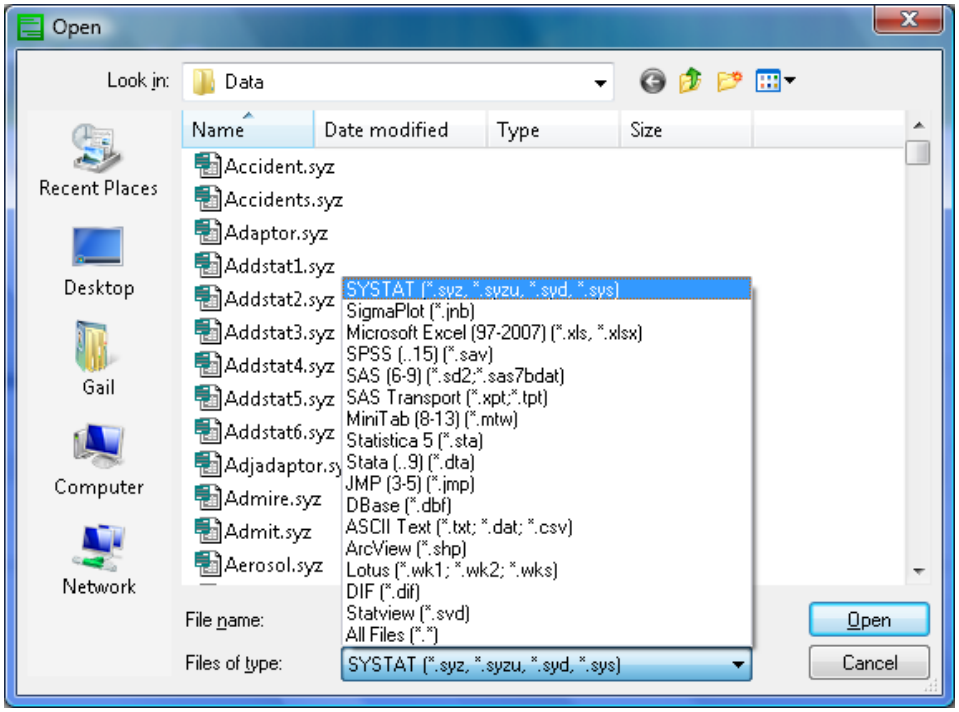
SYSTAT 13 for SPSS Users – Opening files and Working with Data.

Learning a new software package can be daunting. But, never fear – learning SYSTAT is easy, especially if you are already familiar with SPSS. The purpose of this guide is to show how you can easily open your SPSS files into SYSTAT, and then work with them.

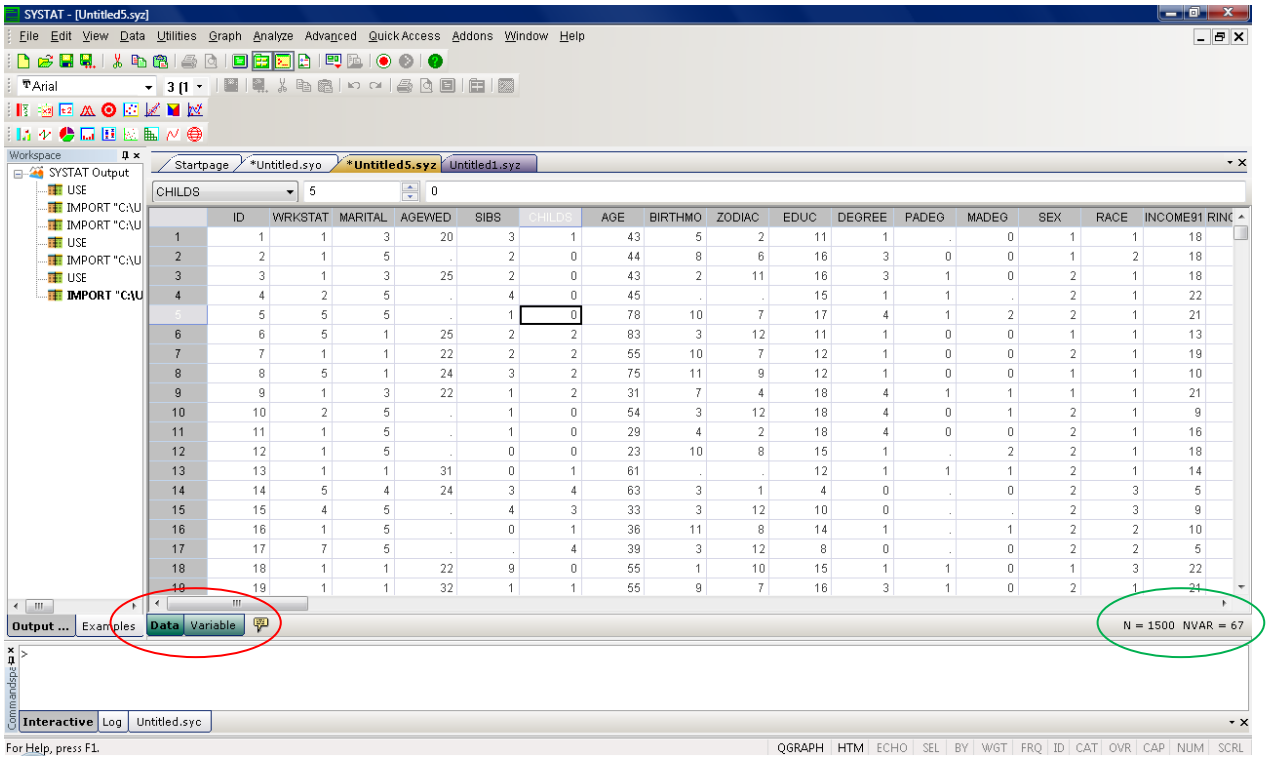
Opening Data

In the SYSTAT 13 menu, select File -> Open -> Data

Click the arrow next to "Files of Type" – you'll see the following list of files that SYSTAT will open.



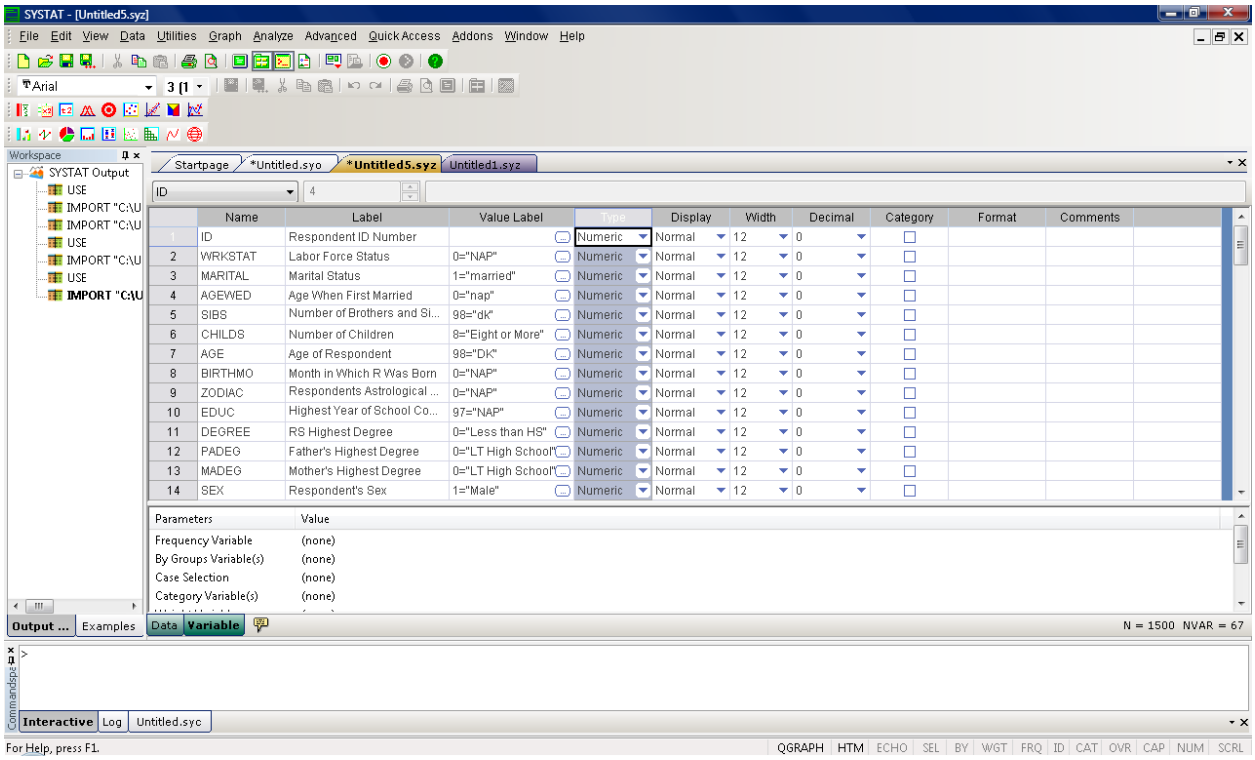
Select the SPSS option, and then browse to the file you would like to open. Select it, and click Open.



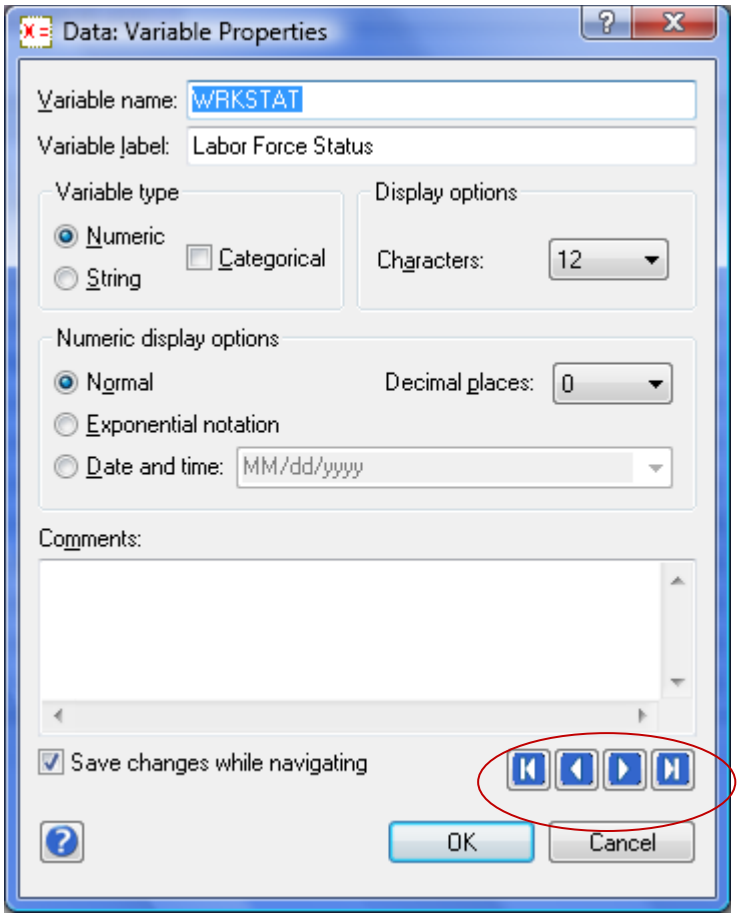
You'll notice that the Data Editor in SYSTAT 13 looks a lot like SPSS's. The variable names go across the top. Much like SPSS, SYSTAT variable names can contain up to 256 letters or numbers and must begin with a letter or an underscore. However, names of character, or string, variables must end with a dollar sign ($), which counts as a character. If you create a string variable, SYSTAT will automatically add the dollar sign on the end for you. If you change the variable to numeric, it will remove the dollar sign.

SYSTAT 13 displays a small summary of the number of cases and variables in the data file you just opened. Note where the summary is circled in green above.

SYSTAT also has Data and Variable tabs, circled in red above. If you click the Variable tab, you'll see the following screen:



When SYSTAT reads the SPSS file (in this case, the GSS 93 Subset data file), the Variable Labels and Value Labels transferred from the original file. You can change any of the details by double clicking in the cell, or clicking the browse button. If you would prefer to see a summary of the variable attributes, click anywhere in that variable's row to highlight it. Then go to Data -> Variable Properties. You'll see a screen like this:



Once the dialog appears, use the buttons circled above in red to browse through the entire variable list. By default, any changes you make while scrolling through the list will be saved. The same controls are available for Value Labels as well, if you select Data -> Value Labels from the menu.

If you want to create a new variable, just scroll to the bottom of the variable list, and type in a new variable name, just like you would in SPSS. Or, from the menu you can go to Data -> Edit -> Insert Variable(s).

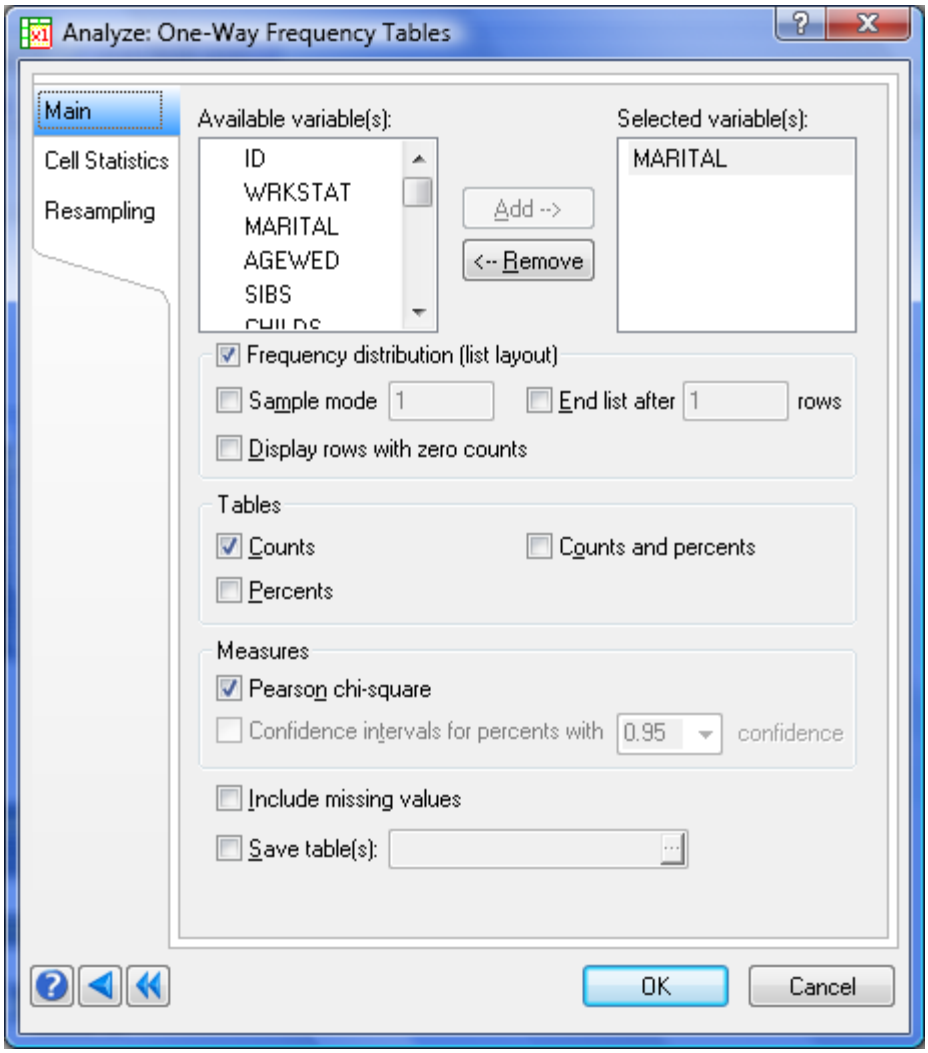
One caveat in variable naming is that string variables are limited to 255 characters. If you read in an SPSS file, and have a larger string variable, SYSTAT will truncate the text to 255.

Now that you have some data, you can get to doing some statistics!

Descriptive Statistics

A first step for many users is to perform Frequencies on their categorical variables. It is easy to see if there have been any miscodings, and can give you a sense of your data.

In SYSTAT 13, you can perform a Frequency Analysis by going to Analyze -> One Way Frequency Tables. You'll see this dialog box.



Select the variables on which you want to perform a Frequency, and move them into the Selected Variable(s) box. Make sure to check the box next to Frequency distribution (list layouts) – this will give you a table that looks much like what you would see in SPSS. If you leave Counts and Chi-Square checked, which are the default options, you'll see output like this:

▼One-Way Frequency Distribution

Frequency Distribution for Marital Status

Marital Status	Frequency	Cumulative Frequency	Percent	Cumulative Percent
married	795	795	53.035	53.035
widowed	165	960	11.007	64.043
divorced	213	1173	14.209	78.252
separated	40	1213	2.668	80.921
never married	286	1499	19.079	100.000

Counts

Values for Marital Status					
married	widowed	divorced	separated	never married	Total
795	165	213	40	286	1499

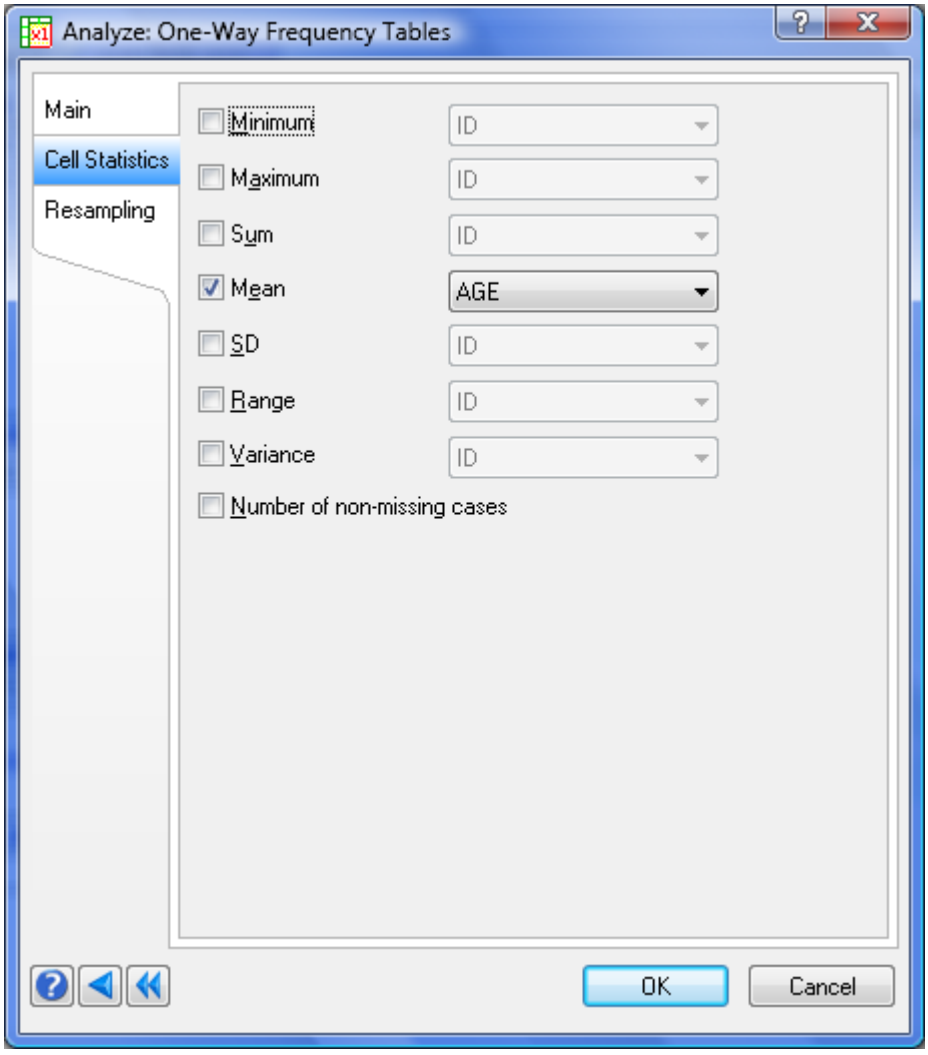
Chi-Square Tests of Association for Marital Status

Test Statistic	Value	df	p-Value
Pearson Chi-Square	1129.469	4.000	0.000

Number of Valid Cases: 1499

A quick note about SYSTAT output – it is HTML based, so it easily copies into Word and other word processing programs without losing its formatting.

The One-Way Frequencies dialog box contains a feature that allows you to generate cell statistics for each group. Go back to Analyze -> One-Way Frequency Tables. The variables you selected earlier will still be in the Selected Variable(s) dialog box. Next, click Cell Statistics. On this panel, you can choose a number of staistics.



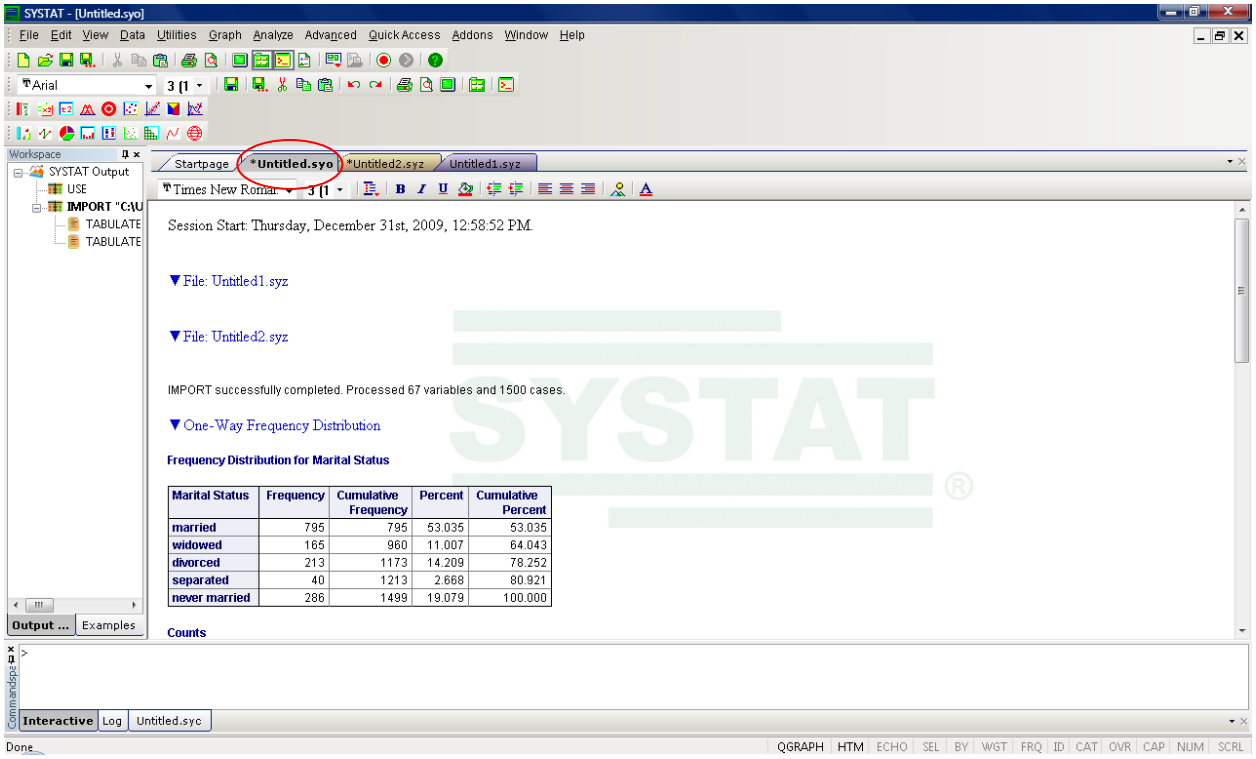
In this example, the check box next to Mean has been selected, and the AGE variable was selected from the drop down. Clicking OK produced this additional table:

Mean Age of Respondent

Values for Marital Status				
married	widowed	divorced	separated	never married
46.490	71.963	46.188	40.775	31.568

Here, you can see the mean age of each martial status category.

Output Editor



The output editor has its own tab, which I've circled in red above. It will be named Untitled.syo until you save it. To the left of the output is the Workspace pane, which mirrors SPSS's. Double clicking an item in the tree will jump you to that set of output.

By right-clicking anywhere in the output window, you can export to HTML or RTF, both of which are easily readable by a variety of word processing and presentation programs. Output can also be highlighted by dragging over it with the mouse, and cut-and-paste into a wide variety of Windows programs.

Conclusion

This document is intended to give long-time SPSS users guidance on how to import and manipulate data using SYSTAT, highlighting the similarities between the two programs. Please direct document feedback to info@systat.com.