

CG-1D Neutron Imaging Checklist

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We recommend that you discuss your experiment with the instrument team several weeks before your beam time.

PI: PROPOSAL CONFIRMATION (MUST COMPLETE 3 WEEKS BEFORE BEAM TIME. ACCESS YOUR PROPOSAL USING THE IPTS SYSTEM. SEE http://web.ornl.gov/sci/iums/ipts/)

- \Box Confirmed complex (adding only new complex, and including composition)?
- Confirmed samples (adding any new samples, and including composition)?
- Confirmed need for lab space?
- □ Confirmed experiment team that will be present at beam time (add any new members)?
- □ Confirm experiment equipment and/or sample environment?

PI: ENGINEERING & EQUIPMENT SAFETY

- Provided all safety documentation for user provided equipment *immediately*?
- Shipped/delivered all user provided equipment at least 2 weeks prior to beam time for electrical and safety inspection?
- □ Answered all safety related questions through IPTS?
- Ensured that sample environment requested equipment is available and compatible with experiment/beam line?
- □ Written a JHA for hands on work at HFIR?

ALL PARTICIPANT ACCESS * (MUST BE COMPLETE BEFORE 1ST DAY OF BEAM TIME)

- Received training e-mail from user office (<u>neutronusers@ornl.gov</u>)?
- Completed online training if assigned? ORNL training website: <u>https://learning.ornl.gov/Saba/Web/Main</u>
- □ Scheduled onsite training and tour for HFIR access?
- Followed attached procedure to access CG-1D data?
- □ Followed attached procedure to access CG-1D analysis computer?

*PI is responsible for ensuring that all proposal participants have these five steps before the 1st day of beam time.

Sample Shipping and/or Handling at HFIR

Your samples MUST be confirmed in IPTS before shipping

Attention: Kristin Nevius Special requirements (like freezer) To: Neutron Sciences User Sample IPTS # XXXX Oak Ridge National Laboratory / HFIR Site BLDG 7972 DP1 Oak Ridge, TN 37831

IF you prefer to bring your samples, please go first to the SAMPLE MANAGEMENT DESK located in the Cold Guide Hall and work with Kristin and/or Brian to have all your samples labeled with an ITEMS barcode before proceeding to the beamline.

HOW TO ACCESS IMAGING DATA

Step 1: Create an XCAMS account

If you have not done so, please create an XCAMS account using the following link: <u>https://xcams.ornl.gov/xcams/groups/prpsl_user/index.shtml</u> ORNL staff: your XCAMS = your UCAMS, read instructions carefully please.



Step 2: Request access to HFIR data

Visit the following link to request access to HFIR data: https://neutronsr.us/accounts/request.html

You will receive an email confirming your request has been approved.

Step 3: Connect to the HFIR Data Storage Server

Using SFTP (Secure File Transfer Protocol), connect to the **analysis.sns.gov** If you are not familiar with command lines on a terminal window, there are free SFTP software packages available (you can google "SFTP Client" for example).

The following is a series of screenshots showing you how to connect to the server using FileZilla.

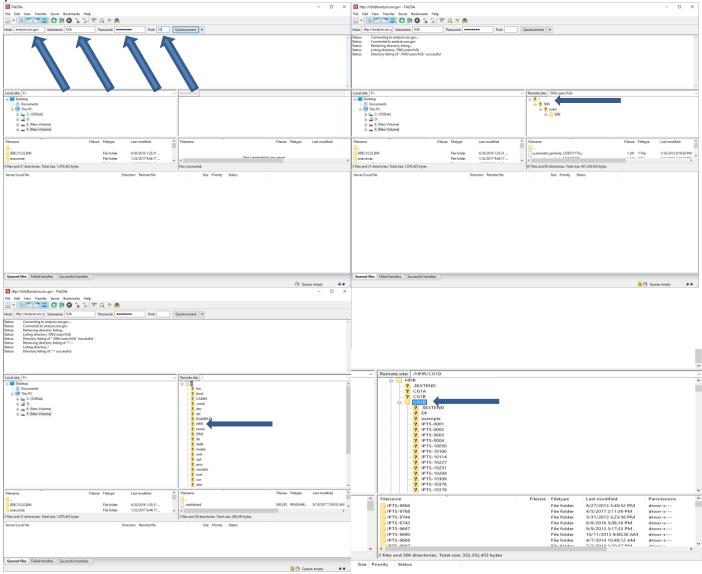
analysis.sns.gov is the host/server name.

Username is your xcams user name.

Password is your xcams password.

Don't forget to put "22" in the Port box. Then, click "Quickconnect".

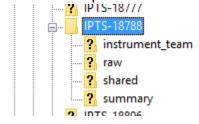
Go to the upper directory "/", then expand "HFIR", then "CG1D", and you will see the list of proposals where your data sit.



Step 4: You're connected!

AFTER your experiment has begun, your data will transferred automatically to analysis.sns.gov if you are using the CCD or sCMOS. Your local contact will transfer the data collected with the MCP.

Here is an example of the structure of your IPTS folder:



If you want to exchange data, data analysis or documents with the Neutron Imaging Team (NIT), you will need to use the "shared" folder, also located in your IPTS folder.

HOW TO ACCESS THE CG-1D ANALYSIS COMPUTER

Step 1: Email your XCAMS ID to Lee Anderson (<u>andersonjl@ornl.gov</u>) and request access to the CG1D-analysis computer. Await confirmation.

Step2: On a PC, go to: >Start menu >All Programs >Accessories >Remote Desktop Connection

Step 3: Connect to the computer <u>CG1D-analysis.extranet.ornl.gov</u> In the user name box, please use <u>extranet\XCAMS</u> (using your individual XCAMS id and password).



Once you have access to the data analysis computer, you will need to transfer your data from the HFIR data storage to the data analysis computer (if you have not done so already). To do so, utilize Cyberduck, Filezilla or WinSCP, all available on the analysis server desktop. We asked that you do not use more than 50 GB of space as this server is shared by all of our imaging users.

To begin data **reconstruction**, open the **Octopus** program on the desktop. Instructions/review of the program can be found in the Octopus Manual pdf on the desktop. Once you have reconstructed your data, you may use **VolView** to visualize your reconstruction. **Data analysis is performed using iMARS**. If there is a tool that you need implemented in iMARS, please discuss it with Hassina Bilheux.