TrkRBase Update

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MIPP Software Meeting

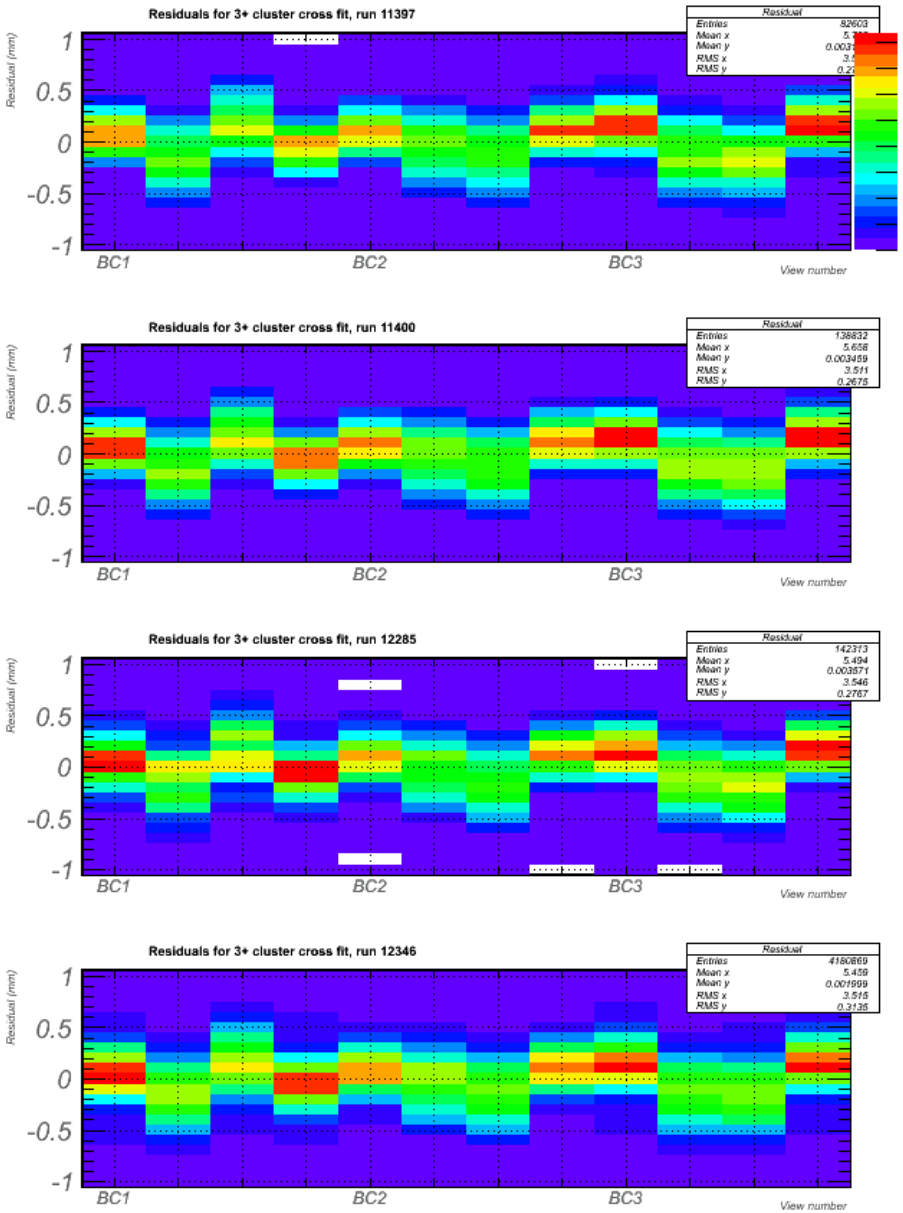
Aug 4, 2005

Filtering tracks

- Found that if crosses were more reliable, tracks would look better (no surprise)
  - Stop creating crosses where maximum deviation is too large (tunable through parameter)
- Added a filter to throw away tracks that share a point with a track that has more clusters
  - Helps to reduce the amount of garbage, but sometimes throws away real tracks
- Thinking about more improvements...

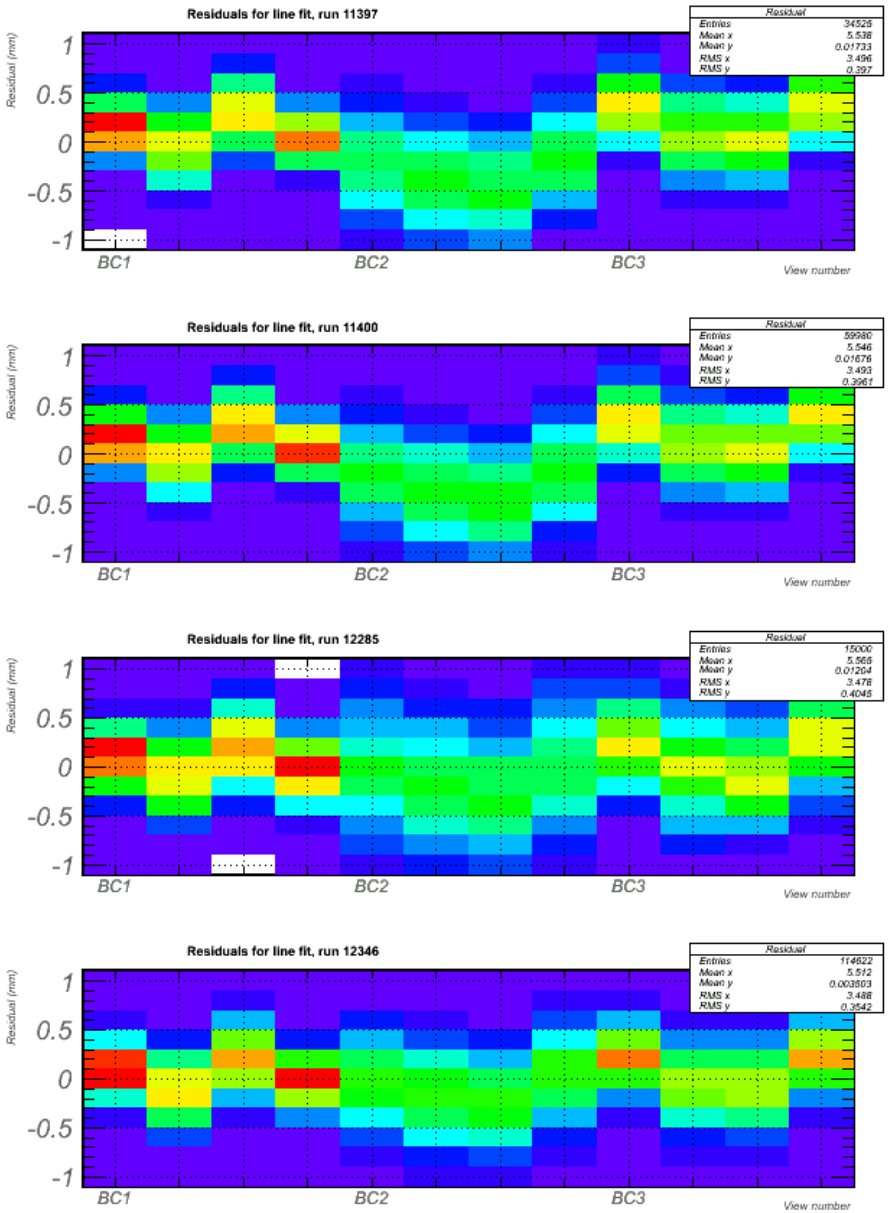
Residuals from cross fits

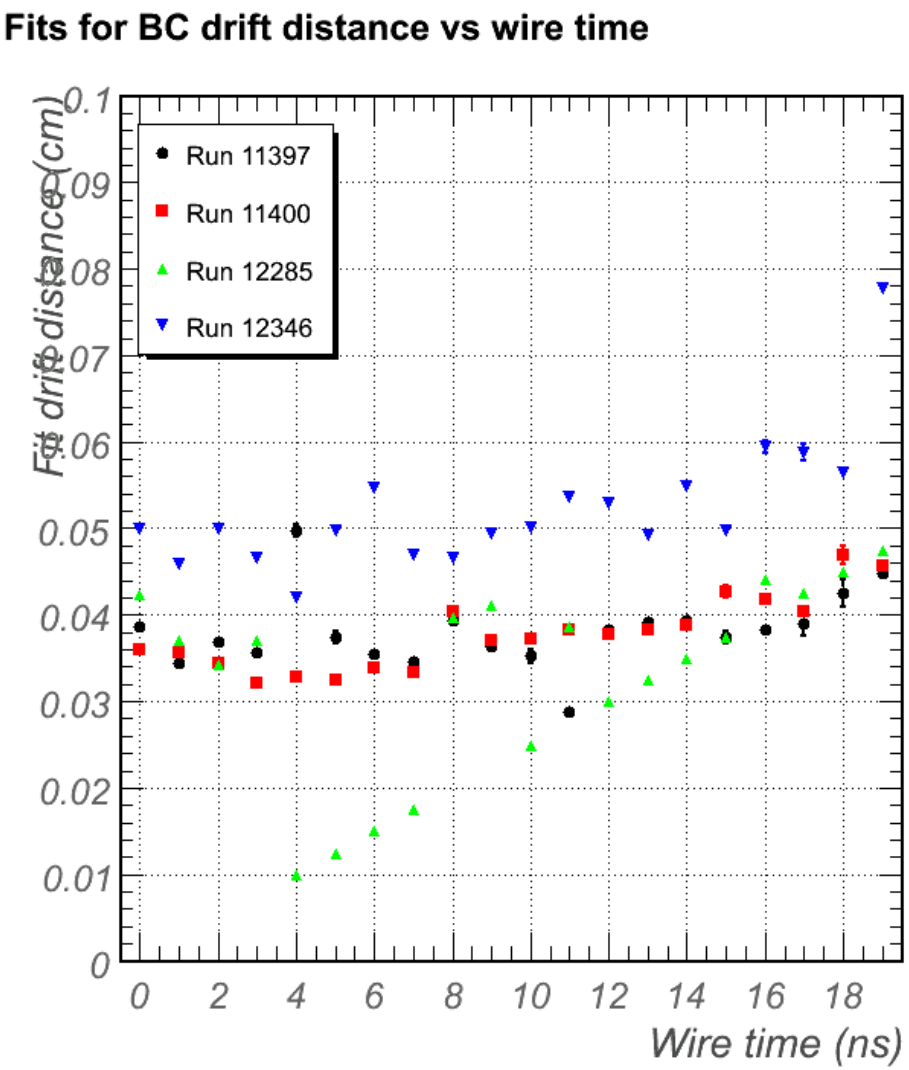
- The plots are made using cross fits ONLY
- Am I wrong in interpreting these as internal chamber misalignment to not more than 0.3 mm?
  - If so, it's easy to fix



Residuals from line fit

- Doesn't look too different, but maybe impossible to interpret until cross fit residuals are understood



Using drift time for fits

- Use TMinuit to fit for the best total chi squared of all 4 cluster crosses *in a run* where each cluster has exactly one wire
- Hope that once chambers are aligned, this will look ok