



Local forecast by "City, St" or "ZIP"
City, St

Mesoscale Discussion 875

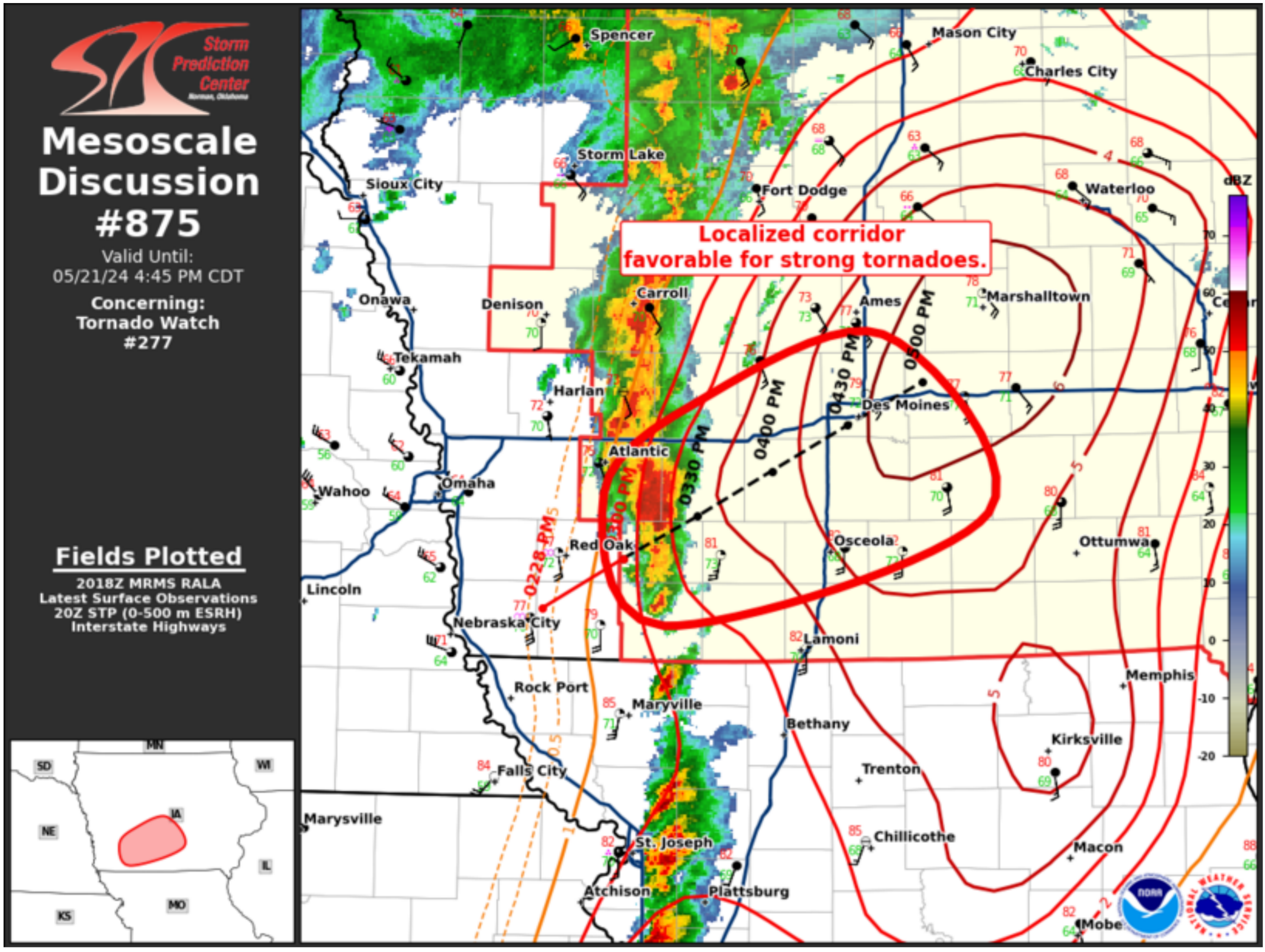
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Mesoscale Discussion #875
 Valid Until: 05/21/24 4:45 PM CDT
 Concerning: Tornado Watch #277

Fields Plotted
 2018Z MRMS RALA
 Latest Surface Observations
 20Z STP (0-500 m ESRH)
 Interstate Highways



Mesoscale Discussion 0875
 NWS Storm Prediction Center Norman OK
 0320 PM CDT Tue May 21 2024

Areas affected...Southwest/South-Central IA

Concerning...Tornado Watch 277...

Valid 212020Z - 212145Z

The severe weather threat for Tornado Watch 277 continues.

SUMMARY...A localized corridor favorable for strong tornadoes exists across southwest/south-central Iowa, including Des Moines vicinity.

DISCUSSION...Pair of supercells on the southern end of the line of storms extending across western IA have recently shown notable intensification, with rotational velocity recently estimated around 50 to 55 kt within the southernmost cell. Strong southerly flow exists ahead of this storm, contributing to strong low-level shear, evidenced by recent 0-500m storm relative-helicity around 200 m²/s² from DMX VAD. Robust deep-layer shear exists as well, with DMX VAD sampling 0-6 km bulk shear was over 60 kt. Recent mesoanalysis estimates effective-layer STP from 3 to 4 downstream. All of these factors suggest the downstream environment will remain conducive for supercell persistence. Storm motion for this southernmost storm is estimated to be northeasterly at around 45 kt, bring it into the Des Moines vicinity around 2130Z.

..Mosier.. 05/21/2024

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

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