

Background subtraction in PbPb

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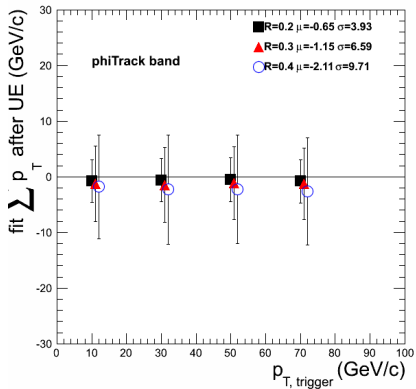
April 22, 2013

$\sum p_T \mu$ after subtraction in bands vs. p_T

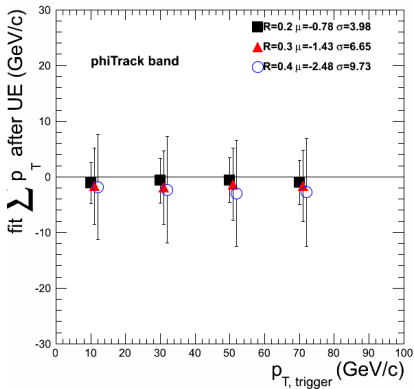
- μ is < 0 for tracks and > 0 for clusters
- The bigger is R the bigger $|\mu|$ gets.
- $\mu_{\phi\text{band}} < \mu_{\eta\text{band}}$
- Looking only at good tpc runs do not help putting the means closer to 0 in the ϕ band.... In the η band it changes only very little because of the big acceptance fiducial cut in η .

Tracks ϕ band

all runs

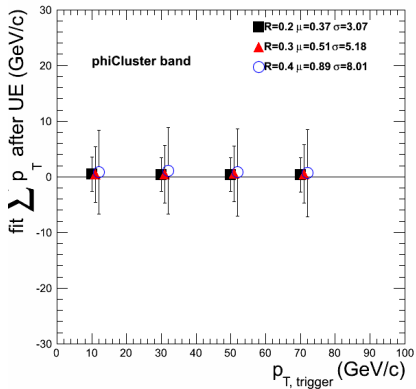


good tpc runs

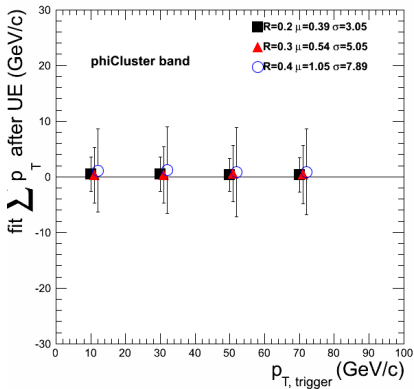


Clusters ϕ band

all runs

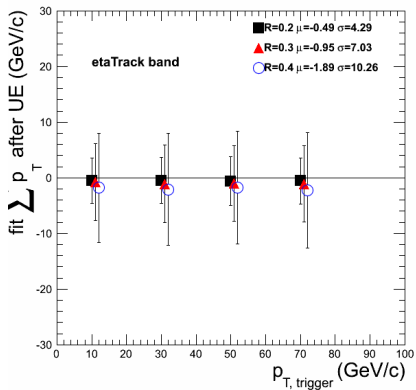


good tpc runs

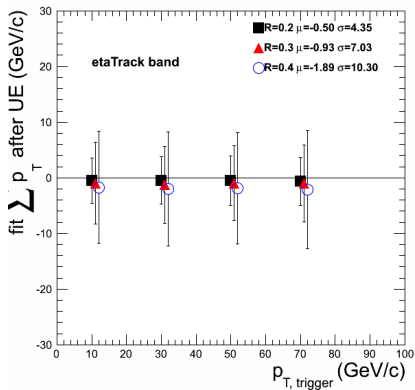


Tracks η band

all runs

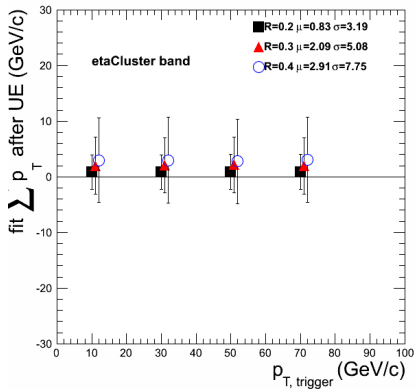


good tpc runs

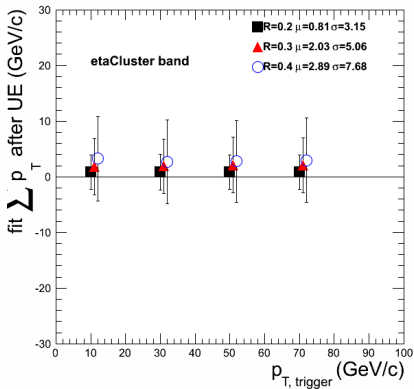


Clusters η band

all runs

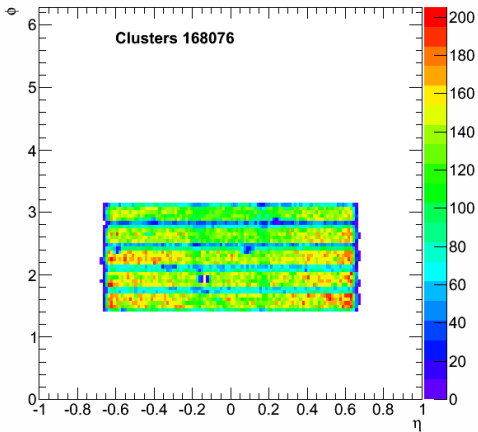
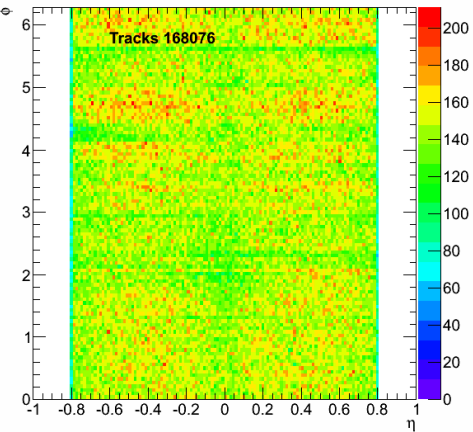


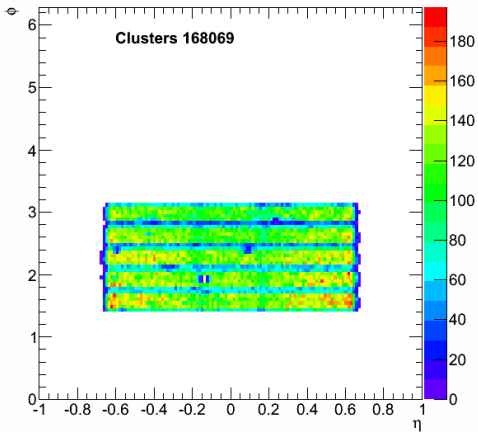
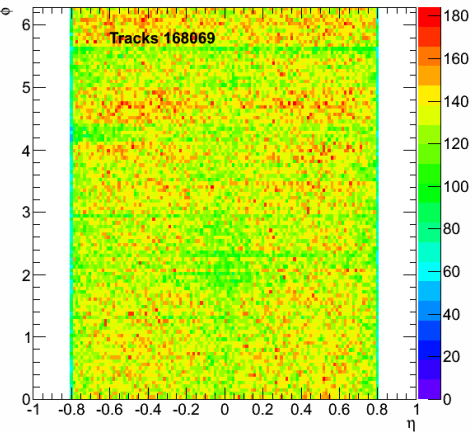
good tpc runs

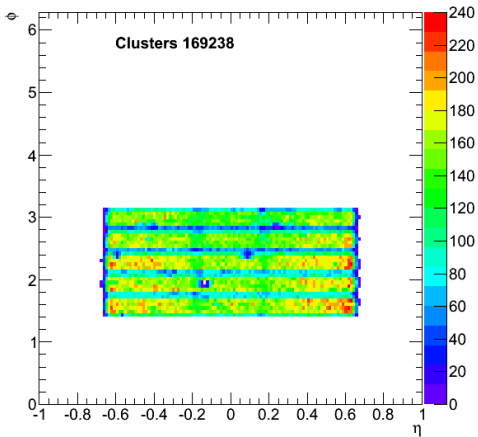
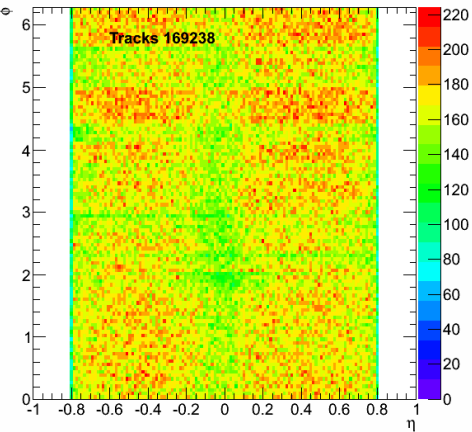


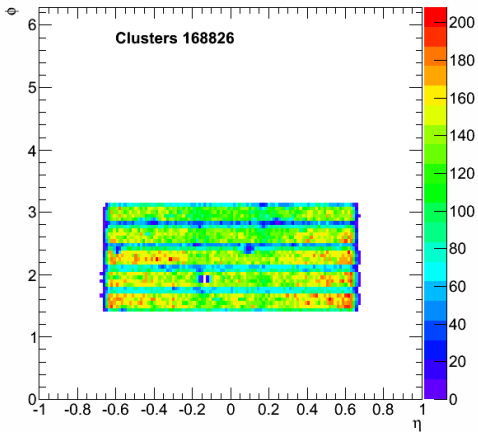
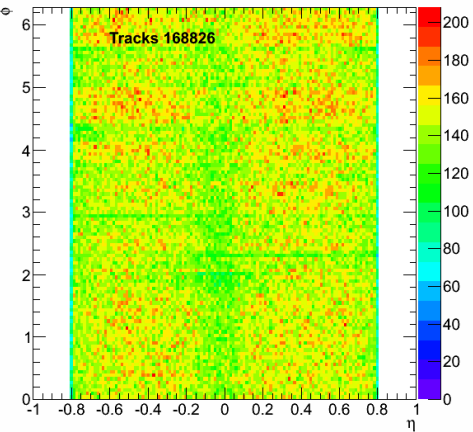
η vs. ϕ vs. runnumber

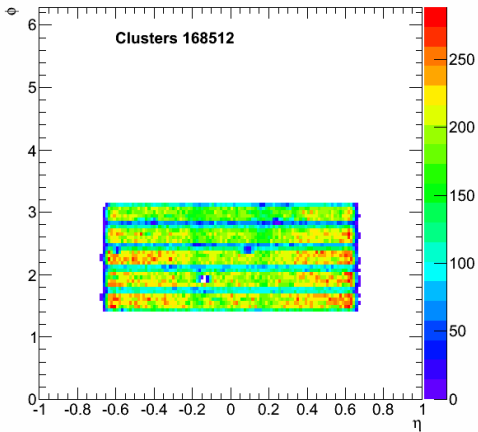
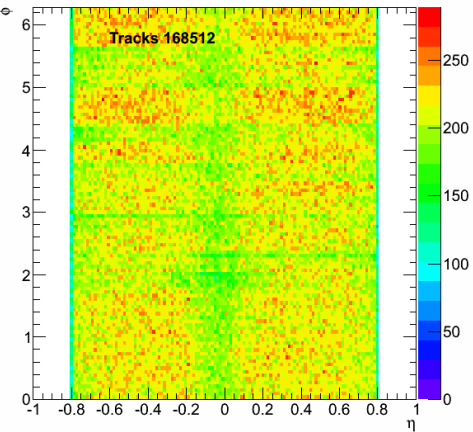
- runs : 168069, 168076, 168512, 168826, 169238, 169515, 169846, 169855, 170088, 170228
- For tracks, $\eta:\phi$ is symmetric but less for clusters vs. ϕ
- Prob for tpc in runs : 169515, 170228, 170088 \Rightarrow bias

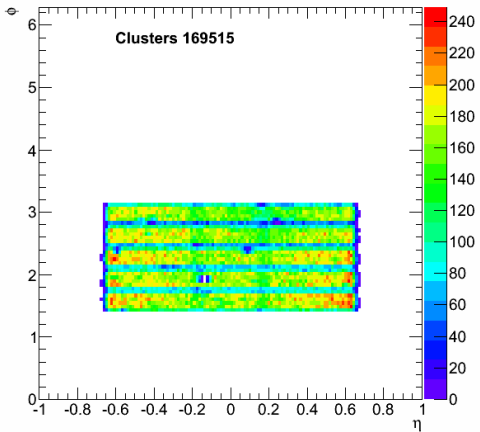
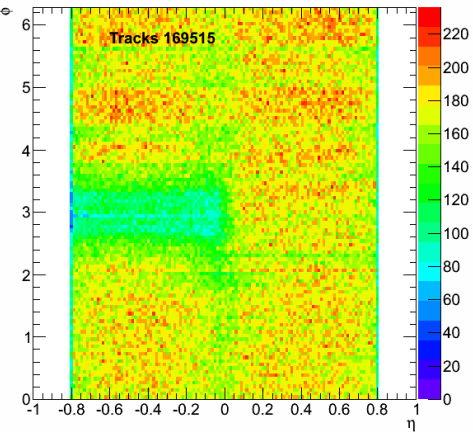


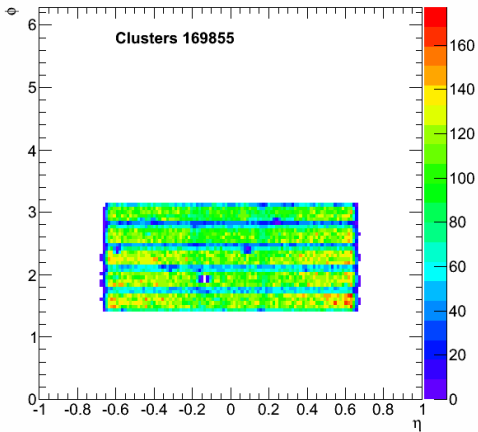
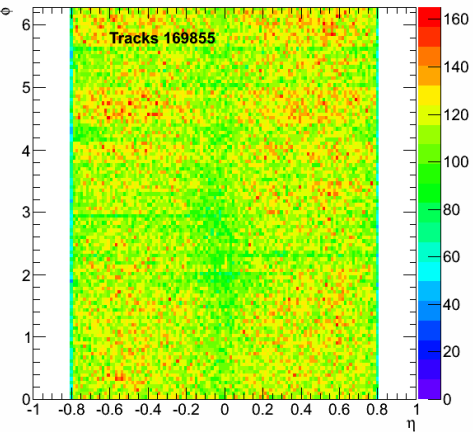


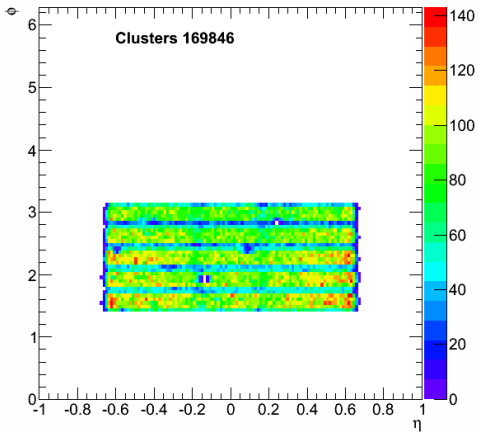
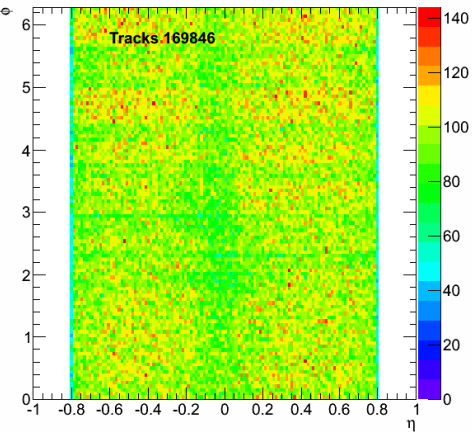


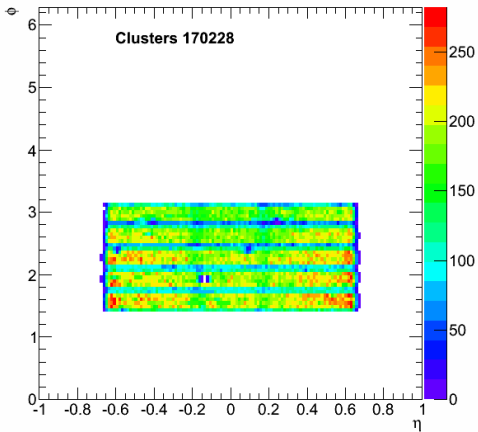
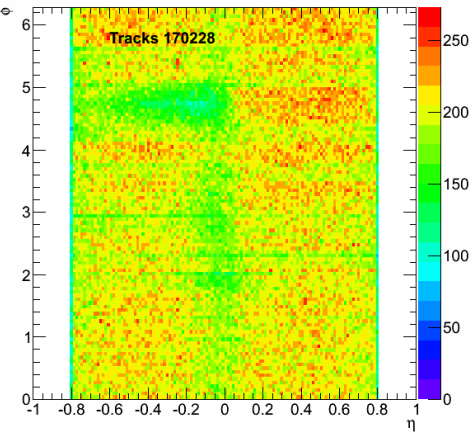


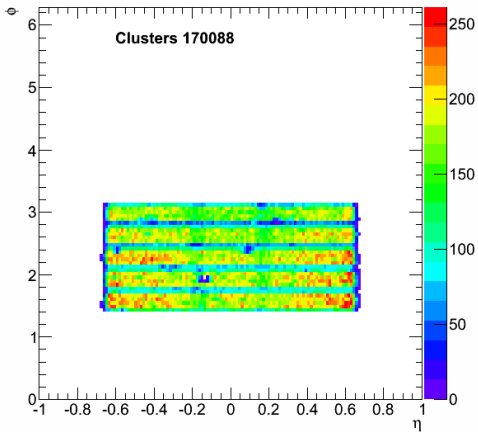
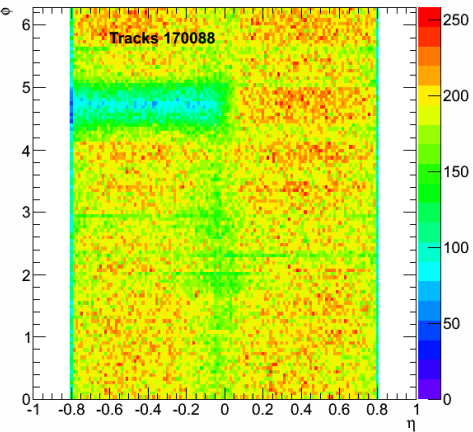












todo

- Check subtraction when using only good runs
- Look at embedding