

# SAM MAGE Igor Tool

## Latest

Use the #igorpro channel of the SAM-MSL Slack for help requests and discussion.

Software: [MAGE1.0.1.pxp](#)

## Overview

Derived from SAGE, the intent of MAGE is to work more generally for multiple instruments -- mainly lab instruments. MAGE doesn't deal with importing data. It expects waves and data directories to be in a pre-defined structure. The proposed organization is as follows:

Every data directory under the root directory is a separate dataset. In the SAM model, this corresponds to a TID. For a lab instrument, it would be a single run. The name of the data directory may contain alphanumeric characters and underscores, however, must not begin with a number.

The main goal is to quickly plot signal versus temperature using the familiar listbox interface of SAGE. Indicate which waves are associated with which mass by naming them with a suffix of '\_m#' where '#' is any integer value. For example:

- \_m44
- \_m66

Temperature, time and generic x waves are acceptable to plot these values against. The prefix of the wave name indicates that it may be used as the x-axis quantities. The following are the only valid x-axis prefixes:

- time
- temp
- x

Anything named with a different prefix is assumed to be a y-axis value. For example, if you want the interface to be able to plot the counts per second of m/z 44 over temperature, the following waves must exist:

- cps\_m44
- temp\_m44

Other quantities can be plotted as "overlays" with independently labeled y-axes. They must have a corresponding x-axis wave with the same prefix naming convention (i.e. time, temp or x). For example, suppose you have some differential scanning calorimetry (DSC) data. Waves with the following names will allow the DSC data to be overlaid:

- dsc

- time\_dsc

# History

For background and historical discussion, see the #igorpro channel archive: [igorpro\\_archive.docx](#)

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