

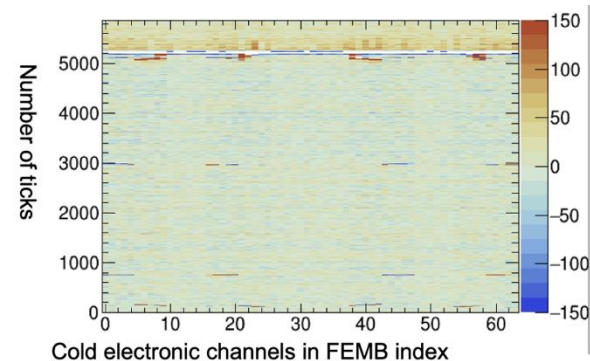
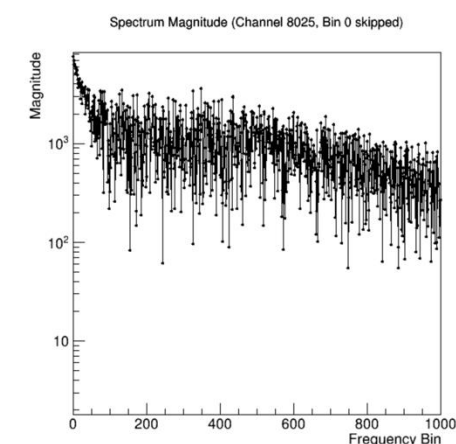
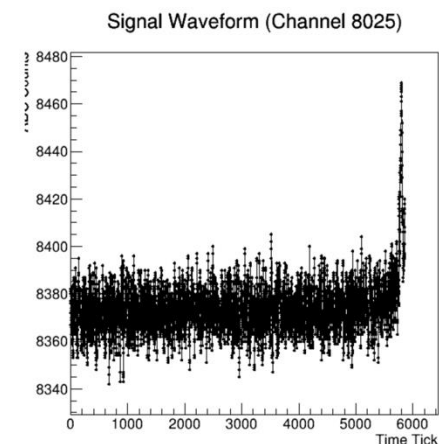
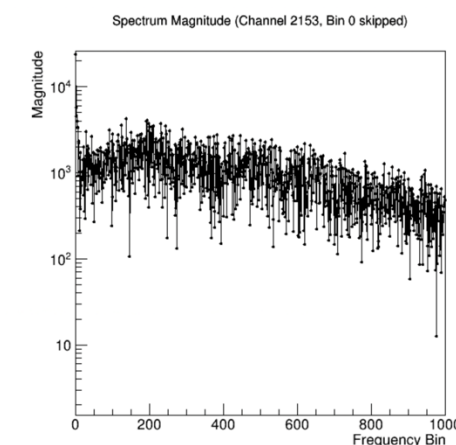
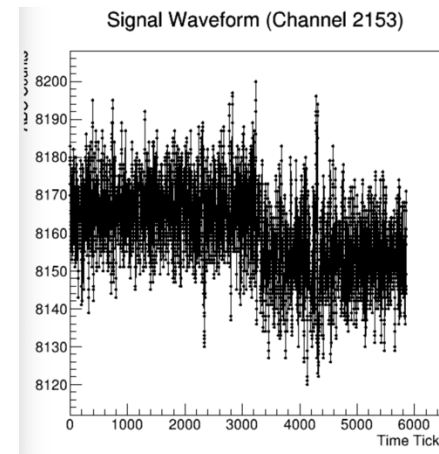
Bad channels

Tags:

- “bad”: require input to define
 - Add a list from Roger and Karla:

7876, 9120, 9125, 9126, 9127, 9306, 9307, 9309, 9310, 9534, 2297, 5379, 5472, 5556, 5607, 5608, 5920, 5921, 6072, 7679, 2580, 2940, 3347, 3758, 3805, 3866, 4722, 9956, 9986, 9987, 9988, 10016, 10018, 10020, 10022, 10024

- “If_noisy”:
 - Only defined in induction plane;
 - update for APA1, because APA1 w is induction and v is collection
 - Some examples here.
- “noisy”: not put into use previously, added now
 - $RMS < 1$ or $RMS > 30$
- “femb_noise”: included (still have some problems)
- In the end all tag will be merged to “bad”



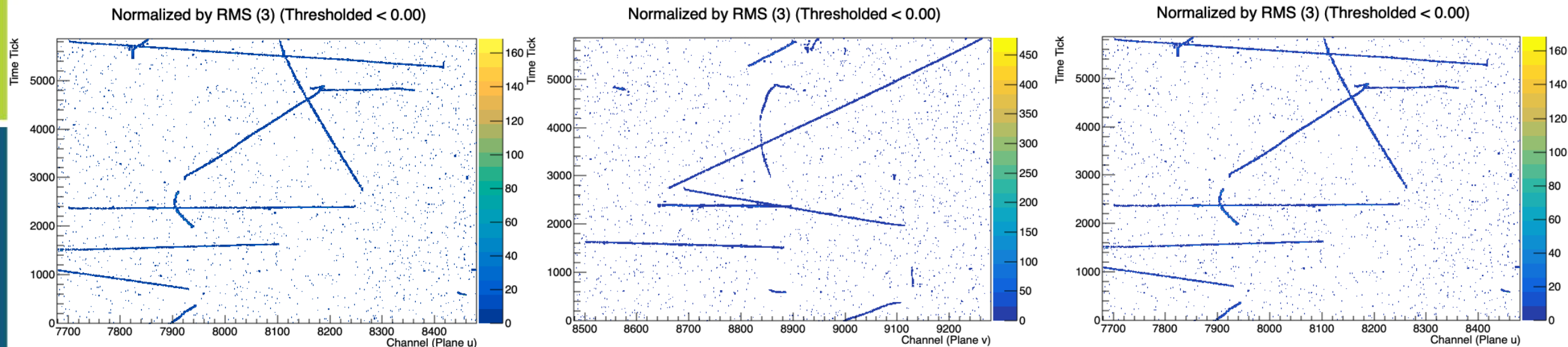
nthreshold

- Threshold: applied on wiener charge, $n_{\text{threshold}} \times \text{rms}$
 - rms is calculated in signal processing
 - Different per channel
-
- Extract the rms vs channel
 - Draw wiener_charge/rms

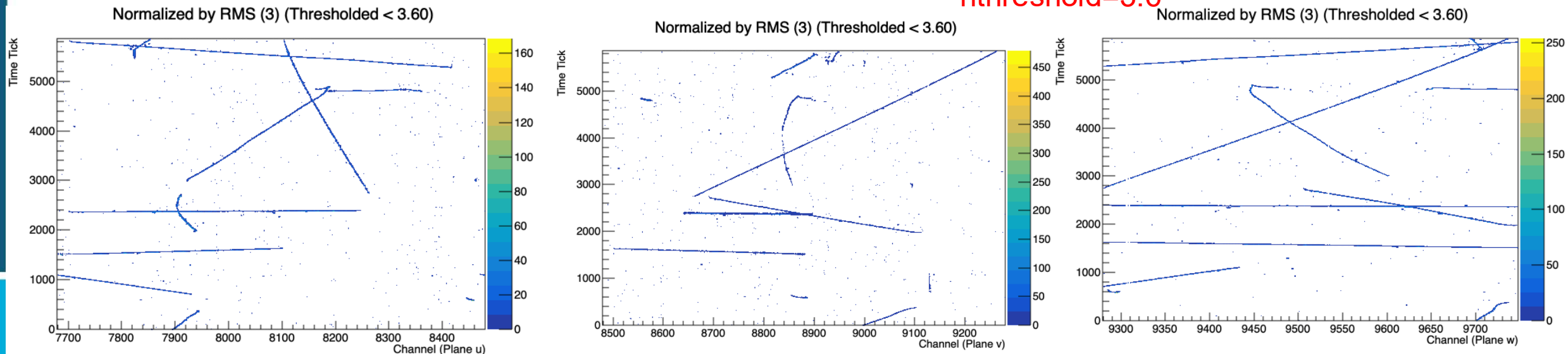
```
// A function that sets up slicing for an APA.
slicing :: function(anode, aname, span=4, active_planes=[0,1,2], n
ret: g.pnode({
  type: "MaskSlices",
  name: "slicing-"+aname,
  data: {
    tick_span: span,
    wiener_tag: "wiener%d" % anode.data.ident,
    charge_tag: "gauss%d" % anode.data.ident,
    error_tag: "gauss_error%d" % anode.data.ident,
    anode: wc.tn(anode),
    min_tbin: 0,
    max_tbin: 8500,
    active_planes: active_planes,
    masked_planes: masked_planes,
    dummy_planes: dummy_planes,
    nthreshold: [1e-6, 1e-6, 1e-6],
    // nthreshold: [3.6, 3.6, 3.6],
  },
}, nin=1, nout=1, uses=[anode]),
}.ret,
```

Compare different threshold

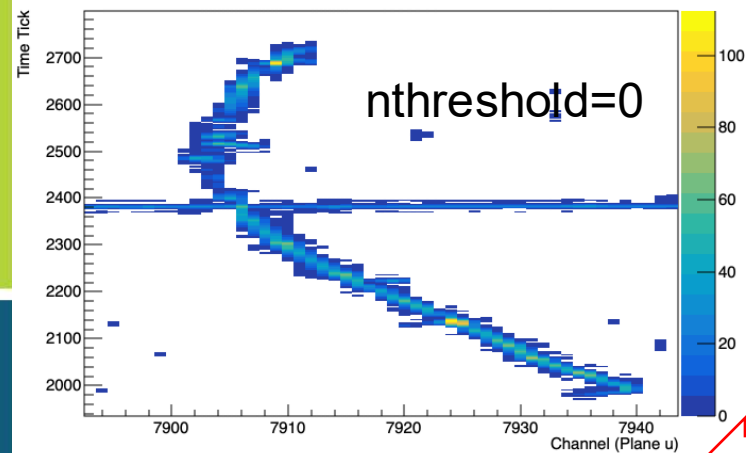
nthreshold=0



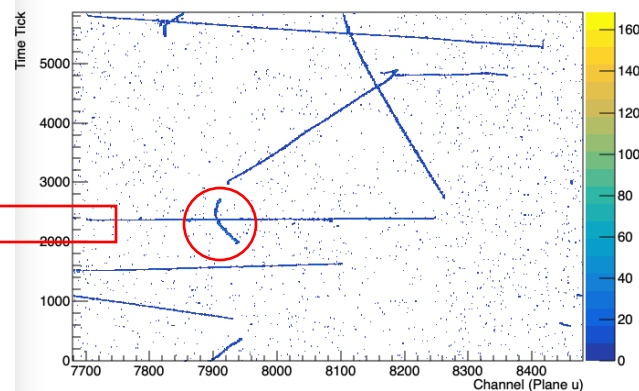
nthreshold=3.6



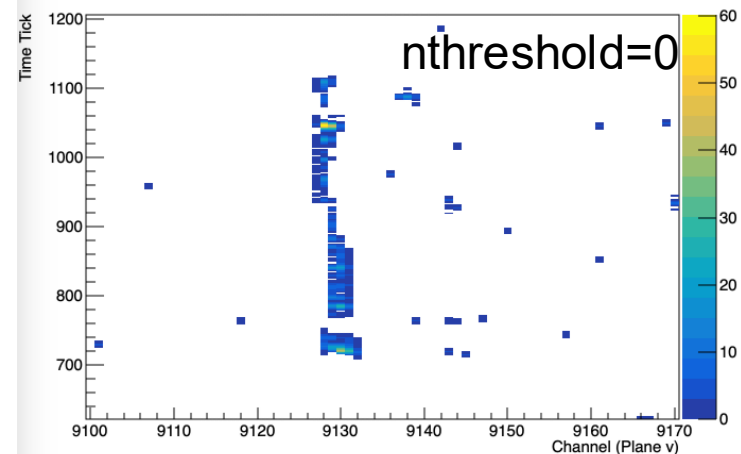
Normalized by RMS (3) (Thresholded < 0.00)



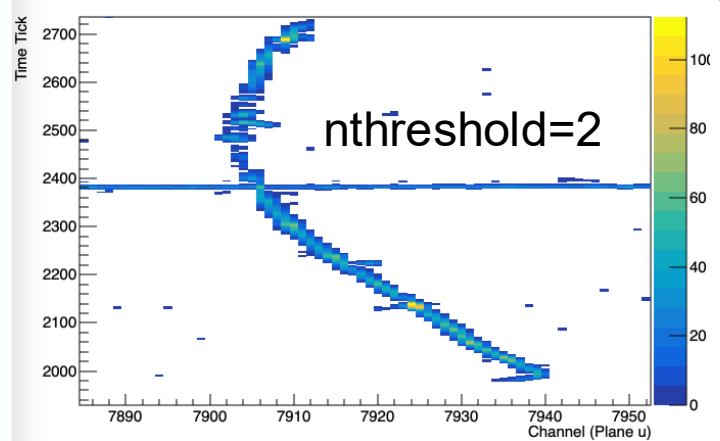
Normalized by RMS (3) (Thresholded < 1.00)



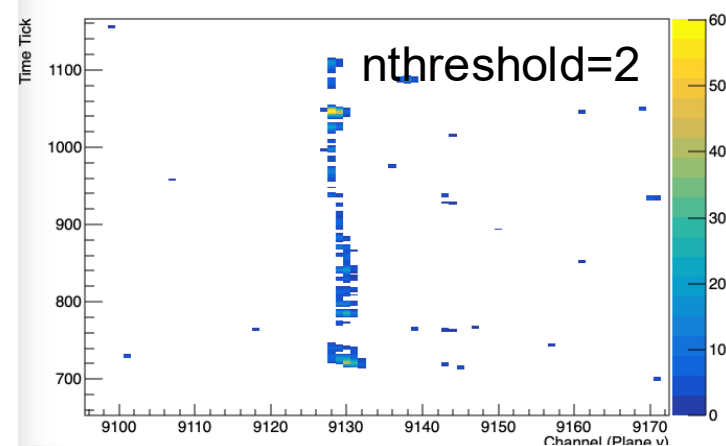
Normalized by RMS (3) (Thresholded < 0.00)



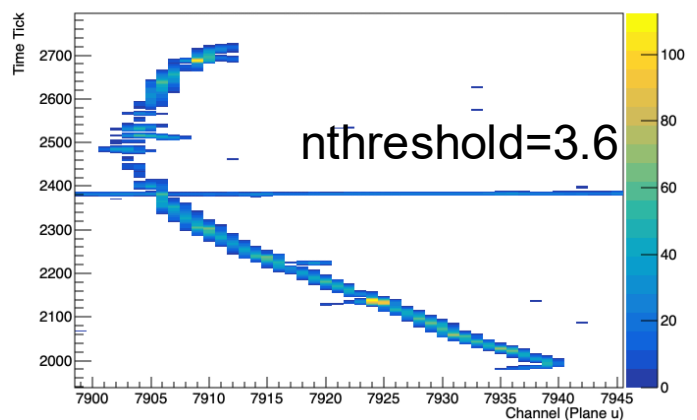
Normalized by RMS (3) (Thresholded < 2.00)



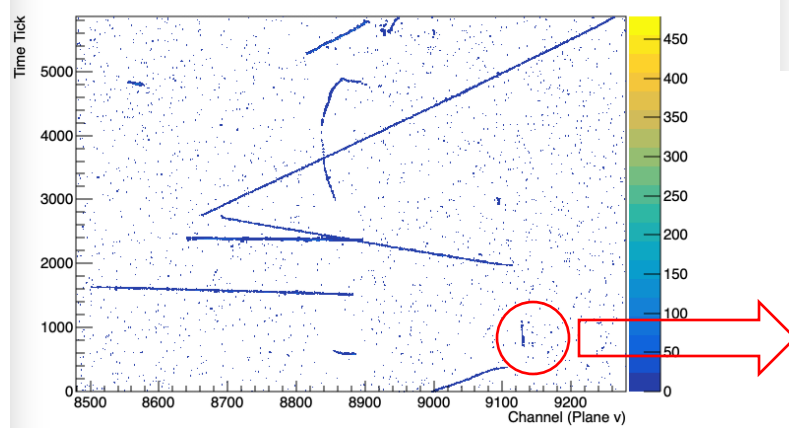
Normalized by RMS (3) (Thresholded < 2.00)



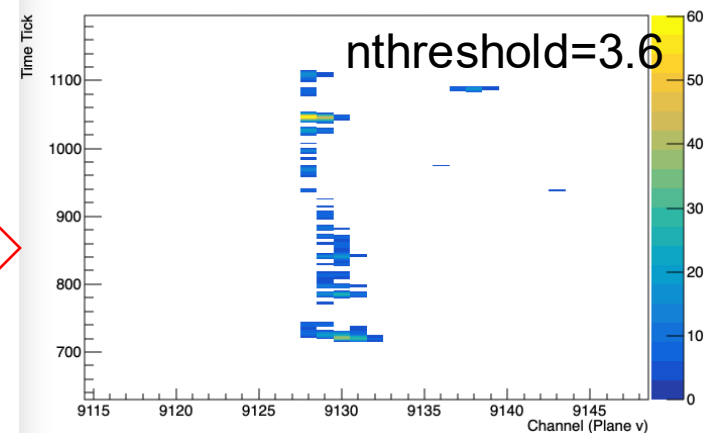
Normalized by RMS (3) (Thresholded < 3.60)



Normalized by RMS (3) (Thresholded < 1.00)

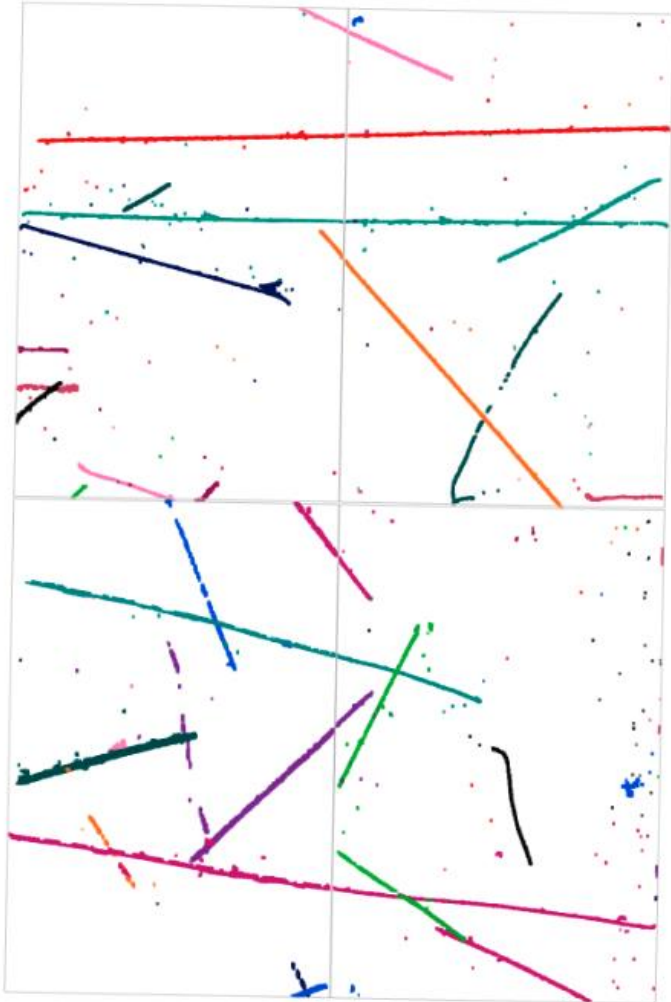


Normalized by RMS (3) (Thresholded < 3.60)



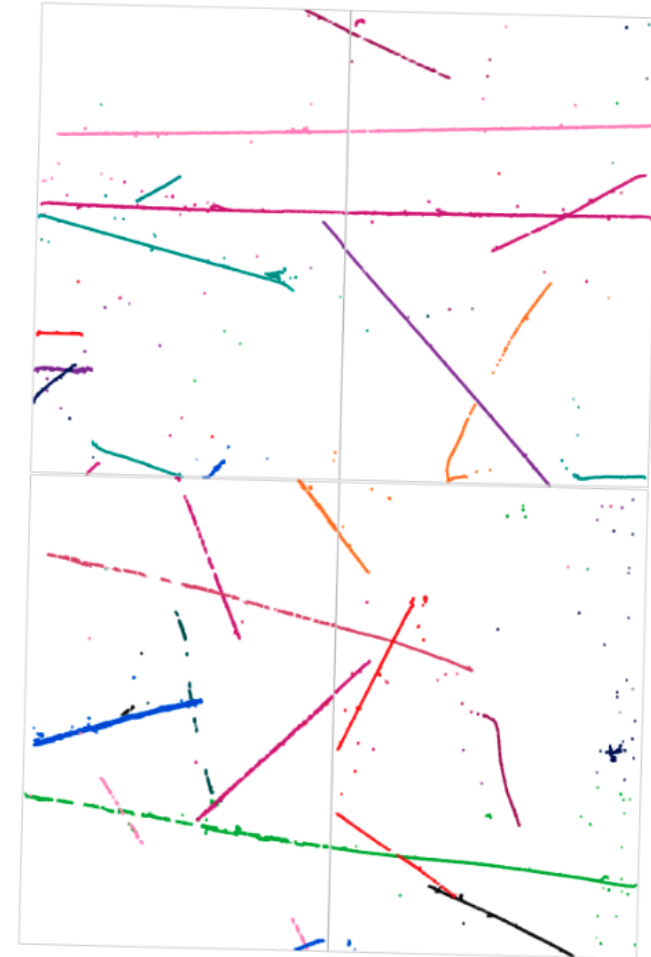
<https://www.phy.bnl.gov/twister/bee/set/d246b44f-cc34-4f10-8e96-18e4ac1e7d1a/event/0/>

nthreshold=0



<https://www.phy.bnl.gov/twister/bee/set/6f9a9a6f-1a87-465c-b427-56374ab2a534/event/0/>

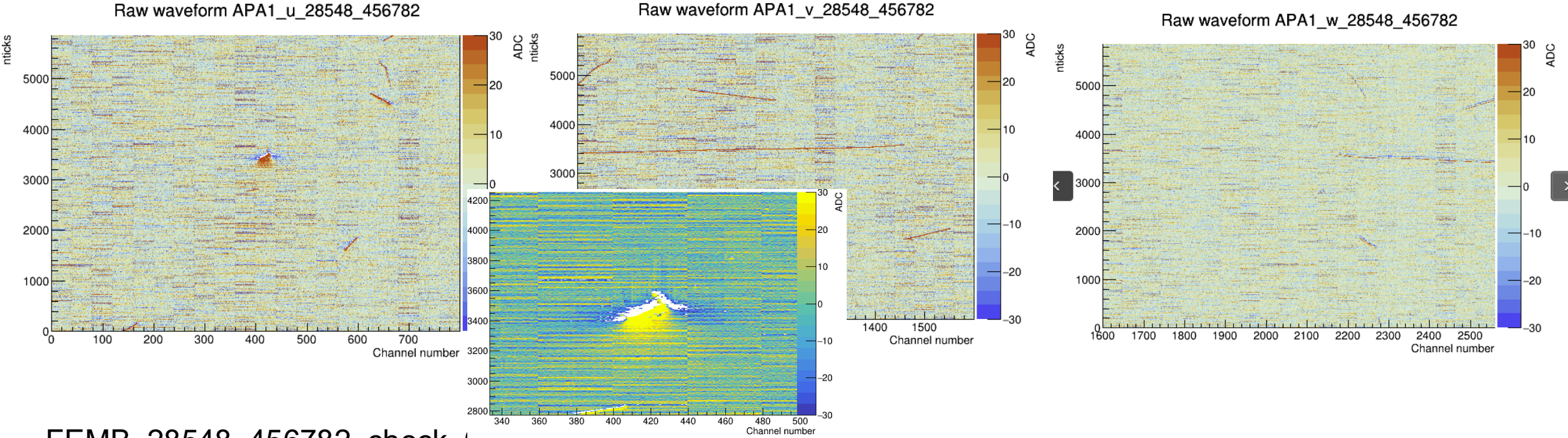
nthreshold=3.6



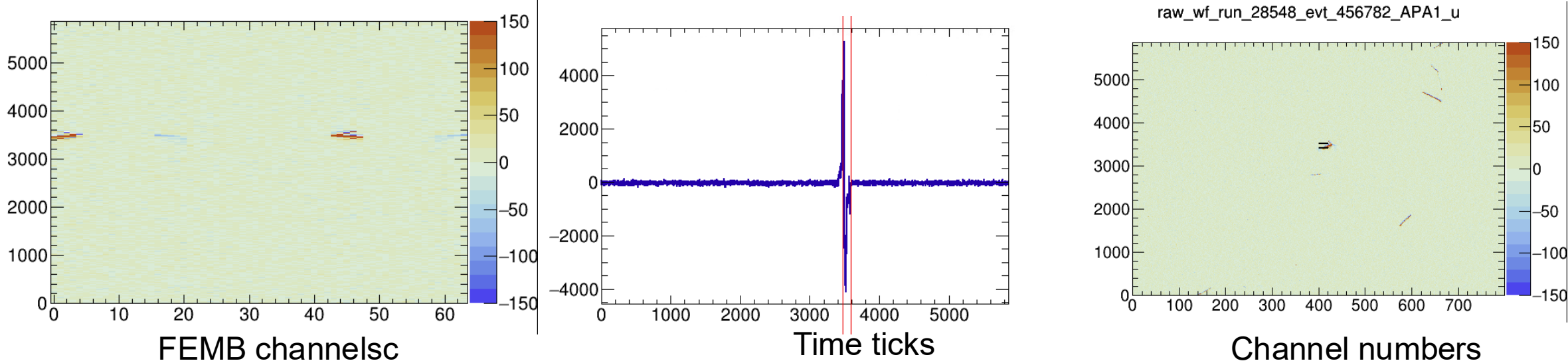
Data is here:

https://github.com/HaiwangYu/wcp-porting-img/tree/main/pdhd/test_cl_th0

Problem found for FEMB noise filter



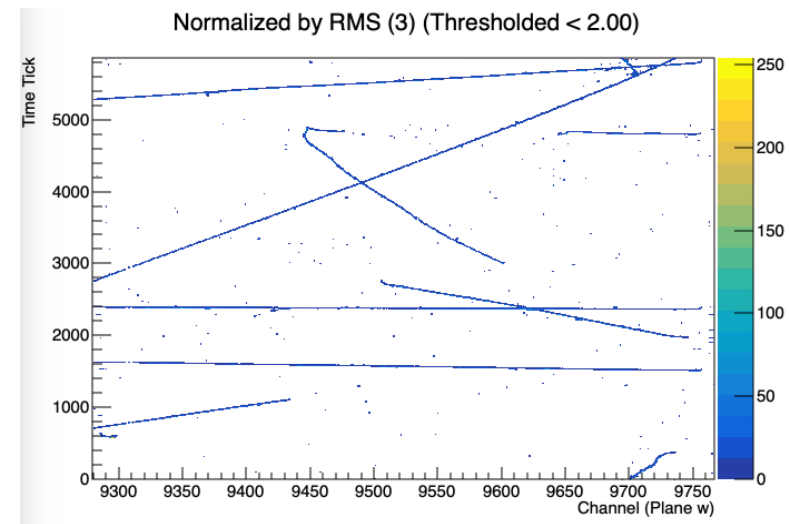
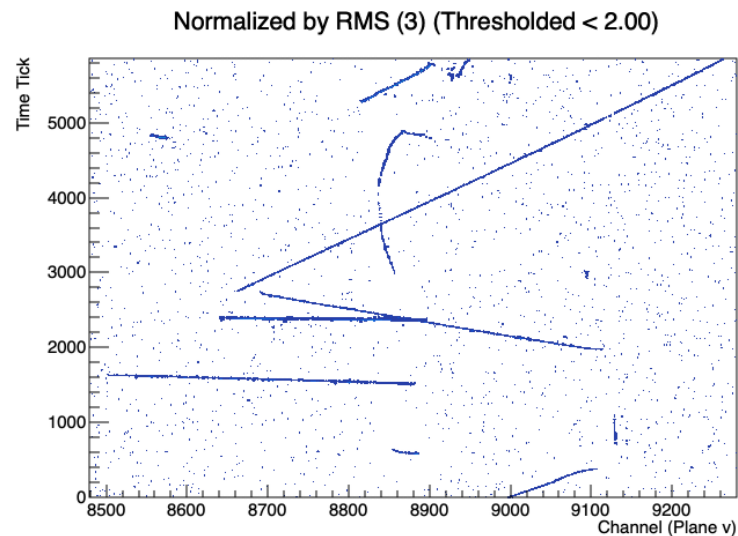
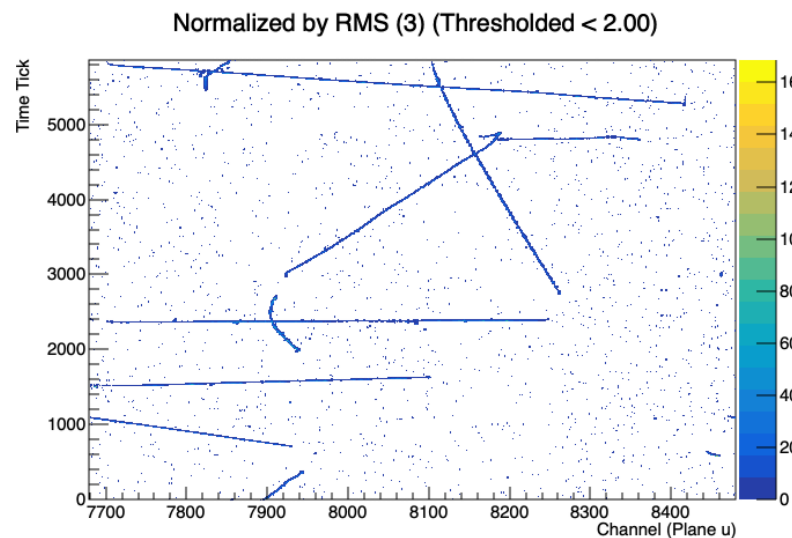
FEMB_28548_456782_check_u_v_w



Backup

Compare different threshold

nthreshold=2



nthreshold=1

