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

Month: September
Year: 2013

Temperature:
Mean $T_{\text{max}}$ was 77.3 which is 1.4 degrees above the normal for the month. This ranks as the 42$^{\text{nd}}$ warmest in the 125 year record (1889-2013) tied with 1921.

Mean $T_{\text{min}}$ was 52.8 degrees which is 5.3 degrees above the normal for the month. This ranks as the warmest in the 125 year record (1889-2013).

Mean $T_{\text{mean}}$ was 65.1 degrees which is 3.3 degrees above the normal for the month. This ranks as the 2$^{\text{nd}}$ warmest in the 125 year record (1889-2013). The last September this warm or warmer was 1998 with 66.5 degrees.

The maximum daily temperature was 97 and occurred on 6 September 2013. The minimum daily temperature was 35 and occurred on 28 September 2013.

<table>
<thead>
<tr>
<th>Year</th>
<th>September Minimum Temperature (F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>52.8</td>
</tr>
<tr>
<td>1998</td>
<td>51.7</td>
</tr>
<tr>
<td>1990</td>
<td>50.8</td>
</tr>
<tr>
<td>1997</td>
<td>50.4</td>
</tr>
<tr>
<td>1940</td>
<td>50.1</td>
</tr>
</tbody>
</table>

A table of the top 5 warmest September minimum temperatures is shown above.
A time series of temperatures for Fort Collins, CO is shown in Figure 1 below.

![Fort Collins September Temperature](image)

Figure 1: September temperature time series

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

*Highest Maximum Temperature:*

**6 September 2013:** The maximum temperature of 97 broke the old record of 95 set in 1959.

**8 September 2013:** The maximum temperature of 93 broke the old record of 92 set in 1959 and 1977.

*Highest Minimum Temperature:*

**1 September 2013:** The low temperature of 64 degrees tied the old record set in 1988.

**4 September 2013:** The low temperature of 61 degrees broke the old record of 59 set in 2004.
5 September 2013: The low temperature of 64 degrees broke the old record of 62 set in 1995.
6 September 2013: The low temperature of 65 degrees broke the old record of 64 set in 1939.

Precipitation and Snowfall:
Total monthly precipitation was 6.09” and was 4.76” above the normal for the month (458% of normal). This ranks as the 3rd wettest in the 125 year record (1889-2013). The last September this wet was 1938 with 7.34”. 1902 is second place with 7.02”

Water year 2013 precipitation total ends with 17.66” and was 1.56” above the normal for the water year (110% of normal). This ranks as the 30th wettest water year in the 124 year record (1890-2013).

Time series of September and water year precipitation are shown in figure 2.

Figure 2: September (left) and water year (right) precipitation time series.
The top 5 September precipitation totals are shown in the table above.

<table>
<thead>
<tr>
<th>Year</th>
<th>September Precipitation (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1938</td>
<td>7.34</td>
</tr>
<tr>
<td>1902</td>
<td>7.12</td>
</tr>
<tr>
<td>2013</td>
<td>6.09</td>
</tr>
<tr>
<td>1940</td>
<td>5.44</td>
</tr>
<tr>
<td>1982</td>
<td>4.06</td>
</tr>
</tbody>
</table>

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

12 September 2013: Daily precipitation of 1.99” broke the old record of 0.80” set in 1974.

Wind:
In September 2013 there were 2 days with maximum wind gusts ≥ 20 mph and 0 days ≥ 30 mph.

The maximum daily wind gust for the month was 29 mph and occurred on 23 September 2013 at 11:50 MST from 280°.

Evaporation:
September 2013 pan evaporation was 4.42” which was 0.49” below the normal (90% of normal).