XAS Data Collector Help

XAS Data Collector Overview

Getting Started

XAS Web Interface

Start Firefox (or another web browser) and navigate to URL:

- https://www-ssrl.slac.stanford.edu/webxas

You will be prompted to enter your SSRL User Portal username and password, followed by your Beam Line username and password.

Setting Up An XAS Experiment

Detector Files

To obtain a new detector file, view an existing detector file, take offsets, or check count levels, click on the box labeled, "Detectors."

If you do not see the detector file you would like to use in the list, press the "New" button. In the lightbox that appears, copy a master detector file to your directory. Master files can vary from beamline to beamline, but typically include the following options:

- trans.det - ion chambers
- lytle.det - ion chambers and Lytle/PIPS detector
- ge*.det - ion chambers, Lytle/PIPS, and Germanium detector

Detector File Setup

Region Files

To create a new region file, or to view or modify existing region files, click on the box labeled, "Regions."

To create a new EXAFS region file, press the "New" button. In the lightbox that appears, enter the element of interest, select an edge, enter a file name, and press "Save." This will

automatically generate a basic EXAFS region file with pre-edge, edge, and EXAFS segments. Once the file is saved, it will appear in the list. Select it and modify the segments as needed.

Region File Setup

Queue Controls - Starting a Run

Once your experiment is set up with the correct detector and region files, press the "Queue Controls" button. A lightbox will appear with basic information about the queue. Verify that everything is correct, and press "Start" to begin the queue. Queue status, current point and sweep information will be displayed in the "Status" section.

Press the "Queue Controls" button while the queue is active, and another lightbox will appear. In this lightbox, you can repeat a sweep, skip to the next sweep, pause/continue a sweep, stop queue execution, and modify the number of sweeps.


Queue Controls - Queue Active

Plotter

To launch the plotter, click the "Plotter" button. If your browser preferences are set to allow pop-up windows, a plotter window may already have been launched when the main XAS window was opened.
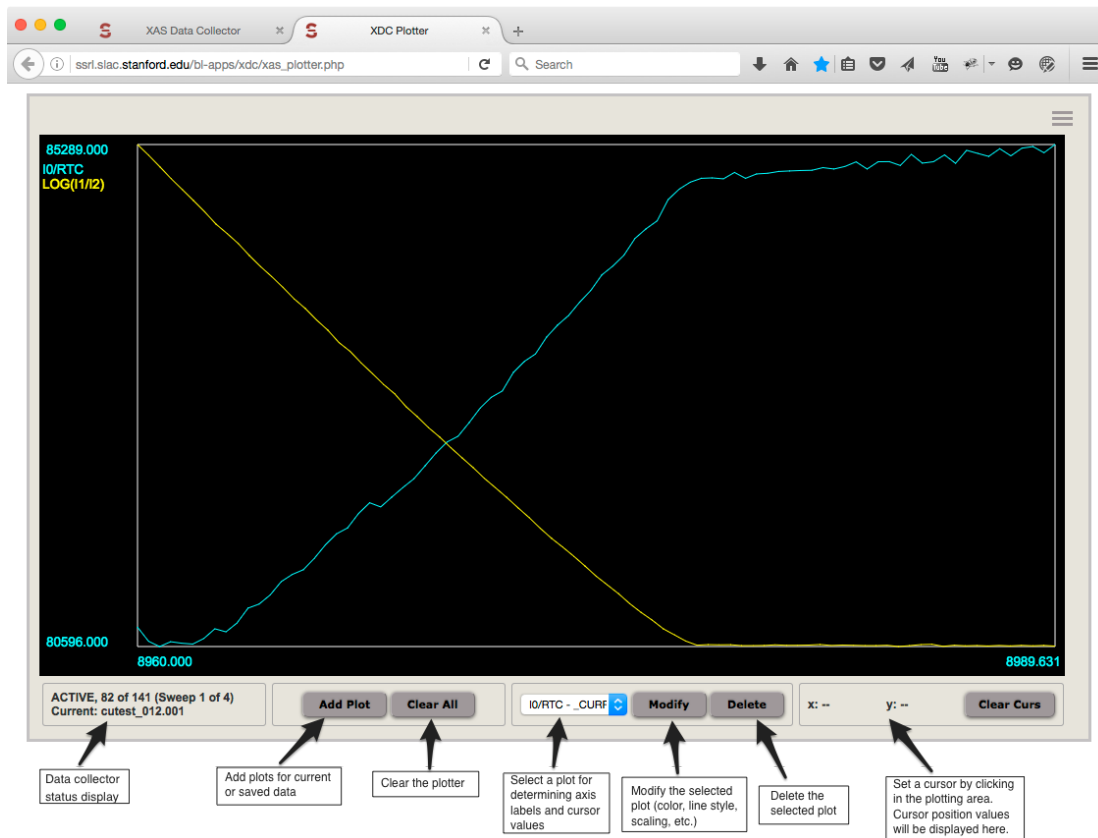
XAS Plotter

Clicking the "Add Plot" button will display a section with a data source list, checkboxes for turning plots on and off, and buttons for adding or removing data sources from the list.
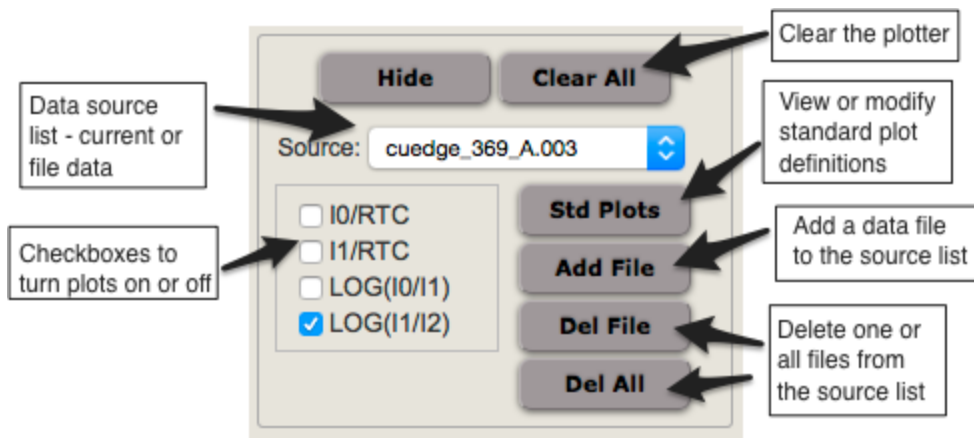
Add Plot Section

To add a plot from a current data scan, choose "Current" in the source list. Check the appropriate boxes for the plots you would like to display.

To add a plot from a data file that has already been collected, press the "Add File" button. Select the file from the list and press "Add Source" in the lightbox that appears. Once you have finished adding files to the source list, press "Close" to close the lightbox. Select the file in the source list and then check the appropriate boxes to display the plot for that file.

Running a Time Scan

Technical Info