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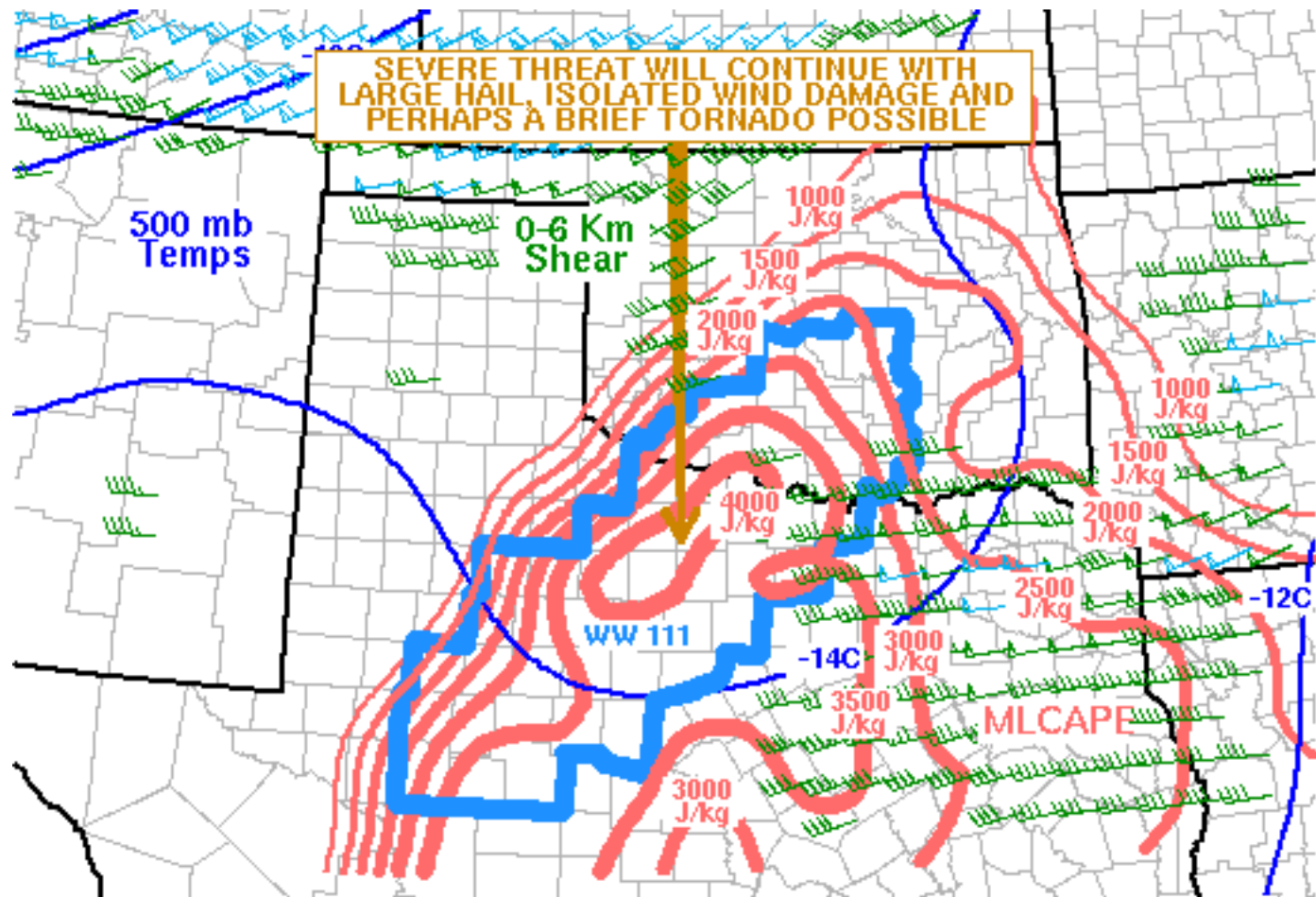


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## Mesoscale Discussion 494

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SPC MCD #0494

Mesoscale Discussion 0494

NWS Storm Prediction Center Norman OK

0325 PM CDT Wed May 01 2019

Areas affected...West-central and Northwest Texas...South-central Oklahoma

Concerning...Severe Thunderstorm Watch [117](#)...

Valid 012025Z - 012230Z

The severe weather threat for Severe Thunderstorm Watch 117 continues.

SUMMARY...A severe threat is likely to continue across northwest Texas and south-central Oklahoma over the next few hours. Large hail, isolated wind damage and a brief tornado will be possible.

DISCUSSION...Latest surface analysis shows a washed out frontal boundary from north-central Oklahoma extending southwestward into southwestern Oklahoma. An outflow boundary, from last night's

storms, intersects the front in southwest Oklahoma. The storms in south-central Oklahoma are located on the cool side of the outflow boundary where surface temperatures are generally around 70 F. In spite of this, moderate instability is in place across south-central Oklahoma where the RAP is estimating MLCAPE values from 2000 to 2500 J/kg. This combined with moderate deep-layer shear evident on the Oklahoma City WSR-88D VWP and 700-500 mb lapse rates near 8.0 C/km, will be favorable for supercells with large hail. Supercells may also produce isolated wind damage and perhaps a brief tornado.

Further southwest into northwest Texas, a cluster of strong to severe thunderstorms is ongoing just to the southeast of the front in a very moist and unstable airmass. Surface temperatures are in the mid 80s F and the RAP is estimating MLCAPE to be in the 4000 to 4500 J/kg range. This thermodynamic environment will be very favorable for supercells with large hail. Hailstones of greater than 2 inches will be possible with the strongest of updrafts. Isolated wind damage and a brief tornado will also be possible.

..Broyles/Hart.. 05/01/2019

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NOAA / National Weather Service  
National Centers for Environmental Prediction  
Storm Prediction Center  
120 David L. Boren Blvd.  
Norman, OK 73072 U.S.A.  
[spc.feedback@noaa.gov](mailto:spc.feedback@noaa.gov)  
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