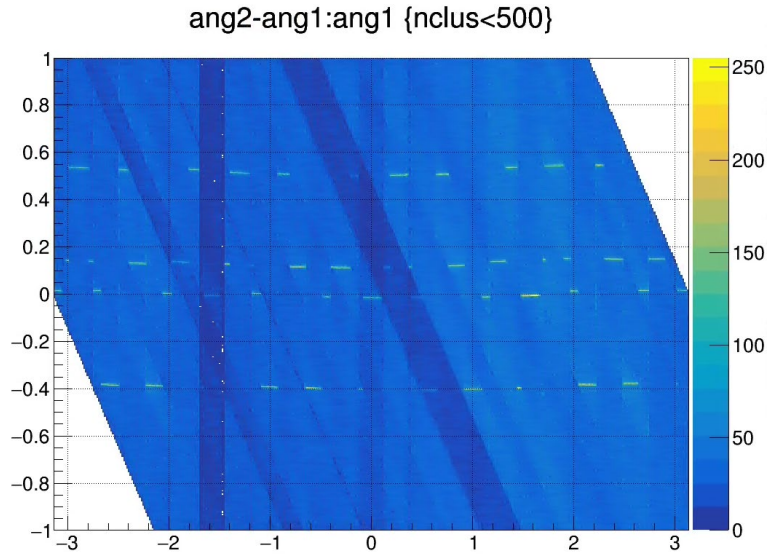
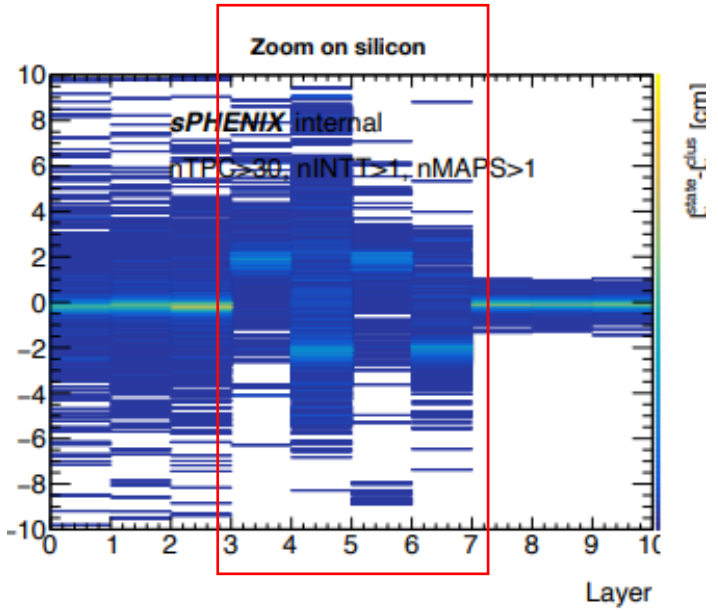
Updates on Cluster position issue

- Reported that the cluster position has issue when making DST w/ F4A framework (current library)

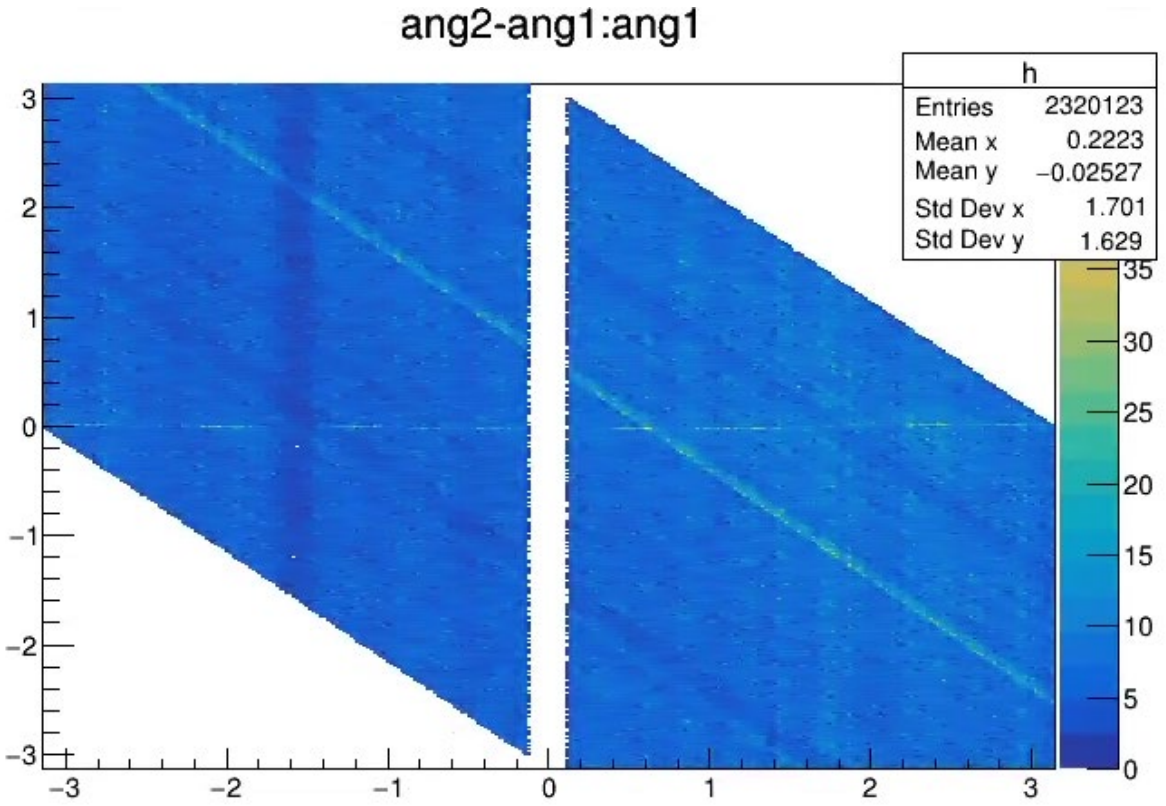
- Systematic shifts are also seen in the residual distribution with cosmic ray
  - This happens for the same reason?

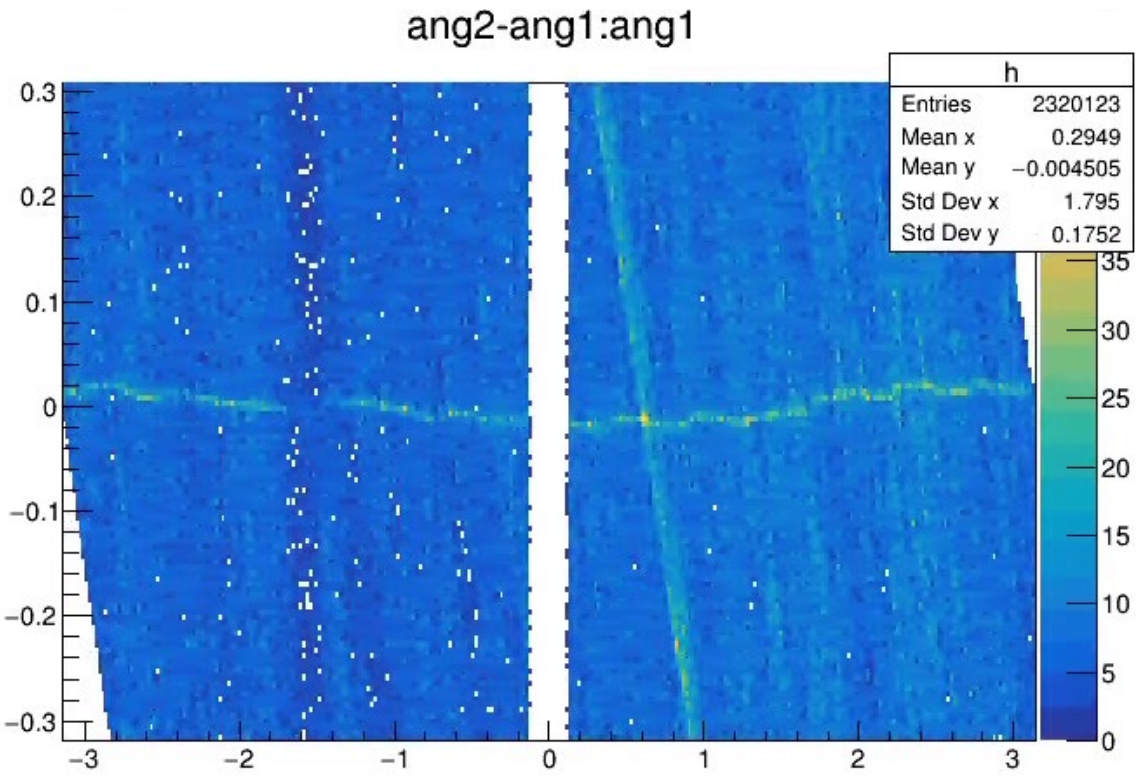




library

Successful reconstruction w/ old setup



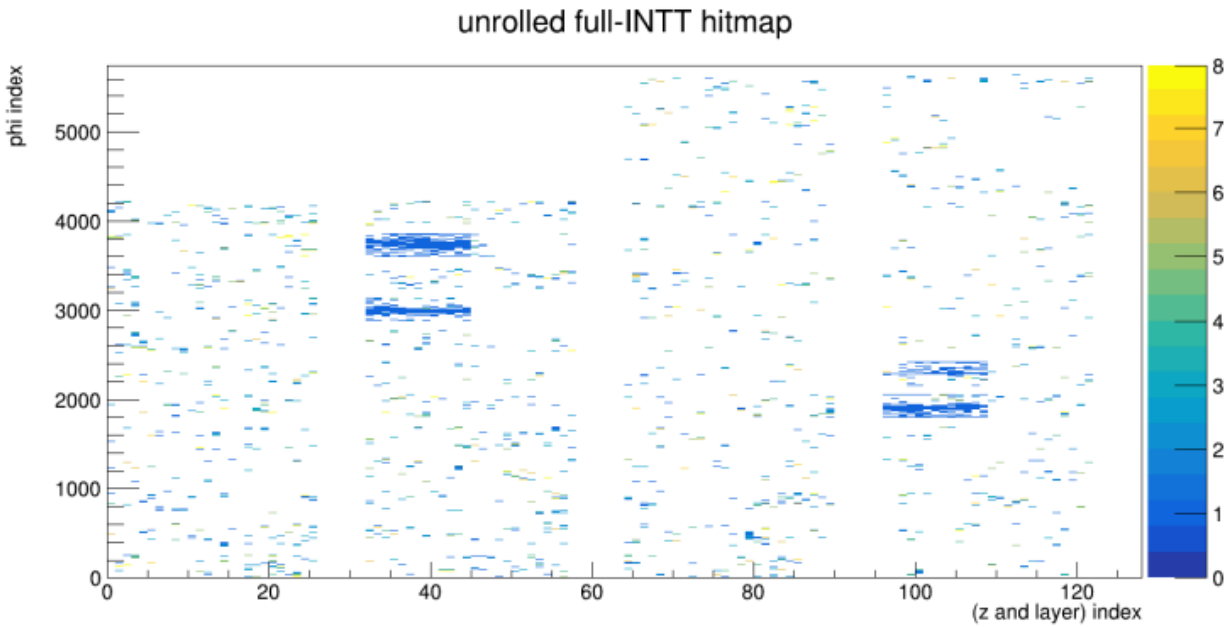


- A clear correlation btw inner and outer cluster angle w/ old setup
  - I could reproduce w/ Ana.374 (Sep. 2nd) + private InttMapping
  - Ana.374 doesn't work alone, current library neither.
  - I will process DAC scan dataset and Run20869

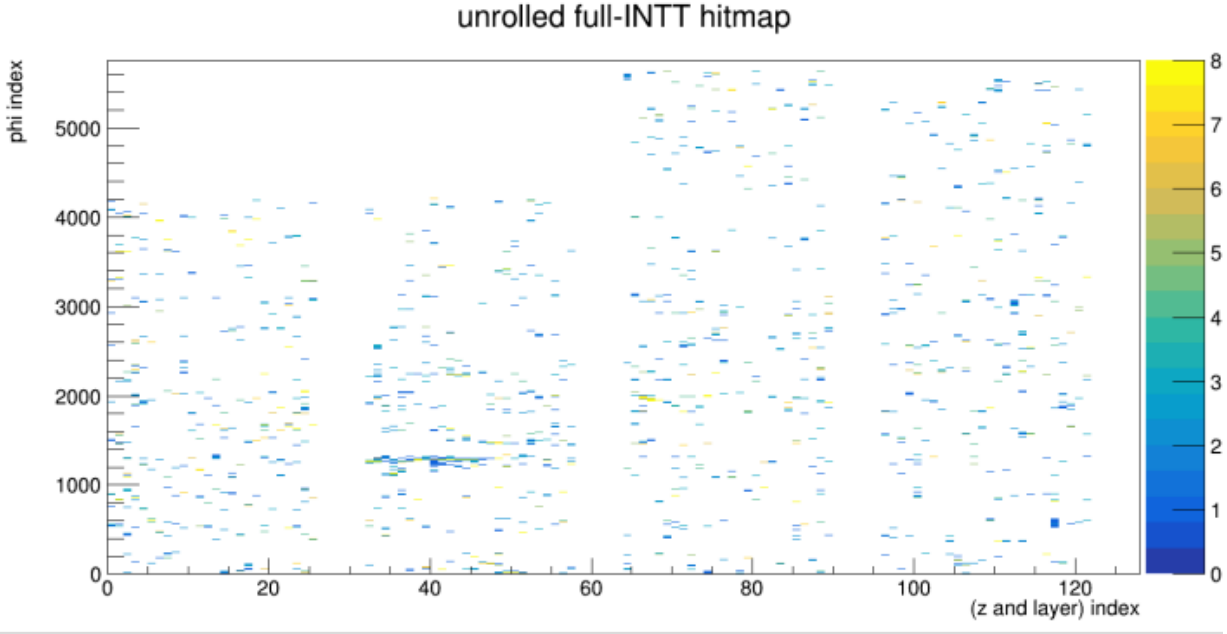
- I am still working on this with the current library

Strange hits reported by MIT

From Michael's slide



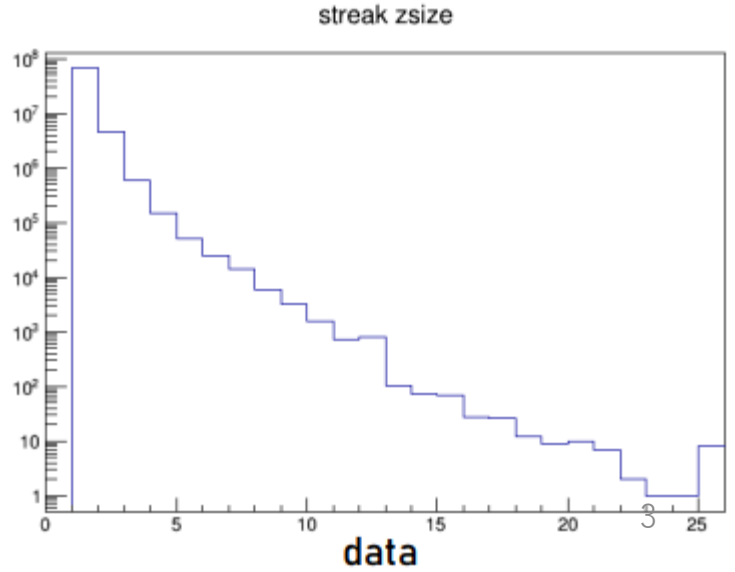
Ly1 Ly2 Ly3 Ly4



- Left: Large Z size w/ ADC=0
- Right: Large Z size w/ higher ADC

- Larger Z-size than the half hadder (Z>13)

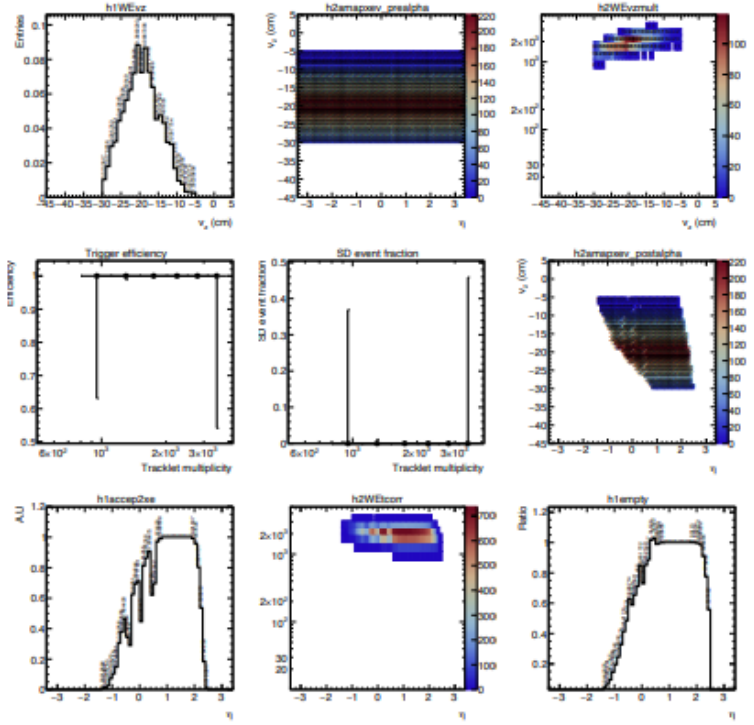
- Questions is why this happen?
  - Common mode noise? Charge leakage? beam BG?

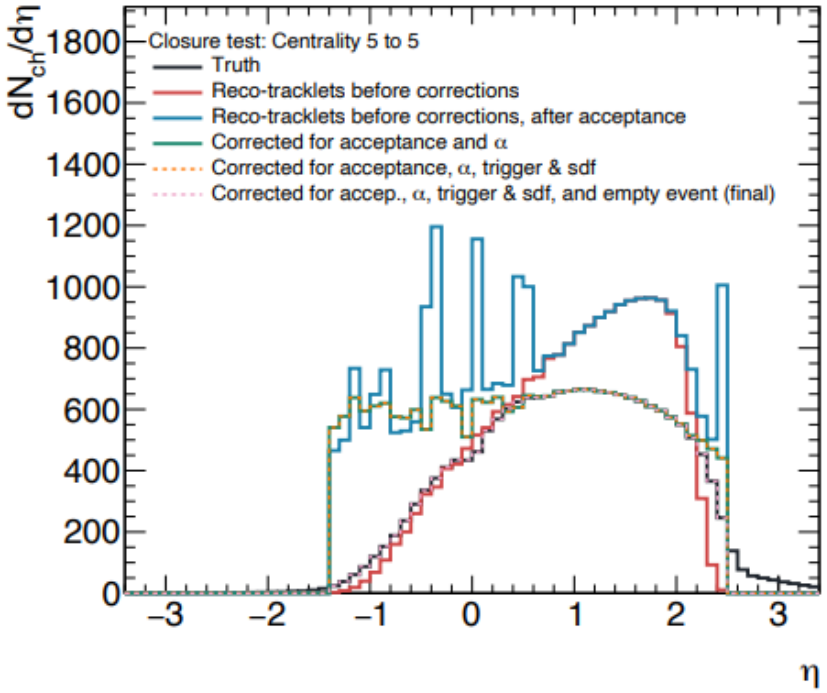


Acceptance study is on going w/ MC

Status update

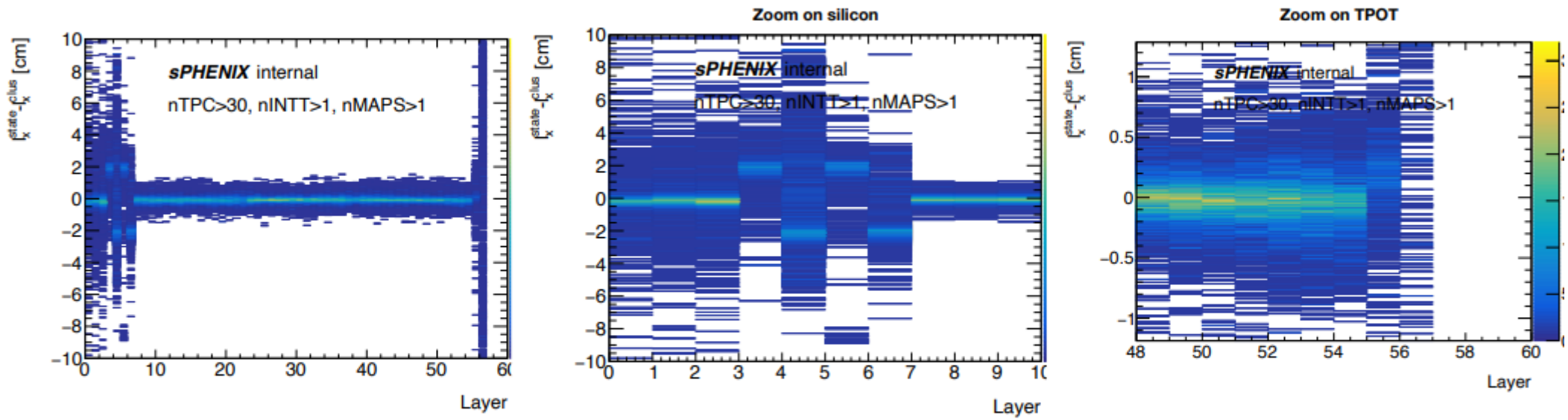
■ Quality cuts for the α factor: required to be between 0 and 3.6, regions in (η, v_z) that have values outside the range are excluded in the analysis





- MC is generated w/ same Z-vertex distribution
- Raw distribution is a triangular shape
- w/ correction factors, the distribution becomes more round shape and get similar w/ MC truth

Residuals



- Previous plots were over a single run
- This is for all good runs identified in previous slide with ntpc>30, nintt>1, nmaps>1