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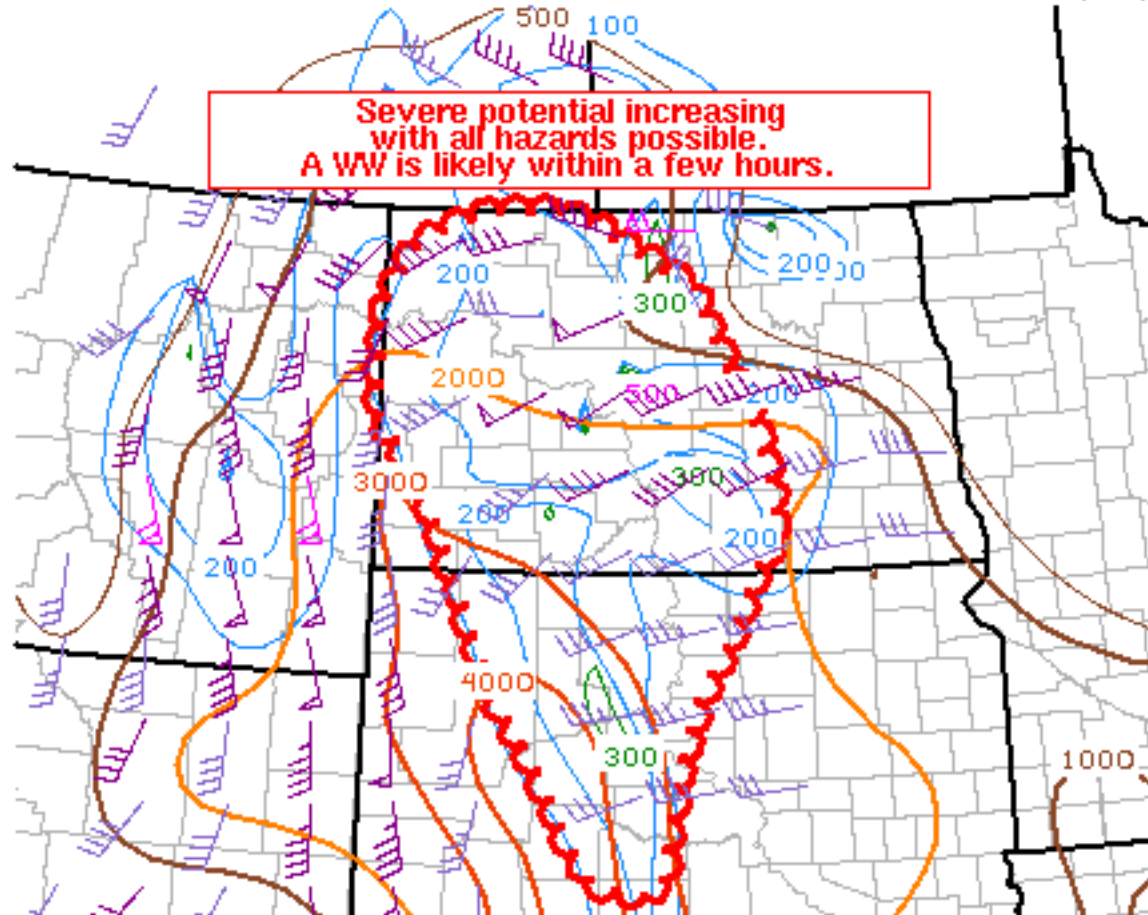
SPC Feedback

Mesoscale Discussion 608

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0601/1800 MUCAPE(warm), SRH(cool), Effective Bulk Shear (purp



SPC MCD #0608

Mesoscale Discussion 0608

NWS Storm Prediction Center Norman OK

0213 PM CDT Fri Jun 01 2018

Areas affected...Much of North Dakota...western into central South Dakota

Concerning...Severe potential...Watch likely

Valid 011913Z - 012115Z

Probability of Watch Issuance...80 percent

SUMMARY...Severe storms are expected to develop and become more widespread with time. One or two WW issuances will likely be needed later this afternoon.

DISCUSSION...A cumulus field is becoming increasingly agitated across western North Dakota/South Dakota, and a few thunderstorms have also initiated across northwestern North Dakota and vicinity. Convective trends should continue to increase across the region in



response from an 1) approaching, mid-level shortwave trough over Montana/Wyoming, 2) weak convective inhibition, and 3) moderate to strongly unstable thermodynamic profiles (i.e., MUCAPE values ranging from around 1500 J/kg in central North Dakota to 4000+ J/kg in western South Dakota. Backed surface wind fields along and north of an east-west-oriented warm front was also contributing to enhanced low-level shear especially across North Dakota, and initial surface-based development in this area will likely have some tornado potential.

With time the magnitude of forcing and rapidly weakening inhibition will result in widespread convective development, with mixed linear/cellular modes and upscale growth possible with eastward extent. All modes of severe are likely with this scenario, including tornadoes (especially across North Dakota) and very large (2"+ diameter) hail (areawide). Pending evolution of convective trends, one or more WVs will likely be issued before 21Z.

..Squitieri/Cook/Guyer.. 06/01/2018

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

ATTN...WFO...FGF...ABR...BIS...UNR...GGW...

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