How to run software?

e10011

**1. Run Readout**

Type ./godaq

code location: /opt/lucid/daq/10.1-008/

run readout: ./godaq

**2. Run Scalers display**

code location: ~/VMUSB/Scalers

run: goscaler

Note: You can use "goscaler" from anywhere

**3. Run Switcher**

"goswitch" from anywhere

**4. Run elog**

code location: /user/e10001/elogsync

Type commands:

elogServer

-run this only ONCE. Running it on two different machines will kill the server

goelog

Start elogclient; can be run multiple times.

**5. Power supply printout for HiRA Si and CsI**

telnet 35.9.56.159 1527

user name : admin

password: admin

Use tab to navigate the menus. Go to Main -> Channels, then Groups->Group 05.

DON'T CHANGE ANYTHING IF YOU DON'T KNOW WHAT YOU'RE DOING!!!

Printout the voltage log on linux

Applications🡪Accessories🡪Take screens shot

“Grab current window”, wait for a second

Click “Take screenshot” and immediately click the HV display window.

**6. Online Data analysis with SpecTcl**

code location:e10001/VMUSB/VMUSBSpecTclSIS

run spectcl : ./SpecTcl

files in /e10001/VMUSB/VMUSBSpecTclSIS/

**vdef-files:** Use Files->Load

**eb, ef calibration:** vdef-files/hira\_ebef.vdef

**de calibration:** vdef-files/run21.vdef

def-, win-files to use:

|  |  |  |  |
| --- | --- | --- | --- |
| Description | def-file (inside def-files/) | win-file (inside win-files/) | Needs vdef? |
| **PID plots** |  |  |  |
| DE-E PID plots (calibrated)  | pid\_DEEF.tcl | pid\_DE\_EF.win | Yes |
| E(EB)-CSI PID plots (calibrated) | pid\_EB\_CSI.tcl | pid\_EB\_CSI.win | Yes |
| E(EF)-CSI PID plots (calibrated) | pid\_EF\_CSI.tcl | pid\_EF\_CSI.win | Yes |
|  |  |  |  |
| **HiRA Si** |  |  |  |
| Hit pattern: EFmaxchannel vs EBmaxchannel  | hitPattern.tcl | hitPattern.win | Yes |
| Summary spectra of DE's (calibrated) | summary\_4mb.tcl | summary\_DE.win | Yes |
| Summary spectra of E's (EF&EB) (calibrated) |  | summary\_EBEF.win | Yes |
| EB summary spectra (calibrated) | summary\_EB\_cal.tcl | summary\_EB\_cal.win | Yes |
| EB summary spectra (raw) | summary\_EB\_raw.tcl | summary\_EB\_raw.win | No |
| EF summary spectra (calibrated) | summary\_EF\_cal.tcl | summary\_EF\_cal.win | Yes |
| EF summary spectra (raw) | summary\_EF\_raw.tcl | summary\_EF\_raw.win | No |
| Summaries for times (DE, EF, EB) | timesummary\_4mb.tcl | No win files | No |
| 1D spectra for all dE, E channels | 1dspectra\_4mb.tcl | No win files | No |
|  |  |  |  |
| **HiRA CsI** |  |  |  |
| Summary of raw CsI energy spectra | csi\_summary.tcl | csi\_summary.win | No |

For online analysis: change local host to **spdaq36**

keep **ring buffer** selected

For offline analysis:

Data Source🡪File🡪**click ringbuffer (very important or the program crashes)**

Runs are in stagearea/complete

**7. HiRA Si Control Software**

code location: ~/VMUSB/ASIC\_control\_E

run : ./CHIP

then

ONLY if the VME crate has been reset, either by software or by powering it off, load the

XLM configurations a.k.a. the bit file. DON’T DO THIS IF THE VME CRATE HAS NOT

BEEN DISTURBED:

1) On the File menu, select XLM configure

2) In the frame that opens at the right of the program, you will have to load a

configuration into each XLM.

3) Set the “crate” slider to 0, and the “type” slider to XLMXXV

4) Set the “XLM” slider to 1

5) push “Pick Load File”, then select “Browse”. You cannot just type the

filename.

6) Select “xlmxxv\_rev518.bit ”

7) The bit file will load into the XLM, which will take some time (10 s to 1 m)

8) If the program crashes, chances are the XLM has locked up and you have to

turn the VME crate off and back on again, and start over.

9) When it has loaded, check the messages in the terminal window. They will

tell you whether the XLM correctly communicated with the motherboards. Make a note if you

saw any errors here but you can continue regardless if there are only a

couple of lines of errors.

10) Repeat steps 3 – 9 for the other XLM.

11)From the File menu, select Load.

12) Select Browse. Again, you cannot just type in the filename

13) Browse to setupfiles, and select: e10011\_Aug4.setup

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**8. Load CsI**

code location: ~/VMUSB/CSI\_disc

run: wish pico.tcl

This will not work if CAMAC crate is off.

Shaper file: e10011.shp

Discriminator file: e10011.dis

(Re)load gains and thresholds by pressing F8.

**9. To Fill in Logbook**

Write in data file size and stop time when you end the run.

Scaler information can be found in:

Files area: ~/VMUSB/Scalers/

run: xemacs run##.scalers (or your favorite editor)

All scaler info (totals) are listed, write them in the logbook under the appropriate columns