

Analysis Progress

for the d_2^n analysis meeting

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1 BigBite Optics

2 Farm Replays

3 To Do

BigBite Optics Update I

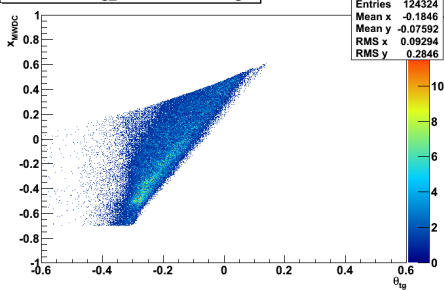
- Using the T1 trigger mostly shifts Δ peak, not proton
- Since we aren't sure yet where the Δ peak *should* be, it doesn't make sense to retune (or remove) the low-momentum correction yet
- However, I *did* make corrections to the target coordinate system ...

BigBite Optics Update II: θ

- The sign of BB.tr.tg_th was reversed relative to BB.tr.th
- In one, + meant up; in the other, + meant down
- Now, they're in agreement

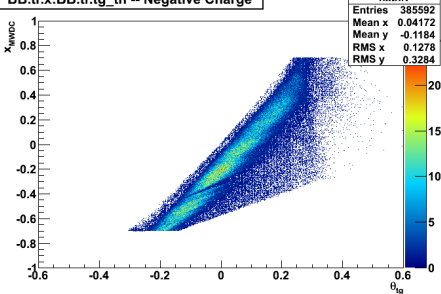
Positive

BB.tr.x:BB.tr.tg_th -- Positive Charge



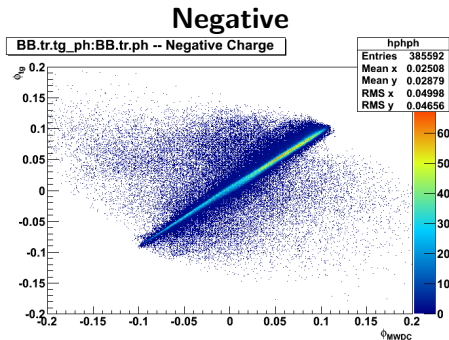
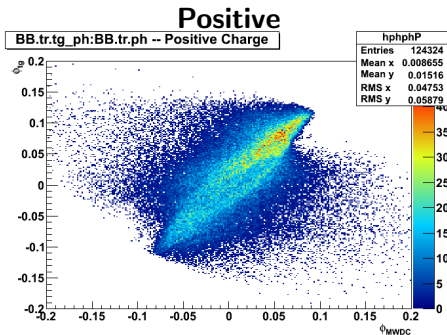
Negative

BB.tr.x:BB.tr.tg_th -- Negative Charge



BigBite Optics Update III: ϕ

- What about the sign of `BB.tr.tg_ph` and `BB.tr.ph`?
- This direction is perpendicular to dispersive direction, so the angles should be approximately equal to each other



Replay Status

- Replay code is up and running on 32-bit farm
- Script automatically generates job submission scripts for BigBite runs
- Replay macros slightly rewritten ... Dave is testing for LHRS
- New momentum, shower code incorporated
- Produces good root files

But there's a problem...

Disk Space

- We have 3.4 TB of space on /work and on d2n's /data1
- A single BigBite run gives a little over 30 GB worth of root files
- Let's take the four-pass data set – very roughly 150 runs
- We need 4.5 TB just to hold the replayed four-pass runs
- That doesn't count the space requirements for skimmed root files ... and there's much more five-pass data than four-pass
- Brad is looking into some storage options

To Do

- Make minor, file-slimming changes to farm replay
- Find a home for data files
- Start production replays
- Have BB skim code ready for replayed runs