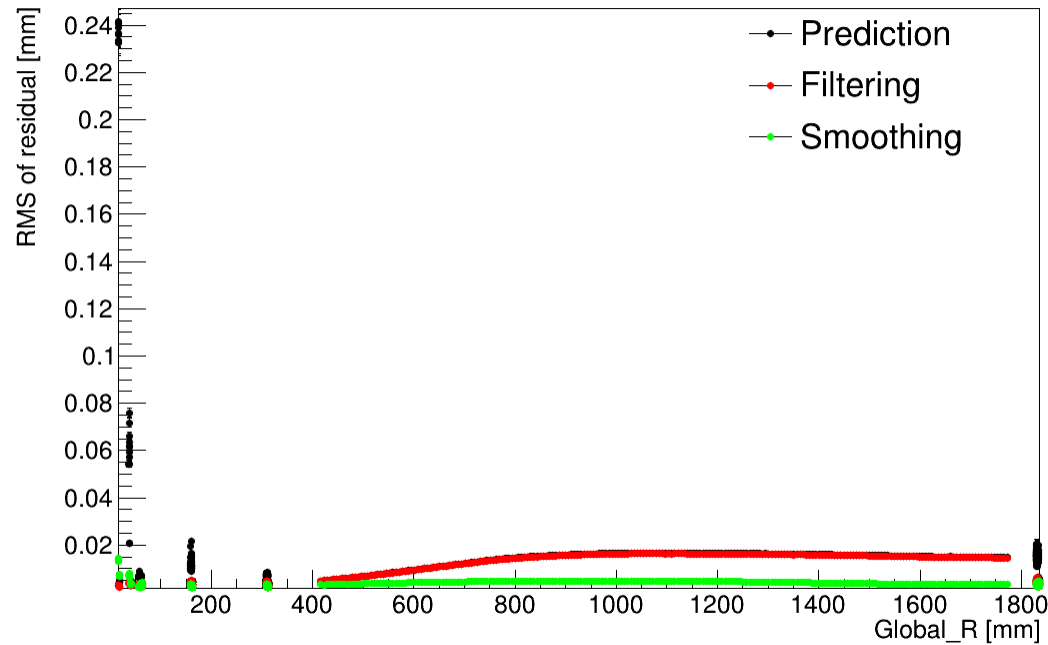# Weekly Report

Yebo

2020.07.30

OUTLINE

- After changing the geometry
  - Previous smooth method
    (commit id: ad2f6496ad208ab7e289c6cb83b04f4baacf3001)

  - Current smooth method: backward filtering
    - All sub-detectors
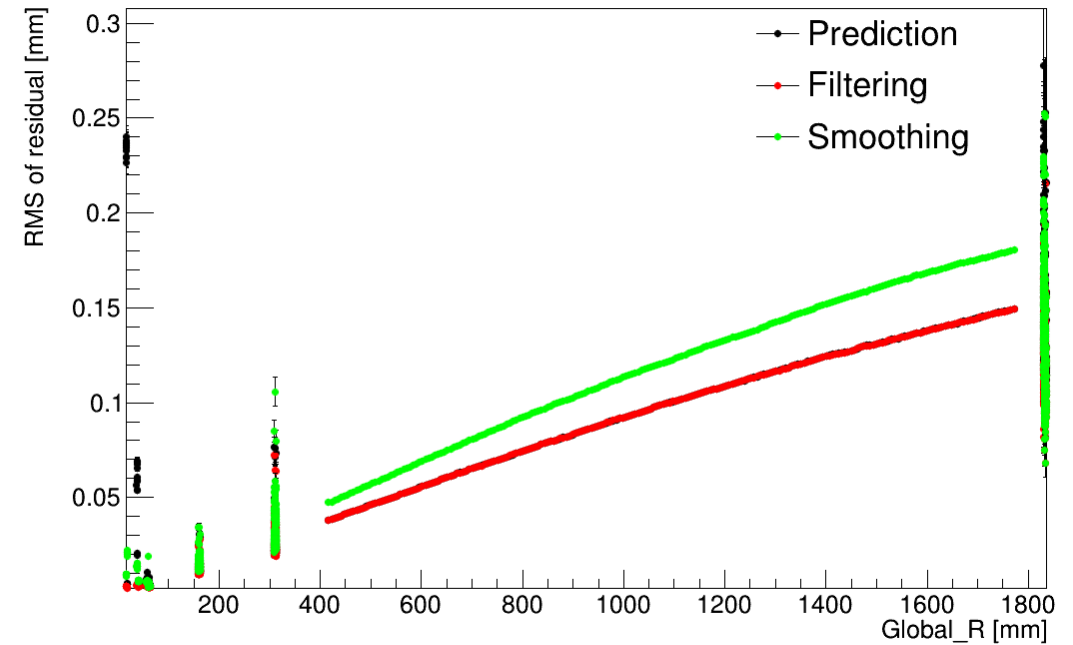   - Turn off the TPC
    - TPC only

Same options

- Particle gun: 10000 μ from (0, 0, 0)
- Magnetic field: (0, 0, 3T)
- p_T: 100GeV
- θ: 85°
- φ: uniform distribution
- No material

After changing the geometry – Previous smooth method

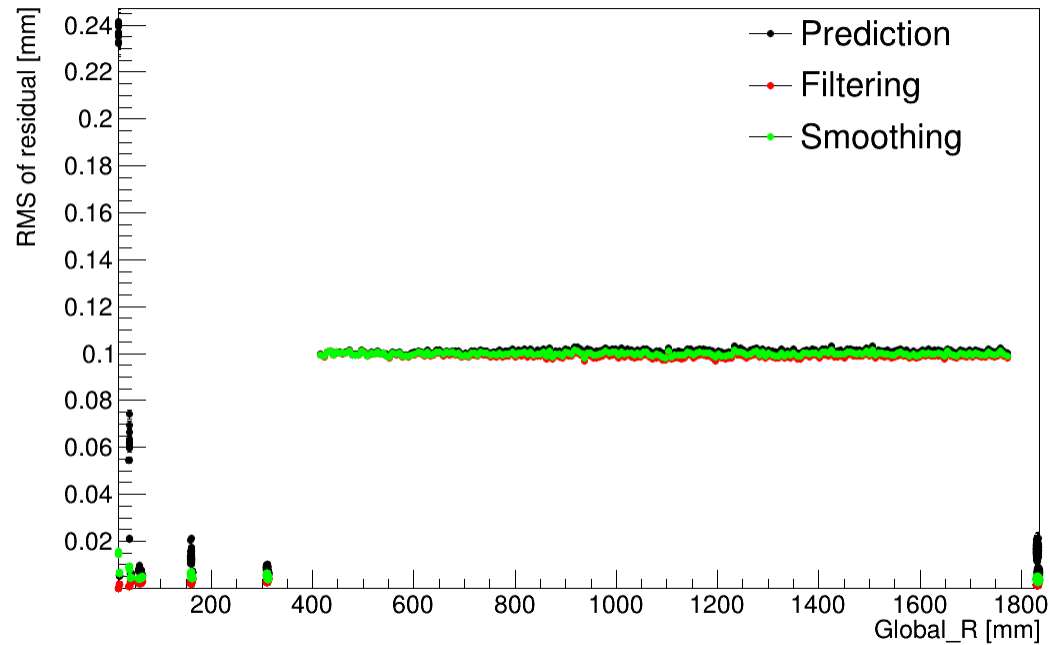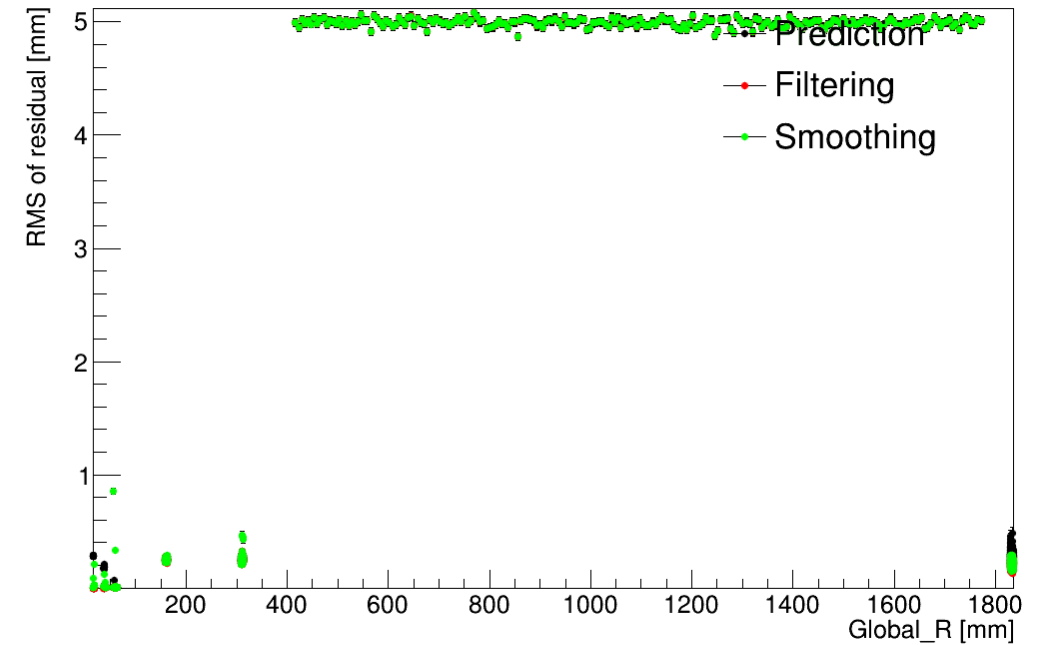- RMS of Residuals (prt/flt/smt – truth) of loc0 and loc1

loc0

loc1

After changing the geometry – Previous smooth method

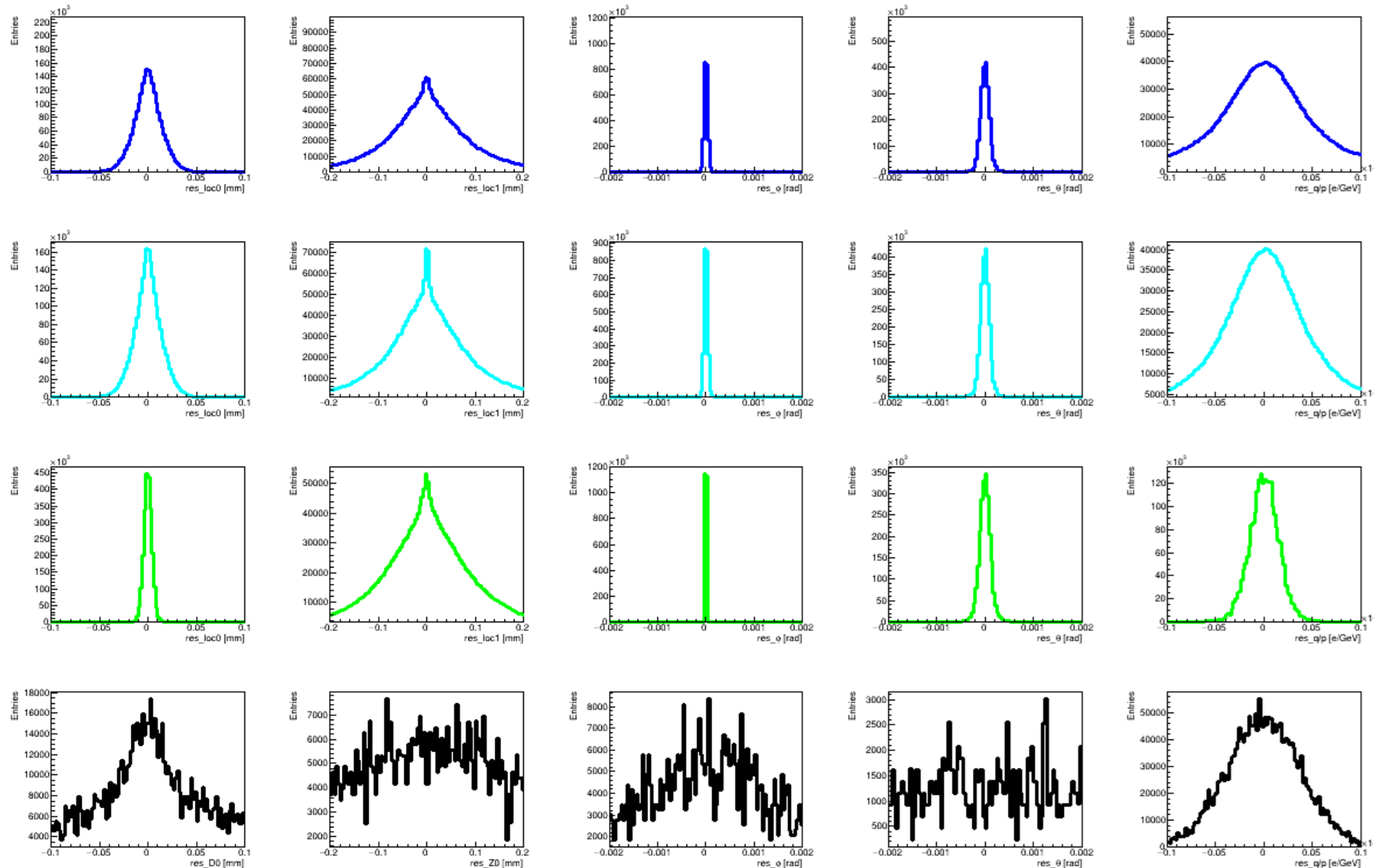- RMS of Residuals (prt/flt/smt – smear) of loc0 and loc1
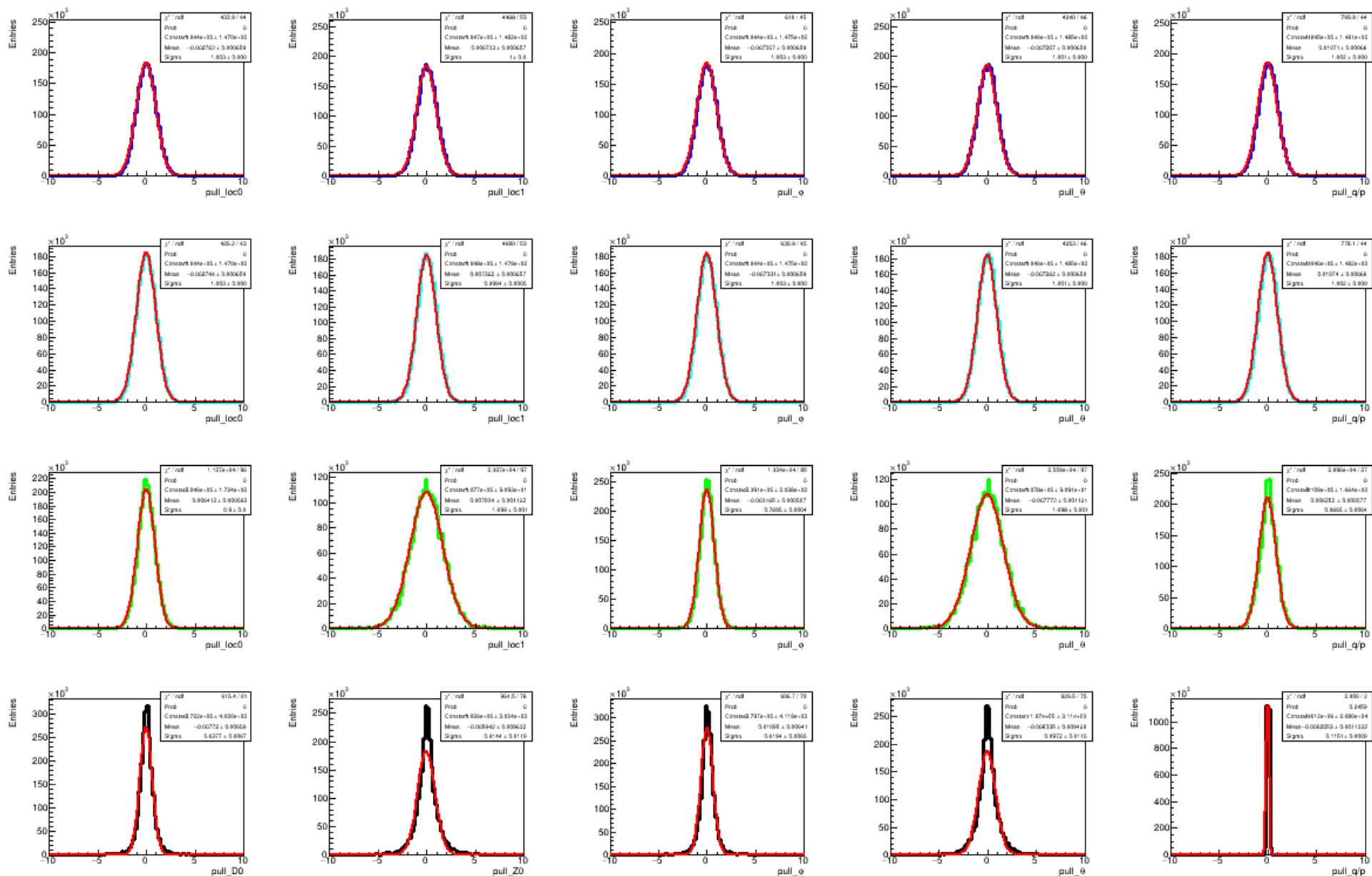

loc0

loc1

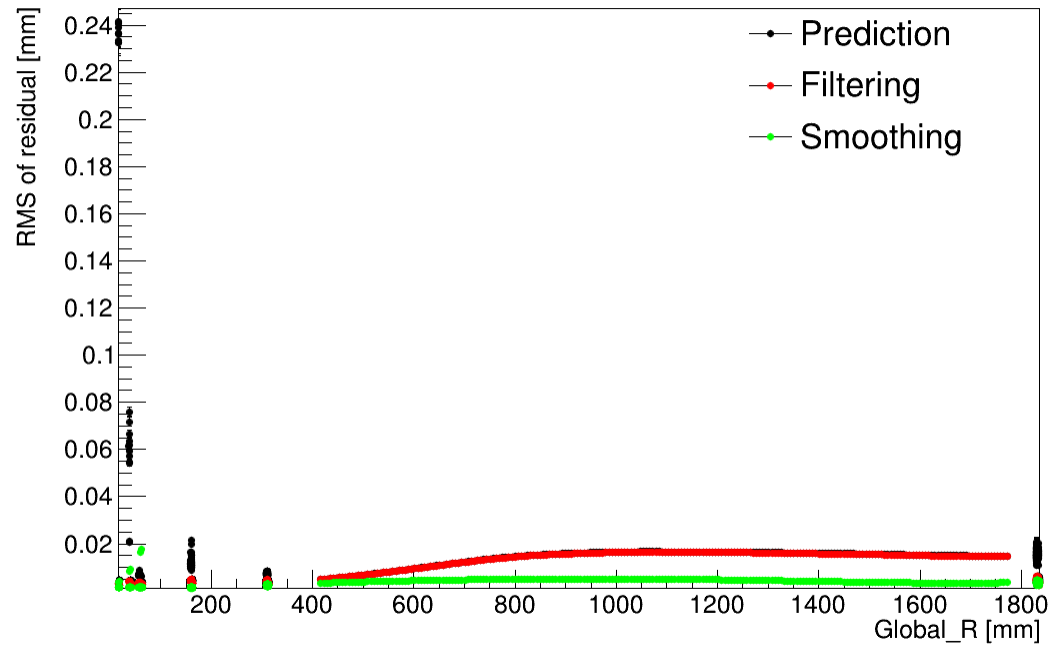# After changing the geometry – Previous smooth method

- Residuals

After changing the geometry – Previous smooth method
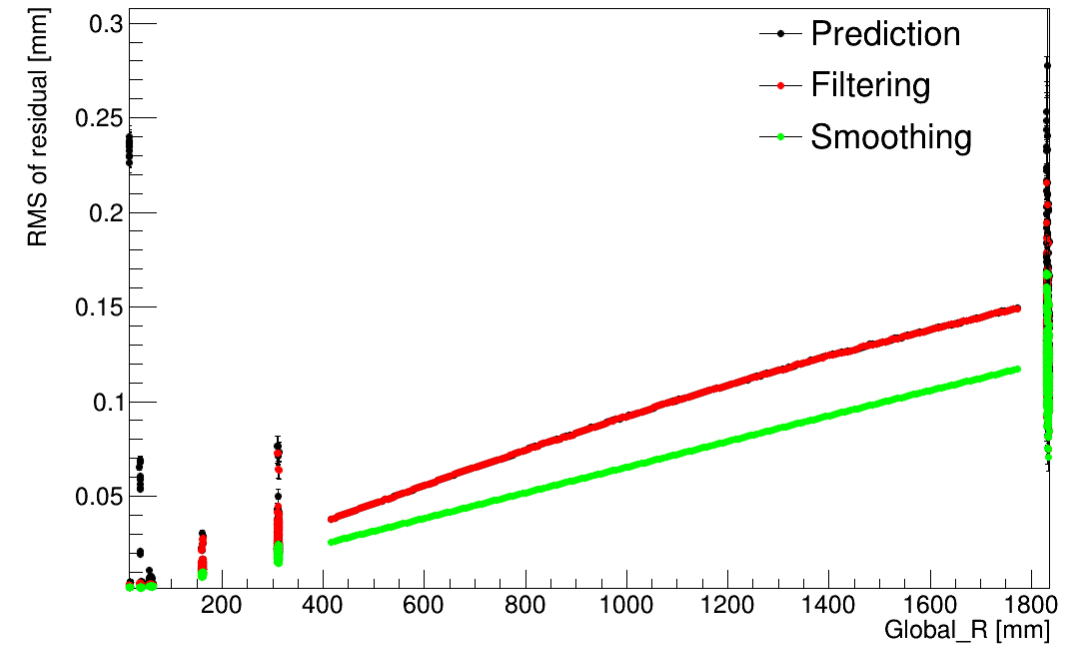
- Pulls

After changing the geometry – Backward filtering – All sub-detectors

- RMS of Residuals (prt/flt/smt – truth) of loc0 and loc1
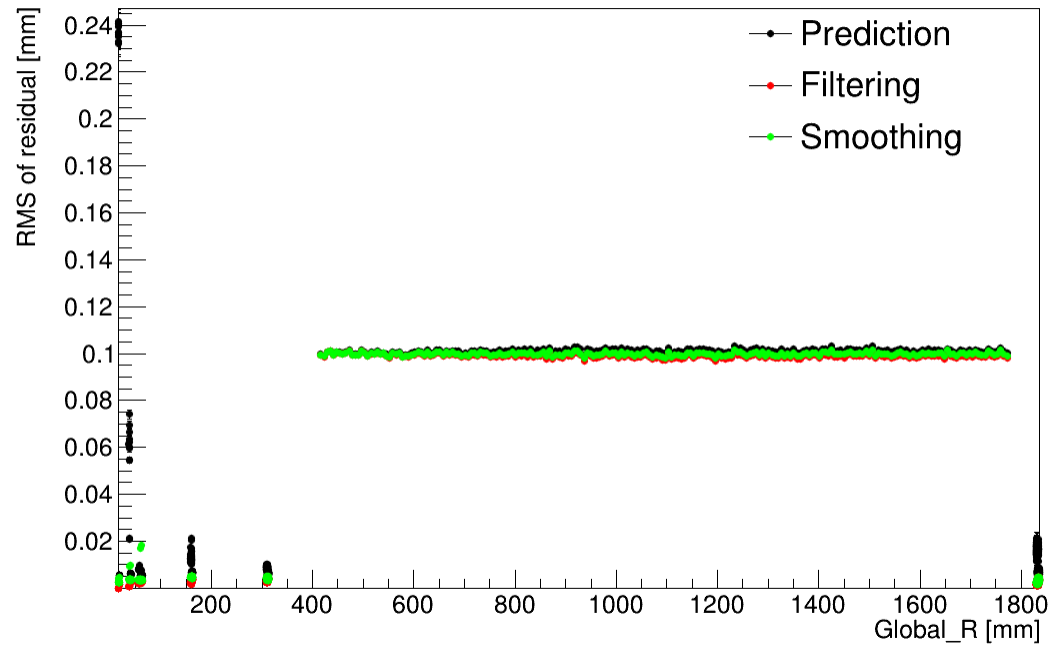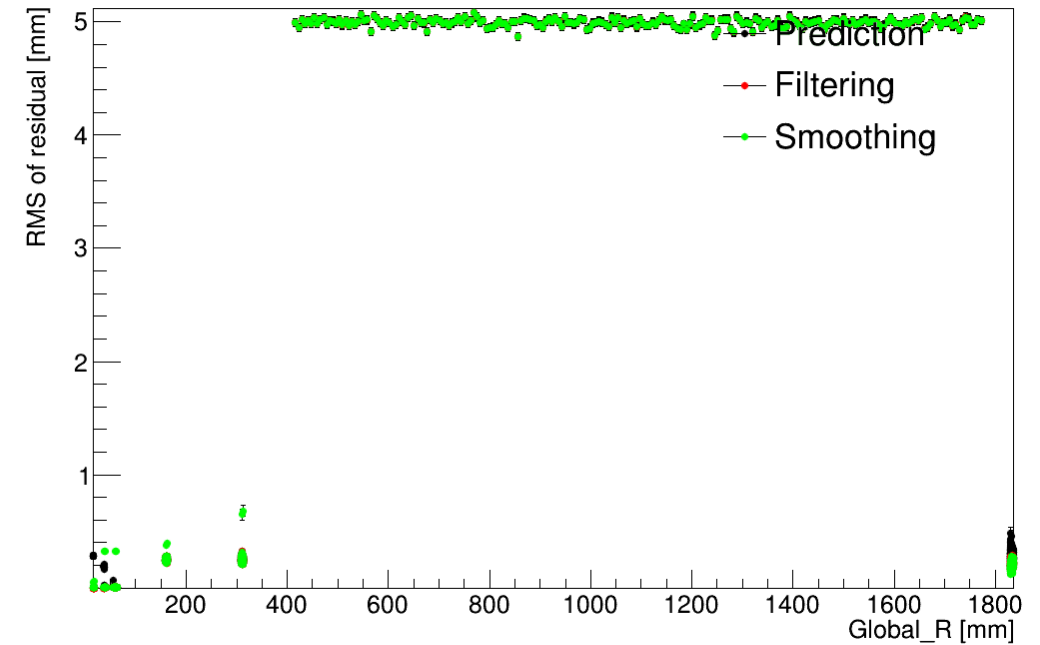

loc0

loc1

After changing the geometry - Backward filtering - All sub-detectors

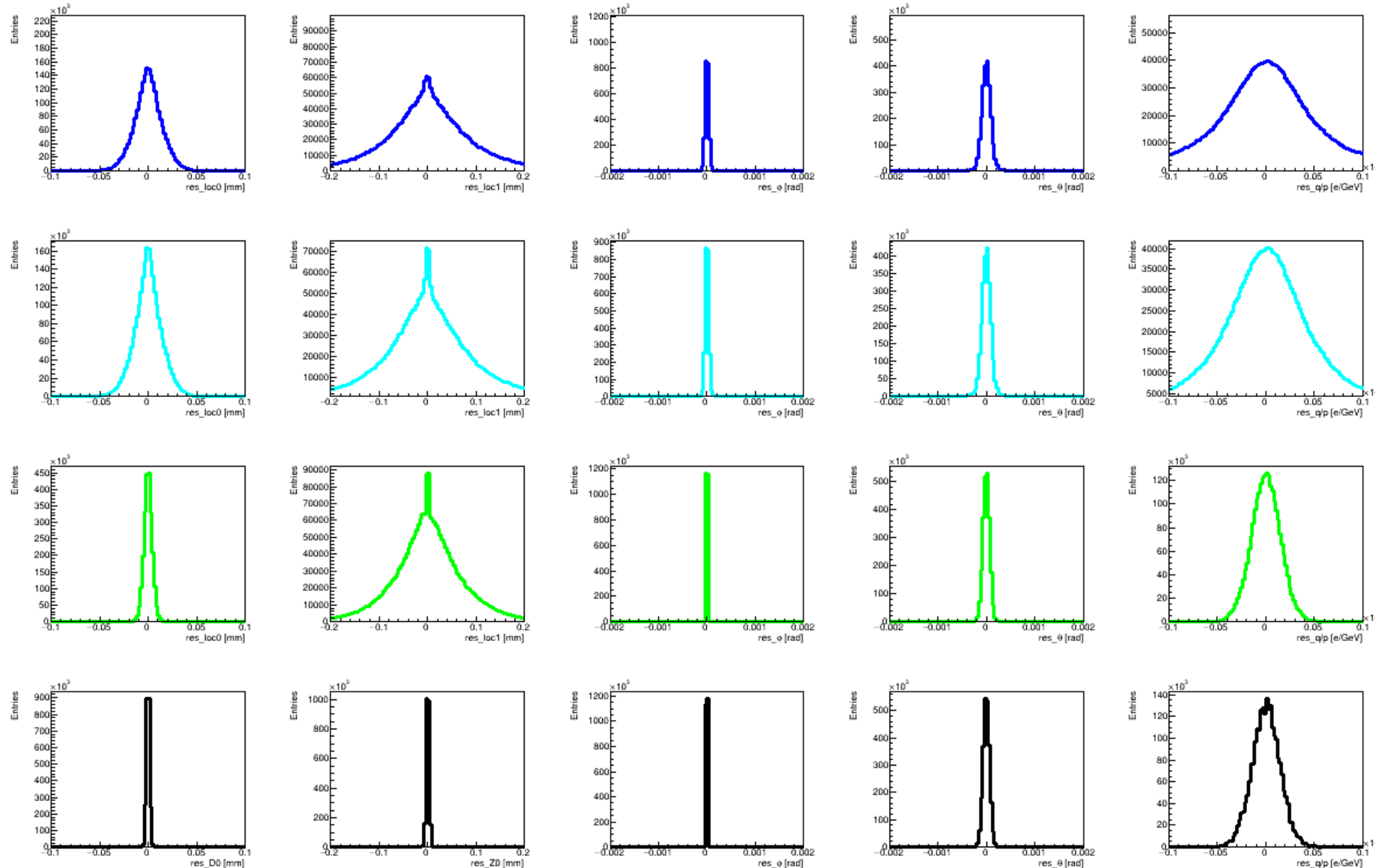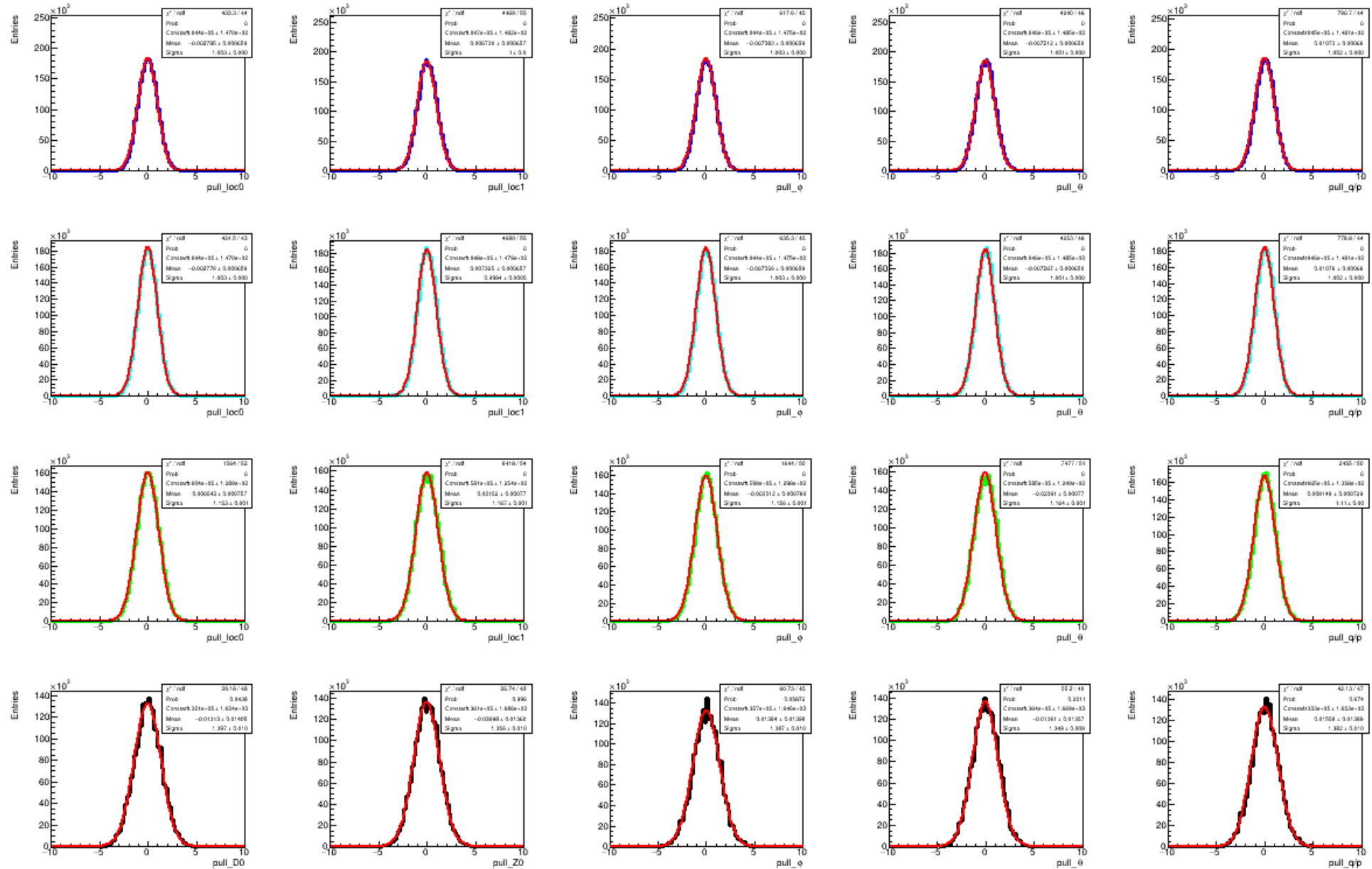- RMS of Residuals (prt/flt/smt - smear) of loc0 and loc1
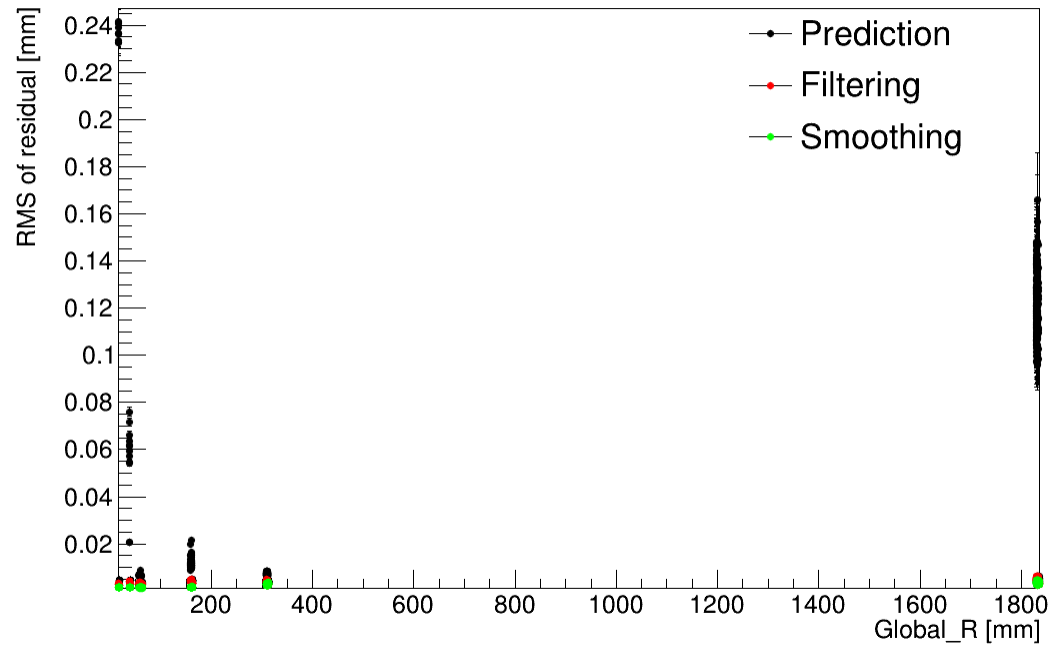

loc0

loc1

- Residuals

After changing the geometry – Backward filtering – All sub-detectors
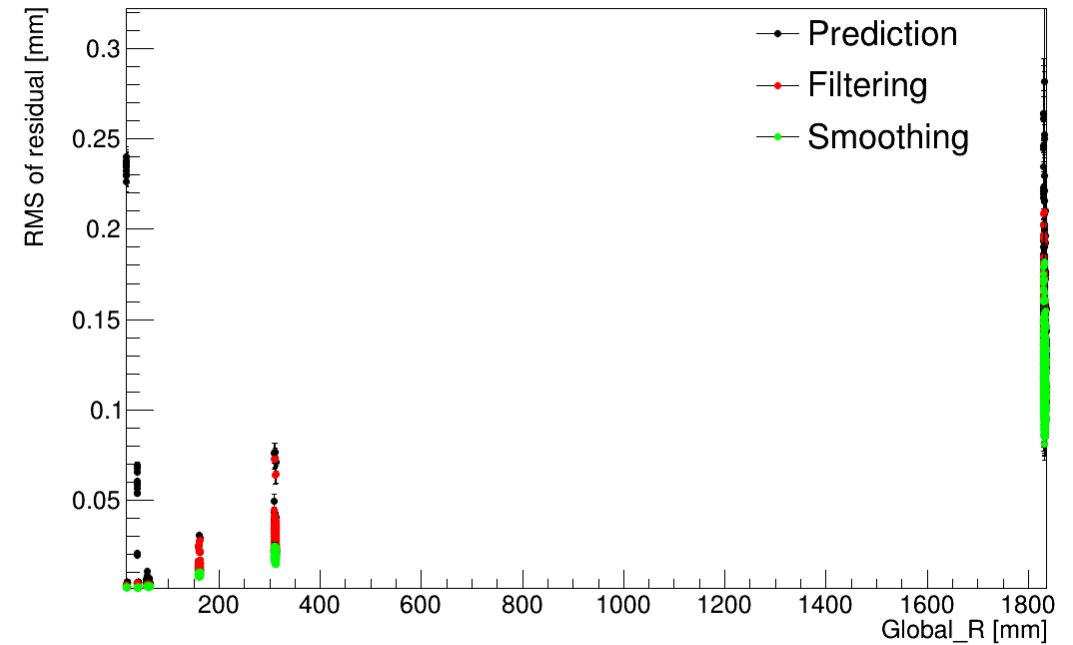
- Pulls

After changing the geometry – Backward filtering – Turn off TPC

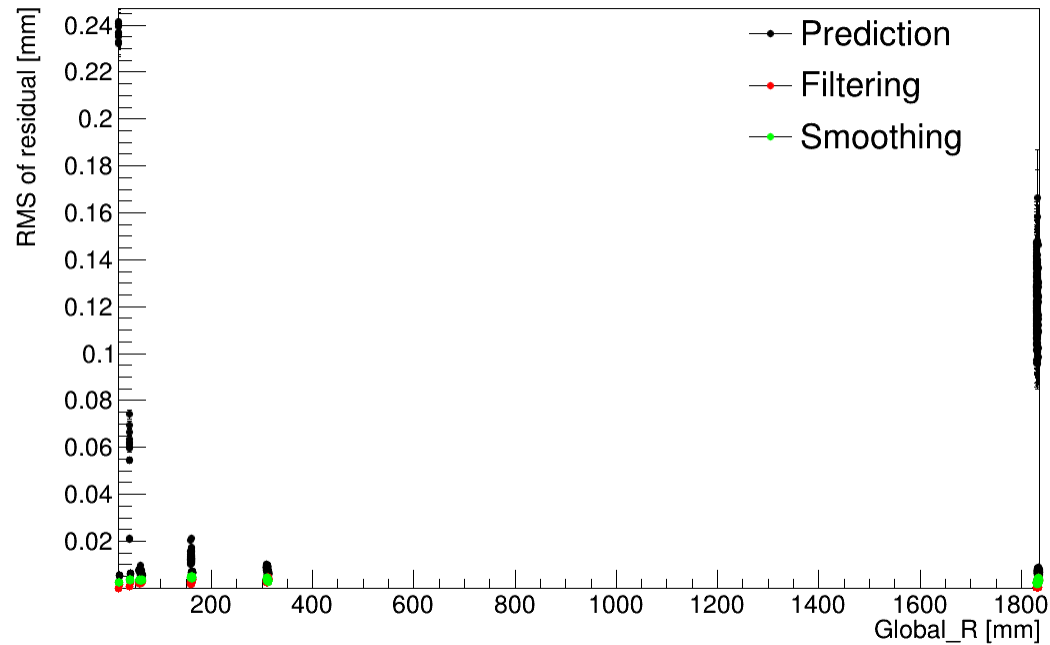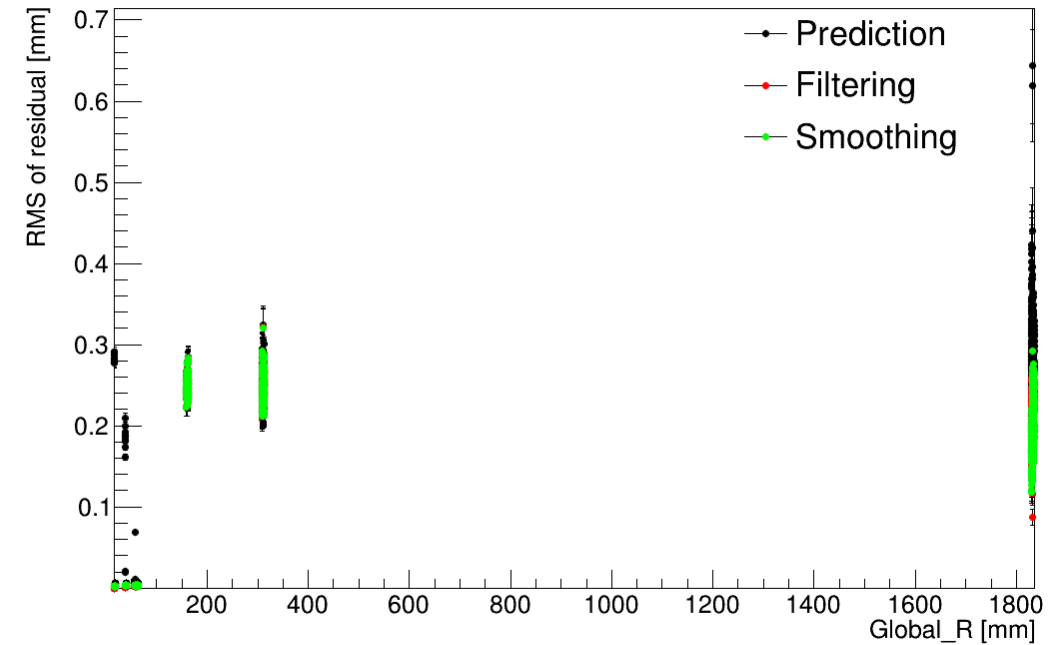- RMS of Residuals (prt/flt/smt – truth) of loc0 and loc1

loc0

loc1

After changing the geometry – Backward filtering – Turn off TPC

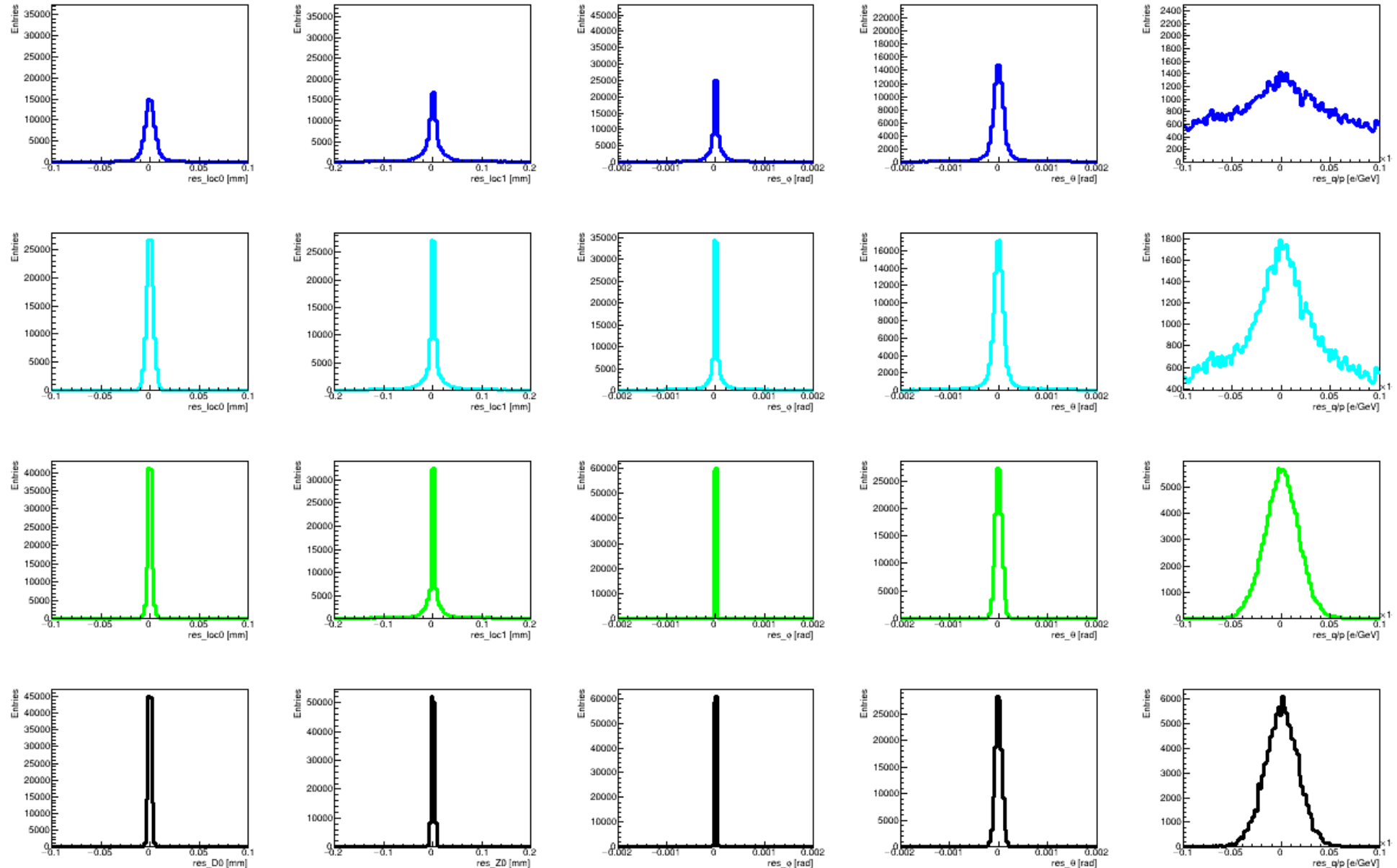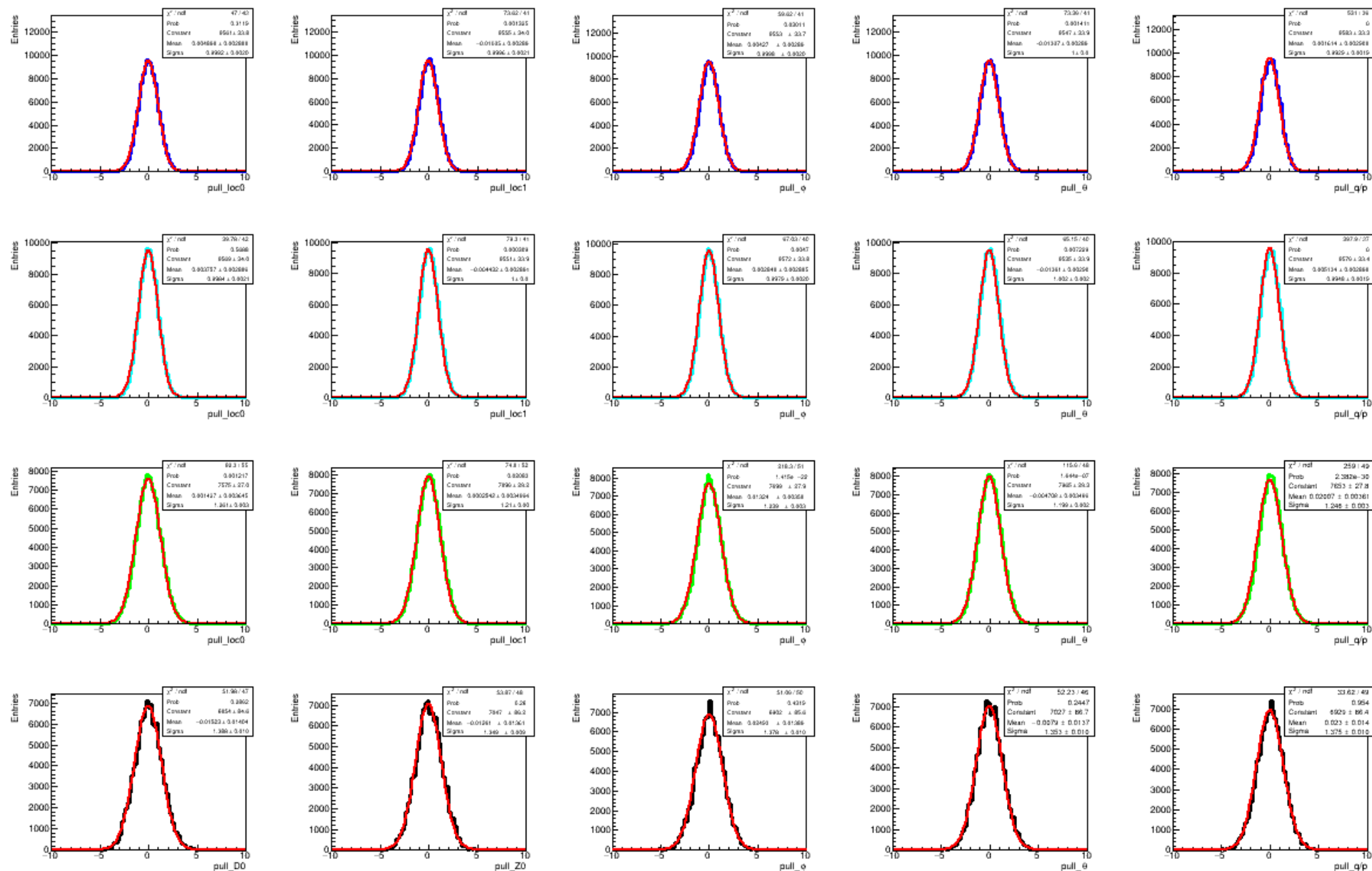- RMS of Residuals (prt/flt/smt – smear) of loc0 and loc1

loc0

loc1

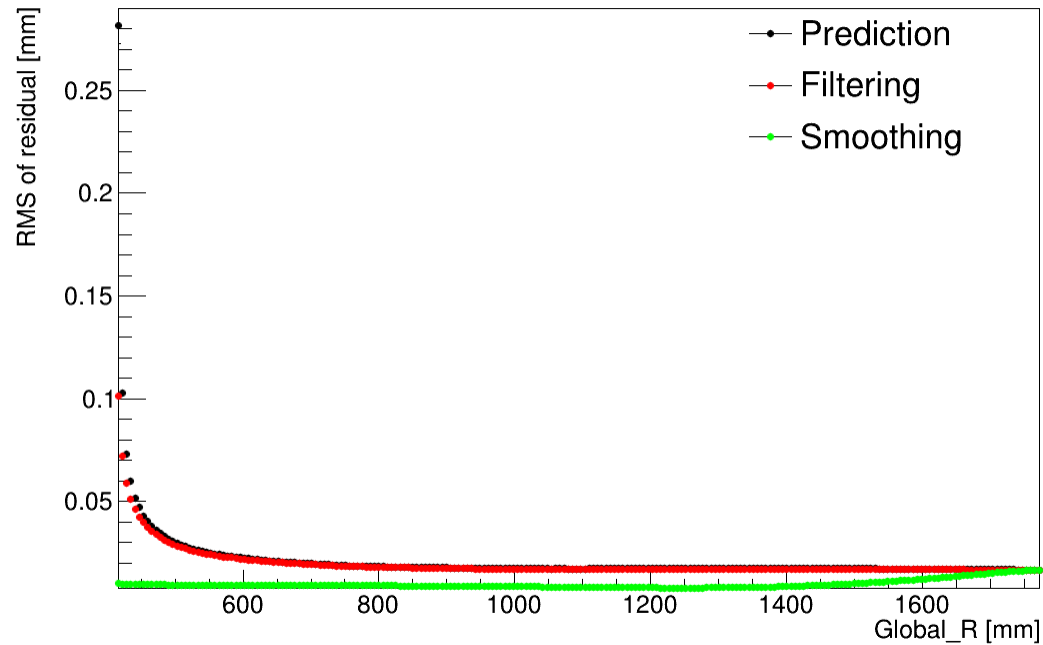# After changing the geometry – Backward filtering – Turn off TPC
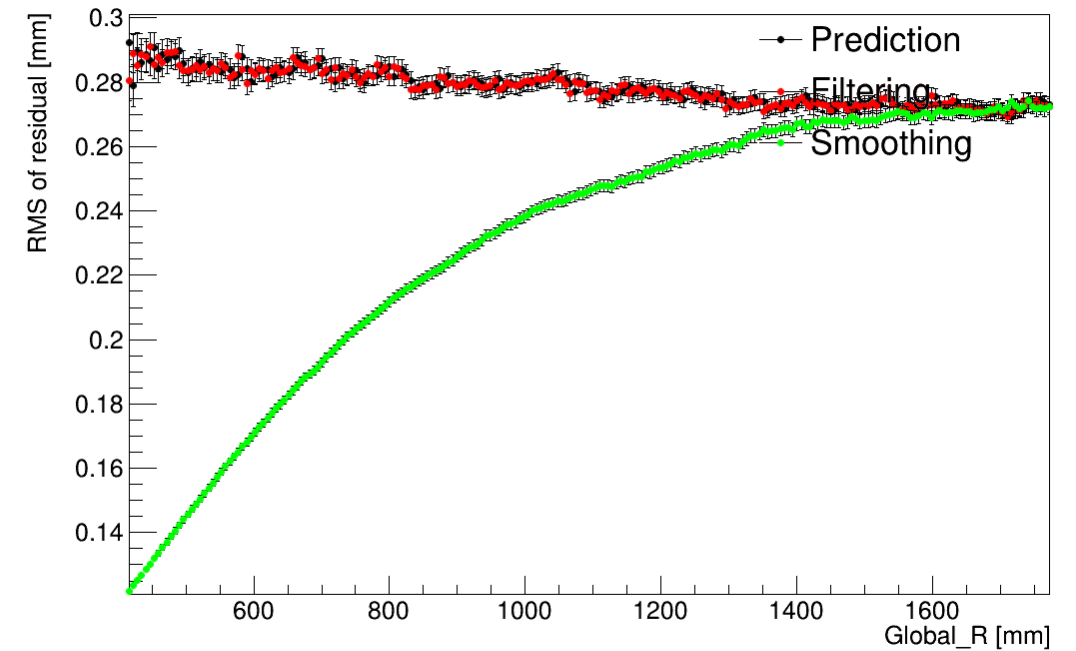
- Residuals

- Pulls

After changing the geometry – Backward filtering – TPC only

- RMS of Residuals (prt/flt/smt – truth) of loc0 and loc1
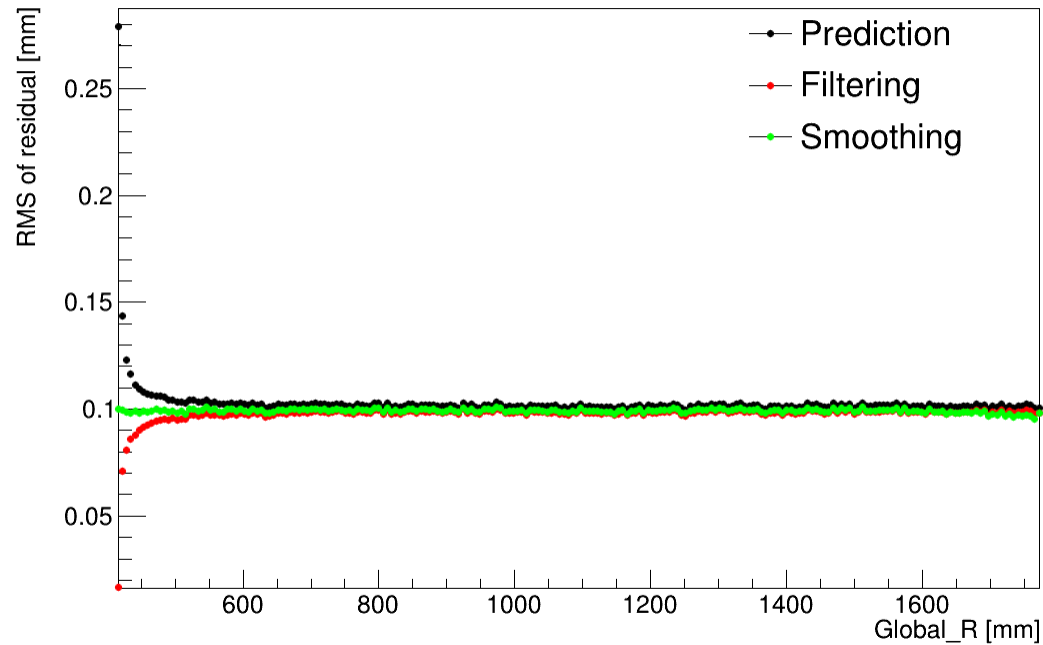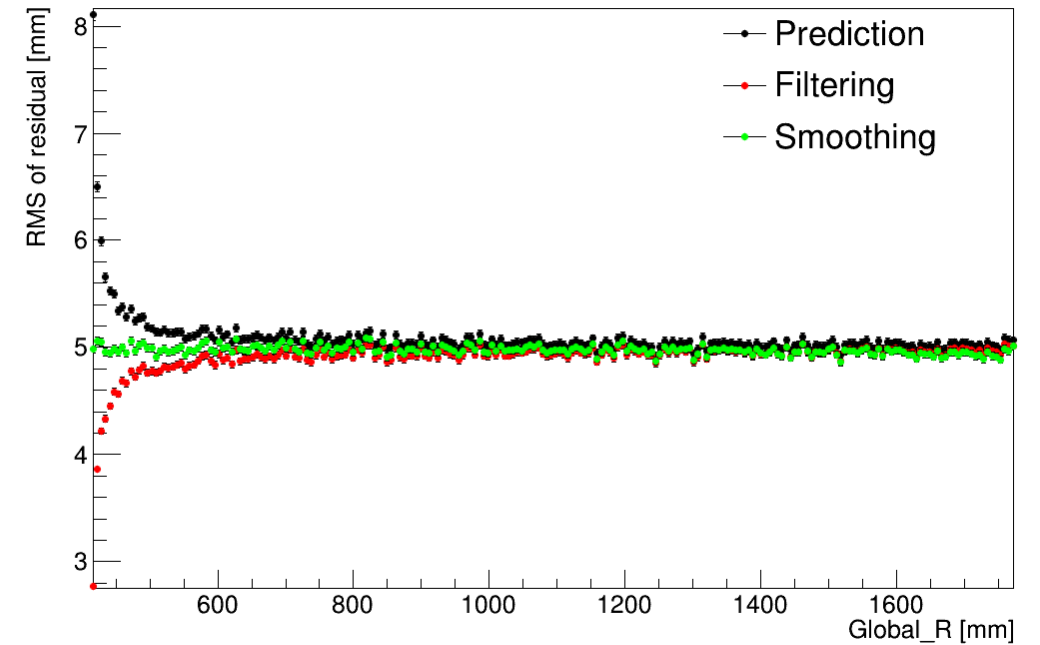

loc0

loc1

After changing the geometry – Backward filtering – TPC only

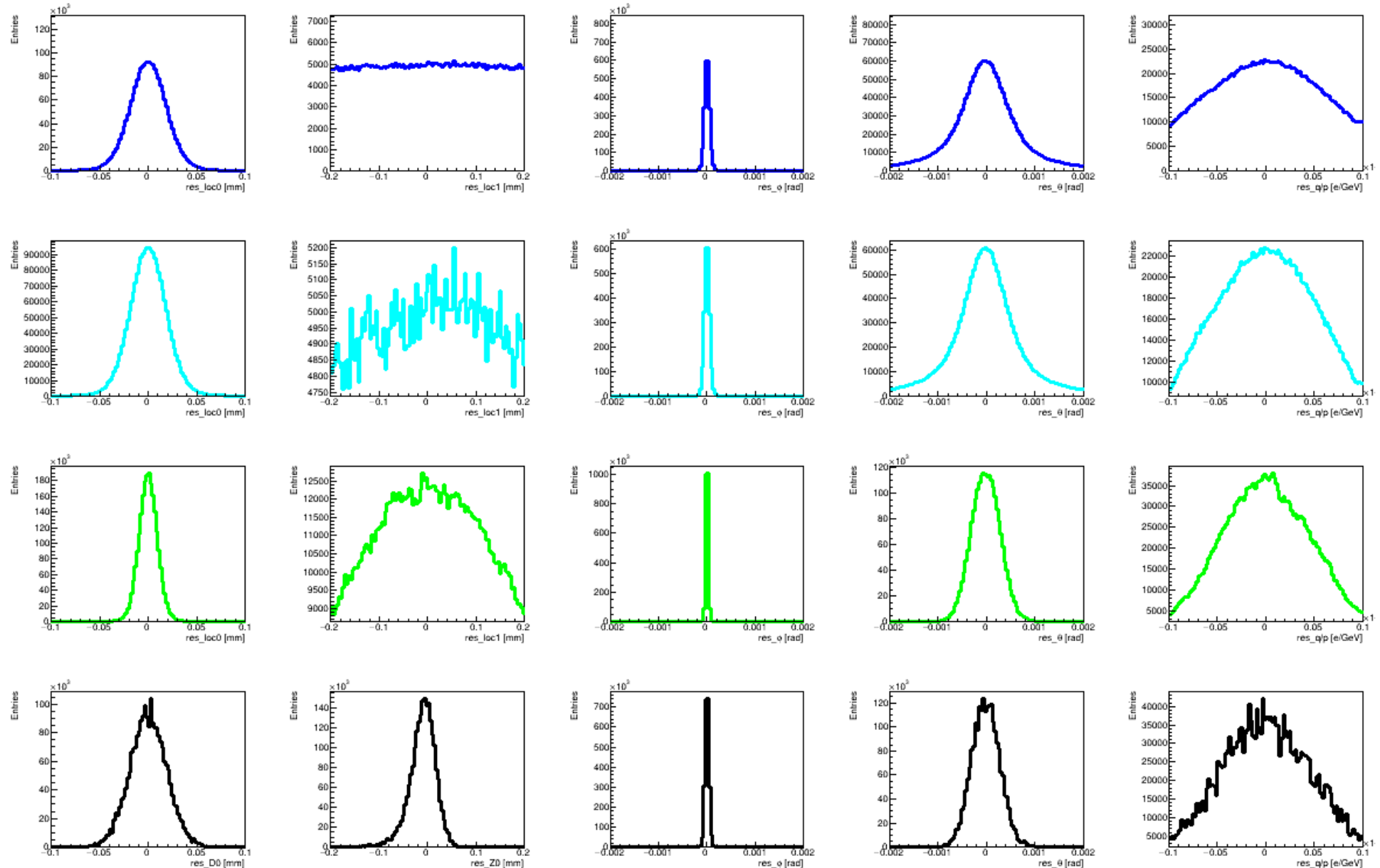- RMS of Residuals (prt/flt/smt - smear) of loc0 and loc1

loc0

loc1

After changing the geometry – Backward filtering – TPC only

- Residuals

After changing the geometry – Backward filtering – TPC only

- Pulls