Quiz for Lecture 3: Understanding Climate Data and Implications for Trend Analysis

This quiz contains 2 questions. Complete this quiz to continue to the next lecture. Good luck!

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Understanding Climate Data and Implications for Trend Analysis

Consider a gridded analysis of temperature derived from irregularly spaced station observations. From the list below, select all that should be a concern to someone considering using data from a single grid point in analyzing temperature variability at that location:

A. If the spatial resolution of the grid may be less than the distance between some stations, thus the grid point values may be based solely on interpolation.

B. If over the time period covered by gridded data set there may have been a different number of stations used in its construction.

C. If the latitude of the grid point selected is between 30 deg. N and 40 deg. N.

D. If the data set has no documentation available on how it was constructed.

The Answer:

A, B, and D:

- If the spatial resolution of the grid may be less than the distance between some stations, thus the grid point values may be based solely on interpolation.
- If over the time period covered by gridded data set there may have been a different number of stations used in its construction.
- If the data set has no documentation available on how it was constructed.

Understanding Climate Data and Implications for Trend Analysis

When looking at a time history of surface air temperature data it is important to know when an observing station was moved just 100 m from its original location because:

A, The station name may have changed as well

B. The weather instruments may have been damaged during the move

C. Even seemingly slight changes in location can affect temperature readings

D. All of the above

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The Answer:

D. All of the above:

- The station name may have changed as well
- The weather instruments may have been damaged during the move
- Even seemingly slight changes in location can affect temperature readings

You have completed Quiz 3.

If you have any questions, please see the recommended readings and lecture materials before continuing to the next lecture.

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