

## **Storm Prediction Center**



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

City, St

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**NCEP Quarterly Newsletter** 

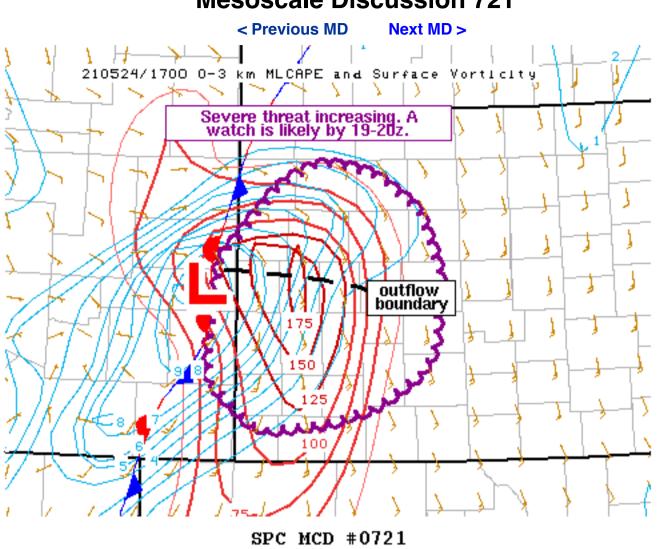
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News



Mesoscale Discussion 0721 NWS Storm Prediction Center Norman OK 0100 PM CDT Mon May 24 2021

Areas affected...portions of western KS

Concerning...Severe potential...Watch likely

Valid 241800Z - 242000Z

Probability of Watch Issuance...95 percent

SUMMARY...Thunderstorms are expected to develop in the next 1-2 hours. A watch will likely be needed by 19-20z. Some tornado potential along with damaging gusts and large hail is expected.

DISCUSSION...A broad cumulus field near the KS/CO border into much of western KS has begun to deepen in the vicinity of the surface low and near a remnant outflow boundary extending west to east across west-central KS. Latest visible satellite imagery has shows at least one failed attempt at convective initiation, and surface observations in comparison to regional forecast soundings indicate convective temperatures have been reached near and south of the outflow boundary/surface low. Moderate instability is already evident across the region, aided by low to mid 60s F surface dewpoints beneath steep midlevel lapse rates. Given little to no inhibition, thunderstorms are likely to develop in the next 1-2 hours.

Sufficient effective shear will support organized storms capable of large hail and damaging gusts. Some increased tornado potential is possible near the surface low and outflow boundary, where low level vorticity is maximized and surface dewpoints have climbed into the 64-65 F range. Steepening low level lapse rates and increasing moisture is aiding in quite a bit of low level instability, with 0-3km MLCAPE greater than 125 J/kg present. This may increase tornado potential in a narrow corridor near the surface low and along the outflow boundary. With time, storms may grow upscale into a forward propagating bow moving eastward across western KS toward evening.

..Leitman/Guyer.. 05/24/2021

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

ATTN...WFO...DDC...GLD...PUB...

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