

# Insitu Cavity AMC Testing

## Moving files for testing

- First move the yaml files from mcclogin to the cpu
  - login into acclegr
  - `scp <UnixLoginName>@mcclogin:/afs/slac/g/lcls/users/BPM/LCLS_II/BPM/software/lcls2-py-scripts/insitu_cavity.tar laci@cpu-xxxx-xxxx:/data/cpu-xxxx-xxxx/`
- ssh on to the cpu `ssh laci@cpu-xxxx-xxxx`
- cd into the data folder and cpu `cd /data/cpu-xxxx-xxxx/`
- Untar the compressed file in /data/cpu-xxxx-xxxx/
  - `tar -xvf insitu_cavity.tar`
- Change directory into the new folder `insitu_cavity/`
- The ip address needs to be updated in the NetIO (Line 84) section of `000TopLevel.yaml` found in
  - `cavity_yaml/AmcCarrierBpmCavityDDV1_project.yaml/000TopLevel.yaml`
    - The last digit in the ip address to be updated to match the shelf number being tested (Line 84)
      - Slot 2 -> 10.0.1.102
      - Slot 3 -> 10.0.1.103
      - Slot 4 -> 10.0.1.104
      - Slot 5 -> 10.0.1.105
- The file permissions may need to be changed for the launch script for it to be executed
  - `chmod u+x launch.sh`
- Run the the launch script. The `-b` flag may need to be updated to reflect the correct bay
  - `./launch.sh cavityTakeData.py -Y cavity_yaml/*_project.yaml/000TopLevel.yaml -D cavity_yaml/*_project.yaml/config/defaults_cc.yaml -b0 -nl -d ./data/`
  - **\*\*This may need to be done twice to set the registers**
  - Once the script completes it will make a folder in the local /data directory in the current working directory.

## Copying made files for analysis

- From acclegr. Copy the output files to the BPM data directory
  - `scp -r laci@xxx-xxxx-xxx:/data/xxx-xxxx-xxx/insitu_cavity/data/<filename>/ <UnixLoginName>@mcclogin:/afs/slac/g/lcls/users/BPM/LCLS_II/Data/`
- From here see [Cavity AMC Testing](#) for the rest of the testing procedure.