This poster shows the results of a semester long investigation of UVM’s physical plant. I worked with large physical data sets from UVM’s boilers and chillers to determine their performance curves and common operation points of energy plant assets. Using Matlab I was able to clean and organize over a year’s worth of 15-minute data from the physical plant, including steam energy, temperature, and pressure. The goal of the project was to determine efficiency curves for UVM’s five boilers and two chillers. These curves are being used to model the UVM central heating plant system. In the future we would like to be able to build a simulation tool for multi-energy systems at a large scale. The UVM physical plant would then act as a test-bed for new studies in energy usage and operation.