### ......January 2024 Climate Summary for the Denver Area......



The mild and dry December weather carried over into early January with high temperatures in the upper 40s to mid 50s. Temperatures cooled off to mostly below normal values from the 4<sup>th</sup> through the 12<sup>th</sup> as a series of upper level troughs and associated cold fronts moved across the region. The main weather maker of the month was a strong Arctic Cold Front which swept across Northeastern Colorado on the evening of the 12th. In the wake of the front, the foothills, Front Range Urban Corridor and Northeastern plains experienced bitterly cold temperatures, light snow and dangerous wind chills. Daytime temperature through this period only managed to climb into the single digits in Denver with some plains locations staying below zero on the 14<sup>th</sup> and 16<sup>th</sup>. Coldest overnight lows occurred on the 16<sup>th</sup> when the temperature at Denver International Airport dropped to -19°F. It was even colder further northeast across the plains where the temperature at the Briggsdale Cooperative Weather station plummeted to -35°F. In addition, heavy snow and windy conditions occurred in the Northern Mountains from the 12<sup>th</sup> through the 15<sup>th</sup> as a strong upper level jet combined with favorable northwesterly orographic flow and abundant Pacific moisture. One to five feet of snow was measured in the Northern Mountains during this period with wind gusts over 100 mph at times over the higher mountain peaks. The combination of the wind and snow resulted in difficult travel and road closures. Denver saw much warmer and mostly dry conditions the last half of the month as upper level high pressure dominated the Rocky Mountain Region.

#### **TEMPERATURES:**

January in Denver typically ranks as the 2<sup>nd</sup> coldest month of the year with only December averaging colder conditions during the official NCEI 1991-2020 period. The average temperature at Denver International Airport for the month of January was 28.2 degrees F, which is 3.5 degrees below the normal of 31.7 degrees. The warmest temperature of the month was 61 degrees F which occurred on the 31<sup>st</sup>, with the coldest temperature of -19 degrees F on the morning of the 16<sup>th</sup>. The max temperature of 2°F on the 15<sup>th</sup> and the low of -19°F on the 16<sup>th</sup> tied the record low max and the record low respectively on those days which were both last set in 1930.

# TEN WARMEST JANUARY AVERAGE TEMPERATURES IN DENVER WEATHER HISTORY SINCE 1872: DEGREES F°

40.3 - 1986

40.1 - 1934

39.6 - 1953

39.4 - 1935

38.3 - 1893

38.2 - 1911

37.9 - 1923

37.4 - 2006

<u>37.3 - 1981, 1896</u>

# TEN COLDEST JANUARY AVERAGE TEMPERATURES IN DENVER WEATHER HISTORY SINCE 1872: DEGREES F

16.8 - 1930 \*\*\* COLDEST MONTH IN DENVER'S HISTORY

18.0 - 1979

18.1 - 1875

18.2 - 1937

19.1 - 1963

19.4 - 1949

19.5 - 1962

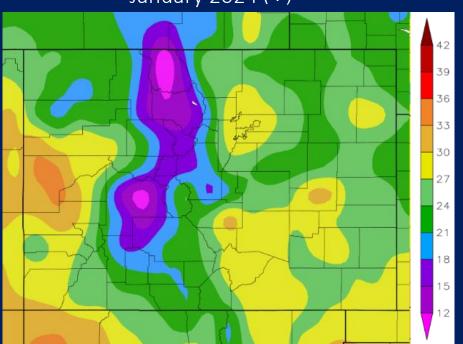
20.8 - 2007

21.7 - 1886

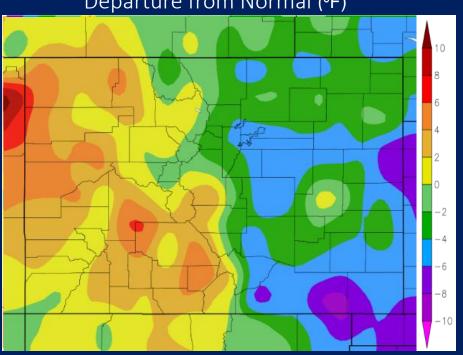
22.8 - 1916

Location	County	Maximum Temperature	Location	County	Minimum Temperature January 16th
		January 14th	Walden	Jackson	-39°F
New Raymer 21N	Weld	-8°F	Briggsdale Woodrow 6ENE	Weld	-35°F -31°F
Hereford	Weld	-6°F	Fort Morgan	Morgan Morgan	-31°F
		-6°F	Grand Lake 6SSSW	Grand	-28°F
Julesburg	Sedgwick		Lindon 5WNW	Washington	-25°F
Virginia Dale 7ENE	Larimer	-6°F	Gould 45E	Jackson	-25°F
Leroy 9WSW	Logan	-5°F	Kassler	Jefferson	-24°F
Sedgwick 5S	Sedgwick	-5°F	Loveland 2N	Larimer	-24°F
Buckhorn Mountain 1E	Larimer	-5°F	Kremmling	Grand Grand	-24°F -23°F
Flemming 3Sw	Logan	-4°F	Grand Lake 1NW Hereford	Weld	-23°F
Briggsdale	_	-4°F	Brighton 3SE	Adams	-22°F
	Weld		Sedgwick 5S	Sedgwick	-22°F
Denver Central Park	Denver	-3°F	Williams Fork Dam	Grand	-21°F
Akron 4E	Washington	-3°F	Fraser	Grand	-20°F
Lindon 5WNW	Washington	-3°F	Greeley UNC	Weld	-20°F
Holyoke	Phillips	-2°F	Holyoke	Phillips	-20°F
Waterdale	Larimer	-2°F	Karval Waterdale	Lincoln Larimer	-19°F -19°F
			Denver International Airport	Denver	-19°F
Lakewood	Jefferson	-2°F	Estes Park	Larimer	-19°F
Ralston Reservoir	Jefferson	-2°F	New Raymer 21N	Weld	-19°F
Waterdale	Jefferson	-2°F	Julesburg	Sedgwick	-18°F
Longmont 2ESE	Boulder	-1°F	Flemming 35w	Logan	-18°F
Loveland 2N	Larimer	-1°F	Akron 4E	Washington	-18°F
Marston Filter Plant	Denver	-1°F	Roxborough State Park Gross Reservoir	Douglas Boulder	-18°F -18°F
			Dillon 1E	Summit	-18°F
Wheat Ridge	Jefferson	-1°F	Fort Collins CSU	Larimer	-17°F
Brighton 3SE	Adams	0°F	Grant	Park	-17°F
Elizabeth 2NW	Elbert	0°F	Leroy	Logan	-17°F
Strontia Springs	Douglas	0°F	Elizabeth 2NW	Elbert	-16°F
Woodrow 6ENE	Morgan	0°F	Evergreen	Jefferson	-16°F
Northglenn	Adams	2°F	Wheat Ridge Longmont	Jefferson Boulder	-16°F -15°F
			Strontial Springs	Douglas	-15°F
Denver Water	Denver	2°F	Virginia Dale	Larimer	-15°F
Roxborough State Park	Douglas	2°F	Northglenn	Adams	-14°F
Kassler	Jefferson	<b>2</b> °F	Boulder	Boulder	-14°F
Castle Rock	Douglas	4°F	Ralston Reservoir	Jefferson	-14°F
Fort Morgan	Morgan	<b>4</b> °F	Denver Central Park	Denver	-13°F
Denver International Airport		6°F	Georgetown	Clear Creek	-13°F
Denver international Airport	Denver	10	Marston Filer Plant	Denver	-12°F

Average Temperature January 2024 (°F)



January 2024 Temperature Departure from Normal (°F)



Graphics generated by HPRCC using provisional data

#### PRECIPITATION:

January in Denver typically ranks as the 2<sup>nd</sup> driest month of the year with only December averaging drier conditions over the official NCEI 1991-2020 period. Denver received 0.28 inches of precipitation in January 2024 which is 0.10 inches below the normal of 0.38 inches. The highest daily precipitation amount of 0.09 inches was measured on the 13<sup>th</sup> and the 15<sup>th</sup>.

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

2.35 - 1883

1.90 - 1877

1.60 - 1891

1.46 - 1949

1.43 - 1948

1.33 - 1962

1.31 - 1973

1.25 -- 2023

1.24 - 1959

1.19 - 1992

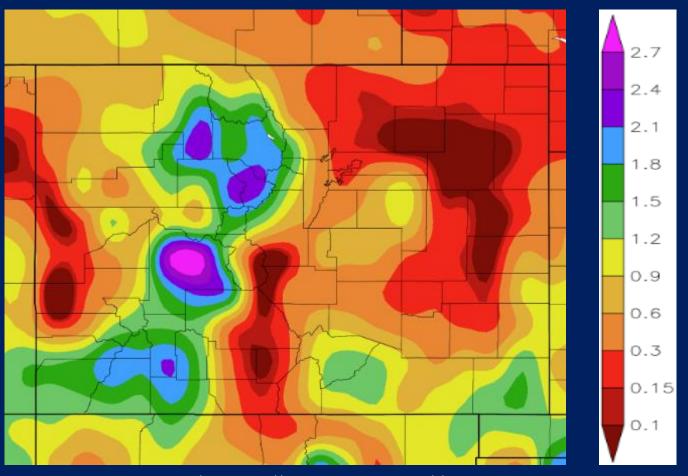
# ELEVEN DRIEST JANUARY PRECIPITATION TOTALS IN DENVER WEATHER HISTORY SINCE 1872: INCHES

0.01 - 1952, 1934, 1933

0.02 - 1931 0.03 - 2003, 1935, 1914

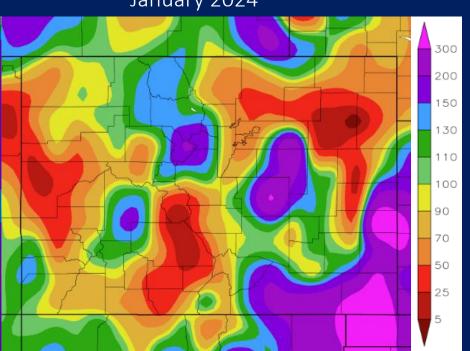
0.04 - 1904 0.05 - 1998, 1901, 1893

### January 2024 Precipitation (Inches)

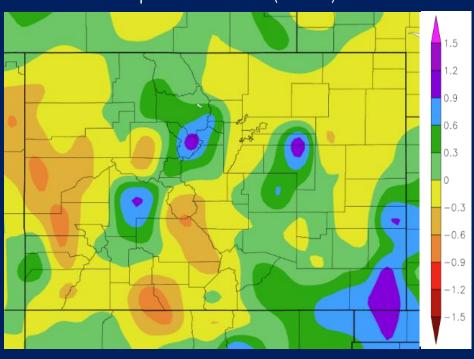


Graphic generated by HPRCC using provisional data

Percent of normal Precipitation (%)
January 2024



# Departure from Normal Precipitation 2024 (Inches)



Graphics generated by HPRCC using provisional data

#### **SNOWFALL:**

3.6 inches of snow was measured in the month of January. This is 2.8 inches below the normal of 6.4 inches. The greatest daily snowfall occurred on the 15<sup>th</sup> when 1.5 inches was measured at Denver International Airport.

# TEN SNOWIEST JANUARYS IN DENVER WEATHER HISTORY SINCE 1872: INCHES

24.3 - 1992

22.2 - 1949

20.5 - 1883

19.2 - 1948

17.4 - 1959

17.2 - 1962

17.0 - 1987, 1891

15.9 - 2007

15.7 - 1951

# ELEVEN LEAST SNOWIEST JANUARYS IN DENVER WEATHER HISTORY SINCE 1872: INCHES

TRACE - 2003, 1934

0.1 - 1931

0.2 – 1933

0.3 - 1952

0.4 - 1914

0.8 – 1935

0.9 - 2020, 1970

1.0 - 1961, 1893

There was 1 day in which thunder was observed at Denver International Airport, and 1 day with dense fog with a visibility at or below 1/4 mile during the month. A peak wind gust of 49 mph from the west was recorded on the 10<sup>th</sup>

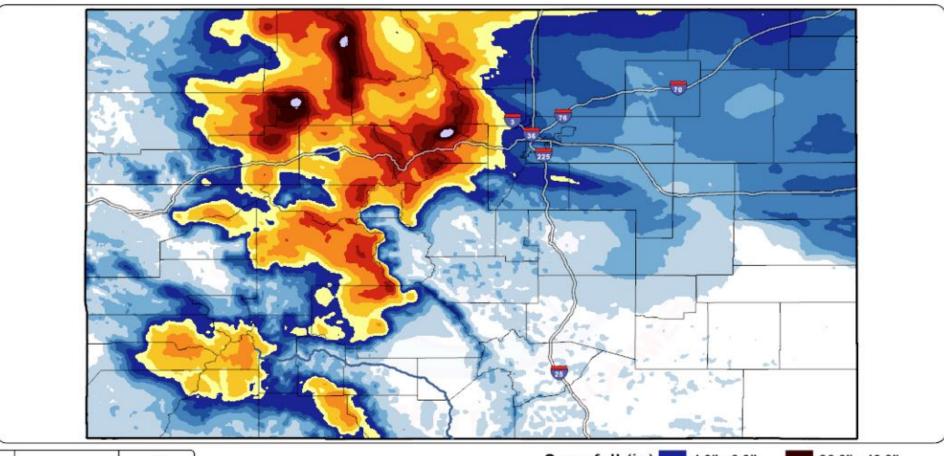


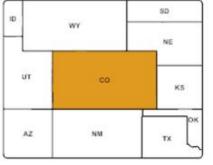
### National Weather Service State of Colorado

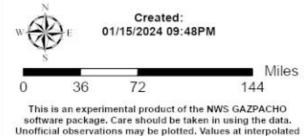
Snowfall Analysis 01/12/2024 05:00AM to 01/15/2024 05:00PM MST



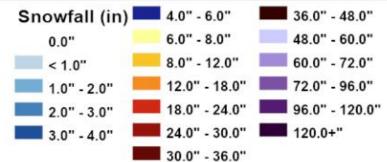
Preliminary Analysis Data Source: NOHRSC and Regional Observations (Values Estimated at Locations)







locations may not represent actual reports at that location.



Peak Wind Gusts January 13th 2024					
		Peak			
Location	County	Wind Gust			
3 ESE Copper Mountain	Summit	119 MPH			
2 E Copper Mountain	Summit	114 MPH			
3 N Berthoud Pass	Grand	112 MPH			
3 SW Breckenridge	Summit	107 MPH			
2 S Winter Park	Grand	101 MPH			
3 SE Tolland	Gilpin	82 MPH			
1 S Copper Mountain	Summit	81 MPH			
8 SW Tabernash	Grand	80 MPH			
1 ENE Berthoud Pass	Grand	78 MPH			
1 NW Loveland Pass	Clear Creek	76 MPH			
3 S Loveland Pass	Summit	75 MPH			
1 N Georgetown	Clear Creek	70 MPH			
Difficult Travel in the Mountai					



### Difficult Travel in the Mountains on Sunday morning January 14th



