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GUI experience with pyqt

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Outline

- Tools I use

- Example application - Recycler tune read back
  - Python code
  - Demo on writing a gui to
    - Read tune
    - Plot currents

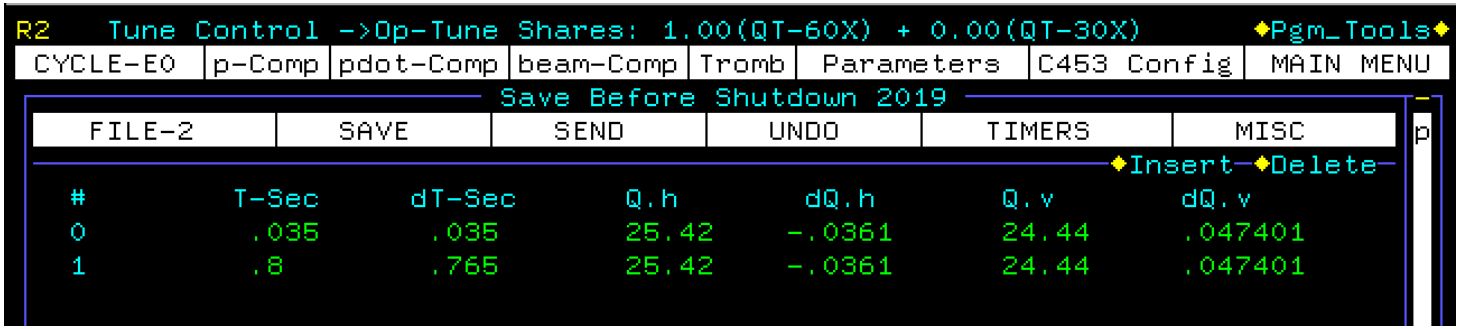
Tools

- Python3
- Pyqt5

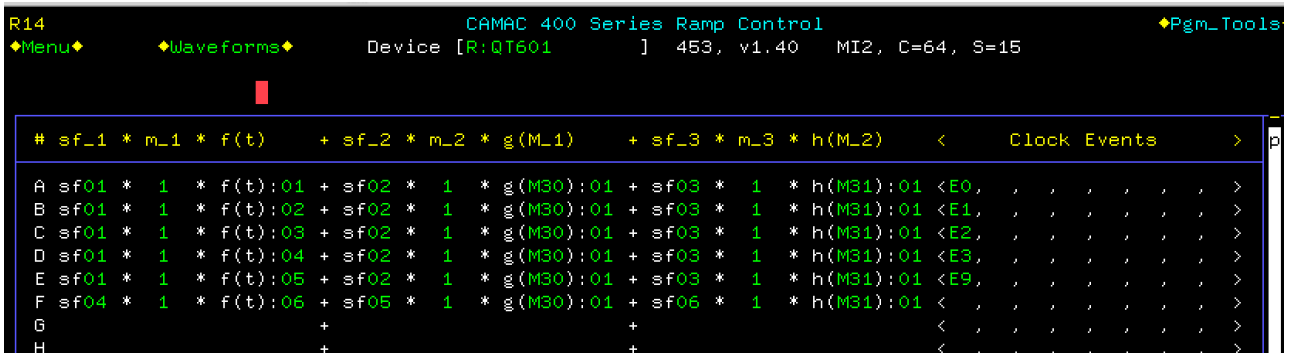
- Qt designer
  - https://build-system.fman.io/qt-designer-download
  - Very helpful in designing the gui layout, buttons etc.

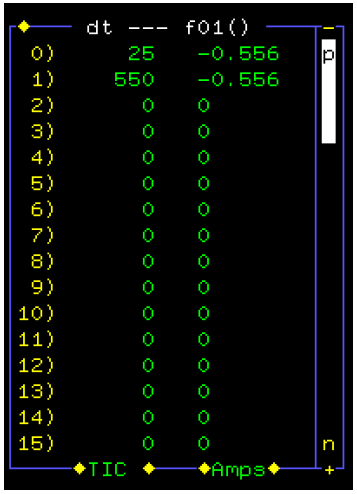
Example application

- Reading/setting the Recycler tune



- Which really means, settings the currents on 9 quads





Example application

- Aim:
  - Write a gui that will let us read the tune and plot the quad currents using matplotlib

- First, need some python code to talk to acnet to get the quad currents
- Second, write the gui code with the help of qt designer

rr_tune.py

- rr_tune.py has
  - update_ramp_list - sets a list of devices
  - read_settings - reads a list of devices
  - qt60 class - class for reading/setting the tune