1067-B1-2349 **Max Buot*** (buotm@xavier.edu), Department of Mathematics & Computer Science, Xavier University, 3800 Victory Parkway, Cincinnati, OH 45207. *Data Visualization in Introductory Statistics.*

The standard graphical displays of univariate data that are studied in the early weeks of an introductory statistics course are well suited to visualize variability, outlying data values, and measures of location. To examine the relationship between two or more variables, a side-by-side graph, or in the case of quantitative data, a scatterplot, is constructed. These displays are sufficient for a first course in statistics, but students often perceive them as bland and uninspiring. As a counter to this impression, I supplement lectures with examples of data visualizations that are employed in modern research (but not mentioned in the course text). Students have found these displays aesthetically pleasing, as well as an effective means to illustrate multivariate relationships. Although their construction is beyond the scope of an introductory course, the presentation of an advanced graphical display usually provides students some insight as to how a data set should be analyzed. In this talk, I will discuss how bubble charts and heat maps can help motivate many of the topics covered in a traditional first course in statistics. Each example is either found online, or readily duplicated with the open-source statistical package R. (Received September 22, 2010)