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News

Mesoscale Discussion 0408 NWS Storm Prediction Center Norman OK 0327 PM CDT Fri Apr 23 2021

Areas affected...parts of western north-central TX and far southwestern  $\ensuremath{\mathsf{OK}}$ 

Concerning...Tornado Watch 100...

Valid 232027Z - 232230Z

The severe weather threat for Tornado Watch 100 continues.

SUMMARY...A mesoscale area most favorable for a tornadic supercell will be near the adjacent portions of southwest OK/northwest TX during the 5-7 pm period. Large to giant hail is possible.

DISCUSSION...Latest subjective surface mesoanalysis places a moist axis east of the dryline and extending from near Seymour and protruding north-northwest to near Childress, with lower 60s degree F dewpoints near and south of the OK border as of 325 pm. RAP forecast soundings show continued differential thermal advection occurring during the next few hours with 500 mb temperatures cooling from -16 deg C to -18 across this region. Additional heating and low-level moistening will contribute to a very unstable airmass within this confined mesoscale corridor (2500-3000 J/kg MLCAPE). Some low-level backing of surface winds is expected which will contribute to enlarging the hodograph during the 5-7 pm period. If an established quasi-discrete supercell manages to develop (increasingly probable at this point), a tornado risk may accompany it for an hour or so. Large to giant hail (1 to 3.5 inches in diameter) may also occur with the discrete surface-based updrafts. Further storm development and consolidation of cold pools into a cluster by early evening will likely diminish the supercell-tornado risk towards sunset.

..Smith.. 04/23/2021

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

ATTN...WFO...OUN...LUB...AMA...

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