



May 2023 Colorado Monthly Climate Summary

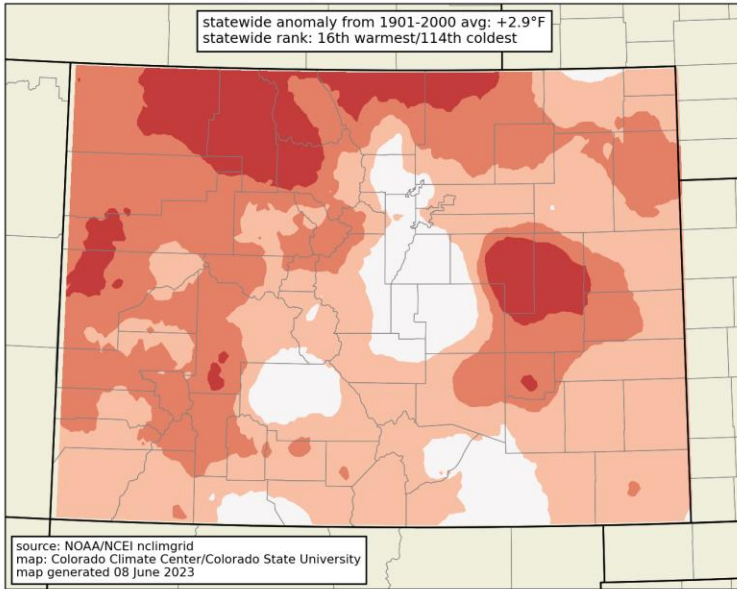


ATMOSPHERIC SCIENCE
COLORADO STATE UNIVERSITY

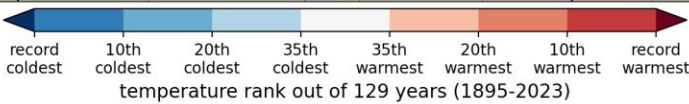
temperature : May

average temperature rank: May 2023

statewide anomaly from 1901-2000 avg: +2.9°F
statewide rank: 16th warmest/114th coldest



source: NOAA/NCEI nclimgrid
map: Colorado Climate Center/Colorado State University
map generated 08 June 2023

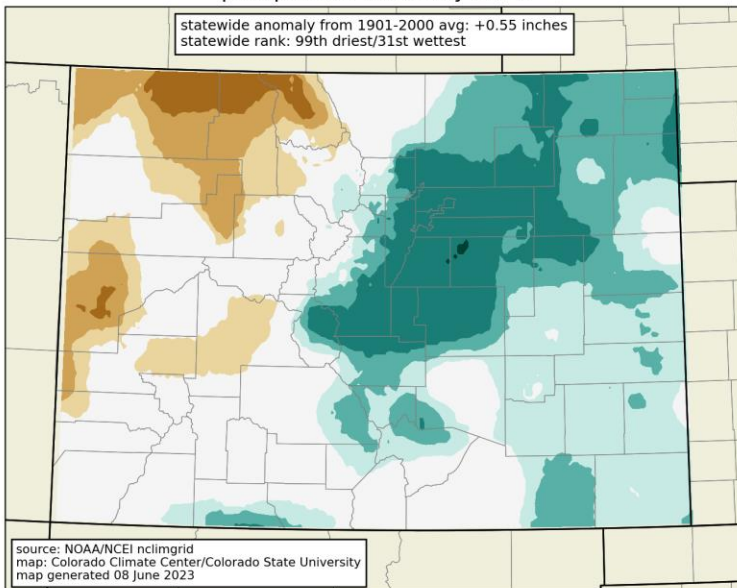


May broke the streak of 6 consecutive colder-than-normal months, with most of the state seeing warm conditions. Parts of northwestern Colorado, which had gone through a very cold and snowy winter, saw an especially abrupt change with a top-10 warmest May.

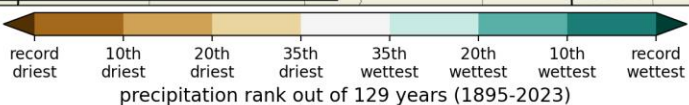
precipitation : May

precipitation rank: May 2023

statewide anomaly from 1901-2000 avg: +0.55 inches
statewide rank: 99th driest/31st wettest



source: NOAA/NCEI nclimgrid
map: Colorado Climate Center/Colorado State University
map generated 08 June 2023



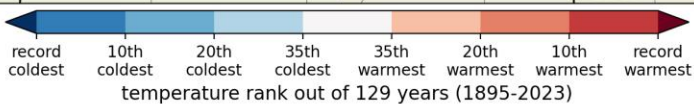
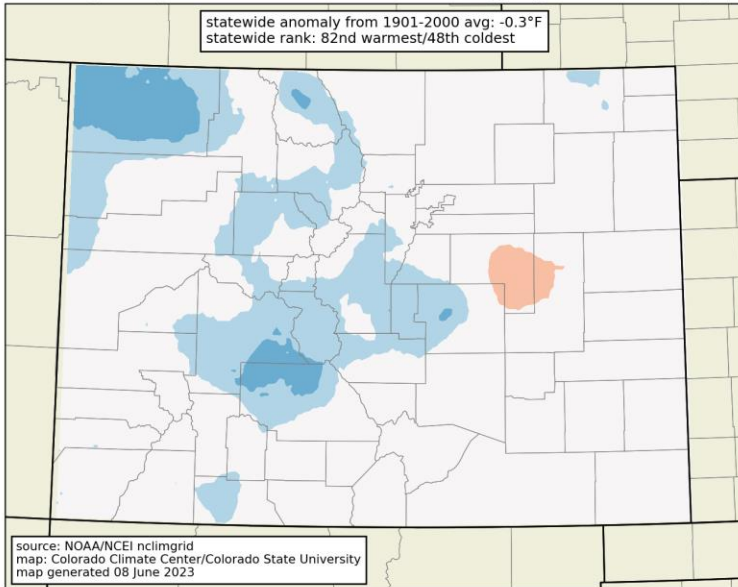
The major story for precipitation in May was the persistent rain along the Front Range and in northeastern Colorado. A small area in Douglas and Elbert Counties saw a record-wet May according to NOAA's dataset. Overall, this May was not as wet as the "Miracle May" of 2015, but there was still a whole lot of water that fell!



temperature : spring

average temperature rank: 3 months ending May 2023 (Mar-May)

statewide anomaly from 1901-2000 avg: -0.3°F
statewide rank: 82nd warmest/48th coldest

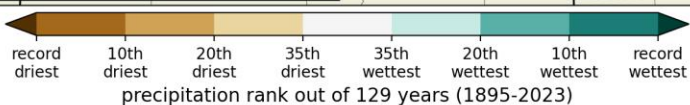
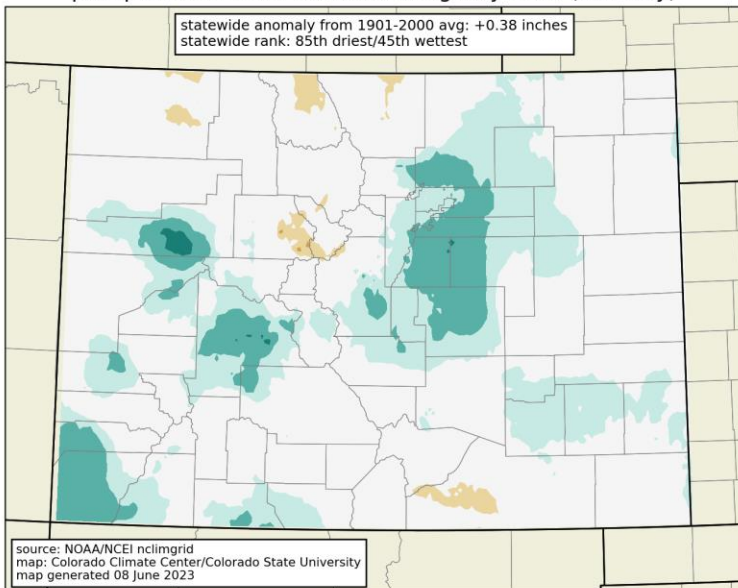


After a cold March and April and a warm May, the spring season ended up a bit colder than average across the state. The largest departures from average were in northwestern and central Colorado. The cool spring followed a cold winter, the first time that two consecutive seasons had temperatures below the 20th century average since 2013.

precipitation : spring

precipitation rank: 3 months ending May 2023 (Mar-May)

statewide anomaly from 1901-2000 avg: $+0.38$ inches
statewide rank: 85th driest/45th wettest



The spring season ended up slightly wetter than average across Colorado. The very wet May brought the Front Range to a top-20 wet spring, and some areas in the mountains were also much wetter than average from big snowstorms back in March.



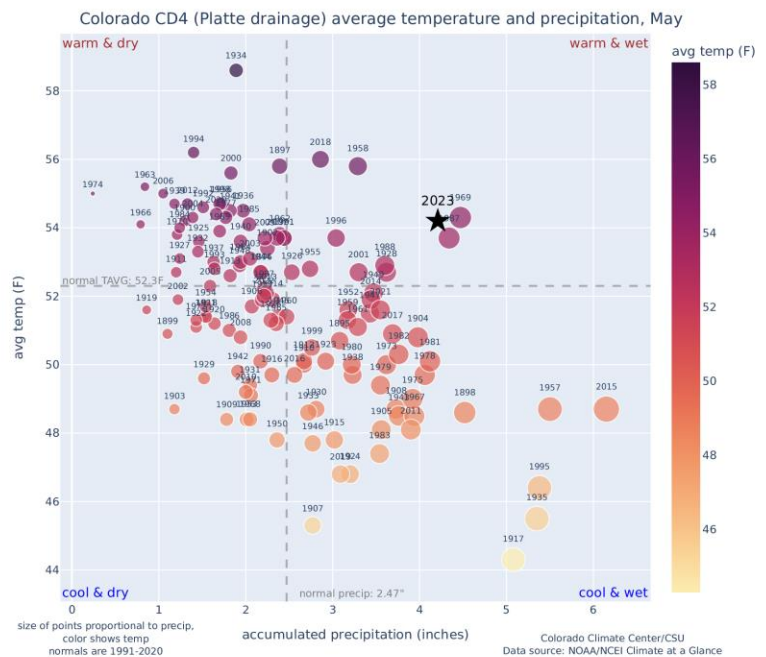
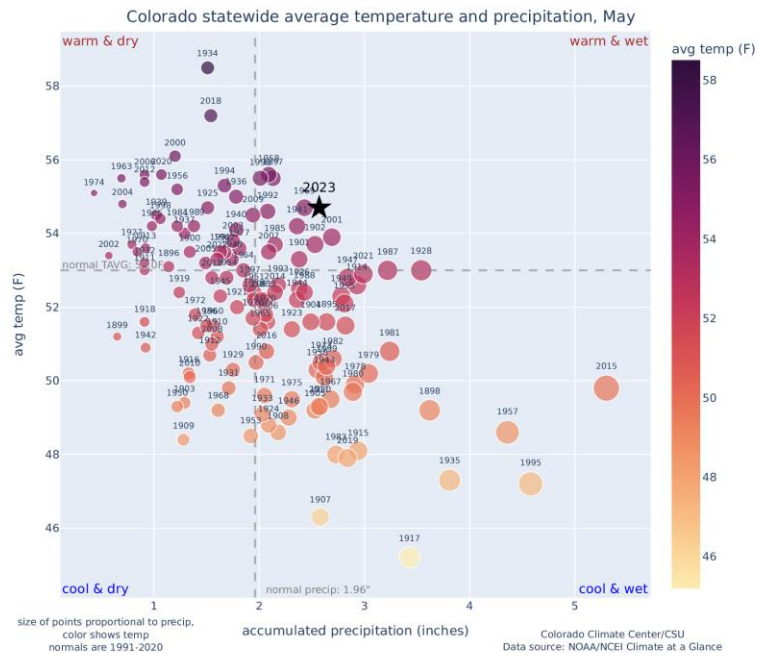
quadrant charts

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.

Statewide, Colorado was warm and wet in May. It was tied for the 16th warmest May on record, and tied for the 31st wettest. The quadrant chart illustrates that warm and wet is an uncommon combination in May: when it's wet, it's usually also cool during the spring.

Zooming into the Platte River basin in northeast Colorado, it was the 9th wettest May---the wettest since 2015. Other years that had a similar combination of warm and wet conditions in May were 1969 and 1987.

[view all quadrant charts](#)

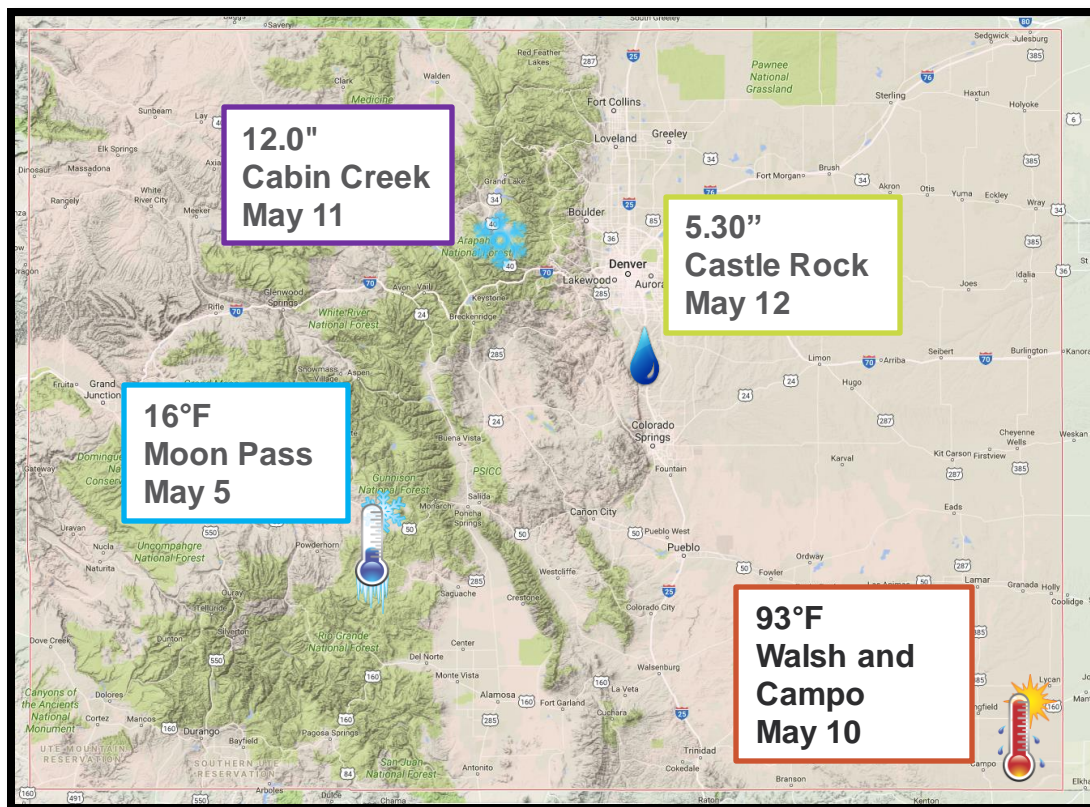


records tied and broken

	High Max	Low Max	High Min	Low Min	Precip	Snow
Daily	6/6	2/7	23/42	1/0	22/103	2/3
Monthly	0/0	0/0	0/0	0/0	0/9	0/0
All-time	0/0	0/0	0/0	0/0	0/3	0/0

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

state extremes

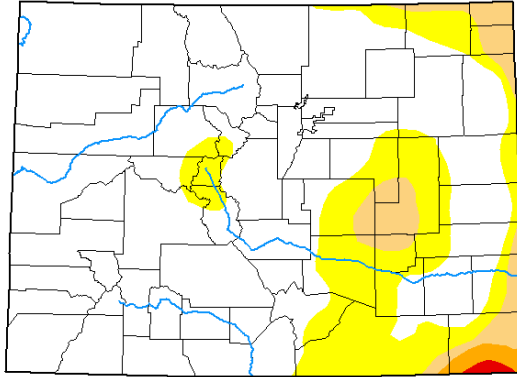


drought

The wet May in eastern Colorado greatly improved drought conditions, with less than 8% of the state in drought at the end of May, compared to over 37% of the state at the end of February.

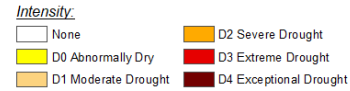
U.S. Drought Monitor Colorado

May 30, 2023
(Released Thursday, Jun. 1, 2023)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	76.28	23.72	6.34	1.08	0.24	0.00
Last Week 05-23-2023	71.93	28.07	7.83	2.53	0.81	0.08
3 Months Ago 02-28-2023	45.67	54.33	37.42	7.94	2.00	0.16
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 05-31-2022	1.09	98.91	87.50	57.03	15.50	0.99



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>

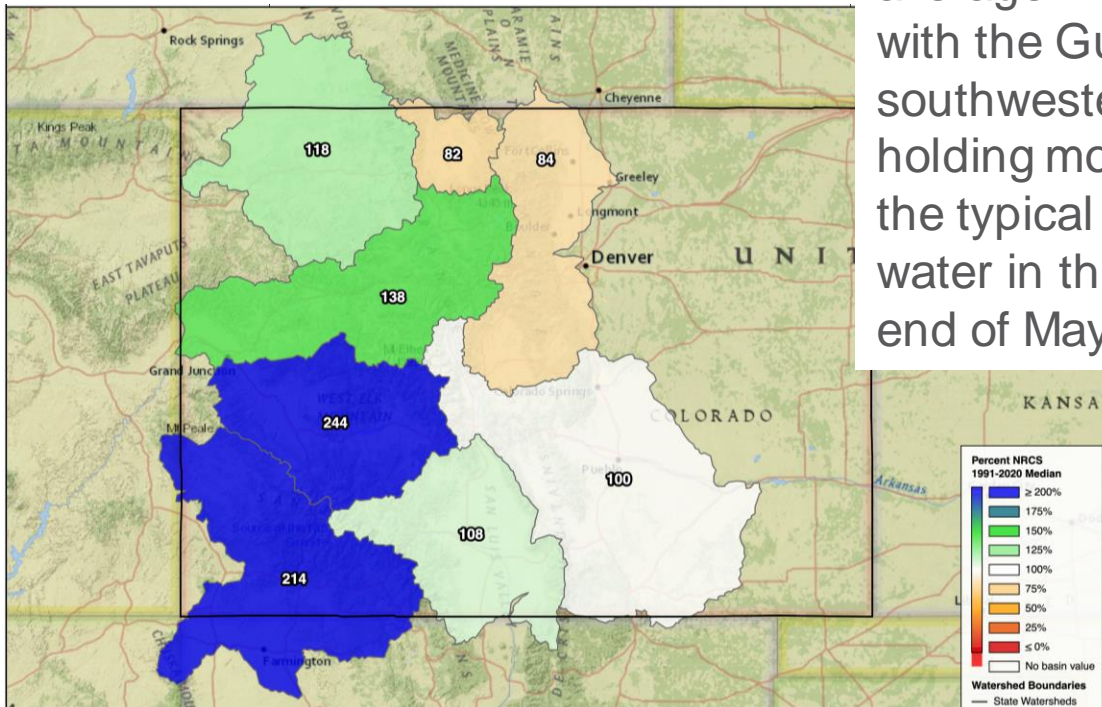
Author:
Richard Heim
NCEI/NOAA



droughtmonitor.unl.edu

[Colorado Drought Update Page](#)

snowpack



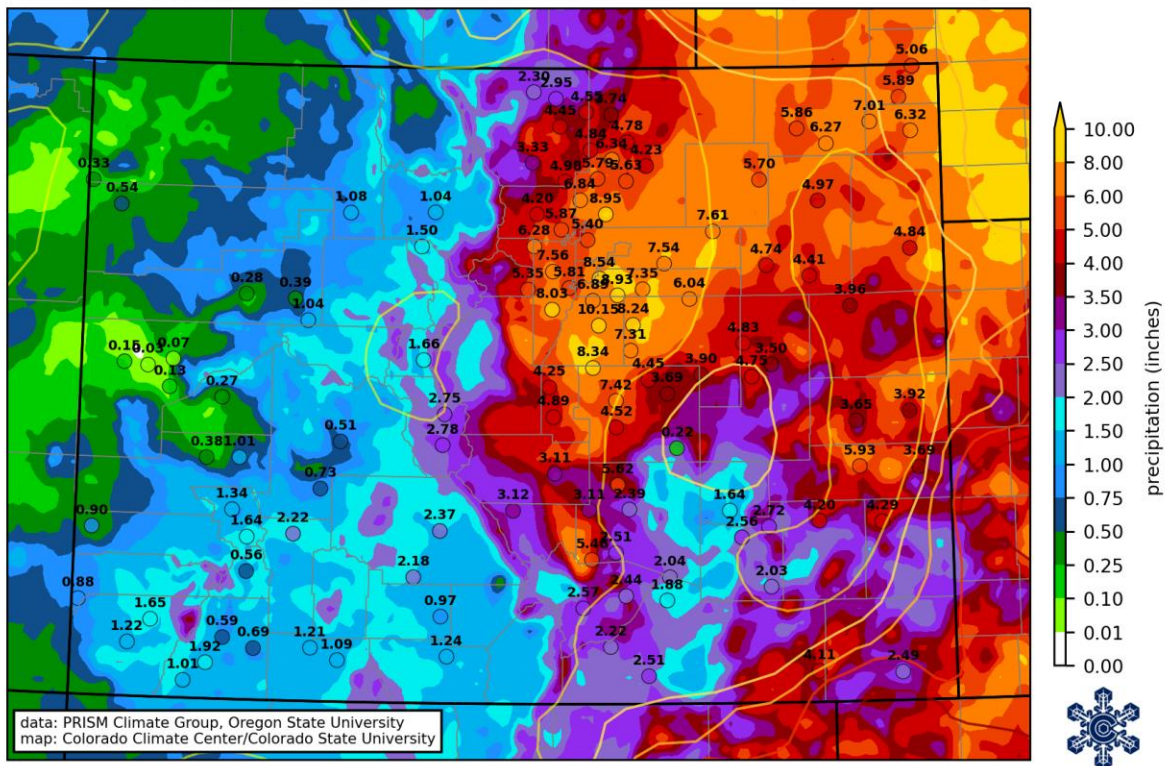
Mountain snowpack remained well above average in most basins, with the Gunnison and southwestern basins still holding more than twice the typical amount of water in the snow at the end of May.



significant events

PRISM and CoCoRaHS month-to-date precipitation, US Drought Monitor

through 5:00am MST Wed 31 May 2023



Map of precipitation in May from the PRISM dataset and CoCoRaHS observers, along with the US Drought Monitor categories.

Some additional statistics on May's heavy rainfall:

- A CoCoRaHS observer in Castle Rock reported 10.15" for the month.
- Denver recorded 2.92" of rain on May 11, the wettest single day since 1973, and 3.75" on May 11-12, which was the 2nd wettest 2-day period on record.
- Colorado Springs recorded 3.18" on May 11, the wettest May day on record and the 7th wettest day overall.

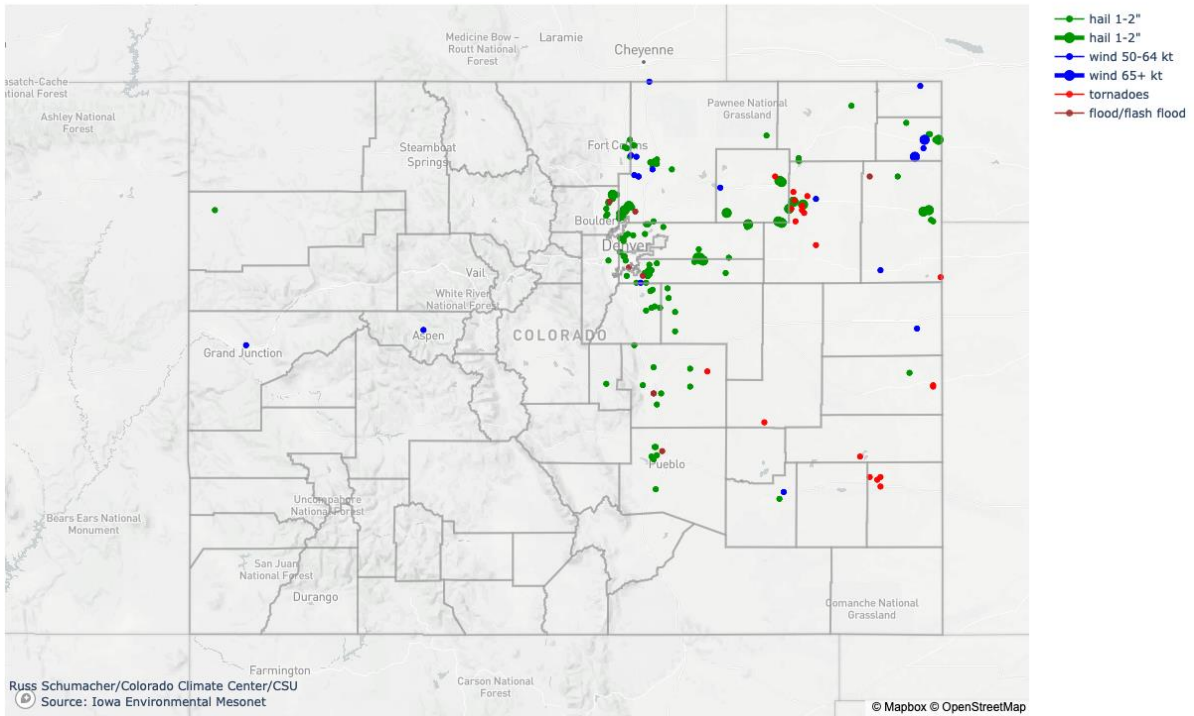
Flooding was reported from the heavy rain on May 10-12, especially on Sand Creek, Cherry Creek, Plum Creek, and parts of the Arkansas River.

Flooding was also a persistent issue as the deep snowpack melted, especially on rivers and creeks in northwestern (Elk and Yampa Rivers) and southwestern Colorado (Dolores and Mancos Rivers)



significant events

Colorado PRELIMINARY severe weather reports, May 2023



The first half of the month was active in terms of severe weather. Intense winds were observed on May 6th in northeastern Colorado, with a gust of 98 mph in Phillips County, which is in the top 50 thunderstorm wind gusts statewide.

May 10th was also a very active day, with several tornadoes and hail up to 4" in diameter reported west of Akron, and numerous hail reports statewide.

Landspout tornadoes were also reported on several days in southeast Colorado.



CCC in the news

- ❑ [Denver records one of its wettest Mays in decades. What does that mean for wildfires?](#)
 - The Denver Post, May 31, 2023, Becky Bolinger and Russ Schumacher
- ❑ [Windsor Tornado: On 15th anniversary, we look back on Colorado's most destructive twister](#)
 - The Coloradoan, May 21, Russ Schumacher
- ❑ [Double trouble? Colorado primed for flooding between torrential rains, spring snowmelt](#)
 - Greeley Tribune, May 20, Russ Schumacher
- ❑ [Why there's so much rain on Colorado's Front Range and Eastern Plains](#)
 - Colorado Public Radio, May 12, Russ Schumacher
- ❑ [New study shows Durango's water supplies declining dramatically as climate change, drought hit home](#)
 - Freshwater News, May 26, Peter Goble

