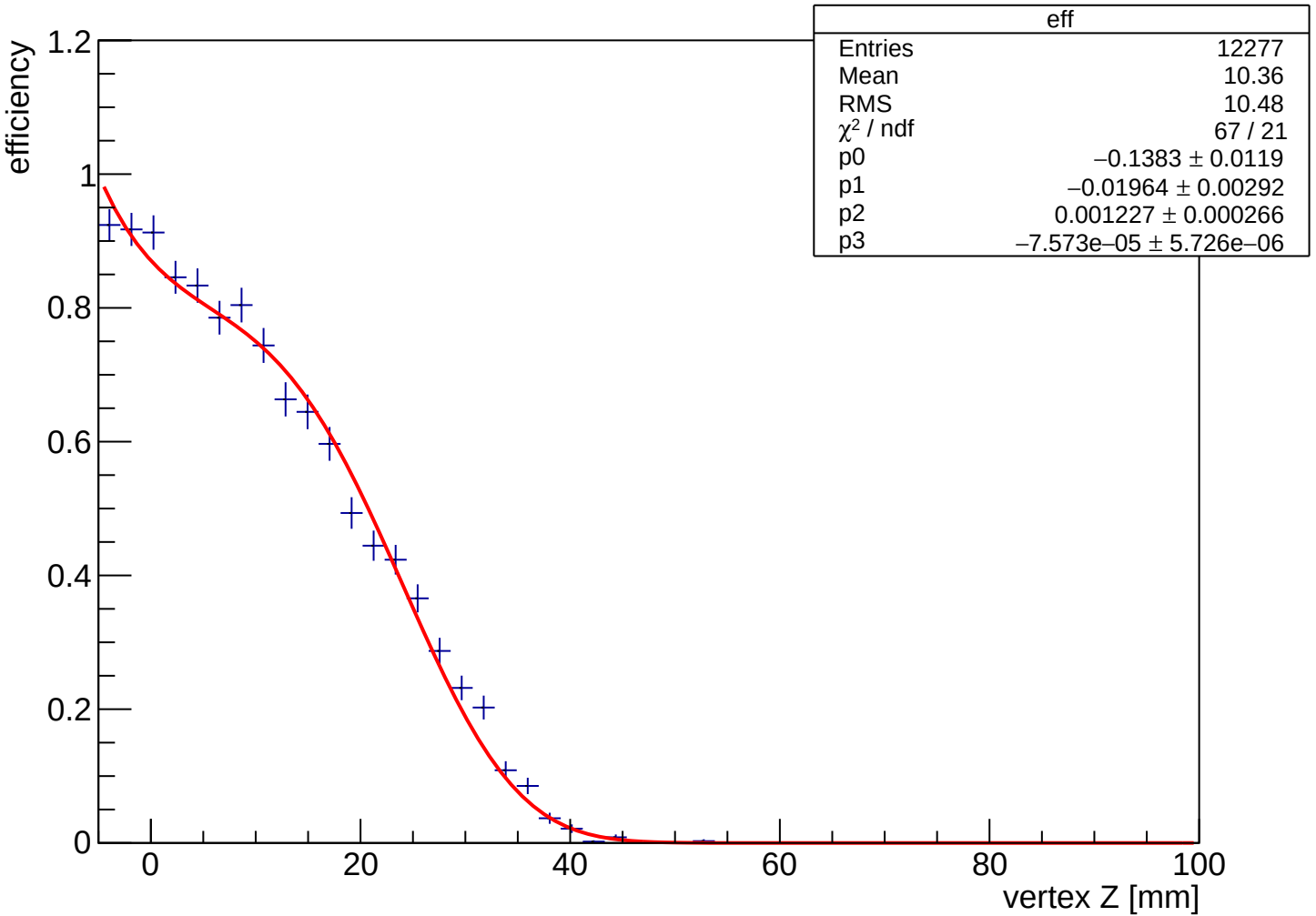
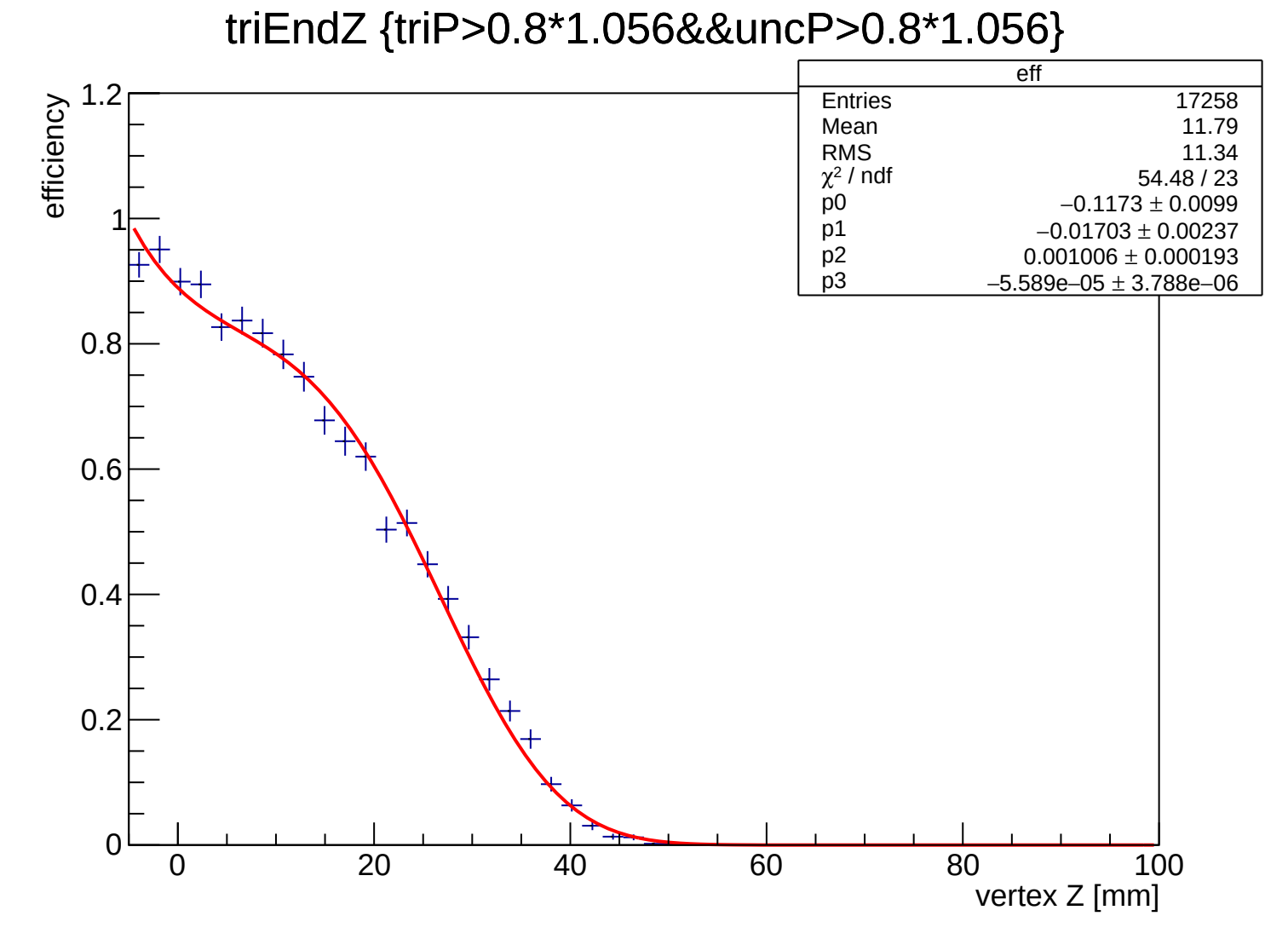
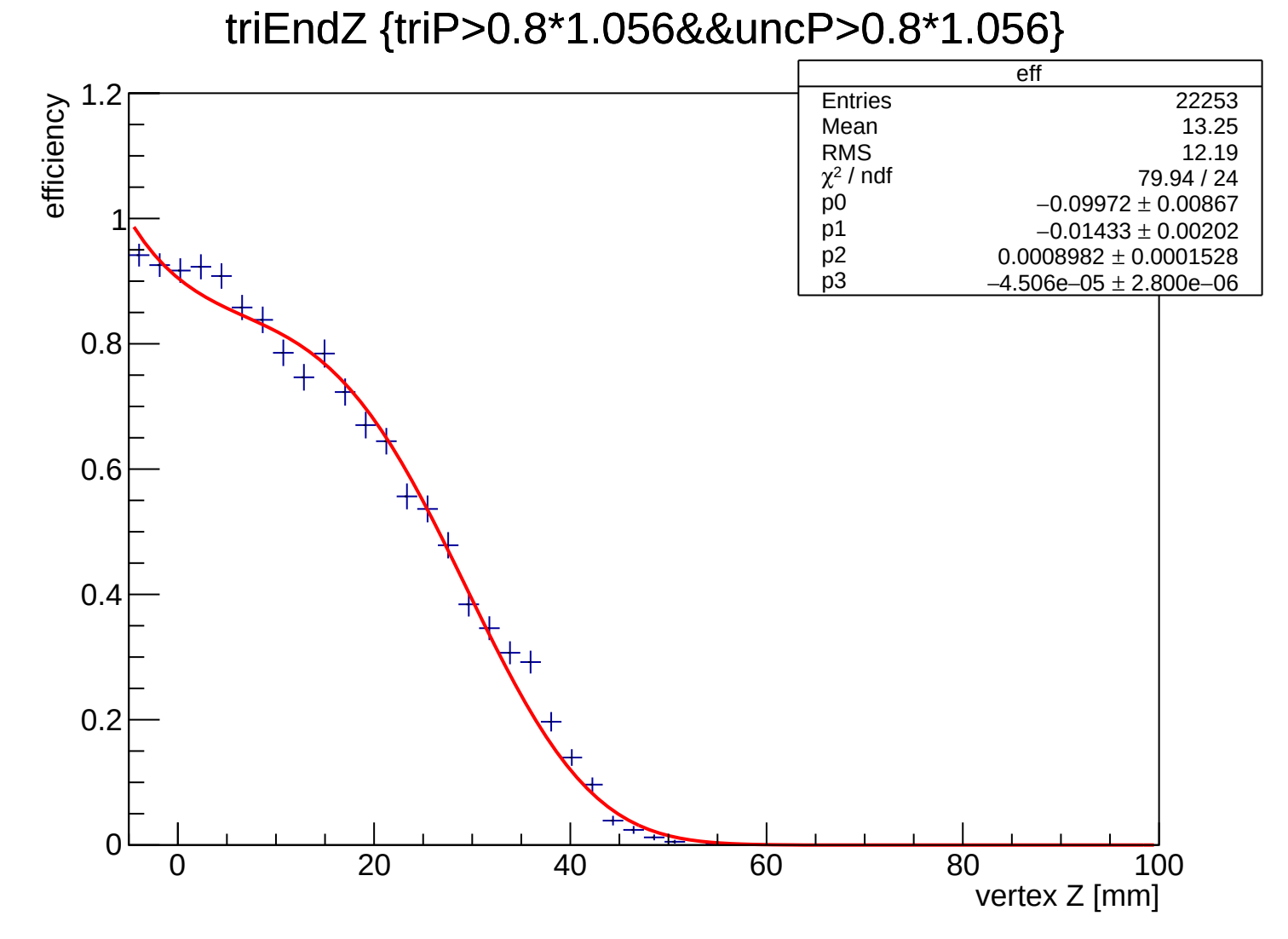
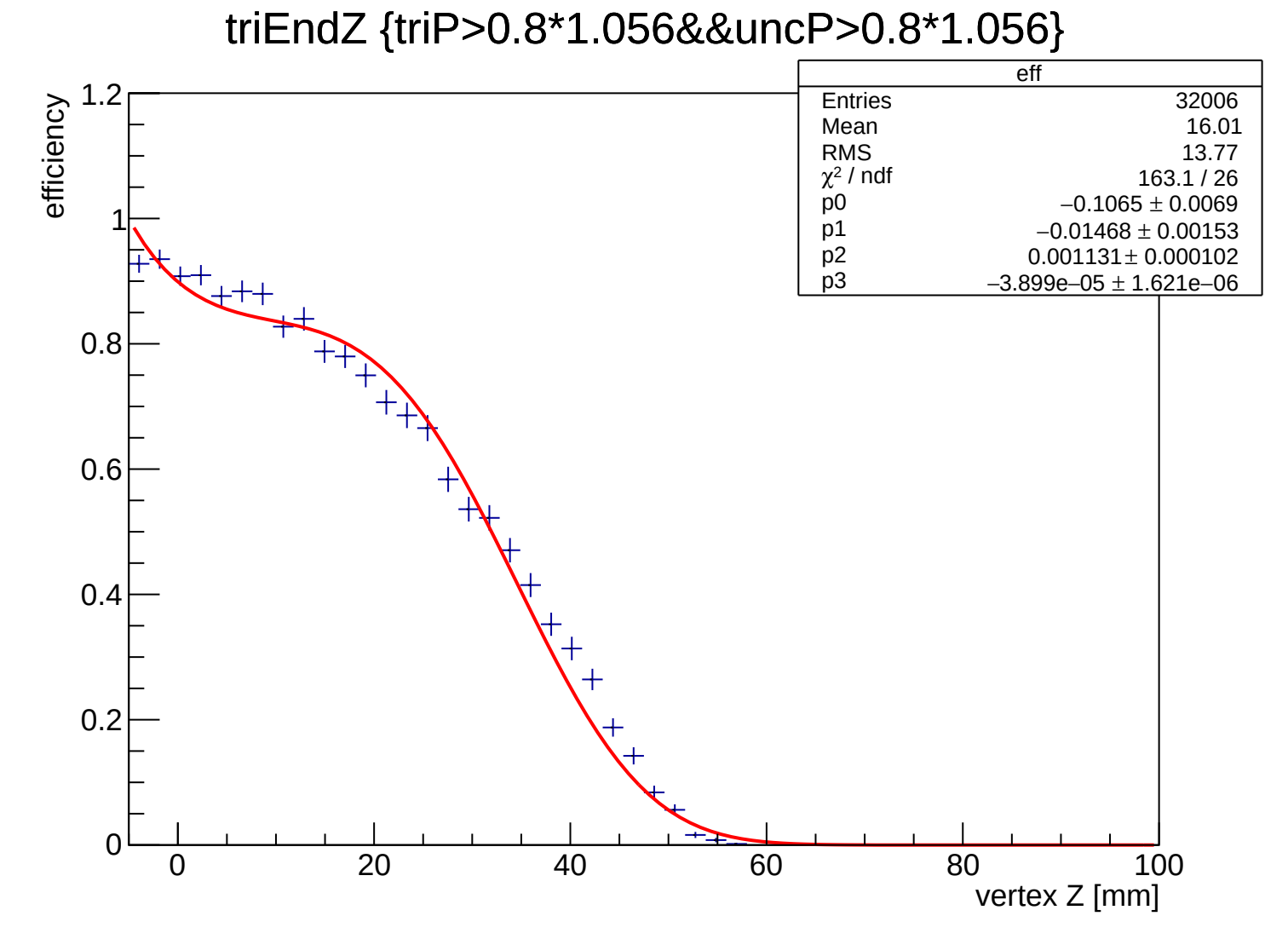

triEndZ {triP>0.8*1.056&&uncP>0.8*1.056}
eff
Entries 4498
Mean 6.781
RMS 8.357
χ² / ndf 13.6 / 17
p0 −0.1431 ± 0.0198
p1 −0.02622 ± 0.00507
p2 4.222e−05 ± 6.449e−04
p3 −8.758e−05 ± 1.871e−05
efficiency
vertex Z [mm]
0
0.2
0.4
0.6
0.8
1
1.2
0
20
40
60
80
100

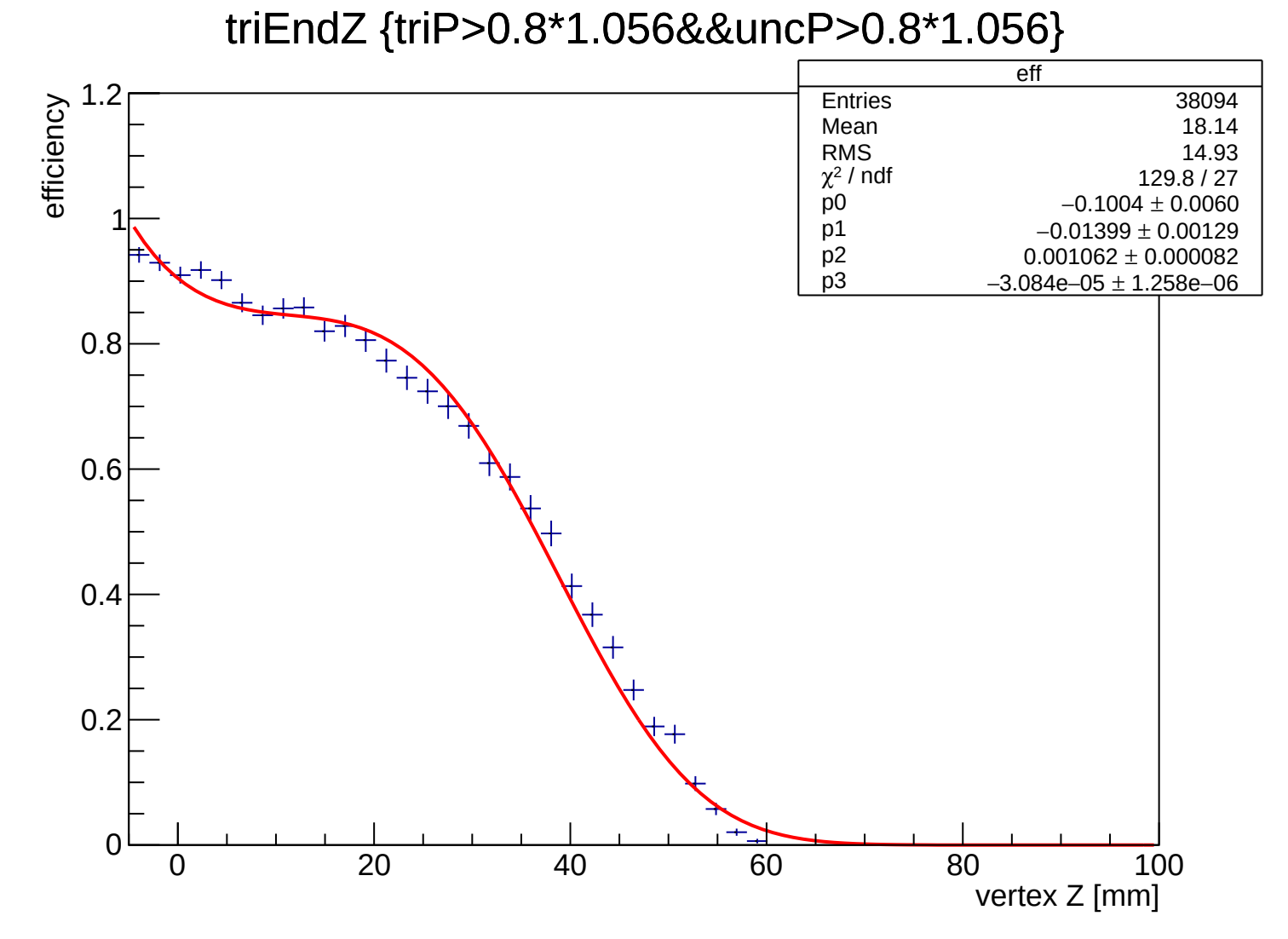

triEndZ {triP>0.8*1.056&&uncP>0.8*1.056}
eff
Entries 7981
Mean 8.759
RMS 9.571
χ² / ndf 17.93 / 19
p0 −0.1509 ± 0.0147
p1 −0.02383 ± 0.00373
p2 0.0008766 ± 0.0003915
p3 −7.837e−05 ± 9.650e−06
efficiency
1.2
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100
vertex Z [mm]

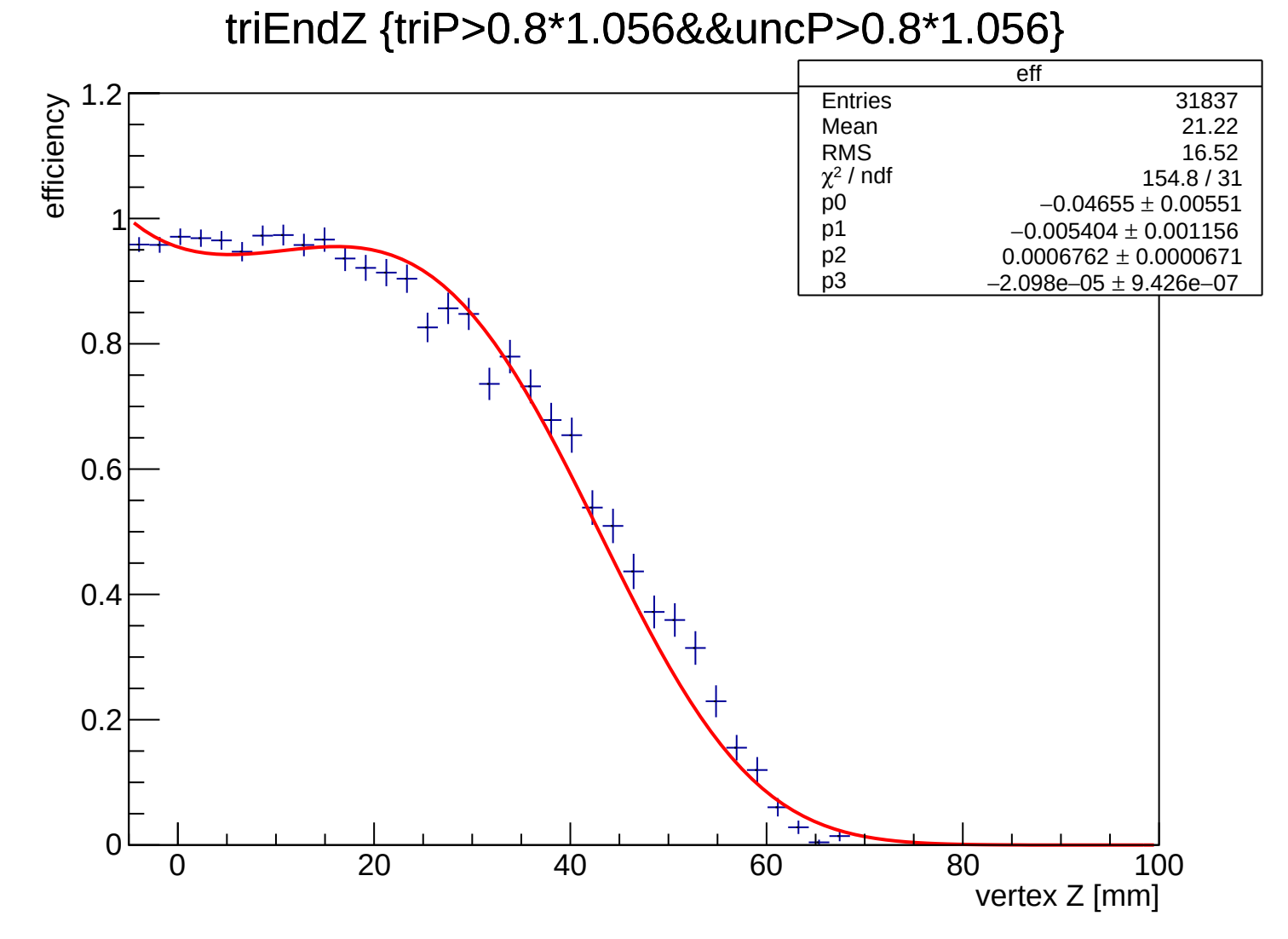

triEndZ {triP>0.8*1.056&&uncP>0.8*1.056}
eff
Entries 12277
Mean 10.36
RMS 10.48
χ² / ndf 67 / 21
p0 −0.1383 ± 0.0119
p1 −0.01964 ± 0.00292
p2 0.001227 ± 0.000266
p3 −7.573e−05 ± 5.726e−06
efficiency
1.2
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100
vertex Z [mm]

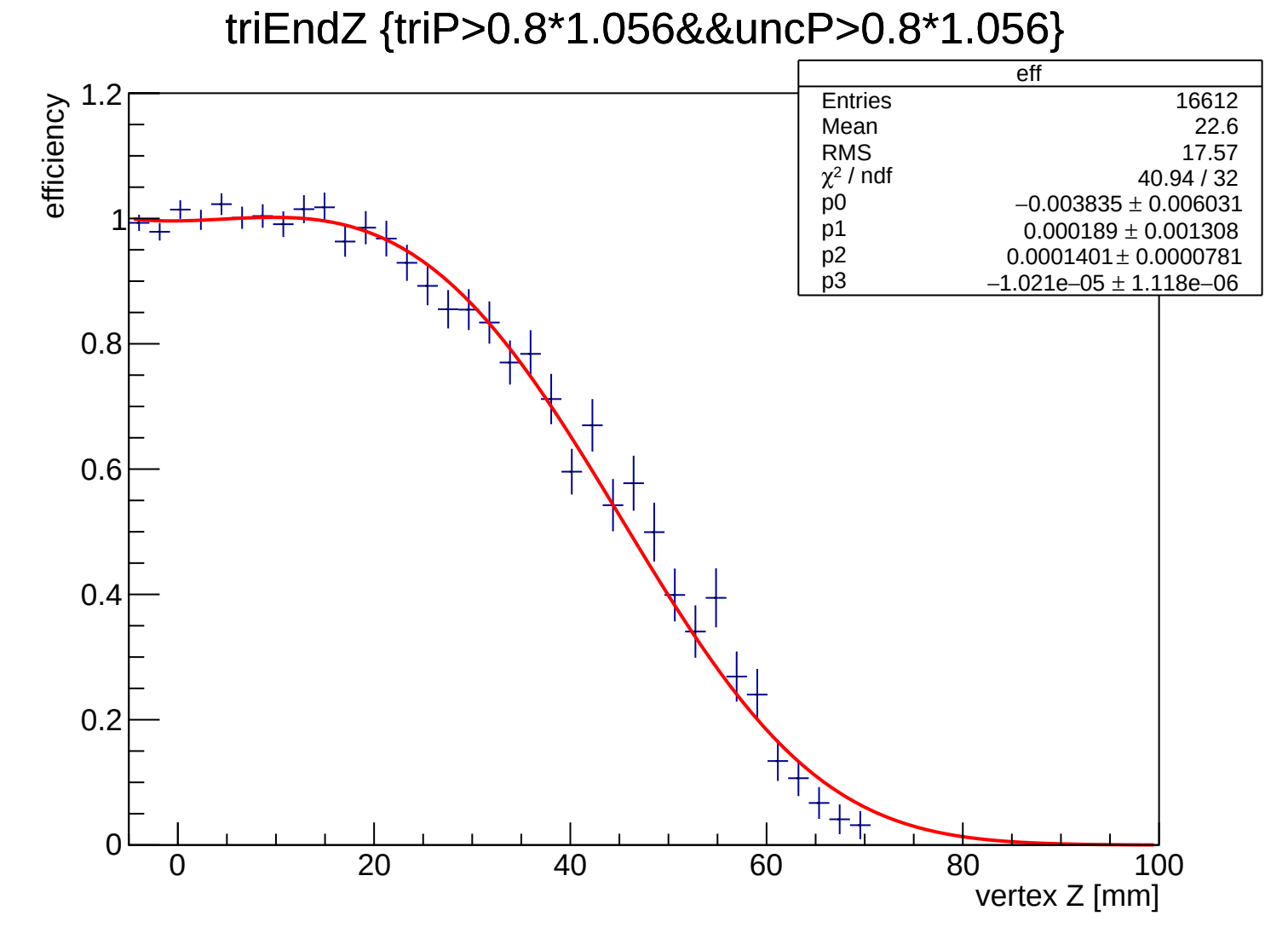

triEndZ {triP>0.8*1.056&&uncP>0.8*1.056}
eff
Entries 17258
Mean 11.79
RMS 11.34
χ² / ndf 54.48 / 23
p0 −0.1173 ± 0.0099
p1 −0.01703 ± 0.00237
p2 0.001006 ± 0.000193
p3 −5.589e−05 ± 3.788e−06
efficiency
vertex Z [mm]
0
0.2
0.4
0.6
0.8
1
1.2
0
20
40
60
80
100

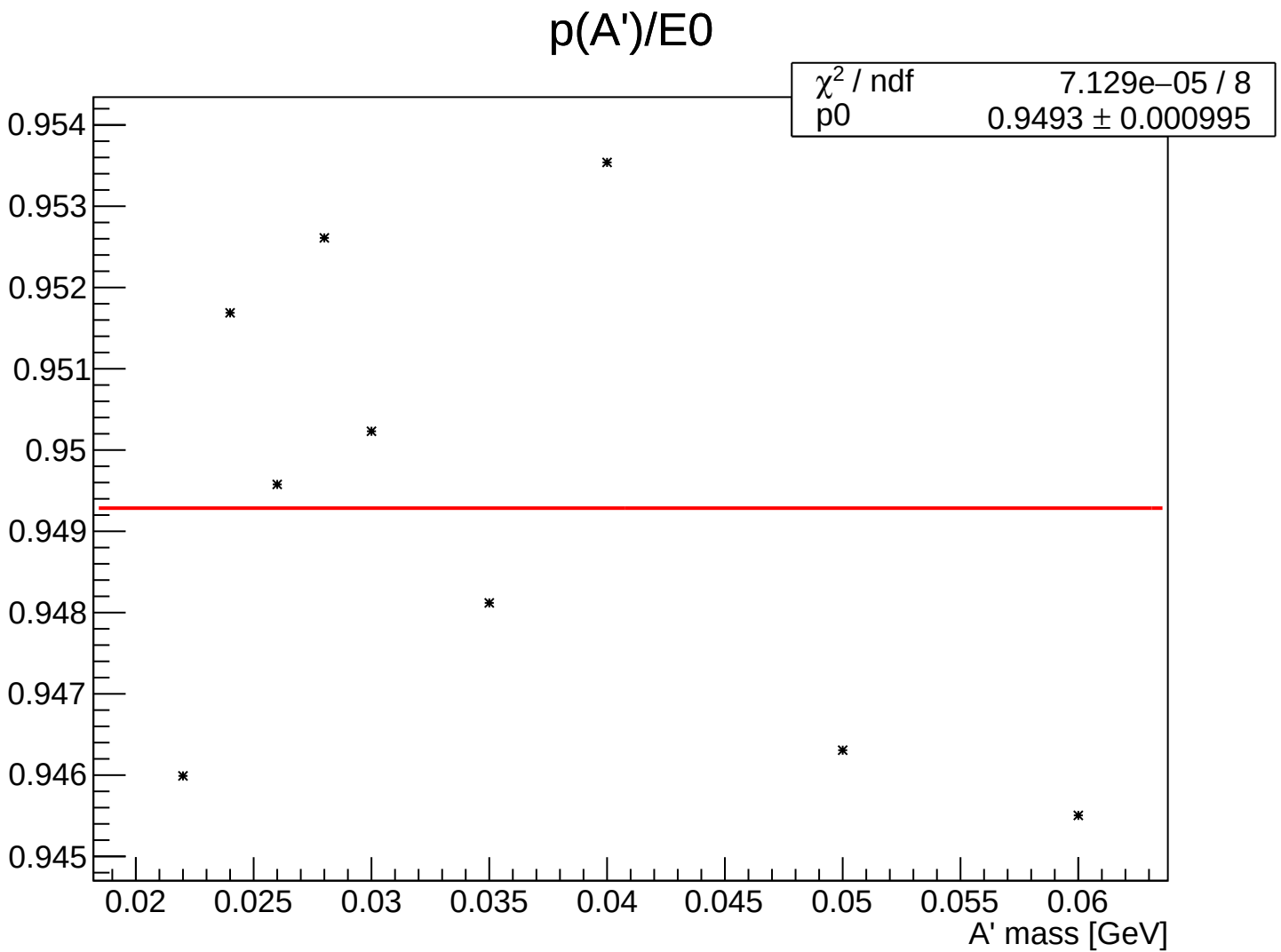

triEndZ {triP>0.8*1.056&&uncP>0.8*1.056}
eff
Entries 22253
Mean 13.25
RMS 12.19
χ² / ndf 79.94 / 24
p0 −0.09972 ± 0.00867
p1 −0.01433 ± 0.00202
p2 0.0008982 ± 0.0001528
p3 −4.506e−05 ± 2.800e−06
efficiency
vertex Z [mm]
0
0.2
0.4
0.6
0.8
1
1.2
0
20
40
60
80
100

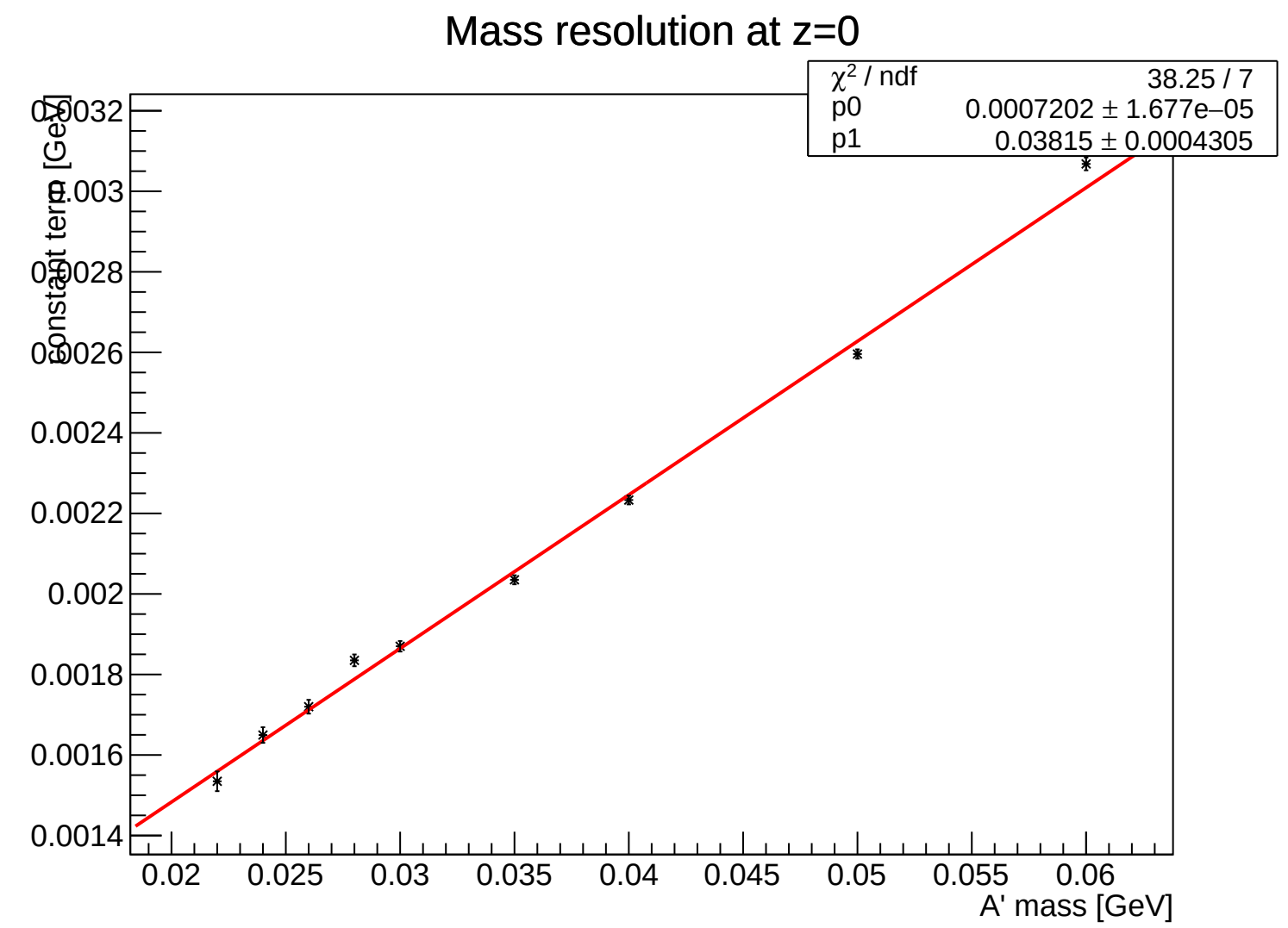

triEndZ {triP>0.8*1.056&&uncP>0.8*1.056}
eff
Entries 32006
Mean 16.01
RMS 13.77
χ² / ndf 163.1 / 26
p0 −0.1065 ± 0.0069
p1 −0.01468 ± 0.00153
p2 0.001131 ± 0.000102
p3 −3.899e−05 ± 1.621e−06
efficiency
vertex Z [mm]
0
0.2
0.4
0.6
0.8
1
1.2
0
20
40
60
80
100

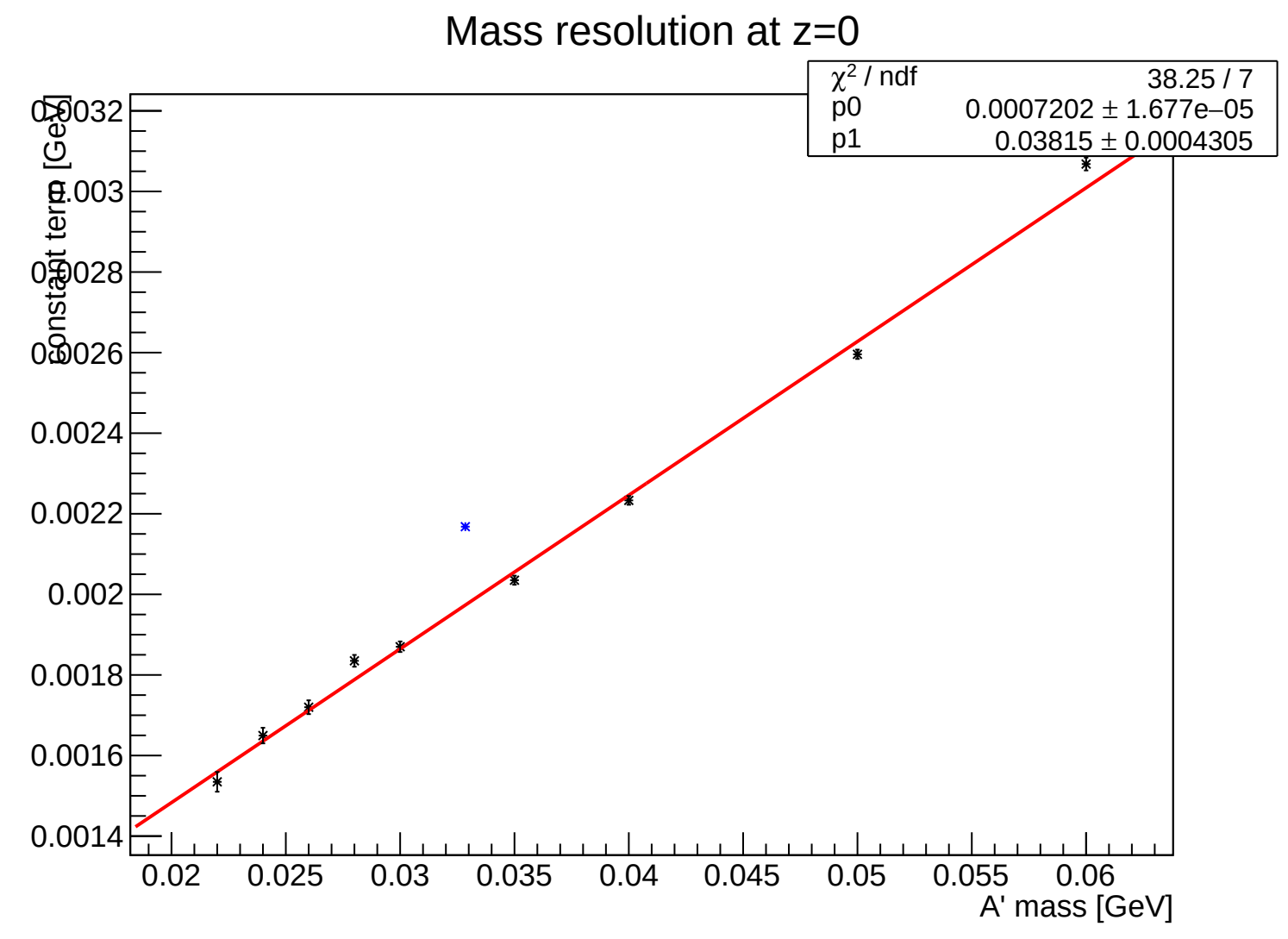

triEndZ {triP>0.8*1.056&&uncP>0.8*1.056}
eff
Entries 38094
Mean 18.14
RMS 14.93
χ² / ndf 129.8 / 27
p0 −0.1004 ± 0.0060
p1 −0.01399 ± 0.00129
p2 0.001062 ± 0.000082
p3 −3.084e−05 ± 1.258e−06
efficiency
vertex Z [mm]
0
0.2
0.4
0.6
0.8
1
1.2
0
20
40
60
80
100

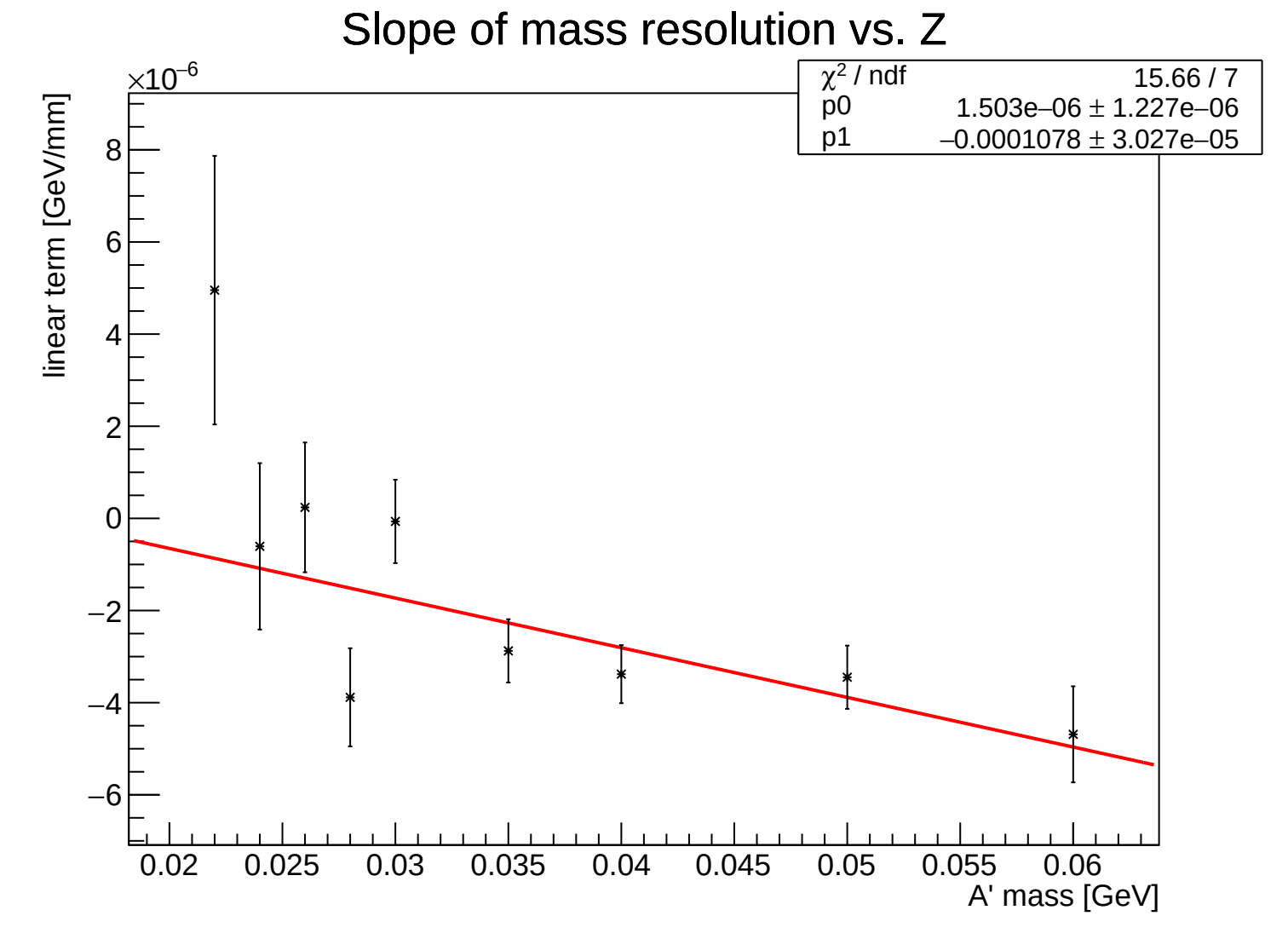

triEndZ {triP>0.8*1.056&&uncP>0.8*1.056}
eff
Entries 31837
Mean 21.22
RMS 16.52
χ² / ndf 154.8 / 31
p0 −0.04655 ± 0.00551
p1 −0.005404 ± 0.001156
p2 0.0006762 ± 0.0000671
p3 −2.098e−05 ± 9.426e−07
efficiency
1.2
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100
vertex Z [mm]

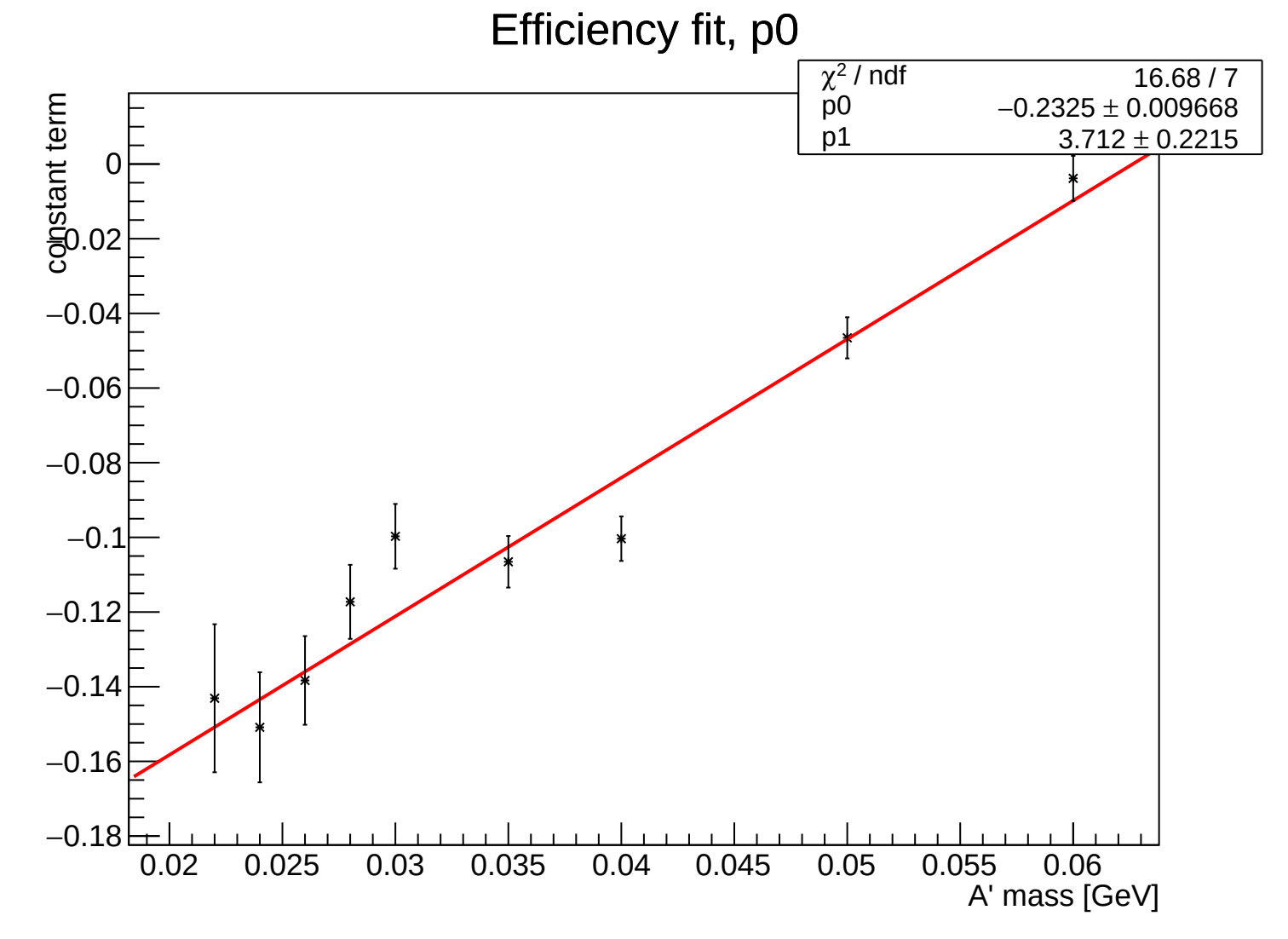

triEndZ {triP>0.8*1.056&&uncP>0.8*1.056}
eff
Entries 16612
Mean 22.6
RMS 17.57
χ² / ndf 40.94 / 32
p0 −0.003835 ± 0.006031
p1 0.000189 ± 0.001308
p2 0.0001401 ± 0.0000781
p3 −1.021e−05 ± 1.118e−06
efficiency
1.2
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100
vertex Z [mm]

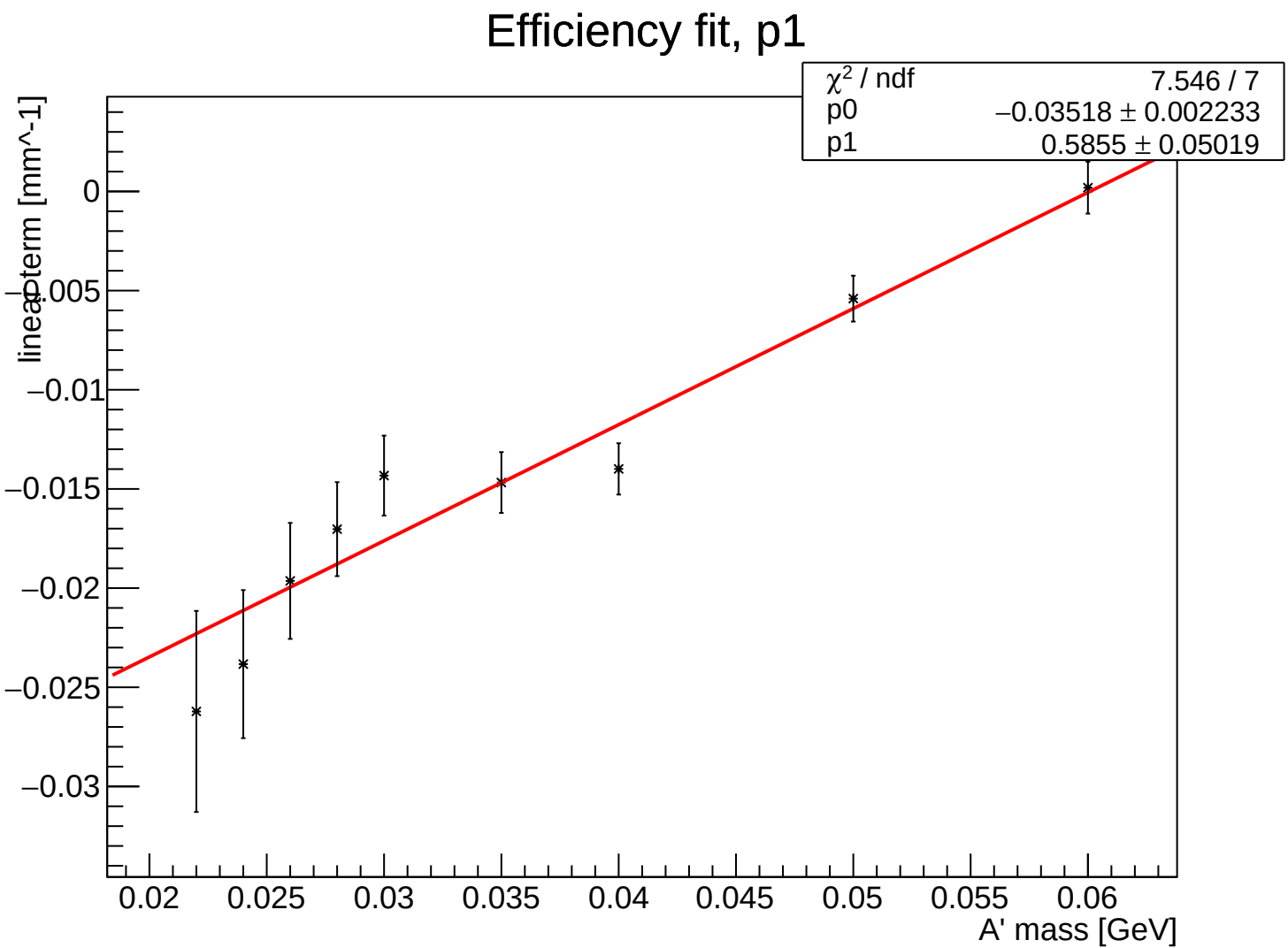

p(A')/E0
χ² / ndf 7.129e−05 / 8
p0 0.9493 ± 0.000995
0.954
0.953
0.952
0.951
0.95
0.949
0.948
0.947
0.946
0.945
0.02
0.025
0.03
0.035
0.04
0.045
0.05
0.055
0.06
A' mass [GeV]

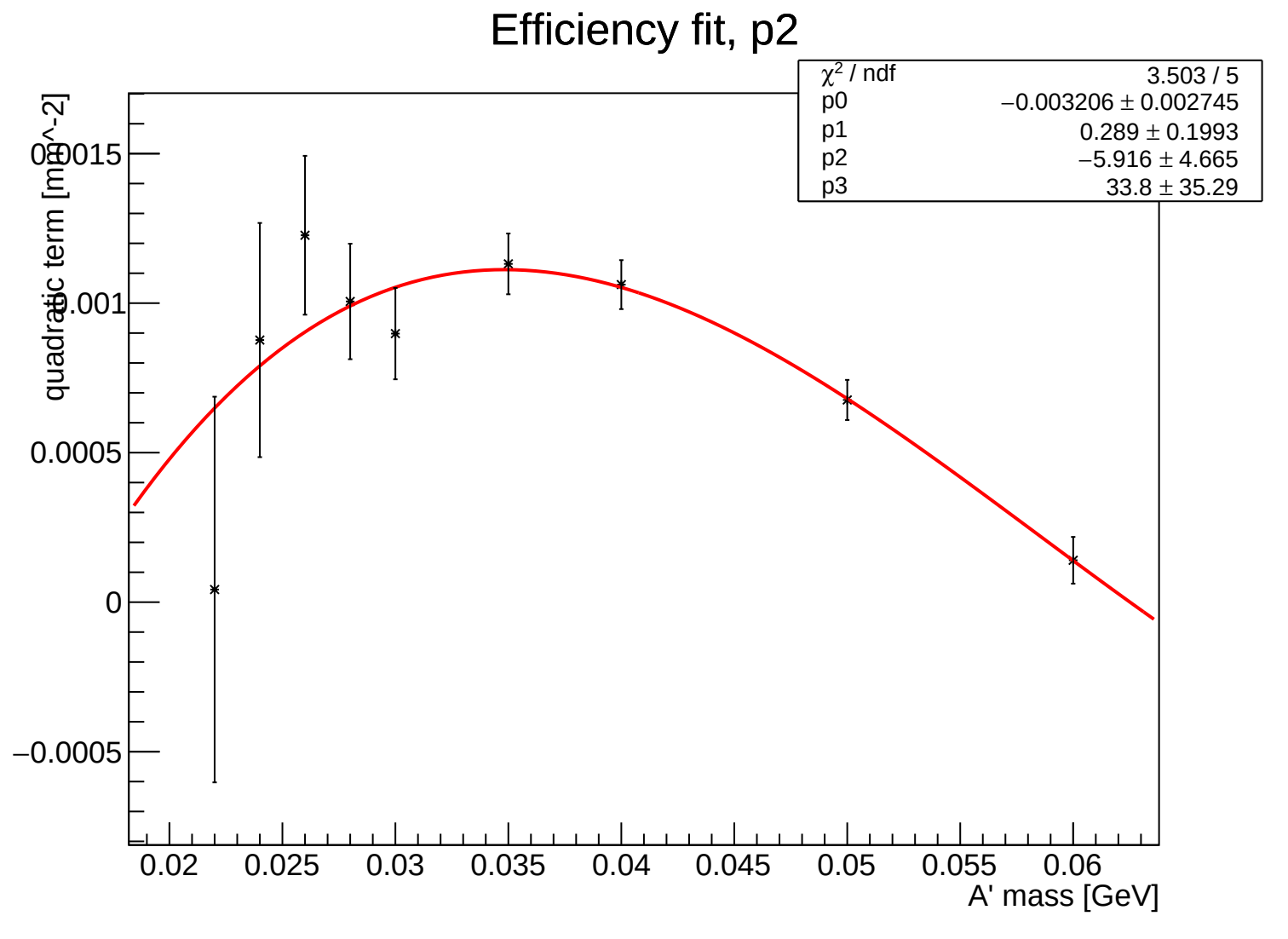

Mass resolution at z=0
χ² / ndf 38.25 / 7
p0 0.0007202 ± 1.677e−05
p1 0.03815 ± 0.0004305
constant term [GeV]
A' mass [GeV]
0.0014
0.0016
0.0018
0.002
0.0022
0.0024
0.0026
0.0028
0.003
0.0032
0.02
0.025
0.03
0.035
0.04
0.045
0.05
0.055
0.06

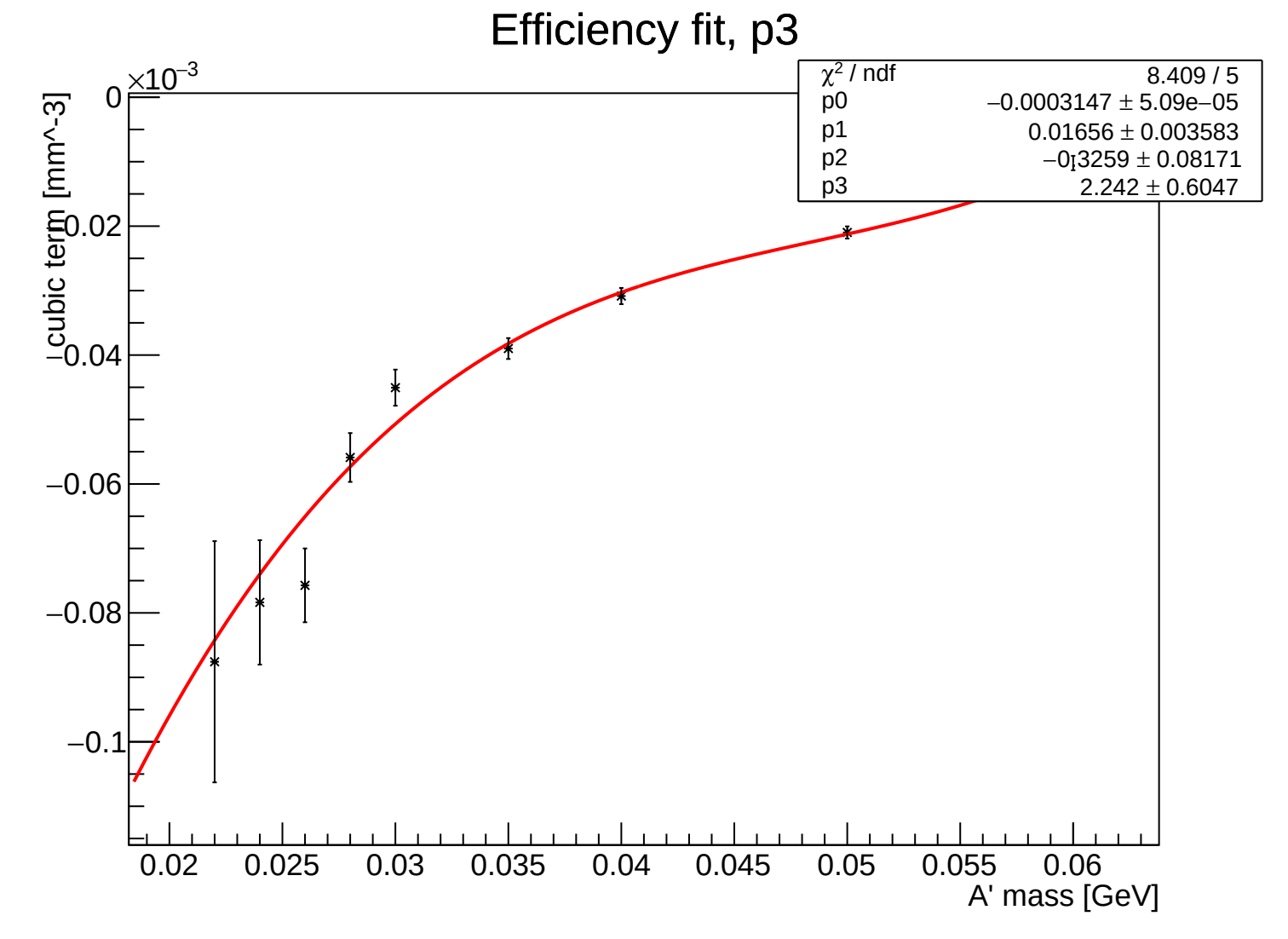

Mass resolution at z=0
χ² / ndf 38.25 / 7
p0 0.0007202 ± 1.677e−05
p1 0.03815 ± 0.0004305
constant term [GeV]
A' mass [GeV]
0.0014
0.0016
0.0018
0.002
0.0022
0.0024
0.0026
0.0028
0.003
0.0032
0.02
0.025
0.03
0.035
0.04
0.045
0.05
0.055
0.06


Slope of mass resolution vs. Z
χ² / ndf 15.66 / 7
p0 1.503e–06 ± 1.227e–06
p1 –0.0001078 ± 3.027e–05
×10⁻⁶
linear term [GeV/mm]
8
6
4
2
0
–2
–4
–6
0.02
0.025
0.03
0.035
0.04
0.045
0.05
0.055
0.06
A' mass [GeV]


Efficiency fit, p0
χ² / ndf 16.68 / 7
p0 −0.2325 ± 0.009668
p1 3.712 ± 0.2215
constant term
0
−0.02
−0.04
−0.06
−0.08
−0.1
−0.12
−0.14
−0.16
−0.18
0.02
0.025
0.03
0.035
0.04
0.045
0.05
0.055
0.06
A' mass [GeV]


Efficiency fit, p1
χ² / ndf 7.546 / 7
p0 −0.03518 ± 0.002233
p1 0.5855 ± 0.05019
linear term [mm^-1]
0
−0.005
−0.01
−0.015
−0.02
−0.025
−0.03
0.02
0.025
0.03
0.035
0.04
0.045
0.05
0.055
0.06
A' mass [GeV]


Efficiency fit, p2
χ² / ndf 3.503 / 5
p0 −0.003206 ± 0.002745
p1 0.289 ± 0.1993
p2 −5.916 ± 4.665
p3 33.8 ± 35.29
quadratic term [mm^-2]
0.0015
0.001
0.0005
0
−0.0005
0.02
0.025
0.03
0.035
0.04
0.045
0.05
0.055
0.06
A' mass [GeV]


Efficiency fit, p3
χ² / ndf 8.409 / 5
p0 −0.0003147 ± 5.09e−05
p1 0.01656 ± 0.003583
p2 −0.3259 ± 0.08171
p3 2.242 ± 0.6047
×10⁻³
0
−0.02
−0.04
−0.06
−0.08
−0.1
cubic term [mm^-3]
0.02
0.025
0.03
0.035
0.04
0.045
0.05
0.055
0.06
A' mass [GeV]