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

Month: December Year: 2018



#### **Temperature:**

Mean  $T_{max}$  was 45.2°F, which is 2.4° above the 1981-2010 normal for the month. This is the 42<sup>nd</sup> warmest in the 130-year record (1889-2018). The last December this warm or warmer was 2017 (47.2°F).

Mean  $T_{min}$  was 18.4°F, which is 0.7° above the 1981-2010 normal for the month. This is the 33<sup>rd</sup> warmest in the 130-year record (1889-2018). The last December this warm or warmer was 2017 (20.3°F).

Mean  $T_{mean}$  was 31.8°F, which is 1.6° above the 1981-2010 the normal for the month. This is tied for the 37<sup>th</sup> warmest in the 130-year record (1889-2018). The last December this warm or warmer was 2017 (33.7°F).

Calendar Year 2018: the annual mean temperature was  $51.2^{\circ}$ F, which is 0.7°F above the 1981-2010 normal for the year. This is tied for the 11<sup>th</sup> warmest year in the 130-year record (1889-2018). The last calendar year this warm or warmer was 2017 (52.4 °F).

The maximum temperature for the month was 61°F. It occurred on December 21, 2018.

The minimum temperature for the month was 4°F. It occurred on December 29, 2018. (Note: It did get colder than this after the official observation time of 7:00 PM on December 31<sup>st</sup>, but before midnight. So while technically this occurred in December, it will be reflected in the January 2019 records.)

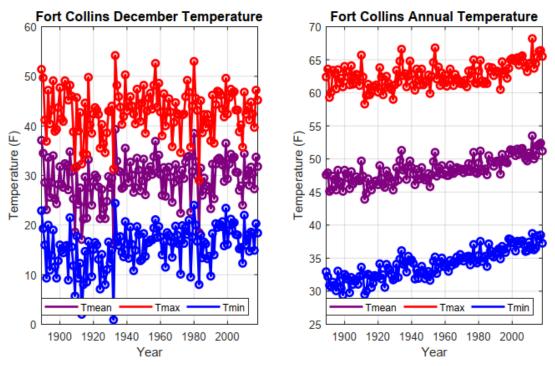


Figure 1: December (left) and annual (right) time series of mean daily Tmean (purple), mean daily Tmax (red), and mean daily Tmin (blue)

### **Precipitation:**

Total monthly precipitation was 0.03", which is 0.47" below the 1981-2010 normal for the month (6% of normal). This ranks as tied for the  $14^{th}$  driest in the 130-year record (1889-2018). The last December this dry or drier was 1991 (0.02").

Calendar Year 2018 precipitation totaled 13.60", which is 2.50" below the 1981-2010 normal for the year (84% of normal). This ranks as the  $52^{nd}$  driest in the 130-year record (1889-2018). The last year this dry or drier was 2016 (11.63").

December snowfall totaled just 1.4", which is 7.0" below the normal for the month (17% of normal). This ranks as a tie for the 27<sup>th</sup> least snowy in the 130-year record (1889-2018). The last December with this little snow was 2002 (no snowfall).

Seasonal snowfall accumulation for the 2019 season through December is 13.1", which is 8.4" below the 1981-2010 normal for the season (61% of

normal). The last season to start with this little snowfall was the 2017 snow season, 11.2" of snowfall by the end of December.

December had 2 days with measurable precipitation (  $\geq 0.01$  ") and 2 days with measurable snowfall (  $\geq 0.1$  ").

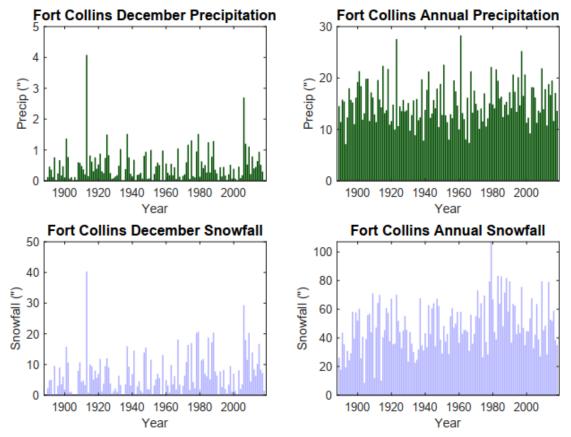


Figure 2: December (left) and annual (right) accumulated precipitation (top) and snowfall (bottom) time series.

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

December had no days with 1" of snow or greater on the ground at our 7:00 PM MST observation time. This is a bit startling given the normal amount of days in December is 12.

There has only been four days so far this season where 1" of snow or greater was on the ground at 7:00 PM. The normal number by the end of December is 18 days.

# Wind:

In December 2018 there were 8 days with maximum wind gusts  $\ge 20$  mph, and 3 days  $\ge 30$  mph.

The maximum daily wind gust for the month was 34 mph and occurred on December 11, 2018 at 11:50 AM MST from WNW (290°).