

A wind turbine Friday in south central Kansas. Seventeen states have had cooler-than-usual temperatures in July.
CHARLIE RIEDEL/AP

# El Nino, La Nina drive cool summer

## 17 states mark cooler-than-usual temps in July

**By Doyle Rice**
USA Today

El Nino and La Nina have been on vacation over the past few months, leaving much of the eastern and southern U.S. with a cool summer.

El Nino (warmer-than-average water temperatures in the tropical Pacific Ocean) and its counterpart La Nina (cooler-than-average water temperatures) are unquestionably the world's climate drivers — and the main influences on weather in the U.S.

The El Nino pattern is officially known as the "El Nino Southern Oscillation" (ENSO). And when either El Nino or La Nina are really strong, the world's other climate patterns run and hide.

That's not happened this summer: With tropical Pacific ocean temperatures neither unusually warm nor cold), the little-known "East Pacific-North Pacific" (EP-NP) pattern has taken over, according to climate scientist Richard Heim of the National Climatic Data Center in Asheville, N.C.

This pattern is partly responsible for the weirdly cool and damp summer over parts of the eastern and southern U.S.

How cool? Seventeen states, mainly in the South, had a cooler-than-average July, according to the data center. And cities such as Washington, D.C., Atlanta, and Nashville, Tenn., are all having an unusually cool August, the National Weather Service reports.

Also, Florida had its wettest July on record.

Unlike the tropical waters of El Nino, the "EP-NP" pattern deals with north Pacific sea-surface temperatures. This summer, water temperatures in the eastern north Pacific Ocean have been unusually warm, which Heim says has led to atypical weather patterns over most of North America.

"We've had a weird 'trough' of low pressure over the north-central USA," Heim says. (Low-pressure troughs typically bring cloudy and rainy skies.) And last weekend, a stationary front draped across the Gulf Coast was a typical winter location for the front, not one for summer, he says.

A 1995 study in the *Bulletin of the American Meteorological Society* found that unusually warm north Pacific ocean temperatures in the spring of 1993 could be linked to the disastrous flooding that inundated the Midwest that summer.