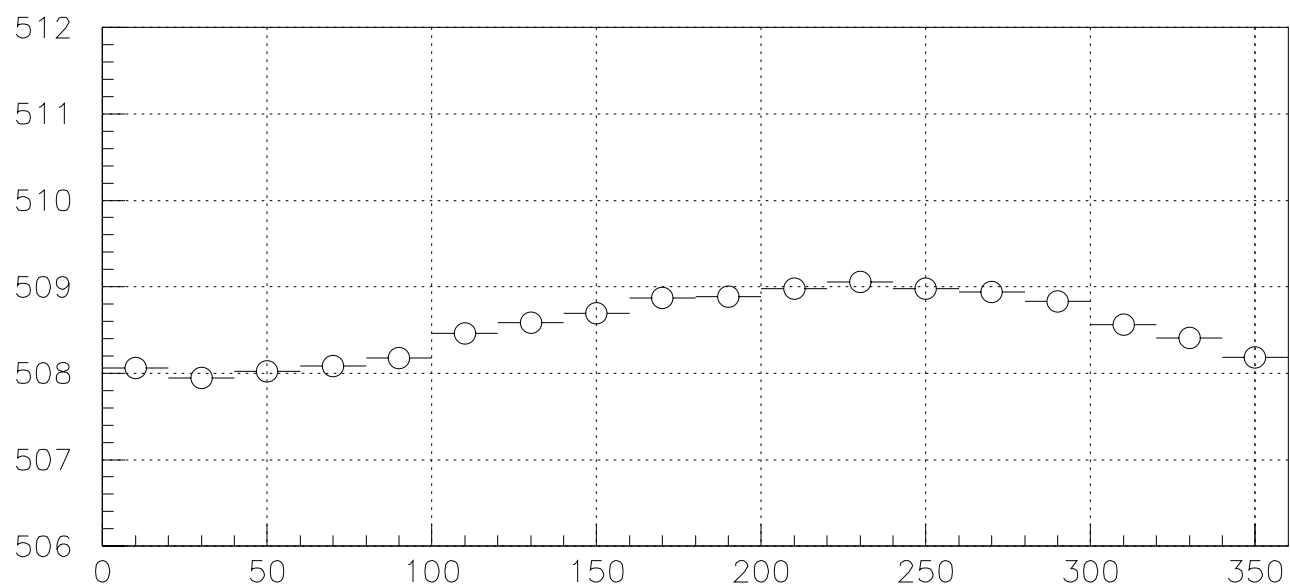
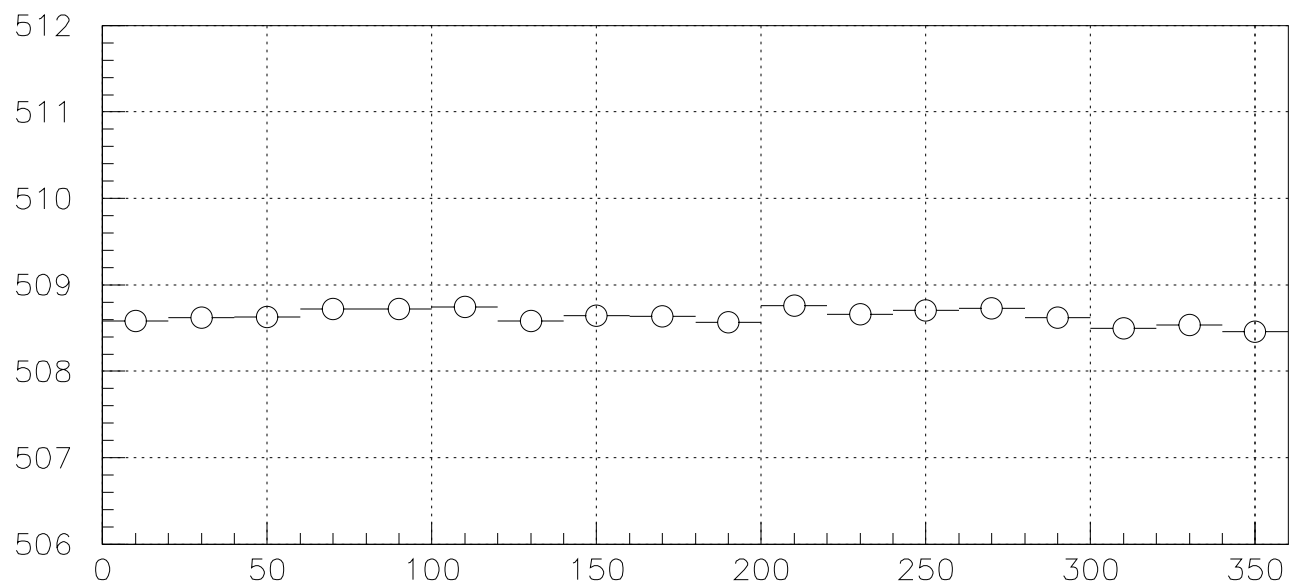


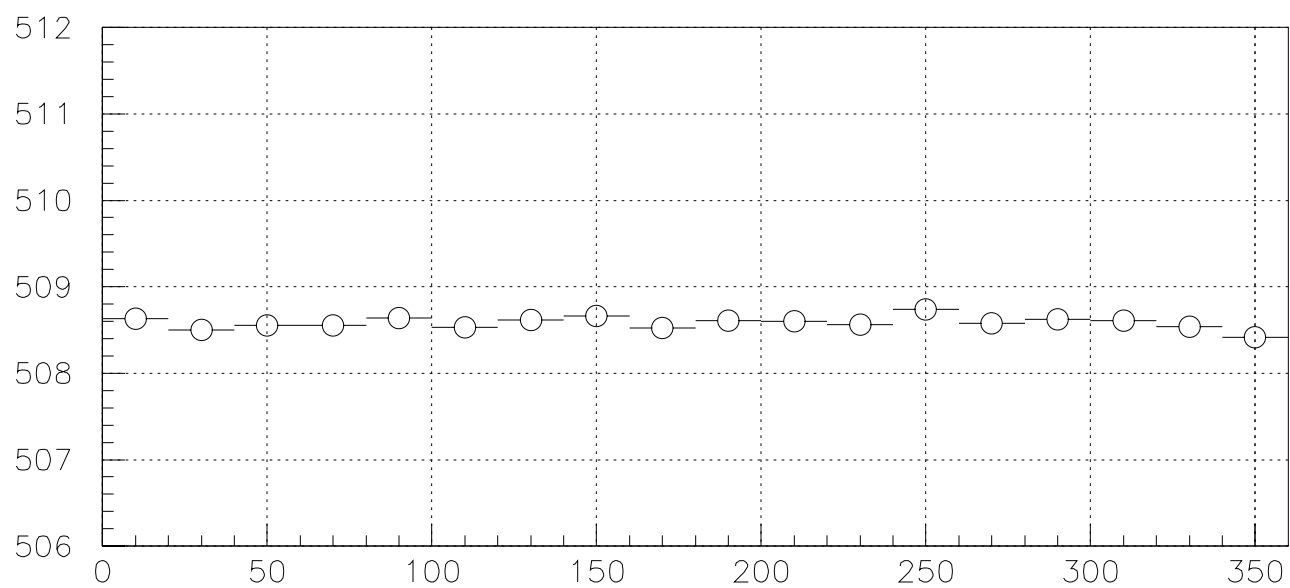
P_n vs φ for $\Theta < 40$



P_p vs φ for $\Theta > 140$



P_n vs φ for $\Theta < 40$



P_p vs φ for $\Theta > 140$

Drift Chamber MC geometry

- EP geometry correctly modeled (Ti screws and connectors missing: EMC reco can see them ?)
- Inner wall modeled with best knowledge:
 $0.01\text{Al} + .075\text{CF} + 0.01\text{Al}$ cm. Track reco uses CF total equivalent of material; data vs mc now
- FEE on EP: added .5 cm CF to EP thickness
- Outer wall: 0.4CF cm. Al skin missing; CF struts missing: EMC reco can see them ?
- DC feet and IR legs missing: EMC reco can see them ?

IP/DC/EMC global geometry

- Currently all co-axial and centered
- In real life DC below IP by $\Delta y = -1\text{cm}$, barrel EMC below by $\Delta y = -0.4\text{cm}, -0.7\text{cm}$
- To fire correct (shifted) hits in the DC and keep current DB wire description same for DATA and MC
 - Start trajectory wrt IP system. Move GEANT DC “box” so tracks enter DC wall in the correct position **V_{in}**
 - When inside the DC, trace particle in the DC system (**V_{in} → V_{in} - Δy**). Then reconstruct in DC system like for the data and before filling DTFS, move track by **+ Δy**
 - When exiting the DC (exit point needs careful treatment) refer particle trajectory back to IP system (**+ Δy**) to generate EMC clusters in the correct position
 - NOTE: it seems more convenient to move the particle trajectory than the wire positions inside the DC