

This is a preliminary analysis of the following 30 runs from day 95-96 of run 11.

Runs are divided into 3 groups.

Most of the calibration work was done using group 1.

Time dependent corrections were not yet applied to groups 2 and 3.

group1: 12095005 12095006 12095008 12095020 12095021 12095023 12095037

group2: 12095038 12095043 12095052 12095054 12095056 12095057 12095059 12095060

12095064 12096005 12096011 12096014 12096015

group3: 12096024 12096026 12096027 12096028 12096029 12096030 12096032 12096033

12096034 12096036

While considerable work has been done to calibrate based on group 1 runs from day 95, more is needed. In particular, small cells near the beam are still in need of improvement and large cells are far from calibrated.

Cross Ratios

Single Cluster and Pi0 A_N vs Energy.

In the following figure we show the cross ratio single spin A_N for single cluster events and for two photon (π^0) events. Note: that above ~ 90 GeV, few of the π^0 's are separated in this analysis.

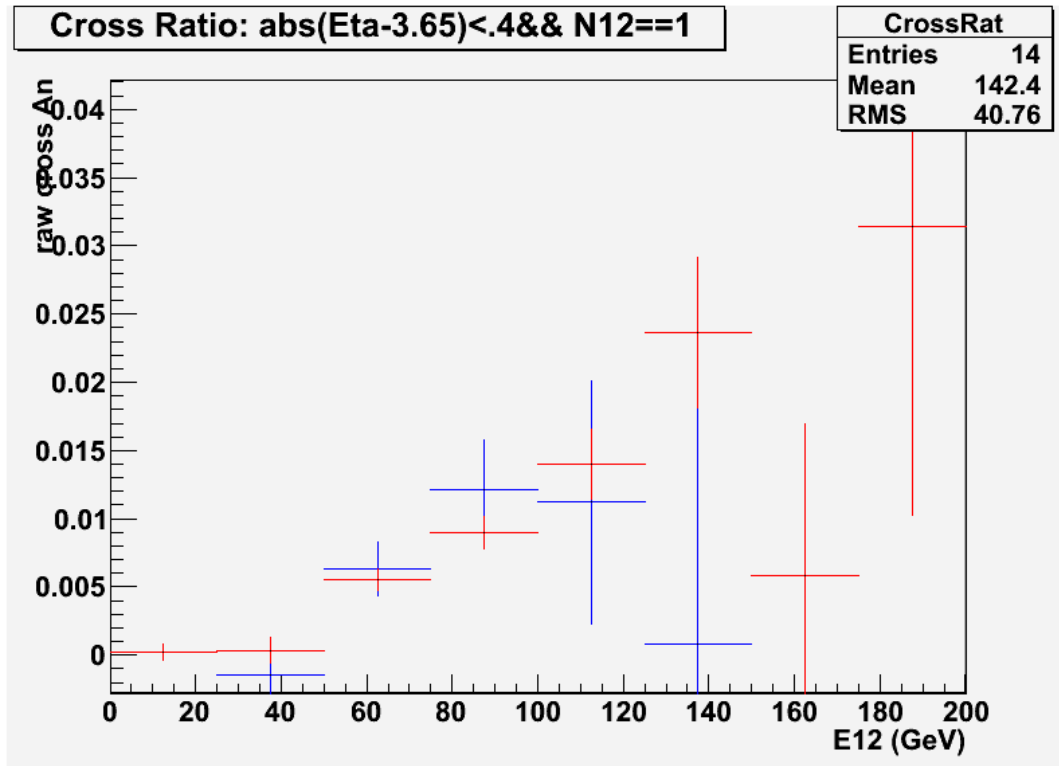


Figure 1: Cross ratio A_N as a function of energy for
red: Single Reconstructed Photon,
blue: Two photon low mass (π^0) reconstructed.

The Left/Right selection is based upon $\text{Cos}(\phi)>.5$ or $\text{Cos}(\phi)<-.5$ We assume that most of the single cluster events are actually π^0 's without resolved photons.

Pt dependence of single cluster A_N ($0.28 < X_F < 0.36$).

We now look at events with one photon cluster at fixed X_F ($0.28 < X_F < 0.36$). There events are again likely mostly π^0 's.

Here we find the slope to be positive about 1 sigma above slope zero.

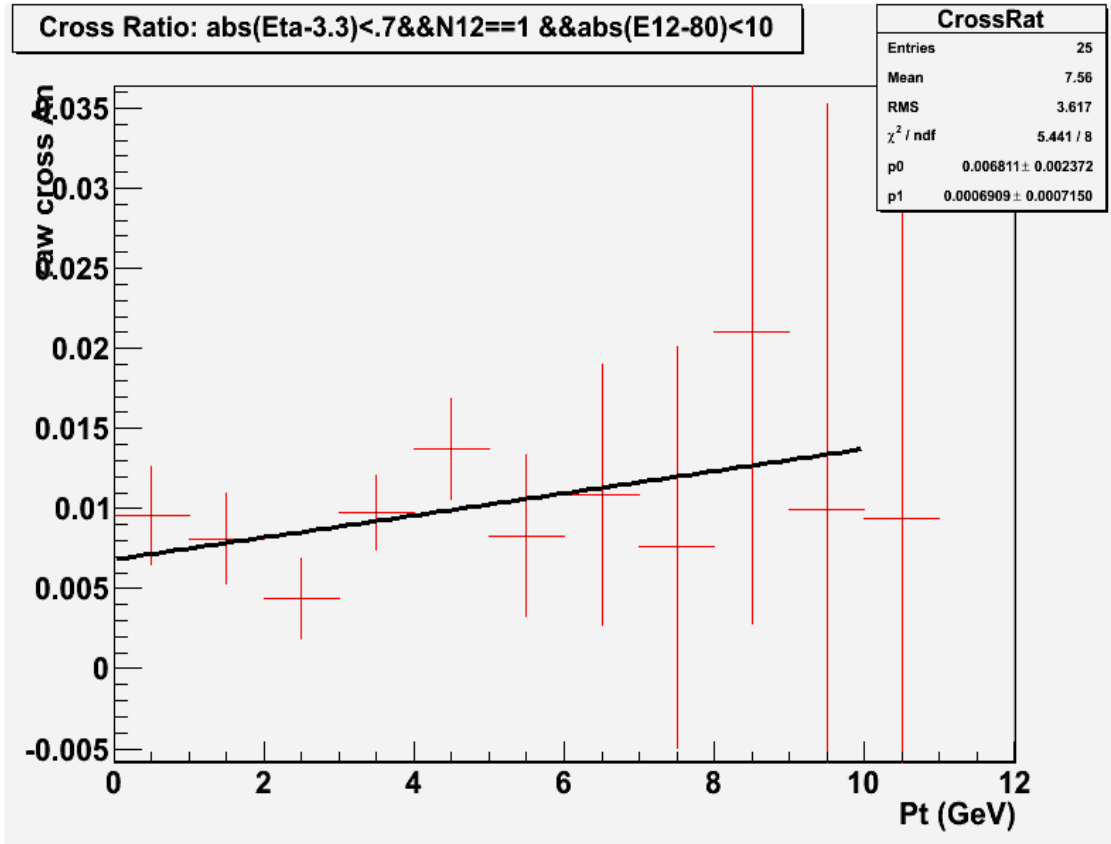


Figure 2 : A_N for one photon cluster at fixed X_F ($0.28 < X_F < 0.36$) as a function of Pt .

Pt dependence of single cluster A_N ($0.36 < X_F < 0.60$).

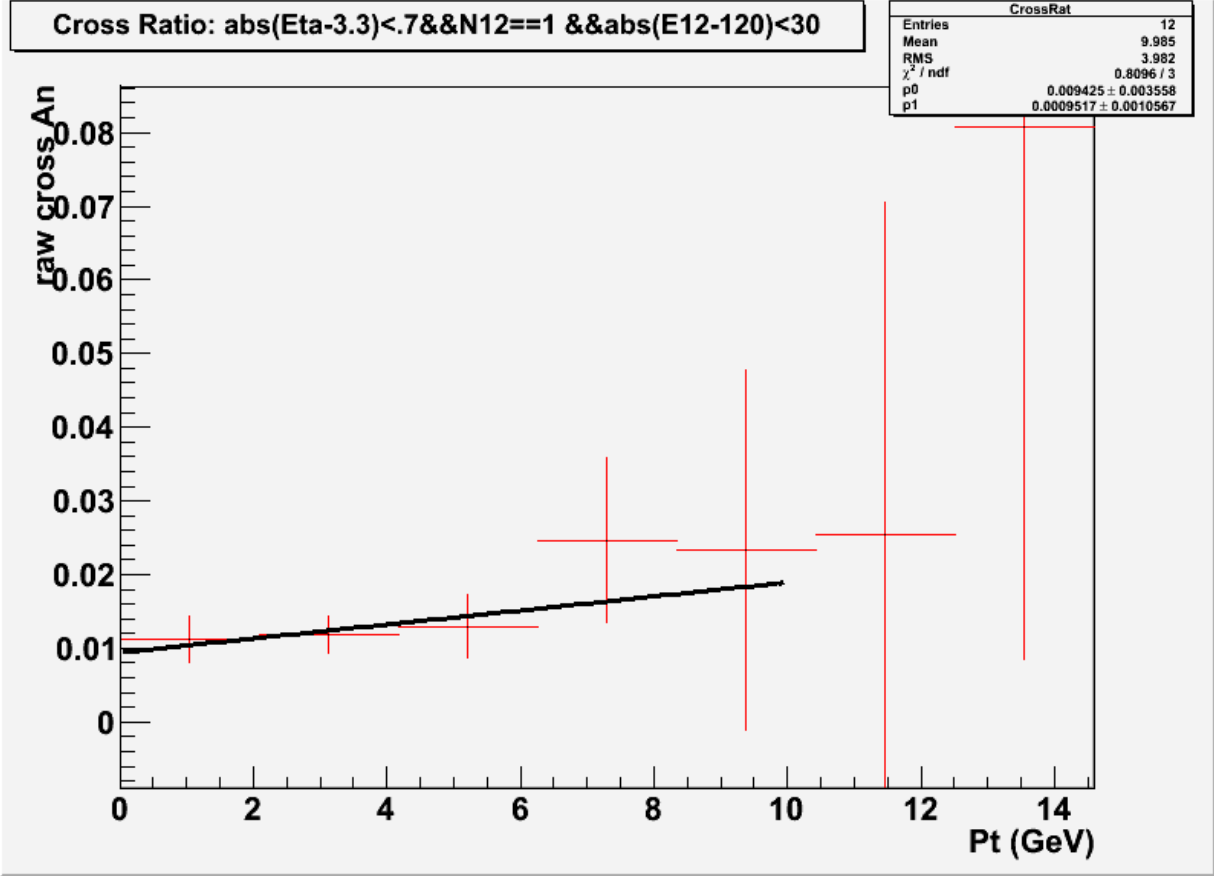


Figure 3: A_N for events with one photon cluster at fixed X_F ($0.36 < X_F < .60$)

Here we find the slope to be positive again about 1 sigma above slope zero..

PT Dependence of A_N for 2 photon (π^0 's)

Now we look at P_T dependence of A_N for actual π^0 's. The Selected mass region is shown in Error:
 Reference source not found
 The range of X_F is $0.22 < X_F < 0.4$.

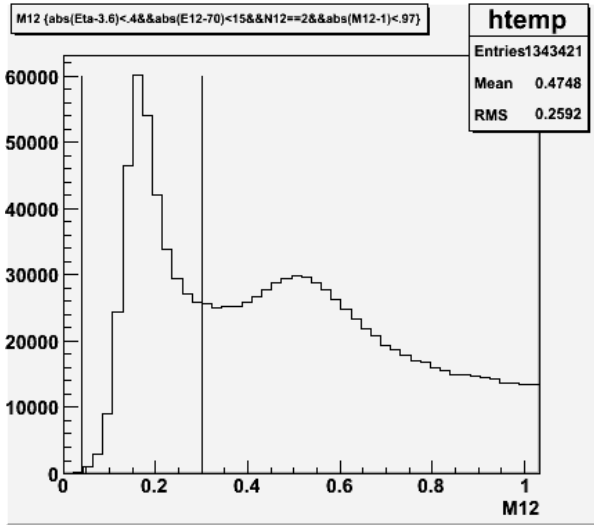


Figure 4: Mass distribution for small cell region and $0.22 < X_F < 0.4$.

For these events, we again see evidence for asymmetry rising with P_T for P_T as large as 6 GeV.

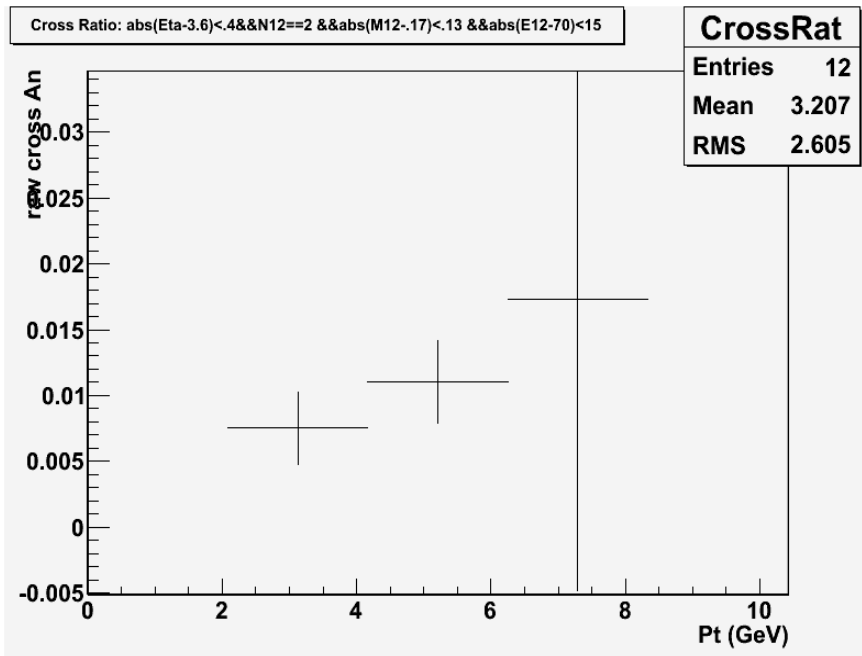


Figure 5 A_N for events in π^0 peak, The P_T dependence of A_N for small cell region and $0.22 < X_F < 0.4$.