



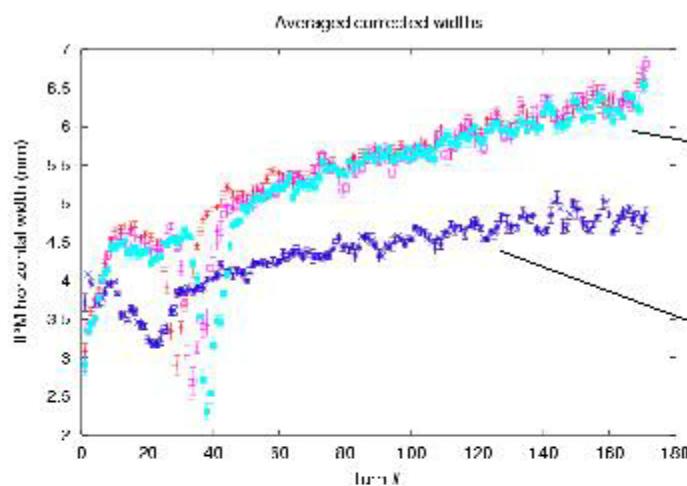
A look at IPM data before and after the dogleg & ORBUMP changes

Investigate “dip” at about ORBUMP turn off
Vertical (y) IPM (using x-calibration)

Booster after dogleg change

Booster after the shortening of ORBUMP pulse
→ should monitor more often...

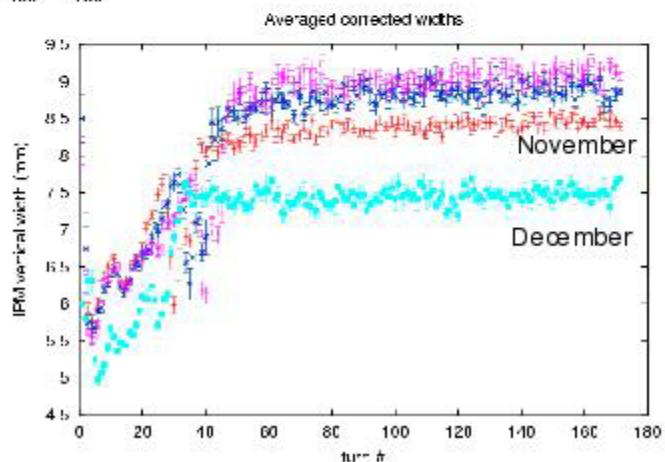
Proposal to calibrate vertical IPM

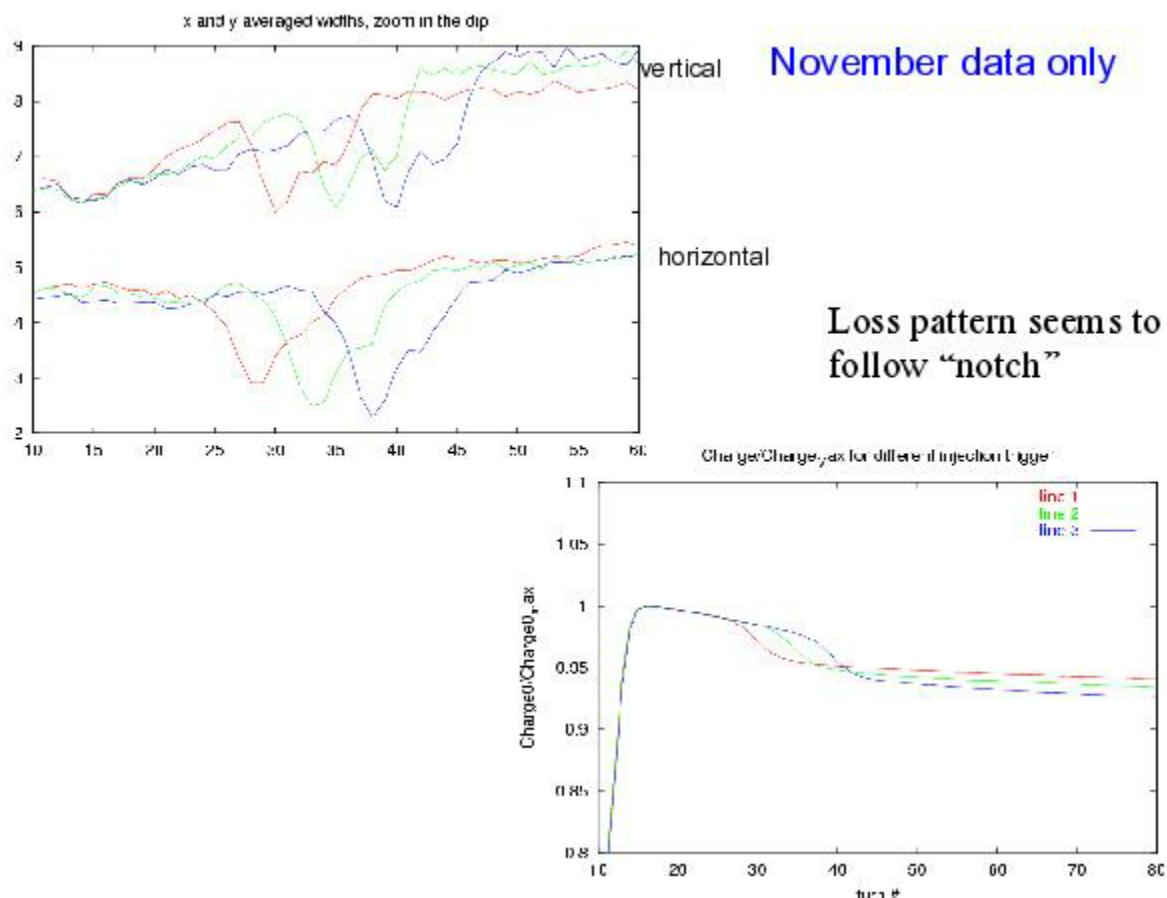


November calibration data.
Flying beam wire is in place
The three data sets have
different injection timing with
respect to ORBUMP

December calibration data
notice differences at injection

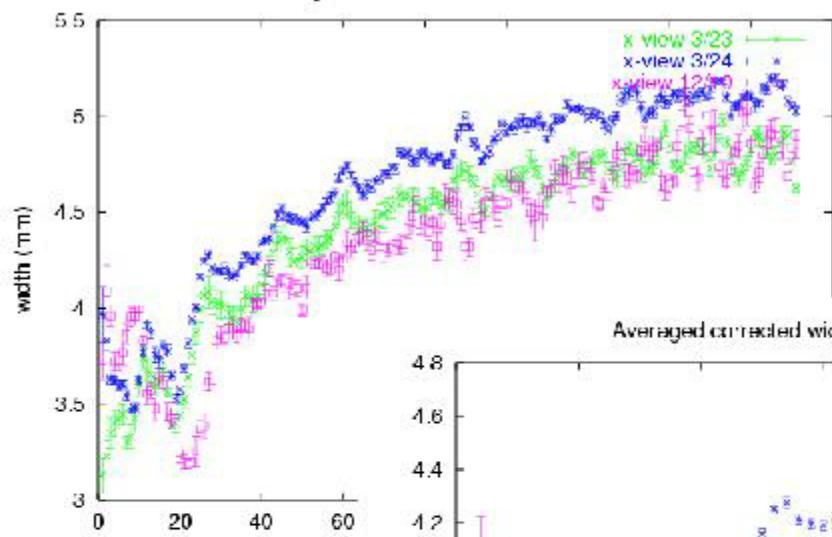
The points shown are the averages of data sets (10-15) taken with the same running conditions. The errors are the errors on the mean, and not the spread of the points.





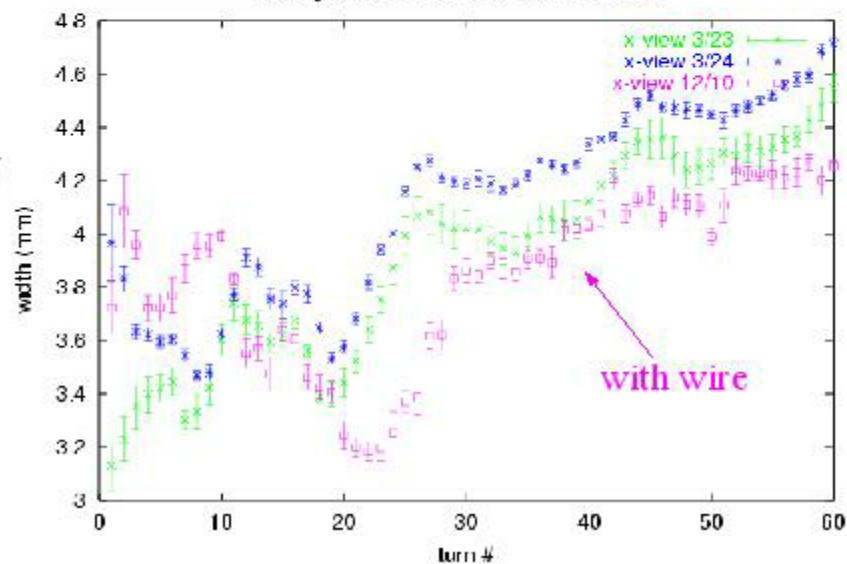


Averaged corrected widths before and after

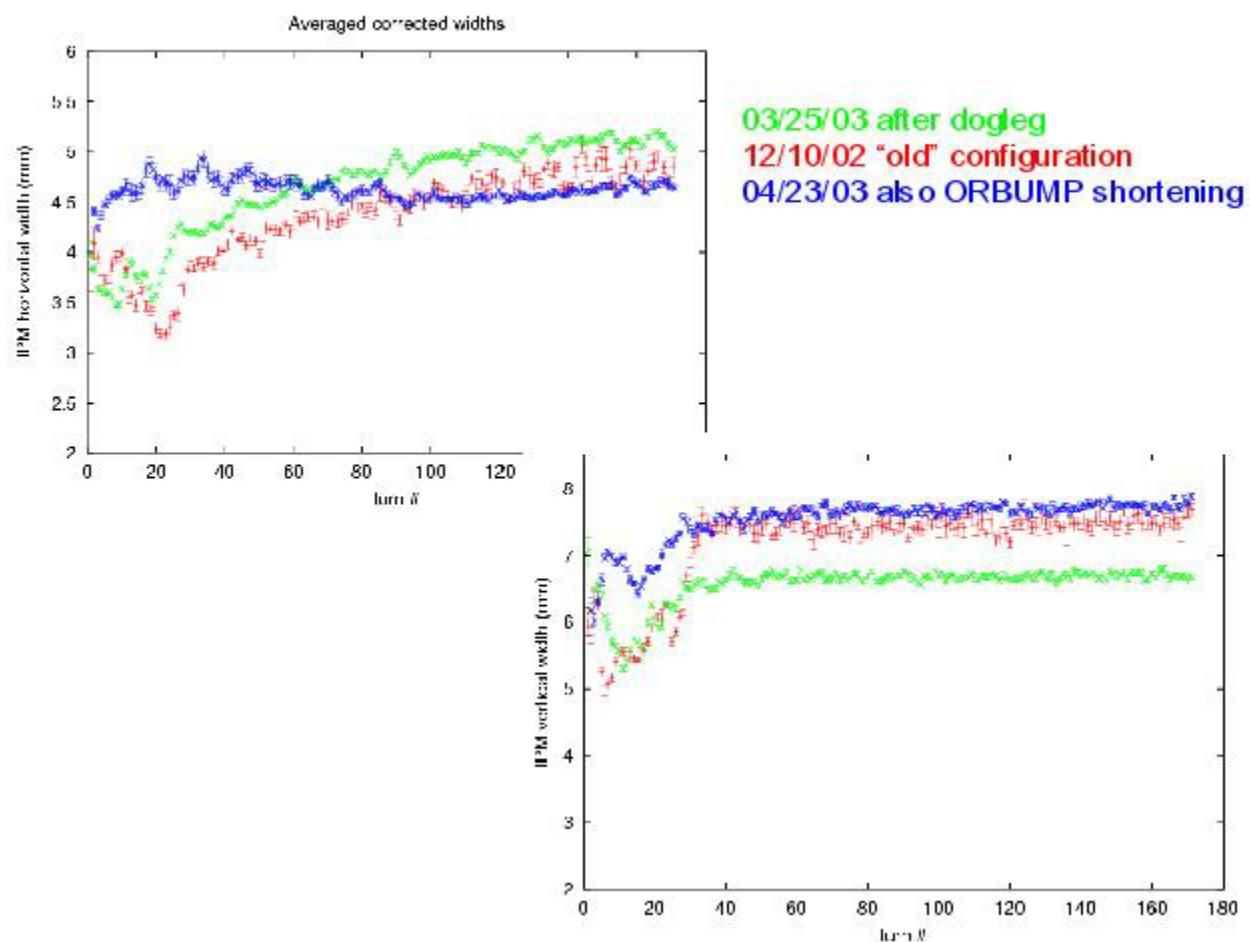


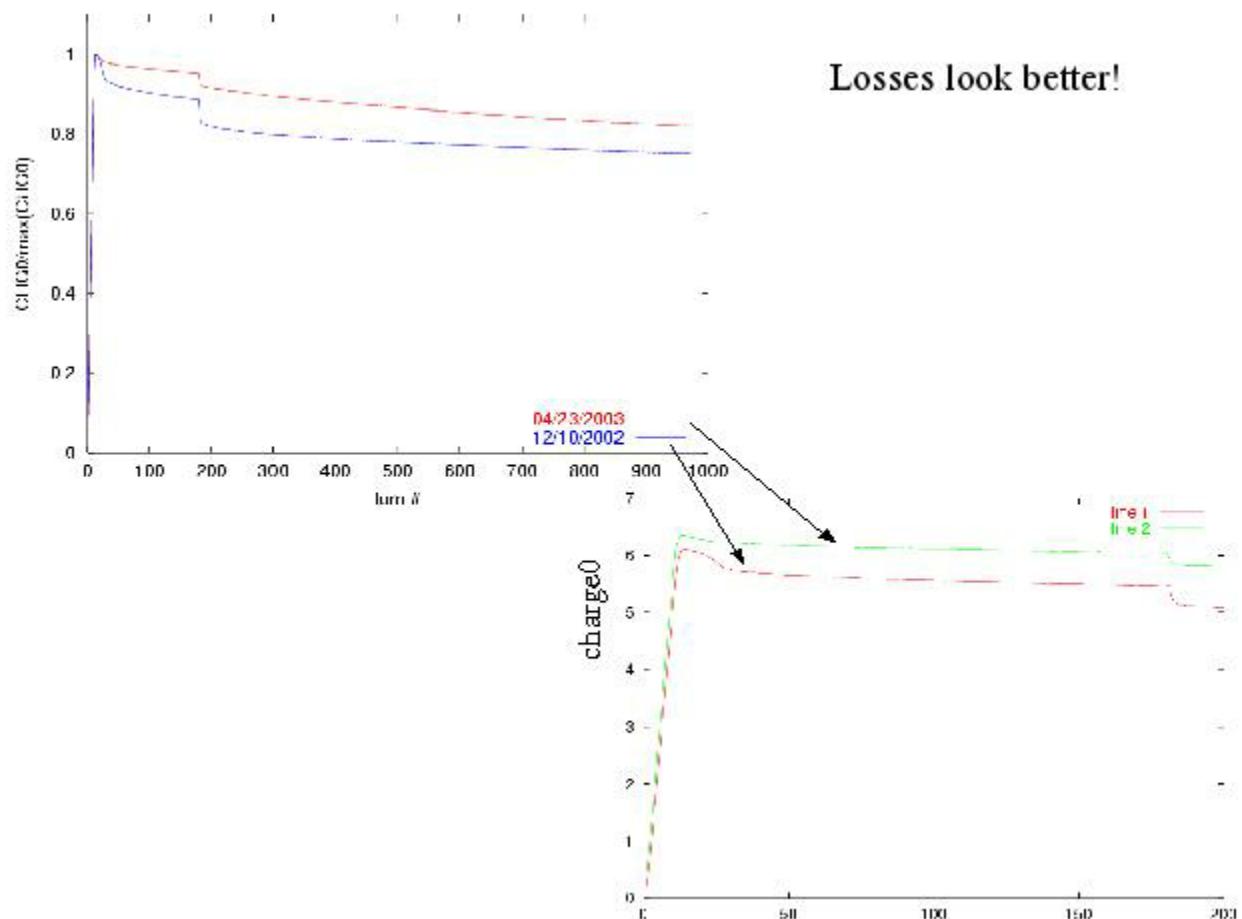
Widths before and after dogleg change

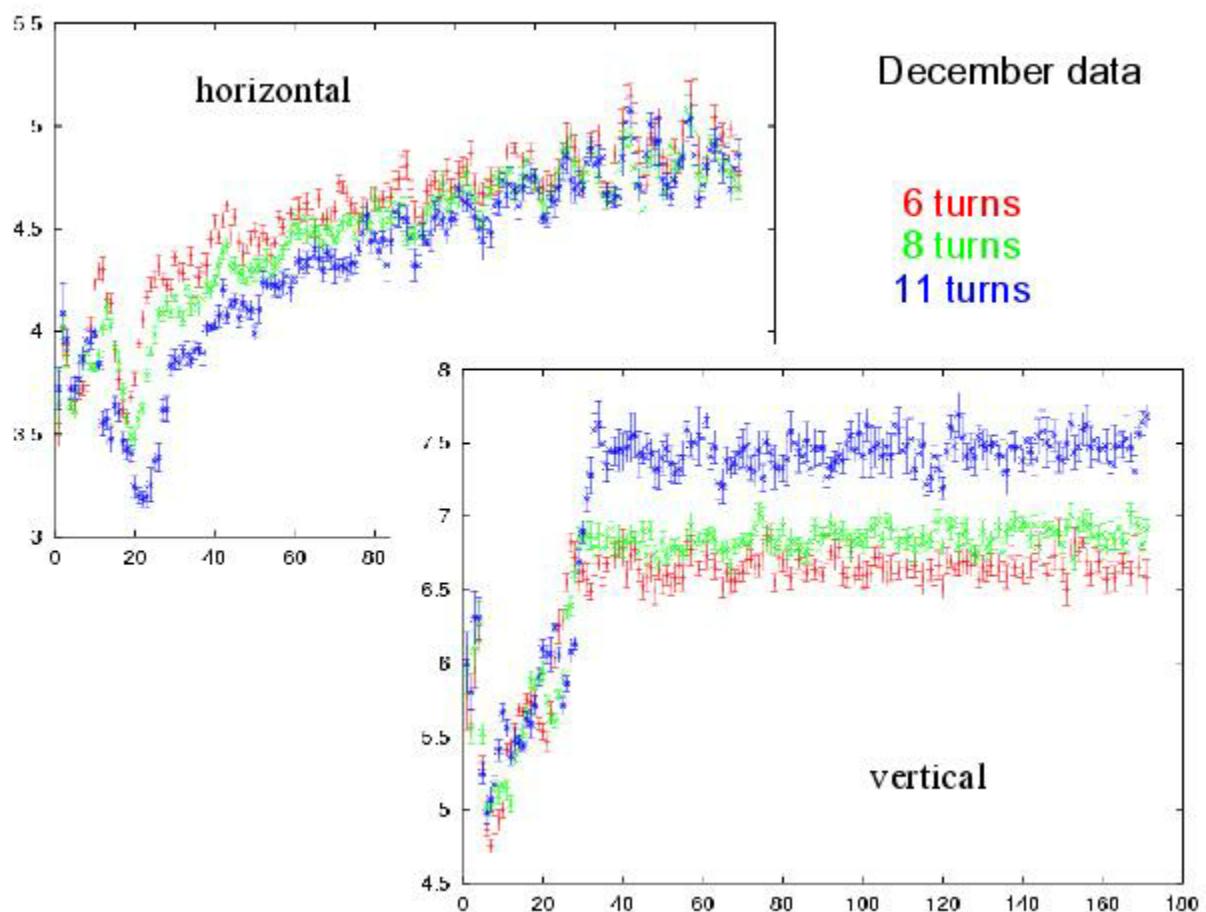
Averaged corrected widths before and after

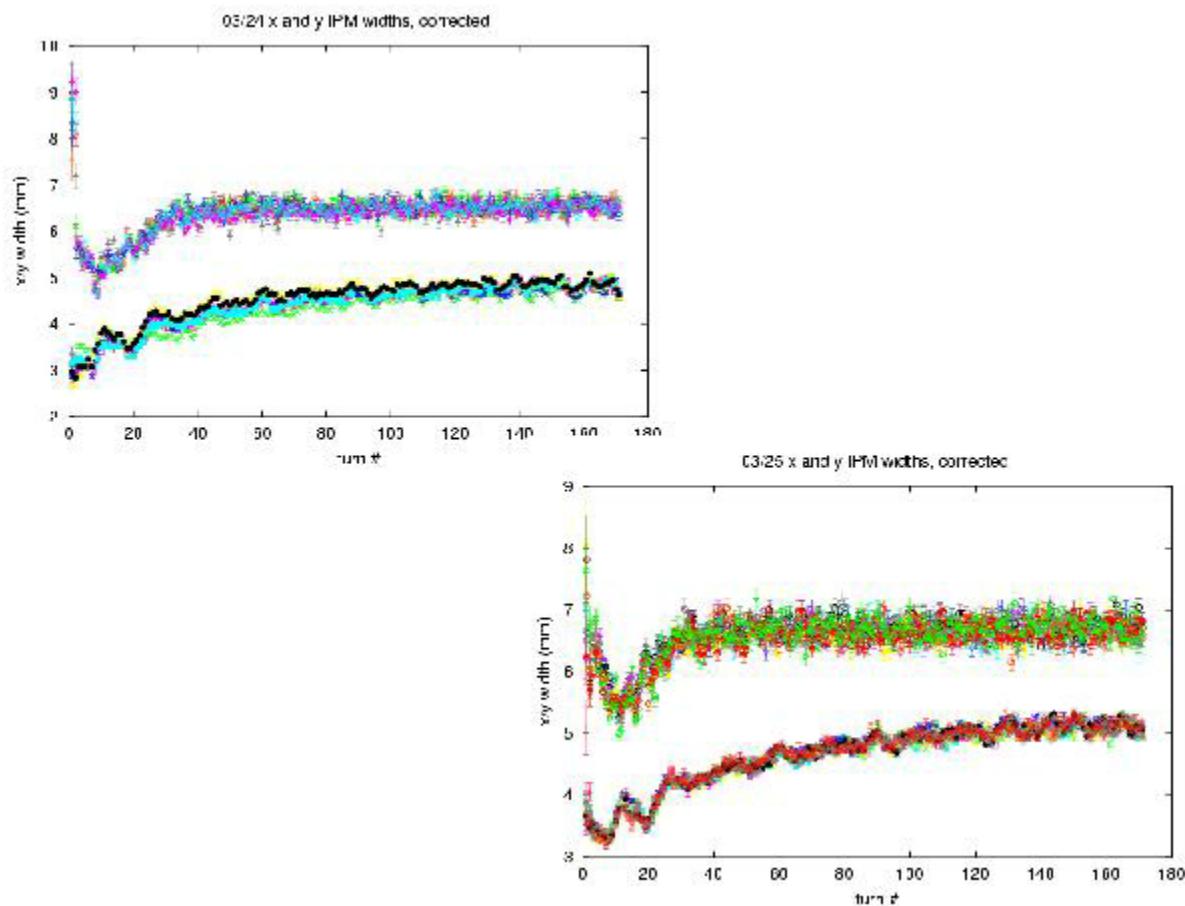


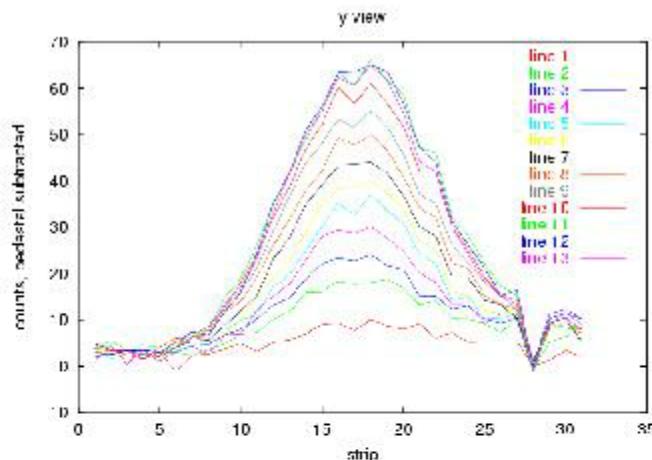
with wire



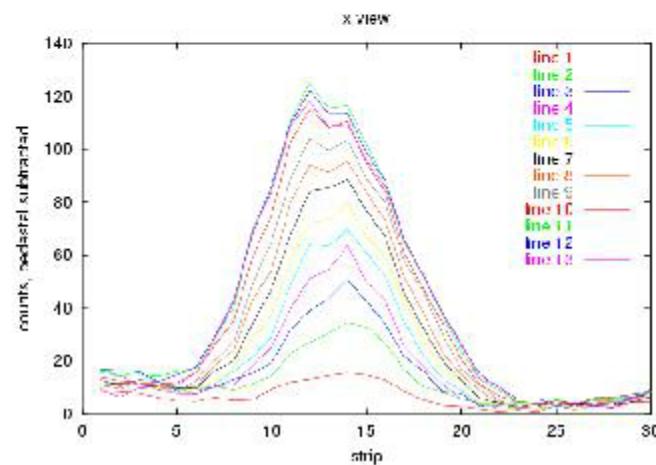








measurement for first turn (s)
has larger error (small signal
to background)



Another observation: we fit
gaussian + bgnnd.
The bgnnd term is always
higher for the first few turns.



Summary

- 1) Notch (x & y) seems to be related to ORBUMP transition
- 2) Beam losses associated with notch
- 3) Notch characteristics change with dogleg change & ORBUMP pulse change
- 4) Beam losses best in current configuration
 - would like to monitor on regular basis

Should calibrate the vertical detector

Would like to take one shift with the vertical IPM rotated the
and the flying beam wire in.