Directory Tree, program location information Mercurius:

- become camrasdemo usr
- run ~/frb/start_frb.sh bash script to start recording observation programs leading to storage
  - these are the USRP_to_vrt, and VRT_to_filterbank scripts
- Data is stored in: /data/camras/demo/frb
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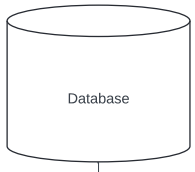
- run check_frb.py with ~camrasdemo/frb/check_frb.py in the same dir you want the processed dir to be created
  - this creates the .h5 candidate files
- run make .png diagnostic plots from the .h5 files: ~/frb/plot_h5.py



Run: check_frb.py

- give it .fil files of the raw data to run on
- Args .fil file names
- other important args but not all
- --dm
  - centers expected dm
- --dmrange
- --display
  - display results in evince
- --threshold
  - detection snr threshold
- --quiet
- --noclip
  - passses -noclip to prepsubband
- skip-processed
  - doesnt rerun pipeline on ones with results
- --time
  - rfifind second to integrate default 30s

Start pipeline: (check_frb.py)

- get filterbank files
- basename of obs
- path
- nchans
- checks if .fil file is already processed
- guesses dm for a few known sources
- makes outidr /process
- moves into outdir

Get ready for Presto

rfifind

- using subprocess, is a presto cmd
- runs the presto command rfifind, with 4 cpus
- identifies strong narrow-band and/or short duration broadband RFI
- creates a mask file where RFI is replaced by median values
- PRESTO programs automatically
- clip strong, transient, DM=0
- signals (turn off using -noclip)

prepsubband

- using subprocces with 4 cpus, is a presto cmd
- a de-disperses the data
- uses RFI mask just made
- output is still a .fil file

prepsubband

single_pulse_search.py

- presto
- Search the data for single pulses with boxcar matched filtering
- If there are very strong pulses in your data, they can look like RFI.
- For those cases, turn off bad-block finding (--nobadblocks)
- threshold used here
- makes candidates file *.singlepulse, there will be a bunch
- outputs ps plots. converts to PDF and might display
-

make_candidates_for_singlepulsefile

- not a presto file
- made by Tammo
- makes .h5 files for the Pulse candidates, using the .fil file and the .singlepulse files
- turn .h5 files into diagnostic .png plots with ~/frb/plot_h5.py

make_candidates_for_singlepulsefile