1. Overview of drill computer setup

## Start-up script is **~/drill-bootstrap.sh**

* Sets static IP address to 10.2.3.10
* Synchronizes wall clock
* Launches Aslak’s & JCs scripts that communicate with the (1) load cell, (2) winch encoder (depth counter) , and (3) drill. All values are set in the local REDIS server.
* Launches drill control GUI that interacts with drill through the REDIS server.

## Old 2018/2019 drill control software

To launch the older drill control software used in 2018/2019, run the follow command in the terminal:  
 python3 ~/surface-unit/legacy/drill-surface/drill\_surface.py

## Logs and drill plots

Logs are always backed up on the EGRIP “bob” server: [10.2.3.1/public/drill-logs](smb://10.2.3.1/public/drill-logs)

Daily and sub-daily plots are generated automatically by “bob” and stored in: [10.2.3.1/public/drill-logs](smb://10.2.3.1/public/drill-logs)/plots  
  
To plot daily logs yourself, run:

python3 ~/surface-unit/logging/plot-log.py /mnt/logs/drill.log.YYYY-MM-DD HOUR\_START HOUR\_END PLOT\_ORIENTATION /output/path

e.g.:

python3 ~/surface-unit/logging/plot-log.py /mnt/logs/drill.log.2022-07-13 8 24 1 ./

## Scripts that are run on regular interval (crontab -e)

See crontab file for details; in short, it synchronizes the computer clock and drill log with “bob”: <smb://10.2.3.1/public/drill-logs>.

## **Software repository**

All drill computer software (including logs plotter) can be found at:

<https://github.com/nicholasmr/surface-unit>  
or  
[smb://10.2.3.1/public/EGRIP%20drill/software/](smb://10.2.3.1/public/EGRIP drill/software/)

## If unable to resolve hostnames

Move “dns” forward (imeadiately after “myhostname”) in /etc/nsswitch.conf