

## SPSS and Importing Data

► Let's import some data from a table on a web page. The following web page contains weather data for Forest Grove, OR collected in December 2011.

<http://www.wunderground.com/history/airport/KHIO/2011/12/17/MonthlyHistory.html>

In a web browser (e.g. Firefox), go to the URL above. Scroll down to the **Daily Observations** table and click on **Comma Delimited File** at the bottom. This converts the table to a text file with the items separated by commas. Select the text and copy it.

Open Excel and paste the data into cell A1.

Now we need to convert the text to columns. Go to the **Data** tab and click on **Text to Columns**. Select **Delimited**, and on the next screen select **commas**. Your data should now be in the correct format.

Since SPSS needs the data in a particular format, we need to edit the spreadsheet. The first row needs to contain the variable names that SPSS will use during the import. Remember, spaces are not your friend. For now, let's just use the columns PST, the max temp, mean temp, and min temp for each day of December.

1. Let's edit row 1 to give meaningful column names. I'm using Date, MaxTempF, MeanTempF, MinTempF, DP\_high, DP\_avg, DP\_low, H\_high, H\_avg, and H\_low.
2. Let's add a **DayOfWeek** column before the **MaxTempF** column. Insert a column, add a heading **DayOfWeek**, and type **Thursday** in the second row (Dec 1, 2011 was a Thursday). Click and drag **Thursday** to fill in the remaining rows. Excel should fill out the days of the week correctly.
3. Save this as an Excel file (**Wunderground-Dec2011**) and close the workbook. Open the new Excel file in SPSS. Check the definition of each variable and make any changes you deem necessary.
4. Add values to DayOfWeek (1=Sunday, 2=Monday....)
5. Transform | Recode into Same Variables... Map: Sunday=1, etc for DayOfWeek.

► Build a chart to show the mean temperature over time, from December 1 to December 31.

What type of chart should you use? Why?

What is on the X-Axis? Why?

What is on the Y-Axis? Why?

► Build a chart to show the mean high temperature per day of the week, from December 1 to December 31. (This should show the mean temperature of Sunday, Monday, Tuesday, etc. in the correct order).

What type of chart should you use? Why?

What is on the X-Axis? Why?

What is on the Y-Axis? Why?

► How well does average humidity predict low dew point? (Hint: Use regression)