



.....September 2020 CLIMATE SUMMARY FOR THE DENVER AREA.....

A strong upper level ridge of high pressure centered over the Four Corners Region produced hot and dry weather across north central and northeastern Colorado the first week of September. On the 5th, the high temperature in Denver soared to 101 degrees which is the latest 100 degree Day ever recorded in Denver during a calendar year. The record heat and dry weather quickly transitioned to snow and record low temperatures on the 8th and 9th as a powerful Storm system and cold front moved across the Rocky Mountain Region. Denver International Airport measured 1.0 inches of snow on the 8th which is the first measurable September snowfall in the past 20 years. Temperatures gradually moderated through the 12th as the storm system moved away from Colorado into the Upper Midwest. Above normal temperatures returned to the area on the 13th and continued through the 26th as upper level high pressure rebuilt over the region. Denver experienced cooler temperatures and some light rainfall on the 27th as an upper level trough and associated cold front moved across the Northern and Central Rockies. In addition to the record temperatures and early snowfall, smoke from several large fires in Colorado and the western U.S. produced smoky skies across north central and northeastern Colorado much of the month.



Late Summer Fires with Record Heat to Record Cold and Snow



Williams Fork Fire courtesy of USFS



- Record Highs (Denver) set on 9/6, "97" and 9/5, "101" "101" was the latest 100 degree High on Record.
- Warmest Temperature , day before measureable snow at Denver, 93 degrees on 9/7. Previous high was 92 degrees on 9/12/1993.
- Shortest number of days, between a 100 Degree Day and first measurable Snowfall at Denver, 3 Days "2020". Previous record was 38 Days in 2019.
- Number of Days between a Record High and Record Low at Denver. 2 Days, "97" on 9/6, "31" on 9/8, 2020. Also occurred in 1960, "98" on 8/15, "44" on 8/17.

- September 8, 2020 tied the earliest Freeze on record, for Denver, previously set in September 8, 1962
- Denver's Record Low of 31 degrees, on 9/9 and 9/8, tied previous records lows, from 9/9/1962 and 9/8/1962.
- Largest 2 Calendar day drop, in temperature for September, of 62 degrees at Denver. Previous record was 59 degrees which occurred in September of 1993.
- 2nd Earliest Snowfall (9/8) on record for Denver. Earliest Snowfall on record occurred on 9/3/1961.
- "19" Consecutive Snowless Septembers end at Denver.

Temperatures:

The average temperature at Denver International Airport for the month of September was 65.4° F, which is 2.0° above normal. There were 7 days with max temperatures at or above 90° and 2 days with temperatures at or below 32°. The temperature soared to 101° on the 5th which is the latest 100 degree day ever recorded in Denver during a calendar year. The hot weather continued through the 7th with another daily record high of 97° set on the 6th. The record heat quickly transitioned to record low temperatures on the 8th and 9th as a powerful storm system moved across the Region. The low temperature of 31° both of these days tied low record temperatures which were previously set back in 1962.

TEN WARMEST SEPTEMBER AVERAGE TEMPERATURES IN DENVER WEATHER HISTORY SINCE 1872: DEGREES F

69.4 - 2015
69.3 - 2019
68.3 - 1948
68.2 - 1981, 1931
68.0 - 1998
67.8 - 2018
67.7 - 1933
67.6 - 1947
67.2 - 2005

ELEVEN COLDEST SEPTEMBER AVERAGE TEMPERATURES IN DENVER WEATHER HISTORY SINCE 1872:DEGREES F

54.7 - 1912
55.6 - 1965
56.3 - 1961
57.5 - 1971
58.1 - 1918
58.8 - 1985
58.9 - 2006, 1929
59.2 - 1999
59.3 - 2003, 1913

3501

DEN ASOS

02/29 05:51



METAR KDEN 052053Z 00000KT 10SM FEW120 FEW220 36/00 A3023
SLP145 T03610000 56025

TEMP/DP 37.8 /0.6 AW 170 03 P

SKY CLR

VSBY 10SM TWR VSBY

PREWX SEA PRES

TEMP/DP 37.8 /0.6 C 100/33 F REL HUM

WIND VRB/03 MAG WIND

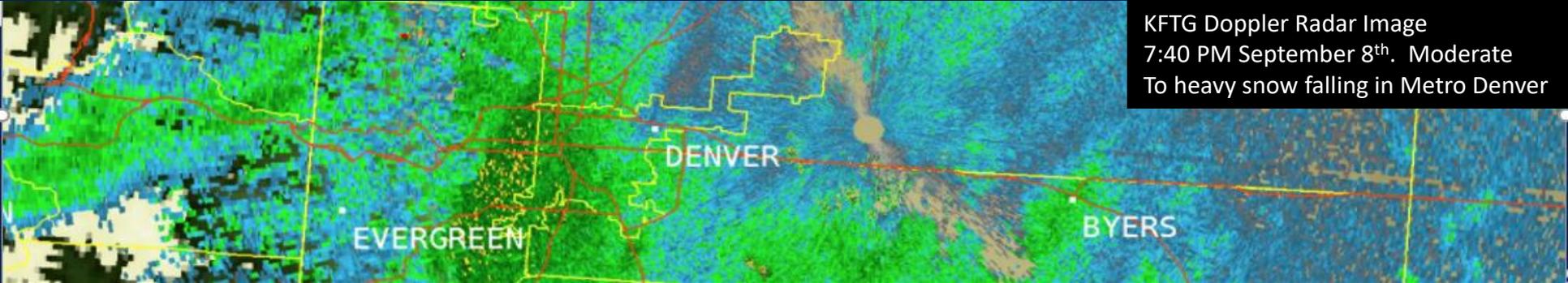
ALT SET 30.23 DEN ALT 8800 PRES ALT

REMARKS RMK A02 T03780006



METAR KDEN 052053Z 00000KT 10SM FEW120 FEW220 36/00 A3023
T03610000 56025

100° in Denver! This is the latest date Denver has hit 100° breaking the record set last year when Denver reached 100° on September 2nd. The temperature climbed another degree later in the day with a high of 101° which set a new monthly and daily record high.



PRECIPITATION:

Denver received 0.93 inches of precipitation in September 2020. This is 0.03 below the normal of 0.96 inches. The highest daily precipitation amount of 0.72 inches was measured on the 8th.

TEN WETTEST SEPTEMBER PRECIPITATION TOTALS IN DENVER WEATHER HISTORY SINCE 1872: INCHES

5.61 – 2013
4.67 – 1961
3.78 – 1909
3.70 – 1902
3.42 – 1938
2.95 - 2012
2.89 - 1936, 1918
2.85 - 1973, 1971

TEN DRIEST SEPTEMBER PRECIPITATION TOTALS IN DENVER WEATHER HISTORY SINCE 1872: INCHES

T - 1944, 1892
0.01 - 1992, 1956
0.02 - 1921, 1879
0.05 - 1893
0.06 - 2010, 1920, 1882



U.S. DEPARTMENT OF COMMERCE
NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
DAVID SKAGGS RESEARCH CENTER

Fresh snowfall near the Boulder National Weather Service Office on the night of September 8th

SNOWFALL:

1.0 inch of snowfall was recorded in Denver during the month which is 0.3 inches below normal.

TEN SNOWIEST SEPTEMBERS IN DENVER WEATHER HISTORY SINCE 1872: INCHES

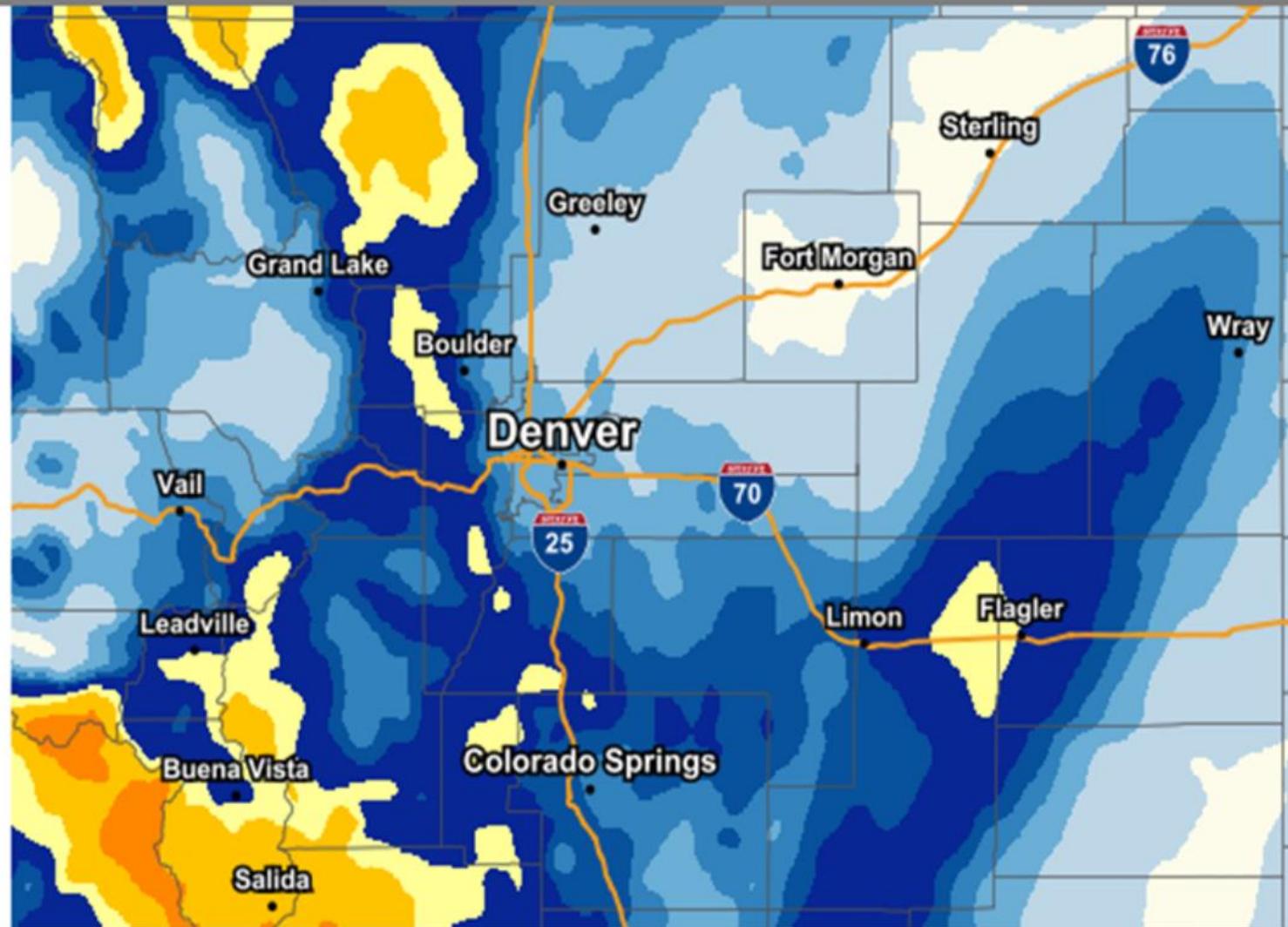
17.2 - 1971
16.5 - 1936
12.9 - 1959
11.4 - 1895
8.7 - 1985
6.5 - 1908
5.8 - 1961
5.5 - 1965
5.4 - 1993
5.2 - 1984



Snowfall Summary

Valid Ending Wednesday September 9th, 2020 at 6 AM MDT

- Less than an inch
- 1 to 2 inches
- 2 to 3 inches
- 3 to 4 inches
- 4 to 6 inches
- 6 to 8 inches
- 8 to 12 inches
- 12 to 18 inches

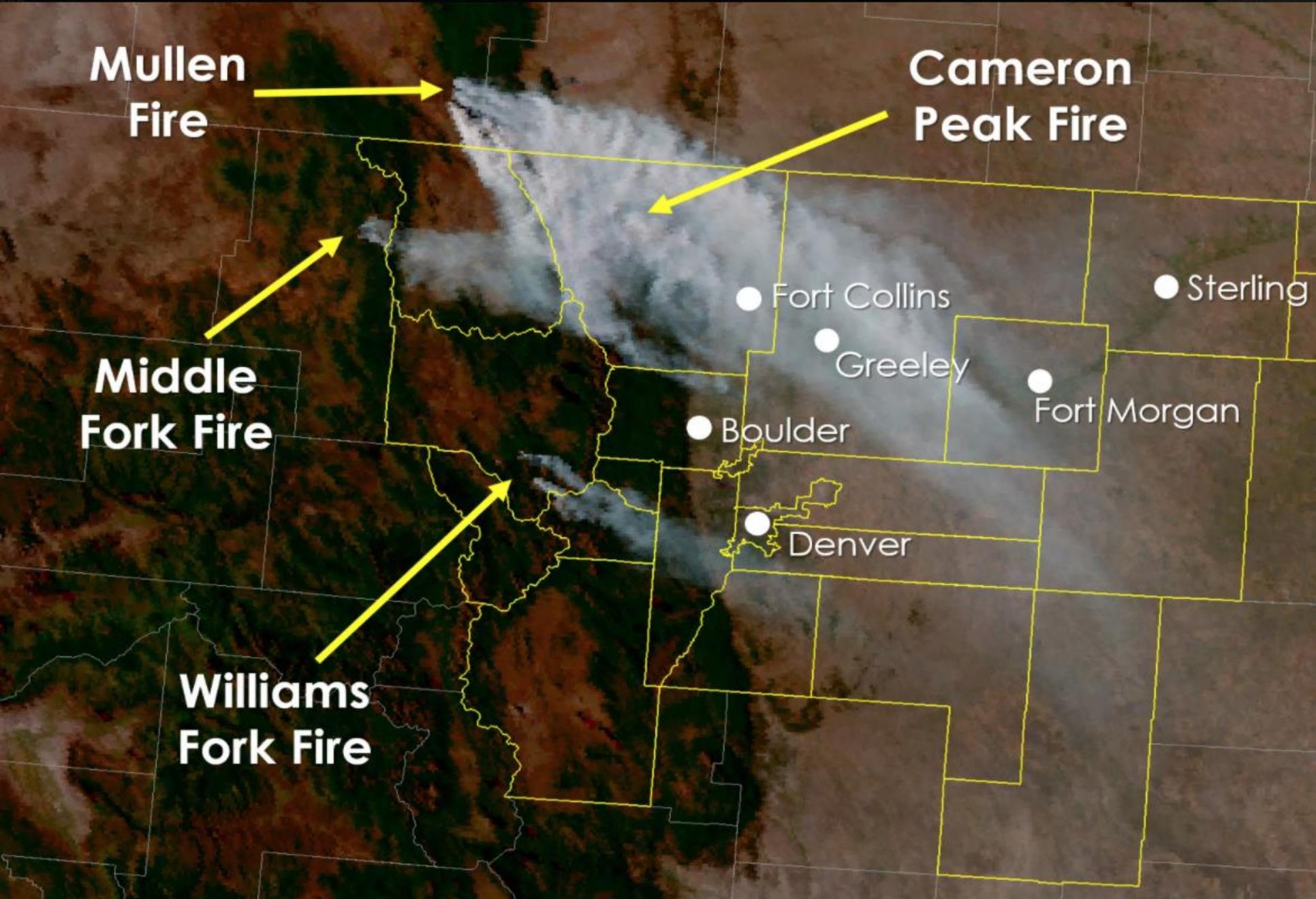


Graphic Created
September 9th, 2020
12:32 PM MDT



Weather Conditions

There were 9 days with smoke or haze, 2 days in which in which thunder was observed at Denver International Airport, and one day with dense fog with a visibility at or below $\frac{1}{4}$ mile during the month. The peak wind of 41 mph from the north northeast was recorded on The 7th



**Mullen
Fire**

**Cameron
Peak Fire**

**Middle
Fork Fire**

**Williams
Fork Fire**

● Fort Collins

● Sterling

● Greeley

● Fort Morgan

● Boulder

● Denver

Smoke from several large forest fires across northern Colorado and southern Wyoming spreading into the Front Range Urban Corridor and northeastern plains on September 29th. This was a common occurrence during much of the month.