



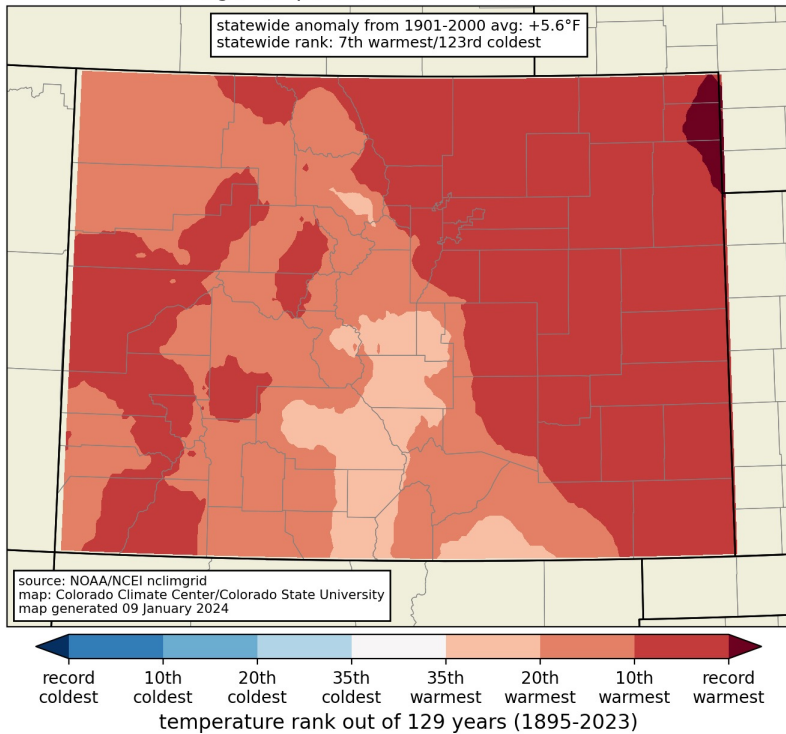
December 2023 Colorado Monthly Climate Summary



ATMOSPHERIC SCIENCE
COLORADO STATE UNIVERSITY

temperature

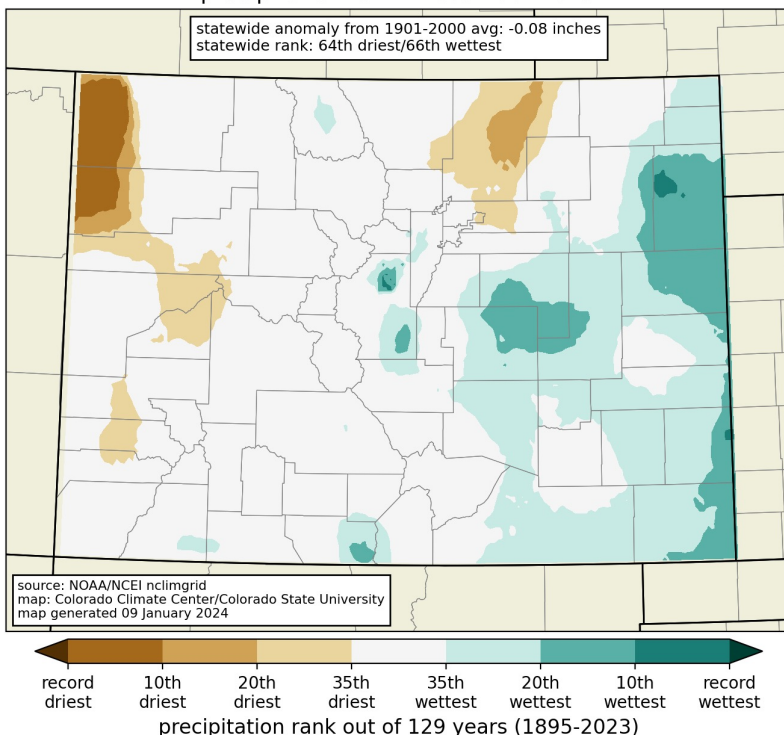
average temperature rank: December 2023



Calendar year 2023 ended with another very warm month, the 6th straight warmer-than-average month in Colorado. Nearly all of eastern Colorado had a top-10 warm December, whereas western and southern Colorado were “only” among the top 20-30 warm Decembers on record.

precipitation

precipitation rank: December 2023

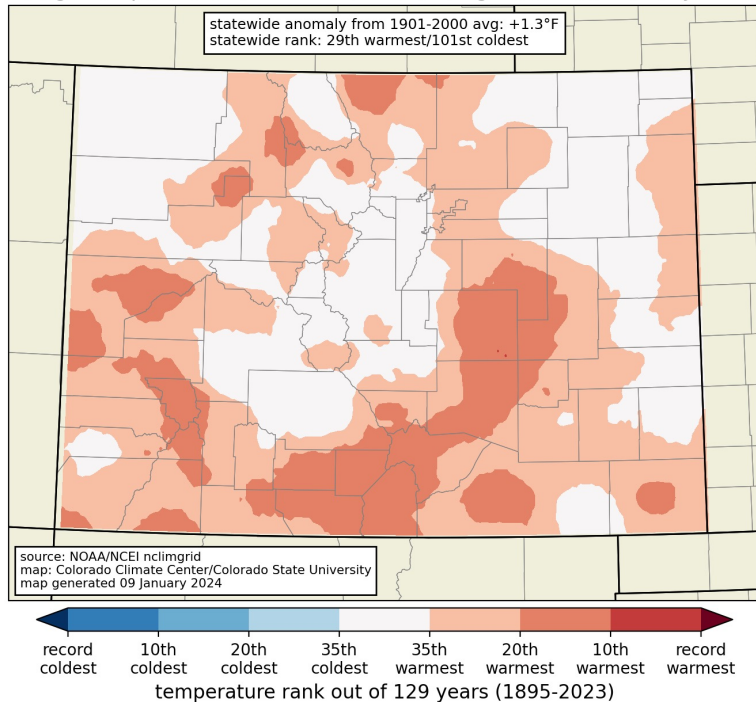


When averaging across the state, precipitation in December was very close to the long-term average. The eastern plains received a few storms with rain and snow that brought those areas above average, whereas some spots in Weld County and in northwestern Colorado were much drier than average in December.



temperature: calendar year 2023

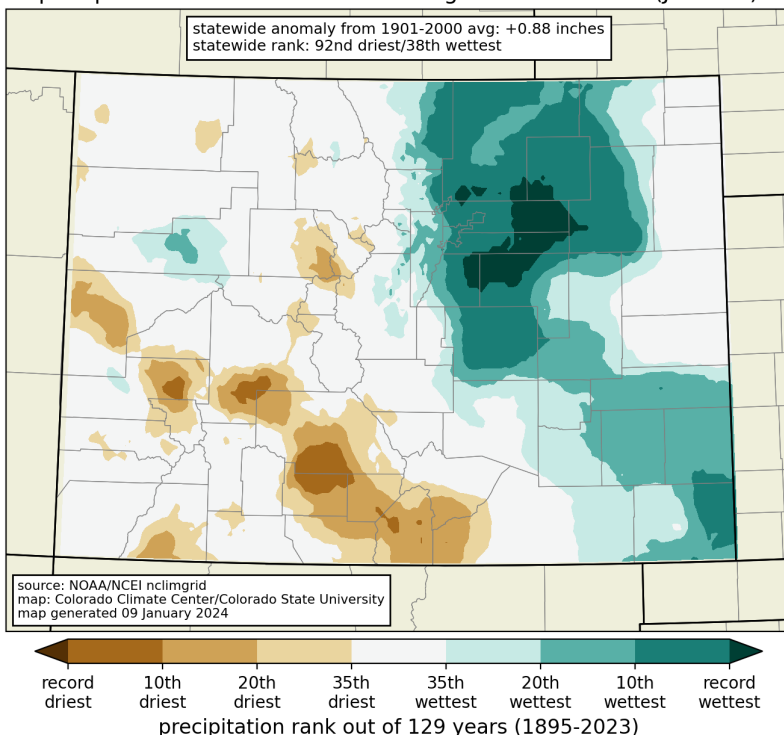
average temperature rank: 12 months ending December 2023 (Jan-Dec)



Calendar year 2023 was split in half in terms of temperature: the first 6 months were cooler than average, and the last 6 months were much warmer than average. Overall, it ended as the 29th warmest year in the 129-year record, at 1.3°F above the 20th century average. Some areas, especially, in southern Colorado, had a top-20 warm year, while there were no areas substantially colder than average.

precipitation: calendar year 2023

precipitation rank: 12 months ending December 2023 (Jan-Dec)



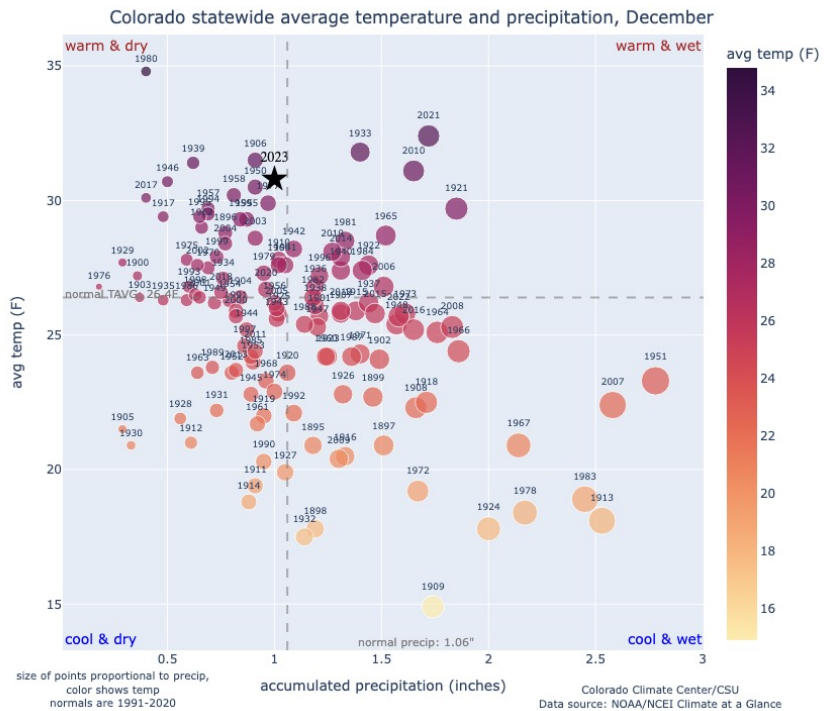
2023 was a record-setter for precipitation in parts of Colorado: portions of Weld, Morgan, Adams, Arapahoe, Douglas, and Elbert Counties had their wettest year on record according to NOAA's dataset, and surrounding areas were also much above average after the extremely wet spring and summer. In contrast, the San Luis Valley had an abnormally dry year.



quadrant charts

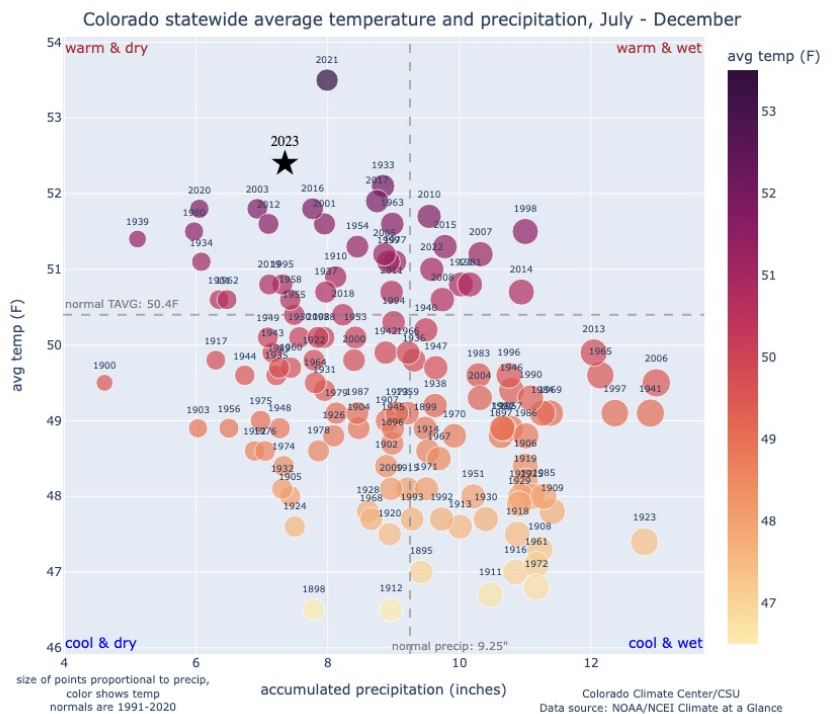
Each dot plots the precipitation on the x-axis and the temperature on the y-axis. Dots are colored based on temperature and size is based on precipitation. The current year is denoted with a star. Long-term averages are denoted by the dashed lines.

Averaged across the state, December 2023 was the 7th warmest December on record at 4.4° F above the 1991-2020 average and 5.6° F above the 20th century average. It was tied for the the 62nd driest/68th wettest December, at just 0.08” below average statewide.



The 2nd half of 2023 was squarely in the warm and dry quadrant in Colorado. In fact, it was the 2nd-warmest July through December period on record, behind only 2021. It was also the 26th driest July through December, averaging 1.70” less than the normal precipitation across Colorado.

[view all quadrant charts](#)

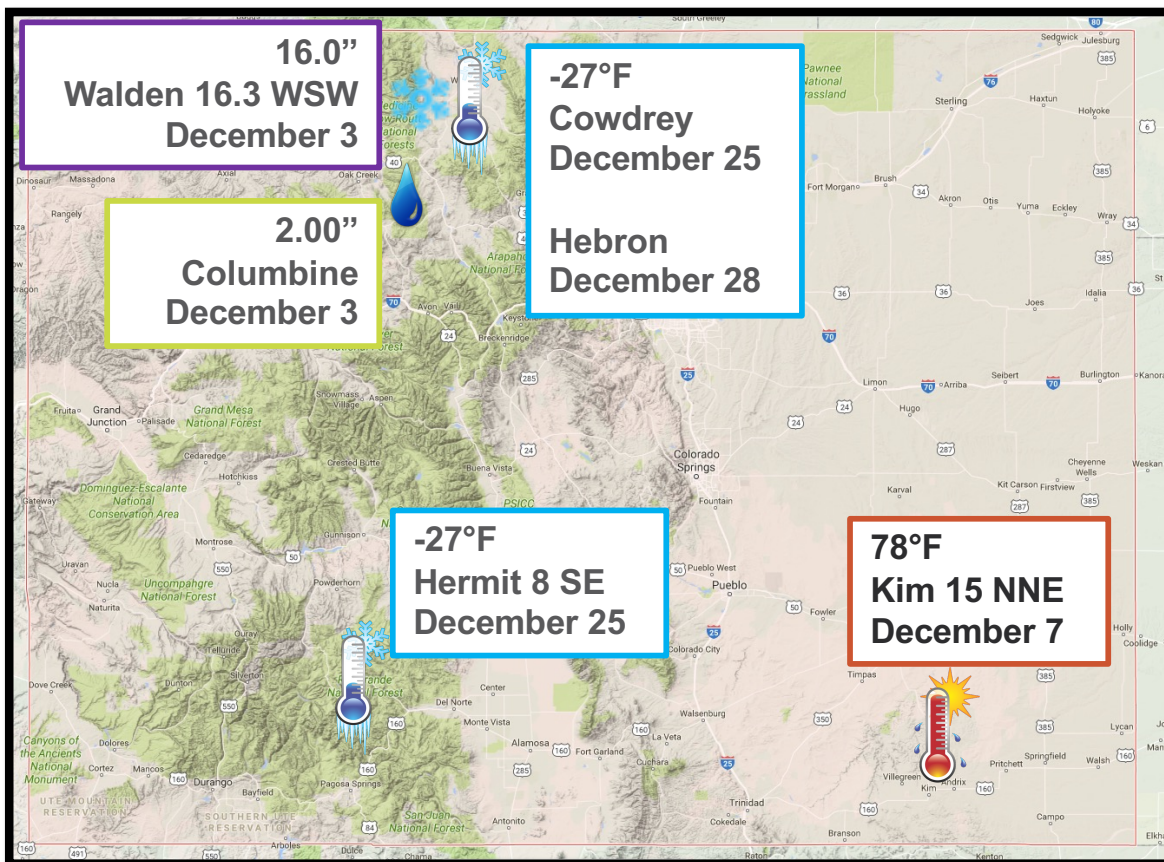


records tied and broken

	High Max	Low Max	High Min	Low Min	Precip	Snow
Daily	44/168	2/5	29/111	2/6	11/80	3/24
Monthly	0/0	0/0	0/0	0/0	1/2	0/0
All-time	0/0	0/0	0/0	0/0	0/0	0/0

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

state extremes

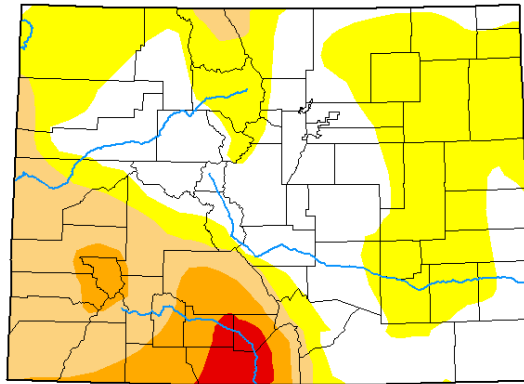


drought

Some drought improvement occurred over southeast CO, while abnormally dry conditions expanded over the northern mountains and severe drought expanded over parts of the San Juan mountains and severe drought expanded over parts of the San Juan mountains. D3 drought remains in the San Luis Valley.

U.S. Drought Monitor Colorado

December 26, 2023
(Released Thursday, Dec. 28, 2023)
Valid 7 a.m. EST



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	36.69	63.31	25.85	8.85	2.05	0.00
Last Week 12-19-2023	35.09	64.91	26.18	8.85	2.05	0.00
3 Months Ago 09-26-2023	65.71	34.29	17.43	2.77	0.00	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 09-26-2022	65.71	34.29	17.43	2.77	0.00	0.00
One Year Ago 12-27-2022	13.75	86.25	42.37	30.79	3.23	0.53

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:

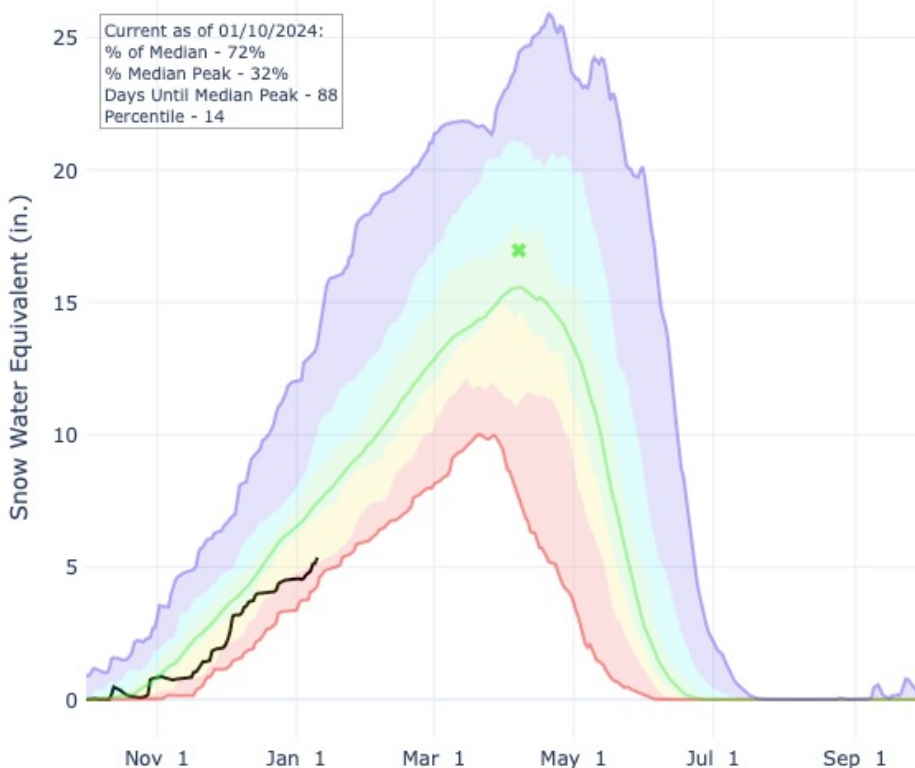
Rocky Billotta
NCEI/NOAA



droughtmonitor.unl.edu

[Colorado Drought Update Page](#)

snowpack



Statewide snowpack at the end of December was around the 10th percentile and 2 inches below the median.

Snowpack did rebound in early December. While there were several snow accumulating events throughout the month, most were smaller.



CCC in the news

- ❑ [As the world ends the hottest year recorded, scientists say it's getting harder to predict Colorado's climate](#)
 - Colorado Public Radio, December 30, Russ Schumacher
- ❑ [Colorado snowpack off to a below-average start](#)
 - Denver Gazette, December 29, Becky Bolinger
- ❑ [From major cold snaps to record-breaking rainfall: A look back at Colorado's extreme weather in 2023](#)
 - Denver 7, December 29, Russ Schumacher
- ❑ [Each day, over 15,000 volunteers take weather observation data. Here's why.](#)
 - News Virginian, December 23, CoCoRaHS
- ❑ [2024 forecasts show less water will flow into Lake Powell. Don't panic, experts say](#)
 - Colorado Sun, December 22, Russ Schumacher
- ❑ [Snow falling on Christmas Day isn't common in Fort Collins, but this could be the year](#)
 - The Coloradoan, December 29, Russ Schumacher
- ❑ [Early snowpack numbers a bit off pace](#)
 - Grand Junction Daily Sentinel, December 12, Peter Goble
- ❑ [Another good winter of snow could help recharge the Colorado River](#)
 - Aspen Daily News, December 10, Becky Bolinger
- ❑ [Reservoir empty, farm wells retired amid high demand for water on Colorado's Eastern Plains](#)
 - CBS Colorado, December 1, Becky Bolinger

