

.....March 2021 Climate Summary for the Denver Area.....



Snow Drifts in Broomfield CO.
Photo taken by Russell Danielson



Snow Blankets Boulder, CO.

Photo taken by Russell Danielson

March 2021 was an active month with slightly below normal temperatures and much above normal precipitation and snowfall. The month started out mild and dry as upper level high pressure dominated the Rocky Mountain Region. Denver experienced cooler unsettled weather from the 10th through the 27th as a series of storm systems moved across the region. The most notable storm of the month and past several years occurred from the 13th through the 14th as a huge upper level storm system tracked across the Four Corners Region into the Central Plains States. Bands of snow developed over the northern Foothills and Mountains, on the afternoon of the 13th, and intensified during the evening hours. The heavy snow then gradually shifted south and east on the 14th and covered much of the area. The snow slowly decreased on the evening of the 14th with only some lingering light snow across the plains through the morning of the 15th. North winds increased to 25 to 35 mph, on the 14th, with gusts up to 50 mph. This produced blizzard conditions along the I-25 Corridor from Palmer Divide north to the Wyoming border. Denver International Airport runways were closed, from noon on the 14th until 2 pm on the 15th, with over 2000 flights canceled. All major Interstates were closed except for those areas around Denver and Fort Collins. Snowfall amounts along the I-25 Corridor ranged from 18" to 30" with 20" to 40" in the Foothills and Mountains. Local amounts up to 4 feet were reported in the northern Foothills and Mountains of Larimer county. The official snow for Denver was 27.1" which was the 4th largest storm on record since 1882. Dry weather and above normal temperature returned to North Central and Northeastern Colorado toward the end of the month with cooler unsettled weather the last two days of the month.

TEMPERATURES:

The average temperature at Denver International Airport for the month of March was 39.4 degrees F which is 1.0 degrees below the normal of 40.4 degrees. The warmest Temperature of 75 degrees occurred on the 29th with the coldest temperature of 16 degrees on the morning of the 15th.

ELEVEN WARMEST MARCH AVERAGE TEMPERATURES IN DENVER WEATHER HISTORY SINCE 1872: DEGREES F

50.4 – 1910
49.2 - 2012
47.9 – 2017
47.2 – 1907
47.1 – 1986
47.0 - 1918
46.5 – 1879
46.4 - 2004, 1946
46.0 - 2007, 1887

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

26.4 – 1912
28.0 – 1924
29.0 – 1965
29.7 – 1906
32.1 – 1969
32.2 – 1891
32.8 – 1958
33.0 – 1964
33.1 – 1899
33.2 - 1917

PRECIPITATION:

Denver received 3.80 inches of precipitation during the month, making it the 2nd wettest March in Denver Weather History. This is 2.88 inches above the average of 0.92 inches. The highest daily precipitation amount of 2.28 inches was measured on the 14th. This is the second greatest daily precipitation amount ever recorded in the month of March in Denver. The greatest daily amount of 2.68 inches occurred on March 5th of 1983.

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

4.56 – 1983
3.80 - 2021
3.50 – 1992
3.10 – 1990, 1891
3.07 – 1905
3.05 – 2003
3.03 – 1909
2.85 – 1959
2.75 - 1944

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

0.03 – 2012
0.11 – 1908
0.14 – 2008, 2004
0.18 - 1982
0.19 - 1999
0.20 – 1882
0.21 – 1883, 1880
0.22 – 1945, 1873

March Precipitation & Snowfall Records Denver Area

Precip (since 1872)	Year	Snow (since 1882)	Year
4.56"	1983	35.2"	2003
3.80"	2021	34.0"	2021
3.50"	1992	32.5"	1944
3.10"	1990	31.3"	1891
3.10"	1891	30.5"	1983

* Denver's all time snowiest month was December 1913 with 57.4"

SNOWFALL:

34.0 inches of snow fell during March 2021 which is 23.3 inches above the average of 10.7 inches. This makes March of 2021 the 2nd snowiest March and the 4th snowiest month in Denver Weather History. The majority of March's snowfall (27.1 inches) fell from the 13th through the 14th as a potent winter storm moved across the region. This makes the March 13th-14th Winter Storm the 4th largest snowstorm in Denver Weather History.

TEN SNOWIEST MARCH'S IN DENVER WEATHER HISTORY SINCE 1872: INCHES

35.2 – 2003
34.0 – 2021
32.5 – 1944
31.3 – 1891
30.5 - 1983
29.2 - 1961
26.8 – 1959
25.7 – 1923
25.2 – 1952
24.8 - 1929

ELEVEN LEAST SNOWIEST MARCH'S IN DENVER WEATHER HISTORY SINCE 1872: INCHES

TRACE – 2017, 2012, 1995
0.3 – 1883
0.4 – 1911
0.5 – 1885
1.1 – 1887
1.8 – 2004
2.0 – 1882
2.1 – 1982, 1908

No thunder was observed at Denver International Airport in March 2021. There were 14 days in which fog was detected and with 5 of those days experiencing dense fog with visibility restricted to below ¼ mile. A peak wind of 56 mph from the west-northwest was recorded on the 7th.

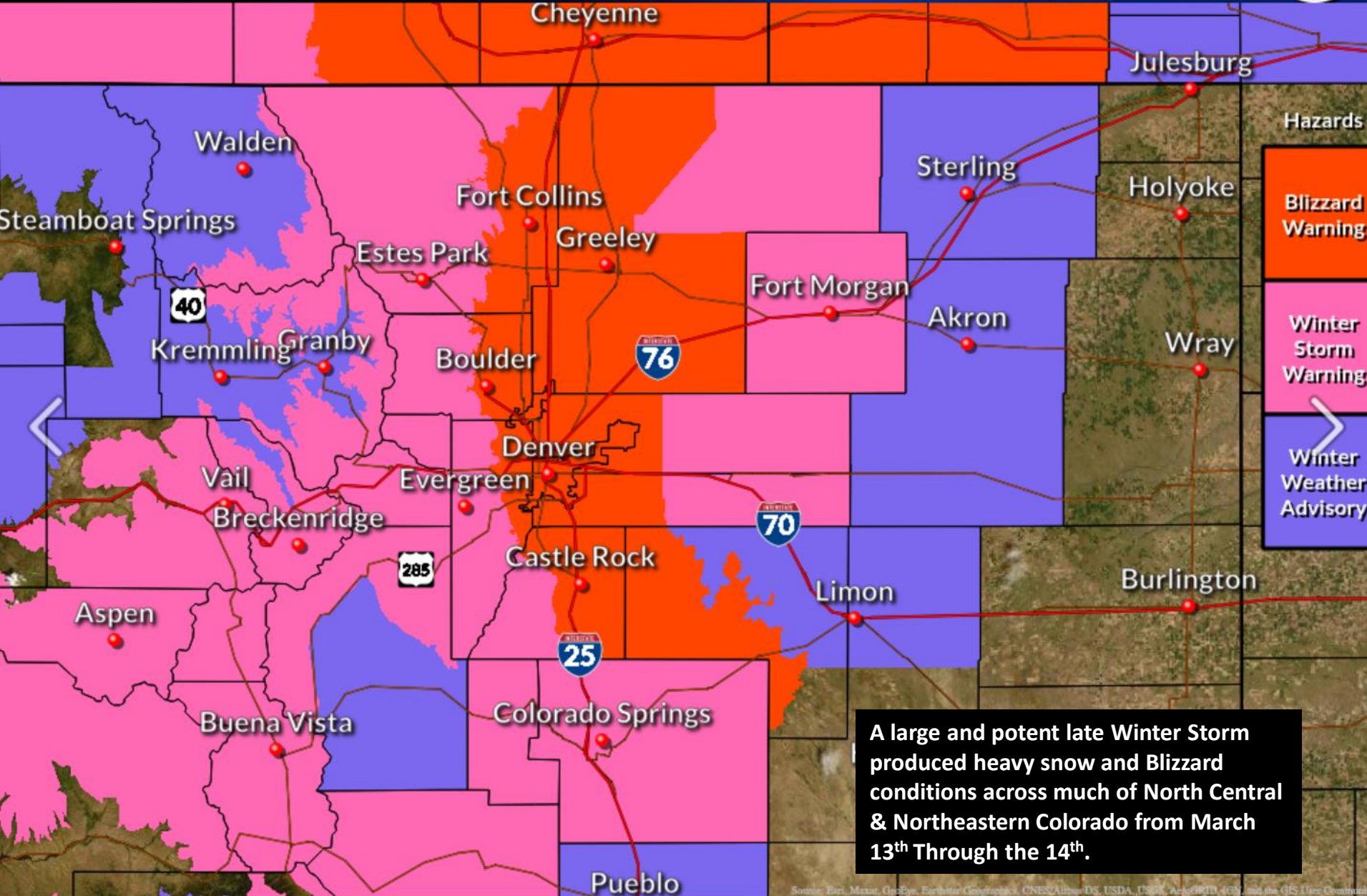
Blizzard Warning for I-25 Corridor

Weather Forecast Office
Denver/Boulder



Current Winter Weather Headlines

Issued Mar 14, 2021 12:20 PM MDT

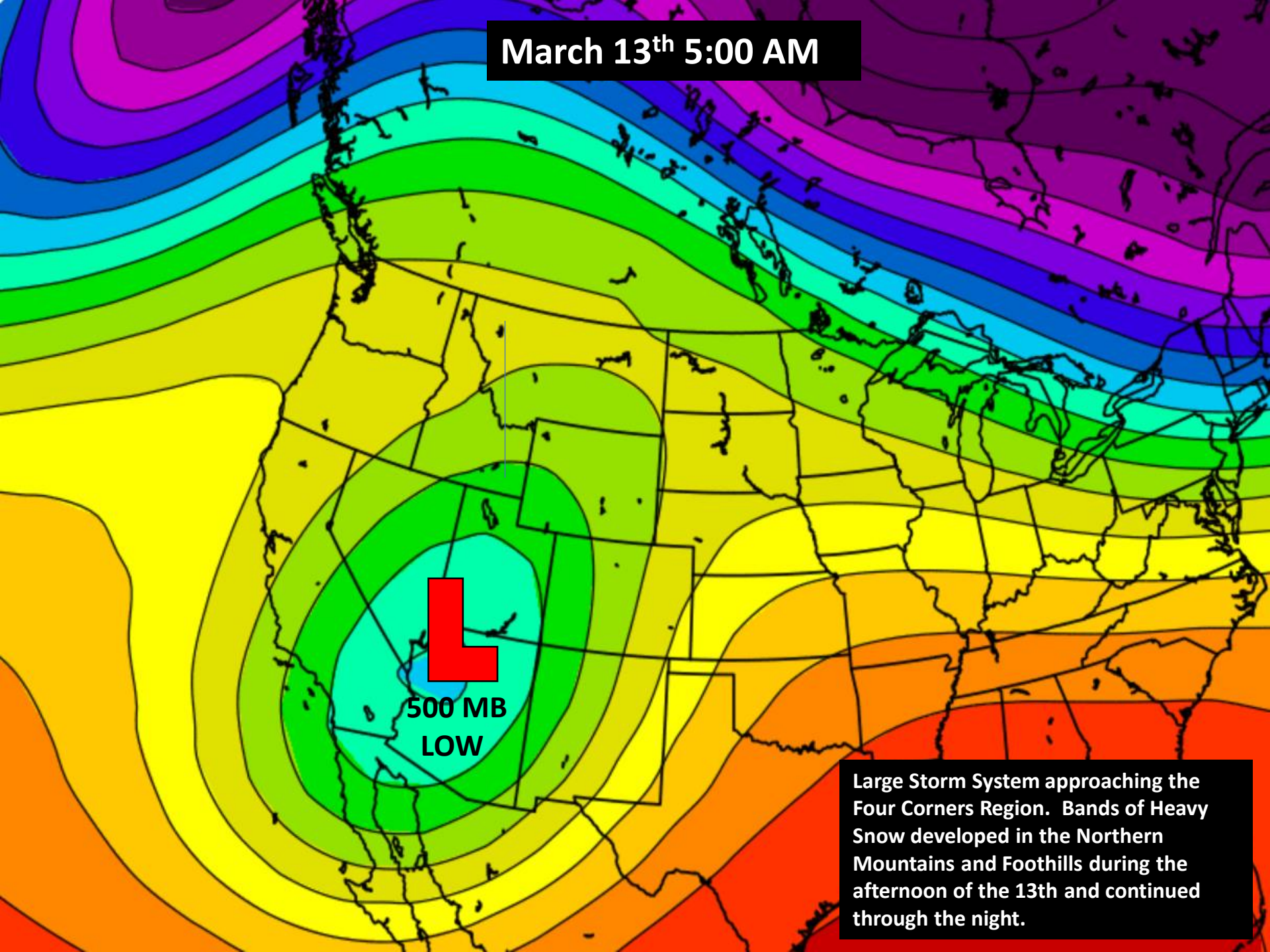


Hazards

- Blizzard Warning
- Winter Storm Warning
- Winter Weather Advisory

A large and potent late Winter Storm produced heavy snow and Blizzard conditions across much of North Central & Northeastern Colorado from March 13th Through the 14th.

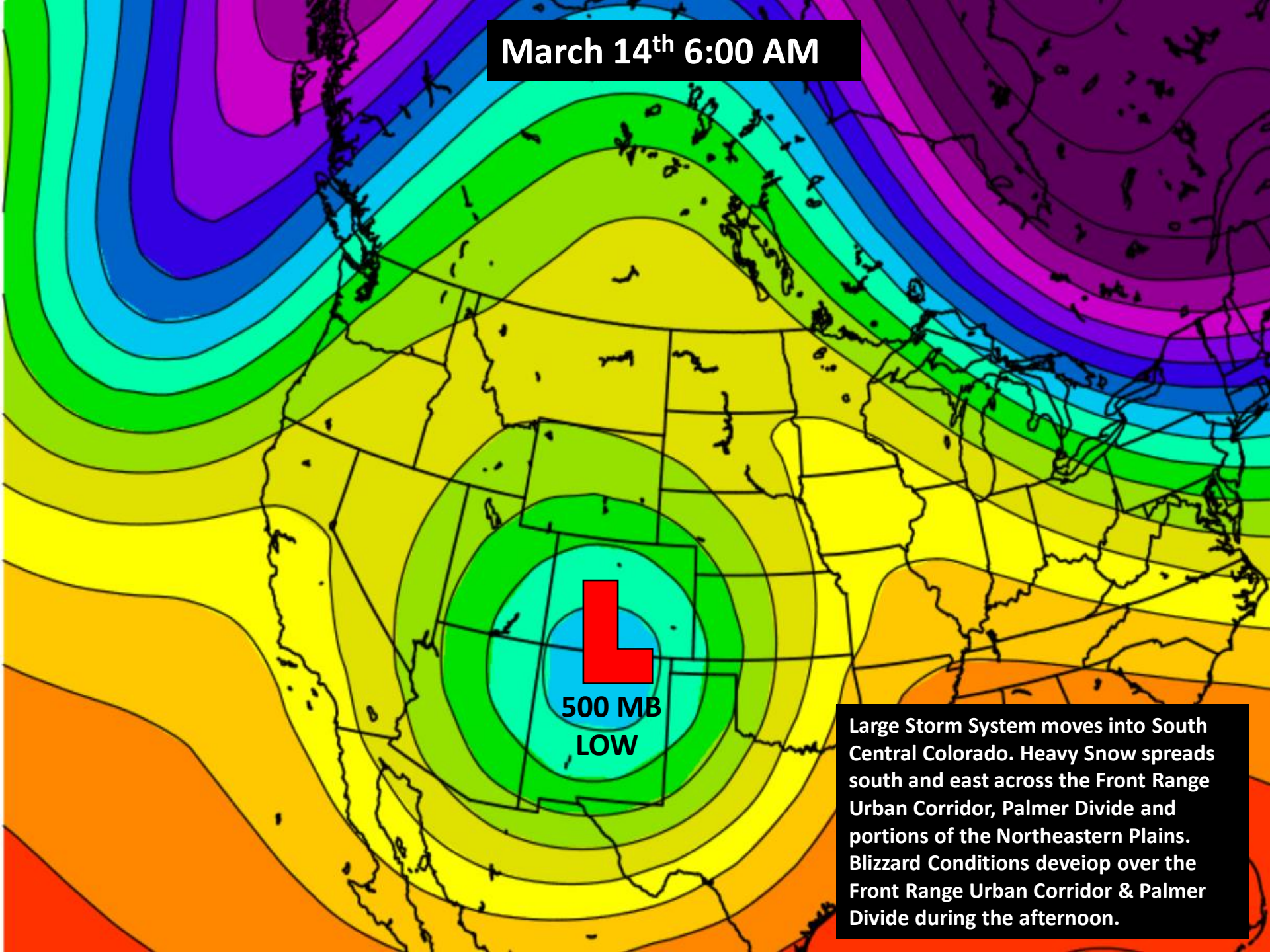
March 13th 5:00 AM



L
500 MB
LOW

Large Storm System approaching the Four Corners Region. Bands of Heavy Snow developed in the Northern Mountains and Foothills during the afternoon of the 13th and continued through the night.

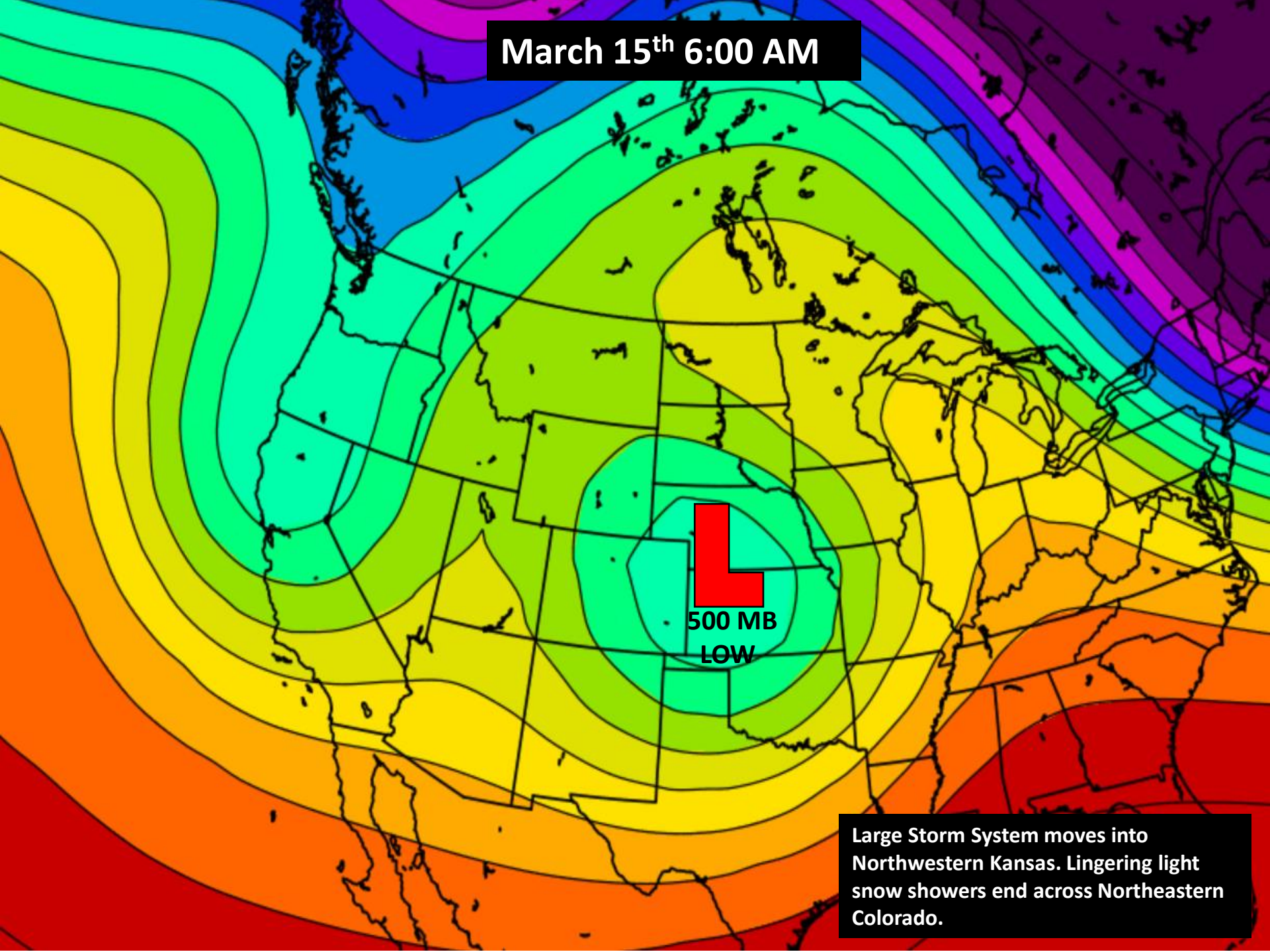
March 14th 6:00 AM



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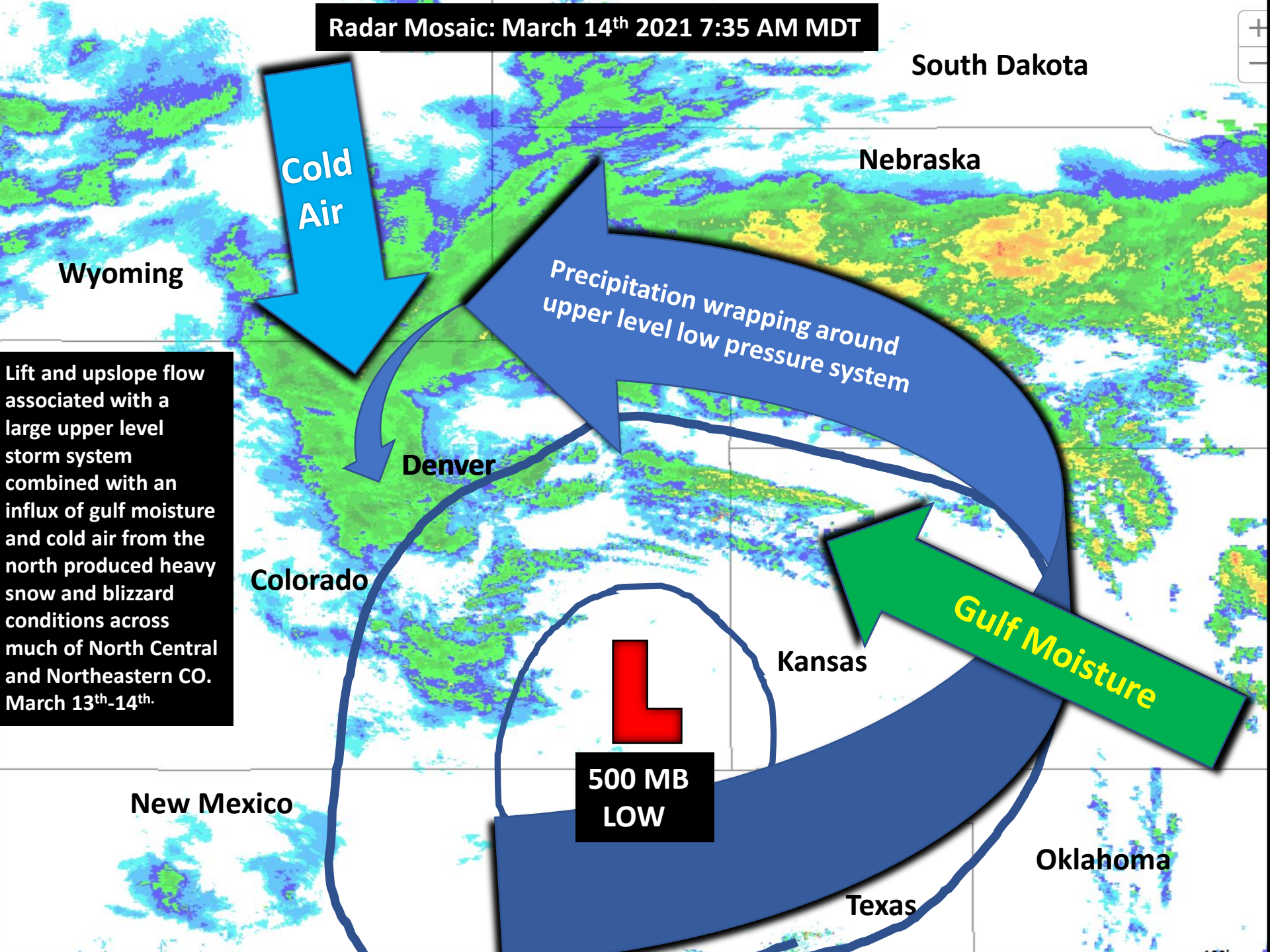
Large Storm System moves into South Central Colorado. Heavy Snow spreads south and east across the Front Range Urban Corridor, Palmer Divide and portions of the Northeastern Plains. Blizzard Conditions develop over the Front Range Urban Corridor & Palmer Divide during the afternoon.

March 15th 6:00 AM



Large Storm System moves into Northwestern Kansas. Lingering light snow showers end across Northeastern Colorado.

Radar Mosaic: March 14th 2021 7:35 AM MDT



South Dakota

Nebraska

Wyoming

Cold Air

Precipitation wrapping around upper level low pressure system

Lift and upslope flow associated with a large upper level storm system combined with an influx of gulf moisture and cold air from the north produced heavy snow and blizzard conditions across much of North Central and Northeastern CO. March 13th-14th.

Denver

Colorado

Gulf Moisture

Kansas

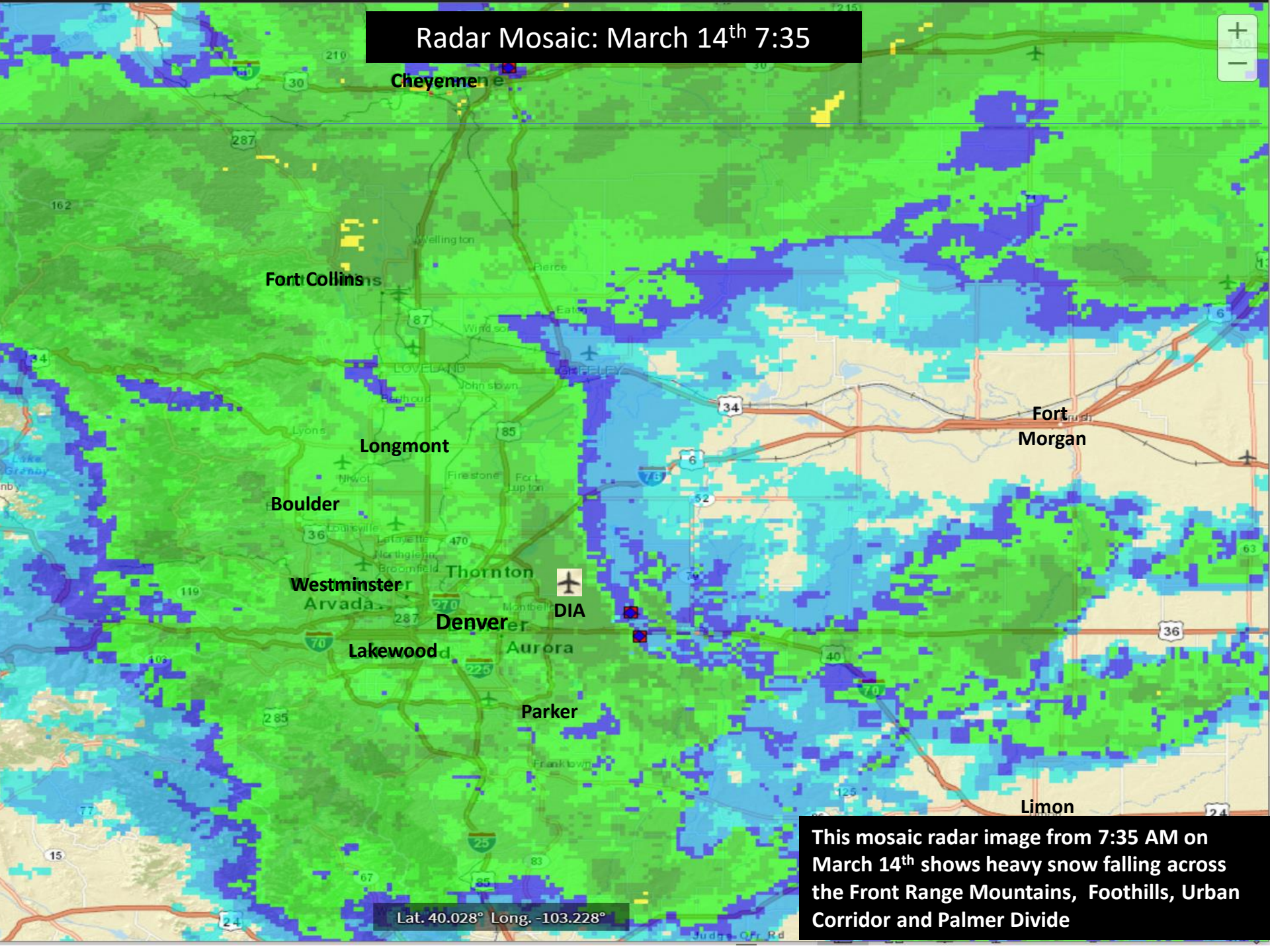
500 MB LOW

New Mexico

Oklahoma

Texas

Radar Mosaic: March 14th 7:35



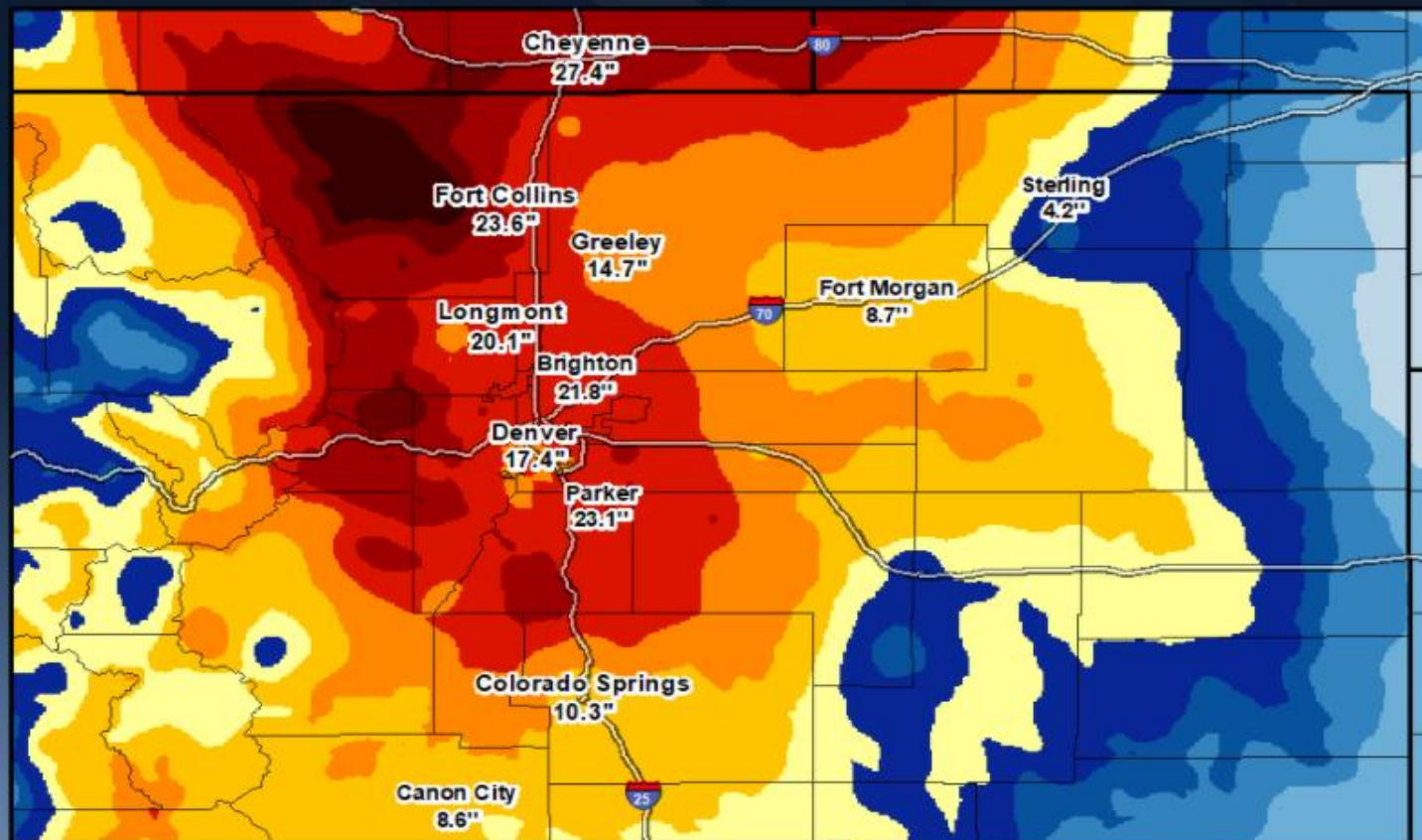
Lat. 40.028° Long. -103.228°

This mosaic radar image from 7:35 AM on March 14th shows heavy snow falling across the Front Range Mountains, Foothills, Urban Corridor and Palmer Divide

National Weather Service

Snowfall Analysis 03/12/2021 05:00AM MDT to 03/15/2021 06:00PM MDT

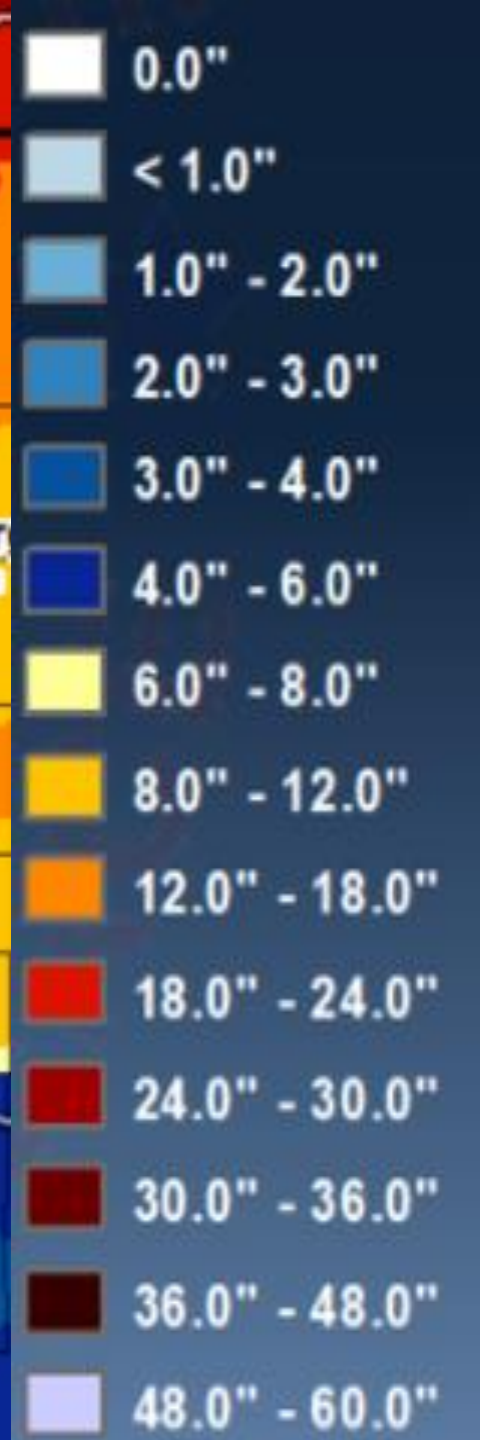
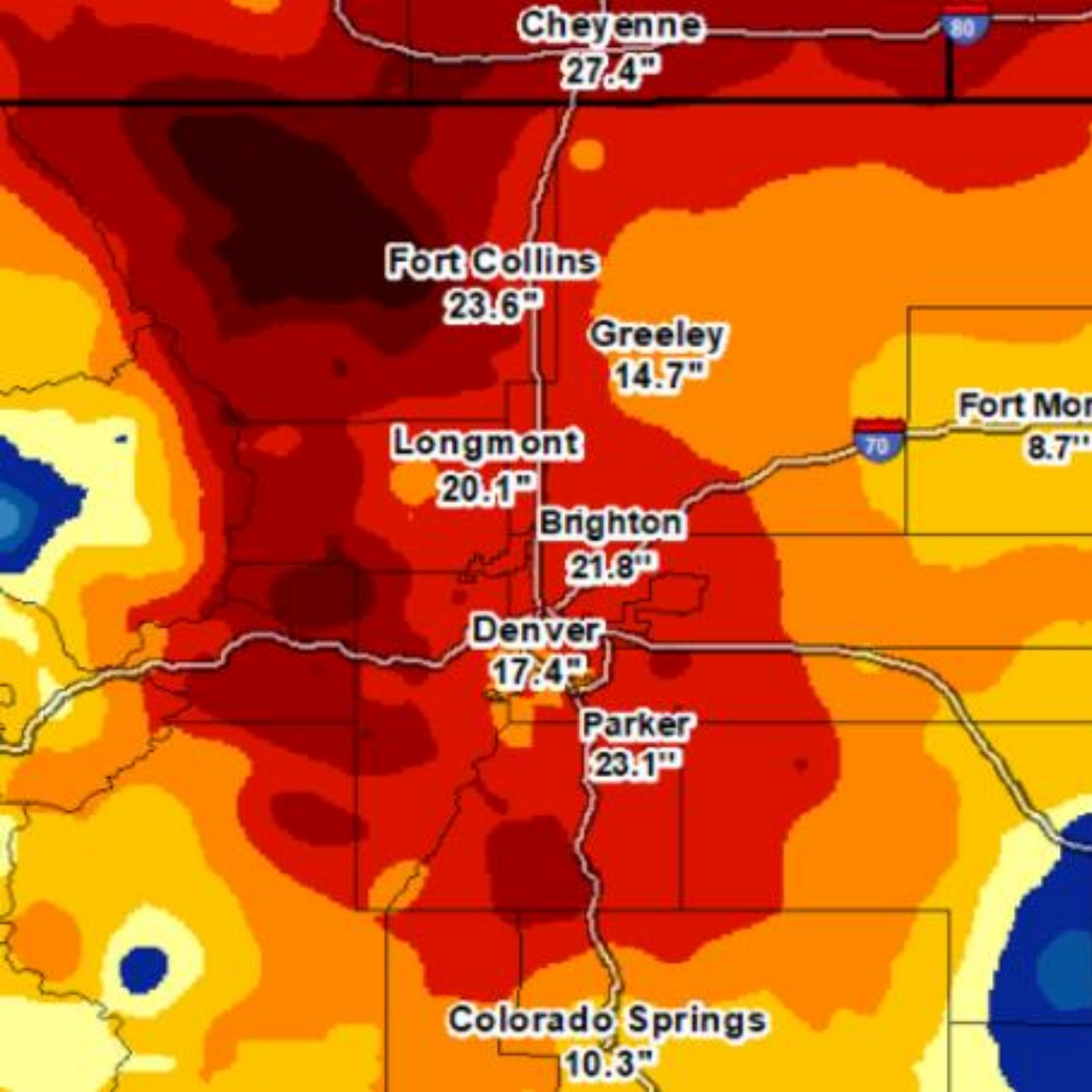
Analysis Data Source: NOHRSC and Regional Observations (Values Estimated at Locations)



Snowfall Analysis 0" - 120"



Created:
03/19/2021 07:47AM



25 Biggest Denver Snowstorms (1881–Present)

Snowfall (inches)	Dates
45.7	Dec 1-5, 1913
31.8	Mar 17-19, 2003
30.4	Nov 2-4, 1946
27.1	Mar 13-14, 2021
23.8	Dec 24th 1982
23.0	Apr 23rd, 1885
22.7	Oct 20-23, 1906
21.9	Oct 24-25, 1997
21.5	Nov 26-27, 1983
20.7	Dec 20-21, 2006
19.3	Jan 29-31, 1883
19.0	Apr 24-25, 1935
18.7	Mar 5-6, 1983
18.5	Mar 20-22, 1944
18.2	Apr 17-19, 1920
18.0	Apr 19-20, 1907
18.0	Mar 31-Apr 1, 1891
17.7	Nov 19-21, 1979
17.3	Apr 2 1957
16.9	Mar 20-21, 1952
16.8	Apr 20-22, 1933
16.5	Sep 26-28, 1936
16.0	Oct 3-5, 1969
15.9	Feb 2-4, 2012
15.8	Apr 26-27, 1972

