SVT Alignment
v1 vs v2

Per Hansson Adrian 9/15/2015

Explainer

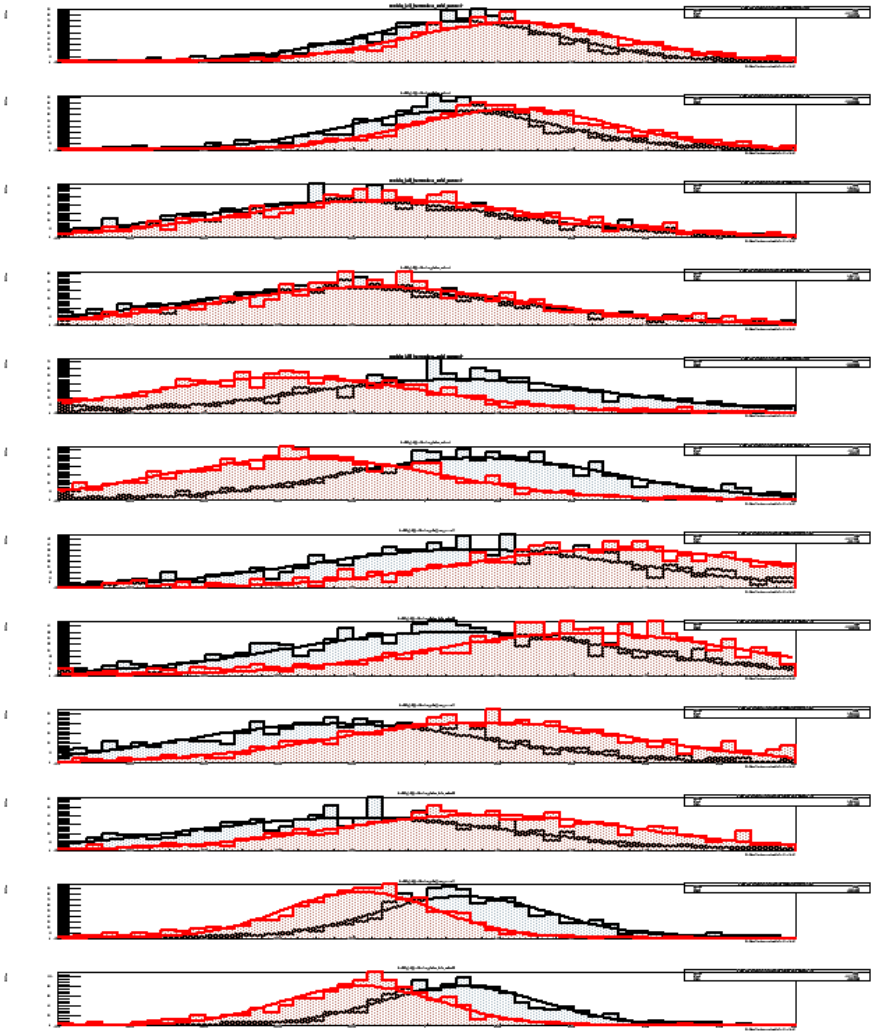
First few slides

- Compare run 5772: v1 (black) vs v2 (red)
- Compare GBL residuals, lambda and phi kinks

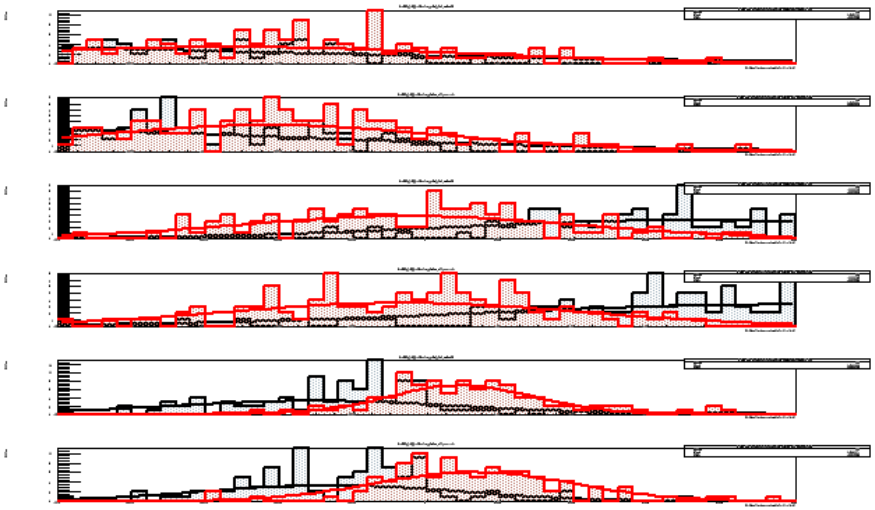
Last couple of slides

- Ideal detector simulation: v1

GBL Residuals Top

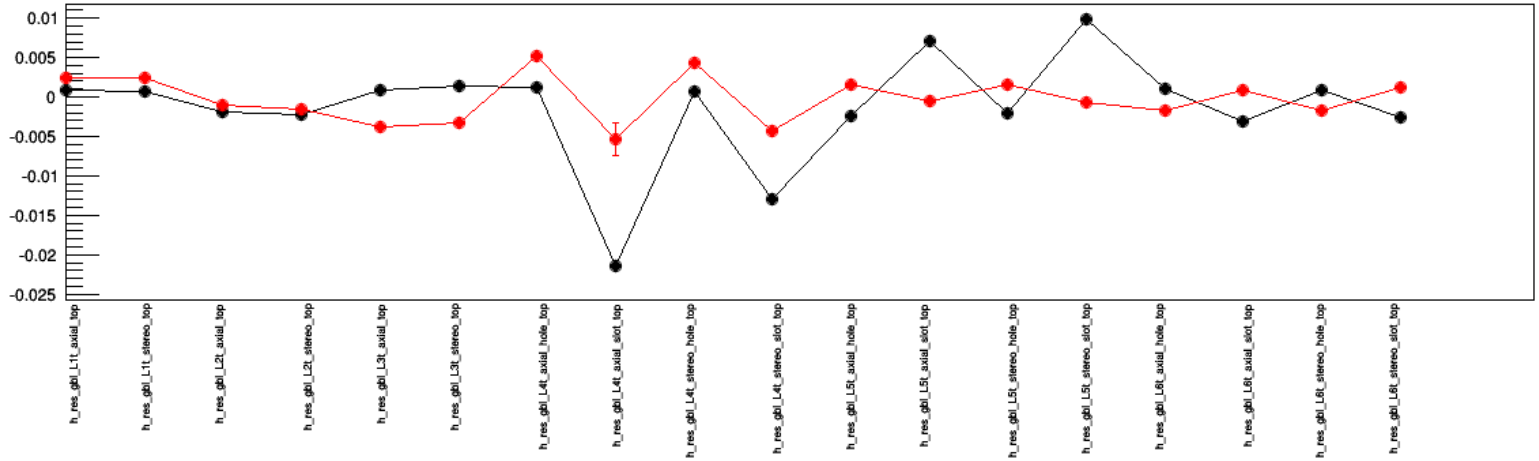


X-axis: +-0.01
5772

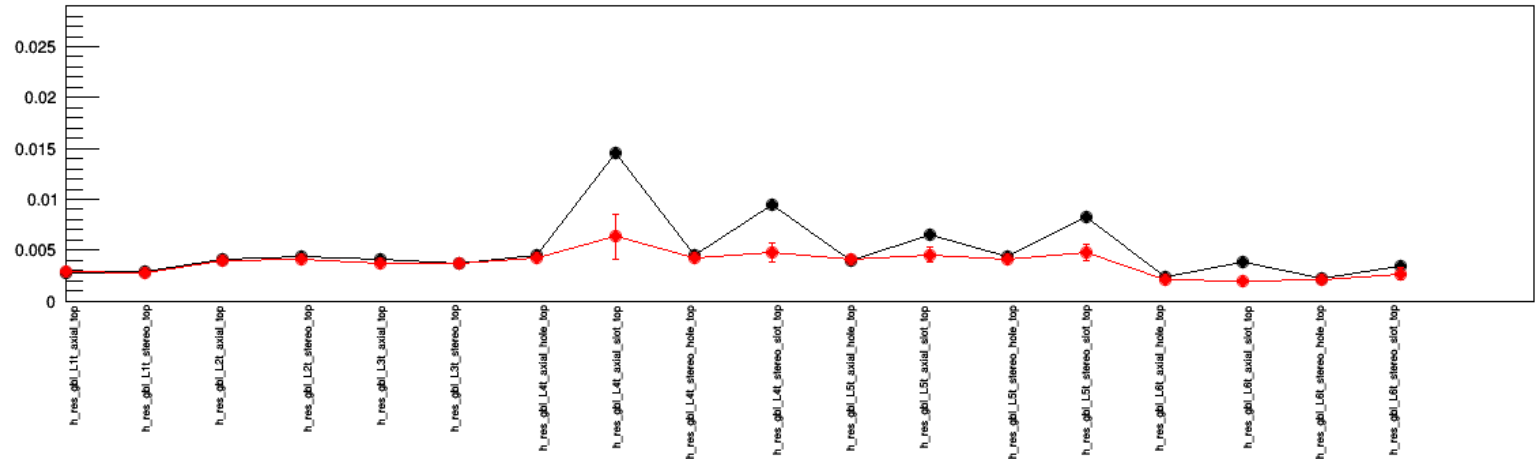


GBL Residuals Top

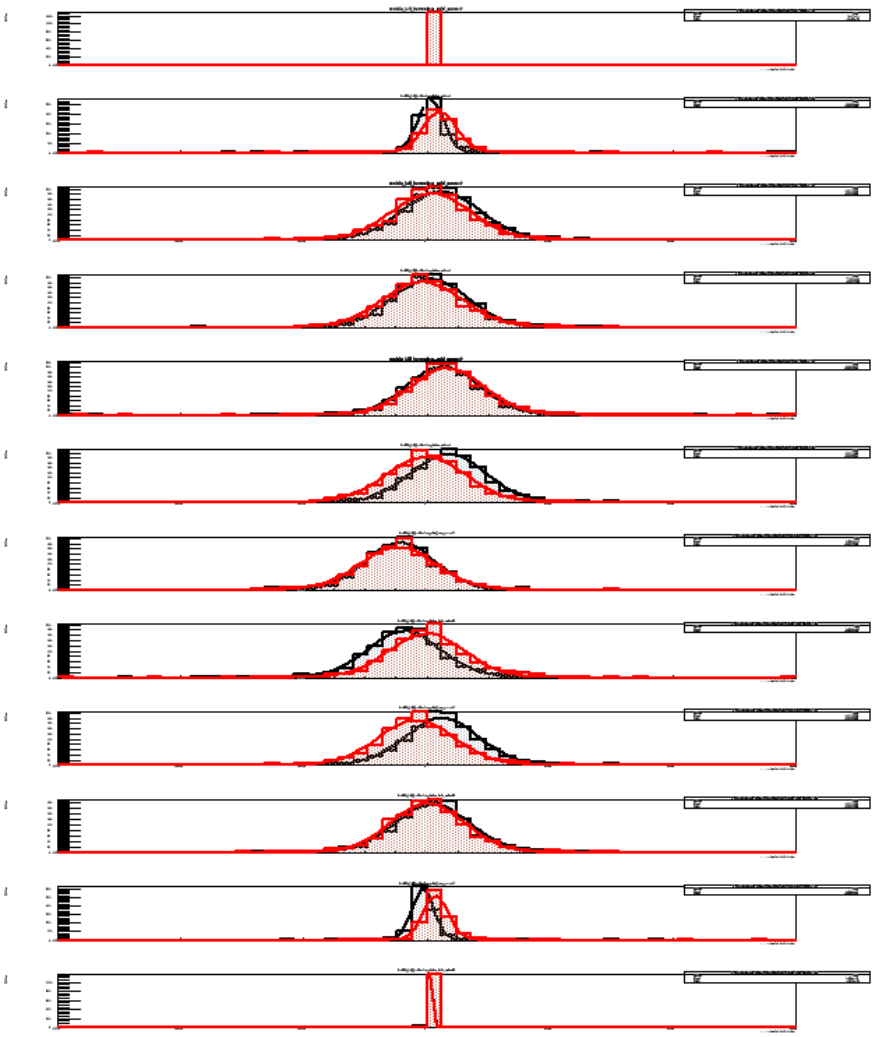
mean



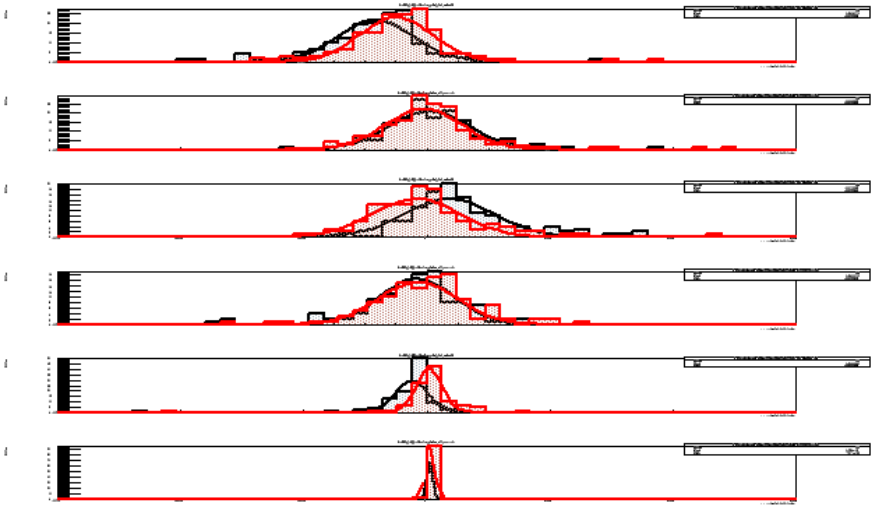
sigma



GBL Kinks Lambda Top

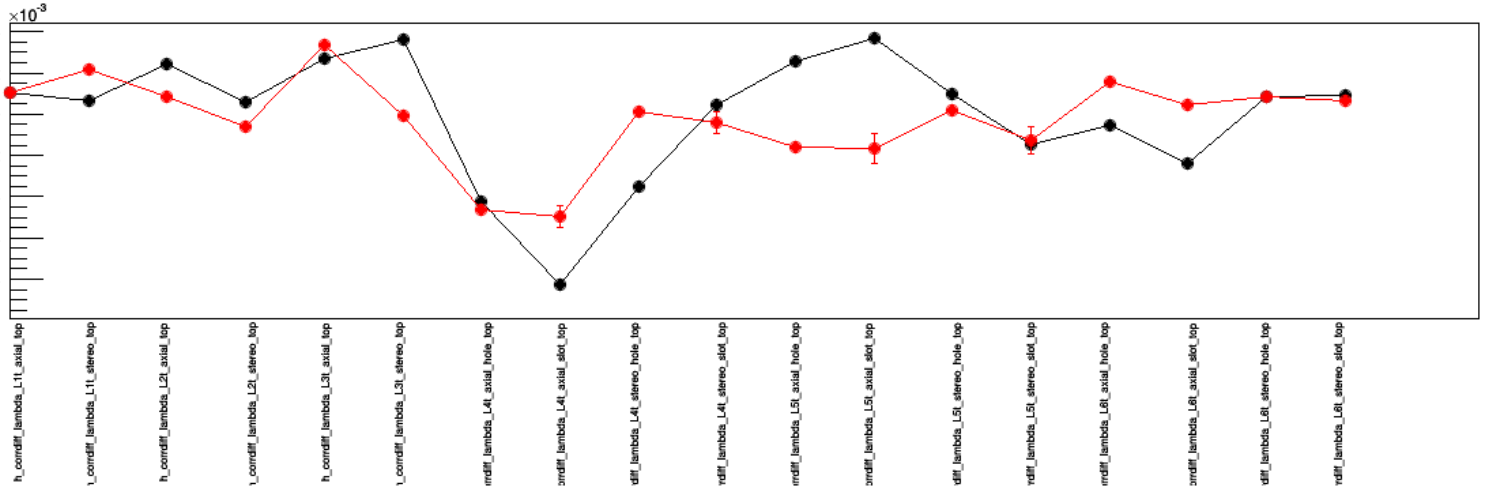


X-axis: +-0.006
5772

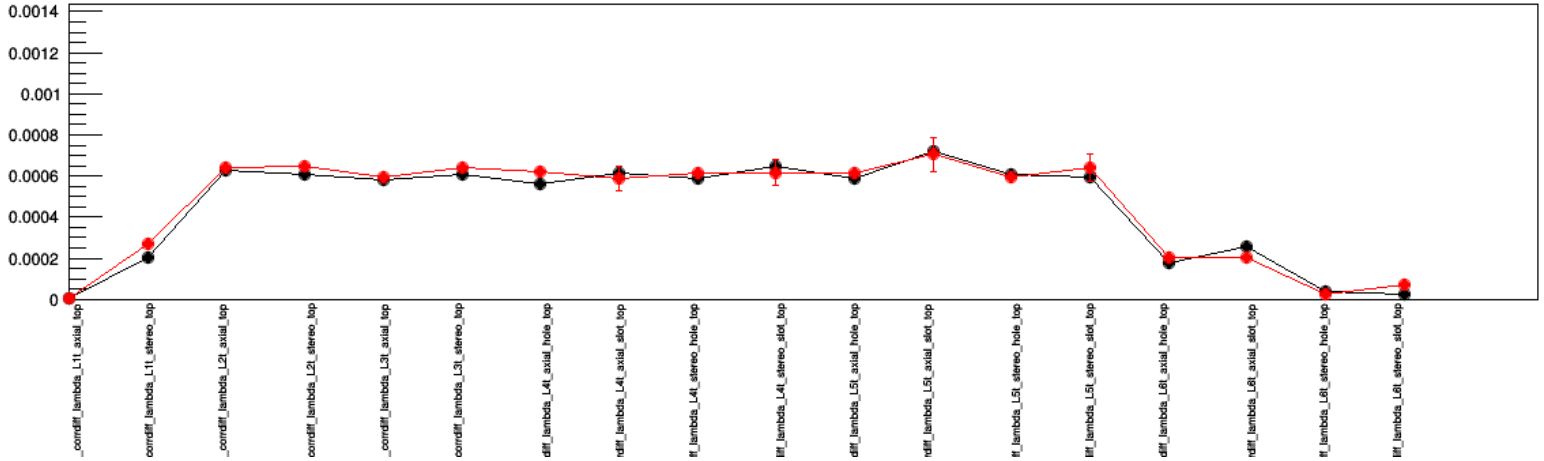


GBL Kinks Lambda Top

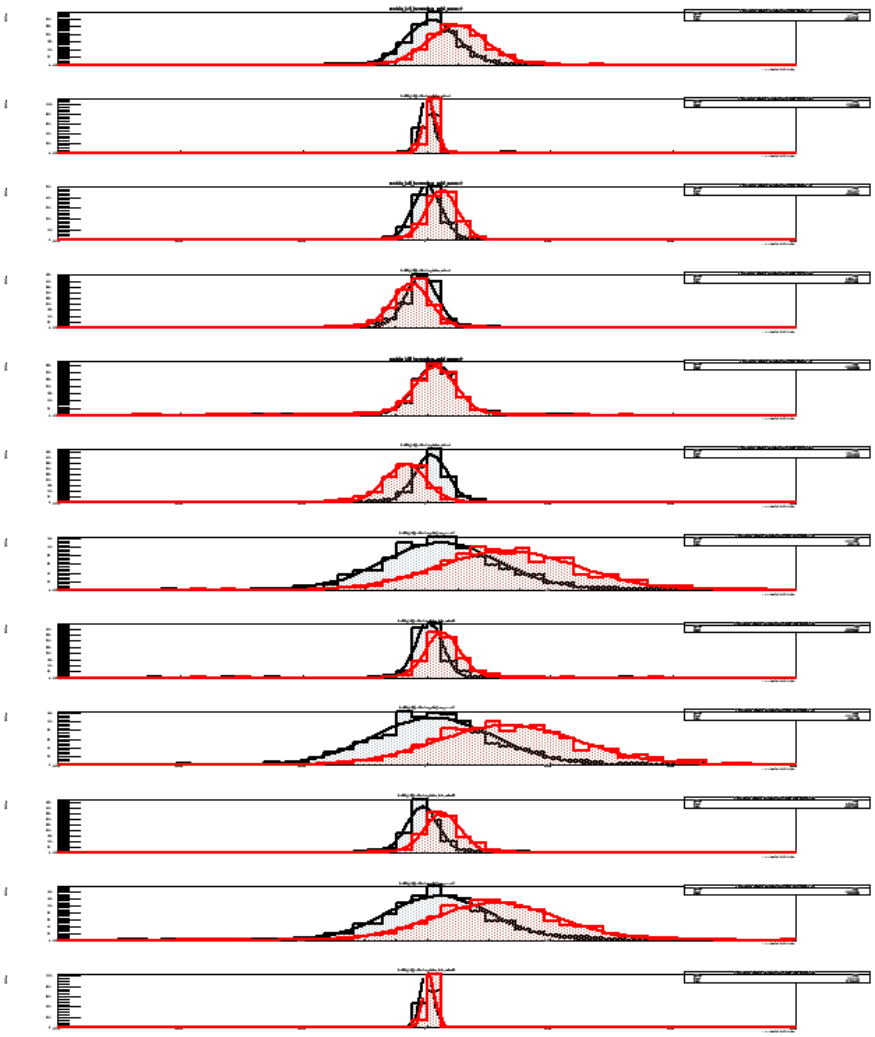
mean



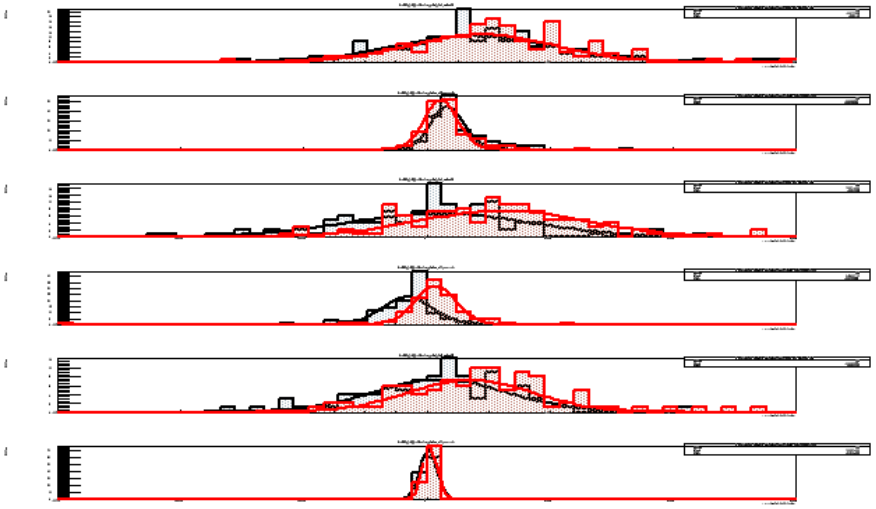
sigma



GBL Kinks Phi Top

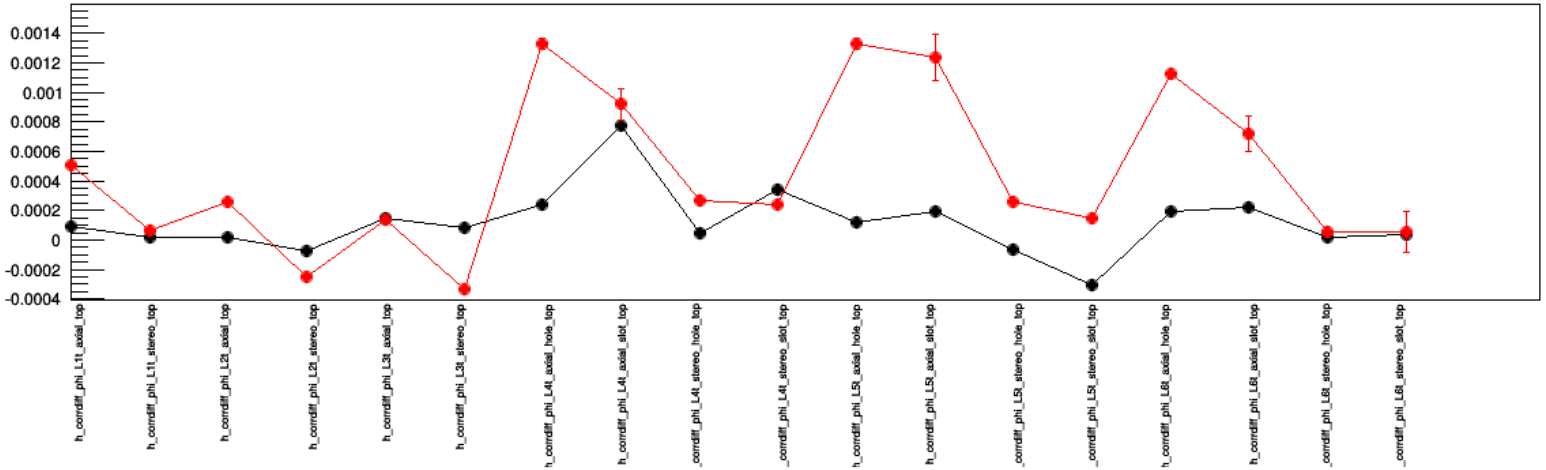


X-axis: +-0.007
5772

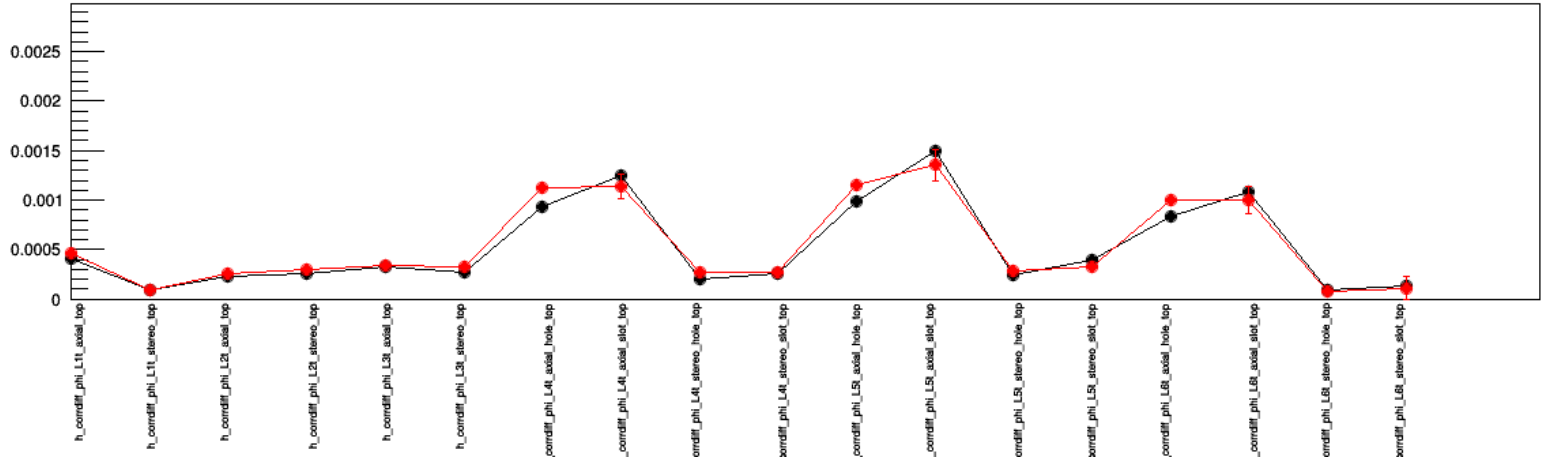


GBL Kinks Phi Top

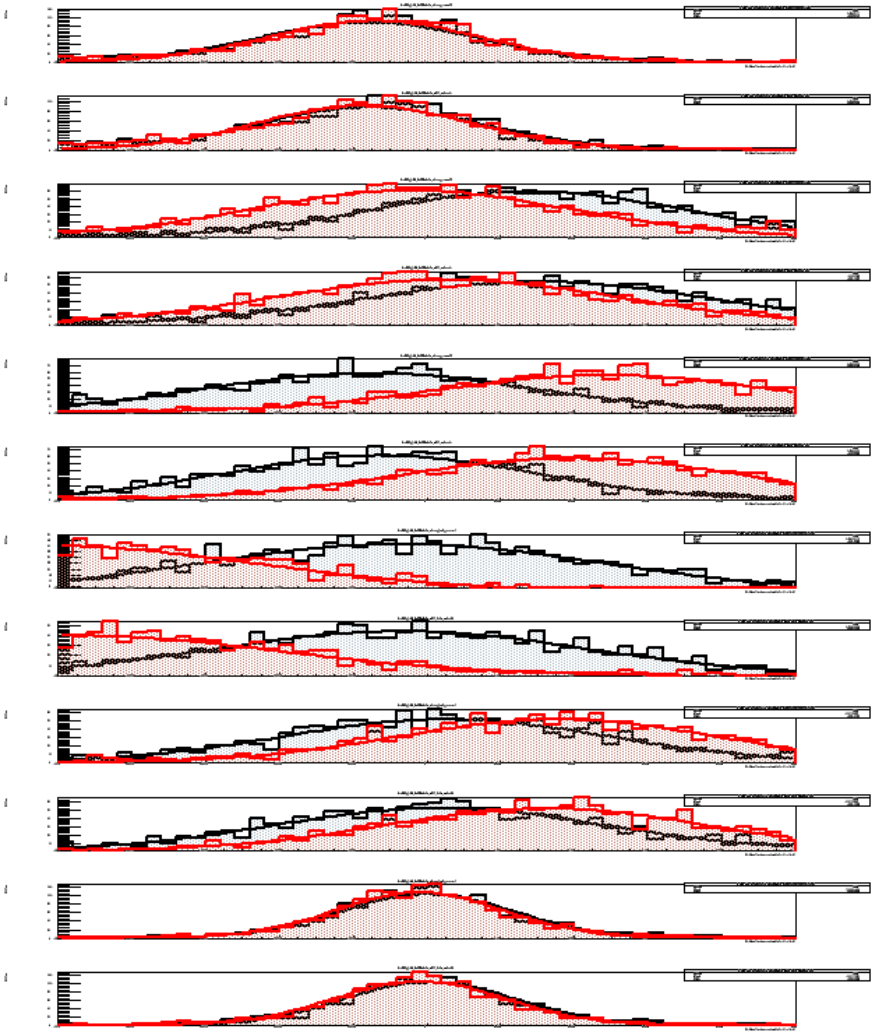
mean



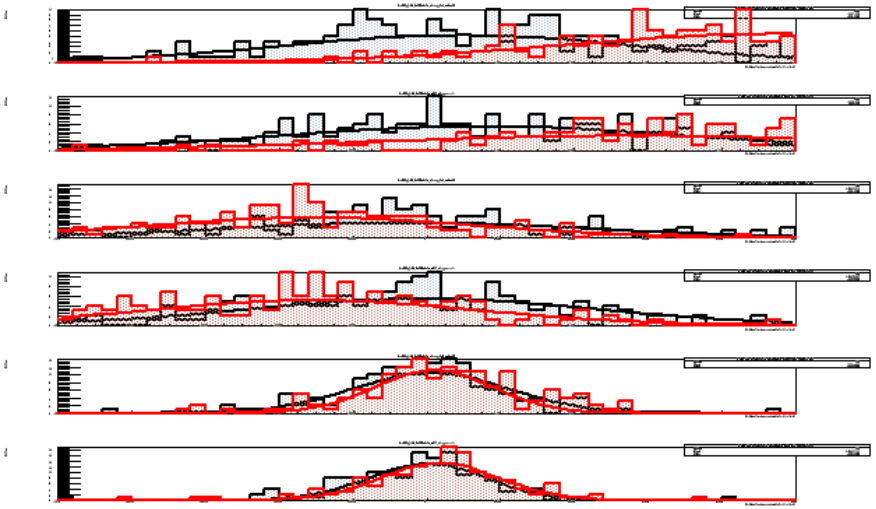
sigma



GBL Residuals Bottom

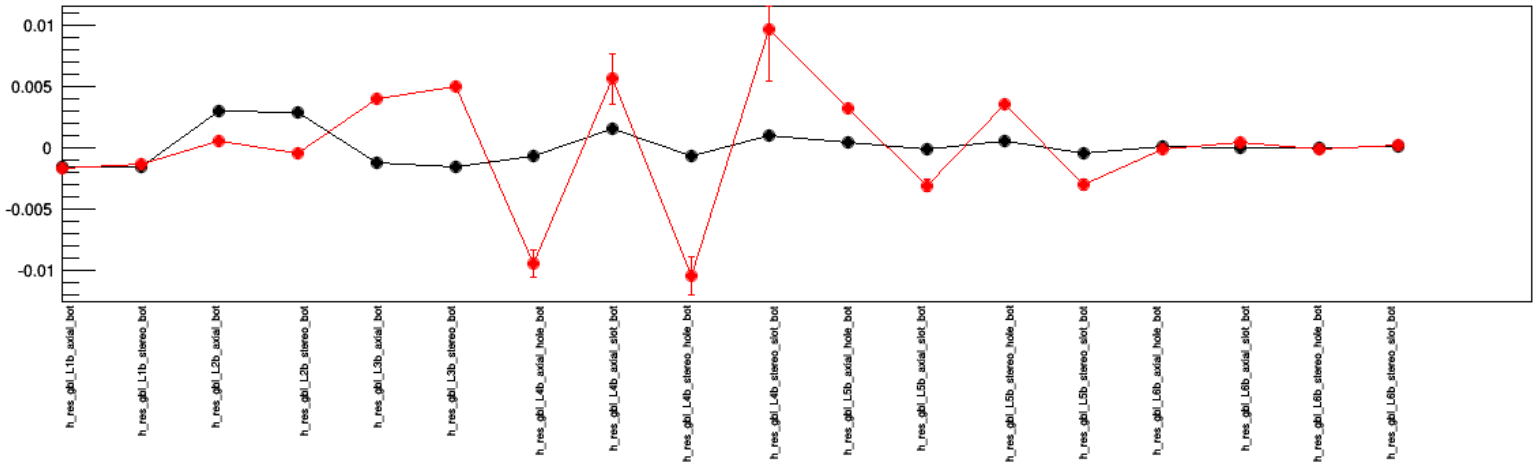


X-axis: +-0.01
5772

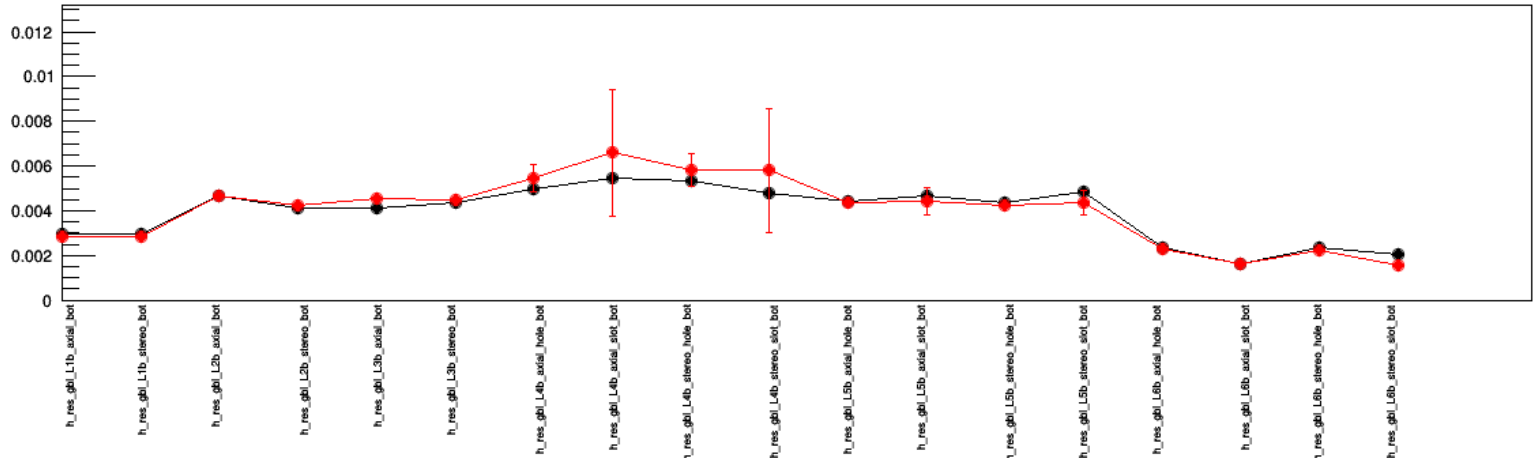


GBL Residuals Bottom

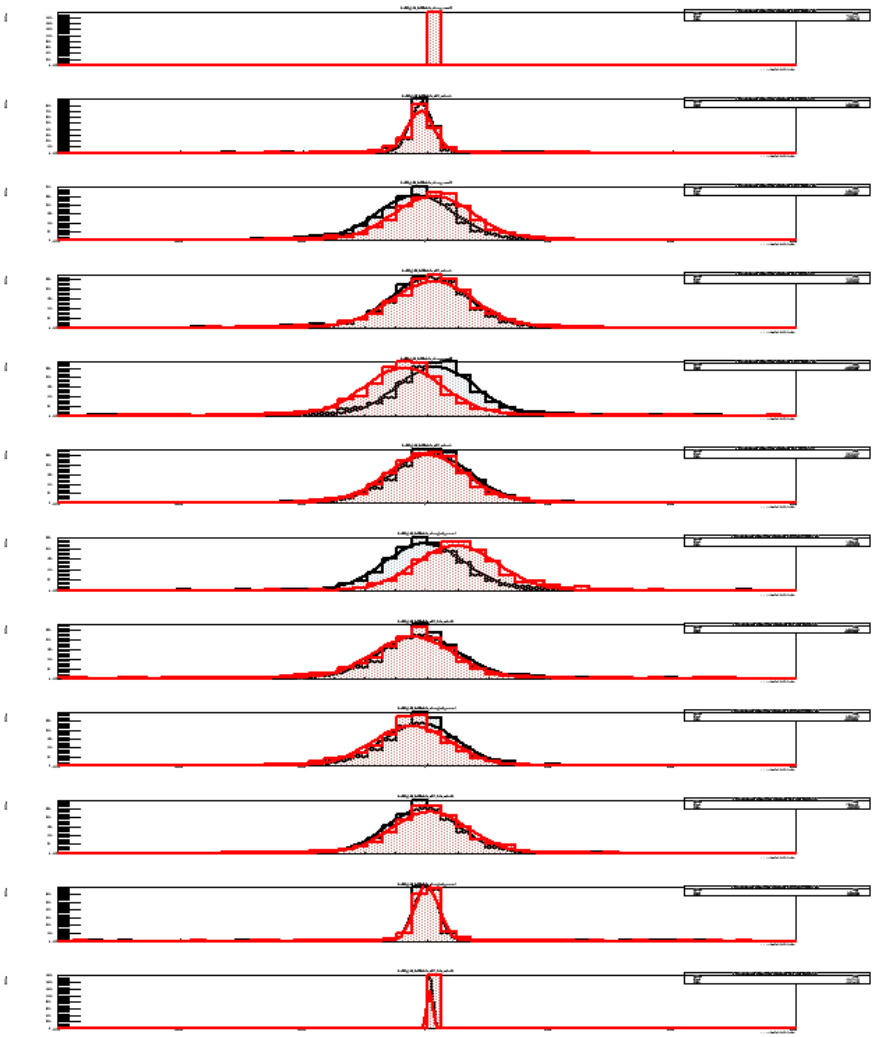
mean



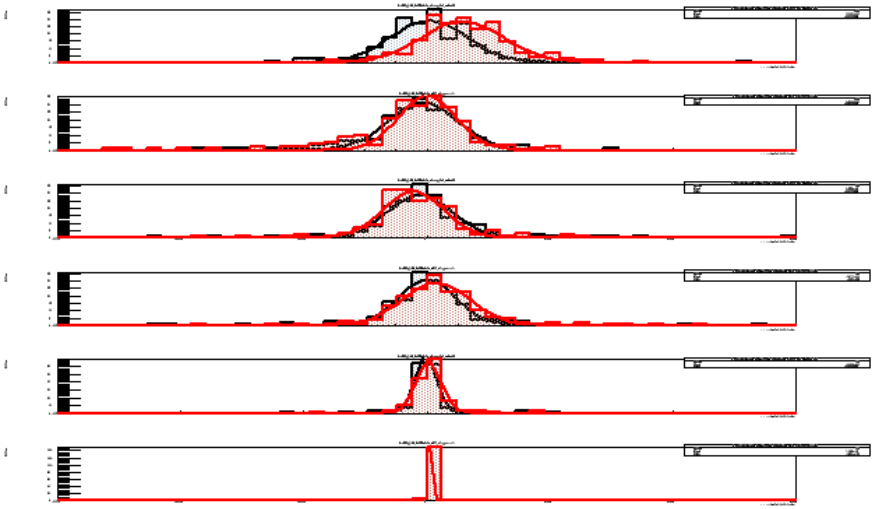
sigma



GBL Kinks Lambda Bottom

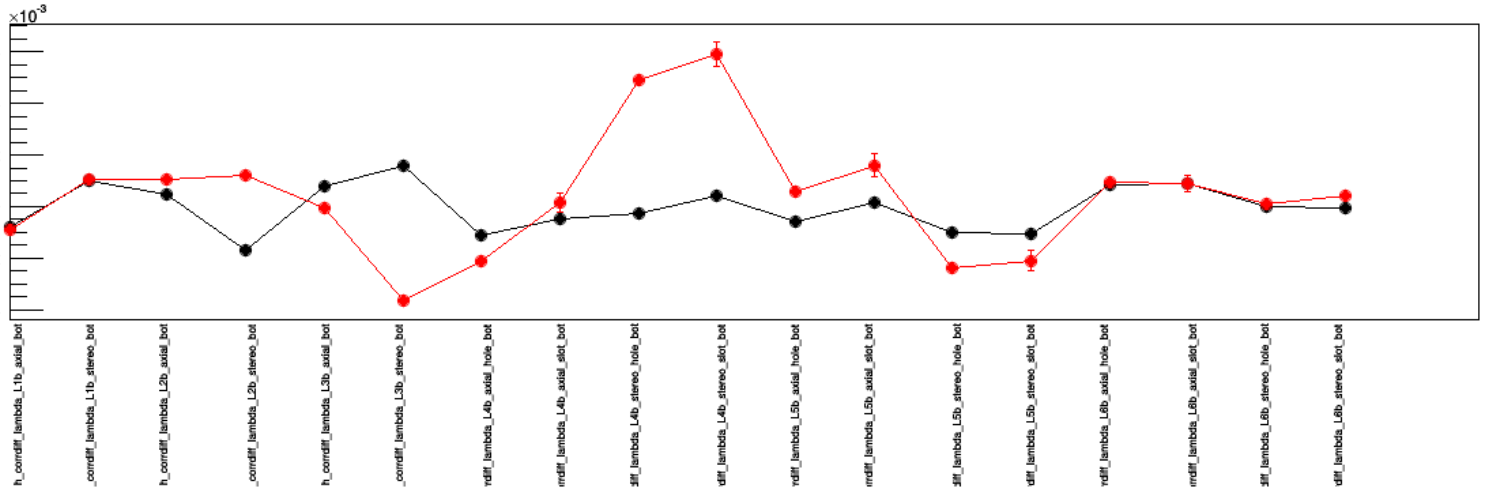


X-axis: +-0.006
5772

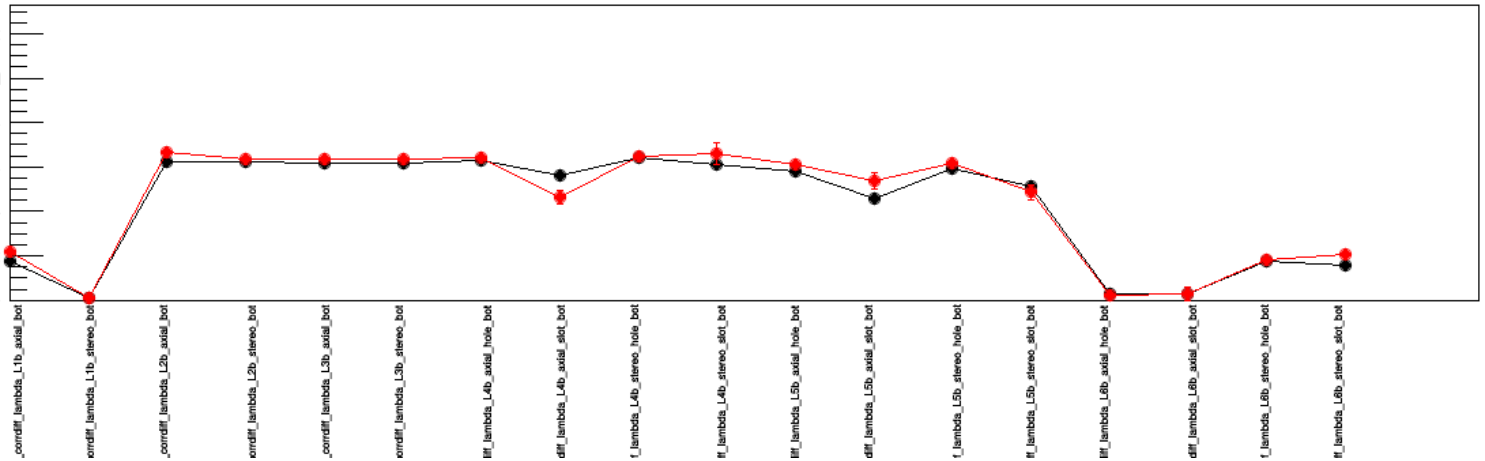


GBL Kinks Lambda Bottom

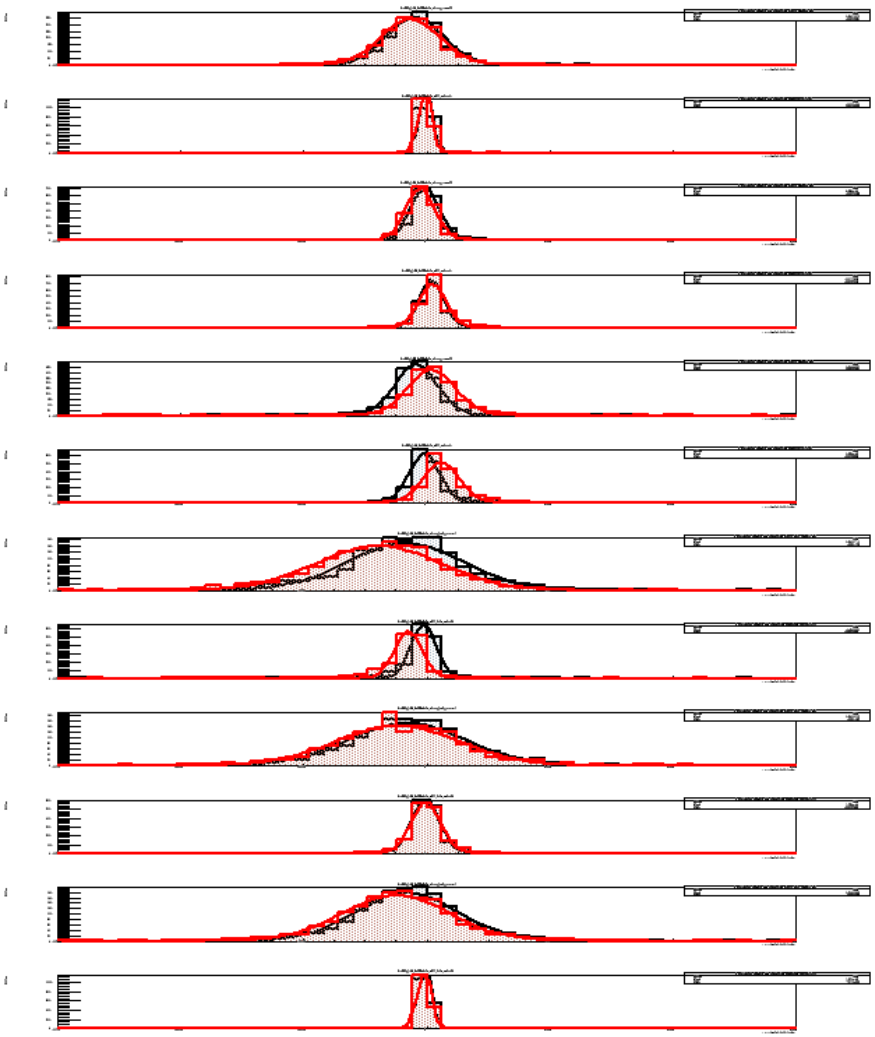
mean



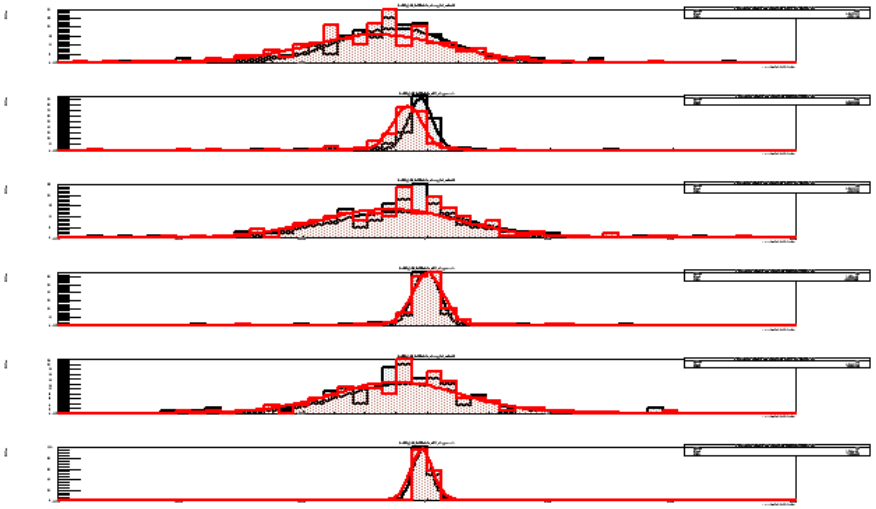
sigma



GBL Kinks Phi Bottom

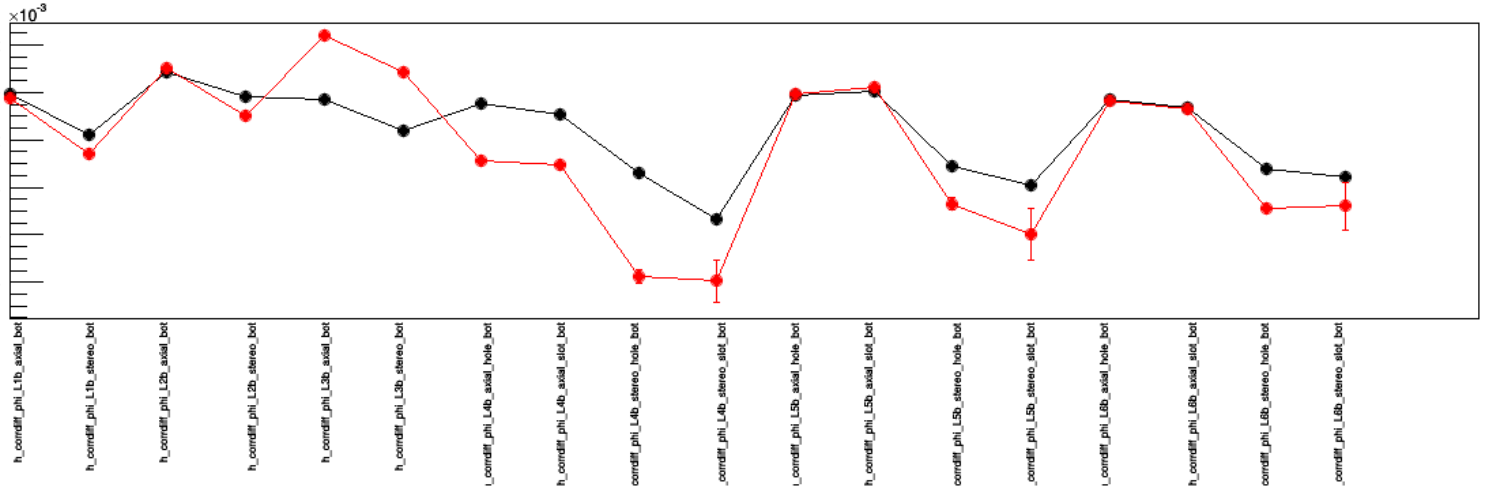


X-axis: +-0.007
5772

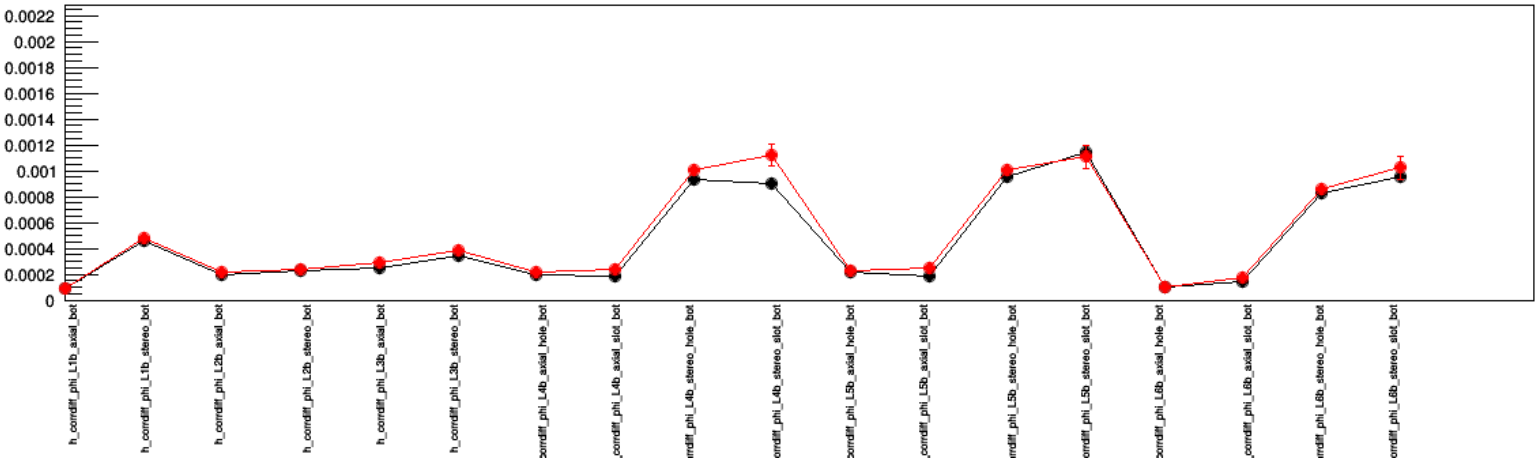


GBL Kinks Phi Bottom

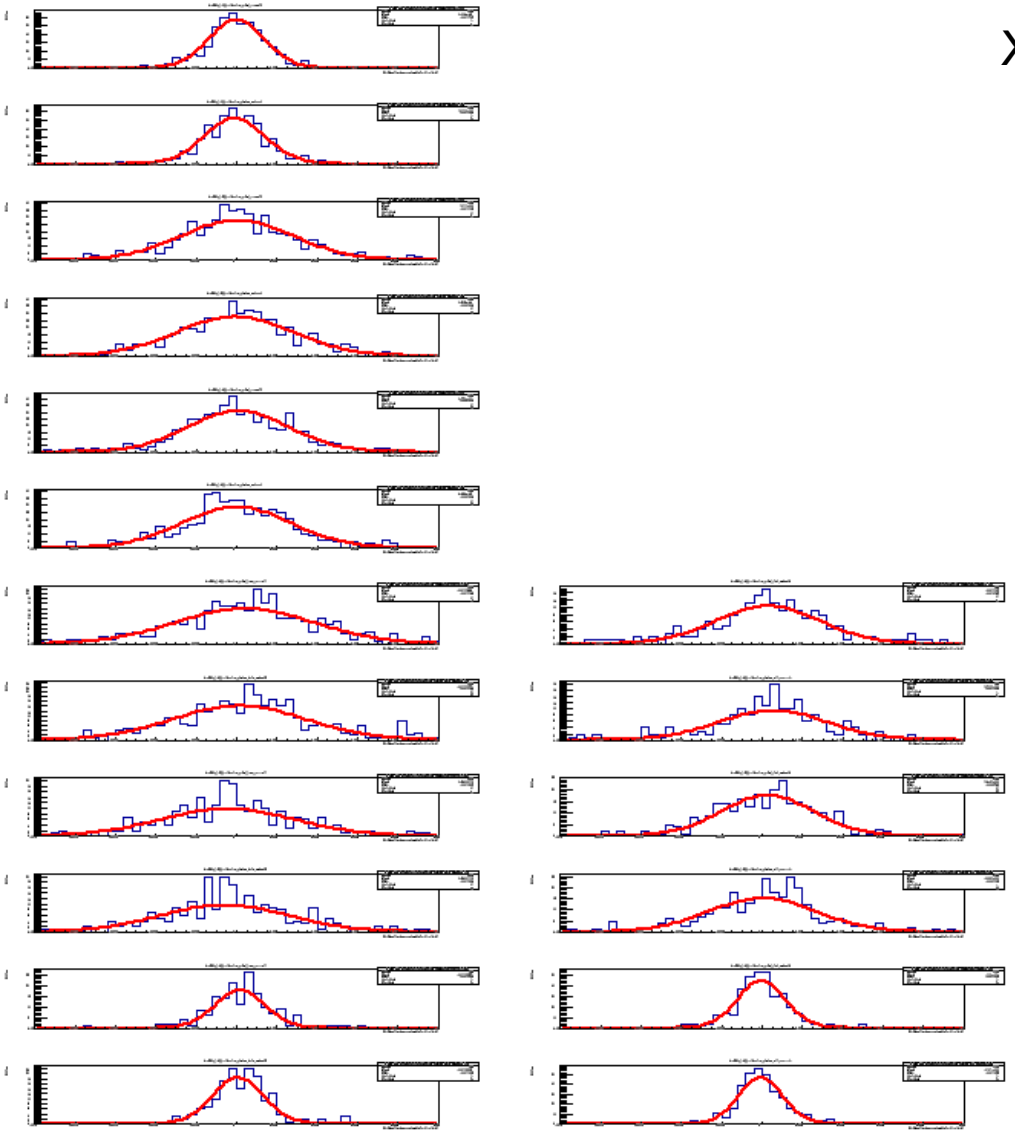
mean



sigma



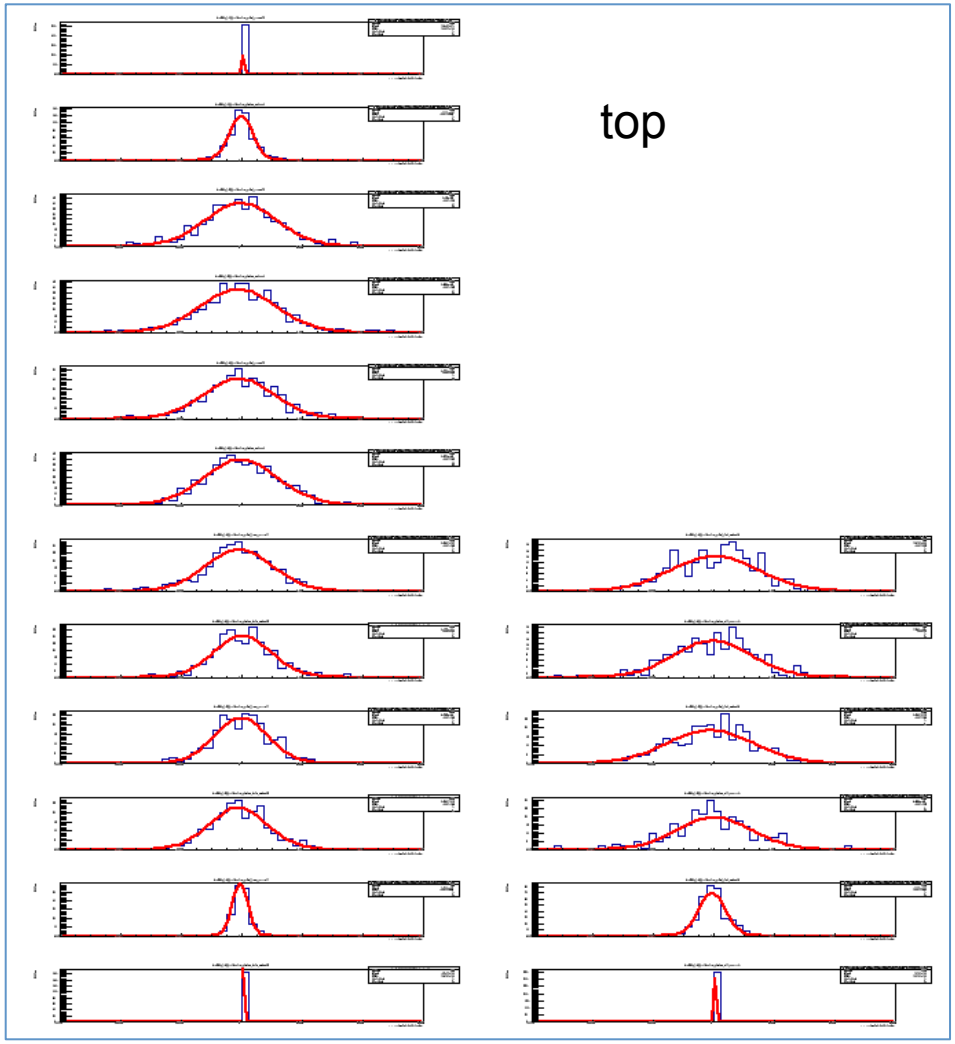
GBL Residuals Top - Simulation

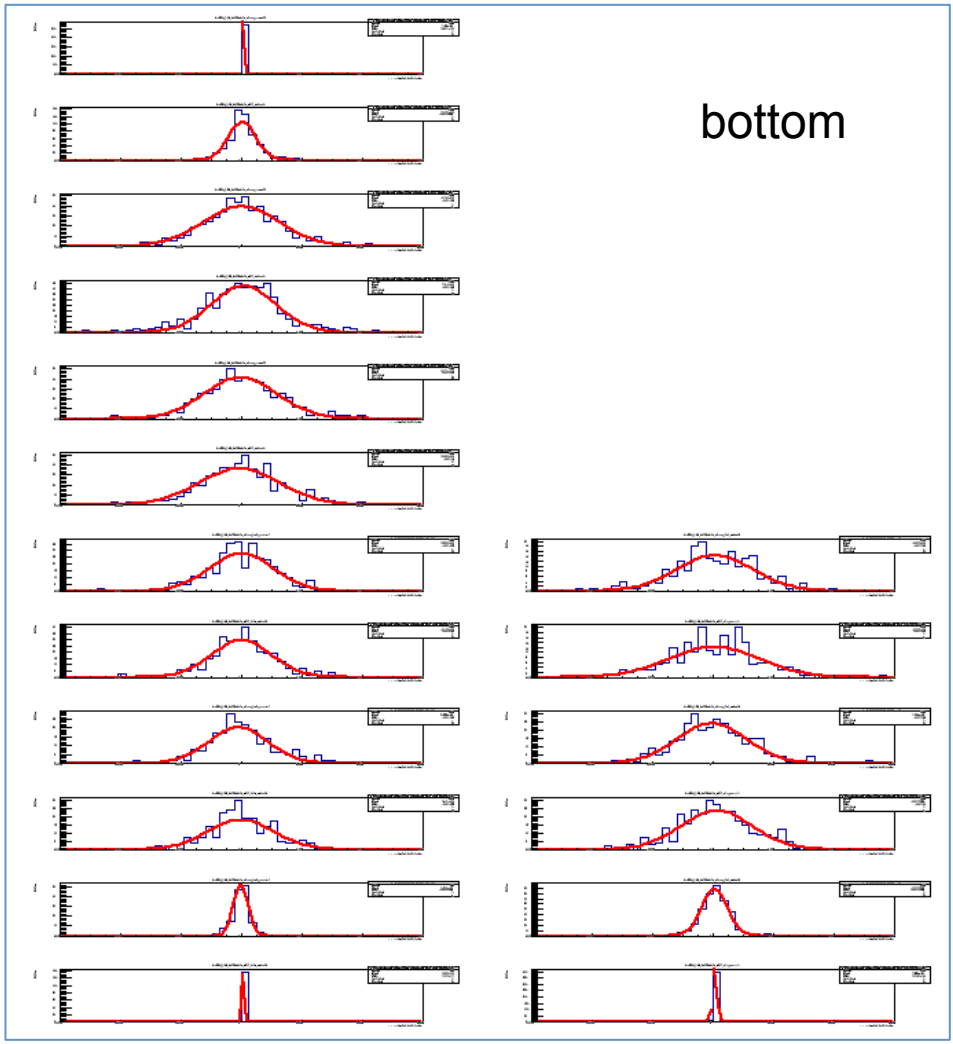


X-axis: +-0.01

X-axis: +-0.006

GBL Kinks Lambda

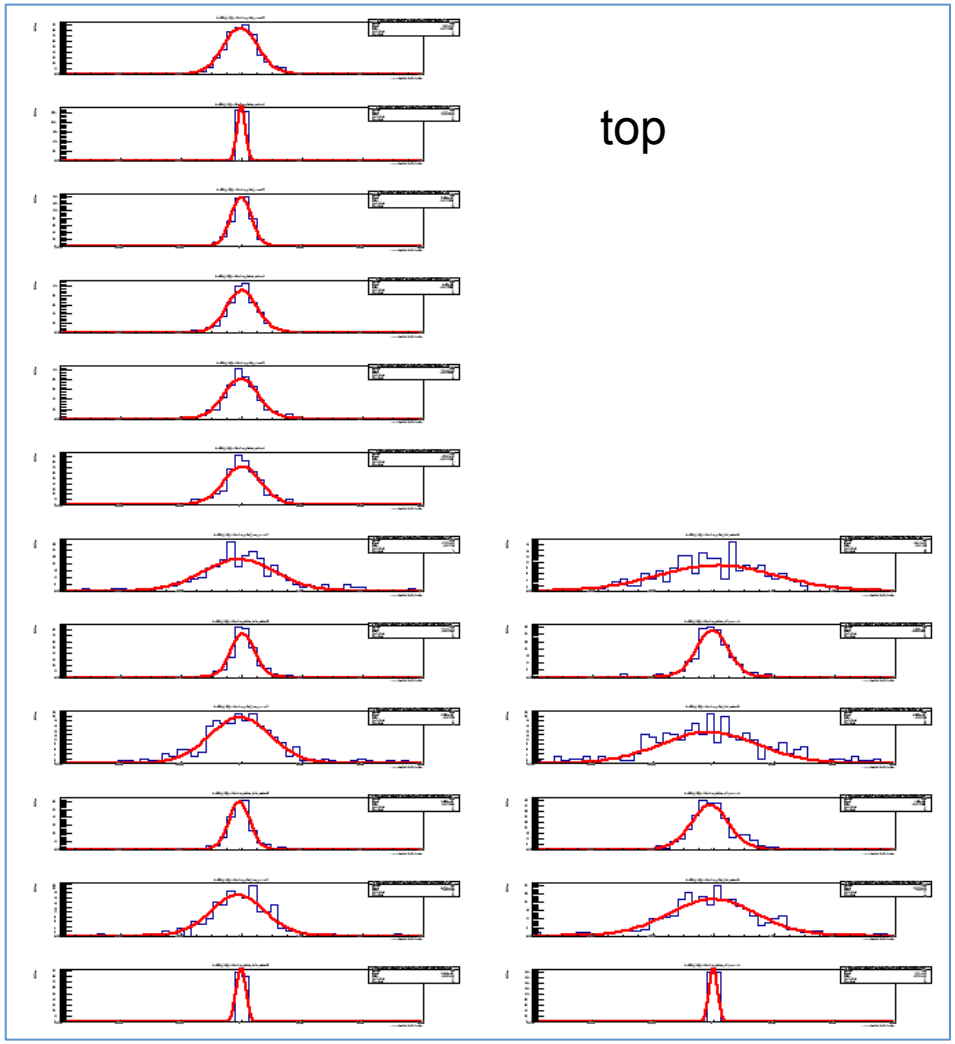


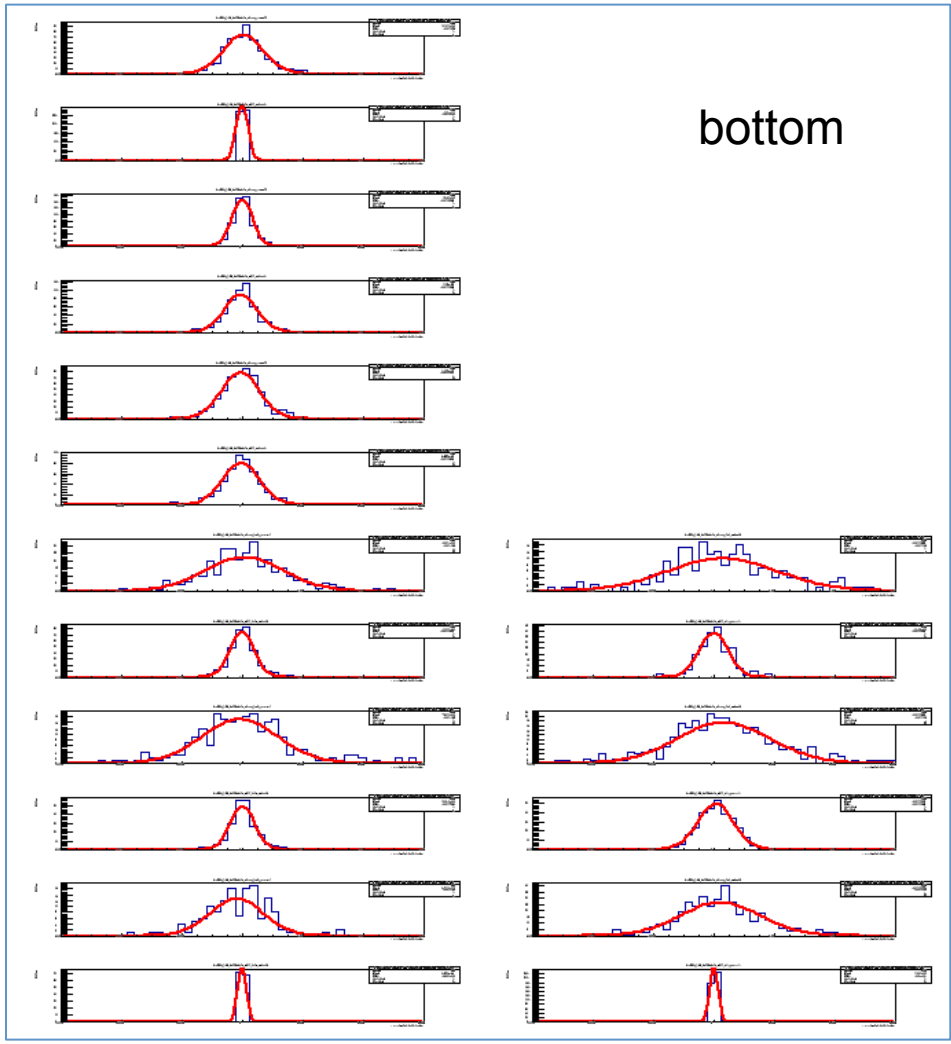


Lambda (almost measurement dir.) consistent b/w top and bottom
Width ~1.2mrad consistent with multiple scat. Formula for 320um Si @ 500MeV

GBL Kinks Phi

X-axis: +-0.007



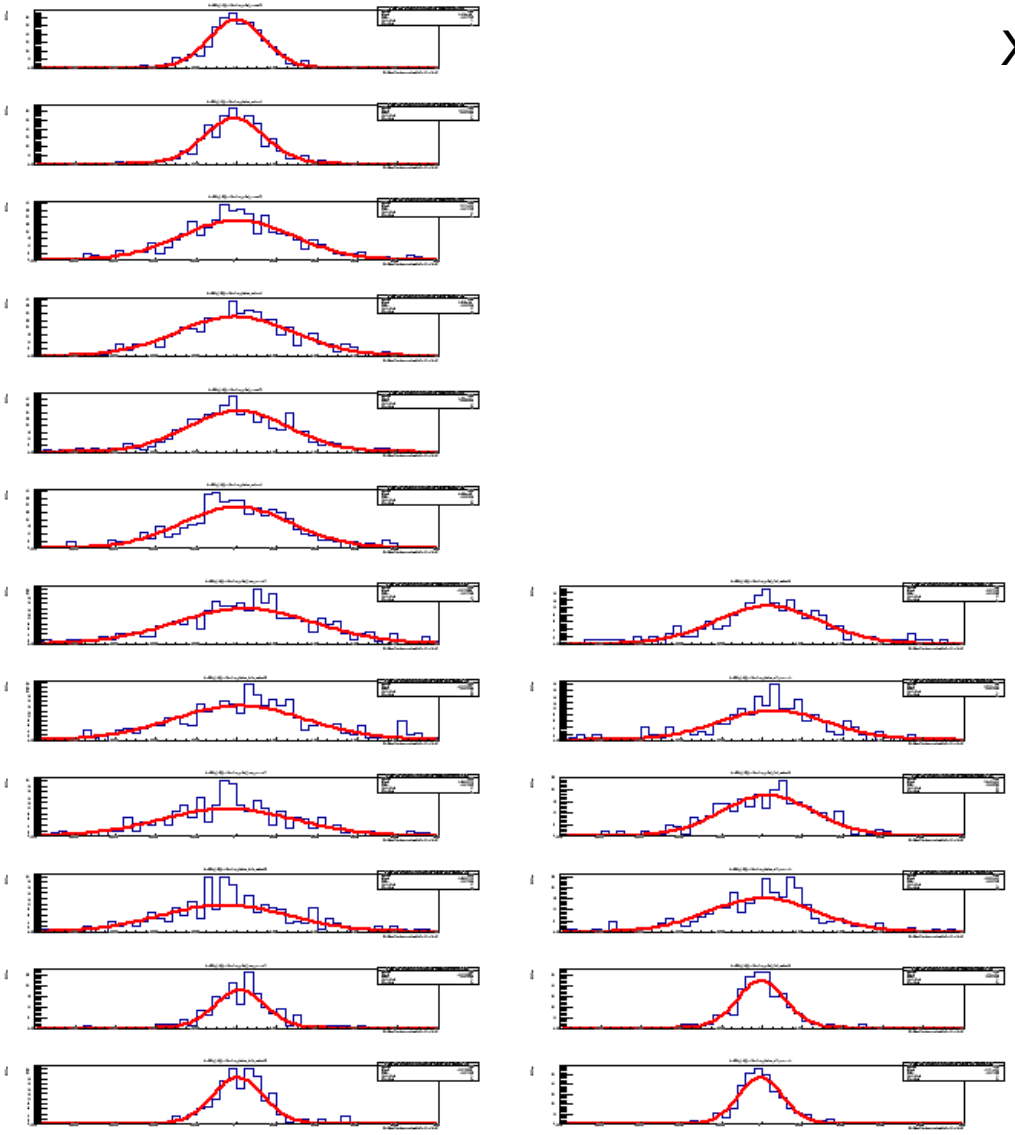


Phi (approx. along strips) consistent b/w top and bottom.
Note large/small width variation: no constraint from axial sensors.

GBL Residuals Top - Simulation

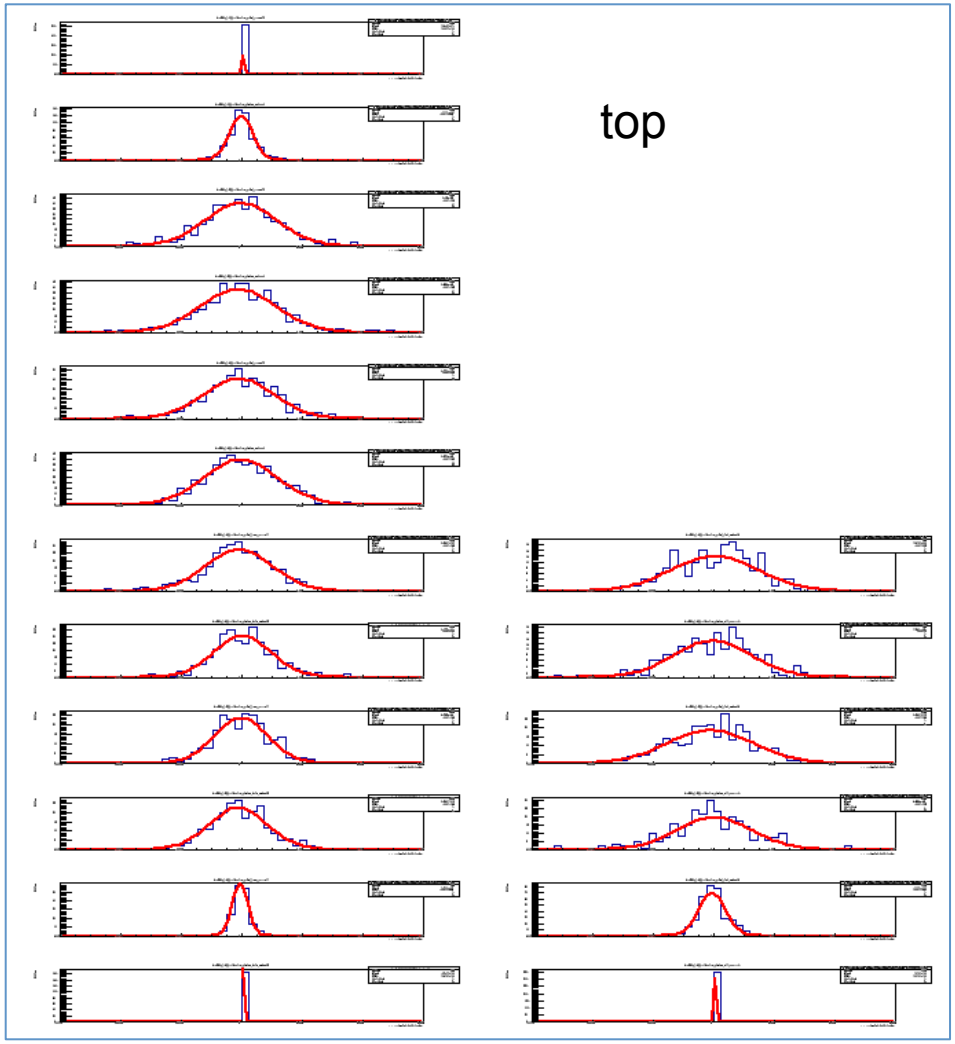
X-axis: +-0.01

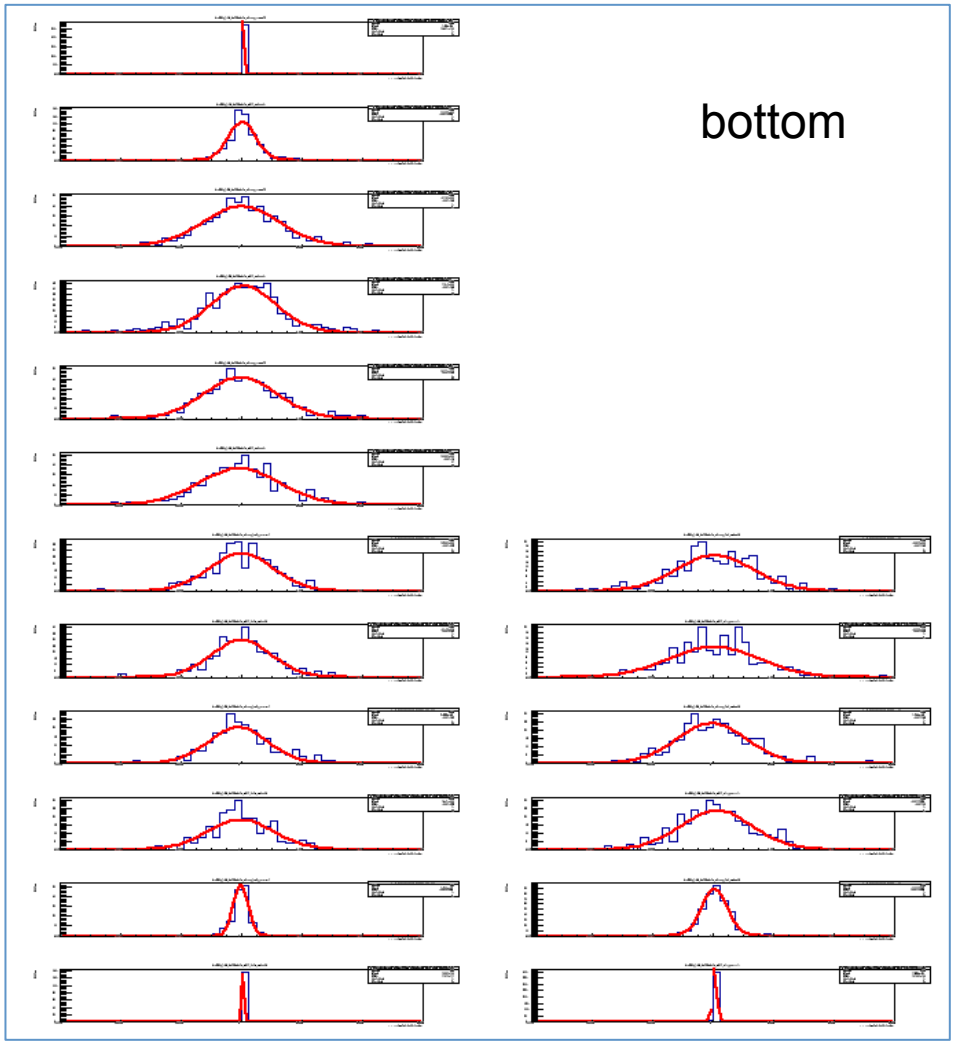
Top:
A
S
hole slot



X-axis: +-0.006

GBL Kinks Lambda - simulation

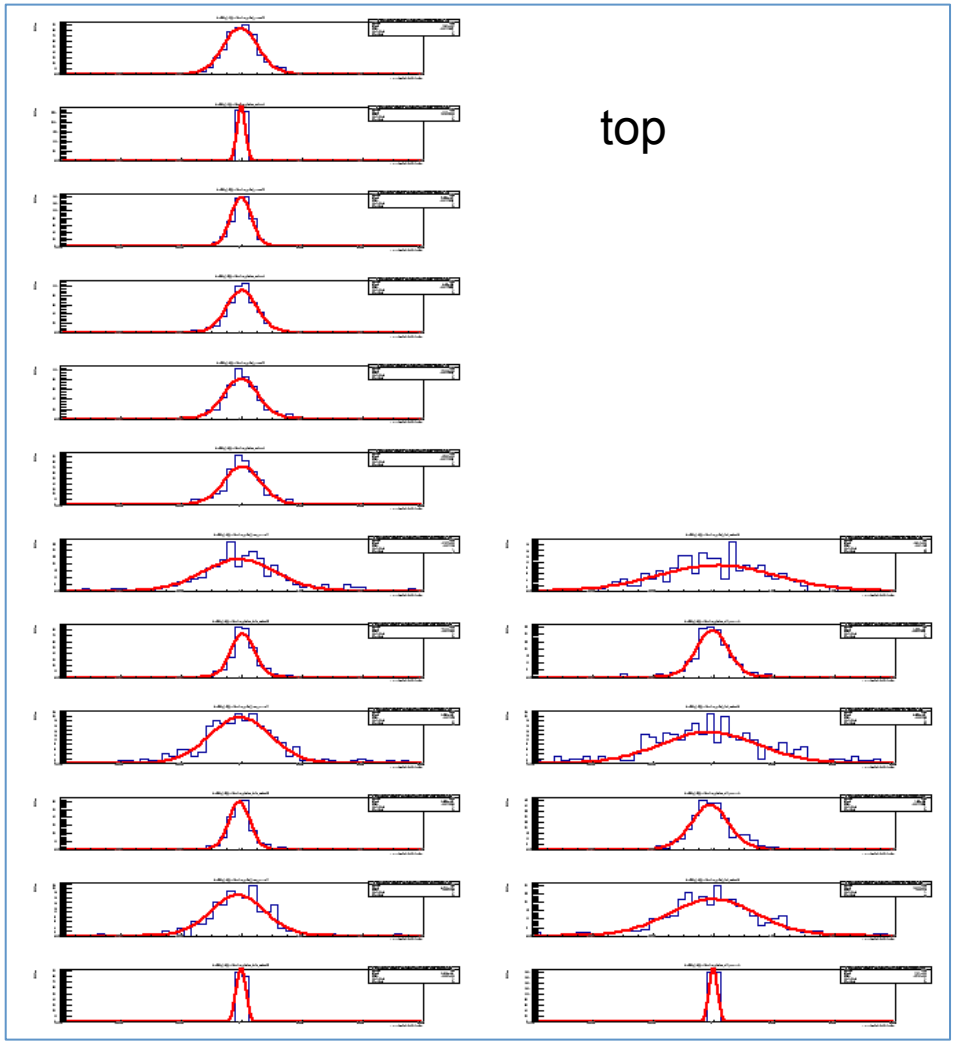


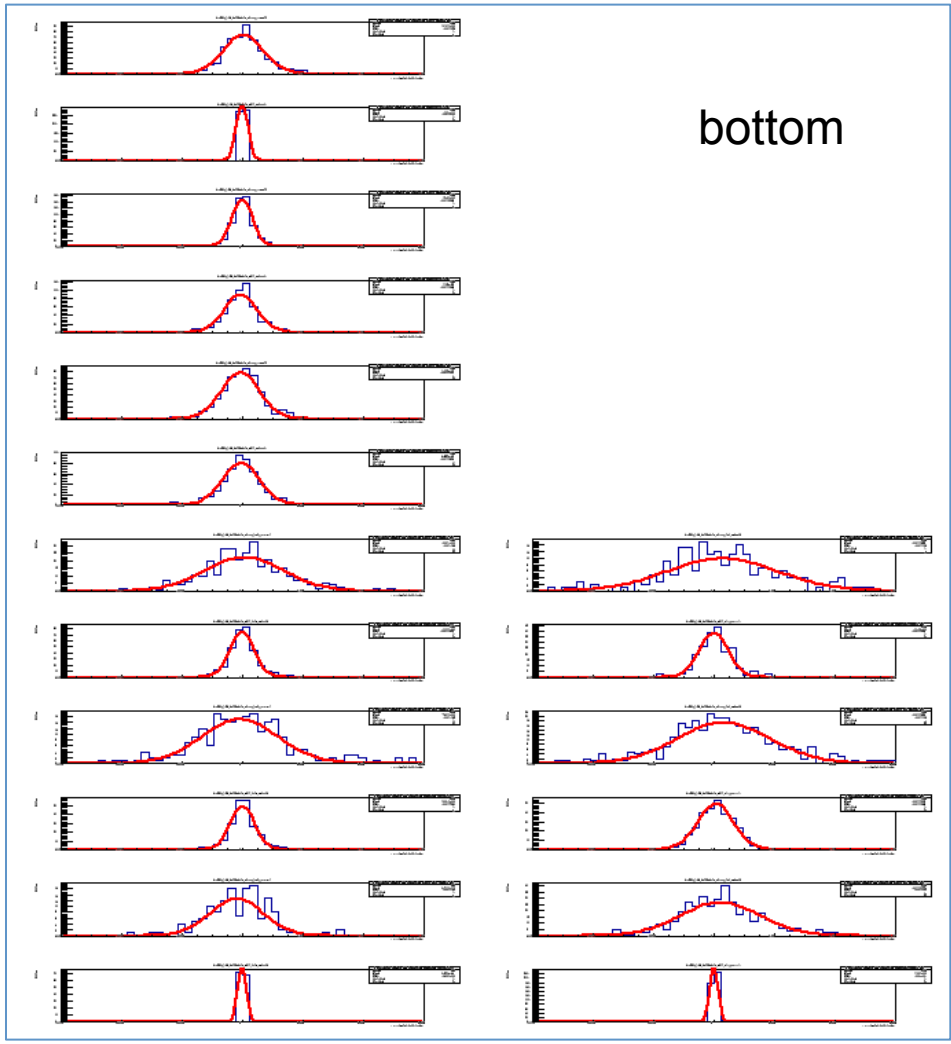


Lambda (almost measurement dir.) consistent b/w top and bottom
Width ~1.2mrad consistent with multiple scat. Formula for 320um Si @ 500MeV

GBL Kinks Phi - simulation

X-axis: +-0.007





Phi (approx. along strips) consistent b/w top and bottom.
Note large/small width variation: no constraint from axial sensors.