

Storm Prediction Center



SPC NCEP All NOAA Go

Local forecast by "City, St" or "ZIP" Go City, St

Site Map

Mesoscale

#854

Valid Until:

05/20/24 5:15 PM MDT

Concerning:

Severe Potential

Watch Possible

Fields Plotted

Latest Surface Observations

Latest Radar VAD Winds

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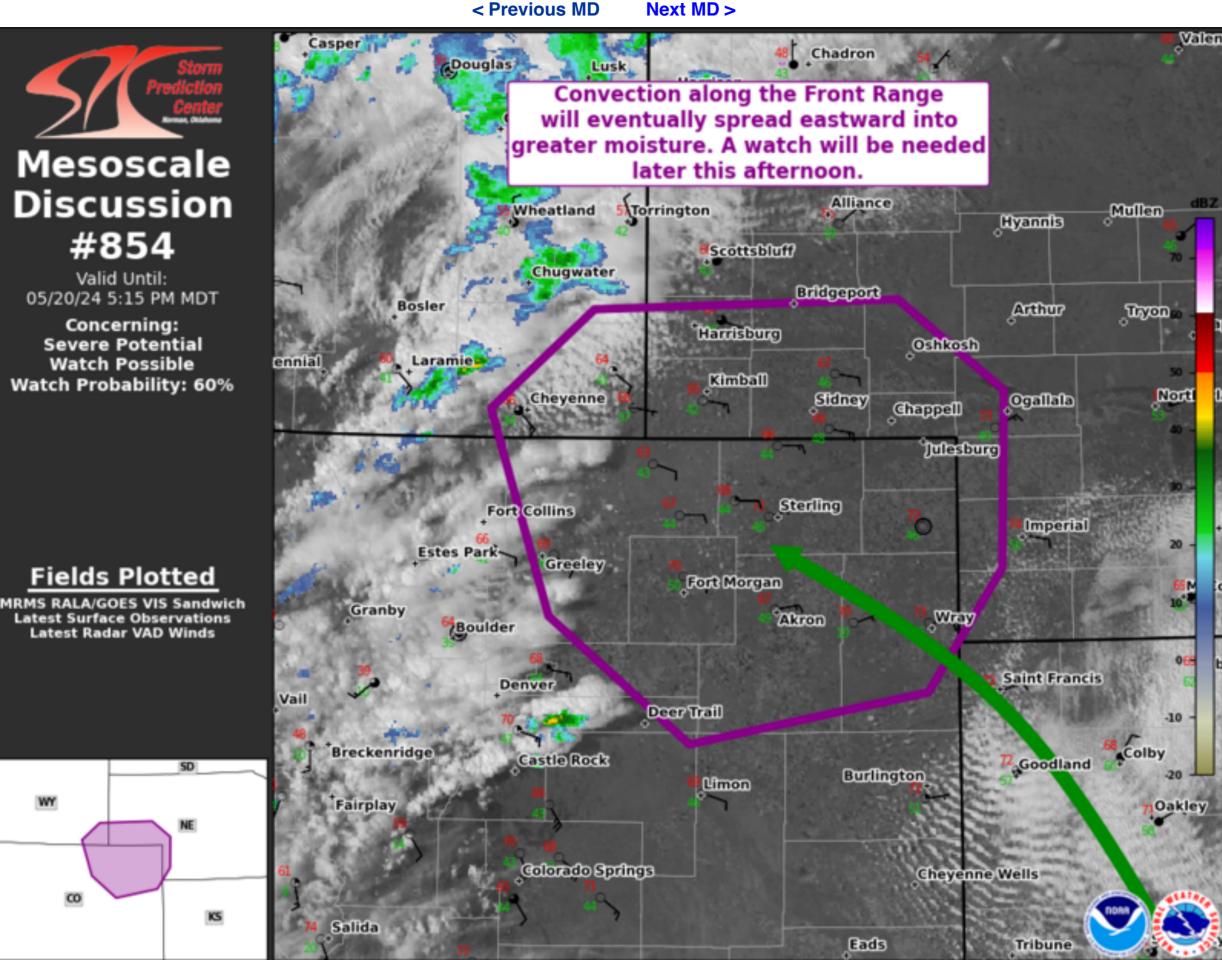


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Mesoscale Discussion 854

News



Organization

Mesoscale Discussion 0854 NWS Storm Prediction Center Norman OK 0347 PM CDT Mon May 20 2024

Areas affected...Northeast Colorado...southeast Wyoming...southwest Nebraska

Concerning...Severe potential...Watch possible

Valid 202047Z - 202315Z

Probability of Watch Issuance...60 percent

SUMMARY...Initially high-based convection within the Front Range into southeast Wyoming will eventually spread east and intensify. Primary hazards will be severe wind gusts and large/very-large hail. A mesoscale corridor with greater tornado risk will in northeast Colorado and vicinity within the moisture axis. A watch will eventually be needed this afternoon.

DISCUSSION...Convection continues to develop along the Front Range as upslope flow continues this afternoon. A weak thunderstorm has formed recently south of Denver in drier air. The exact timing of storm greater initiation/intensification is a bit unclear, but the approach of the mid-level ascent from the Four Corners region should foster additional development within the next 2-3 hours or so. Further, the lee trough to the east should also deepen and pull richer surface moisture (upper 50s to low 60s F, as observed in upstream in Kansas) into northeast Colorado and southwest Nebraska. The current thinking is that storms will initiate within the Front Range as well as southeast Wyoming. Storms will initially be high-based and primarily capable of severe wind gusts and large hail. Storm intensification can be expected as they encounter richer moisture to the east. A greater tornado threat will exist with supercells moving within the moisture axis in northeast Colorado and nearby vicinity. Here, backed surface winds will combine with an eventual modest increase in easterly 850 mb winds to increase low-level hodograph curvature. Very-large hail will also become more probable as supercell storms intensify farther east.

- ..Wendt/Hart.. 05/20/2024
- ...Please see www.spc.noaa.gov for graphic product...

ATTN...WFO...LBF...GLD...BOU...CYS...

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