



Short and Long Term Trends in Colorado Front Range Temperatures

Becky Bolinger, PhD

Colorado Climate Center

Plant Health Care Workshop

June 15, 2017 – Fort Collins, Colorado

Overview

- ❑ About the Colorado Climate Center
- ❑ New web services – normals, extremes, tools
- ❑ The climate of Colorado
- ❑ Observed temperature trends throughout Colorado
- ❑ What trends might trees and vegetation be sensitive to?



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The Colorado Climate Center

State Climatologist:
Nolan Doesken

Climatologists:
Becky Bolinger
Peter Goble

CoAgMET:
Zach Schwalbe

CoCoRaHS:
Noah Newman
Henry Reges
Julian Turner



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The Colorado Climate Center

- ❑ Providing climate services to the state of Colorado since 1974
- ❑ “collect and observe data with the purpose of monitoring the climate...”
- ❑ “place individual events into historical perspective...”
- ❑ “disseminate climate information to the user community...”
- ❑ “communicate climate variability of Colorado to scientists, educators, stakeholders, media, and the general public.”



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http://climate.colostate.edu


General Info ▾ **Colorado's Climate** ▾ **Data Access** **Climate Maps** **Normals and Extremes** ▾ **Drought** ▾ **Tools** ▾

Visit our [Climate Extremes](#) page for locations and dates of various climate extremes. Where and when has the warmest January temperature occurred? What was the wettest day ever recorded in May? Get the answers here!

[Previous](#) | [Next](#)


Current Conditions

Fort Collins, CO

 **81°F**

Last Updated on June 14, 6:46 PM MDT


Wind: Calm
Dewpoint: 35°F
Humidity: 19%




[Zip Code](#) [Local Conditions](#)

Fort Collins Weather Station
Current conditions

News Feeds

 **Colorado Climate Ce...**
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 **Colorado Climate Center**
June 12 at 6:21pm



A group of storm chasers from CSU cataloged ~3" diameter hail today north of Greeley. (Don't worry, they didn't drive through it as it was falling.) This reminds us at the Climate Center that

Quick Links

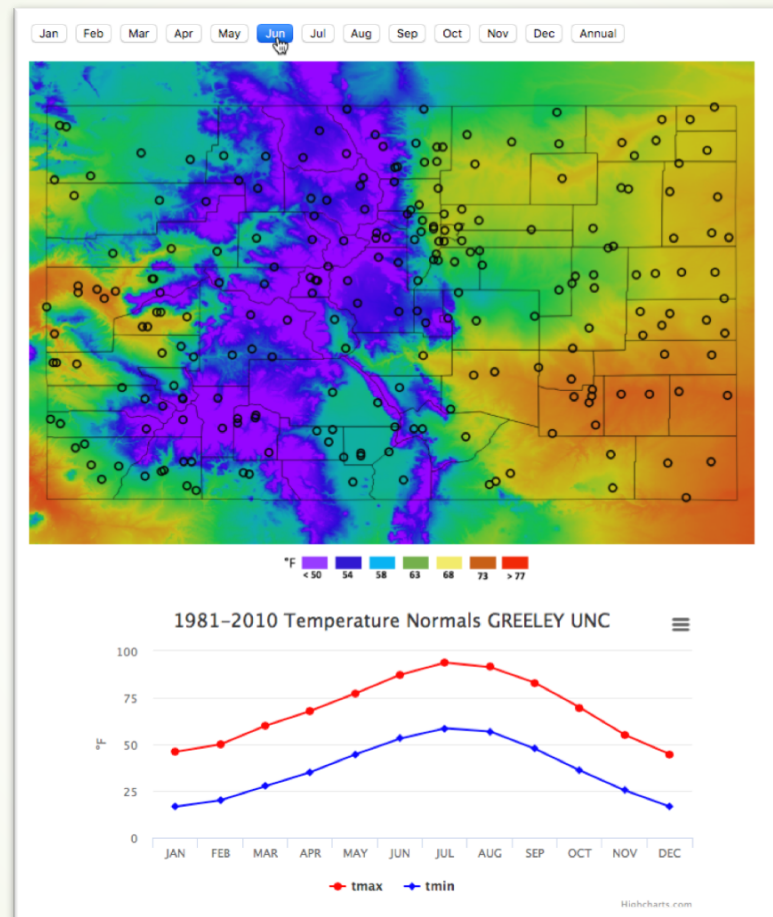
CoAgMET

The Colorado Agricultural Meteorological nETwork provides live-updated meteorological conditions at agriculture sites across Colorado.

CoCoRaHS

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<http://climate.colostate.edu/normals.html>



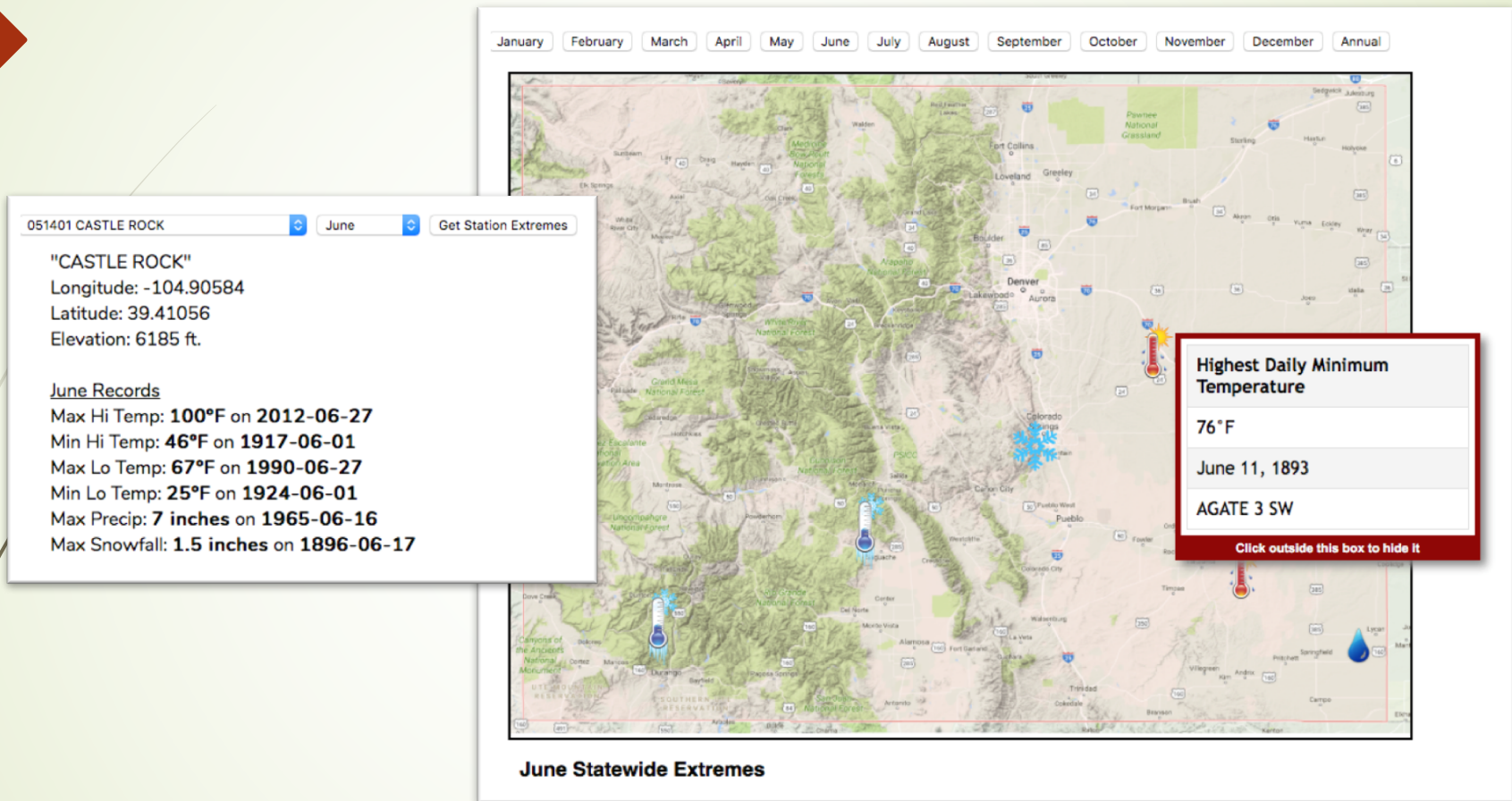
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<http://climate.colostate.edu/extremes.html>



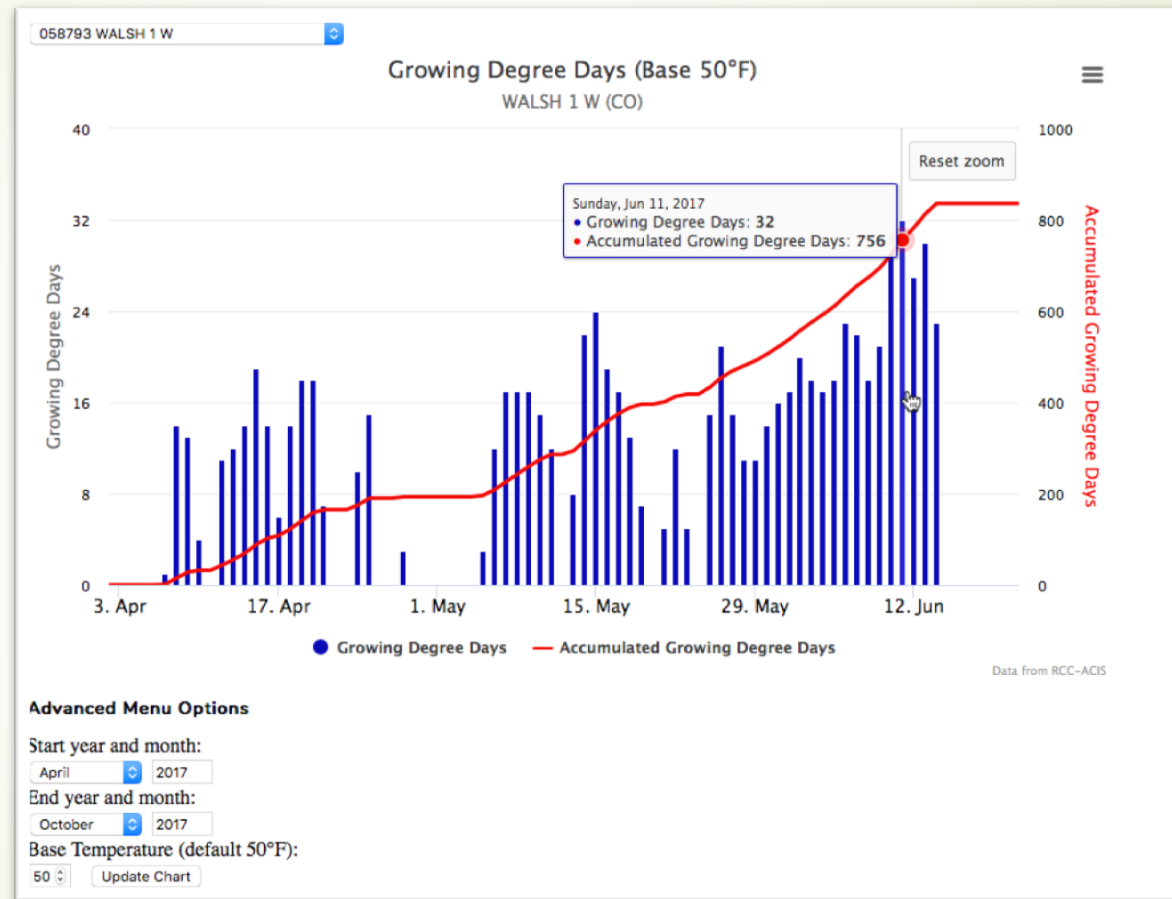
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<http://climate.colostate.edu/tools.html>



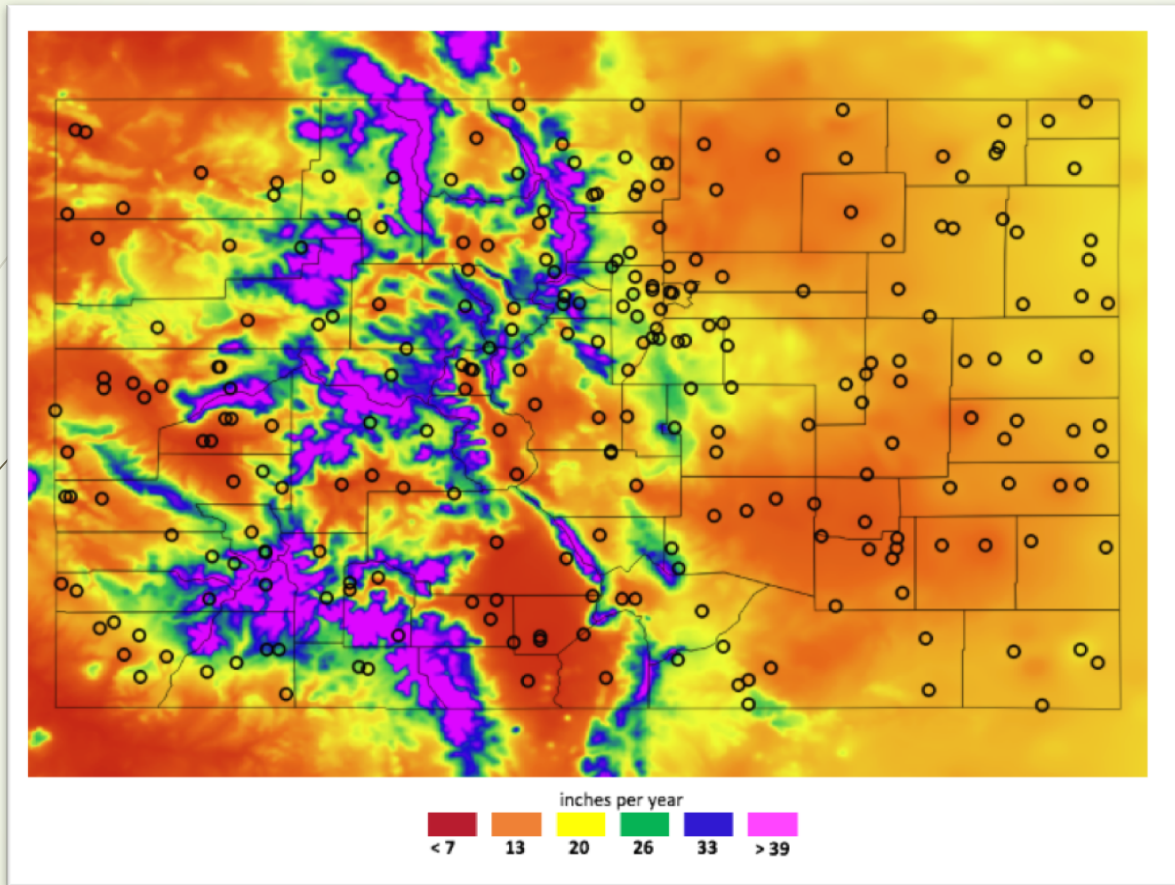
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Colorado's Climate



1981 – 2010
Annual Average
Precipitation



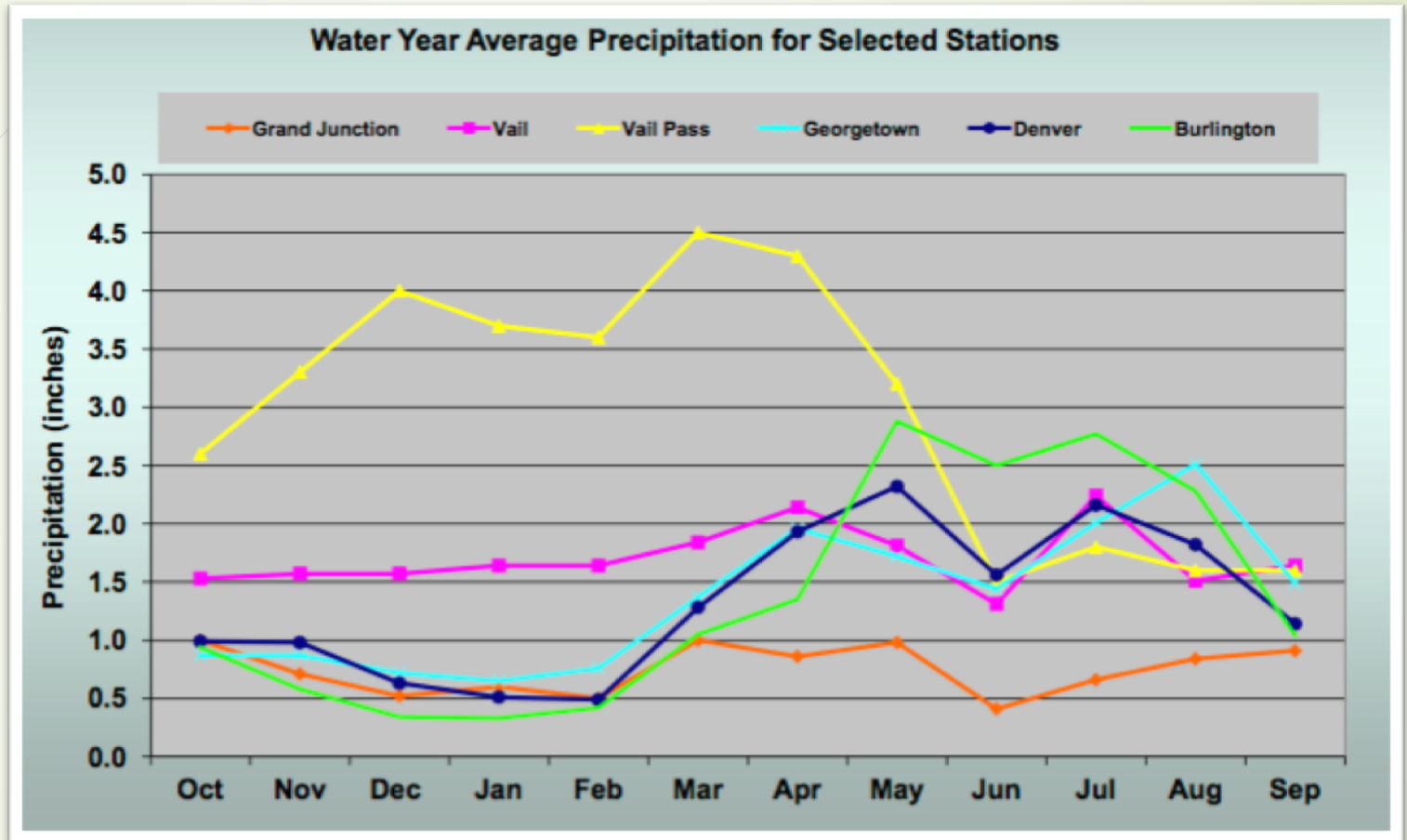
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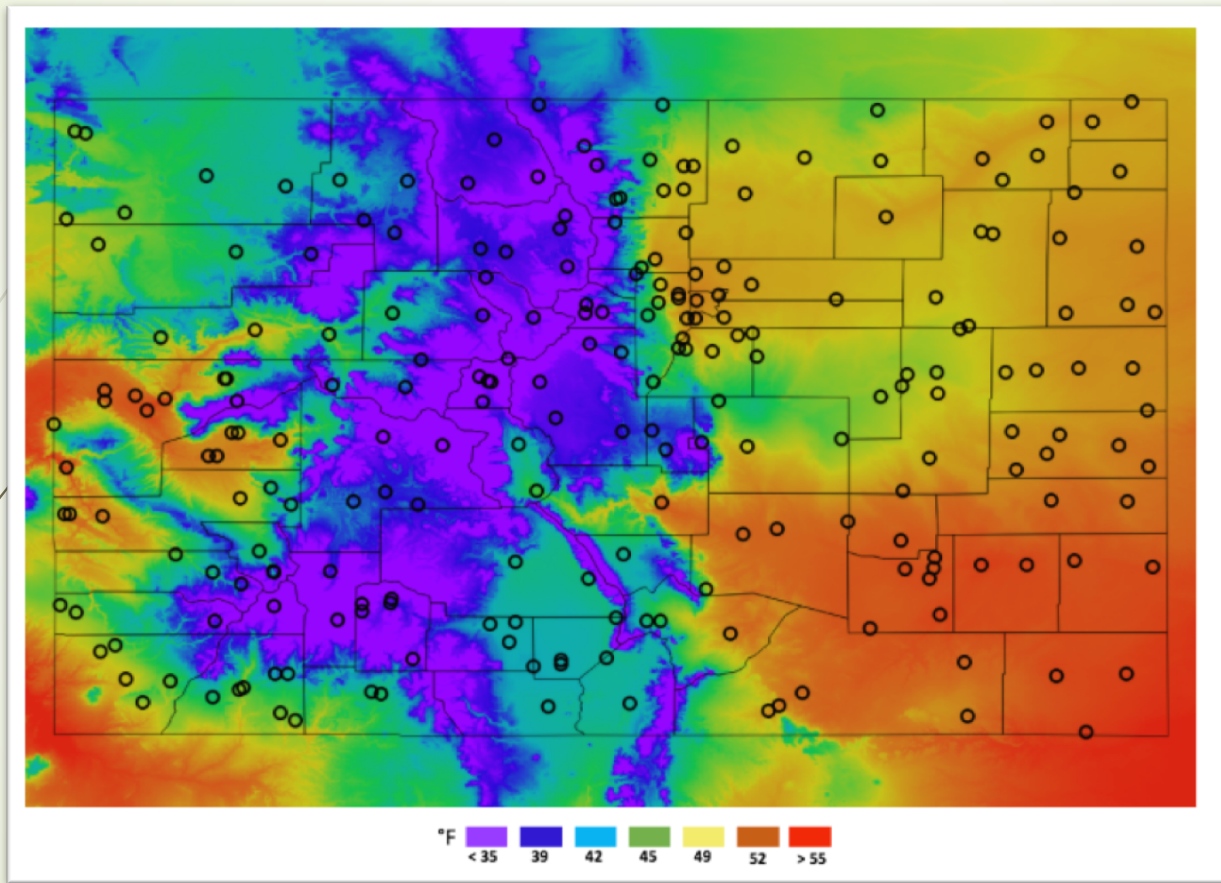
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Colorado's Climate



1981 – 2010
Annual Average
Temperature



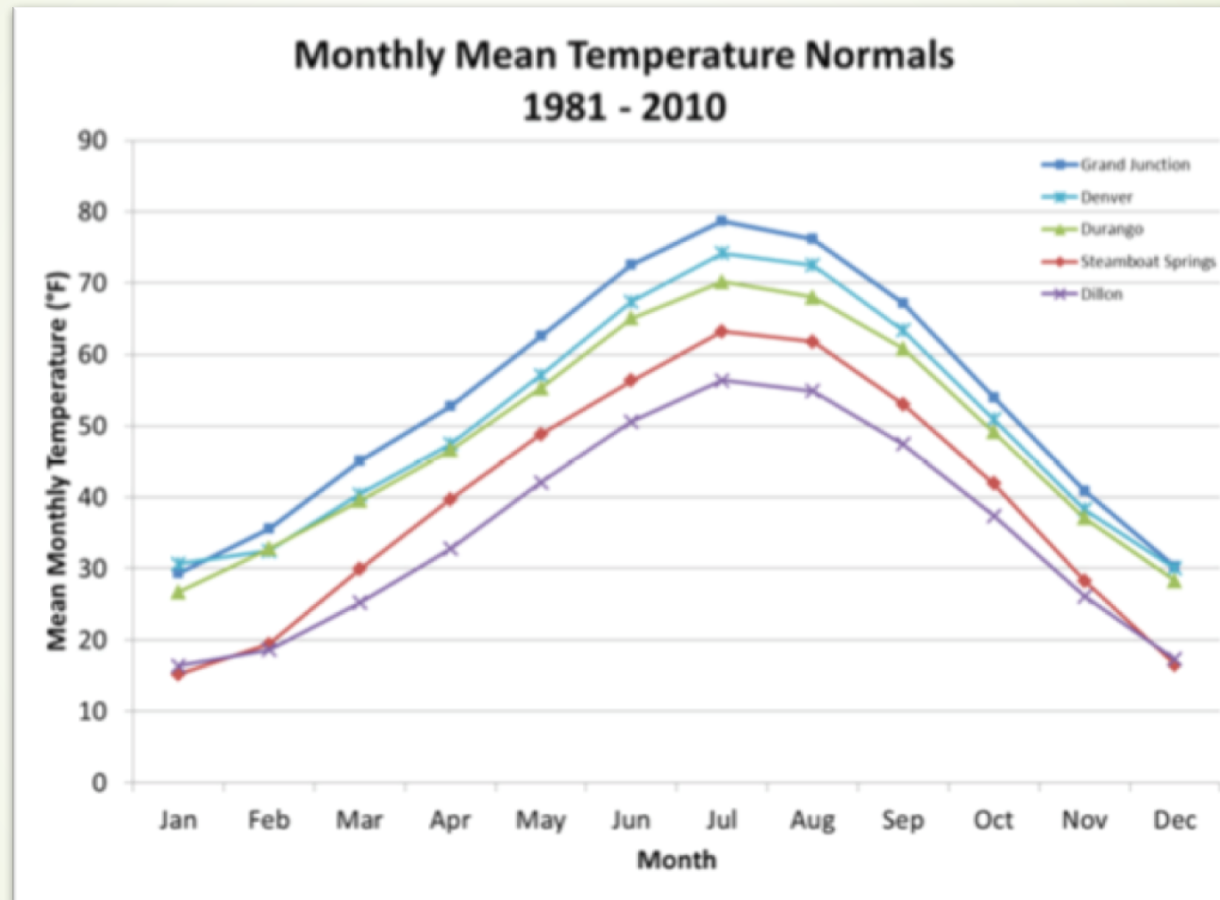
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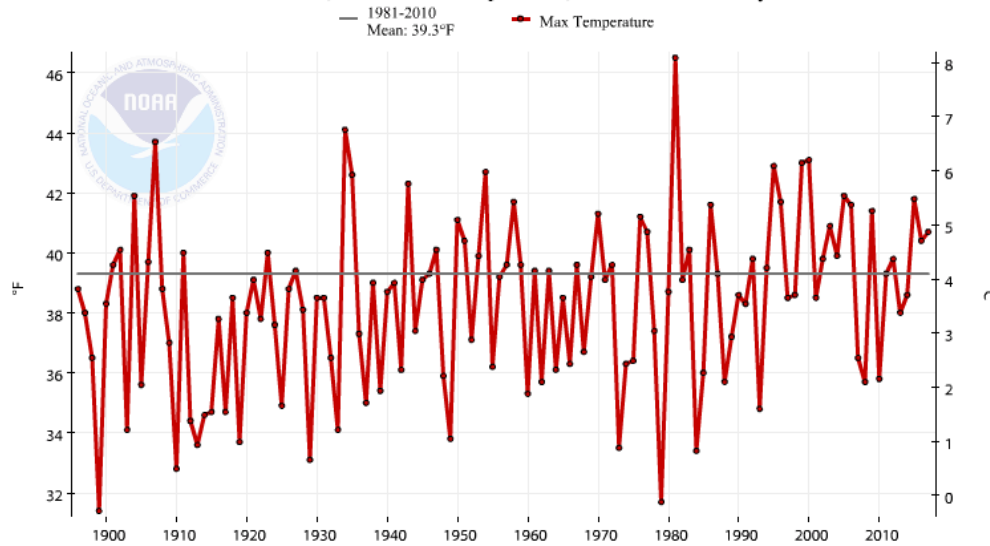


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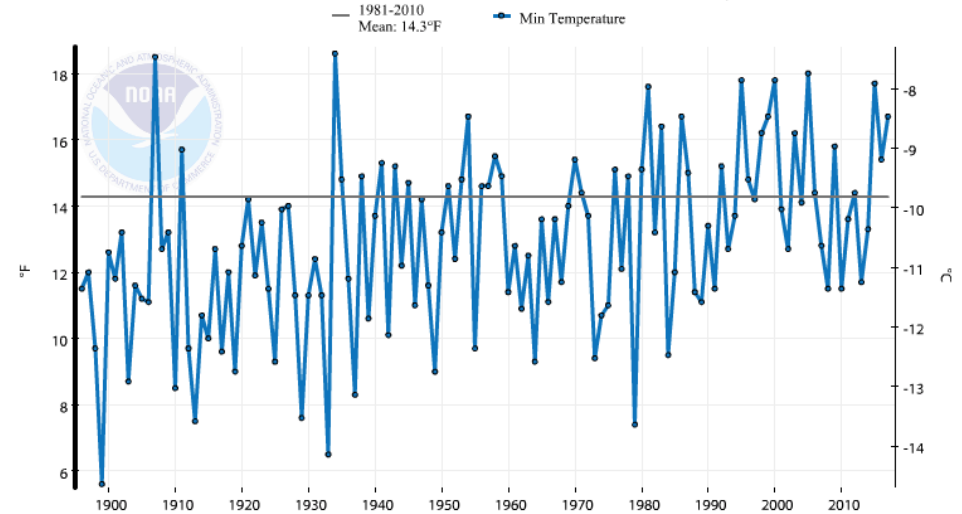
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Trends in Colorado Temperatures

Colorado, Maximum Temperature, December-February



Colorado, Minimum Temperature, December-February



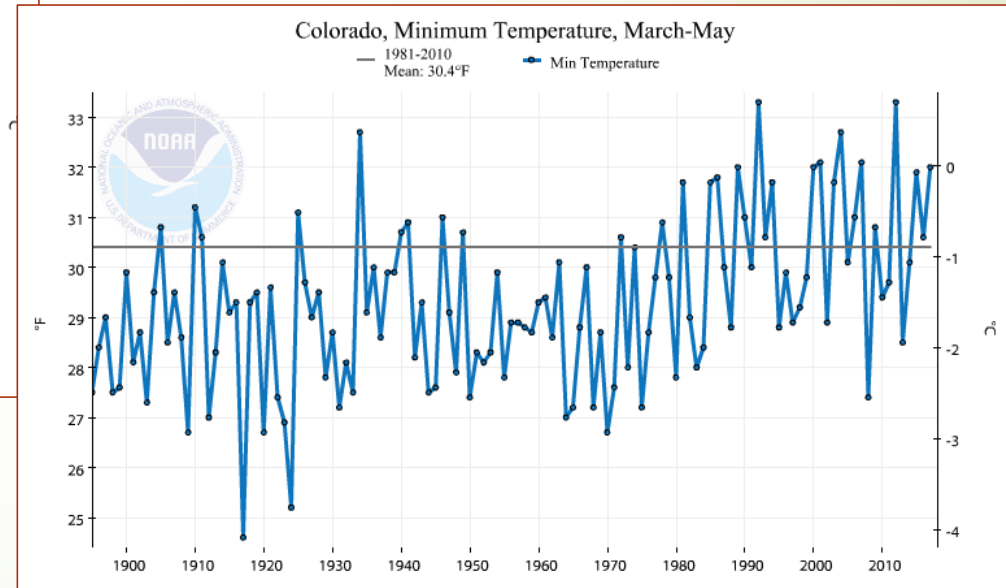
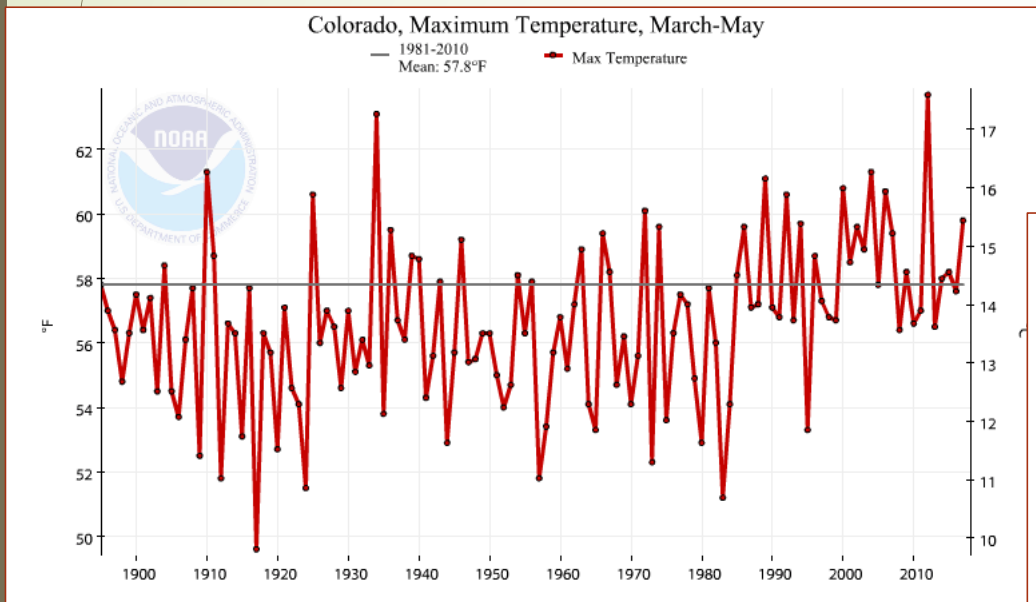
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Trends in Colorado Temperatures



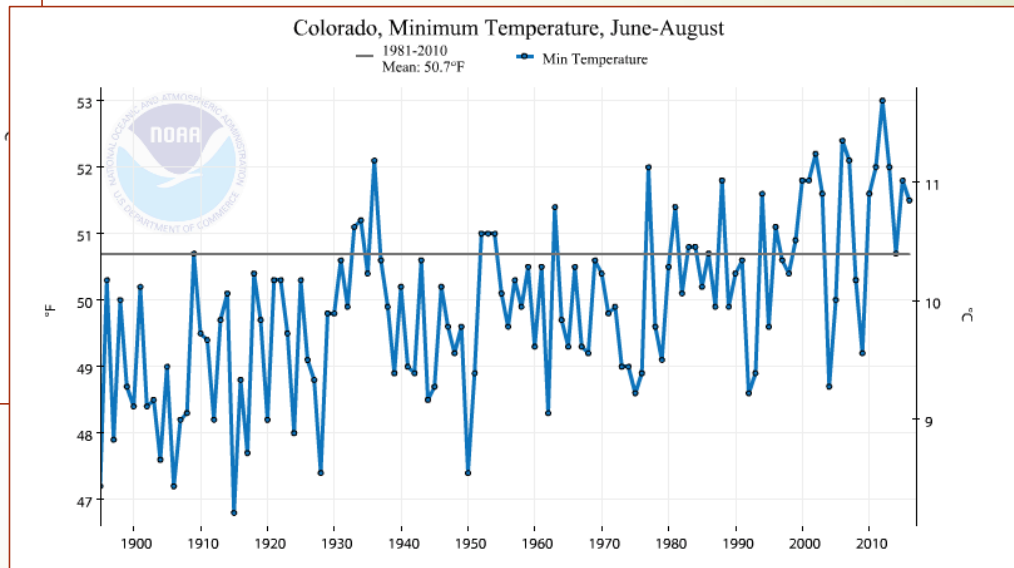
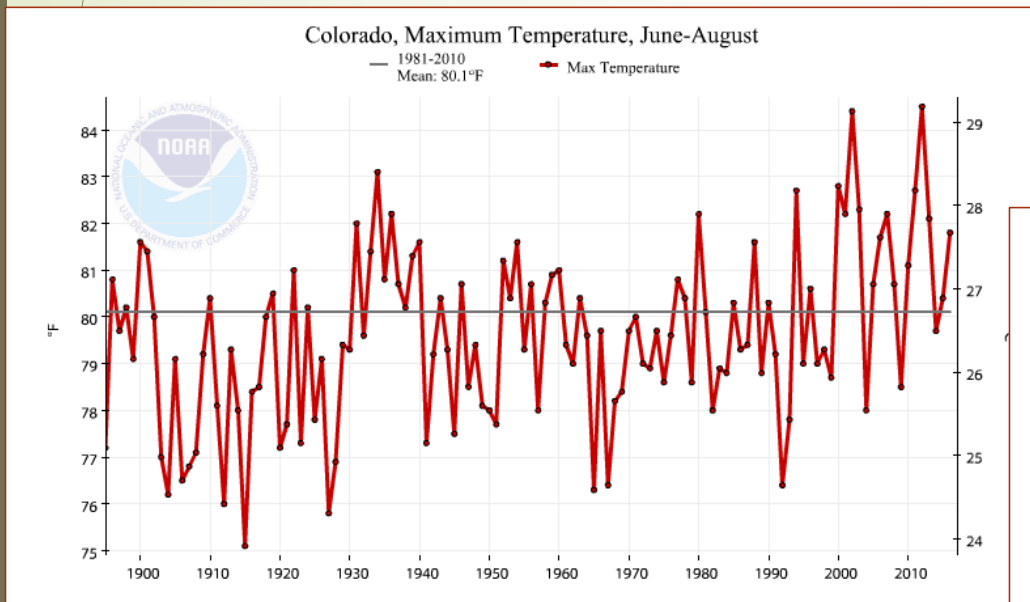
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Trends in Colorado Temperatures



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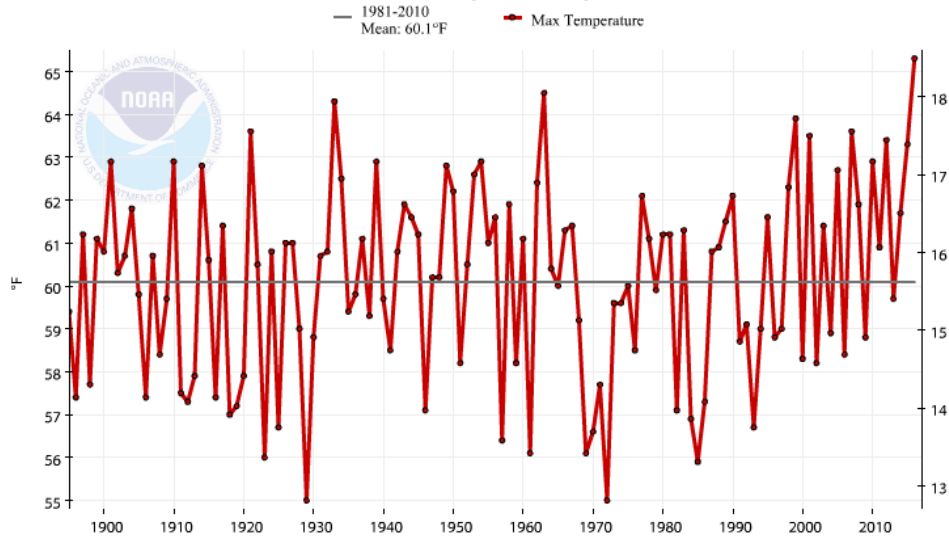


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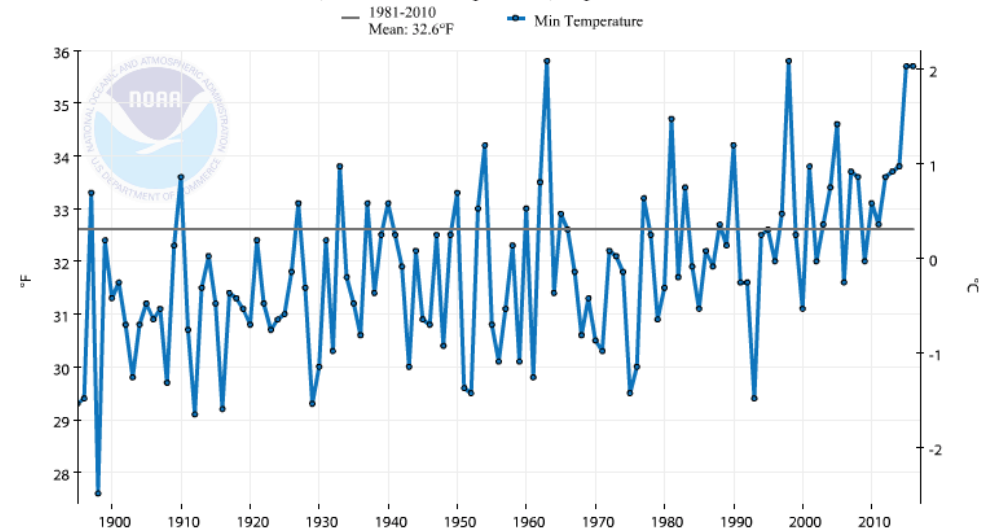
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Trends in Colorado Temperatures

Colorado, Maximum Temperature, September-November



Colorado, Minimum Temperature, September-November



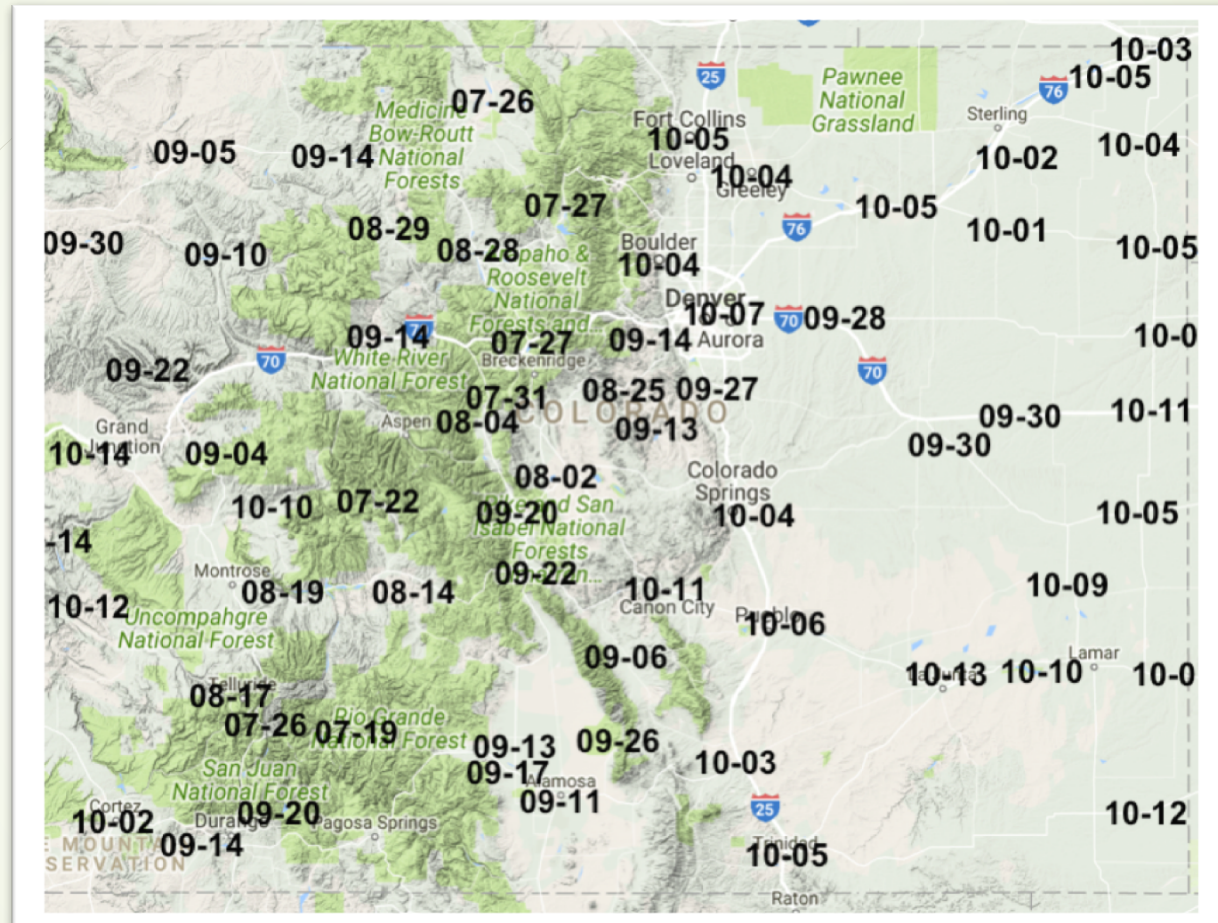
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Climate Thresholds – First Frost Date



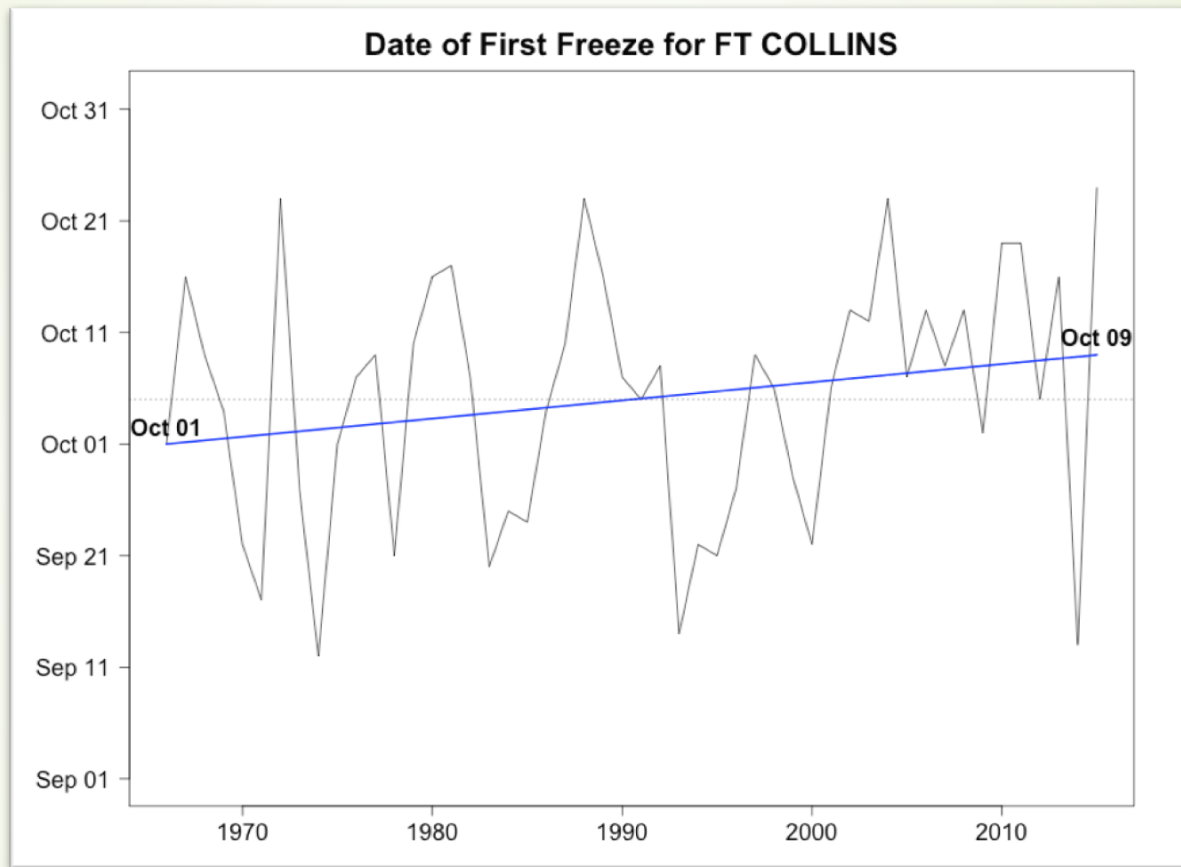
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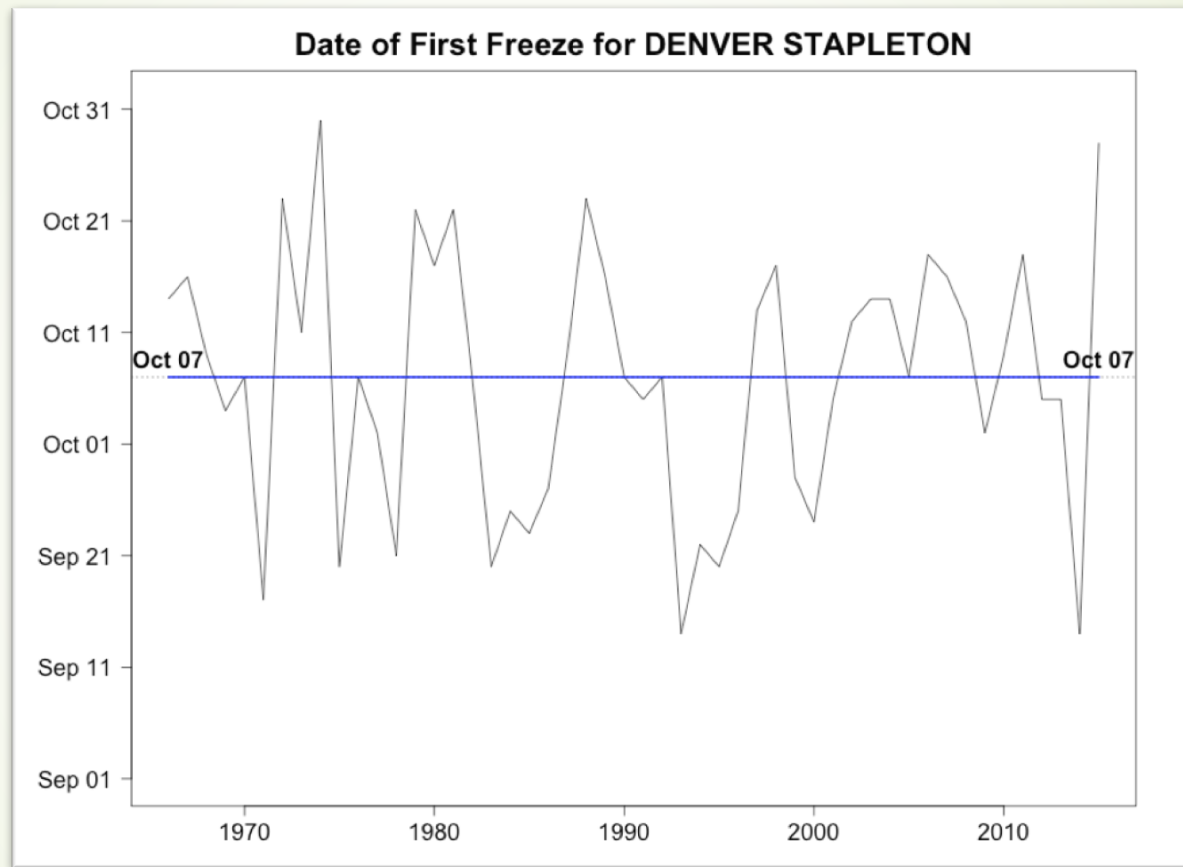
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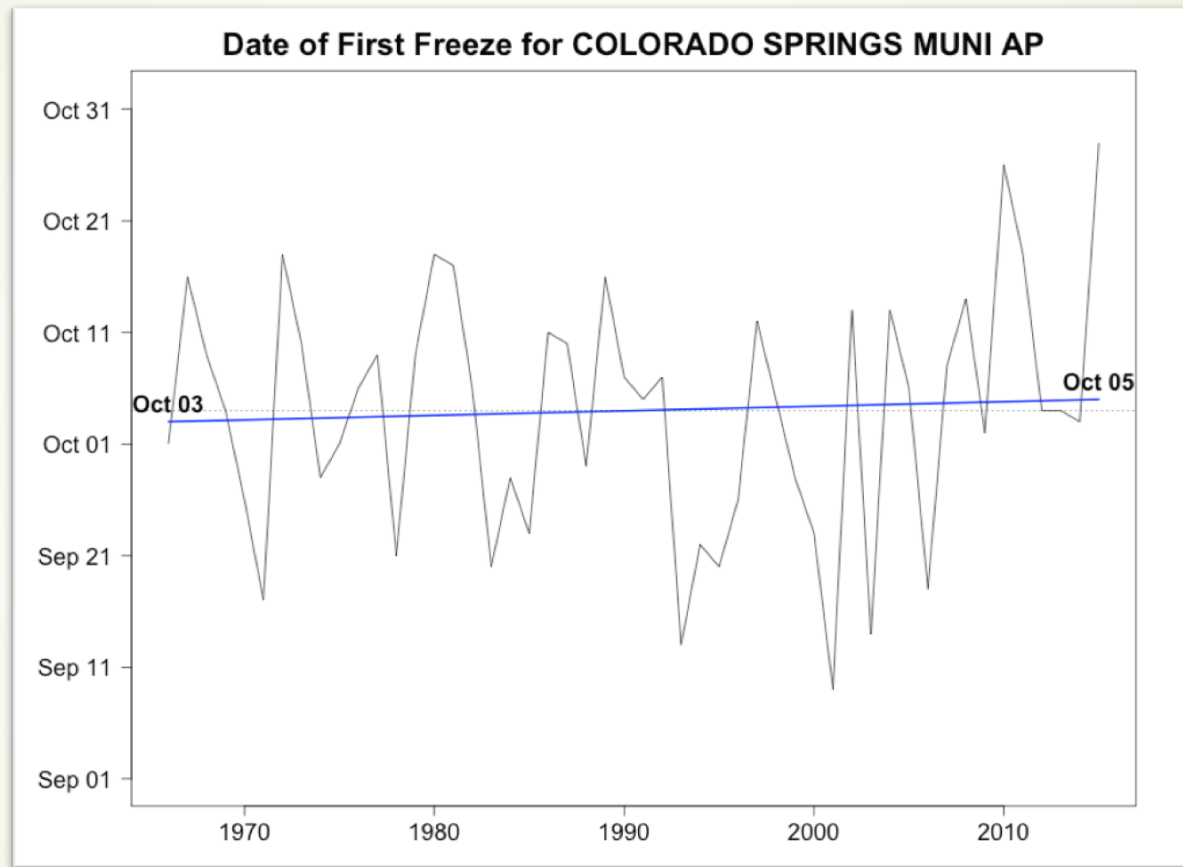
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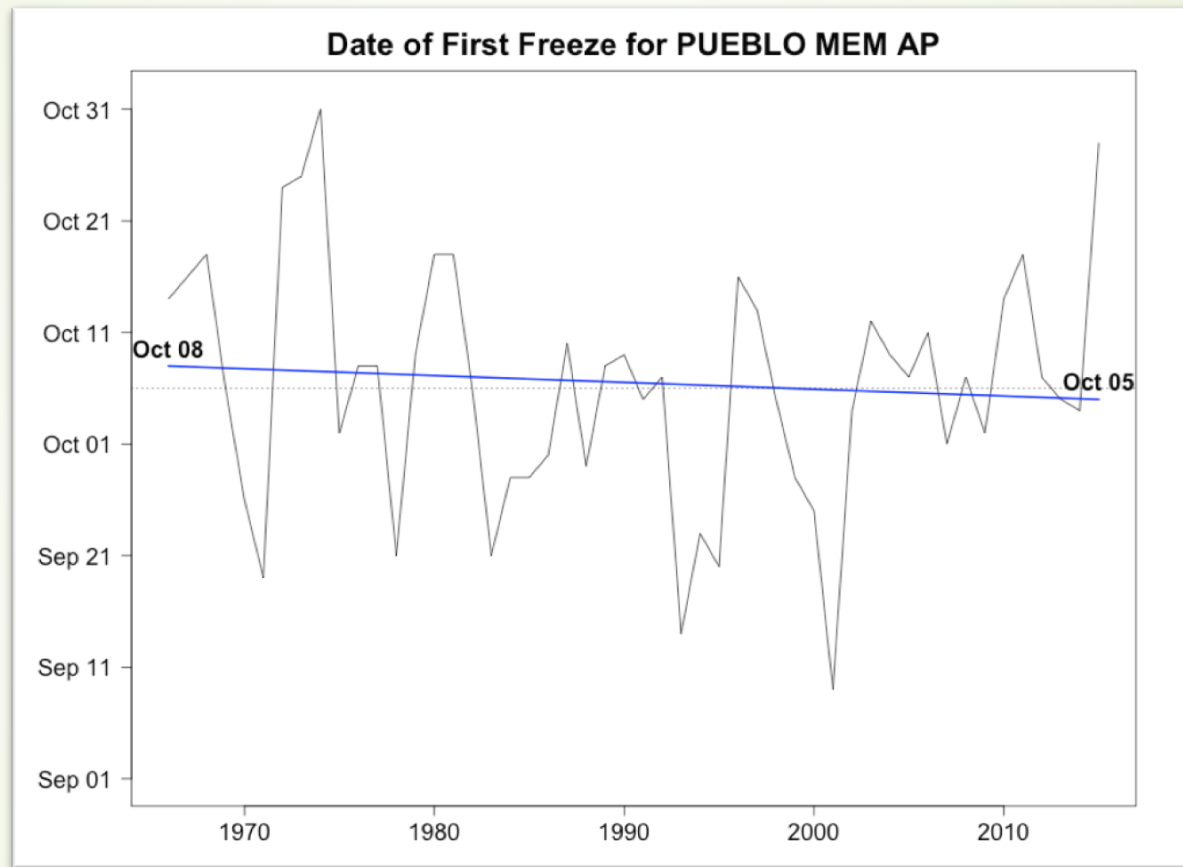
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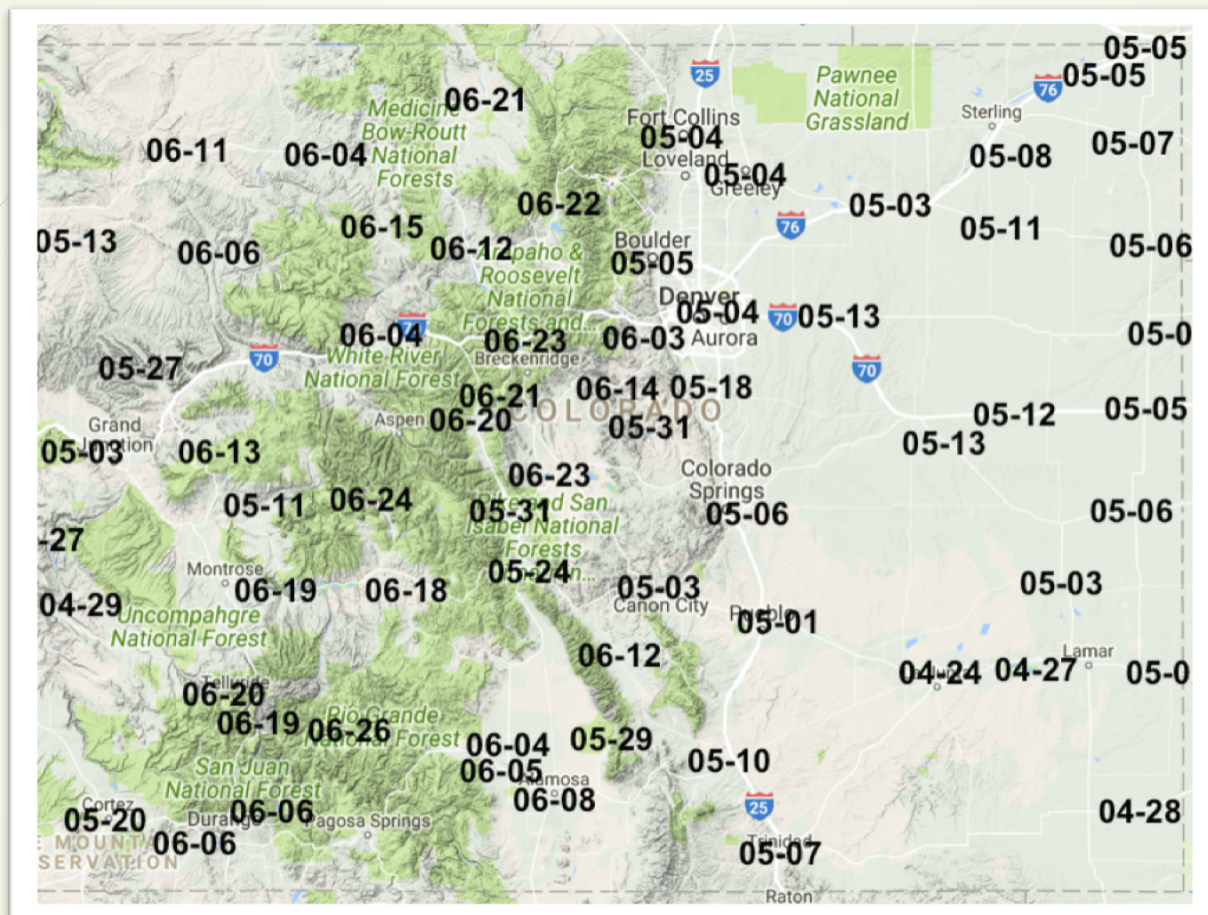
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Climate Thresholds – Last Frost Date



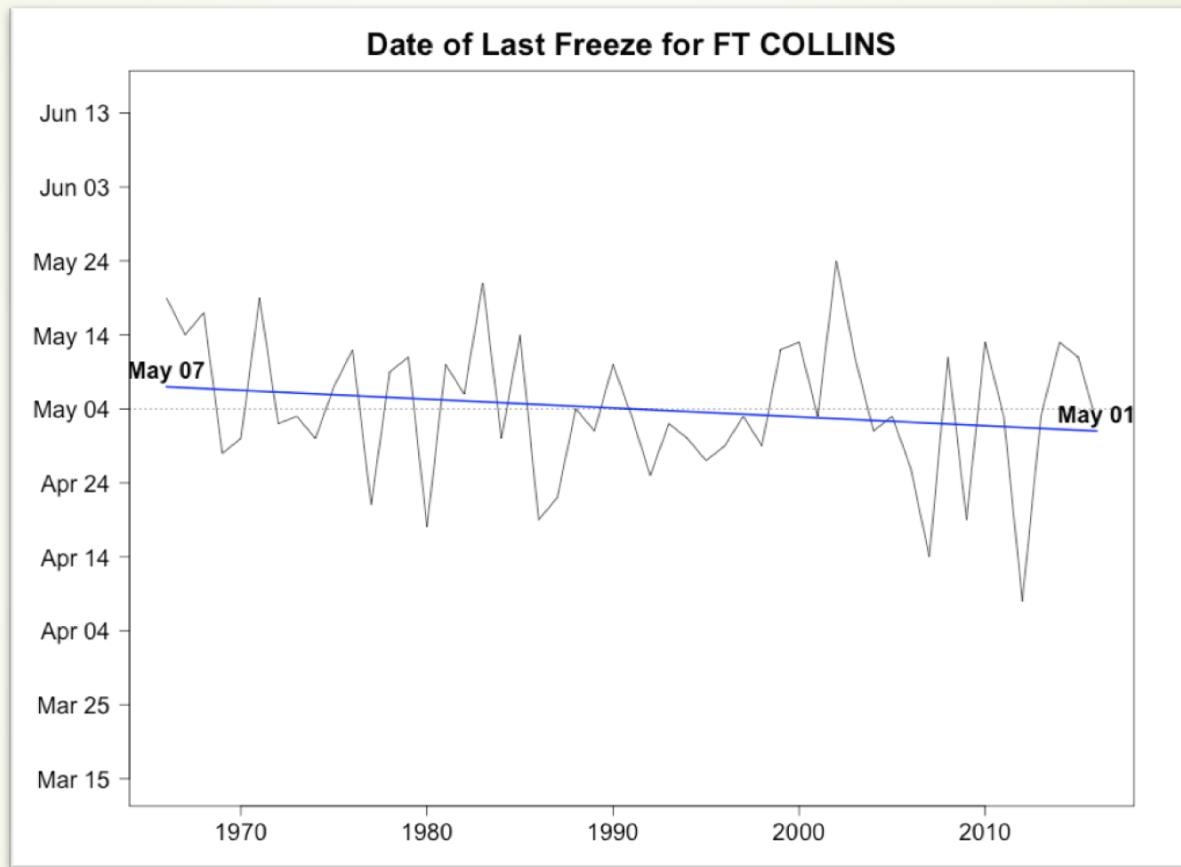
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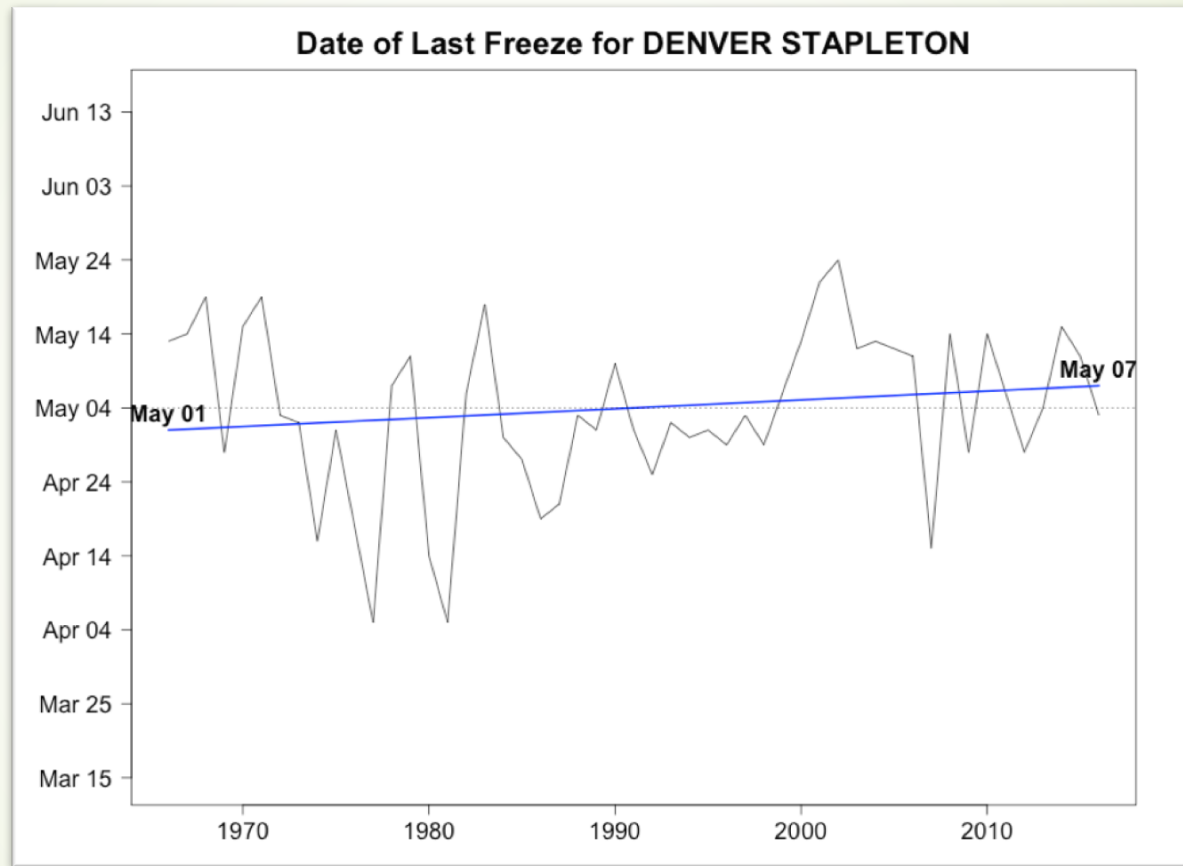
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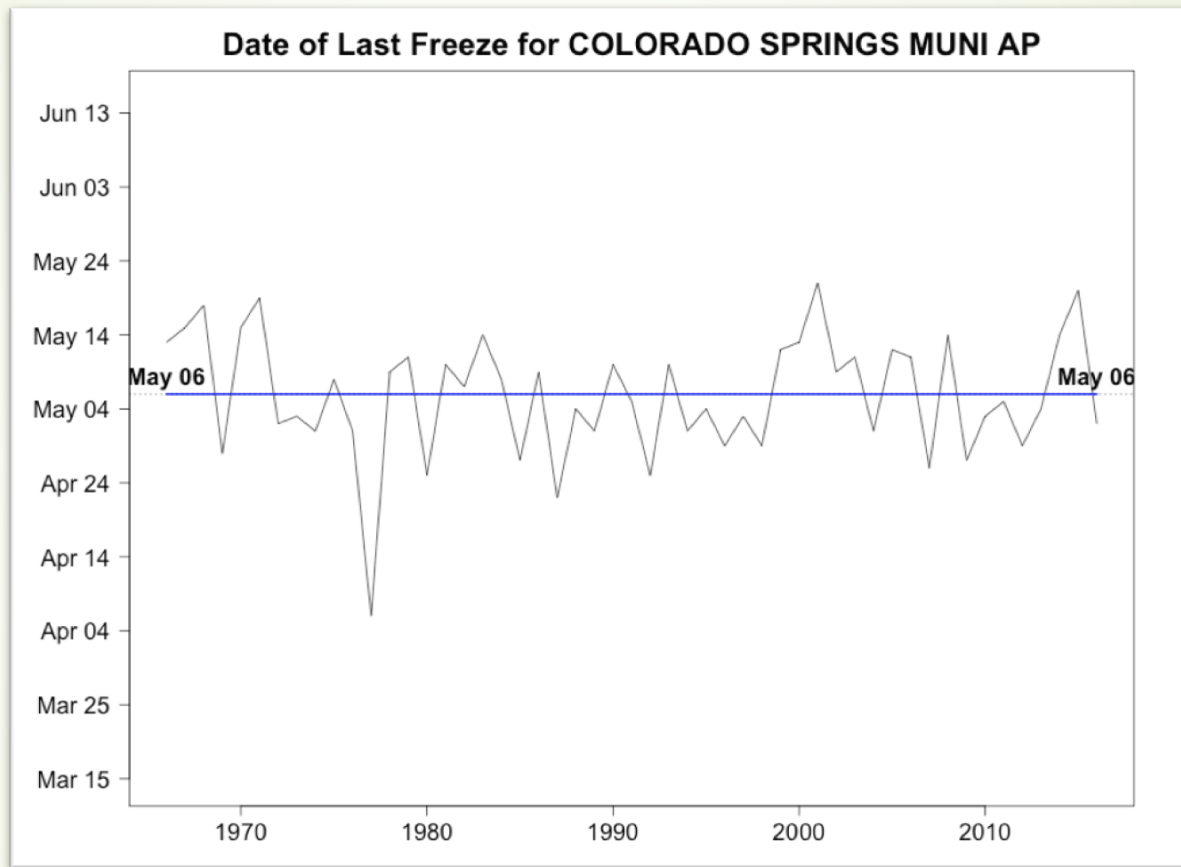
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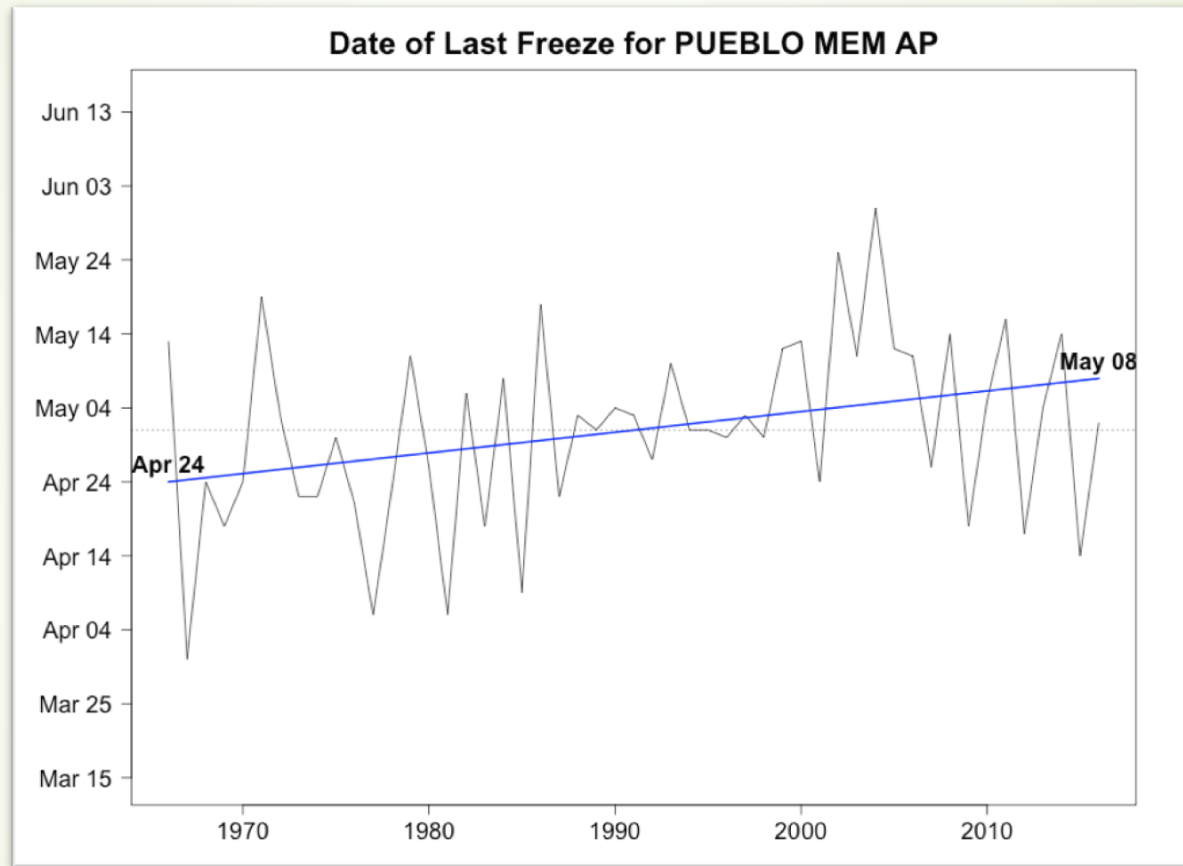
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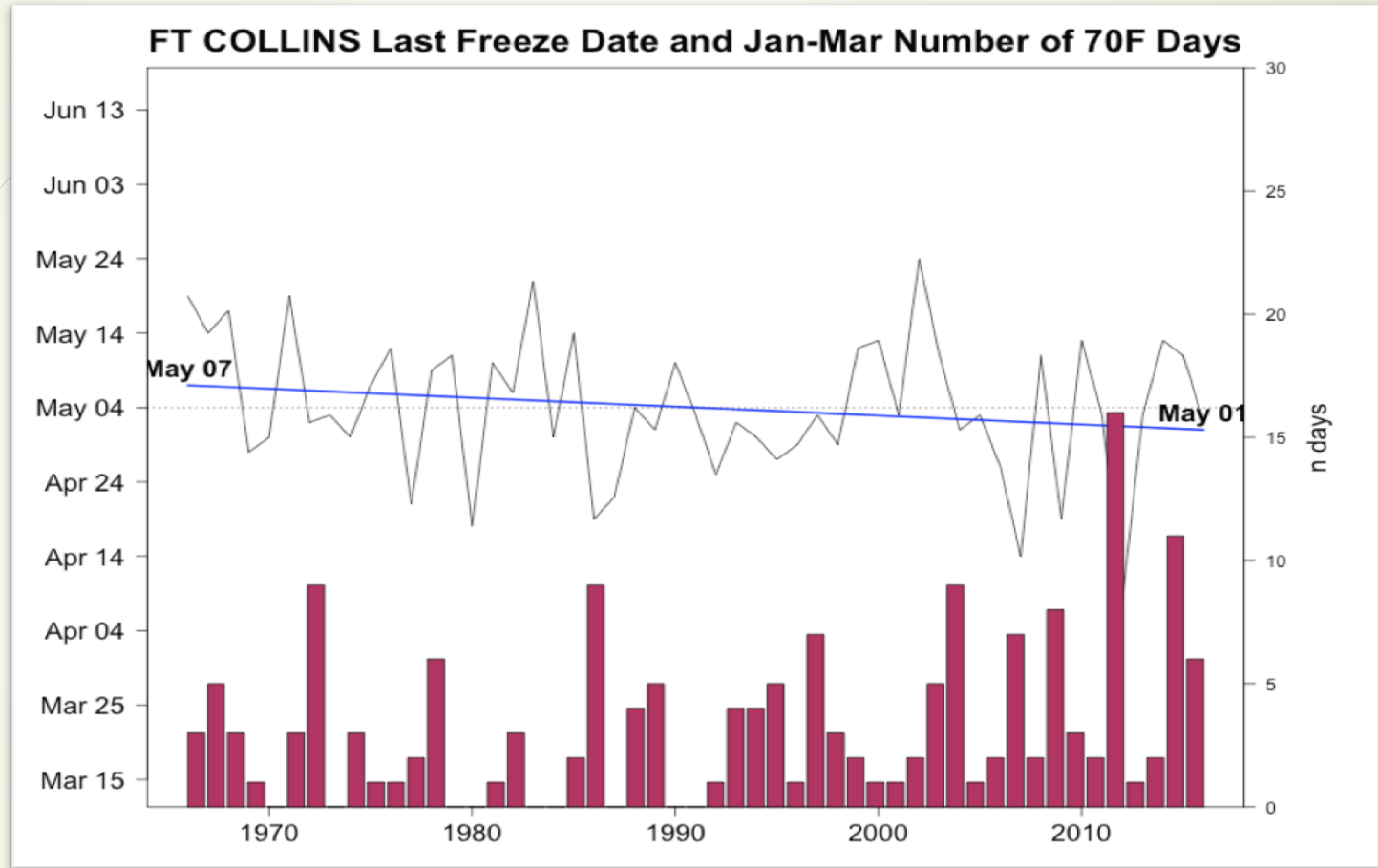
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Warm Winters vs. Last Frost Dates



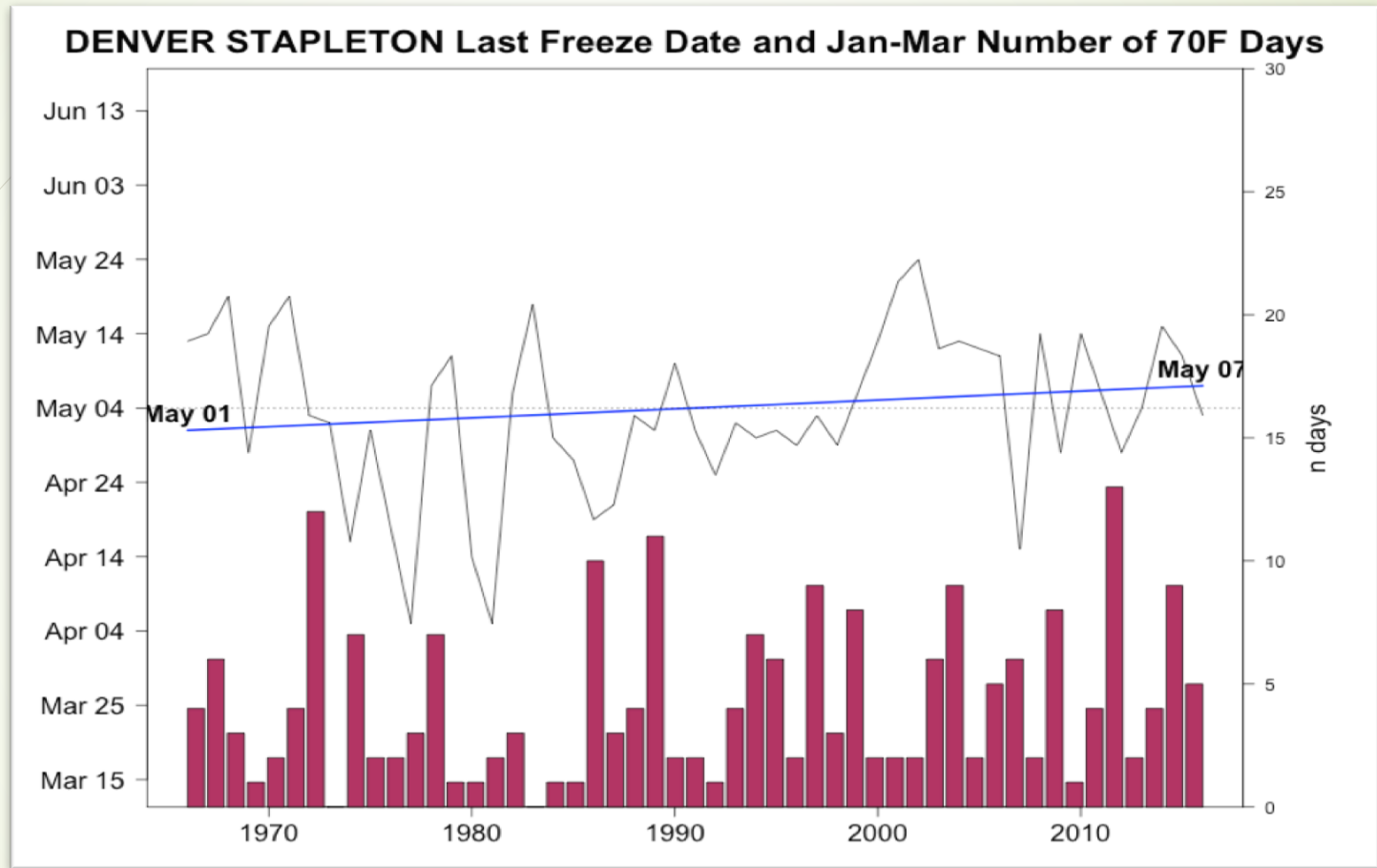
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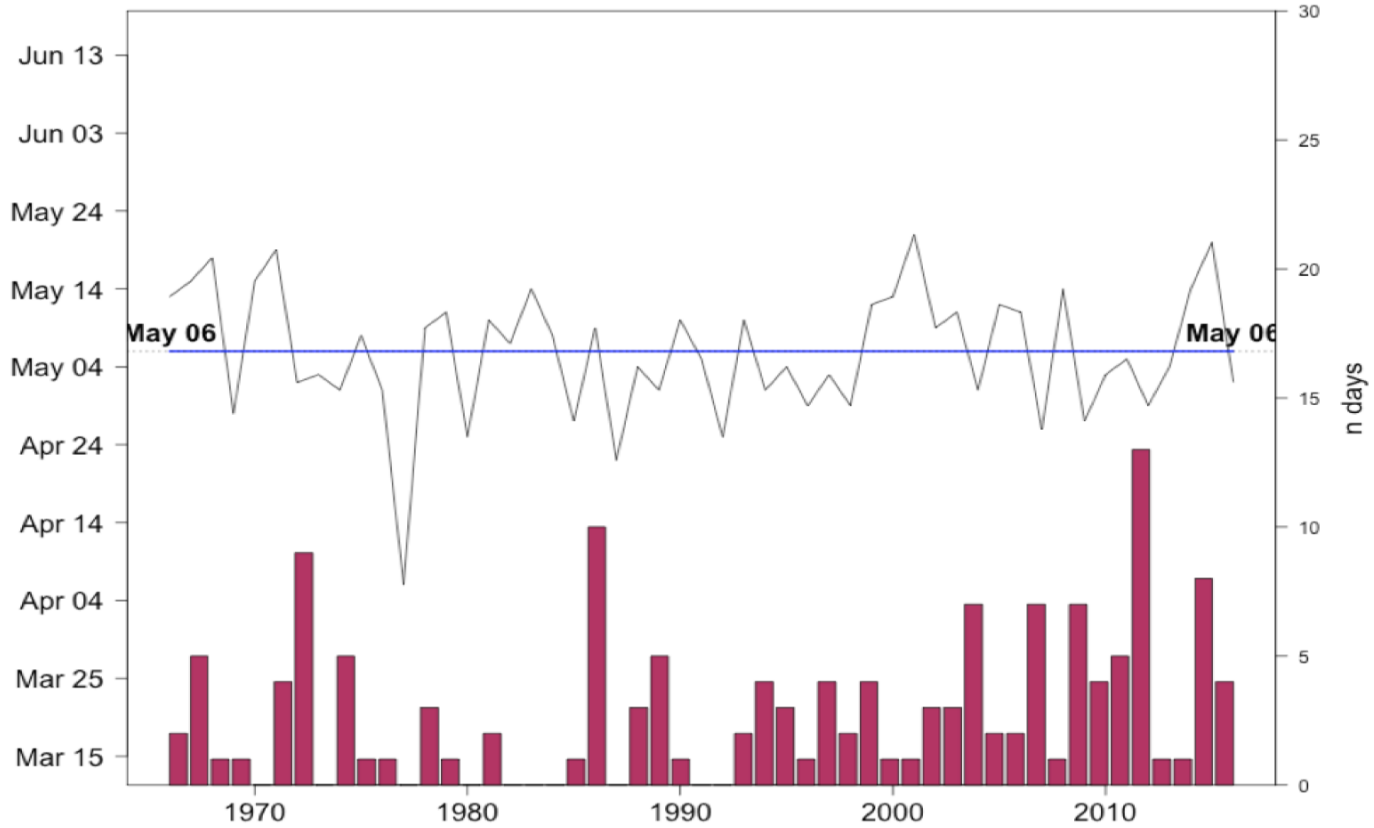


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Warm Winters vs. Last Frost Dates

OLORADO SPRINGS MUNI AP Last Freeze Date and Jan-Mar Number of 70F Da



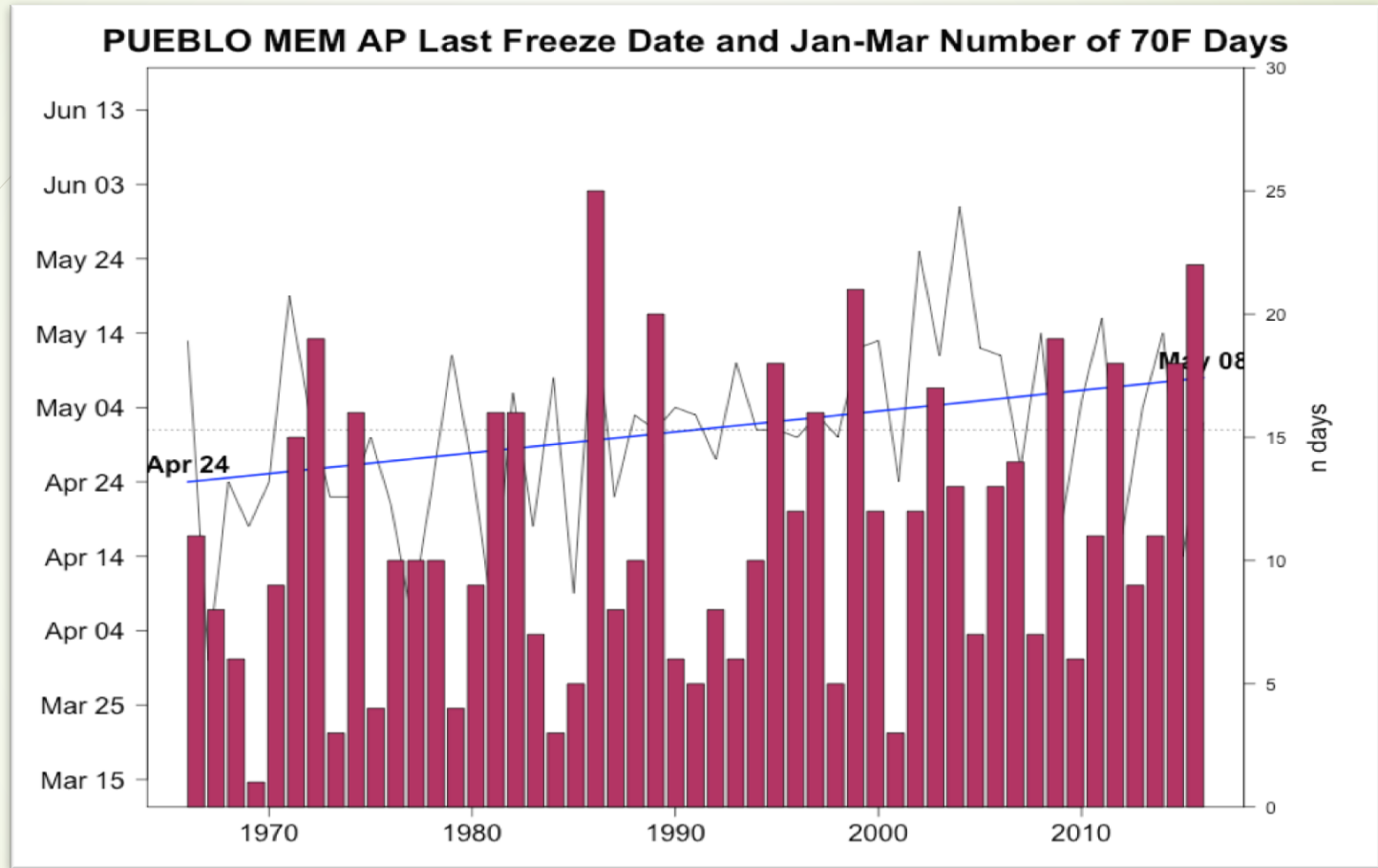
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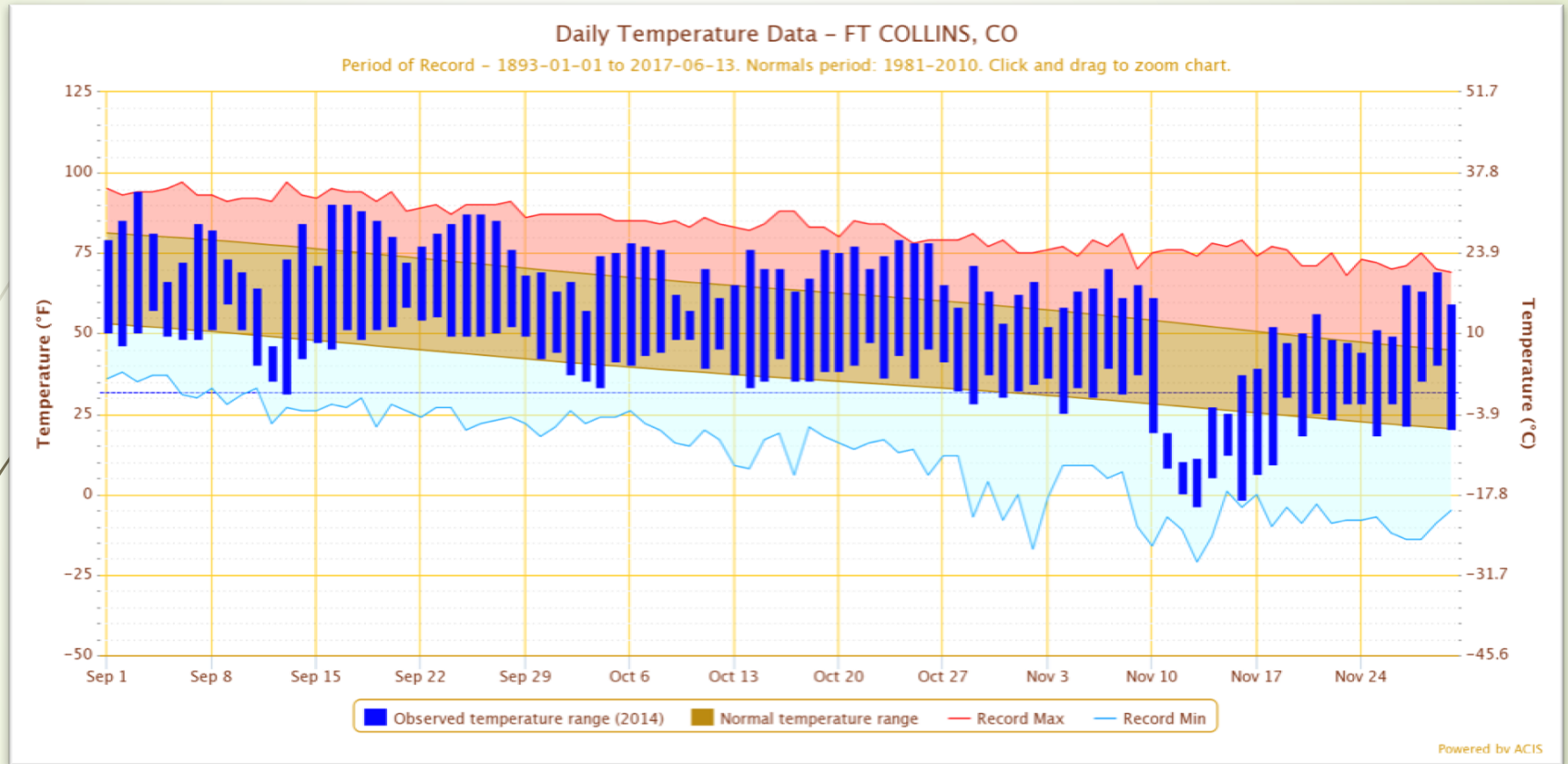
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Fall of 2014 – warmth followed by deep freeze

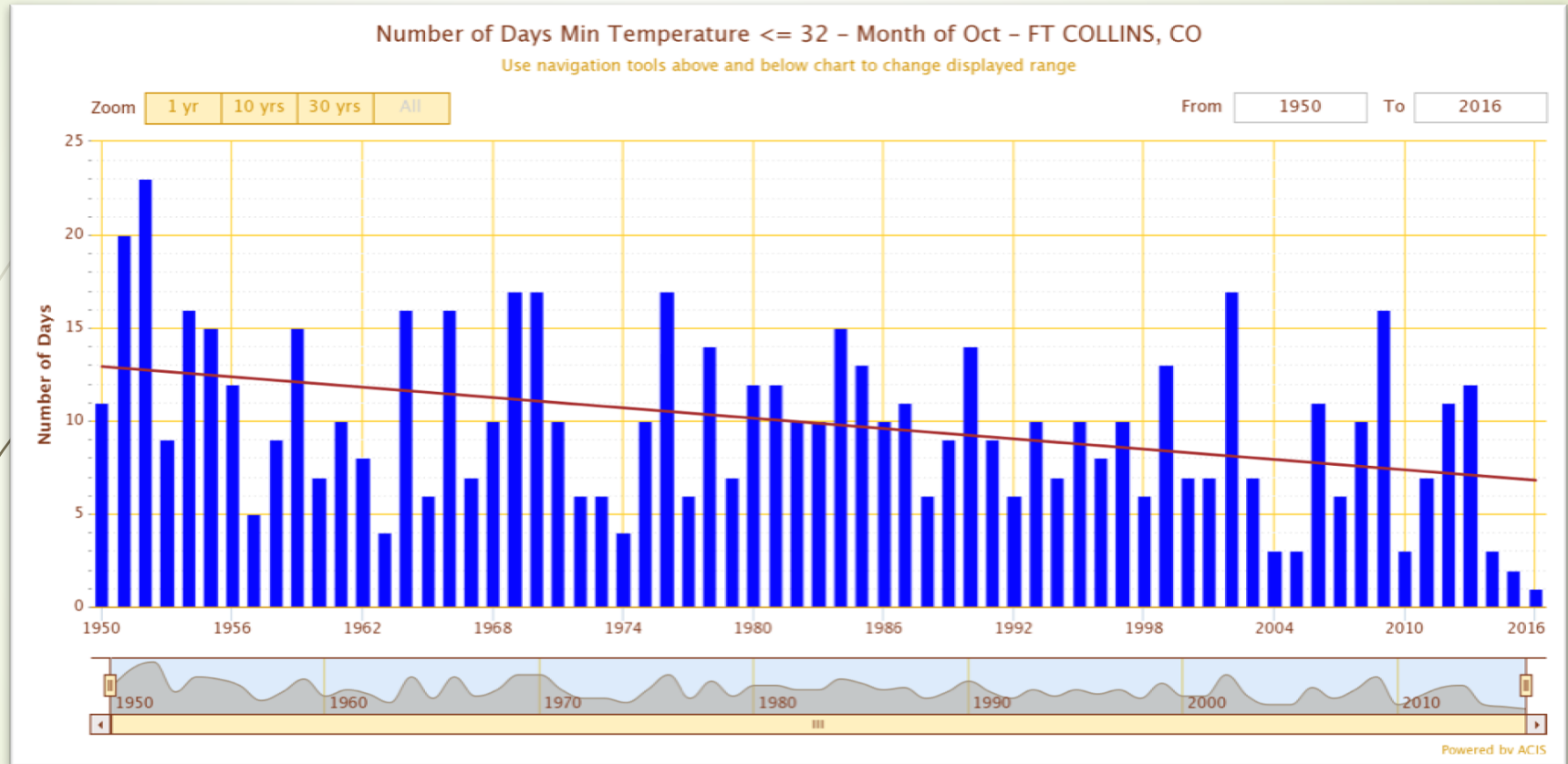


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Fall Trends – repeat of large swings?



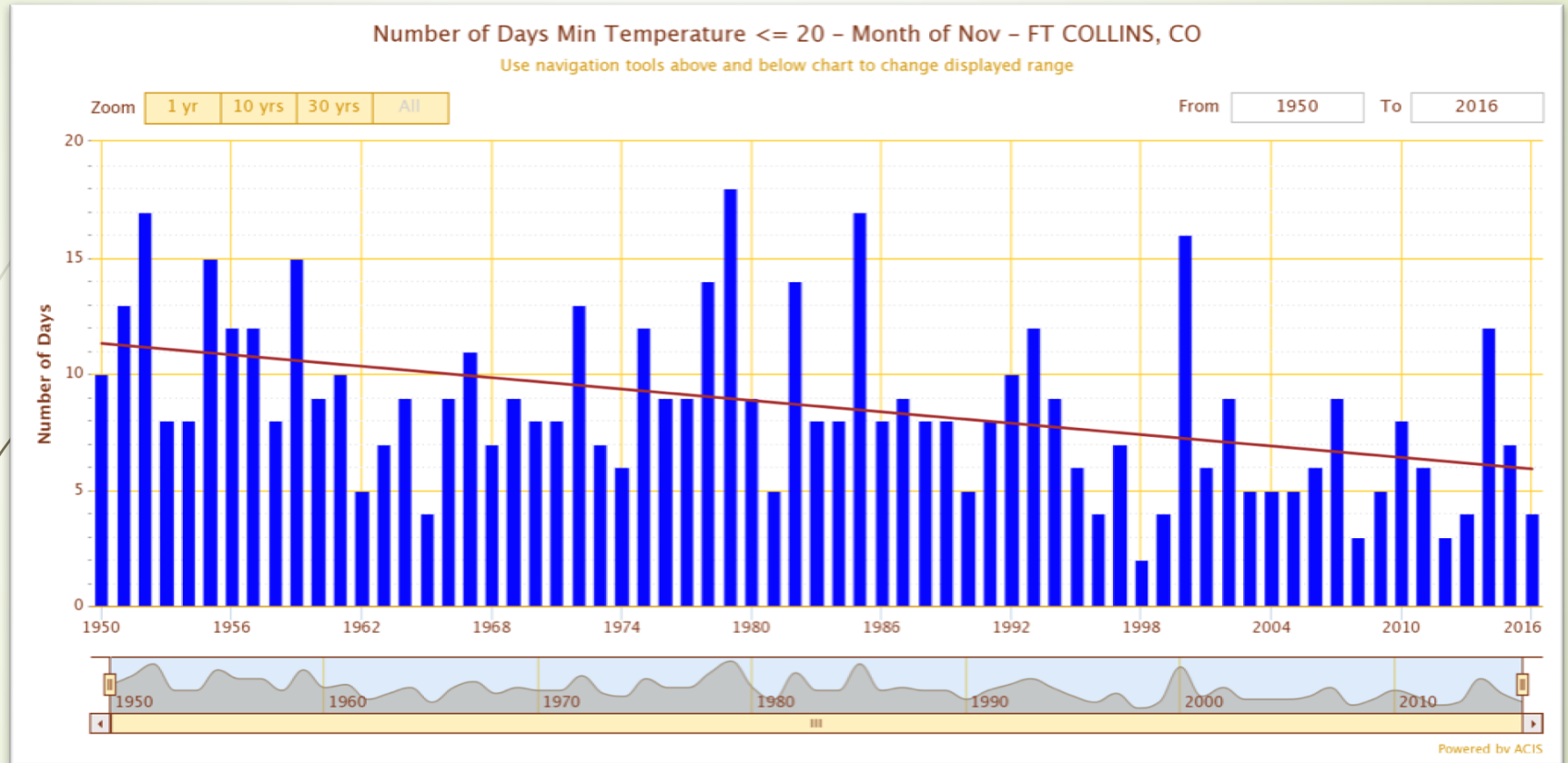
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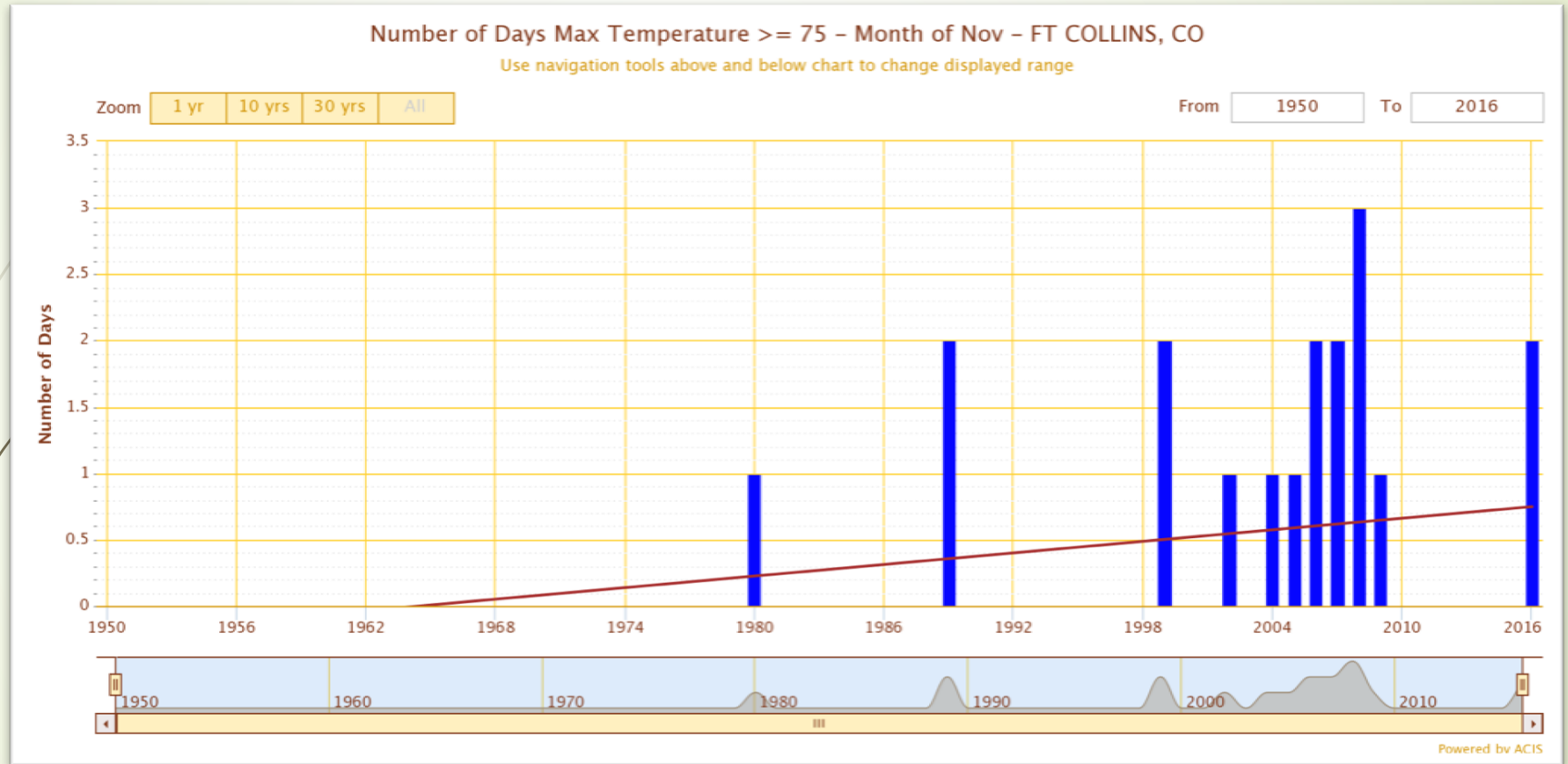
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Fall Trends – repeat of large swings?



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Thank You!

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