

F_b-c Parametrization studies

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INFN Padova

PD meeting,
PD, 5 April 2011

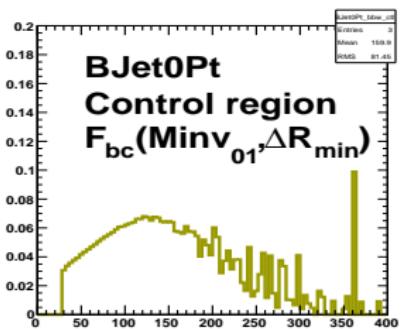
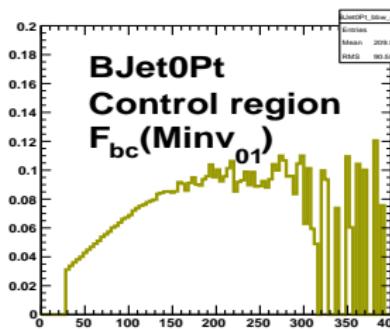
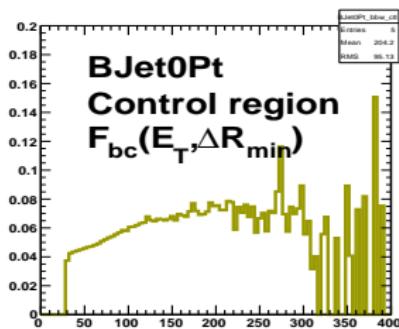
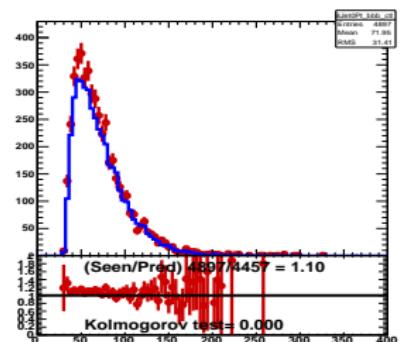
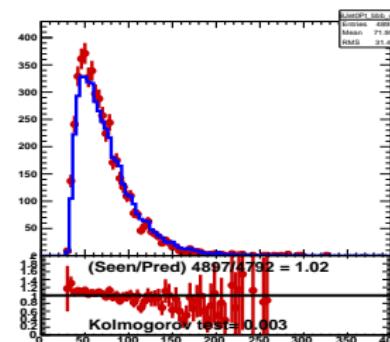
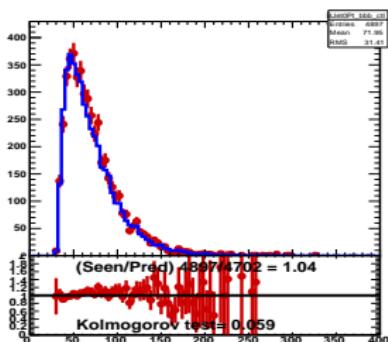


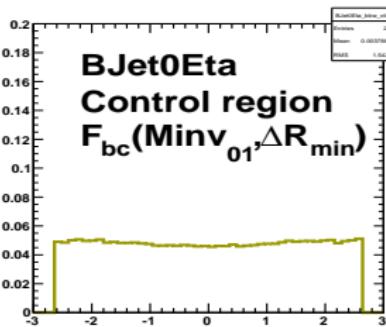
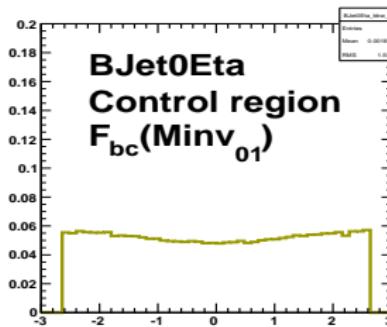
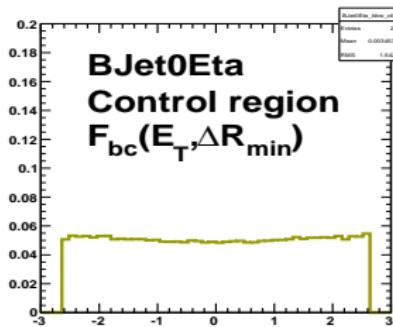
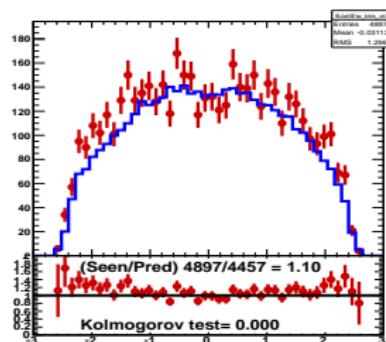
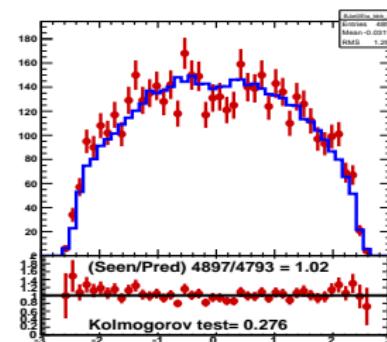
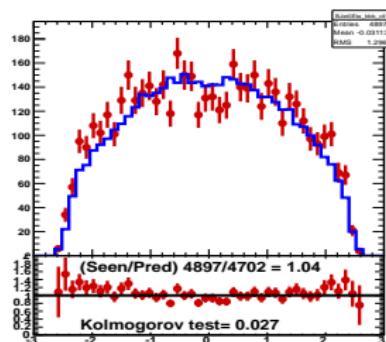
Intro

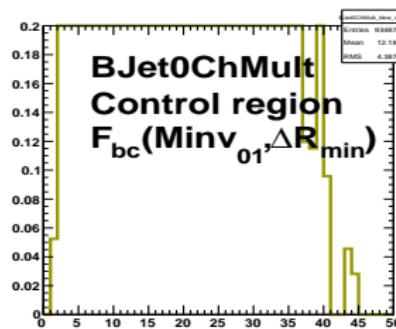
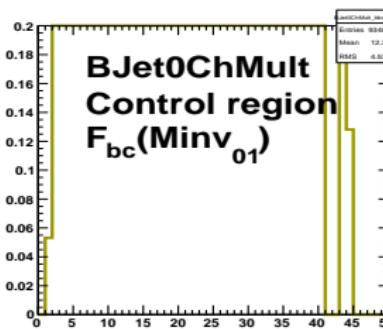
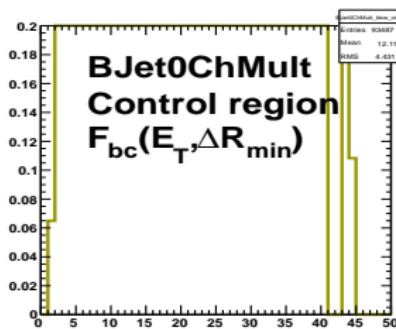
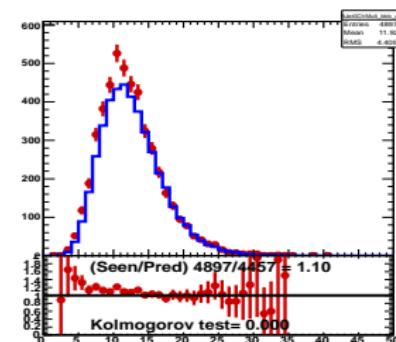
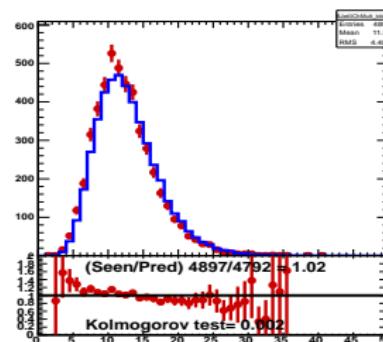
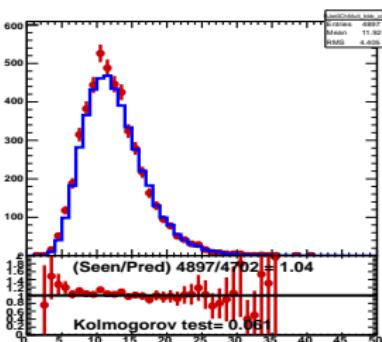


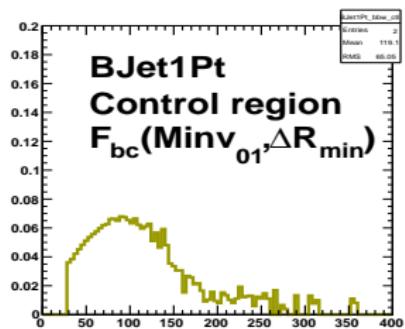
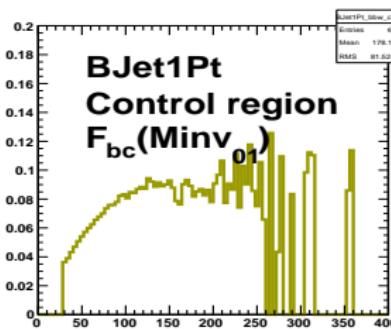
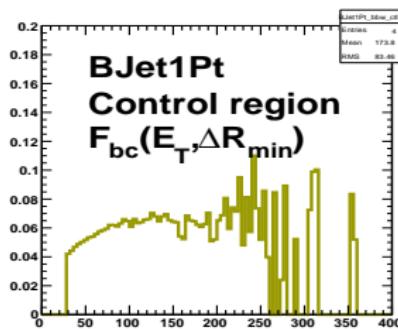
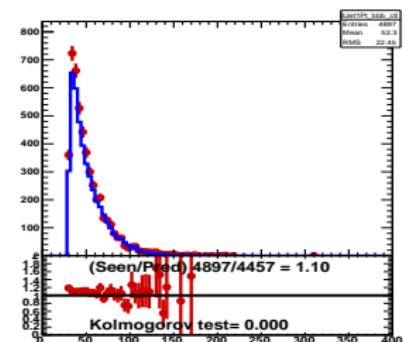
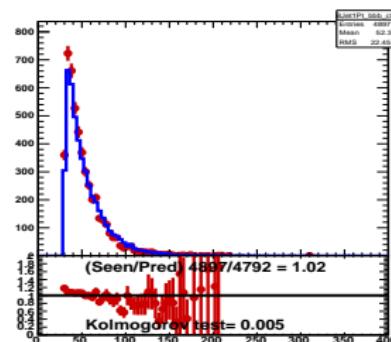
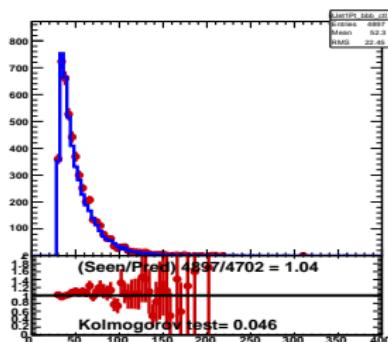
More test

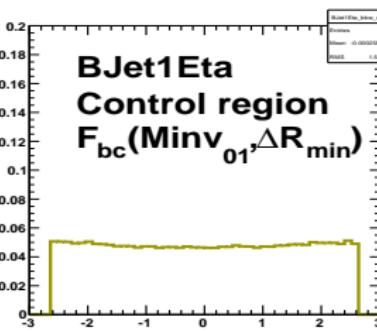
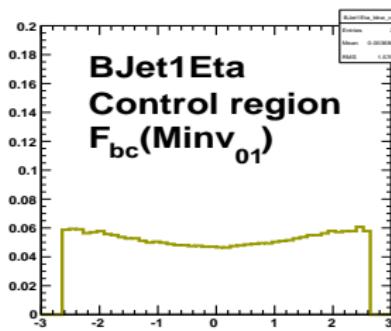
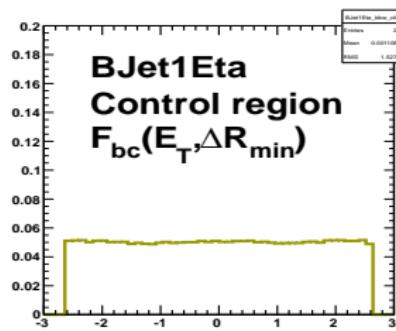
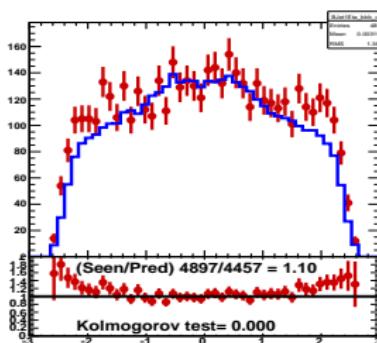
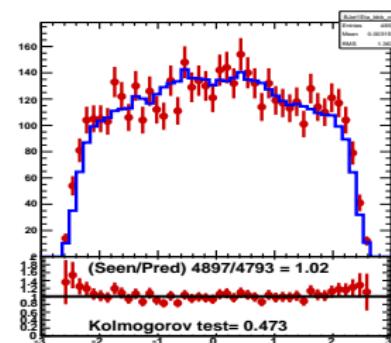
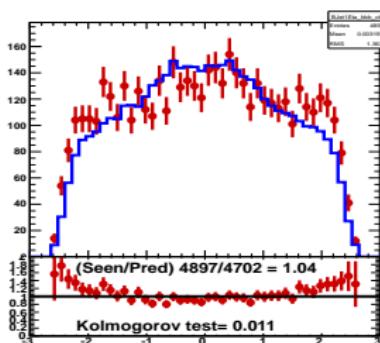
- Try to change parametrization variables (other than $E_T^{(3)}$ and ΔR_{min}) to see if closure improves.
- Test with just M_{01} , invariant mass of first two jets, the very same variable we are observing;
- try also with M_{01} and ΔR_{min}
- Results are promising: maybe it's just a matter to find the right parametrization.

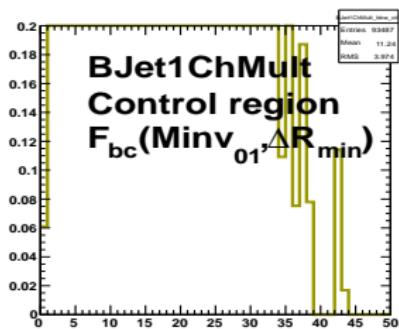
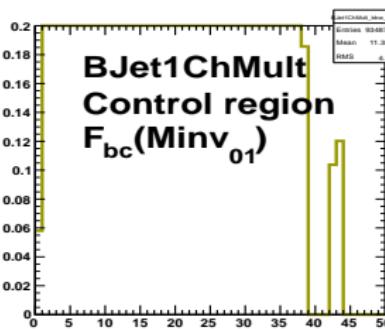
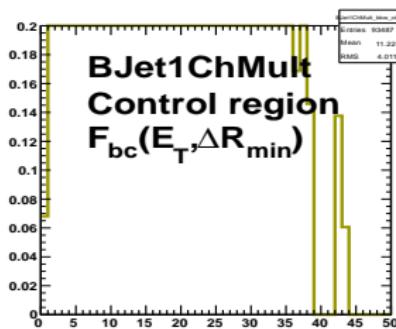
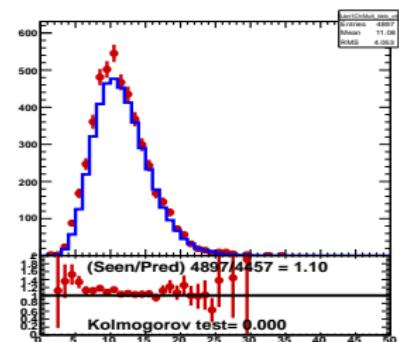
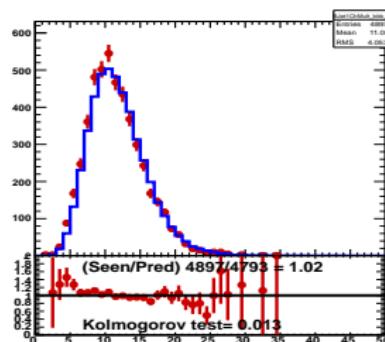
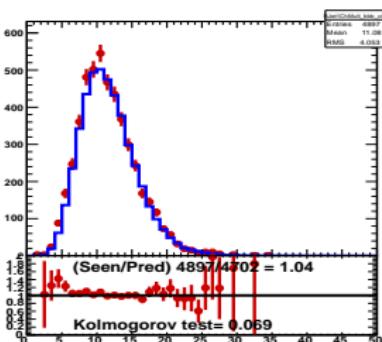


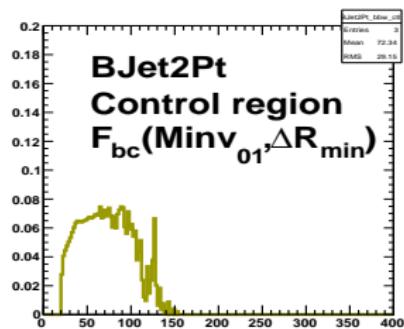
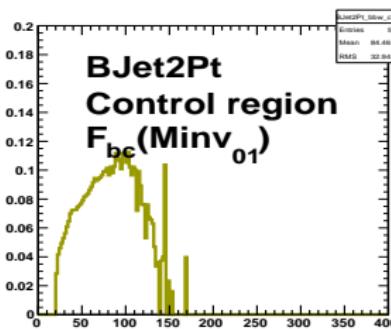
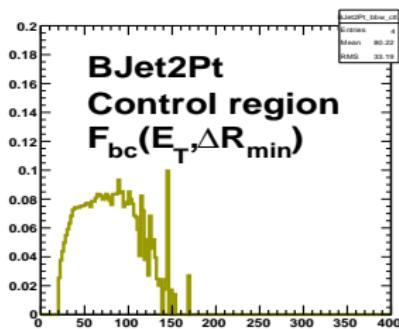
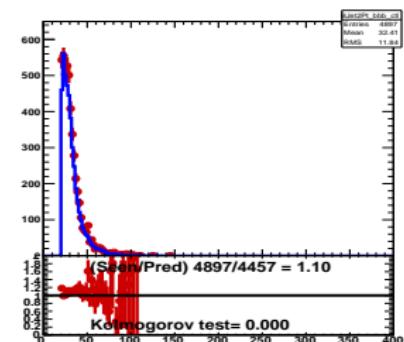
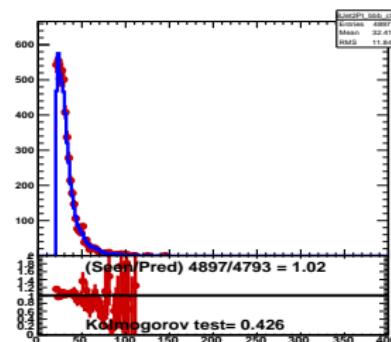
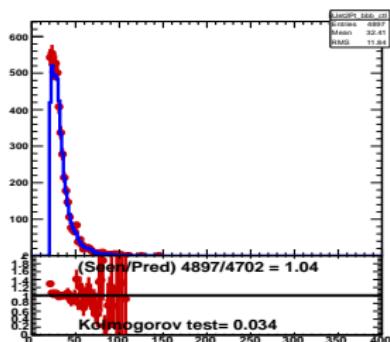


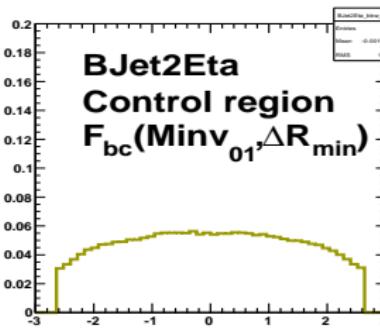
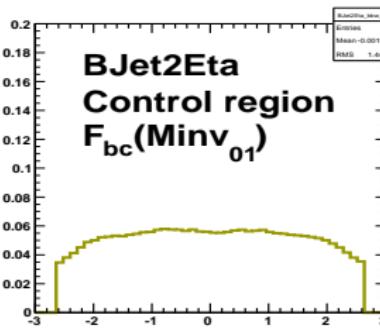
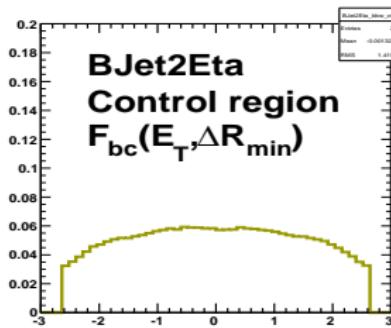
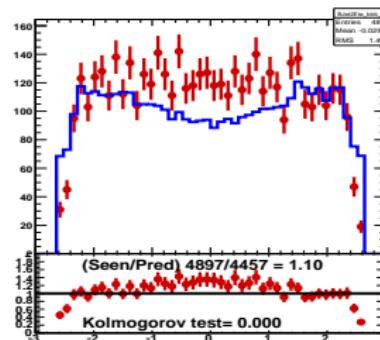
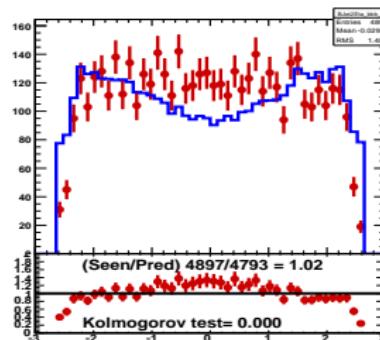
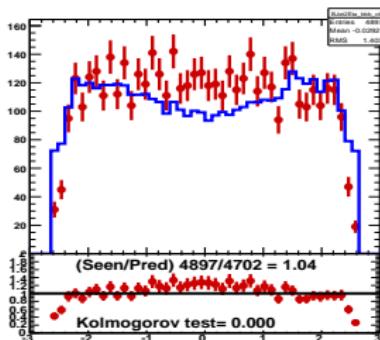


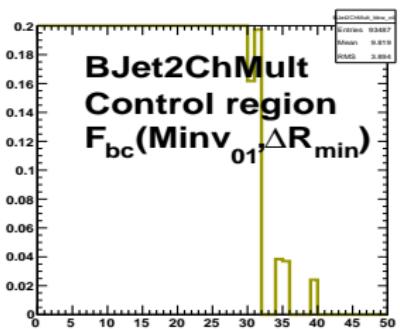
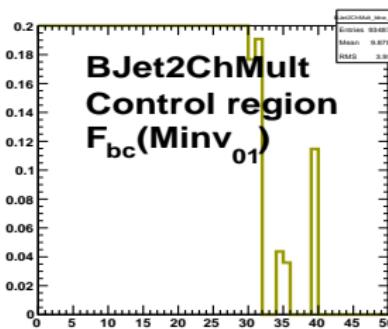
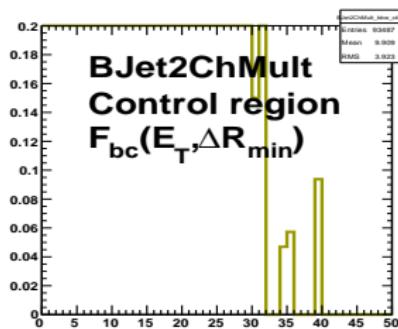
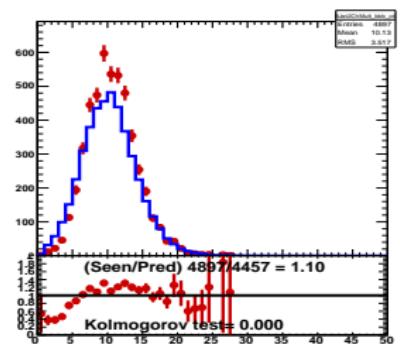
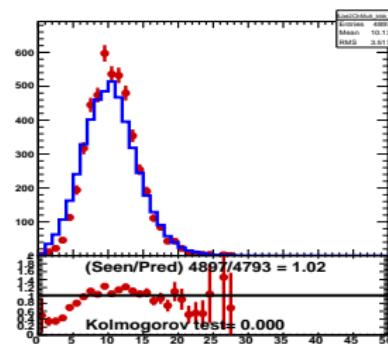
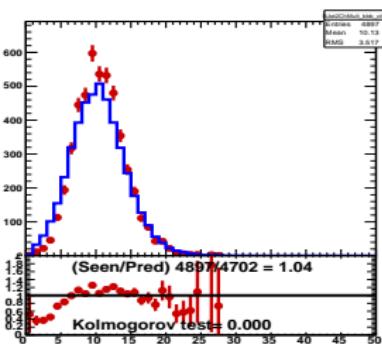


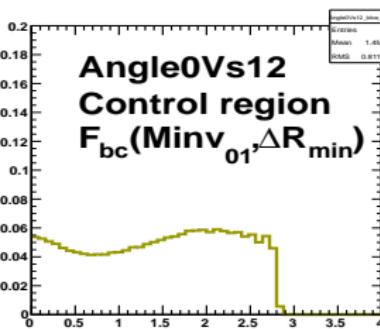
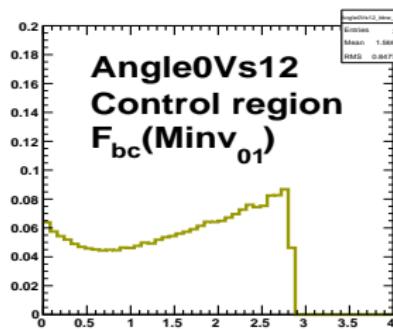
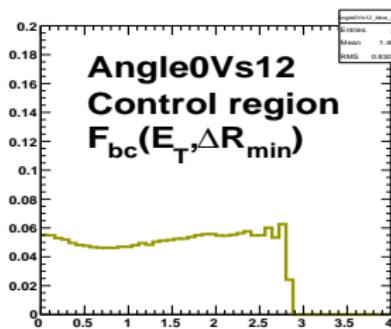
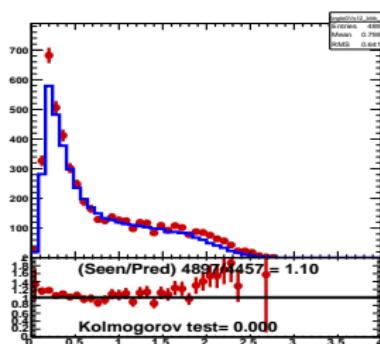
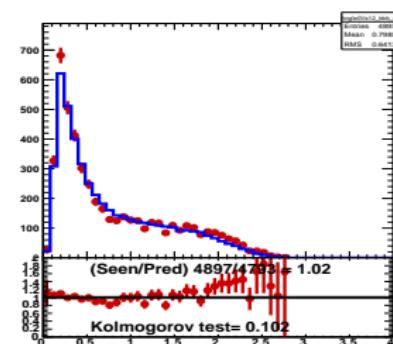
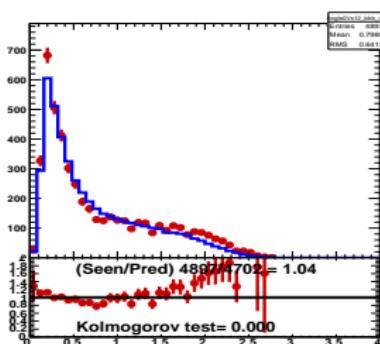
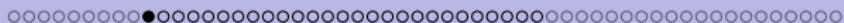


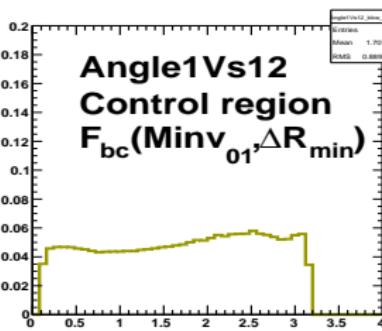
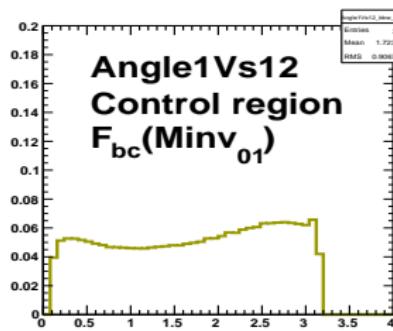
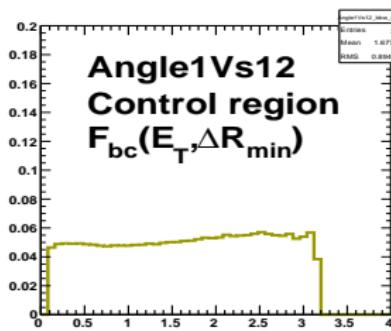
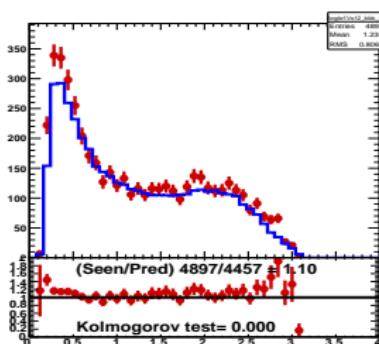
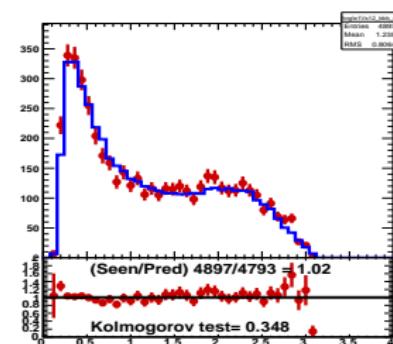
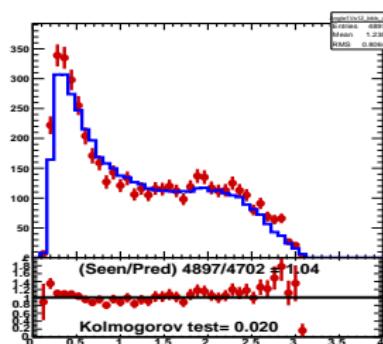


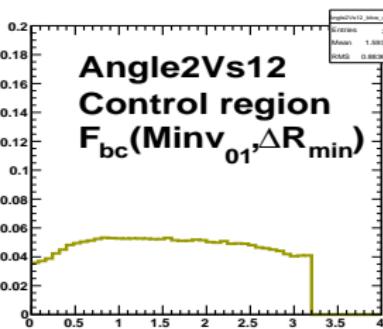
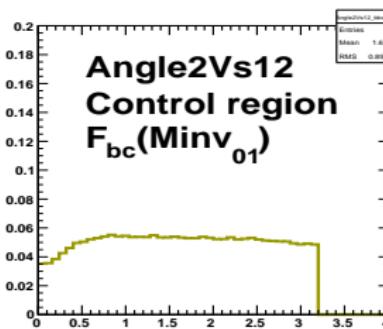
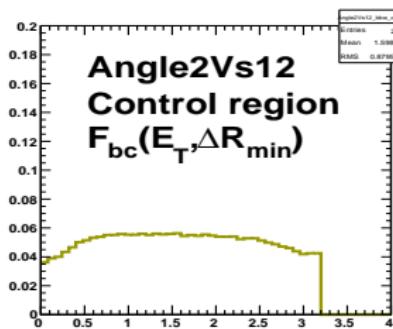
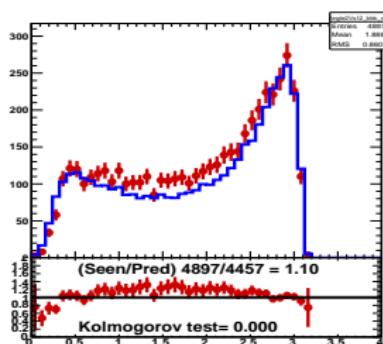
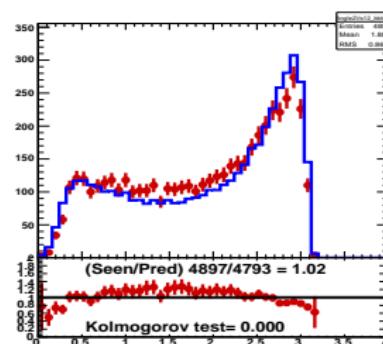
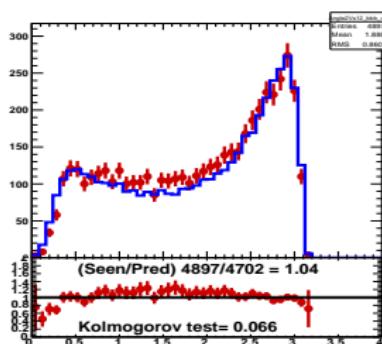
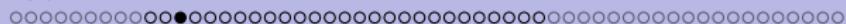


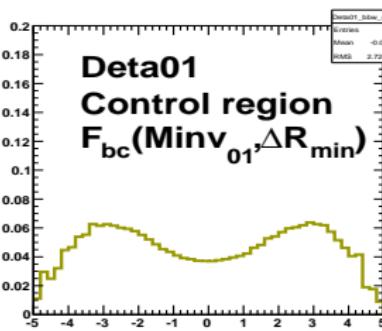
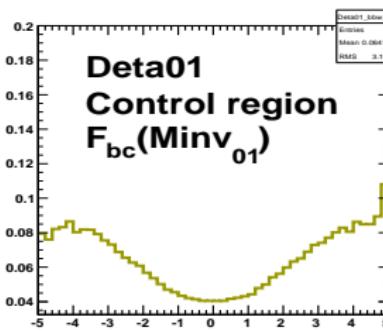
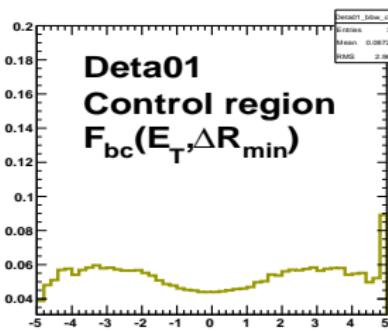
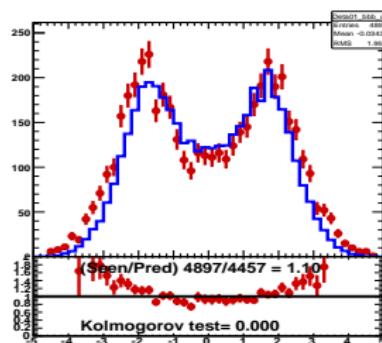
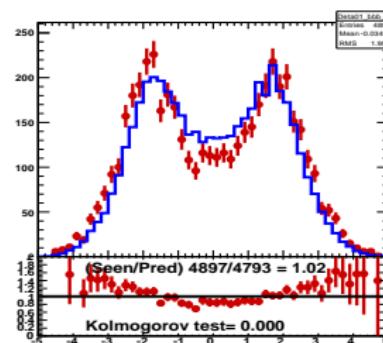
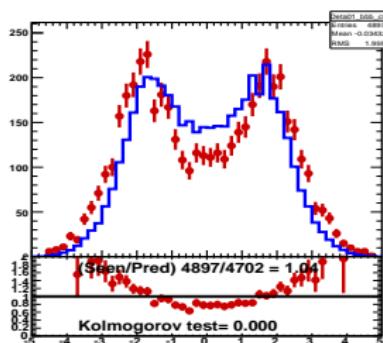


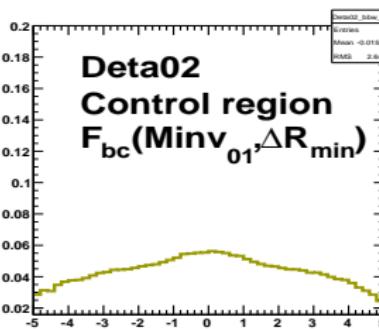
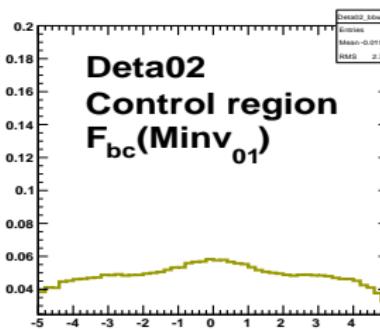
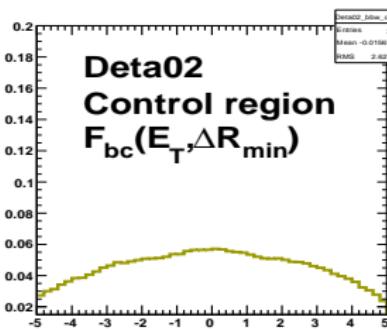
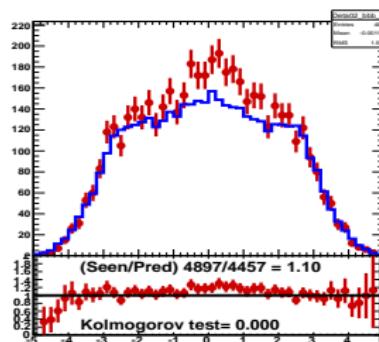
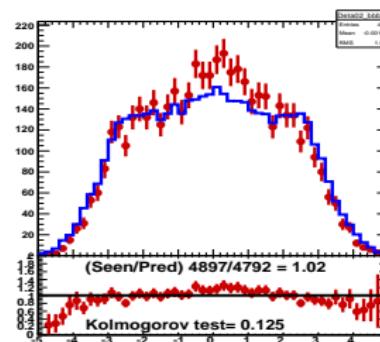
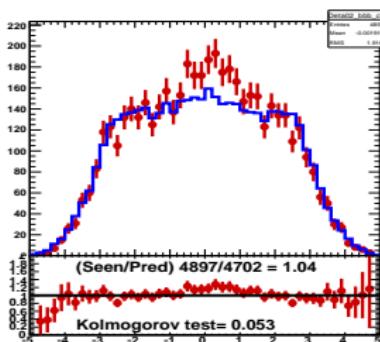


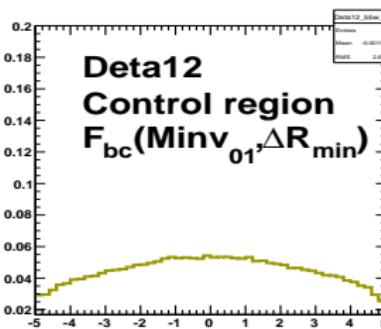
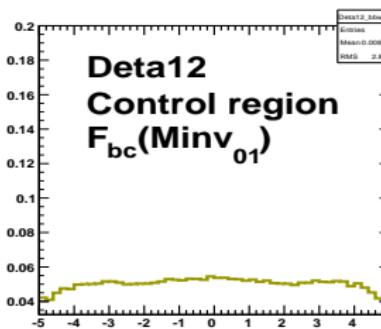
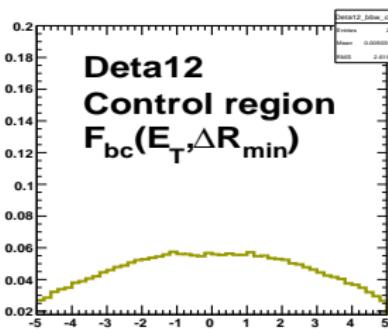
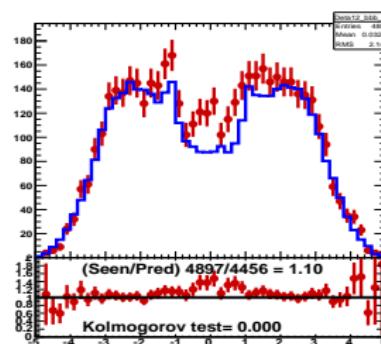
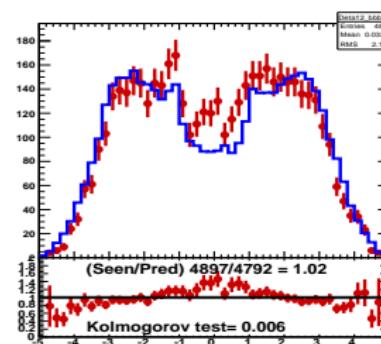
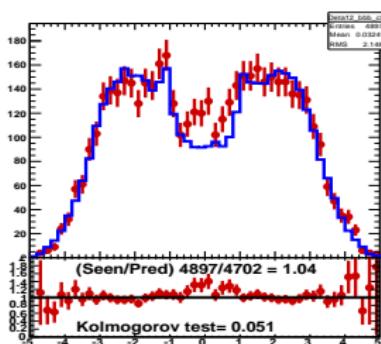
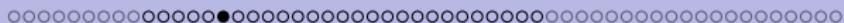


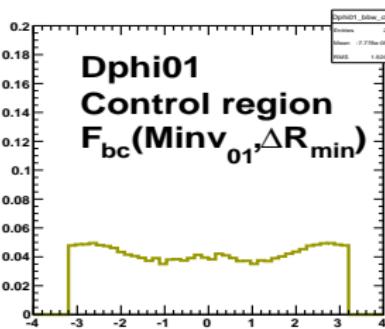
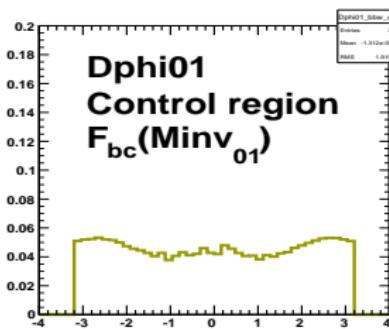
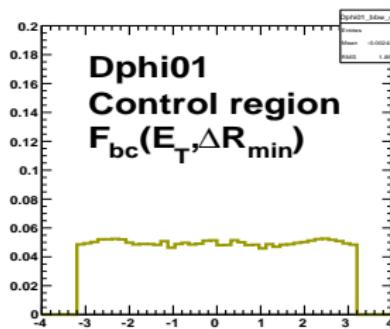
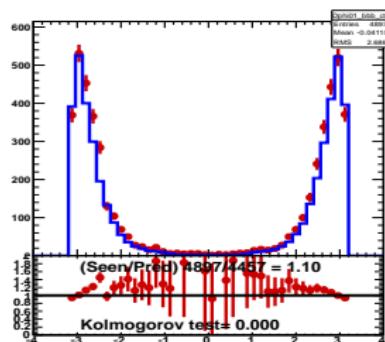
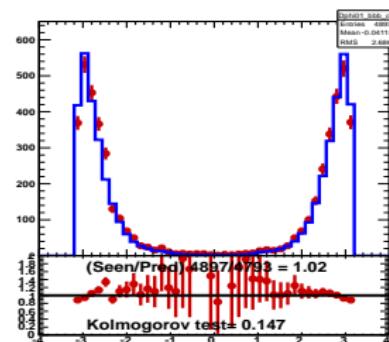
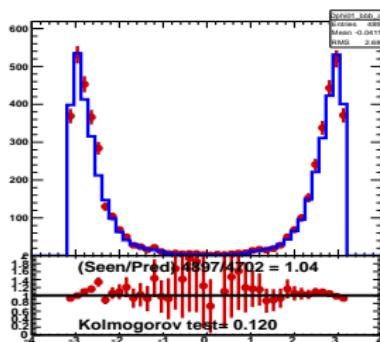


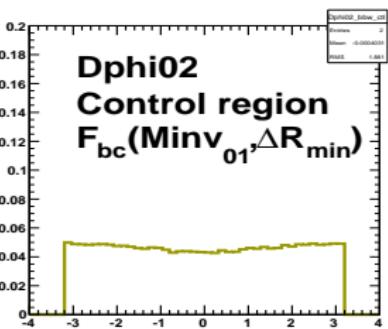
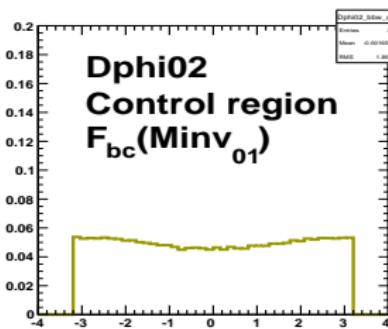
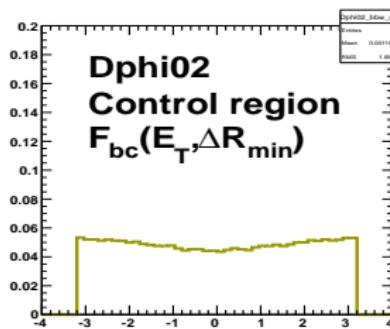
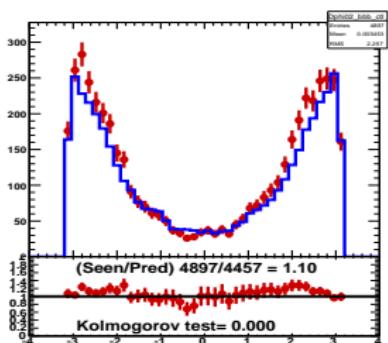
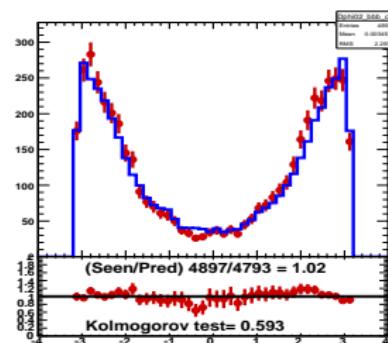
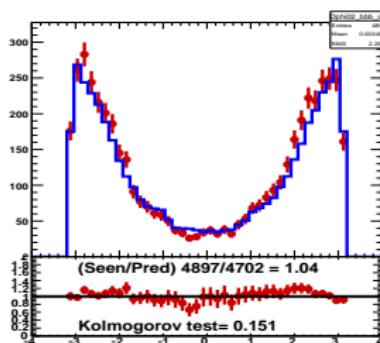


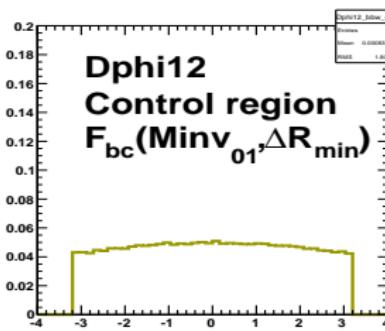
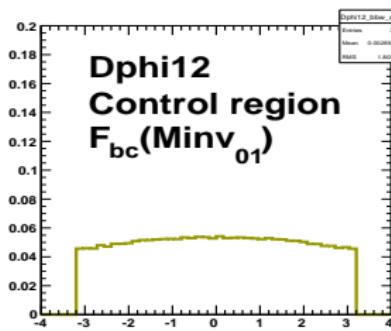
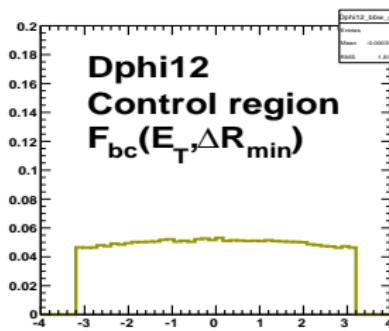
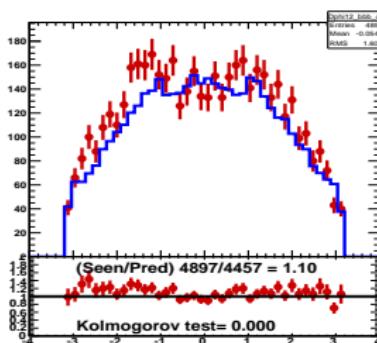
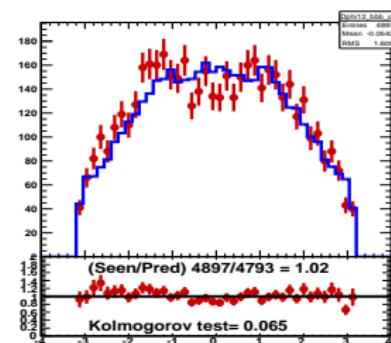
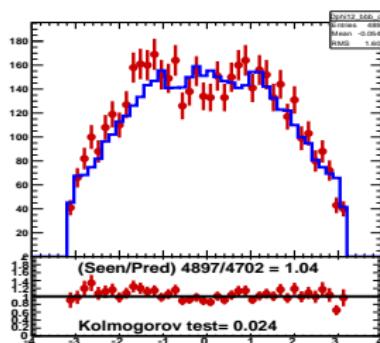


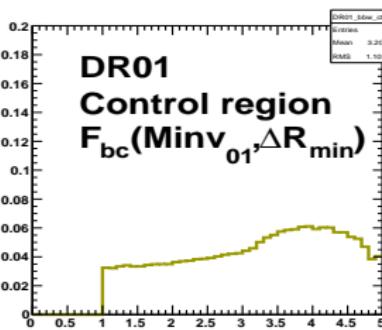
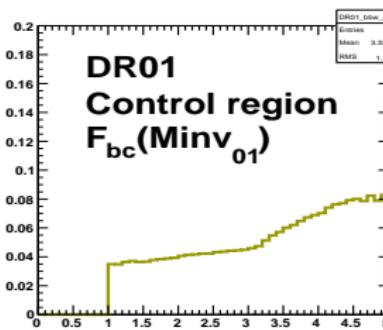
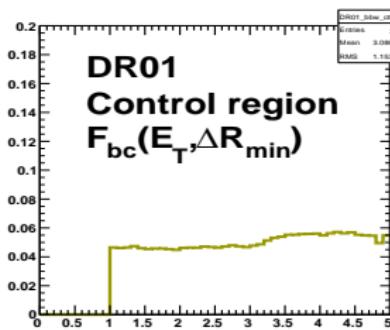
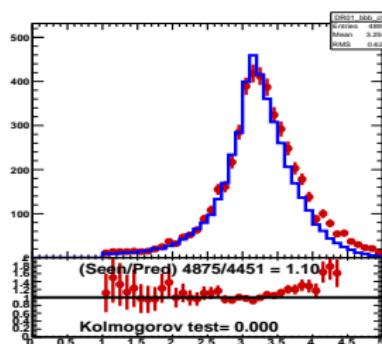
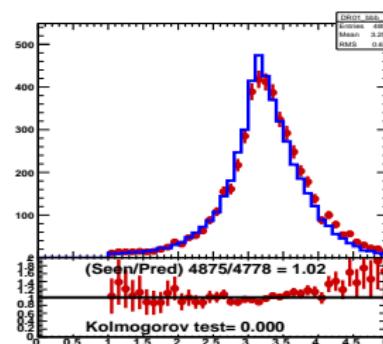
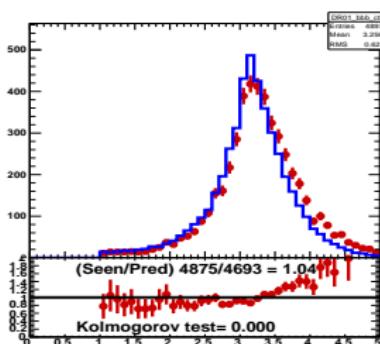


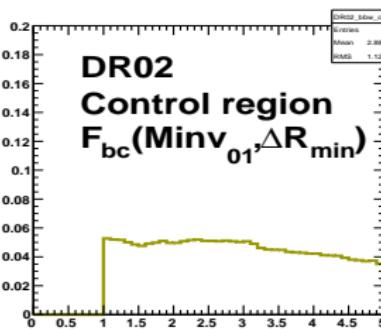
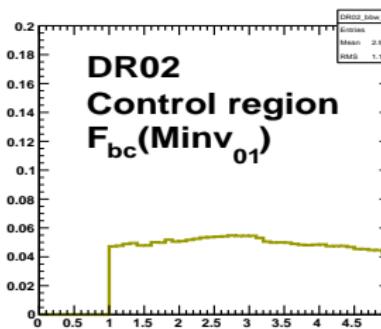
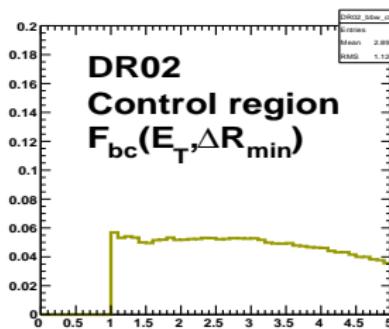
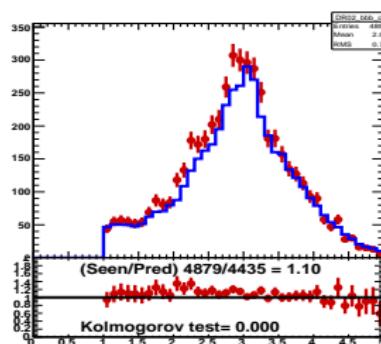
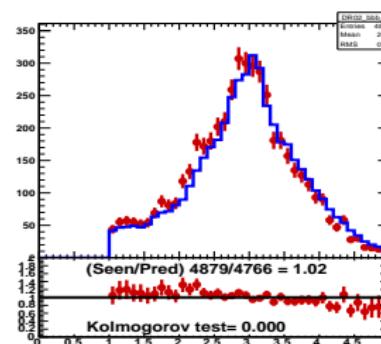
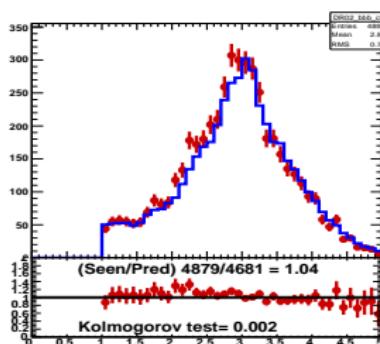
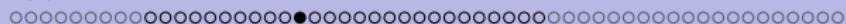


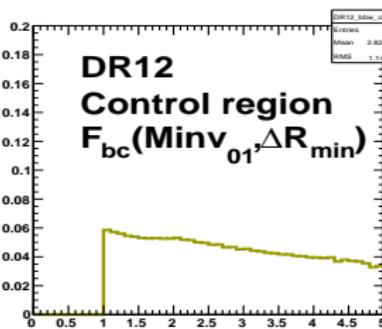
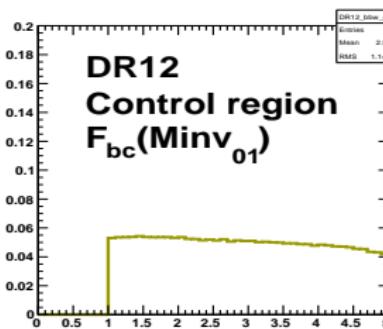
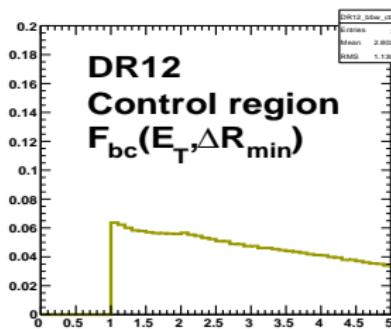
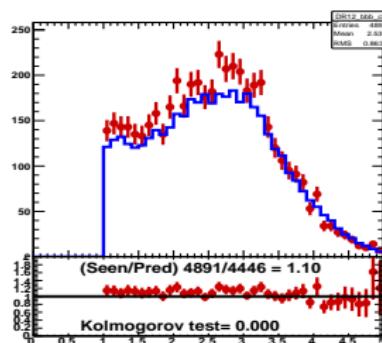
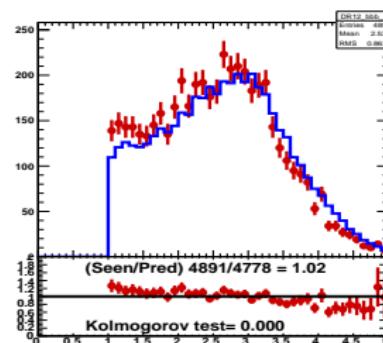
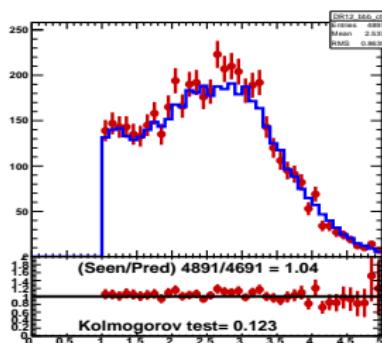
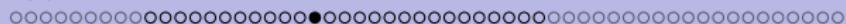


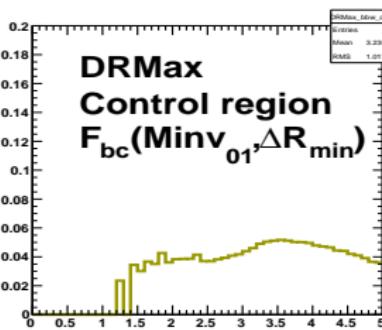
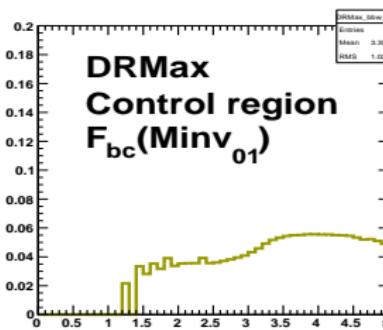
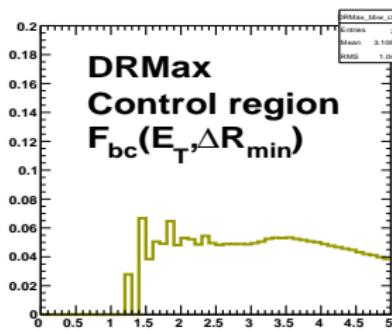
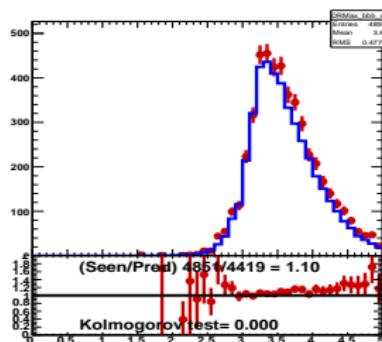
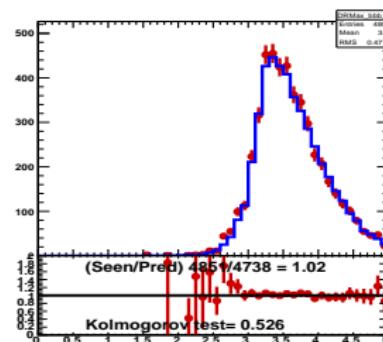
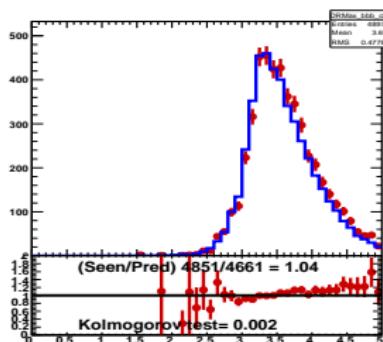


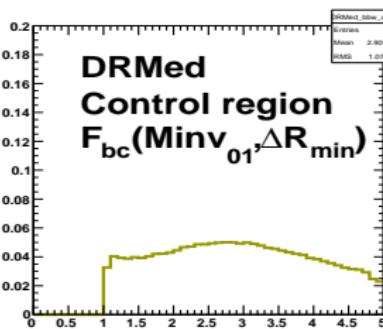
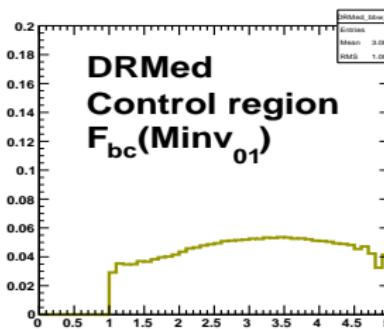
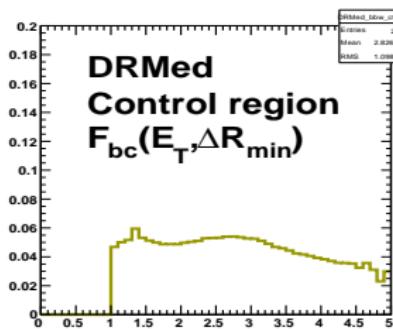
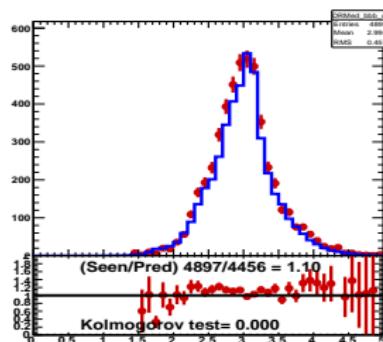
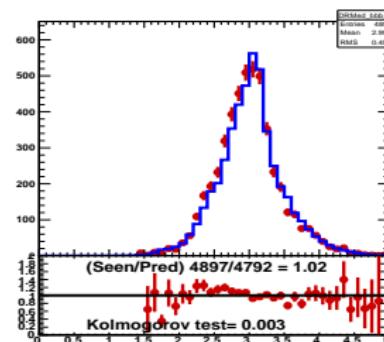
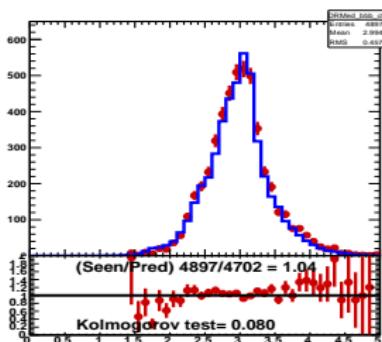
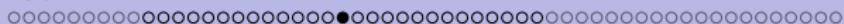


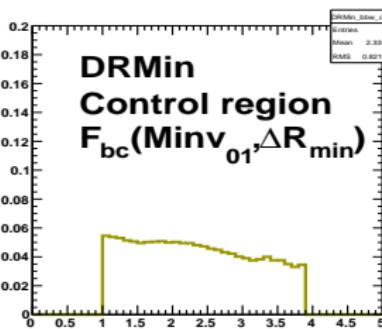
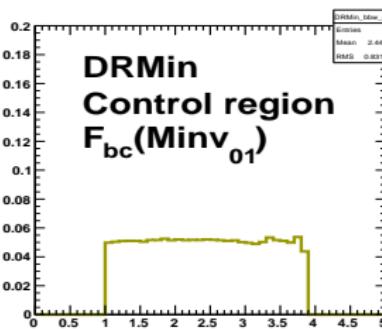
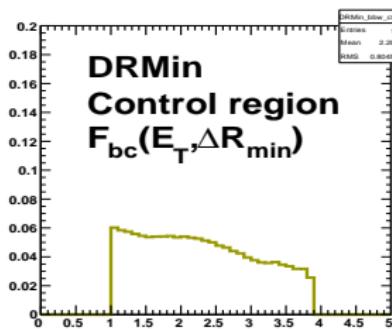
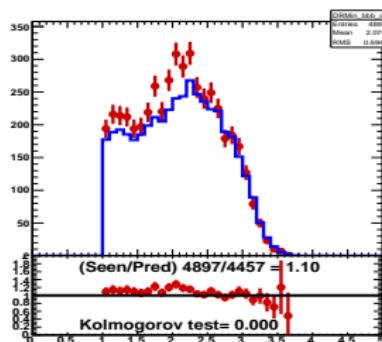
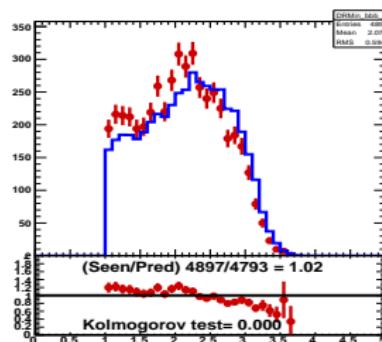
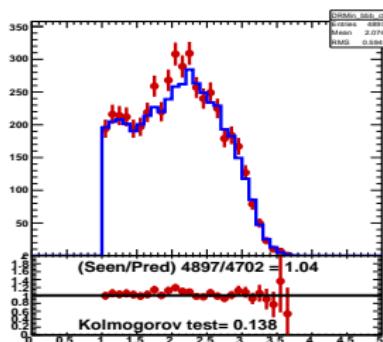
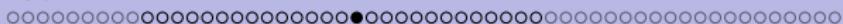


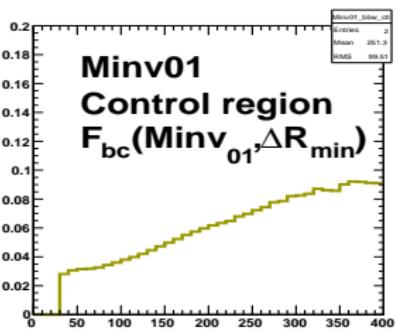
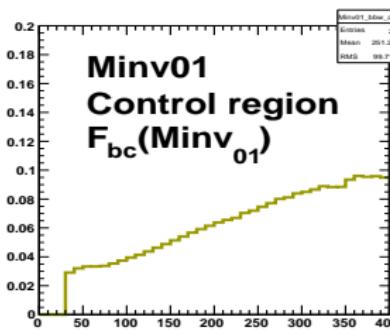
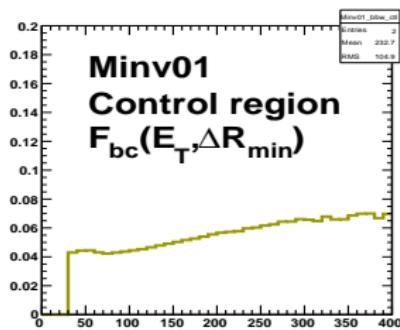
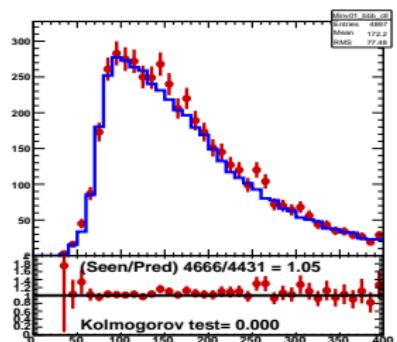
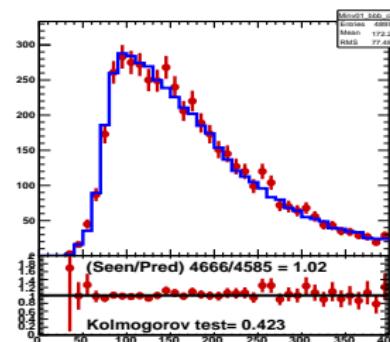
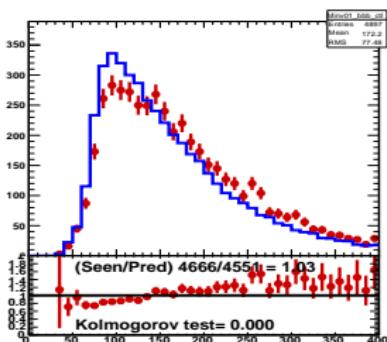


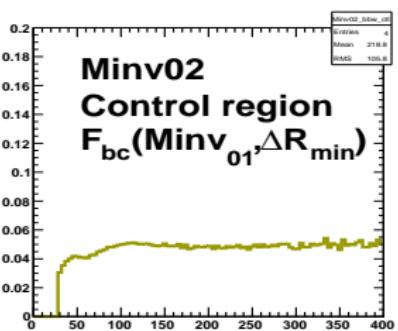
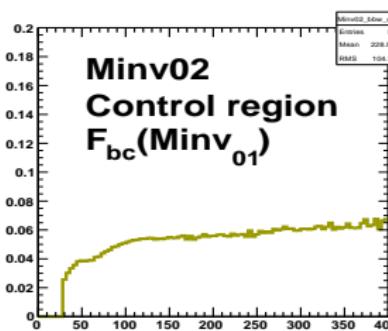
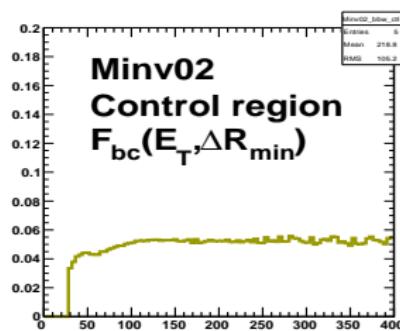
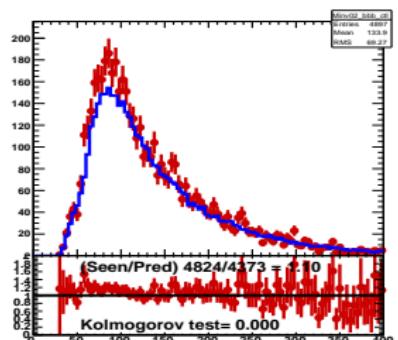
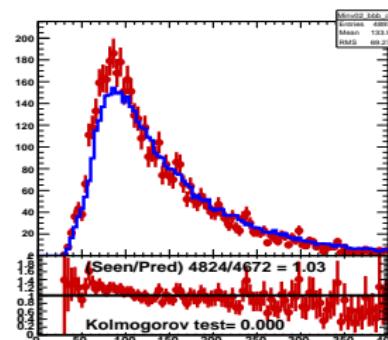
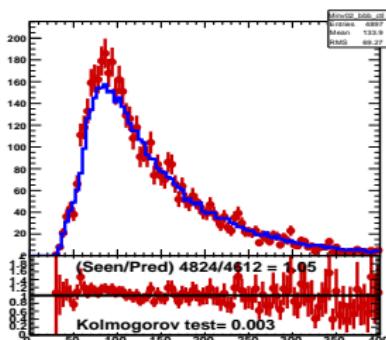


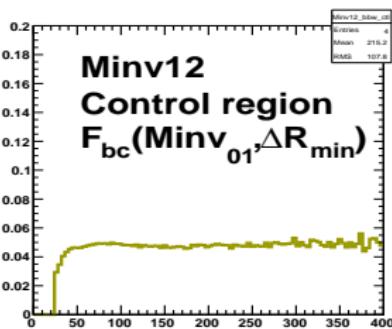
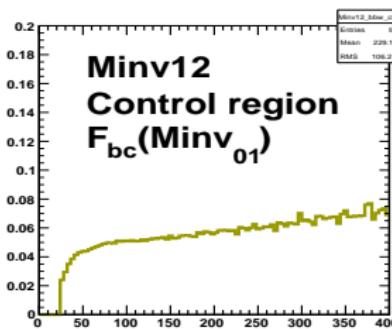
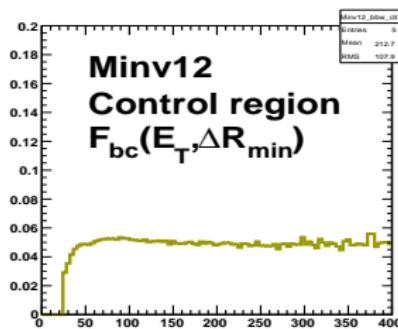
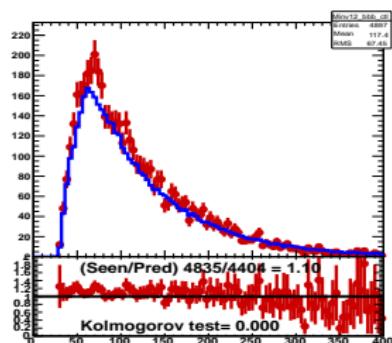
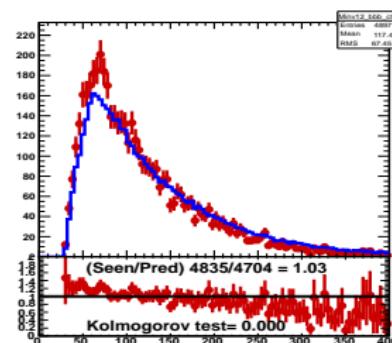
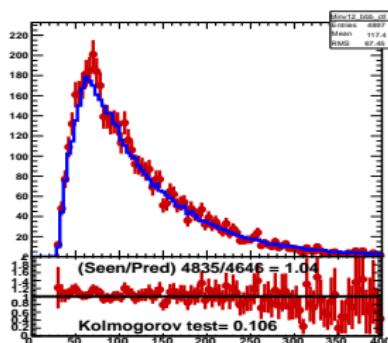


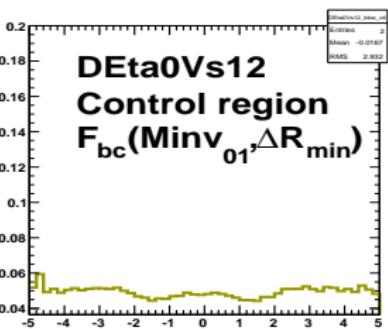
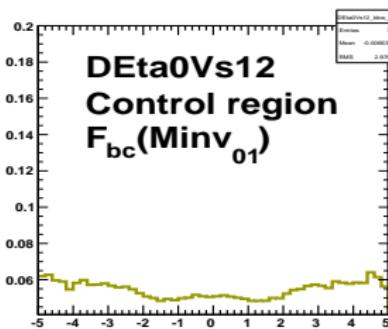
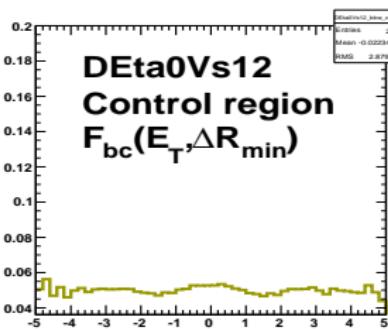
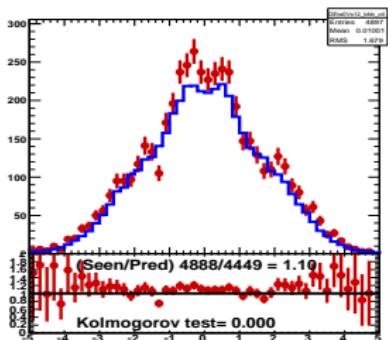
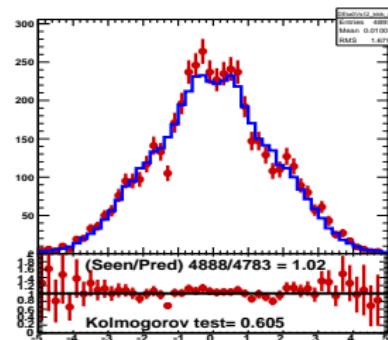
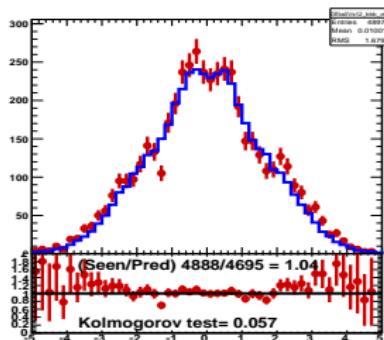


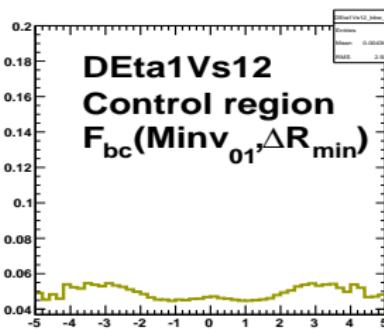
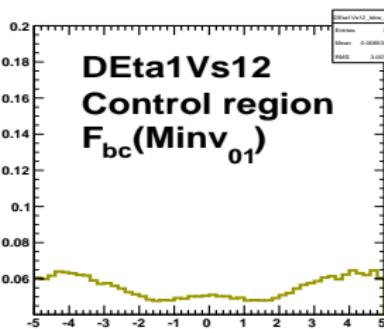
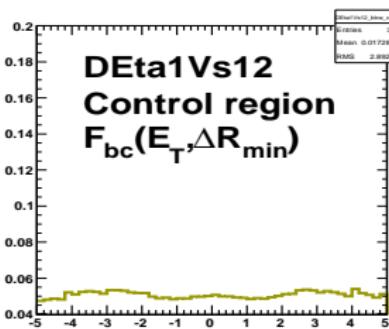
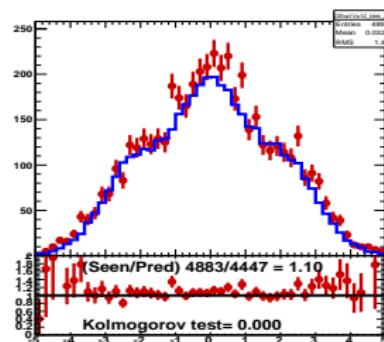
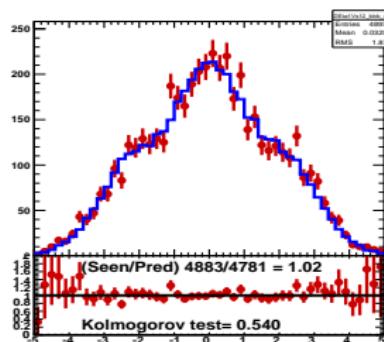
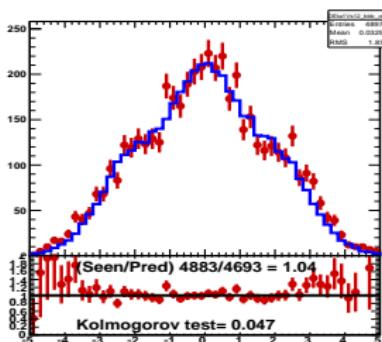
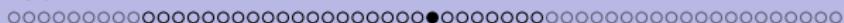


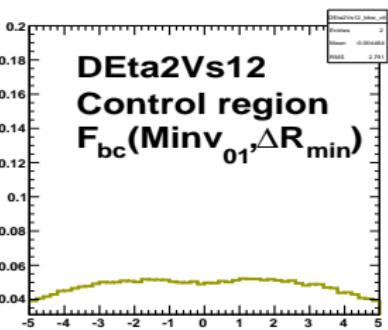
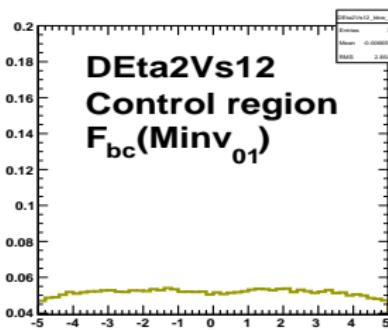
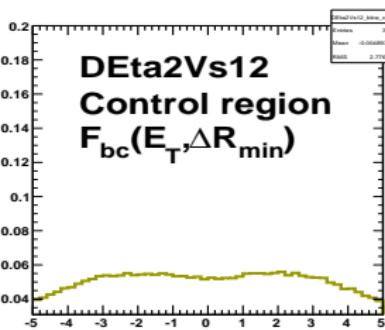
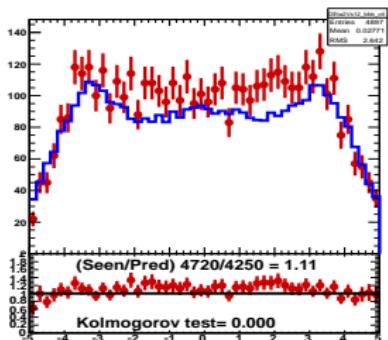
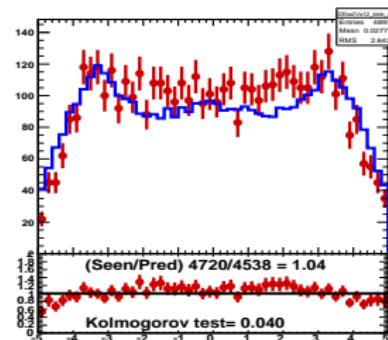
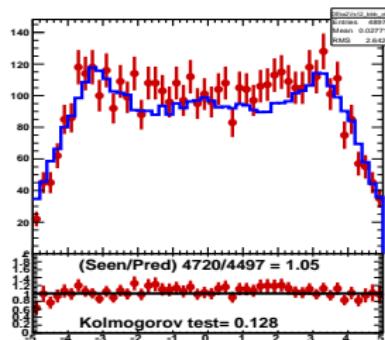
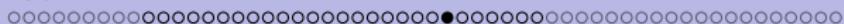


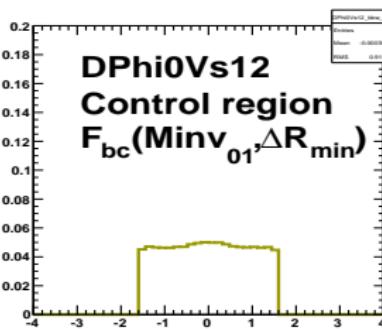
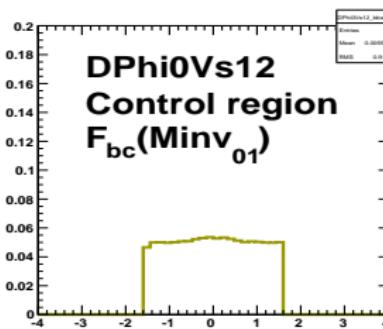
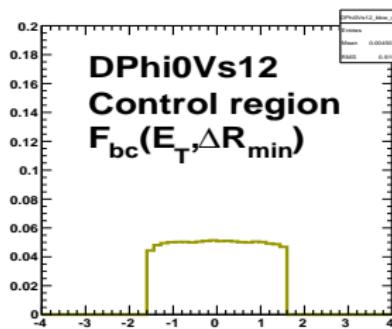
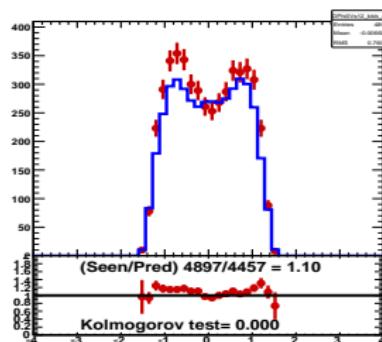
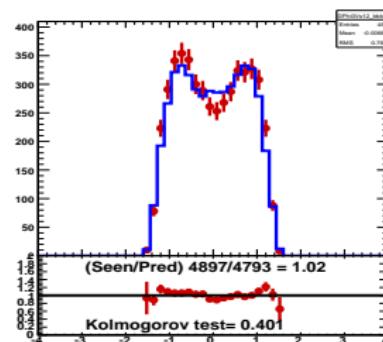
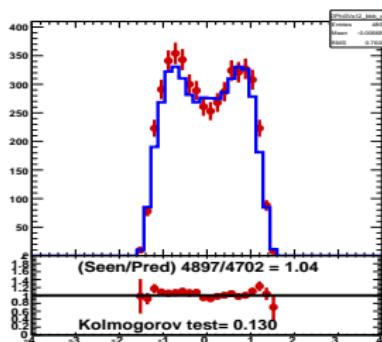


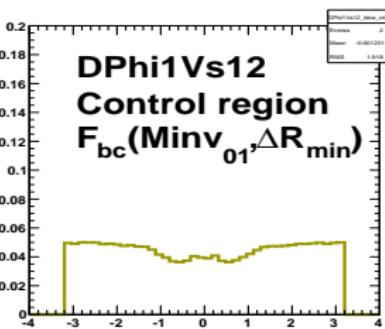
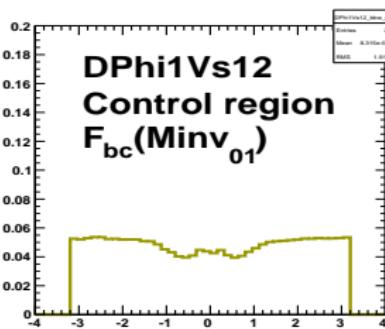
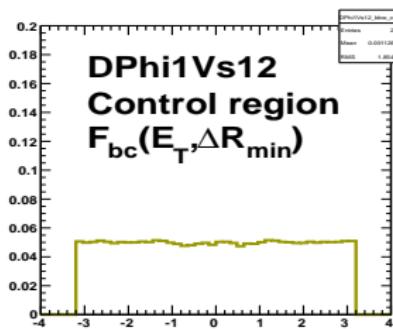
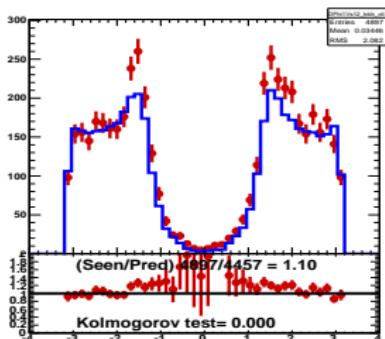
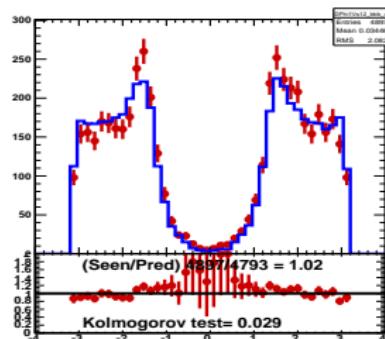
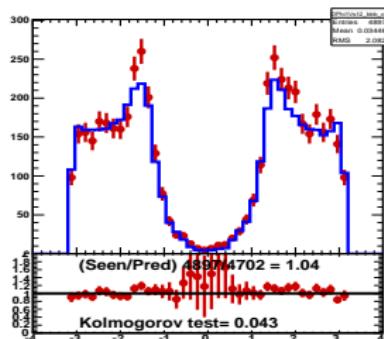


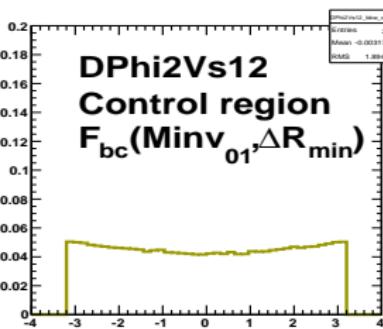
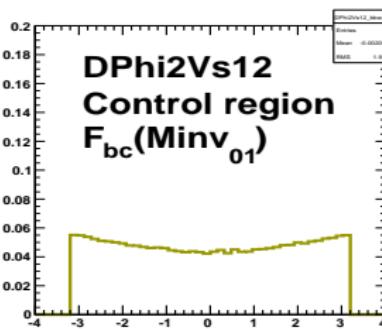
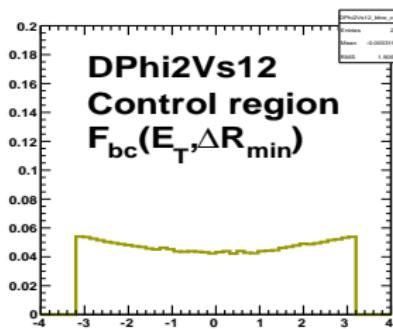
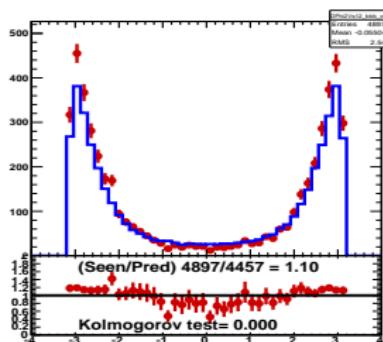
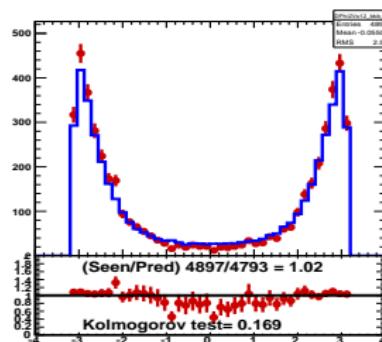
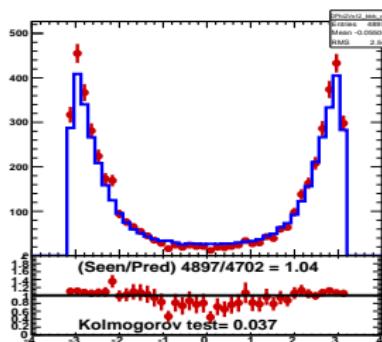


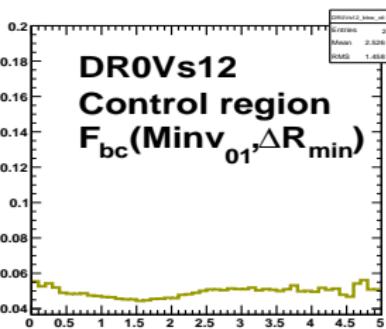
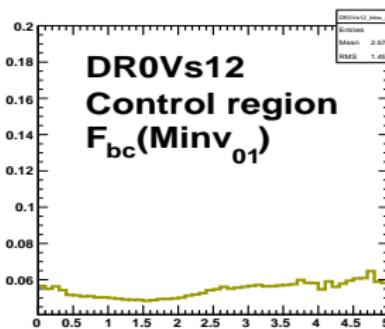
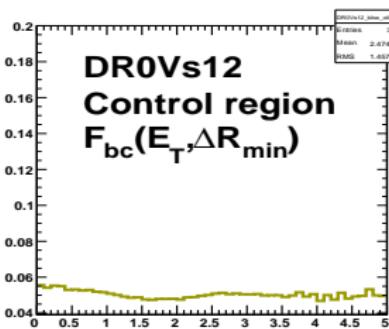
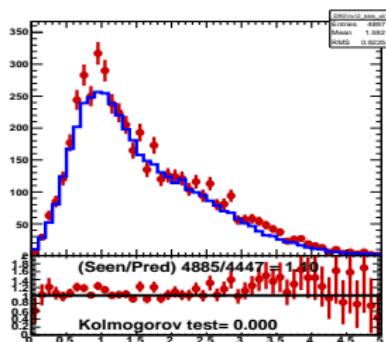
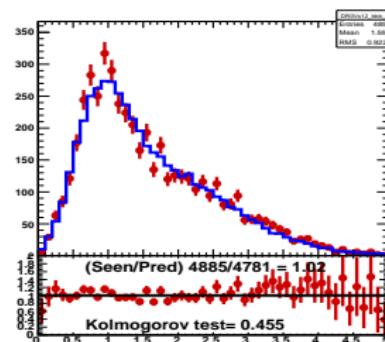
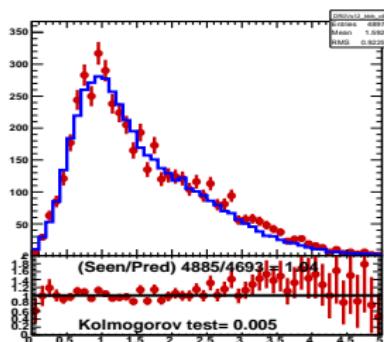
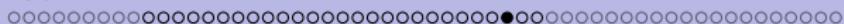


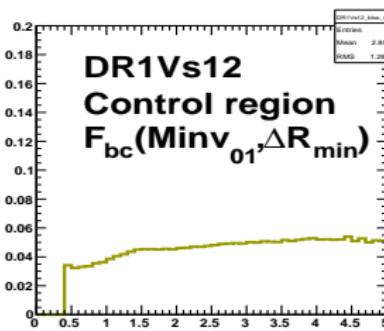
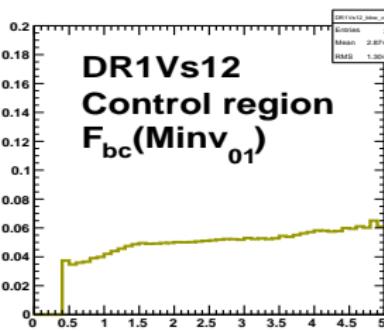
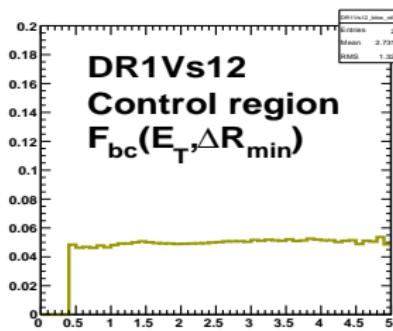
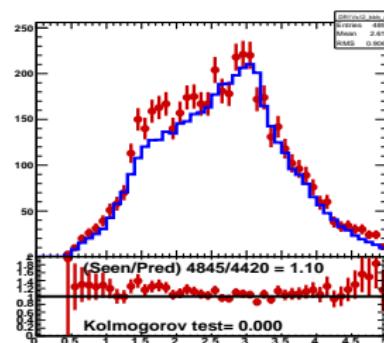
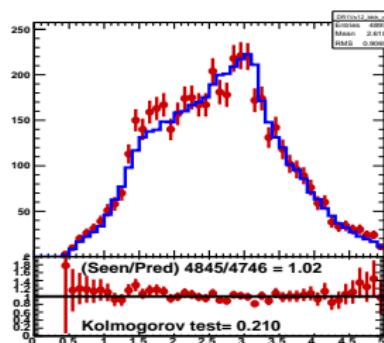
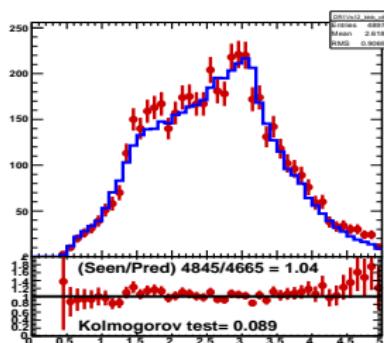


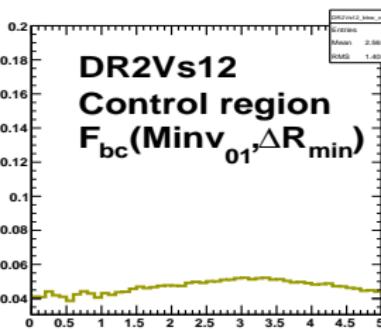
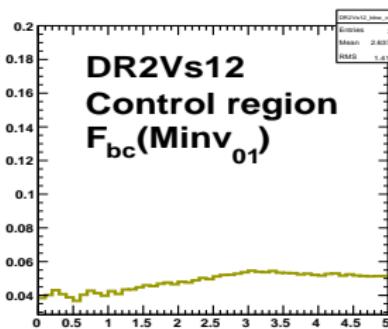
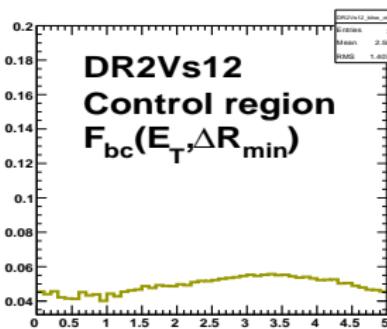
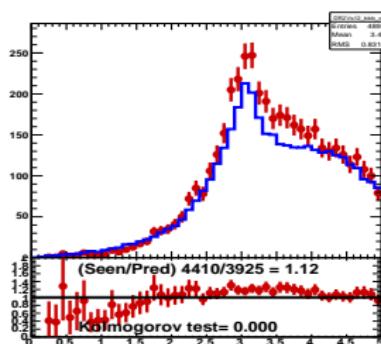
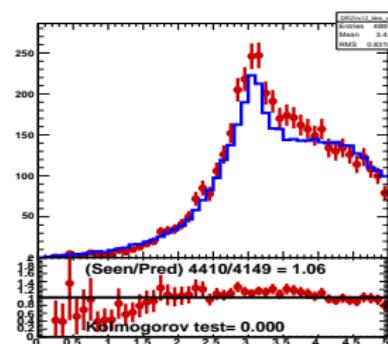
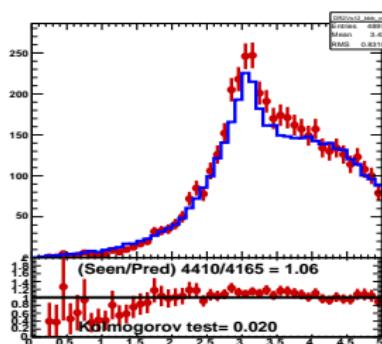
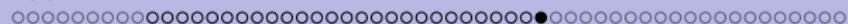


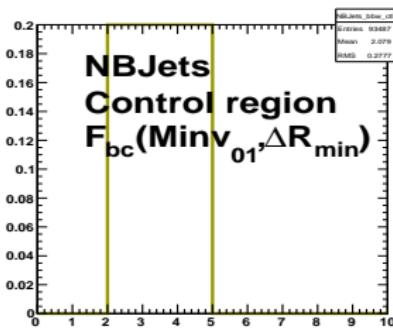
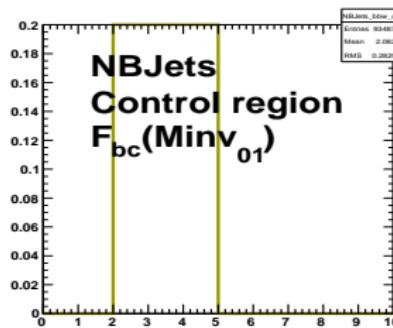
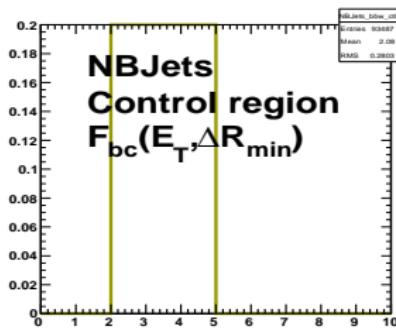
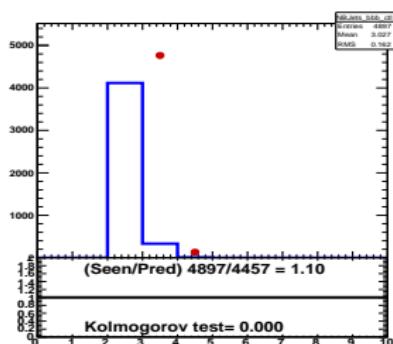
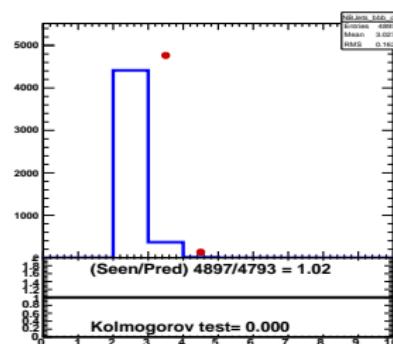
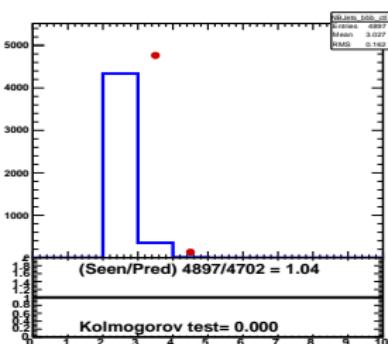


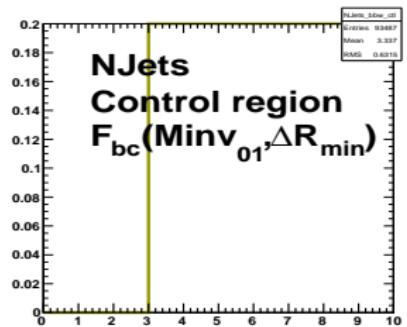
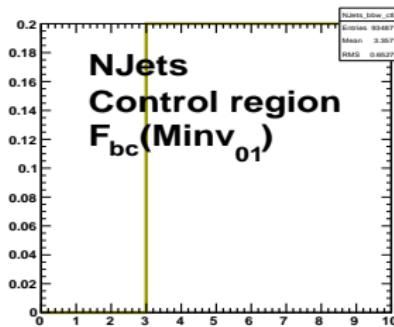
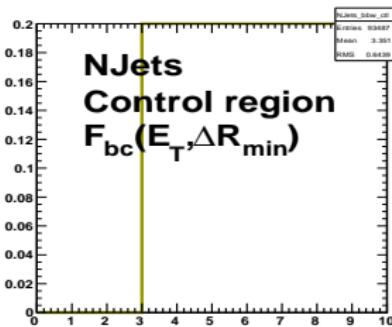
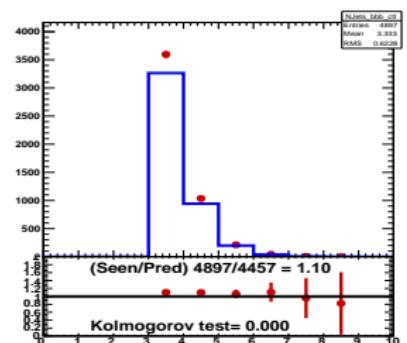
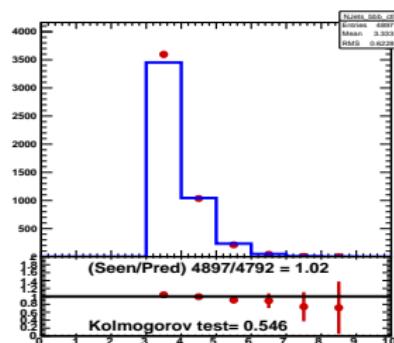
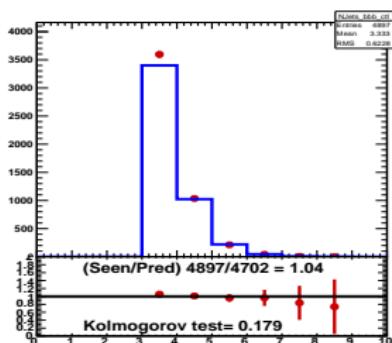


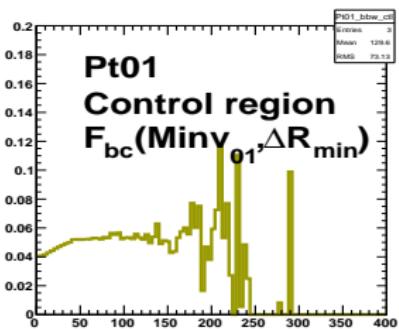
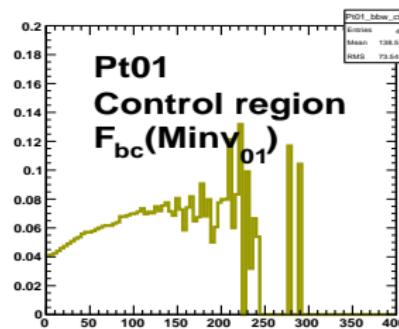
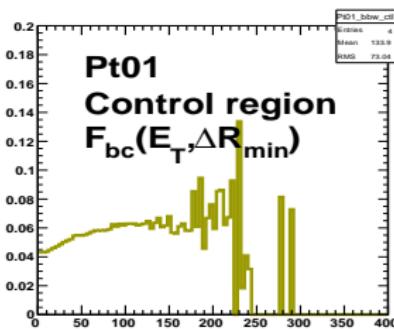
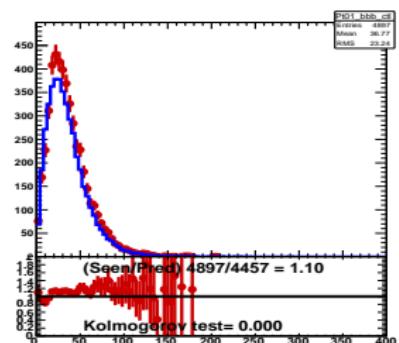
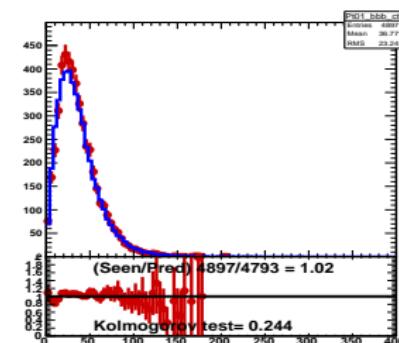
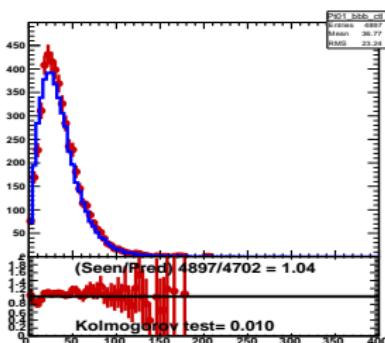


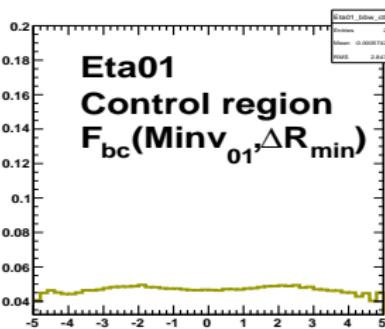
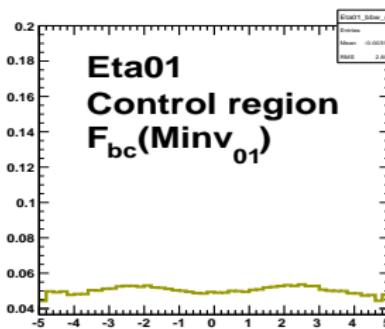
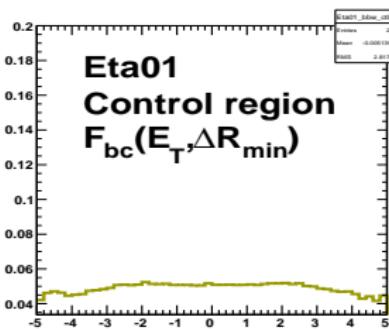
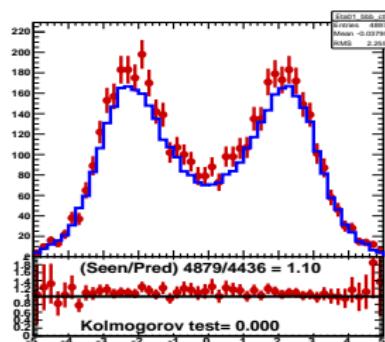
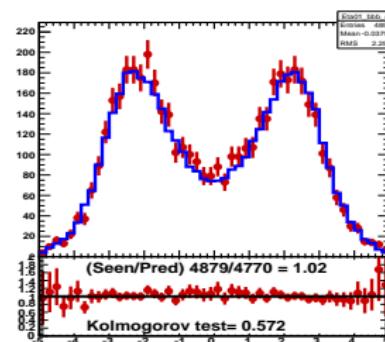
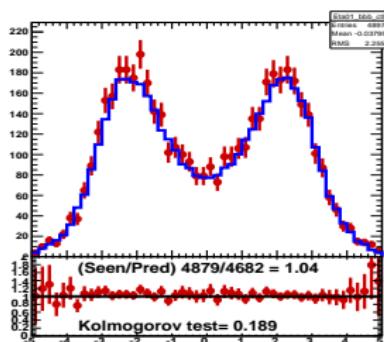


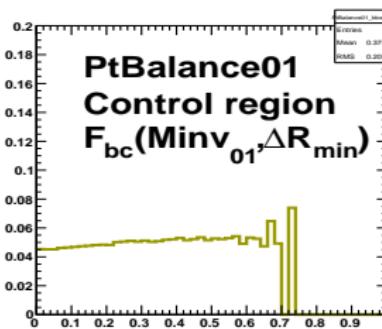
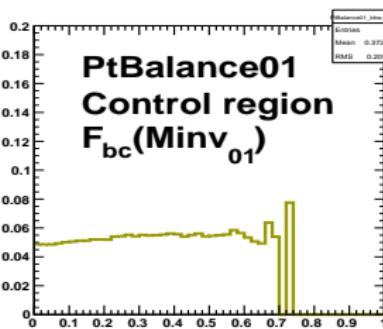
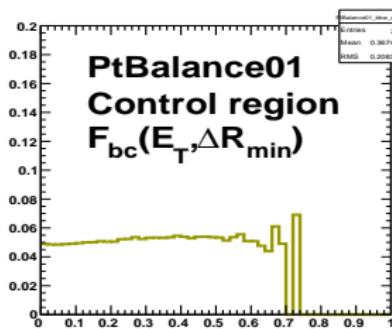
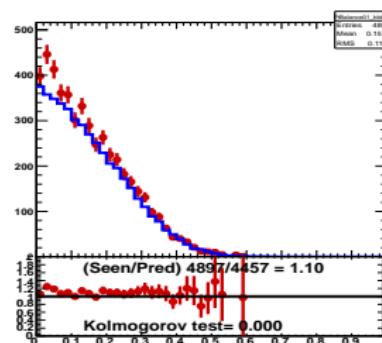
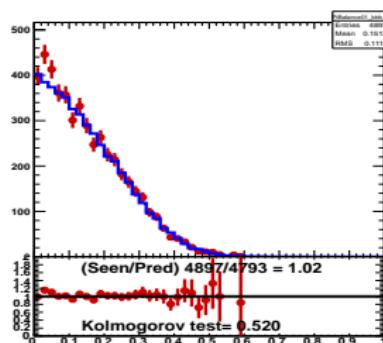
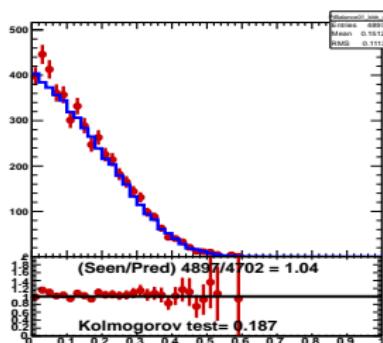


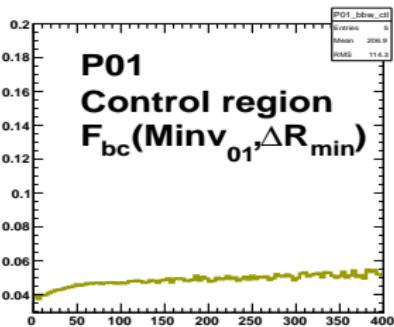
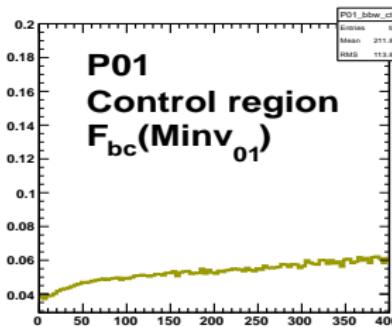
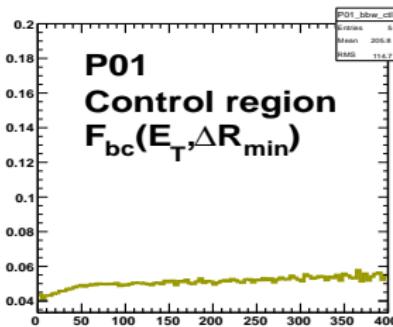
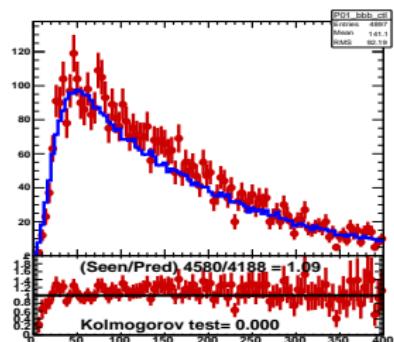
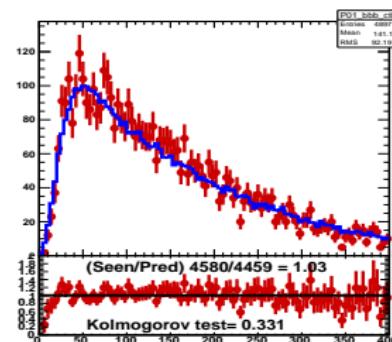
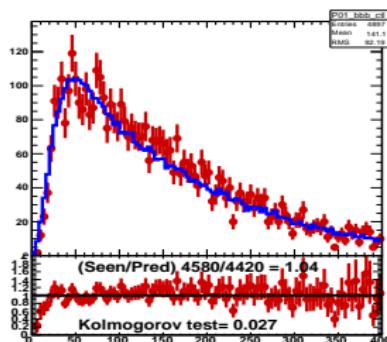
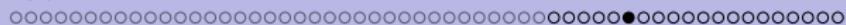


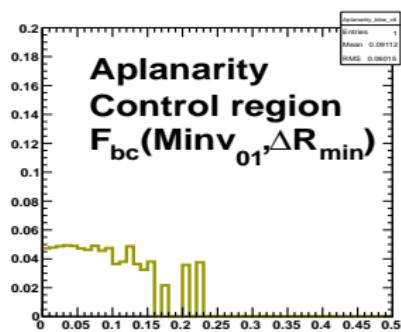
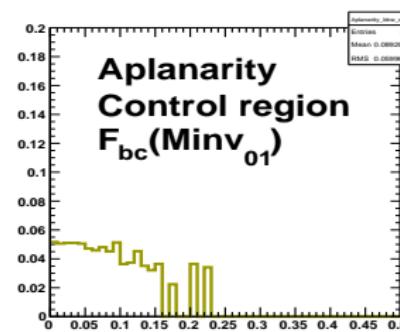
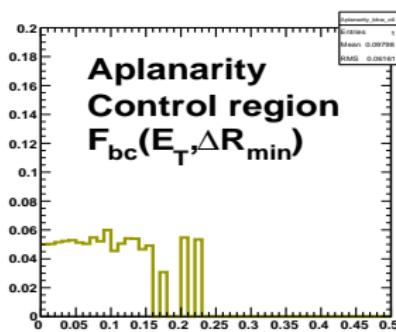
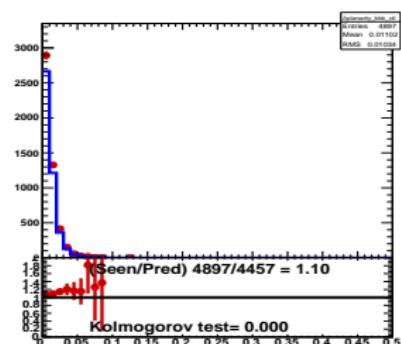
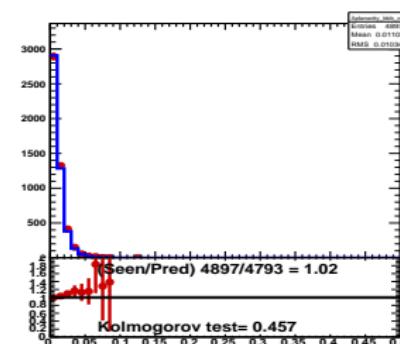
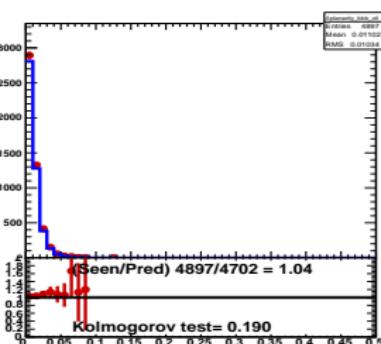


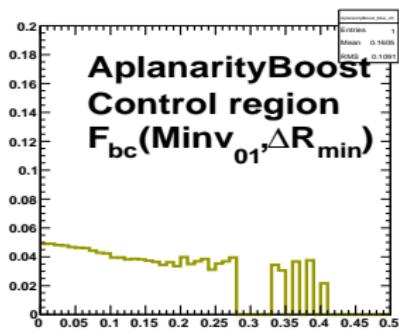
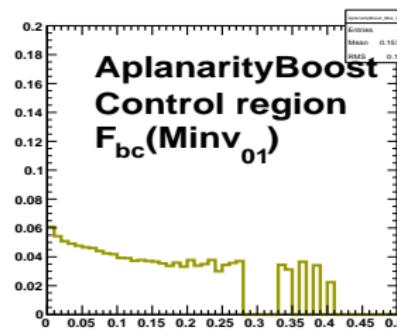
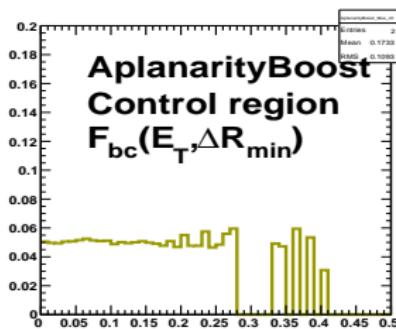
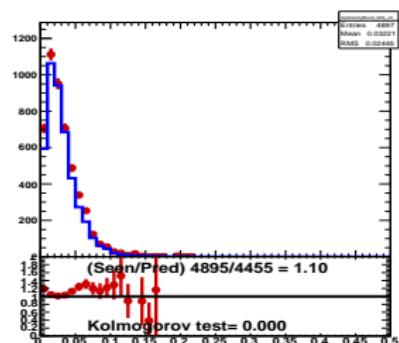
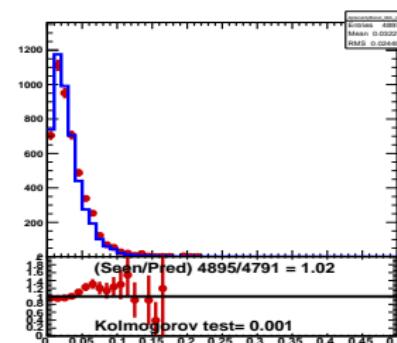
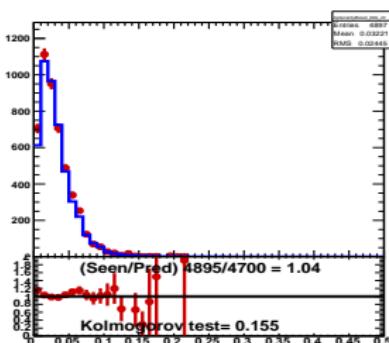


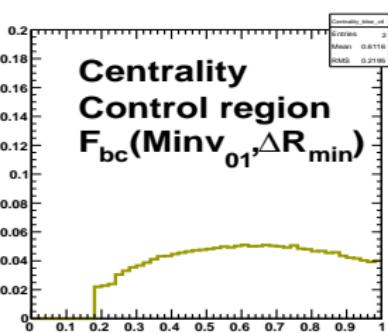
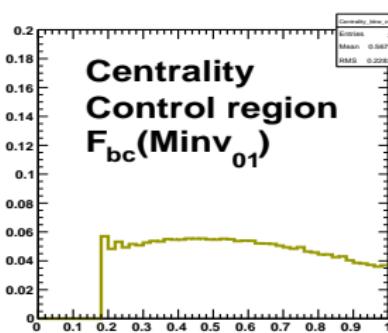
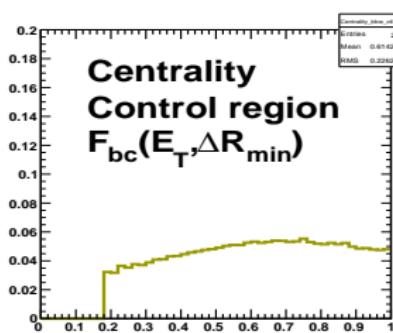
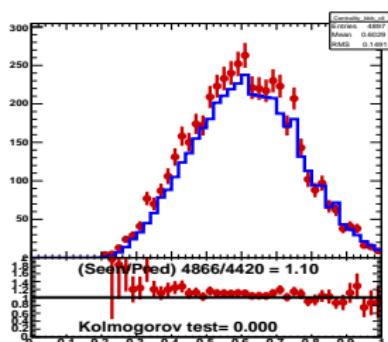
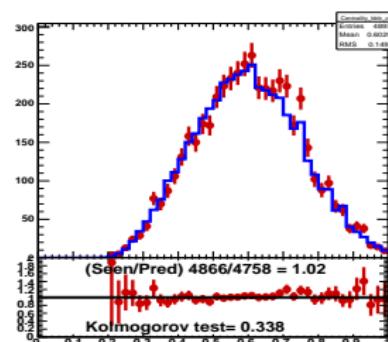
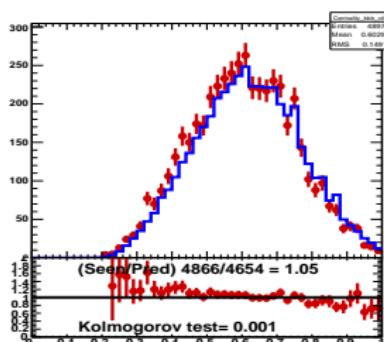


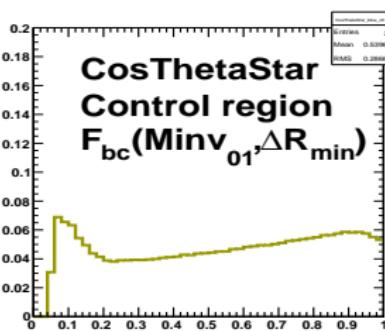
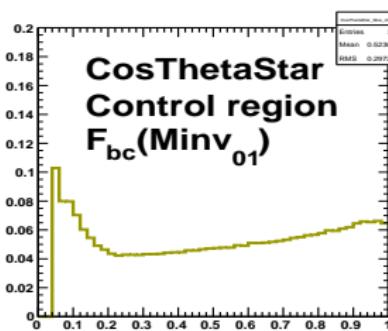
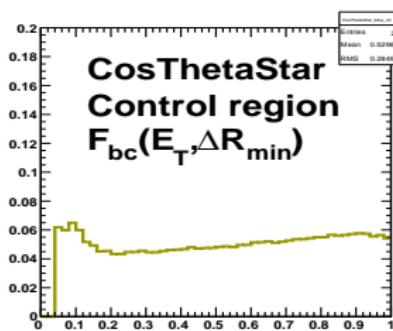
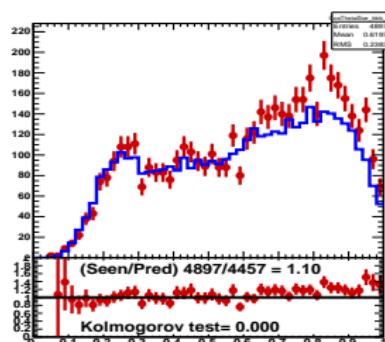
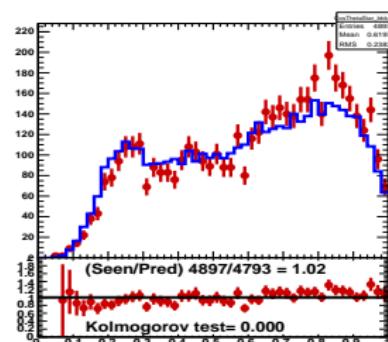
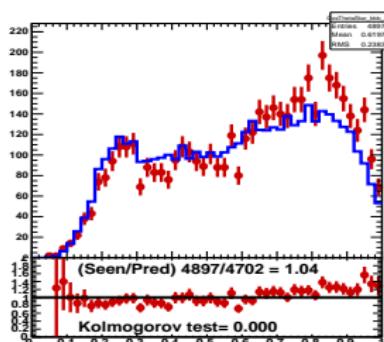
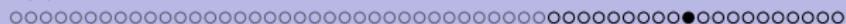


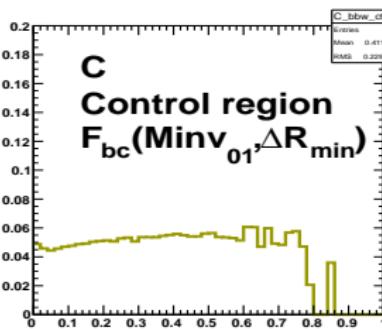
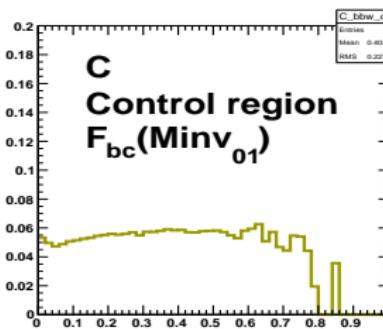
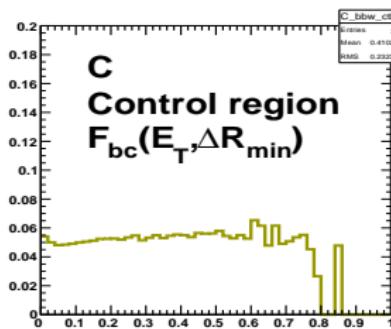
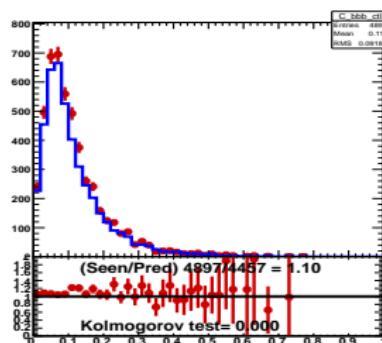
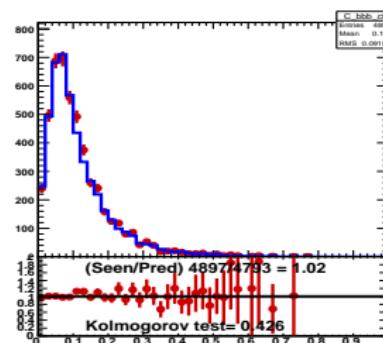
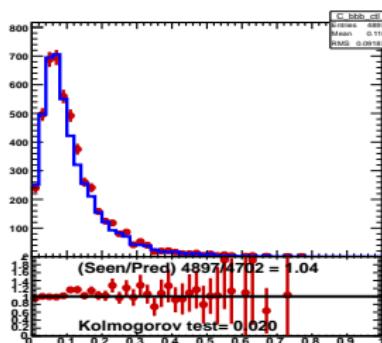


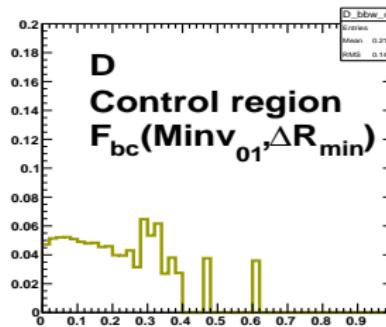
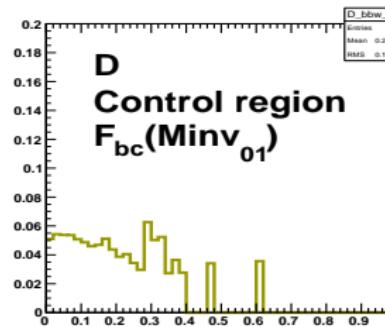
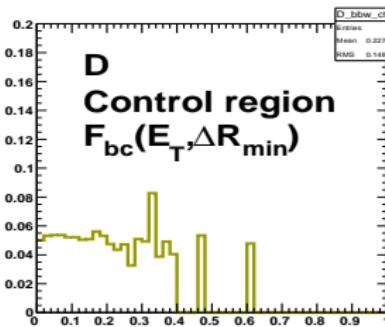
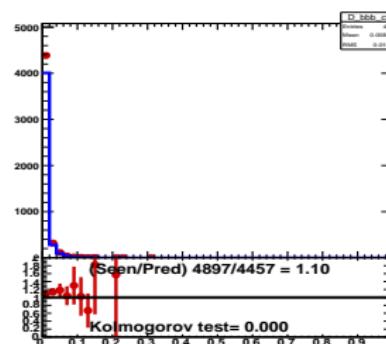
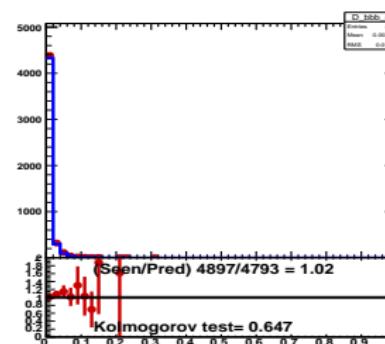
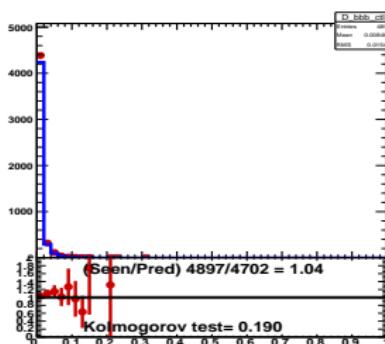
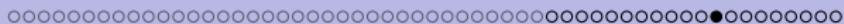


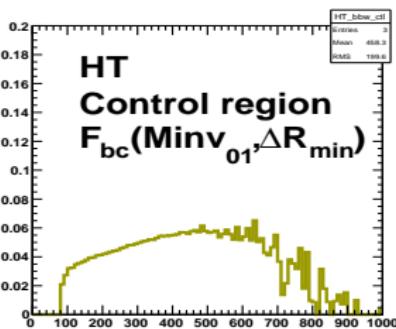
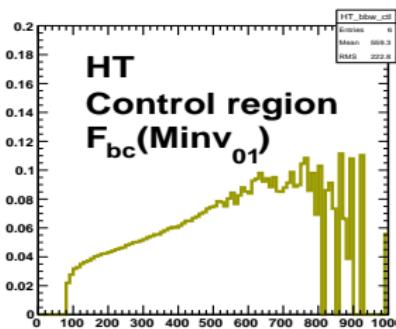
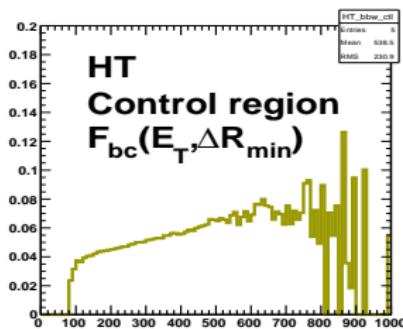
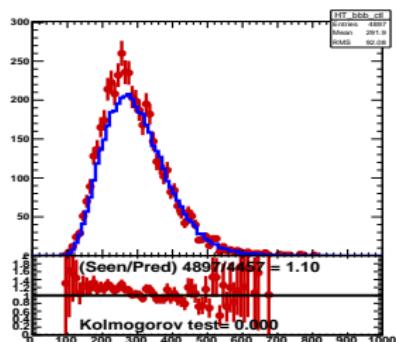
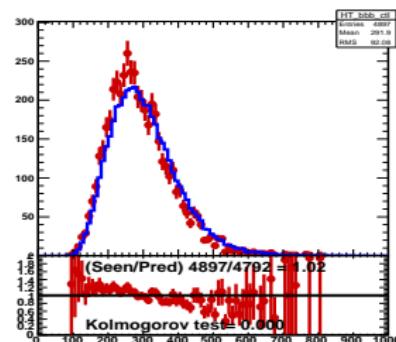
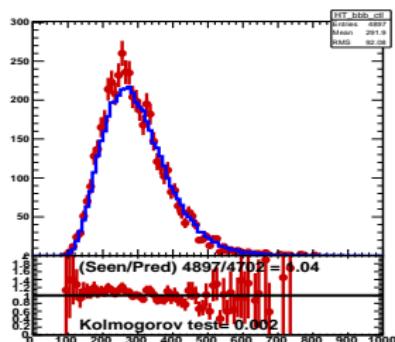


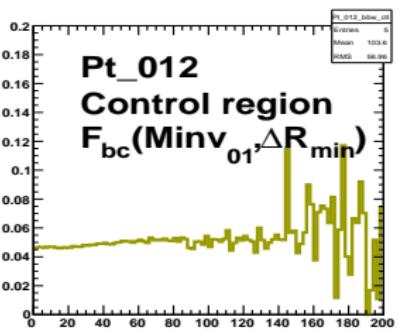
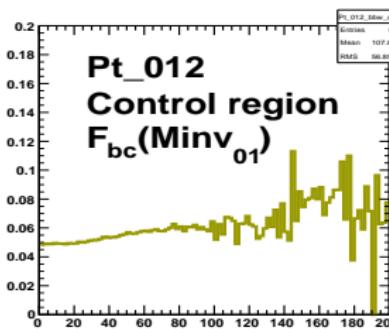
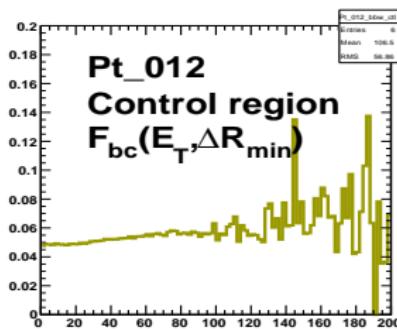
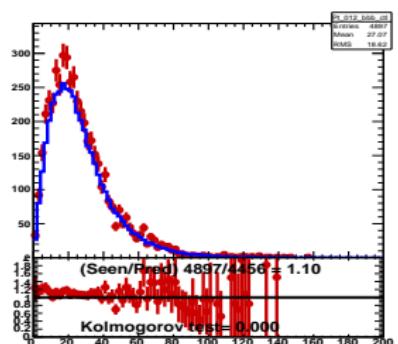
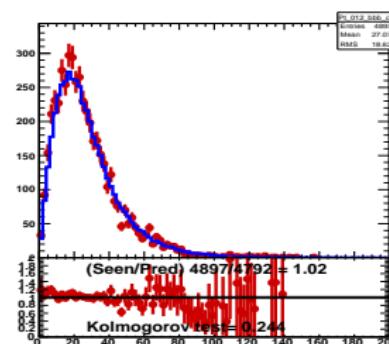
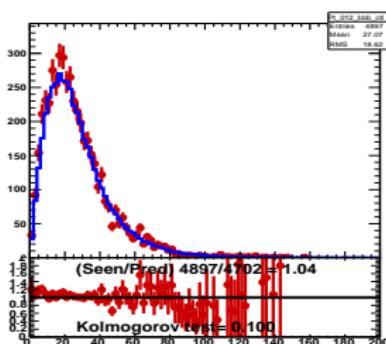
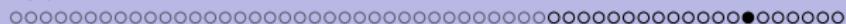


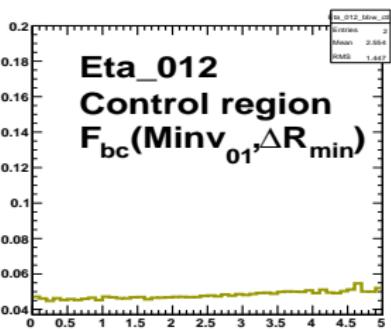
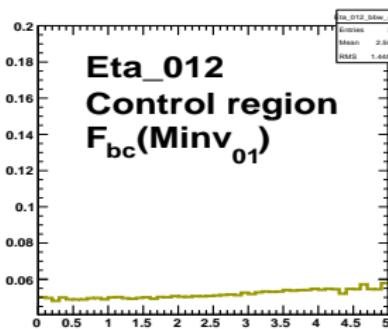
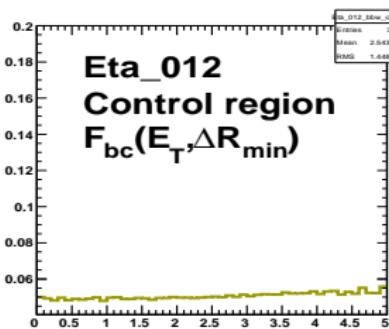
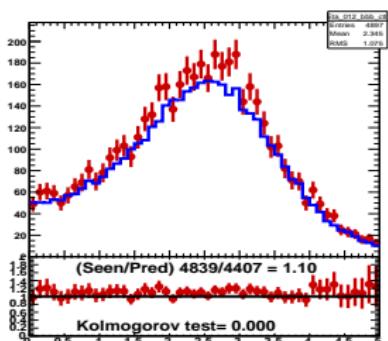
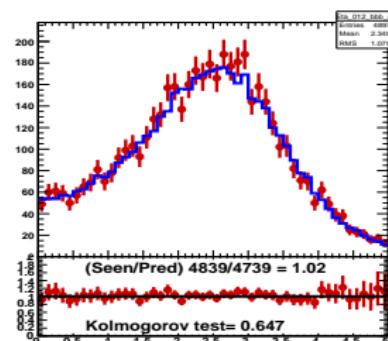
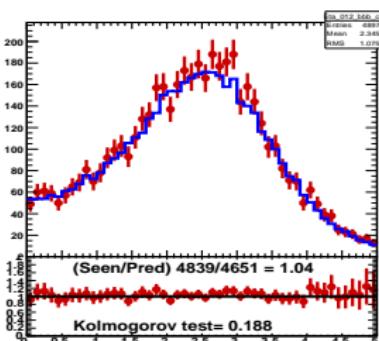
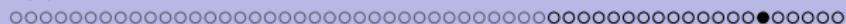


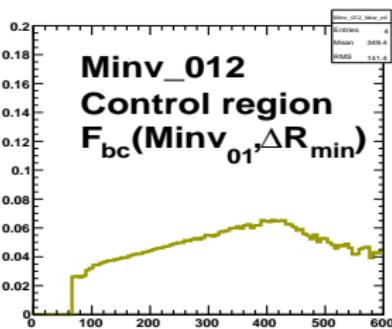
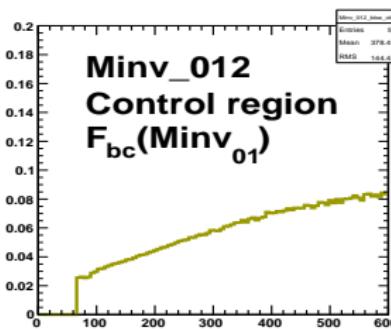
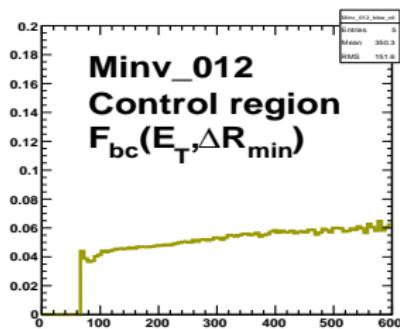
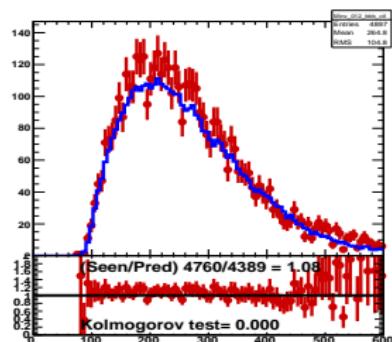
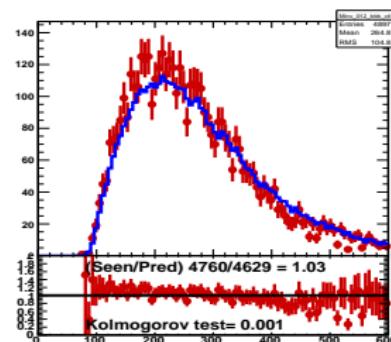
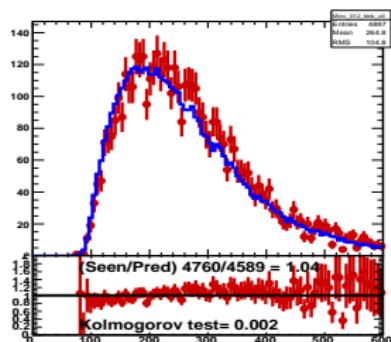


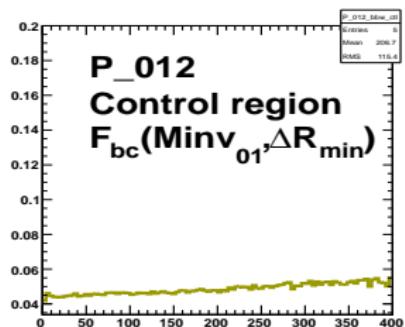
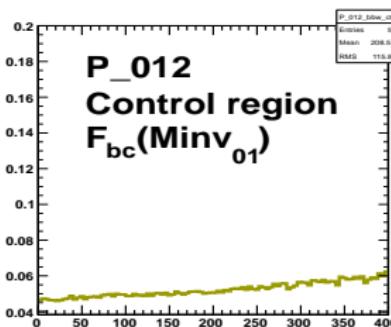
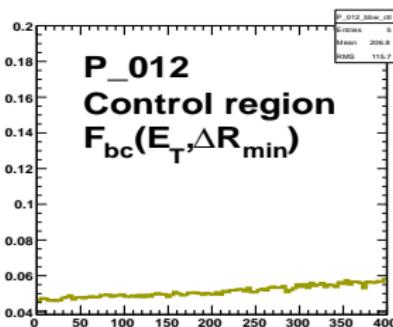
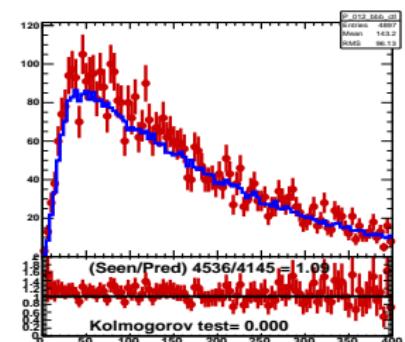
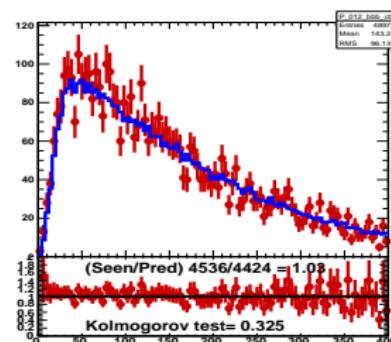
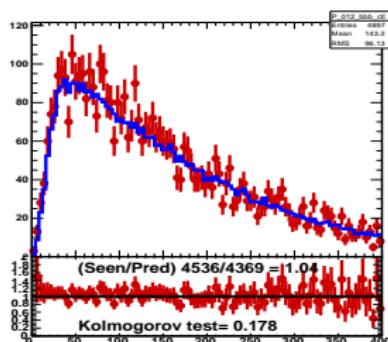
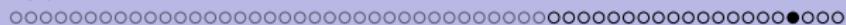


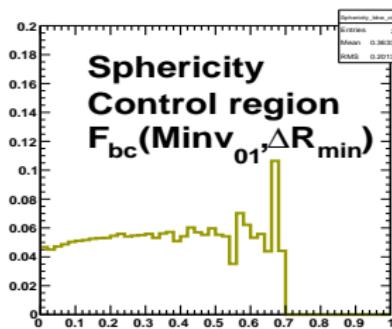
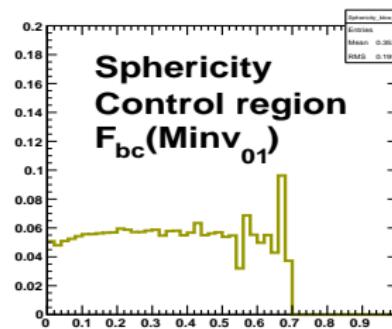
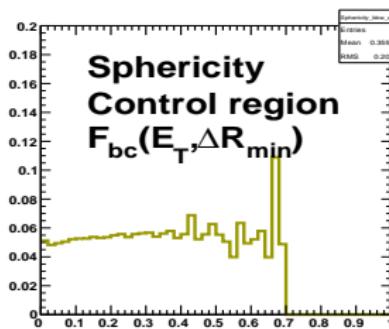
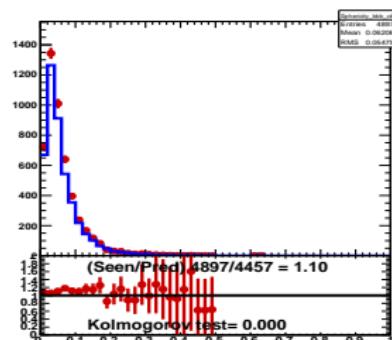
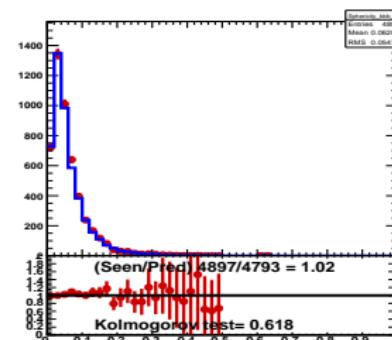
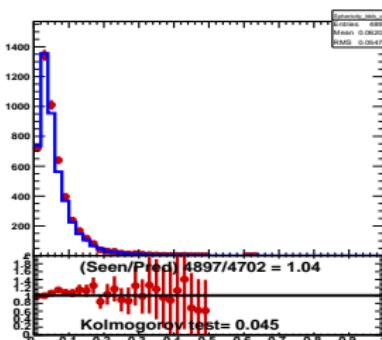


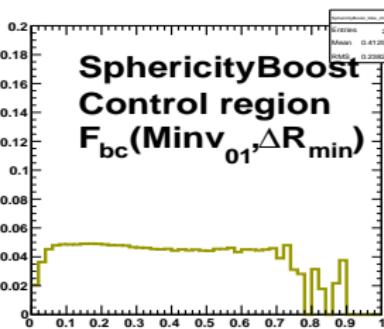
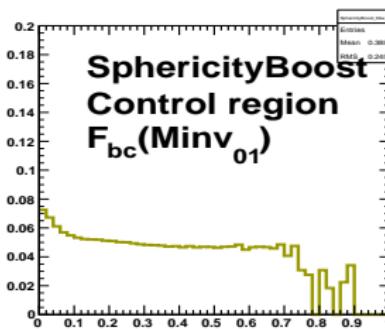
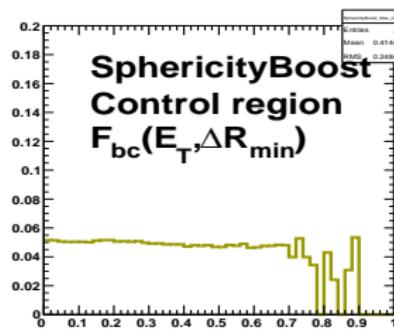
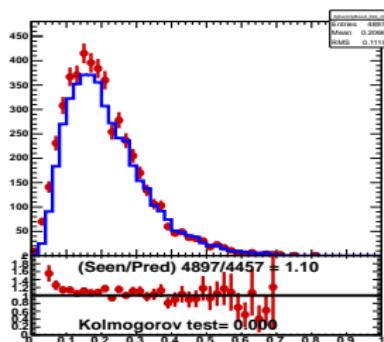
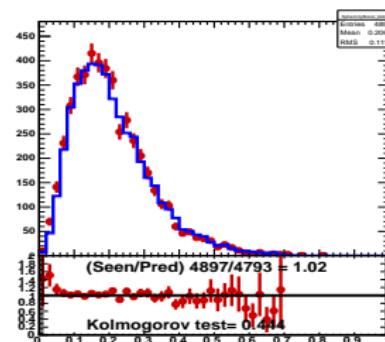
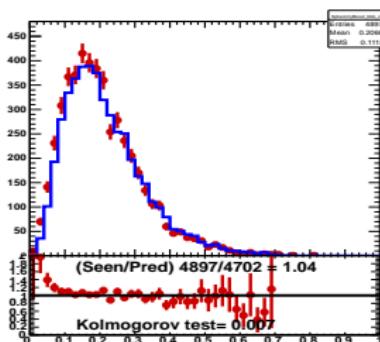


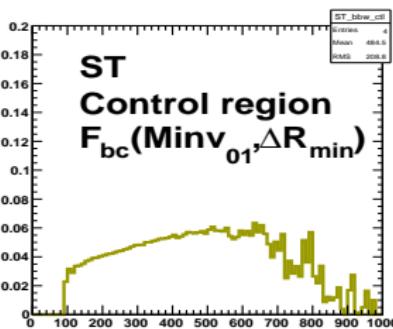
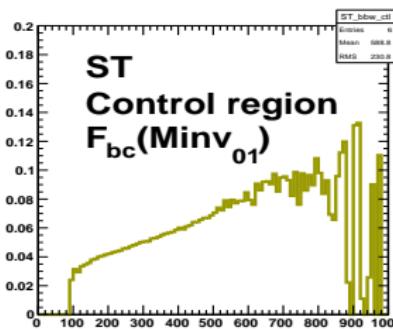
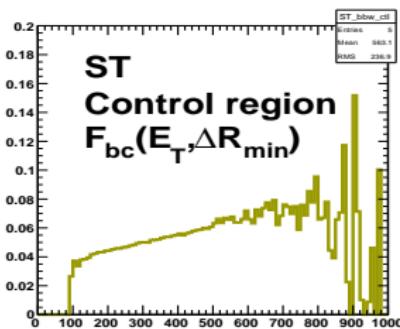
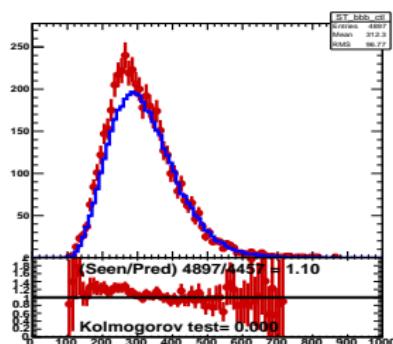
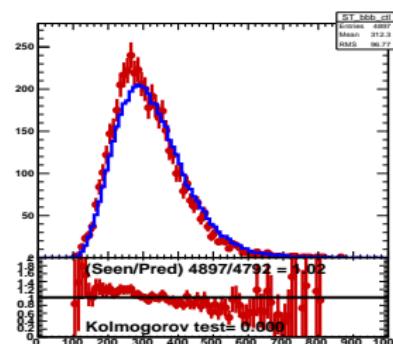
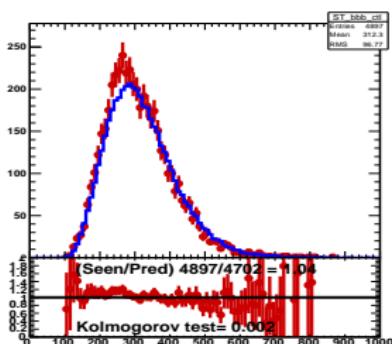














Idea

What is about

- Try to determine which variables should be used for parametrize $F_{b,c}$
- Look at prediction with jet per jet truth, namely using just efficiency;
- Look at third Jet Probability, namely the actual weight from $b\bar{b}j$ to $b\bar{b}b$
- all predicted variable are very good, thus the weight is the **correct** one.
- Look for variables for which the probability is **not flat**, and is **similar** for control and signal region

Non Flat so it makes sense to use that variables.

Similar so the systematics from trasport control→signal region is low.

