

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

Month: August
Year: 2012



Temperature:

Mean T_{\max} was 88.2 which is 4.2 degrees above the normal for the month. This ranks as the 3rd warmest in the 124 year record (1889-2012). The last August this warm or warmer was 2011 with 89.8 degrees, which is the warmest on record.

Mean T_{\min} was 57.4 degrees which is 0.7 degrees above the normal for the month. This ranks as the 14th warmest in the 124 year record (1889-2012). The last August this warm or warmer was 2011 with 58.8 degrees.

Mean T_{mean} was 72.8 degrees which is 2.4 degrees above the normal for the month. This ranks as the 5th warmest in the 124 year record (1889-2012) tied with 2003. The last August this warm or warmer was 2011 with 74.3 degrees, which is the warmest on record.

The calendar year mean temperature (Jan-Aug) is 57.0 degrees which is 4.2 degrees above the normal for the period. This ranks as the warmest calendar year through August in the 124 year record (1889-2012).

The maximum daily temperature was 97 and occurred on 6 August 2012. The minimum daily temperature was 47 and occurred on 17 August 2012.

A time series of temperatures for Fort Collins, CO is shown in Figure 1 below.

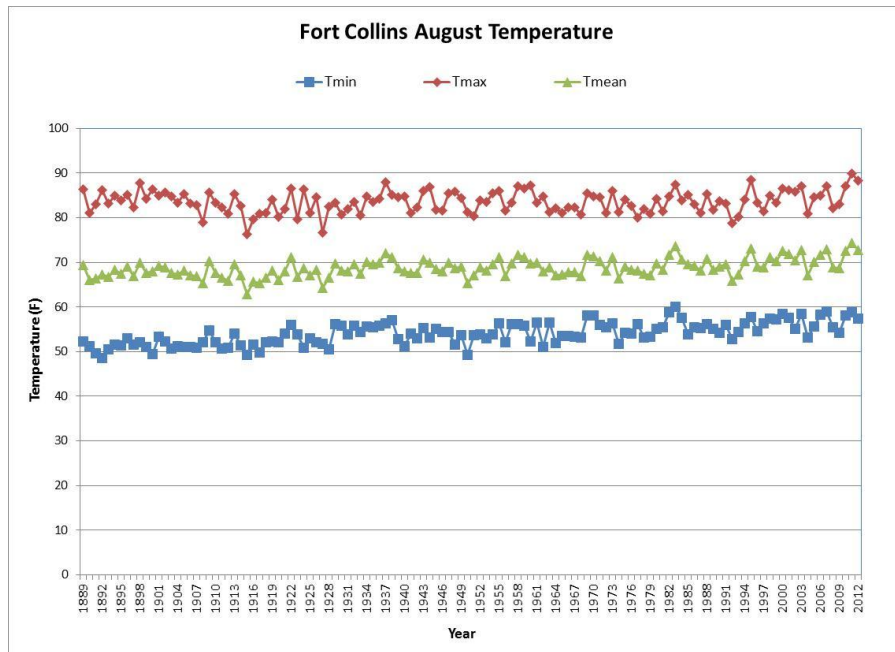


Figure 1: August temperature time series

Misc. Temperature (record status, days above/below thresholds):

90 Degree Days

As of the end of August, we have beaten the record number of days greater than or equal to 90 degrees in any year. The previous record was 45 days set in 1960. As of the end of August the running tally is 53 days. (As of 3 September 2012 it is 55 days and counting!)

Highest Maximum Temperature

6 August 2012: Maximum temperature of 97 ties the old record set in 1889.

28 August 2012: Maximum temperature of 95 ties the old record set in 1899 and 2011.

Highest Minimum Temperature

1 August 2012: Minimum temperature of 66 breaks the old record of 65 set in 1959.

30 August 2012: Minimum temperature of 65 breaks the old record of 63 set in 1947.

Precipitation and Snowfall:

Total monthly precipitation was only 0.03” and was 1.57” below the normal for the month (2% of normal). This ranks as the driest August in the 124 year record (1889-2012) tied with 1960.

Calendar year precipitation was 6.63” which is 5.73” below the normal (54% of normal). This ranks as the 7th driest calendar year through August in the 124 year record (1889 – 2012). The last calendar year this dry or drier was 2006 with 4.82” (2002 had 5.88”).

Water year 2012 precipitation through August was 10.06” and was 4.71” below the normal (68% of normal). This ranks as the 20th driest water year in the 123 year data record (1890-2012). The last water year this dry by August was 2006 with 8.34” (2002 had 7.09”).

Time series of August and water year precipitation are shown in Figure 2.

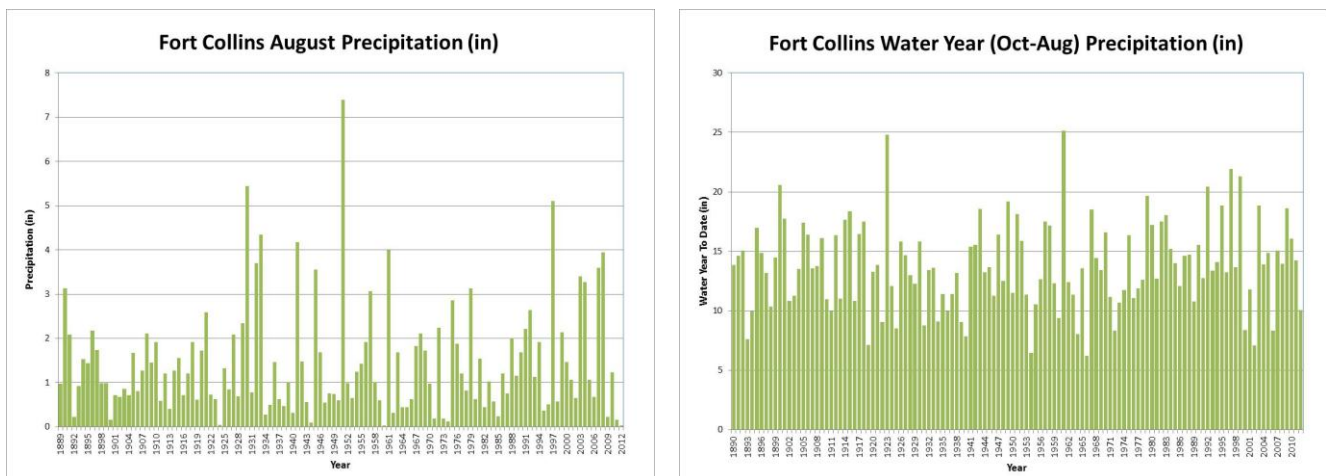


Figure 2: August (left) and water year (right) precipitation time series.

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

Wind:

In August 2012 there were 9 days with maximum wind gusts ≥ 20 mph and 2 ≥ 30 mph.

The maximum daily wind gust for the month was 39 mph and occurred on 29 August 2012 at 12:20 MST from 200°.

Evaporation:

August 2012 pan evaporation was 6.99” and is 0.51” above the normal for the month (108%).

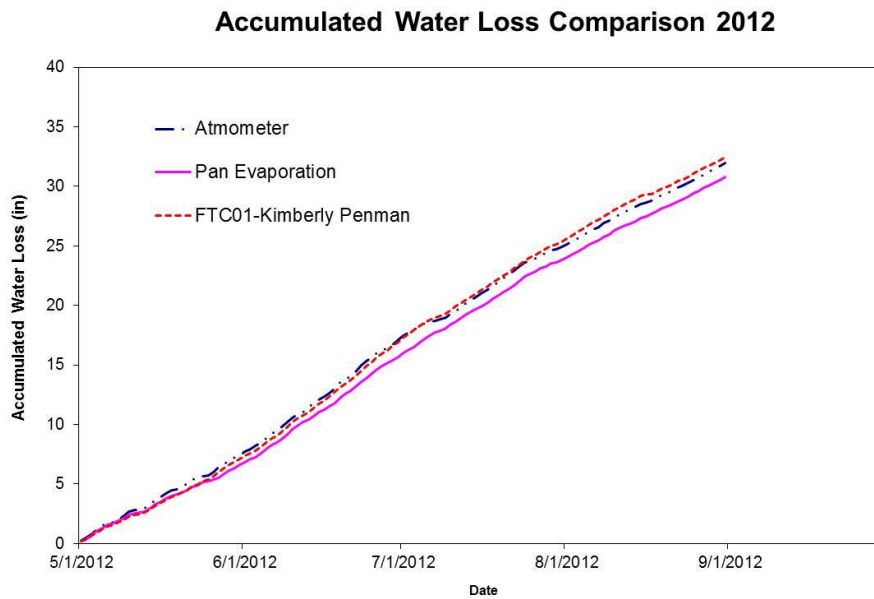


Figure 3: Water loss comparison of Fort Collins Weather Station instruments (atmometer and class A pan) and nearby FTC01 CoAgMet (ccc.atmos.colostate.edu/~coagmet) station.