



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

City, St

Mesoscale Discussion 1207

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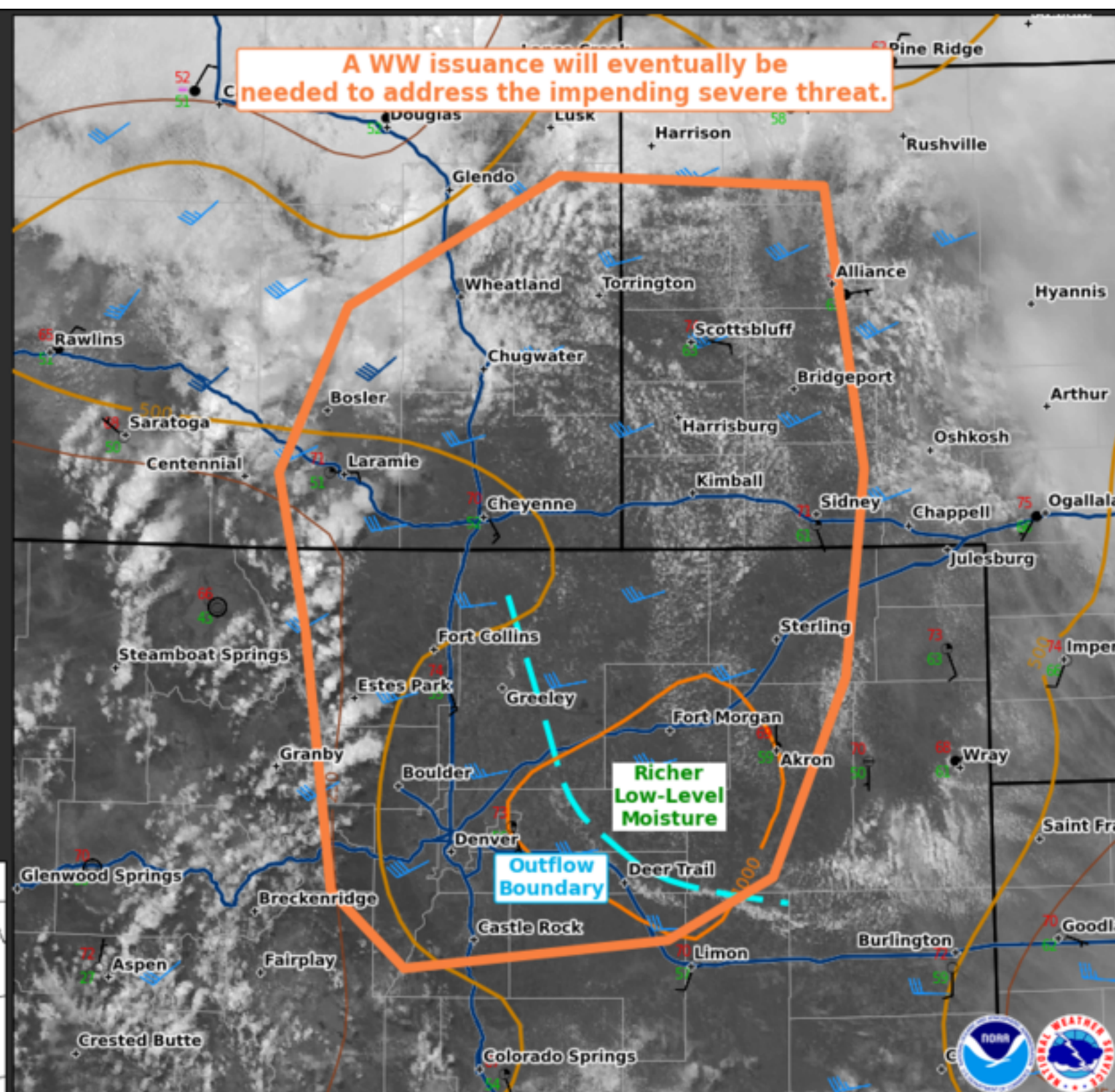
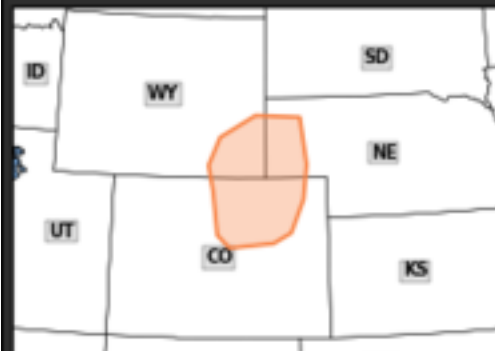
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Mesoscale Discussion #1207
Valid Until: 06/22/23 1:15 PM MDT
Concerning: Severe Potential Watch Likely
Watch Probability: 95%

Fields Plotted
1701Z Visible Satellite
Latest Surface Observations
17Z MLCAPE (J/kg)
and Effective Shear (kts)
Interstate Highways



Mesoscale Discussion 1207
NWS Storm Prediction Center Norman OK
1208 PM CDT Thu Jun 22 2023

Areas affected...portions of southeast Wyoming into central and northeast Colorado and far western Nebraska

Concerning...Severe potential...Watch likely

Valid 221708Z - 221915Z

Probability of Watch Issuance...95 percent

SUMMARY...The severe threat is increasing across portions of the central High Plains. Large hail will be the main concern, with 2+ inch diameter hailstones also likely. A couple of tornadoes are also possible. A WW issuance will be needed soon to address the impending severe threat.

DISCUSSION...Clear skies have allowed for surface temperatures to warm into the 70s F amid 50s F dewpoints (with 60+ F dewpoints noted farther east in northeast CO). As such, the boundary-layer is undergoing deepening and destabilization, with SBCAPE already approaching 2000 J/kg in spots and visible satellite showing deepening convection along the higher terrain of the Rockies. With continued destabilization, SBCAPE may approach 3000 J/kg given 8 C/km mid-level lapse rates. While tropospheric flow is modest in magnitude, considerable veering with height from the surface to 500 mb is contributing to modestly curved/elongated hodographs and over 40 kts of effective bulk shear. Given the strong buoyancy and initial discrete modes of convection, supercell development is expected. Large hail will be the main threats with these storms, and 2+ inch diameter stones appear likely with the strongest, sustained supercells. Furthermore, modest low-level hodograph curvature, the generation of locally higher amounts of near-surface vertical vorticity and 0-3 km CAPE over the DCVZ, and the presence of an outflow boundary north of LIC, may also promote the development of a couple of tornadoes.

Given the overall expected coverage and magnitude of the impending severe threat, a WW issuance will be needed.

..Squitieri/Hart.. 06/22/2023

...Please see www.spc.noaa.gov for graphic product...

ATTN...WFO...BOU...CYS...

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