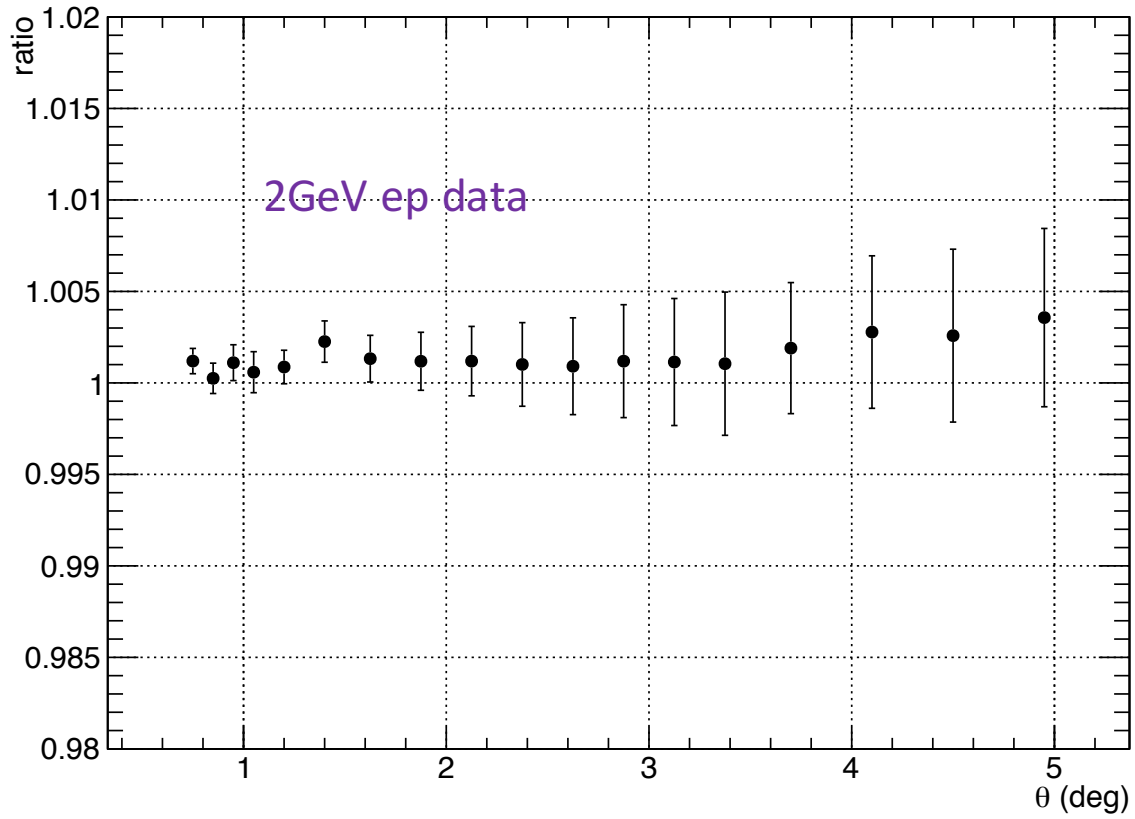


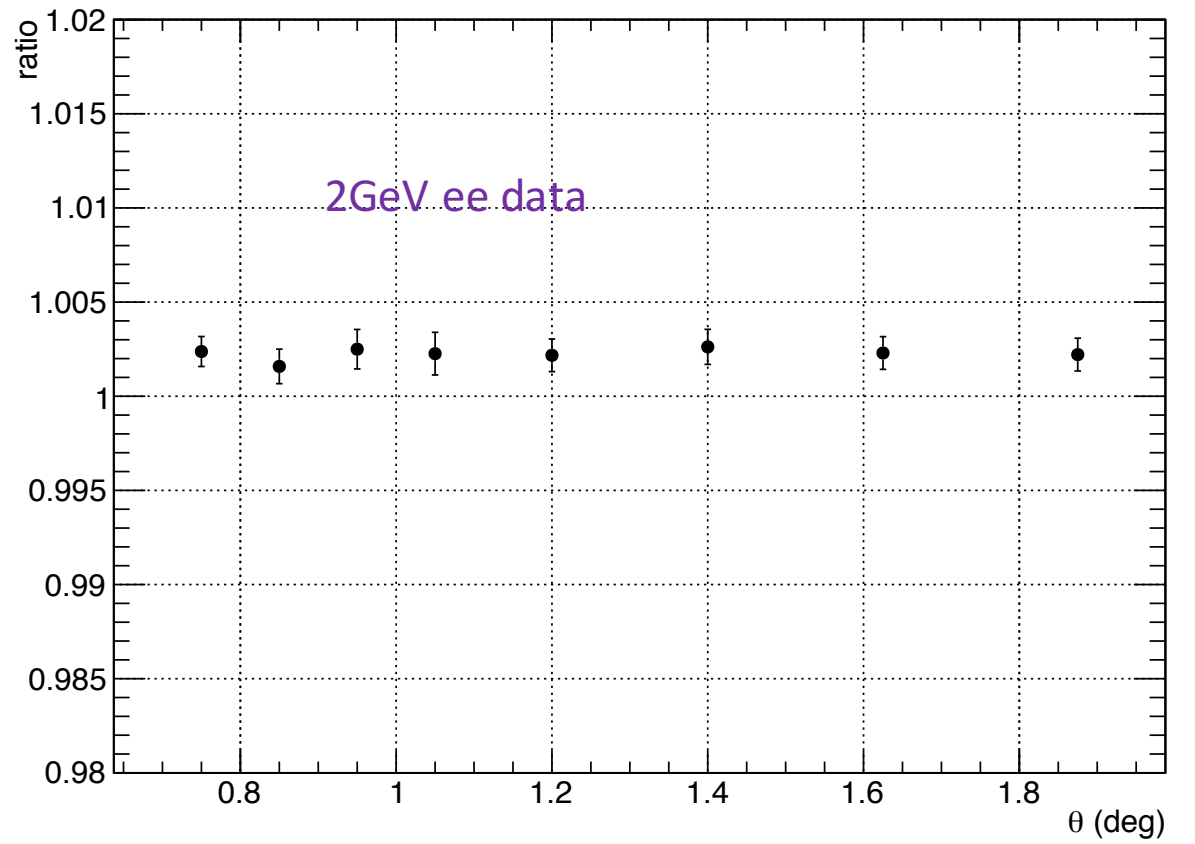
# Yield comparison -- data

Yield with s-shape correction / Yield without s-shape correction

Graph



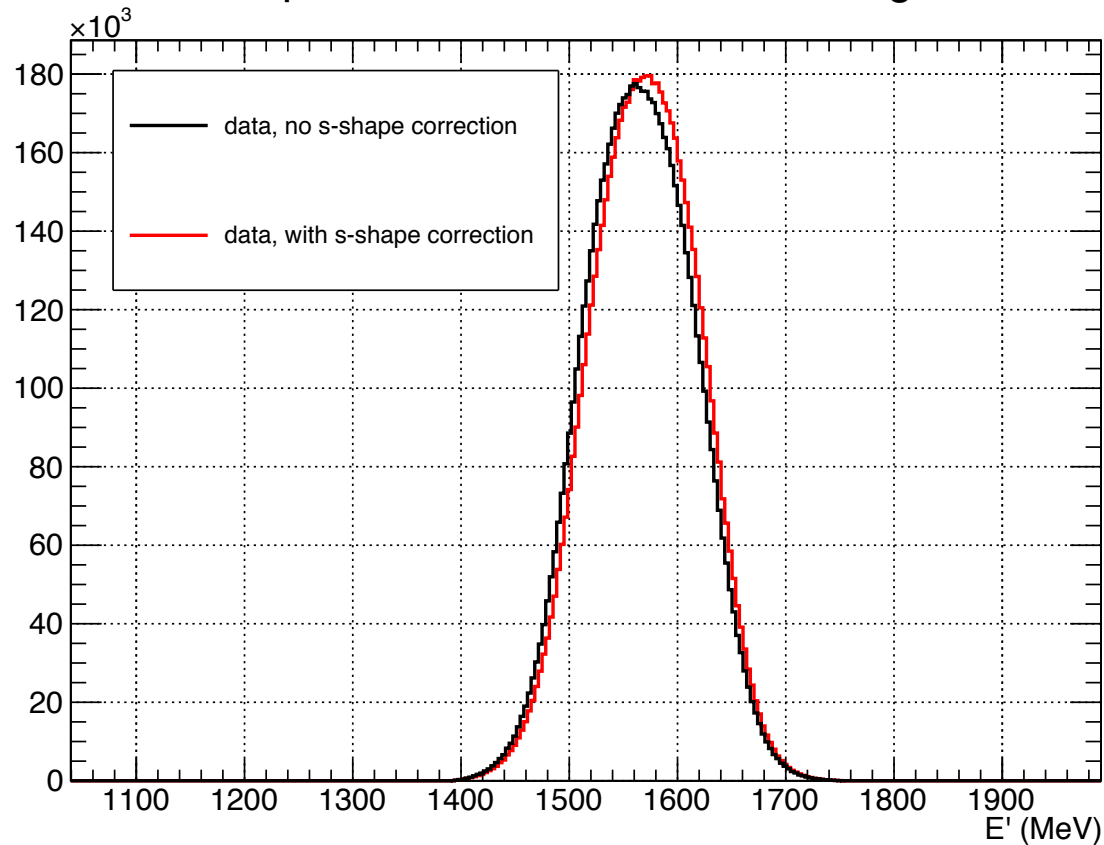
Graph



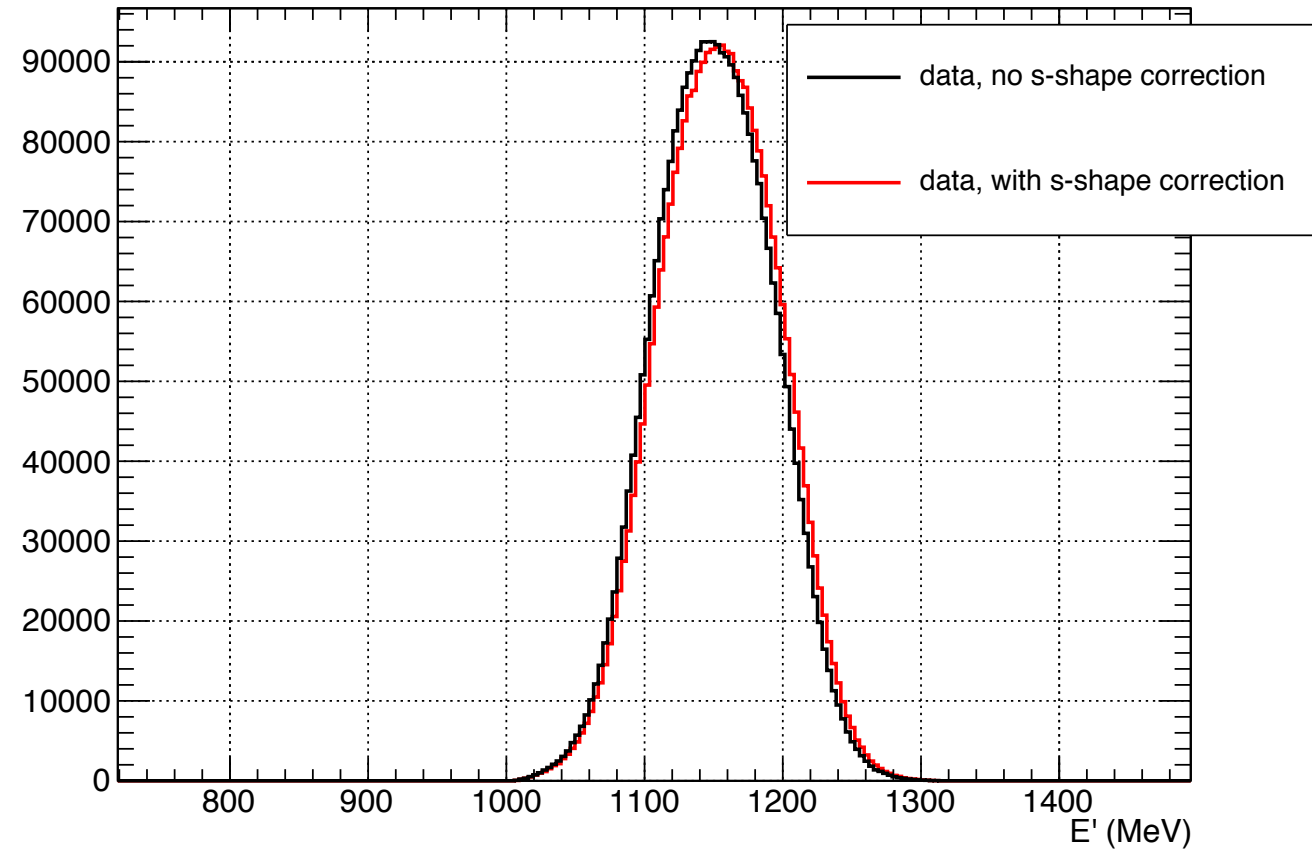
# Yield comparison -- data

The previous calibration was done before the final update of detector z position and offsets, these seems to shift the ee peak slightly. For ep, it is mostly insensitive.

spectrum for  $0.70 < \theta < 0.80$  deg

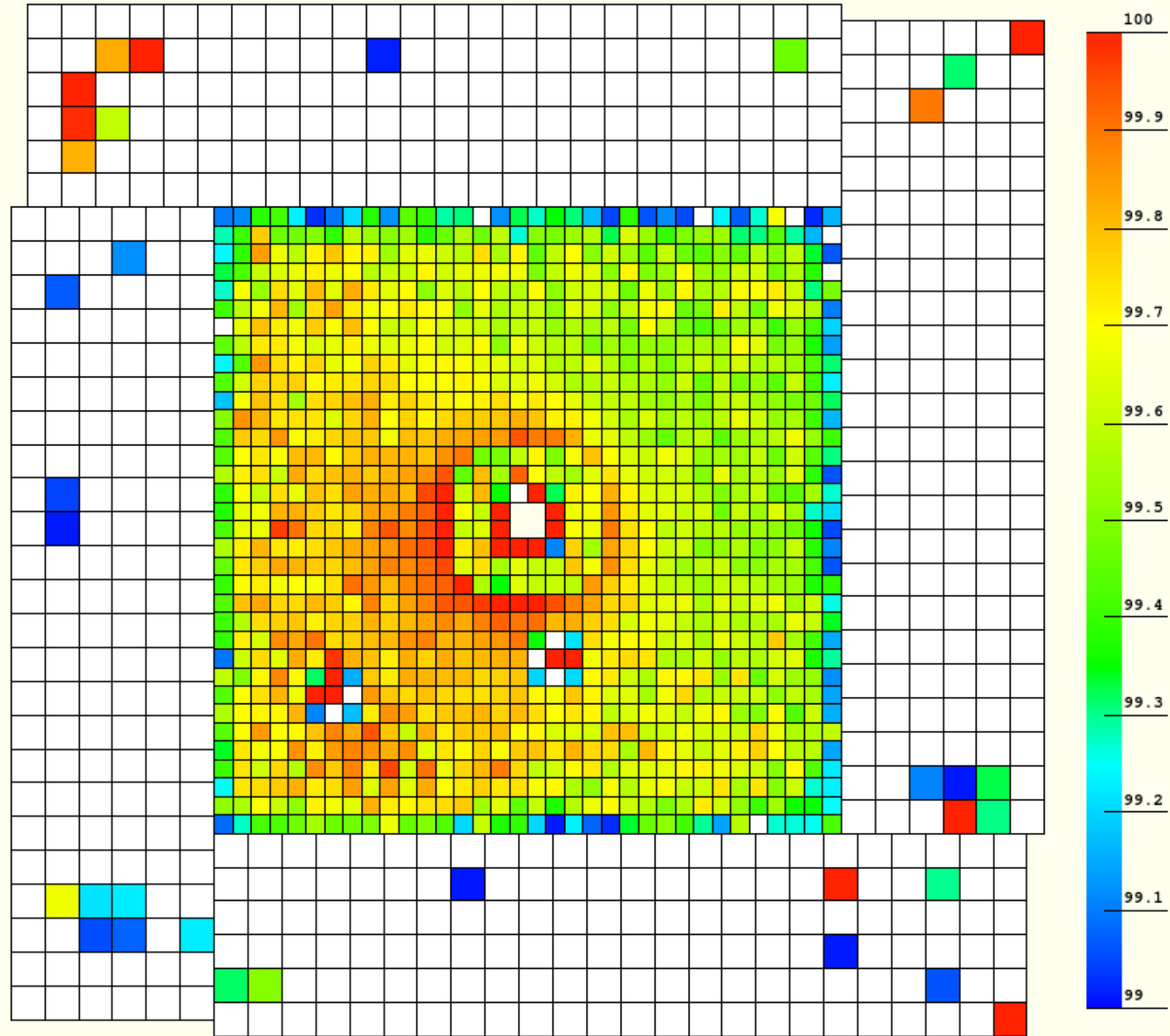


spectrum for  $1.10 < \theta < 1.20$  deg



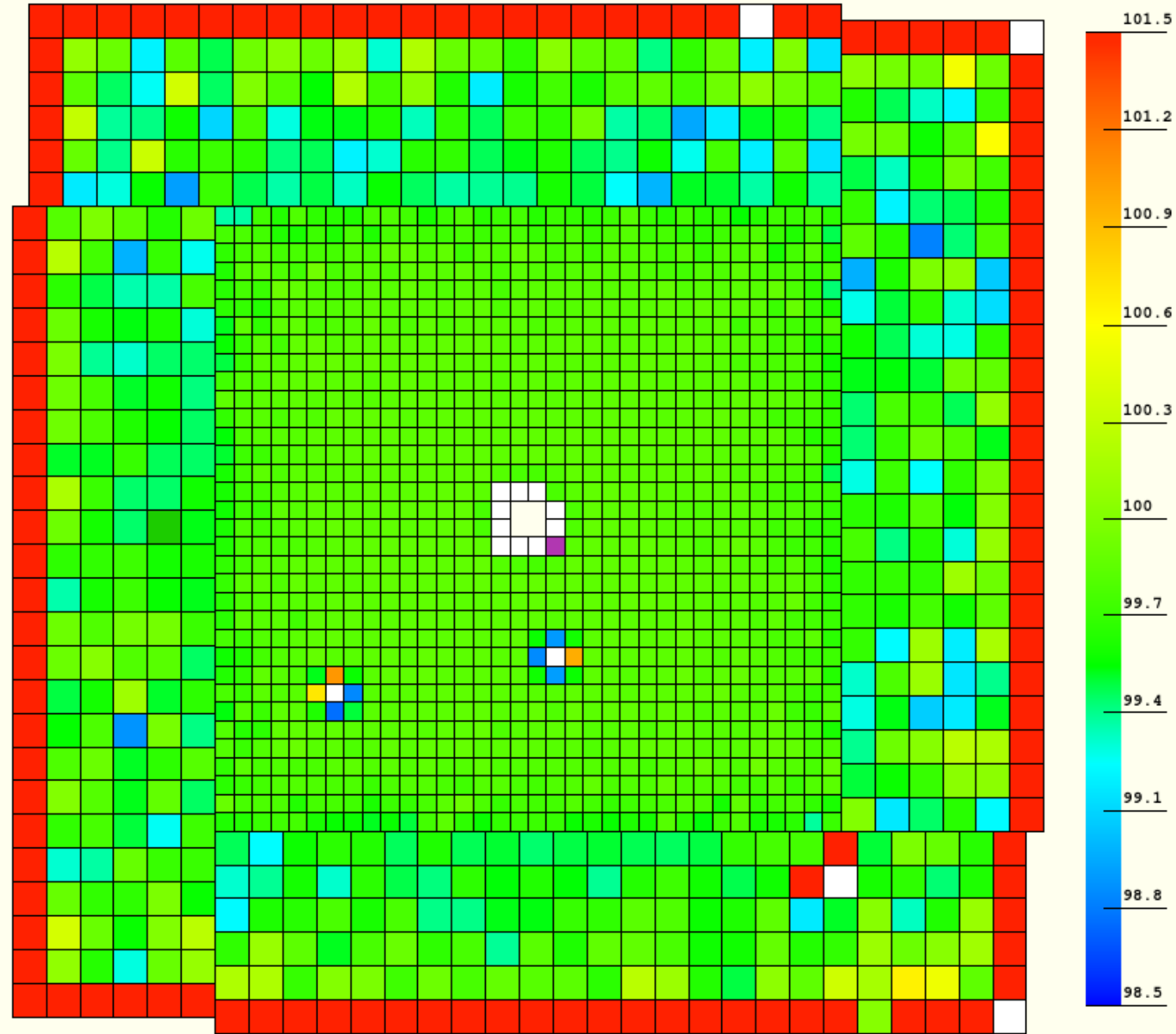
# Shift of ee peak

1GeV ee



# Shift of ep peak

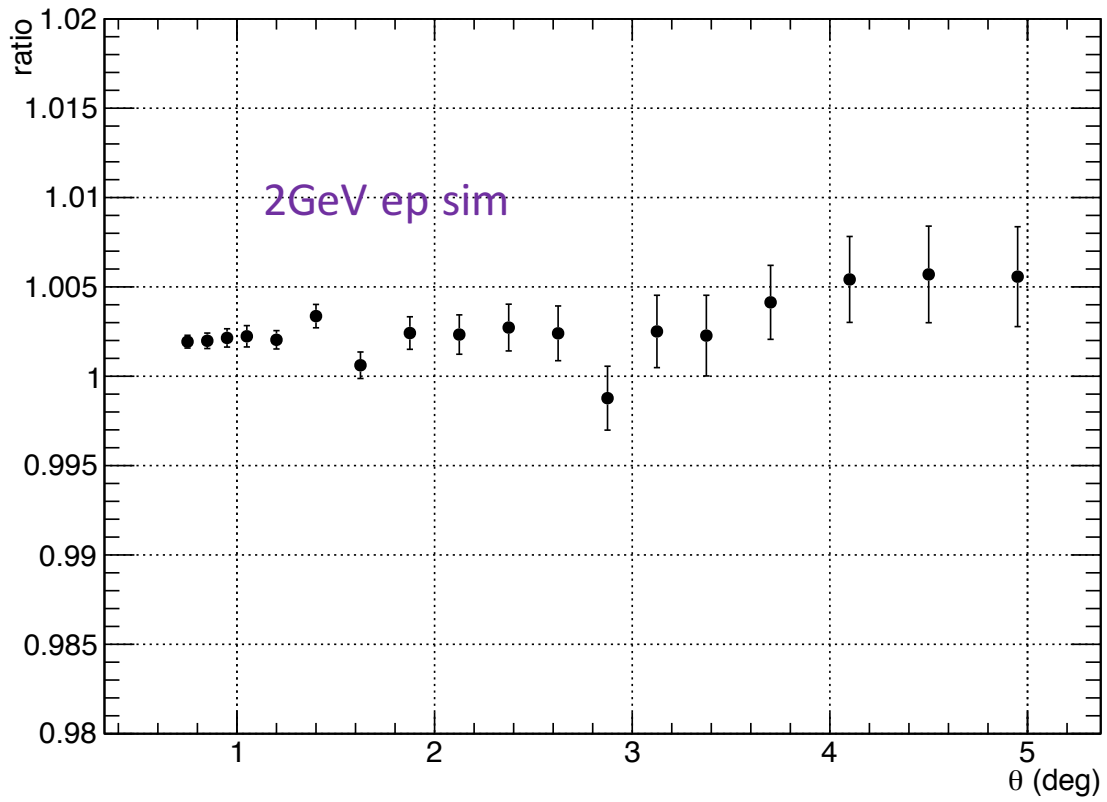
2GeV ep



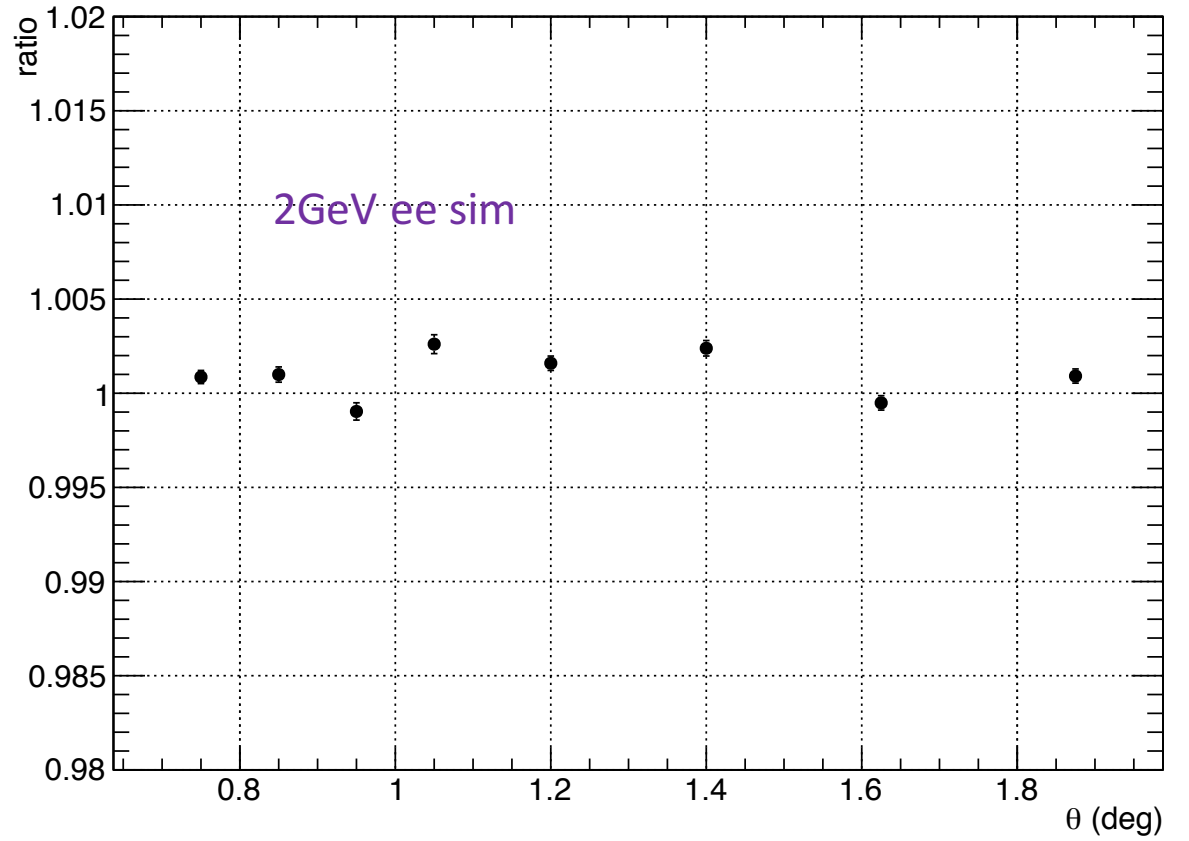
# Yield comparison -- simulation

Yield with s-shape correction / Yield without s-shape correction

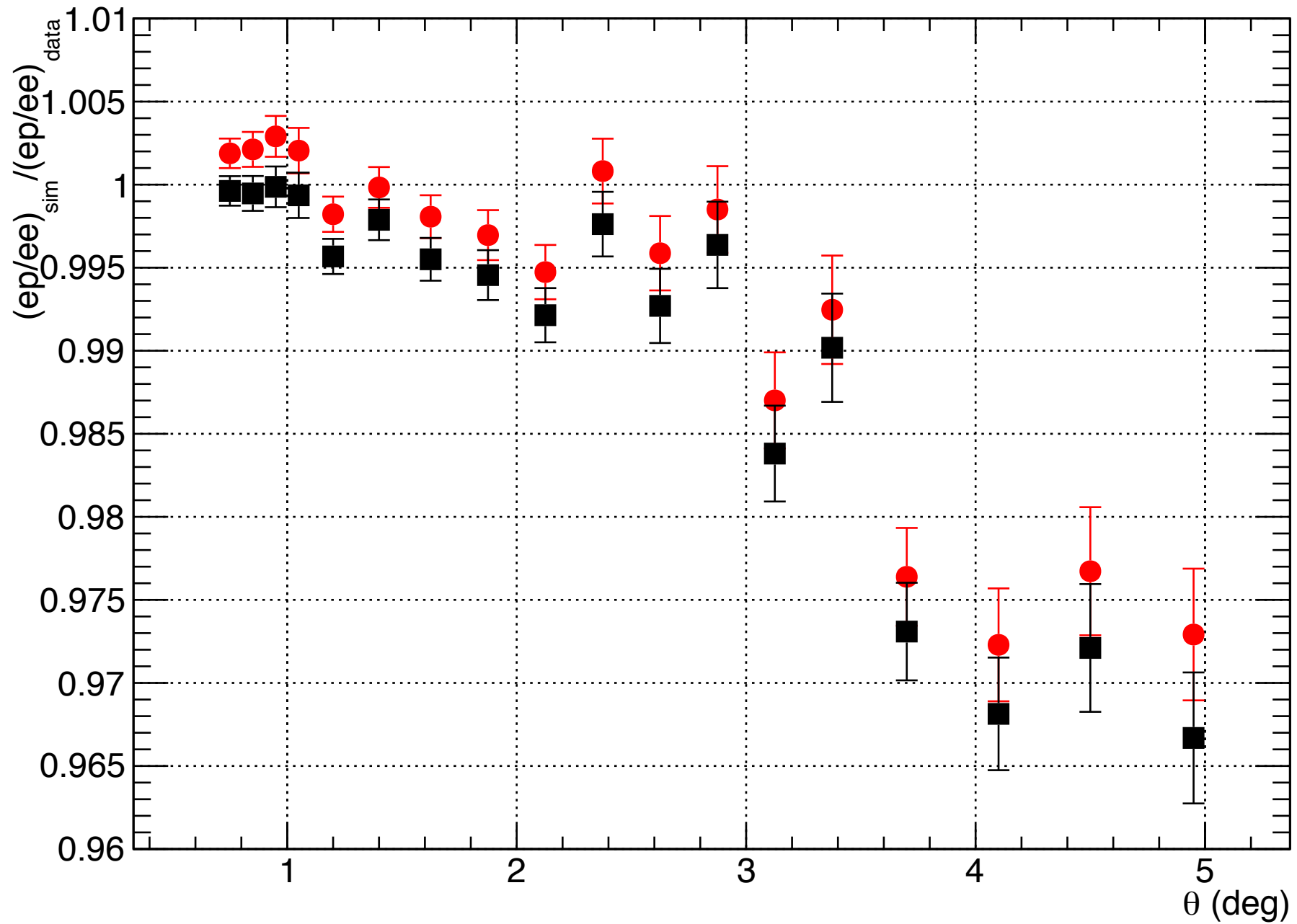
Graph



Graph



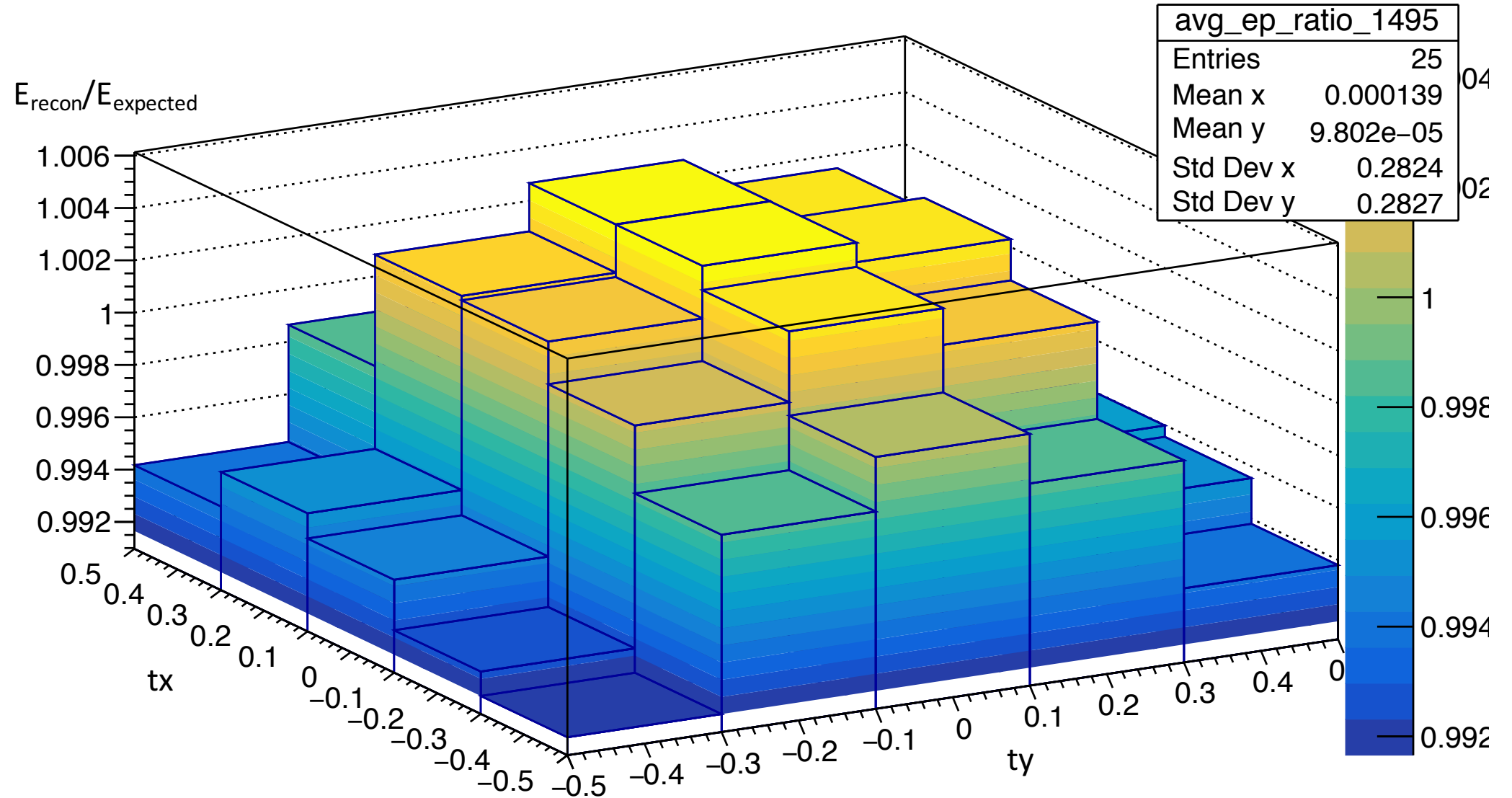
# Graph



# S-shape in simulation

W495

avg\_ep\_ratio\_1495

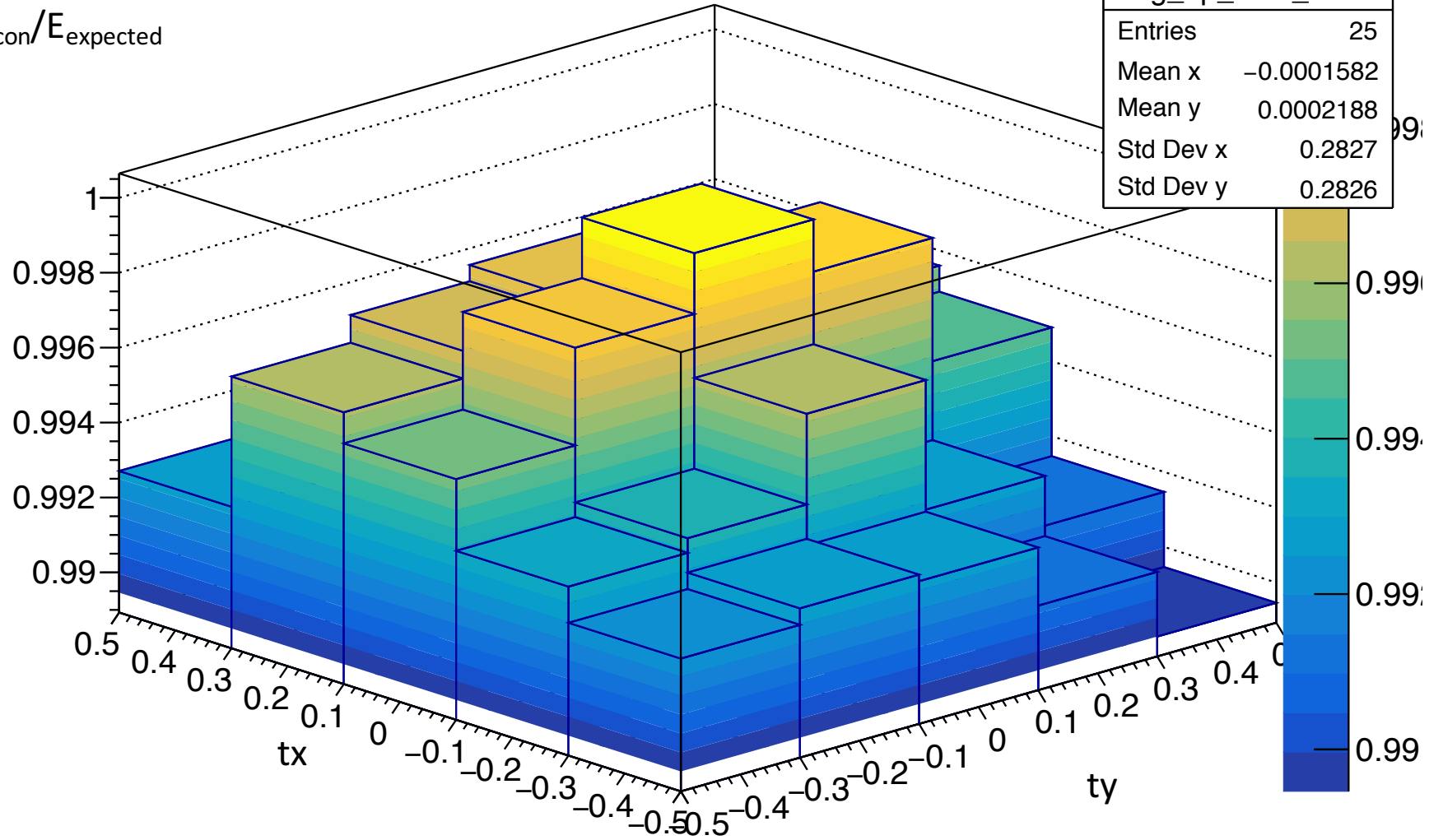


# S-shape in simulation

G104

avg\_ep\_ratio\_104

$E_{\text{recon}}/E_{\text{expected}}$



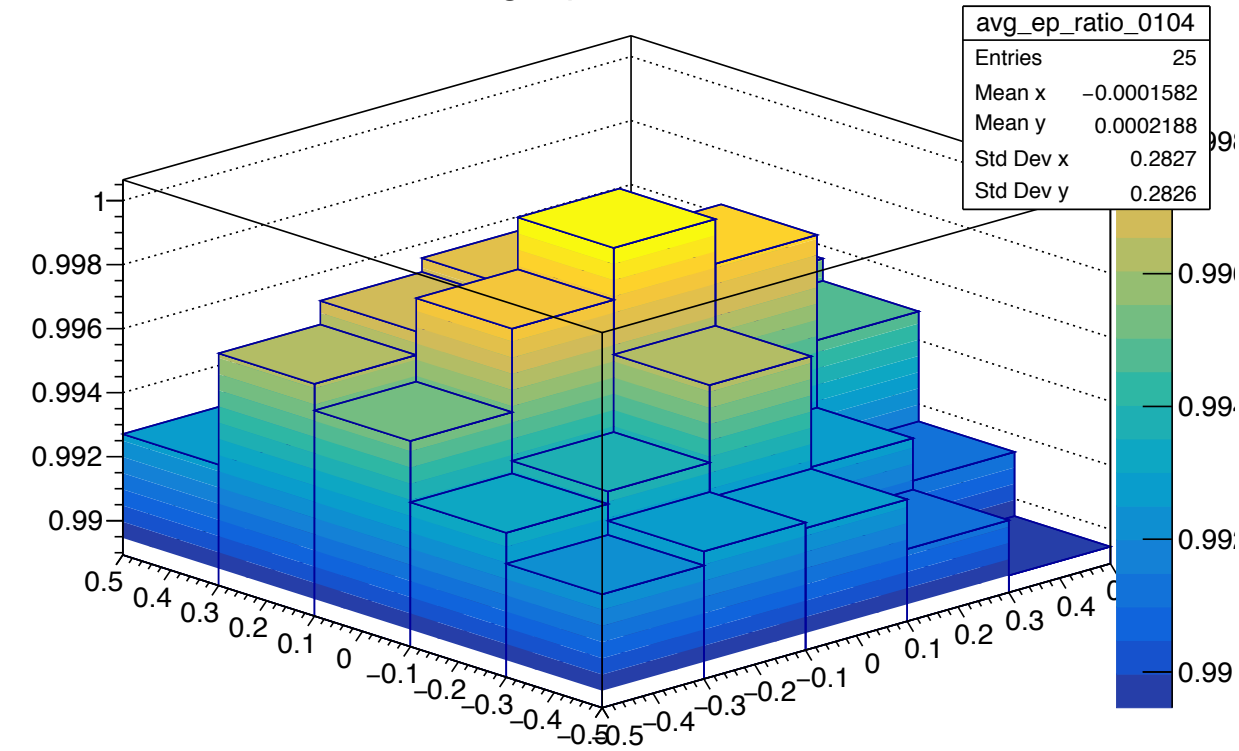


# S-shhape in simulation

G104

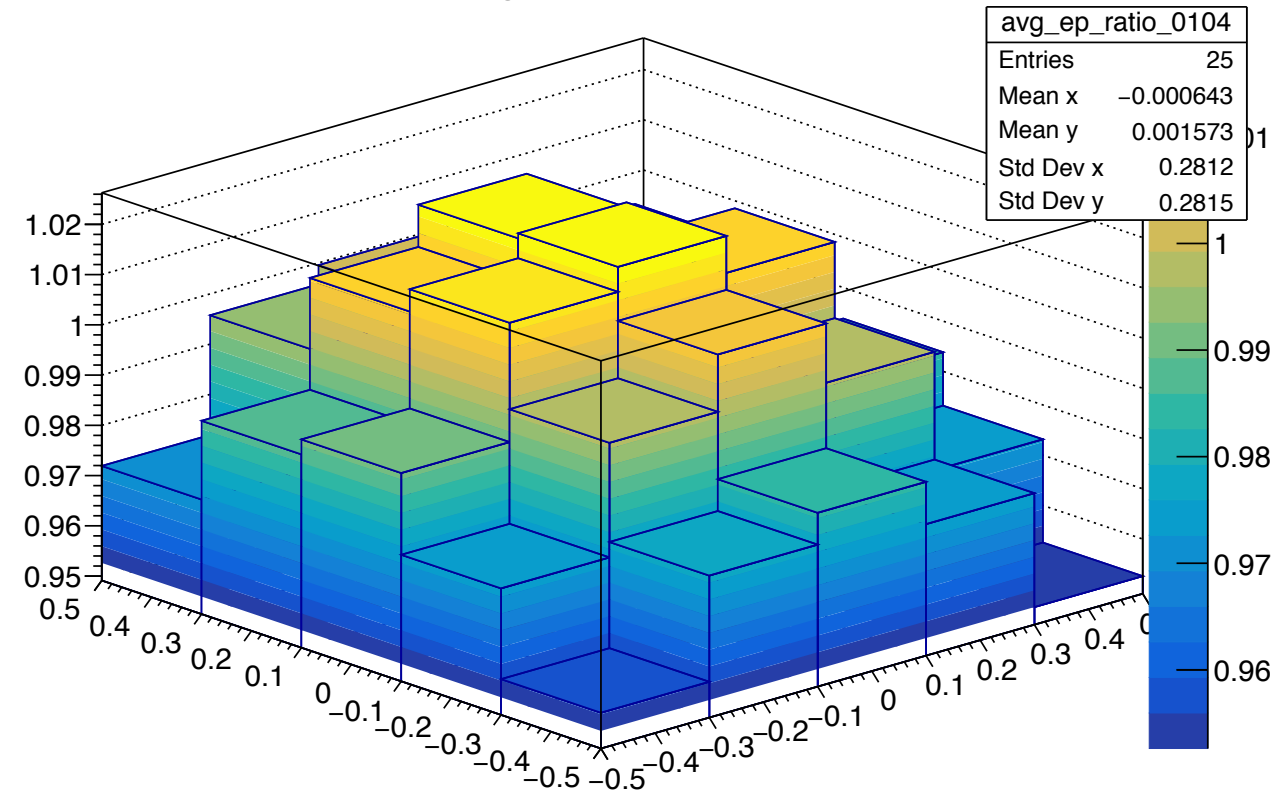
Using **energy deposition** to reconstruct energy

avg\_ep\_ratio\_104



Using **total track length** to reconstruct energy

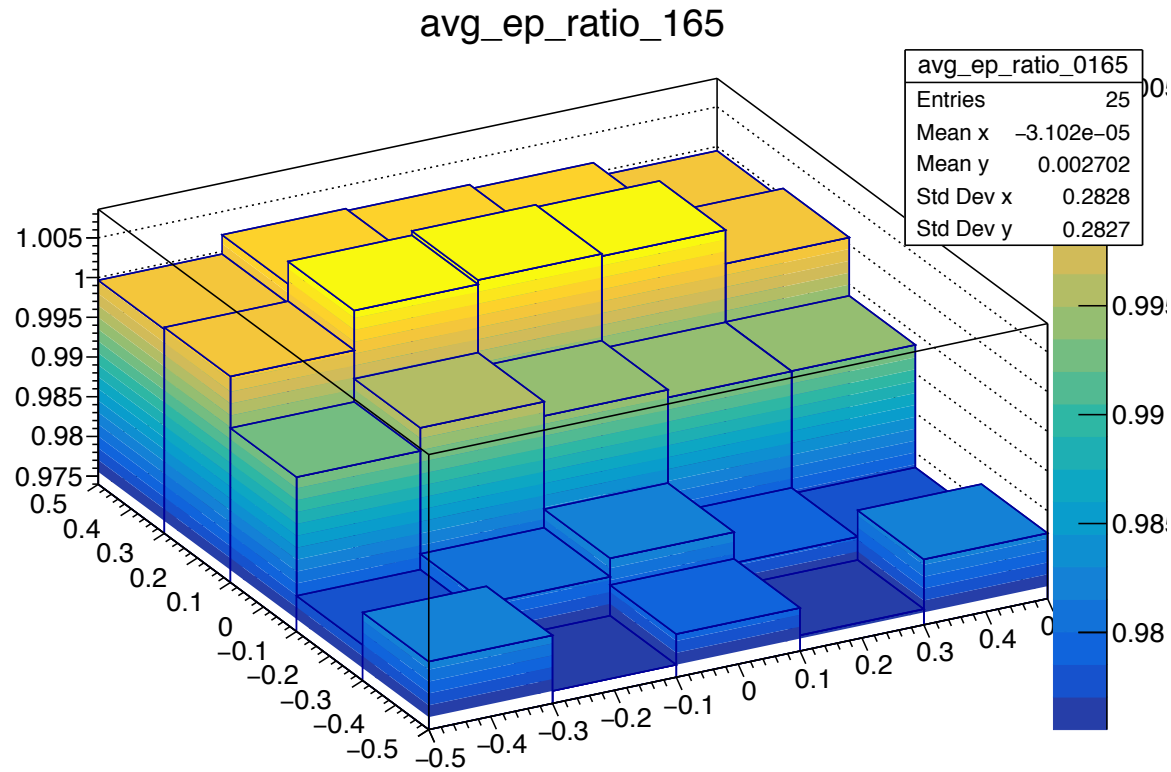
avg\_ep\_ratio\_104



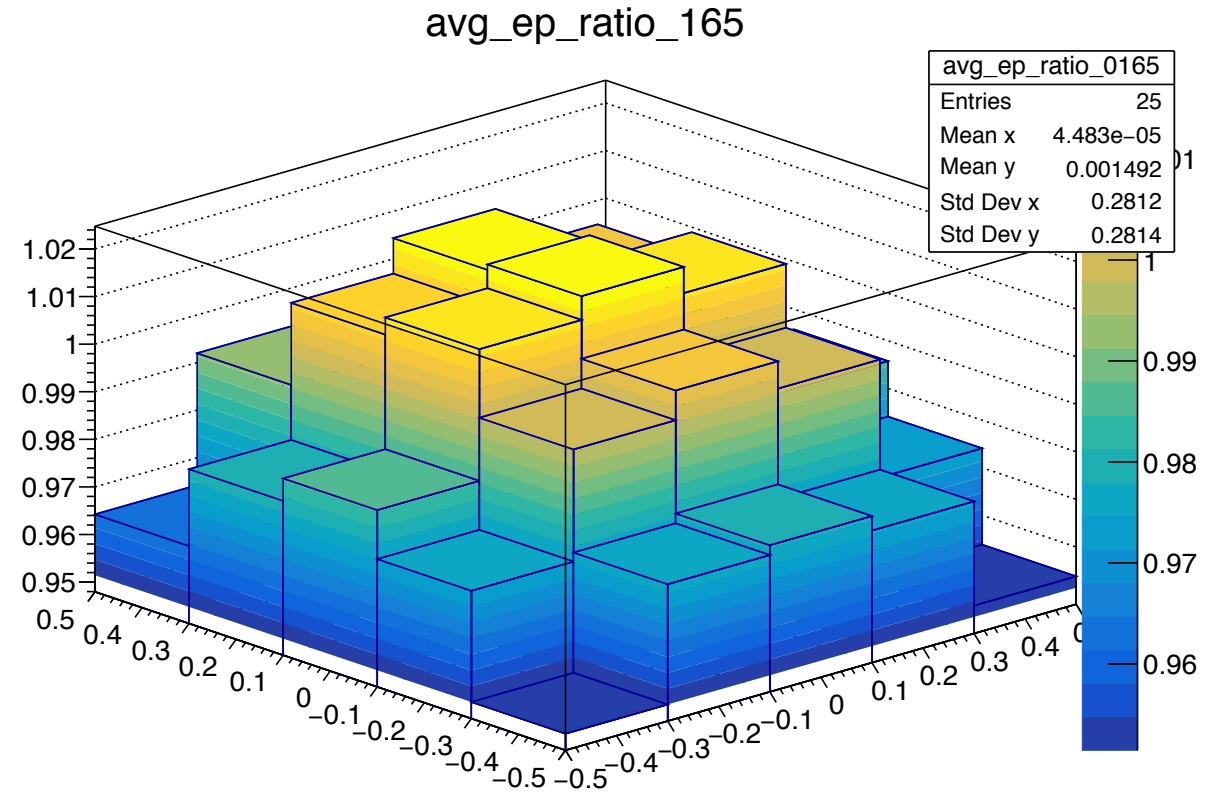
# S-shape in simulation

G165 – transition LG module

Using **energy deposition** to reconstruct energy



Using **total track length** to reconstruct energy

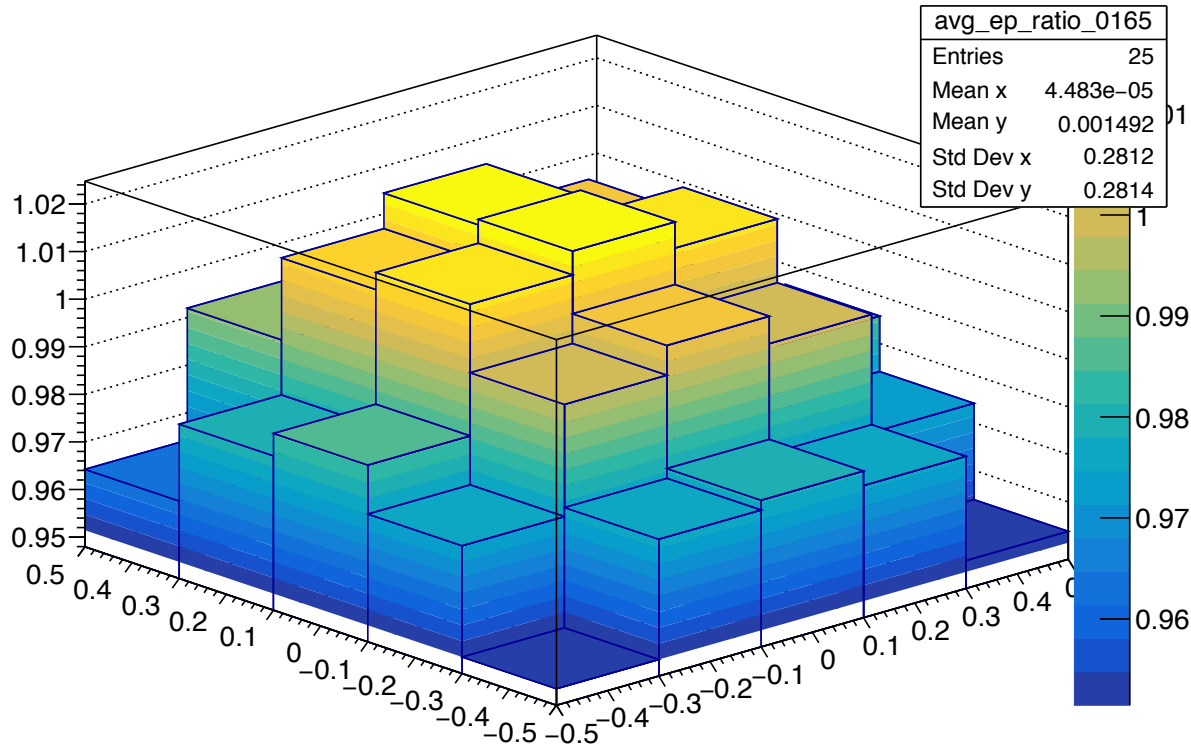


# S-shape in simulation - correction

G165 – transition LG module

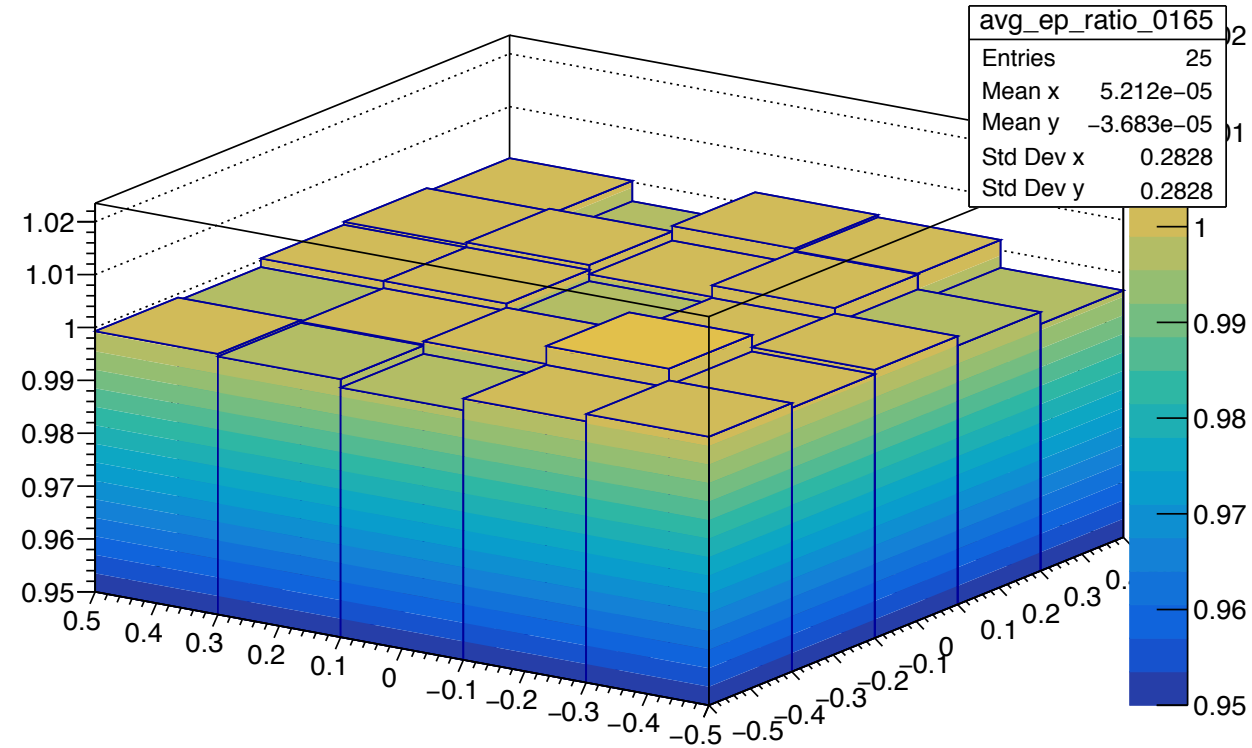
Before s-shape correction

avg\_ep\_ratio\_165



After s-shape correction

avg\_ep\_ratio\_165



# Graph

