

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

Month: August
Year: 2021



Temperature:

Mean T_{\max} was 87.2°F which is 2.2° above the 1991-2020 normal for the month. This is the 10th warmest in the 133-year record (1889-2021), tied with 1960. The last August this warm or warmer was 2020 with 90.2°F .

Mean T_{\min} was 56.9°F which is 0.4° above the 1991-2020 normal for the month. This is the 20th warmest in the 133-year record (1889-2021). The last August this warm or warmer was 2019 with 58.5°F .

Mean T_{mean} was 72.0°F which is 1.3° above the 1991-2020 normal for the month. This is the 13th warmest in the 133-year record (1889-2021), tied with 2015. The last August this warm or warmer was 2020 with 73.5°F .

Summer (June-August) mean temperature was 72.4°F which is 2.0° above the 1991-2020 normal for the season. This is the 4th warmest summer in the 133-year record (1889-2021), tied with 2007. The last summer this warm or warmer was 2012 with 73.8°F .

The maximum daily temperature for the month was 93°F and occurred on August 17 and 18, 2021.

The minimum daily temperature for the month was 50°F and occurred on August 20, 2021.

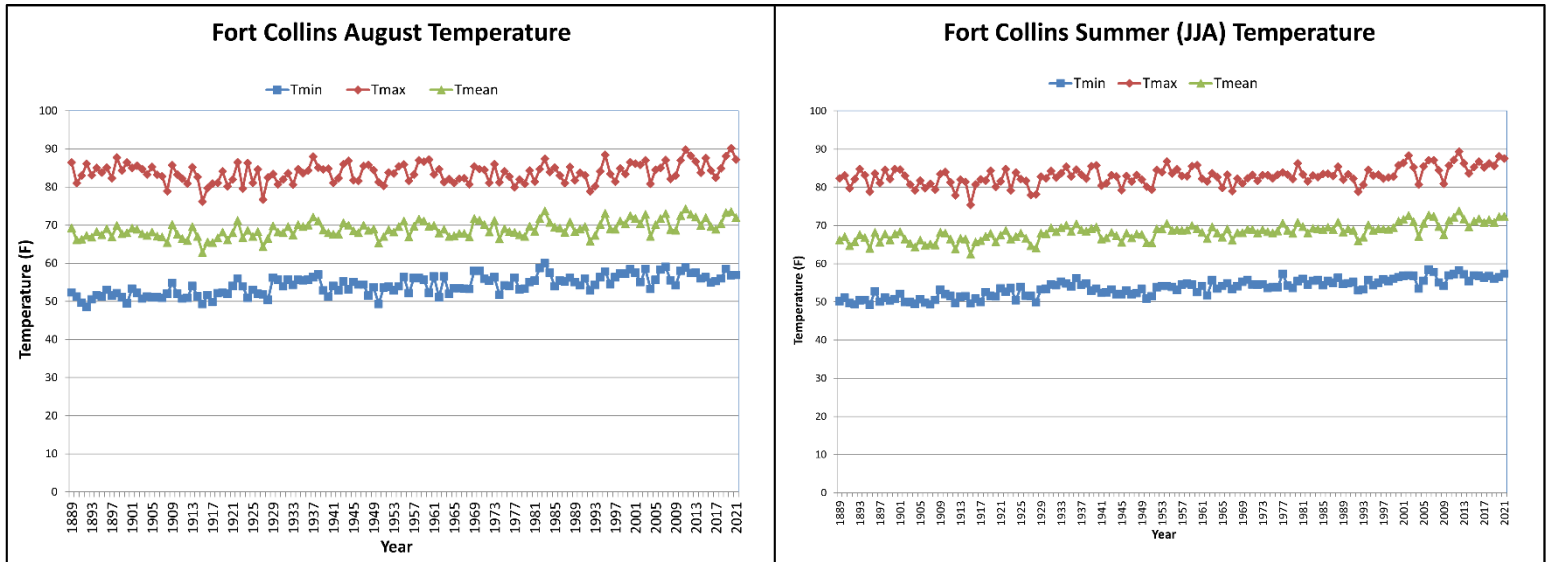


Figure 1: August (left) and summer (right) temperature time series.

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

Warmest Minimum Daily Temperature:

August 15, 2021: The minimum temperature of 65°F tied the record warmest minimum for the day set in 1958, 2000 and 2007.

August 19, 2021: The minimum temperature of 66°F broke the record warmest minimum for the day of 65F set in 1959 and 2010.

90 Degree Days:

August 2021 had 14 days with temperatures at or above 90°F. The average for August is 6.

Through August, there have been 42 days at or above 90F this summer. The average number of days in the 90s through August is 19. This is currently the 3rd highest number of days at or above 90F for a summer through August. The highest is 56 days in 2012 and second is 46 days in 2020.

Precipitation and Snowfall:

Total monthly precipitation was 0.64” which is 0.81” below the 1991-2020 normal for the month (44% of normal). This ranks as the 44th driest in the 133-year record (1889-2021). The last August this dry or drier was 2020 with 0.48” of precipitation.

Water Year 2021 precipitation through August totaled 15.49” which is 1.04” above the 1991-2020 normal (107% of normal). This ranks as the 40th wettest start to a water year in the 132-year record (1890-2021). The last water year this wet or wetter through August was 2015 with 17.32” of precipitation.

Summer (June-August) precipitation totaled 1.77” which is 3.21” below the normal for the season (36% of normal). This ranks as the 11th driest summer in the 133-year record (1889-2021). The last summer this dry or drier was 2016 with 1.72” of precipitation.

August had 6 days with measurable precipitation (≥ 0.01 ”) and 3 days with a trace of precipitation (≤ 0.01 ”).

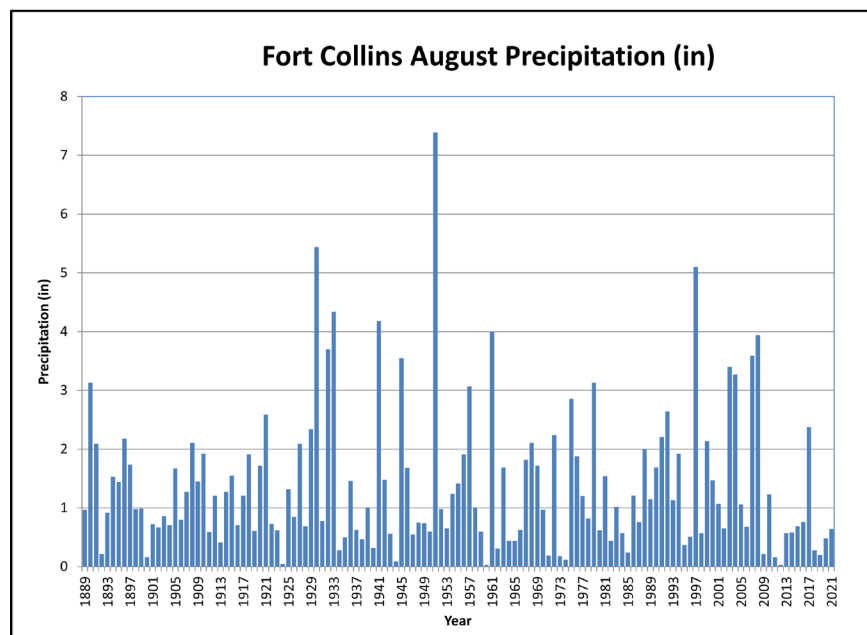


Figure 2: August precipitation time series.

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

No precipitation records for August 2021.

The highest one-day precipitation total for August 2021 was 0.34” falling on August 20th.

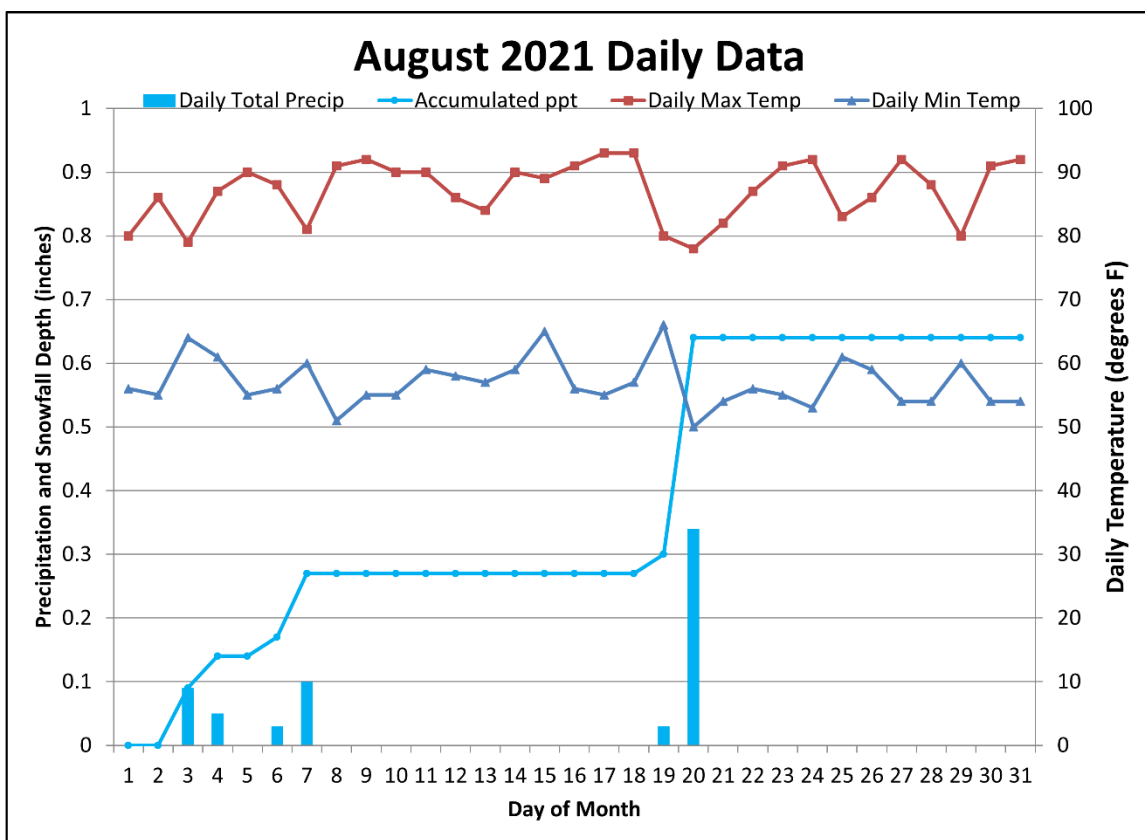


Figure 3: Daily Data for August 2021. Precipitation and temperature both show up on this graph. The y-axis on the left is for precipitation and snowfall. The y-axis on the right is for temperature.

Wind:

In August 2021 there were 6 days with maximum wind gusts ≥ 20 mph and 1 day ≥ 30 mph.

The maximum daily wind gust for the month was 36 mph and occurred on August 17, 2021, at 5:03 PM MST from 080° (ENE).

Evaporation:

Pan evaporation for August 2021 totaled 6.55" which is 0.07" above the normal (101% of normal).

Additional graphs on the next page!

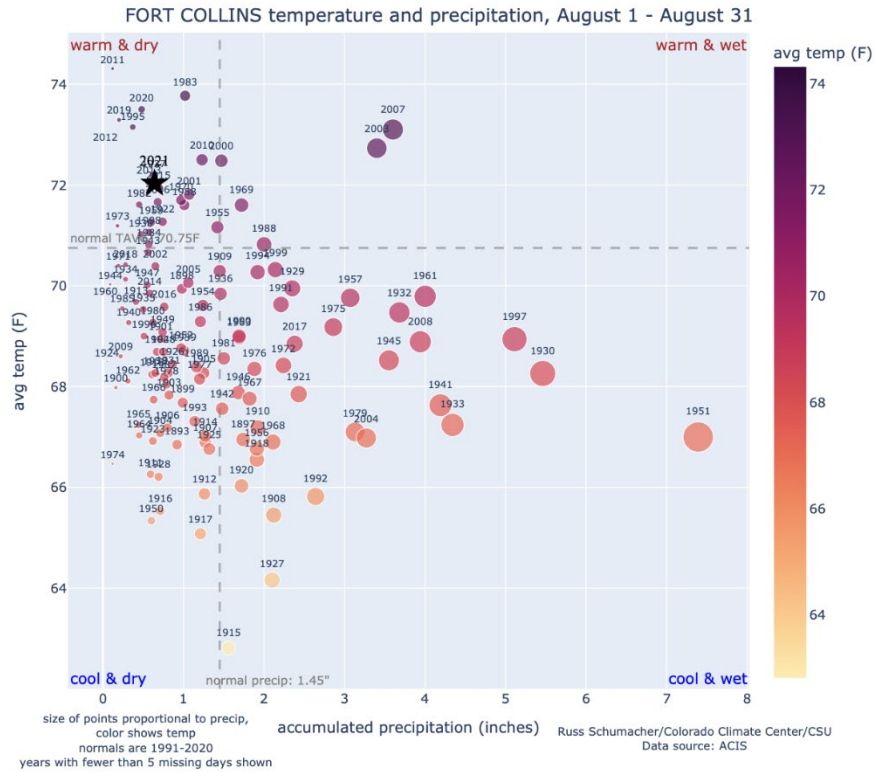


Figure 4: August (top) and summer (bottom) precipitation and temperature data plot. Each dot plots monthly average temperature and precipitation at Fort Collins for the period of record. From left to right, monthly precipitation is shown on the x-axis, where the wettest years are plotted furthest to 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 and summer show up much warmer and drier than normal.

