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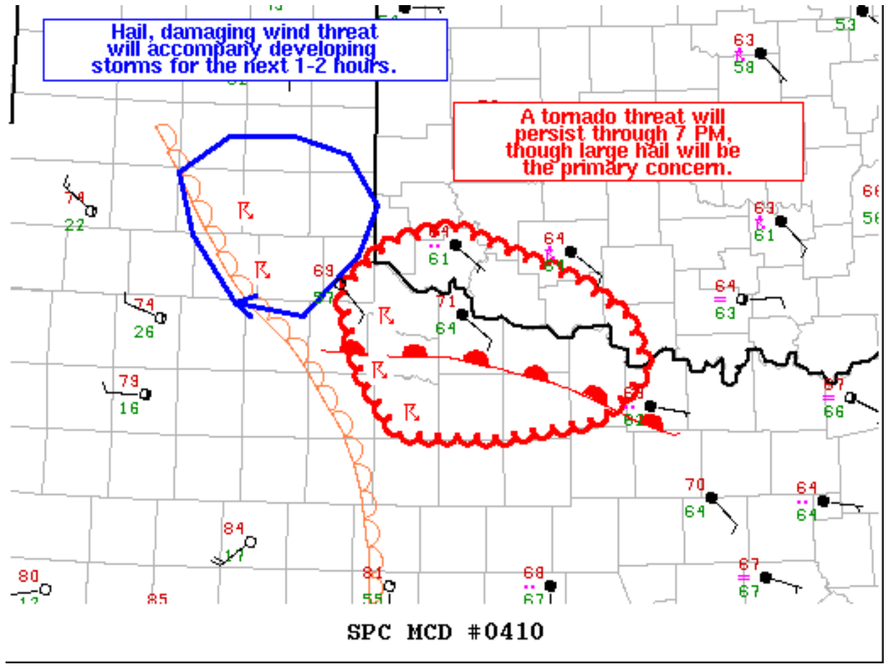

SPC MCD #0410

Mesoscale Discussion 0410
NWS Storm Prediction Center Norman OK
0526 PM CDT Fri Apr 23 2021

Areas affected...Northwest Texas and southwest Oklahoma

Concerning...Tornado Watch 100...

Valid 232226Z - 240030Z

The severe weather threat for Tornado Watch 100 continues.

SUMMARY...A tornado threat will persist through at least 7 PM associated with a trio of discrete supercells, though large hail will remain the primary concern. To the northwest across the Texas Panhandle, developing thunderstorms will pose a wind/hail threat over the next couple of hours.

DISCUSSION...A trio of discrete supercells have become established as they move off the dryline and toward the Red River. Radar and satellite trends suggest the more robust northern supercell is likely taking advantage of enhanced low-level helicity along and just north of a warm frontal boundary that is draped along the Red River. This cell has also exhibited notable right deviant motion, likely the result of a strengthening mesocyclone and propagation along the warm front/instability gradient to the east. This cell should continue on an eastward trajectory over the next 1-2 hours and will primarily pose a large hail threat. However, given ambient surface vorticity along the boundary (and backed easterly flow just north of the boundary), the tornado threat will persist. The neighboring storms to the south/southeast may intensify in the coming hours, especially if they can become rooted along the boundary. Upscale growth into a cluster is still expected later this evening after 00Z as storms continue to move east.

To the northwest, thunderstorm development along the dryline has been underway with a few stronger updrafts noted. This activity is occurring on the northwestern periphery of richer boundary layer moisture where dewpoint remain in the 50s. Sufficient instability (around 1000 J/kg MLCAPE) along with favorable effective bulk shear (35-45 knots) roughly off the dryline should continue to support semi-discrete storms capable of producing severe hail and wind.

..Moore.. 04/23/2021

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

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