Patterns of climate change in the USA: an analysis of temperature and precipitation trends since 1950

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Abstract

- Applied Climate Information System database (ACIS)
- parameters included :

Introduction

Periods of warming and cooling are natural phenomena throughout the history of the earth. However, evidence suggests that the unprecedented climate changes occuring over the last century have been a result of anthropogenic increases in carbon dioxide to the atmopshere. Here, we provide evidence to support climate warming in the United States based on patterns of temperature and precipitation. The objectives of this study were to (1) determine whether or not the United States has expereinced climate warming since 1950, (2) highlight key areas of the United States that have exeperienced the greatest changes in average annual temperature, and (3) determine the degree to which precipitation has changed in the United States over the last century.

Methods

Temperature and precipitation datasets were pulled from the Applied Climate Information System (ACIS) database (*1*). The temperature dataset includes yearly average temperature data gathered from weather stations located all over the USA, between the years of 1950 and 2016. The precipitation dataset includes annual average rainfall measurements at weather stations all across the USA, measured between the years of ___ and ___.

Results

- figure
- map

Discussion

References

1. K. D. R. K.G. Hubbard A. T. DeGaetano, A modern applied climate information system. *Bulletin of the American Meteorological Society.* **85**, 811–812 (2004).