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

**Month: October** 

**Year: 2022** 



## **Temperature:**

Mean  $T_{max}$  was 68.0°F which is 3.7° above the 1991-2020 normal for the month. This is the  $20^{th}$  warmest ( $85^{th}$  percentile) in the 134-year record (1889-2022) tied with 1962. The last October this warm or warmer was 2016 with 72.5°F, the second warmest on record.

Mean  $T_{min}$  was 36.2°F which is 0.1° above the 1991-2020 normal for the month. This is the  $32^{nd}$  warmest ( $74^{th}$  percentile) in the 134-year record (1889-2022), tied with 1931, 1940, and 1973. The last October this warm or warmer was 2021 with 36.9°F.

Mean  $T_{mean}$  was 52.1°F which is 1.9° above the 1991-2020 normal for the month. This is the 19<sup>th</sup> warmest (85<sup>th</sup> percentile) in the 134-year record (1889-2022), tied with 1967 and 2007. The last October this warm or warmer was 2021 with 52.2°F.

The maximum daily temperature for the month was 81°F and occurred on October 20, 2022.

The minimum daily temperature for the month was 24°F and occurred on October 28 and 29, 2022.

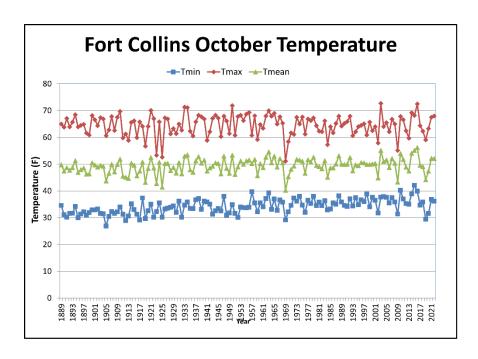


Figure 1: October temperature time series.

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

#### Maximum Temperature Record:

October 20, 2022: The maximum temperature of 81°F broke the old record for the day of 80°F set in 1950 and 2003.

This season's first minimum temperature below freezing was October 17 with  $31^{\circ}F$ . This is the  $10^{th}$  latest first freeze in the record.

## **Precipitation and Snowfall:**

Total monthly precipitation was 0.33" which is 0.92" below the 1991-2020 normal for the month (26% of normal). This ranks as the 28<sup>th</sup> driest (20<sup>th</sup> percentile) in the 134-year record (1889-2022). The last October this dry or drier was 2021 with 0.20" of precipitation.

Total monthly snowfall was 0.2" which is 3.9" below the 1991-2020 normal for the month (5% of normal). This ranks as the 62<sup>nd</sup> least snowy (46<sup>th</sup> percentile) in the 134-year record (1889-2022), tied with 1980. The last October with this little snowfall was 2021 with a trace (less than 0.1") of snowfall.

Seasonal snowfall for the start of the 2023 snow season totaled 0.2" through October. This is 4.6" below the 1991-2020 normal (4% of normal). This ranks as the 57<sup>th</sup> least snowy (42<sup>nd</sup> percentile) start to a snow season in the 133-year record (1890-2022), tied with the 1981 season. The last season to start with this little snowfall was the 2022 season (last year) with a trace of snowfall.

October had 4 days with measurable precipitation ( $\geq 0.01$ ") and 1 day with measurable snowfall ( $\geq 0.1$ ").

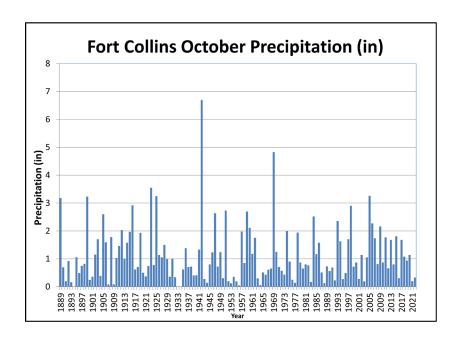


Figure 2: October precipitation time series.

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

No precipitation records for October 2022.

The highest one-day precipitation and snowfall total for October 2022 was 0.21" precipitation and 0.2" snowfall falling on October 27<sup>th</sup>.

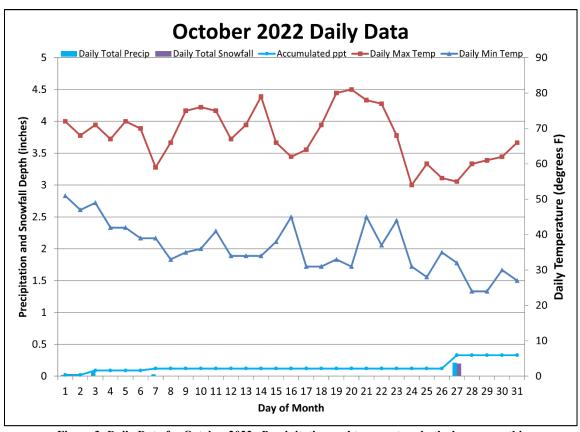


Figure 3: Daily Data for October 2022. Precipitation and temperature both show up on this graph. The y-axis on the left is for precipitation and snowfall. The y-axis on the right is for temperature.

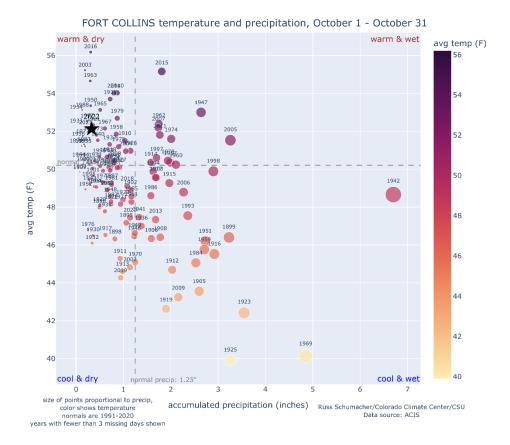
#### Wind:

In October 2022 there were 9 days with maximum wind gusts  $\geq$  20 mph and 0 days  $\geq$  30 mph.

The maximum daily wind gust for the month was 29 mph and occurred on October 23, 2022, at 4:15 PM MST from 310° (NW).

## Pan Evaporation:

Pan evaporation for October 2022 totaled 3.53" which is 0.32" above the normal for the month (110% of normal).



**Figure 4:** October (top), year to date (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 horizonal and vertical dotted lines indicate the 1991-2020 normals. Both October and 2022 through October are warmer and drier than normal.

FORT COLLINS temperature and precipitation, January 1 - October 31

