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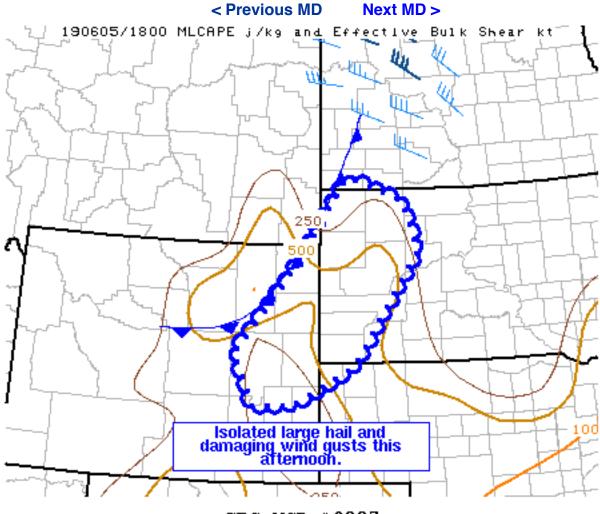
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Mesoscale Discussion 987



SPC MCD #0987

Mesoscale Discussion 0987 NWS Storm Prediction Center Norman OK 0138 PM CDT Wed Jun 05 2019

Areas affected...Western South Dakota...Northeastern Wyoming

Concerning...Severe potential...Watch unlikely

Valid 051838Z - 052045Z

Probability of Watch Issuance...20 percent

SUMMARY...A few storms capable of large hail, particularly over the Black Hills, and damaging wind gusts are possible this afternoon. Weak deep-layer shear will limit the threat as storms will struggle to organize. A WW is not expected.

DISCUSSION...A few slow moving storms can be expected this afternoon as weak cold front moves southeastward. Steep mid-level lapse rates of 7-8 C/km will support the threat for large hail. Steep low-level lapse rates and a deeply mixed boundary layer will also foster a few



stronger wind gusts. Dewpoints along the front are generally in the low 50s F, with mid to upper 50s farther east near the Black Hills. Buoyancy will be maximized in the Black Hills where higher boundary layer moisture at higher elevation will contribute to 1000-1500 J/kg MLCAPE. The hail threat will be maximized in this area. Outside the higher terrain, around 500 J/kg MLCAPE can be expected. Overall threat will be marginal given the very weak deep-layer shear. If storms can congeal and develop a mature cold pool, a more organized damaging wind gust threat would be possible. A WW is not expected.

..Wendt/Hart.. 06/05/2019

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

ATTN...WFO...ABR...BIS...UNR...CYS...BYZ...

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120 David L. Boren Blvd.
Norman, OK 73072 U.S.A.
spc.feedback@noaa.gov
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