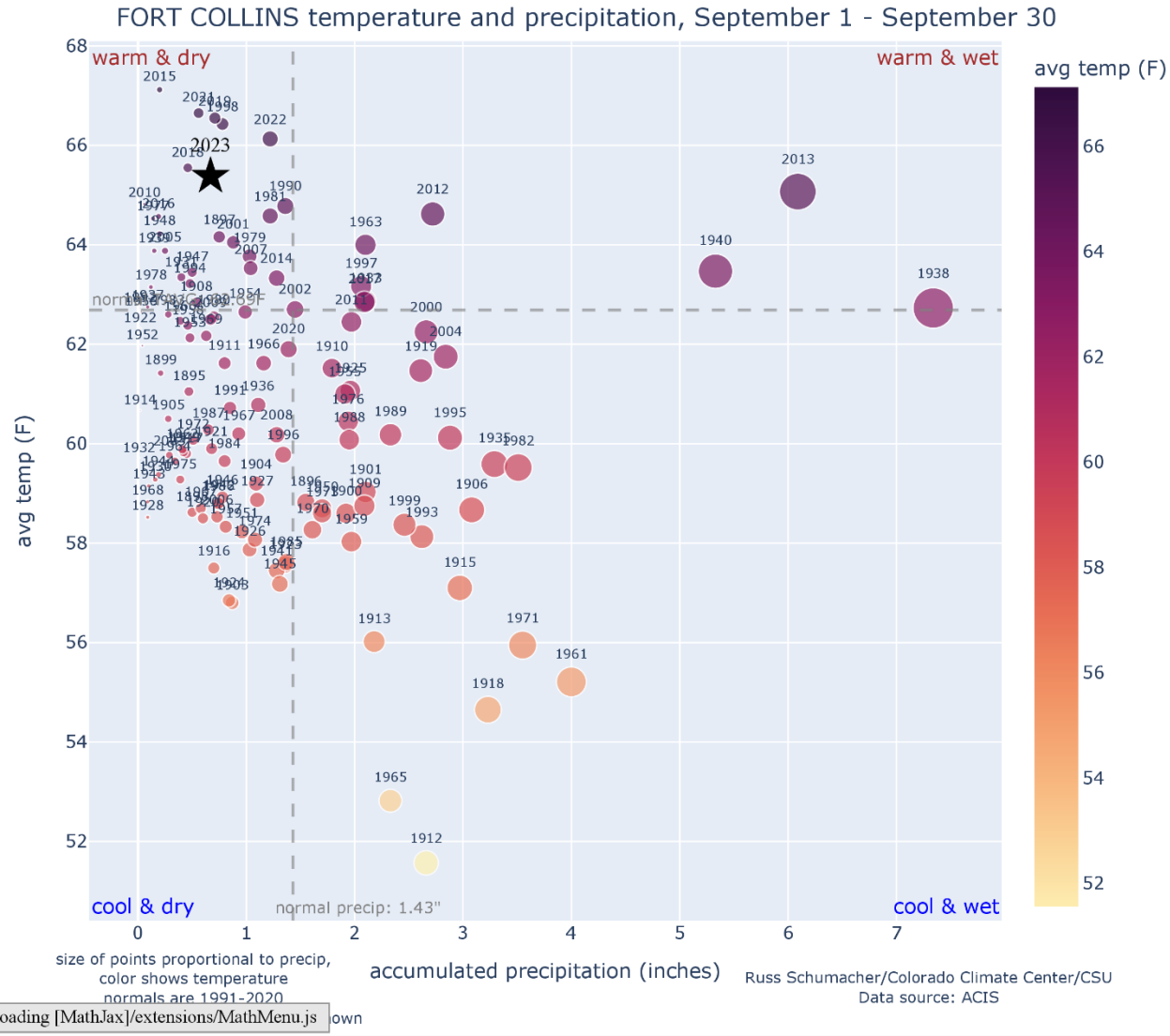
Fort Collins Weather Station Monthly Summary

September 2023

COLORADO CLIMATE CENTER

Average September Temperature and Precipitation



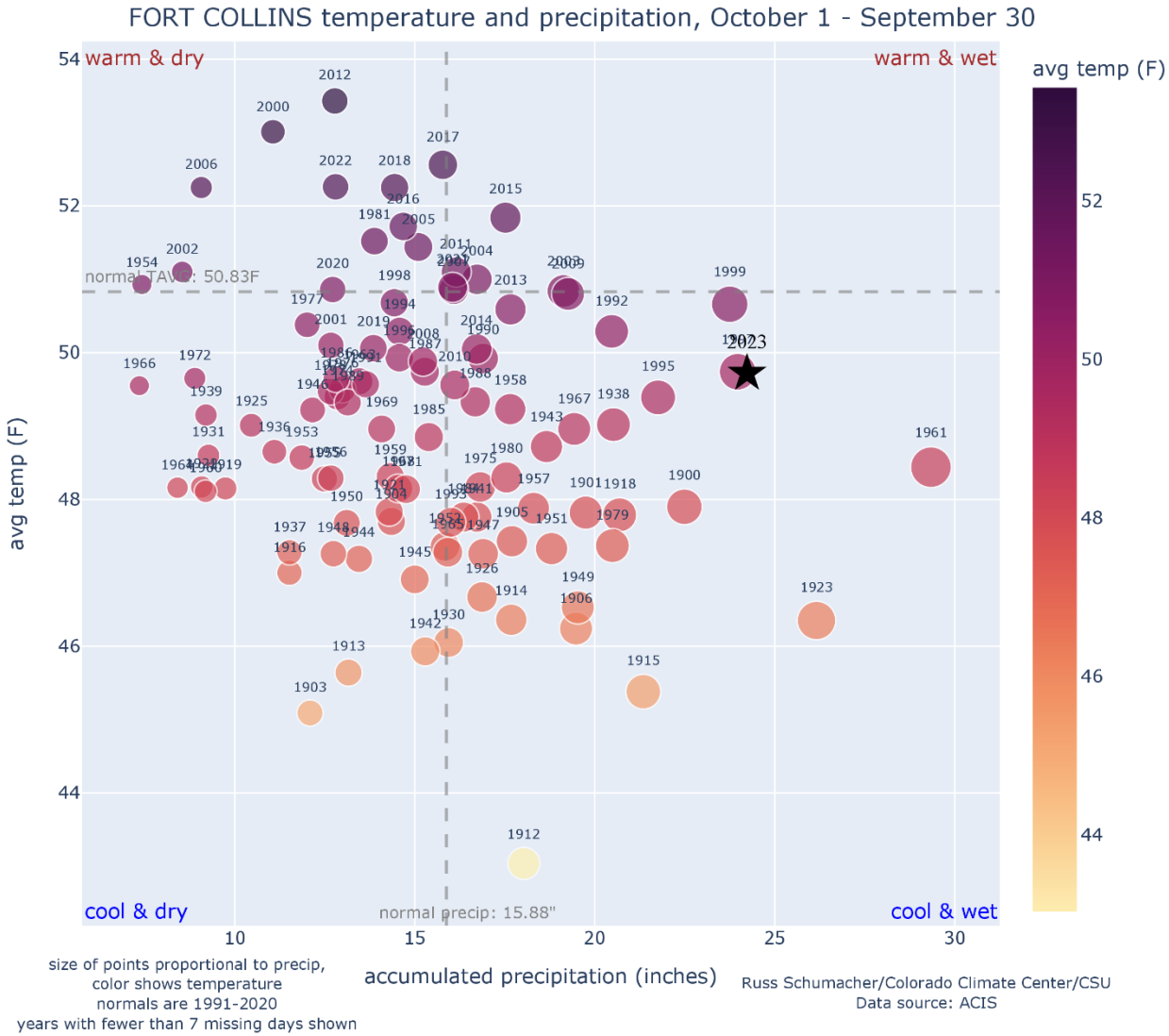
The average air temperature for September 2023 was 65.3 ˚F, 2.7 ˚F above our 1991-2020 September normal (62.6 ˚F)

The last warmer September was 2022 (66.1 ˚F)

We received 0.67” of precipitation in September 2023, 47% of our 1991-2020 September normal (1.42”)

The last drier September was 2021 (0.56”).

Average Water Year Temperature and Precipitation



Happy New Water Year!

The average air temperature for our 2023 Water Year was 49.6 ˚F. This is 1.2 ˚F below our 1991-2020 normal of 50.8 ˚F

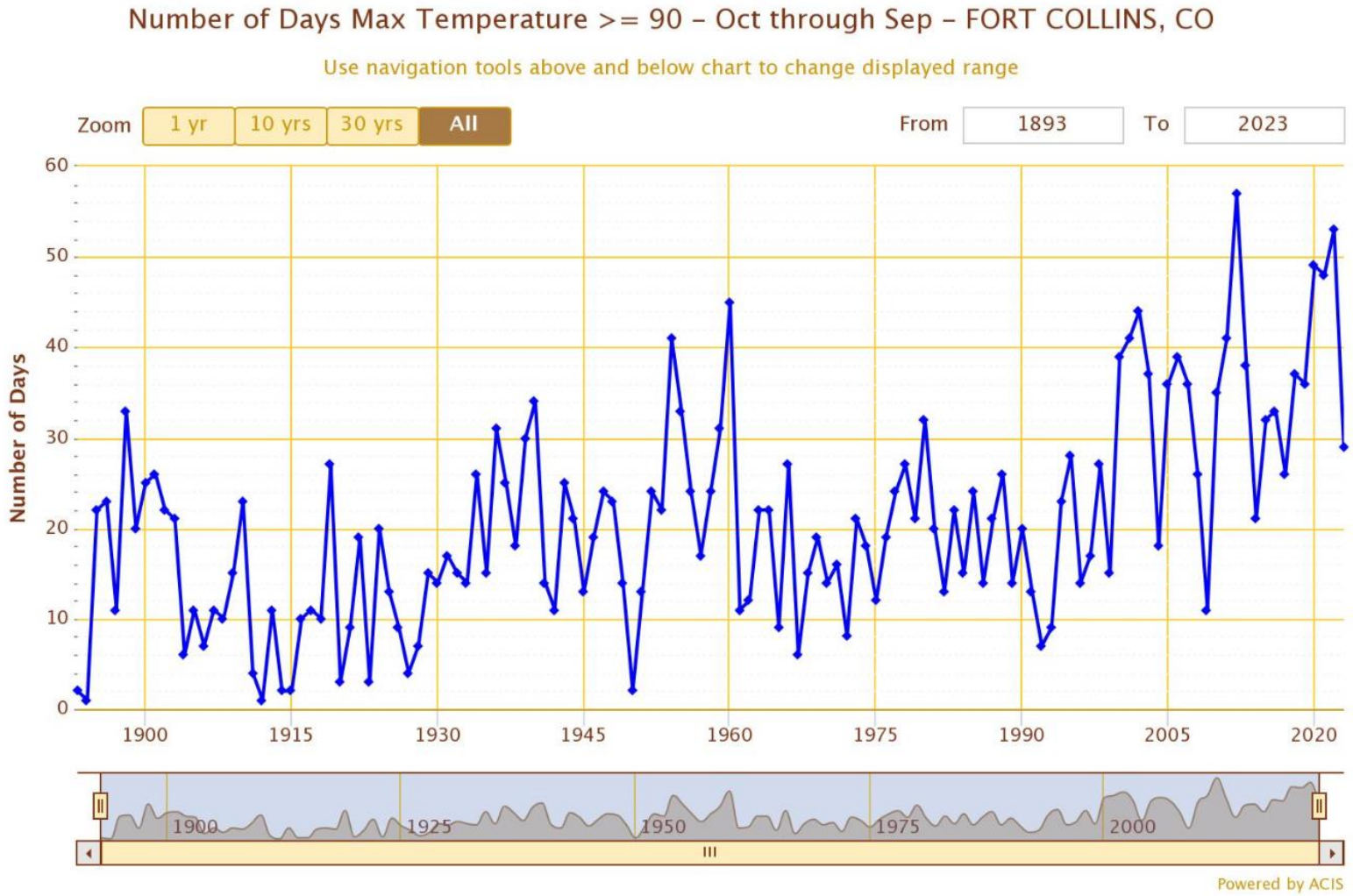
The last cooler water year was 2010 (49.5 ˚F)

2023 was the third wettest water year on record! We received 24.40” of precipitation this Water Year, 154% of our 1991-2020 normal (15.82”).

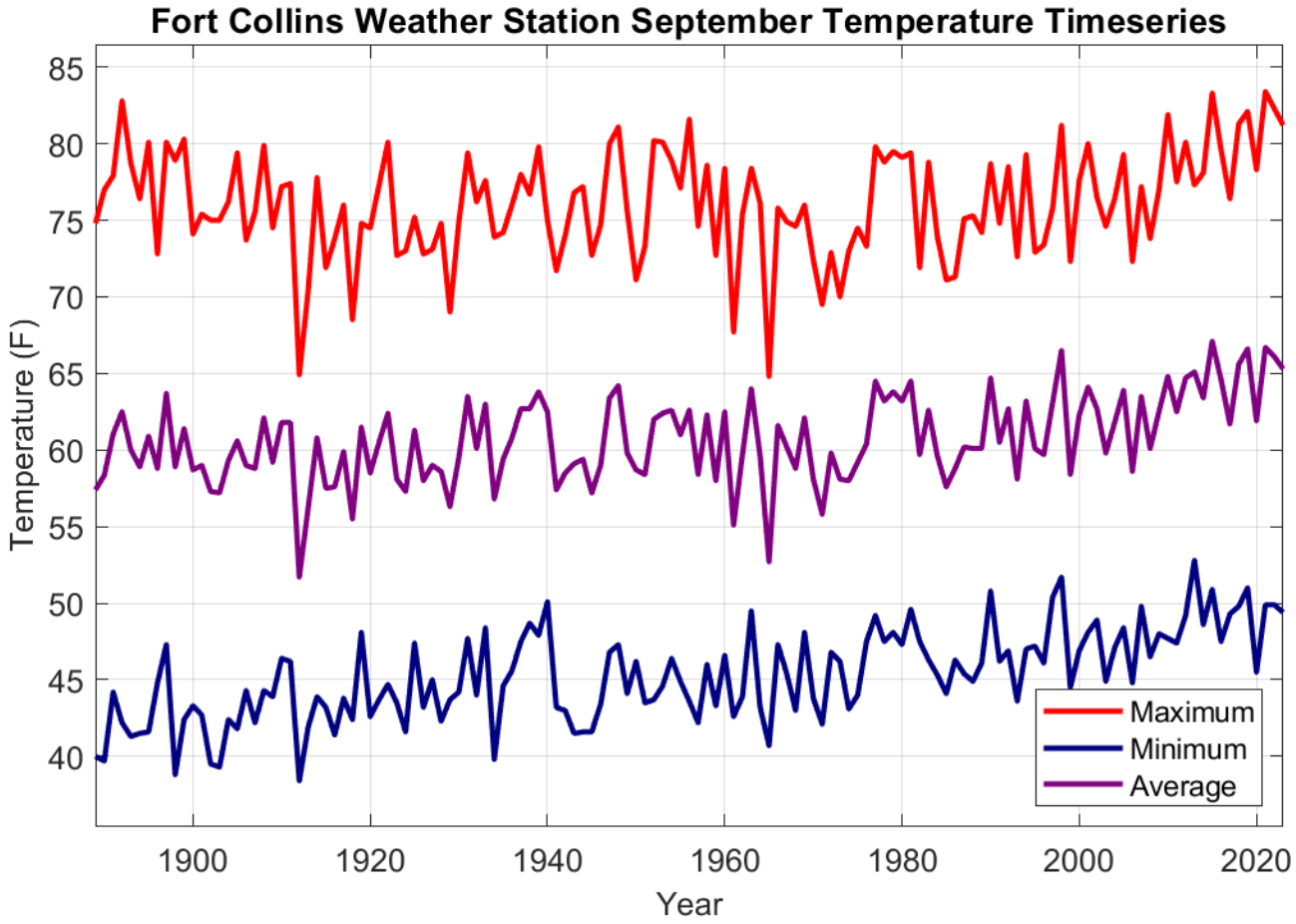
The last Water Year this wet was 1961 (29.34”)

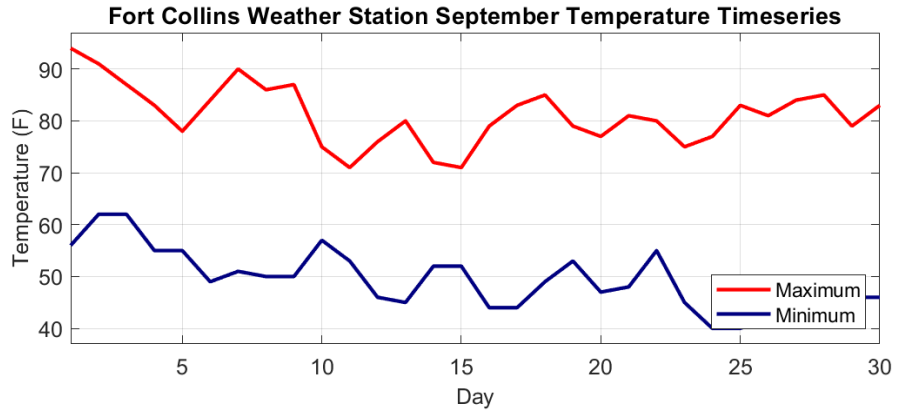
Feature Story: 90-degree days

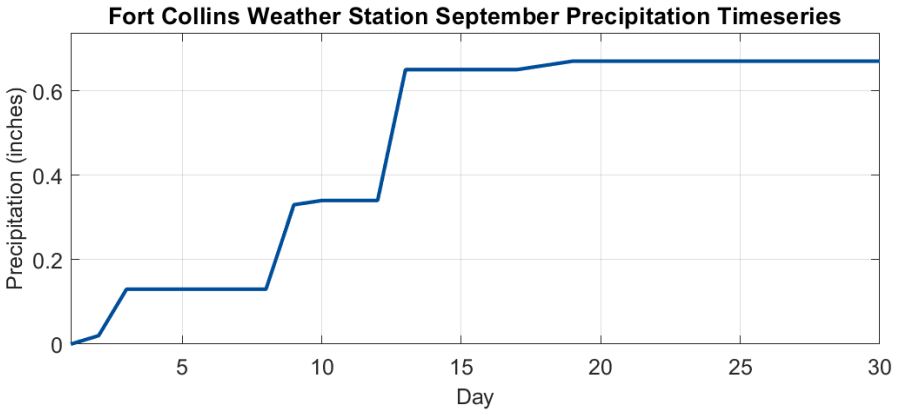
- We experienced 29 days this water year with a high temperature >= 90 ˚F. This is one day below average compared to the 1991-2020 average, but eight days above average for our entire period of record. The image on the right shows the significant tend Fort Collins has experienced in 90 degree days in recent decades
- It is worth noting the campus weather station was moved to its current location in 1961, and the CSU transit center was built next to the station in 2002, so land use change has likely played some role in this particular trend
- Our summer heat had a late start this year: Only one 90 degree day in June, 13 in July, 12 in August, and 3 in September



September 2023 Time Series Graphics







Highest Daily T_{max}: 94 ˚F on September 1st
Lowest Daily T_{min}: 40 ˚F on September 24th and 25th
Highest Daily Precipitation: 0.31” on September 14th

Highest Daily Pan Evaporation: 0.28” on September 6th

Total Pan Evaporation: 5.17” (105% of normal)

Additional September 2023 Statistics

	Observed	1991-2020 Normal	POR Average	Depart from Normal	Depart from POR Average	Last Above	Last Below
T_{mean} ˚F	65.3	62.7	60.7	2.6	4.6	2022	2020
Mean(T_{max}) ˚F	81.2	77.4	76.1	3.8	5.1	2022	2020
Mean(T_{min}) ˚F	49.4	47.9	45.3	1.5	4.1	2022	2020
Precipitation “	0.67	1.42	1.30	-0.75	-0.63	2022	2021
Snowfall “	0	0.7	0.4	-0.7	-0.4	2020	N/A
Water Year Precip “	24.40	15.82	15.16	8.58	9.24	1961	2022

	Value	Date
Max(T_{max}) ˚F	98	16th
Min(T_{max}) ˚F	71	11th and 15th
Max(T_{min}) ˚F	62	2nd and 3rd
Min(T_{min}) ˚F	40	24th and 25th
Max(Daily Precip)”	0.31	14th
Peak Wind Gust (mph)	31.3	20th

Days Precip > 0	10
Days Snowfall > 0	0
Days Precip > Trace	7
Days Snowfall > Trace	0
Days Wind Gust > 20mph	5
Peak Wind Gust Direction	166
Peak Wind Gust Time (MST)	1510 MST

POR = period of record (1889-2023)

Records Broken

We did not set any new temperature or precipitation records in September 2023. The weather was simply pleasant.

We were one degree shy of the record for highest minimum maximum daily temperature. In other words, the lowest daily T_{max} was 71 ˚F (the record is 72 ˚F in 2015 and 2019). September almost always provides us with some days that don't get out of the 60s (if not the 50s or 40s). The days have become short, but summer has yet to meaningfully give way to fall.

Photo Credit: Noah Newman

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