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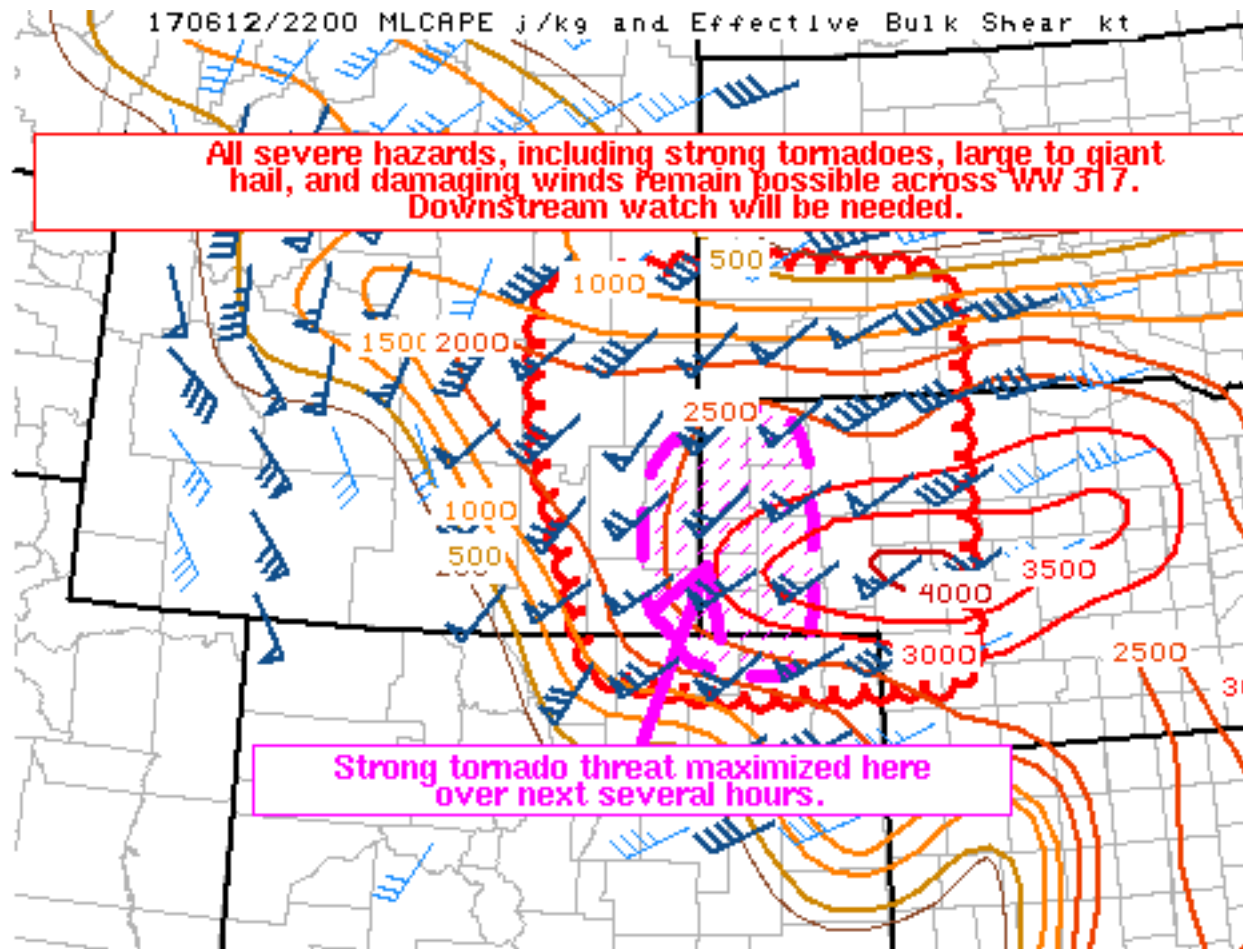
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## Mesoscale Discussion 1001

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SPC MCD #1001

Mesoscale Discussion 1001  
 NWS Storm Prediction Center Norman OK  
 0605 PM CDT Mon Jun 12 2017

Areas affected...Portions of eastern WY...southwestern SD...western NE...and northeastern CO

Concerning...Tornado Watch 317...

Valid 122305Z - 130030Z

The severe weather threat for Tornado Watch 317 continues.

SUMMARY...All severe hazards, including strong tornadoes, large to giant hail, and damaging winds will continue with multiple supercells across Particularly Dangerous Situation Tornado Watch 317. A downstream watch into western/central NE and southern SD will be needed within the next several hours.

DISCUSSION...At least 3 supercells are ongoing as of 23Z across far southeastern WY/northeastern CO into far western NE. With a very

favorable thermodynamic and kinematic environment characterized by MLCAPE of 2000-3500 J/kg and effective bulk shear of 50-60 kt, these supercells have produced over a dozen reports of significant hail (2 inch in diameter or greater) over the past few hours, with several reports of hail greater than 4 inches. At least 2 tornadoes have also occurred. The airmass downstream of ongoing convection will easily support continued significant severe hail, along with a risk for tornadoes and damaging winds through this evening. Strong tornadoes will continue to be a possibility with any discrete supercell across far southeastern WY, northeastern CO, and western NE for the next few hours given a strongly veering and strengthening wind profile with height. Of note, 0-1 km SRH is around 300 m2/s2 per recent VWP from KCYS, and 0-3 SRH is around 500 m2/s2.

A southerly low-level jet will strengthen to around 40-50 kt across western/central NE into southern SD this evening/tonight, and all severe hazards will remain possible into this evening across these areas. Evolution from discrete supercells into one or more bowing line segments appears likely to occur at some point later this evening in tandem with the increasing low-level jet, which would likely increase the threat for damaging winds with eastward extent. In addition, large hail and a few tornadoes should continue to be a threat with any supercell embedded within the line(s). A downstream watch in western/central NE and southern SD will be needed within the next several hours.

..Gleason.. 06/12/2017

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NOAA / National Weather Service  
National Centers for Environmental Prediction  
Storm Prediction Center  
120 David L. Boren Blvd.  
Norman, OK 73072 U.S.A.  
[spc.feedback@noaa.gov](mailto:spc.feedback@noaa.gov)  
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