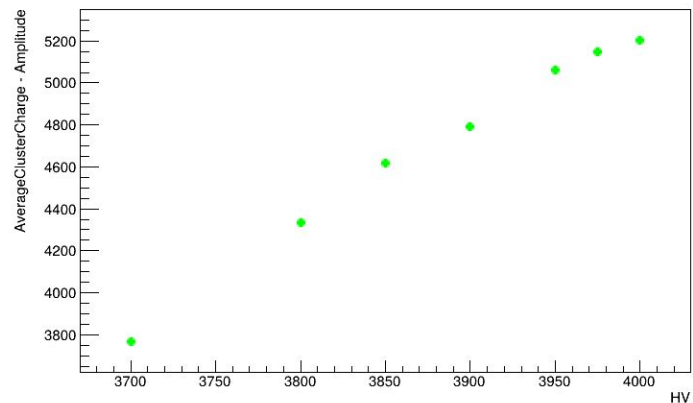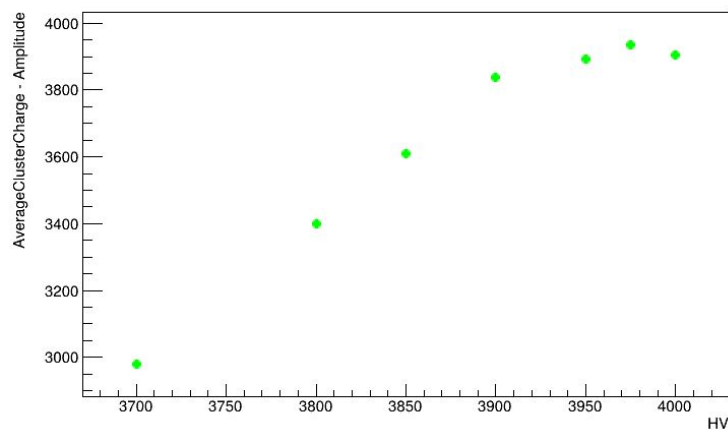# Charge based HV Studies

(01/08/26)

- HV set to 3950V for one GEM while varying the other
- # of clusters, average charge were looked at
- Peak ADC channel charge subtracted from the total cluster charge to get a better understand charge accumulated in clusters

LEFT ARM

LEFT ARM

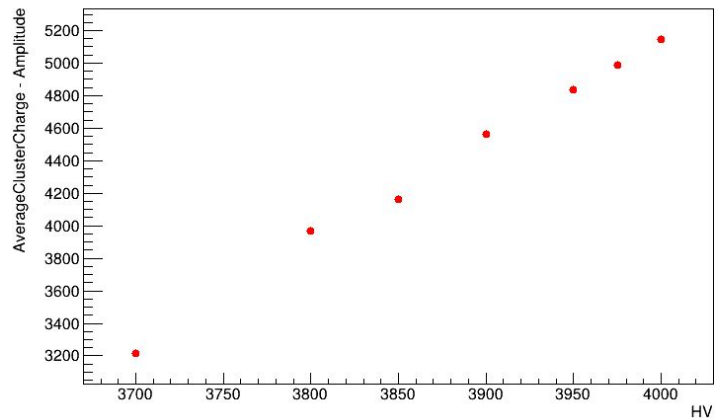# clusters in bottom GEM

clusters in top GEM

RIGHT ARM

Avg Charge of a cluster - avg charge of a peak ADC channel (X Bottom)
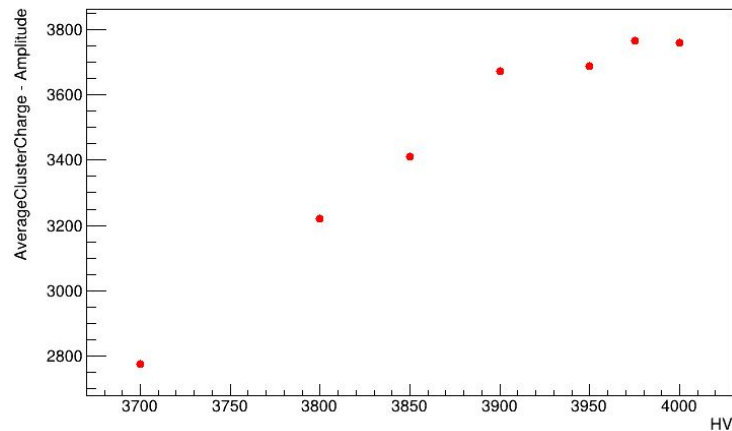
Avg Charge of a cluster - avg charge of a peak ADC channel (Y Bottom)

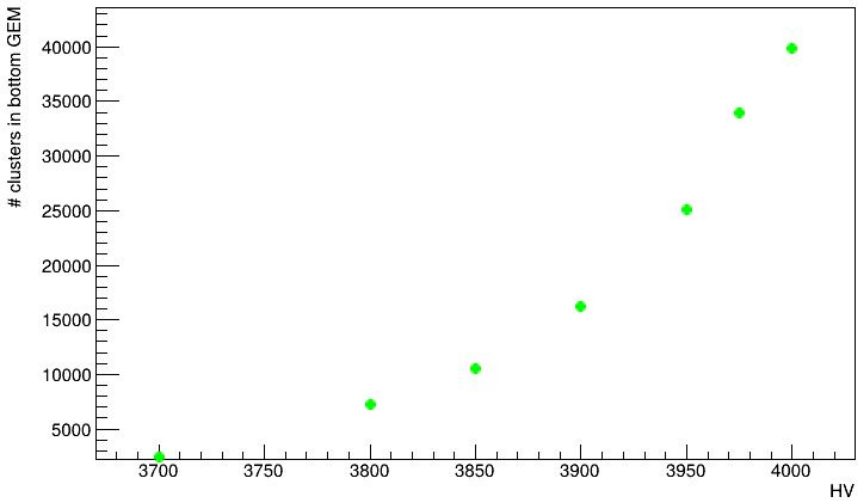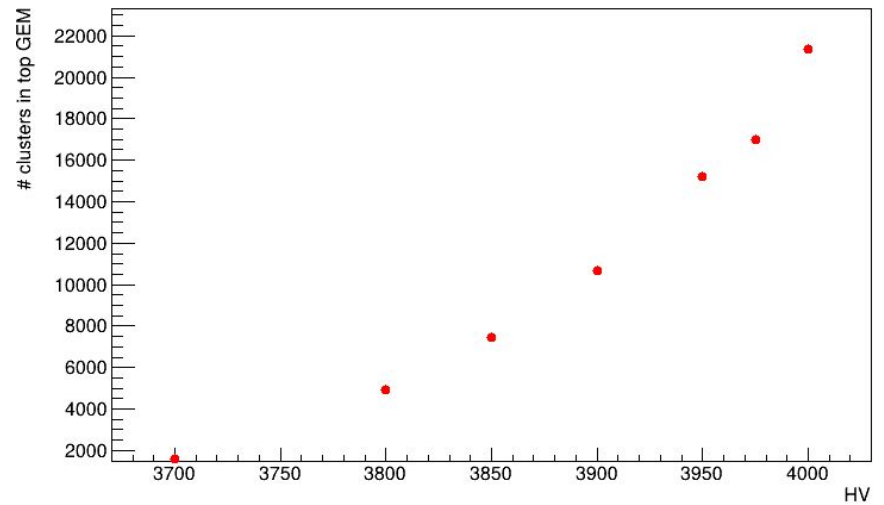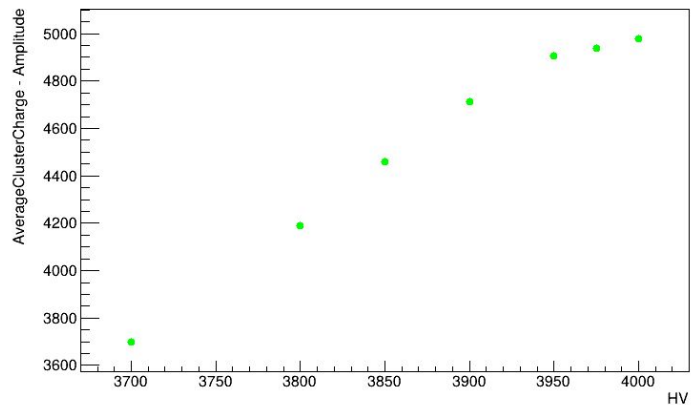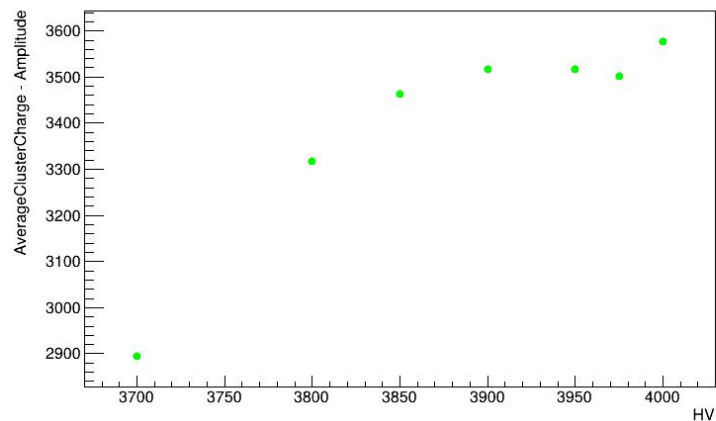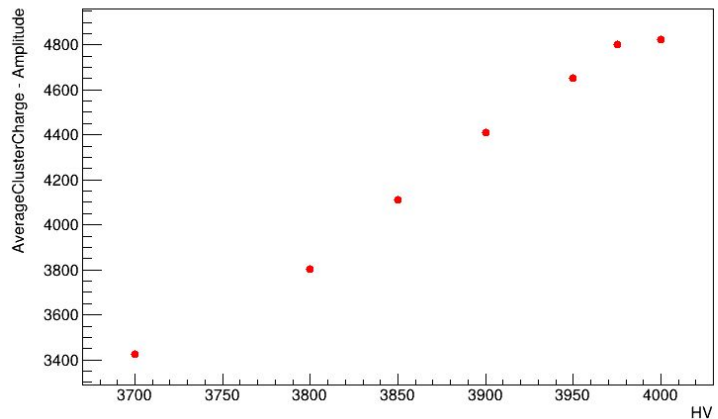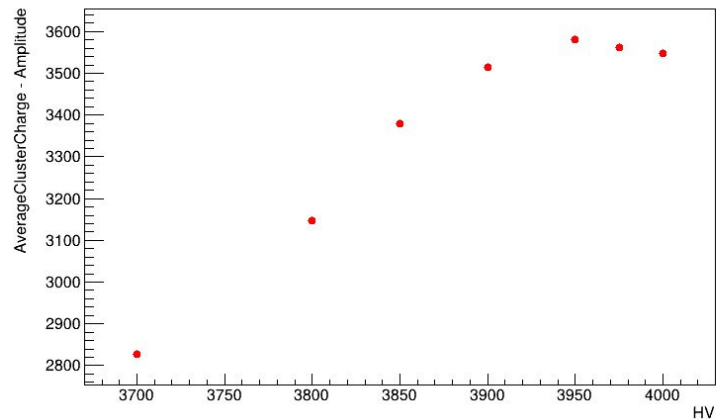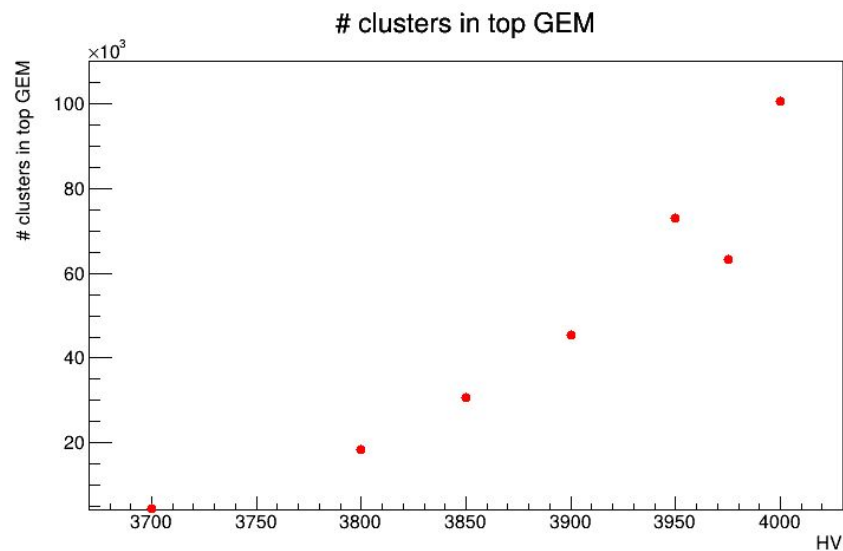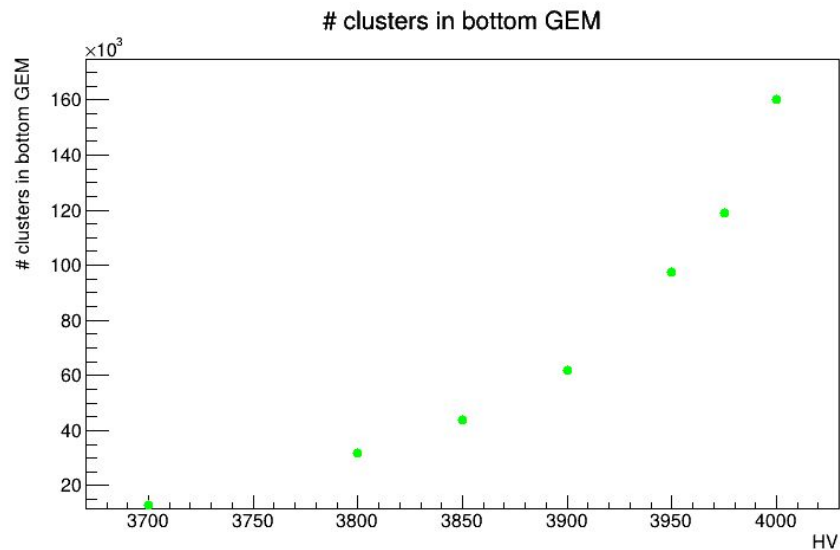Avg Charge of a cluster - avg charge of a peak ADC channel (X Top)

Avg Charge of a cluster - avg charge of a peak ADC channel (Y Top)

RIGHT ARM

clusters in bottom GEM

clusters in top GEM

To do..

- Redo plots looking at only the biggest cluster
- Look at single event views for clusters and different HV to see if the neighboring channels (i.e. not peak channel) are in saturation.
- Channel masking for dead/hot channels will be implemented too