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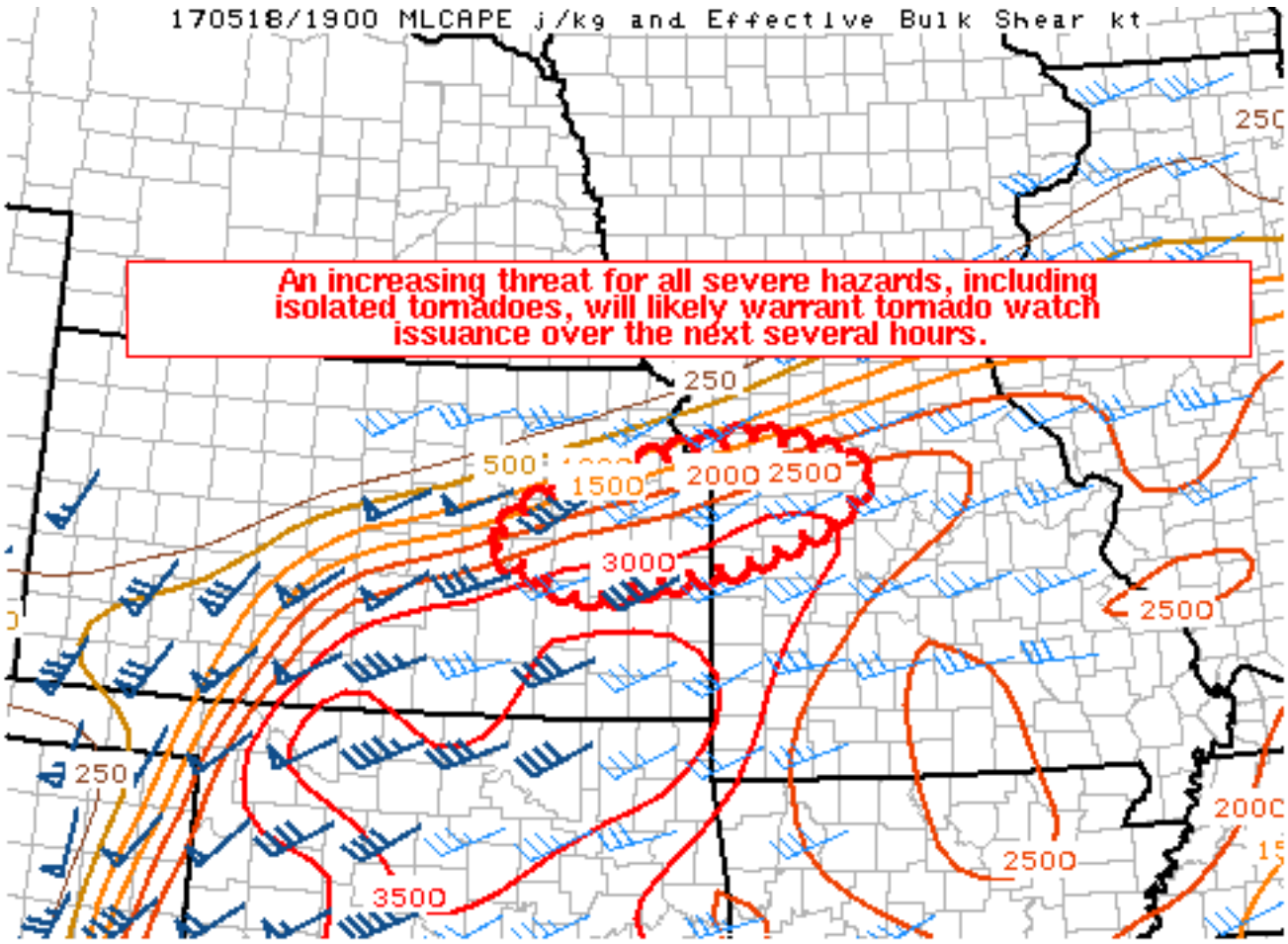

SPC MCD #0759

Mesoscale Discussion 0759
NWS Storm Prediction Center Norman OK
0216 PM CDT Thu May 18 2017

Areas affected...Portions of eastern KS and western MO

Concerning...Severe potential...Tornado Watch likely

Valid 181916Z - 182115Z

Probability of Watch Issuance...80 percent

SUMMARY...An increasing threat for all severe hazards, including isolated tornadoes, will likely warrant tornado watch issuance over the next several hours.

DISCUSSION...Satellite trends show building cumulus along a warm front extending across KS into western MO as of 1915Z. The airmass along and south of the front is strongly unstable, with MLCAPE in the 2000-3500 J/kg range. As a 50+ kt southwesterly mid-level jet approaches this region, large-scale forcing for ascent will

gradually increase. Low-level convergence along the front in tandem with the increasing large-scale ascent should be sufficient for convective initiation over the next several hours. Recent short-term model guidance is generally consistent in developing convection along the warm front by 21Z. Strengthening mid-level winds will support effective bulk shear values of 40-50 kt, and supercells structures appear likely.

Although low-level flow is not forecast to be quite as strong as locations farther west (mainly western/central KS), backed easterly/northeasterly winds in the 0-1 km layer along the front will enhance effective SRH through the afternoon and early evening, and isolated tornadoes will be possible. Low-level winds are forecast to increase across this region by this evening as a low-level jet strengthens across the central/southern Plains. If initially discrete supercells remain the dominant storm mode into this evening, then the tornado threat would increase in the 00-03Z time frame. In addition to the isolated tornado threat, the very favorable thermodynamic environment and steep mid-level lapse rates present across this region will likely support large to very large hail with any supercell. Isolated damaging winds may also occur.

..Gleason/Goss.. 05/18/2017

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

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