

BigBite Analysis

Track to PS Match Cut, 1-pass Stability (Cer TDCs,E/p)

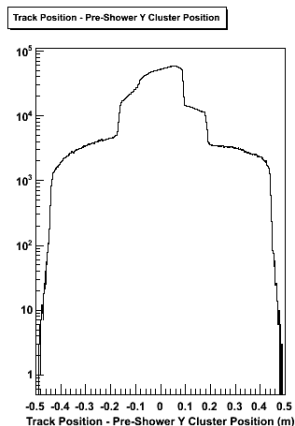
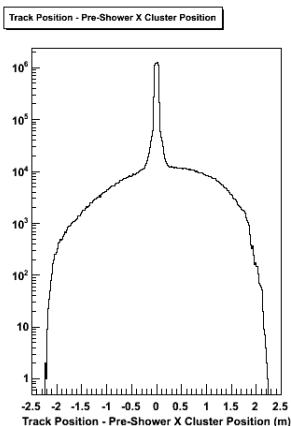
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02/04/2011

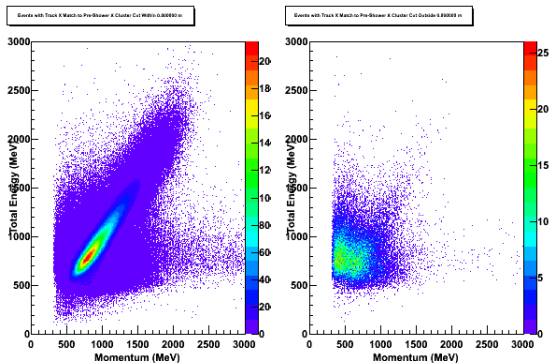
- 1 Track to Pre-Shower Cluster Match Cut
 - Reconstructed Track and Pre-Shower Cluster Difference
 - Procedure
 - Results
- 2 1-Pass Data Quality
 - BigBite Čerenkov TDCs
 - BigBite E/p
- 3 What's Next

Reconstructed Track and Pre-Shower Cluster Difference



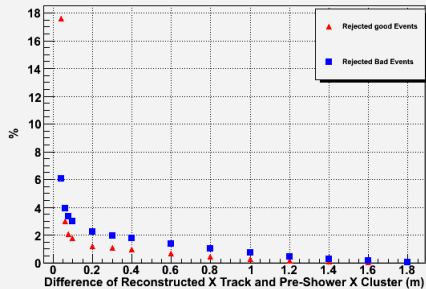
Define Good and Bad Tracks

- Count correlated and uncorrelated E, p events that fall outside of the reconstructed track - pre-shower cluster cut
- Normalize these counts by total events

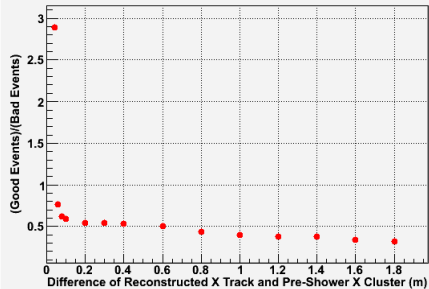


Vertical Cuts

Vertical Tracks Matched to Pre-Shower Cluster

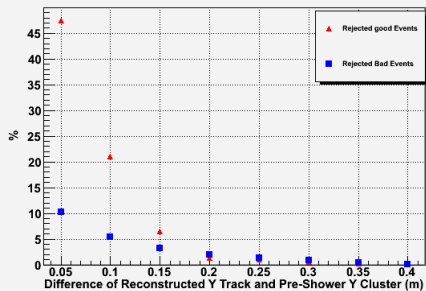


Ratio of Events Out-Side Vertical Cut Position

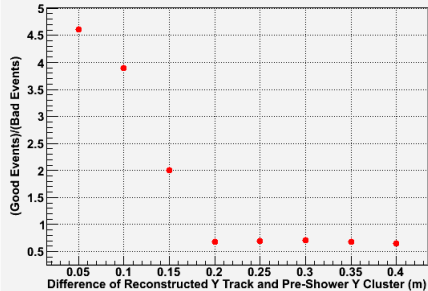


Horizontal Cuts

Horizontal Tracks Matched to Pre-Shower Cluster

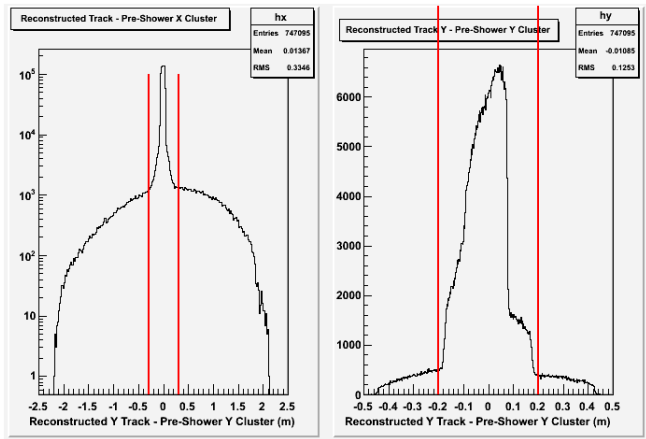


Ratio of Events Out-Side Horizontal Cut Position

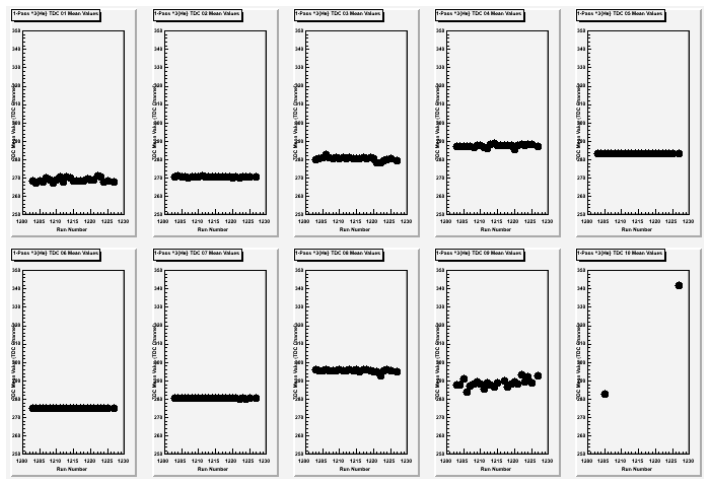


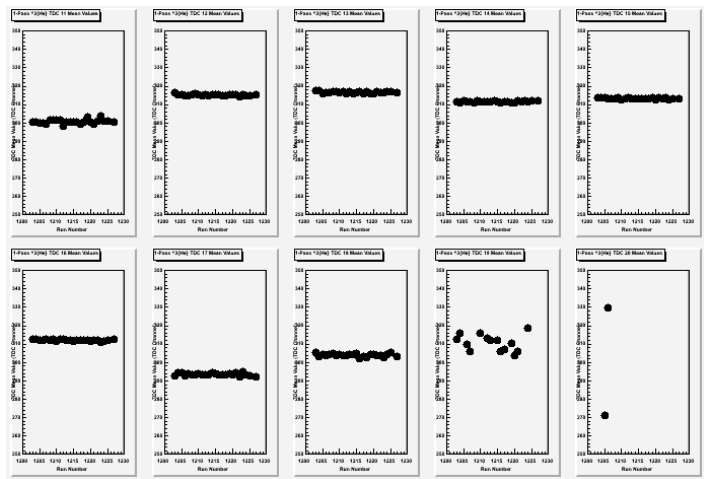
Final Cut

$$\text{Abs}((\text{BB.tr.x} + 0.97*\text{BB.tr.th}) - (\text{BB.ts.ps.x}+7.303\text{e-3})) < 0.3 \ \&\& \\ \text{Abs}((\text{BB.tr.y} + 0.97*\text{BB.tr.ph}) - (\text{BB.ts.ps.y}+0.01)) < 0.2$$

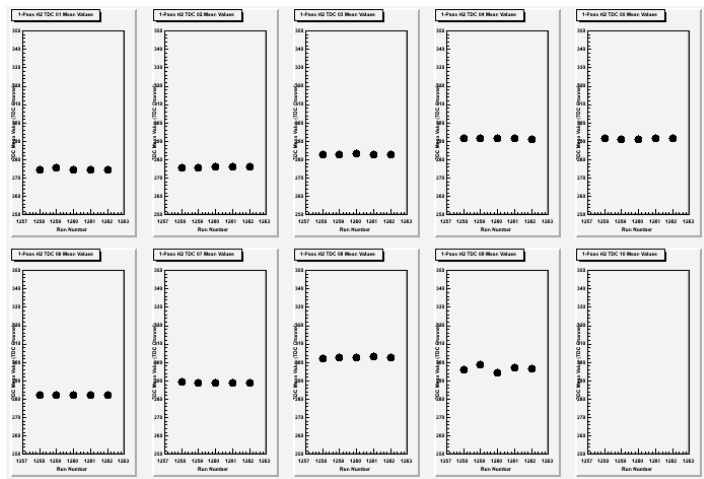


^3He Beam-Side Čerenkov TDC

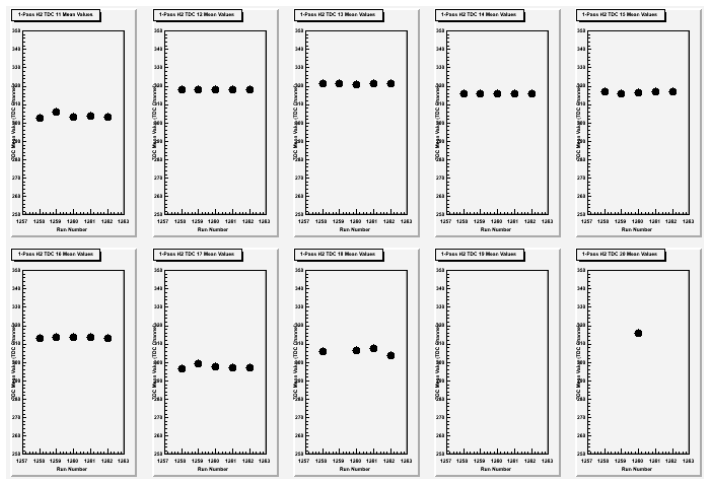


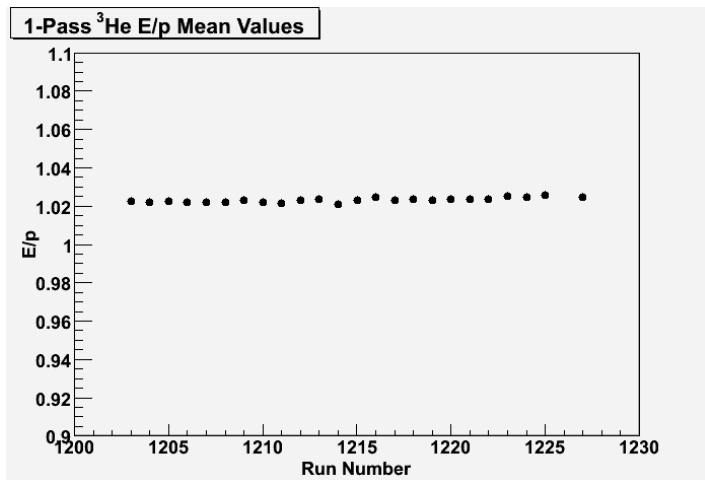
^3He RHRS-Side Čerenkov TDC

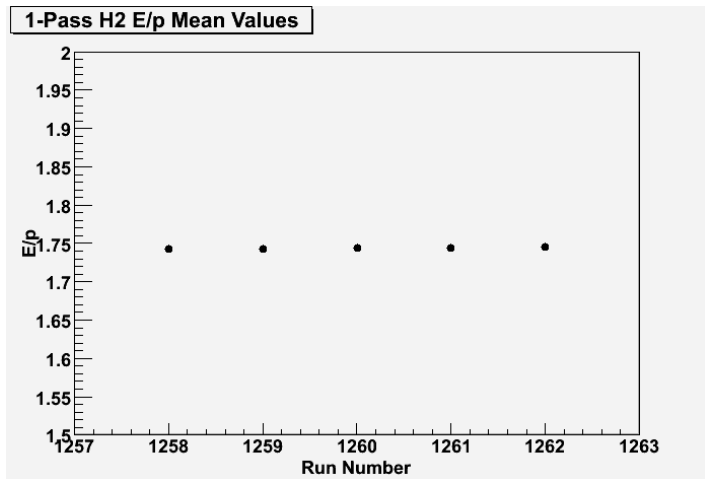
^2H Beam-Side Čerenkov TDC



^2H RHRS-Side Čerenkov TDC



^3He E/p

^2H E/p

^2H E/p Difference

1-pass Skim ROOTfile Version:

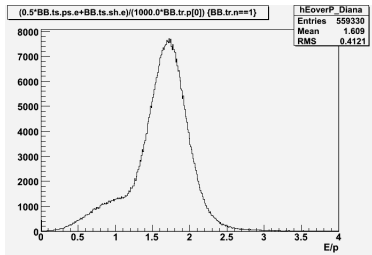


Figure: H2 run 1258 E/p. From 1-pass skim ROOTfile

Recent (02/01/2011) d2n Machine Replay

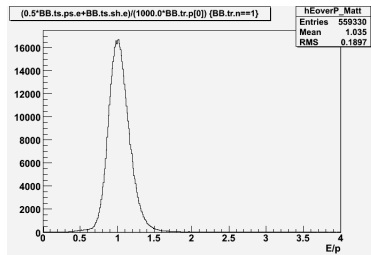


Figure: H2 run 1258 E/p. Replayed with updated DB

For Next week

- Continue working on asymmetry code
- Calculate 4pass asymmetries binned in momentum and scattering angle
- Check/Calibrate 1-pass RHRS ADCs

^3He E/p Fit

