## PASW and Importing Data

Let's import some data from a table on a web page. The following steps will get us weather data for Forest Grove for February 2011. 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
Custom
Feb 1, 2011 to Feb 28, 2011
Go!
Scroll down to the Observations table. Click the yellow box with the black arrow next to 2011 and then press Import to bring the data into the current worksheet.

## Observations

| 2011 | Temp. ( ${ }^{\text {F }}$ ) |  |  | 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 PASW needs the data in a particular format, we need to edit the spreadsheet. The first row needs to contain the variable names that PSAW 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 Feb, T_high, T_avg, and T_low, DP_high, DP_avg, DP_low, H_high, H_avg, and H_low.
2. Let's add a DayOfWeek column before the T_high column. Insert a column, add a heading DayOfWeek, and type Tuesday in the second row (Feb 1, 2011 was a Tuesday). Click and drag Tuesday to fill in the remaining rows. Excel should fill out the days of the week correctly.
3. Save this as an Excel file (Wunderground_Feb2011) and close the workbook. Open the new Excel file in PASW. 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 high temperature over time, from February 1 to February 28.

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

- Build a chart to show the mean high temperature per day of the week, from February 1 to February 28. (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-Axs? Why?
What is on the Y-Axis? Why?

- How well does average humidity predict low dew point?

