

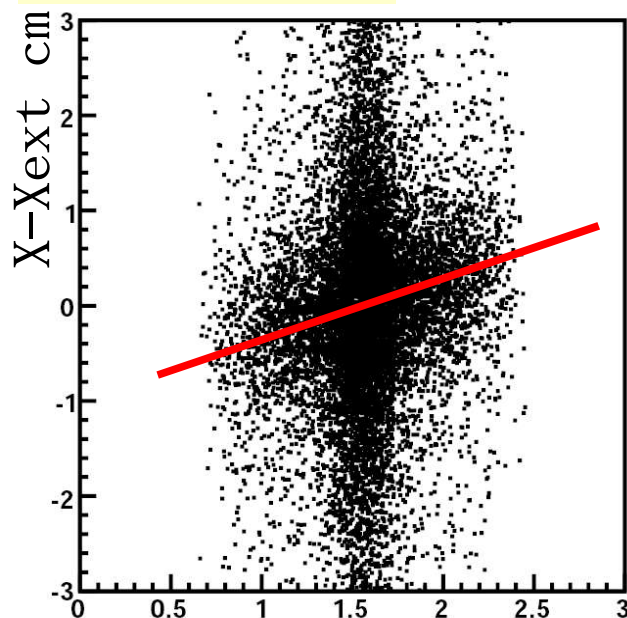


Selection of Tracks for Alignment validation

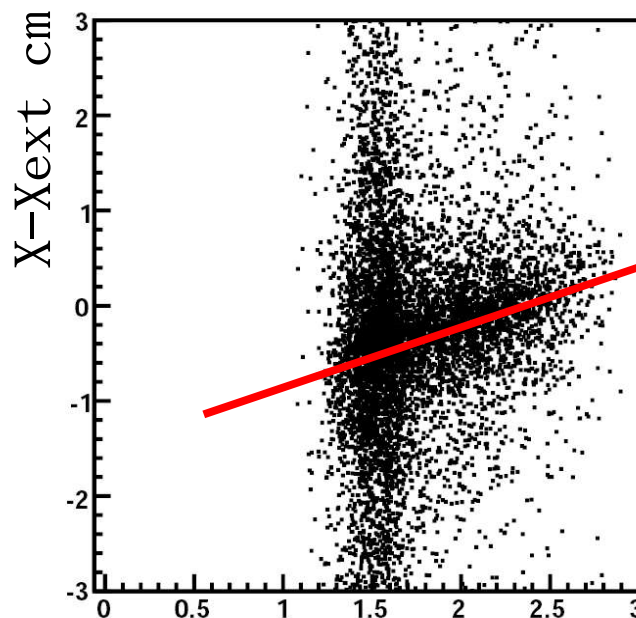
Observed a dependence of the residuals between chambers and the Phi angle of the 4D segment extrapolated

YB0 GREN 30625

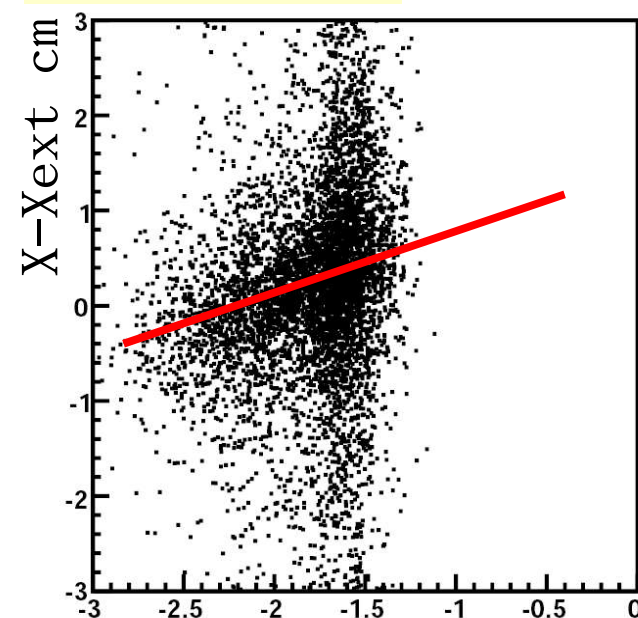
Sector 4 /MB3



Sector 5 /MB3



Sector 9 /MB3



Phi angle (rad) (CMS system)

Different shift direction between upper and bottom sectors

**Still under study the origin of this dependence
Ideas are welcome!!!**



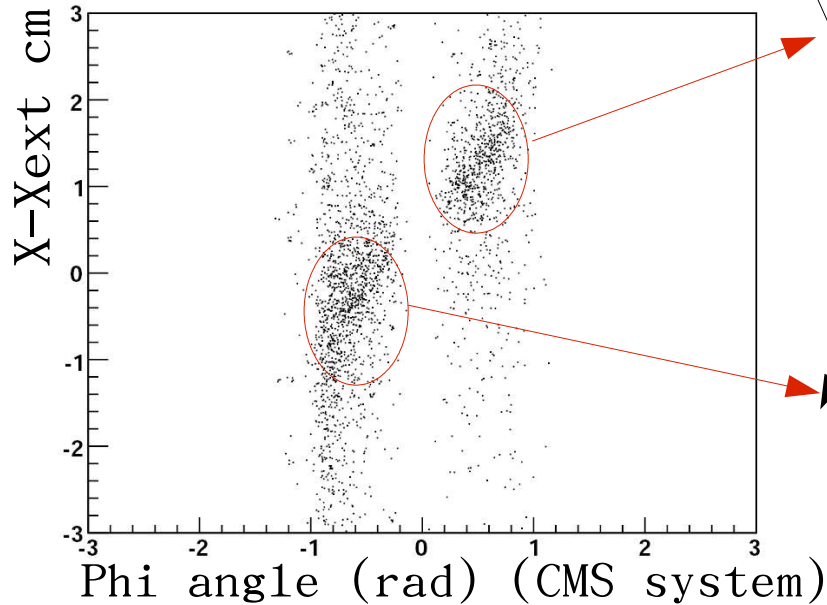
Selection sample

Phi dependence effect better observable in vertical sectors

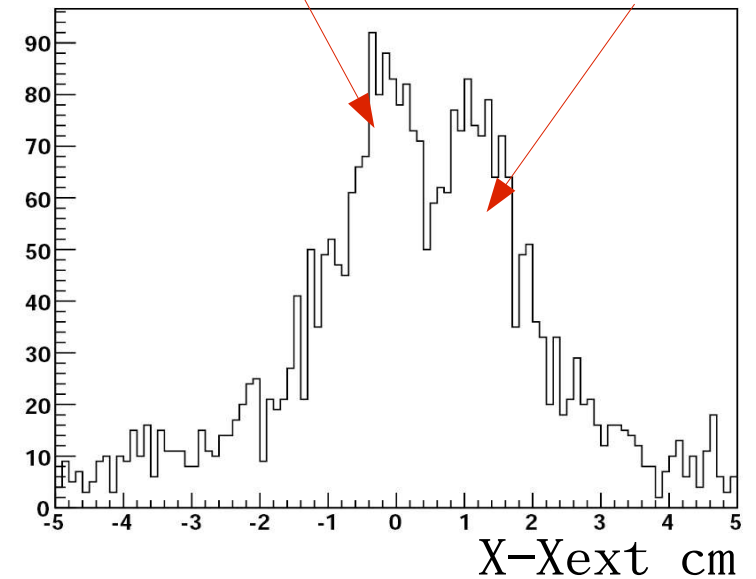
YB-1 Local Run February08

Sector 1 /MB4

Res X vs Phi, S1/MB4



RPhi plane (LocalX-LocalPropX), S1/MB4



Also observable in GRUMM data

Reproducibility of data (Commissioning/GREN/GRUMM) and validation of alignment geometry -> selection a sample of tracks perpendicular to each sector. (30% of the full sample)

[$90 \pm 10^\circ$]

