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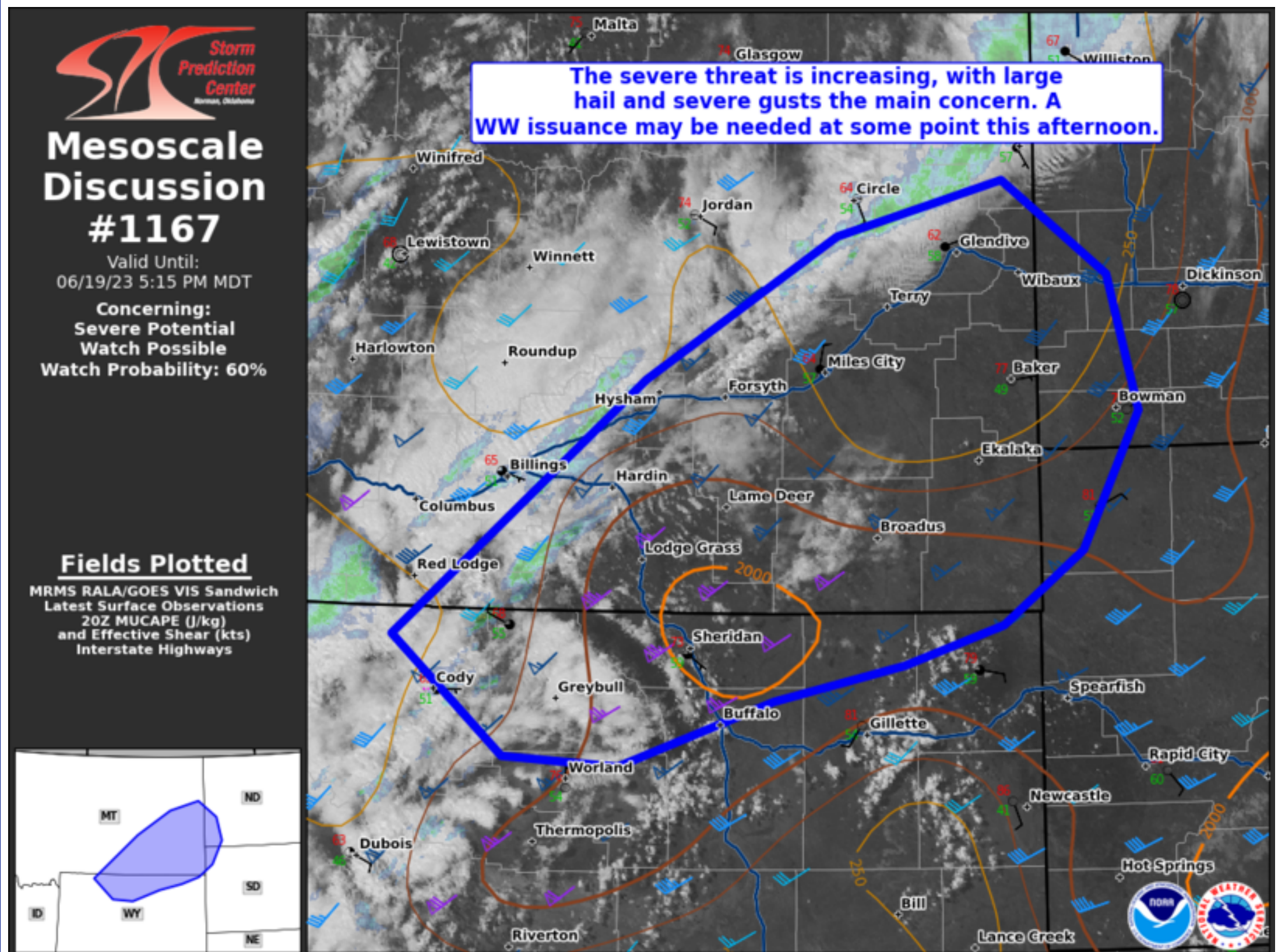
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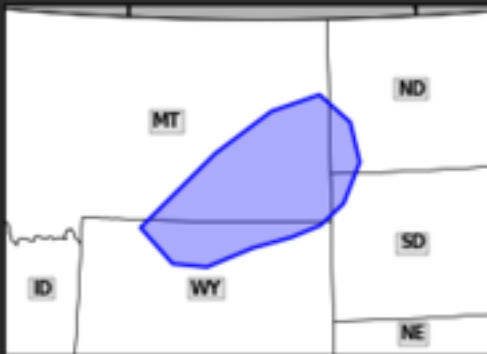
Mesoscale Discussion 1167

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Mesoscale Discussion #1167
 Valid Until: 06/19/23 5:15 PM MDT
Concerning: Severe Potential Watch Possible
 Watch Probability: 60%

Fields Plotted
 MRMS RALA/GOES VIS Sandwich
 Latest Surface Observations
 20Z MUCAPE (J/kg)
 and Effective Shear (kts)
 Interstate Highways



Mesoscale Discussion 1167
 NWS Storm Prediction Center Norman OK
 0351 PM CDT Mon Jun 19 2023

Areas affected...portions of southeast Montana into far northeast Wyoming

Concerning...Severe potential...Watch possible

Valid 192051Z - 192315Z

Probability of Watch Issuance...60 percent

SUMMARY...The severe threat is increasing across portions of the northern High Plains. Severe winds and hail are the greatest threats with any of the stronger storms that develop. An organized convective cluster may ultimately materialize and a WW issuance may become necessary at some point this afternoon.

DISCUSSION...Several hours of clearing skies have supported surface temperatures to warm into the upper 70s F amid upper 40s to 50s F dewpoints, resulting in 2000+ J/kg SBCAPE/MUCAPE given the presence of 7-8 C/km low- and mid-level lapse rates. Cumulus are increasing in depth and coverage across northeast WY, likely driven by the strong surface heating. However, the approach of the mid-level trough will result in increasing deep-layer ascent and stronger flow aloft, which will also support 60+ kts of effective bulk shear/elongated hodographs. As storms develop, cellular modes are possible, with a mix of severe hail/gusts the hazards of concern. However, as potential upscale growth of an MCS occurs later this afternoon or early evening, severe winds will become the prevalent threat.

..Squitieri/Hart.. 06/19/2023

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

ATTN...WFO...BIS...UNR...BYZ...GGW...RIW...

LAT...LON 44830940 46360734 47190573 47520432 46950344 46150319
 45340368 44920436 44680518 44470625 44090753 44130847
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