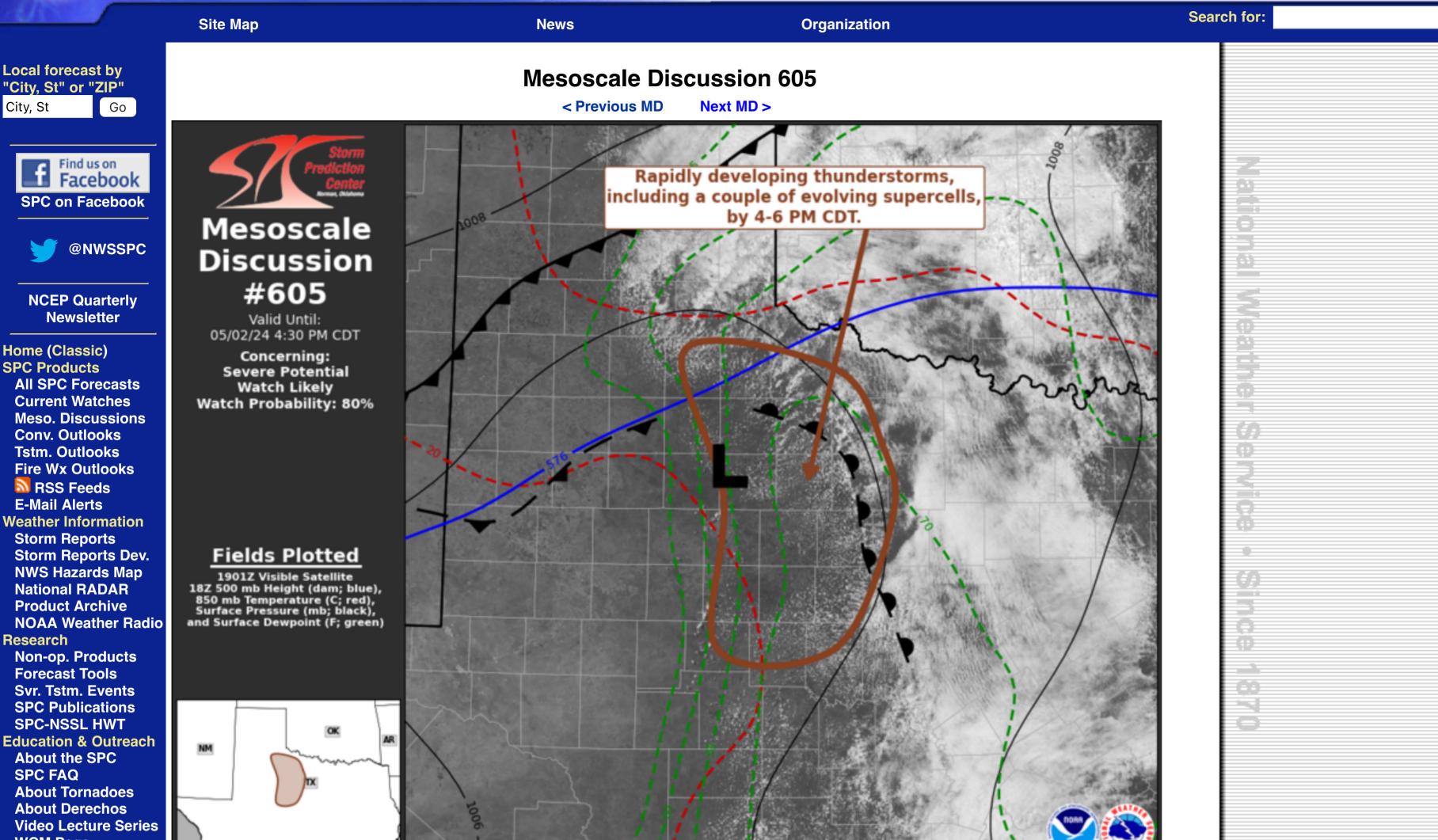
NOAA's National Weather Service

Storm Prediction Center





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Mesoscale Discussion 0605 NWS Storm Prediction Center Norman OK 0207 PM CDT Thu May 02 2024

Areas affected...parts of northwest Texas

Concerning...Severe potential...Watch likely

Valid 021907Z - 022130Z

Probability of Watch Issuance...80 percent

SUMMARY...Intensifying thunderstorm development, including a couple of evolving supercells with potential to producing large hail in excess of 2 inches in diameter and perhaps a tornado or two, appears increasingly likely by 4-6 PM CDT.

DISCUSSION...A zone of differential surface heating continues to become better defined across parts of the Texas South Plains into central Texas, with stronger boundary-layer heating and mixing ongoing to the west of air impacted by overnight convection. A weak surface low appears to be developing along this boundary between Childress and Abilene, with a developing area of strengthening warm advection to its east and southeast. This appears to be contributing to ongoing gradually deepening convective development, beneath a plume of warm and capping elevate mixed-layer air.

Along and east of a sharpening dryline, to the south of the low, a seasonably moist boundary-layer is becoming characterized by mixed-layer CAPE up to 3000 J/kg. Low-level wind fields are light, but veering with height beneath 25-50 kt flow in the 500-300 mb layer appears to be contributing to sufficient shear for supercells.

Although potential mid/upper forcing for thunderstorm development remains unclear, latest model output suggests that lift associated with warm advection, coupled with the approach of convective temperatures, will contribute to increasing probabilities for thunderstorm initiation through 21-23Z. Once this occurs, intensification may be rapid, with stronger storms becoming capable of producing large hail and perhaps posing a risk for tornadoes.

..Kerr/Hart.. 05/02/2024

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

ATTN...WFO...FWD...OUN...SJT...LUB...

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