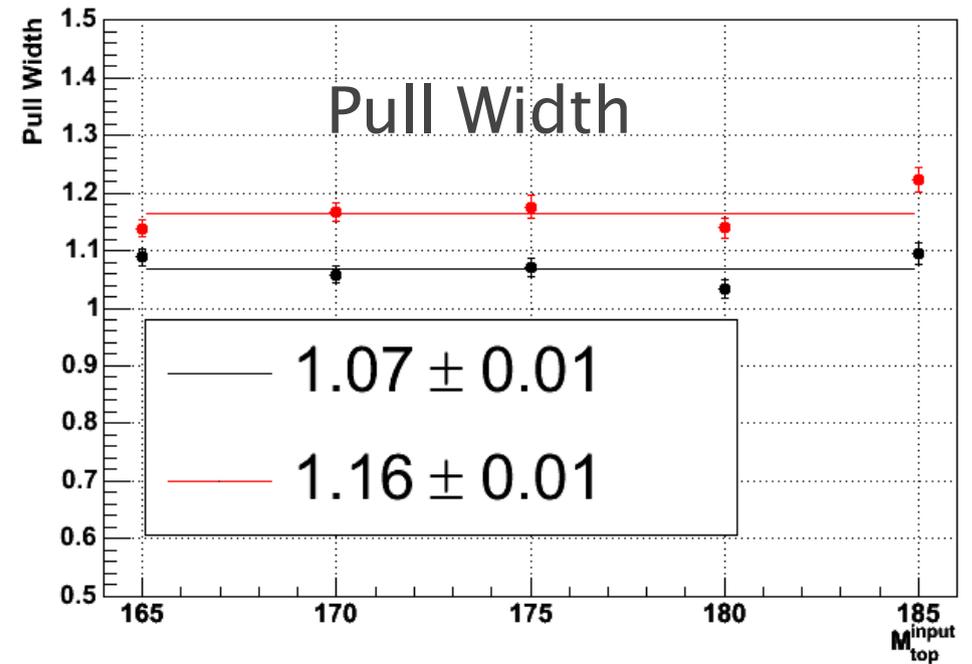
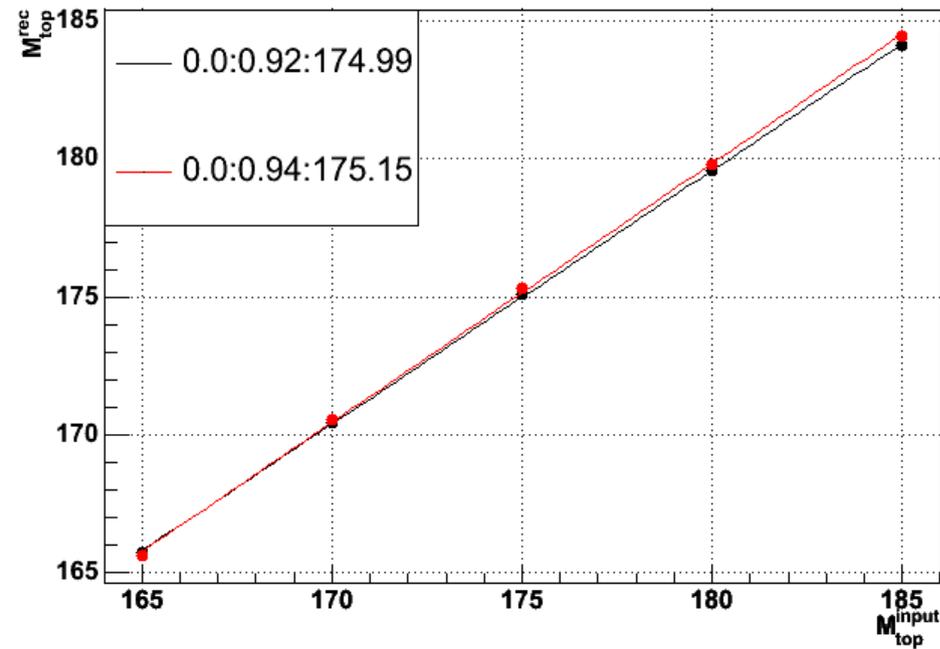


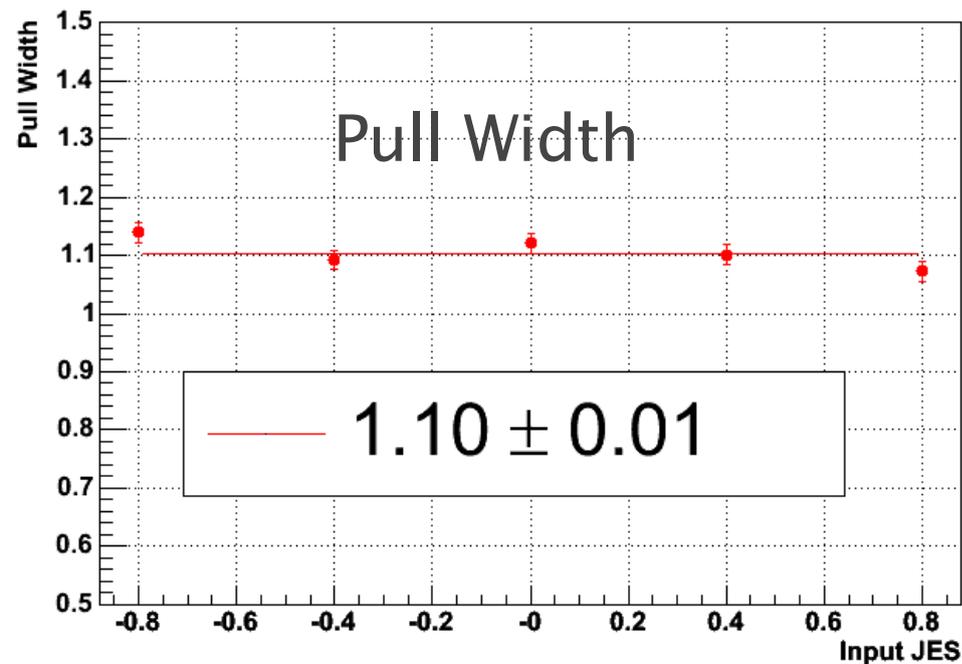
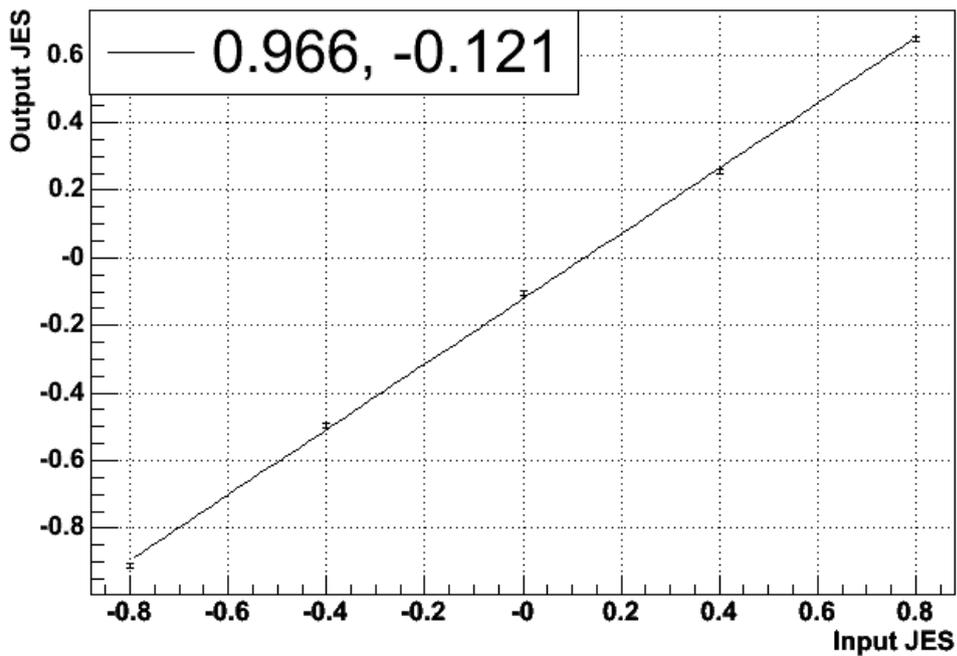
Pseudo Experiments(Mtop)

1D vs 2D
Right combination
2500 PE's/point

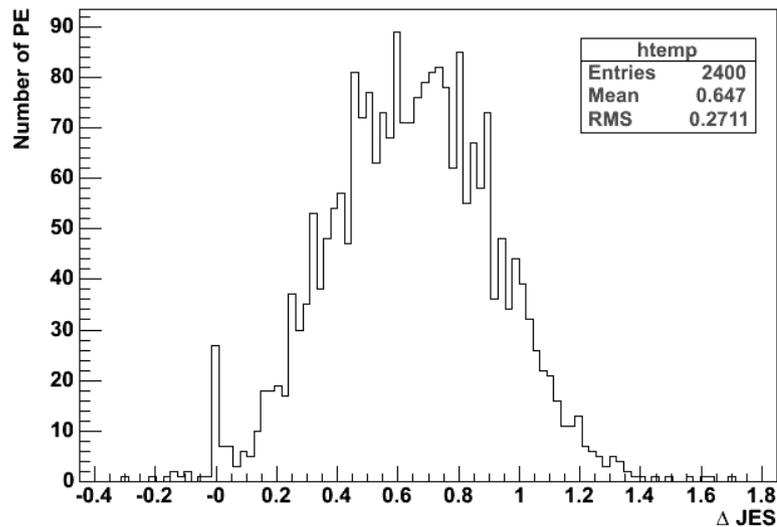
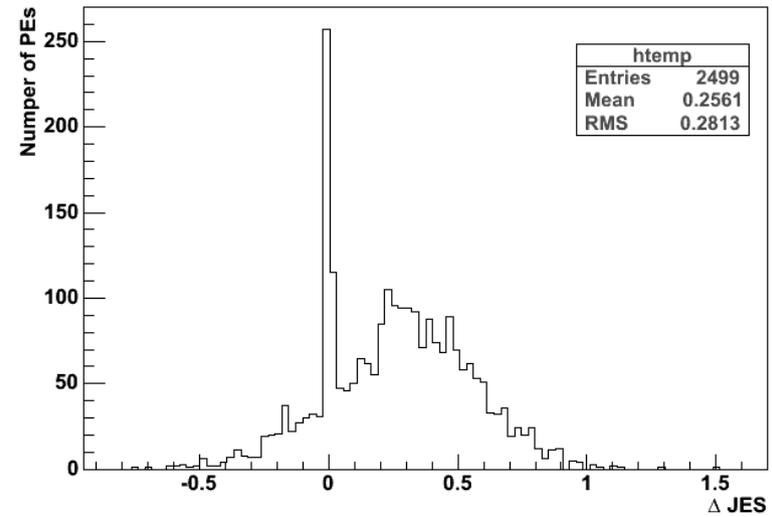
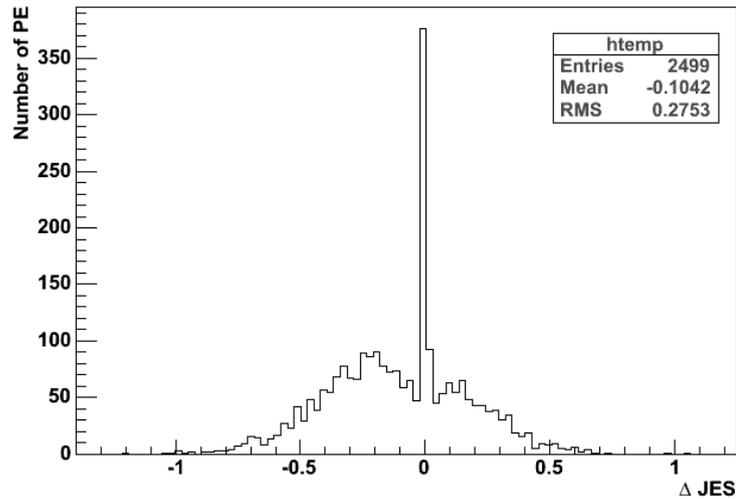


Pseudo Experiments(JES)

Right combination
2500 PE's/point

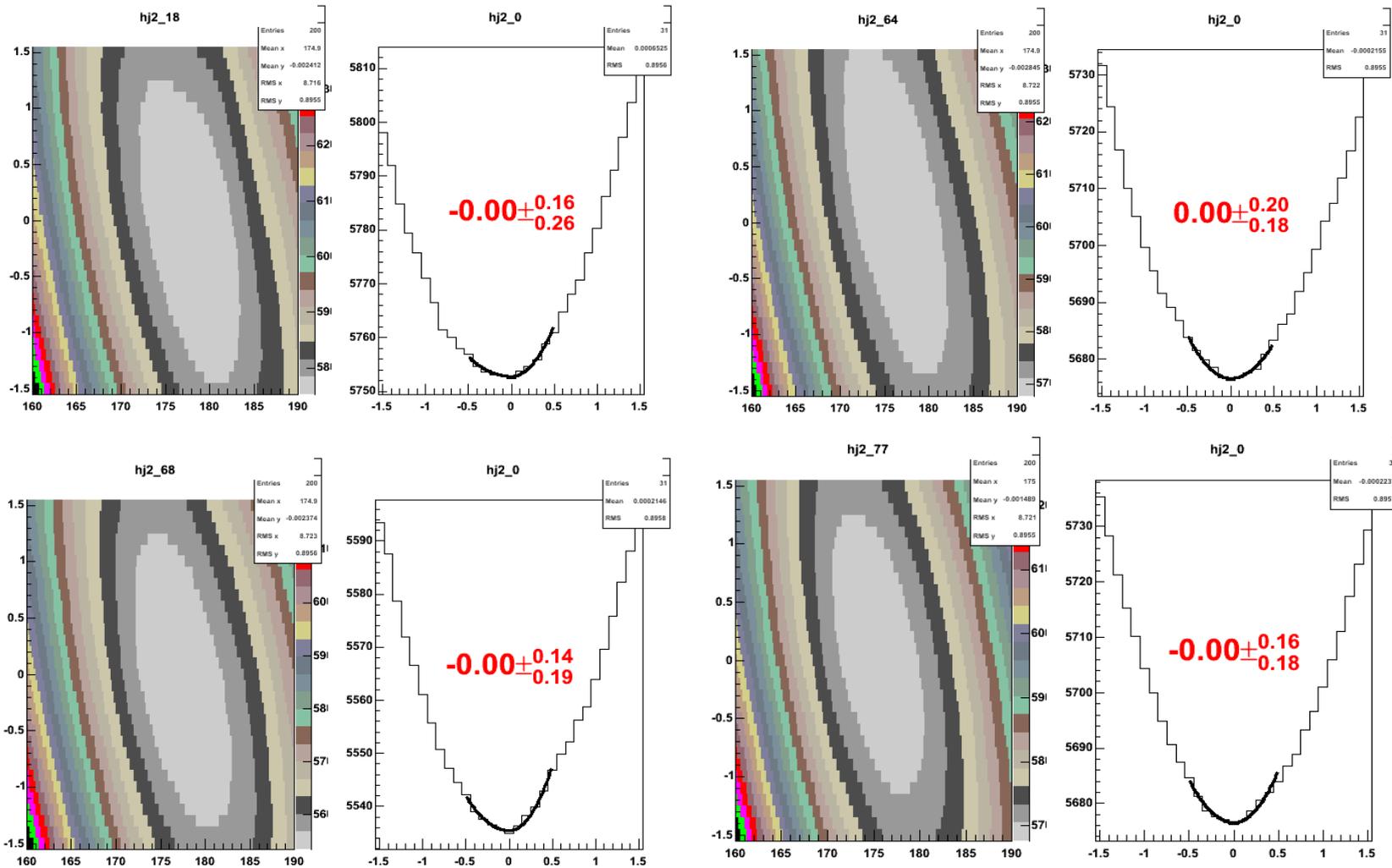


Pseudo Experiments(JES)



Bug?

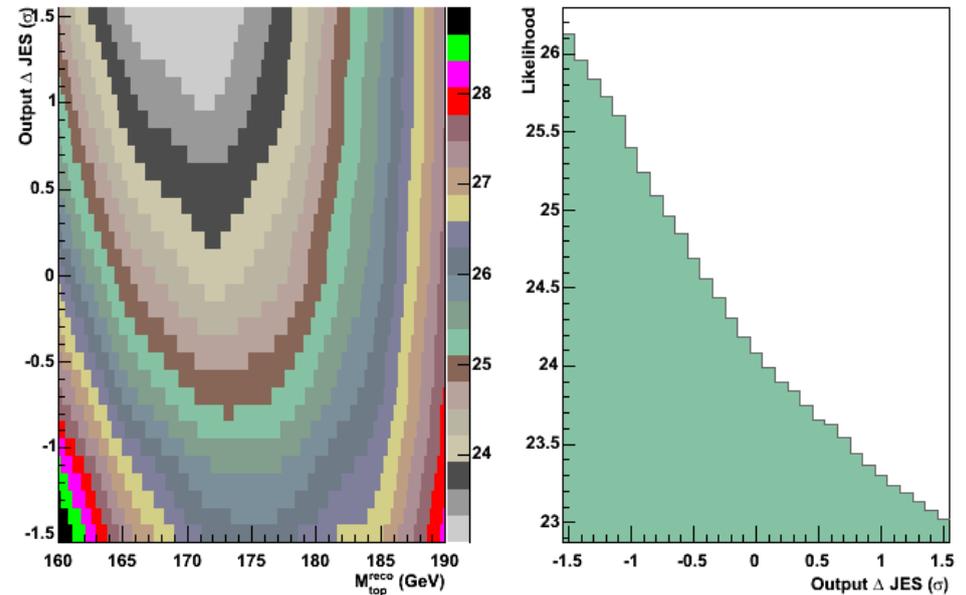
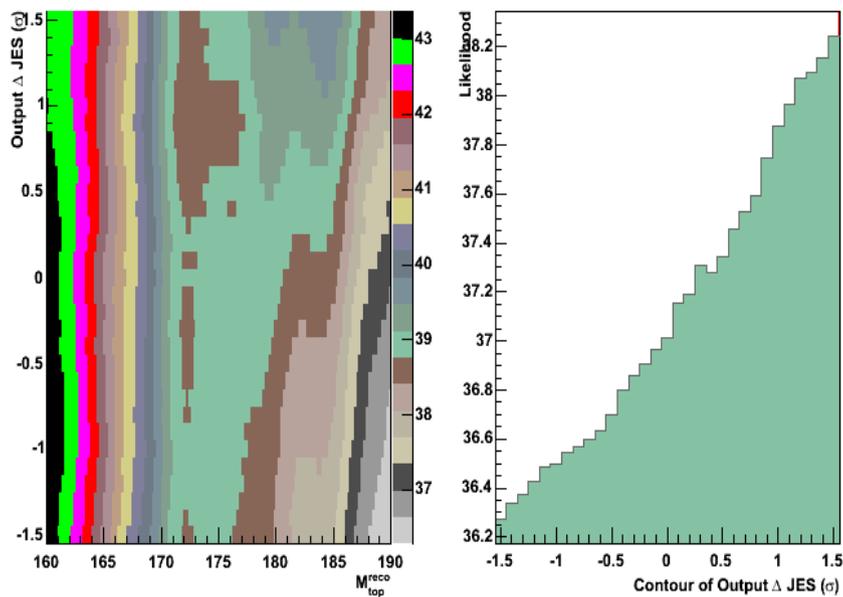
JES likelihood/PE



Investigating now...

Event likelihood

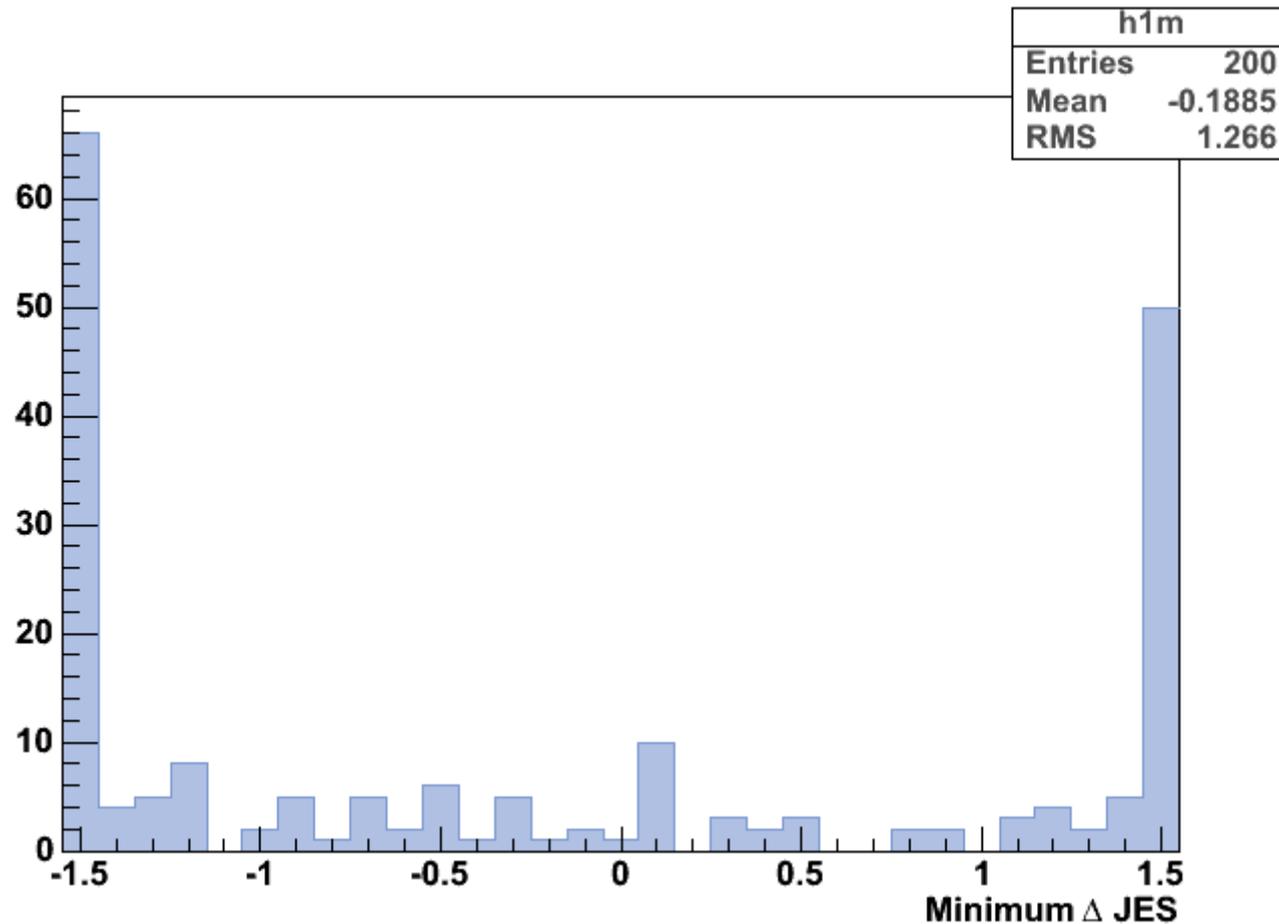
Two examples of event likelihood



minimum point of these examples are out of range
(-1.5~1.5)

Minimum JES

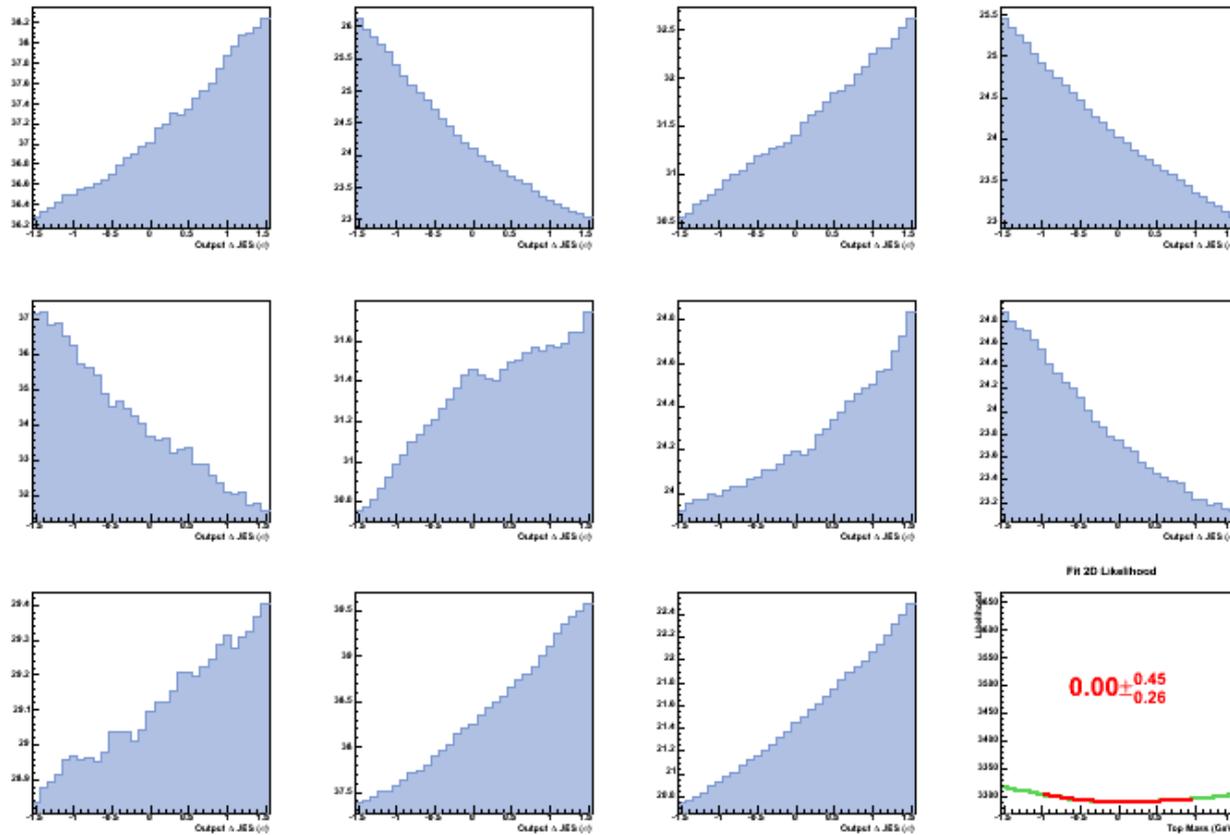
Minimum points for each event likelihood



There are many minimum points on boundary of range.

Event/Joint likelihood

Joint likelihoods whose minimum point is on boundary.



Scan range on JES should be extended.

Plans

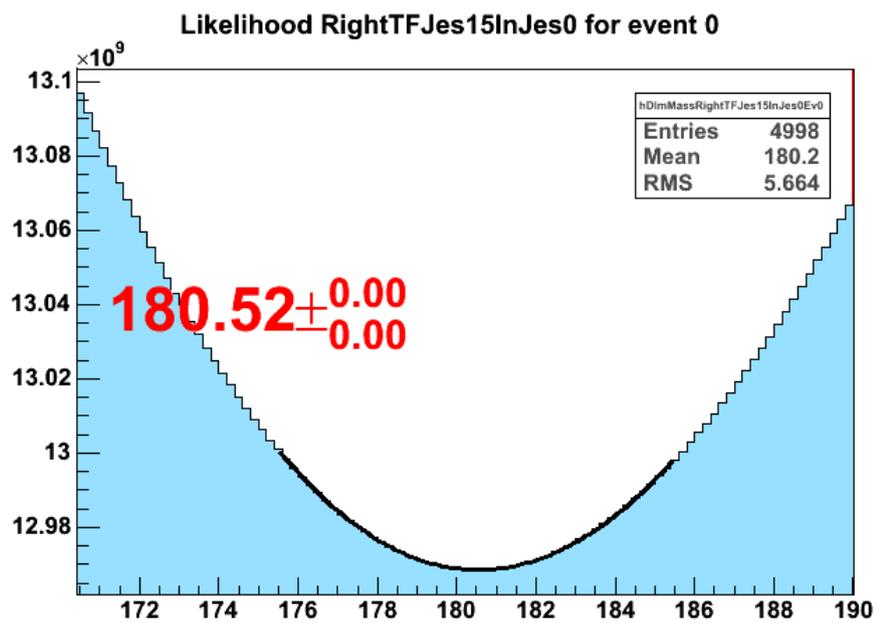
- **JES scan range**
 - **Make additional TF for extended range(Done)**
 - **Processing time will increase(~3000jobs on CAF)**
- **Shape study**
 - **Event selection for all backgrounds is almost done.**
- **Apply backgrounds**
- **Estimate systematic error**

- **Full status report on early June.**

- **1.2/fb or 1.7/fb**
 - **ntuple for 1.7/fb is ready**
 - **Background estimation for 1.7/fb is not done yet.**

Joint likelihood/path

with M*Gamma



w/o M*Gamma

