

Does Topography Affect Precipitation

Question: Does the topography of an area affect the precipitation?

Procedure:

1. Using a topographic map of the area, determine if the site of the weather station is on a mountain, in a valley, or on a plain.
2. Use the map to determine the elevation of your weather station.
3. Plot one years precipitation on a line graph using months as intervals.
4. Email your data to your sister stations and receive their data.
5. Add their information to your graph, using separate colors for each of the three topographies.

Questions:

1. According to your data, was elevation a factor? Is there any way to lessen that variable?
2. According to your data, was the topography a factor?
3. If topography was a factor, why do you think that affected the precipitation amounts?
4. Do you think that location on a mountain or in a valley would change the amount of precipitation at your station? Give reasons for your answer.

Comparison of Average Daily Temperature to Elevation

Question: Does elevation have an effect on average daily temperature?

- Procedure:
1. Record the daily temperature for your station at 10:00 AM.
 2. Use the mesonet web page to record the temperatures at that time for the sister schools.
 3. Use topographic maps to determine the elevation of the various schools.
 4. Graph elevation vs. temperature
 5. Compare for various days throughout the year.
 6. Analyze data to see if the elevation does affect temperature.