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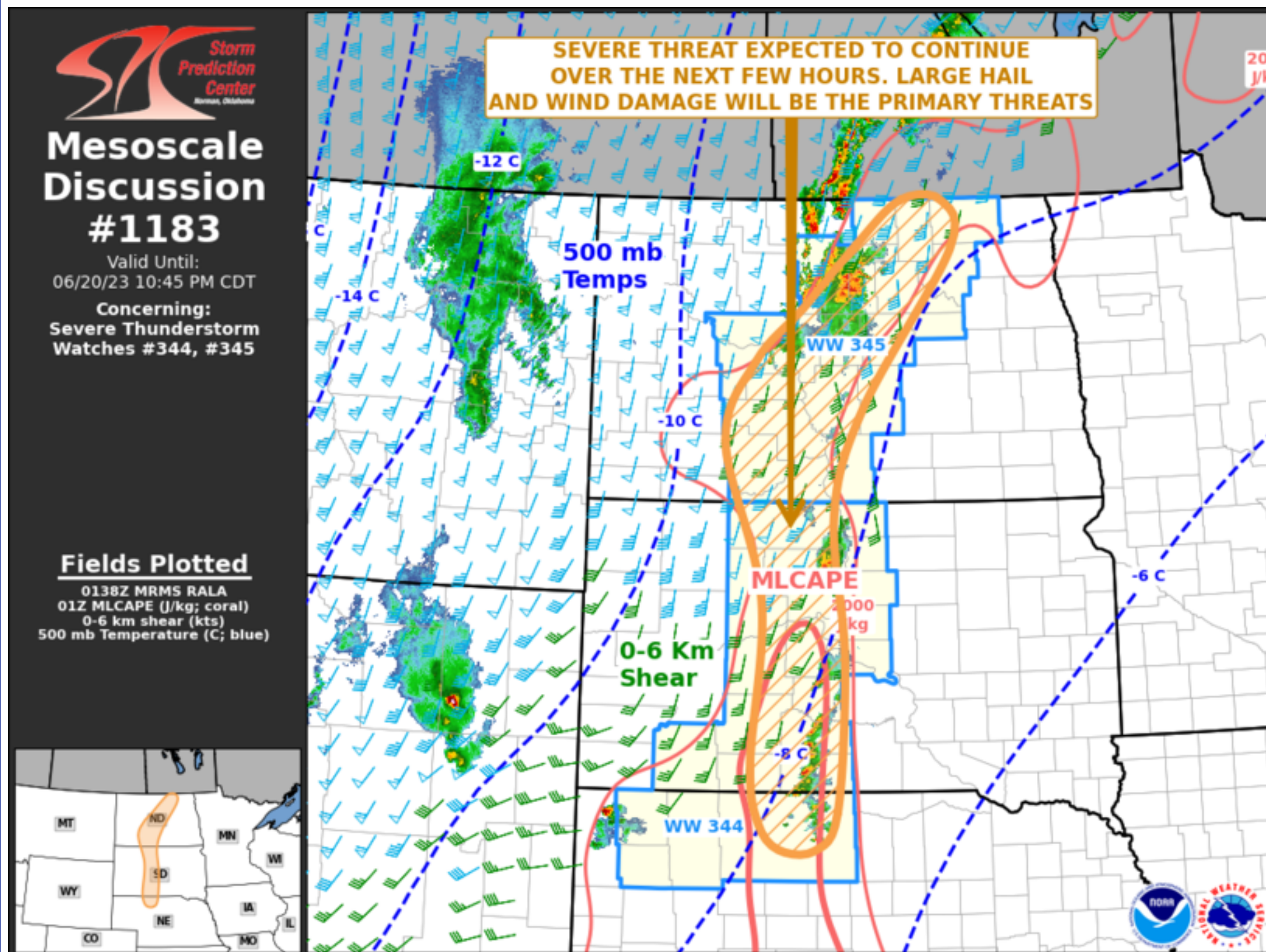
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## Mesoscale Discussion 1183

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**Mesoscale Discussion #1183**  
 Valid Until: 06/20/23 10:45 PM CDT  
 Concerning: Severe Thunderstorm Watches #344, #345

**Fields Plotted**  
 0138Z MRMS RALA  
 01Z MLCAPE (J/kg; coral)  
 0-6 km shear (kts)  
 500 mb Temperature (C; blue)

Mesoscale Discussion 1183  
 NWS Storm Prediction Center Norman OK  
 0840 PM CDT Tue Jun 20 2023

Areas affected...Central Dakotas...Northern Nebraska

Concerning...Severe Thunderstorm Watch 344...345...

Valid 210140Z - 210345Z

The severe weather threat for Severe Thunderstorm Watch 344, 345 continues.

**SUMMARY...**A severe threat will likely continue for several more hours from the central Dakotas southward into far northern Nebraska. Large hail and wind damage will be the primary threats.

**DISCUSSION...**The latest surface analysis shows a north-to-south quasi-stationary front located across the central Dakotas. MLCAPE along this corridor is from 2000 to 4000 J/kg according the RAP. One area of storms is located near a maximum in instability across north-central North Dakota, with a second located in southern South Dakota near another instability max. Water vapor imagery shows a shortwave trough over the central High Plains. As this feature approaches from the southwest, large-scale ascent will continue to be favorable for convective development. The HRRR suggests that the greatest convective coverage will be across central South Dakota over the next few hours. In addition to the instability, 0-6 km shear along and near the front is near 45 knots with 700-500 mb lapse rates in the 7.5 to 8 C/km range. This will be favorable for supercells with large hail. Wind damage will also be likely with supercells and short line segments.

..Broyles.. 06/21/2023

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

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