



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

City, St

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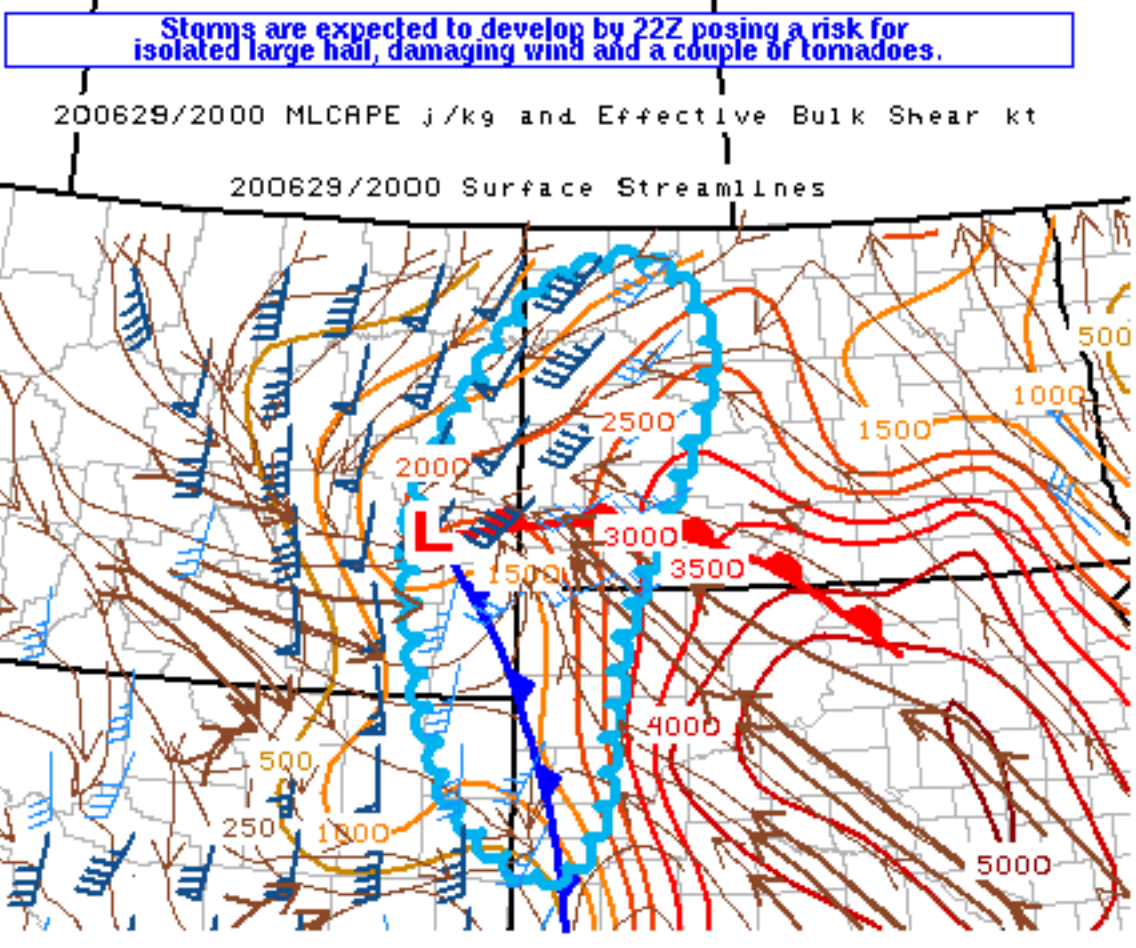
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Mesoscale Discussion 1052

[< Previous MD](#) [Next MD >](#)



SPC MCD #1052

Mesoscale Discussion 1052

NWS Storm Prediction Center Norman OK
0344 PM CDT Mon Jun 29 2020

Areas affected...northeast Wyoming...eastern Montana...western South and North Dakota,

Concerning...Severe potential...Watch possible

Valid 292044Z - 292245Z

Probability of Watch Issuance...60 percent

SUMMARY...Isolated strong to severe thunderstorms are expected to develop over the northern High Plains by 22Z. Trends will continue to be monitored for a possible WW.

DISCUSSION...As of mid afternoon a warm front extends from a surface low in far eastern MT through southwestern ND. A cold front extends southward from the low through southeast MT into southwest SD. The atmosphere in this region has become moderately to strongly unstable with surface dewpoints ranging from the upper 50s to mid 60s F. Further moist advection is expected into early evening beneath steep mid-level lapse rates supporting 1500-3000 J/kg MLCAPE. Visible imagery shows cumulus increasing near and east of triple point along the warm front, with additional towering cumulus over the black hills as well as the higher terrain of northeast WY. RAP analysis also show a weak vorticity maximum lifting northward through eastern WY. Though timing is somewhat uncertain, orographic forcing as well as convergence in vicinity of the triple point and warm front should result in thunderstorm initiation by 22Z. Vertical wind profiles with 30-40 kt effective bulk shear will support both multicell and some supercell structures with damaging wind and large hail the main threats. A window will exist for a couple of tornadoes, mainly near the warm front as low-level shear undergoes some increase during the early evening.

..Dial/Hart.. 06/29/2020

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

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

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