



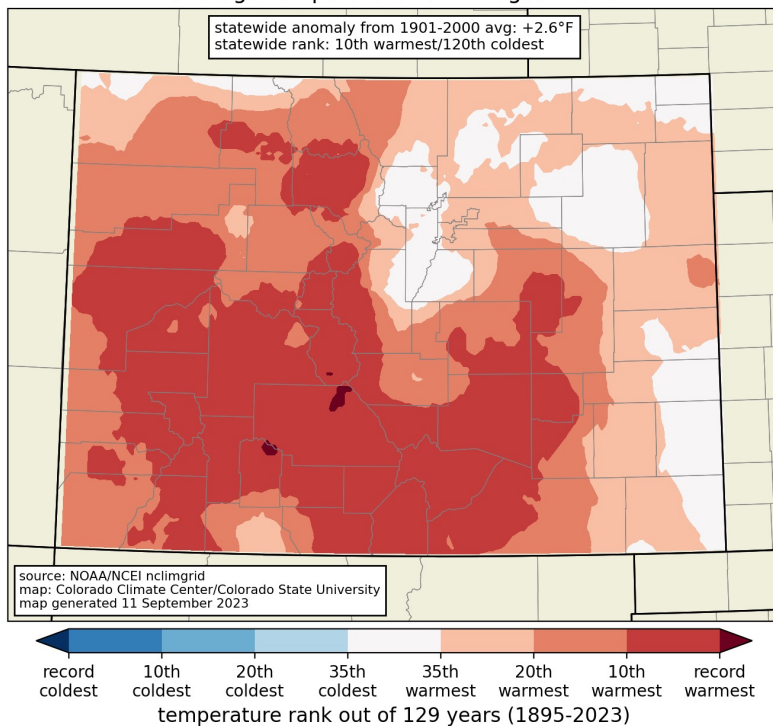
August 2023 Colorado Monthly Climate Summary



ATMOSPHERIC SCIENCE
COLORADO STATE UNIVERSITY

temperature

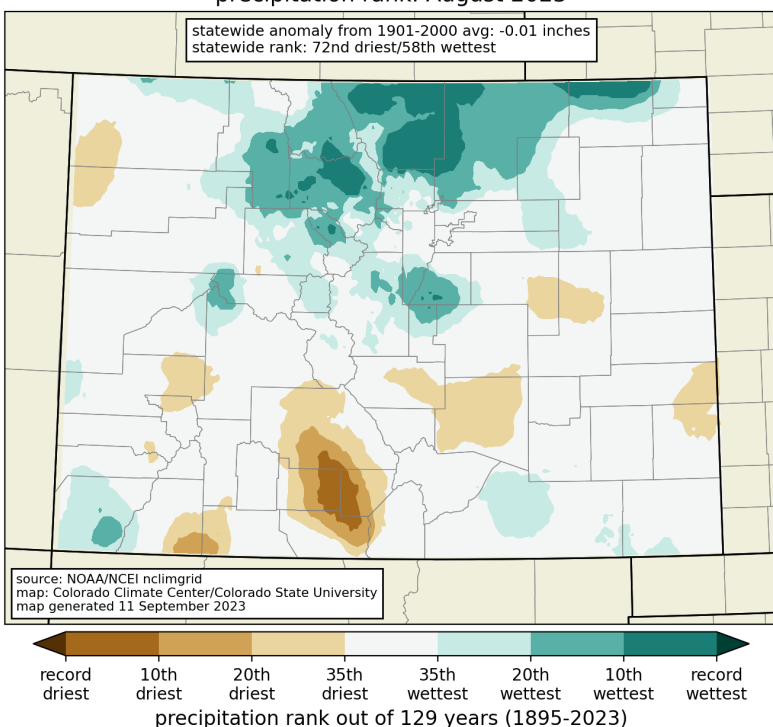
average temperature rank: August 2023



August was warm across Colorado. In fact, it was a top-10 warm August across much of western and southern Colorado. Only a few pockets along the Front Range and eastern plains had a near-average August; it was warmer than average everywhere else.

precipitation

precipitation rank: August 2023

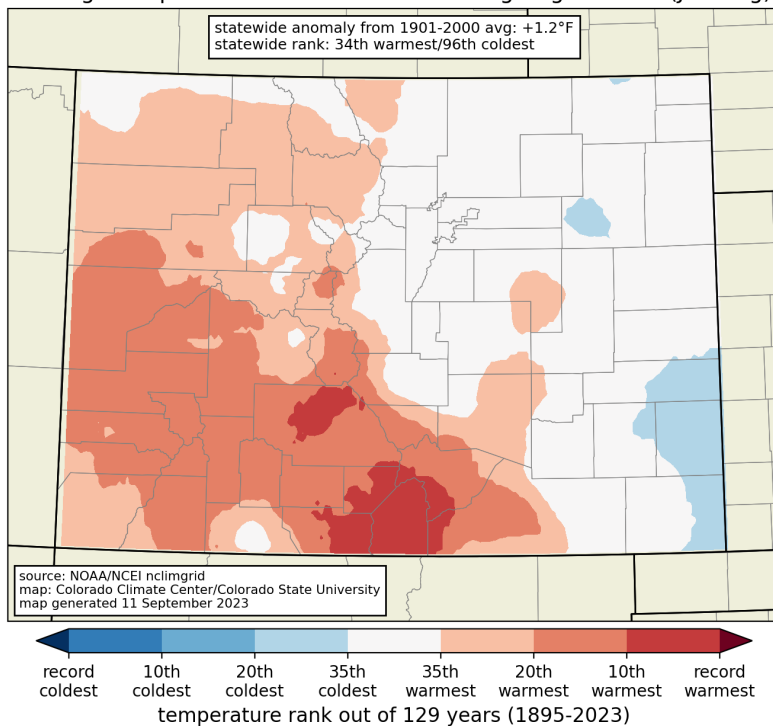


After an extremely dry July in southern and western Colorado, moisture returned in August (especially associated with the remnants of Tropical Storm Hilary), and it was a near-average August for precipitation across much of the state. Northern Colorado saw above-average rainfall, while the San Luis Valley remained abnormally dry.



temperature: summer

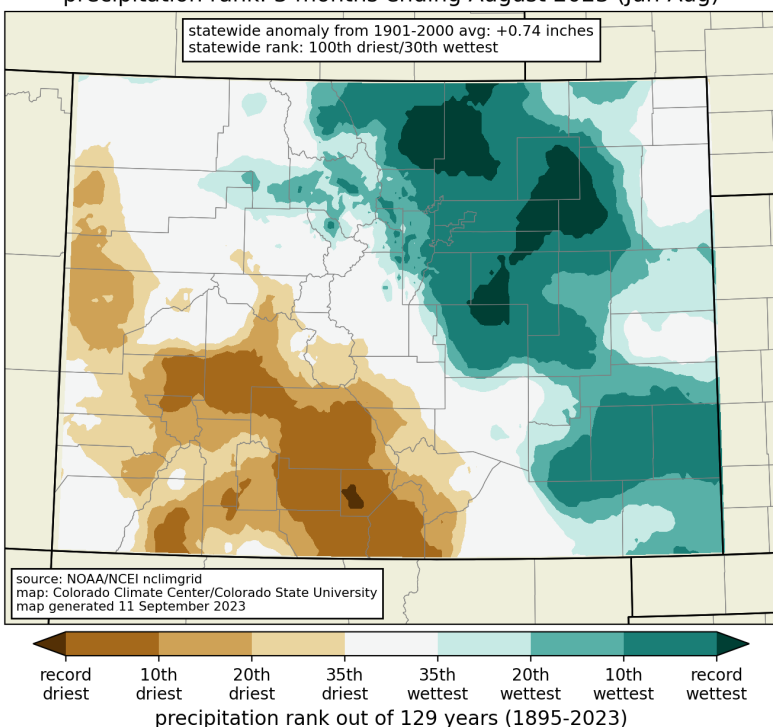
average temperature rank: 3 months ending August 2023 (Jun-Aug)



For climatological summer (June, July, and August), it was warmer than average statewide, with much warmer than average conditions across the western slope and San Luis Valley, and slightly cooler than average conditions in southeastern Colorado

precipitation: summer

precipitation rank: 3 months ending August 2023 (Jun-Aug)



For precipitation, summer had a west-east split across the state. Southern Colorado, especially the San Luis Valley, was extremely dry in summer 2023, while eastern Colorado was wetter than average, with several areas, including the long-term weather station at Fort Collins, experiencing their wettest summer on record.



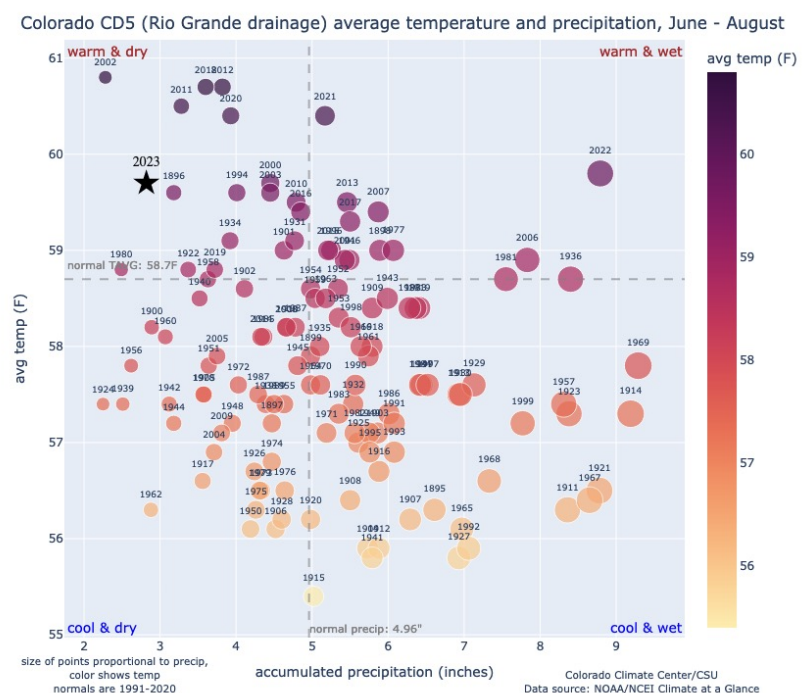
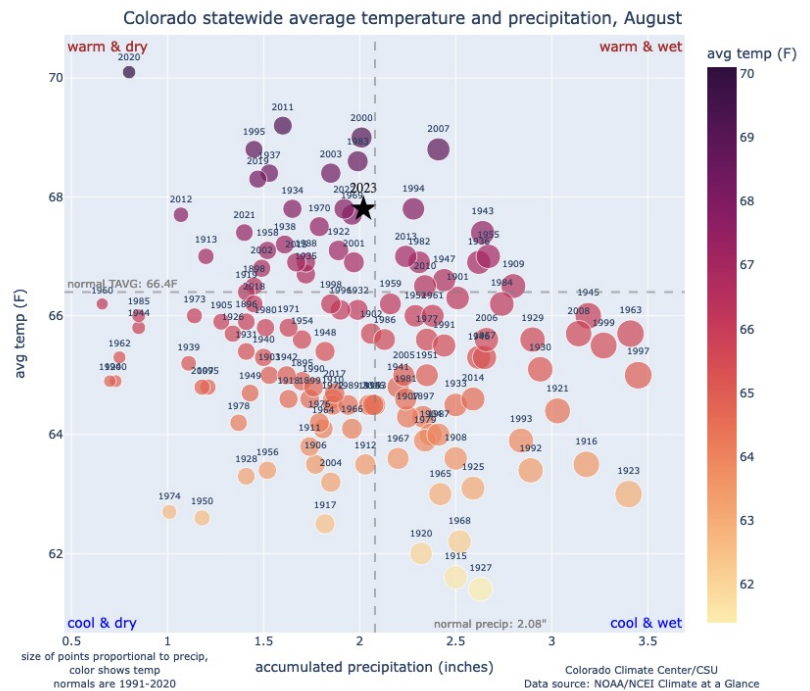
quadrant charts

Each dot plots the precipitation on the x-axis and the temperature on the y-axis. Dots are colored based on temperature and size is based on precipitation. The current year is denoted with a star. Long-term averages are denoted by the dashed lines.

In the statewide average, August was much warmer and slightly drier than average. Overall, August 2023 was tied for the 10th warmest with three other years (including 2022) at 1.4° F above the 1991-2020 average and 2.6° F above the 20th century average; and 72nd driest (0.06" below average) August out of 129 years on record.

Focusing on the Rio Grande river drainage (largely encompassing the San Luis Valley), climatological summer was clearly in the warm and dry quadrant. It was the 6th driest and tied for the 8th warmest summer on record for this climate division. As a result (as noted below), drought expanded in this part of Colorado in August.

[view all quadrant charts](#)

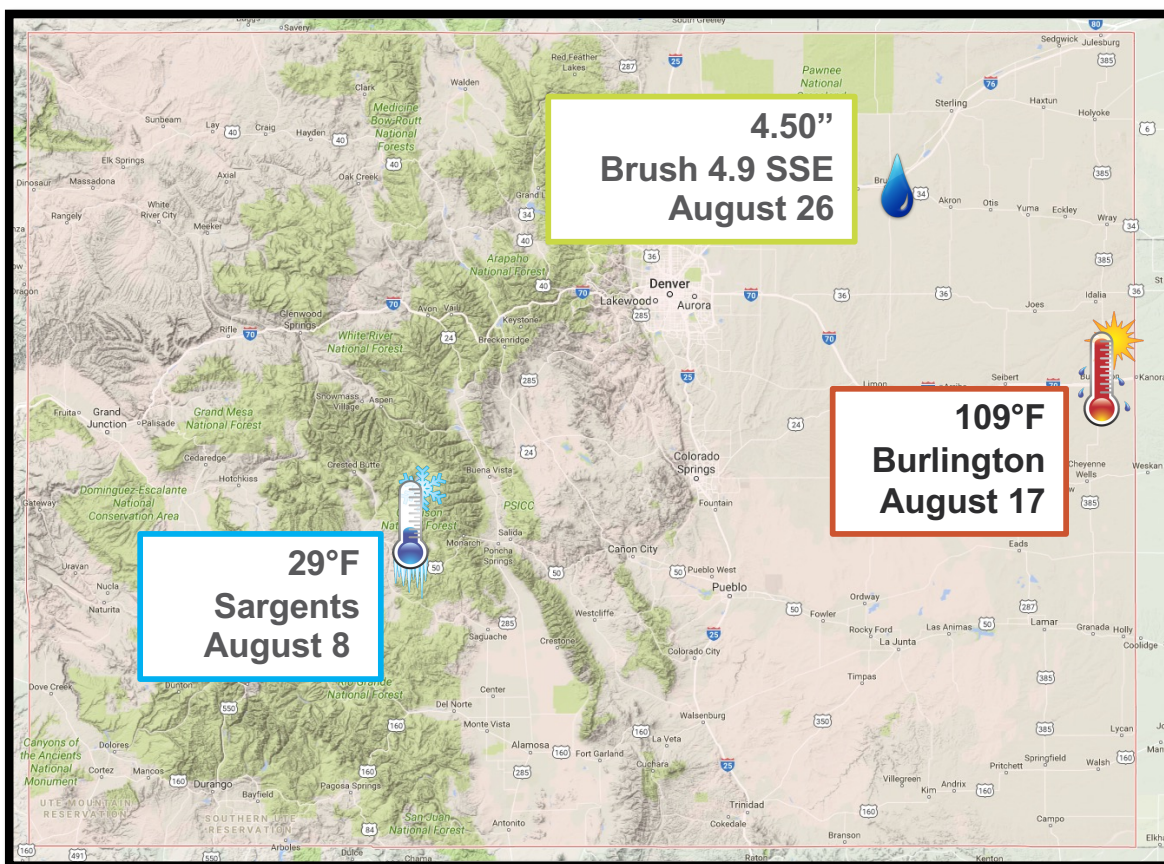


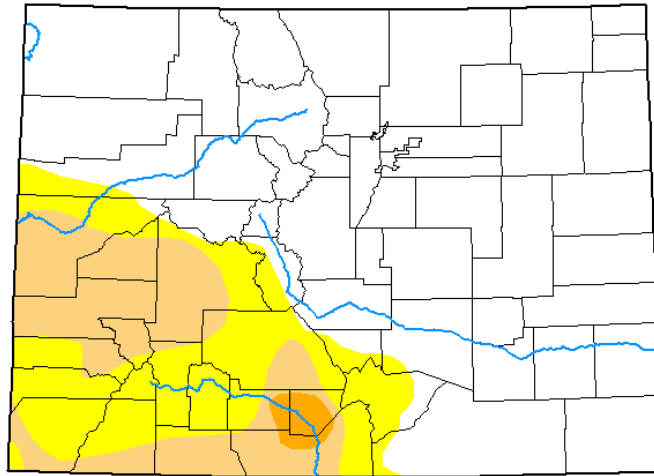
records tied and broken

	High Max	Low Max	High Min	Low Min	Precip	Snow
Daily	71/108	11/31	106/338	5/17	37/126	0/0
Monthly	0/2	0/0	0/0	0/0	2/10	0/0
All-time	7/2	0/0	0/2	0/0	0/2	0/0

Tied/**Broken**, from NOAA National Centers for Environmental Information

state extremes





Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	70.68	29.32	13.97	0.93	0.00	0.00
Last Week 08-22-2023	69.61	30.39	15.67	1.52	0.00	0.00
3 Months Ago 05-30-2023	76.28	23.72	6.34	1.08	0.24	0.00
Start of Calendar Year 01-03-2023	39.97	60.03	33.83	12.28	1.91	0.01
Start of Water Year 09-27-2022	15.46	84.54	45.65	15.47	3.73	0.57
One Year Ago 08-30-2022	13.14	86.86	46.41	16.96	4.17	0.59

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

David Simeral
Western Regional Climate Center



droughtmonitor.unl.edu

[Colorado Drought Update Page](#)

In August 2023, drought expanded across southwest CO. Drought coverage increased from 5% to 14% of the state. D2 (severe drought) was also introduced into the San Luis Valley in August.

The severe drought region coincides with areas that observed a record or near-record dry summer (Jun – Aug). The monsoon season failed to bring normal precipitation to the region, and evaporative demand remained extremely high in August. As a result, vegetation and soils have started drying and streamflows have dropped below average.



significant events

The active summer of severe weather in Colorado continued through the first 10 days of August. In particular, on the 8th of August, a supercell thunderstorm produced multiple tornadoes in Yuma County, including an EF-2 and an EF-3, which was the first EF-3 on record in Yuma County, as well as a giant hailstone that is being considered as the new state record for Colorado, with apparent diameter of 5.25”



Cory Gardner
@CoryGardner

We are in the basement. This is no joke get in your basement and take cover. Taken by Jim Pagel north of Yuma. Southwest of his home.



5:28 PM · Aug 8, 2023 · 80.7K Views

Post from former Senator Cory Gardner showing the Yuma County tornado on Aug. 8



Hailstone dent; photo courtesy NWS Goodland



CCC in the news

- ❑ [Colorado natural disasters rise 275% over 20 years](#)
 - KDVR Fox 31, August 29, Becky Bolinger
- ❑ [Increased attention on issues evident at Colorado Water Congress](#)
 - Aspen Daily News, August 25, Russ Schumacher
- ❑ [New Colorado climate report says state will continue to heat up, but whether it will dry out is unclear](#)
 - Water Education CO, August 23, Becky Bolinger
- ❑ [Tropical storm remnants likely to soak Colorado this week](#)
 - 9News, August 22, Russ Schumacher
- ❑ [After 20 years, Denver records warmest low temperature](#)
 - 9News, August 22, Peter Goble
- ❑ [More frequent extreme weather events on the horizon, Colorado climate experts say](#)
 - CBS News CO, August 21, Becky Bolinger
- ❑ [Farmers' Almanac on winter 2023-2024: 'Brrr' with more snow, cold temperatures across US](#)
 - USA Today, August 19, Russ Schumacher
- ❑ [Cool this summer. Will next year bring killer heat?](#)
 - Colorado Newsline, August 16, Russ Schumacher
- ❑ [First it was drought. Now rain, hail and worms are impacting Colorado's biggest crops](#)
 - The Denver Post, August 16, Becky Bolinger



CCC in the news

- ❑ [Hailstone that hit Yuma County during tornado declared largest in Colorado records](#)
 - Canon City Daily Record, August 16, Russ Schumacher
- ❑ [Giant hailstone found in Yuma County appears to be Colorado's largest on record](#)
 - CPR News, August 16, Russ Schumacher
- ❑ [Daily on Energy: The rare confluence of climate factors that made the Maui fire so dangerous](#)
 - Washington Examiner, August 11, Becky Bolinger
- ❑ [Plans to bury the grid must not forget the poor](#)
 - Energy Central, August 11, Russ Schumacher
- ❑ [Heat from global warming is drying up the Colorado River, UCLA says](#)
 - The Colorado Sun, August 7, Peter Goble
- ❑ ['One hail of a year': Data shows more than 150 damaging hail storms this year](#)
 - KDVR Fox 31, August 7, Colorado Climate Center Data
- ❑ [Colorado monsoon: How much does it really contribute to our flash floods?](#)
 - The Coloradoan, August 3, Russ Schumacher
- ❑ [Soggy basements, closed buildings, impassable roads after Monday deluge](#)
 - The Coloradoan, August 1, Russ Schumacher

