## **SPSS and Importing Data**

▶ Let's import some data from a table on a web page to Excel, then in SPSS. The following steps will get us weather data for Forest Grove for February 2012. If you get a "Continue running scripts?" Error press **Yes**. If you get an "Install Software?" error press **No**.

http://www.wunderground.com/history/

Location: 97116
Feb 1, 2012
Submit
Custom
Feb 1, 2012 to Feb 29, 2012
Go

Click the Yellow and Black checkmark at the **very top** of the web page. This will import the entire web page into Excel and then we can delete everything but the Observations Table. Press **Import** to bring the data into the current worksheet.



## Observations

2011	Temp. (°F)			Dew Point (°F)			Humidity (%)			Sea Level Press. (in)		
Feb	high	avg	low	high	avg	low	high	avg	low	high	avg	low
1	44	35	26	22	17	12	81	57	33	30.61	30.54	30.49

Let's only look at Temperature, Dew Point, and Humidity. Delete all the data to the right of low Humidity in Excel.

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.

- 1. Let's edit row 2 to give meaningful column names then delete row 1. I'm using Day, T\_high, T\_avg, and T\_low, DP\_high, DP\_avg, DP\_low, H\_high, H\_avg, and H\_low. Delete any extra data below the table as well.
- 2. Let's add a **DayOfWeek** column before the **T\_high** column. Insert a column, add a heading **DayOfWeek**, and type **Wednesday** in the second row (Feb 1, 2012 was a Wednesday). Click and drag **Wednesday** to fill in the remaining rows. Excel should fill out the days of the week correctly.
- 3. Save this as an Excel file (**Wunderground\_Feb2012**) 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. Save As Wunderground 2012.sav

▶ Build a chart to show the mean high temperature per day of the week, from February 1 to February 29

Does this show the days in the correct order? Why or why not?

What type of chart should you use? Why? What is on the X-Axis? Why? What is on the Y-Axis? Why?

- 5. Add values to DayOfWeek (1=Sunday, 2=Monday....)
- 6. Transform | Recode into Same Variables... | Select DayOfWeek into String Variables | Old and New Values | Map: Sunday=1, etc for DayOfWeek. View | Value Labels
- 7. Save the file again.
- ▶ Rebuild the chart to show the mean high temperature per day of the week, from February 1 to February 29.

Does this show the days in the correct order? Why or why not?

▶ Build a chart to show the high temperature over time, from February 1 to February 29.

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?