

## Instructions on how to use Harley's Data Viewer:

- Prerequisites:
  - A linux device configured to use libxdaq & libncpa.
  - An installation of python.
  - The channelvisualiser.py program is downloaded & present in the libxdaq folder.
- How to use:
  - Make sure the array is connected to the computer.
  - Open a command prompt in the libxdaq folder.
  - Run xstream, piping the output into the python application, such as:
    - `“./xstream.exe –deviceID 0xb1 –uniqueID 0xb1 OBS | python3 channelvisualiser.py”`
- How to operate:
  - Arrow keys up and down correspond to increase & decrease y respectively.
  - Arrow keys right and left correspond to increase & decrease x respectively.
  - Click on a figure to minimize. Minimizing an entire row or column will cause all other rows or columns to grow to fill in the gap. Click reset to undo, and restore all graphs.
  - The smaller the frame differential, the less latency in the visualization, and the smaller the buffer, thus the more ‘real-time’ the program is.
- Upkeep:
  - Source code can be found at <https://github.com/hhgarret/channelvisualiser/tree/main> .
  - Please forward any requests or questions to Harley Garrett of the Applied Acoustics Group at the NCPA, reachable at [hhgarret@go.olemiss.edu](mailto:hhgarret@go.olemiss.edu)