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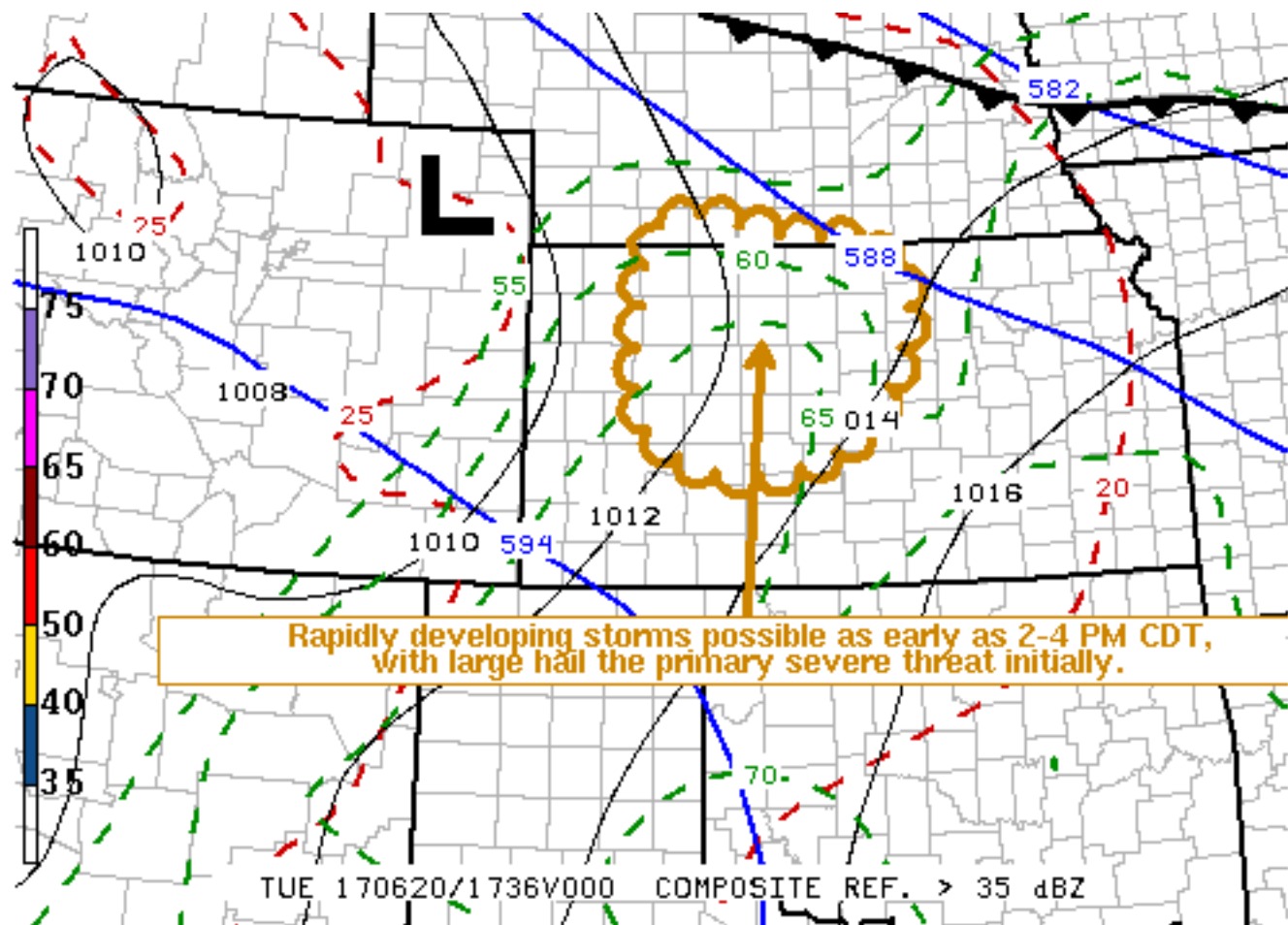
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Mesoscale Discussion 1099

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SPC MCD #1099

Mesoscale Discussion 1099

NWS Storm Prediction Center Norman OK

1259 PM CDT Tue Jun 20 2017

Areas affected...Parts of northwestern/central Kansas and adjacent southern Nebraska

Concerning...Severe potential...Watch possible

Valid 201759Z - 202000Z

Probability of Watch Issuance...60 percent

SUMMARY...Isolated to scattered rapid severe storm development appears possible as early as 19-21Z, with large hail the primary initial severe threat. Strong surface gusts may become an increasing concern near storms later this afternoon. Trends are being monitored for the possibility of a severe weather watch.

DISCUSSION...Surface heating along/west of a corridor of boundary layer moisture return across the Liberal/Dodge City areas,

northeastward through Russell/Hill City, has already contributed to strong potential instability. This is occurring beneath steepening mid-level lapse rates associated with the leading edge of elevated mixed layer air beginning to return eastward across the high Plains.

In the presence of generally weak but veering winds with height, beneath 30-40 kt northwesterly flow around 500 mb, the environment appears conditionally supportive of organized severe storm development, including supercells.

Although the Rapid Refresh suggests that mid-level inhibition is weakening with continuing insolation, this probably is being offset, at least somewhat, by gradual warming aloft. Still, large-scale ascent associated with lower/mid tropospheric warm advection could support the initiation of thunderstorms. And there appears a general consensus among various model output that this may occur as early as 19-21Z, roughly centered around the Russell/Hill City area. Once initiation of deep convection commences, fairly rapid intensification appears possible, accompanied by a risk for severe hail, some of which could be very large.

..Kerr/Hart.. 06/20/2017

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

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