



# PID at large-eta: status

Data set:

UrQMD, 8 GeV, 0..3 fm

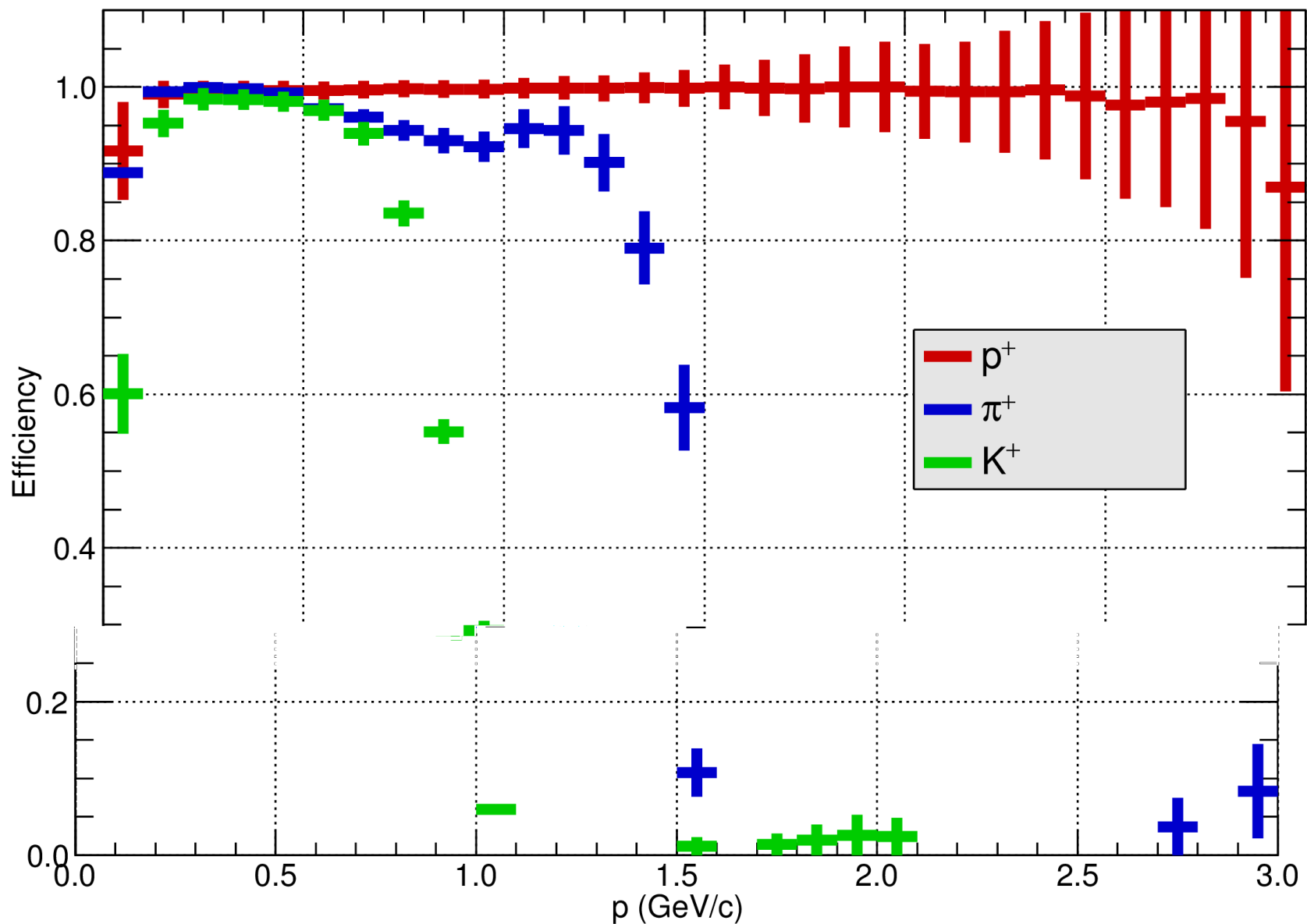
Set of cuts:

Primary tracks,  $n_{\text{Hits}} > 10$ , tracks with 50% hits closer than 1.5 cm to boundaries are removed

# Efficiency, $0 < |\eta| < 0.4$

## Positive charged particles

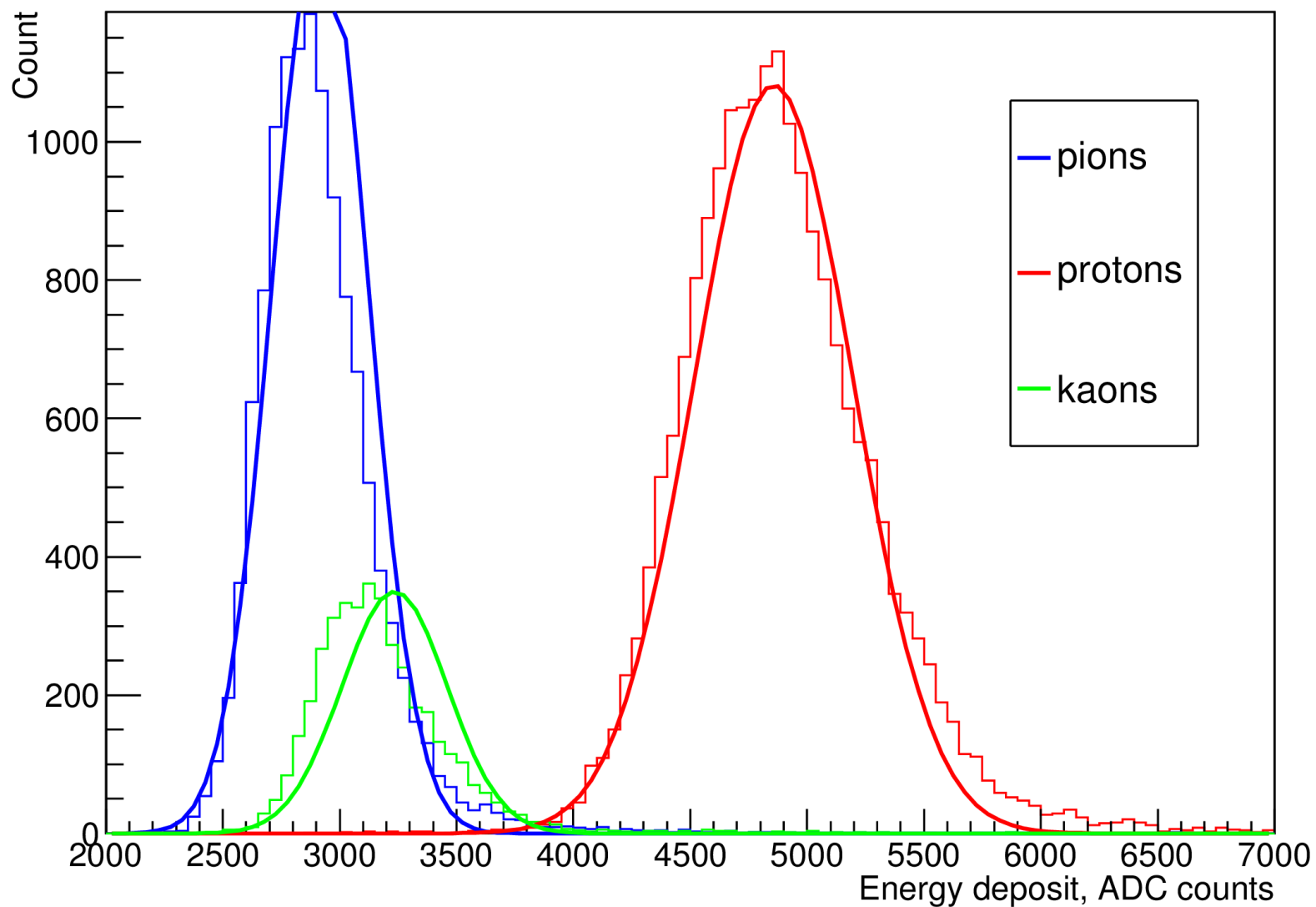
### Only TPC PID



# 0.9 - 1 GeV/c, $0 < |\eta| < 0.4$

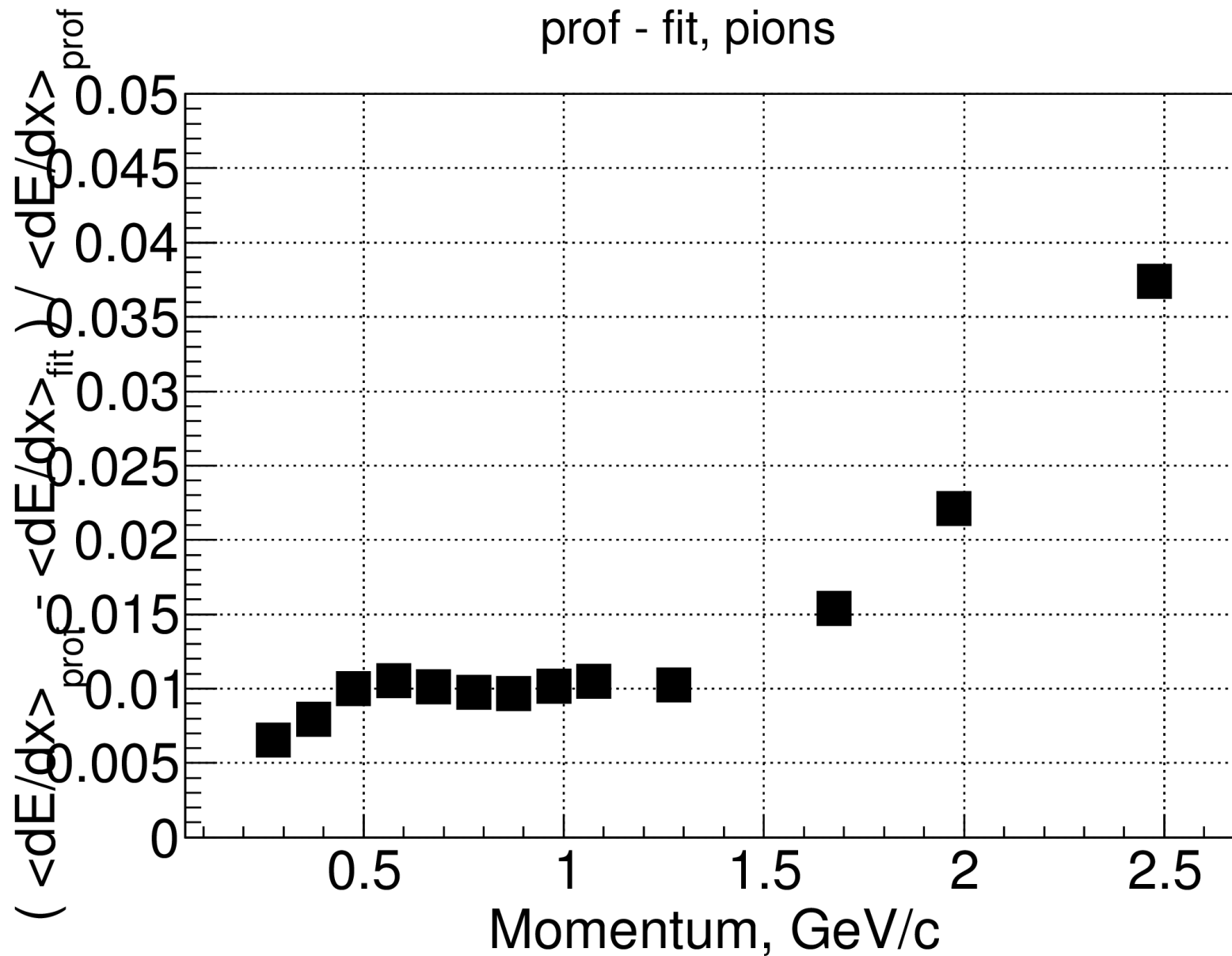
## Positive charged particles

### TPC PID



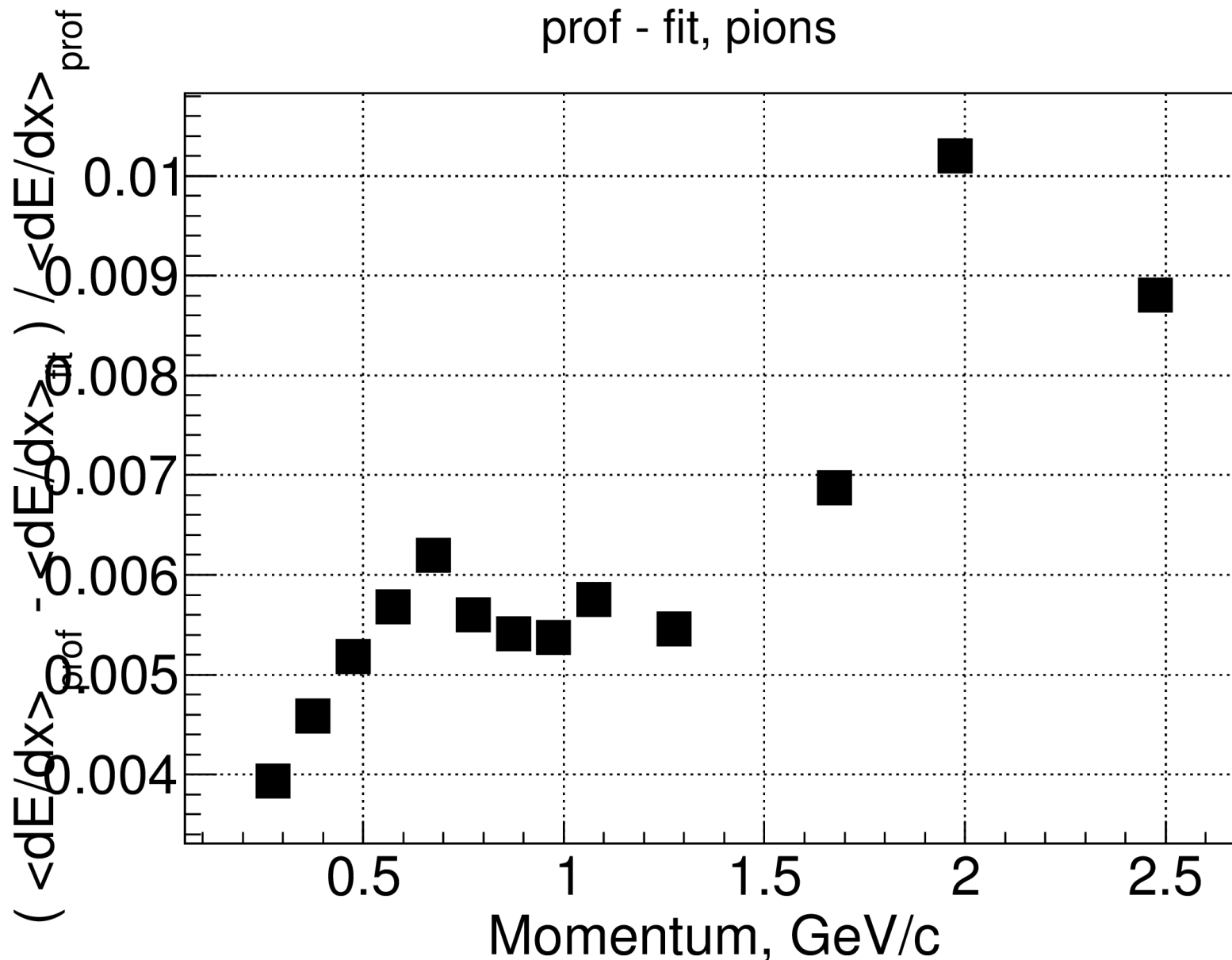
$$\left( \langle dE/dx \rangle_{\text{prof}} - \langle dE/dx \rangle_{\text{fit}} \right) / \langle dE/dx \rangle_{\text{prof}}$$

**0 < |eta| < 0.4, pions**



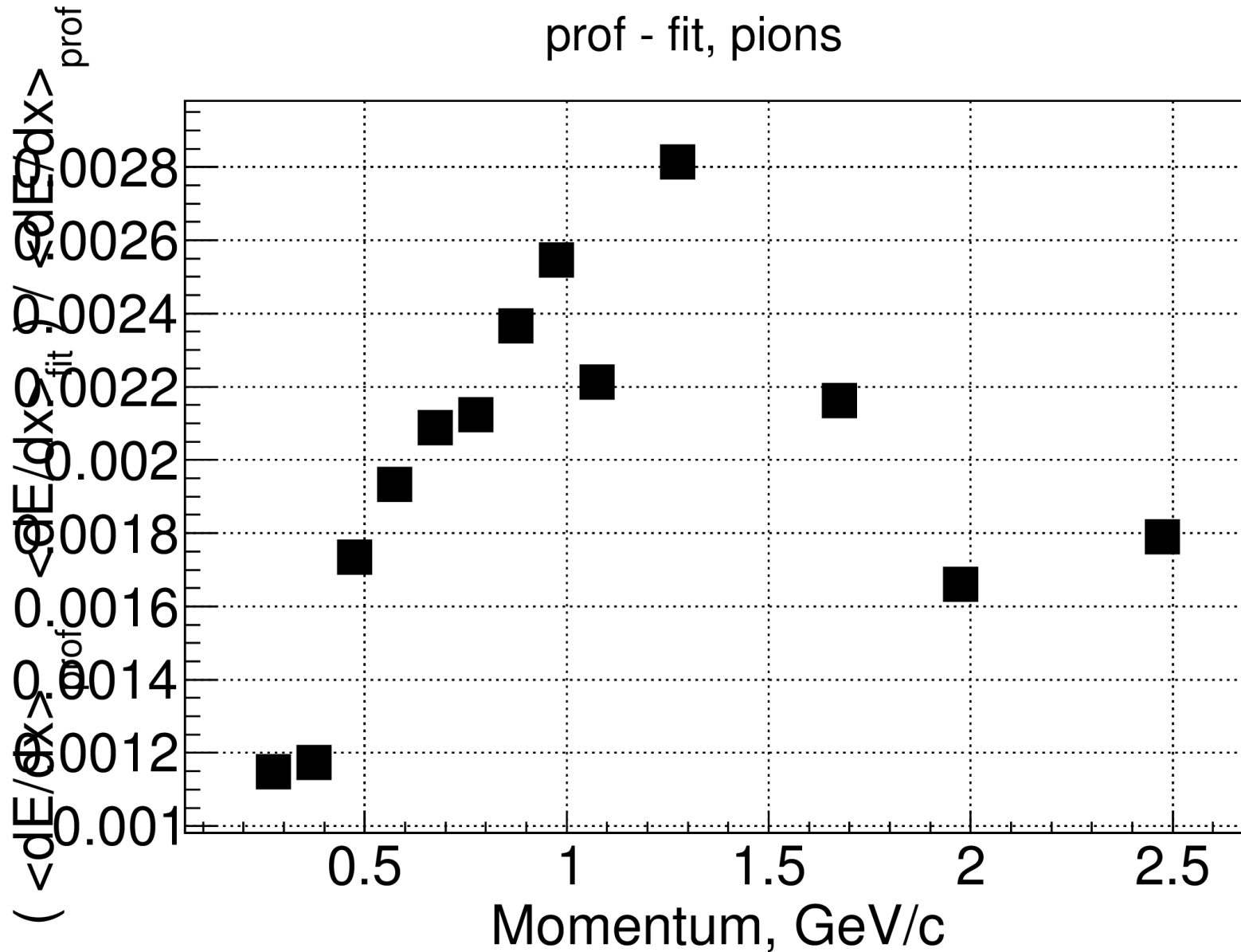
$$\frac{(\langle dE/dx \rangle_{\text{prof}} - \langle dE/dx \rangle_{\text{fit}})}{\langle dE/dx \rangle_{\text{prof}}}$$

**0.4 < |eta| < 0.8, pions**



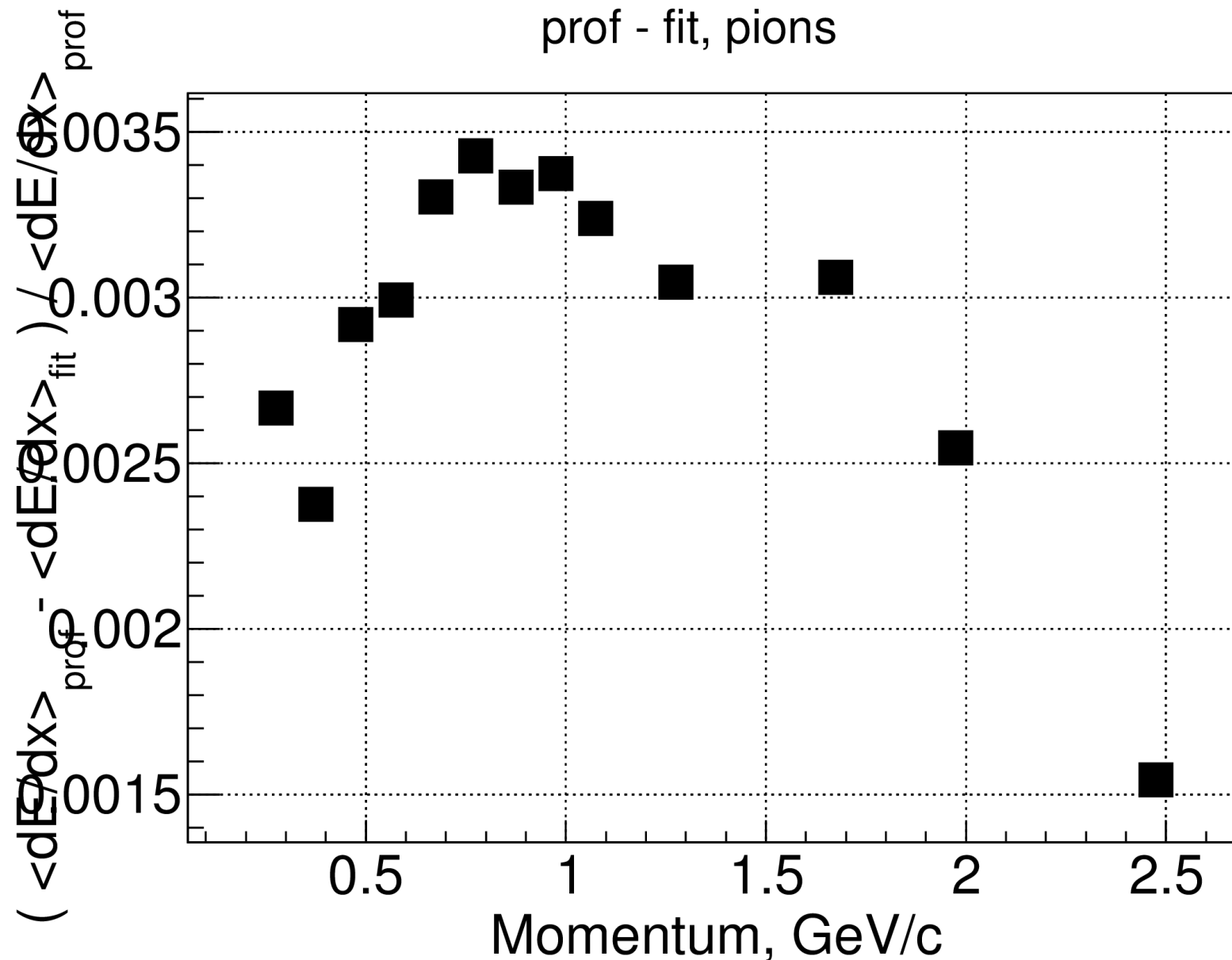
$$\left( \langle dE/dx \rangle_{\text{prof}} - \langle dE/dx \rangle_{\text{fit}} \right) / \langle dE/dx \rangle_{\text{prof}}$$

**0.8 < |eta| < 1.2, pions**

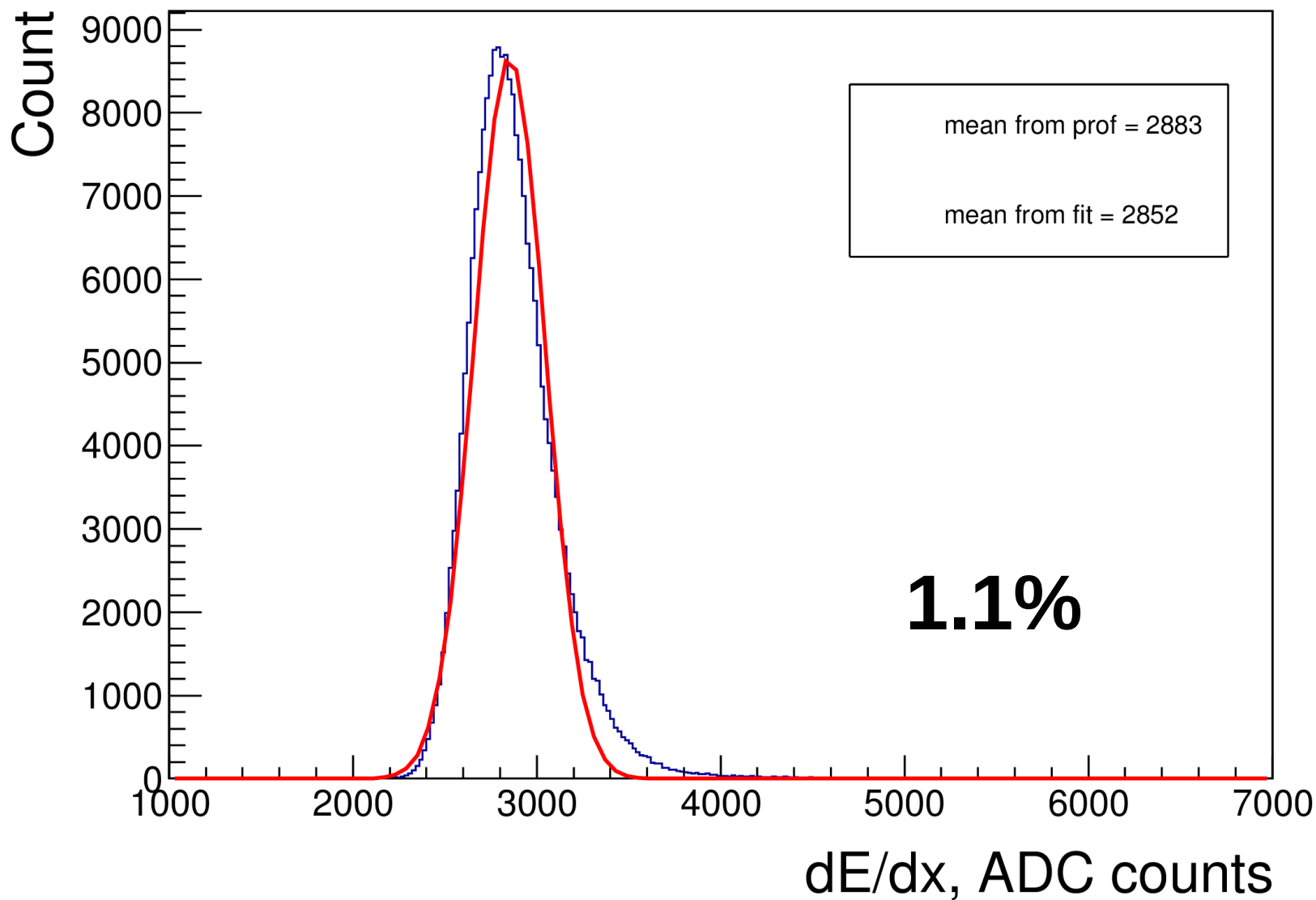


$$\left( \langle dE/dx \rangle_{\text{prof}} - \langle dE/dx \rangle_{\text{fit}} \right) / \langle dE/dx \rangle_{\text{prof}}$$

**1.2 < |eta| < 1.6, pions**

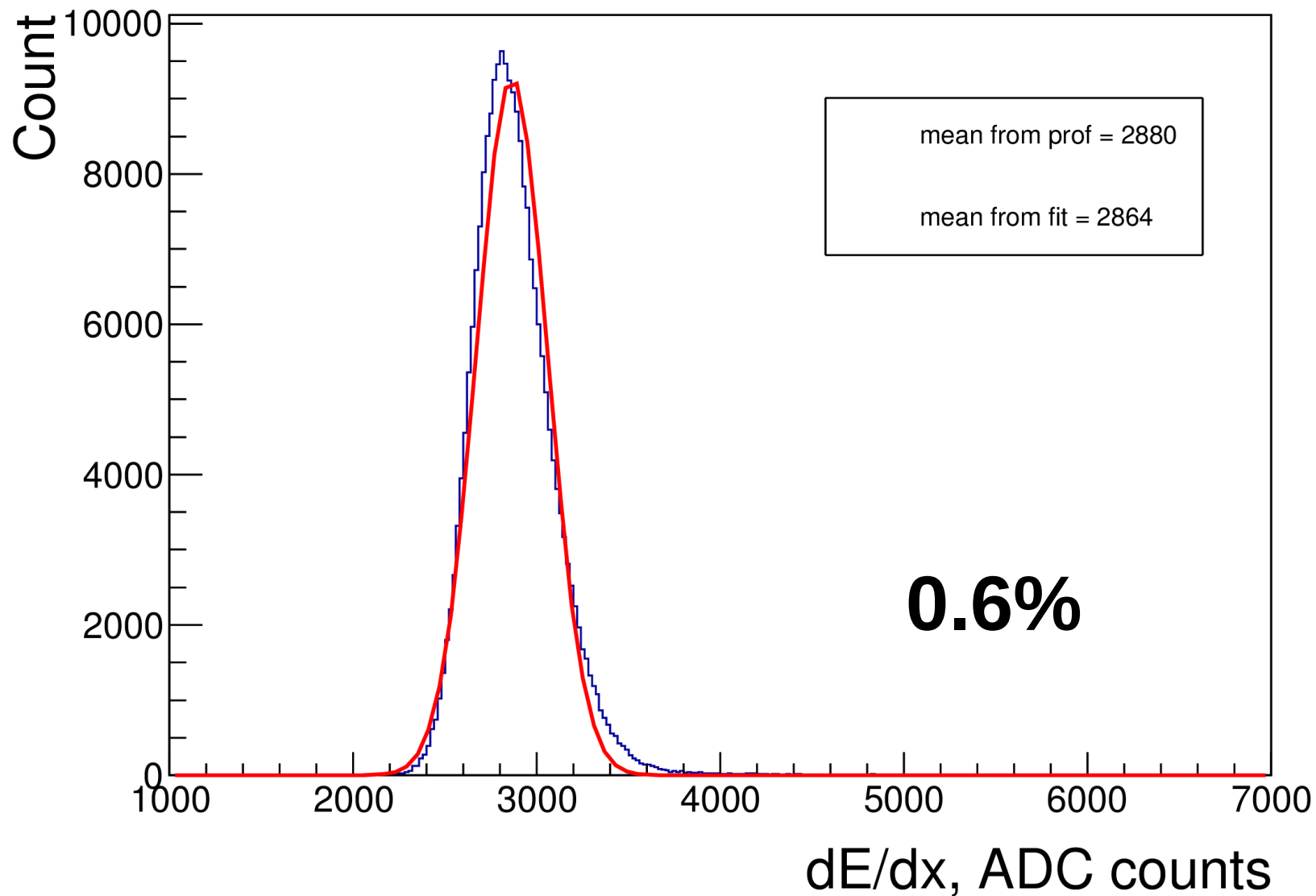


# 0.55 - 0.6 GeV/c, $0 < |\eta| < 0.4$ , pions

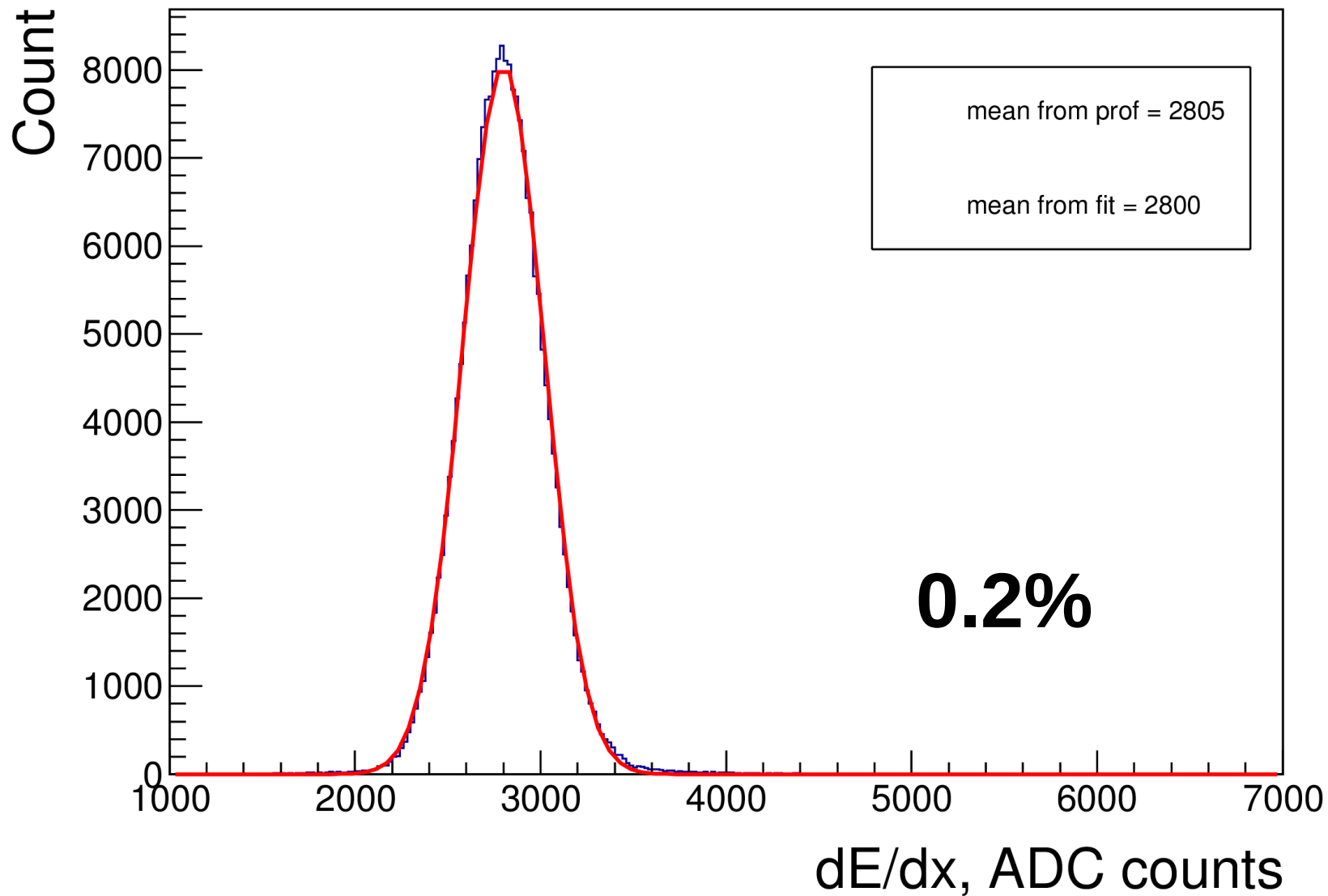




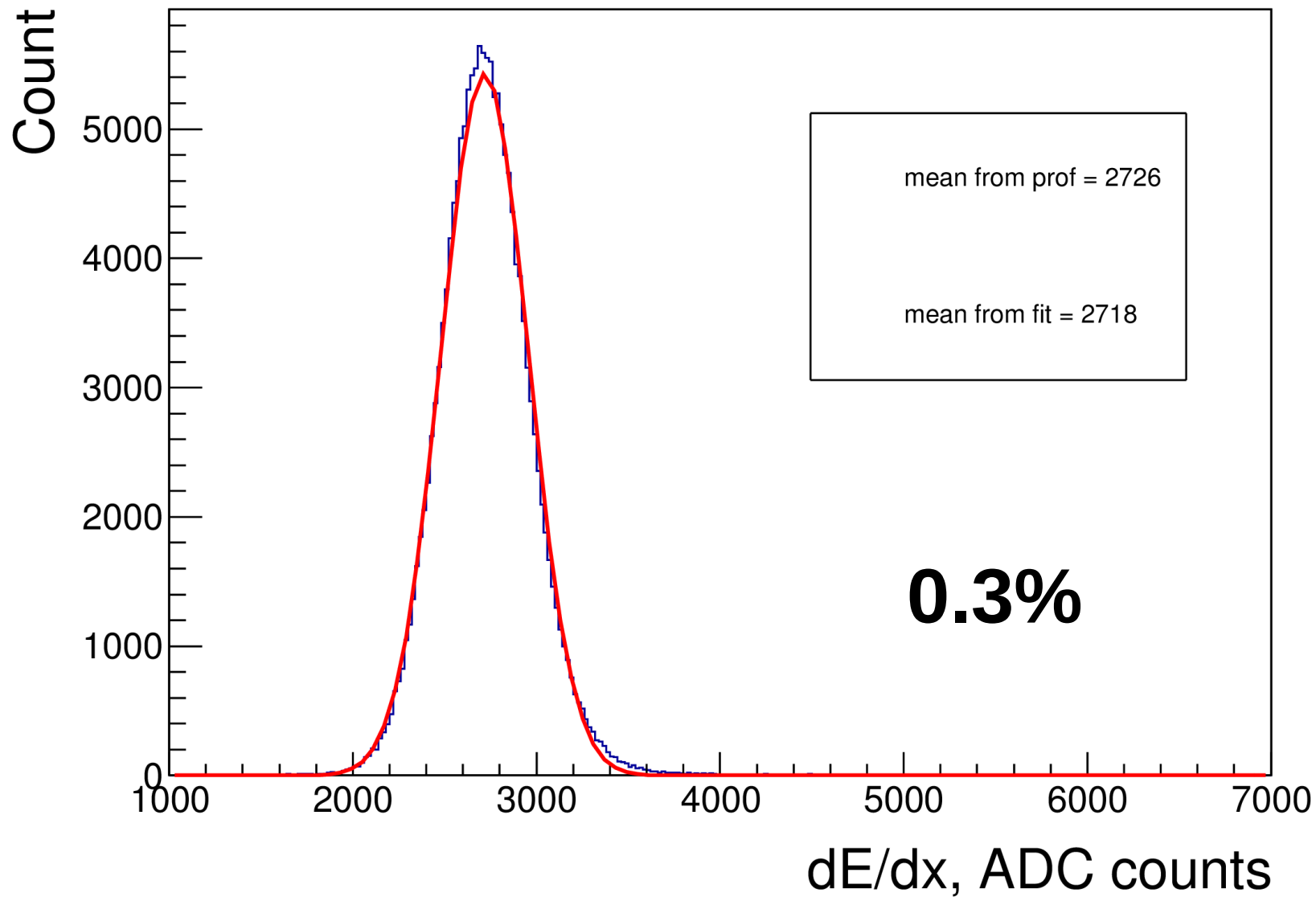
# 0.55 - 0.6 GeV/c, $0.4 < |\eta| < 0.8$ , pions



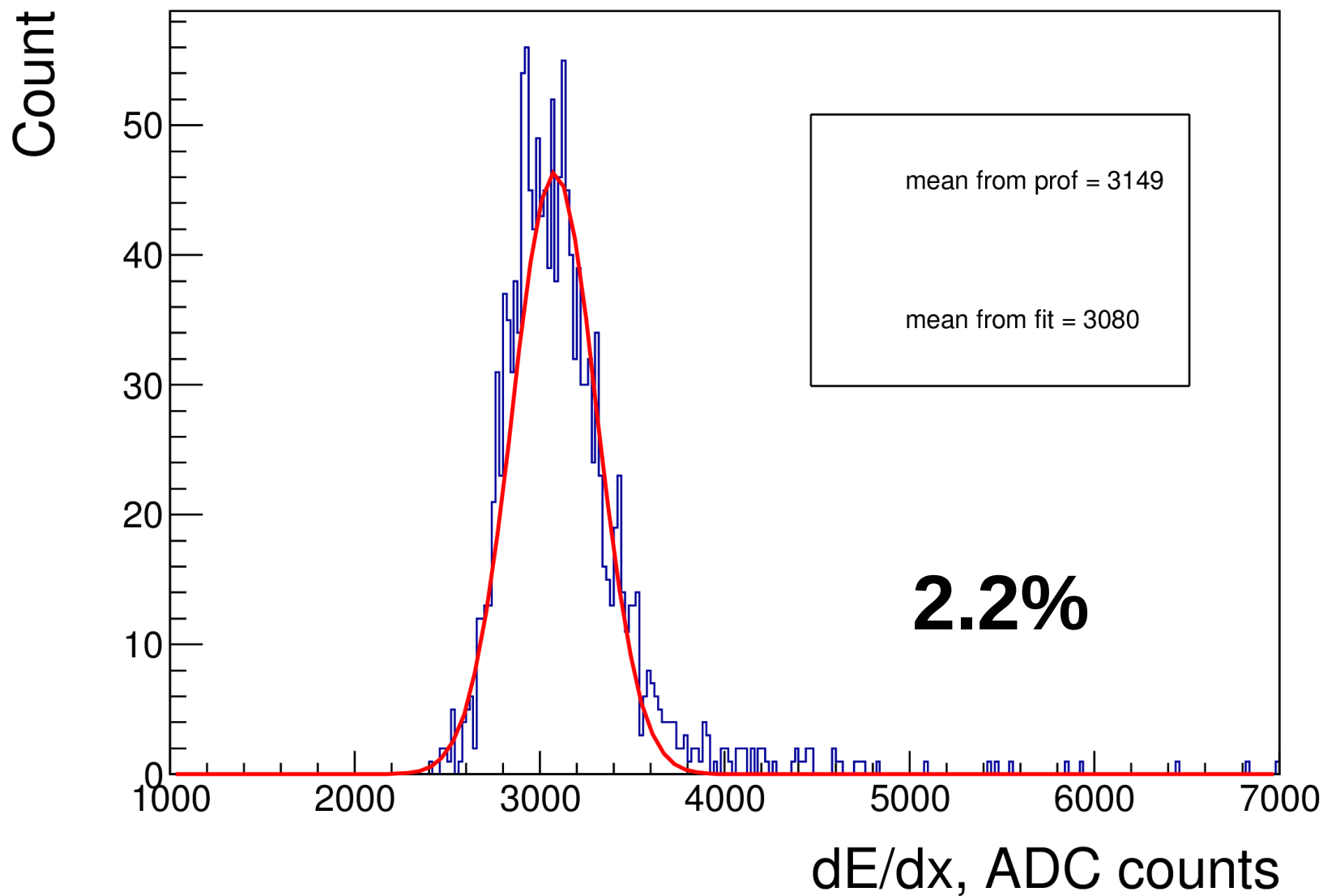
# 0.55 - 0.6 GeV/c, $0.8 < |\eta| < 1.2$ , pions



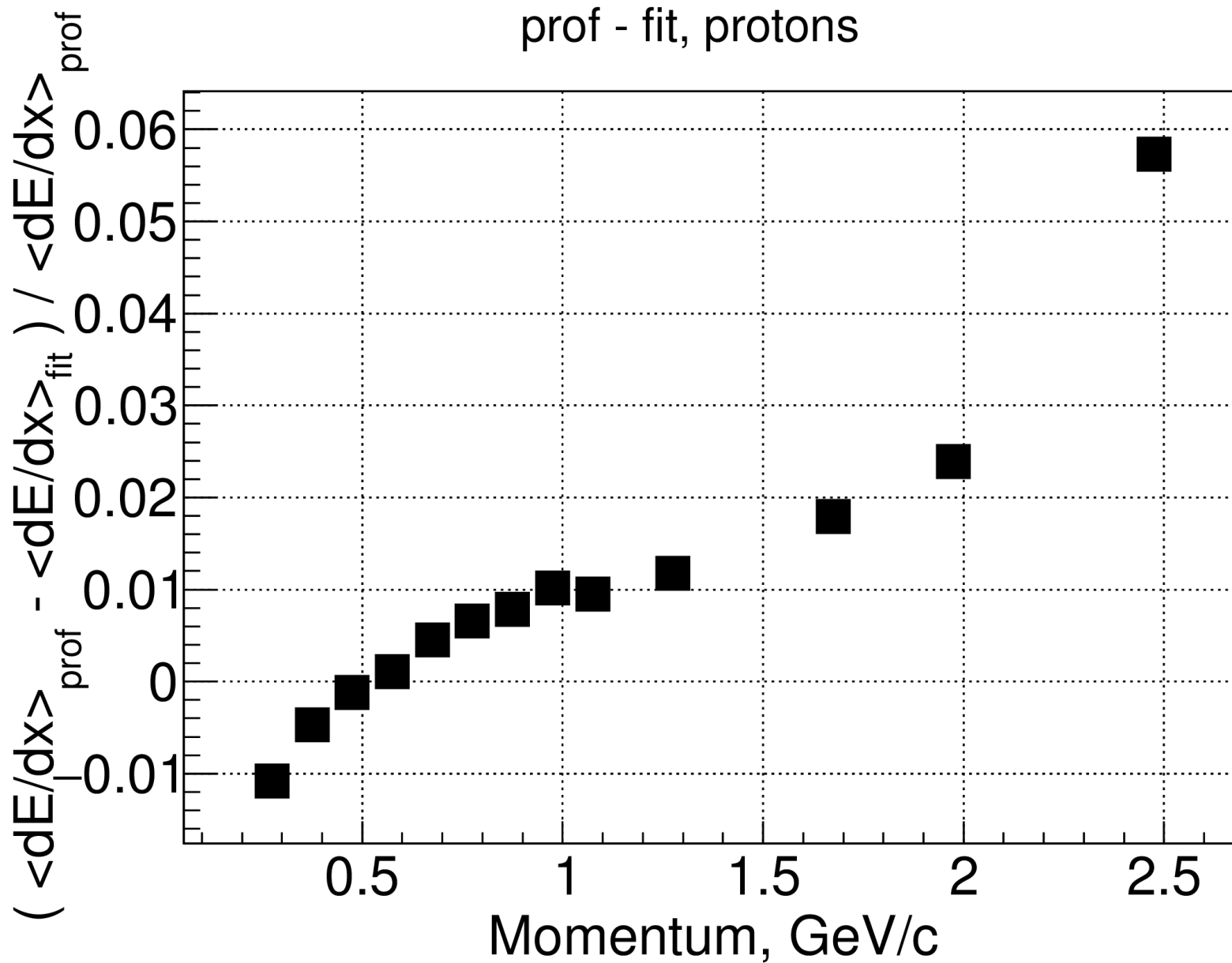
# 0.55 - 0.6 GeV/c, $1.2 < |\eta| < 1.6$ , pions



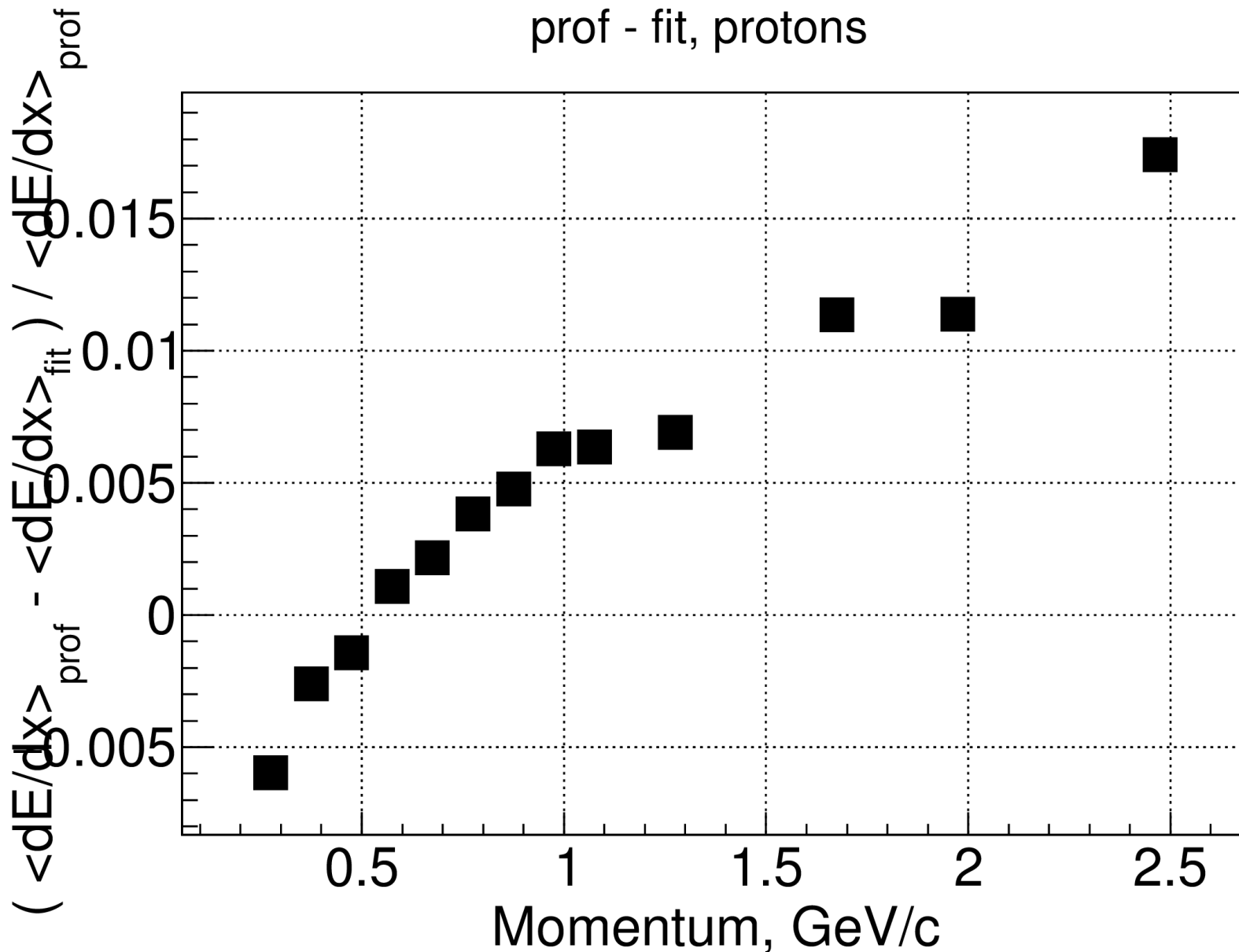
# 1.95 - 2 GeV/c, $0 < |\eta| < 0.4$ , pions



$$\frac{(\langle dE/dx \rangle_{\text{prof}} - \langle dE/dx \rangle_{\text{fit}})}{\langle dE/dx \rangle_{\text{prof}}}$$
  
**0 < |eta| < 0.4, protons**

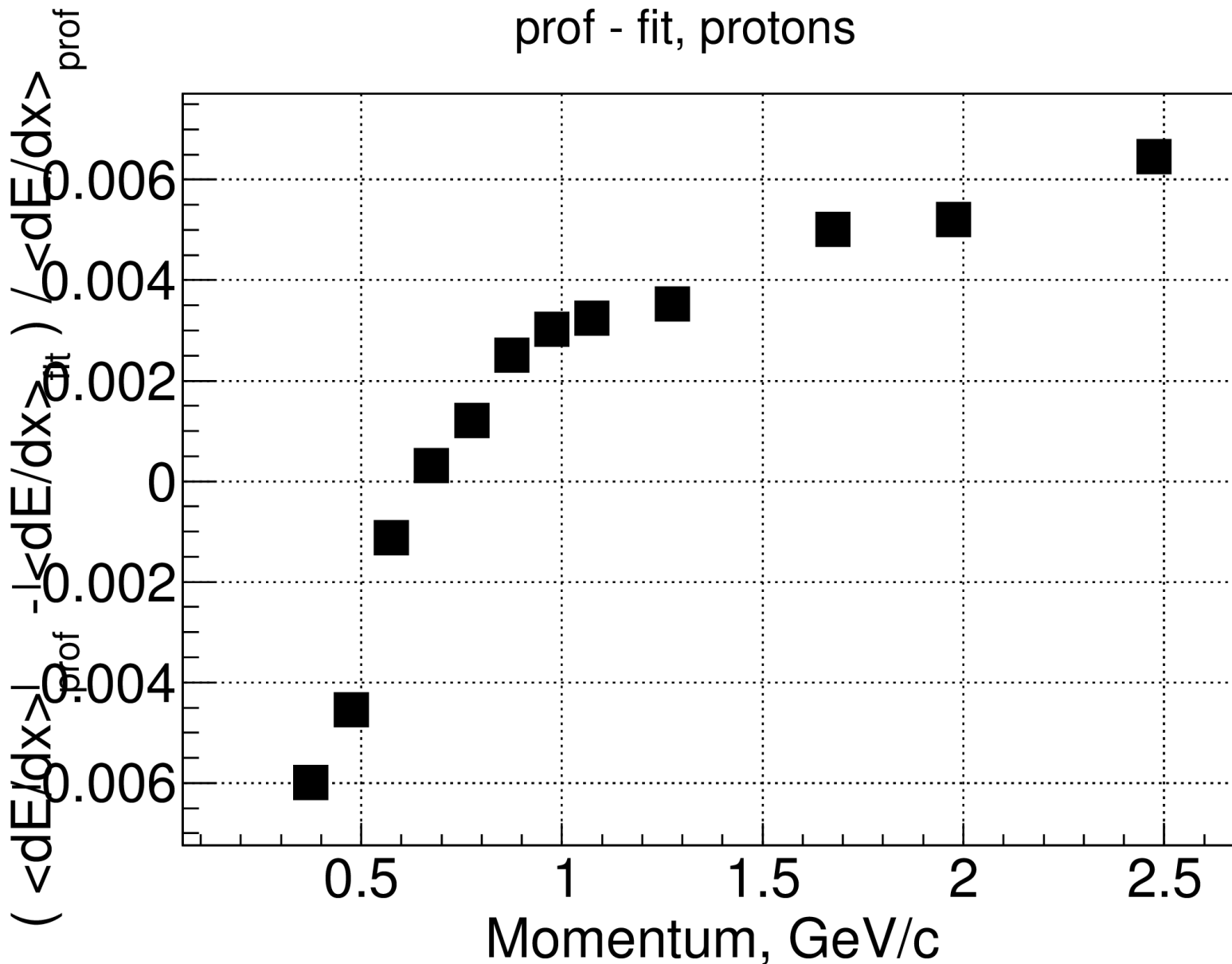


$$\left( \langle dE/dx \rangle_{\text{prof}} - \langle dE/dx \rangle_{\text{fit}} \right) / \langle dE/dx \rangle_{\text{prof}}$$
  
**0.4 < |eta| < 0.8, protons**

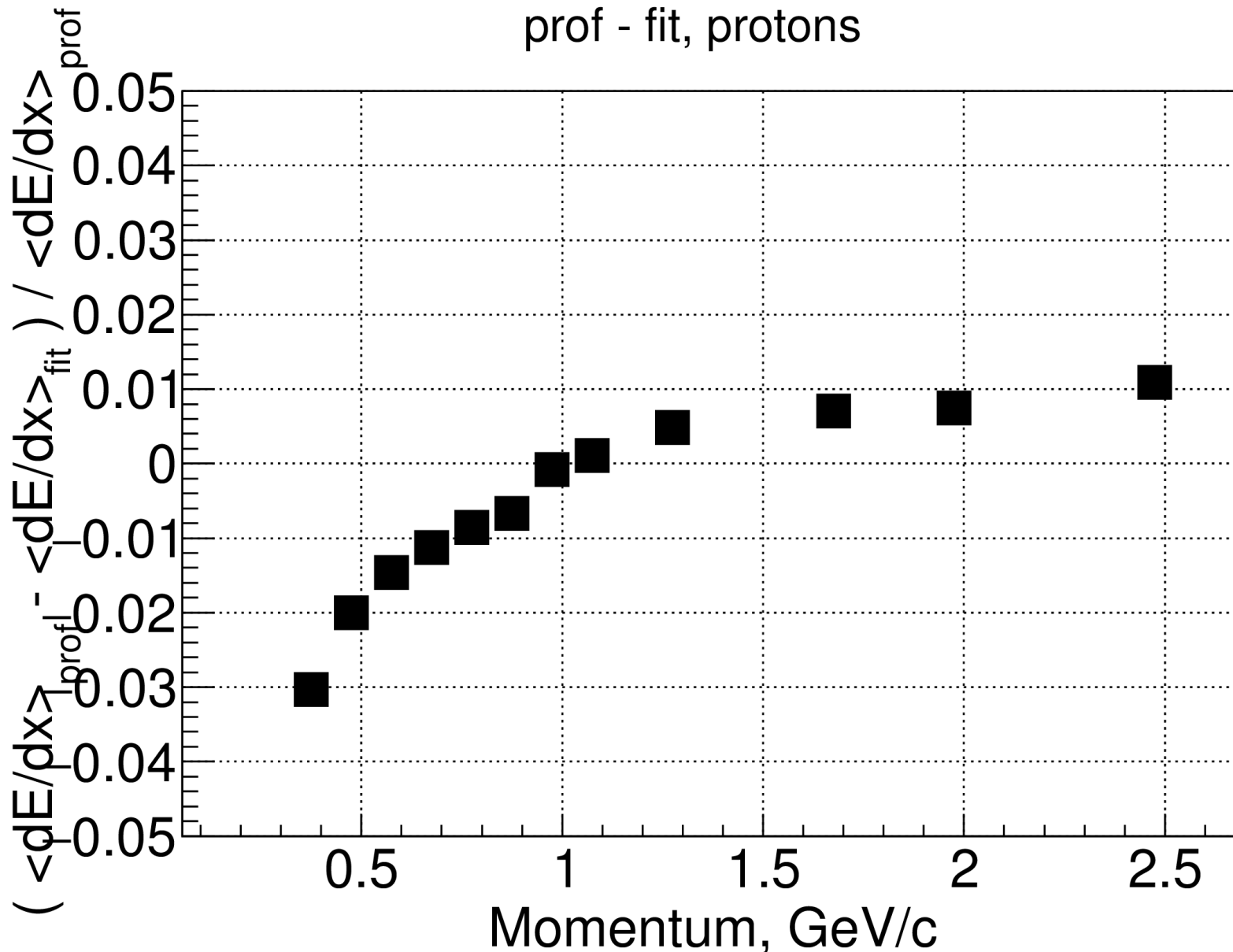


$$\frac{(\langle dE/dx \rangle_{\text{prof}} - \langle dE/dx \rangle_{\text{fit}})}{\langle dE/dx \rangle_{\text{prof}}}$$

**0.8 < |eta| < 1.2, protons**

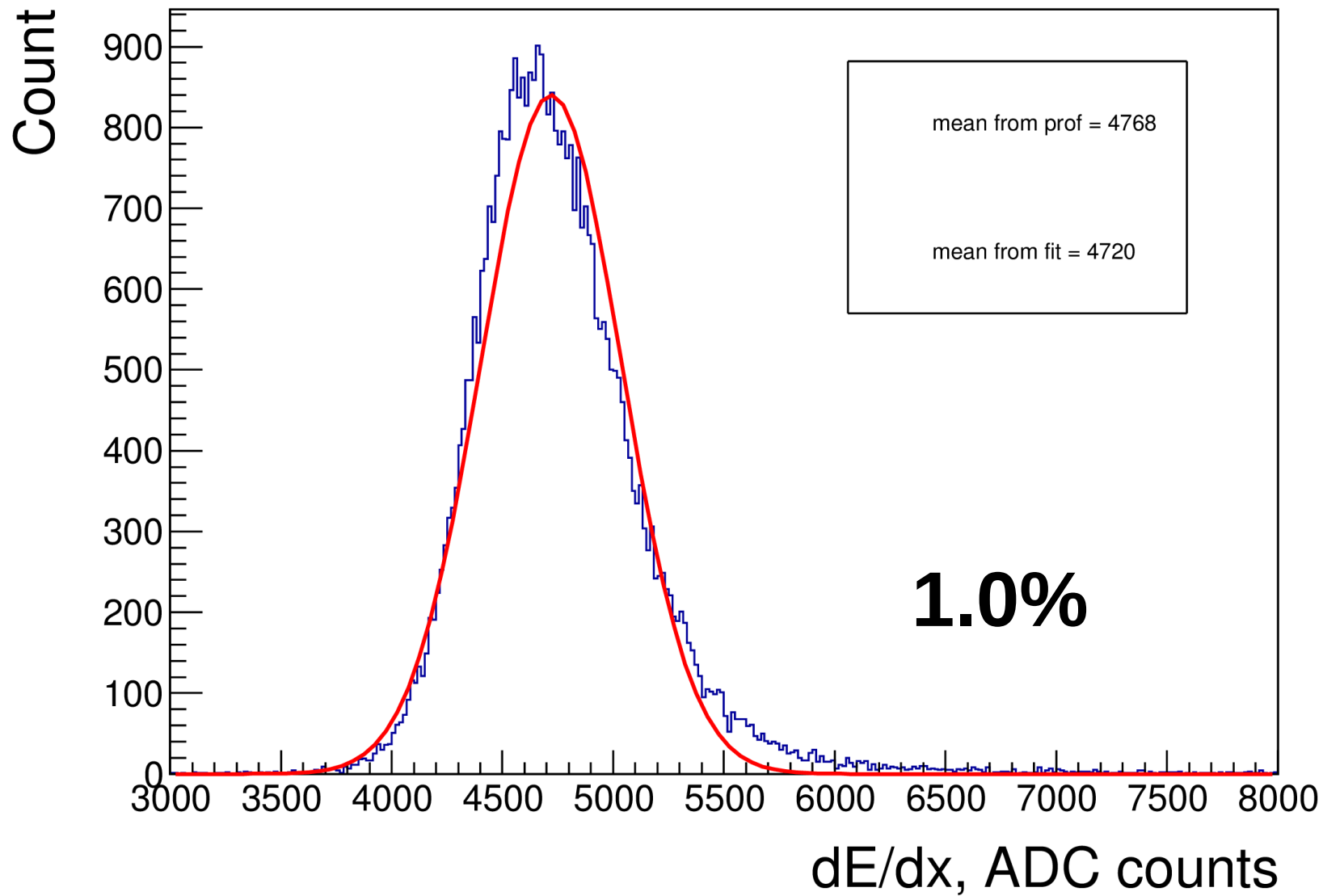


$$\left( \langle dE/dx \rangle_{\text{prof}} - \langle dE/dx \rangle_{\text{fit}} \right) / \langle dE/dx \rangle_{\text{prof}}$$
  
**1.2 < |eta| < 1.6, protons**

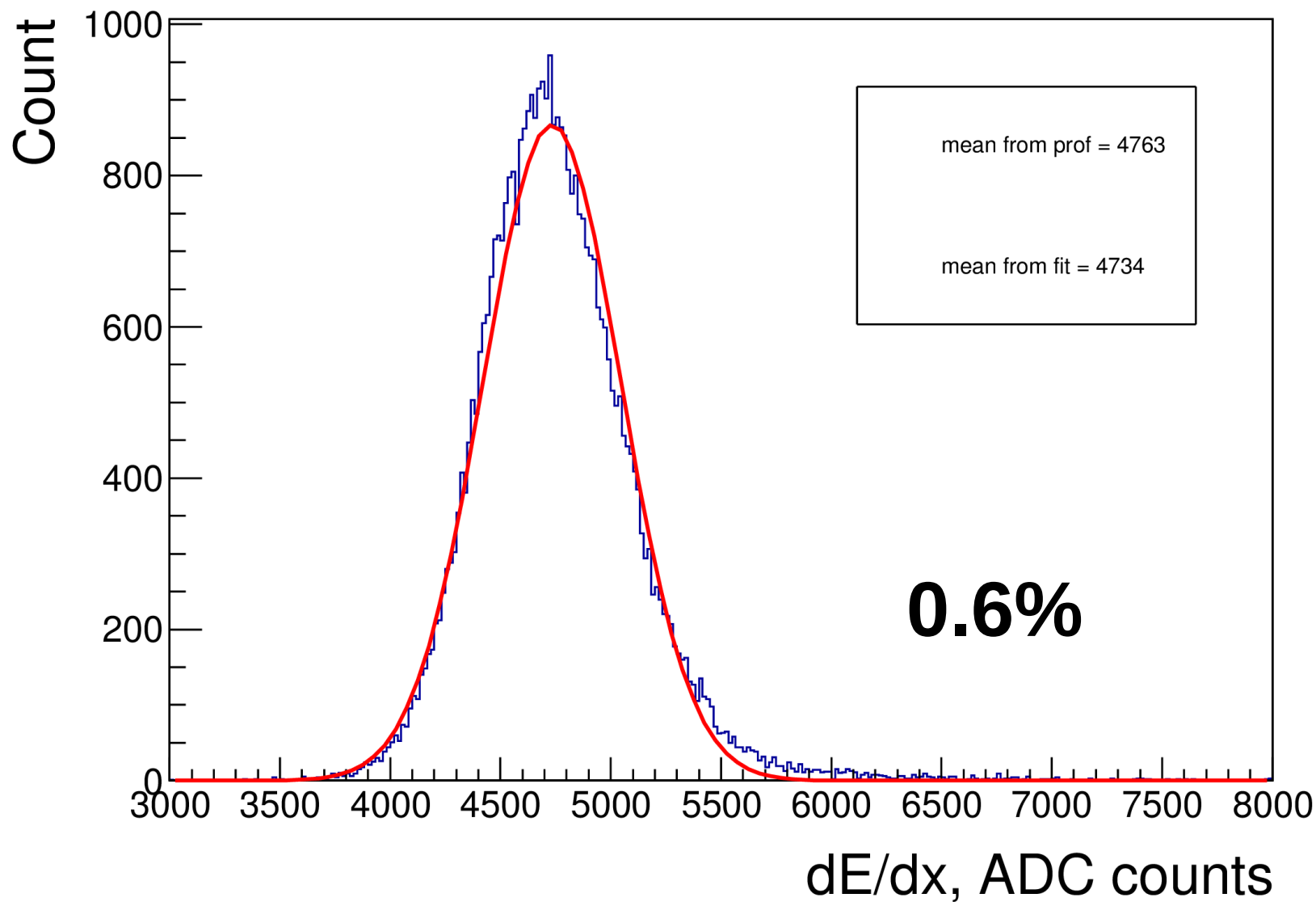




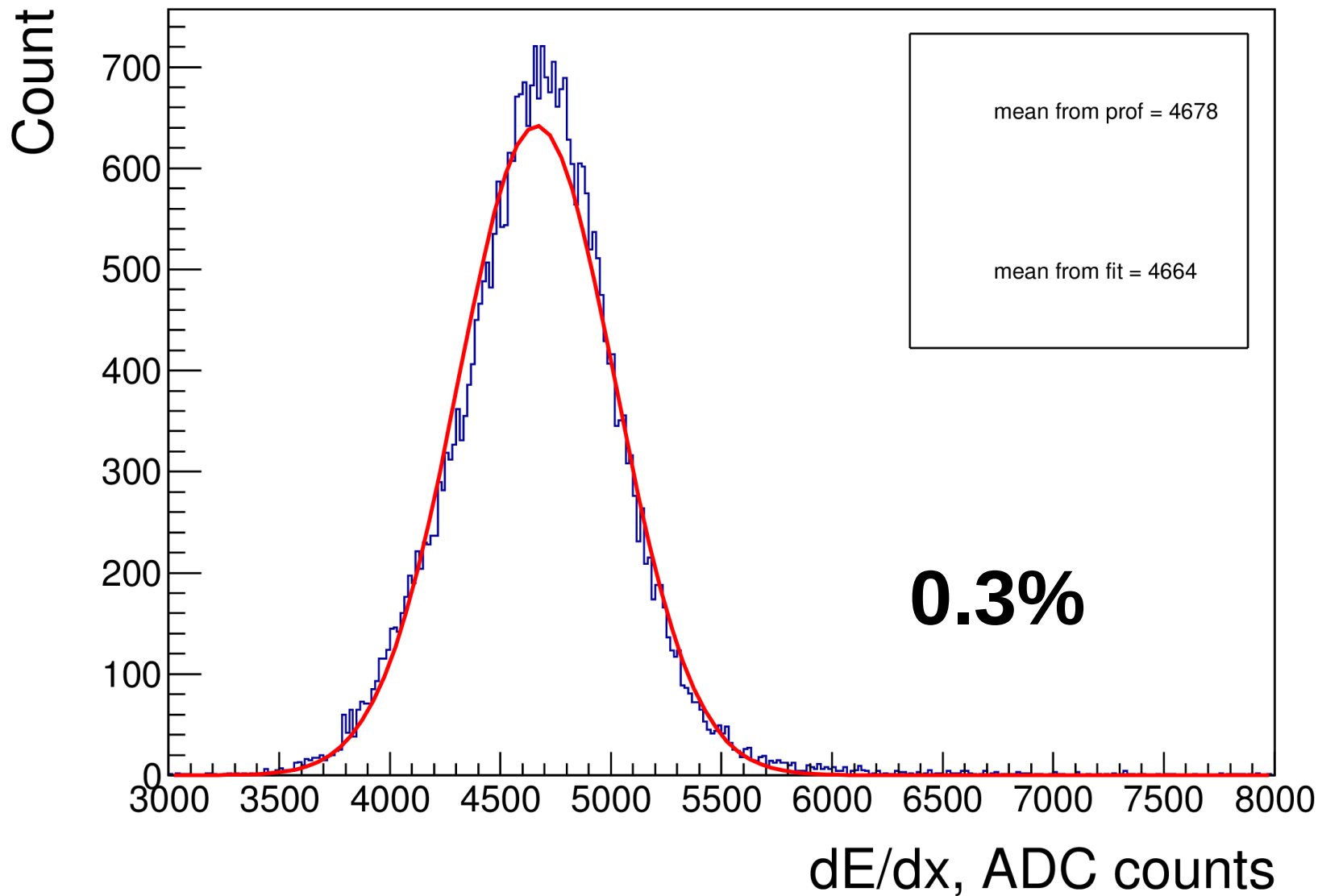
# 0.95 - 1 GeV/c, $0 < |\eta| < 0.4$ , protons



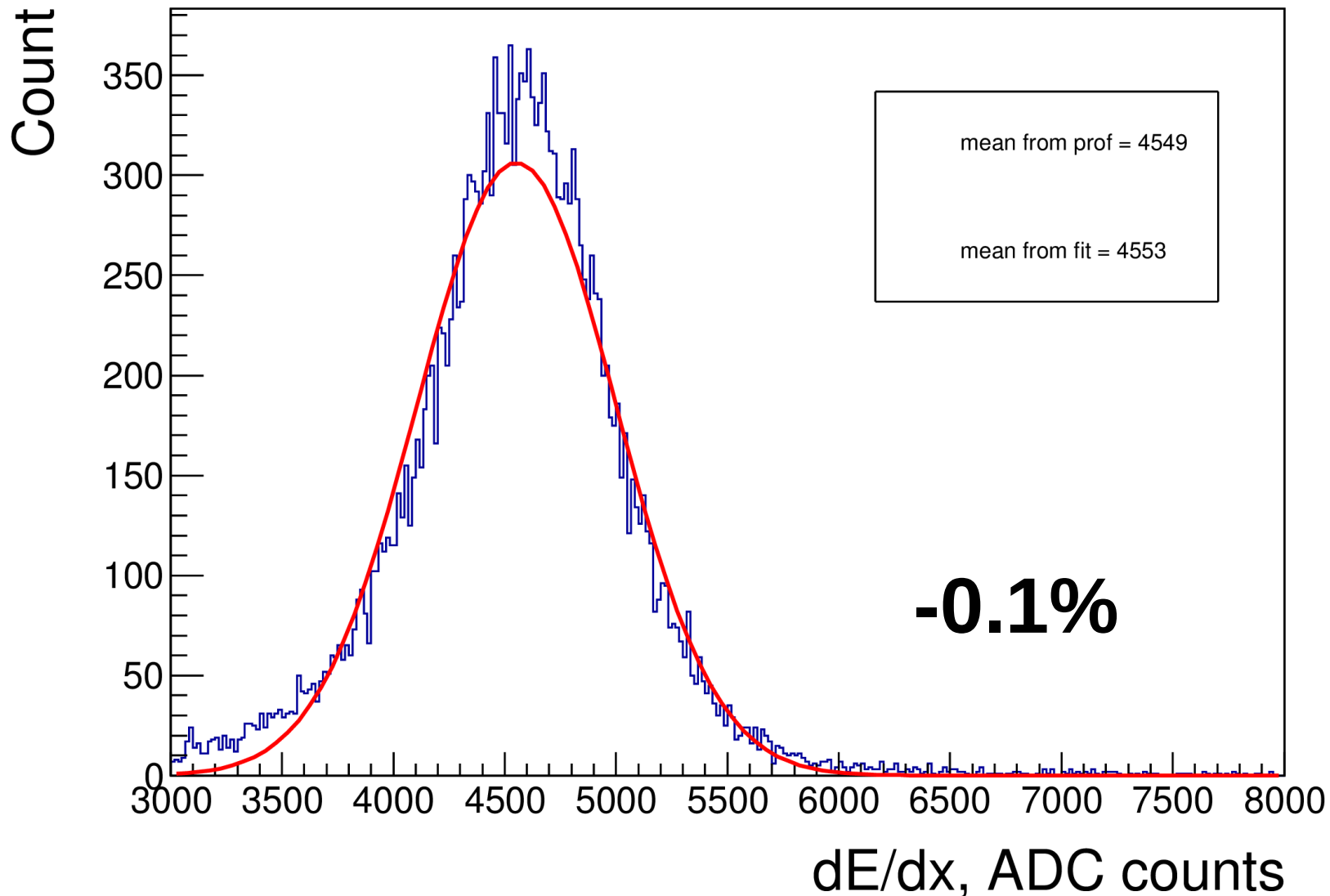
# 0.95 - 1 GeV/c, $0.4 < |\eta| < 0.8$ , protons



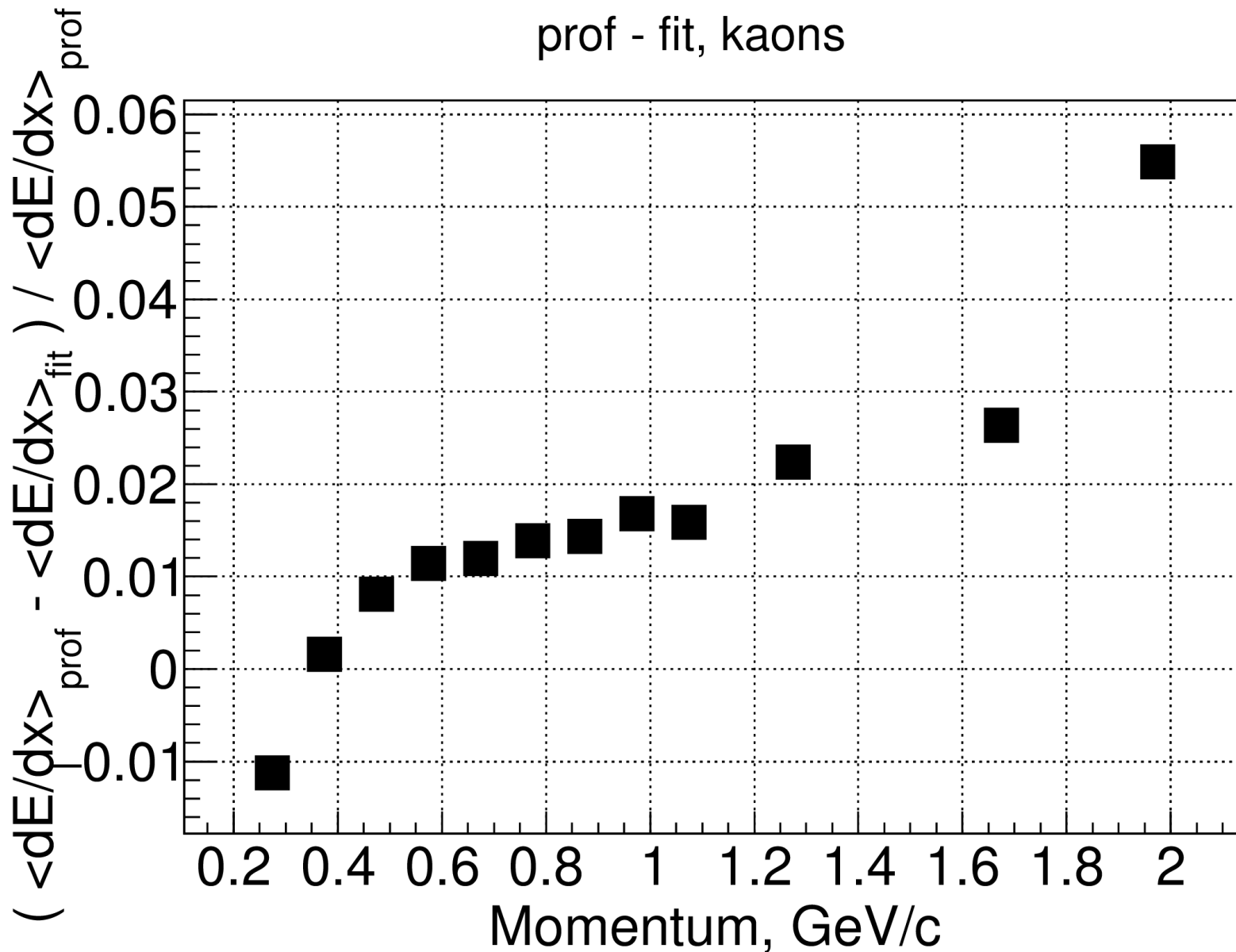
# 0.95 - 1 GeV/c, $0.8 < |\eta| < 1.2$ , protons



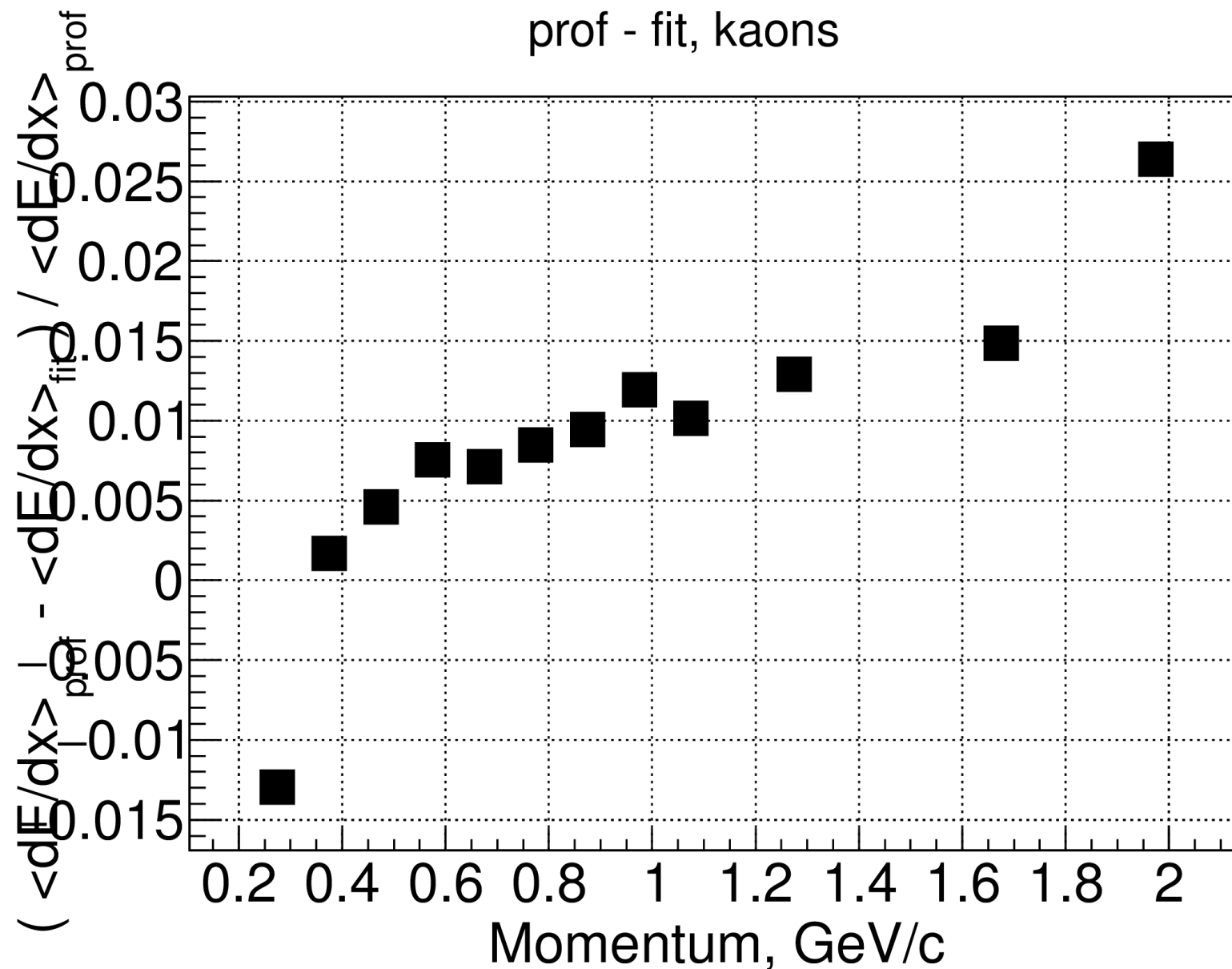
# 0.95 - 1 GeV/c, $1.2 < |\eta| < 1.6$ , protons



$$\left( \langle dE/dx \rangle_{\text{prof}} - \langle dE/dx \rangle_{\text{fit}} \right) / \langle dE/dx \rangle_{\text{prof}}$$
  
 $0 < |\eta| < 0.4, \text{ kaons}$

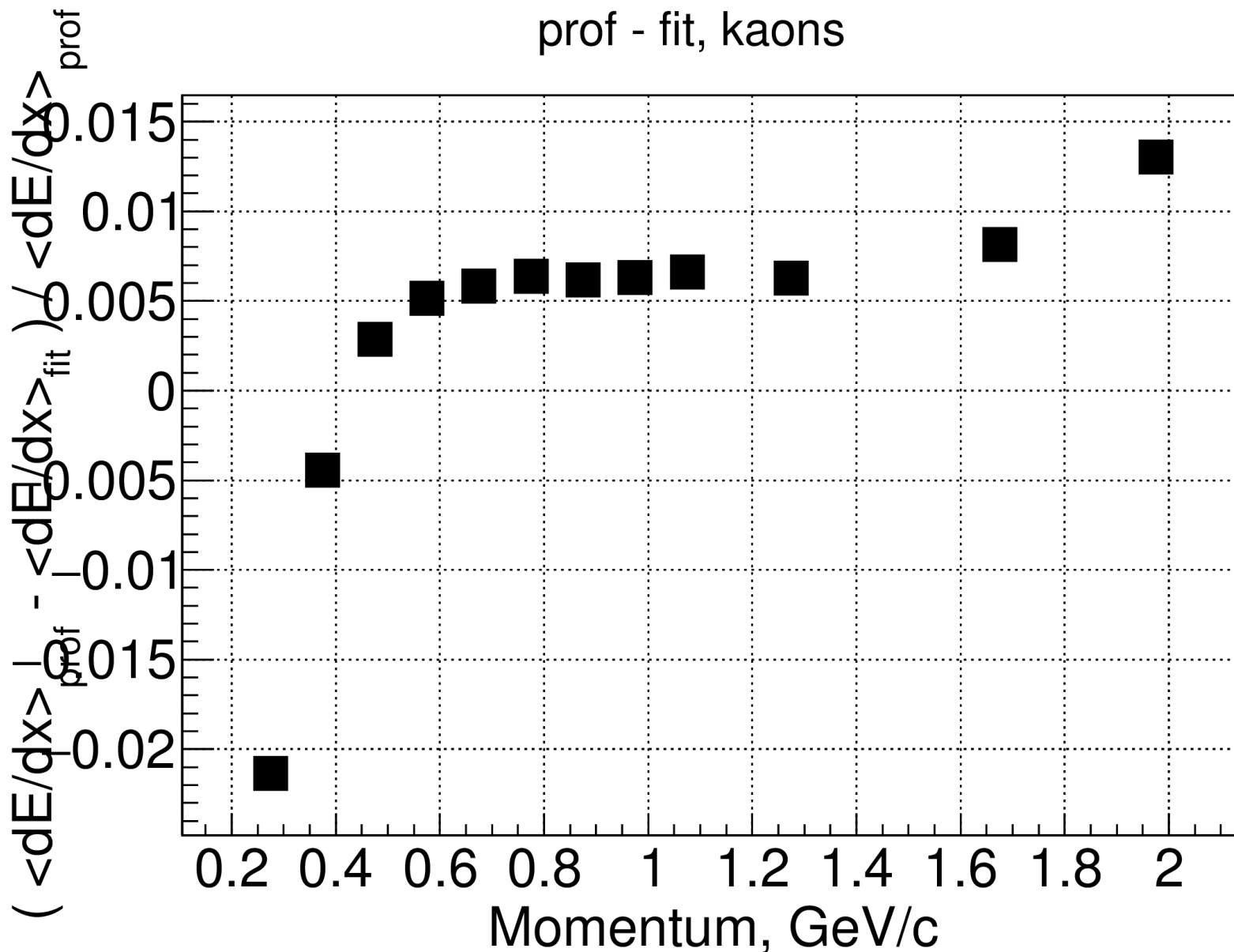


$( \langle dE/dx \rangle_{\text{prof}} - \langle dE/dx \rangle_{\text{fit}} ) / \langle dE/dx \rangle_{\text{prof}}$   
**0.4 < |eta| < 0.8, kaons**



$$\frac{(\langle dE/dx \rangle_{\text{prof}} - \langle dE/dx \rangle_{\text{fit}})}{\langle dE/dx \rangle_{\text{prof}}}$$

**0.8 < |eta| < 1.2, kaons**



$( \langle dE/dx \rangle_{\text{prof}} - \langle dE/dx \rangle_{\text{fit}} ) / \langle dE/dx \rangle_{\text{prof}}$   
**1.2 < |eta| < 1.6, kaons**

