Model Predicts Colder Winter Temperatures in the East, Warmer in the West

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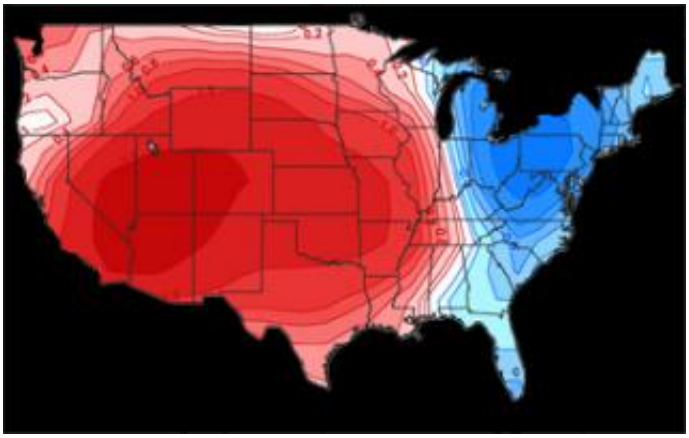

According to a model developed by atmospheric scientist Judah Cohen of Atmospheric and Environmental Research (AER), Inc., temperatures during Dec., Jan., and Feb. will be cold in the eastern United States and warm west of the Mississippi River.

Image: A weather model for Dec., Jan., and Feb. shows cooler and snowier weather in the East and warmer, dryer weather in the West. White areas on the map indicate typical winter temperatures. Blue indicates colder than normal, and red indicates warmer than normal. Credit: Judah Cohen, Atmospheric and Environmental Research, Inc.

The largest departures from normal are found in the eastern Great Lakes (darkest blue) and in the Southwest (darkest red). Cohen's model uses El Nino, recent temperature trends and Siberian snow cover in Oct, as well as sea-level pressure anomalies, in its winter forecast.

For Jan., Feb., and Mar. (at right), the model shows cold temperatures in the Northeast, the Great Lakes, and the Northern Plains and warm in the Rockies and along the West Coast.

Cohen says regions impacted by snow variability differ from those influenced by El Nino, which is often used in forecast models. "The influence of snow cover extent has the potential to complement El Nino-derived forecasts, and to advance our understanding of climate variability and its application in prediction models," he said.

Source: NSF