

# SQUID Workup User Manual

Philip Tregenna-Piggott ([philip.tregenna@psi.ch](mailto:philip.tregenna@psi.ch))

## Program Function

This program works up and visualizes raw SQUID data.

## Program Features

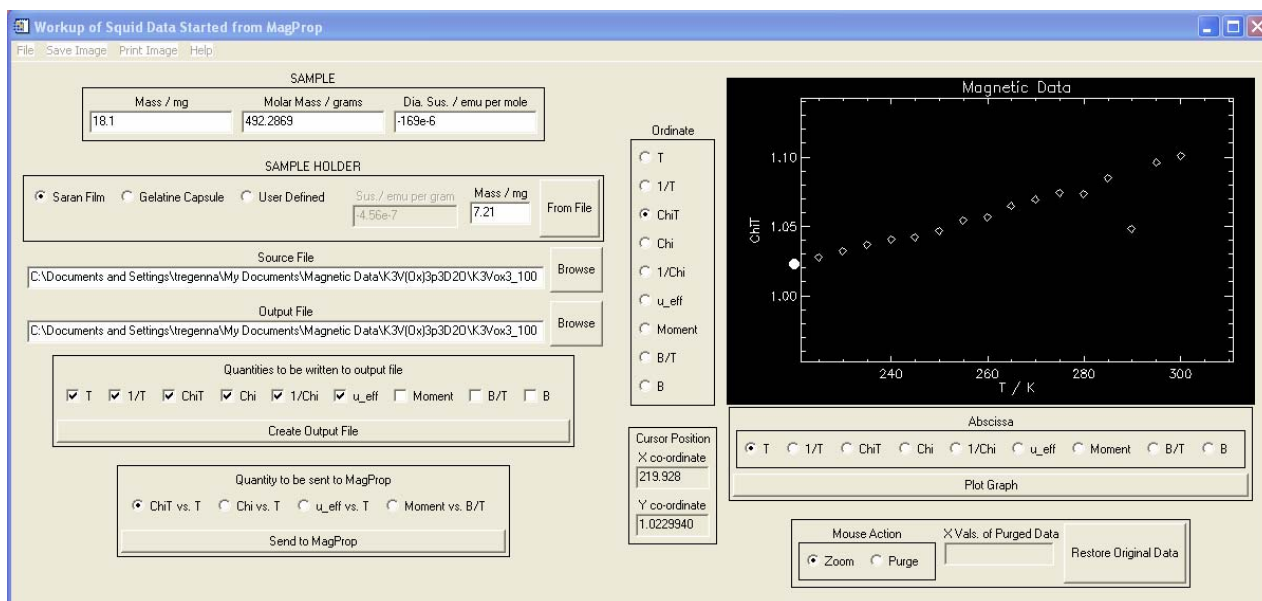
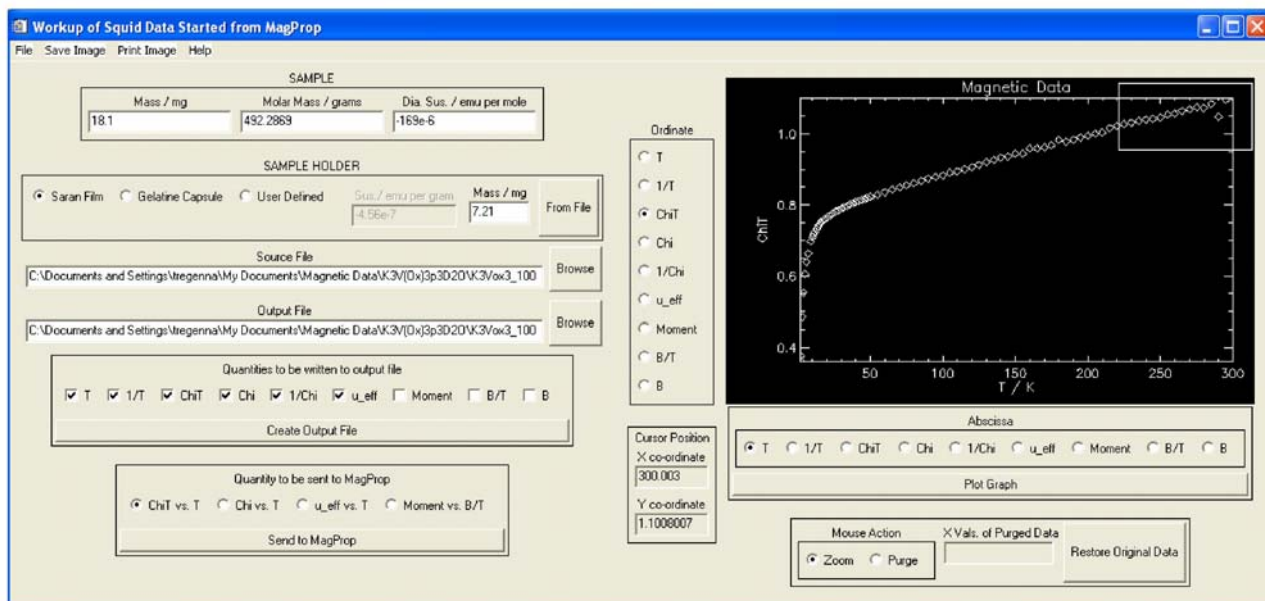
Most of the program's functions are self-evident. There are, however, some features that require explanation.

### 1. Subtraction of Sample Holder

There are two ways of subtracting the signal due to the sample holder. The first is to specify the susceptibility of the sample, in units of emu / gram, along with the mass. The program will then assume that the moment of the sample holder is temperature independent and will subtract this value from the sample accordingly. The second preferred method is to specify a SQUID file containing data obtained from the sample holder as a function of temperature. For a given sample measurement, the program will subtract the sample holder data point collected at the closest temperature. Note that the data sets of the sample and sample holder may be recorded at different temperatures and fields and may contain a different number of data points.

### 2. Purging of data

Many SQUID files contain outlying data points that the user wishes to purge from the data set. The program provides a convenient interface for performing this task. The mouse may be used for one of two purposes. When "Mouse Action – Zoom" is selected, the user may zoom into the area of interest. This is achieved by pressing down on the left mouse and defining a rectangular window. When the mouse button is released the area of interest is displayed.



Right click on the mouse to set the x and y range to encompass all the data.

To purge a given outlier, select “Mouse Action – Purge”. Define a rectangular area around the data point(s), as above, and watch the data point(s) disappear!

