

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

Month: September
Year: 2020



Cameron Peak Fire from Riverbend Ponds, Fort Collins on September 5, 2020. *

Temperature:

Mean T_{\max} was 78.3°F which is 2.4° above the 1981-2010 normal for the month. This is the 39th warmest in the 132-year record (1889-2020). The last September this warm or warmer was 2019 with 82.1°F.

Mean T_{\min} was 45.5°F which is 2.0° below the 1981-2010 normal for the month. This is the 73rd coolest in the 132-year record (1889-2020). The last September this cool or cooler was 2006 with 44.8°F.

Mean T_{mean} was 61.9°F which is 0.2° above the 1981-2010 the normal for the month. This is the 47th warmest in the 132-year record (1889-2020). The last September this warm or warmer was 2017 with 61.7°F.

The maximum daily temperature for the month was 99°F and occurred on September 6, 2020.

The minimum daily temperature for the month was 32°F and occurred on September 8 and 9, 2020.

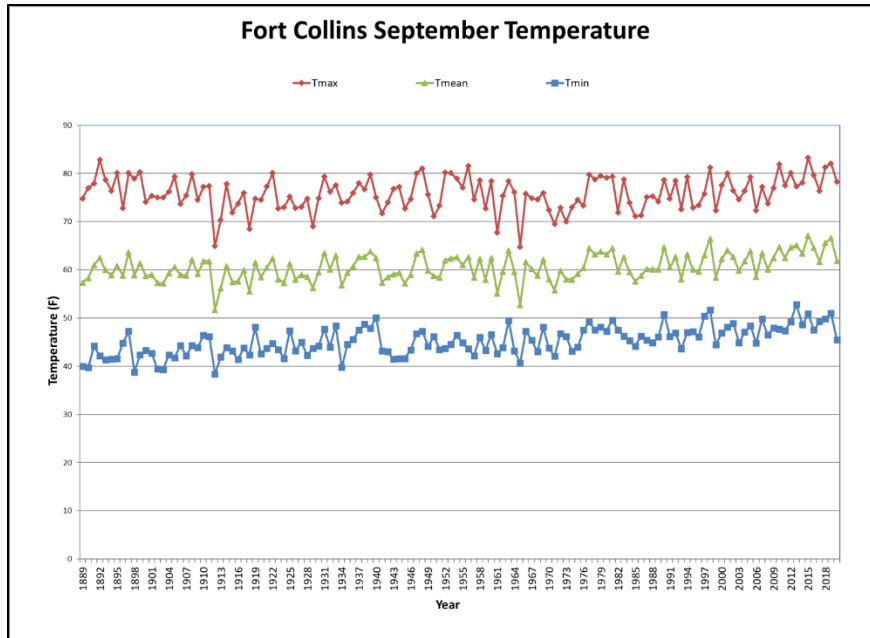


Figure 1: September temperature time series.

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

Maximum Daily and Monthly Temperature Records:

September 6, 2020: The maximum temperature of 99°F broke the record for warmest temperature for the day of 97°F set in 2013.

This temperature ties the record warmest temperature for the month, originally set on September 2, 2019. This also is the latest 99°F in the Fort Collins Weather Station record.

Coldest Maximum Daily Temperature:

September 9, 2020: The maximum temperature of 42°F broke the record coldest maximum temperature for the day of 52°F set in 1989.

90F Degree Days:

September 2020 had 3 days at or above 90F. The average number of days in the 90s for September is 1.

There were 49 days at or above 90F this summer. The average number of days in the 90s for summer is 20.

2020 ranks 2nd for the most days at or above 90F. The most 90F+ days in a season is 57 from 2012.

Precipitation and Snowfall:

Total monthly precipitation was 1.39” which is 0.06” above the 1981-2010 normal for the month (105% of normal). This ranks as the 44th wettest in the 132-year record (1889-2020). The last September this wet or wetter was 2017 with 2.09” of precipitation.

Water year 2020 precipitation totaled 12.89” which is 3.21” below the 1981-2010 normal for the water year (80% of normal). This ranks as the 36th driest water year in the 131-year record (1890-2020). The last water year this dry or drier was 2006 with 9.07” of precipitation.

Total monthly snowfall for September was 2.7” which is 1.8” above the 1981-2010 normal for the month (300%). This ranks as the 9th snowiest September in the 132-year record (1889-2020), tied with 1984. The last time snow fell in September was 2000 with 8.2”.

September had 3 days with measurable precipitation (≥ 0.01 ”) and 2 days with measurable snowfall (≥ 0.1 ”).

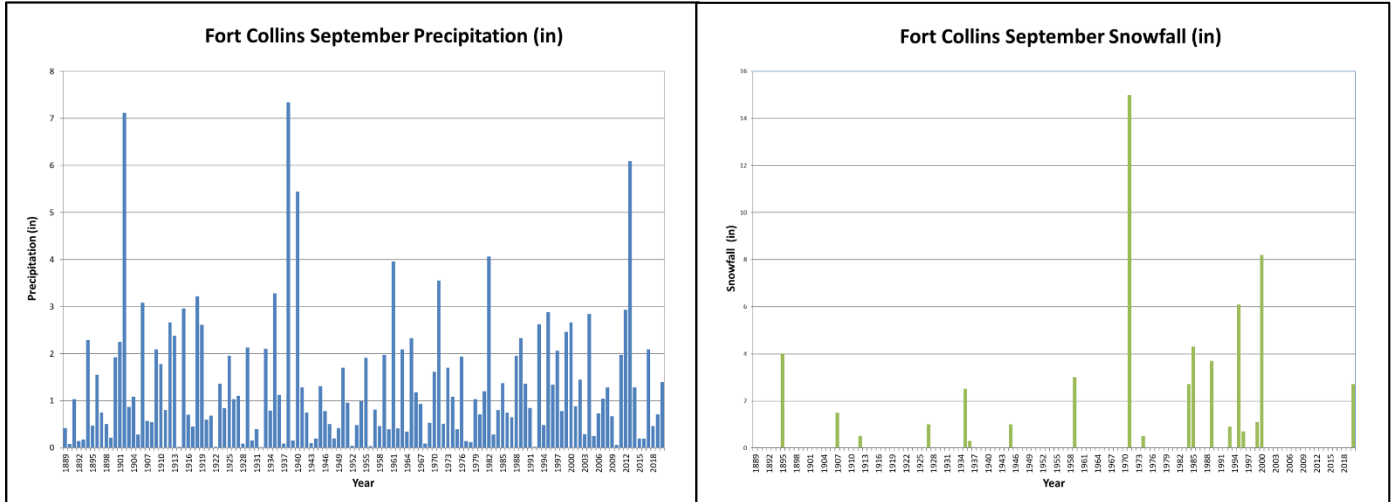


Figure 2: September precipitation (left) and snowfall (right) time series.

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

Daily Precipitation Record:

September 8, 2020: The precipitation amount of 1.19" broke the previous record precipitation for the day of 1.12" set in 1989.

Daily Snowfall Record:

September 8, 2020: The snowfall amount of 2.3" set a record for the day. This is the first recorded snowfall for this day in the history of the weather station. This is the earliest snowfall on record for the snow season.

September 9, 2020: The snowfall amount of 0.4" sets a record for the day. This is the first recorded snowfall for this day in the history of the weather station.

The highest one-day precipitation total for September 2020 was 1.19" falling on September 8th. The highest one-day snowfall total for the month was 2.3" on the same day.

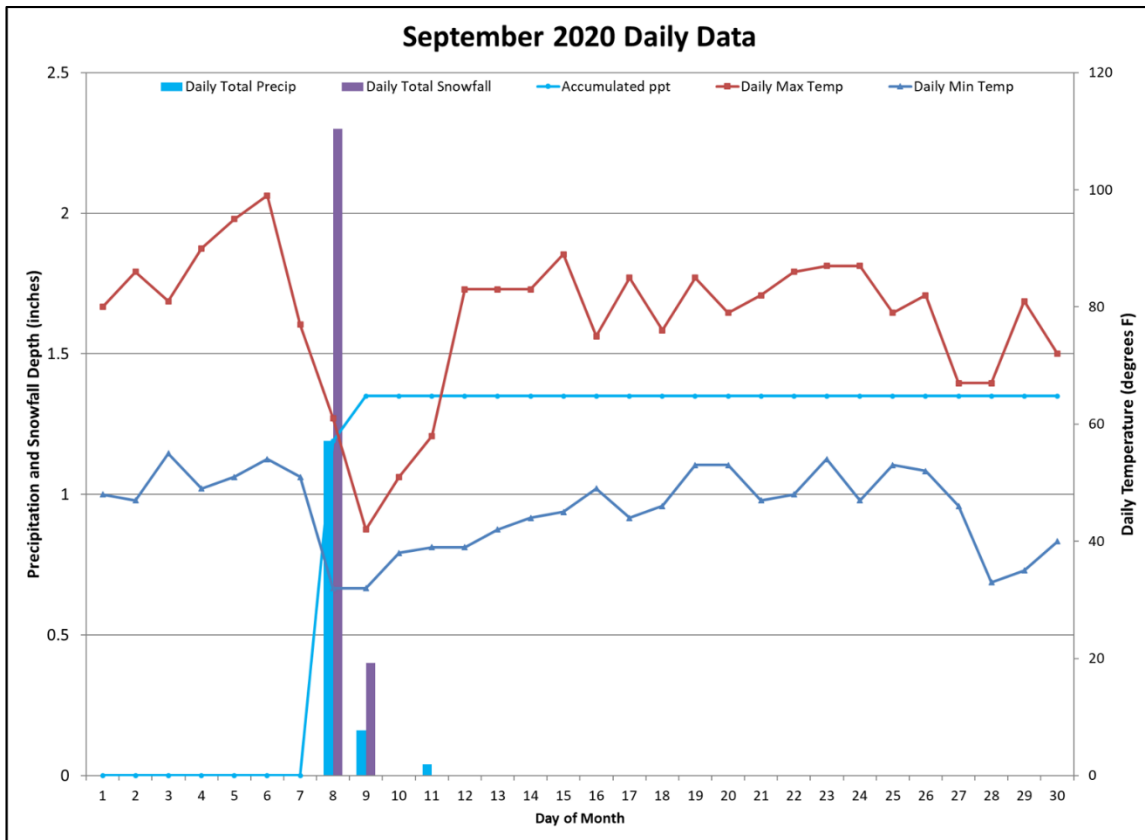


Figure 3: Daily Data for September 2020. Precipitation and temperature both show up on this graph. The y-axis on the left is for precipitation and snowfall. The y-axis on the right is for temperature.

Wind:

In September 2020 there were 5 days with maximum wind gusts ≥ 20 mph and 0 days ≥ 30 mph.

The maximum daily wind gust for the month was 24 mph and occurred on September 3, 2020 at 2:08 AM MST from 20° (ENE).

Evaporation:

Pan evaporation for September 2020 totaled 4.32" which is 0.59" below the normal for September (88% of normal).

Pan evaporation may be slightly off this month due to some estimating because of the early snowfall.

*I didn't get a good picture at the weather station this month.