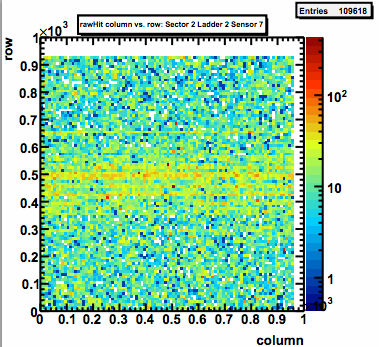
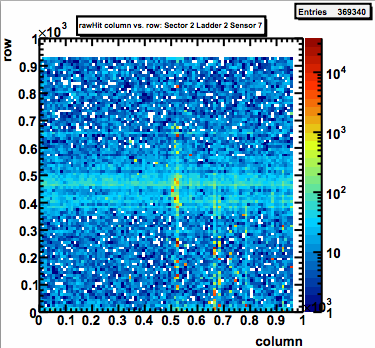
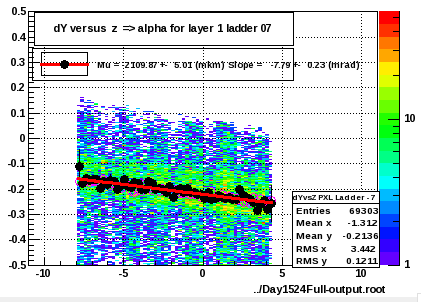
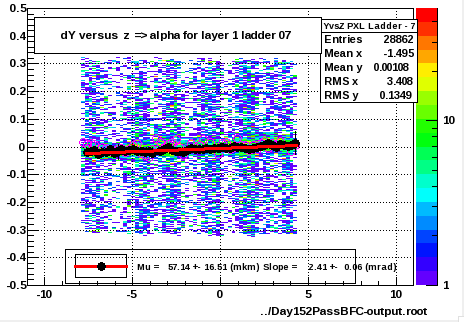
**WBS 1.6 Software**

1. **PIXEL prototype Run-13 data analysis**
   1. *The software group continued the software development, calibrations and data analysis of the recorded data. More analytically*:
   2. The SURVEY geometry Db for the Run13 configuration was finalized and implemented in the offline chain and in production.
   3. We made substantial progress toward the masking of hot pixels/columns/rows, ie the code, Db entry and retrieval,. A first pass was put in production. Below you see a noisy sensor before (left) and after (right) the masking of bad pixels. In this particular case the noise accounted for more than 70% of the reconstructed hits.



* 1. An initial TPC space-charge and beam-line calibration was performed and implemented in the production.
  2. A first pass on Alignment of Sector-7, the one showing the largest offsets from the ideal/model geometry was done and the results (see example of correction in the figure below) are encouraging. On the left we see shifts in the Y-direction of ~2mm and the presence of rotations (related to the slope of red line). After the first alignment pass (right histogram) we see shifts of a few tenths of microns and only a small residual slope. We expect that after we perform 3-5 passes the overall shifts from true positions will be less that the pixel size.



**BEFORE**

**AFTER**

* 1. We begun hit reconstruction efficiency studies.

1. **IST/SSD** 
   1. We had further discussions on IST offline chain and the IST/SSD survey data organization.
2. **AOB**
   1. Simulation work to further test the alignment procedures and resolution is ongoing.
   2. A meeting with the STAR Software and Computing team is scheduled to take place the week of July 9th at BNL.