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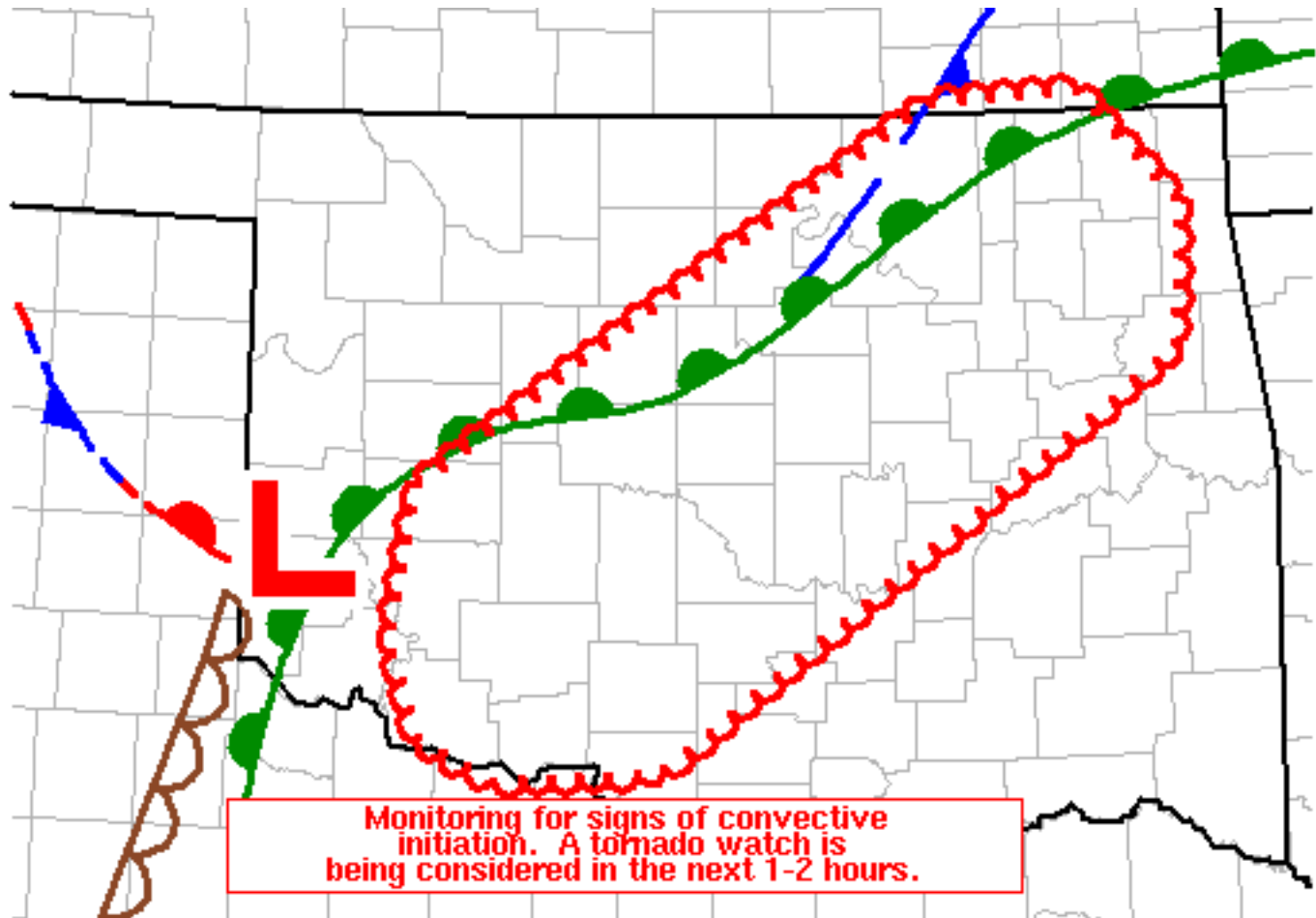
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## Mesoscale Discussion 733

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**SPC MCD #0733**

Mesoscale Discussion 0733

NWS Storm Prediction Center Norman OK

0212 PM CDT Wed May 22 2019

Areas affected...southwest into central and northeast OK

Concerning...Severe potential...Watch possible

Valid 221912Z - 222045Z

Probability of Watch Issuance...60 percent

SUMMARY...Monitoring for signs of convective initiation and sustained thunderstorm development. A tornado watch is being considered in the next 1-2 hours.

DISCUSSION...Latest surface analysis indicates a triple point over southwest OK with a dryline extending southward into west TX. A maritime warm front has progressed northward across the I-44 corridor in OK and a decaying cold front is located from north-central OK northeastward through southeast KS into



west-central MO. Surface observations show temperatures rising into the lower 80s over much of OK south of the warm front with dewpoints in the lower 70s. The warmest conditions are located over southwest OK where convective temperatures are close to being breached. A 17z Norman, OK special sounding showed moderate buoyancy but the boundary layer had not destabilized appreciably. Since then, a very unstable airmass has developed over central OK with 3500 J/kg MLCAPE estimated by objective analysis.

KTLX VAD data over central OK indicates a supercell wind profile is in place with 50kt effective shear and around 100 m<sup>2</sup>/s<sup>2</sup> 0-1km SRH. Model guidance indicates the LLJ will gradually strengthen this afternoon into the early evening. Forecast hodographs become most favorable for low-level mesocyclones/tornadoes during the 5pm-8pm period with a classic sickle-shape structure and 0-1km SRH increasing to 200 m<sup>2</sup>/s<sup>2</sup>.

Models are suggestive of a more isolated coverage from near OKC and south/southwest with widely scattered storms possible farther northeast into northeast OK. Although the severe risk is conditional, high-end severe weather would likely accompany any intense supercell.

..Smith/Hart.. 05/22/2019

...Please see [www.spc.noaa.gov](http://www.spc.noaa.gov) for graphic product...

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