## 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
Dec 1, 2013
Submit
Custom Tab
Dec 1, 2013 to Dec 1, 2013
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 ( ${ }^{\text {F }}$ ) |  |  | 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. Save this as an Excel file (Wunderground_Dec2013) and close the workbook. Open the new Excel file in SPSS. Check the definition of each variable and make any changes you deem necessary.
3. Save as Wunderground_2013.sav

- Build a chart to show the mean high temperature per day of the week, from December 1 to December 31

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 December 1 to December 31.

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

- Build a chart to show the high 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?

How well does average humidity predict low dew point?

