



Alignment/calibration status



- Last presented results
- Current status

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Tracker alignment meeting
DESY, Hamburg

(Alignment)
27.08.2013

Last presented results

Run module alignment with Pixel LA calibration, NO kinks & bows:

Used 60 M tracks (Collision, Cosmics, 3.8T, 0T)

↳ 15 GB of memory by PEDE

Run only LS alignment with Strip LA and BP calibration, NO kinks & bows:

Starting from the previous geometry

Used 60 M tracks (Collision, Cosmics, 3.8T, 0T)

↳ 6 GB of memory by PEDE

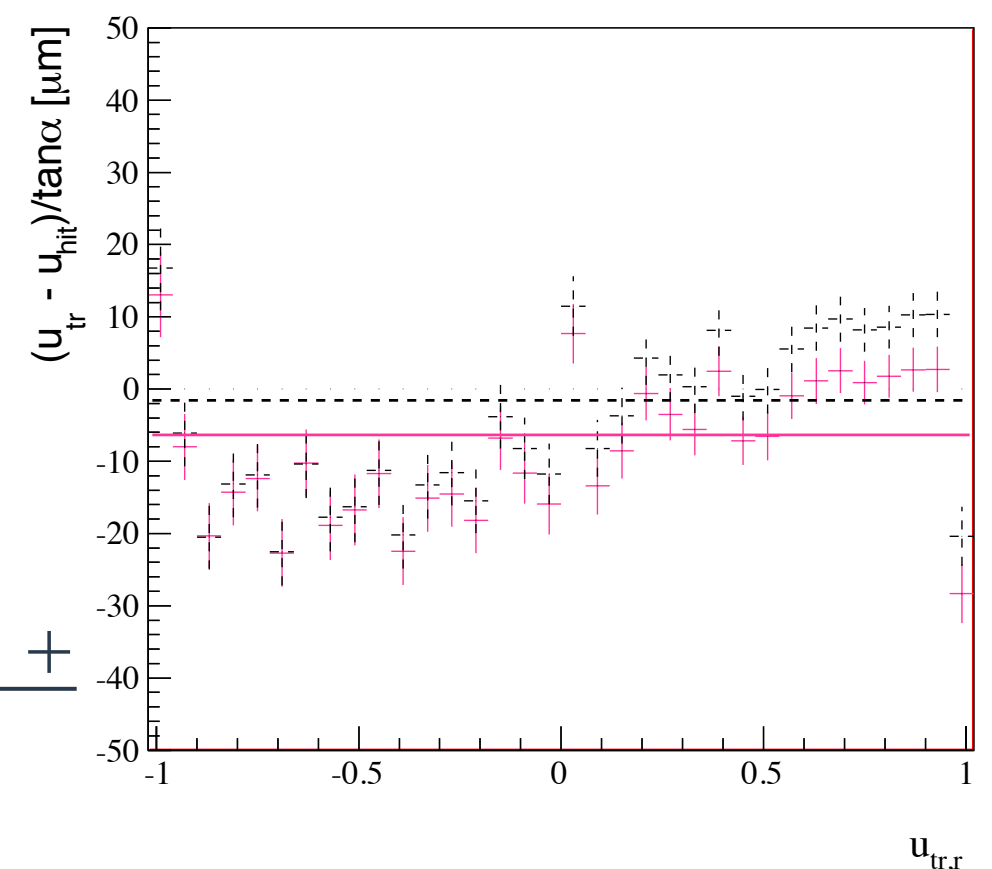
Validation with surface deformation plots:

Mean value is properly corrected to 0

Looks like modules have some curvature

New full scale alignment needed with kinks & bows +
all calibrations

Surface Shape, subDetId==5 && layer==2 && module>4



Last presented results

With kinks & bows memory consumption became huge (> 64 GB by PEDE)

After long tests on desy-cms011 optimal working set of tracks found:

Number of tracks reduced to 30 M:

OT Collision tracks	8M	
Cosmics	2.6M	
Cosmics OT	400K	
Single Muon	13M	
Minimum Bias	5M	
ZtoMuMu	3M	Makes largest effect on size of the matrix

Used memory with different calibrations:

Pixel LA:	44 GB
Pixel LA + Strip LA:	48 GB (400 MB swap)
Pixel LA + Strip LA + Strip BP:	?? GB (3 GB swap) [still running]