

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

**Month: December**  
**Year: 2016**



### **Temperature:**

Mean  $T_{\max}$  was 39.7°F which is 3.1° below the 1981-2010 normal for the month. This is the 27<sup>th</sup> coolest in the 128 year record (1889-2016), tied with 1987. The last December this cool or cooler was 2009 with 35.7°F.

Mean  $T_{\min}$  was 14.9°F which is 2.8° below the 1981-2010 normal for the month. This is the 46<sup>th</sup> coolest in the 128 year record (1889-2016), tied with 1901 and 1945. The last December this cool or cooler was 2013 with 14.7°F.

Mean  $T_{\text{mean}}$  was 27.3°F which is 2.9° below the 1981-2010 normal for the month. This is the 34<sup>th</sup> coolest in the 128 year record (1889-2016). The last December this cool or cooler was 2009 with 24°F.

The maximum daily temperature was 58°F and occurred on December 30<sup>th</sup>. The minimum daily temperature was -9°F and occurred on December 18<sup>th</sup>.

Calendar Year 2016 mean temperature was 52.2°F which is 1.9° above the normal for the calendar year. This ranks as the 2<sup>nd</sup> warmest year in the 128 year record (1889-2016). The warmest year on record is 2012 with 53.5°F. The 3<sup>rd</sup> warmest year on record is 2015 with 52.0°F.

The maximum daily temperature for the calendar was 99°F and occurred on June 21<sup>st</sup>.

The minimum daily temperature for the calendar year was -9 and occurred on December 18<sup>th</sup>.

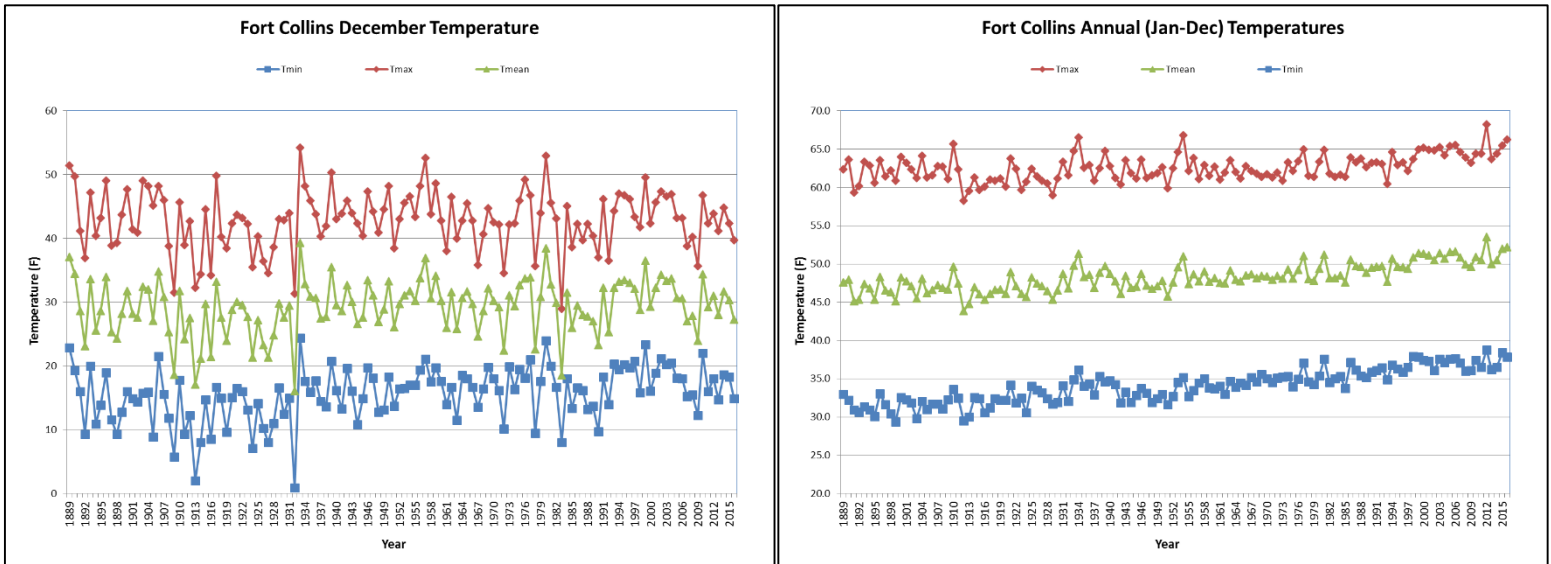


Figure 1: December (left) and calendar year (right) temperature time series.

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

*No temperature records in December*

## Precipitation and Snowfall:

December 2016 precipitation totaled 0.52” and was 0.02” above the 1981-2010 normal for the month (104% of normal). This ranks as the 44<sup>th</sup> wettest in the 128 year record (1889-2016), tied with 1998. The last December this wet or wetter was 2015 with 0.94” of precipitation.

Calendar year 2016 precipitation totaled 11.63” and is 4.47” below the 1981-2010 normal for the calendar year (72% of normal). This ranks as the 25<sup>th</sup> driest calendar year in the 128 year record (1889-2016), tied with 1907. The last calendar year this dry or drier was 2012 with 10.67”.

Snowfall for December totaled 8.2” and was 0.2” below the 1981 – 2010 normal for the month (98% of normal). This ranks as the 86<sup>th</sup> least snowy in the 128 year record (1889-2016), tied with 1994. The last December with this little snow or less was 2013 with 6.3” of snowfall.

Seasonal snowfall for the 2017 snow season is also 11.2” which is 10.3” below the 1981 – 2010 normal for the season through December (52% of normal). This ranks as the 44<sup>th</sup> least snowy start in the 128 year record (1890-2017). The last season to start with this little snowfall was the 2011 snow season with 9.4” by the end of December 2010.

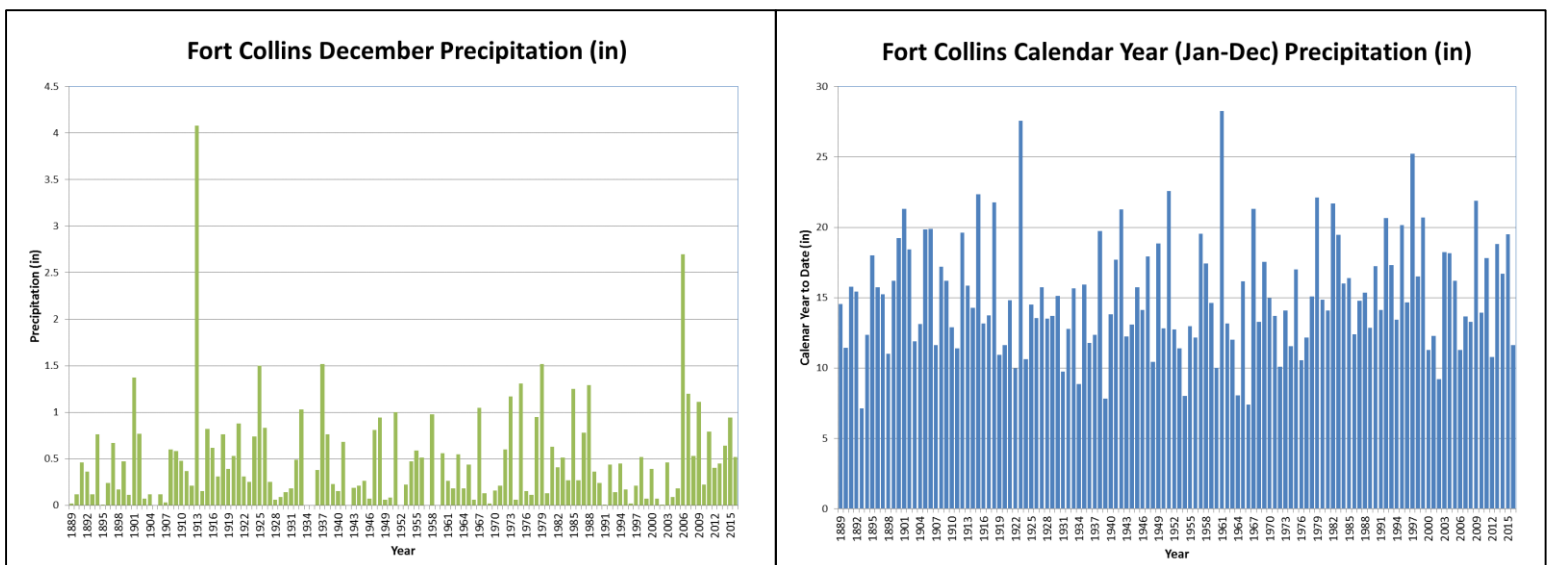
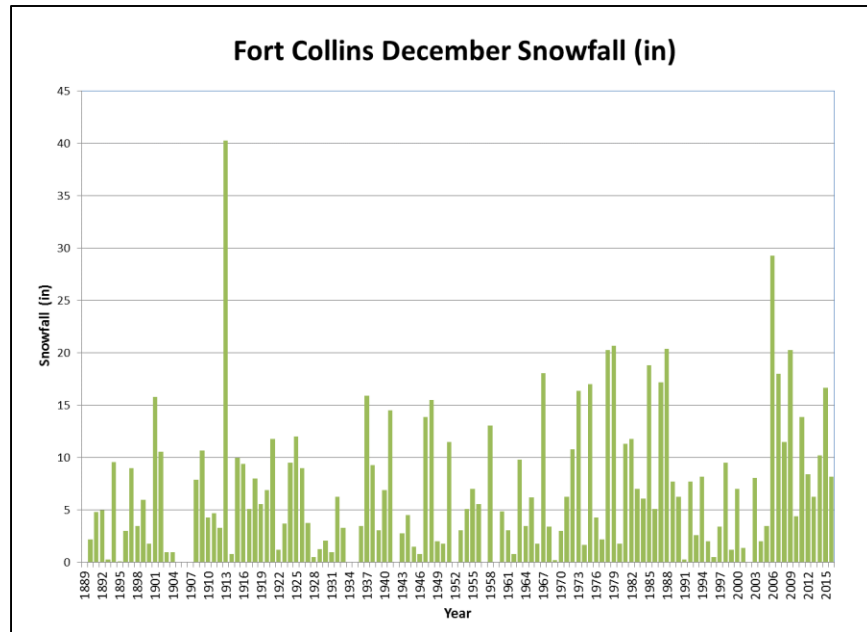


Figure 2: December (left) and annual (right) precipitation time series.



**Figure 3: December snowfall time series.**

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

*No precipitation records for December*

***Days with Precipitation:***

*5 days with measurable (0.01" or greater) precipitation.*

*5 day with measurable snowfall (0.1" or greater).*

***Days with snow on the ground (1" or greater)***

*December 2016 had 12 days with 1" or greater of snow on the ground. This is the normal for December.*

*This snow season has seen 14 days with 1" of snow or greater on the ground at the end of December 2016. This compares to a normal of 18 days by the end of December.*

**Wind:**

In December 2016 there were 9 days with maximum wind gusts  $\geq 20$  mph and 2 days  $\geq 30$  mph.

The maximum daily wind gust for the month was 31 mph and occurred on December 5, 2016 at 4:00 PM MST from  $360^\circ$ .

The maximum daily wind gust from 2016 was 56 mph on March 14<sup>th</sup>, 2016 at 10:50 AM MST from  $240^\circ$ .

**Calendar Year 2016 Records**

Number of daily records broken or tied in 2016:

4 daily maximum temperature records, 5 ties

4 daily highest minimum records, 2 ties

1 daily coldest maximum temperature record tied

3 daily precipitation records broken

3 daily snowfall records broken

0 coldest minimum temperature records were broken

Monthly records in 2016:

October 2016 was the warmest October on record with  $56.2^\circ\text{F}$  (previous warmest were 2003 and 2015 with  $55.2^\circ\text{F}$ ).

November 2016 was the 2<sup>nd</sup> warmest November on record.

November 16, 2016 maximum temperature of  $79^\circ\text{F}$  tied the highest November temperature on record. (Tied November 6, 1934).

Warmest fall on record, mean temperature of  $55.4^\circ\text{F}$  beating 2015 with  $53.5^\circ\text{F}$ .