



# Hawc Meeting September 12<sup>th</sup>

Brendan Boyd

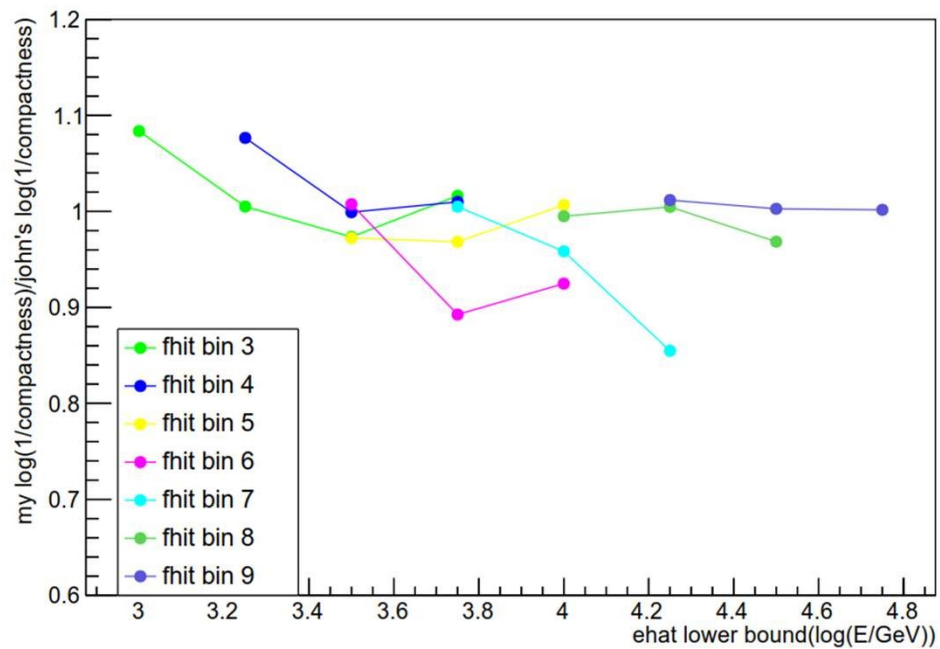
# Cuts added to analysis

- ▶ After Sam, Tolga, Tomas and I talked about what data we were using and what cuts we were using, added to new ones
  - ▶ `rec.nChAvail >= 700`
  - ▶ `rec.angleFitStatus == 0`



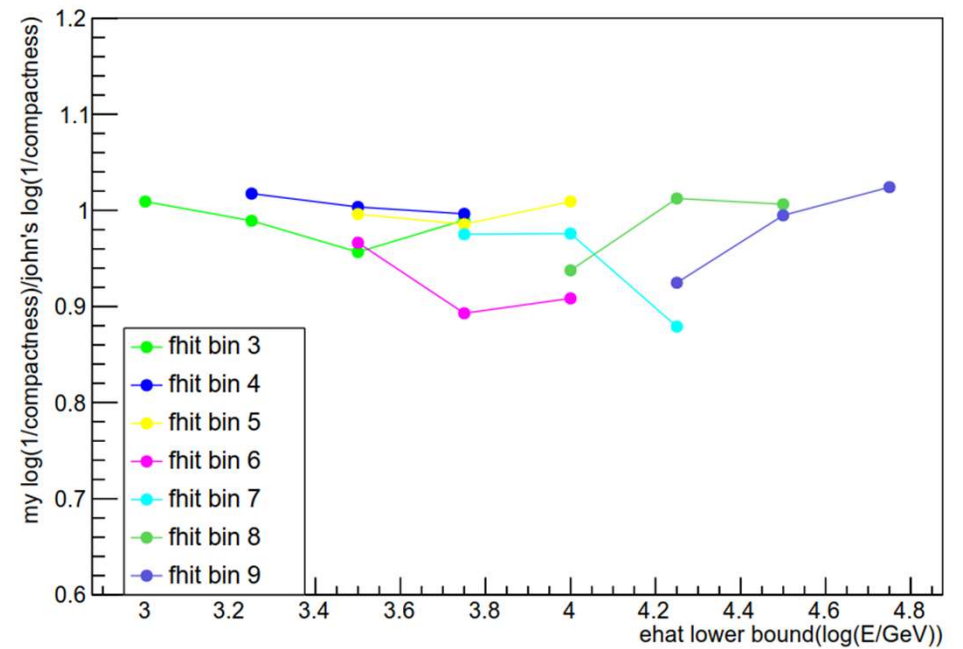
## With new cuts

ratio of log(1/compactness)



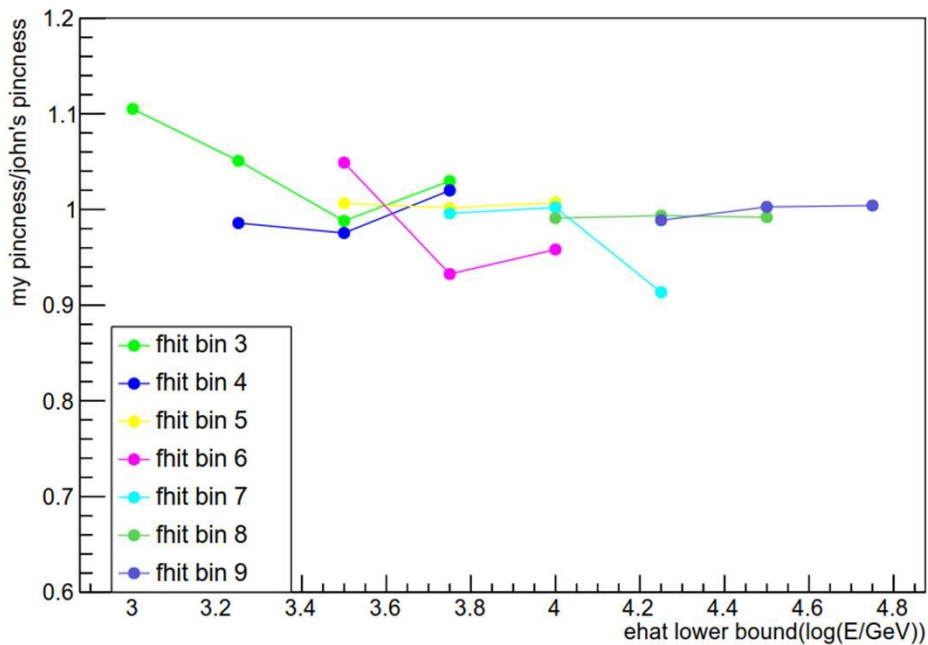
## Previous best

ratio of log(1/compactness)



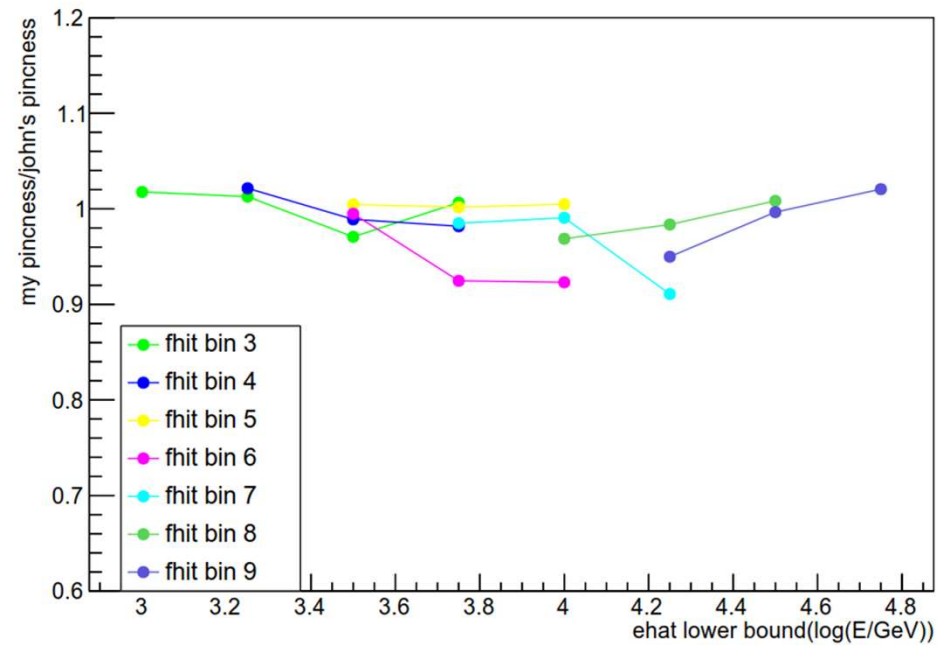
# With new Cuts

ratio of pincess



# Previous best

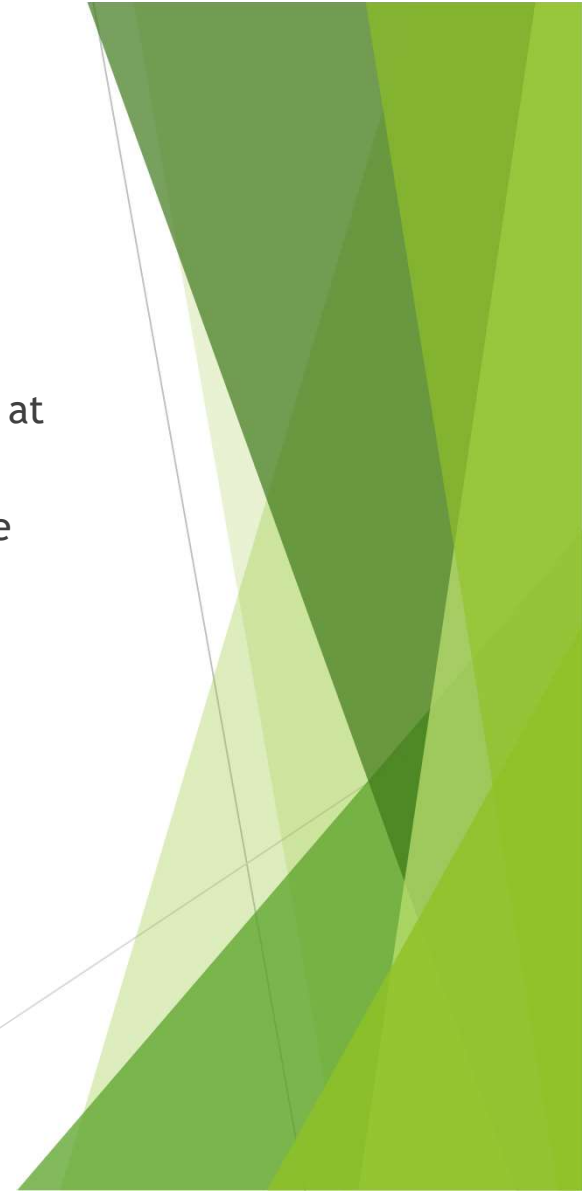
ratio of pincess



In higher bins the cuts bring me closer to johns. In the lower bins it takes me away

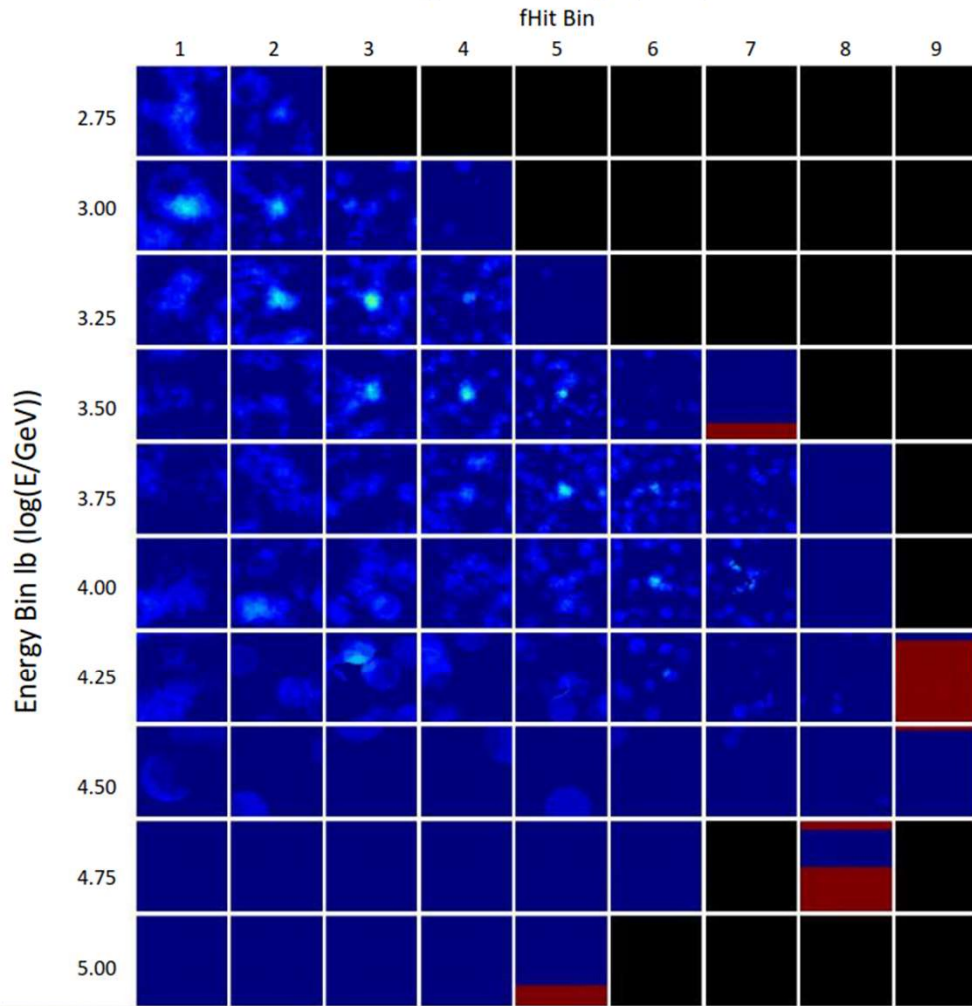
# Significance Plots

- ▶ Previously appeared to have a problem with significance plots, particularly at high energy bins
- ▶ Tried to make Significance plots with john's cuts to see what his values give
- ▶ Definitely looks like I am doing something wrong while making these maps



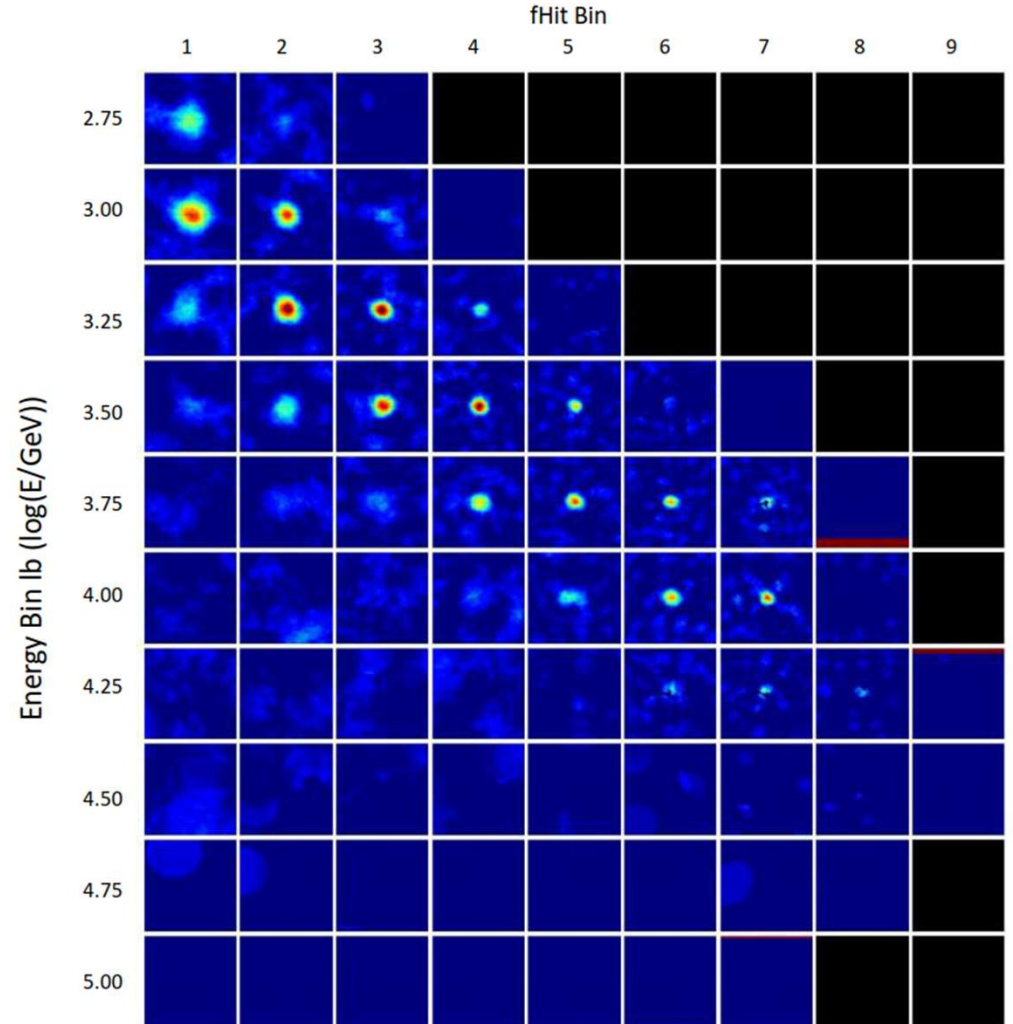
# John's cuts

Crab Significance Maps (0-15)

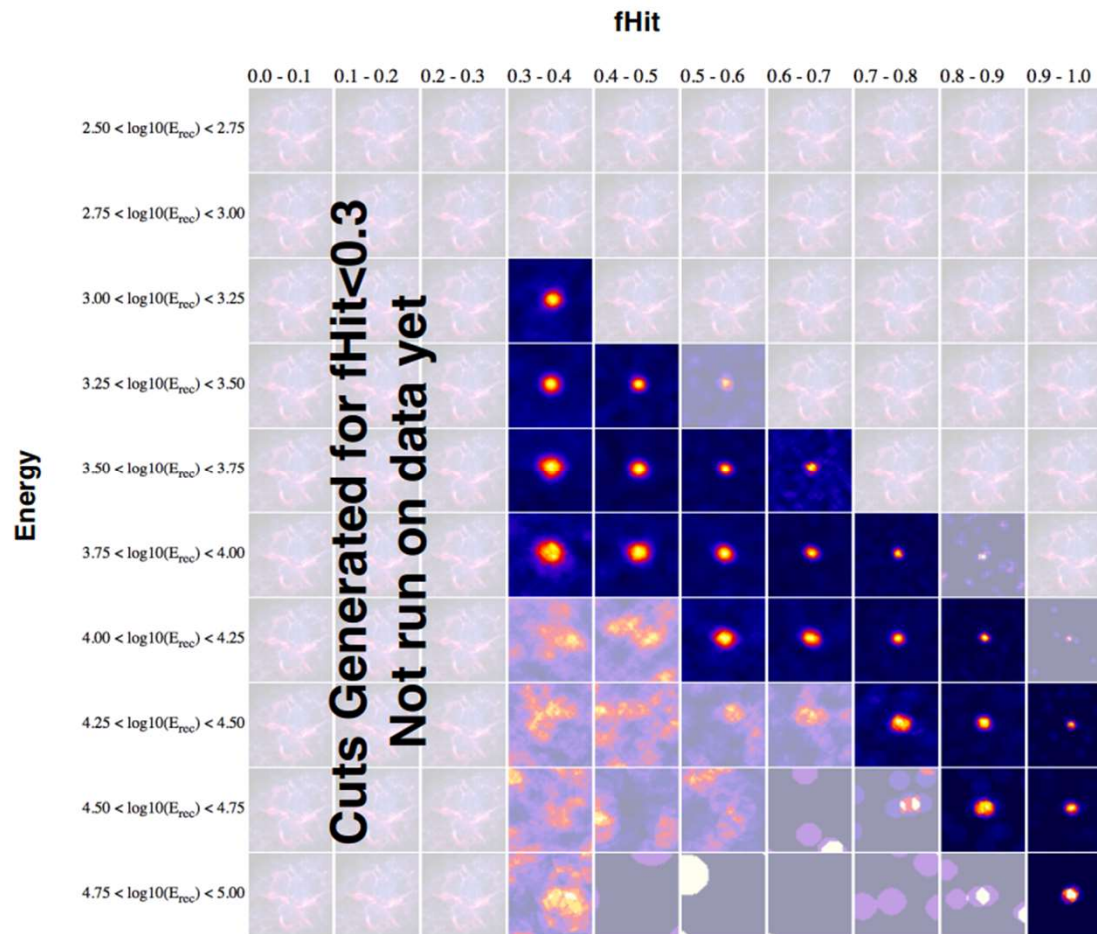


# My cuts

Crab Significance Maps (0-15)



# Significance Plots (made by John)

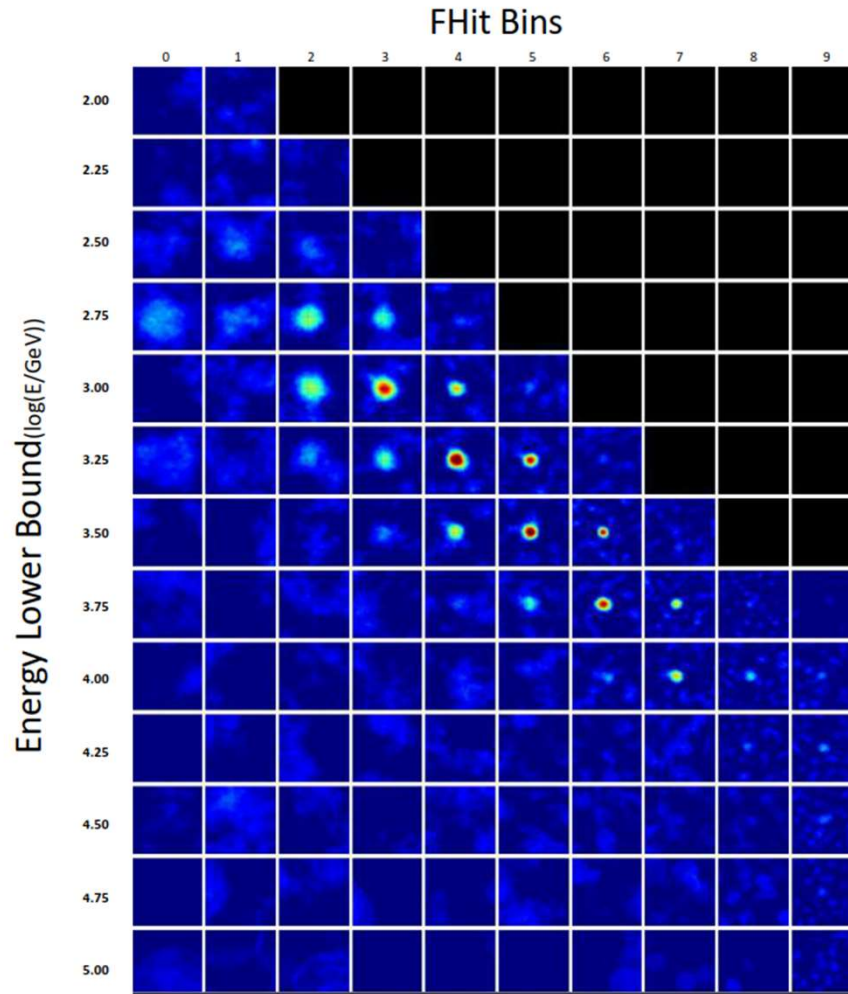


Unlike my plots, you can see crab at 4.25, 4.50, 4.75



# Significance Plot (made by Sam)

These were made using earlier cuts and with different fHit binning.



Can also see crab at 4.25, 4.50, 4.75