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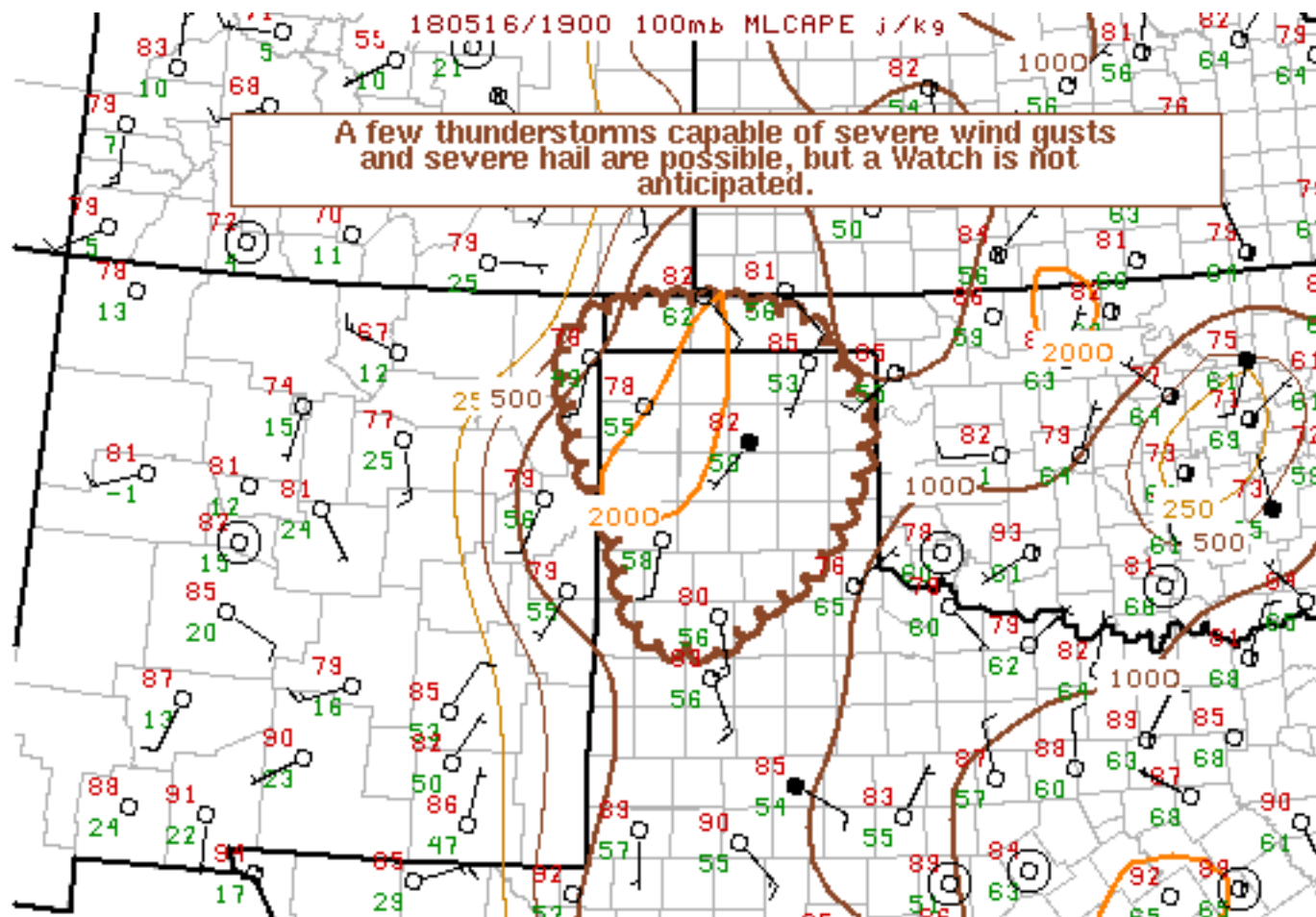
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## Mesoscale Discussion 437

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SPC MCD #0437

Mesoscale Discussion 0437

NWS Storm Prediction Center Norman OK

0240 PM CDT Wed May 16 2018

Areas affected...Portions of the Texas panhandle...western Oklahoma panhandle...and far northeast New Mexico

Concerning...Severe potential...Watch unlikely

Valid 161940Z - 162145Z

Probability of Watch Issuance...20 percent

SUMMARY...A few thunderstorms capable of severe wind gusts and severe hail are possible this afternoon and early evening, but should remain isolated enough to preclude a Severe Thunderstorm Watch.

DISCUSSION...A small area of thunderstorms developing on the Raton Mesa is expected to gradually move over the High Plains this afternoon. A pocket of 50s to low 60s surface dewpoints reside over

the TX and OK panhandles that has yet to mix out and is supporting MLCAPE of 1000-2000 J/kg over the area. Despite some convective overturning yesterday, mid-level lapse rates are steepening again under the mean westerly flow aloft. Although effective bulk shear is rather weak, stronger upper-level flow in the sub-tropical jet is helping to produce 35-40 kt of 0-8 km shear. Furthermore, the 12z AMA raob, and low-level moisture that is currently higher than observed there this morning, suggests the area is close to reaching convective temperatures in the low 80s. Although HRRR guidance is not producing convection over the area, the RAP and HRRR background environments have low-level dewpoints that are 5-10 deg F too low, which is likely contributing to a lack of forecasted storms in the area.

The above factors suggest that a storm or two could reach the unstable air and mature by mid-late afternoon. While the weak low-level winds suggest a multicell mode, supercells are possible since convective updrafts should be able to penetrate the layer with speed shear in mid-to-upper levels. Bunkers storm motion is toward the south to south-southeast, which would allow the storm to move down the longer axis of the instability over the area. Severe wind gusts and severe hail would be the primary threats if this evolution occurs. Regardless, the isolated nature of the storm(s) should preclude the need for a Watch.

..Coniglio/Weiss.. 05/16/2018

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

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