

Quiz 25) May 6, 2004

In order to be able to predict the occurrence of avalanches, considerable effort is invested in being able to predict snow conditions in inaccessible areas from variables that can be measured at more accessible sites. The Swiss Federal Institute for Snow and Avalanche Research has developed a model that predicts snowpack characteristics from variables measured at mountain weather stations. The measurements taken at these sites include values for variables like snow-fall depth, temperature, snow-fall density, snow-crystal grain size, and snow crystal type.

A student studying this model wants to validate the model for conditions in Montana. He takes measurements on the same variables used by the Swiss to develop their model, and uses the model to predict the snowpack conditions. He then measures actual snow pack conditions at various times during the winter and at various sample sites near the weather station. He then compares the predicted snowpack conditions to the actual conditions.

One of the variables of interest is depicted below. How would the student compare the predicted and actual results?

