HKS Drift Chamber Tracking

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OUTLINE

- Hardware
  - ◆ Geometry Alignment
  - ◆ Cable Alignment
- Software
  - ◆ Single hit selection for a space point
  - ◆ Start time calculation
  - ◆ Final two chamber link
- Status

Hardware
–Tracking Geometry Alignment-

Idea: Scan xcenter and ycenter, separately, plane by plane, and compare the Σ(**abs (mean value)**)$_i$ (i=plane11 to plane 12) of the **single residual**.
*xcenter: The center point of a certain plane of the HKS drift chamber in x direction in spectrometer coordinate, so as to ycenter.
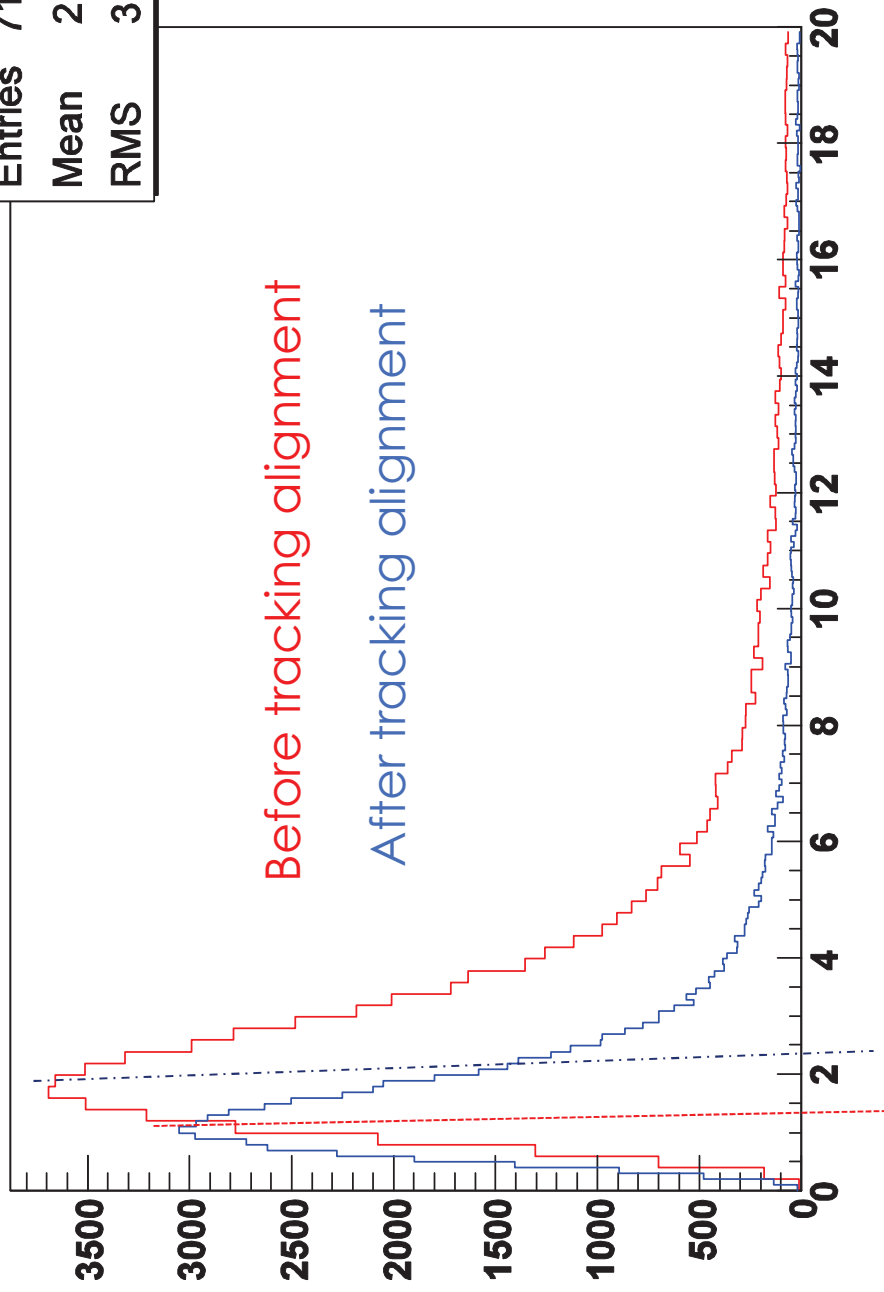**Purpose: Align (xcenter$_i$, ycenter$_i$) to one line.**
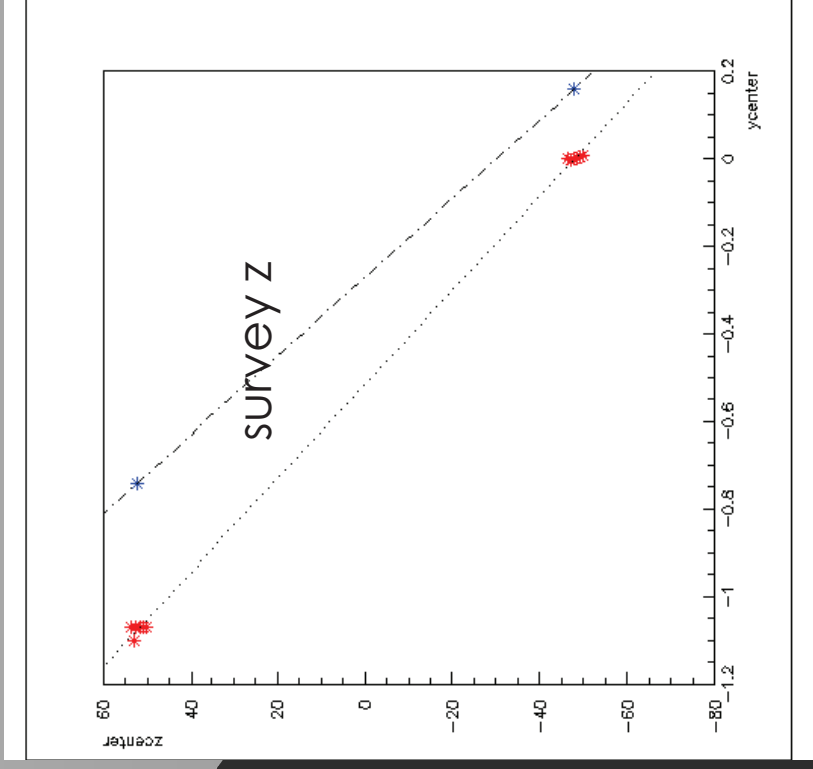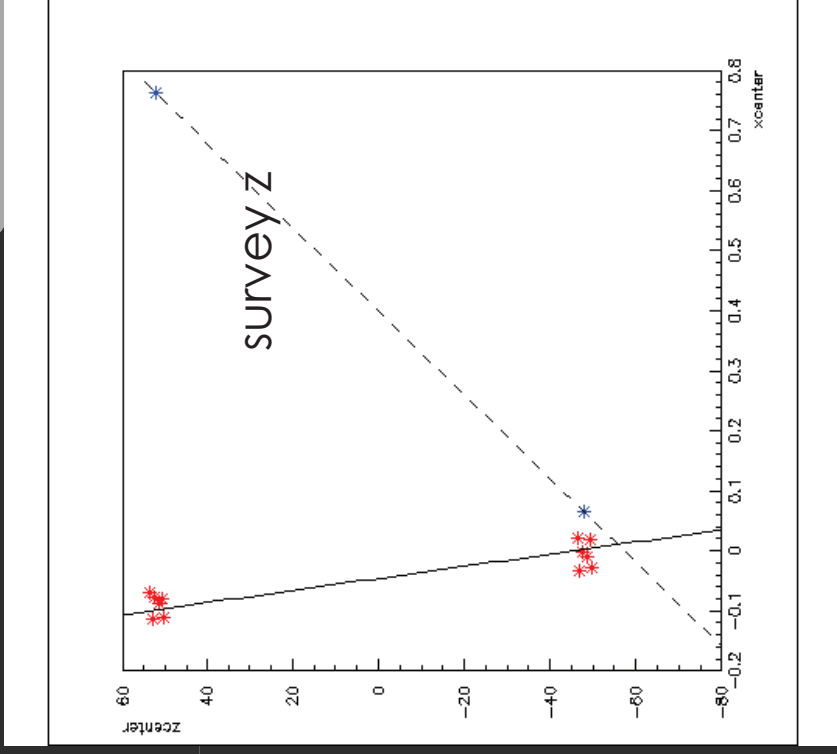
Hardware
-Tracking Geometry Alignment-

RUN# 75409(SS)

After Alignment

Before Alignment
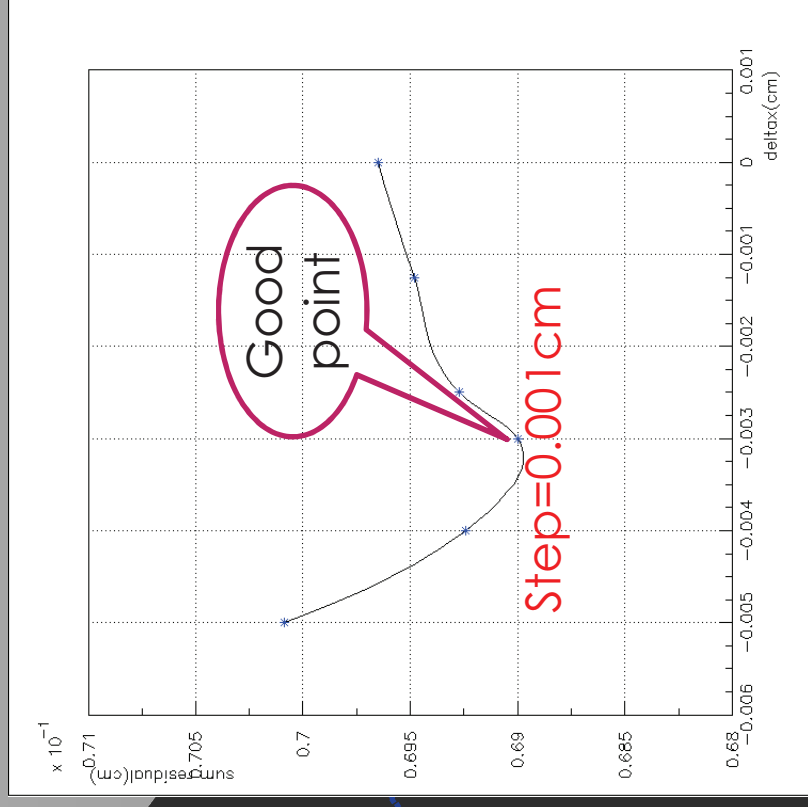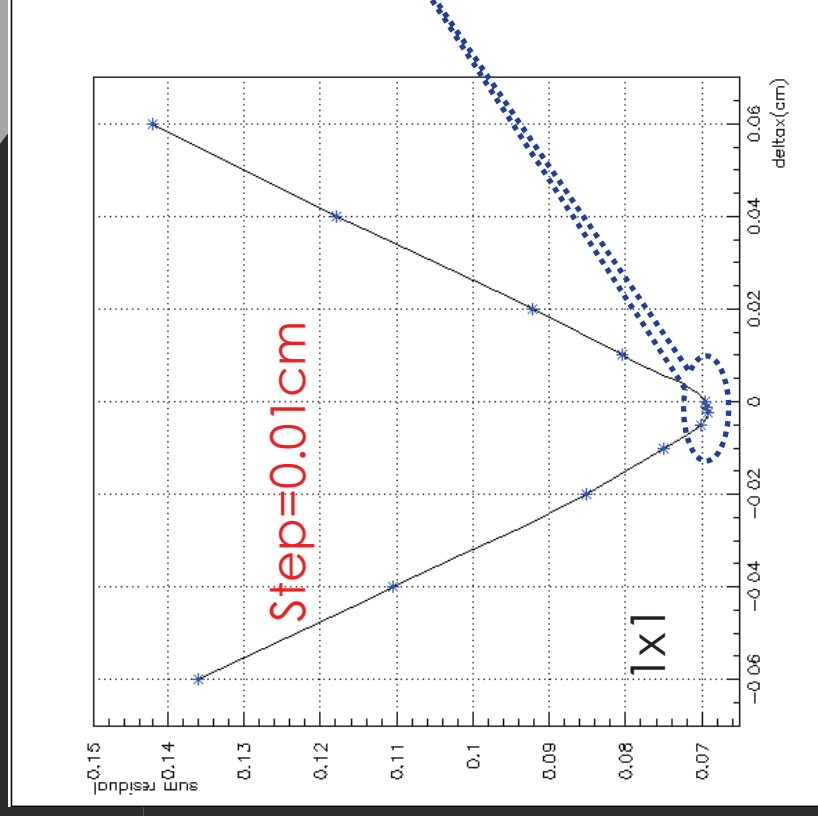
Hardware
-Tracking Geometry Alignment-

HDC chi2 per dof fp (zoom)

h1283	
Entries	71582
Mean	2.686
RMS	3.022

Before tracking alignment

After tracking alignment

HARDWARE
–SURVEY GEOMETRY ALIGNMENT–

Project tracking z to survey z direction

HARDWARE

-SURVEY GEOMETRY ALIGNMENT-

Project tracking z to survey z direction