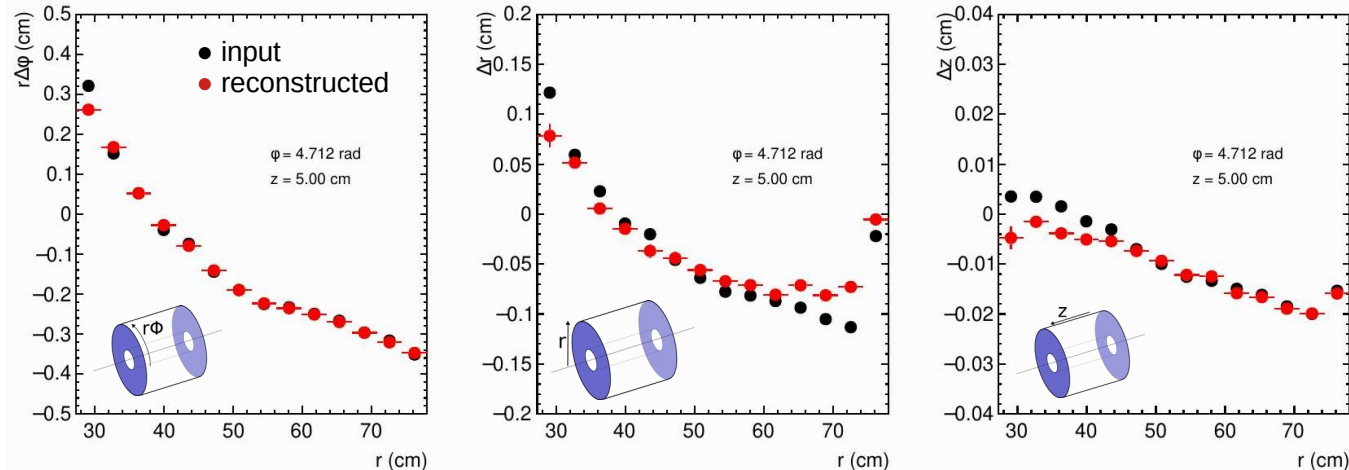# TPOT and track based distortion reconstruction

- Realistic TPOT detector implemented in GEANT4 with correct detector position, size and pitch

- Ability to reconstruct beam-induced space charge distortions in TPOT acceptance has been verified

Limitations:

- assumes that static distortions have been reconstructed (direct laser) and subtracted

- valid in TPOT acceptance only. Needs central membrane reconstruction to extrapolate to full acceptance

- remaining differences along r and z being investigated (time scale: few weeks)

- uses GENFIT. Slightly worse performances with ACTS, being investigated (time scale: few weeks)