

Custer County, Colorado

Why the Weather

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September 18, 2010
Westcliffe, Colorado

What makes the climate of Custer County?



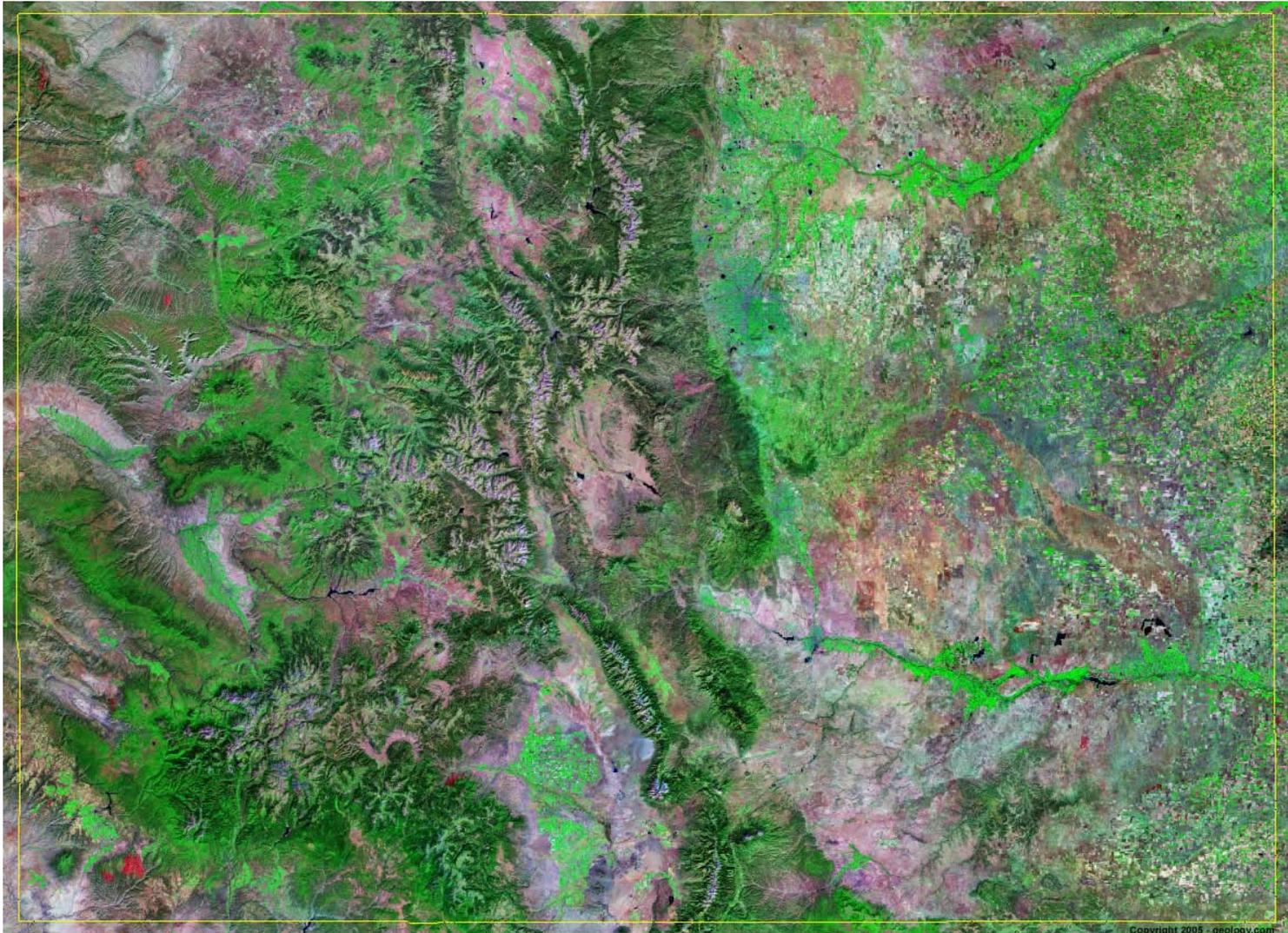
1) Interior continental location



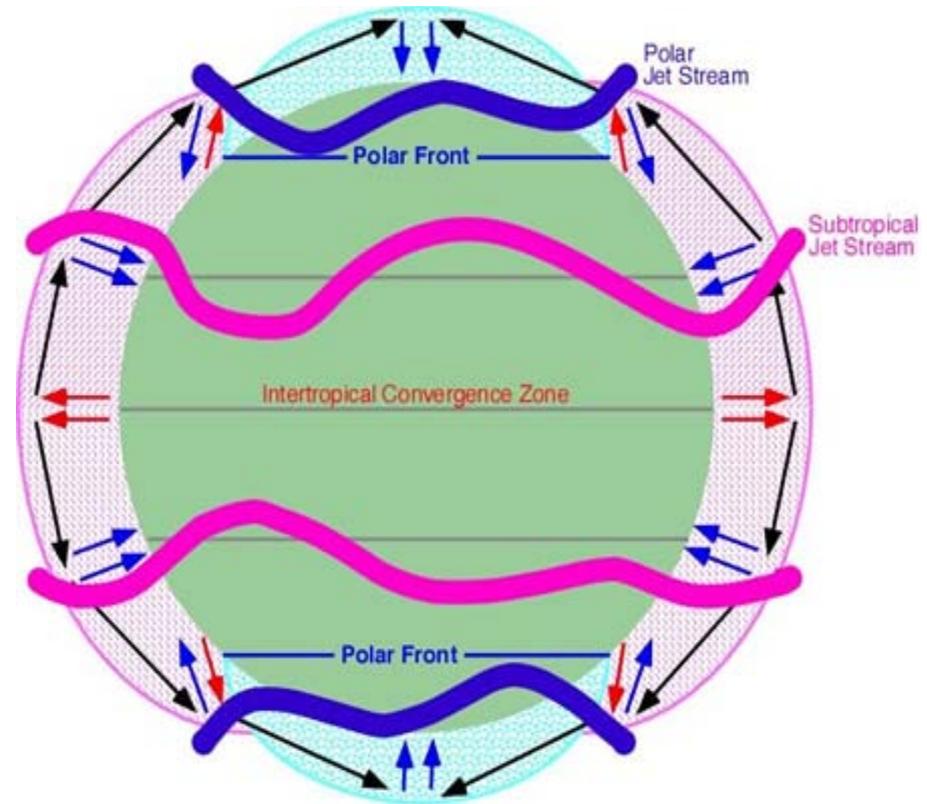
2) High elevations



3) Large and complex mountain ranges with steep elevation gradients



4) Mid Latitudes – Custer County is closer to subtropical moisture sources than much of Colorado



The Result



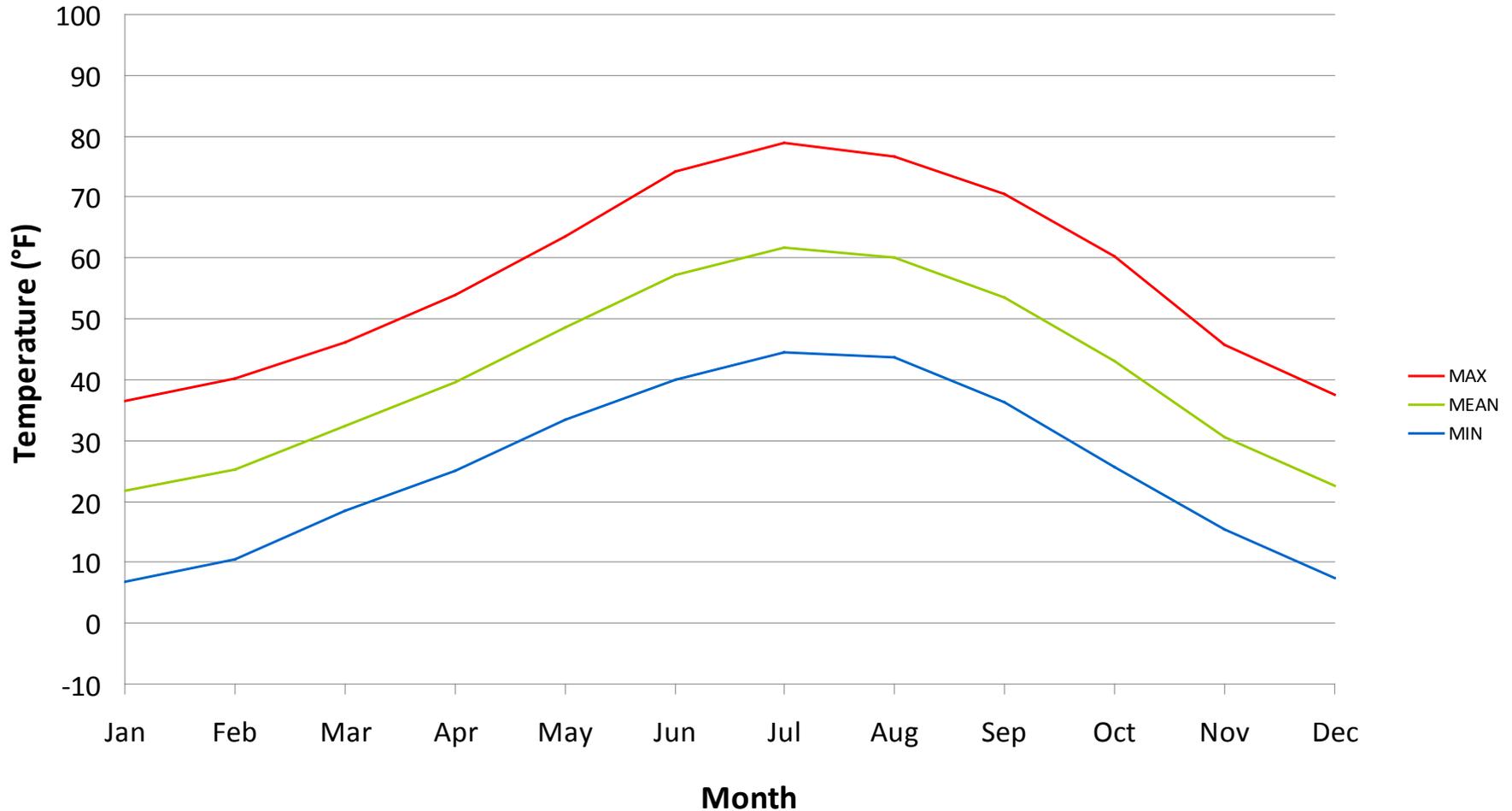
Plentiful sunshine and low humidity

much of the time



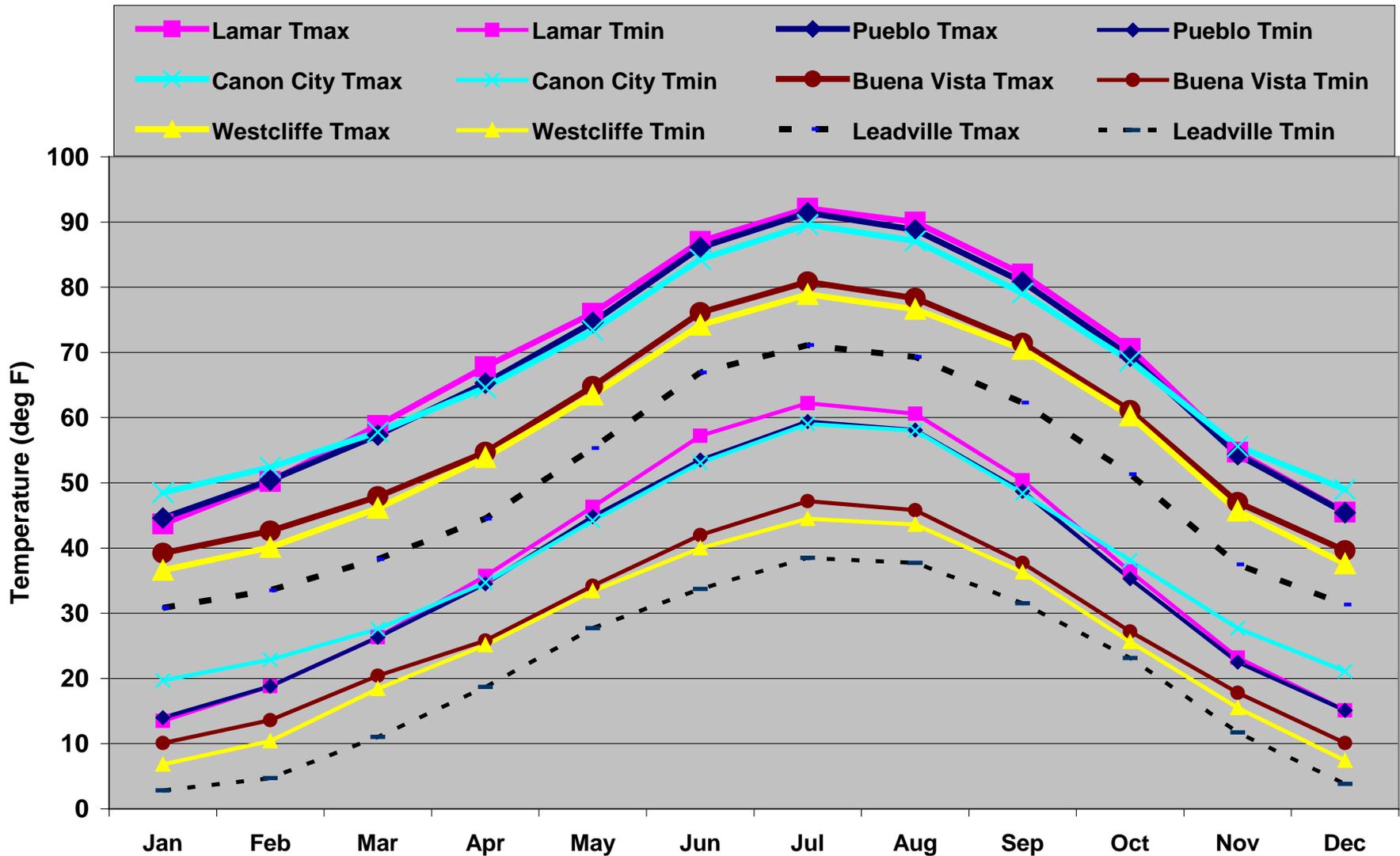
Large seasonal and day-night temperature swings

Westcliffe 1971-2000 Monthly Average Temperatures

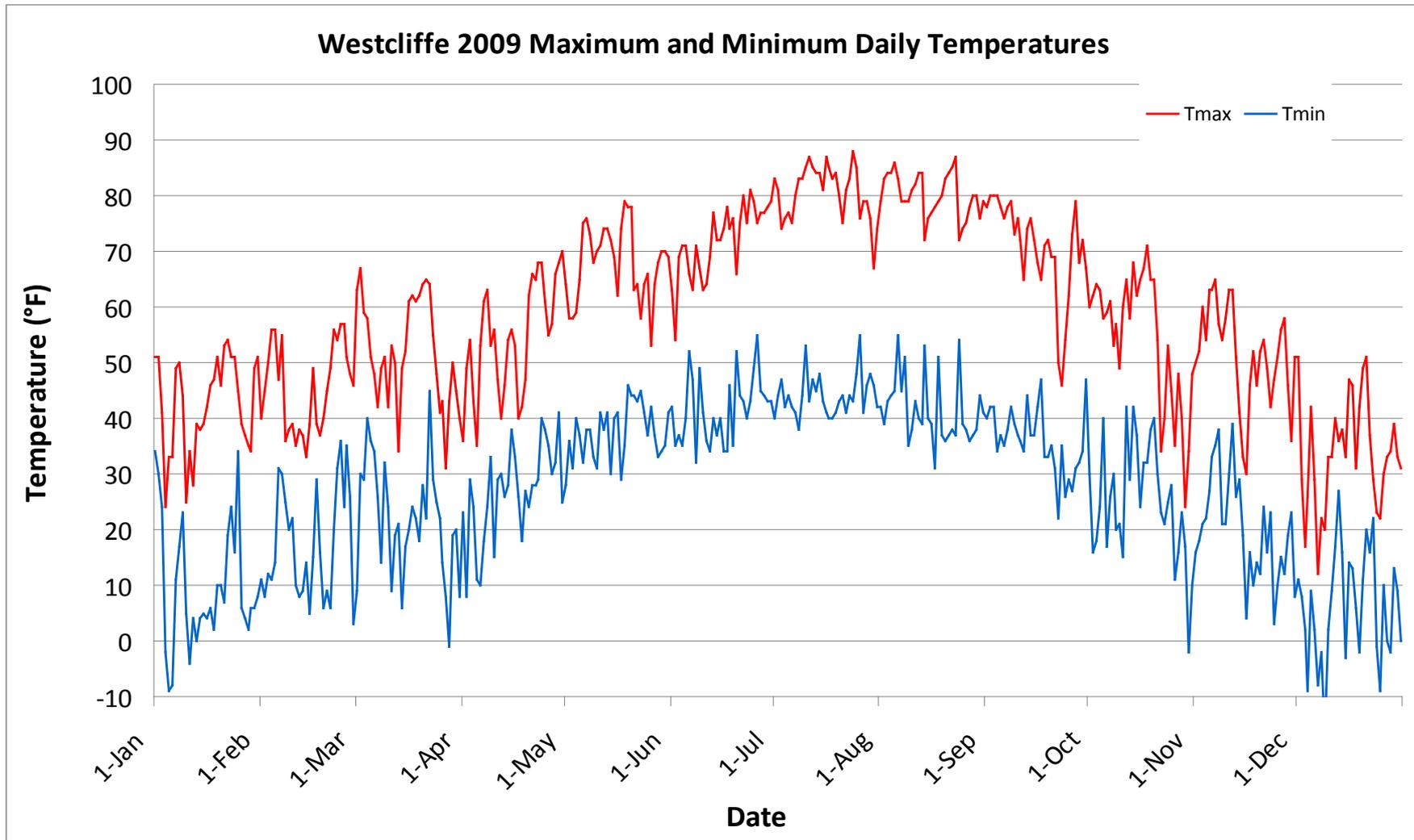


Comparisons with other Arkansas Valley locations

Arkansas Valley Average Monthly Temperatures for Selected Sites



Plenty of day-to-day weather changes

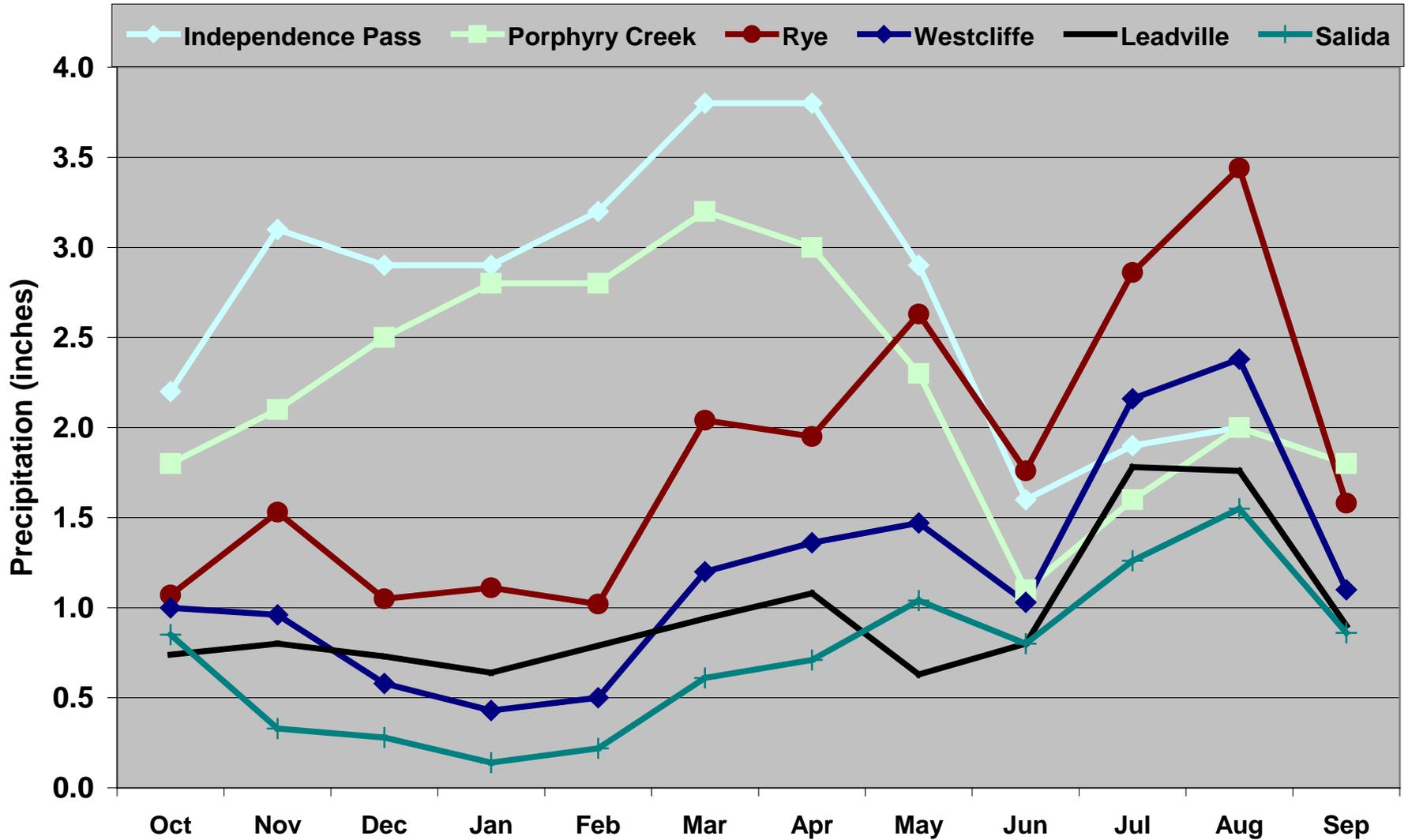


Dry but with sharp gradient in precipitation with elevation. Small areas of the basin get most of the snow (usually).



Highly seasonal precipitation patterns

Arkansas Valley Basin Average Precipitation For Selected Sites



Less frequent precipitation than
other parts of the state



Summer monsoon influence



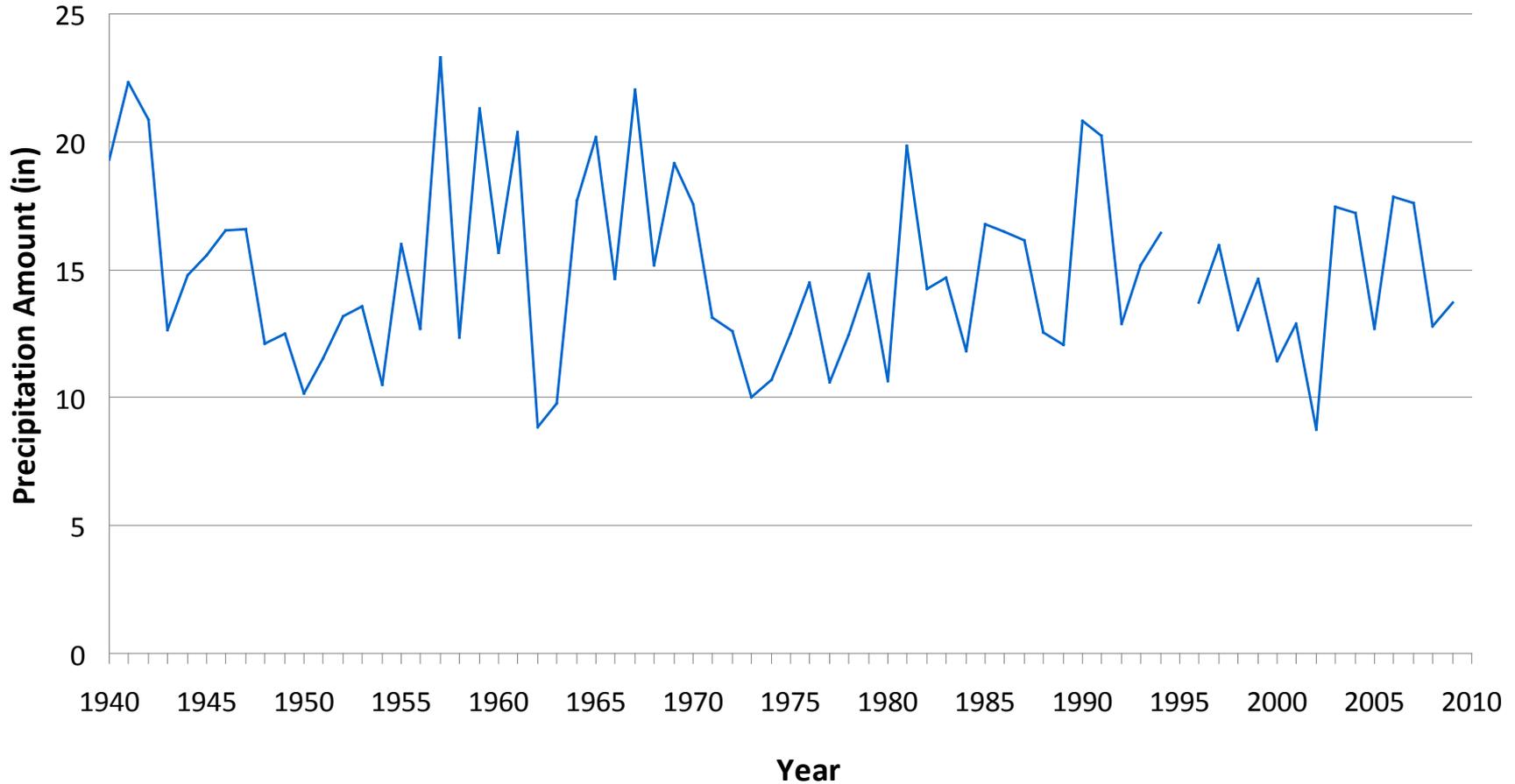
A photograph showing a snow-covered road with a large snowdrift in the foreground. The road is partially cleared, showing tire tracks and patches of brown grass. In the background, a blue pickup truck is parked on the right side of the road. The scene is set in a snowy, rural area with trees and a fence visible in the distance.

Occasional surprises

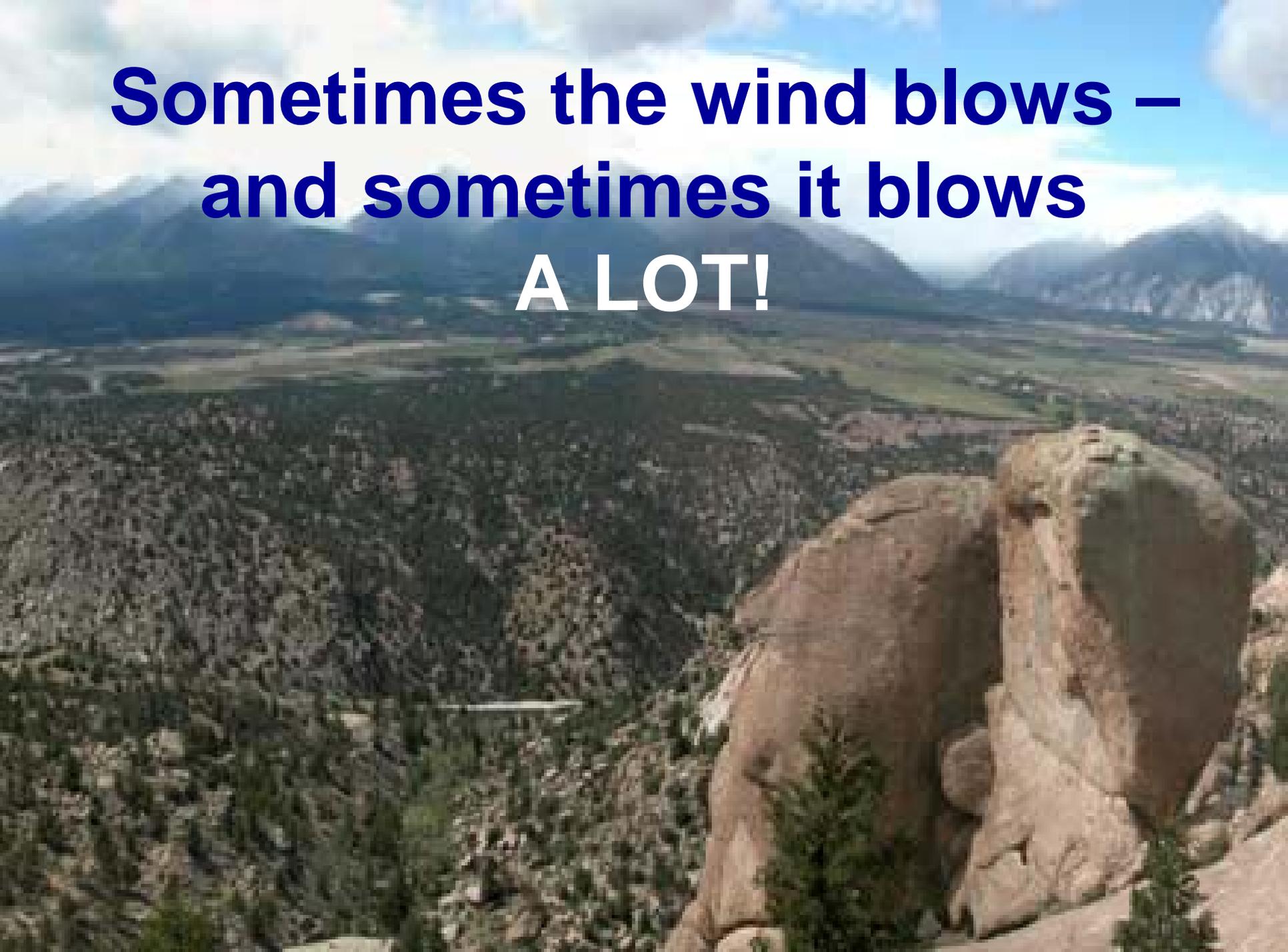
December 2006 Snowstorm

Every Year is Different

Westcliffe Total Annual Precipitation
1940-2009



**Sometimes the wind blows –
and sometimes it blows
A LOT!**

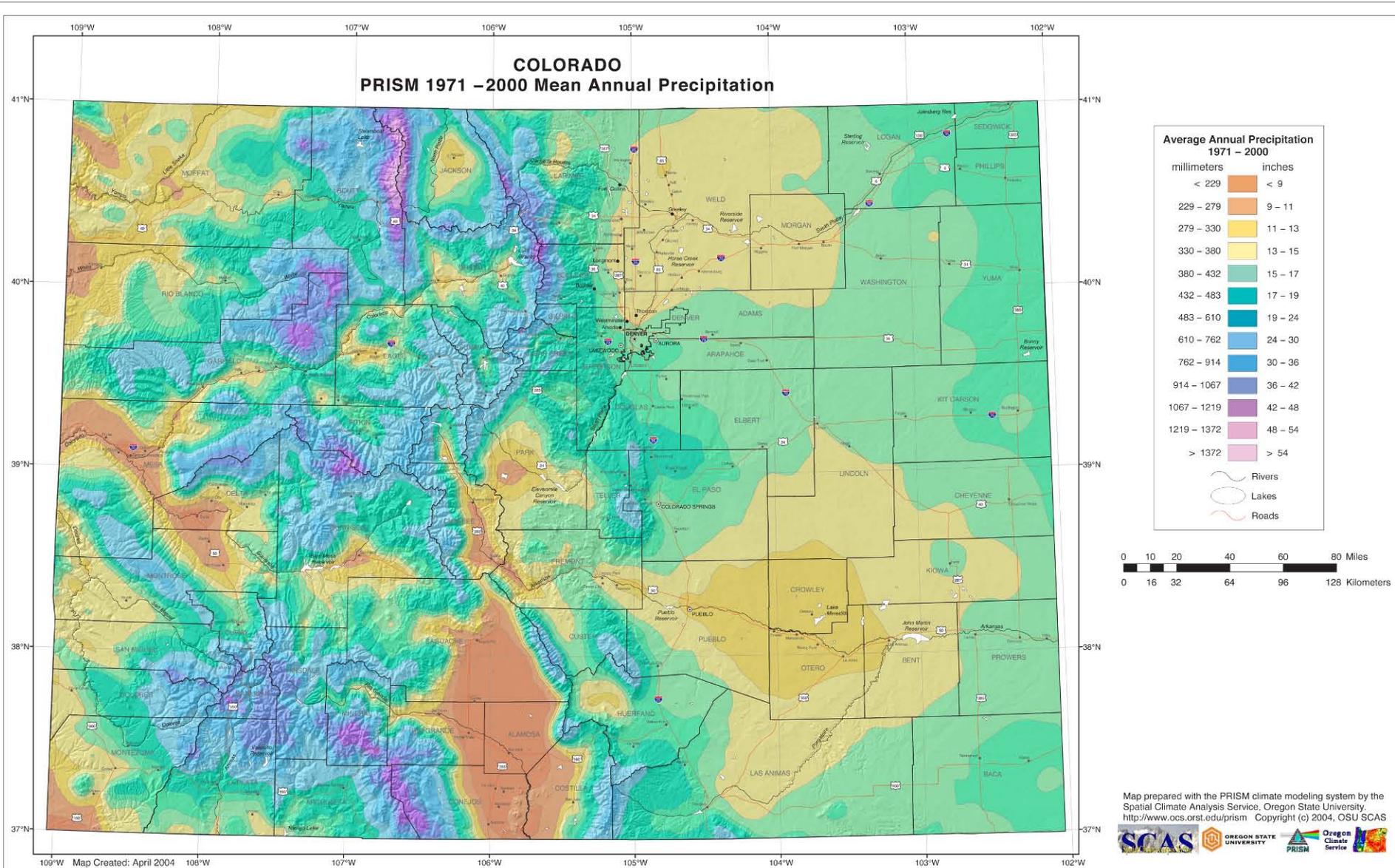


So where does the water come from?

- It comes from our local and nearby precipitation – a renewable but highly variable resource

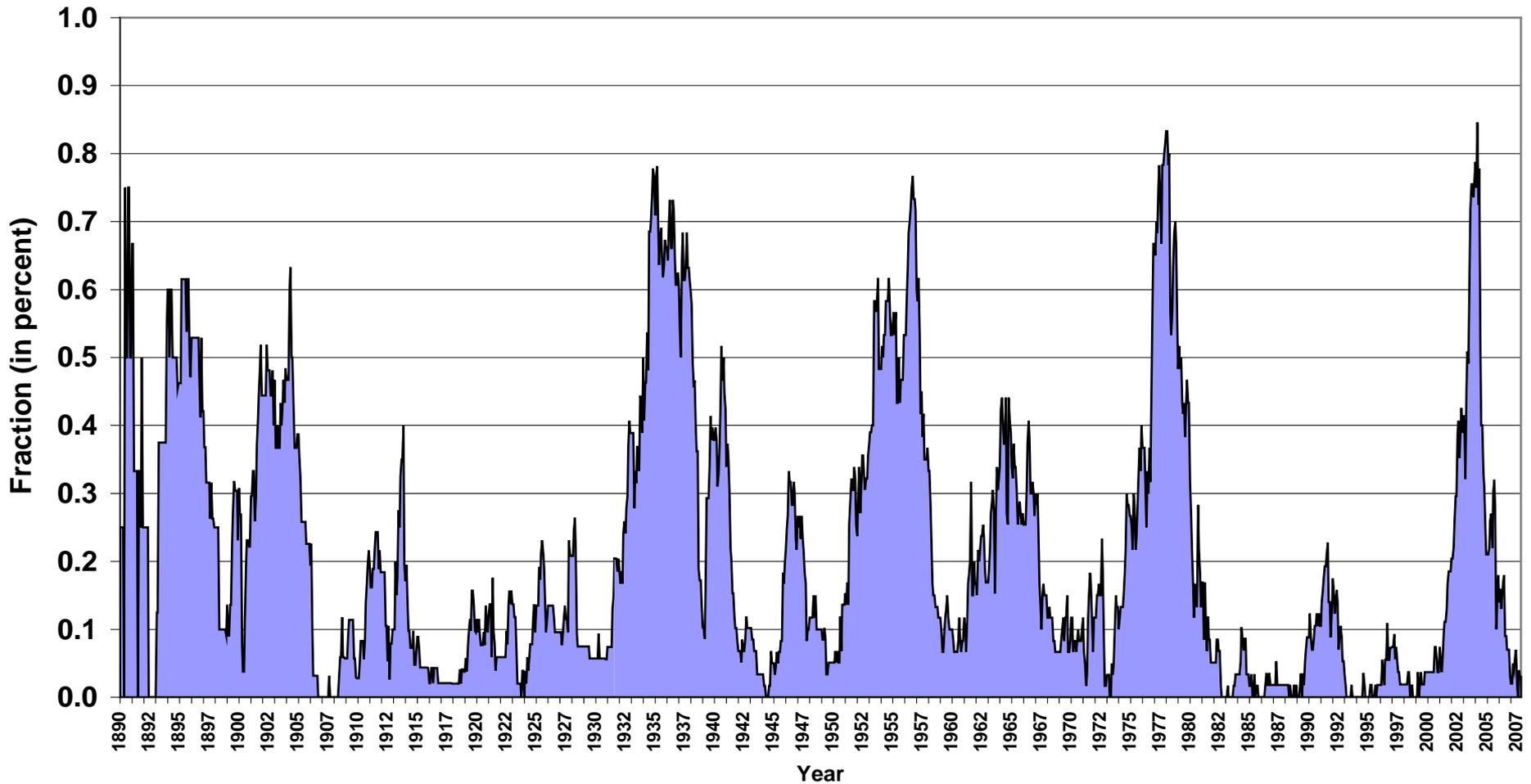
“The weather is our water”

Colorado Average Annual Precipitation



48-Month SPI

Fraction of Colorado in Drought
Based on 48 month SPI
(1890 - February 2008)



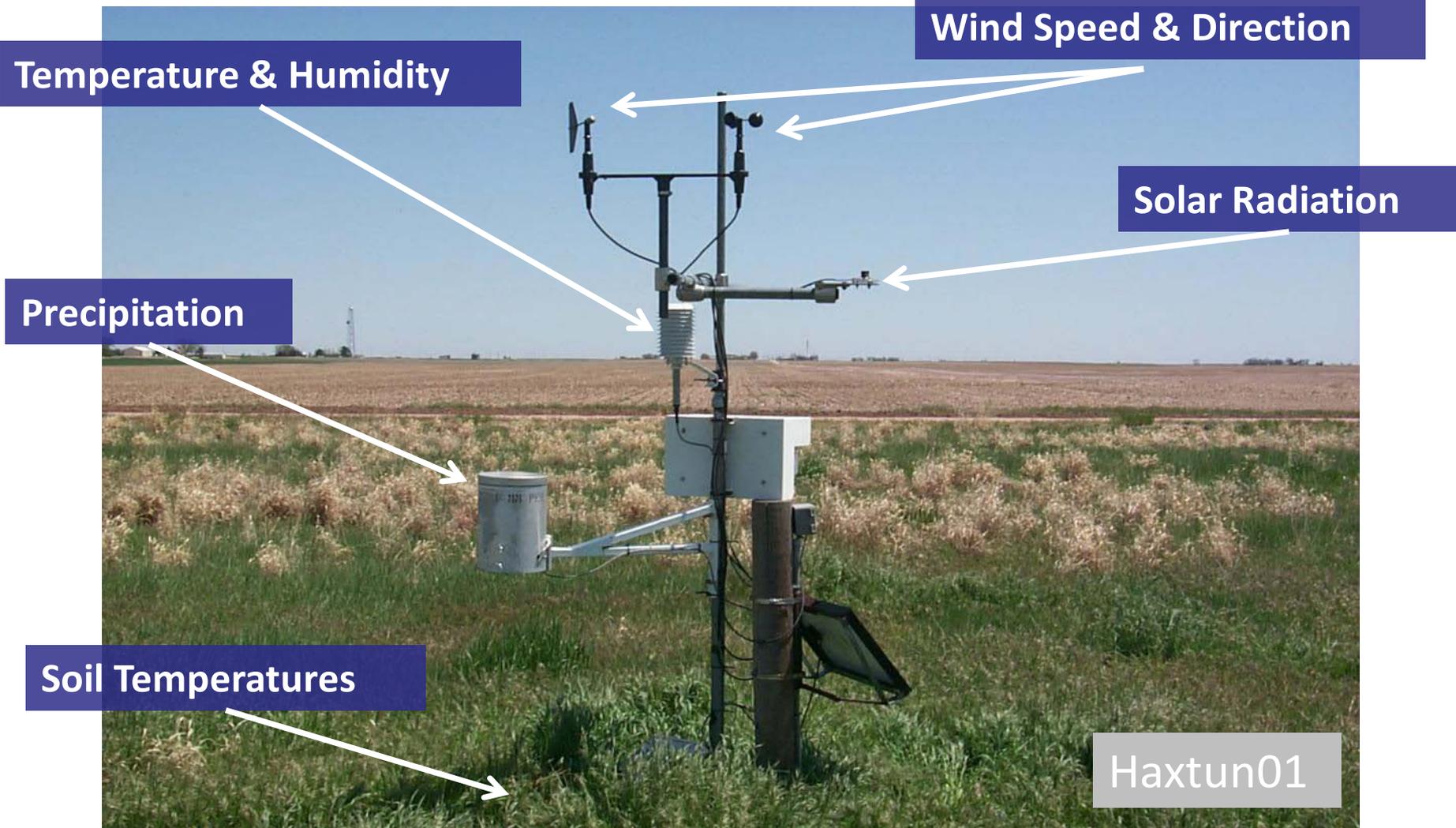
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Improving Climate Monitoring in SE Colorado – With your help!



Introducing Custer County CoAgMet

Colorado Agricultural Meteorological Network (CoAgMet) is a statewide meteorological monitoring system primarily serving Colorado's diverse agricultural regions



CoCoRaHS (Community Collaborative Rain Hail and Snow Network)



Photo by Henry Reges



Photo by Henry Reges



<http://www.cocorahs.org>

CoCoRaHS:

The volunteers collect data by using extremely effective low-cost measurement tools



Photo by Henry Reges



Photo by Henry Reges

Aluminum foil-wrapped Styrofoam hail pads

4-inch diameter high capacity rain gauges

We already have some rain gauge volunteers here!

But we could surely use more help since the rain and snow vary so much!!

Sign up at
<http://www.cocorahs.org>
Then click “Join CoCoRaHS”



Photo by Henry Reges

Colorado Climate Center

Data and Power Point Presentations
available for downloading

<http://ccc.atmos.colostate.edu>

CoAgMet website

<http://www.coagmet.com>



Photo by Henry Reges