LIPRAS Advanced Tutorial

This tutorial highlights the more advanced features of fitting diffraction data with LIPRAS. To learn more about the basics, start with LIPRAS Basic Tutorial.

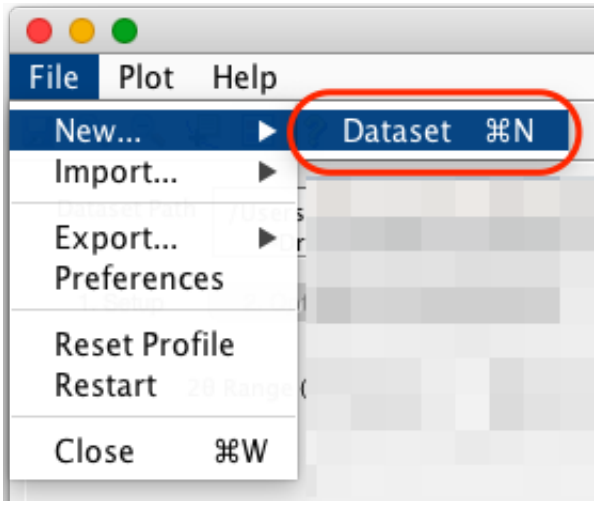
In this tutorial, we are going to work with **.xrdml** files. Go to the Resources section for a list of sample files and download the data set containing .xrdml file.

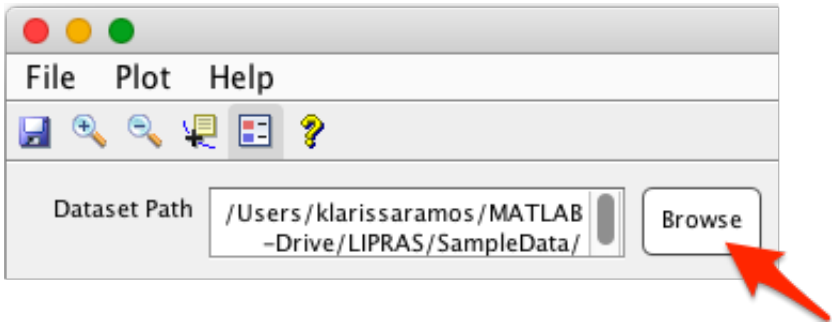
Tips to remember before we start

1. First tip here
2. Second tip here
3. Blah blah blah

Preparing the data set for a new fit

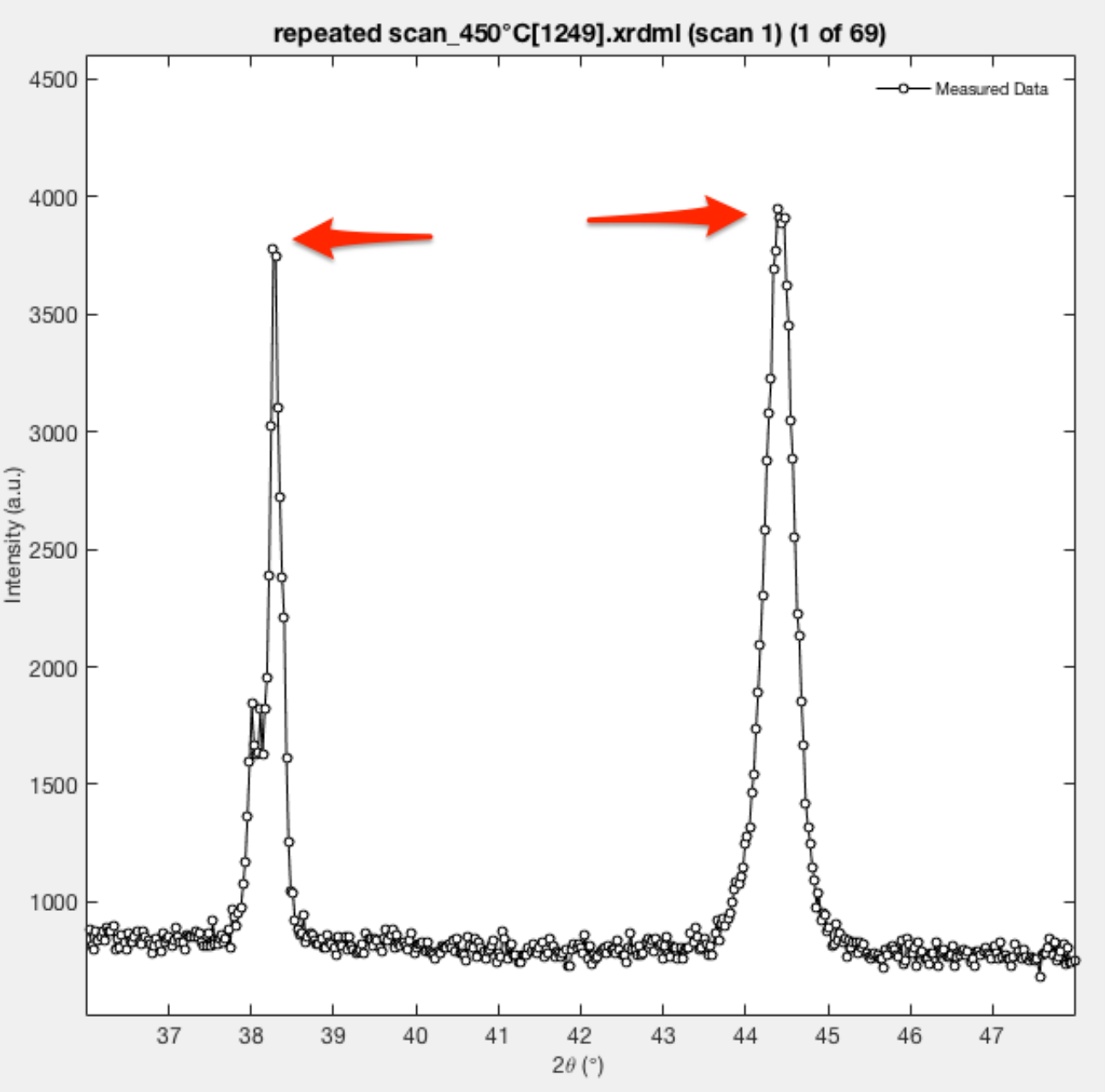
1. Load a new data set by going to the menu **File** > **New…** > **Dataset**, or by clicking **Browse**. For this tutorial, we will use the data set contained in the file **repeated scan_450ºC[1249].xrdml**.





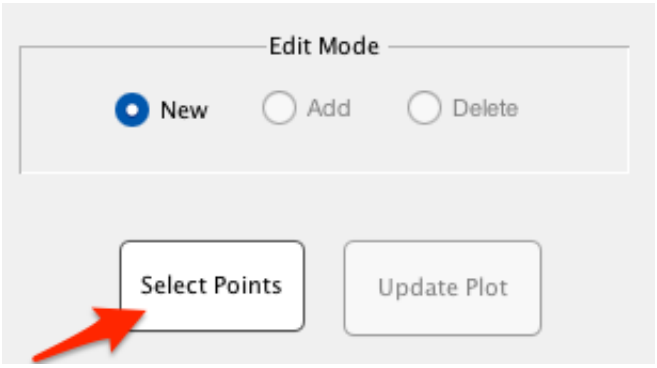
**NOTE:*

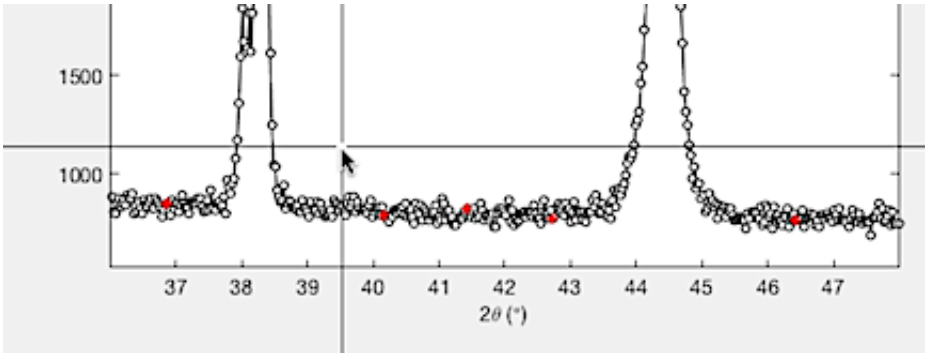
2. Keep the initial 2θ range of 36.012º for the minimum and 47.987º for the maximum. We're going to fit the two peaks at approximately 38.2º and 44.5º.



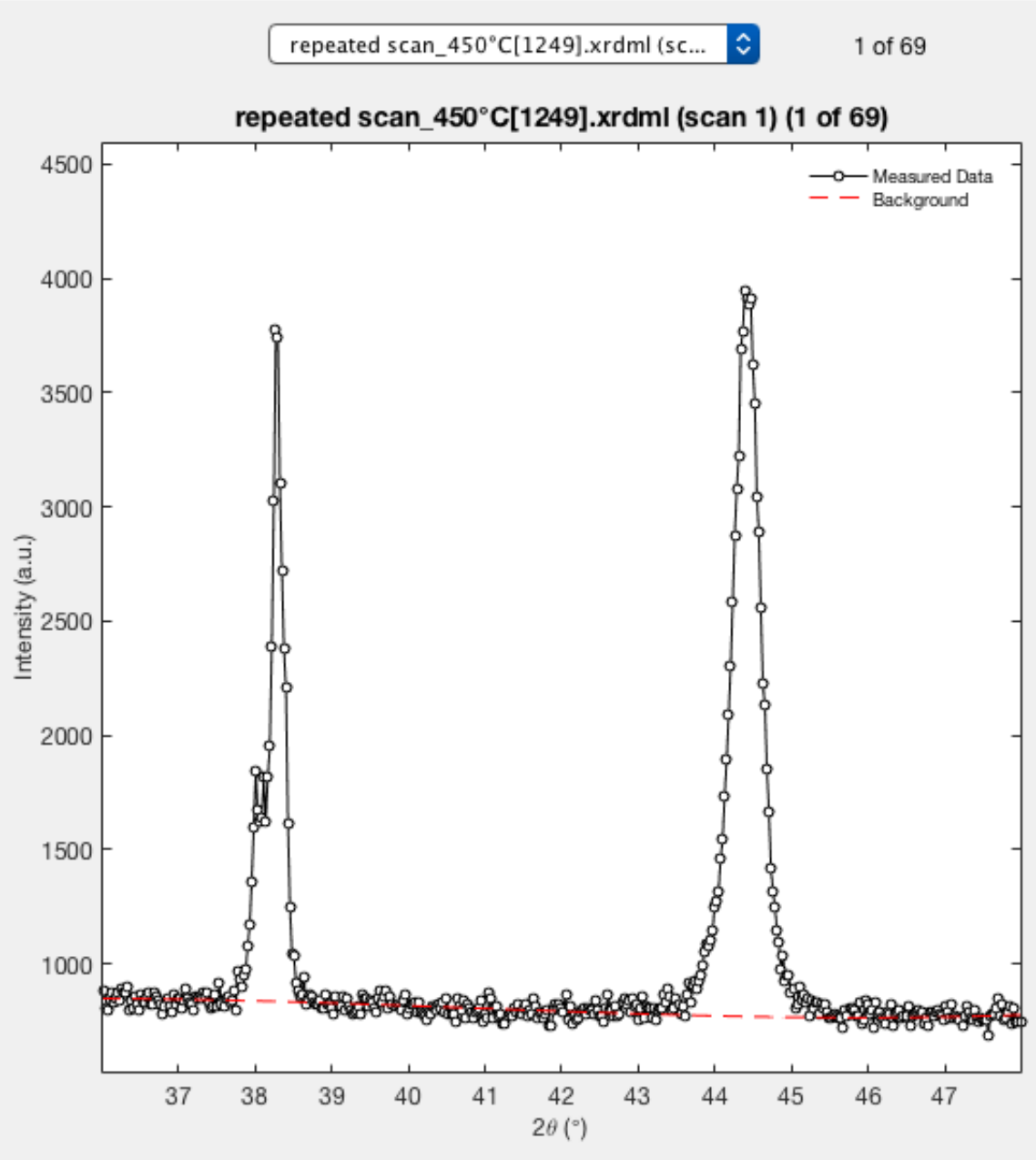
3. Keep the default background model and polynomial order. To learn more about the different background options, read the background tutorial.

4. Push the **Select Points** button and click inside the plot to select as many points as you want to consider them as background data. When you're done, press the **Enter** key on your keyboard to save the points or press **Escape** to cancel.
   ****NOTE:*** Always select more points than the polynomial order.





*__***Checkpoint***__: The background fit should look similar to the one below:



Resources

- .xrdml file