



- ▶ **Muon alignment, residuals dependence on q/p_T :** expanding initial single-chamber study to all MB1, ME1 chambers, to see if the tracker weak mode discovered by Markus also corrects endcap
 - ▶ this is a new set of plots in CommonAlignmentMonitor, turned on/off with a createJobs.py switch
 - ▶ implemented, but not yet tested or checked in
 - ▶ we'll want to add it to Vadim's monitor
 - ▶ target: CMSSW_3_6_X, bundled with Vadim's monitor
- ▶ **Hardware alignment news:** the latest hardware alignment of CRAFT-09 is getting to be high quality, reasonable to start with hardware alignment until we collect a sufficient number of tracks (plots follow)
 - ▶ definition of “sufficient” depends on estimated hardware alignment precision and Aysen's precision-to-integrated luminosity relation

Example plots: HW align

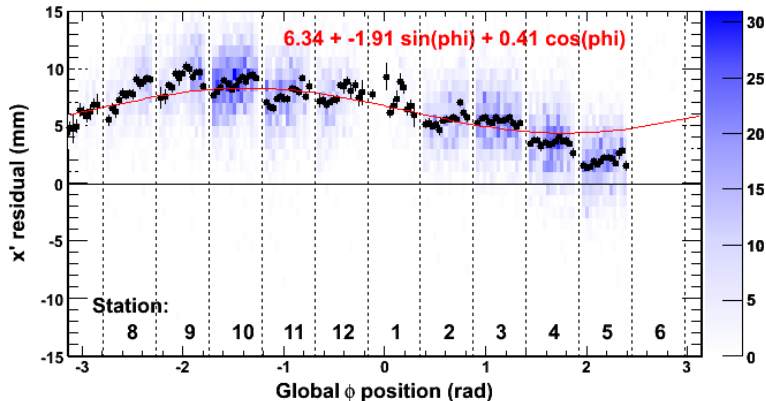
Jim Pivarski 2/5



$A + B \sin \phi + C \cos \phi$ (red curve) is rigid-body translation/rotation: hardware system not expected to get this right (especially now that the Link has been broken)

Tracks *must* be used for this part (everyone is in agreement about that)

wheel +0, station 1

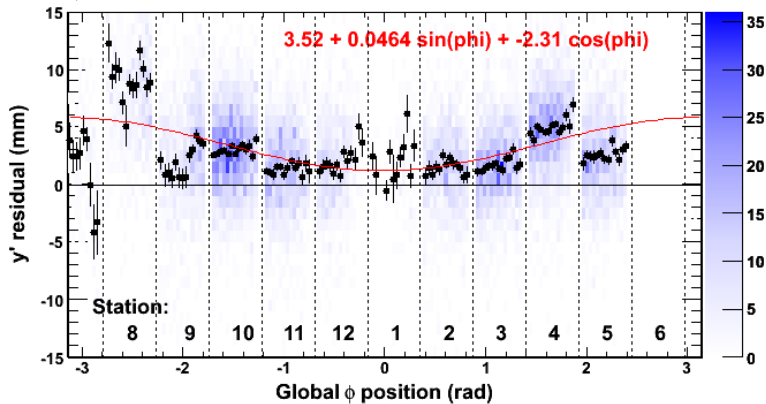


Example plots: HW align

Jim Pivarski 3/5



wheel +0, station 1

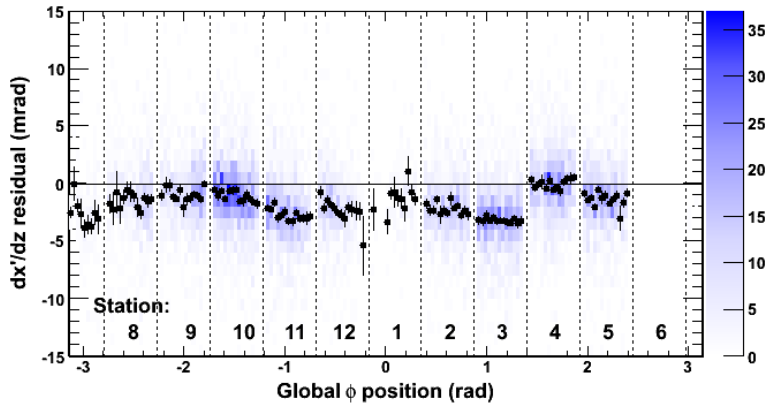


Example plots: HW align

Jim Pivarski 4/5



wheel +0, station 1



Example plots: HW align

Jim Pivarski 5/5



station 1, sector 04

