

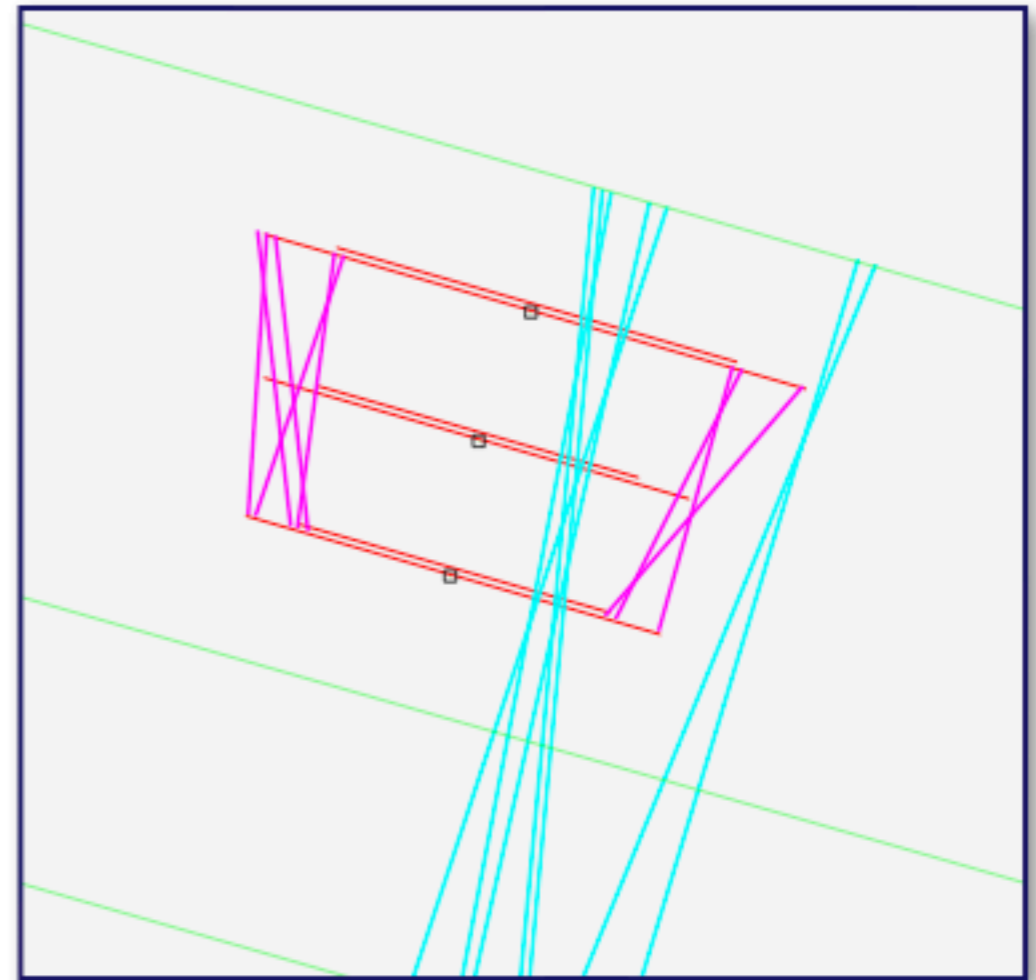
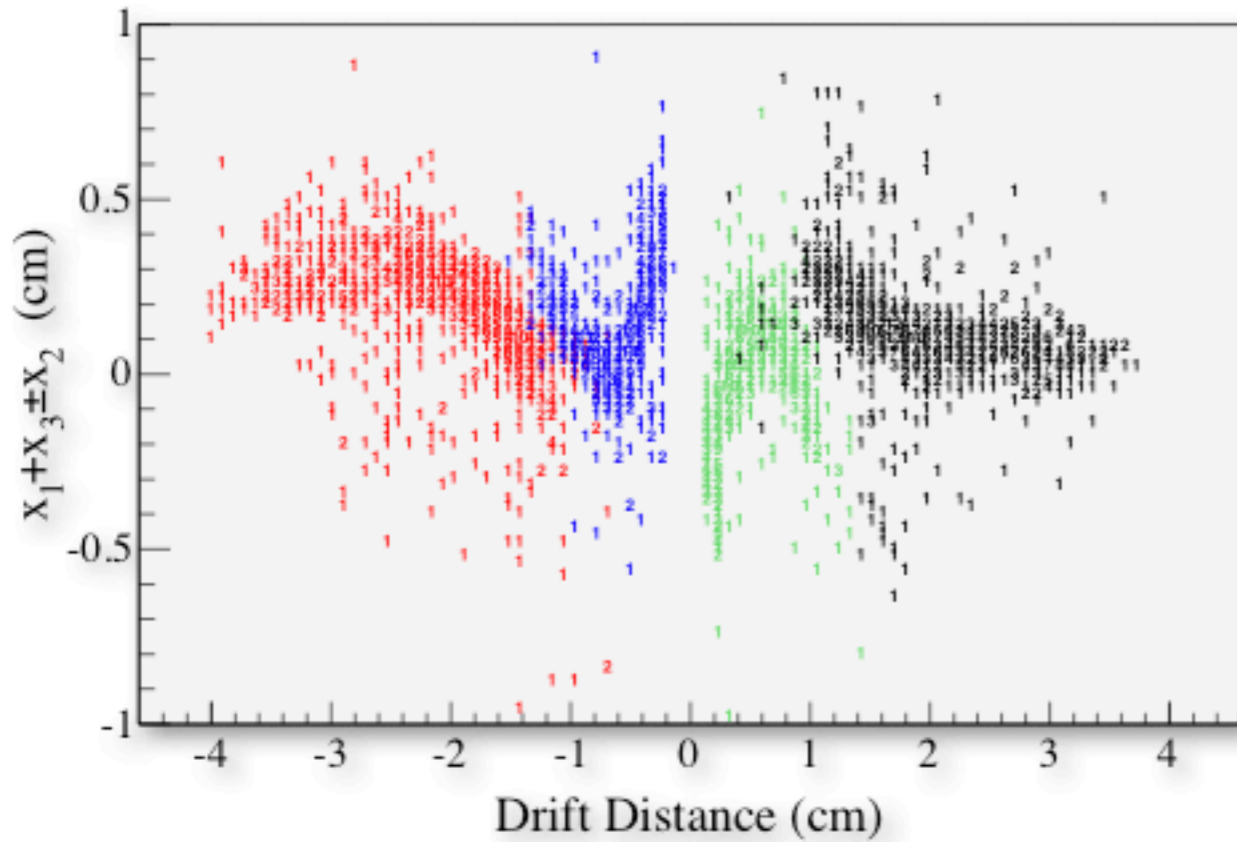
Questions:

- Why the stub errors ($x_1 + x_3 \pm 2x_2$) are large?
- Can we find the time-to-distance relation empirically?

Some yet-to-be-tested new methods:

- Multi-SL Cluster Formation in 3D space
- Adaptive calibration

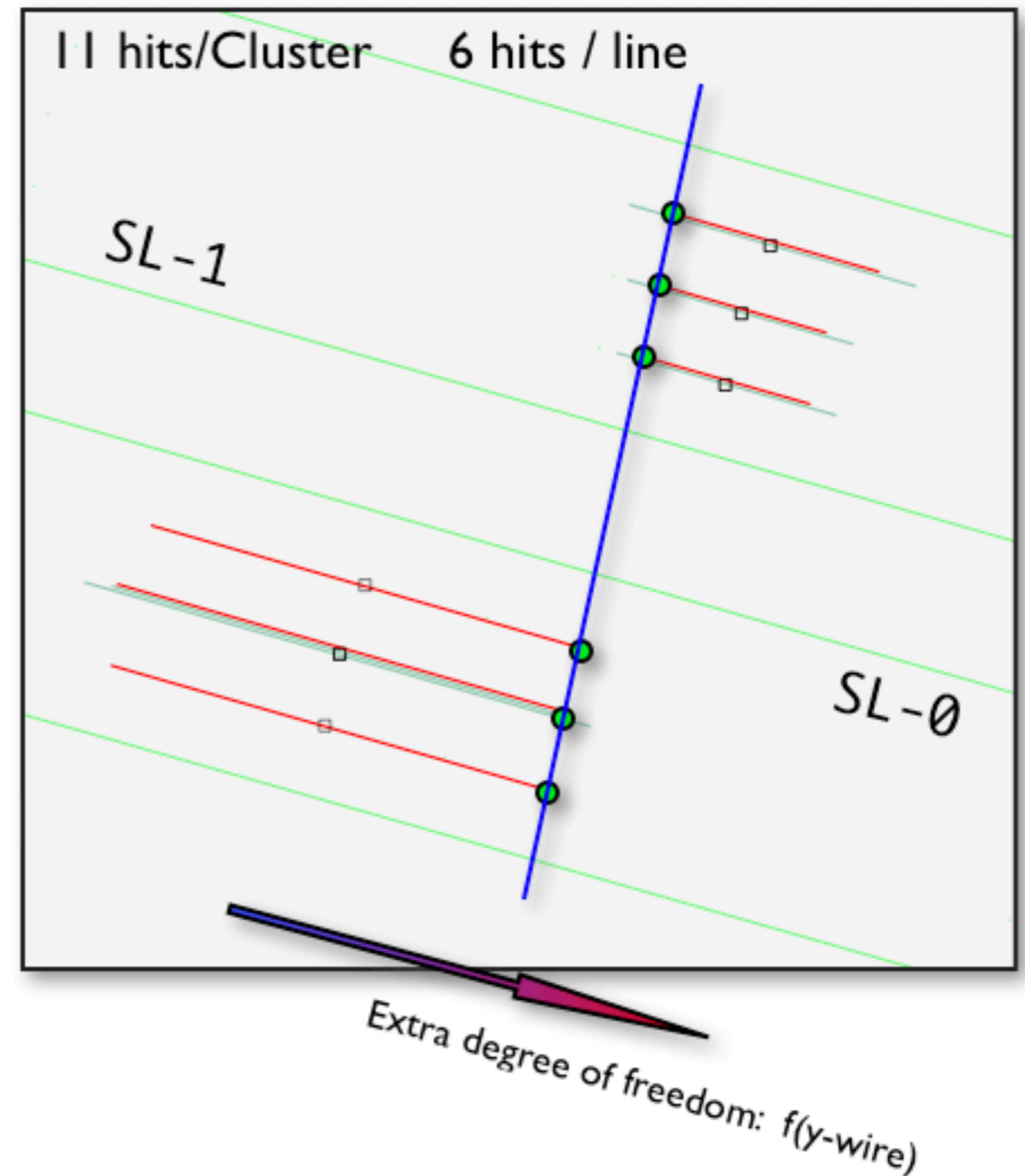
Stub Errors ($x_1 + x_3 \pm 2x_2$)



- Possible misidentification due to drift distance $x_{1,2,3}$ uncertainty.
- ?

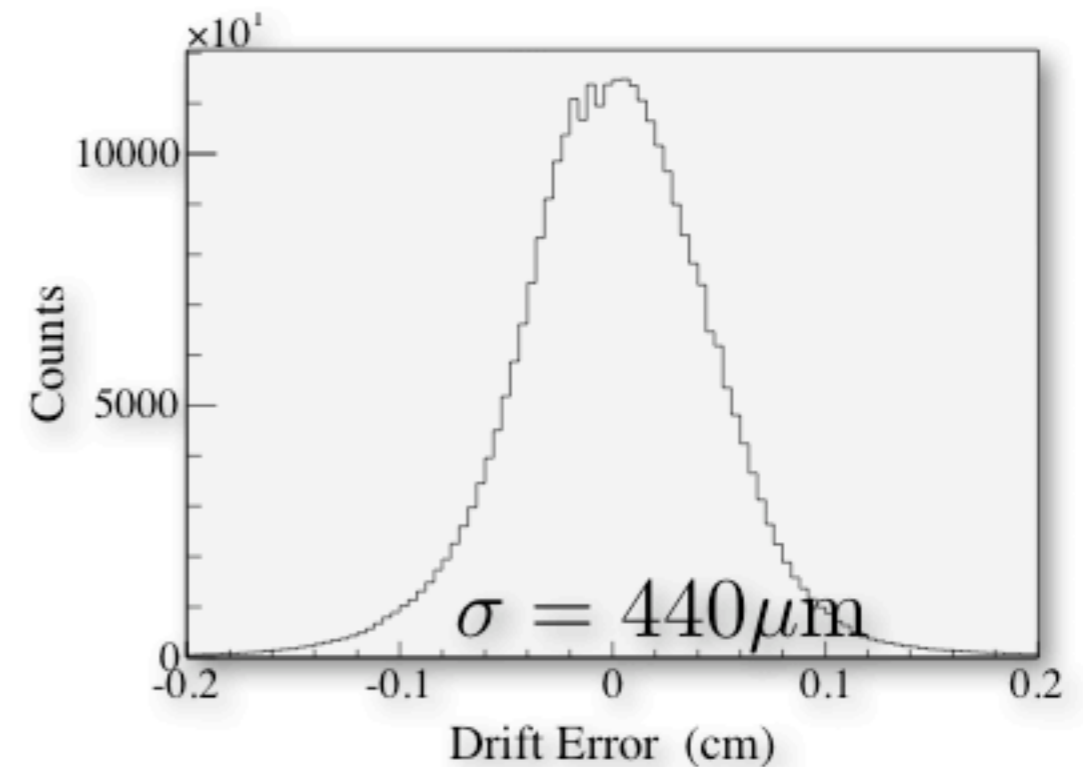
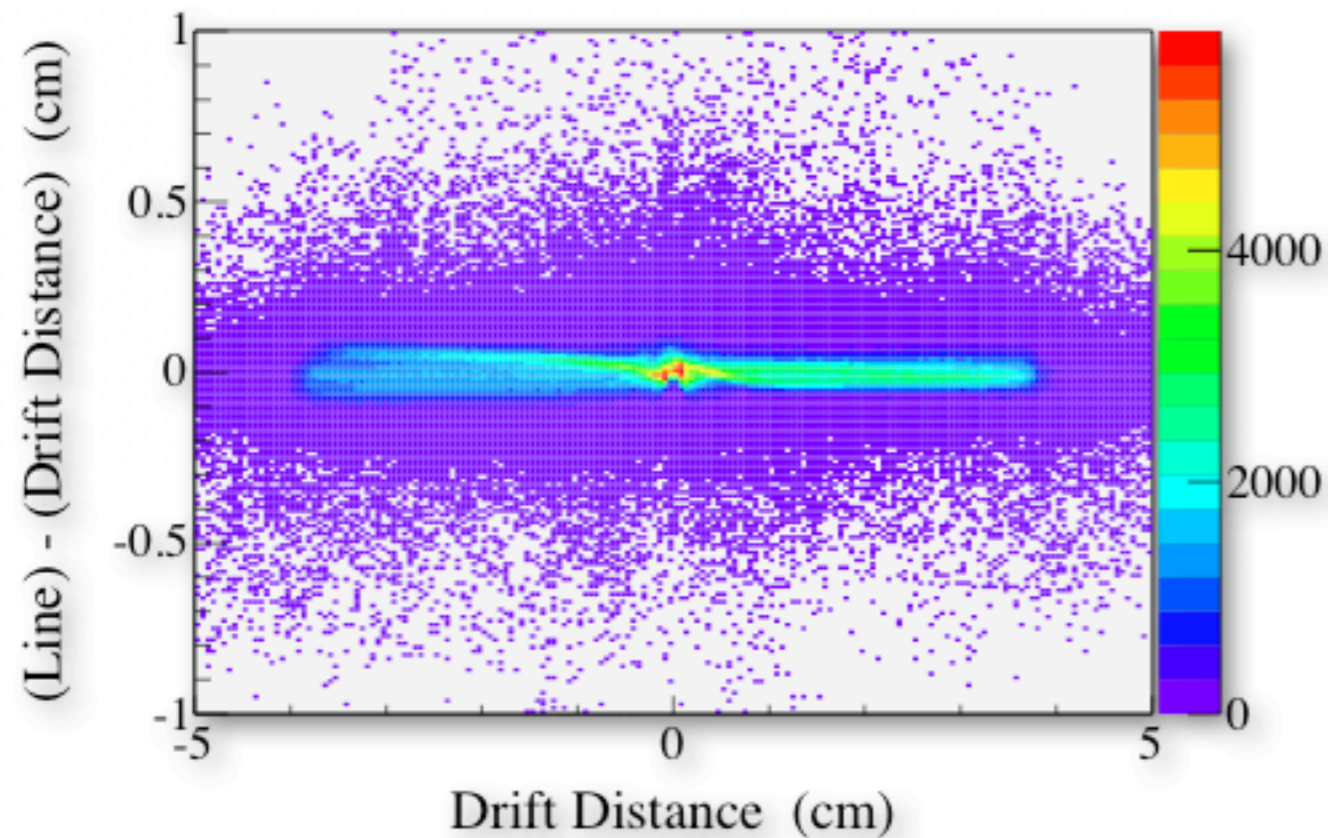
Multi Super Layer Line Construction

- Bypass stub definition
- Use hit information from both SL to construct a 3D line segment at once
- Average number of hit-combination ≈ 512 (too expensive CPU wise)
- Try to reduce combinations by using sort-of-stubs (a very rough cut) info

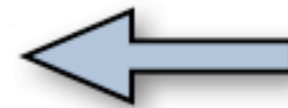
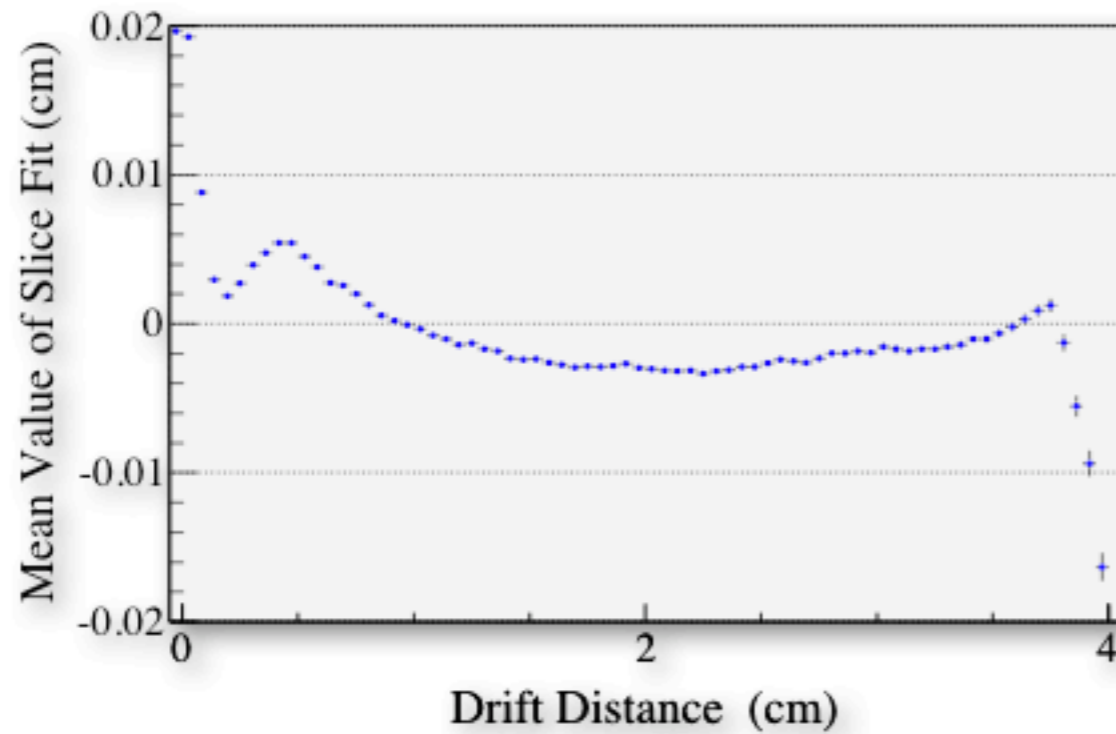


$$\left\langle \frac{\chi^2}{n} \right\rangle = 0.015$$

Iteration-1: Start with a reasonable time-to-distance function



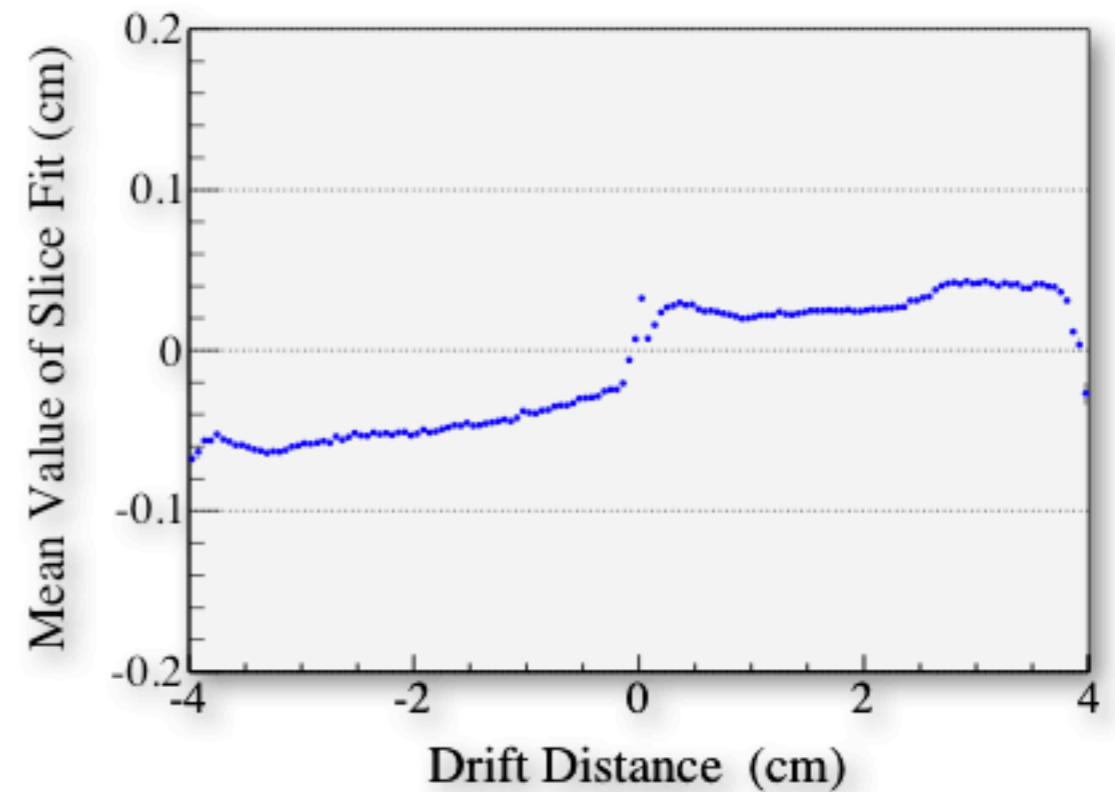
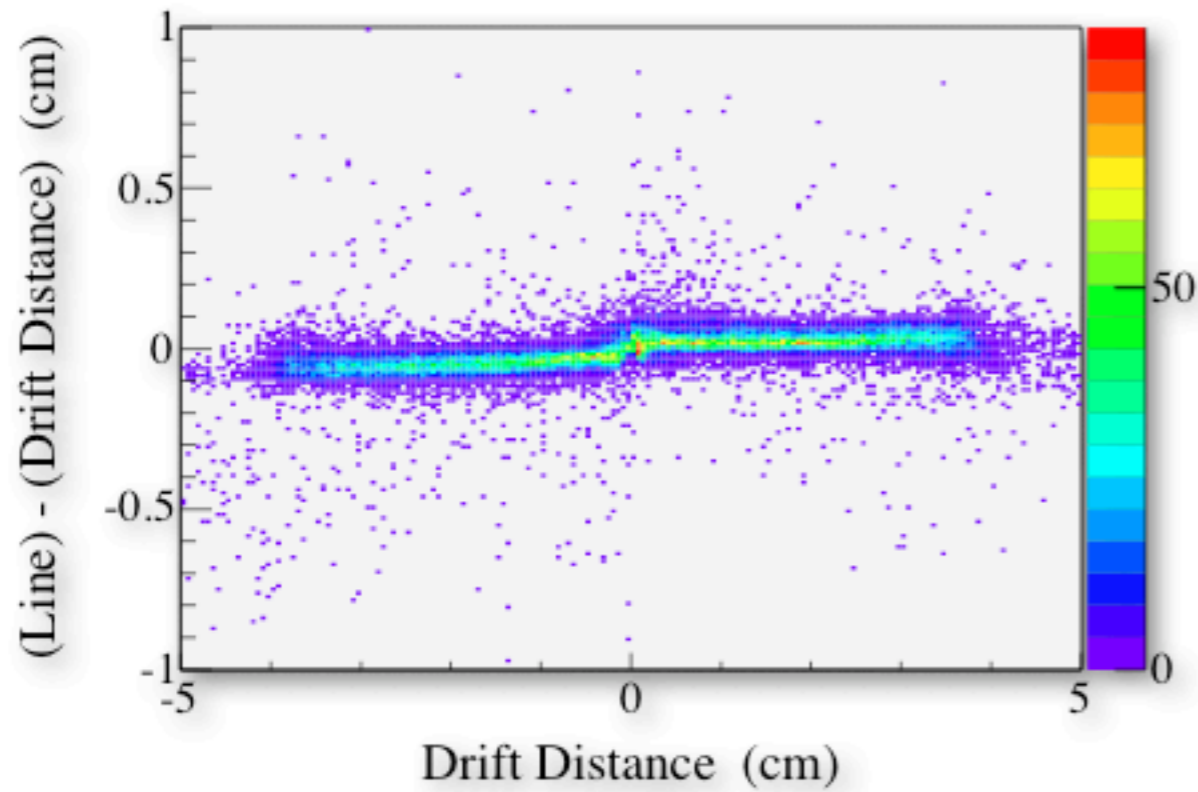
Adaptive/Iterative Time-to-Distance



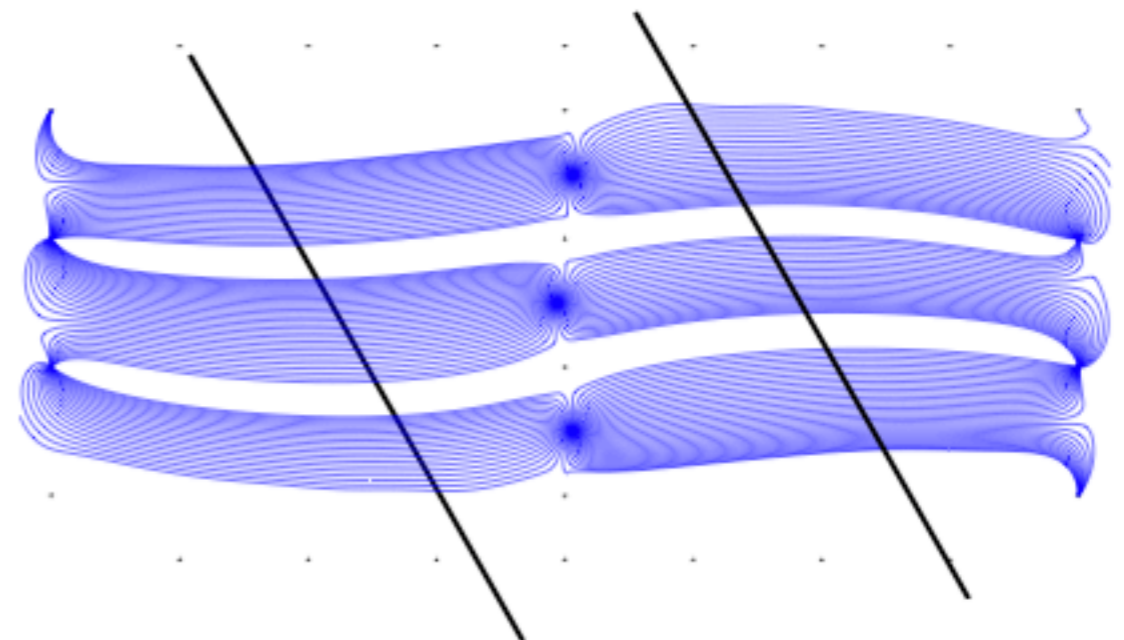
Correction to Time-Distance

Re-process with this correction

Iteration-3: After Two Iteration



- Asymmetric Correction!
- Construct Asymmetric T-2-D



Iteration-4

