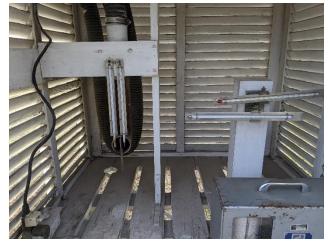
# **Colorado State University, Fort Collins, CO Weather Station Monthly Summary Report**

Month: March Year: 2020



Thermometers used for official temperature measurements. See explanation at the end of the summary!

## **Temperature:**

Mean  $T_{max}$  was 56.0°F which is 1.3° above the 1981-2010 normal for the month. This is the 35<sup>th</sup> warmest in the 132-year record (1889-2020), tied with 1935. The last March this warm or warmer was 2018 with 58.3°F.

Mean  $T_{min}$  was 29.3°F which is 1.1° above the 1981-2010 normal for the month. This is the 14<sup>th</sup> warmest in the 132-year record (1889-2020). The last March this warm or warmer was 2018 with 29.4°F.

Mean  $T_{mean}$  was 42.6°F which is 1.2° above the 1981-2010 the normal for the month. This is the 22<sup>nd</sup> warmest in the 132-year record (1889-2020), tied with 2009. The last March this warm or warmer was 2017 with 48.5°F.

The maximum daily temperature for the month was 71°F and occurred on March 7, 8 and 31, 2020.

The minimum daily temperature for the month was 13°F and occurred on March 21, 2020.

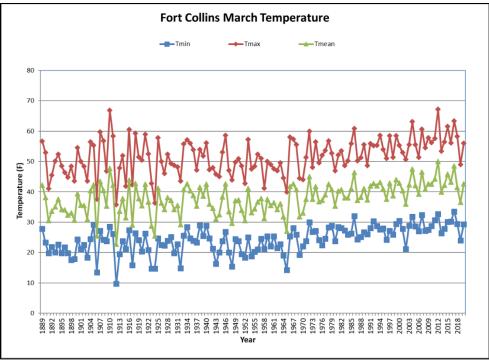


Figure 1: March temperature time series.

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

No records for March

## **0** Degrees and Colder Days:

March had 0 days with a minimum temperature below 0°F. There has been 1 day below 0°F for Winter 2020.

# **Precipitation and Snowfall:**

Total monthly precipitation was 1.29" which is 0.30" below the 1981-2010 normal for the month (81% of normal). This ranks as the 84<sup>th</sup> driest in the 132-year record (1889-2020). The last March this dry or drier was 2018 with 0.71" of precipitation.

Water year precipitation through March totaled 5.28" which is 0.48" above the 1981-2010 normal for the water year (110% of normal). This ranks as the 31<sup>st</sup> wettest start to a water year in the 131-year record (1890-2020), tied with 1974. The last water year this wet or wetter through March was 2016 with 8.18" of precipitation.

March snowfall totaled 4.5" which is 8.1" below the 1981-2010 normal for the month (36% of normal). This ranks as the 38<sup>th</sup> least snowy March in the 132-year record (1889-2020), tied with 2014. The last March with this little snow or less was 2018 with 0.1" of snowfall.

Seasonal snowfall for the 2020 season through March totaled 55.7" which is 6.8" above the 1981-2010 normal for the season (114% of normal). This ranks as the 23<sup>rd</sup> snowiest season through March in the 131-year record (1890-2020). The last season with this much snowfall or more through March was 2016 with 67.0" of snowfall.

March had 8 days with measurable precipitation ( $\geq 0.01$ ") and 6 days with measurable snowfall ( $\geq 0.1$ ").

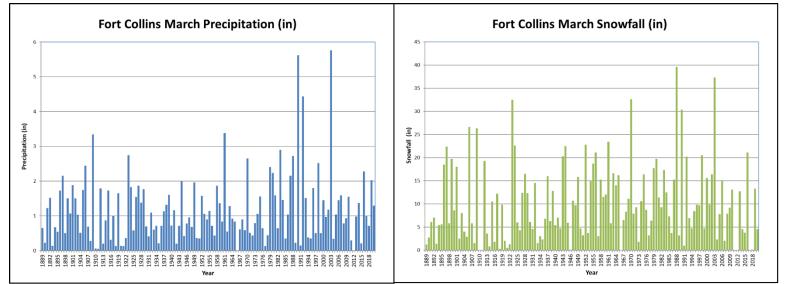


Figure 2: March precipitation (left) and snowfall (right) time series.

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

No precipitation or snowfall records this March

#### *Days with Snow Depth* $\geq$ 1 *inch*

March had just 2 days with 1" of snow or greater on the ground at our 7:00 PM MST observation time. This compares to a normal of 5 days in March. This season has seen 69 days with 1" of snow or greater on the ground through March. This compares to a normal of 44 days.

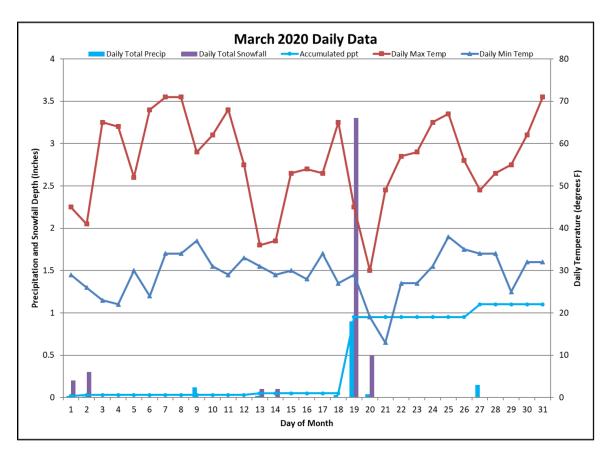


Figure 3: Daily Data for March 2020. Precipitation and temperature both show up on this graph. The y-axis on the left is for precipitation and snowfall. The y-axis on the right is for temperature.

#### Wind:

In March 2020 there were 19 days with maximum wind gusts  $\ge 20$  mph and 0 days  $\ge 30$  mph.

The maximum daily wind gust for the month was 28 mph and occurred on March 28, 2020 at 11:03 AM MST from 300° (WNW).

About the thermometers we use.



On the left side of the picture there are two thermometers hanging. The thermometer of the right is the "dry bulb", which measure ambient air temperature (current air temp). The one on the left is the "wet bulb". This thermometer has a wick that we dip in distilled water. We turn a fan on to cool the wet bulb, which cools off by evaporation, just like sweat off your skin to cool you off. The relationship between these two gives us our dew point temperature (the temperature the air has to cool to condense).

On the right side of the picture is our Maximum and Minimum thermometers. The top thermometer is the minimum thermometer, which is filled with alcohol and has a little marker in the liquid. The marker gets pushed down as the temperature decreases. When the temperature increase, the marker stays there to give us the minimum temperature. The bottom thermometer is the maximum thermometer. This is filled with mercury and is pinched at the bottom. This allows the mercury to move up as the temperature increases and stay up when the temperature cools. The silver box in the lower right of the picture is a Hygro-thermograph, which records the temperature and relative humidity on a chart.

These are in the white enclosure that is in most pictures.