



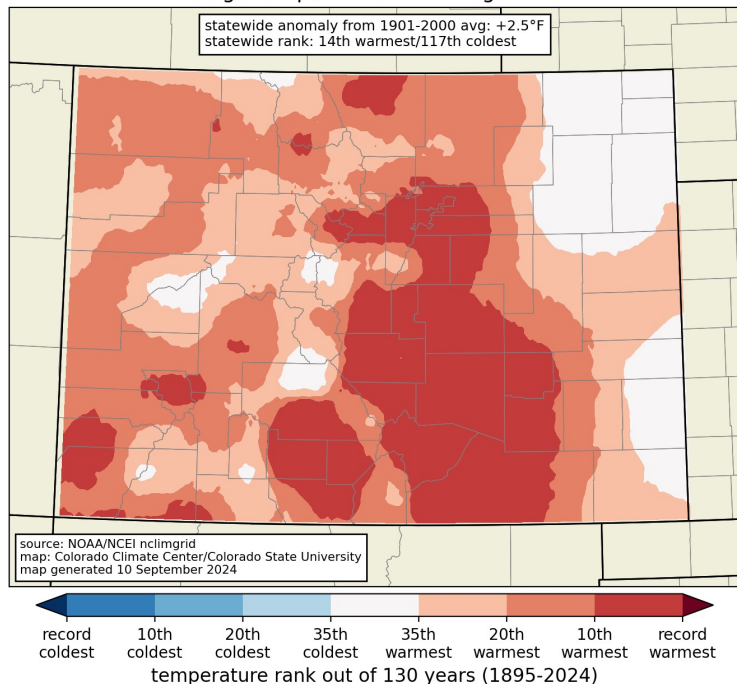
August 2024 Colorado Monthly Climate Summary



ATMOSPHERIC SCIENCE
COLORADO STATE UNIVERSITY

temperature

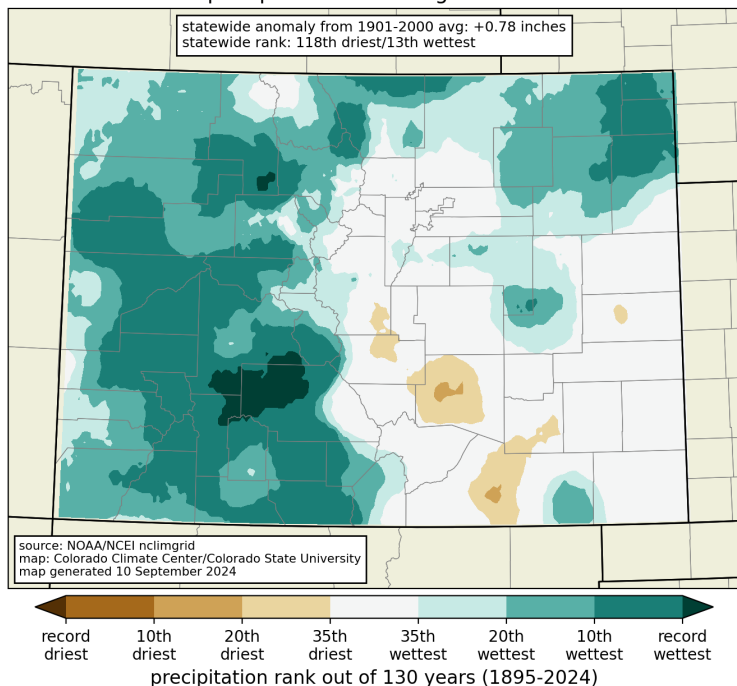
average temperature rank: August 2024



August 2024 was warmer than average across nearly all of Colorado. A broad swath of central and southern Colorado had a top-10 warm August. The only exception was on the far eastern Plains, which were closer to the historical average temperature for August.

precipitation

precipitation rank: August 2024

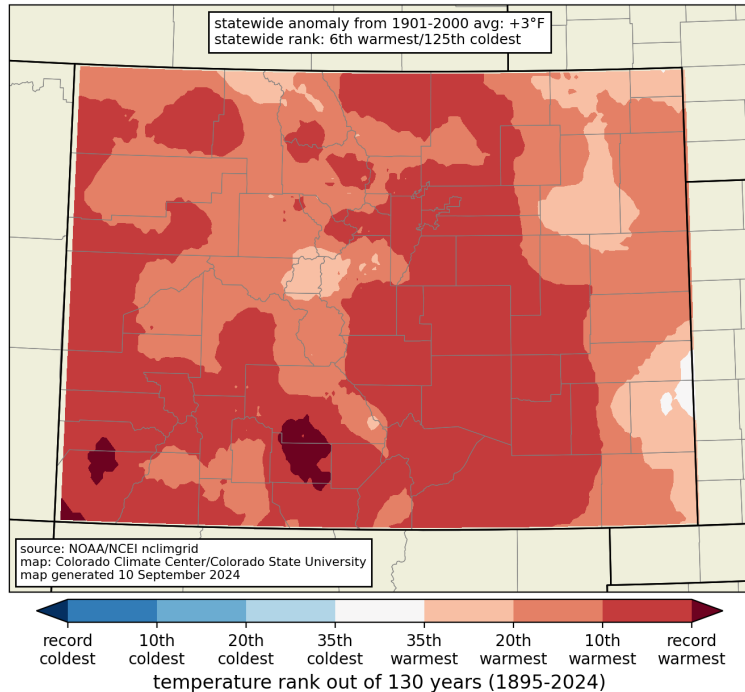


Western Colorado was very wet during August, with regular periods of monsoon thunderstorms and heavy rainfall. The northern San Juan Mountains had their wettest August on record. Northeast Colorado also had a wet August, while parts of southeast Colorado were drier than average.



temperature: summer

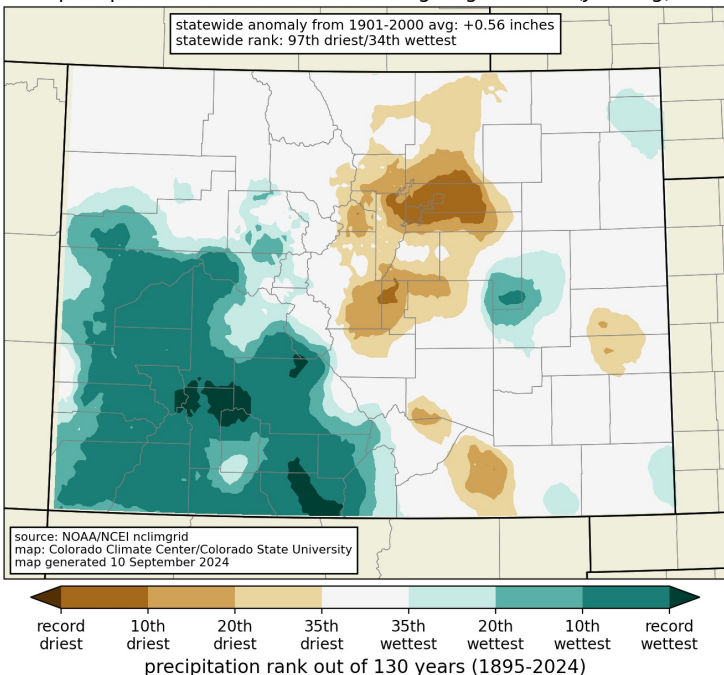
average temperature rank: 3 months ending August 2024 (Jun-Aug)



Climatological summer (June, July, August) was hot across Colorado. June and August were especially warm months, with July closer to the long-term average. Some pockets of southern and western Colorado experienced their hottest summer on record. The nine hottest summers across Colorado have all been since 2000.

precipitation: summer

precipitation rank: 3 months ending August 2024 (Jun-Aug)



Summer saw some major contrasts in precipitation across the state. In southwest Colorado, the monsoon was especially active, and it was one of the wettest summers on record. On the other hand, the Front Range, especially around the Denver metro area, was much drier than average.



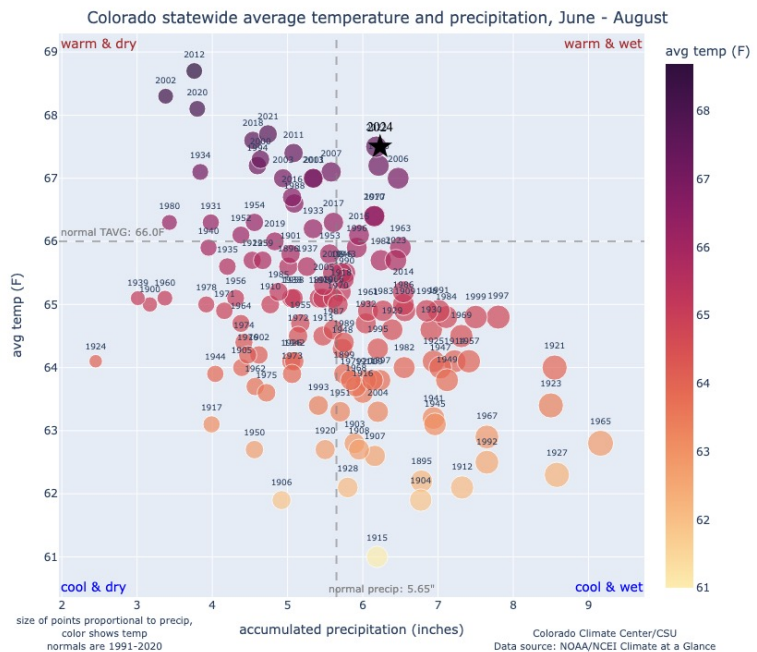
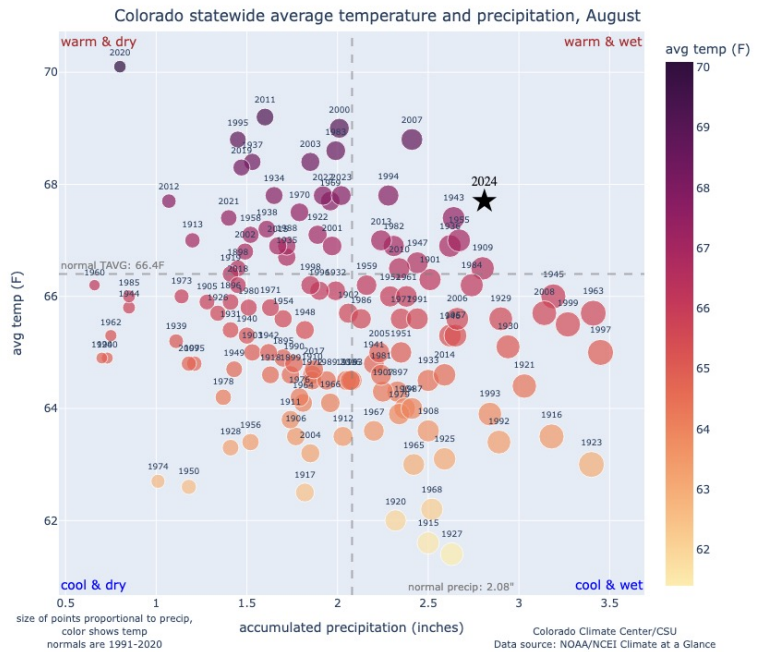
quadrant charts

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.

Averaged across Colorado, August 2024 was warmer and wetter than average. It was tied for the 14th warmest August in the 130-year record, 1.3° F warmer than the 1991-2020 average and 2.5° F warmer than the 20th-century average. It was the 13th wettest August statewide, at 0.87" above average.

Climatological summer also ended up in the warm and wet quadrant statewide. It was tied for the 6th hottest summer on record, 1.5° F warmer than the 1991-2020 average and 3.0° F warmer than the 20th-century average. It was tied for the 34th wettest (97th driest) summer in the 130-year record. These numbers almost exactly matched those from 2022.

[view all quadrant charts](#)

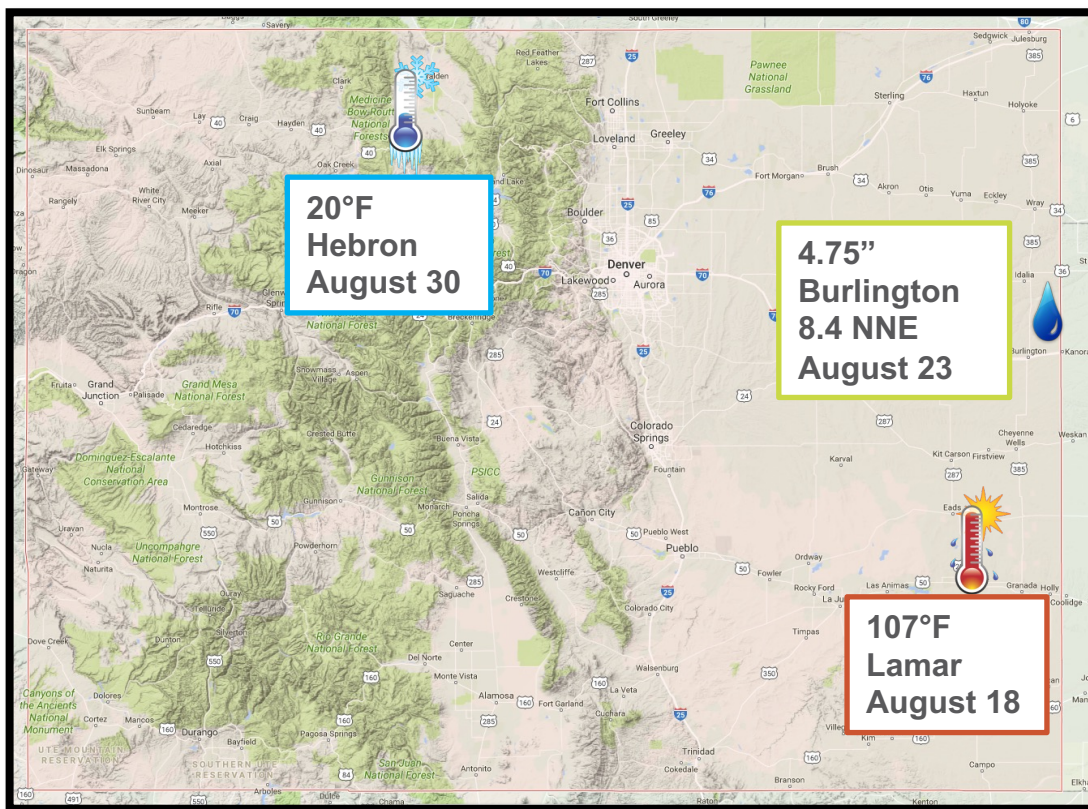


records tied and broken

	High Max	Low Max	High Min	Low Min	Precip	Snow
Daily	73/211	15/77	94/194	1/5	53/123	0/0
Monthly	23/8	0/0	6/10	0/0	0/4	0/0
All-time	1/0	0/0	0/2	0/0	0/0	0/0

Tied/Broken, from NOAA National Centers for Environmental Information

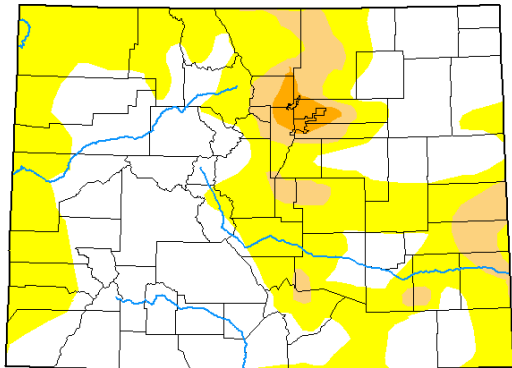
state extremes



drought

U.S. Drought Monitor Colorado

August 27, 2024
(Released Thursday, Aug. 29, 2024)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	50.86	49.14	8.53	1.22	0.00	0.00
Last Week 09-20-2024	47.21	52.79	8.27	1.16	0.00	0.00
3 Months Ago 05-28-2024	60.75	39.25	15.78	0.50	0.00	0.00
Start of Calendar Year 01-01-2024	34.65	65.35	29.59	8.85	2.05	0.00
Start of Water Year 09-26-2023	65.71	34.29	17.43	2.77	0.00	0.00
One Year Ago 08-29-2023	70.68	29.32	13.97	0.93	0.00	0.00

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>

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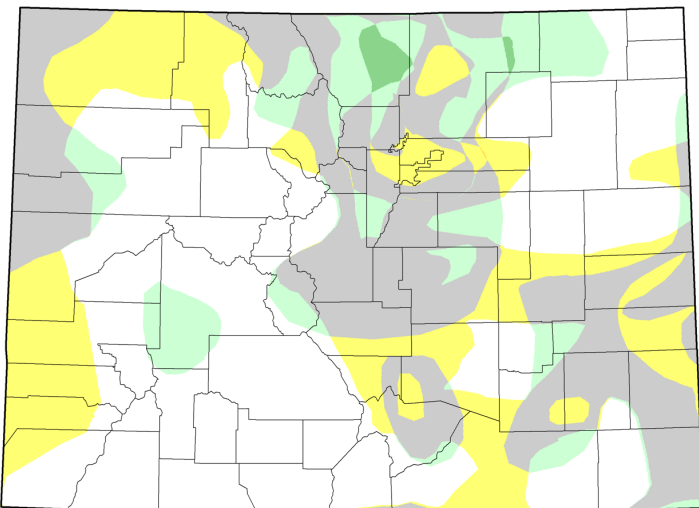


droughtmonitor.unl.edu

As of August 27, just 8.53% of Colorado was in drought conditions on the US Drought Monitor (D1 or worse). Nearly half of the state (49.14%) was at least "abnormally dry" (D0 or worse). Severe drought (D2) remained in place along the Front Range.

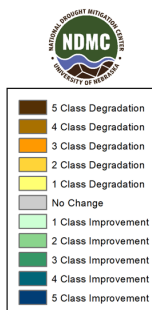
[Colorado Drought Update Page](#)

U.S. Drought Monitor Class Change - Colorado
4 Week



August 27, 2024
compared to
July 30, 2024

droughtmonitor.unl.edu



Changes to the US Drought Monitor in August were a mixed bag: some areas that received helpful rain and saw improved conditions, like Larimer County which improved by two categories. Western and eastern Colorado saw a mix of degradations and improvements, based on where the thunderstorms happened to provide rain.



significant events

Number of Consecutive Days Max Temperature \geq 90 for FORT COLLINS, CO

Click column heading to sort ascending, click again to sort descending.

Rank	Run Length	Dates
1	16	2024-07-23 through 2024-08-07
2	14	2012-06-22 through 2012-07-05
-	14	1987-07-20 through 1987-08-02
4	12	2022-07-12 through 2022-07-23
-	12	2020-08-16 through 2020-08-27
-	12	2002-06-22 through 2002-07-03
7	11	2005-07-06 through 2005-07-16
-	11	1954-07-03 through 1954-07-13
9	10	1989-06-30 through 1989-07-09
-	10	1919-06-21 through 1919-06-30

Grand Junction had their hottest summer on record, and it was the first time the average temperature for the entire summer topped 80°F. It was also the 11th wettest summer in 132 years of data at Grand Junction.

Denver-Central Park Jun-Jul-Aug total precipitation

Rank	Year	Total Precipitation
1	2024	1.47
2	1959	1.52
3	1964	1.81
4	1978	1.97
5	1960	2.00
6	1994	2.10
7	1971	2.28
8	1962	2.52
9	2020	2.53
10	2012	2.57

Monte Vista had their wettest summer in 80 years of data. Can you believe that the San Luis Valley had 3-5 times as much rain as Denver this summer?

Between summer heat and rain (or lack thereof), some notable records were broken at long-term stations.

Fort Collins broke their record for most consecutive 90+ degree days, with 16, between July 23 and August 7.

Grand Junction Jun-Jul-Aug average temperature

Rank	Year	Mean Avg Temperature
1	2024	80.1
2	1994	79.5
3	1977	79.2
4	2018	79.0
-	2012	79.0
6	2021	78.5
7	2017	78.3
-	1940	78.3
9	2022	78.2
-	1933	78.2

At Denver's Central Park station, it was the driest summer in 77 years of records, with only 1.47" of rain. Last year (2023) had 9.41" of rain over that same period!

Monte Vista 2W Jun-Jul-Aug total precipitation

Rank	Year	Total Precipitation
1	2024	8.13
2	1957	6.32
3	2022	5.59
4	1968	5.40
5	1947	5.31
6	2006	5.23
7	1993	5.13
8	1999	5.11
9	1967	4.92
10	2001	4.76



CCC in the news

- ❑ **August 5:** [Next Conversation: State Climatologist Russ Schumacher on Colorado's wildfire year](#) Featuring Russ Schumacher on 9News Next with Kyle Clark.
- ❑ **August 5:** [Fort Collins to set heat record before rapid, drastic weather change this week](#) Featuring Russ Schumacher in the Coloradoan.
- ❑ **August 8:** ["Flash drought" in northern Colorado laid foundation for recent Front Range wildfires](#) Featuring Peter Goble in the Colorado Sun.
- ❑ **August 18:** [Here's a way-too-early forecast for Colorado's 2024-25 winter season](#) Featuring Peter Goble in the Aspen Times.
- ❑ **August 19:** [Large number of customers starting lawn-watering cycles on Mondays is stressing Denver Water's system](#) Featuring Peter Goble in the Colorado Sun.
- ❑ **August 25:** [The monsoon persists - but the long term pattern is warm and dry](#) Featuring Peter Goble in the Telluride Daily Planet.

[And ICYMI, check out Peter Goble's analysis of seasonal forecasts on our blog!](#)

