Highlight Values in XY Scatter Plot

Author: Greta Peterson, Golden Helix, Inc.

Overview

This script plots an XY scatter plot with additional graph items to highlight values of interest. An independent column, dependent column and sample list is needed.

To create the XY scatter plot, the script creates a spreadsheet that contains the original active data as well as one column per identified sample. In the additional columns, the only value is the value for the specified sample's dependent column, all other values are missing.

Recommended Directory Location

Save the script to the following directory:
*..**\Application Data\Golden Helix SVS\UserScripts\Spreadsheet\Plot**

Note: The **Application Data** folder is a hidden folder on Windows operating systems and its location varies between XP and Vista. The easiest way to locate this directory on your computer is to open SVS and go to the **Tools > Open Folder > User Scripts** Folder menu item. Then browse to **/Spreadsheet/**Plot and move the script to this location. If saved to the proper folder, this script will be accessible from the spreadsheet **Plot** menu.

Using the Script

1. From a spreadsheet containing numeric values go to **Plot > Highlight Values in XY Scatter Plot**.
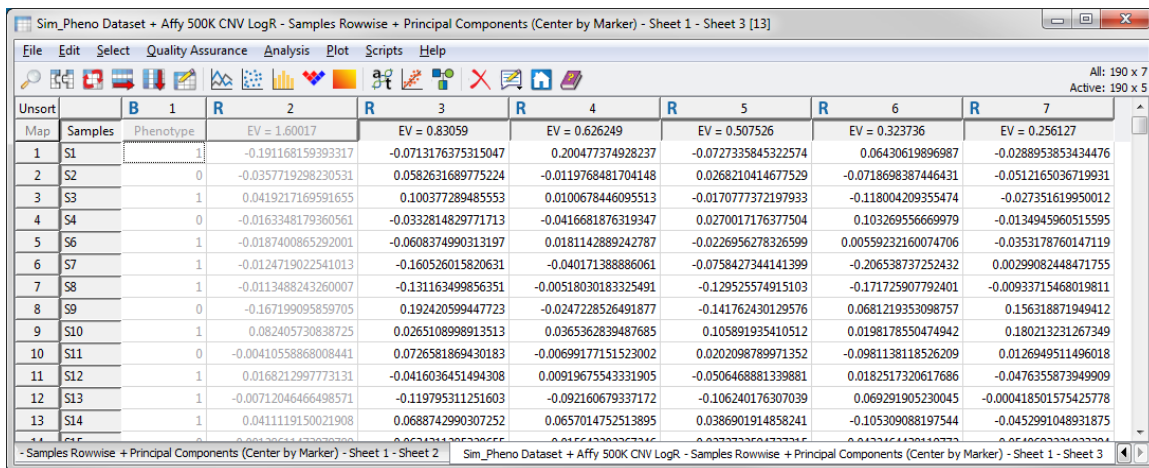

Figure 1: Spreadsheet to create XY Scatter Plot From

2. You will be prompted to specify the independent column, the dependent column and the sample list. You can specify the sample list in one of two ways.

   a. The first way is a string with the sample names separated by a comma. See Figure 1.

   NOTE: Do not add additional white space if using this option. Use only a comma to separate values.
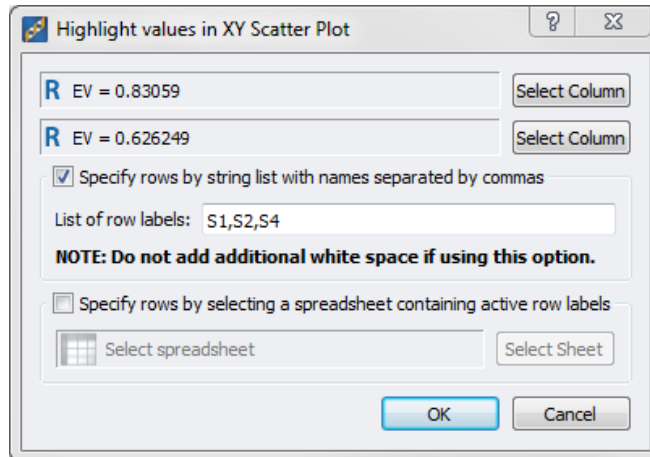

Figure 2: Prompt Dialog using string list to specify samples

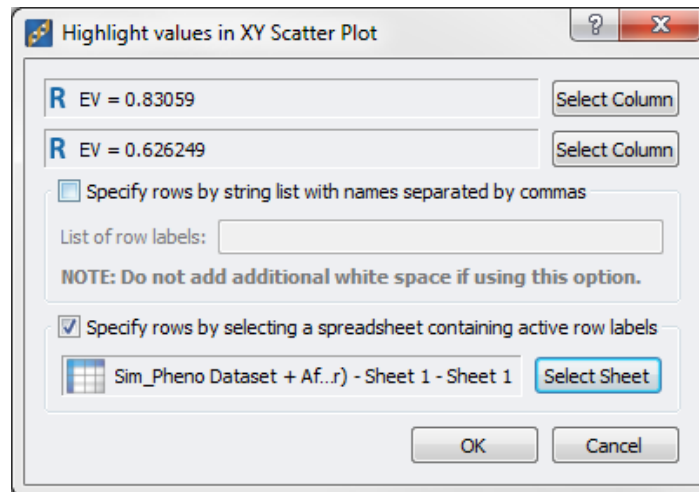   b. The second way is by selecting a spreadsheet that only has the rows for the samples of interest active.

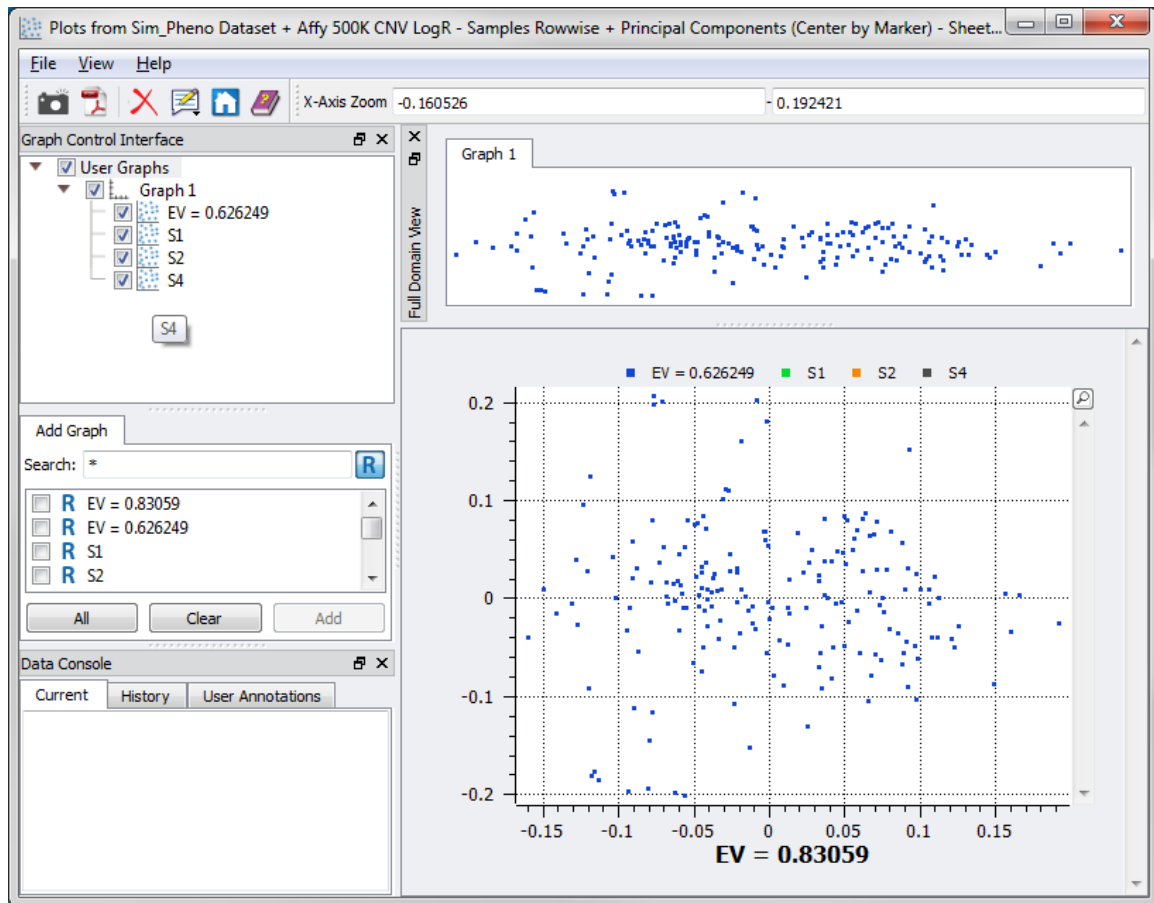**Figure 3: Prompt Dialog using spreadsheet to specify samples**

[**Note**: If both options are selected, only the first list will be used]

The resulting spreadsheet will consist of all of the original active columns as well as additional columns, one for each sample. The only value in the additional columns will be the dependent value for the specific sample. All other values will be missing.

Figure 4: Resulting spreadsheet containing additional columns

An XY Scatter Plot will also be created with graph items with the specified independent variable, and graph items for the original dependent variable and the additional columns to highlight the selected samples.

Figure 5: XY Scatter Plot with additional graph items for specified samples

To get the samples to stand out, move the original dependent variable to the end of the list by clicking and dragging it down the user control tree and dropping it on top of the last graph item. The color, shape and size of the data points can be changed for each sample graph item.
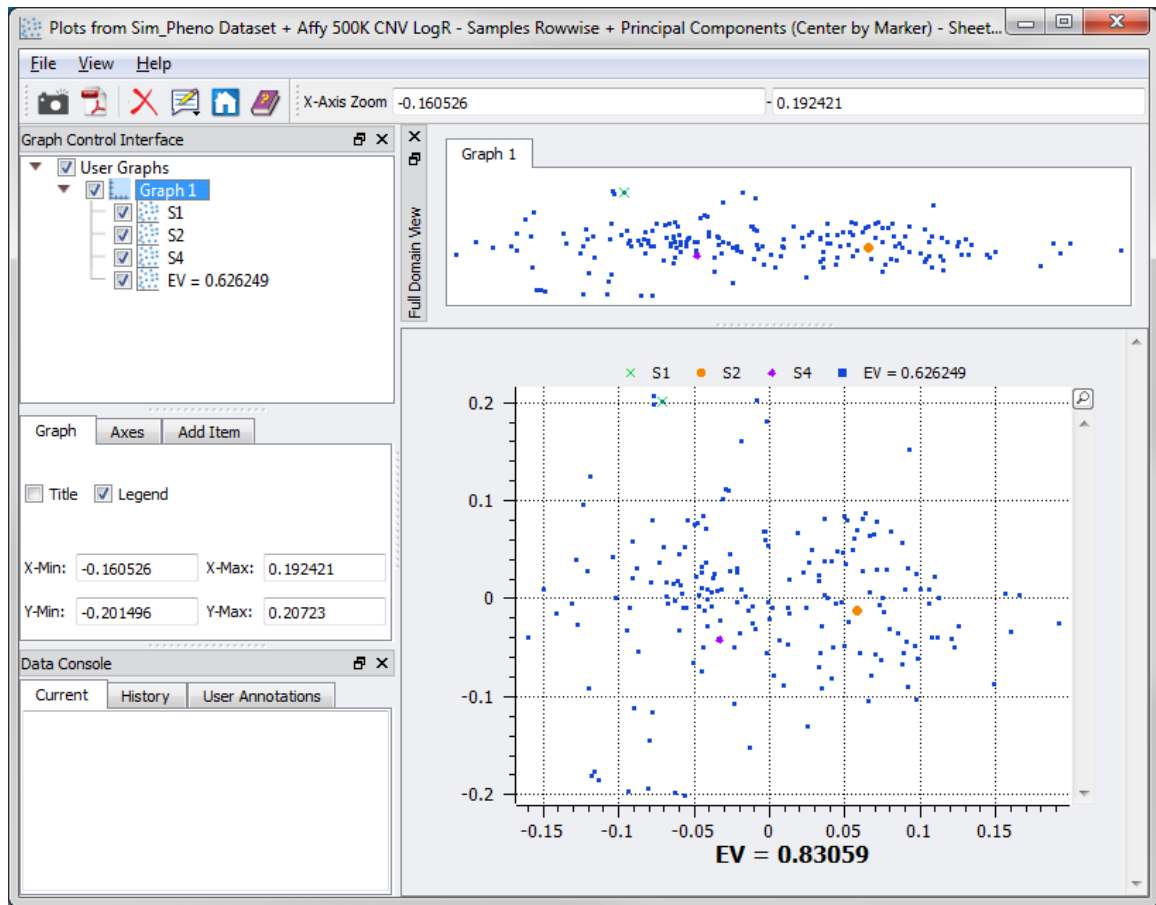
Figure 6: XY Scatter Plot with specified values highlighted and color/shape/size adjusted