

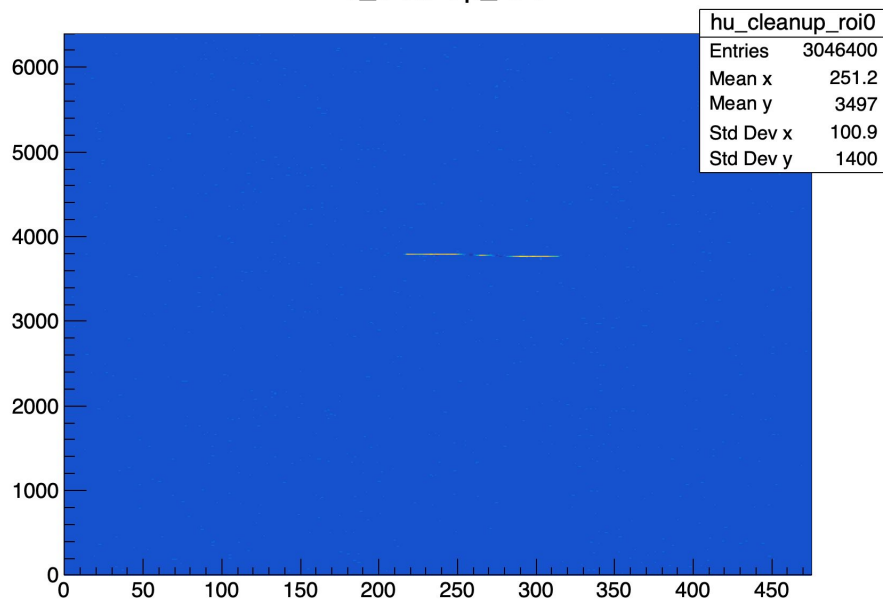


Status report on **DNNROI sigproc**

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MP_th Optimization

hu_cleanup_roi0

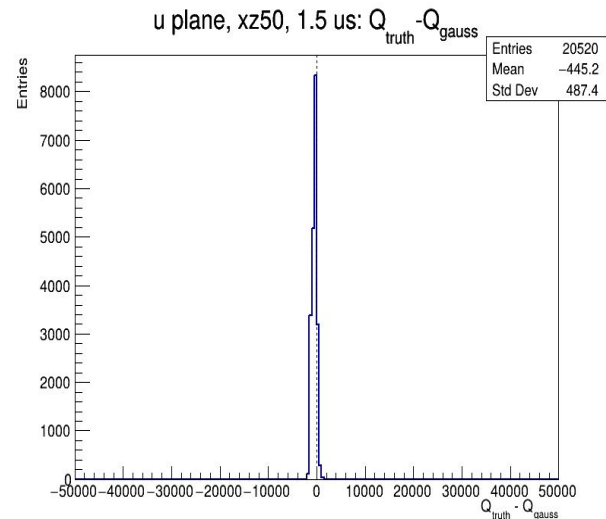
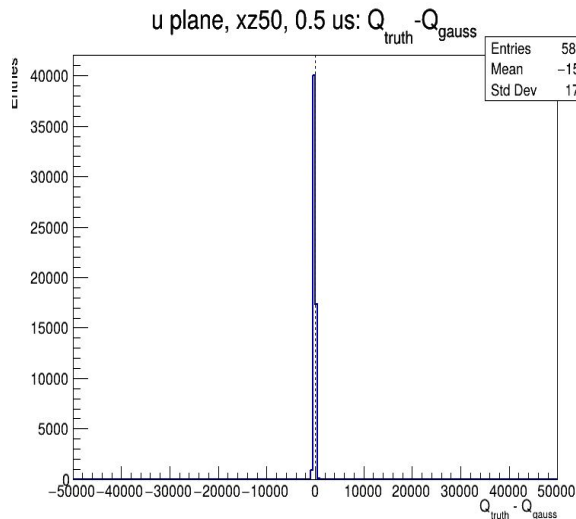
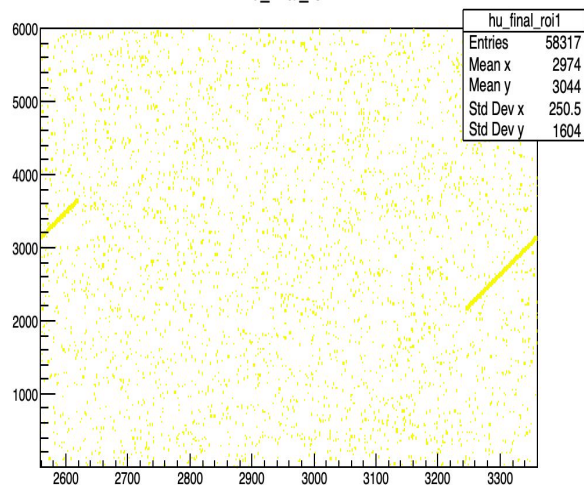


- Included cleanup_roi in the magnify root file
- Looked at the S/N ratio to determine MP threshold
- The noise level for the 1 GeV track is low which means we can use lower MP2 threshold than now
- Currently investigating the cleanup_roi from real data

New test metric requested by Yousen

- Evaluate charge reconstruction locally inside the final ROI for each channel and plane
- Split each ROI into fixed time windows of 0.5 us and 1.5 us, starting from the ROI boundary
- For each window, compare the integrated truth charge from deposplat with the reco

hu_final_roi1



Back Up

PD-HD DNN ROI Workflow

- <https://docs.google.com/document/d/1BhloJsJN32LHJFUiSGQT3O4ibWF33XDm3bbFwyeuy24/edit?usp=sharing>
- Tested with stage1 root files provided by Xuyang
- Need to use recent Wire-Cell with activation of the rms-based NF
- Minor changes to the existing workflow
 - For wcls_input, changed “tick: params.daq.tick” to “tick: 512*wc.ns”
 - Added resampler
 - Added the configuration to the wirecell_dune.fcl

PD-VD LArWC track eval. vs. WC standalone track eval.

- Extracting depo from the geant4 simulated file - working in progress
- Shortened the track length of the WC standalone simulation, and compared the results
- WC standalone result is still worse

