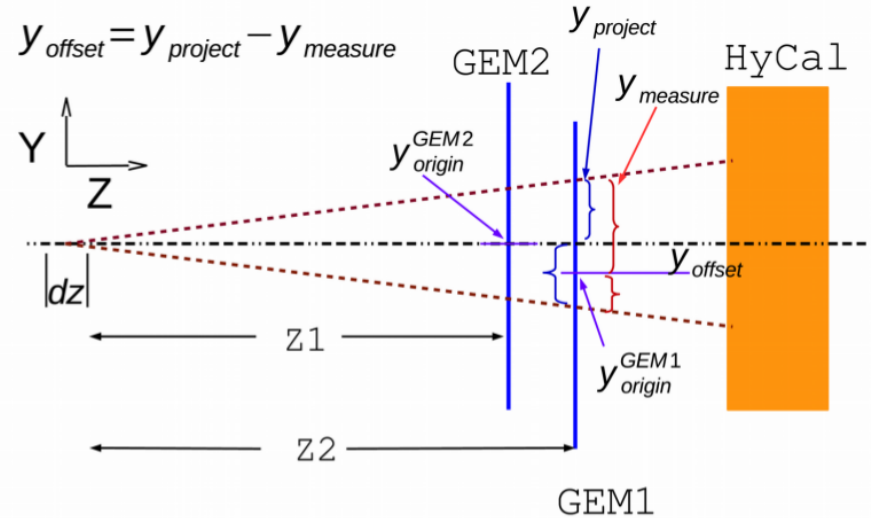


Method1 (old offset table), in each run:

- Using overlap area, get detector offset (against 2<sup>nd</sup> GEM chamber)
- Correct offset
- Use ee2 events, in GEM2 coordinates, get beam center, (using the whole detection area, not limited to overlap area)
- Get offsets for each detector

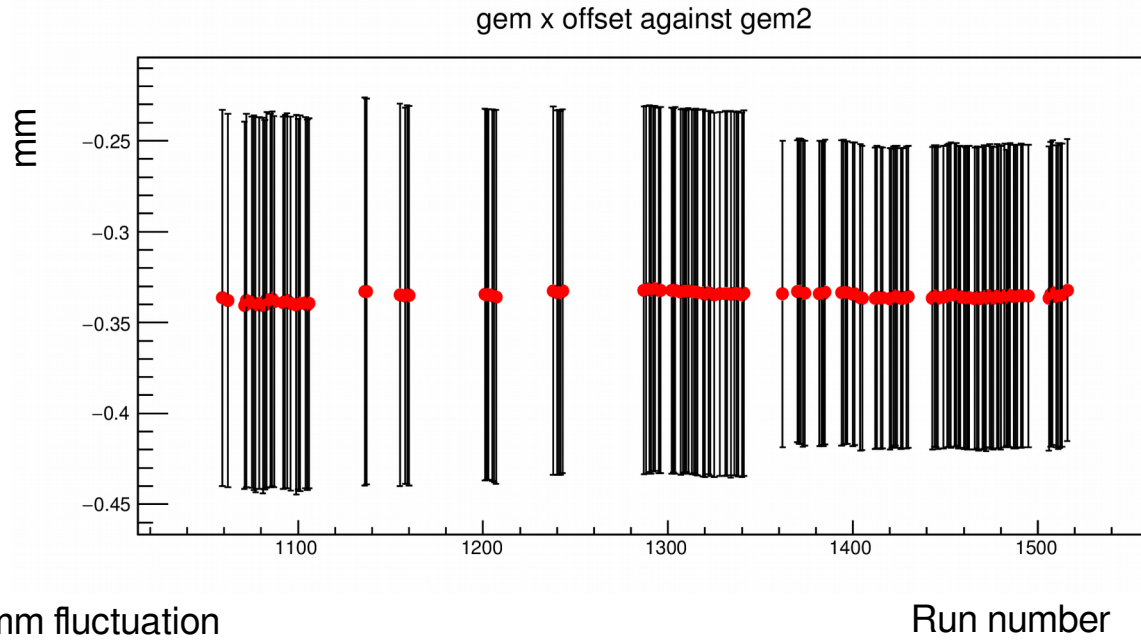


Method2, in each run:

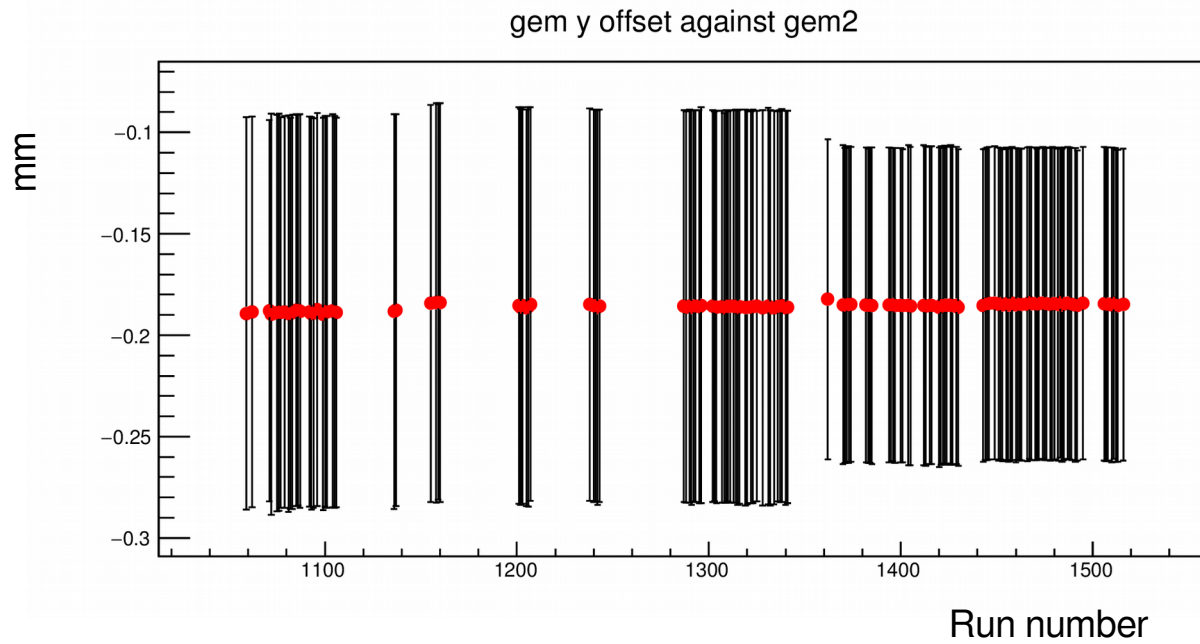
- In overlap area, use ee2 events get beam center,
- Get beam offset for each GEM detector, (can only use overlap area)
- In the whole detection area, use ee2 events to get HyCal offset against beam

# Detector offset against GEM2

Detector offset should be stable:

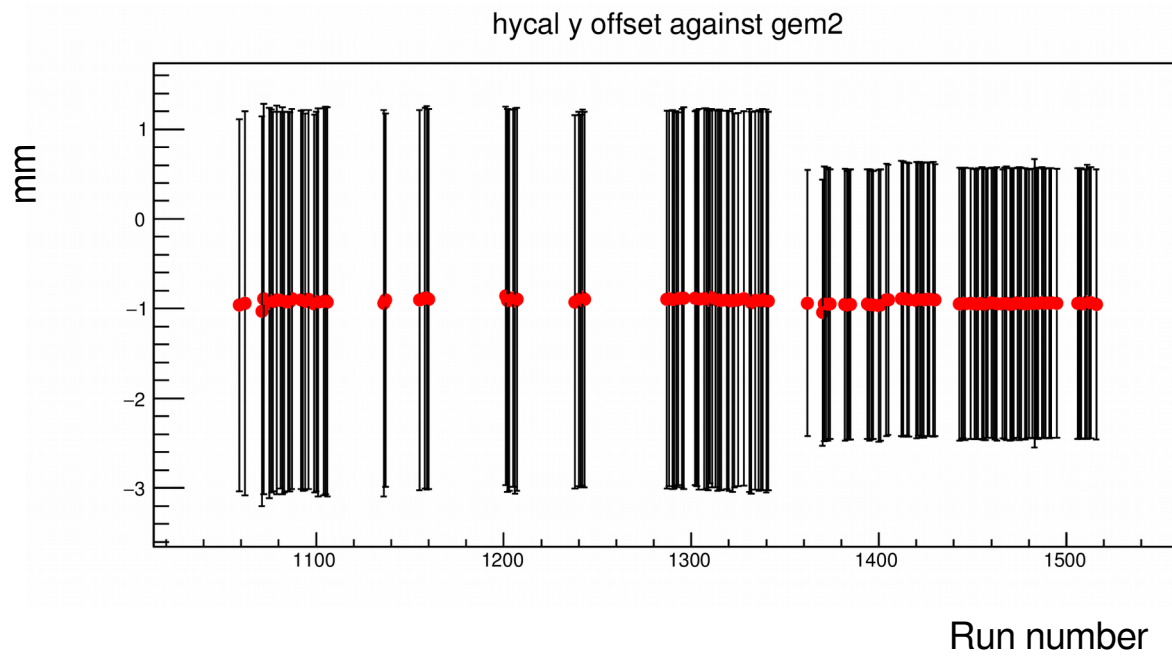
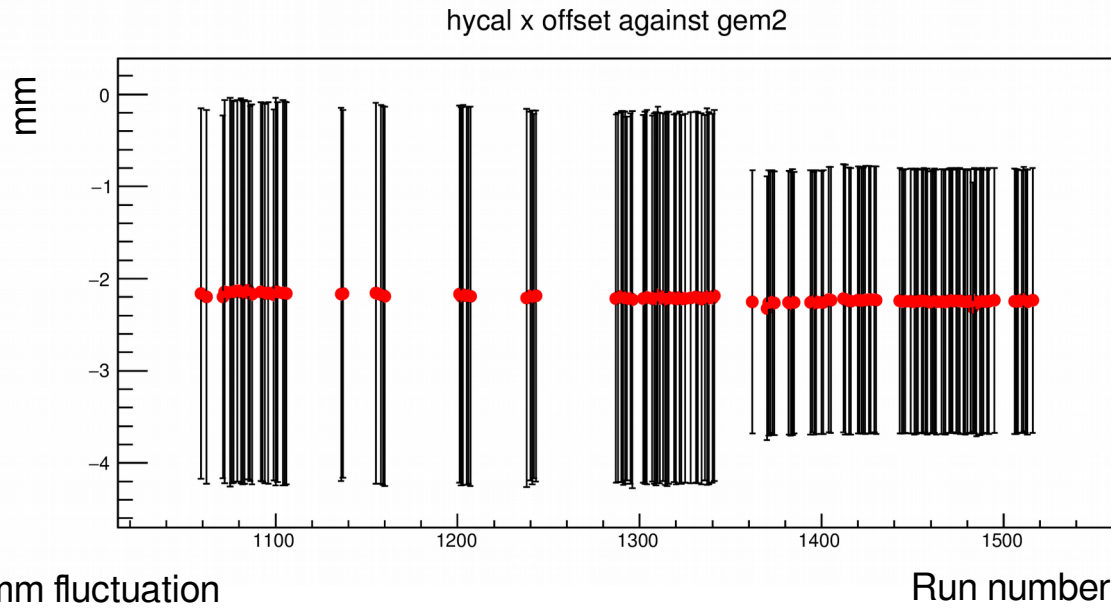


Average within 0.01mm fluctuation



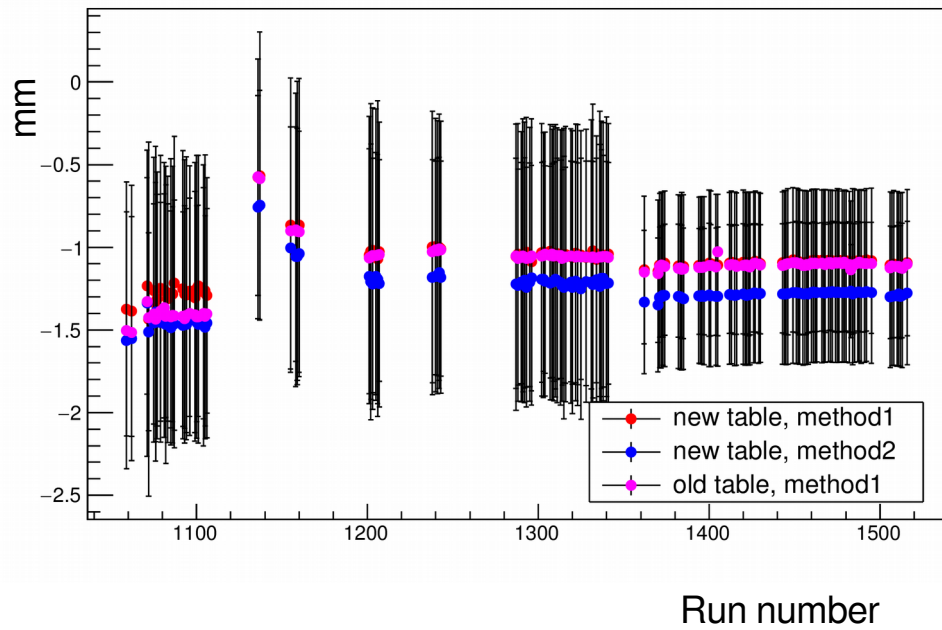
# Detector offset against GEM2

Detector offset should be stable:

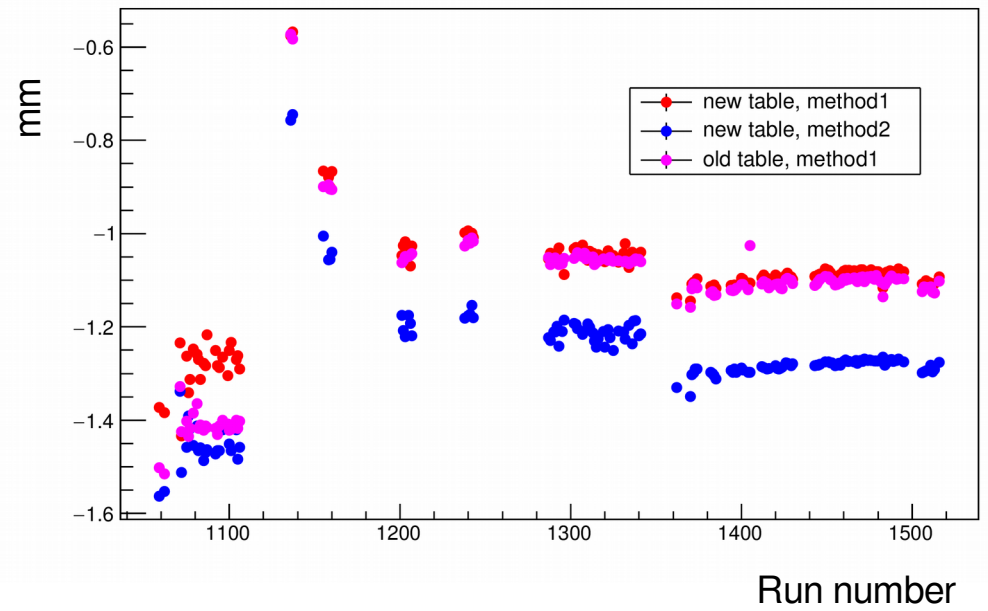


# Beam offset compare

gem1x compare

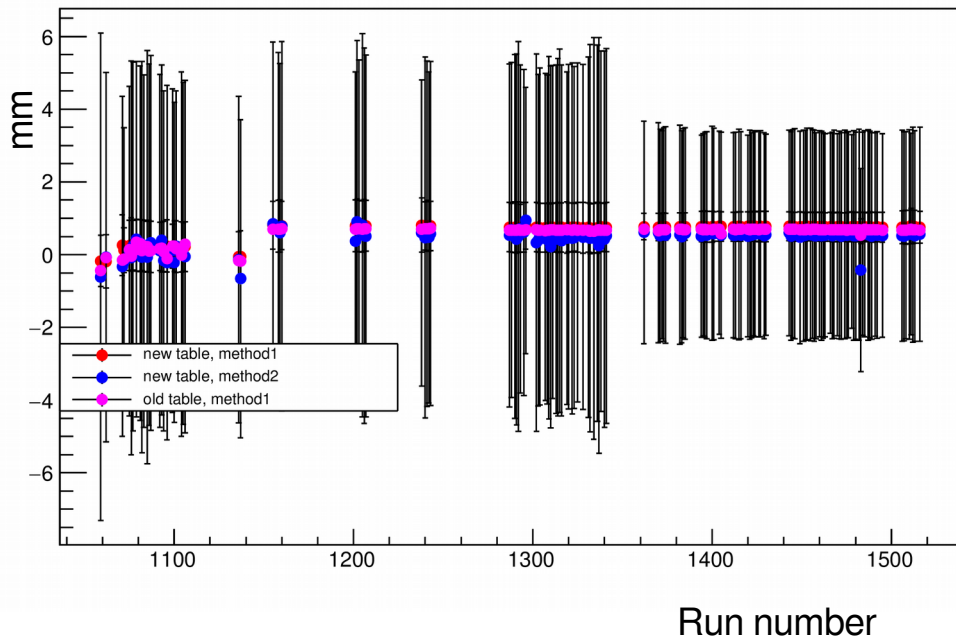


gem1x compare

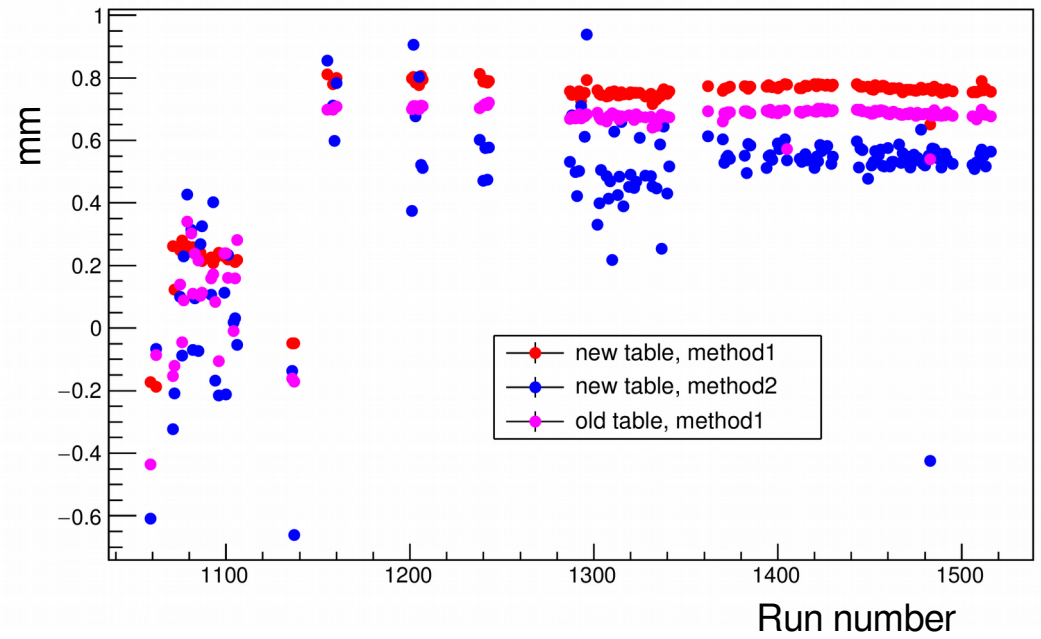


# Beam offset compare

gem1y compare

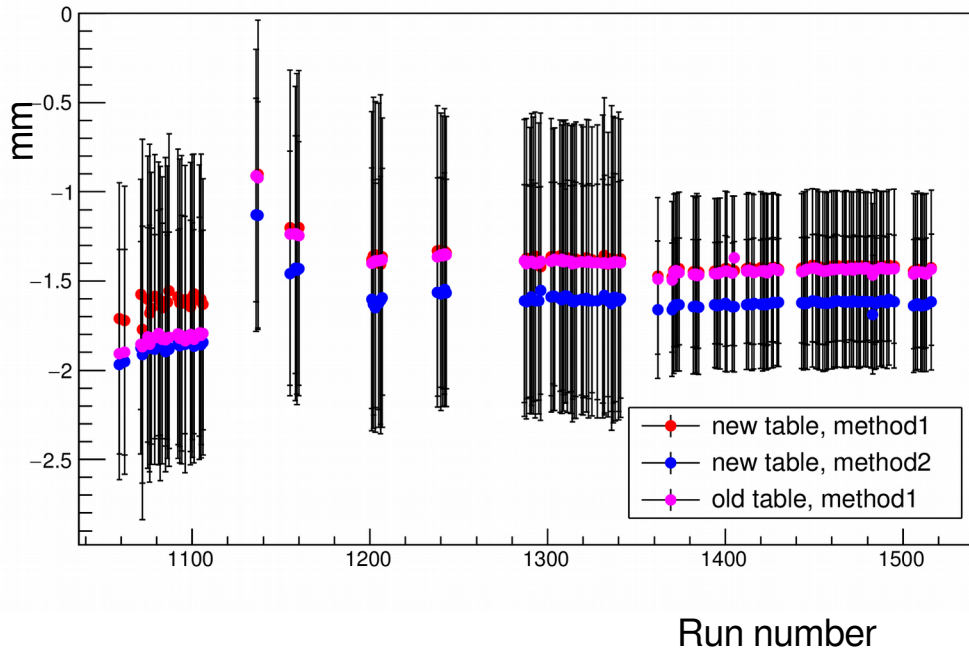


gem1y compare

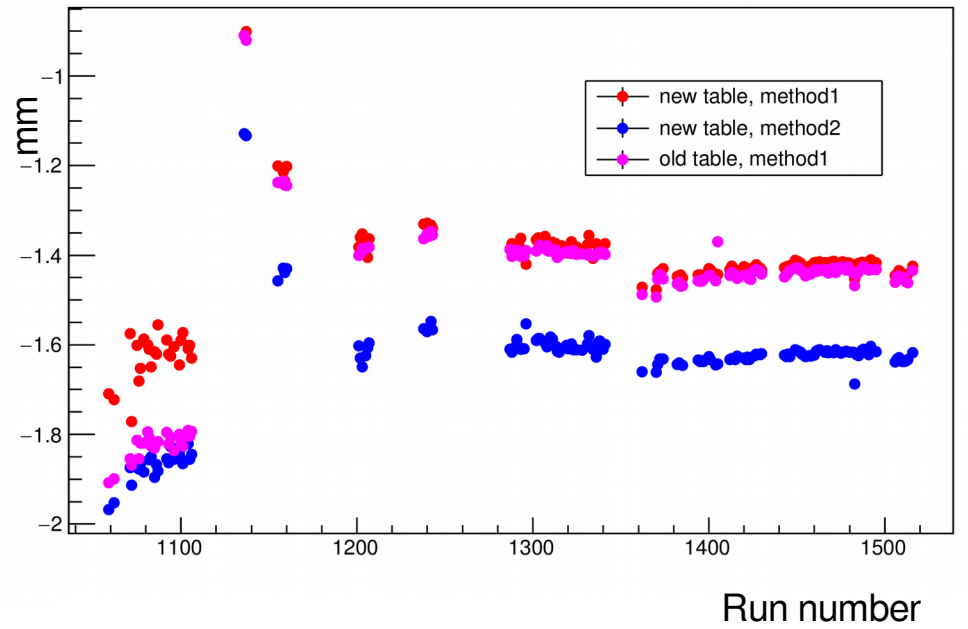


# Beam offset compare

gem2x compare

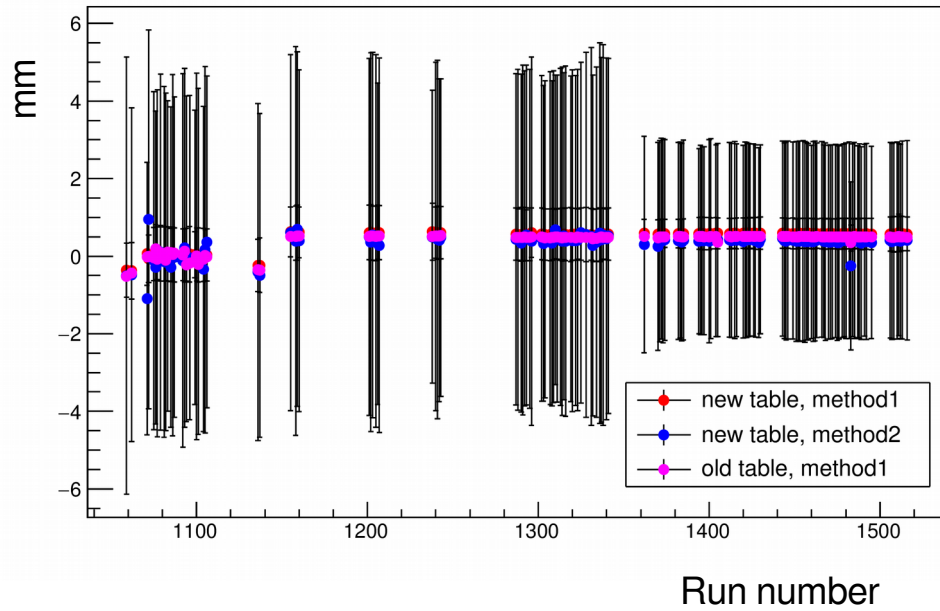


gem2x compare

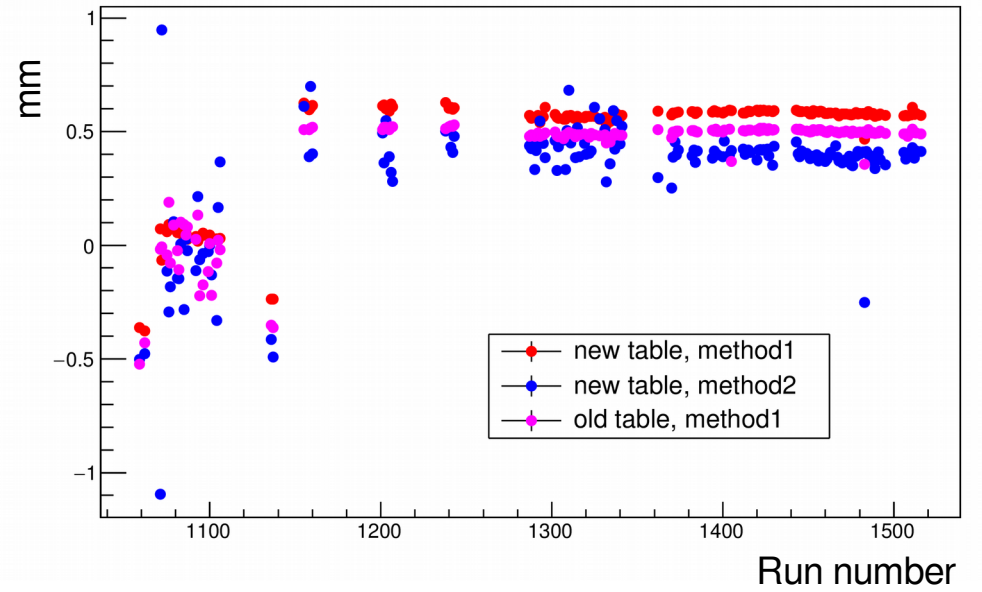


# Beam offset compare

gem2y compare

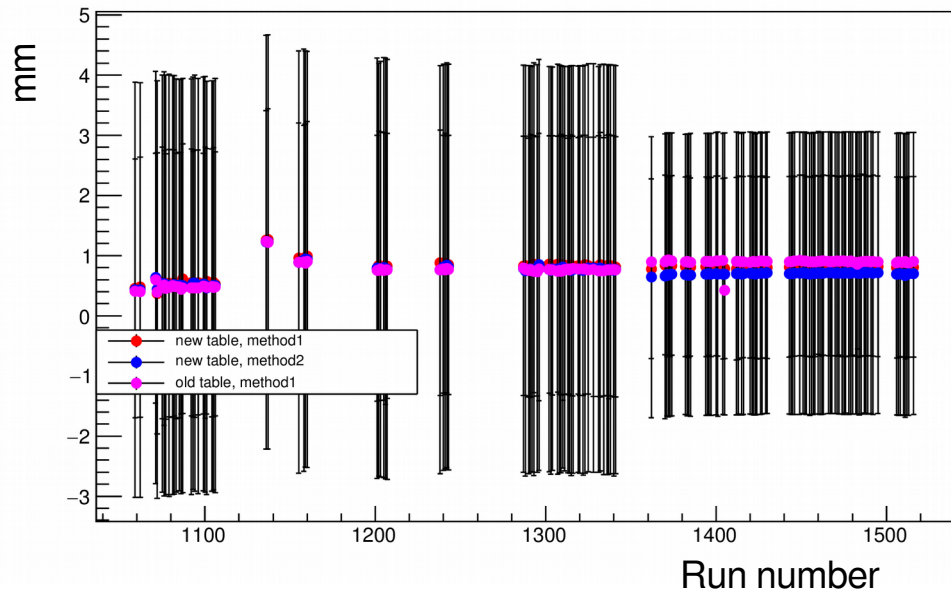


gem2y compare

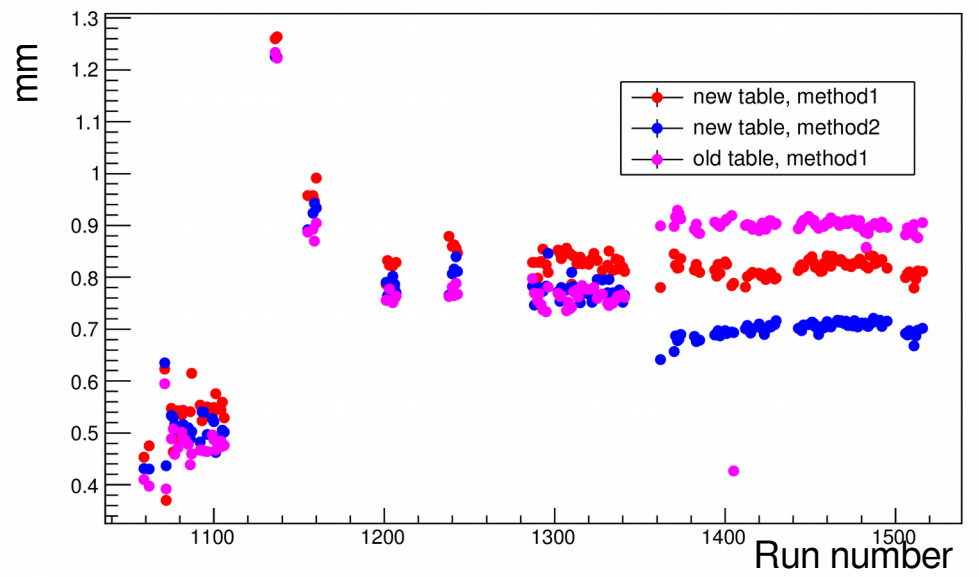


# Beam offset compare

hycal x compare



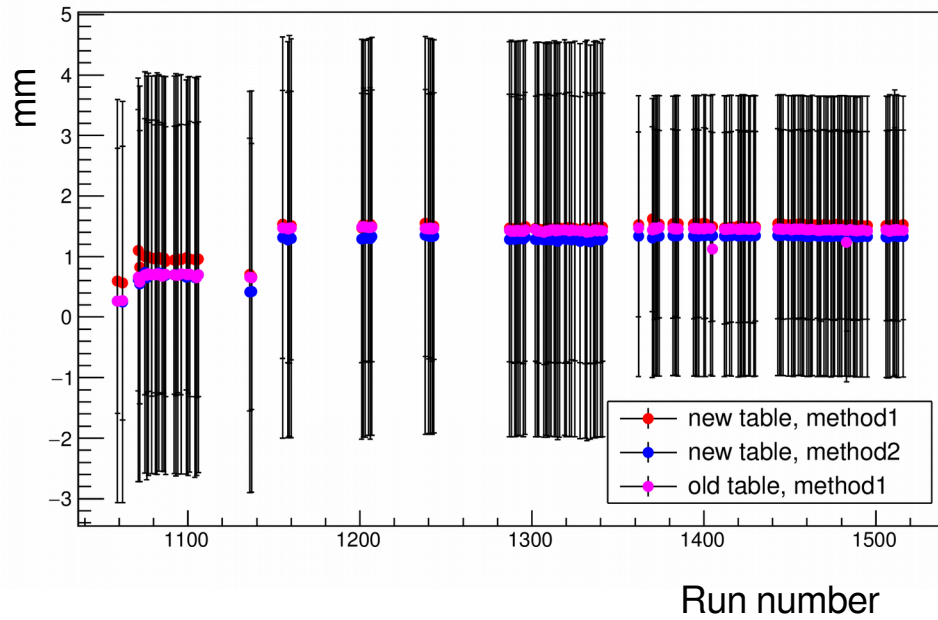
hycal x compare





# Beam offset compare

hycal y compare



hycal y compare

