

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

Month: September
Year: 2019



Temperature:

Mean T_{\max} was 82.1°F which is 6.2° above the 1981-2010 normal for the month. This is the 3rd warmest in the 131-year record (1889-2019). The warmest September was 2015 with 83.3°F and the second warmest was 1892 with 82.8°F .

Mean T_{\min} was 51.0°F which is 3.5° above the 1981-2010 normal for the month. This is the 3rd warmest in the 131-year record (1889-2019). The warmest September was 2013 with 52.8°F and the second warmest was 1998 with 51.7°F .

Mean T_{mean} was 66.6°F which is 4.8° above the 1981-2010 the normal for the month. This is the 2nd warmest in the 131-year record (1889-2019). The warmest September on record was 2015 with 67.1°F .

The maximum daily temperature for the month was 99°F and occurred on September 2, 2019.

The minimum daily temperature for the month was 41°F and occurred on September 22 and 26, 2019.

The 99°F temperature was the hottest temperature this summer. This is only the 4th time in the history of the CSU Weather Station we have seen the hottest temperature of the summer in September.

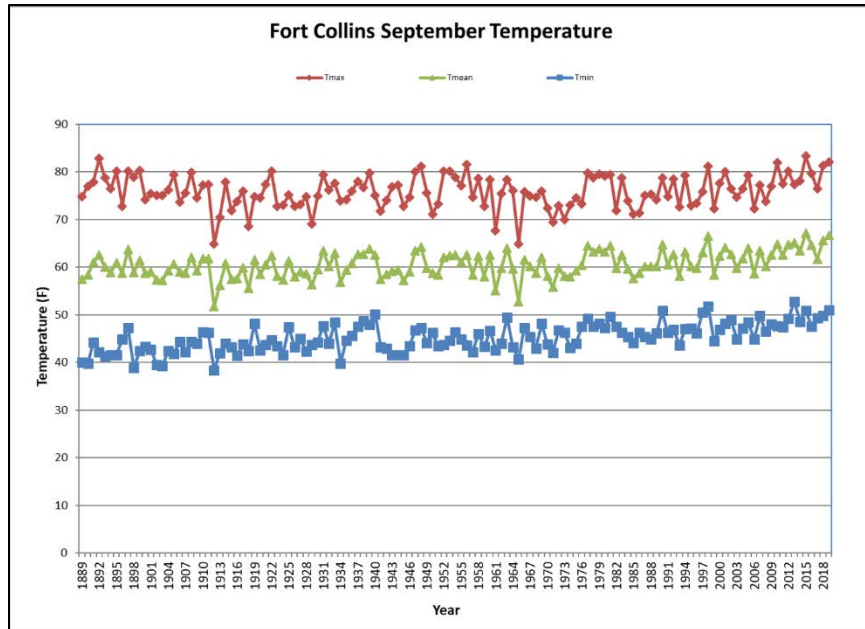


Figure 1: September temperature time series.

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

Warmest Maximum Daily Temperature:

September 1, 2019: The maximum temperature of 96°F broke the maximum temperature for the day of 95°F set in 1995.

September 2, 2019: The maximum temperature of 99°F smashed the previous maximum temperature for the day of 93°F set in 1939, 1947, and 1960.

September 5, 2019: The maximum temperature of 97°F broke the previous maximum temperature for the day of 95°F set in 1899.

Record Warm Temperature for the Month:

The 99° temperature on September 2 is the new hottest temperature for the month of September, beating the previous record of 98°F on September 3, 2017.

The 99°F was also the latest 99° temperature for the year recorded at the weather station. The previous latest was August 16, 2002.

90F Degree Days:

September 2019 had 3 days at or above 90F. The average number of days in the 90s for September is 1.

This summer, including September, there have been 36 days at or above 90°F. The 1889-2018 average for number of days in the 90s through September is 20.

This was the 12th most 90 degree days in a summer, tied with 2007. Last year saw 37 90 degree days. The most ever 90 degree days in a summer recorded at the weather station was 57 in 2012.

Precipitation:

Total monthly precipitation was 0.71” which is 0.62” below the 1981-2010 normal for the month (53% of normal). This ranks as the 52nd driest in the 131-year record (1889-2019), tied with 1980. The last September this dry or drier was 2018 with 0.46” of precipitation.

Water Year 2019 precipitation totaled 13.85” which is 2.25” below the 1981-2010 normal for the water year (86% of normal). This ranks as the 48th driest water year in the 130-year record (1890-2019). The last water year to be this dry or drier was 2012 with 12.99” of precipitation.

September had 10 days with measurable precipitation (≥ 0.01 ”).

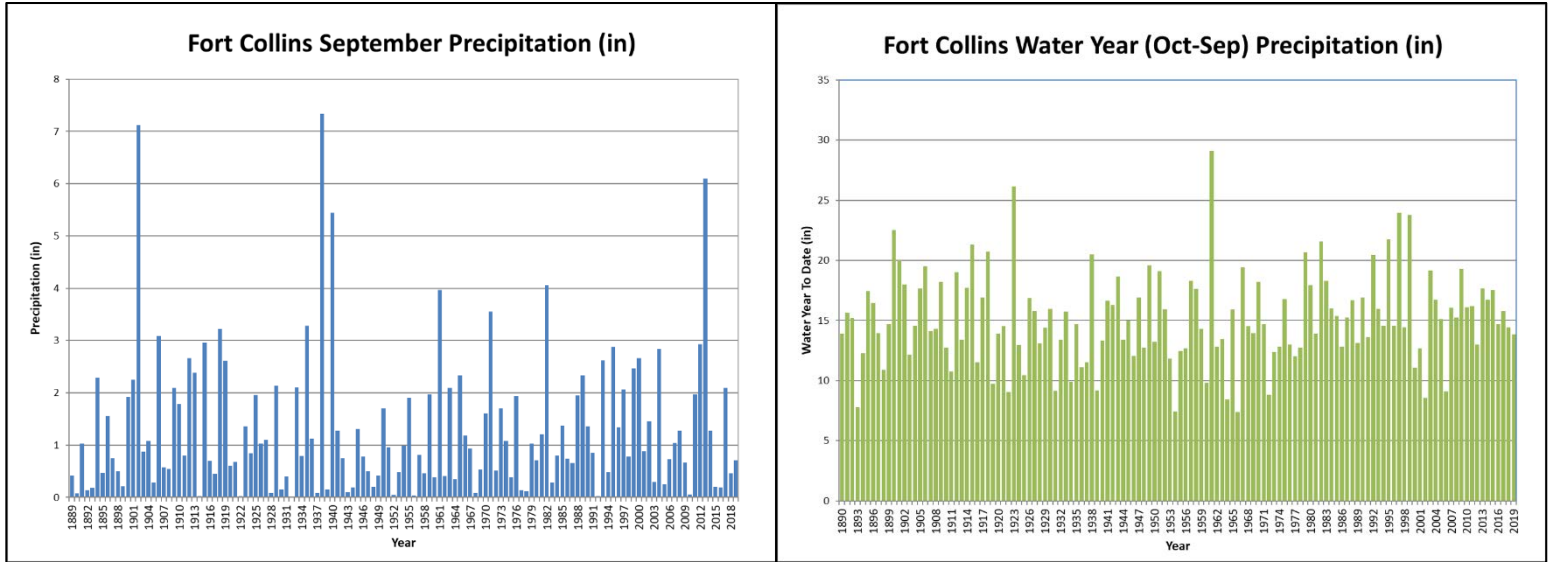


Figure 2: September (left) and Water Year (right) precipitation time series.

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

No precipitation records in September.

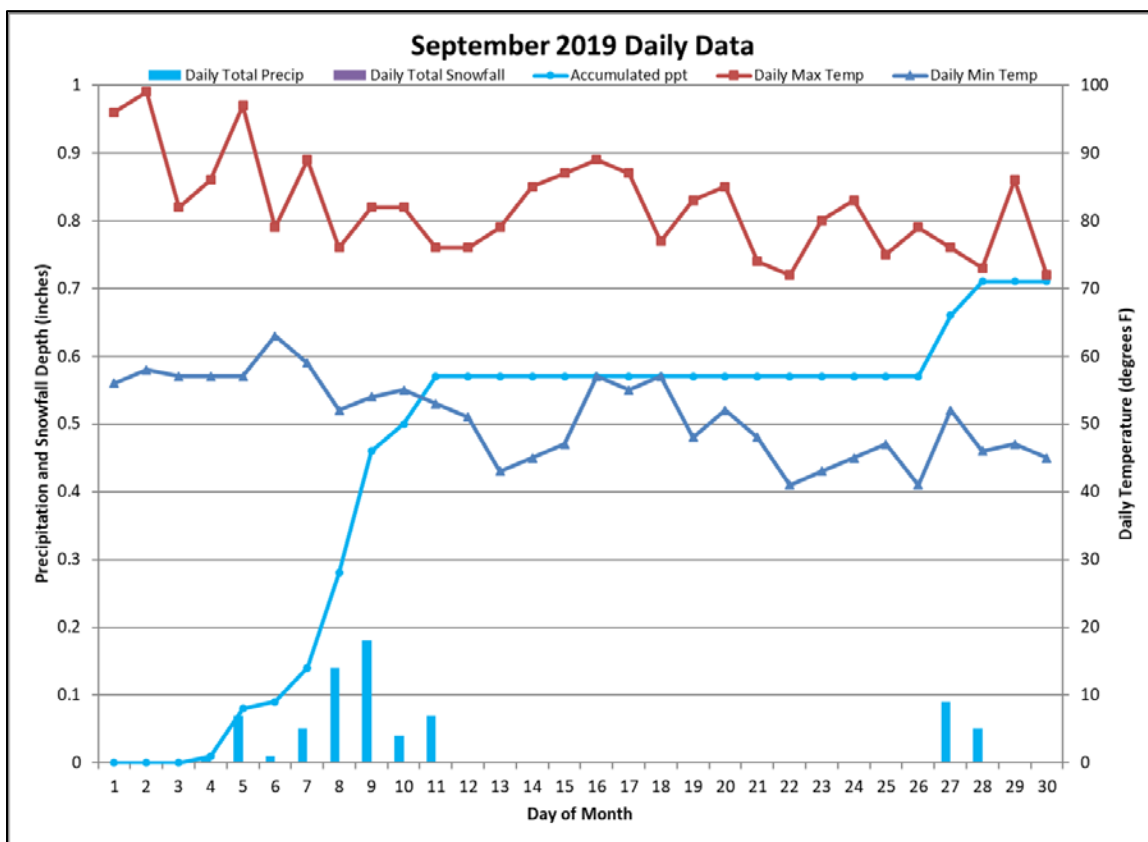


Figure 3: Daily Data for September 2019. Precipitation and temperature both show up on this graph. The y-axis on the left is for precipitation and snowfall. The y-axis on the right is for temperature.

Wind:

In August 2019 there were 6 days with maximum wind gusts ≥ 20 mph and 0 days ≥ 30 mph.

The maximum wind gust for the month was 27 mph and occurred on September 5, 2019 at 1:10 PM MST from 170° (South southeast).

Evaporation:

Pan evaporation for September 2019 was 5.53" which was 0.62" above the normal for September (113% of normal).