



## Status of alignment

Recently corrected:

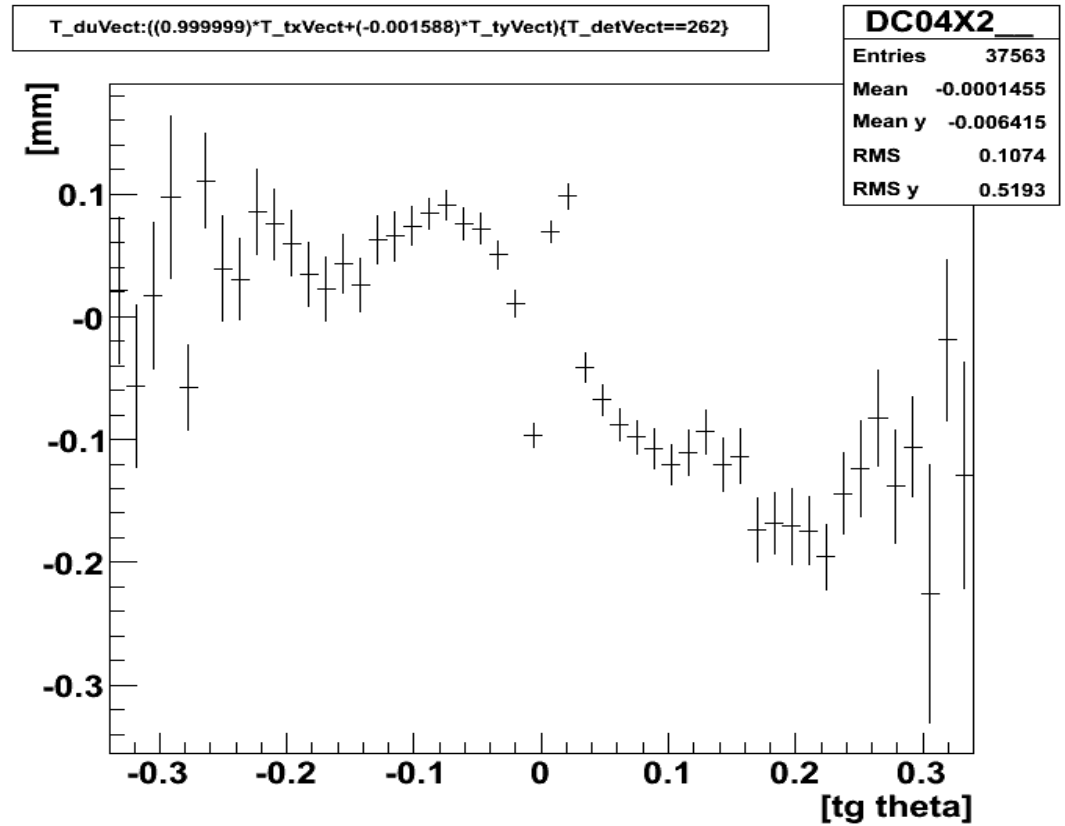
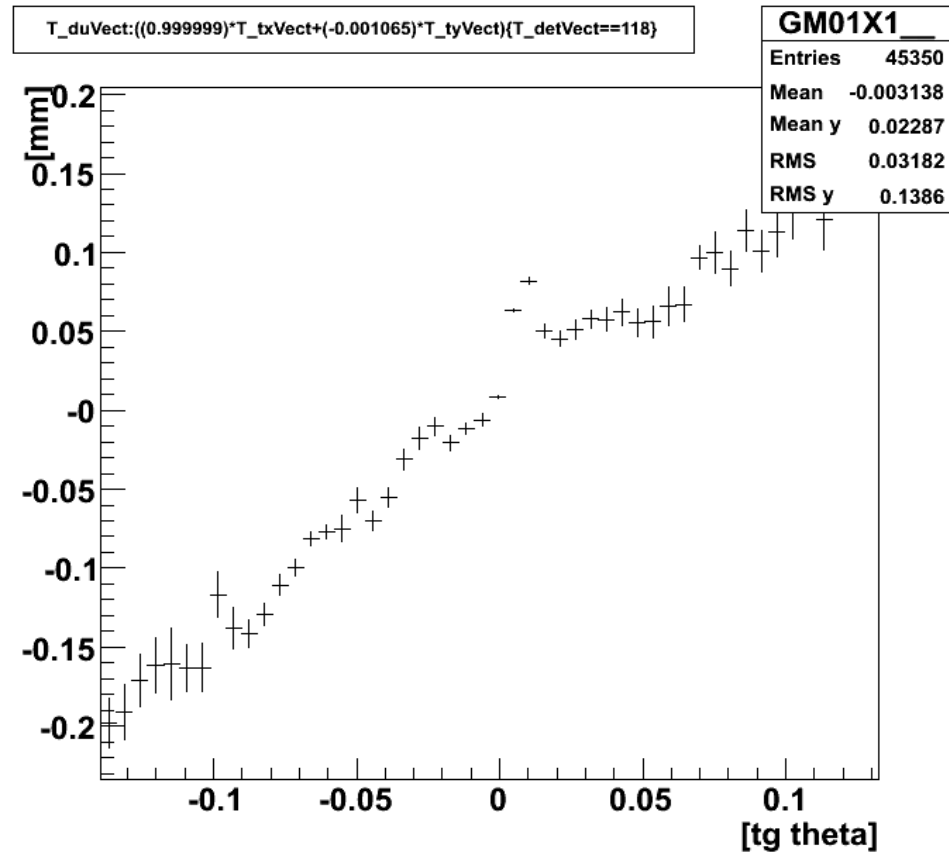
1. Z alignment
2. DC/DW deadzones correction
3. DW mapping files

Remaining problems:

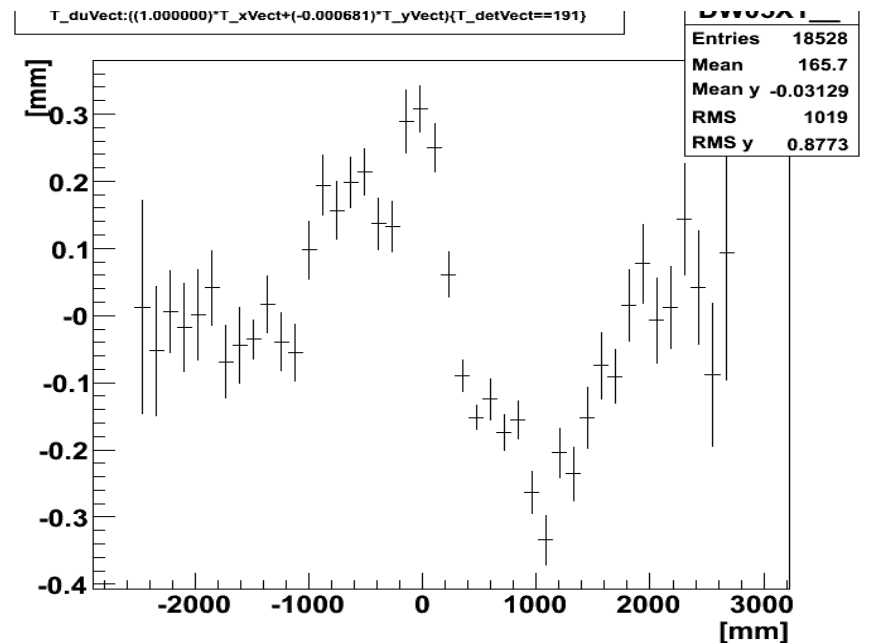
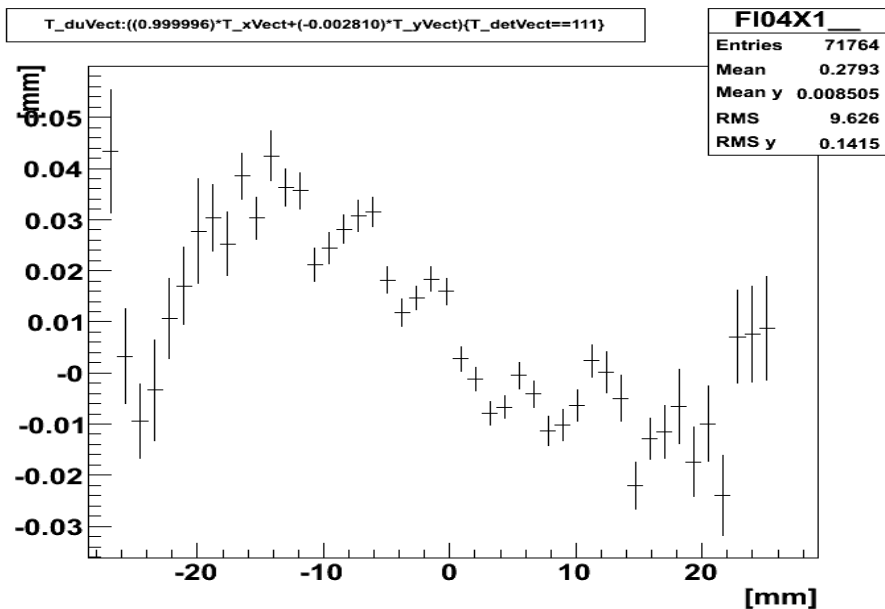
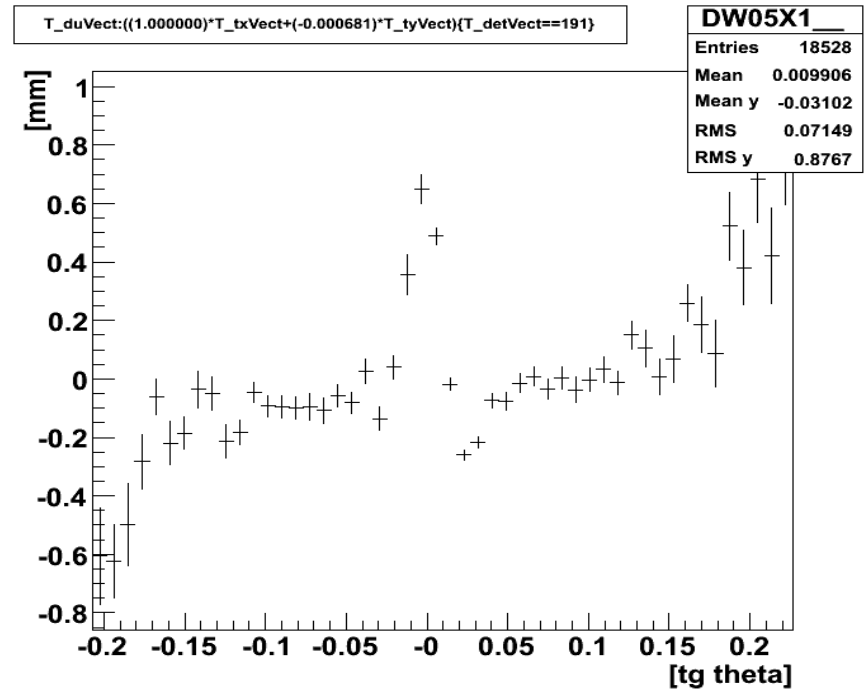
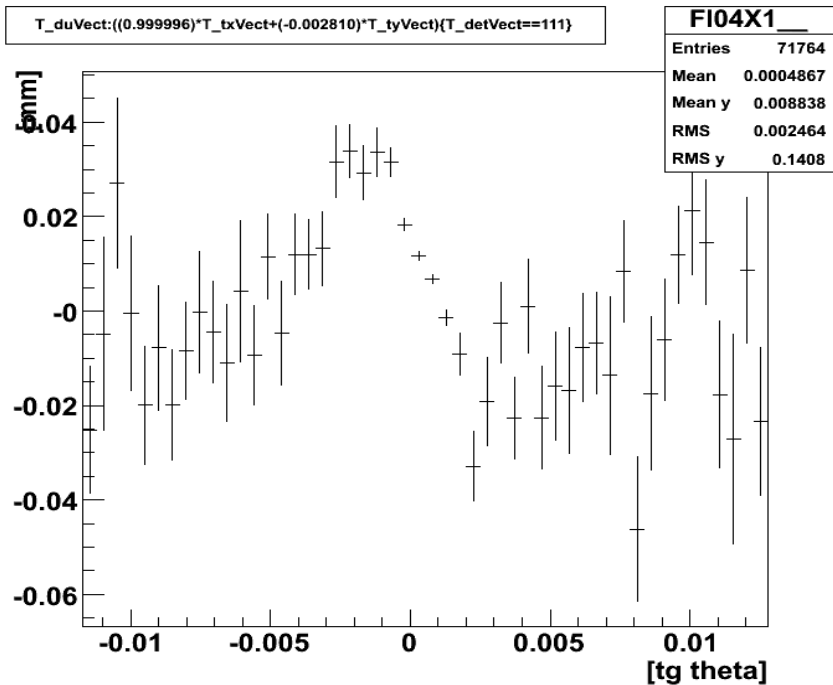
1. center-outer part of detectors inconsistency
2. GEM spacers
3. X-ray corrections

# Inner-outer part of detector inconsistency

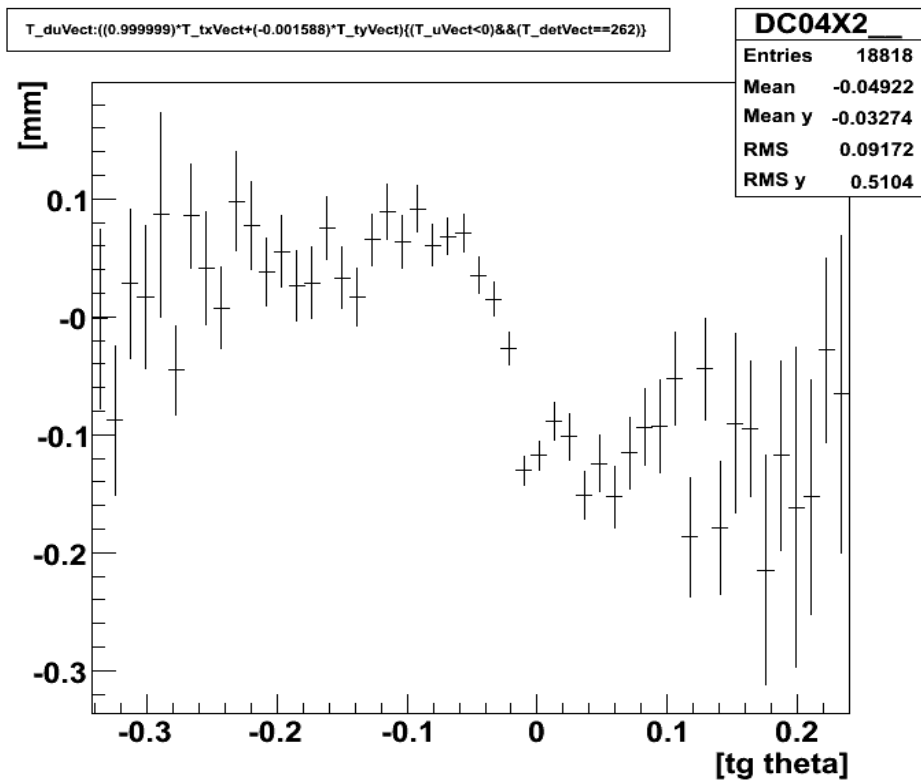
First observed in GEM01 and DC04



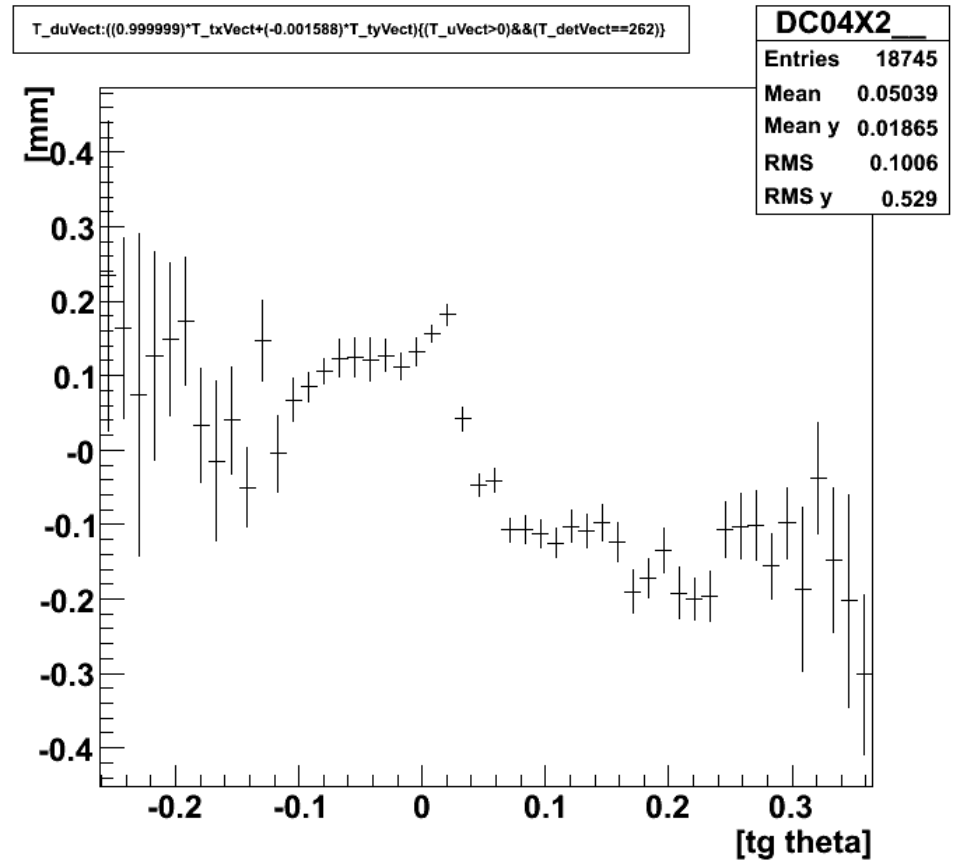
# Inner-outer part of detector inconsistency



# Inner-outer part of detector inconsistency



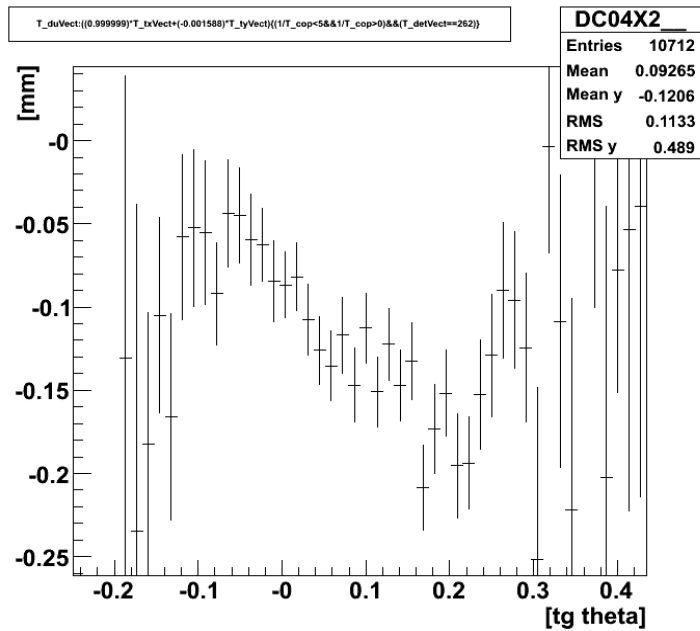
DC04X2 ( $x < 0$ )



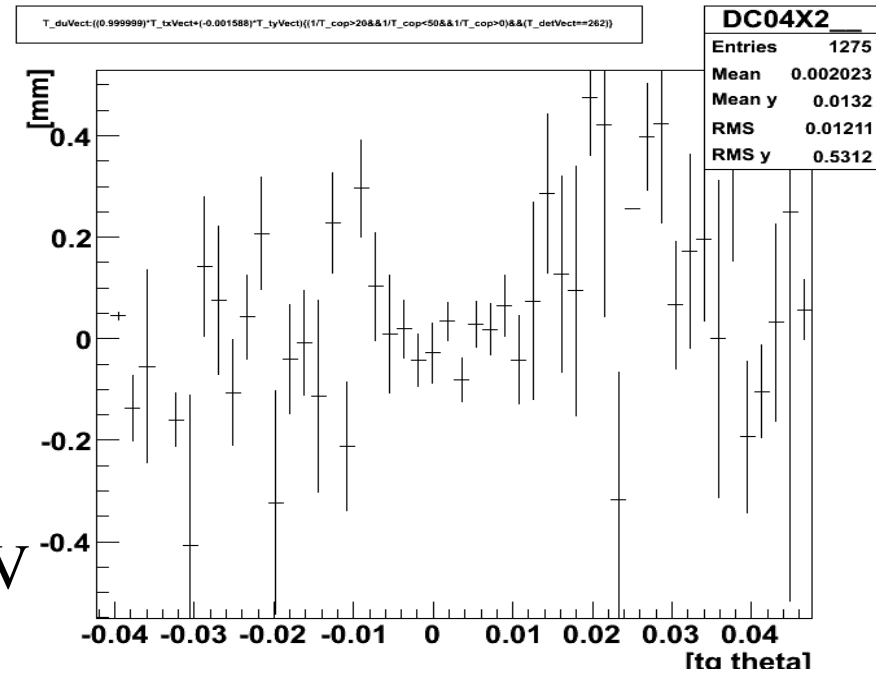
DC04X2 ( $x > 0$ )

# Inner-outer part of detector inconsistency

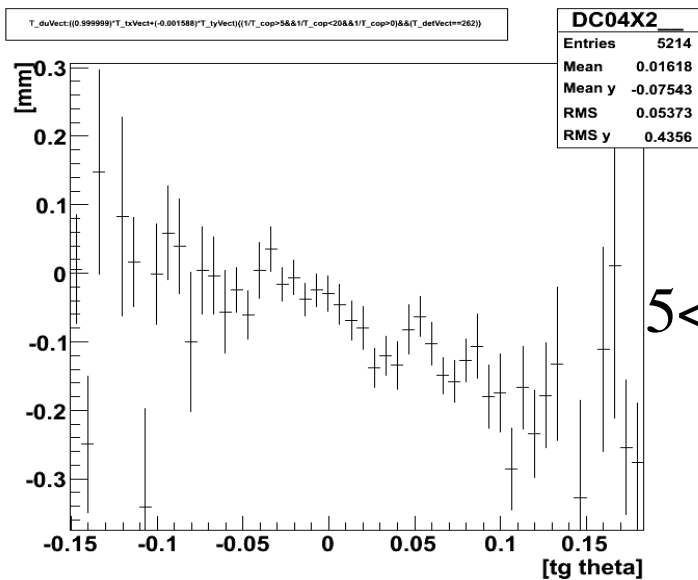
positive particles



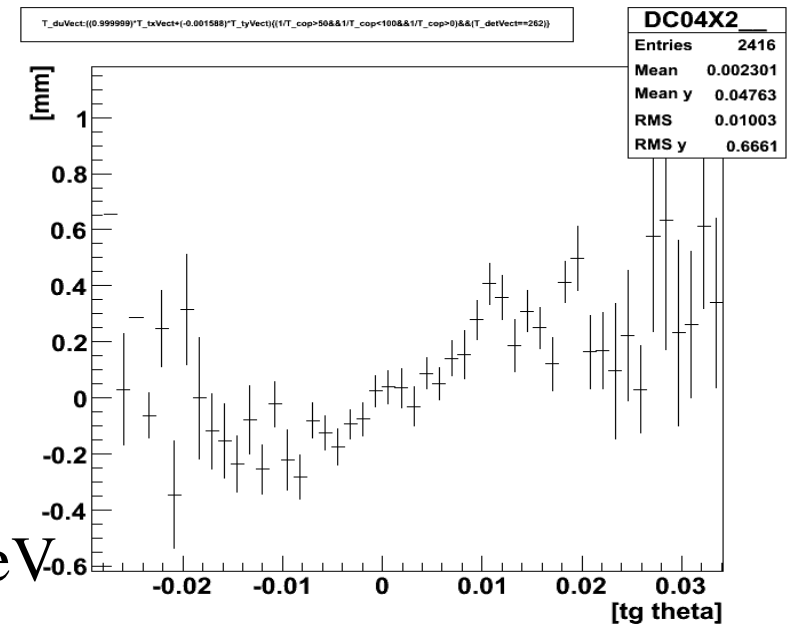
$p < 5$  GeV



$20 < p < 50$  GeV



$5 < p < 20$  GeV



$50 > p > 100$  GeV

# Problem with GEMs spacers

GEMs' spacers  
affect alignment due to  
clusterization algorithm

Theoretically solution  
is present in coral:

[Traf dCut\[72,73,74\]](#)

[\\$CORAL/src/pkopt/gem.spacers.txt](#)

