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

**Month: October** 

**Year: 2021** 



#### **Temperature:**

Mean  $T_{max}$  was 67.5°F which is 3.2° above the 1991-2020 normal for the month. This is the 31<sup>st</sup> warmest in the 133-year record (1889-2021), tied with 1909 and 1973. The last October this warm or warmer was 2016 with 72.5°F (second warmest October on record).

Mean  $T_{min}$  was 36.9°F which is 0.8° above the 1991-2020 normal for the month. This is the 25<sup>th</sup> warmest in the 133-year record (1889-2021). The last October this warm or warmer was 2016 with 39.9°F (third warmest October on record).

Mean  $T_{mean}$  was  $52.2^{\circ}F$  which is  $2.0^{\circ}$  above the 1991-2020 normal for the month. This is the  $18^{th}$  warmest in the 133-year record (1889-2021). The last October this warm or warmer was 2016 with  $56.2^{\circ}$  (warmest October on record).

The maximum daily temperature for the month was 81°F and occurred on October 4, 2021.

The minimum daily temperature for the month was 27°F and occurred on October 16, 2021.

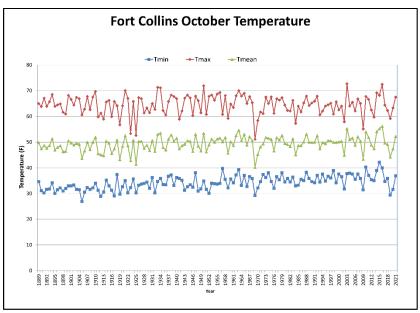


Figure 1: October temperature time series.

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

No Temperature Records for October

## **Precipitation and Snowfall:**

Total monthly precipitation was 0.20" which is 1.05" below the 1991-2020 normal for the month (16% of normal). This ranks as the 16<sup>th</sup> driest in the 133-year record (1889-2021), tied with 1891 and 1952. The last October this dry or drier was 2003 with 0.19" of precipitation.

October saw a trace of snowfall (less than 0.1"). The normal snowfall for the month of October is 4.1". This was the 57<sup>th</sup> year with no measurable snowfall in October.

Seasonal snowfall through October is a trace. The normal snowfall for the season through October is 4.8". This is the 53<sup>rd</sup> year with no measurable snowfall through October.

October had 3 days with measurable precipitation ( $\geq 0.01$ ") and 2 days with a trace of snowfall ( $\leq 0.1$ ").

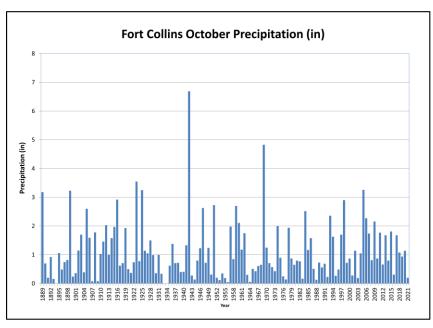


Figure 2: October precipitation time series.

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

No precipitation records for October 2021.

The highest one-day precipitation total for October 2021 was 0.11" falling on October 12<sup>th</sup>.

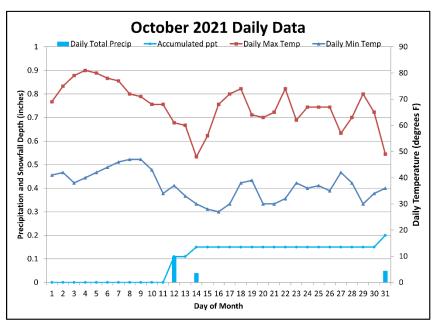


Figure 3: Daily Data for October 2021. Precipitation and temperature both show up on this graph. The y-axis on the left is for precipitation and snowfall. The y-axis on the right is for temperature.

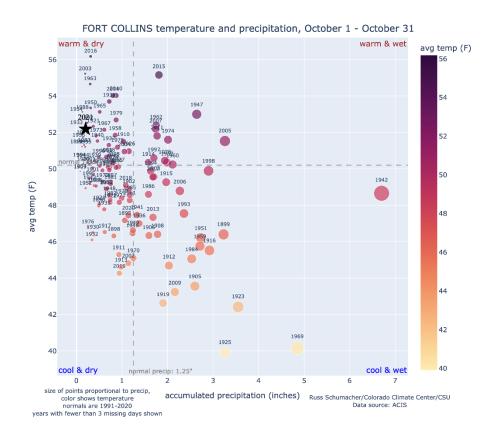
#### Wind:

In October 2021 there were 8 days with maximum wind gusts  $\geq$  20 mph and 1 day  $\geq$  30 mph.

The maximum daily wind gust for the month was 32 mph and occurred on October 27, 2021, at 1:32 PM MST from 300° (NW).

### **Evaporation:**

Pan evaporation for October 2021 totaled 3.66" which is 0.45" above the normal (114% of normal).



**Figure 4:** October 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 horizonal and vertical dotted lines indicate the 1991-2020 normals. October 2021 shows up warmer and drier than normal, with a lot of company.