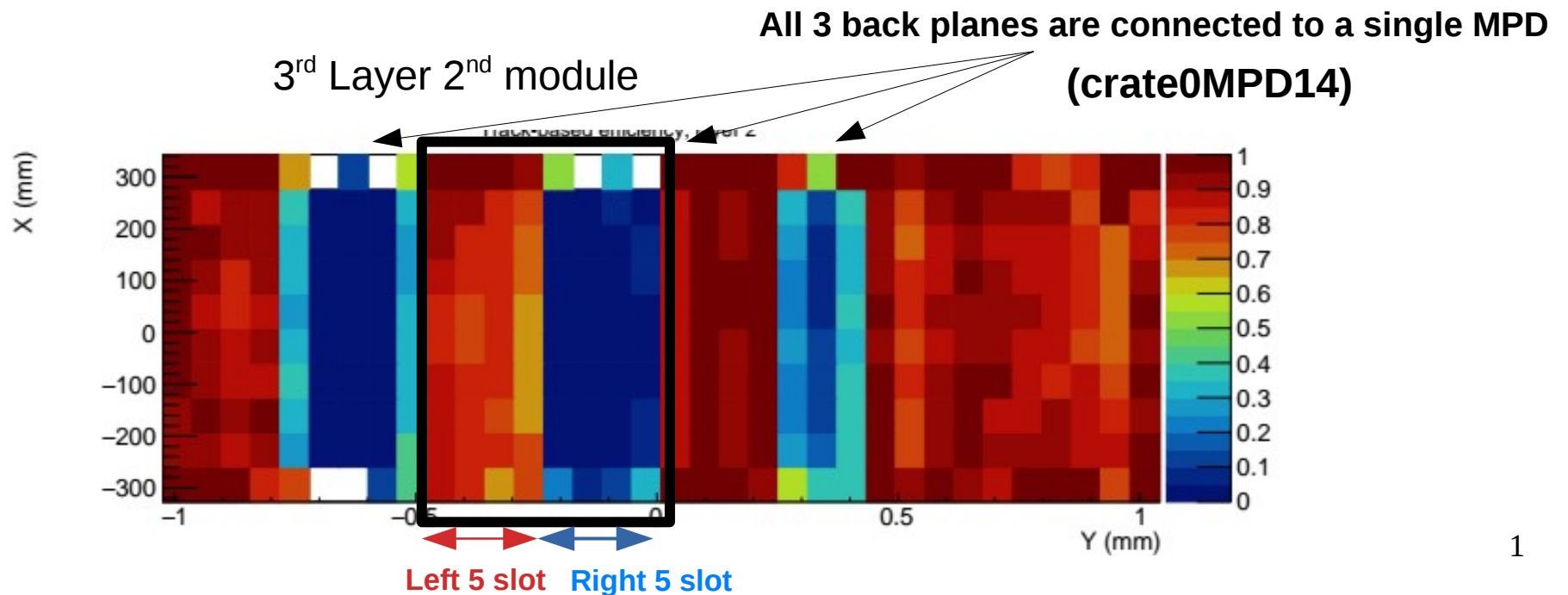


Layer 3 low efficiency issues from EEL cosmic data

Run no: 2069

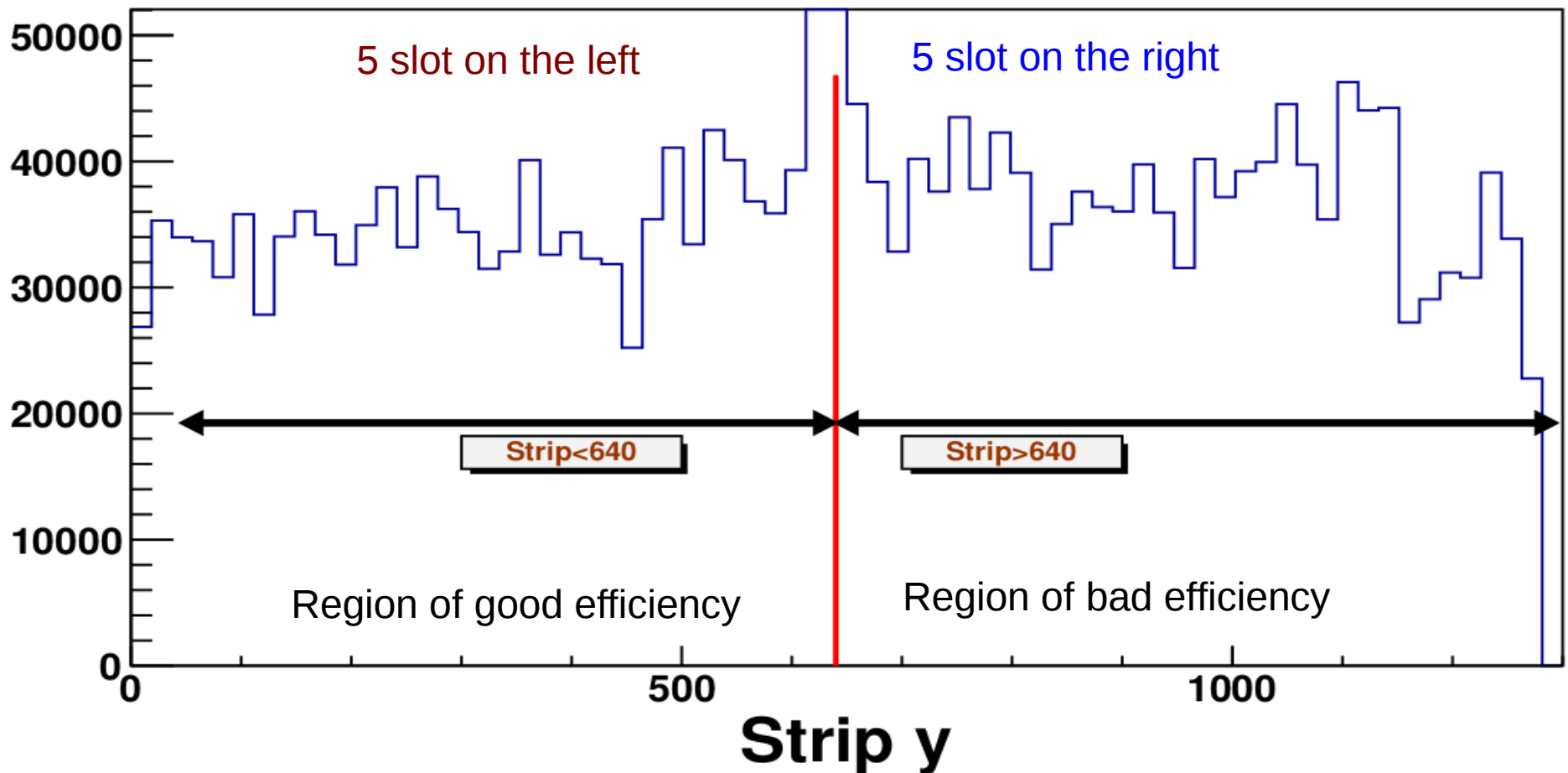
- Investigated low efficiency region further by filling TProfile with 6 bins (one for each sample) with the ADC values of all strips of a given APV card
- Utilized hit root file → 5 sigma cut + c'mode subtraction (Input to Andrew's tracking package)



Layer 3 low efficiency issues from EEL cosmic data

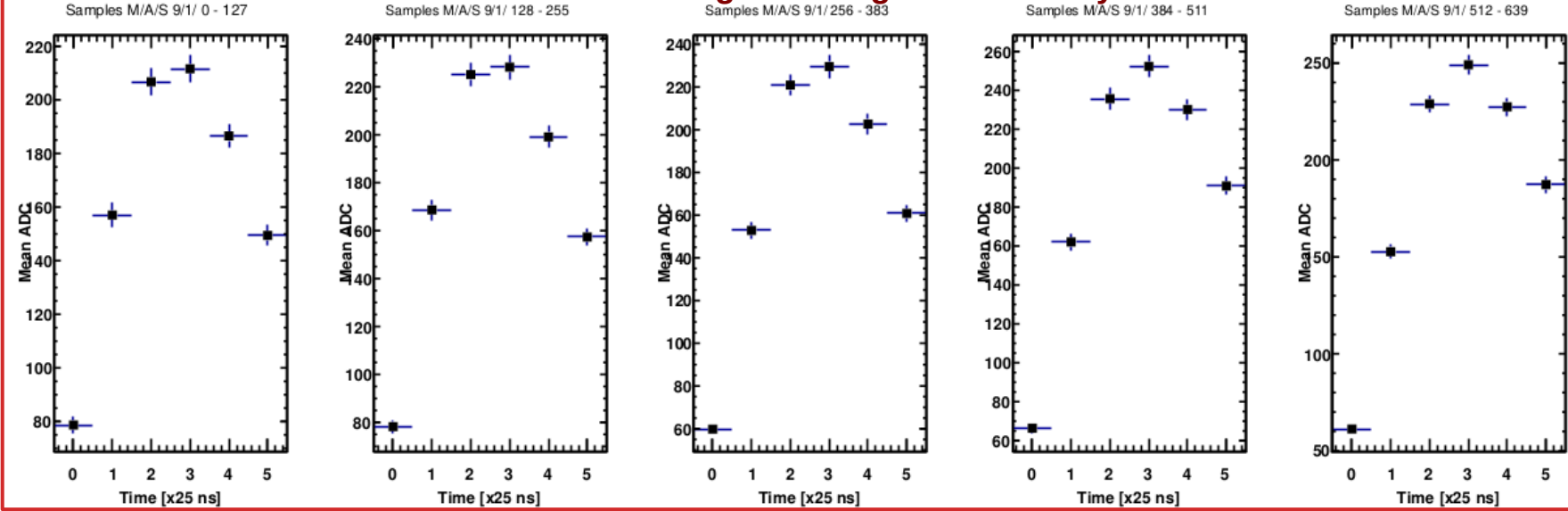
- Strip Y using Hit root file

3rd Layer 2nd module

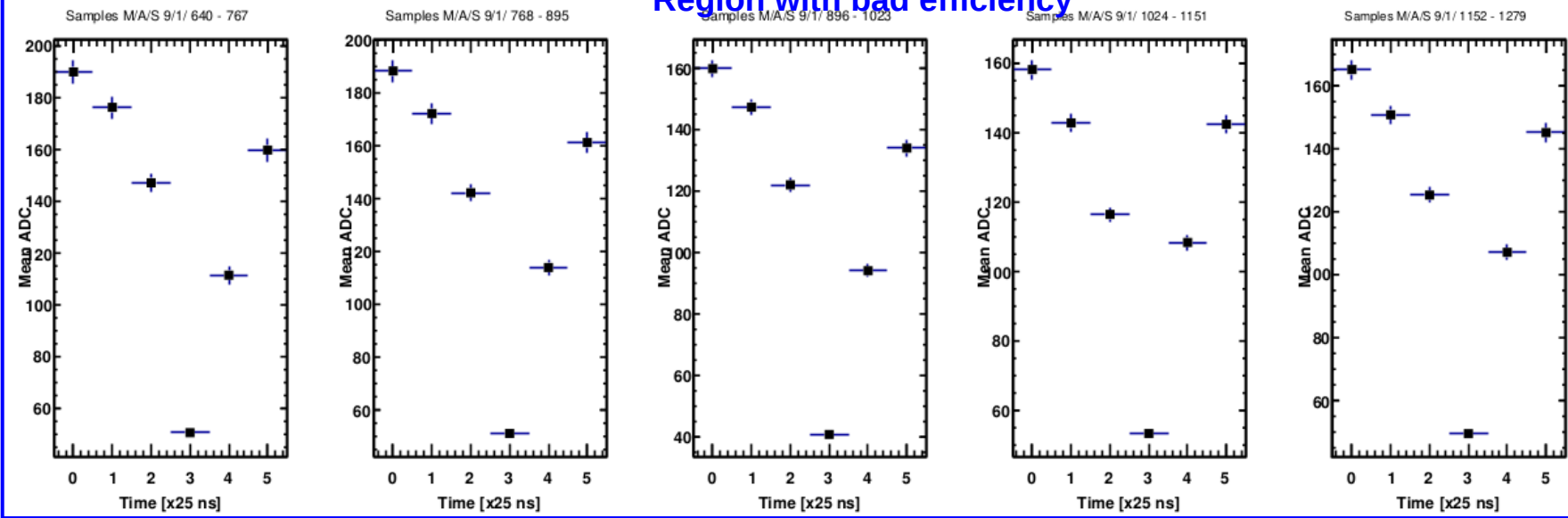


ADC vs time

Region with good efficiency



Region with bad efficiency

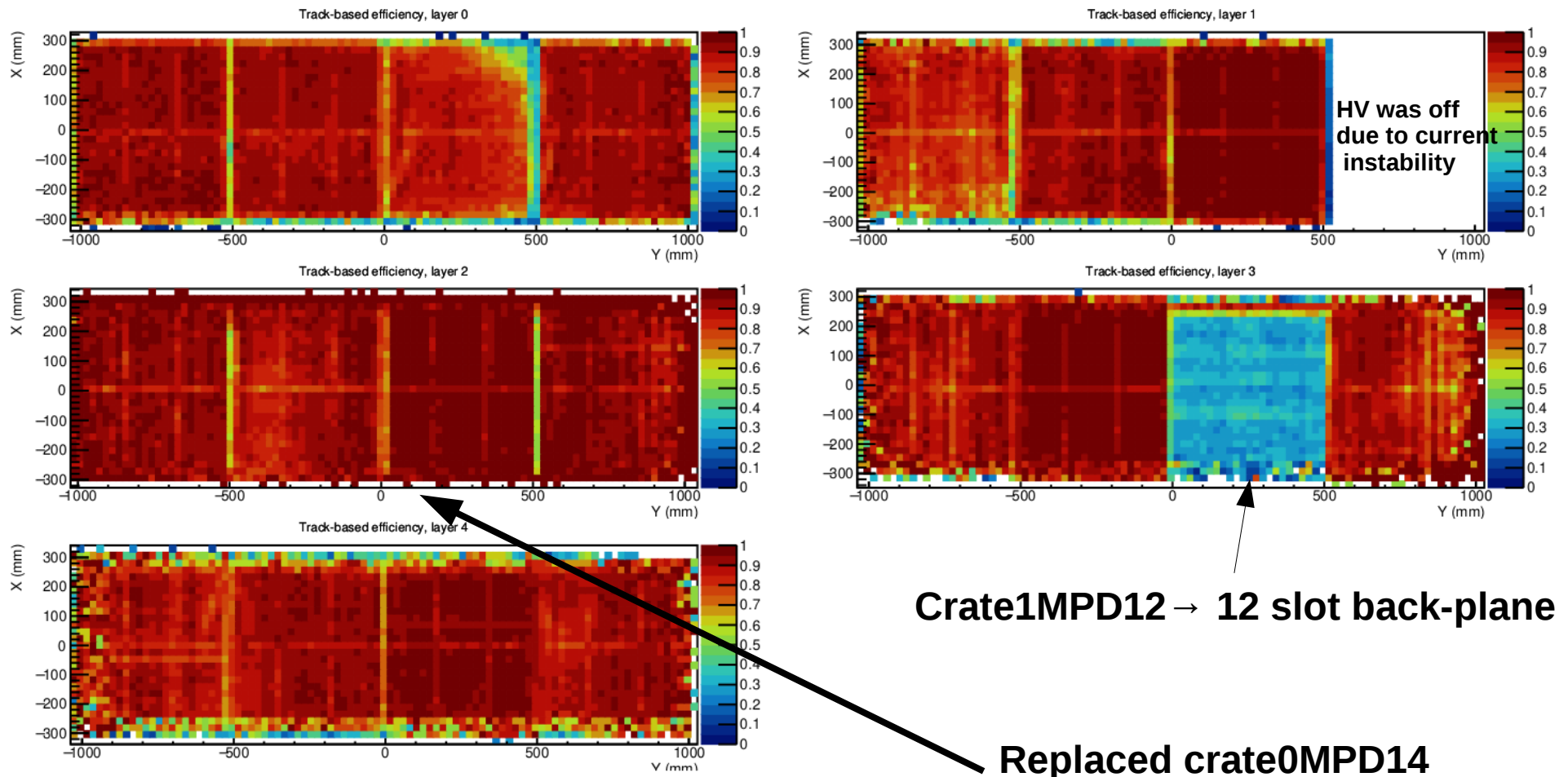


Time sample

Mean ADC → Average ADC of the collected charge

Tracking results with replaced MPD (crate0MPD14)

- Collected ~1.1 M cosmic event with new MPD (Run: 2291): Readout error appeared with **crate1MPD12** for the event 969147
- No readout error seen with replaced MPD



Need more data to verify

Cluster finding in root gui

- Find cluster on X and Y by checking if there are adjacent fired strips. If there are at least two fired strips close to each other, this will be considered as cluster
- For each cluster found in step one, add all the strip ADCs,. this will be considered as the cluster ADC ->> accumulated charge
- Sort the X and Y cluster charge value calculated from step 2.
- Match the X and Y. It will consider Highest ADC on X corresponding the highest on Y , and so on