

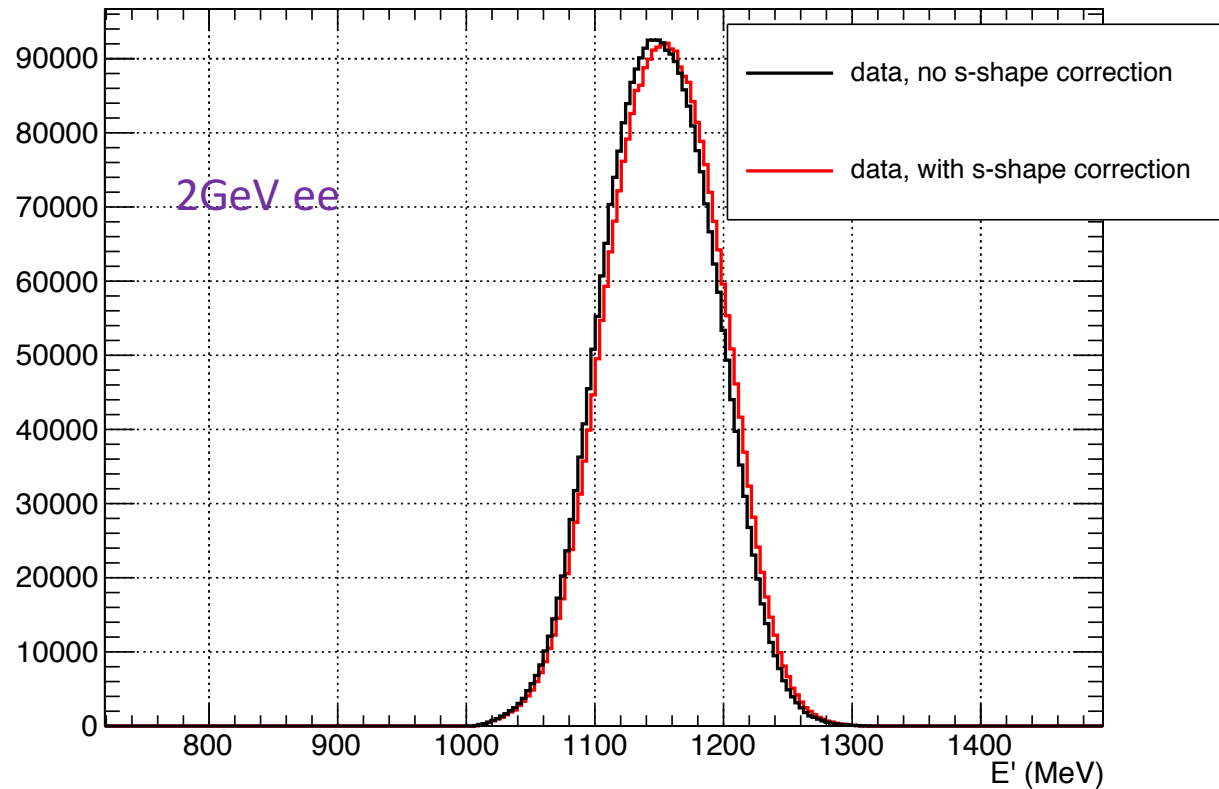
Issue from previous week

- The previous physics calibration was done before the final update of the detector z position and offset
- These changes have almost no effect on the ep, as the energy is almost independent on angle
- For ee, they cause a small shift for the ee elastic peak, and also a phi asymmetry for the peak
- The non-linearity constants have been updated this week to take into account the shifts

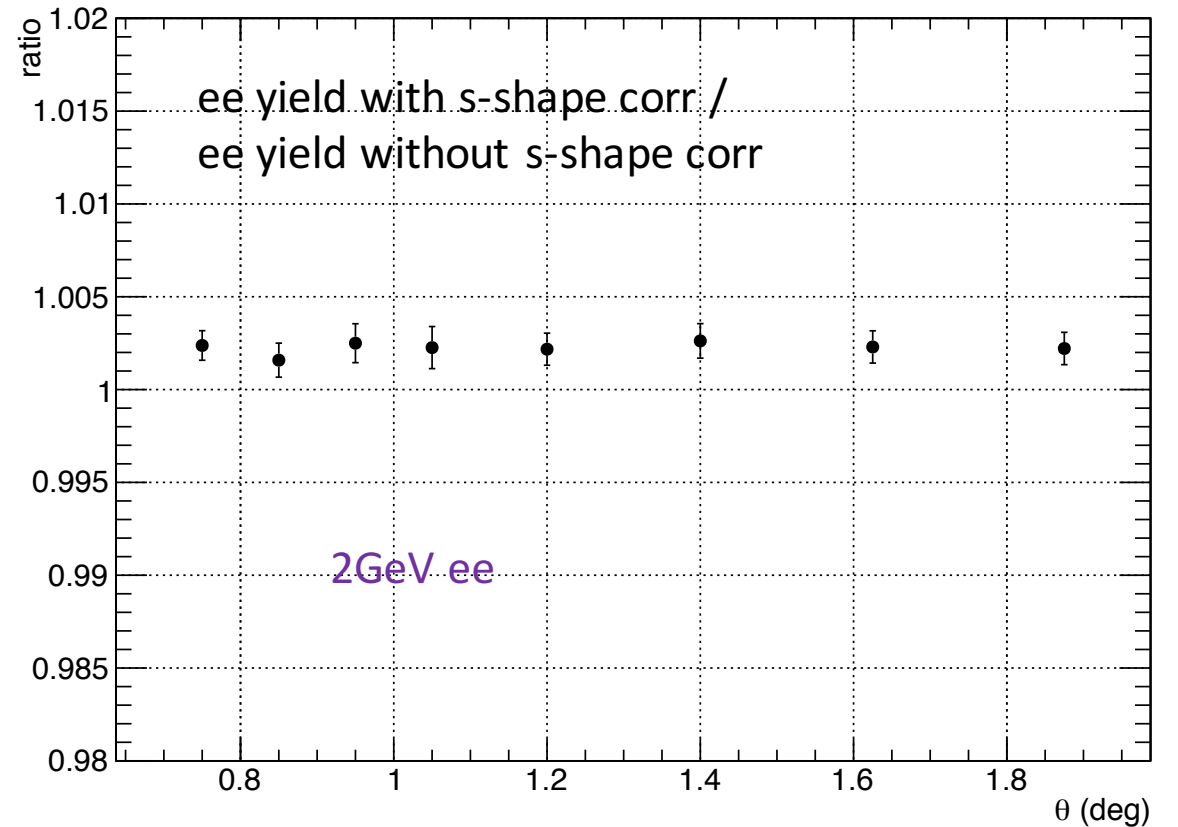
Issue from previous week

With the old calibration constants

spectrum for $1.10 < \theta < 1.20$ deg



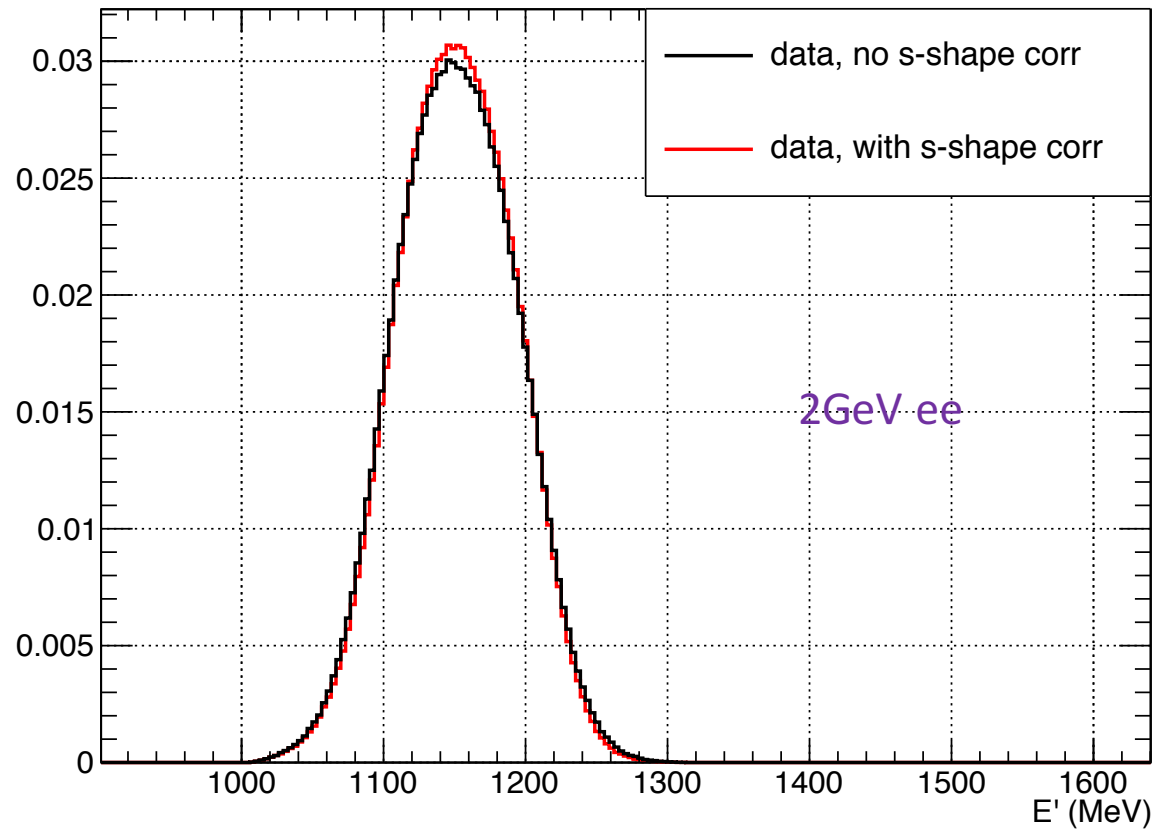
Graph



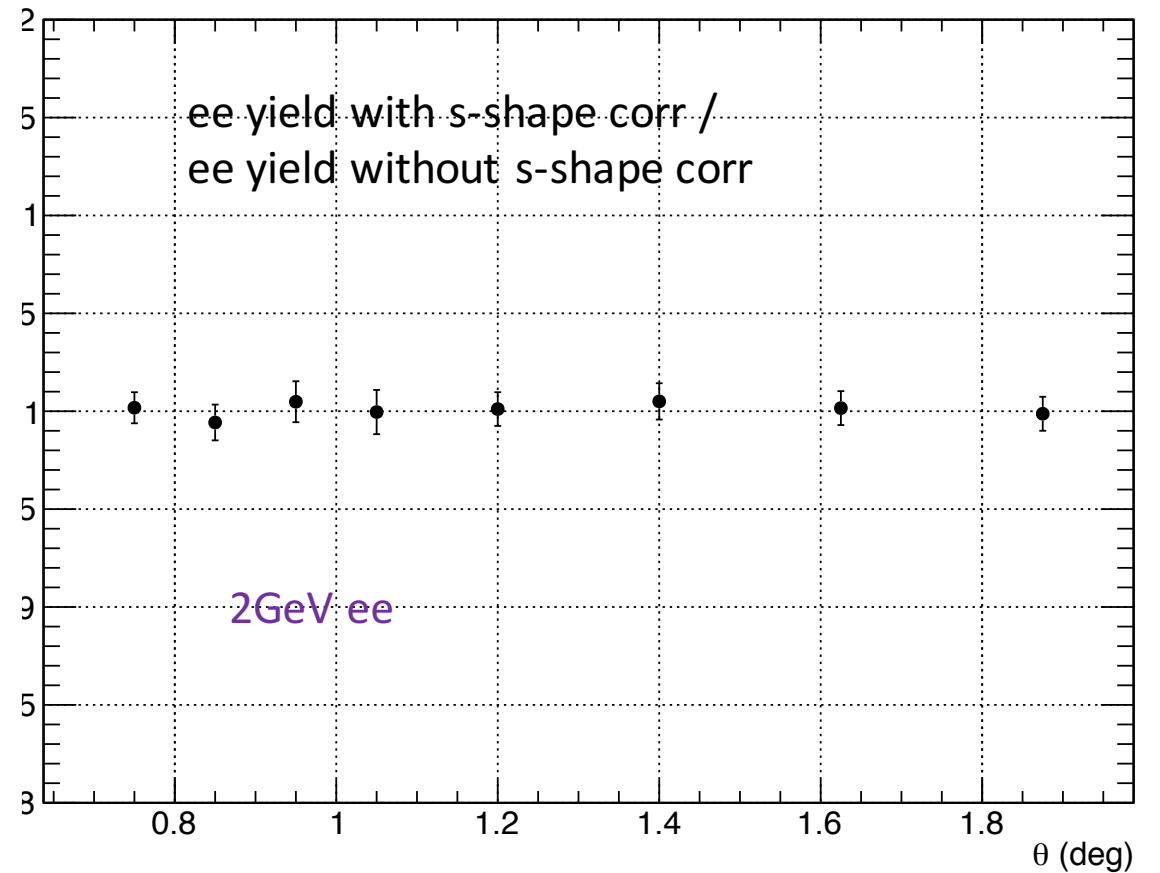
Issue from previous week

With the new calibration constants

spectrum for $1.10 < \theta < 1.20$ deg



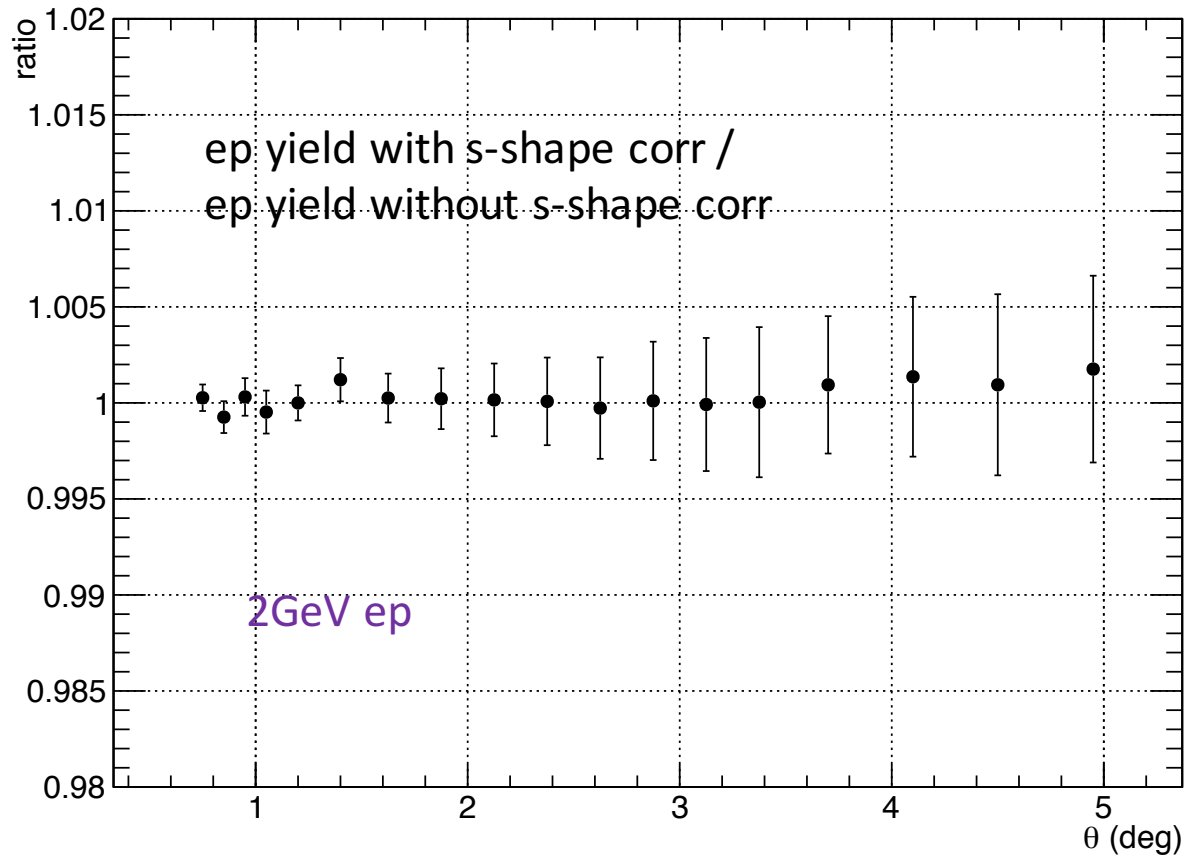
Graph



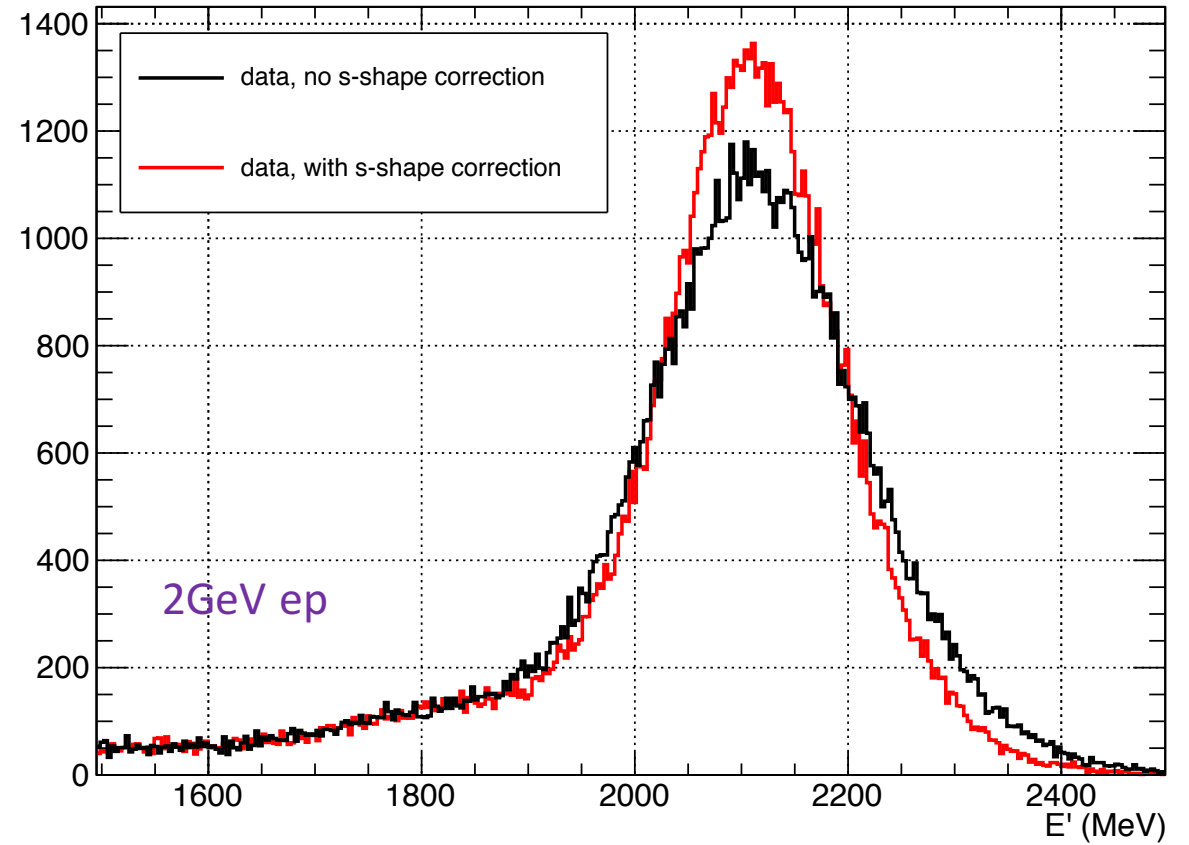
Effect of s-shape correction

With the new calibration constants

Graph



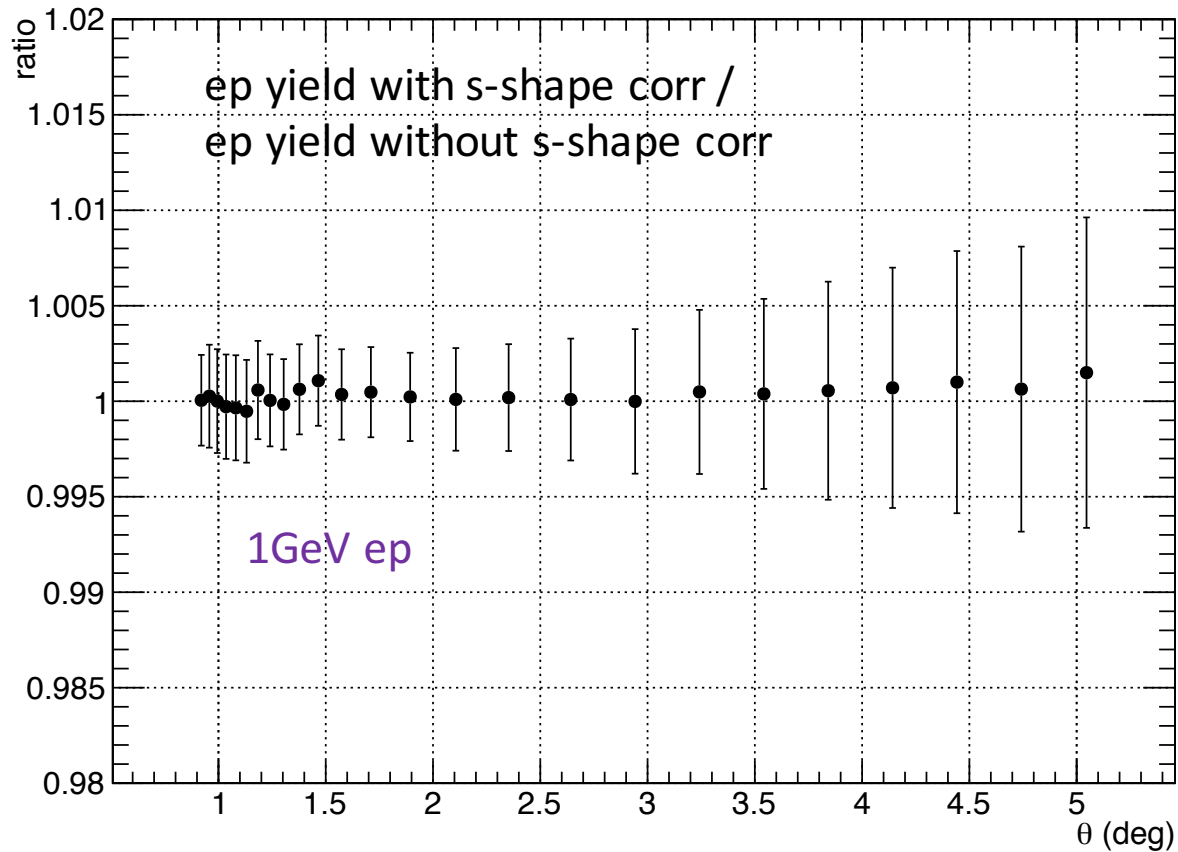
spectrum for $4.70 < \theta < 5.20$ deg



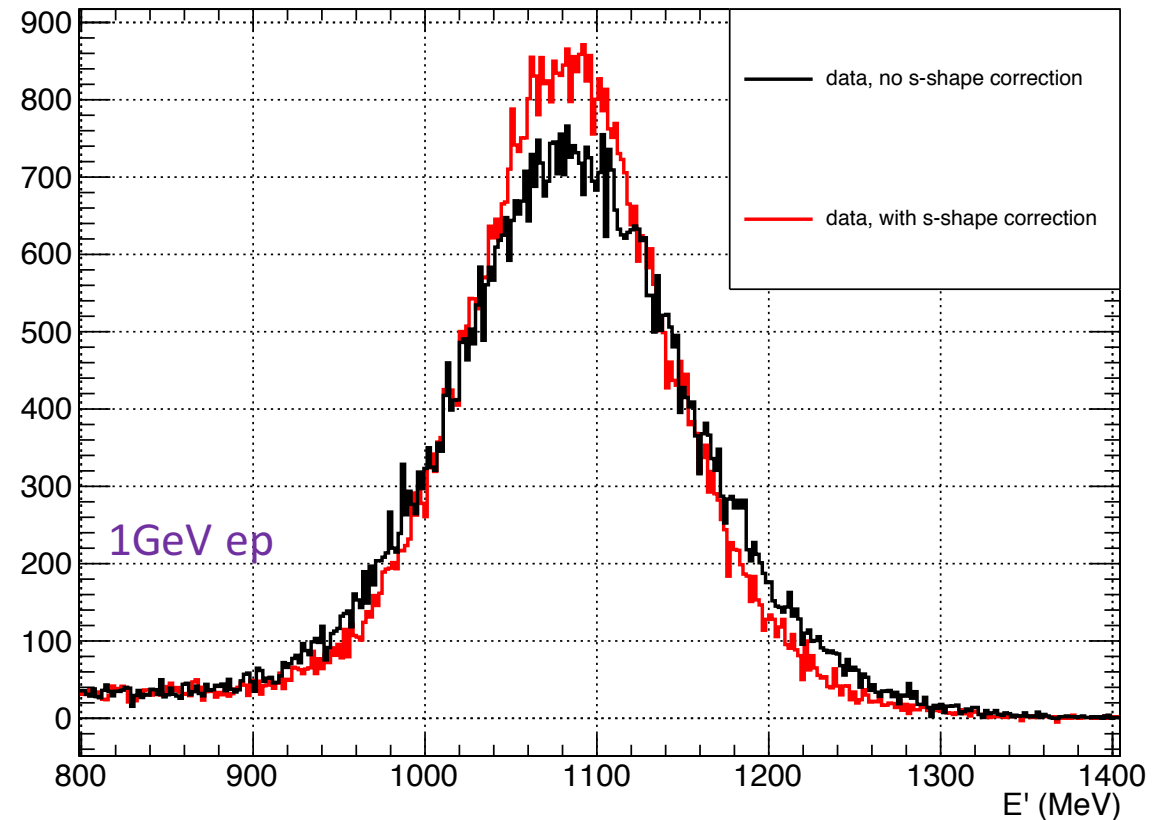
Effect of s-shape correction

With the new calibration constants

Graph

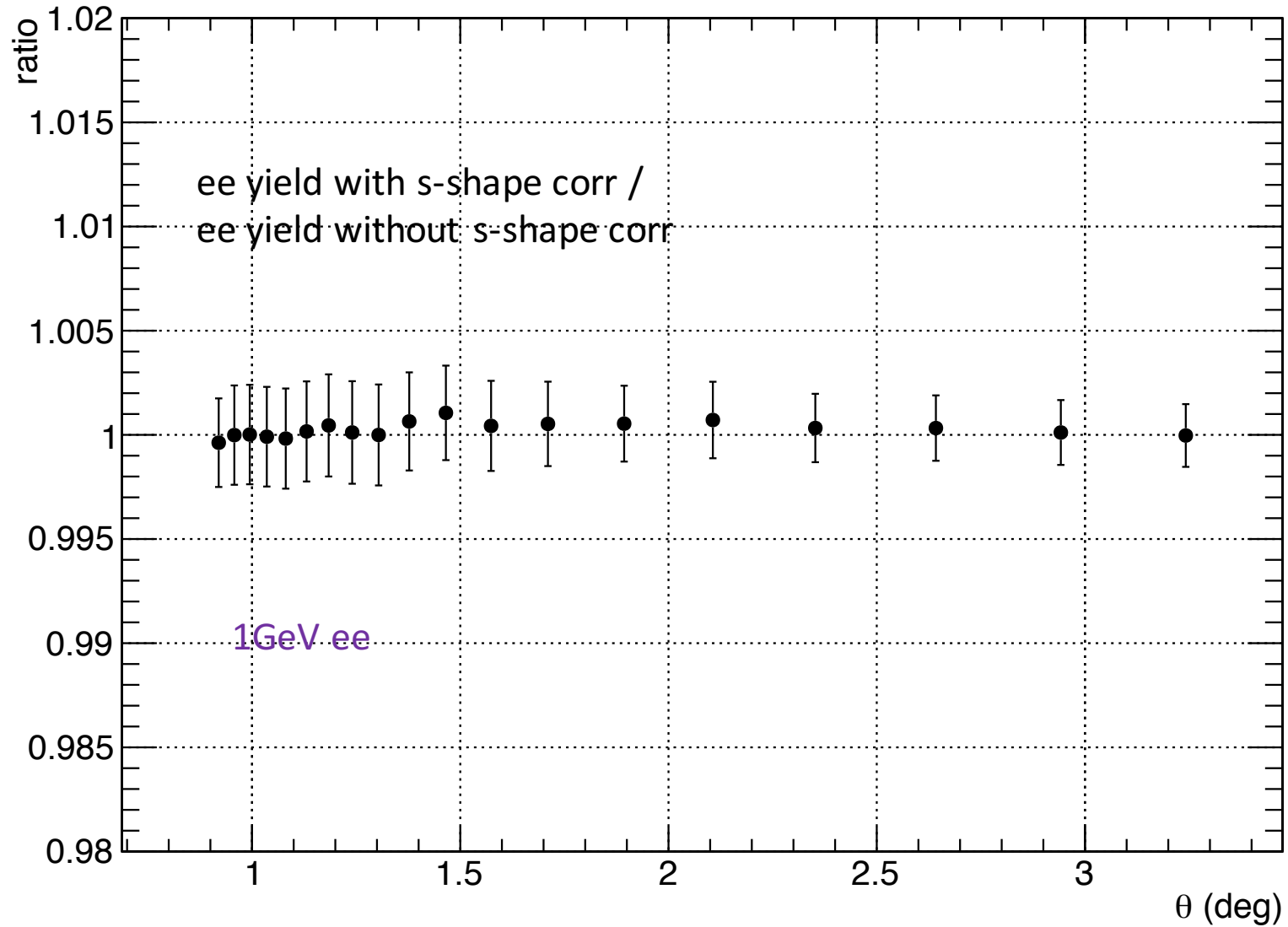


spectrum for $4.70 < \theta < 5.20$ deg



Effect of s-shape correction

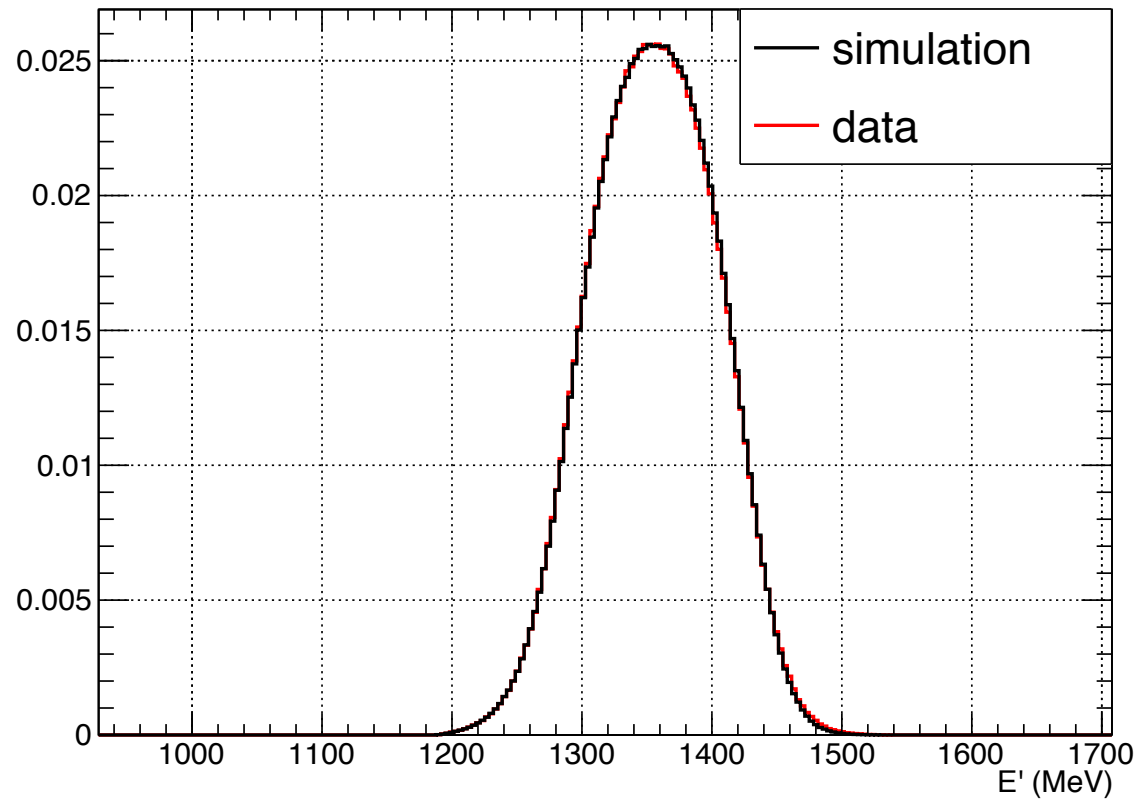
With the new calibration constants



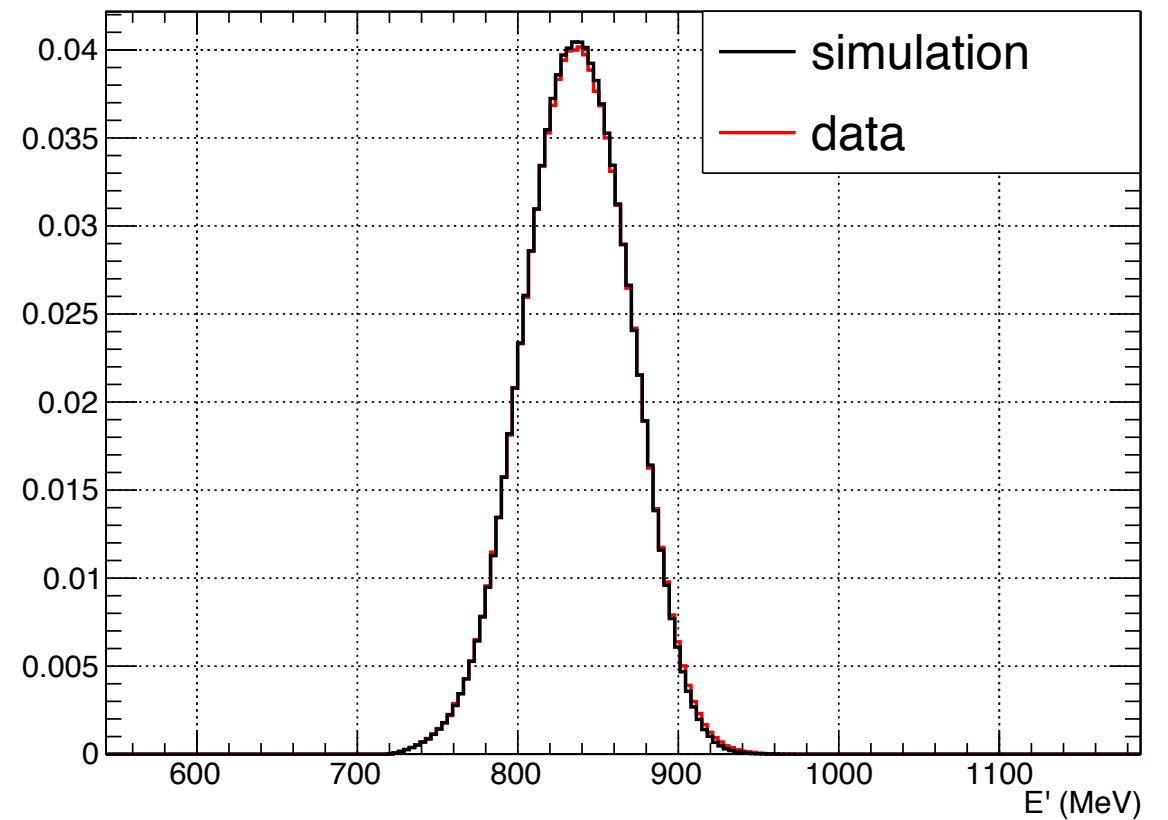
MC calibration

For 2GeV ee, distributions normalized by integrals

spectrum for $0.90 < \theta < 1.00$ deg



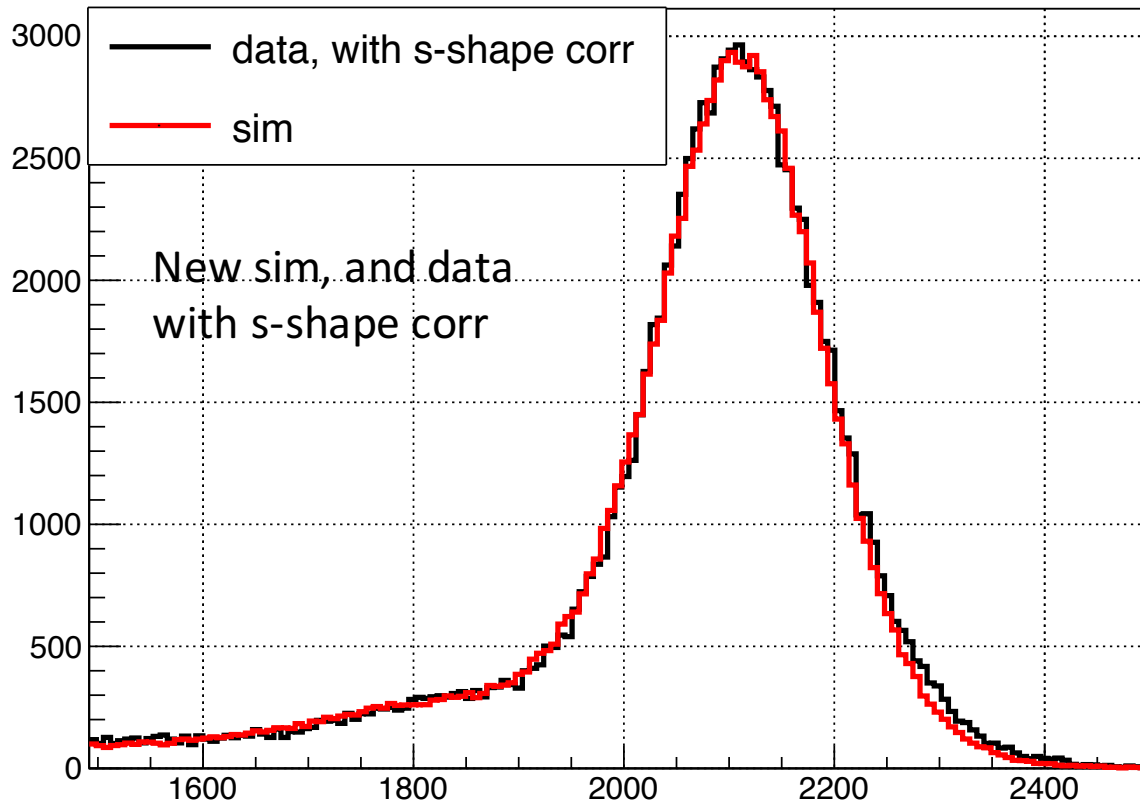
spectrum for $1.50 < \theta < 1.60$ deg



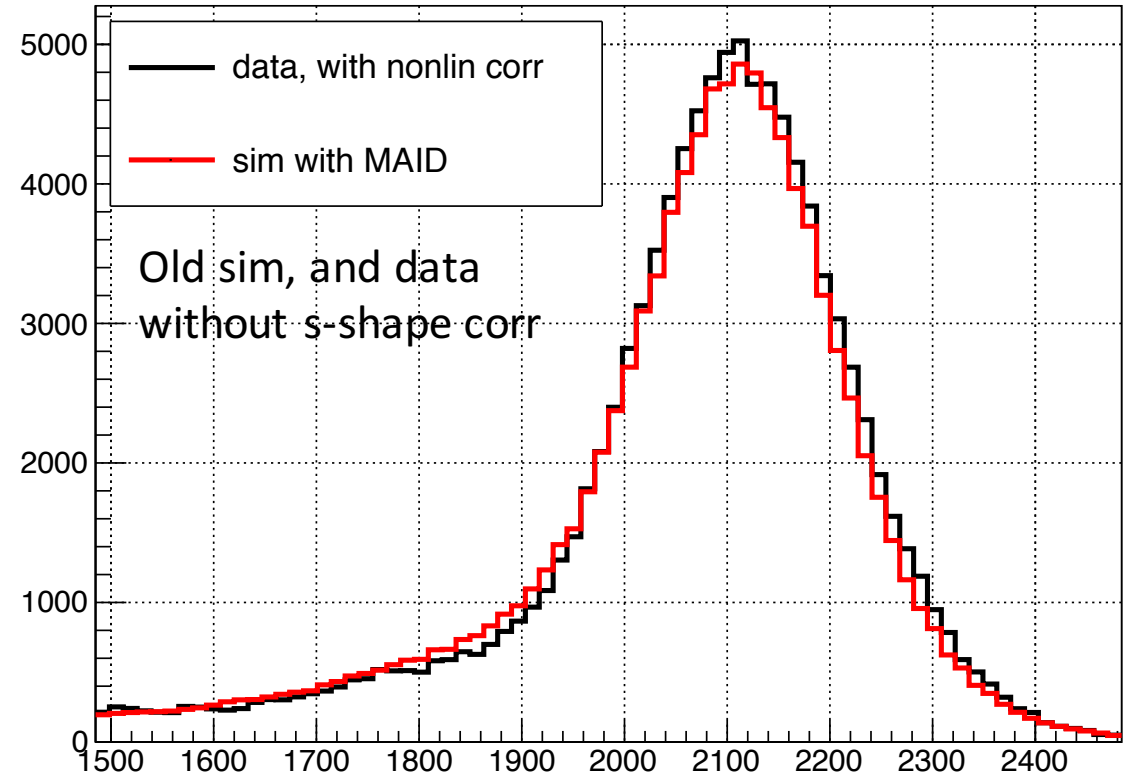
MC calibration

For 2GeV ep, distributions normalized by ee yield

spectrum $4.70 \text{ deg} < \theta < 5.20 \text{ deg}$



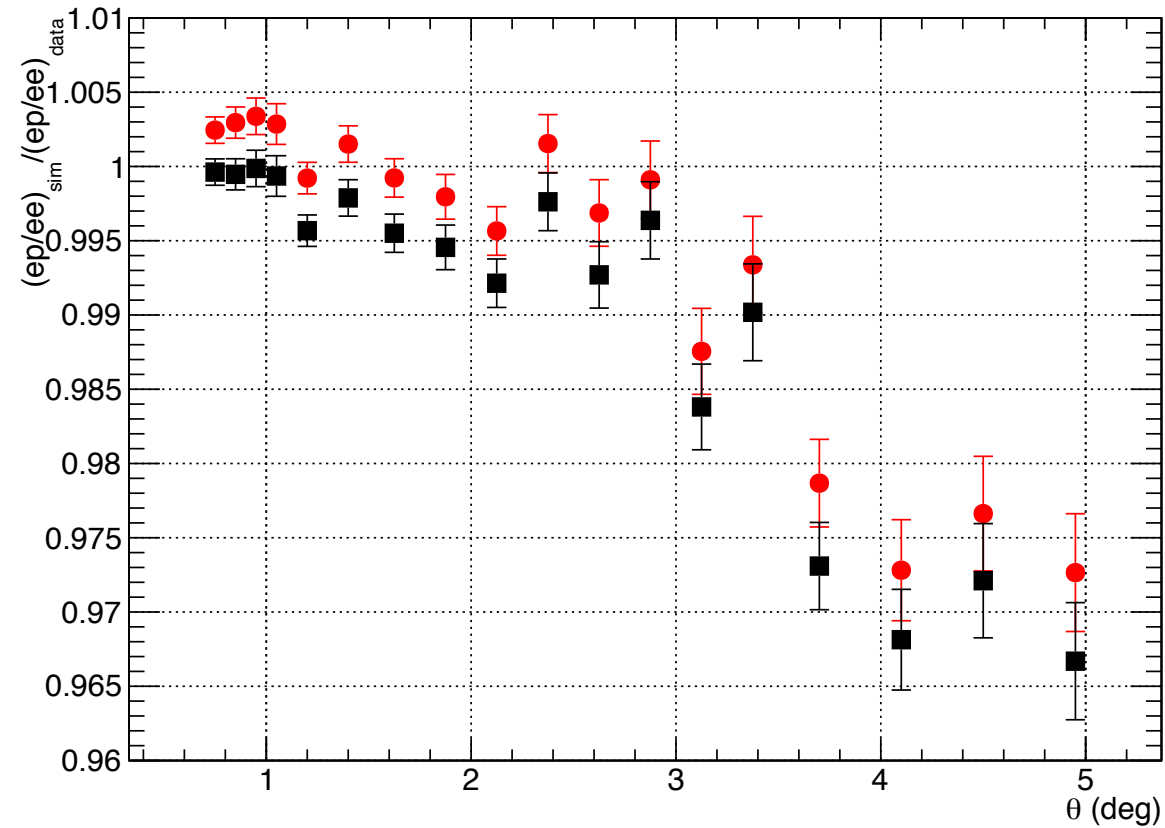
spectrum $4.70 \text{ deg} < \theta < 5.20 \text{ deg}$



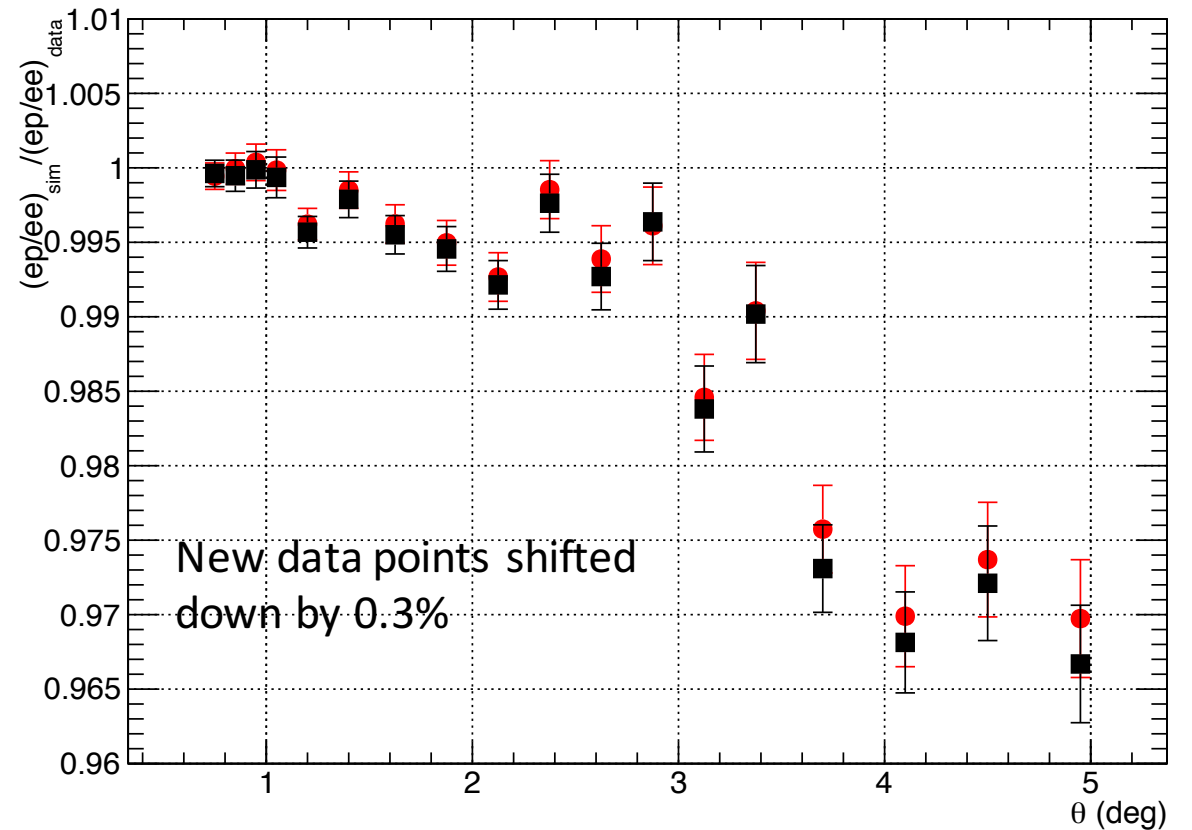
Super ratio

- With new calibration constants, new simulation and s-shape correction
- With old calibration constants, old simulation and no s-shape correction (same used in report for Volker)

Graph



Graph



To do

- Finish 1GeV mc calibration by tomorrow afternoon, produce 1GeV super-ratio
- Study different normalization methods
- Born inelastic MAID simulation
- Systematic uncertainty studies