

Two BodyDecay - ZmuMu Spring10

11th May 2010

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Data samples

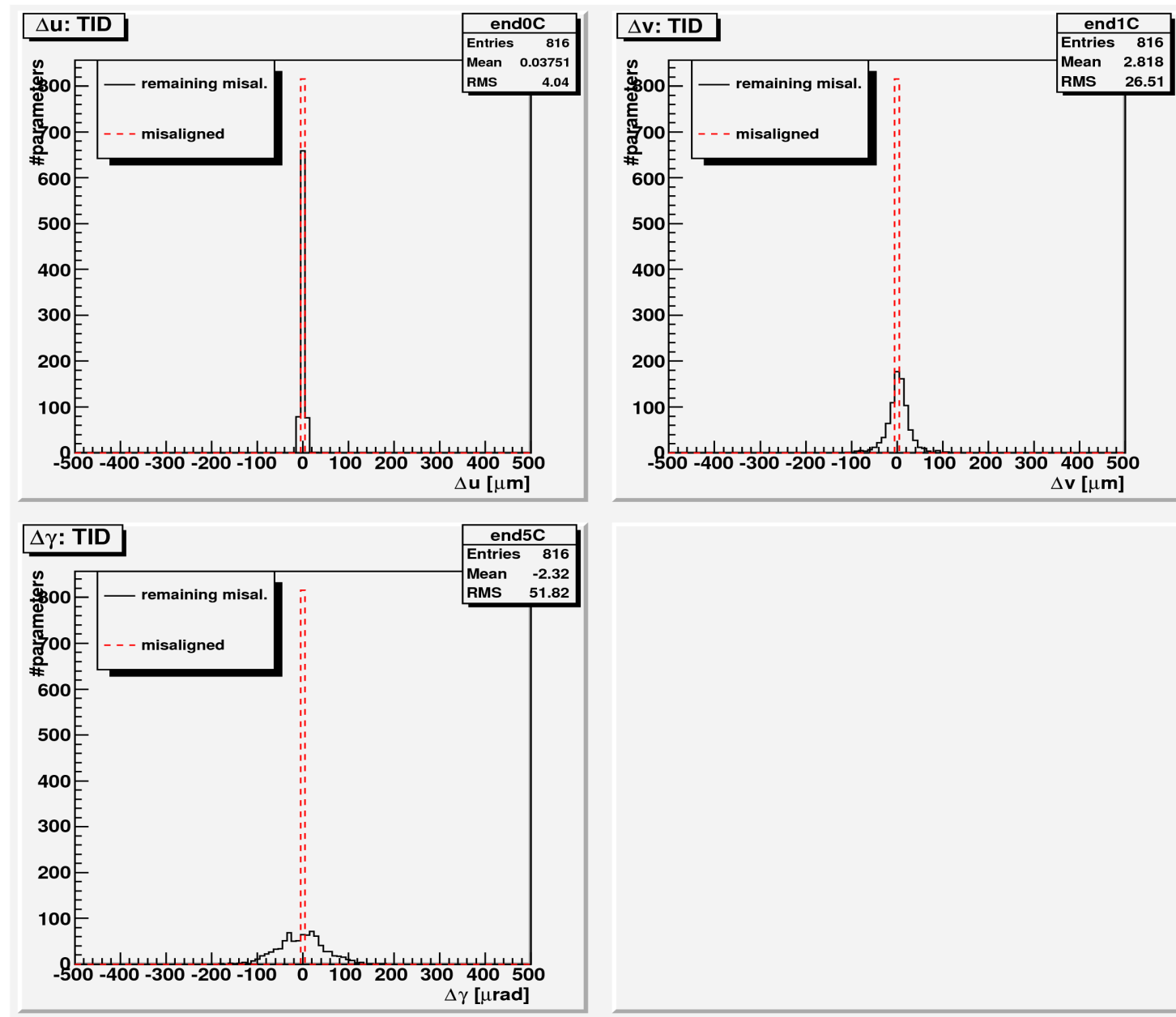
ZmuMu Spring10 MC

/store/mc/Spring10/Zmumu/ALCARECO/START3X_V26_S09_TkAlMuonIsolated-v1/0005/D4BF868F-D64D-DF11-B2ED-90E6BA19A243.root
/store/mc/Spring10/Zmumu/ALCARECO/START3X_V26_S09_TkAlMuonIsolated-v1/0005/CCCC31EB-D44D-DF11-89F0-90E6BA19A22D.root
/store/mc/Spring10/Zmumu/ALCARECO/START3X_V26_S09_TkAlMuonIsolated-v1/0005/66DF9A1E-D24D-DF11-AD9A-90E6BA0D09AD.root
/store/mc/Spring10/Zmumu/ALCARECO/START3X_V26_S09_TkAlMuonIsolated-v1/0005/6025A48F-D64D-DF11-B49A-90E6BA442F33.root
/store/mc/Spring10/Zmumu/ALCARECO/START3X_V26_S09_TkAlMuonIsolated-v1/0005/3236BE2B-E34D-DF11-8254-90E6BA442EF6.root

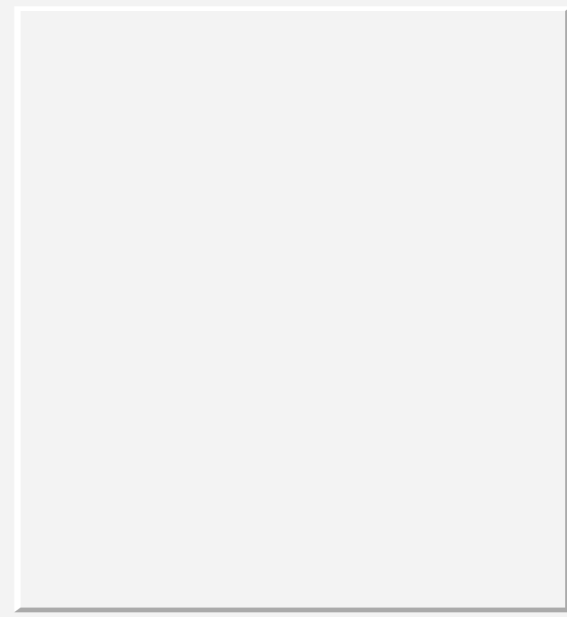
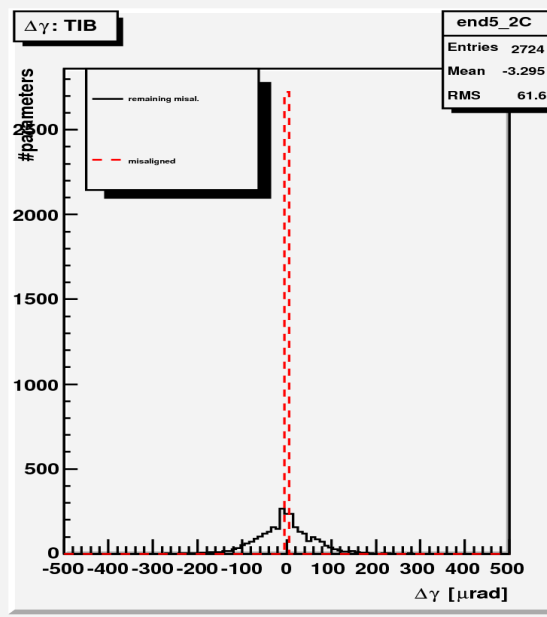
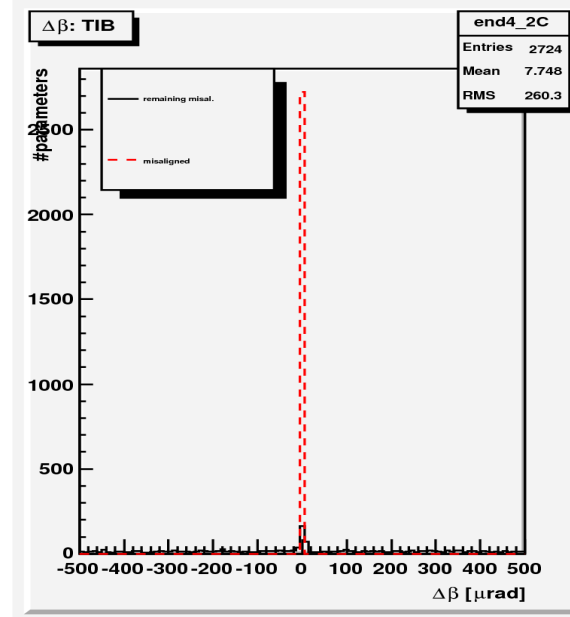
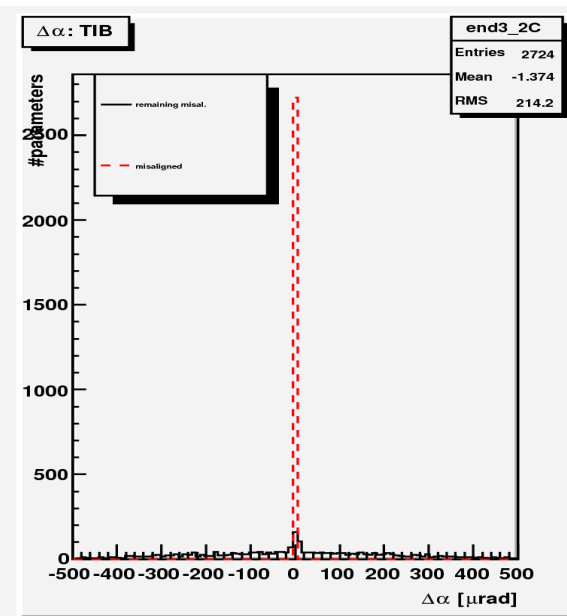
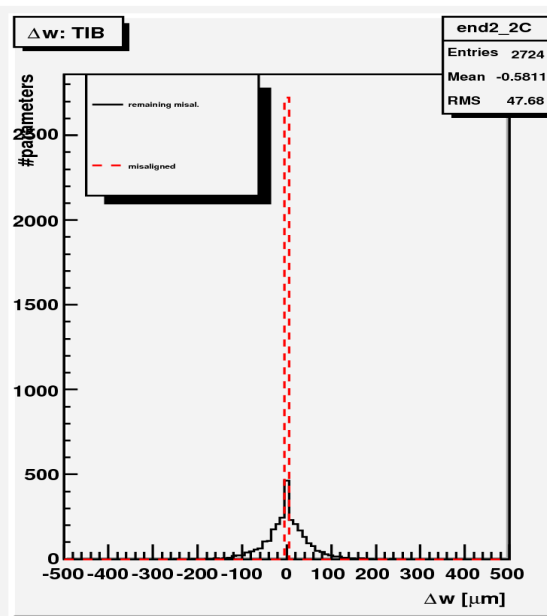
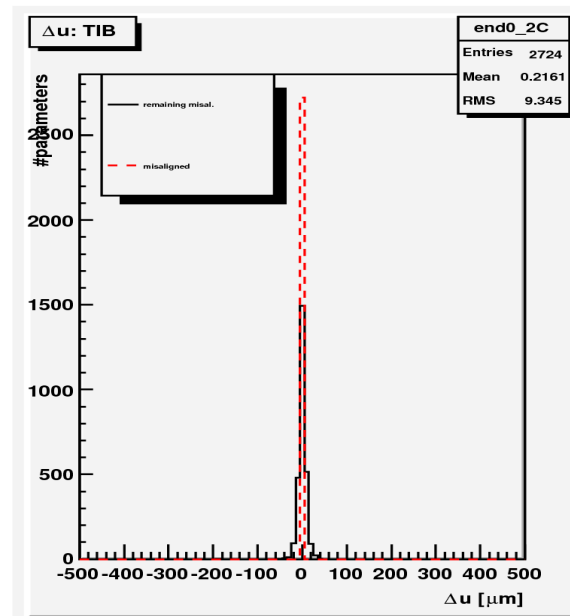
Realise: CMSSW_3_5_4_patch1

Started from IDEAL Geometry

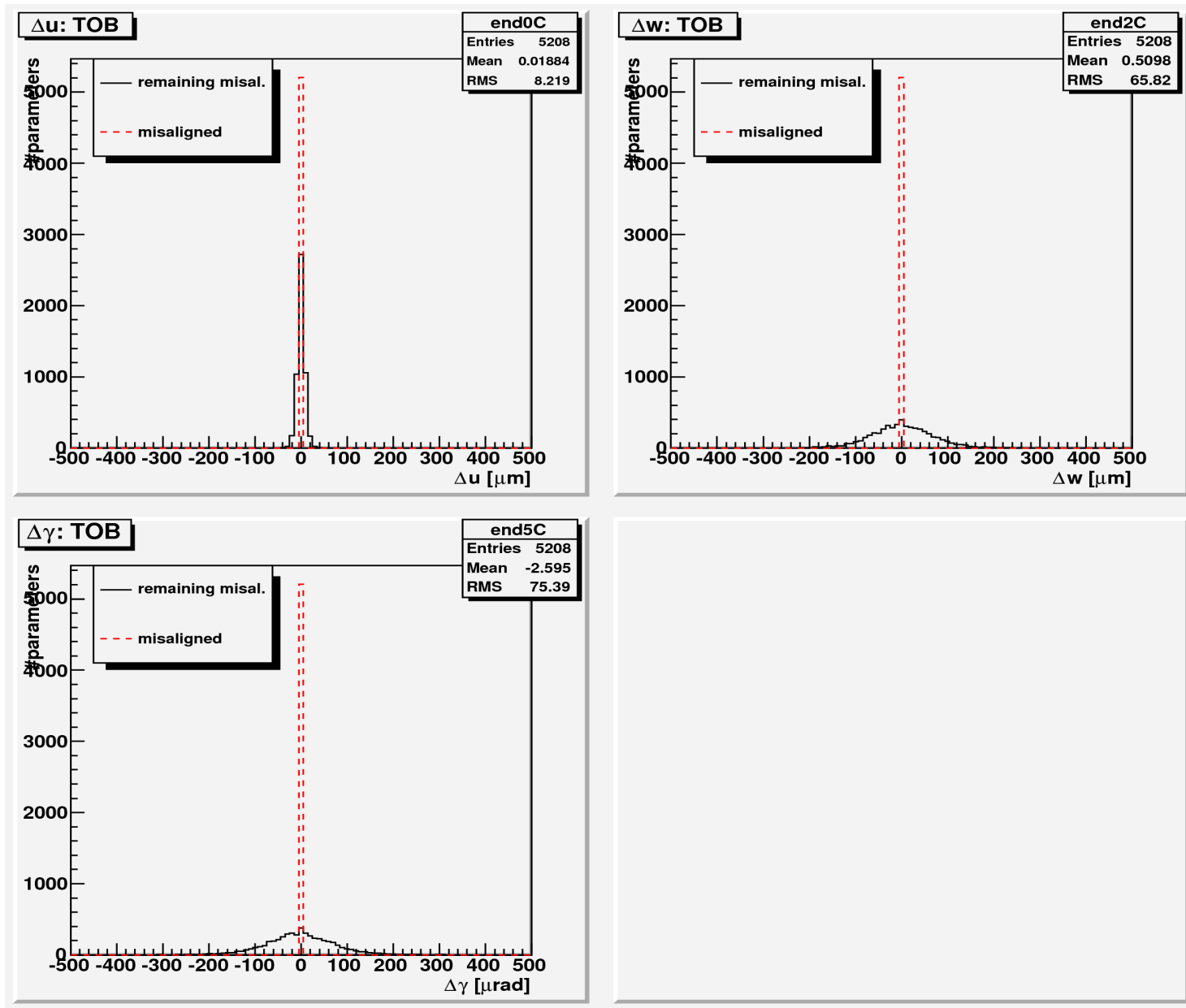
TID



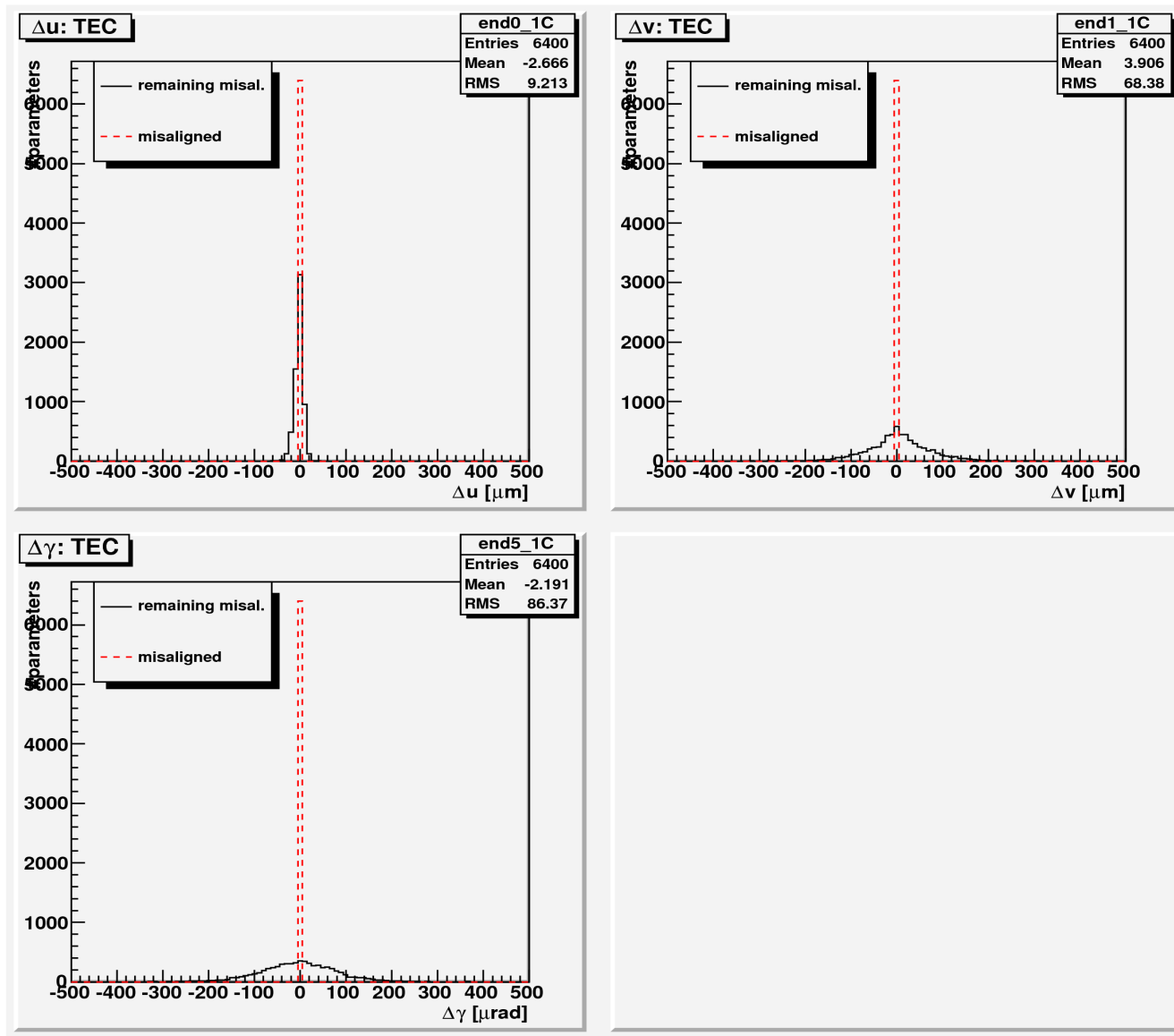
TIB



TOB

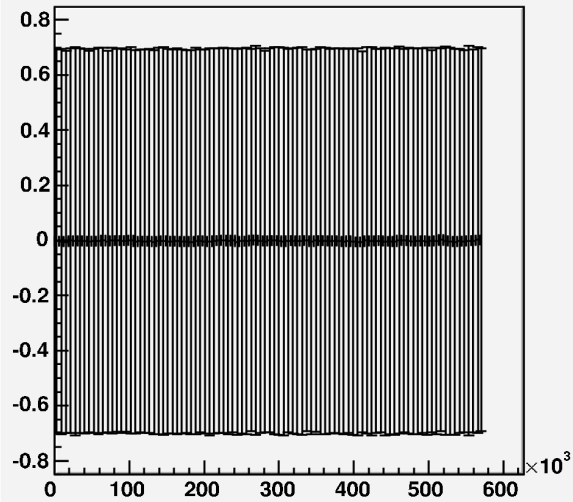


TEC

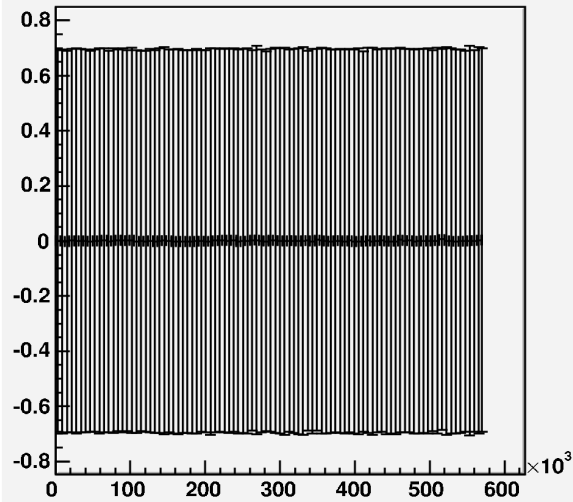


Milepede internal plots

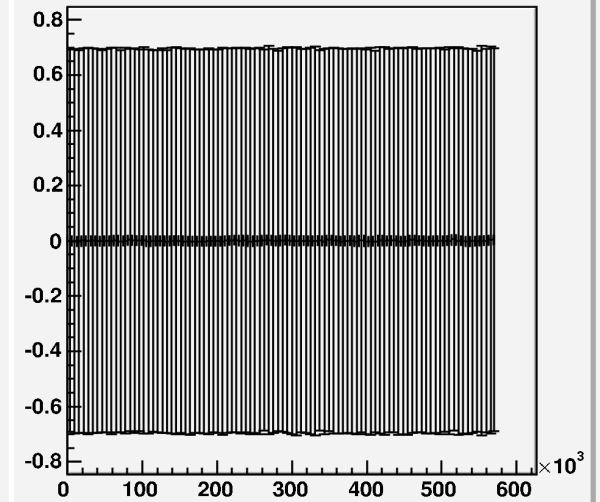
location and dispersion vs record nr (version 0)



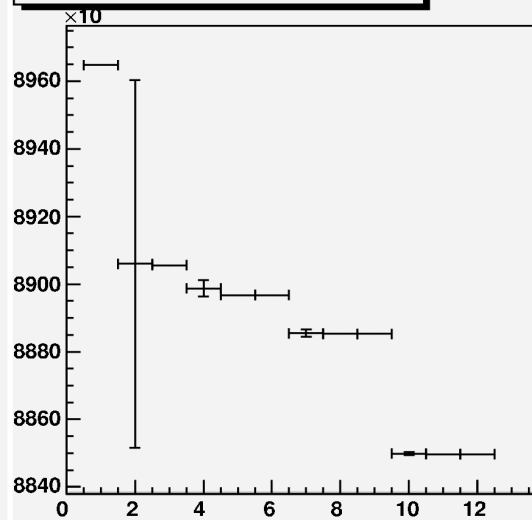
location and dispersion vs record nr (version 1)



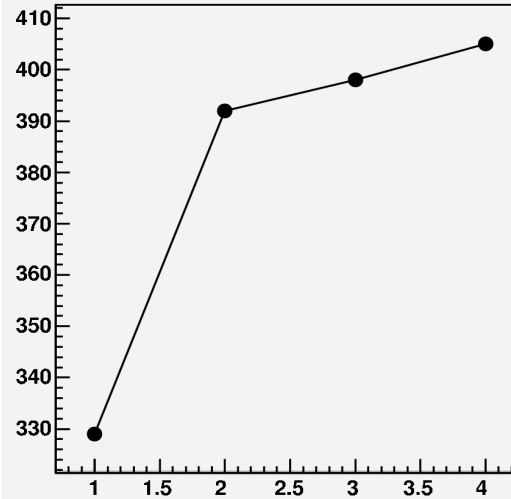
location and dispersion vs record nr (version 11)



Function value in iterations (version 0)

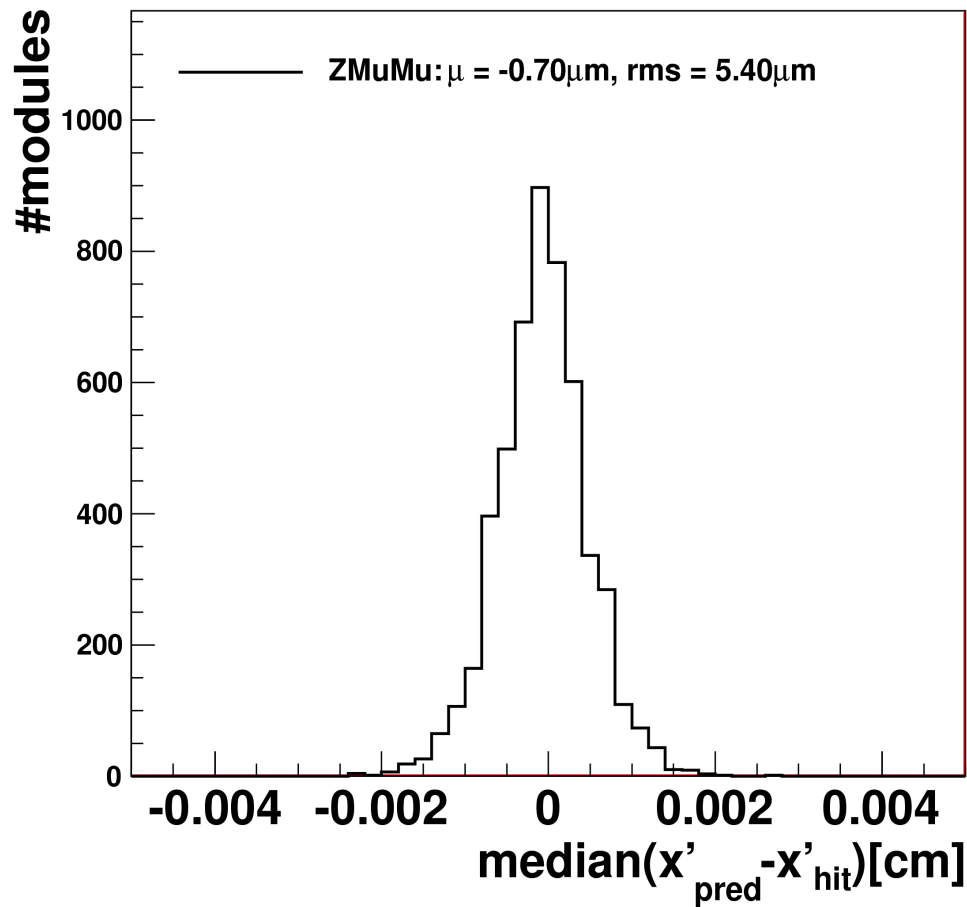


Number of MINRES steps vs iteration nr (version 0)

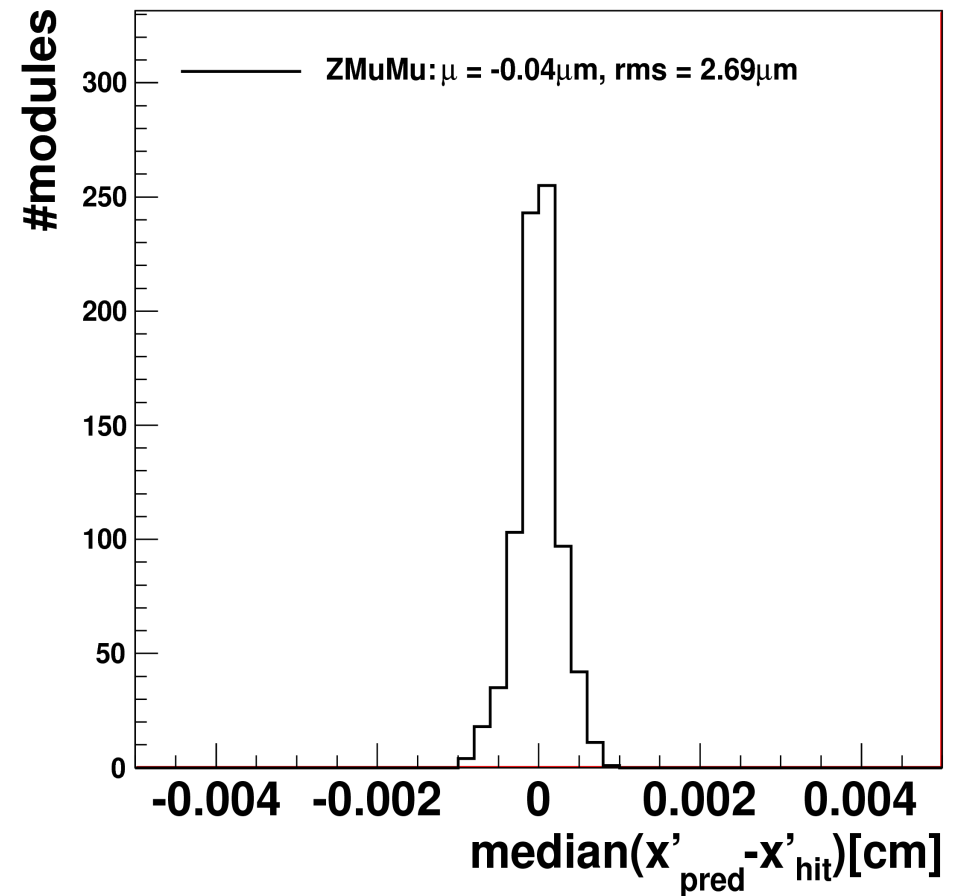


Median

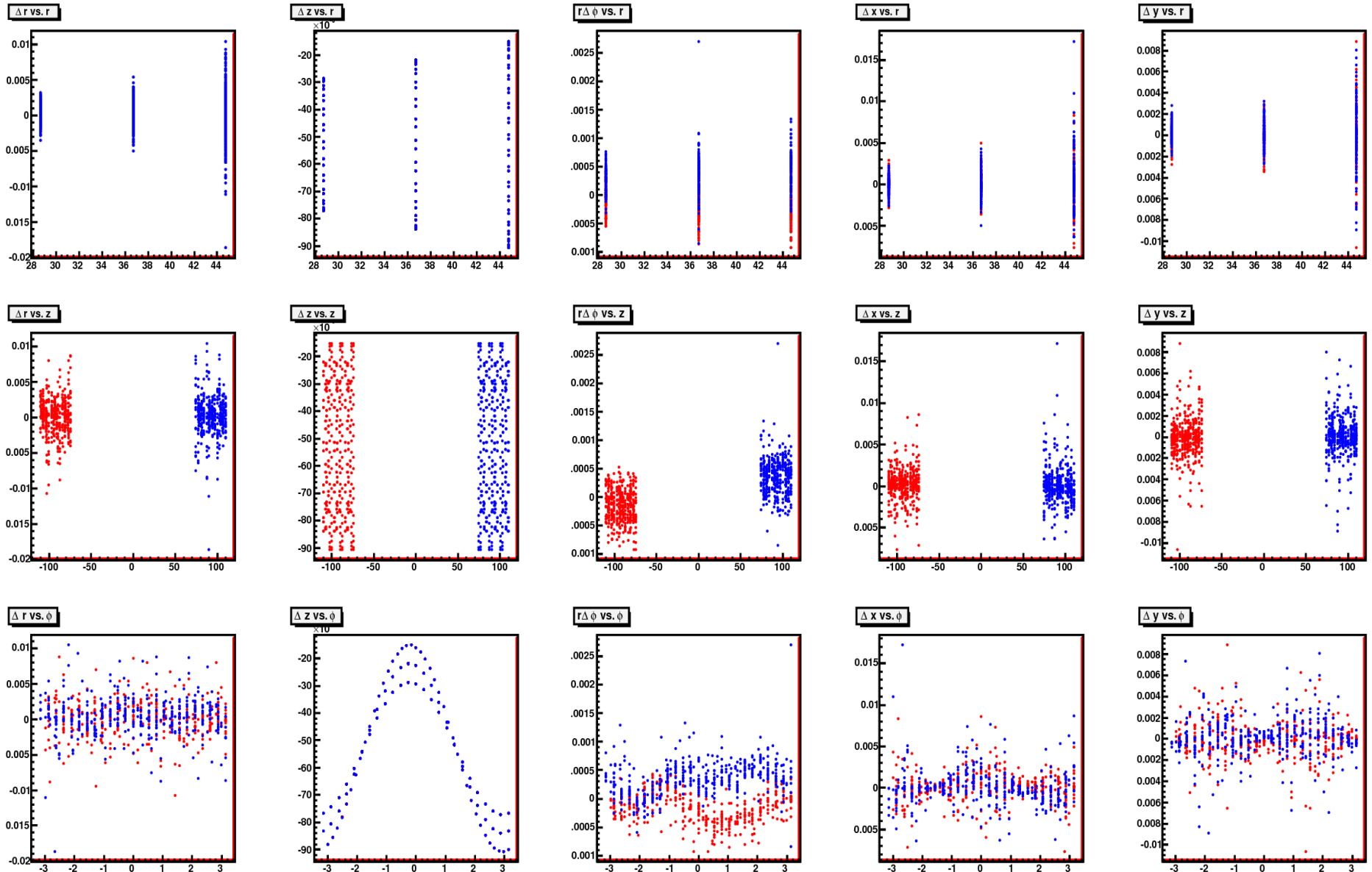
Distribution of the median of the residuals in TOB



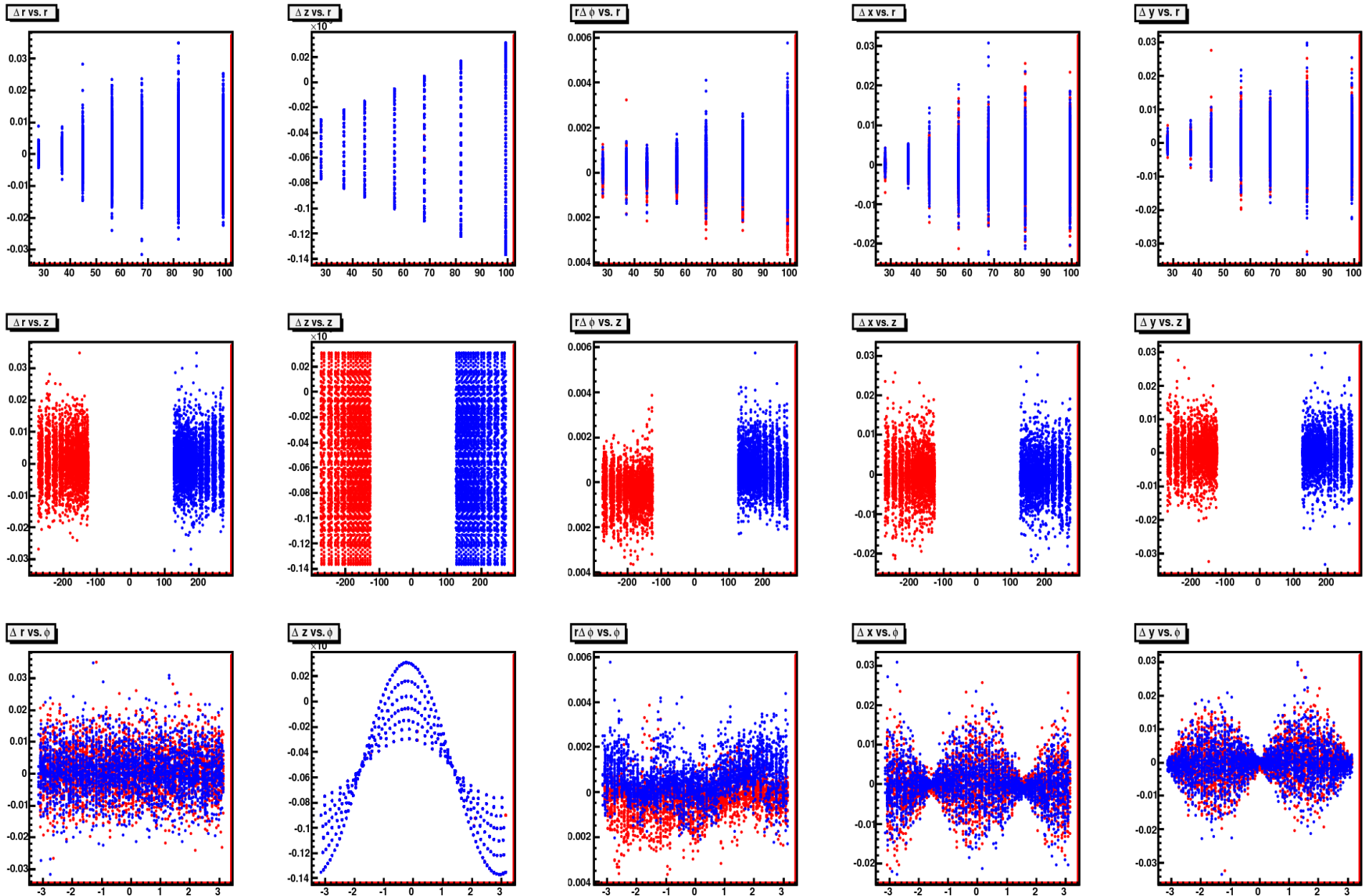
Distribution of the median of the residuals in TID



Geometry comparison – TID



Geometry comparison - TEC

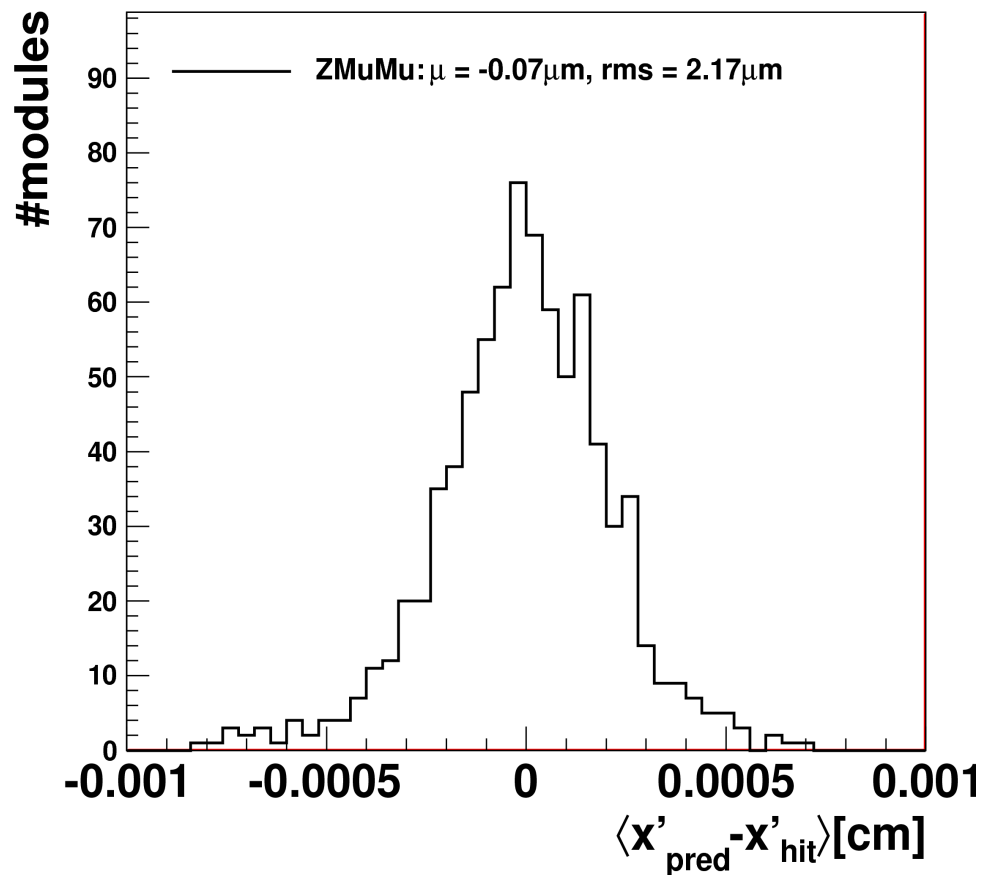


Conclusions

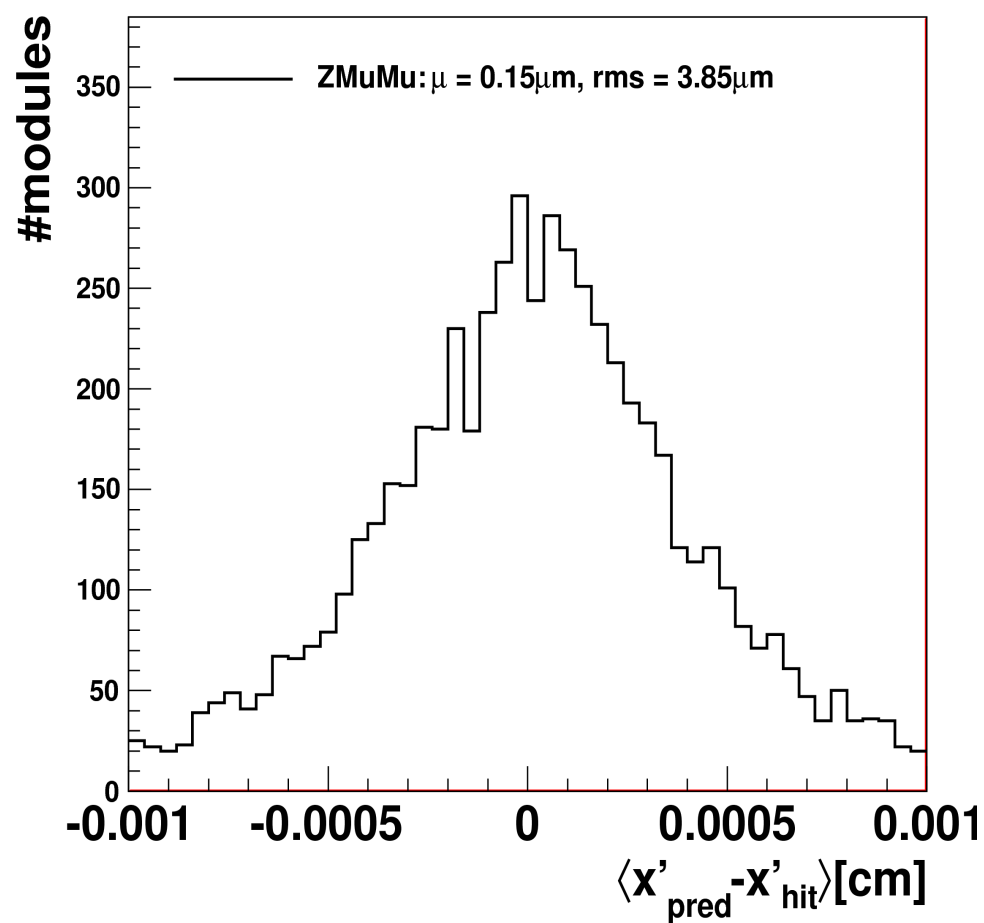
- ZmuMu MC sample looks reasonable

Backup slides -mean

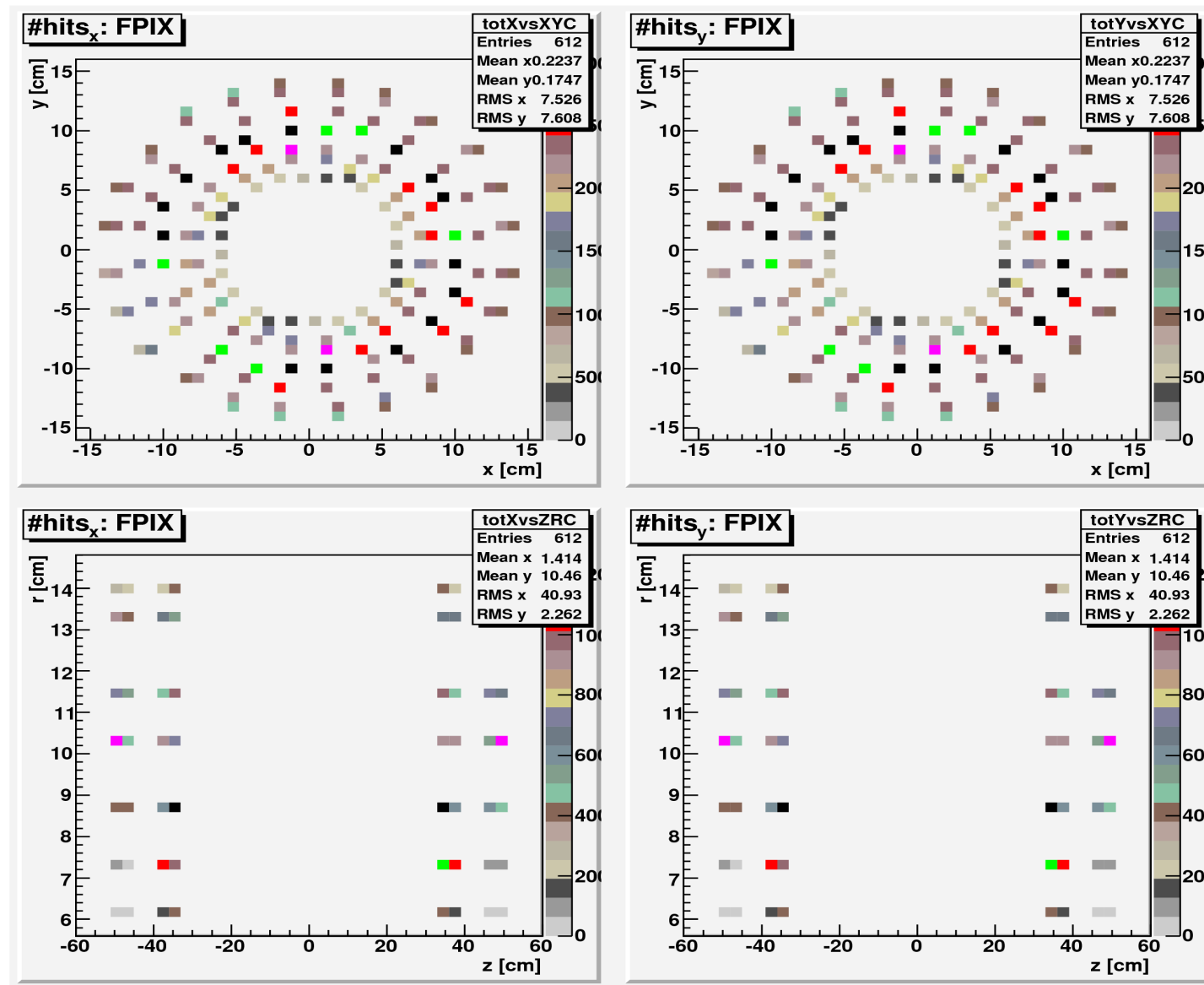
Distribution of the mean of the residuals in TID



Distribution of the mean of the residuals in TEC



Backup slides – hit map



Backup slides – alignment parameters

```
alignParams = cms.vstring(  
#--- Pixel Barrel  
    'TrackerTPBHalfBarrel,111111',  
    'PixelHalfBarrelDets,111001',  
#--- Pixel Forward  
    'TrackerTPEHalfCylinder,110001', #because they are mechanically split into 4 parts...  
    'PXECDets,110001',  
#--- TIB  
    'TrackerTIBHalfBarrel,111111',  
    'TIBSSDets,101111',  
    'TrackerTIBModuleUnit,101111',  
#--- TOB  
    'TrackerTOBHalfBarrel,ffffff',  
    'TOBSSDets,101001',  
    'TrackerTOBModuleUnit,101001',  
#--- TID  
    'TrackerTIDEndcap,110001',  
    'TIDDets,110001,endCapSS',  
    'TrackerTIDModuleUnit,110001,endCapDS',  
#--- TEC  
    'TrackerTECEndcap,110001',  
    'TECDets,110001,endCapSS',  
    'TrackerTECModuleUnit,110001,endCapDS'  
)
```