

Beta* at D0

M. Weber, FNAL
A. Chandra, UCR

Added stores

beta* from a 4h period (one run) each, in:

4862

4902

4947

4970

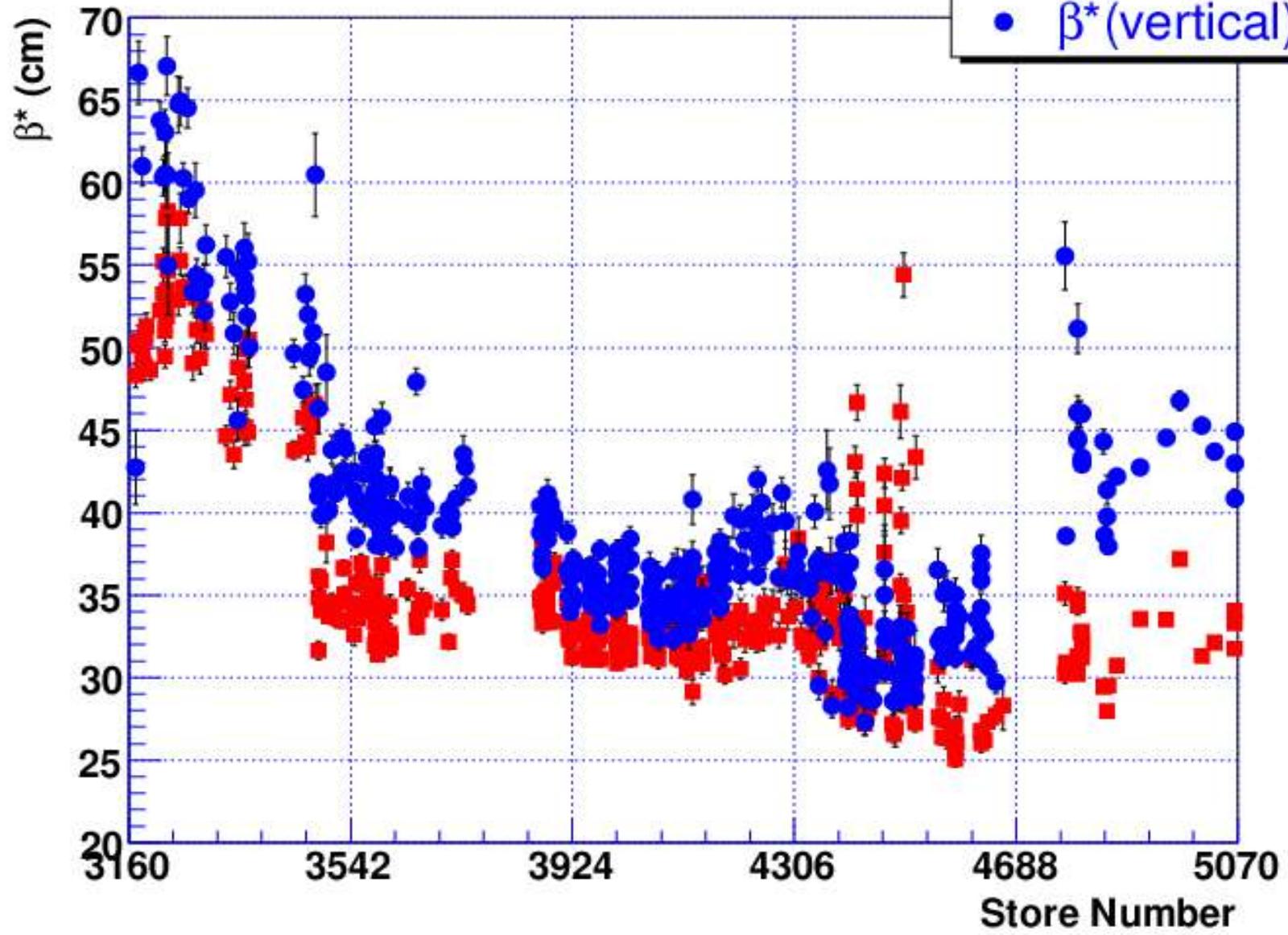
5008

5030

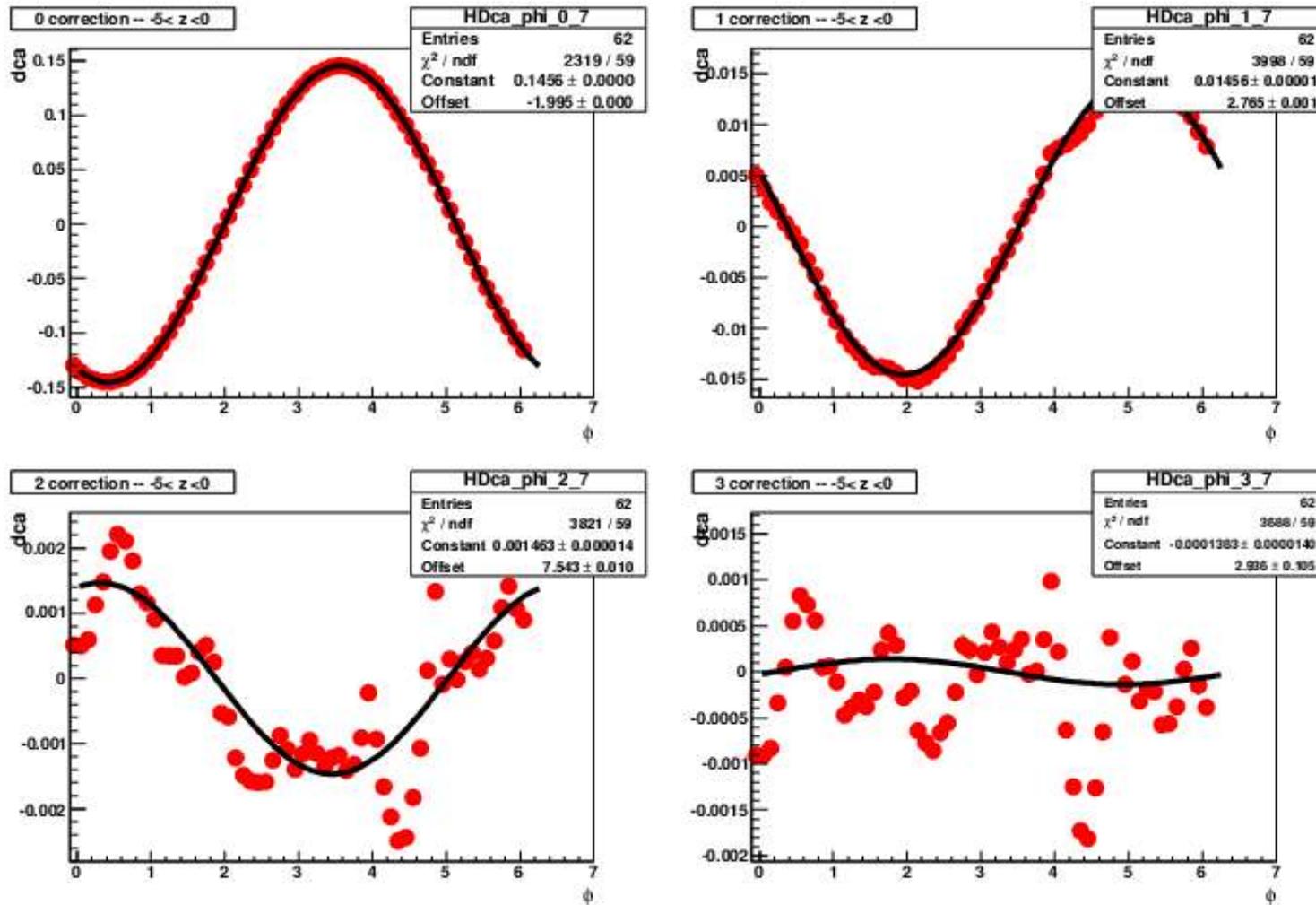
three runs in 5063

beta* Vs Store

- β^* (horizontal)
- β^* (vertical)

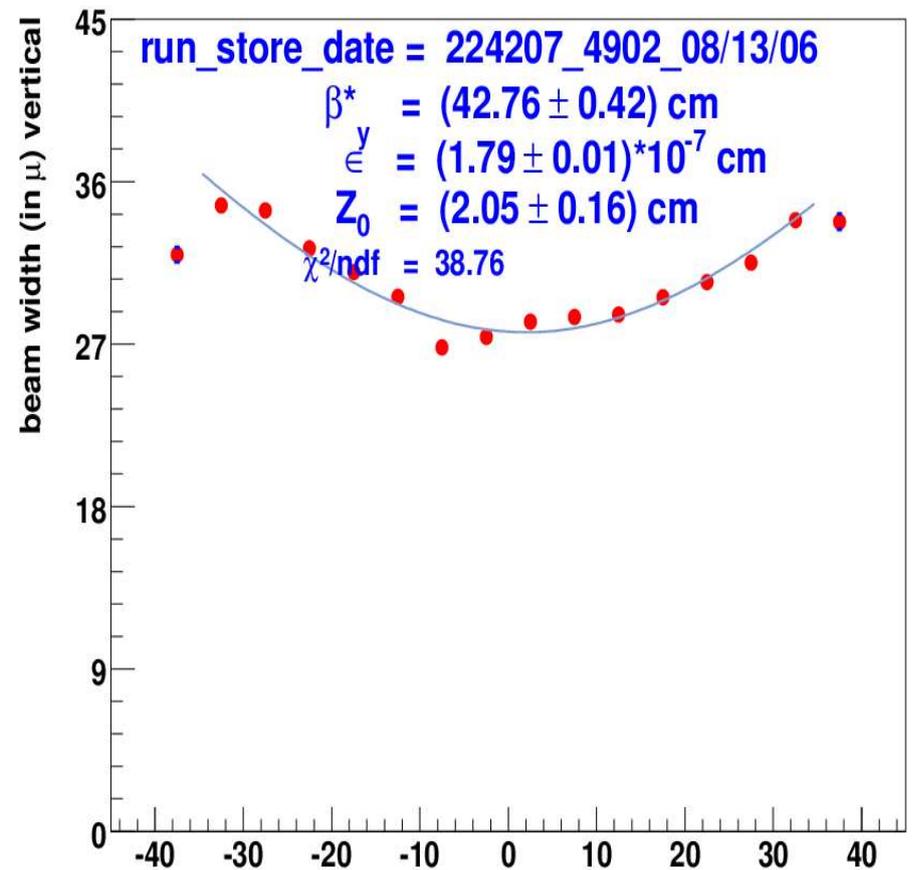
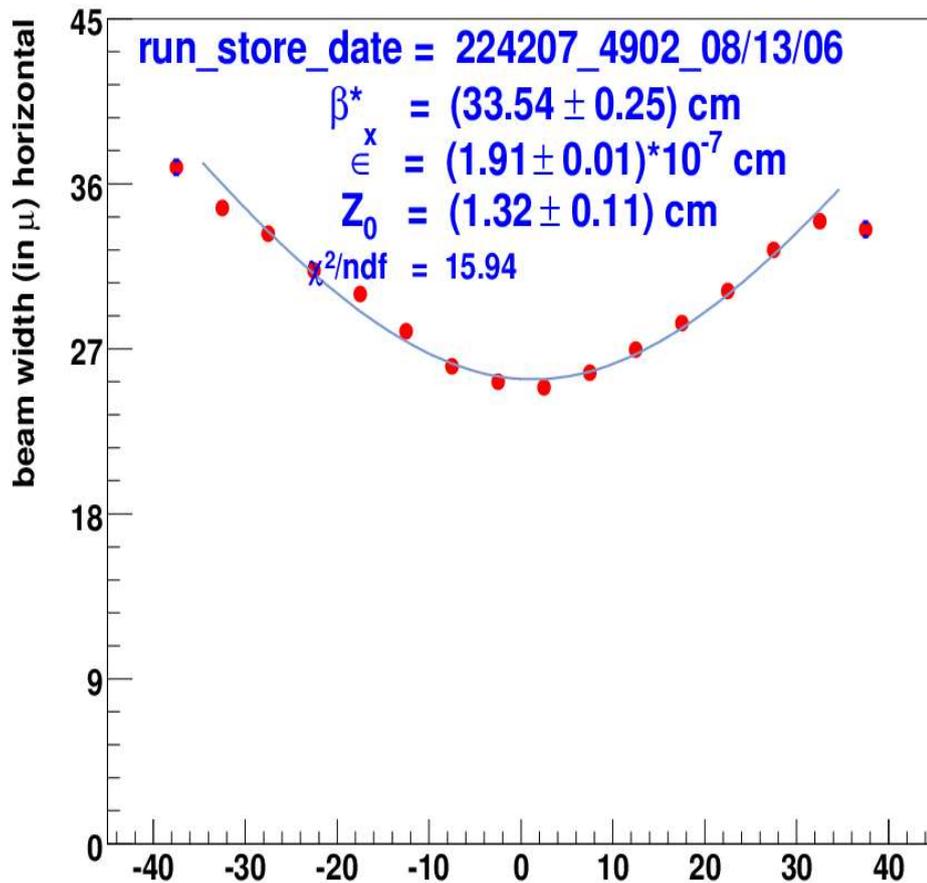


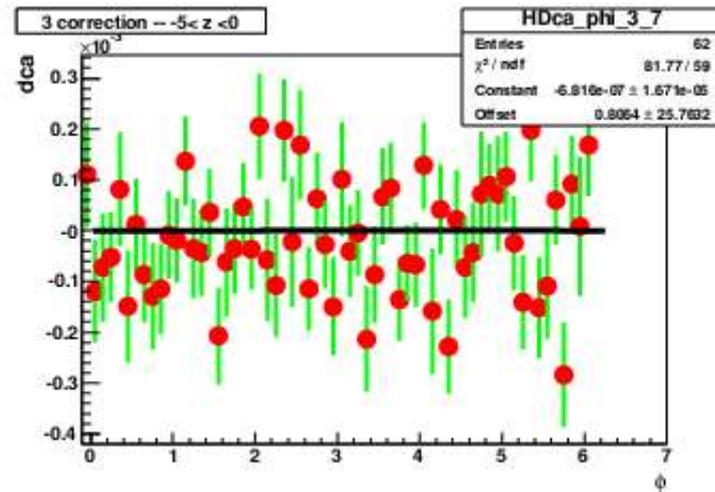
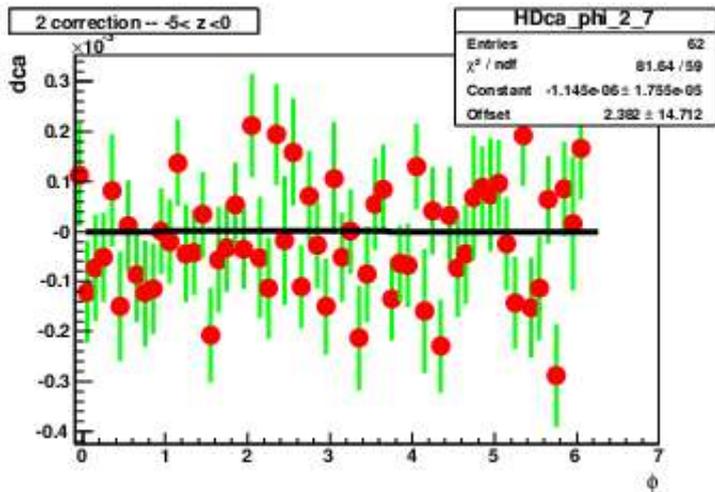
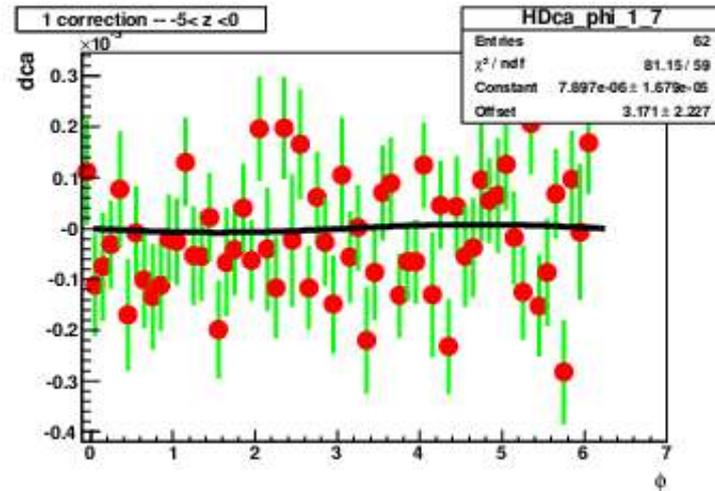
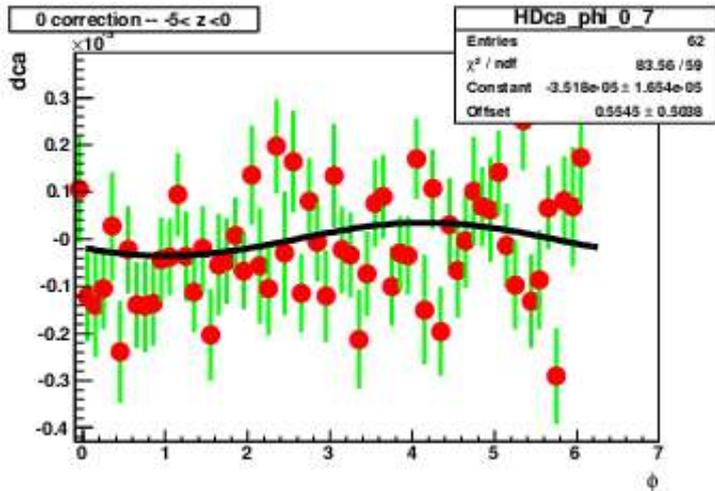
DCA vs. Phi



added additional iteration (4th), seems fine now

Beam width vs. Z in cm (store 4902)





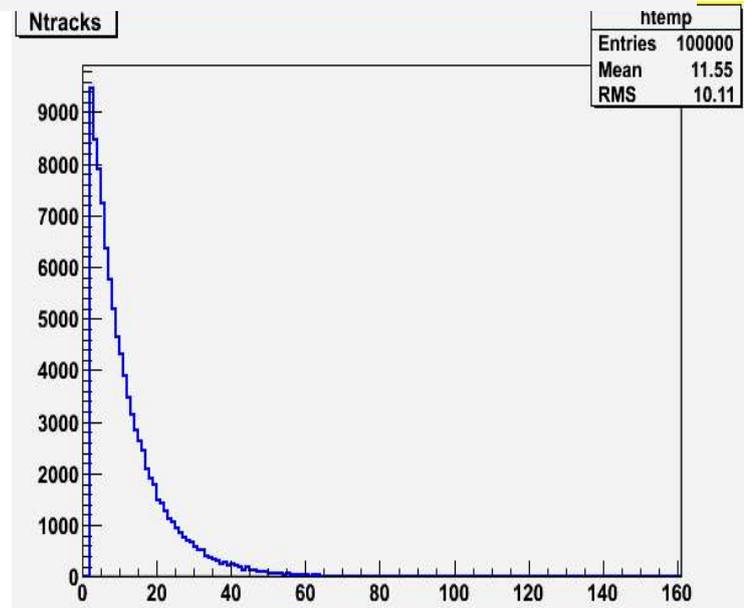
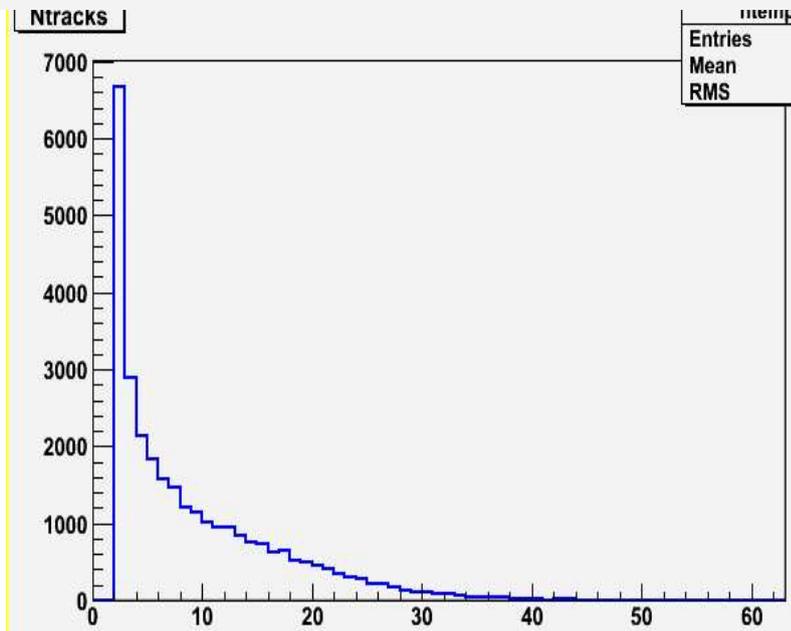
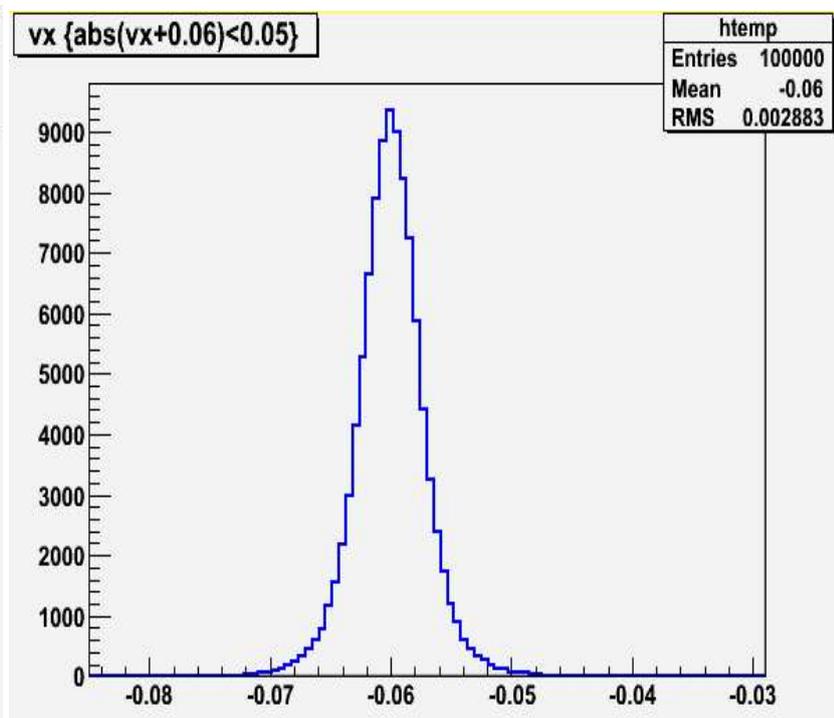
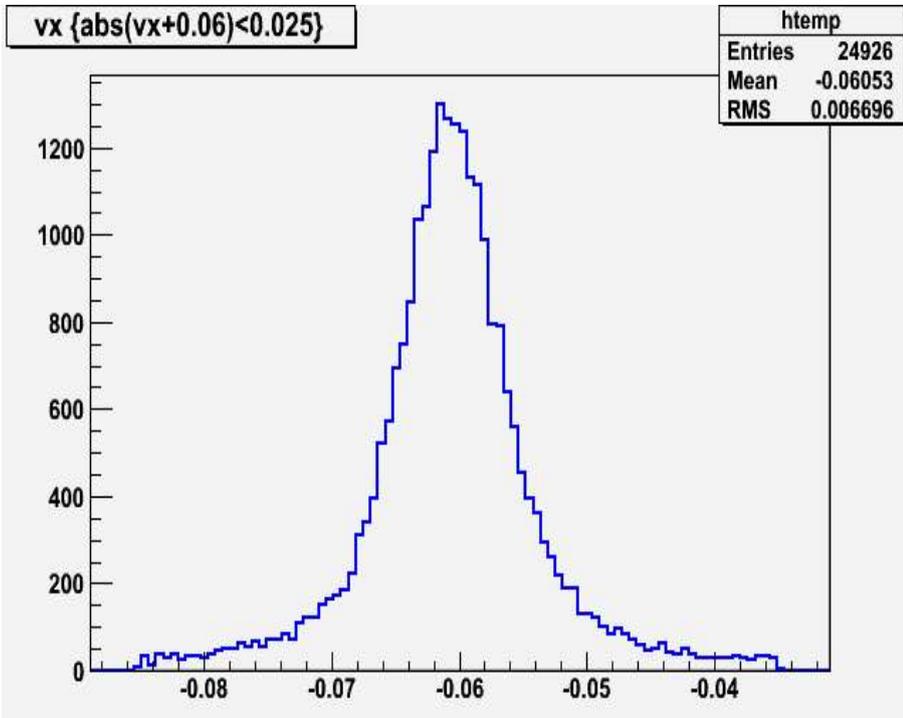
ToyMC studies

Generate vertices and track DCA and Phi.

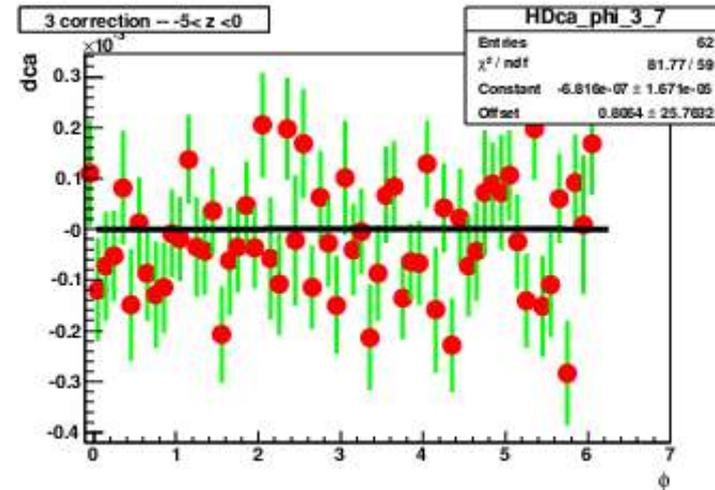
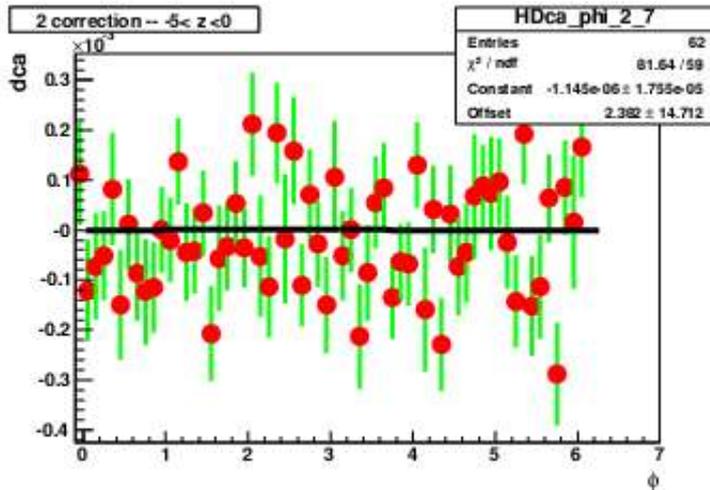
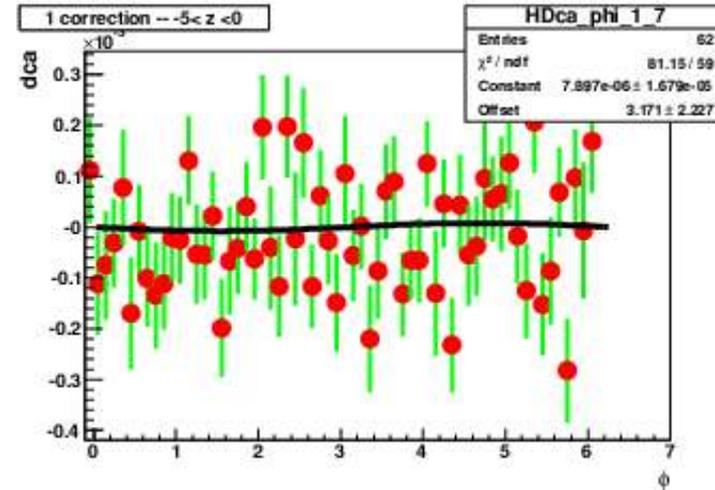
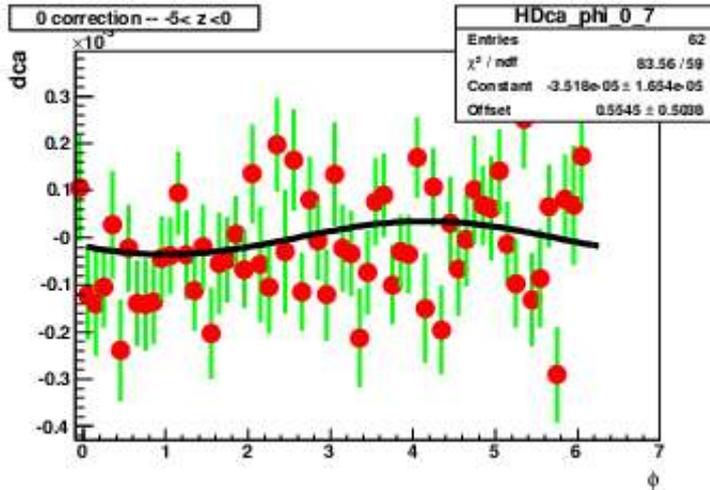
Beamwidth vs. Z according to beta function.

Vertex position smeared according to impact parameter resolution.

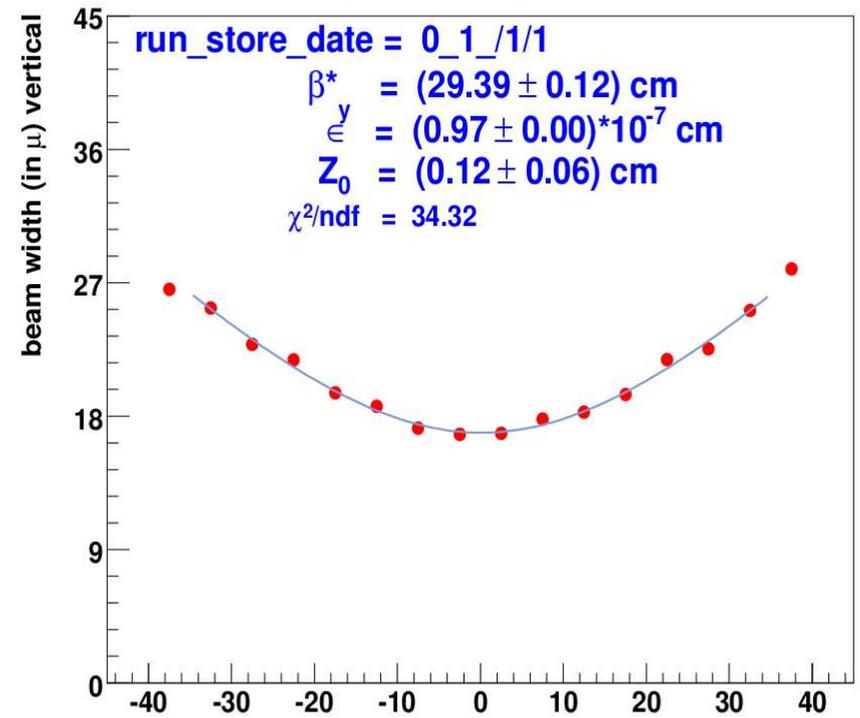
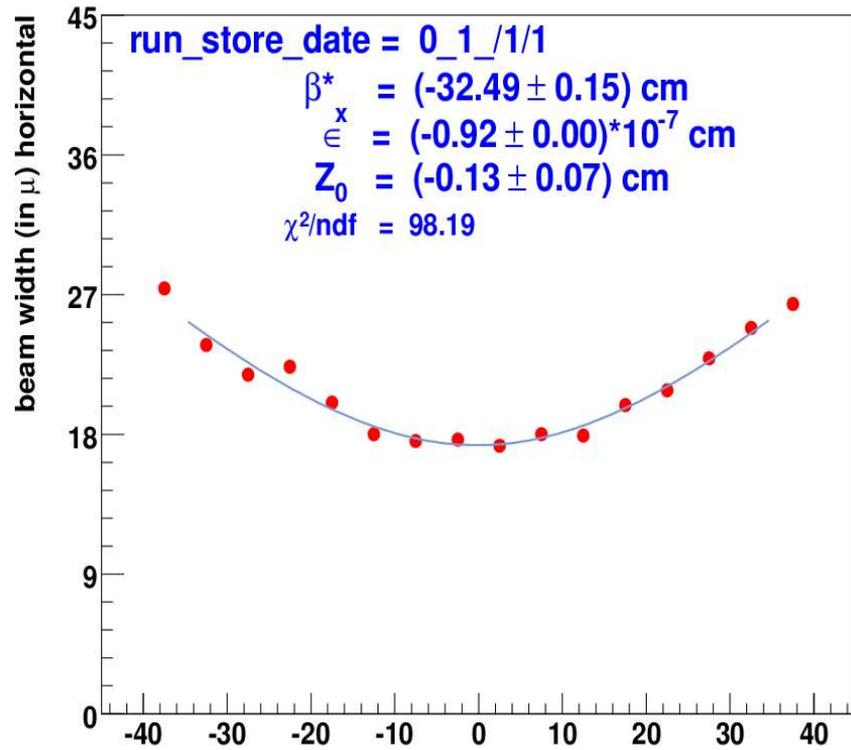
Run through the same code.



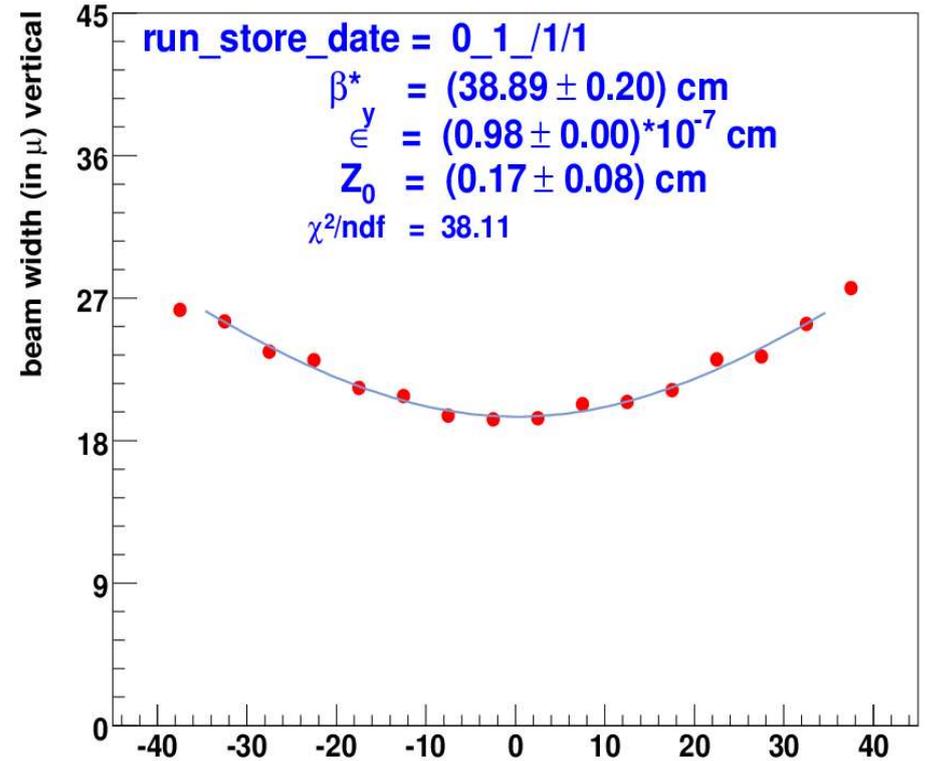
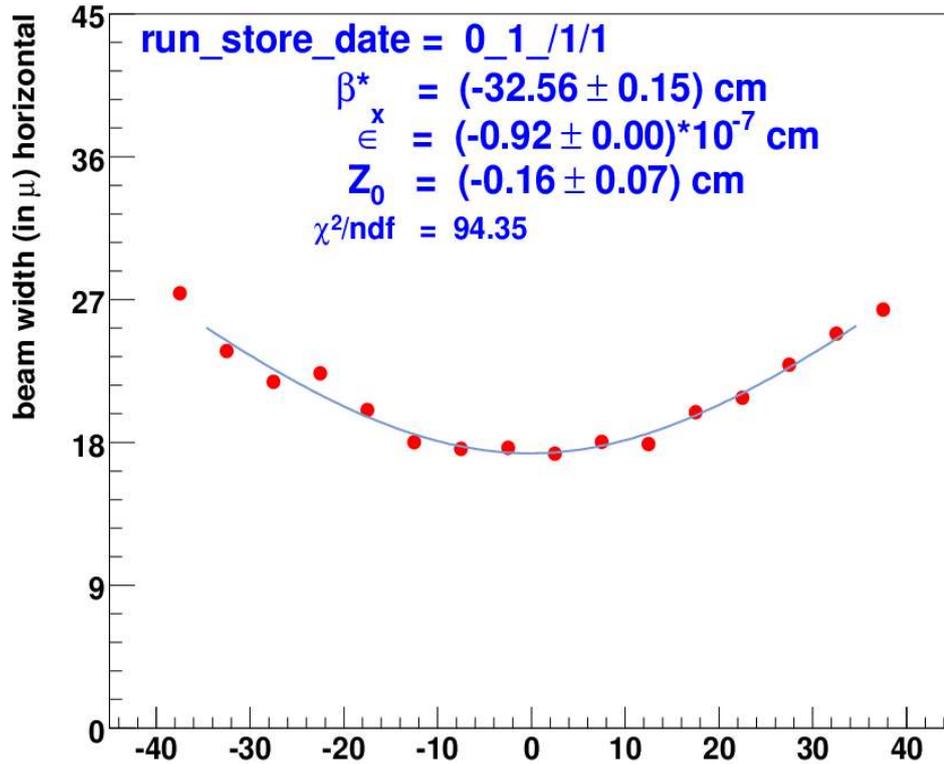
First beam at 0,0



30 - 30

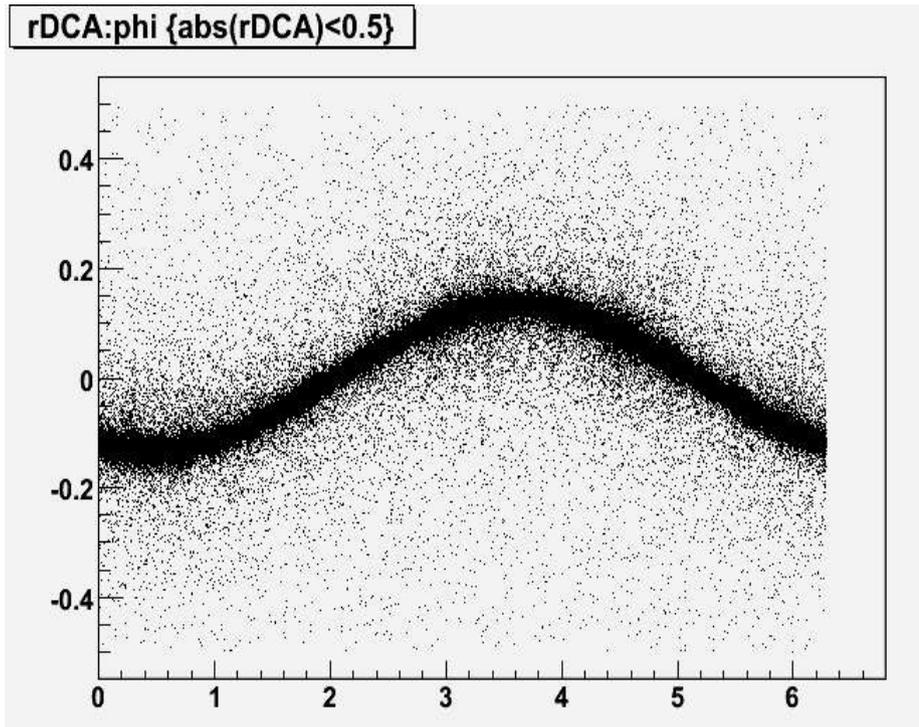


Try betax=30; betay=40

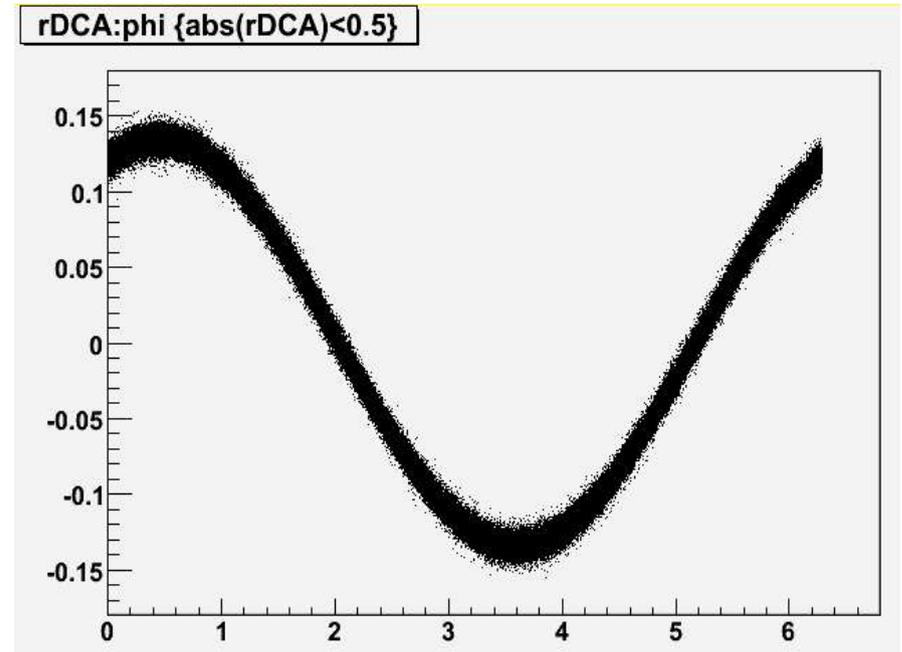


Move beam to -0.6mm/1.2mm

DCA vs. Phi

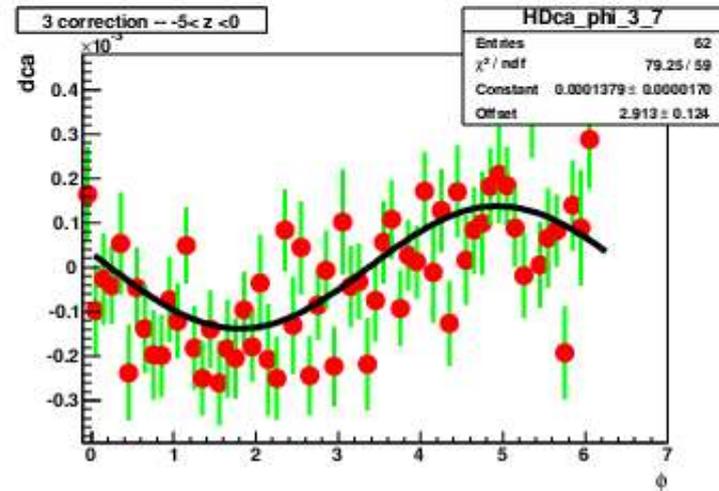
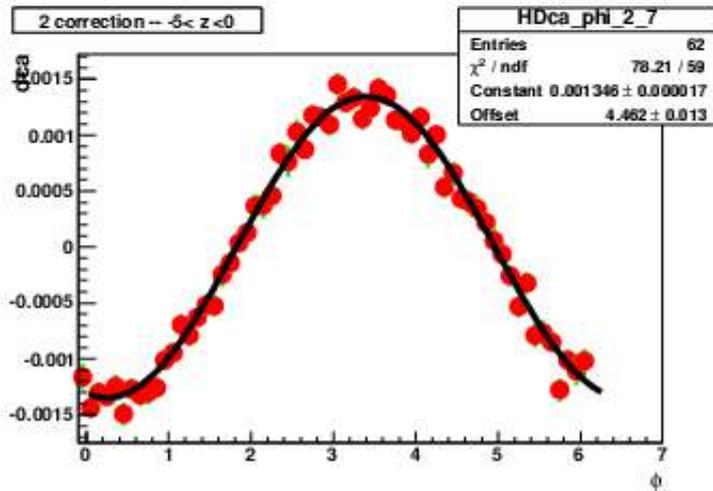
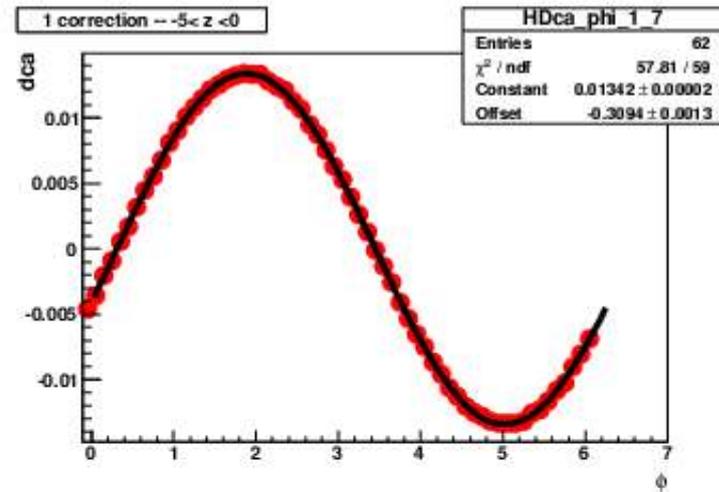
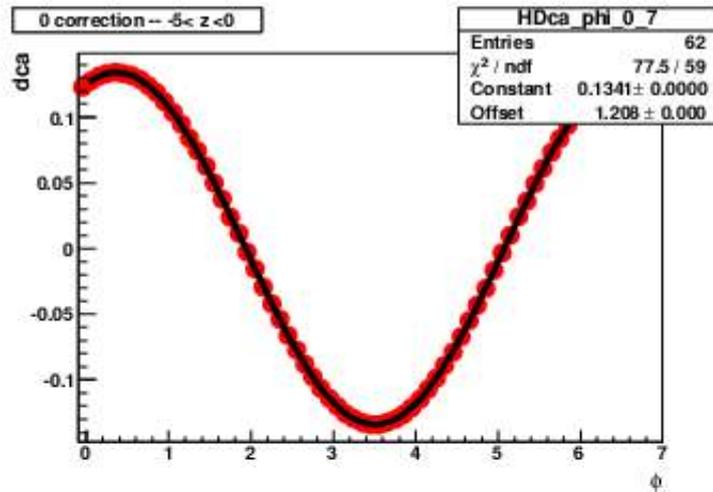


DATA



ToyMC

Corrections



$x=-0.06$ $y=0.12$

