

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

**Month: September**  
**Year: 2014**



125<sup>th</sup> Anniversary celebration at the Fort Collins Weather Station.

## **Temperature:**

Mean  $T_{\max}$  was 78.1 which is 2.2 degrees above the normal for the month. This ranks as the 35<sup>th</sup> warmest in the 126 year record (1889-2014). The last September this warm or warmer was 2012 with 80.1 degrees.

Mean  $T_{\min}$  was 48.6 degrees which is 1.1 degrees above the normal for the month. This ranks as the 13<sup>st</sup> warmest in the 126 year record (1889-2014). The last September this warm or warmer was 2013 with 52.8 degrees.

Mean  $T_{\text{mean}}$  was 63.4 degrees which is 1.6 degrees above the normal for the month. This ranks as the 17<sup>th</sup> warmest in the 126 year record (1889-2014) tied with 1947. The last September this warm or warmer was 2013 with 65.1 degrees.

Water year 2014 mean temperature was 50.0 degrees which is 0.3 degrees below the normal for the water year. This ranks as the 20<sup>th</sup> warmest in the 126 year record (1889-2014) tied with 2001. The last water year this warm or warmer was 2013 with 50.5 degrees.

The maximum daily temperature was 94 and occurred on 3 September 2014. The minimum daily temperature was 31 and occurred on 13 September 2014.

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

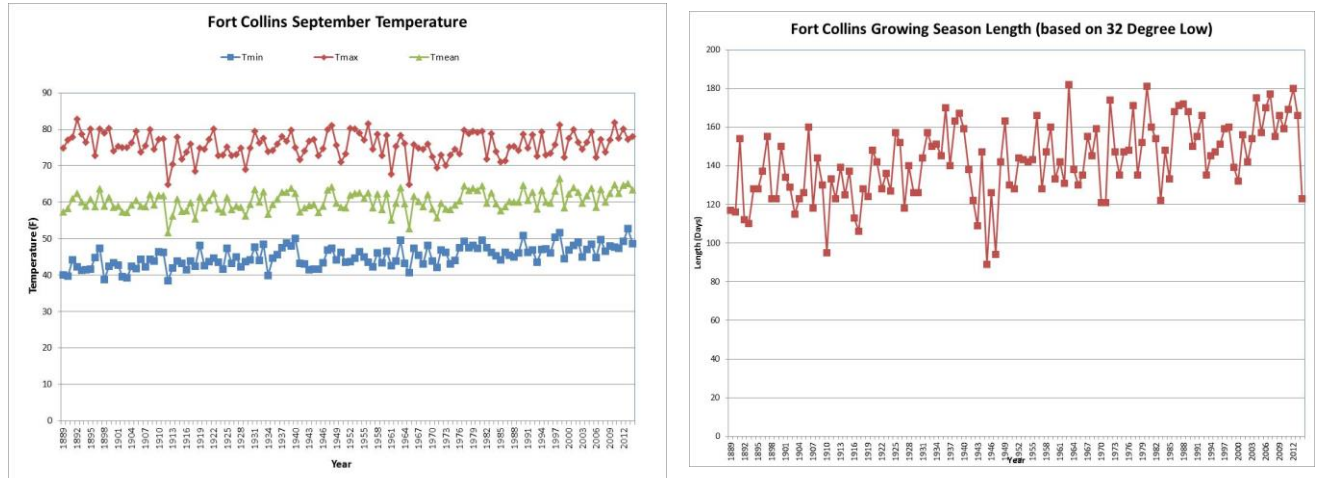


Figure 1: September temperature time series (left) and growing season length time series (right).

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

The low of 31 on 13 September 2014 was the earliest fall freeze date since 1974 when we hit a low of 32 on 12 Sept 1974.

2014 growing season was only 123 days from the last spring freeze on 13 May to the first fall freeze on 13 September. This is the shortest growing season since 1983 which had 122 days. There are only 22 years (including 2014) in the record that had a growing season  $\leq 123$  days.

### ***Highest Maximum Temperature***

*The high temperature of 94 on 3 September 2014 tied the record of 94 set in 1899.*

### **Precipitation and Snowfall:**

Total monthly precipitation was 1.28” and was 0.05” below the normal for the month (96% of normal). This ranks as the 48<sup>th</sup> wettest in the 126 year record (1889-2014) tied with 1941 and 2008.

Water year 2014 precipitation was 16.72” and was 0.62” above the normal for the water year through September (104% of normal). This ranks as the

39<sup>st</sup> wettest water year in the 125 year record (1890-2014). The last water year this wet was 2013 with 17.66”.

Total monthly snowfall was 0.0” and was 0.9” below the normal for the month (0% of normal).

Time series of September and Water Year precipitation is shown in figure 2.

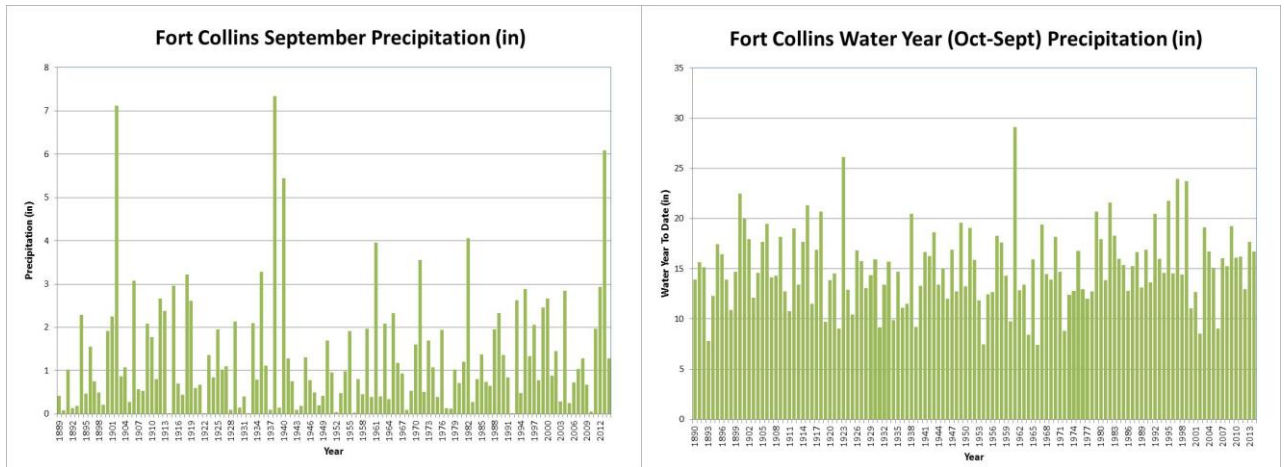


Figure 2: September (left) and water year (right) precipitation time series.

**Misc. Precipitation (predominant type, record status, etc.):**  
None.

**Wind:**

In September 2014 there were 2 days with maximum wind gusts  $\geq 20$  mph and 0 days  $\geq 30$  mph.

The maximum daily wind gust for the month was 25 mph and occurred on 14 September 2014 at 14:10 MST from 310°.

**Evaporation:**

Pan evaporation for the month was 4.37” which is 0.54” below the normal (89% of normal) for September.

### Accumulated Water Loss Comparison 2014

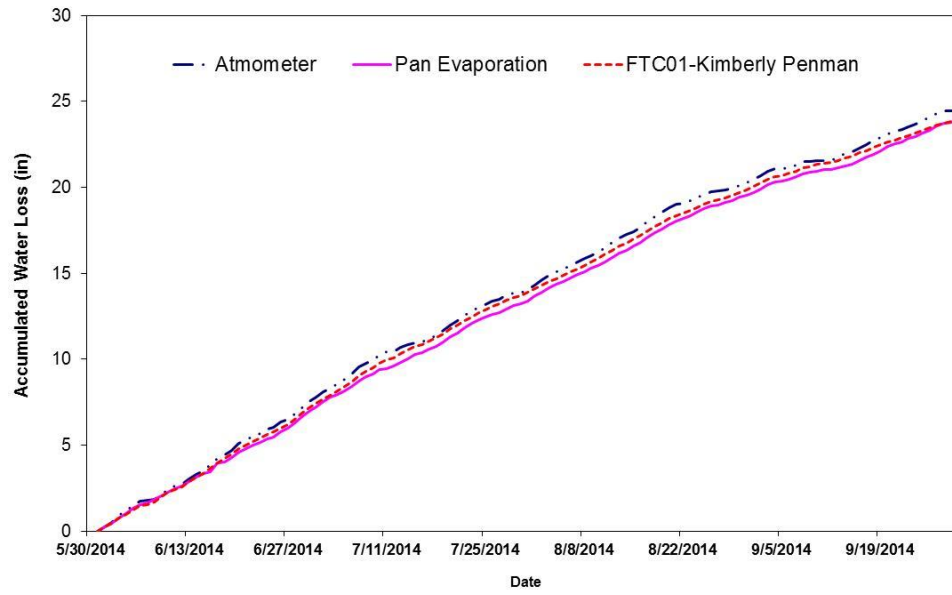


Figure 3: Accumulated water loss from the campus ETgage (atmometer), Class A pan evaporation and our local CoAgMet ET station (FTC01).