

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

Month: August
Year: 2022



Temperature:

Mean T_{\max} was 88.0°F which is 3.0° above the 1991-2020 normal for the month. This is the 6th warmest (95th percentile) in the 134-year record (1889-2022), tied with 1937. The last August this warm or warmer was 2020 with 90.2°F, the warmest on record.

Mean T_{\min} was 59.5°F which is 3.0° above the 1991-2020 normal for the month. This is the 2nd warmest (99th percentile) in the 134-year record (1889-2022). The warmest August on record was 1983 with 60.1°F. The 3rd warmest August was 2007 with 59.0°F.

Mean T_{mean} was 73.8°F which is 3.1° above the 1991-2020 normal for the month. This is the 2nd warmest (99th percentile) in the 134-year record (1889-2022), tied with 1983. The warmest August on record was 2011 with 74.3°F.

Summer (June-August) mean temperature was 72.7°F which is 2.3° above the 1991-2020 normal for the season. This is the 3rd warmest summer in the 134-year record (98th percentile). The warmest summer on record was 2012 with 73.8°F and the second warmest was 2006 with 72.8°F.

The maximum daily temperature for the month was 97°F and occurred on August 5, 2022.

The minimum daily temperature for the month was 53°F and occurred on August 18, 25 and 27, 2022.

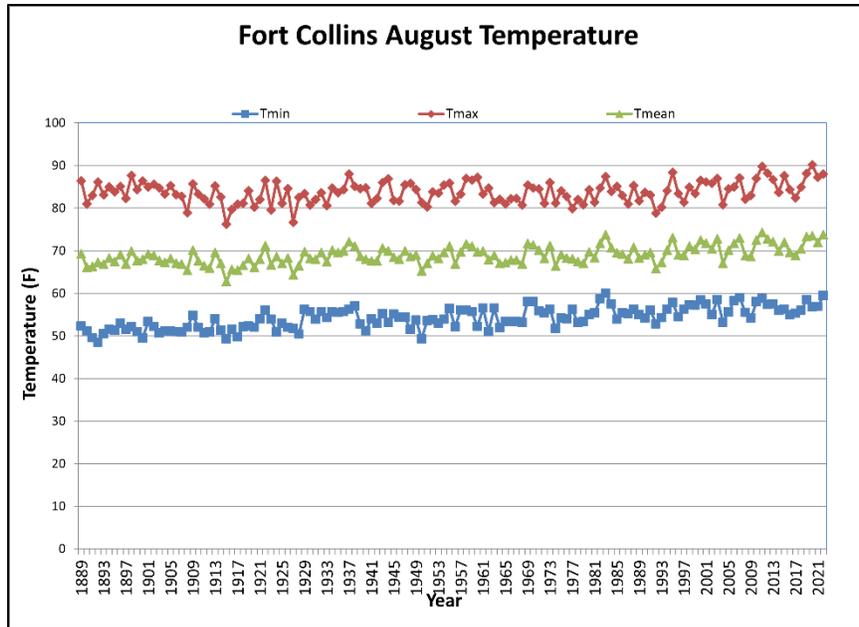


Figure 1: August temperature time series.

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

Maximum Temperature Record:

August 5, 2022: The maximum temperature of 97°F broke the old record for the day of 95°F set in 1979.

Warmest Minimum Temperature:

August 6, 2022: The minimum temperature for the day of 68°F broke the record warmest minimum for the day of 66°F set in 1913.

August 12, 2022: The minimum temperature for the day of 70°F broke the record warmest minimum for the day of 65°F set in 1971.

This also broke the record warmest minimum temperature for the month of August. The previous record was 69°F set on August 11, 1975, tied on August 10, 2006.

90° Days

August 2022 had 13 days with a max temperature at or above 90F. The average for August is 6 days.

This year has seen 44 days with a max temperature at or above 90F. The average for the year through August is 19.

Precipitation and Snowfall:

Total monthly precipitation was 0.51” which is 0.94” below the 1991-2020 normal for the month (35% of normal). This ranks as the 26th driest (19th percentile) in the 134-year record (1889-2022), tied with 1996. The last August this dry or drier was 2020 with 0.48” of precipitation.

Water Year 2022 precipitation through August totaled 11.58” which is 2.87” below the 1991-2020 normal (80% of normal). This ranks as 40th driest start to a water year (30th percentile) in the 133-year record (1890-2022). The last water year to start this dry or drier was 2020 with 11.50” of precipitation through August.

Summer (June-August) precipitation totaled 5.29” which is 0.31” above the normal for the season (106% normal). This ranks as the 41st wettest summer (70th percentile) in the 134-year record (1889-2022). The last summer this wet or wetter was 2009 with 9.20” of precipitation.

August had 6 days with measurable precipitation (≥ 0.01 ”) and 9 days with a trace of precipitation (≤ 0.01 ”)

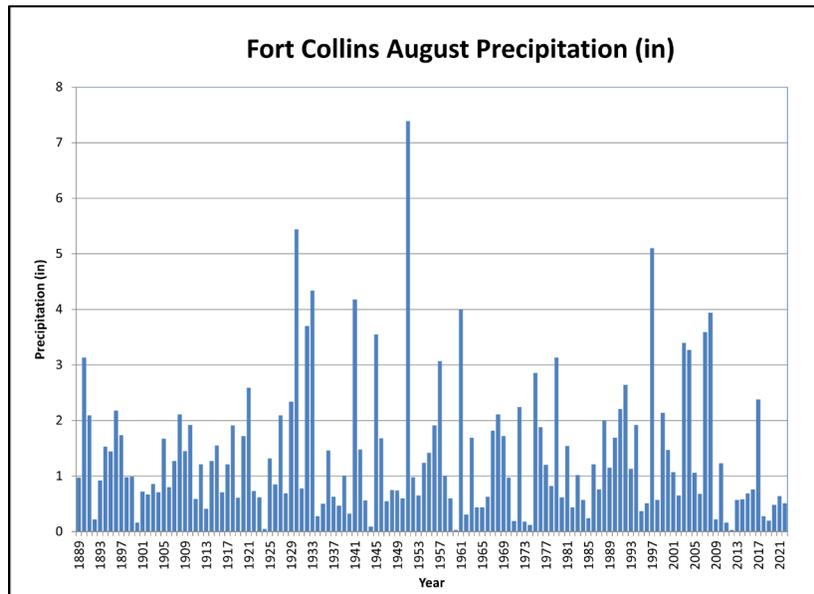


Figure 2: August precipitation time series.

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

No precipitation records for August 2022.

The highest one-day precipitation total for August 2022 was 0.22" falling on August 15th.

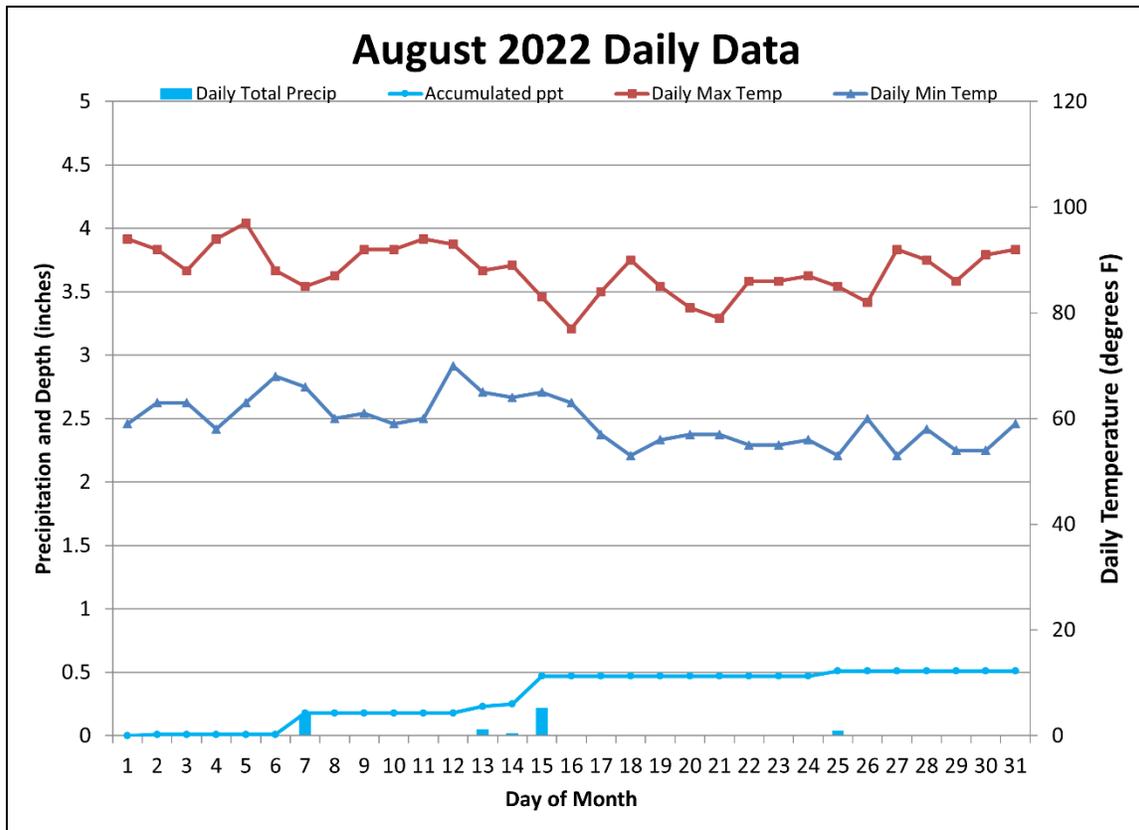


Figure 3: Daily Data for August 2022. Precipitation and temperature both show up on this graph. The y-axis on the left is for precipitation and snowfall. The y-axis on the right is for temperature.

Wind:

In August 2022 there were 7 days with maximum wind gusts ≥ 20 mph and 0 days ≥ 30 mph.

The maximum daily wind gust for the month was 26 mph and occurred on August 28, 2022, at 6:28 PM MST from 180° (S).

Pan Evaporation:

Pan evaporation for August 2022 totaled 6.99” which is 0.51” above the normal for the month (108% of normal).

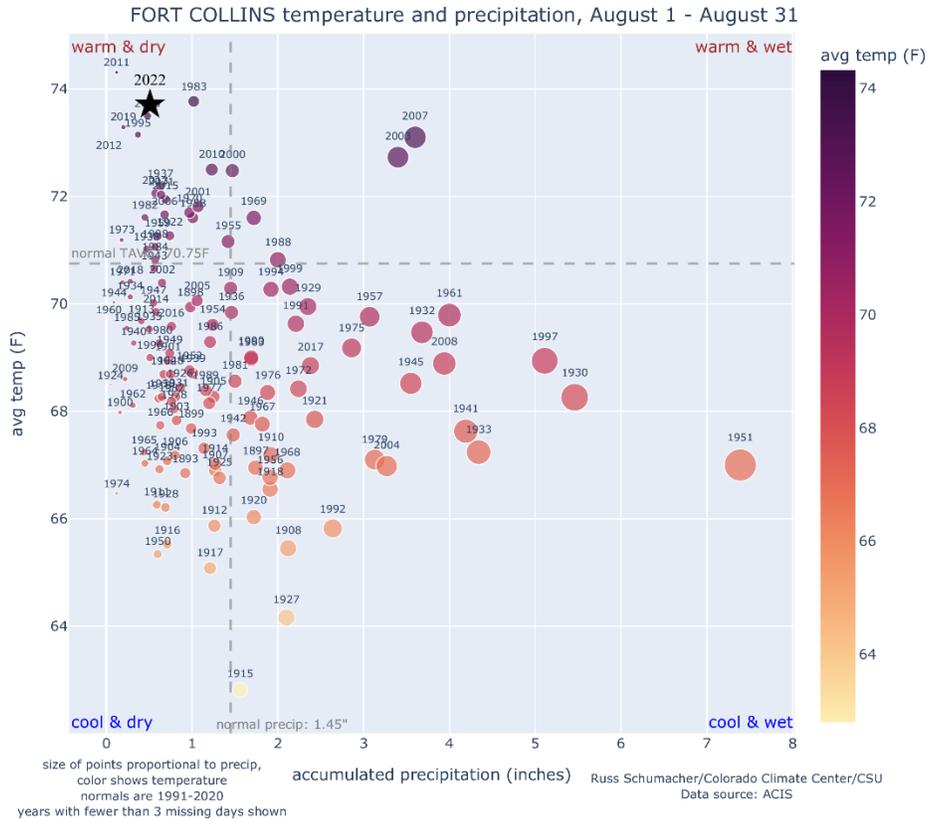


Figure 4: August (top), calendar year to date (top on next page) and summer (bottom on next page) precipitation and temperature data plot. Each dot plots monthly average temperature and precipitation at Fort Collins for the period of record. From left to right, monthly precipitation is shown on the x-axis, 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. August was much warmer and drier than normal. The year through August has been slightly warmer than normal and drier than normal. The summer was very warm but slightly wetter than normal, looks like only the 3rd time in the warm & wet quadrant with 1936 and 1977.

