

Ftksim updates

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July 1, 2008

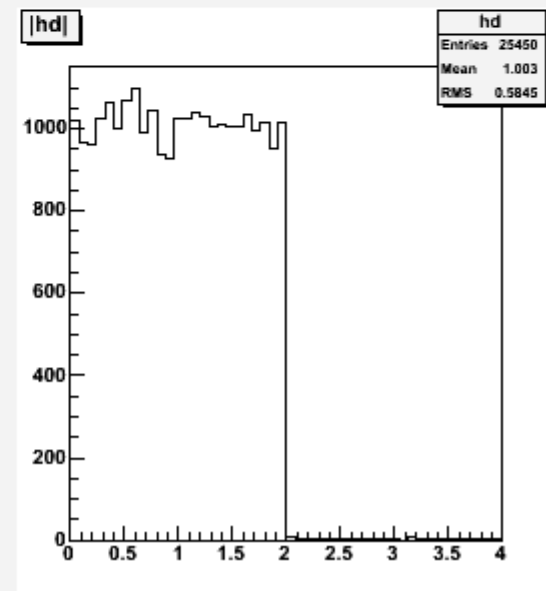
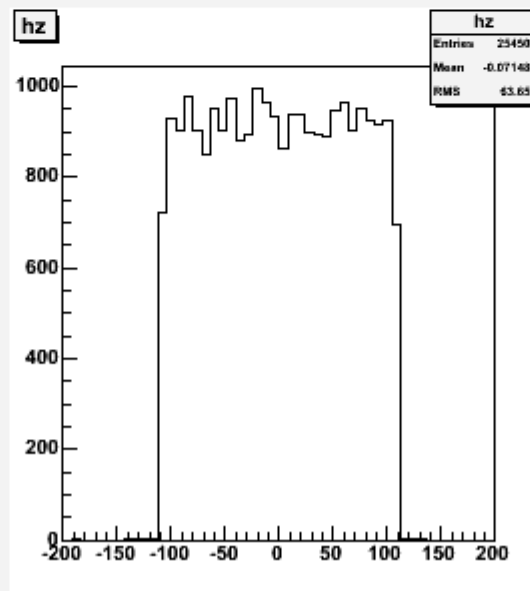
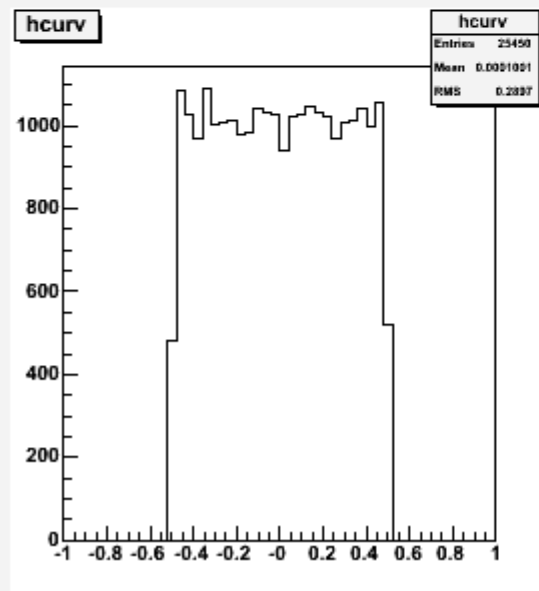
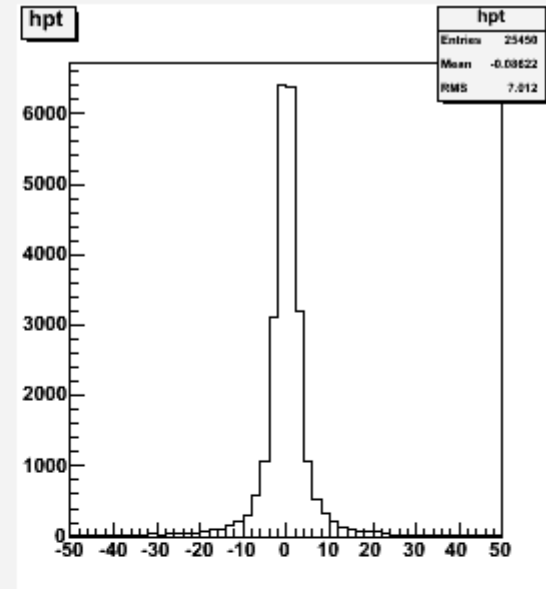
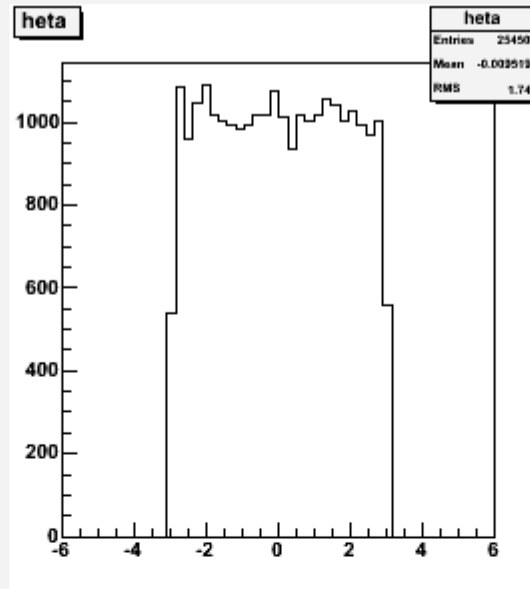
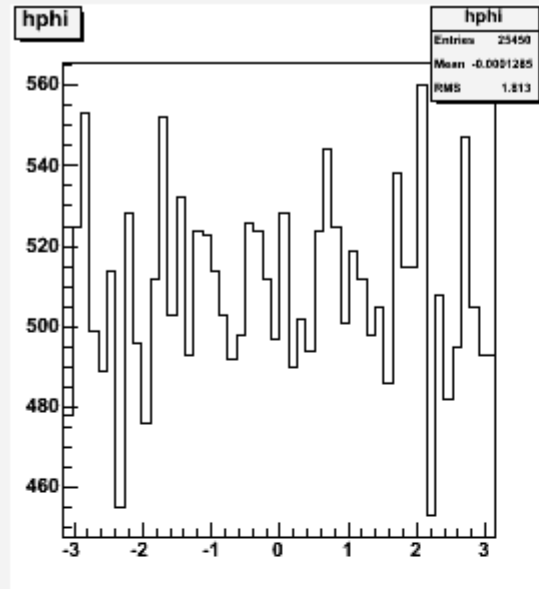
Latest banks

- Updated constants (z0 definition fix)
 - compatible with old patterns and sectors
- Pattern banks 20M (all) -> 10M (w/o 1track)
 - 8x200M patterns-from-constants + 350M pattgen
 - Total: 9 runs merged * 32; ~87-88% coverage.
 - Time: ~4 days
- /castor/cern.ch/user/k/kapliy/
 - constants.tar.bz2, slices.tar.bz2
 - sectors.tar.bz2, patterns.tar.bz2
 - indep_singlemu.tar.bz2 – 1M singlemuon sample

Running ftksim

- /castor/cern.ch/user/k/kapliy/config.tar.bz2
 - Extract and read config/README.AK
- Generates all .in files
- Can submit one ftksim job overnight
 - Will run sequentially all 32 subregions
- merge,hitwarrior,ftksim_comp in one line
- Produces basic plots
- Note: updated version of **mergePOut** in CVS

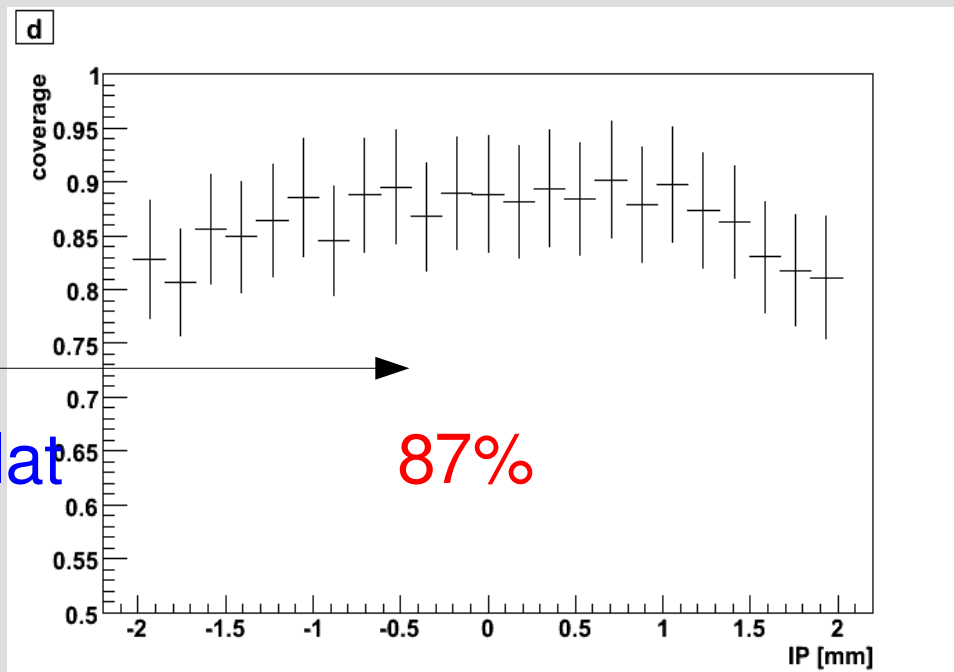
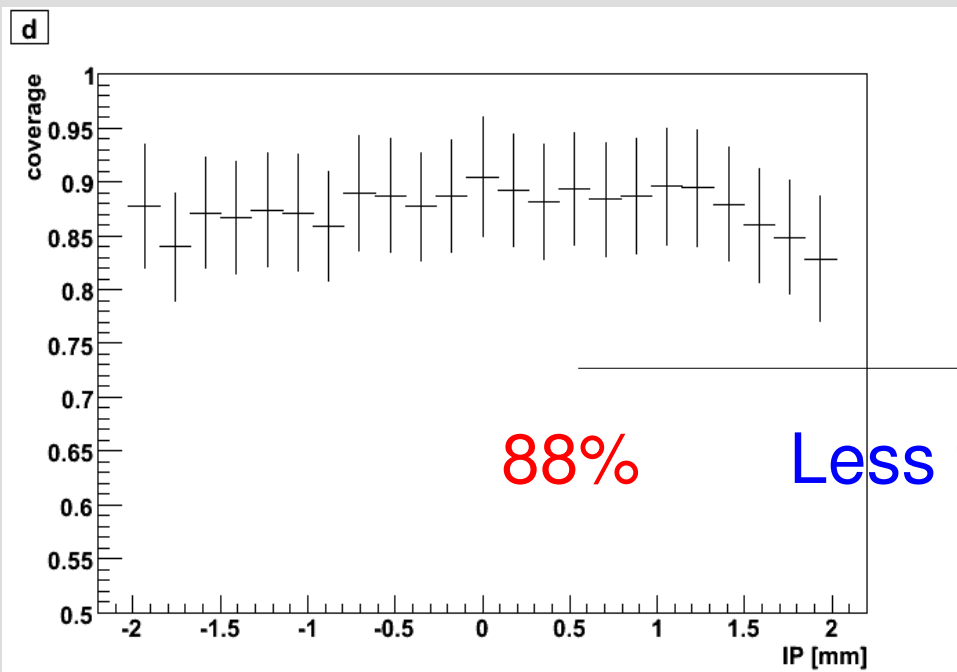
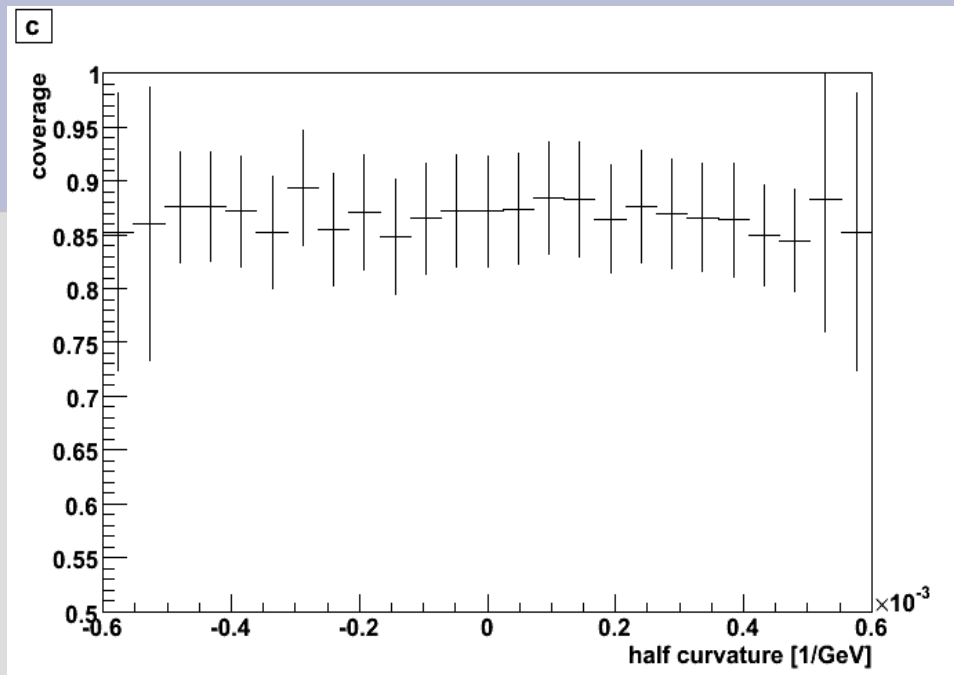
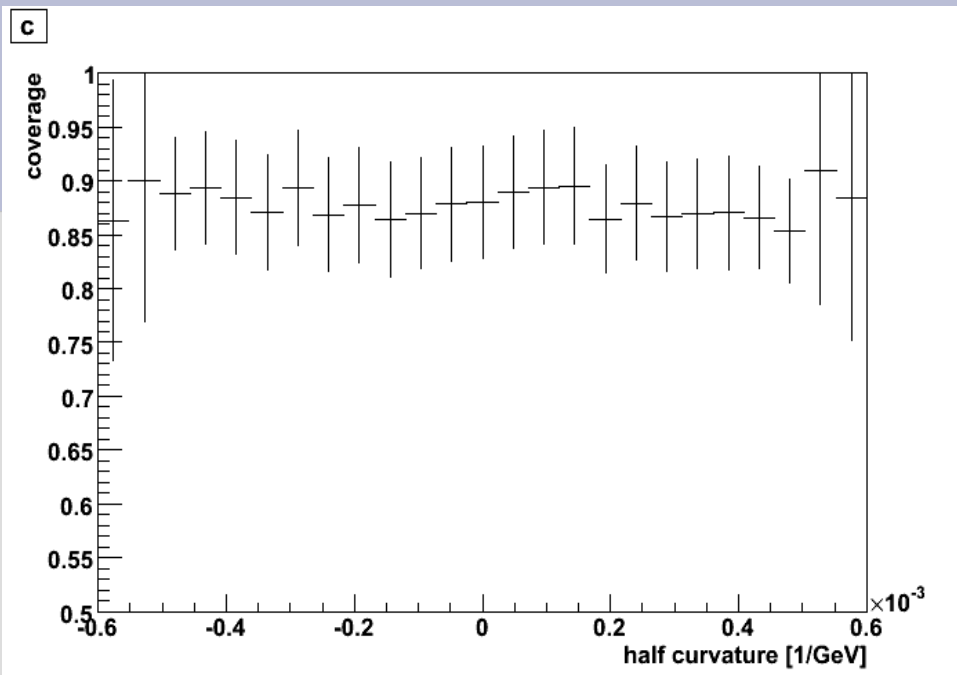
Training parameter coverage



Pattern coverage

All patterns

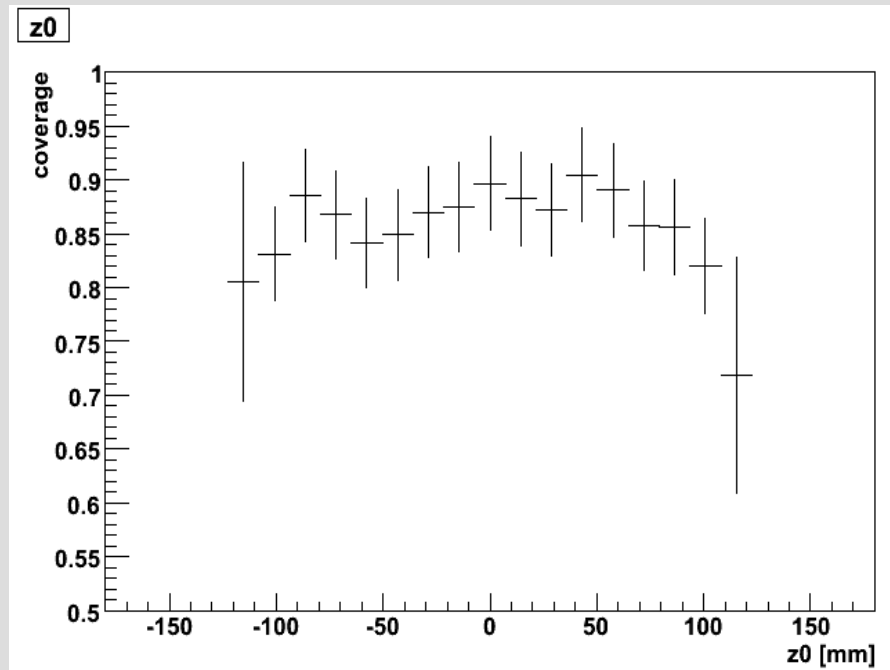
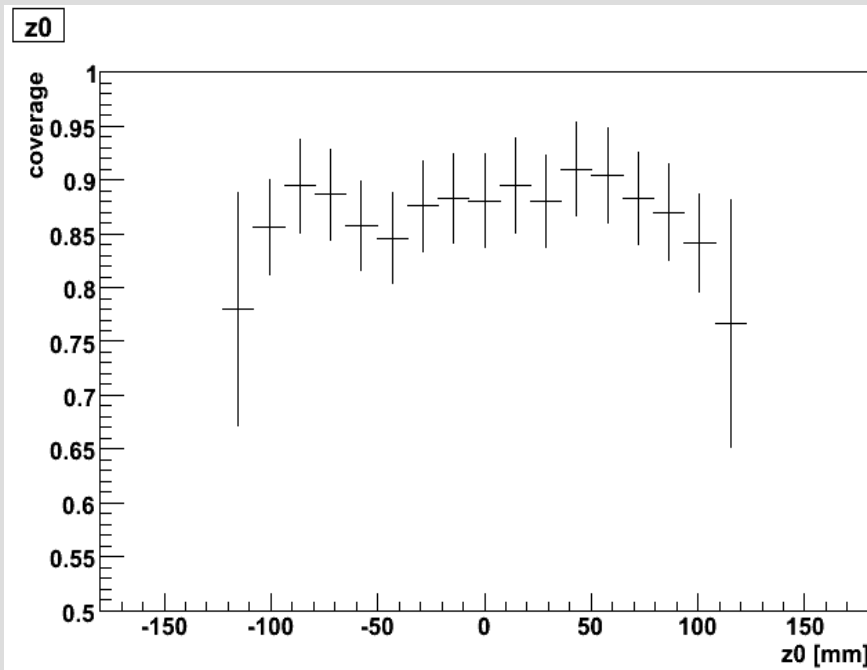
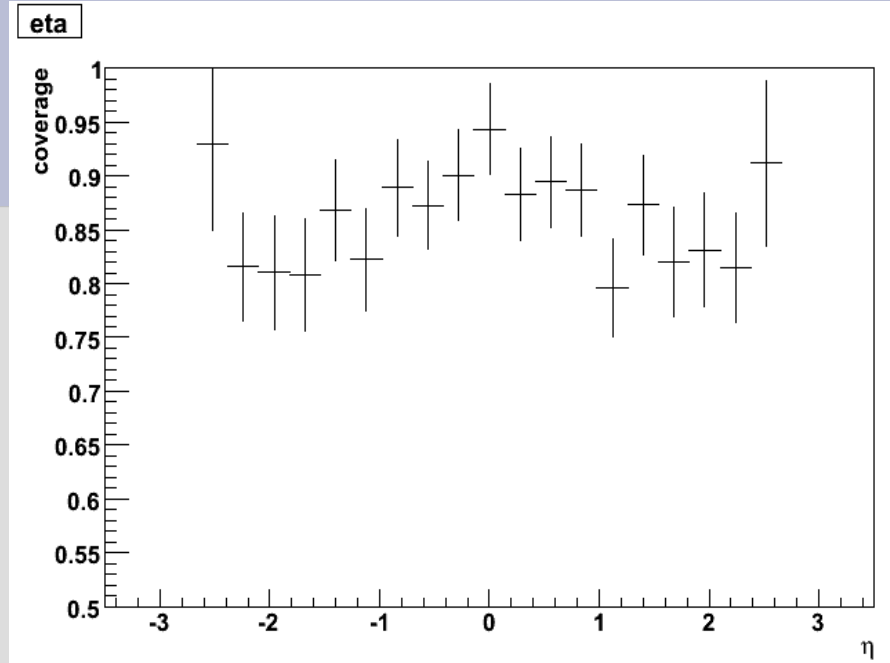
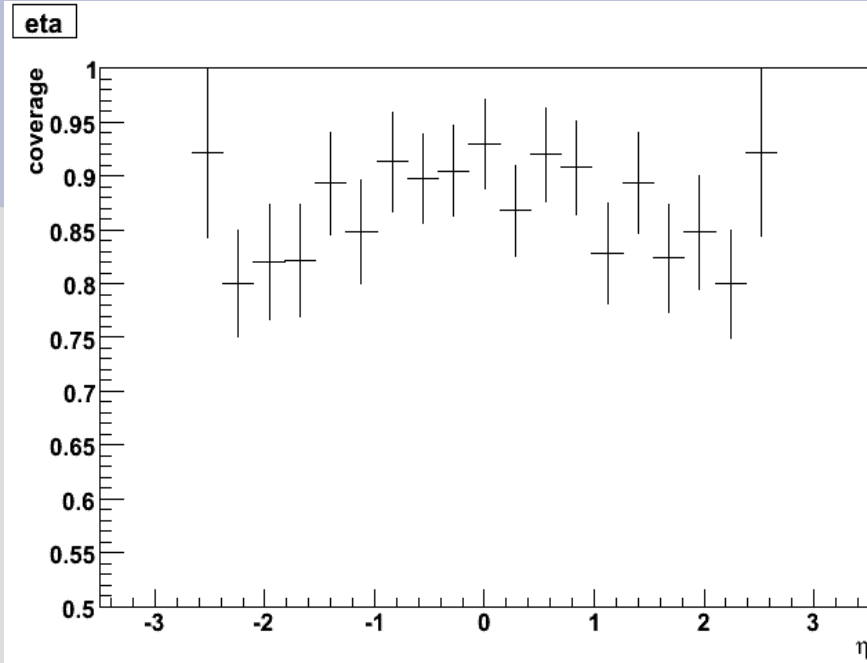
> 1 tracks



Pattern coverage

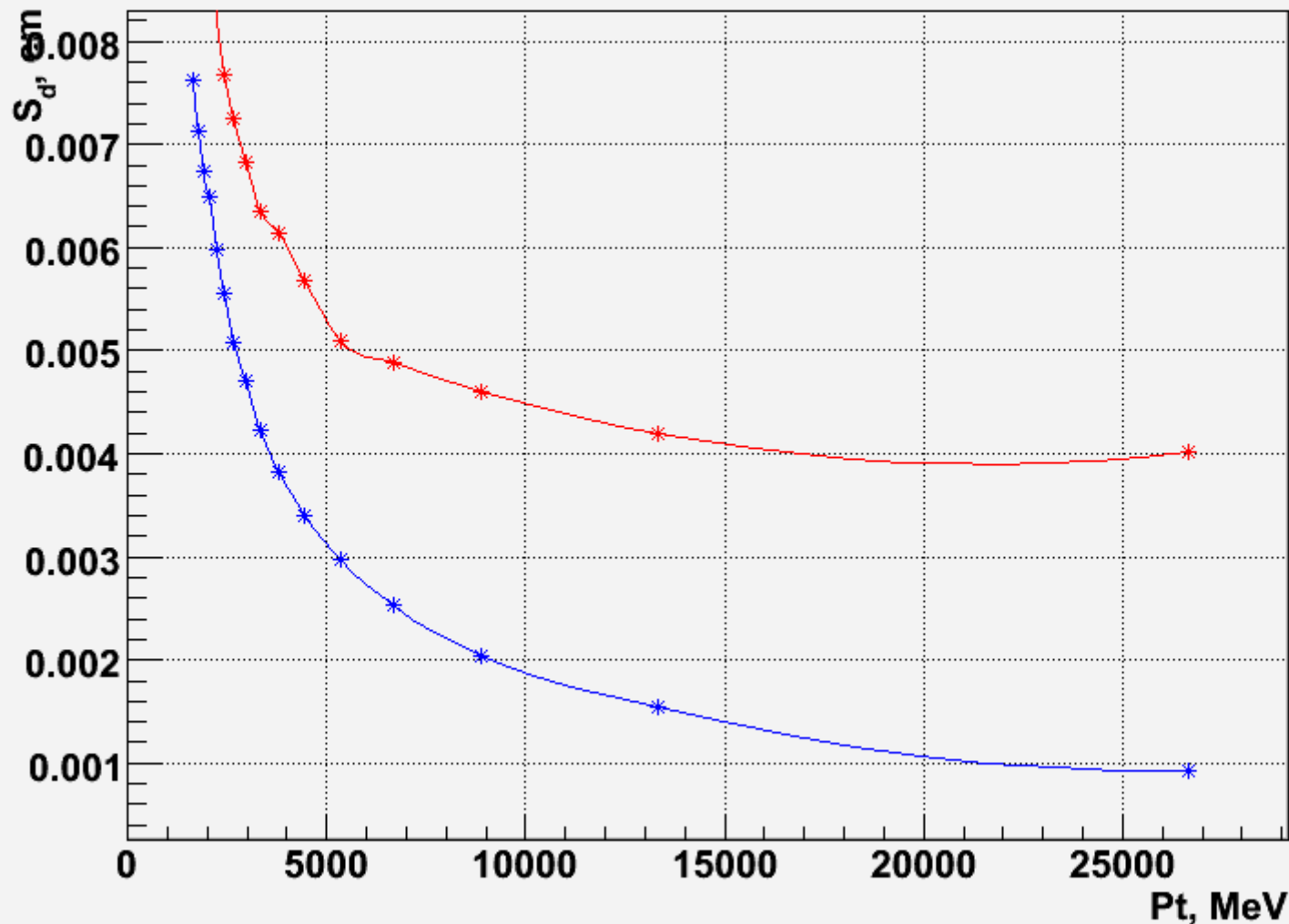
All patterns

> 1 tracks



IP resolution: single muons

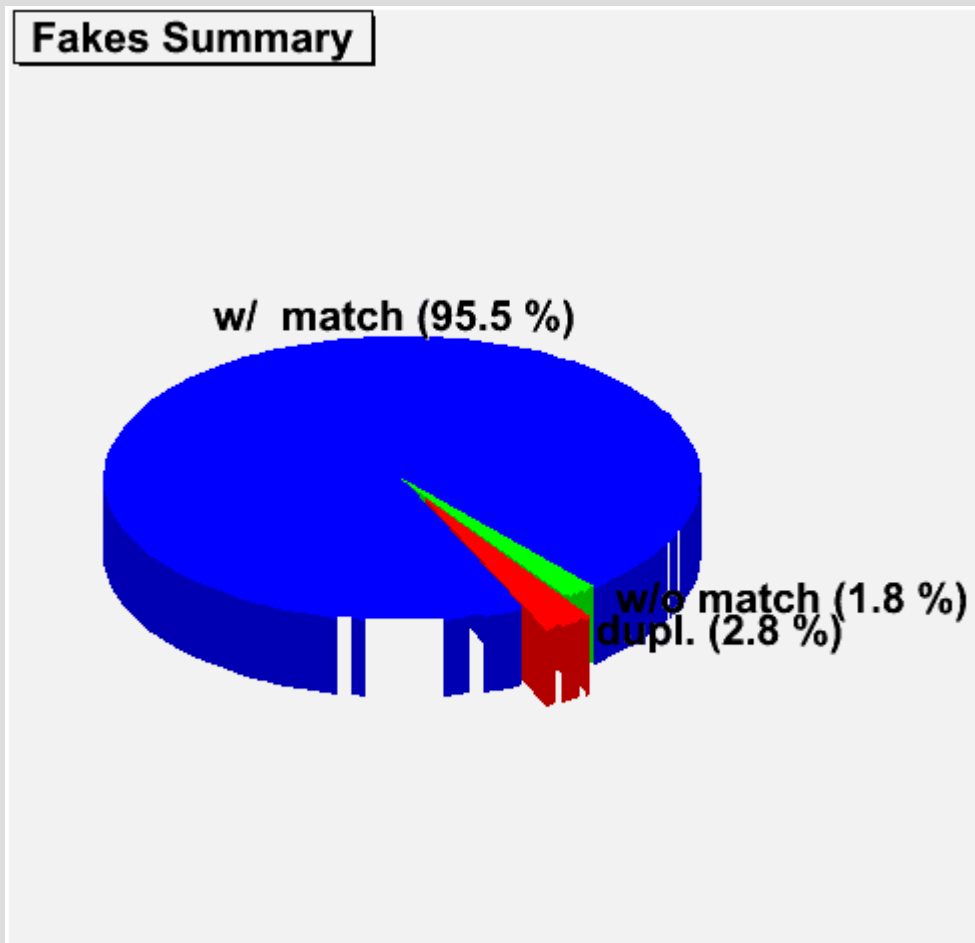
Impact Parameter Resolution, hits



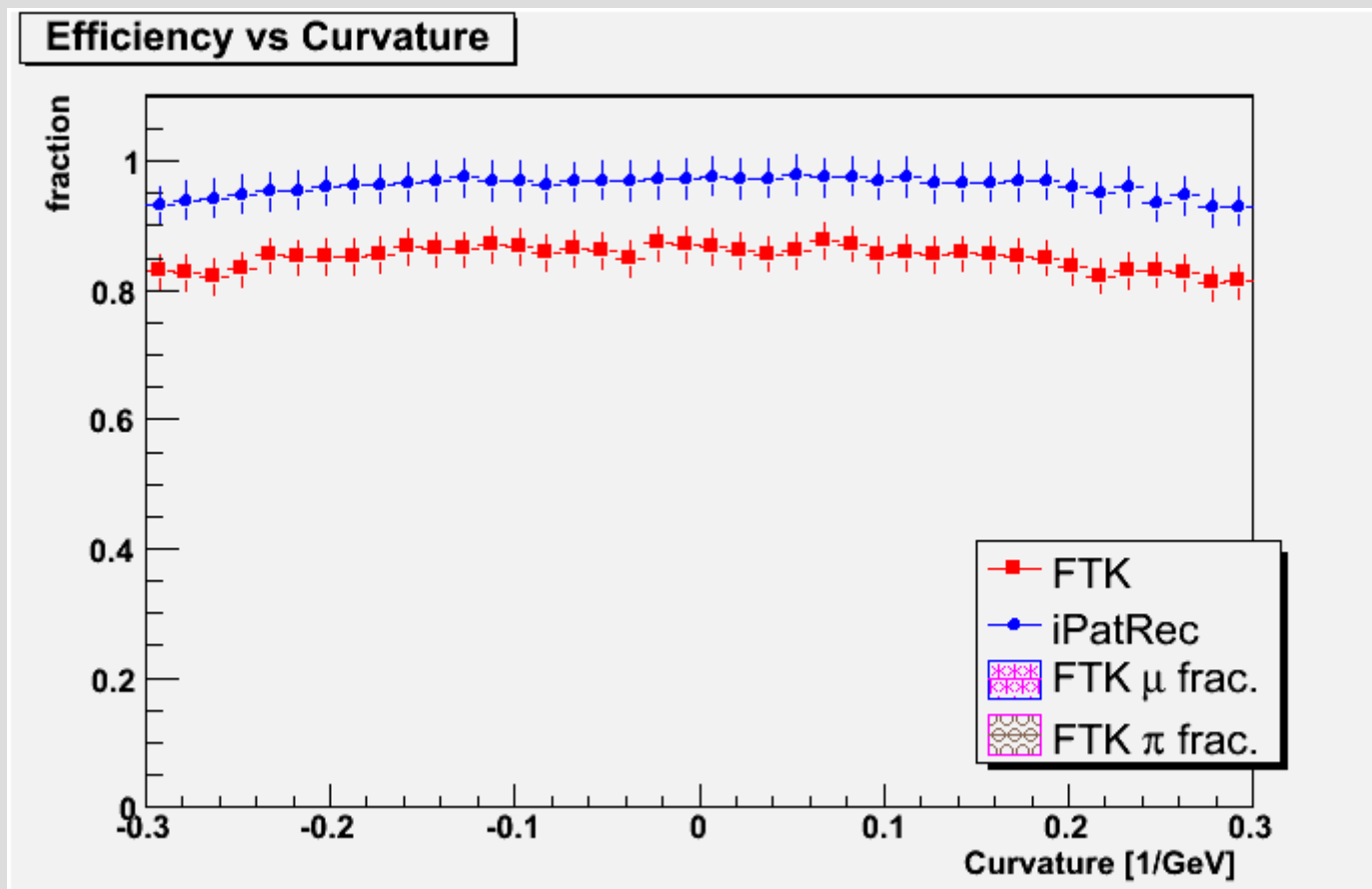
~40 microns
(over full eta)

No change from
before!

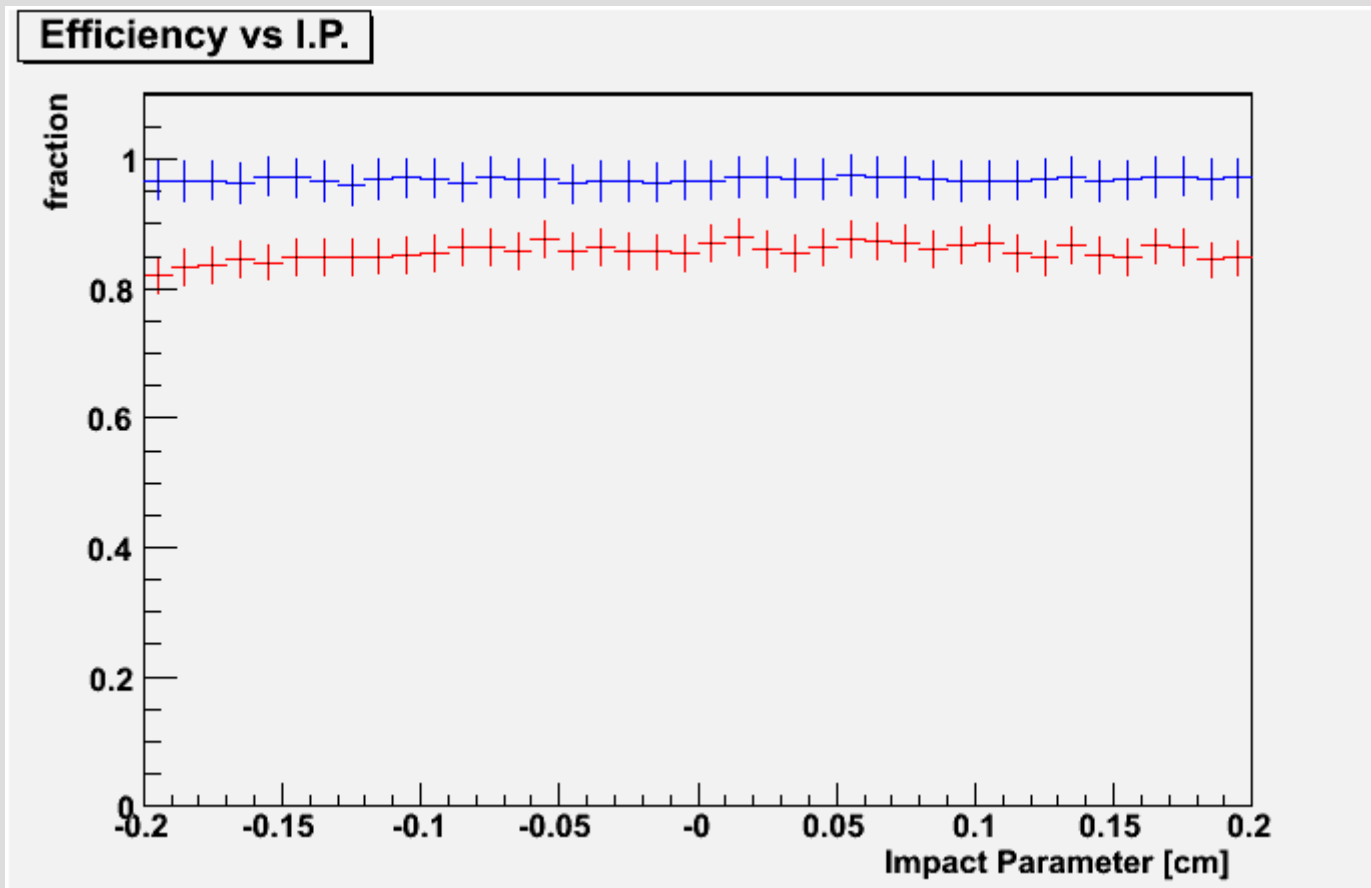
Fakes and ghosts summary



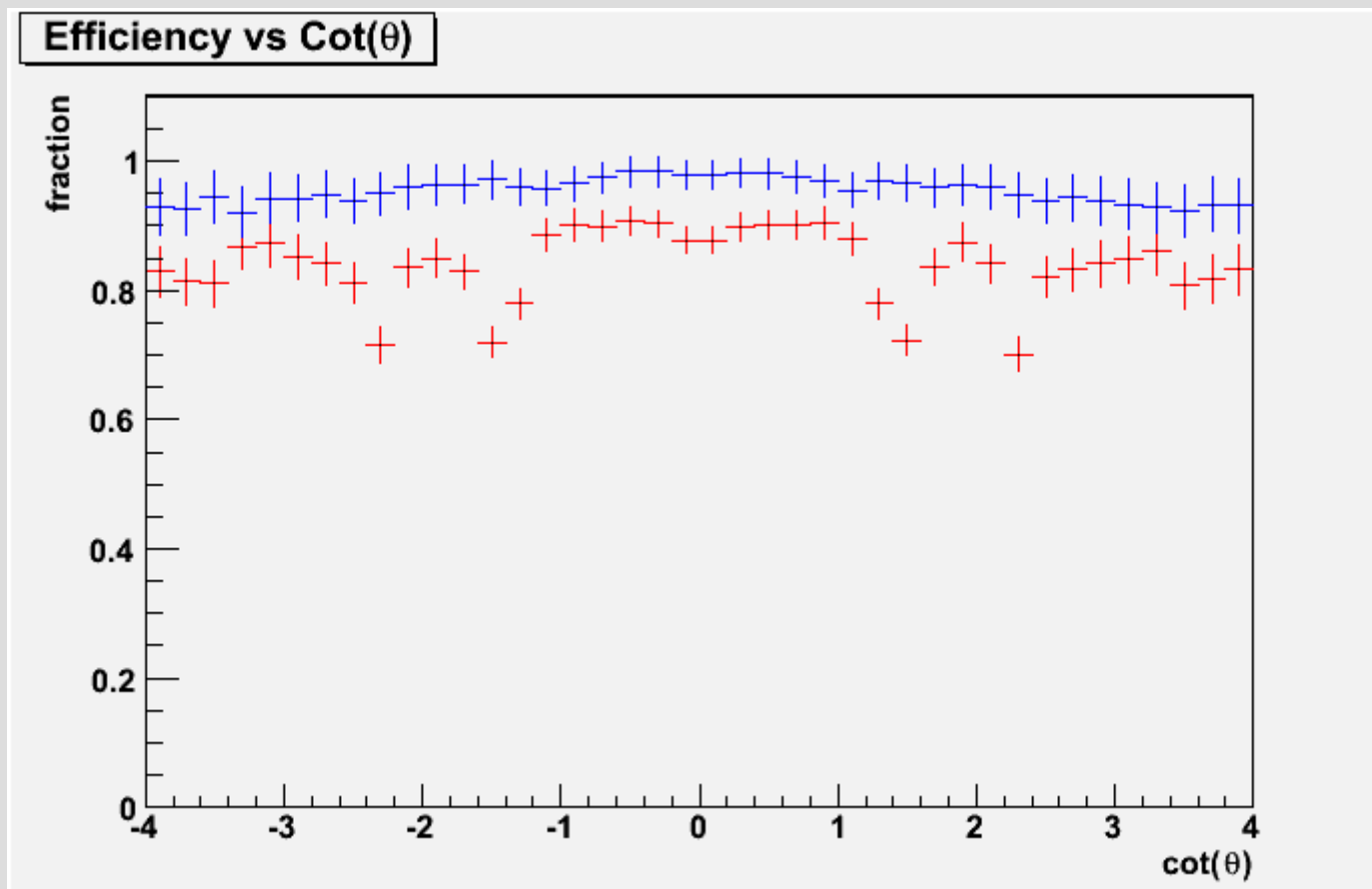
Efficiency -vs- curvature



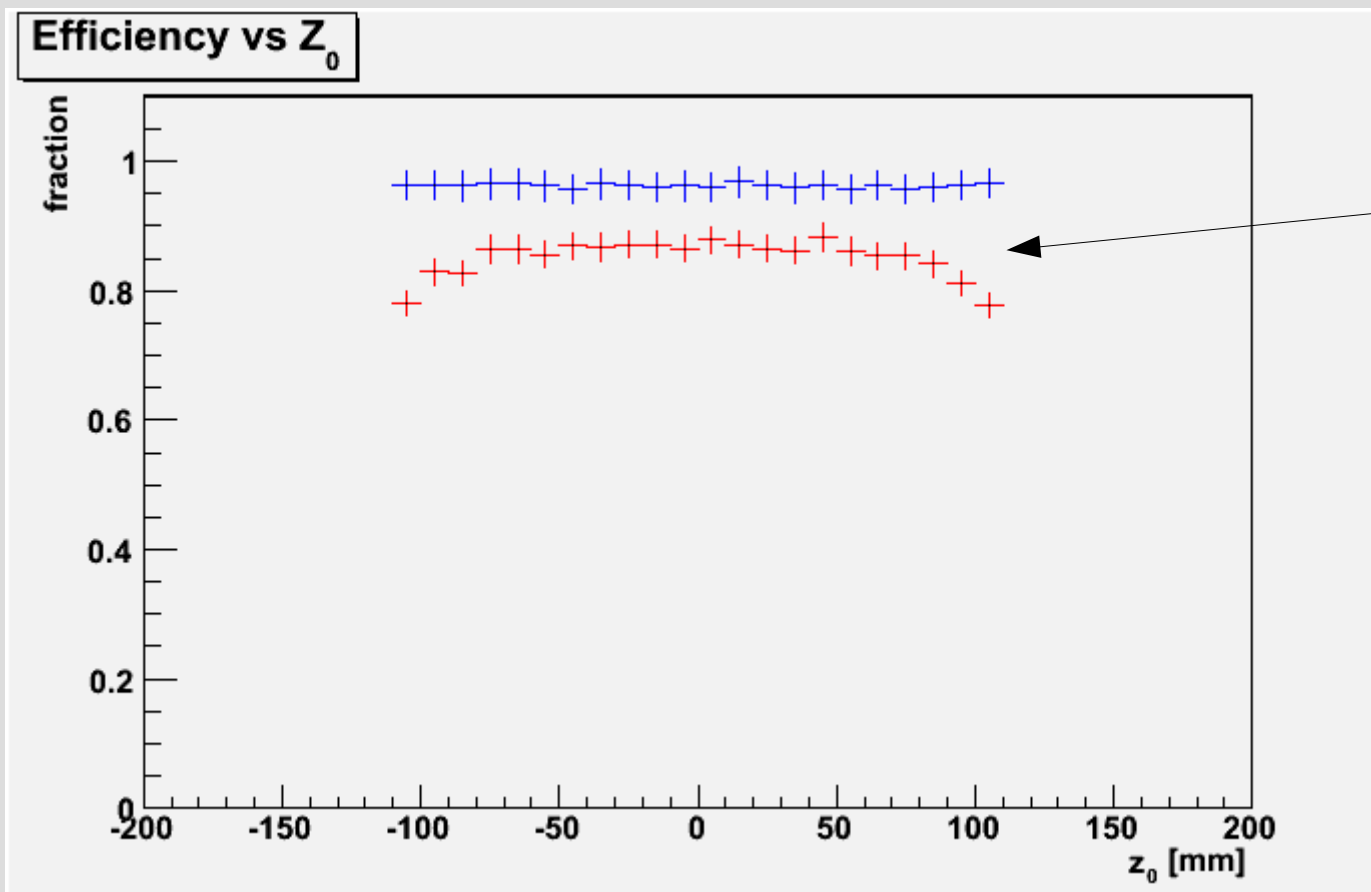
Efficiency -vs- IP



Efficiency -vs- $\cot(\theta)$

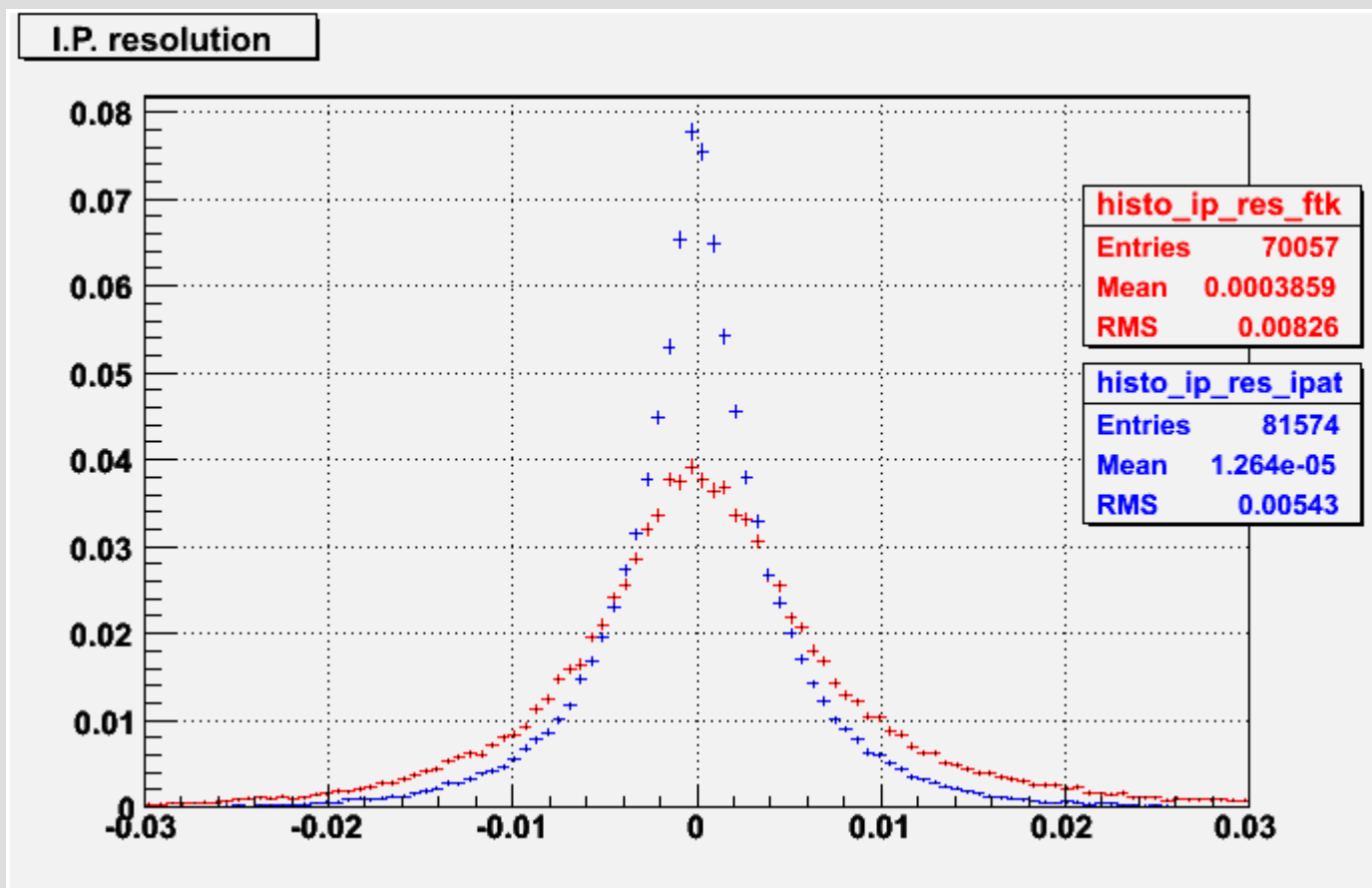


Efficiency -vs- Z_0

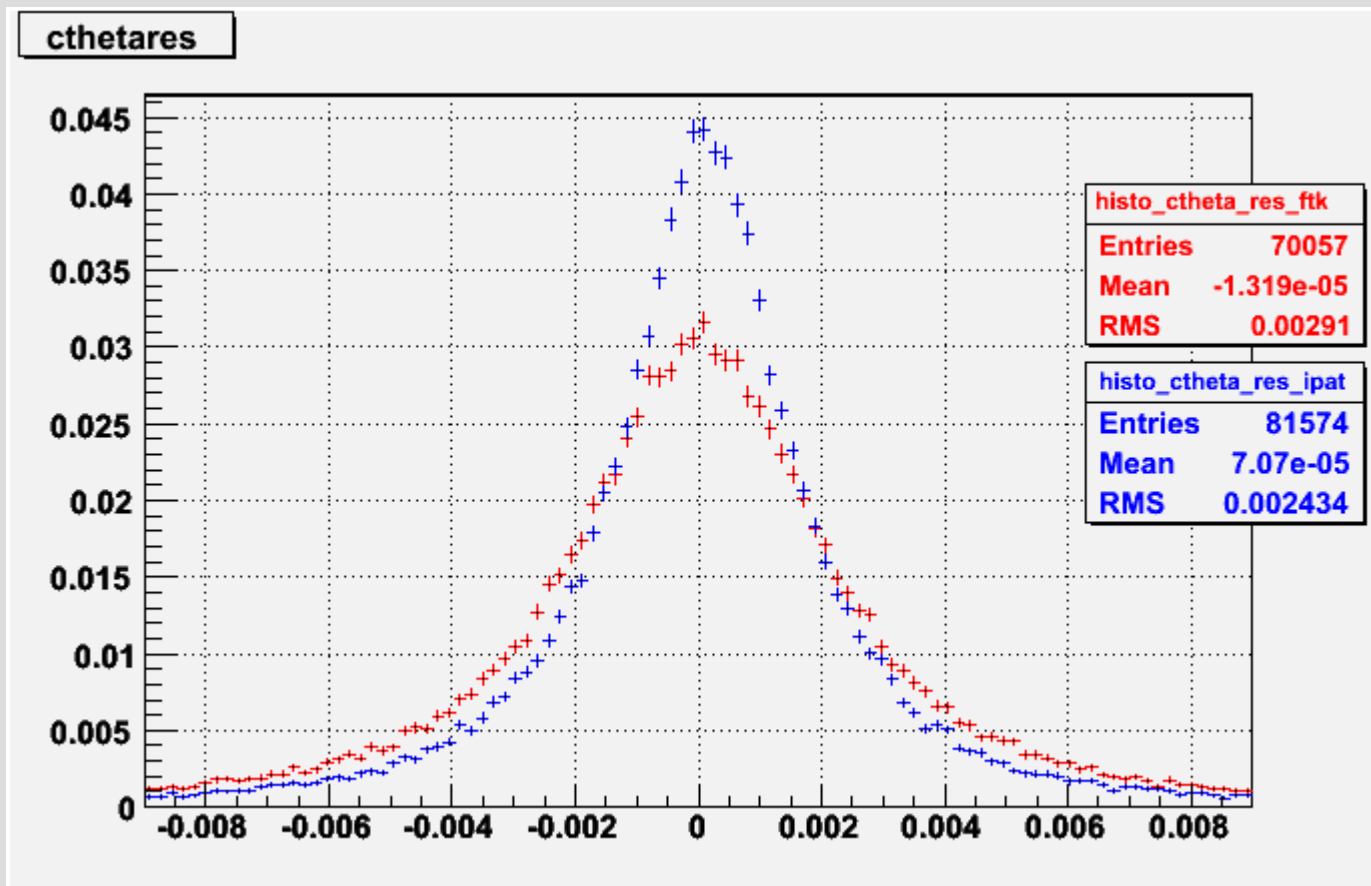


edge effects

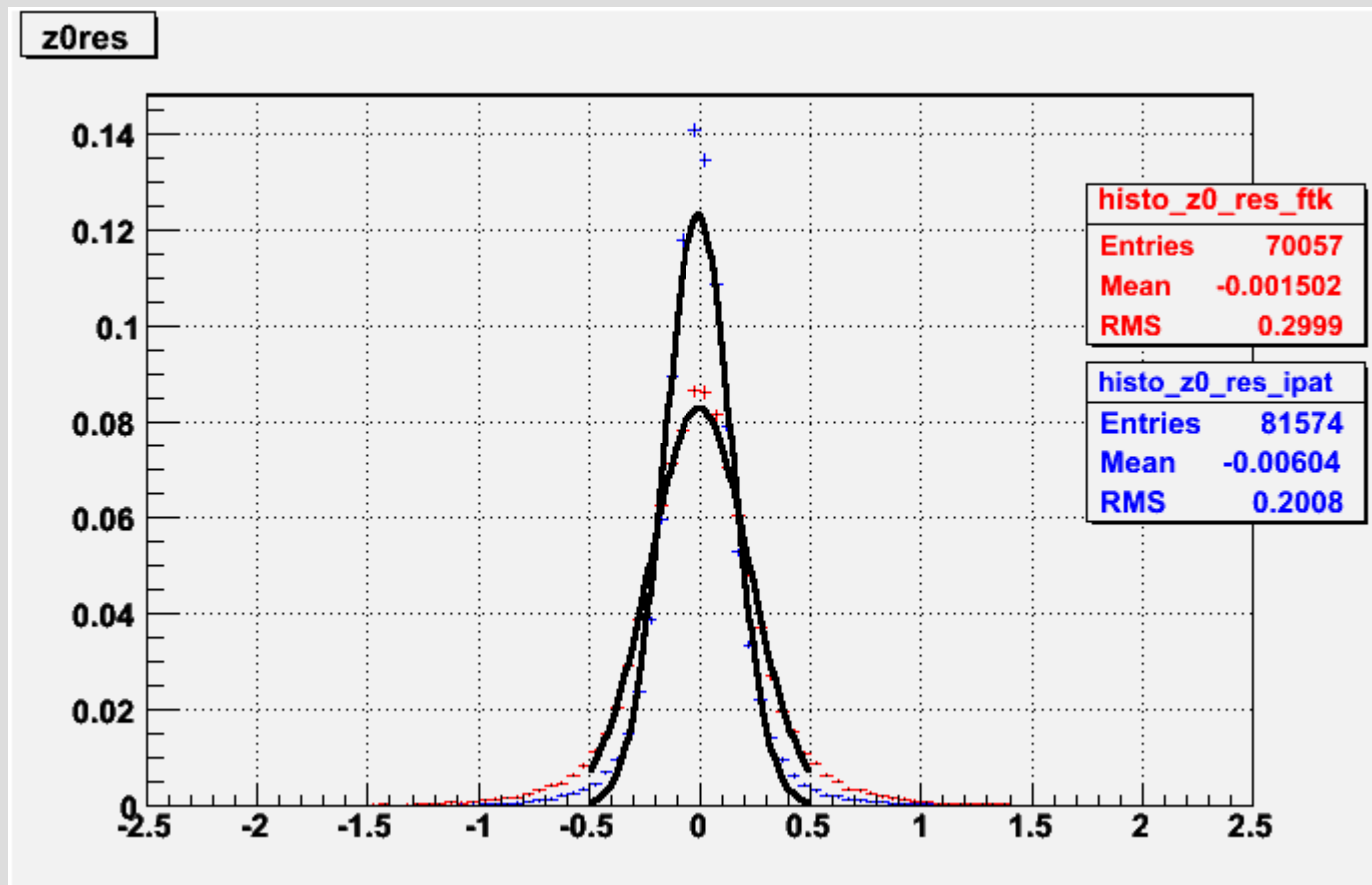
IP resolution



cot(theta) resolution



z0 resolution (**fixed**)



B-tagging and trigger

- Works in v13.0.40.4
- Looking at dq2-produced Whuu and Whbb samples (b-tagging vs mistag rate)
- These files use “old geometry”
 - Ultimately – what we need
 - But: current banks are for “new geometry”
- Will have some plots for next week (L2 & EF)