

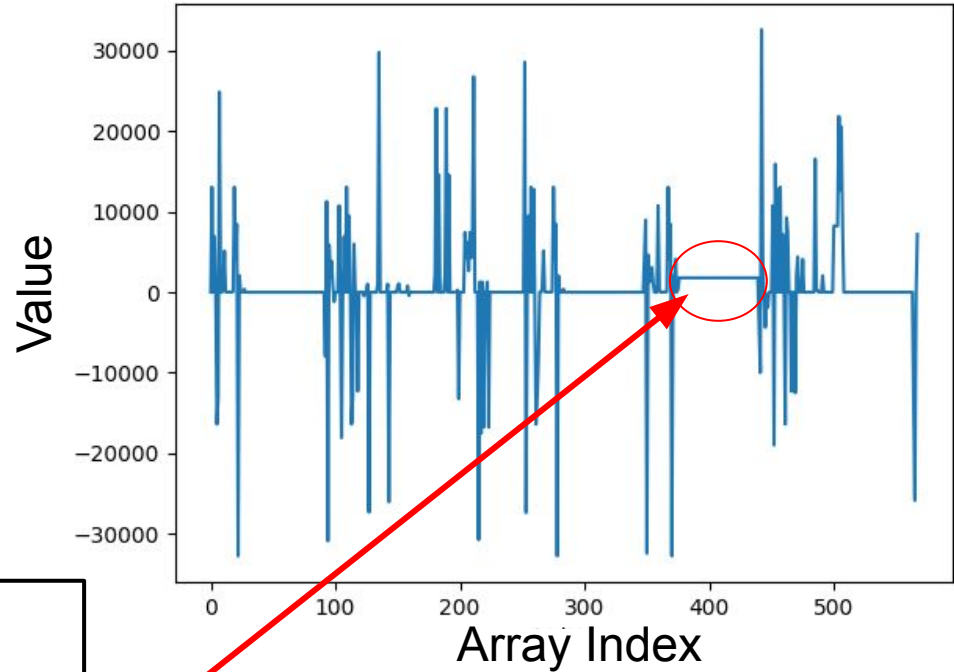
Current Progress

Hardware and Frontend code:

- Data properly logged in .mid output files
 - Messy output
- Adding scripts for ease of use
- Digitized Waveform sample:

```
377-> 1785 1790 1789 1791 1788 1794 1787 1794
385-> 1790 1790 1793 1788 1788 1792 1789 1794
393-> 1788 1790 1786 1791 1788 1794 1792 1788
401-> 1788 1790 1790 1792 1787 1792 1790 1790
409-> 1787 1793 1787 1794 1792 1792 1790 1791
417-> 1789 1792 1791 1793 1788 1790 1789 1790
425-> 1788 1795 1785 1792 1790 1790 1784 1788
433-> 1788 1789 1789 1792 1788 1791 1788 1792
```

All transferred data output



Development Steps (Rough Outline)

- Compiled UKY g-2 teststand DAQ (software only)
 - Uses more recent midas version
- Modified AMC13xx frontend code to edit ODB to match configuration file
- Compiled modified g-2 DAQ on Cornell teststand
 - Connected and communicated with frontend hardware (AMC13s with FC7s or WFDs)
- Swap out hardware to one crate system
- Remove/replace hard coded references to FC7 crate from frontends
- Generate data, check “integrity” of files
- Clean up DAQ for easier user control, package with modified midas, distribute

```
1  <!-- The purpose of this file is to specify what devices are in each frontend crate -->
2  <!-- To declare frontend AMC130x create root node <frontend id="x"> -->
3  <!-- To declare device in slot 'y' of create, create node <slot id="y" type="device_type" -->
4  <!-- Select "device_type" from FC7, WFD, or Rider (WFD and Rider are the same device) -->
5  <?xml version="1.0" encoding="UTF-8"?>
6  <frontend id="0">
7      <slot id="1" type="FC7" />
8      <slot id="2" type="FC7" />
9      <slot id="5" type="WFD" />
10     <slot id="6" type="FC7" />
11     <slot id="7" type="WFD" />
12     <slot id="8" type="WFD" />
13     <slot id="10" type="WFD" />
14     <slot id="11" type="WFD" />
15     <slot id="12" type="WFD" />
16 </frontend>
17 <frontend id="1">
18     <slot id="1" type="WFD" />
19     <slot id="2" type="FC7" />
20     <slot id="3" type="WFD" />
21     <slot id="4" type="WFD" />
22     <slot id="5" type="WFD" />
23     <slot id="6" type="FC7" />
24     <slot id="7" type="WFD" />
25     <slot id="8" type="WFD" />
26     <slot id="9" type="FC7" />
27     <slot id="12" type="WFD" />
28 </frontend>
```

Example crate contents configuration file