



HOW TO MONSTER25

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DAQ :

Starting DAQ :

- daq_start run\$run
- Go in room 110 and start cycles (See section « **Starting cycles** » below)
- Print Counting rates (shift + Impr ecran and saved in Images folder)
- Fill elog and add the print <(-_-)>



Stopping DAQ (when cycles are finished (check red light on control computers)):

- daq_stop

In case DAQ is closed :

- ssh -XY [faster@192.168.0.1](#) (password : b1envenue)
- Go to folder ~/MONSTER25
- Type faster_daq_shell
- Bottom window : see « Starting DAQ » section above

In case visu (RHB) is closed :

- Open a terminal in [faster@ipntdmfaster](#) machine
- Go to MONSTER_RHB/ and type : « RHB -r »

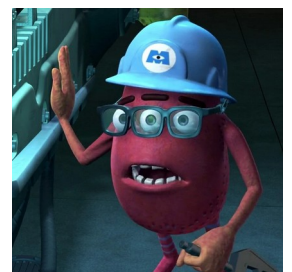
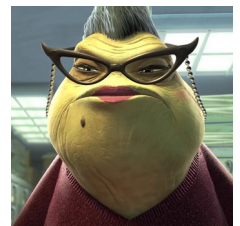


Starting cycles:

- Type in automate computer : « VR(11)=1 »
- Press validation button on automate
- Verify that the cycle starts

Examples of things to check regularly :

- Lights in room 110 are off
- Plastic and MONSTERS counting rates are normal (**m71=0 always**)
- No detectors have tripped (HV computer, instruction to connect on elog) (**m71 has no voltage**)
- The cycles are running smoothly
- Room 110 temperature below 25°C
- Germaniums are cold (around 30 Ohms on cooling automate room 110)



How to run analysis routine :

```
cd MONSTER25_ROOT/nearlineanalysis/  
snakemake --rerun-incomplete --cores 8 --local-cores 8
```

How to convert a run :

- Go to analysis desktop (second one)
- Go to MONSTER25_ROOT/
- Put run file name in filename.dat

example for run 4 : two .fast files in ./data/run_4.fast

In filename.dat :

```
./data/run_4.fast/run_4_0001.fast  
./data/run_4.fast/run_4_0002.fast
```

- Type ./faster2root to convert.

Output will go to MONSTER25_ROOT/data/root_files/

- Merge files of a same run with hadd

example : « hadd run4_raw.root run_4_* »

- Remove non merged files

example : « rm run_4_* »

How to nearline analyse a run :

- Go to MONSTER25_ROOT/nearlineanalysis/
- Add the run in the Sorter.sh file
- type bash Sorter.sh in terminal
- output goes to MONSTER25_ROOT/data/root_files/sortedruns/

Have fun analysing ! 8D

In case of a problem call one of the numbers above.

Network, PC, directories

We work on faster network (local network, 192.168.xx.xx)

DAQ PC : 192.168.0.1 (ls-alto-nuball2)

VISUalisation PC : 192.168.0.2 (ipntdmfaster)

Data server : 192.168.0.5 (ipntdmdata) → mounted on both DAQ & VISU PS as /data_tampon

Folder organisation for MONSTER25 :

(1) on DAQ PC : */home/faster/MONSTER25*

- a) in */cfg* directory : all the configurations on the daughter_boards
- b) *data* symlink connects to the data server (data_tampon)
- c) *trunk_V2_test.cfg* is the definition of the soft trigger (important for RHB and for what will be written on disk)
- d) *.RHBrc* defines what are the inputs for RHB and where RHB should spy, **BUT RHB should not be used on DAQ PC !!!**