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Project Proposal

I am interested in snowfall data in Colorado because I enjoy snowboarding. When considering skiing or snowboarding in the backcountry it is always smart to be aware of avalanche danger. I want to see if the snow depth has any correlation to the number of avalanches that occur. I'm interested to see if a deeper snowpack means more avalanches or if avalanche frequency may not depend on depth of the snowpack.

I want to use data for snow depth in Vail and Summit County along with data for avalanches in Vail and Summit County. I have found data for daily snow depth in inches for Vail and Summit County and data for recorded avalanches. I want to use both data sets to determine if months with more snowfall have more avalanches.

I want to take my data sets and cluster months by avalanche history and compare it to months clustered by snow depth. By observing the months with the most avalanches I will be able to see if the snow depth was correlated to more avalanches. I think that I will see with a deeper snowpack the avalanche frequency will be higher.