

Colorado State University, Fort Collins, CO Weather Station Monthly Summary Report

Month: July
Year: 2022



Temperature:

Mean T_{\max} was 89.8°F which is 2.4° above the 1991-2020 normal for the month. This is the 10th warmest (92nd percentile) in the 134-year record (1889-2022), tied with 1955 and 2007. The last July this warm or warmer was 2013 with 90.3°F .

Mean T_{\min} was 60.4°F which is 1.7° above the 1991-2020 normal for the month. This is the 6th warmest (95th percentile) in the 134-year record (1889-2022), tied with 1966 and 2011. The last July this warm or warmer was 2012 with 61.7°F .

Mean T_{mean} was 75.1°F which is 2.0° above the 1991-2020 normal for the month. This is the 6th warmest (96th percentile) in the 134-year record (1889-2022). The last July this warm or warmer was 2012 with 76.0°F .

The maximum daily temperature for the month was 99°F and occurred on July 9, 2022.

The minimum daily temperature for the month was 54°F and occurred on July 1 and 2, 2022.

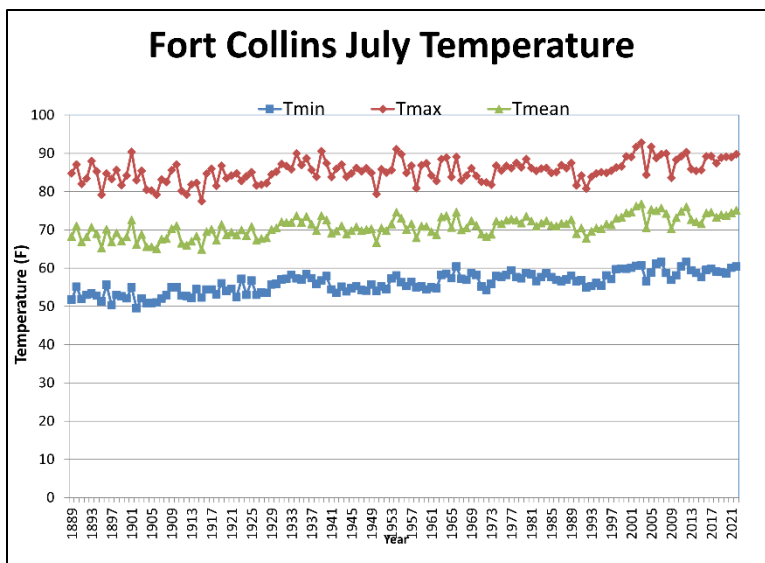


Figure 1: July temperature time series.

Misc. Temperature (record status, thresholds, etc.):

Maximum Temperature Record:

July 9, 2022: The maximum temperature of 99°F broke the old record for the day of 97°F set in 1976.

July 14, 2022: The maximum temperature of 97°F tied the record for the day from 1901, 1931, 1939, 2005 and 2006.

July 18, 2022: The maximum temperature of 98°F tied the record for the day set in 1934 and 2019.

Warmest Minimum Temperature:

July 15, 2022: The minimum temperature for the day of 69°F broke the record warmest minimum for the day of 65°F set in 1977.

July 19, 2022: The minimum temperature for the day of 69°F broke the record warmest minimum for the day of 68°F set in 1990.

Warmest Mean Daily Temperature on Record:

July 19, 2022: The mean daily temperature for the day of 83.5°F set the record for the warmest mean daily temperature on record, beating July 22, 2005 and July 31, 2006, with 83.0°F.

90° Days

July 2022 had 19 days with a max temperature at or above 90F. The average for July is 9 days.

This year has seen 31 days with a max temperature at or above 90F. The average for the year through July is 13.

Consecutive days at or above 90F

*Between July 12 and July 23, there was a run of **12 consecutive days** at or above 90F. This is the 2nd longest in the history of the weather station tied with August 16, 2020 to August 27, 2020. The longest consecutive stretch of days at or above 90F is a tie at **14 days**, July 20, 1987 to August 2, 1987 and June 22, 2012 to July 5, 2012.*

Precipitation and Snowfall:

Total monthly precipitation was 3.84” which is 2.21” above the 1991-2020 normal for the month (236% of normal). This ranks as the 8th wettest (95th percentile) in the 134-year record (1889-2022). The last July this wet or wetter was 2009 with 3.95” of precipitation.

Water Year 2022 precipitation through July totaled 11.07” which is 1.93” below the 1991-2020 normal (85% of normal). This ranks as 54th driest start to a water year (40th percentile) in the 133-year record (1890-2022). The last water year to start this dry or drier was 2020 with 11.02” of precipitation through July.

July had 15 days with measurable precipitation (≥ 0.01 ”) and 5 days with a trace of precipitation (≤ 0.01 ”)

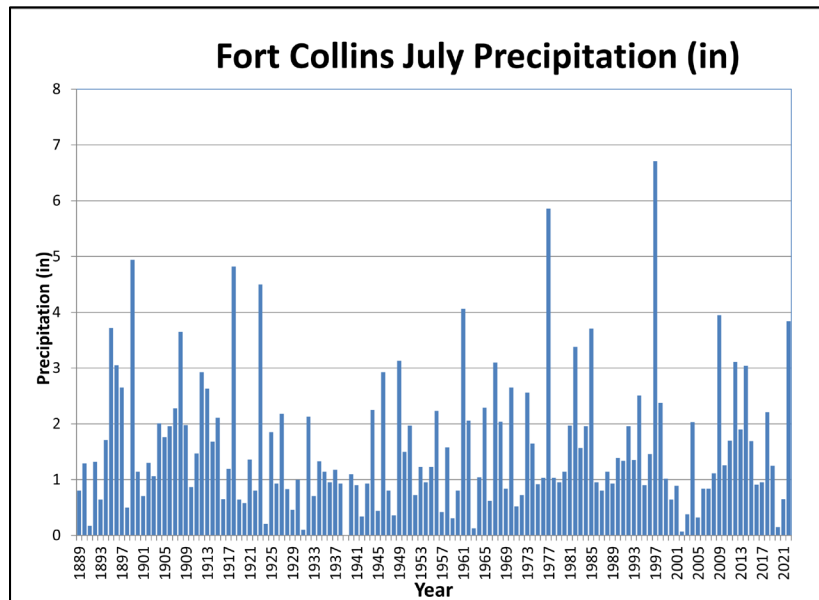


Figure 2: July precipitation time series.

Misc. Precipitation (predominant type, record status, etc.):

Daily Precipitation Record:

July 28, 2022: The precipitation amount of 1.97” broke the previous record precipitation for the day of 1.54” set in 1997.

If July 28, 1997 sounds familiar this was the date of the Spring Creek Flood. This year was the 25th anniversary of the flood. See a nice recap of the event by the former State Climatologist Nolan Doesken here:

<https://source.colostate.edu/perfect-storm-500-year-flood/>

A few other interesting bits of the precipitation this month courtesy of State Climatologist Russ Schumacher:

The 1.97” that fell on July 28th was the wettest single day since May 18, 2017 (a localized storm that caused flash flooding on campus).

This was also the wettest “summer” (June-August) day since July 21, 2009.

It was also the first time more than one inch fell on a summer day since June 2011.

Wettest summer month since July 2009.

The first summer month since June 2019 with above normal precipitation.

The highest one-day precipitation total for July 2022 was 1.97” falling on July 28th.

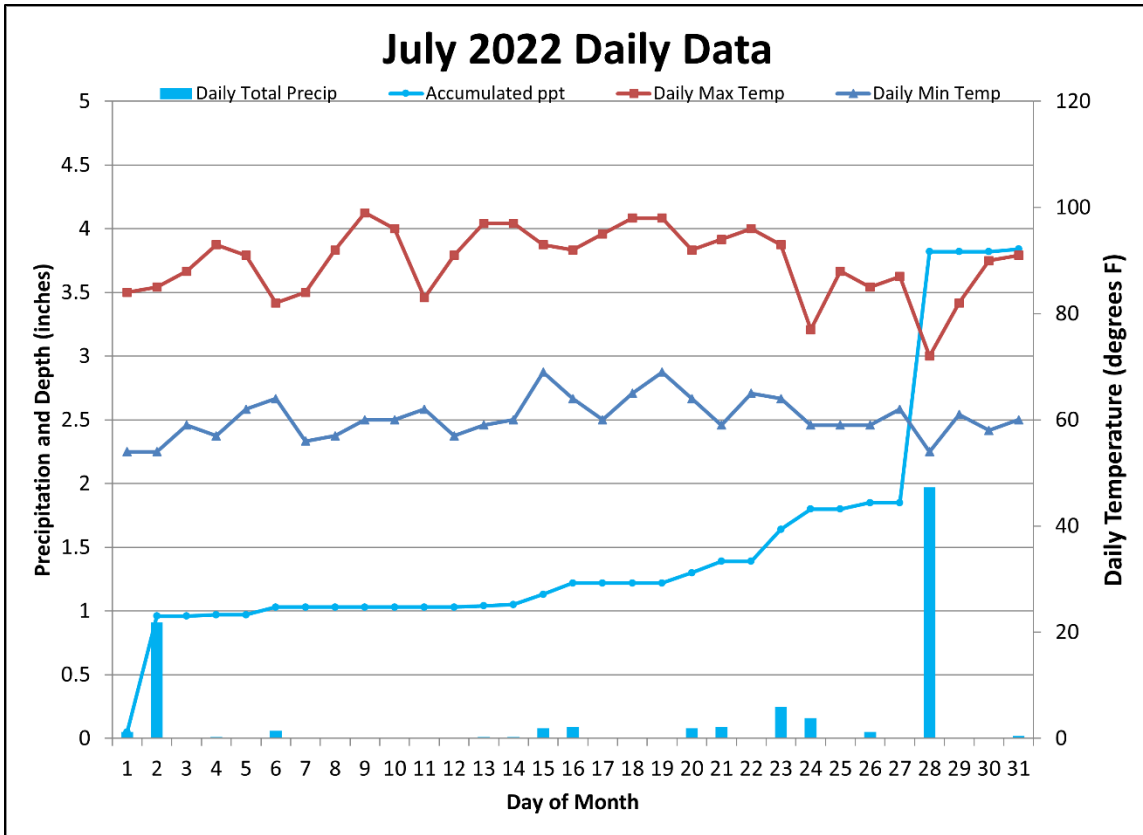


Figure 3: Daily Data for July 2022. Precipitation and temperature both show up on this graph. The y-axis on the left is for precipitation and snowfall. The y-axis on the right is for temperature.

Wind:

In July 2022 there were 15 days with maximum wind gusts ≥ 20 mph and 1 day ≥ 30 mph.

The maximum daily wind gust for the month was 34 mph and occurred on July 15, 2022, at 4:00 PM MST from 190° (SSW).

Pan Evaporation:

Pan evaporation for July 2022 totaled 7.11” which is 0.74” below the normal for the month (91% of normal).

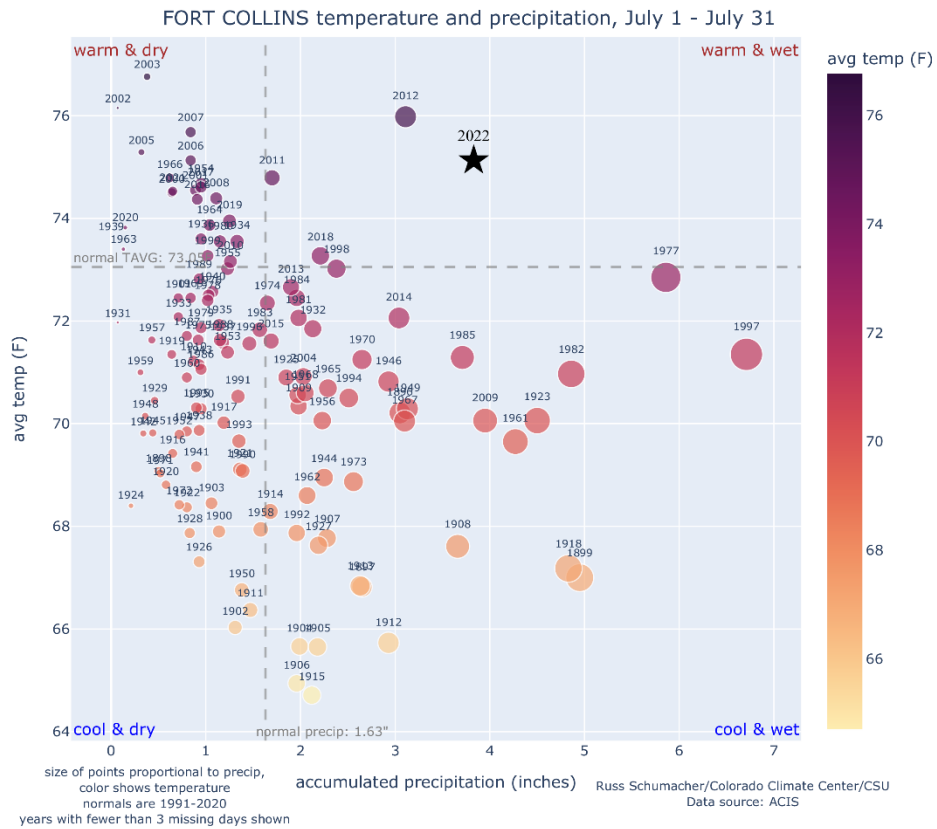
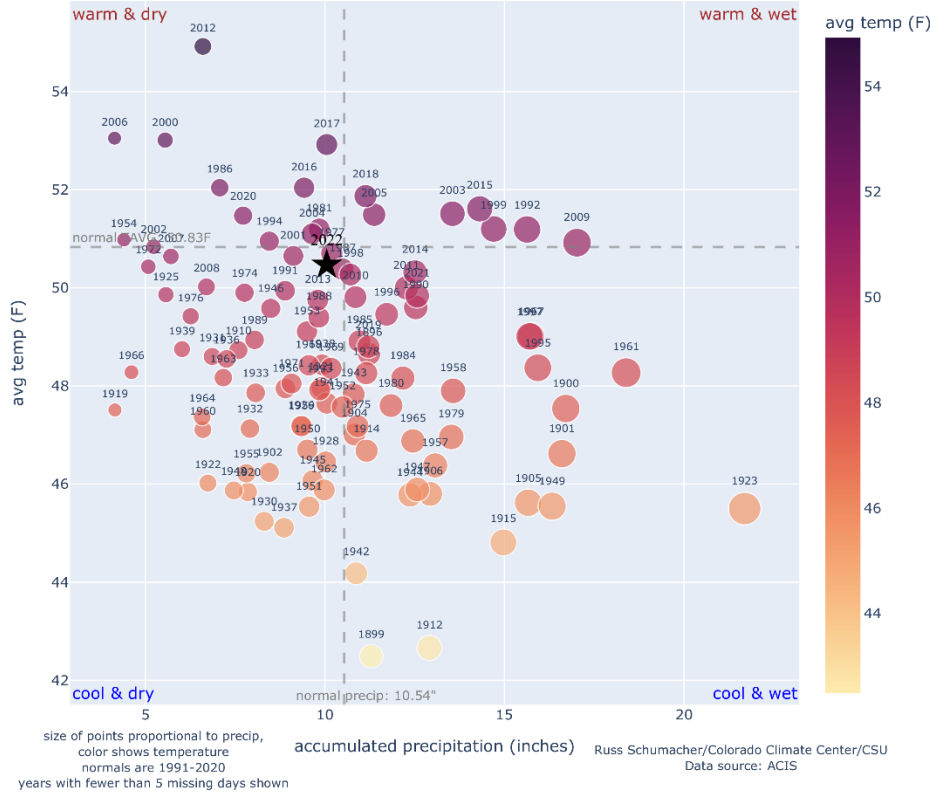


Figure 4: July (top), calendar year to date (top on next page) and water year today (bottom on next page) precipitation and temperature data plot. Each dot plots monthly average temperature and precipitation at Fort Collins for the period of record. From left to right, monthly precipitation is shown on the x-axis, where the wettest years are plotted furthest to the right. Dot sizes are proportional to precipitation amounts. From bottom to top on the y-axis, average monthly temperature is shown, where the warmest years are plotted towards the top. The dots are also color coded with darker colors indicating higher temperatures. The horizontal and vertical dotted lines indicate the 1991-2020 normals. July is in the rare warmer and wetter than normal. The year has been slightly cooler and drier than normal. The water year has been warmer and drier than normal Thanks to July we made some gains on the precipitation!.

FORT COLLINS temperature and precipitation, January 1 - July 31



FORT COLLINS temperature and precipitation, October 1 - July 31

