

Progress with TB2022 data analysis

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Files and run

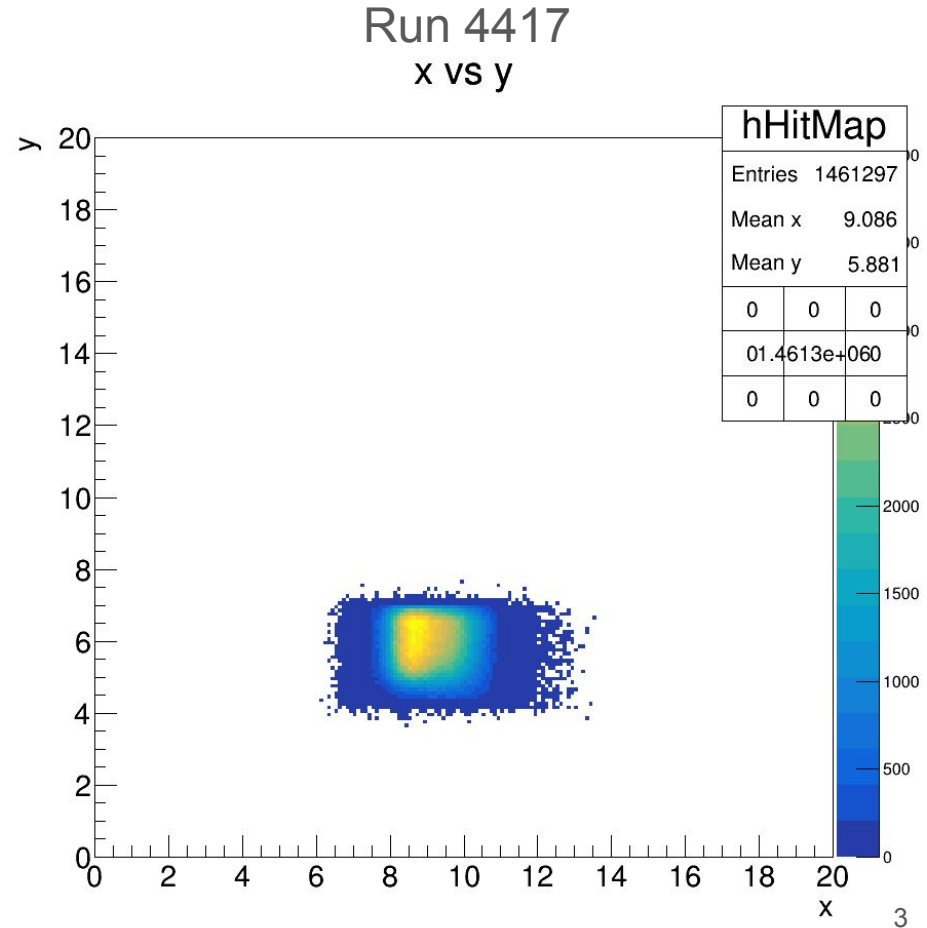
- Using tree in:

Calice-c75.root

- Contains aligned Sensor + Telescope data.
- Made by Shan.

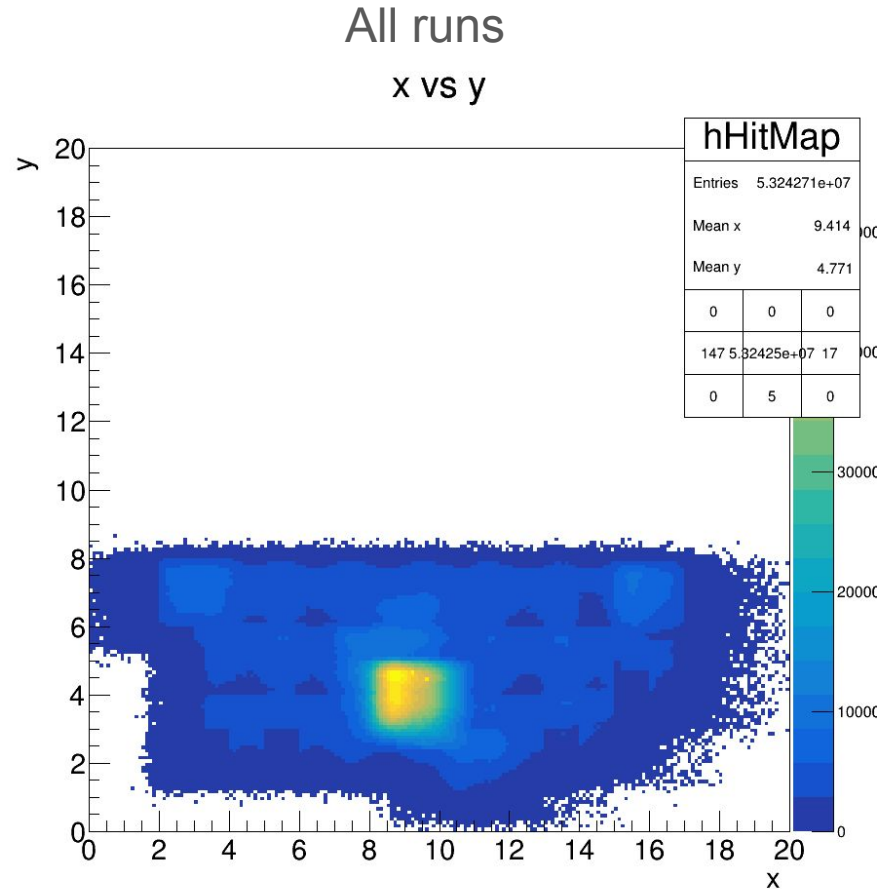
Hit map with telescope

- Pad coordinates on both axes
- All events
- All tracks



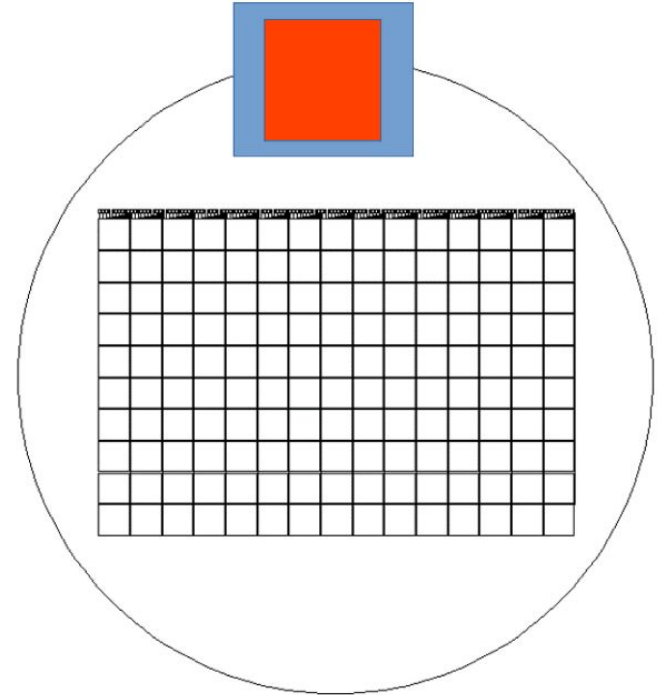
Hit map with telescope

- Pad coordinates on both axes
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- All tracks

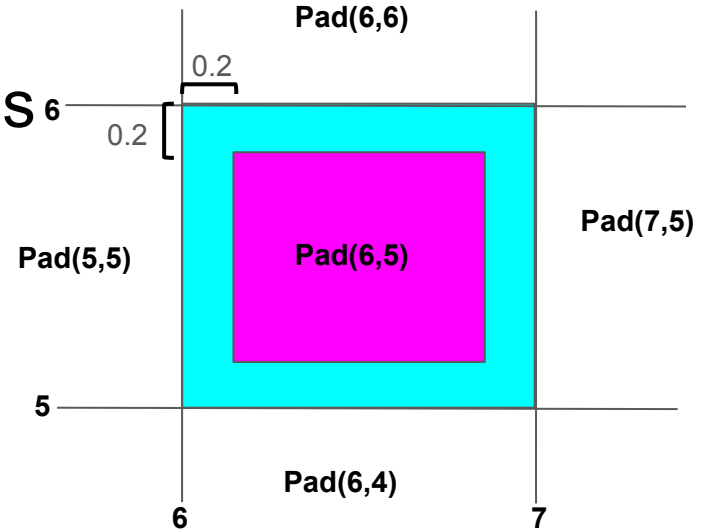


Homogeneity of the pad response

- Only events with 1 track
- Defined three areas to study the response
 - Centre
 - Edges
 - Outside of pad



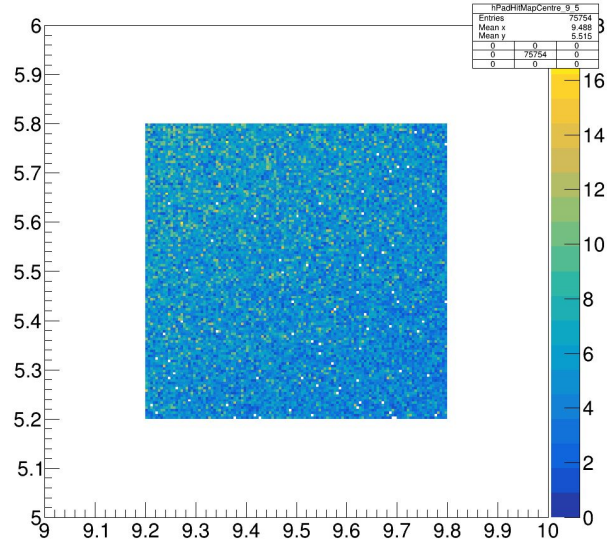
Example of signal for the three areas



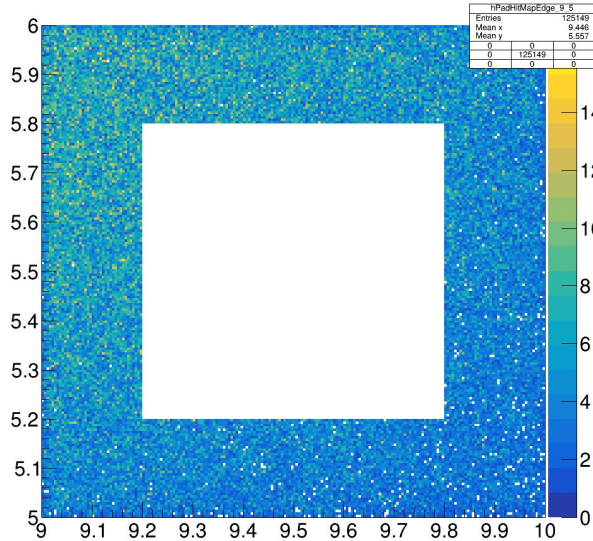
X pad	Y pad	adc	X telescope	Y telescope	Area
6	5	20	6.5	5.6111	Centre
6	5	21	6.1	5.9	Edge
6	5	19	8.5	3.0	Out

Example of hit map for the areas

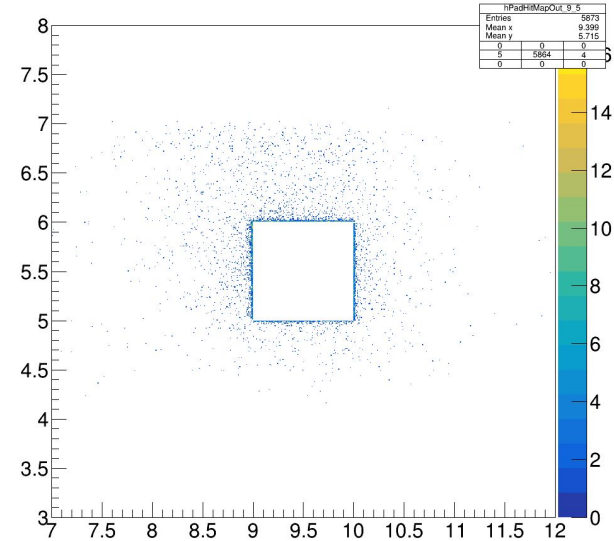
Track Hit Map centre pad (9,5) run 4417



Track Hit Map edge pad (9,5) run 4417

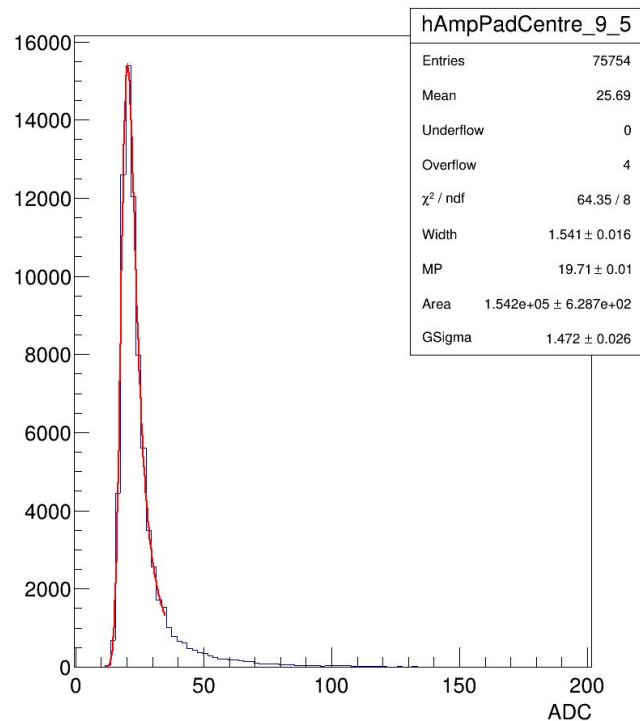


Track Hit Map Outside pad (9,5) run 4417

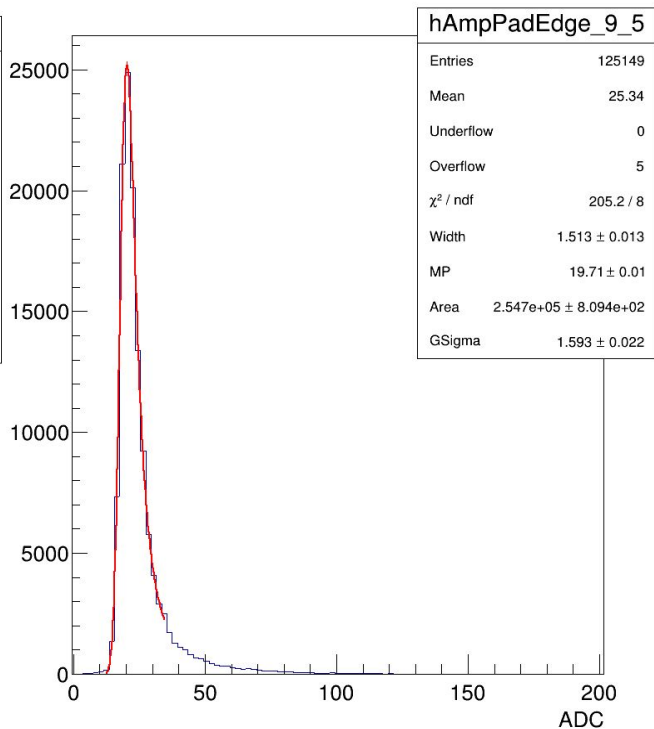


Langaus Fit to individual pad amplitudes (Areas)

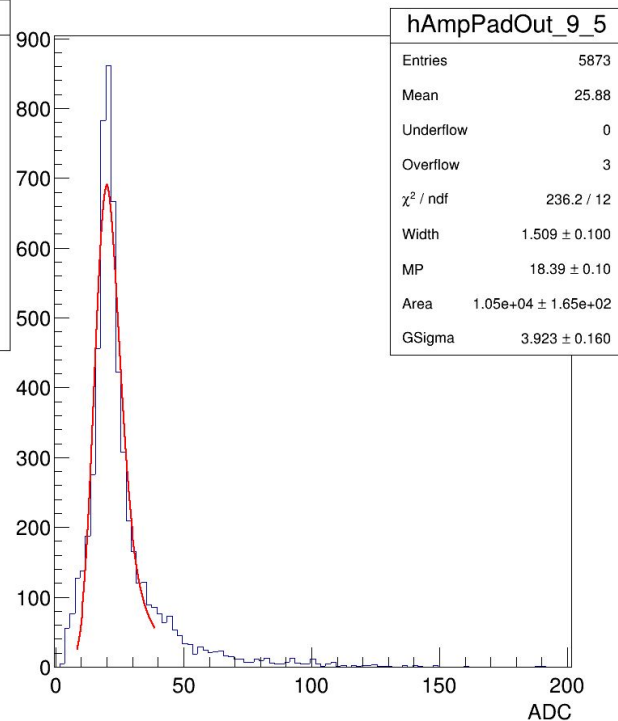
Amplitude Centre of pad (9,5) run 4417



Amplitude Edge of pad (9,5) run 4417

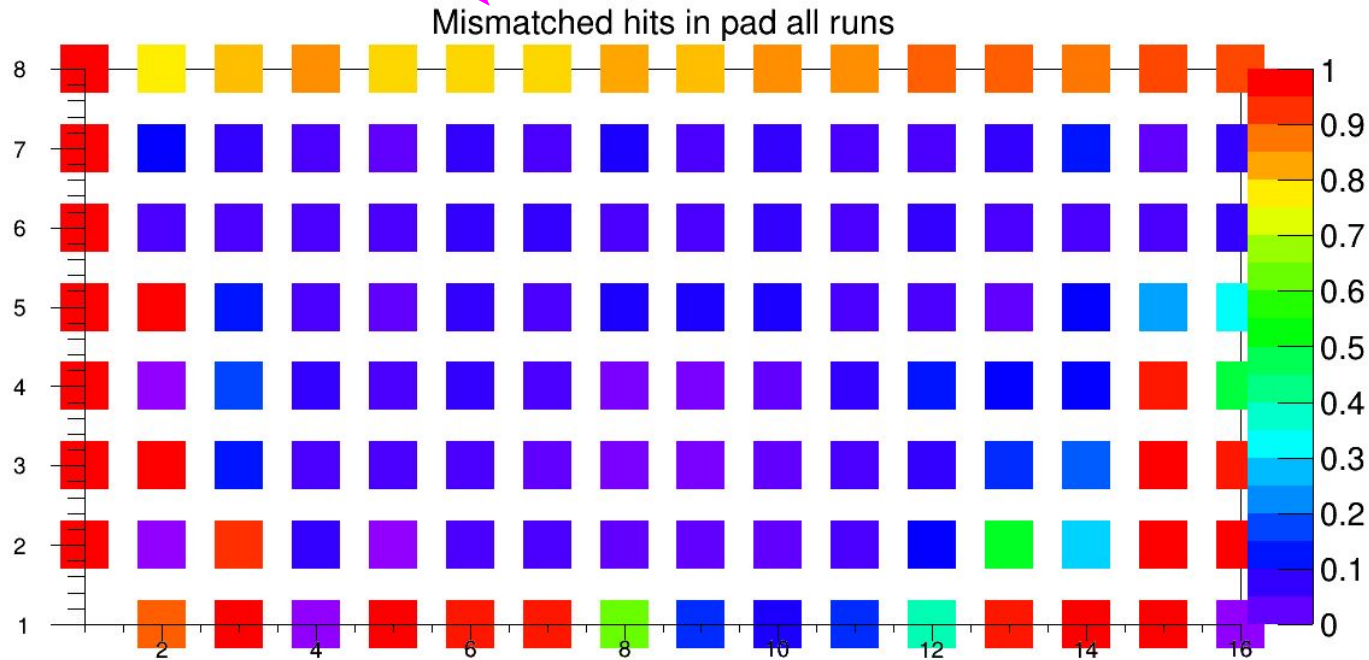


Amplitude Outside of pad (9,5) run 4417

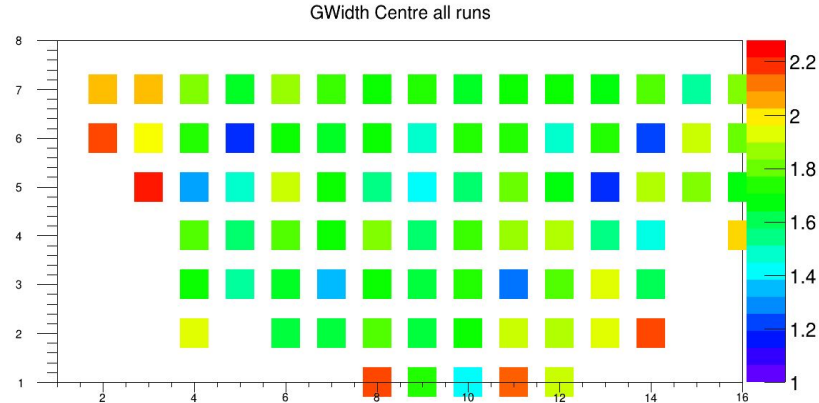
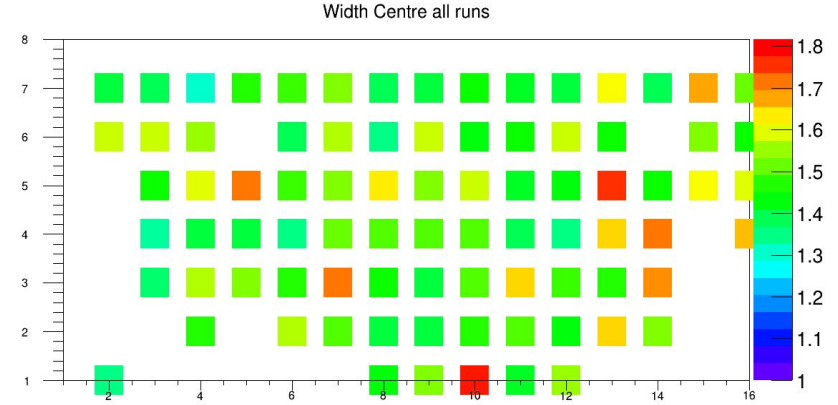
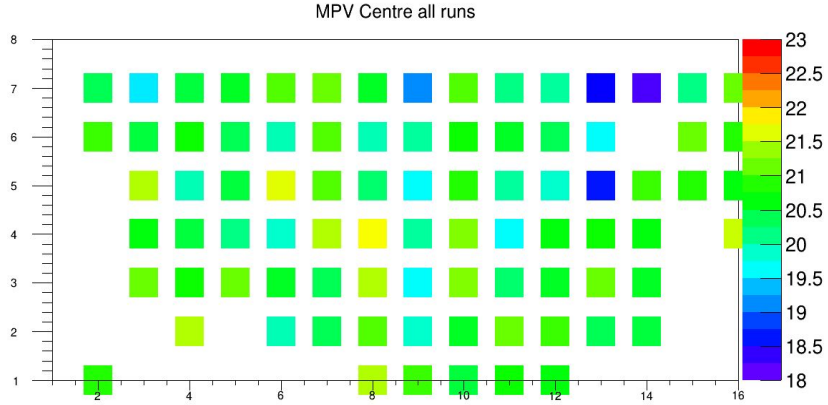


Percentage of events with track outside of pad with signal

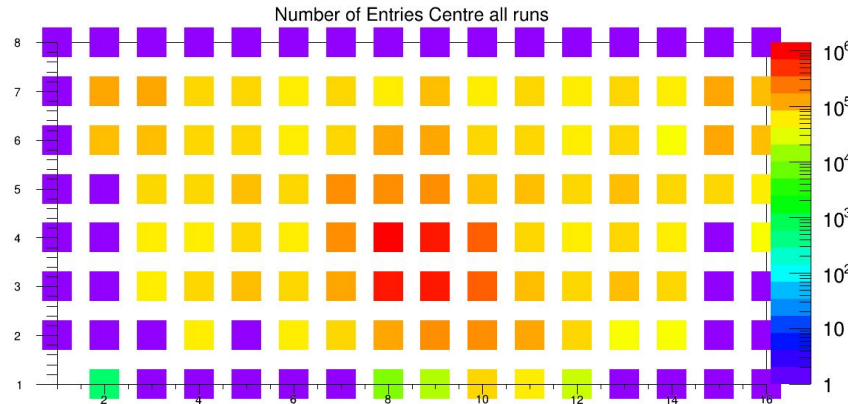
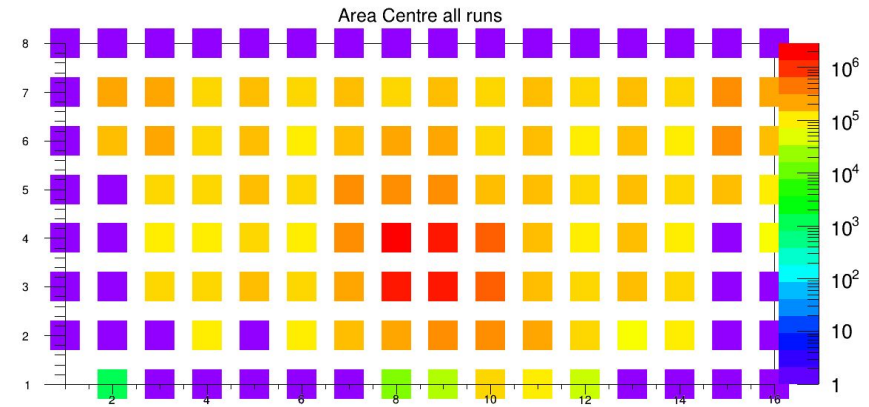
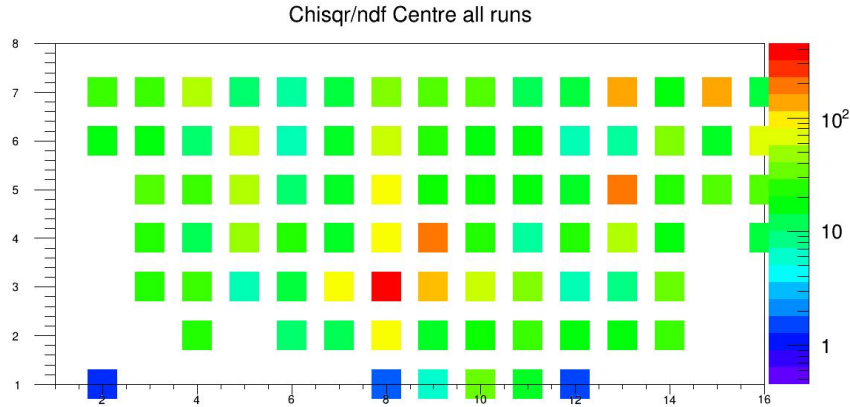
$$\frac{\text{Tracks outside of fired pad}}{\text{Total Tracks}}$$



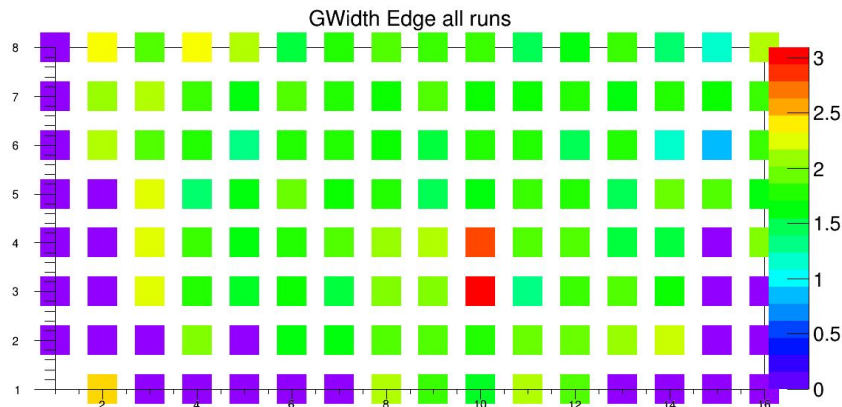
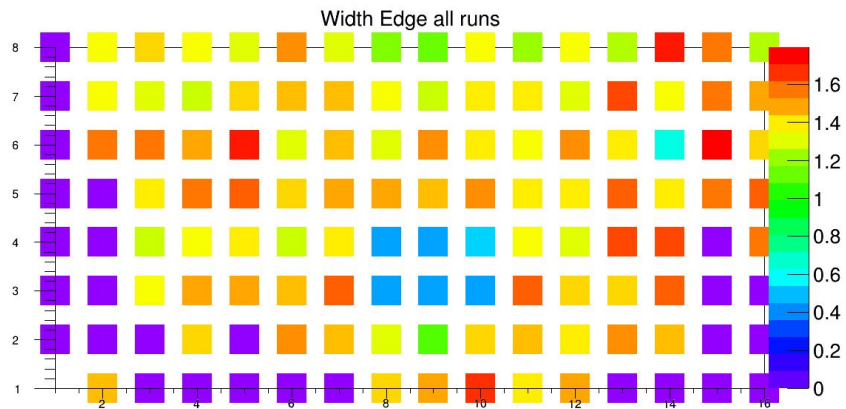
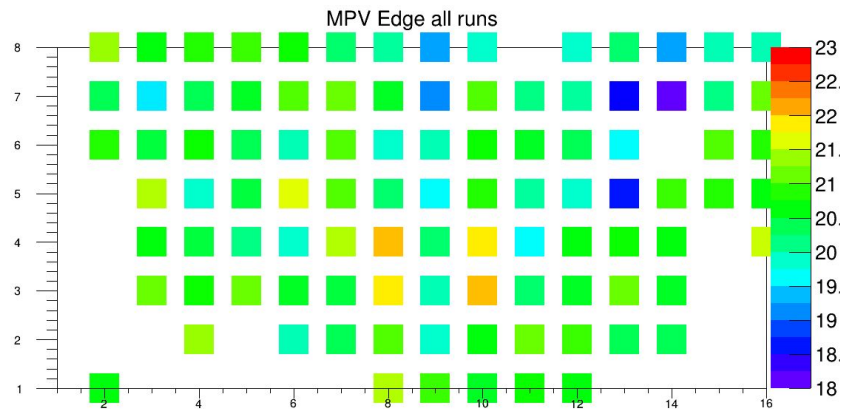
Homogeneity of response for sensor using all runs: Centre



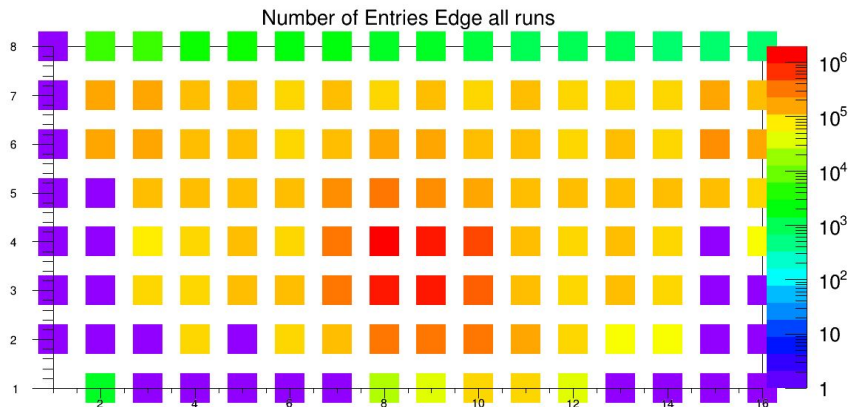
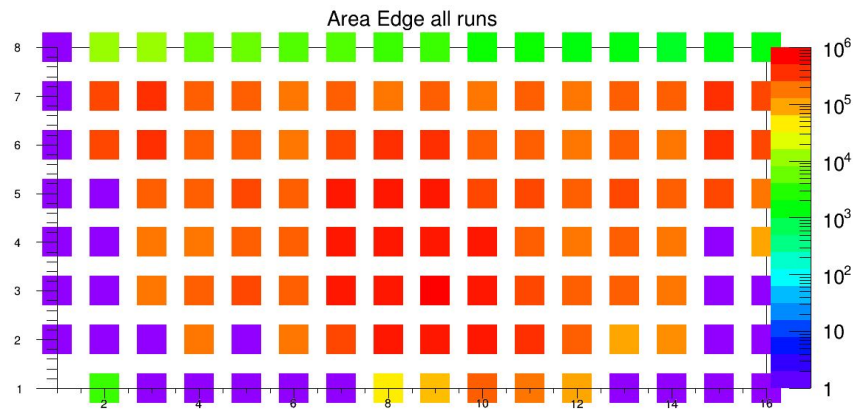
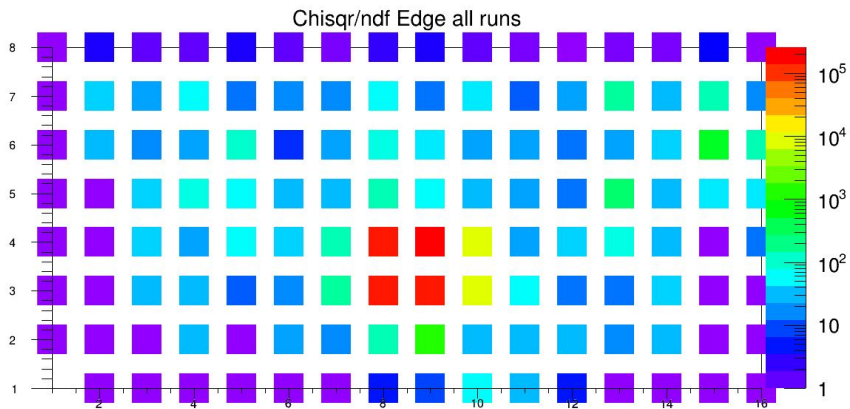
Homogeneity of response for sensor using all runs:Centre



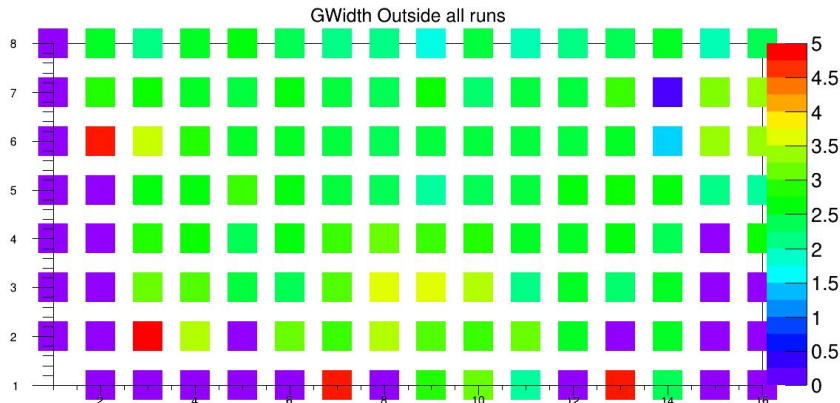
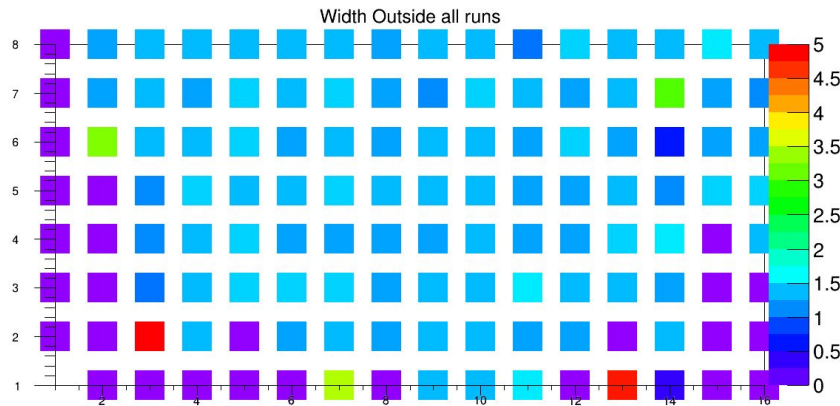
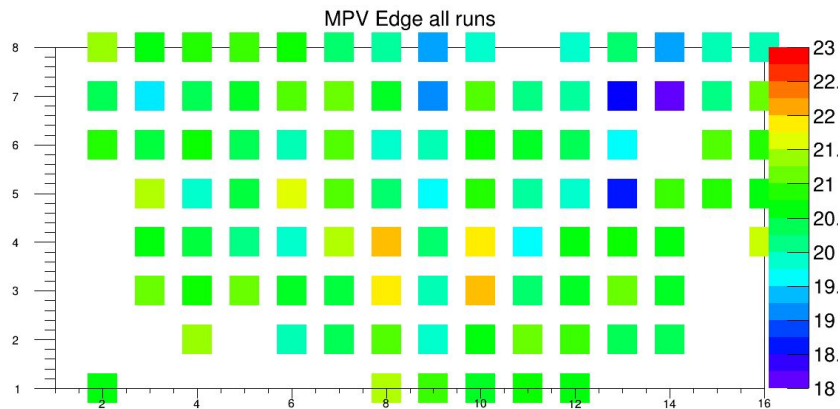
Homogeneity of response for sensor using all runs: Edges



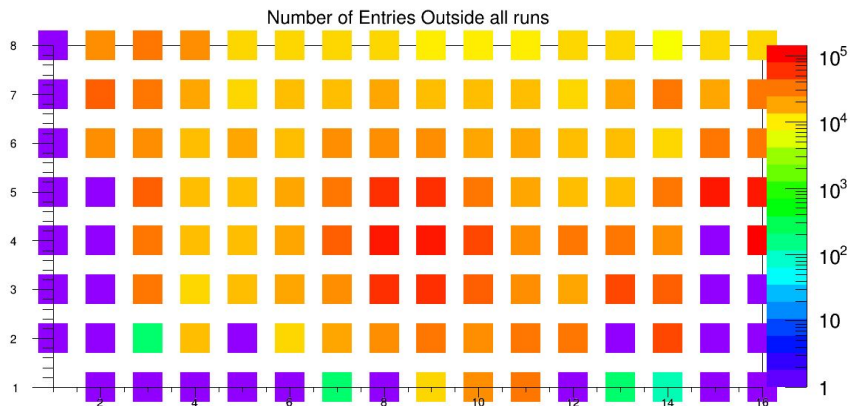
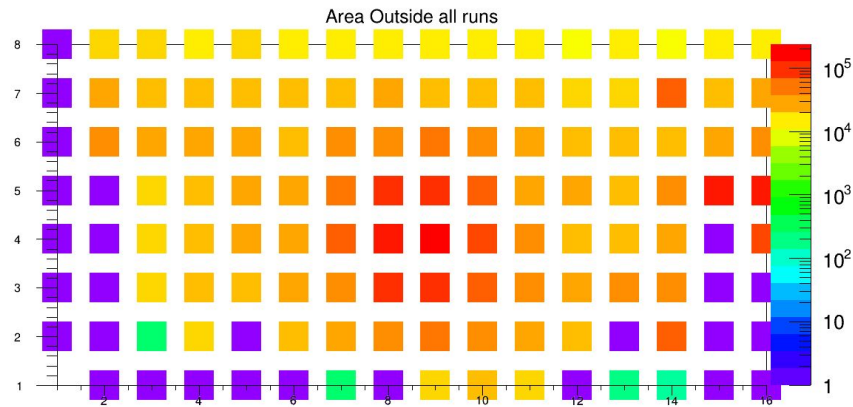
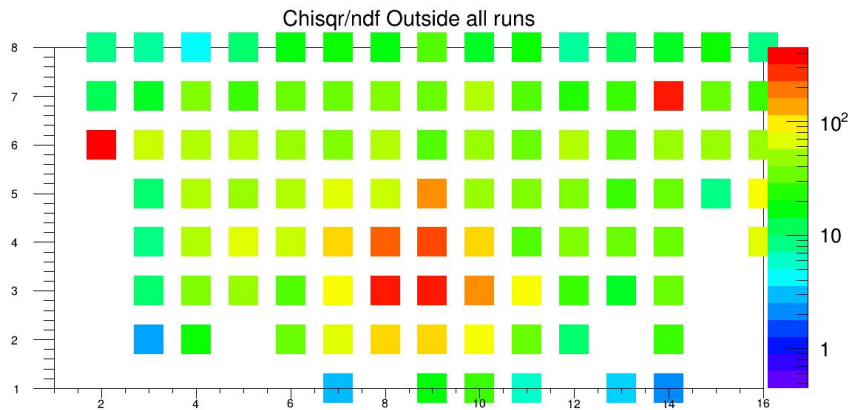
Homogeneity of response for sensor using all runs:Edges



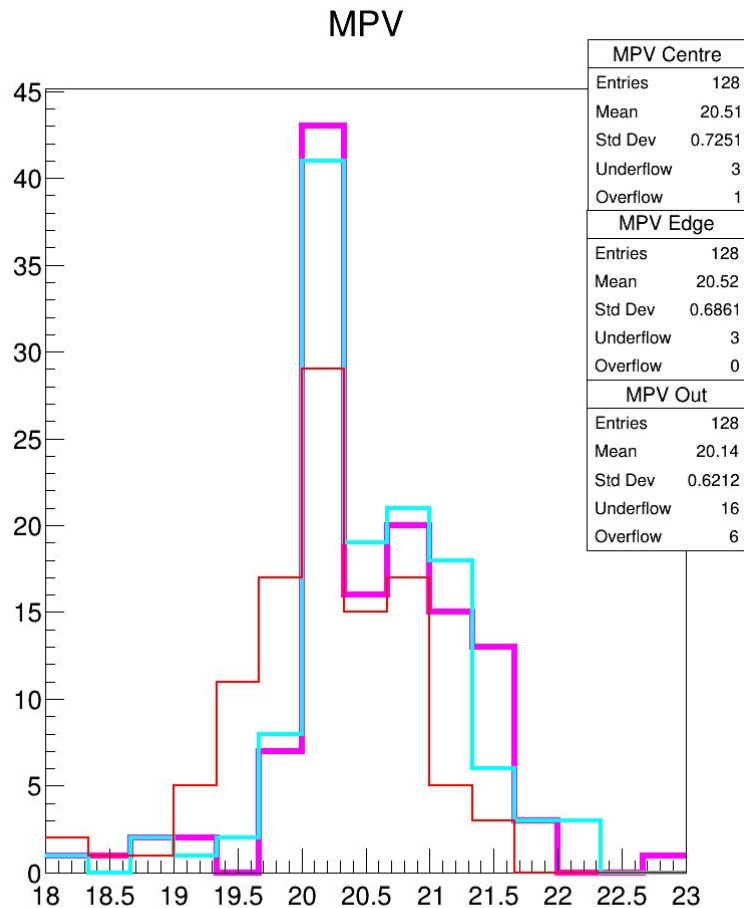
Homogeneity of response for sensor using all runs: Out



Homogeneity of response for sensor using all runs: Out



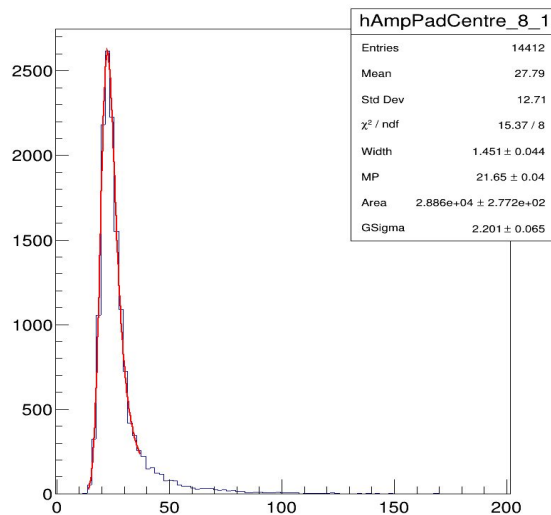
MPV Comparison between areas



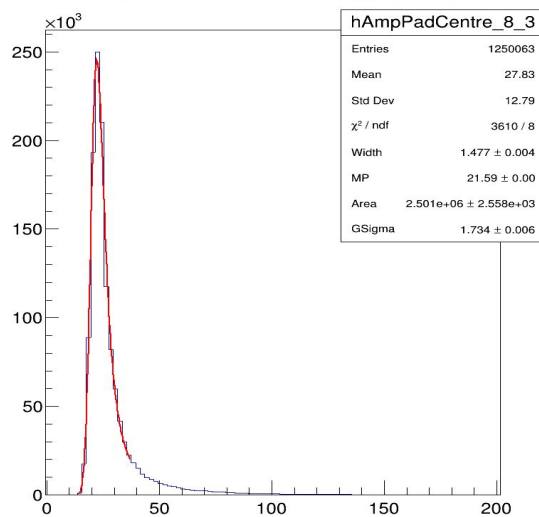
Thank you!

Backup

Amplitude Centre of pad (8,1) all runs



Amplitude Centre of pad (8,3) all runs



Amplitude Centre of pad (13,7) all runs

