Storm Prediction Center

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Organization



Mesoscale Discussion 0610 NWS Storm Prediction Center Norman OK 0354 PM CDT Fri May 14 2021

Areas affected...western kansas and far southwest Nebraska

Concerning...Severe potential...Watch possible

Valid 142054Z - 142230Z

Probability of Watch Issuance...60 percent

SUMMARY...A gradual increase in the threat of damaging winds and severe hail is expected late this afternoon and into this evening across far eastern Colorado and western Kansas. A weather watch may be needed.

DISCUSSION...High-based thunderstorms ongoing east of the Denver Metro are expected to continue eastward towards extreme eastern Colorado and western Kansas over the next few hours. Additional storm development in northeastern Colorado and southern Nebraska appears likely, as lift from weak upslope flow and an upstream shortwave trough begin to move across the High Plains. Surface observations show increasing moisture with eastward extent across western Kansas, where mid to upper 50s F dewpoints reside. Continued low-level moisture advection from southeasterly winds will increase surface dewpoints to near 60 F this evening, contributing to 1000-1500 J/kg of MLCAPE. Effective shear of 30-40 kts should be sufficient to organize updrafts into line segments and clusters, with eventual upscale growth into an MCS expected. Damaging wind gusts and severe hail appear to be the primary threats given steep lapse-rates through the low and mid levels. A weather watch may be needed as early as 22-23z, though some uncertainty in convective evolution remains given the slow organization of storms thus far.

..Lyons/Kerr.. 05/14/2021

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

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

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