

We are here to help!



Michel Fodje
Senior Scientist,
Beamline Responsible

Shaun Labiak
Scientist

Kiran Mundboth
Associate Scientist

Kathryn Janzen
Associate Scientist

Scott Colville
Support Scientist

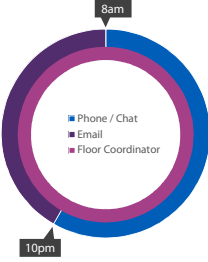
Denis Spasyuk
Industrial Scientist

Joel Reid
Industrial Scientist

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How to Reach Us

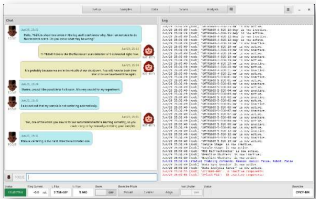


8am

10pm

■ Phone / Chat
■ Email
■ Floor Coordinator

Phone / Chat




Email: cmcf-support@lightsource.ca

Floor Coordinator: 306-657-3836

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User Responsibilities



Only persons trained for remote control and appearing as team members on a valid session permit are allowed to operate the beamline during a remote session. To be permitted to operate the beamline remotely, you must:

1. Register as a CLS User with the CLS User Portal.
2. Accept the User Agreement on your CLS User Portal dashboard.
3. Complete the Remote Beamline Specific Orientation with CMCF staff and confirm that you received the training.
4. Appear as a team member for an active project in the CLS User Portal.

Remote users must also abide by the following code of conduct:

- > User activities shall be in compliance with all applicable laws and regulations. Users shall exercise high academic integrity, and respect the applicable confidentiality of information.
- > Users shall show respect for the dignity and diversity of other people. Any harassment and violence will not be tolerated. Users shall not be impaired by alcohol and/or drug use.

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New connection

Protocol

Test

Select the protocol used to connect.

100101

Protocol

NX


All protocols use NX and is optimized for external networks.

Connecting Remotely with NX

NoMachine (NX) is a software application used by CMCF to allow remote access to beamline computers.

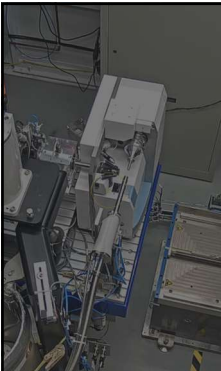
Access to the beamline is only available during your scheduled session time, or by special arrangement with CMCF staff for data processing/transfer.

Contact staff before your beamtime if you would like to set a time to test your NX connection.



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Monitoring the Beamline

Samples

Upon opening MxDC, your samples (defined in MxLIVE) along with their positions in the automounter will appear in the Samples page of MxDC. If the sample list looks out of date, click the "Refresh Sample List" button above the list of samples.

Hutch Activity

The Hutch Camera is accessed through MxDC. Move the camera and zoom in or out to view the entire hutch.

- > Robot and detector motion are forbidden while the endstation is occupied. If you see anyone in the hutch during your session, cease robot operations and contact staff by phone.

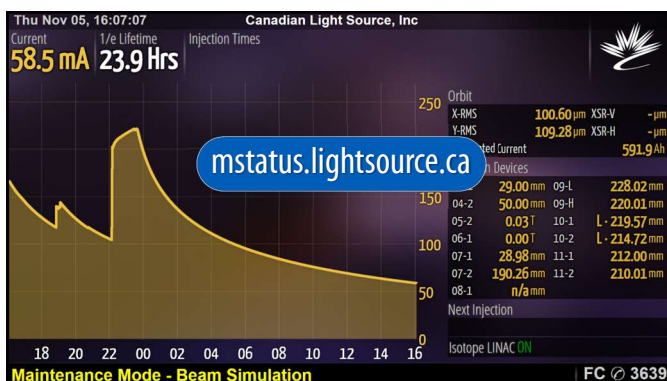
Beam Status

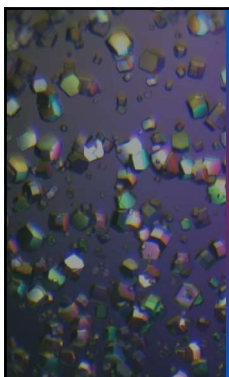
Beam status may be monitored in a number of ways:

- > The storage ring machine status can be found here: <http://mstatus.lightsource.ca/>
- > The bottom status bar on MxDC shows the mode, shutter status, and storage ring current.
- > Watch for warnings in the Status Checks area on the Setup page of MxDC.

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Preparing For Your Beamtime


Become familiar with the CMCF User Guide, which contains detailed information on preparing and shipping samples, software, procedures and safety concerns.

To prepare for your beamtime, consult the applicable sections of the user guide:

1. Prepare your samples: [Samples and Automounters](#)
2. Create an MxLIVE Shipment: [MxLIVE Sample Management](#)
3. Ship your samples: [Shipping Samples](#)
4. Collect data during your beamtime:
 - > [MxDC Data Collection](#)
 - > [Data Collection Primer](#)
 - > [Autoprocess](#)

New CMCF Users must collect data with an experienced crystallography mentor familiar with CMCF software & procedures.

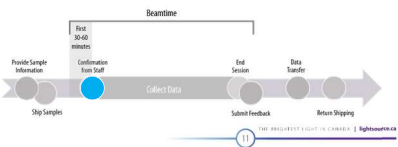


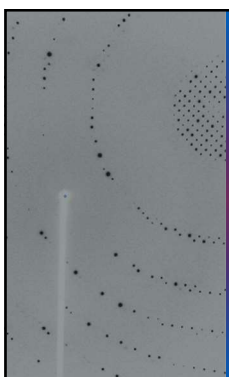


Starting Your Beamtime

CMCF staff will hand-over the session on the User Portal, load your samples in the automounter, and check the beamline before providing you with confirmation that the beamline is ready. This normally takes around 30-60 minutes, so expect the confirmation sometime in the first hour of your scheduled beamtime. You may login remotely while you are waiting, but please wait for confirmation before opening the data collector, MxDC.

You will need to sign-on to the active session on your CLS User Portal dashboard, indicating the appropriate team members & samples. Once you have signed-on and received confirmation from beamline staff, you may begin your experiment.





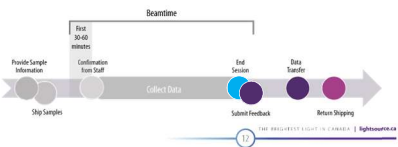
Finishing Your Beamtime

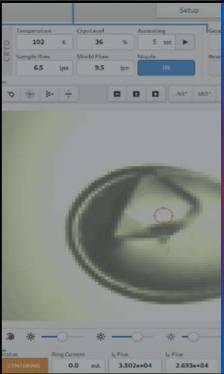
When your experiment is complete, **dismount your last sample, close MxDC** sign-off from the active session in the User Portal, and send an email to cmcf-support@lightsources.ca to indicate that you are no longer using the beamline.

Your samples will be shipped back to you after your beamtime.

Output files generated by AutoProcess and full datasets are available immediately for download through MxLIVE. We highly recommend backing up your data and storing a copy safely in your lab, as we are only able to save data for a limited amount of time.

Once you are ready to use data collected at the CMCF in a publication, visit the section in this guide about acknowledging the CLS.

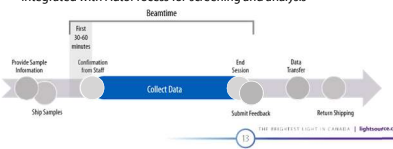





MxDC

MxDC (MX Data Collector):
Run on user workstations at CMCF to collect data.

- Full control of the beamline
- Automatic sample centering
- Automated data collection
- Multi-point or helical data collection
- Raster scanning
- MAD, XRF, XAS scans
- Integrated with AutoProcess for screening and analysis

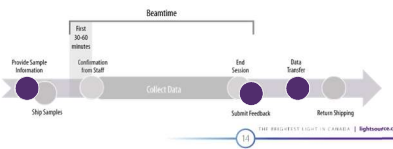





MxLIVE

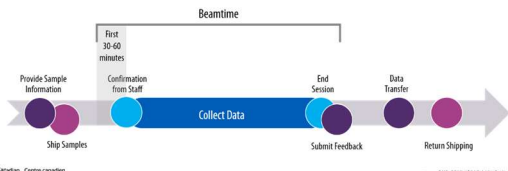
MxLIVE (MX Lab Information Virtual Environment):
Accessed online through a secure web connection.

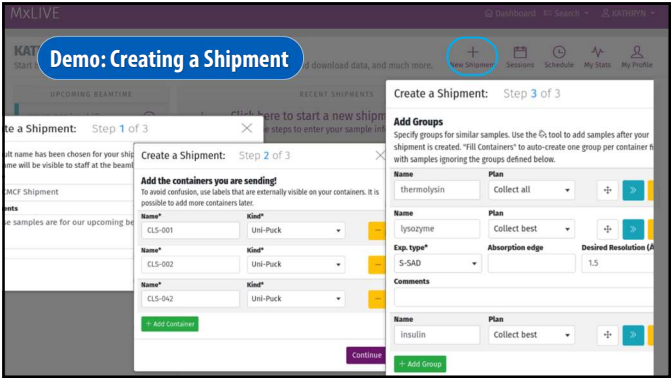
- Sample and data management system
- Shipment management / tracking
- Remote monitoring of data collection sessions
- Immediate viewing of data and analysis reports
- On-demand data transfer
- Fully integrated with MxDC

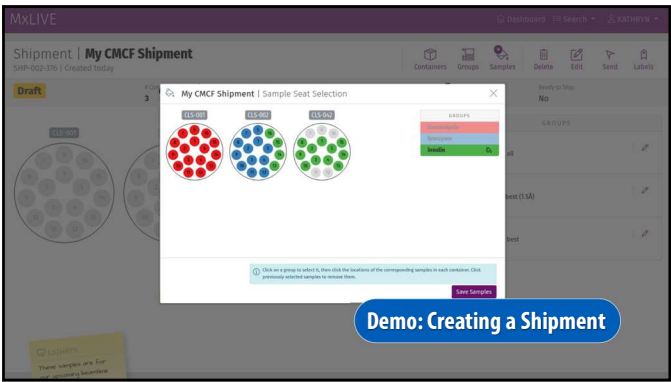


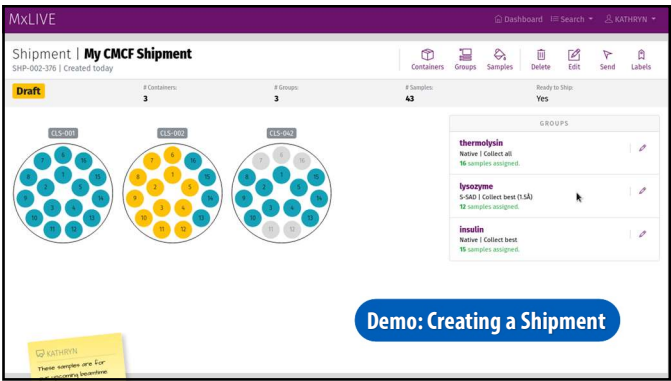


Demo: MxLIVE & MxDC

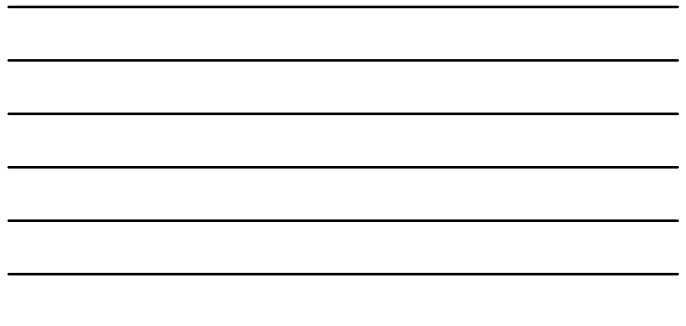




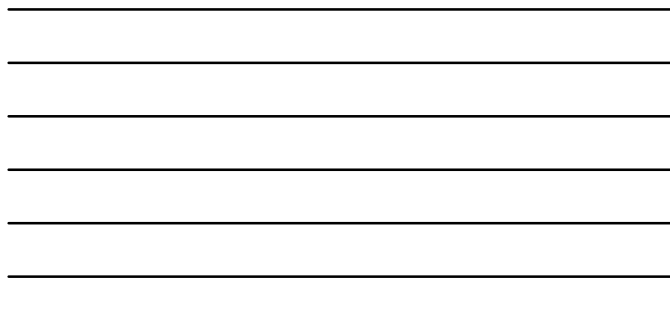
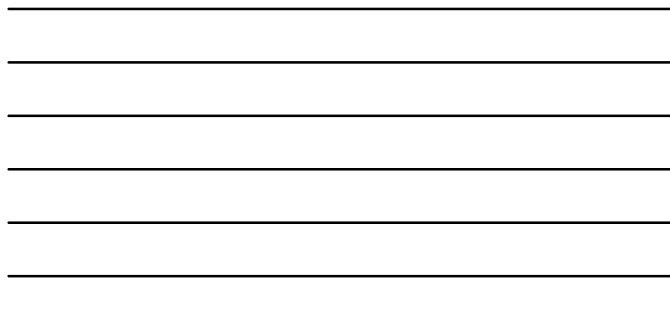


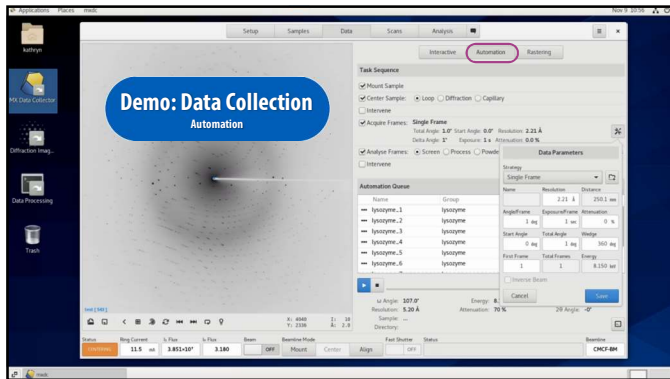


Kathryn Janzen

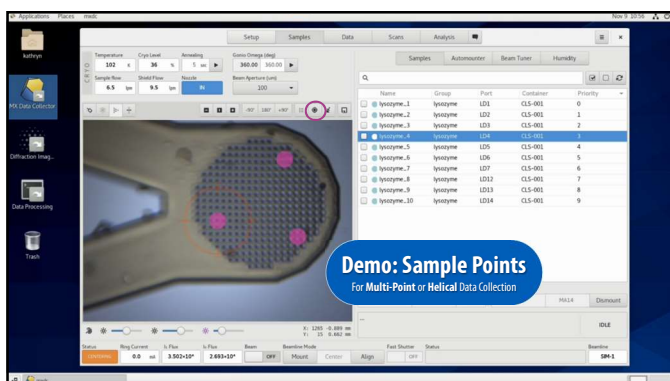


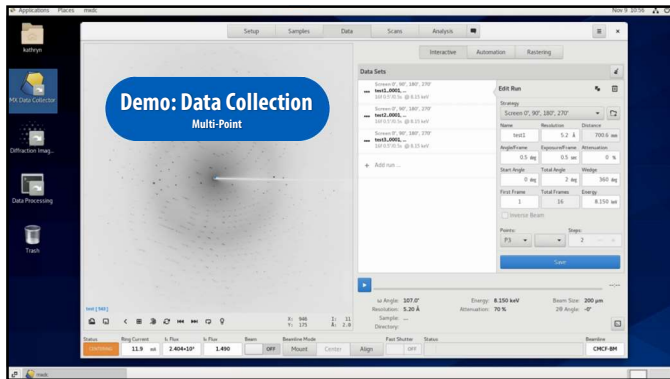
Kathryn Janzen

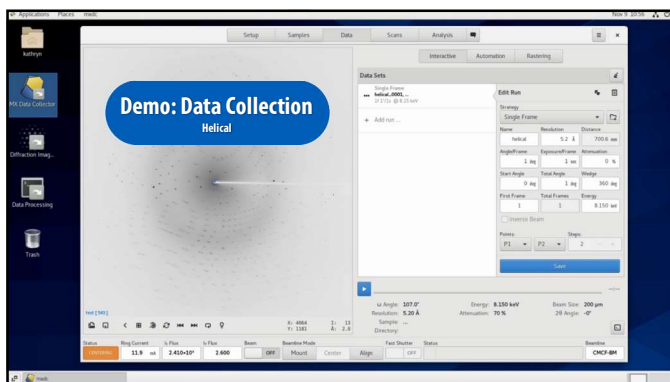


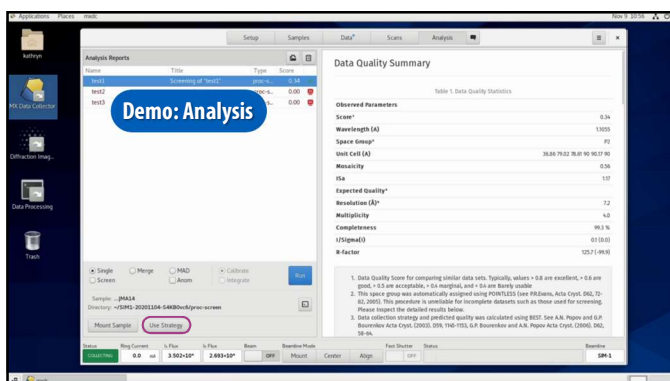






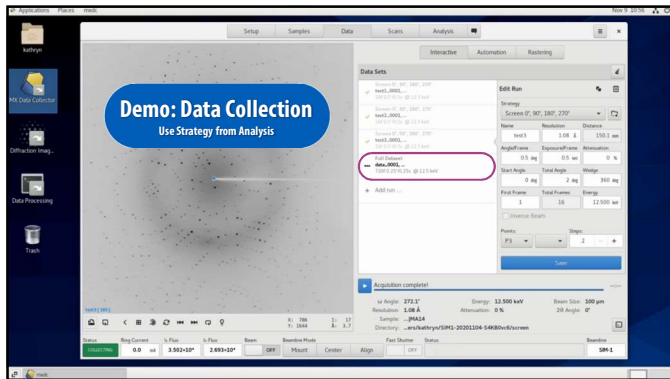


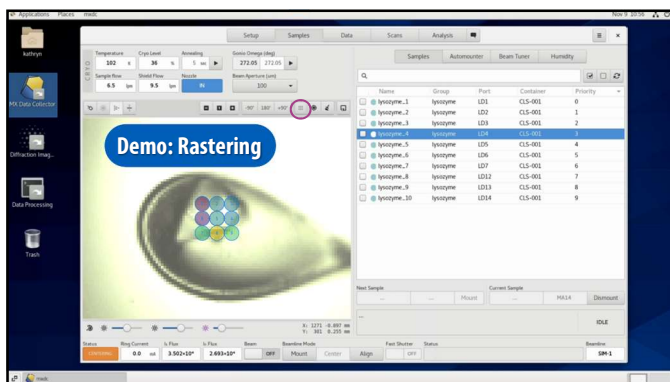


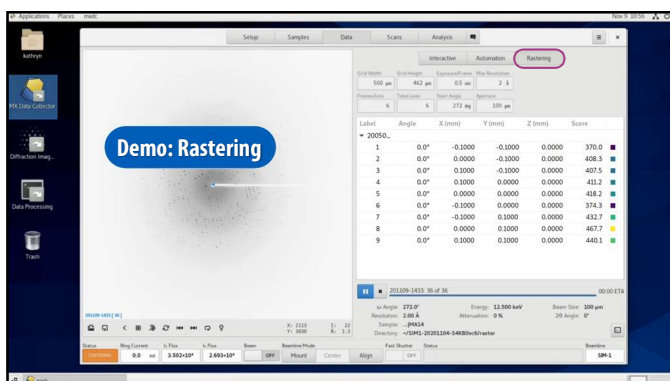


Remote Data Collection Training (with MxDC & MxLIVE)

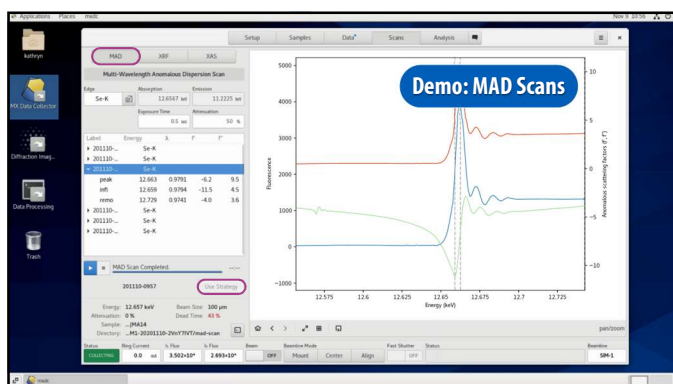
Kathryn Janzen

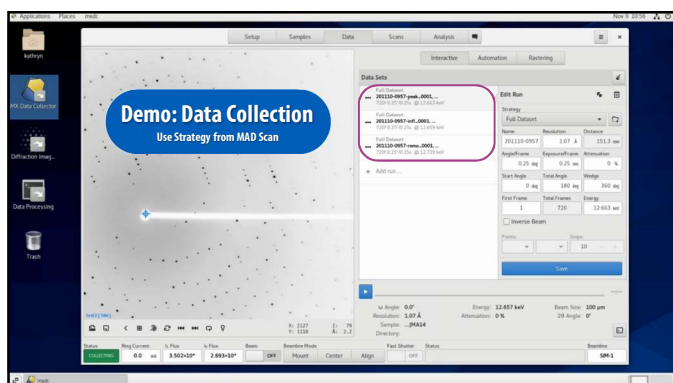


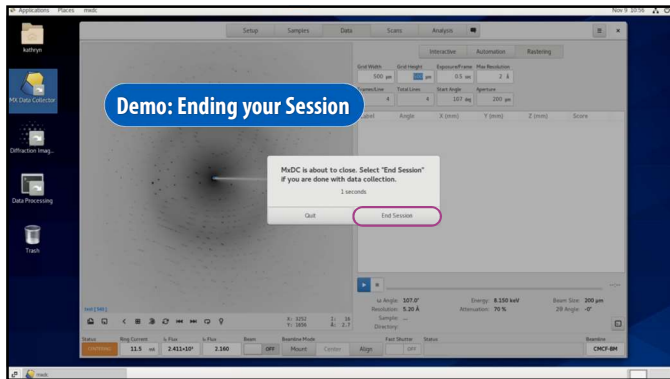


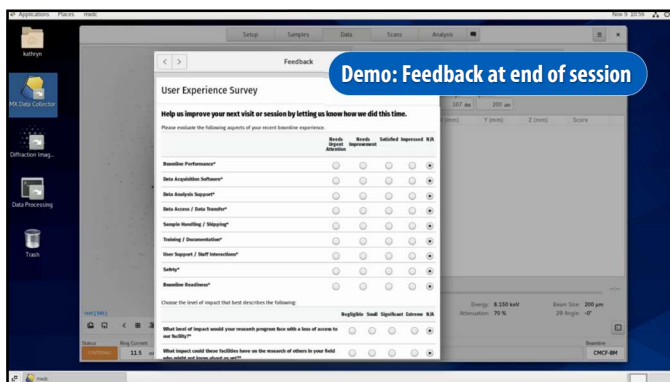


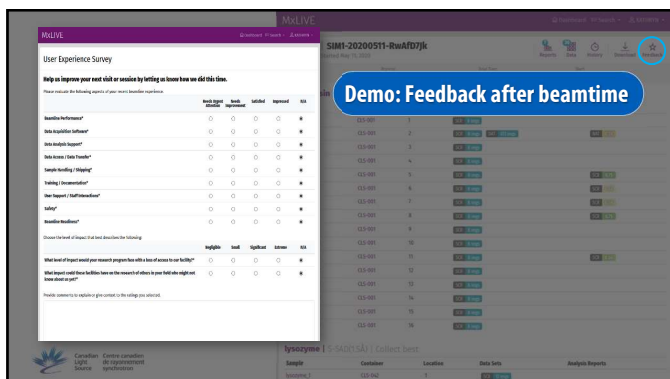


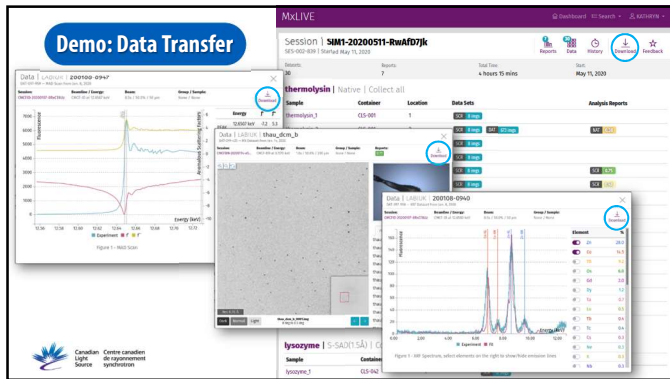












Housekeeping

To receive CMCF Remote Data Collection Training, you must:

- ☐ Register as a CLS User with the User Portal: <https://user.lightsource.ca>
- ☒ Complete the Remote Beamline Specific Orientation with CMCF staff.
- ☐ Confirm that you received the training: <https://training.lightsource.ca>

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