I built a model on Sketch-up of the house Nat Fortune’s students constructed (images above and below). Sketch-up creates three dimensional structures and materials and can be used in Energy Plus, an environment simulation program, that models energy flow.

**Energy Plus**

Energy Plus simulates the energy flow and environmental effects on a specific building’s composition, outputting graphs, images and text based on real-time weather data.

**Energy Plus Features:**
- Building Design (An easy to use graphical interface)
- Outputs Environmental Performance
- Records Heat loss and Gain
- Creates Energy Demand and Savings charts
- Models light, ventilation, & water flow in buildings
- Database with weather data collected from around the world

**Building the house on Sketch-up**

These are pictures of 4 different stages of the construction process of the house on sketch-up. Sketch-up is a great architectural tool, and was the ideal program for this project.

Thank you AEMES and the Smith College Physics Department for financial support and Professor Nalini Easwar for poster printing support.