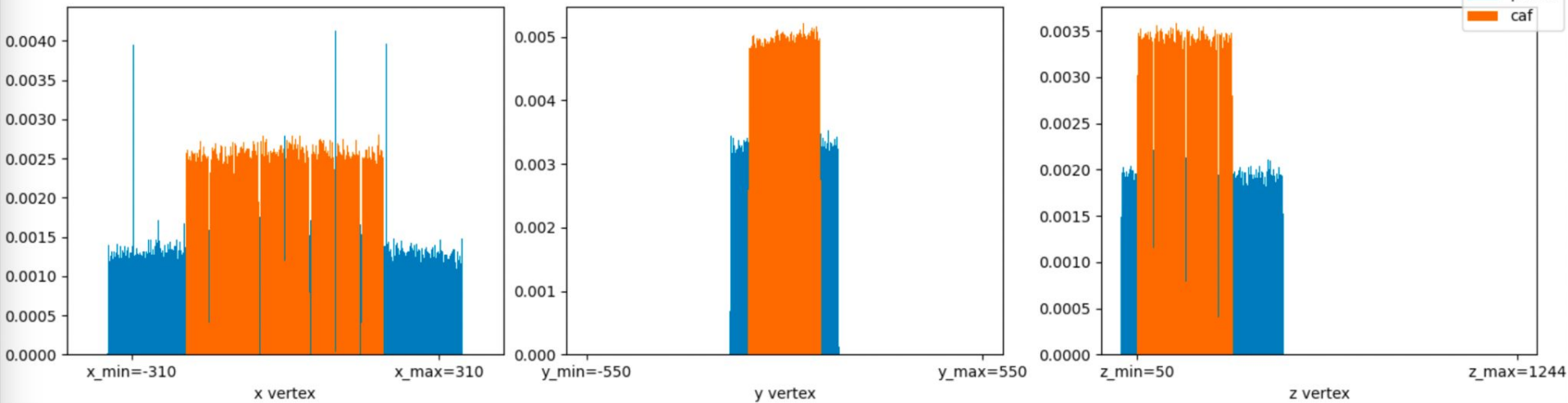


# FHC Numu

ND Caf, paired

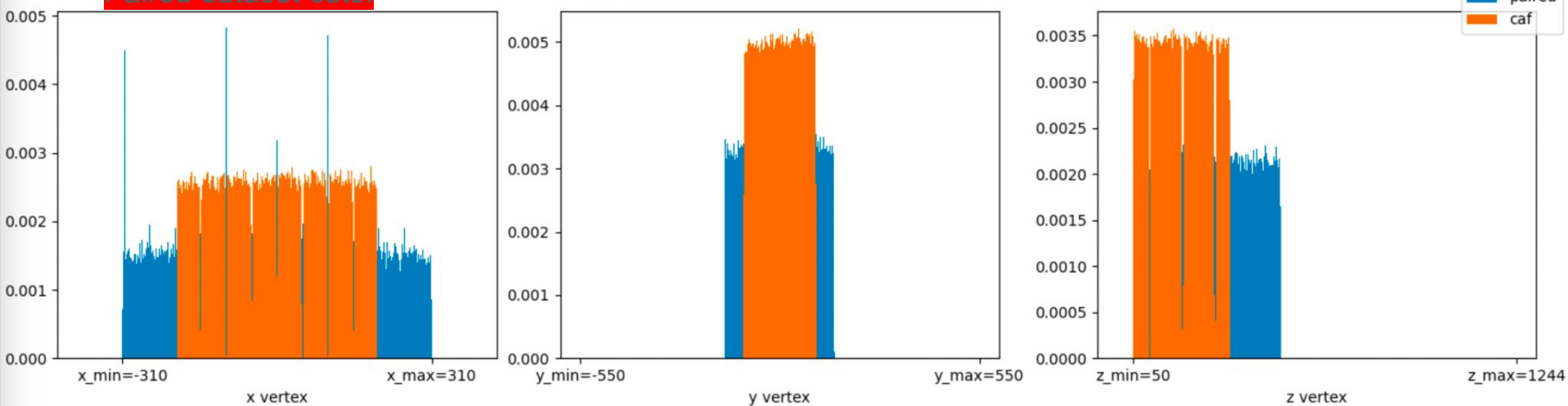
- Previously, hadn't caught that there were events in the paired dataset (roughly 41,000 in FHC) that were outside the minimum and maximum allowed vertices

ND Vertex locations, all events, normalized

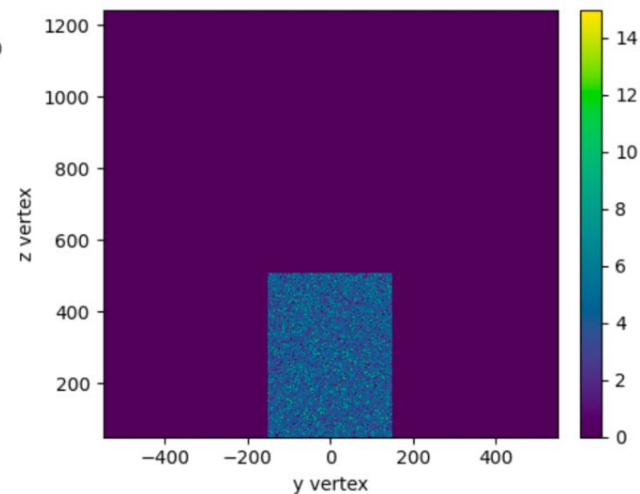
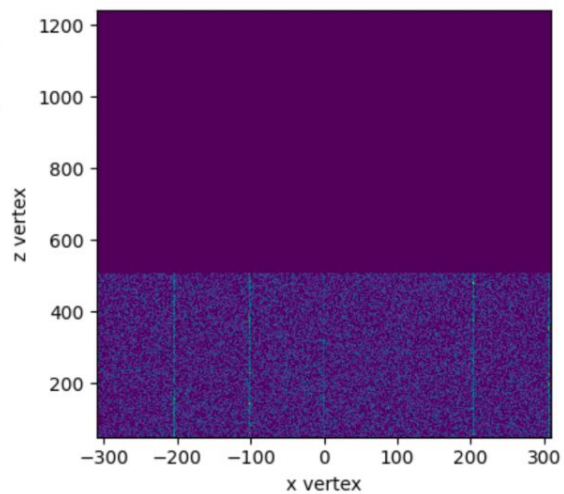
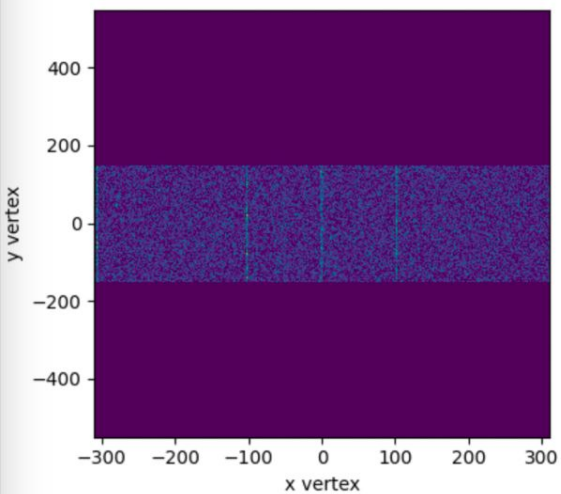


Paired dataset cuts!

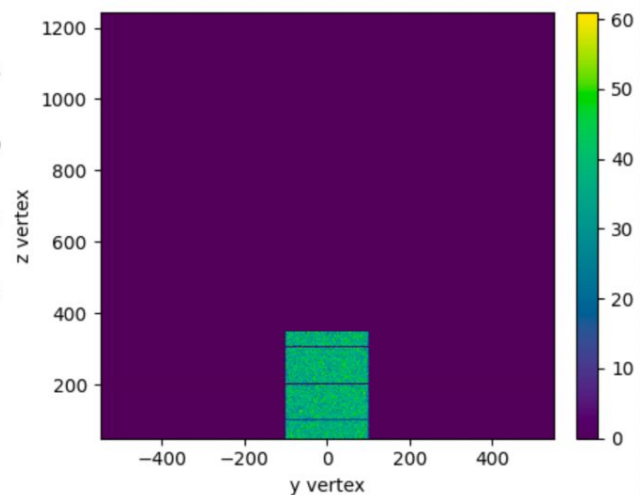
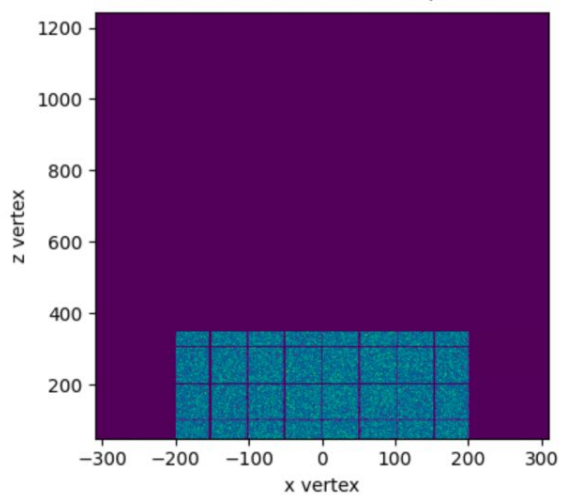
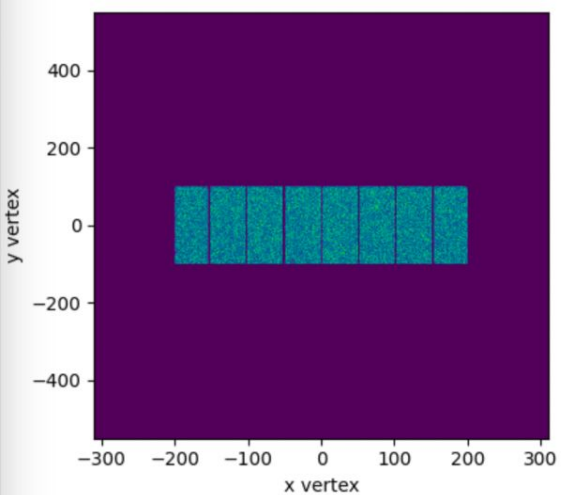
ND Vertex locations, all events, normalized



159141 Paired events vertex planes

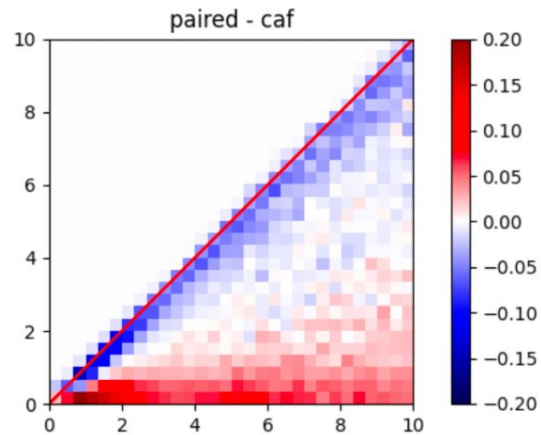
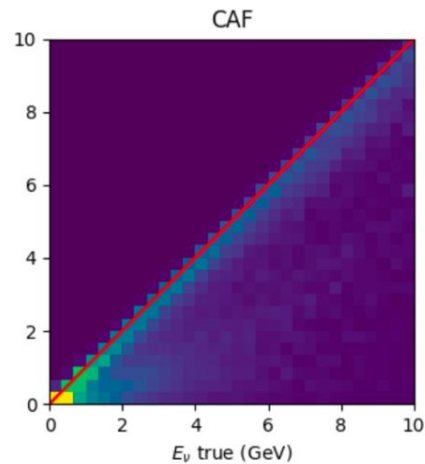
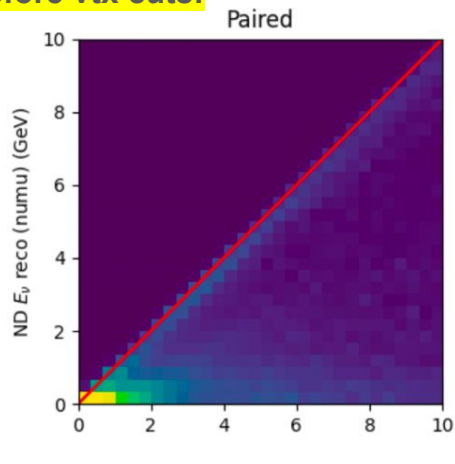


590677 Caf events vertex planes



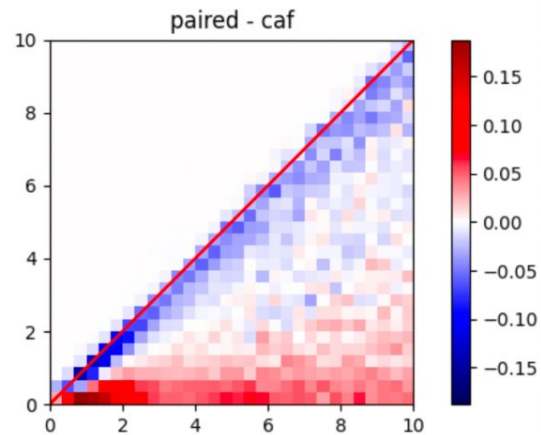
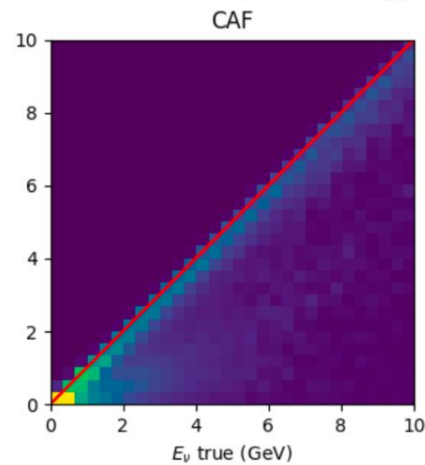
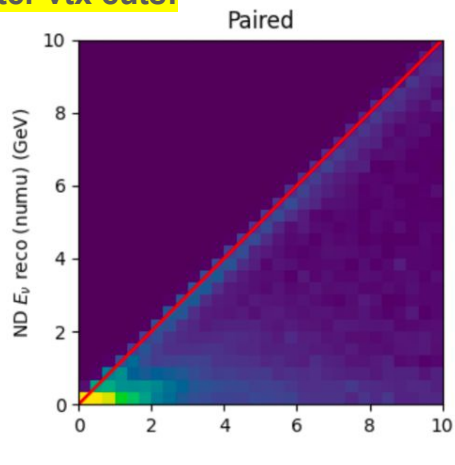
200782 paired events, 555698 CAF events (CAF vtx cut, pre energy cuts)  
(FHC numu, normalized per true energy bin)

**Before vtx cuts:**



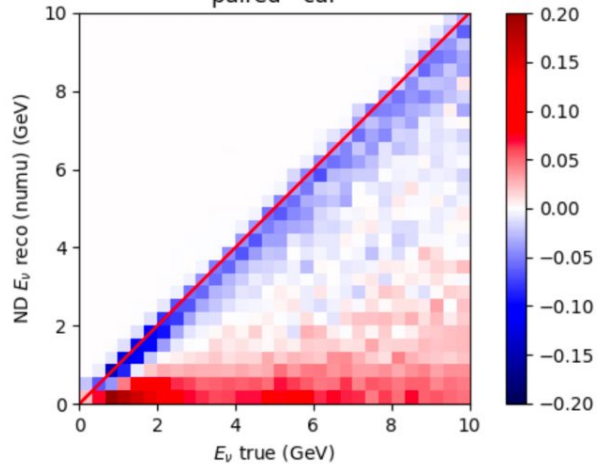
159141 paired events, 555698 CAF events (CAF vtx cut, pre energy cuts)  
(FHC numu, normalized per true energy bin)

**After vtx cuts:**



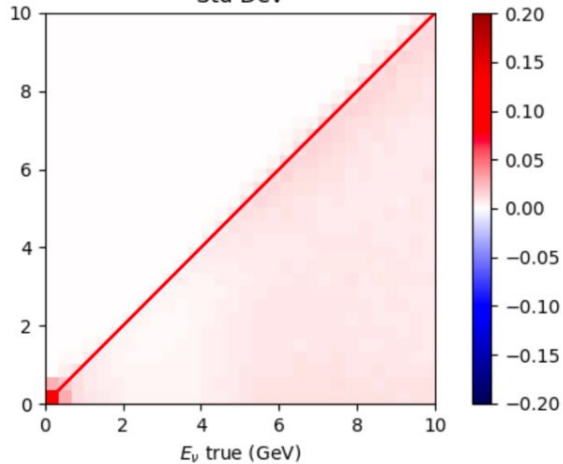
Before vtx cuts:

paired - caf

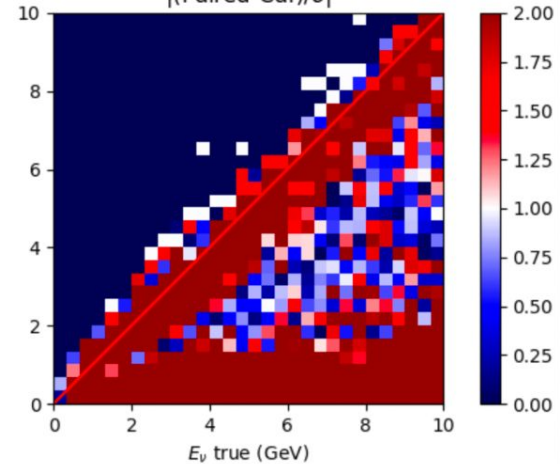


True numu only

Std Dev

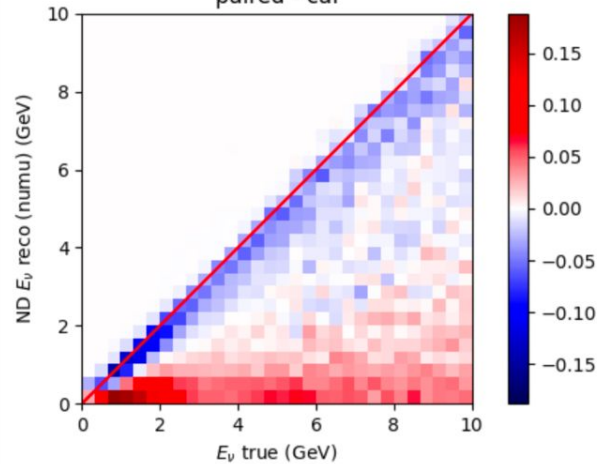


$|(\text{Paired-Caf})/\sigma|$



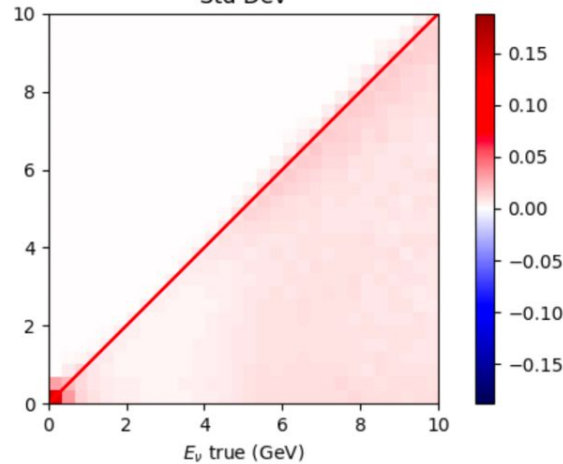
After vtx cuts:

paired - caf



True numu only

Std Dev



$|(\text{Paired-Caf})/\sigma|$

