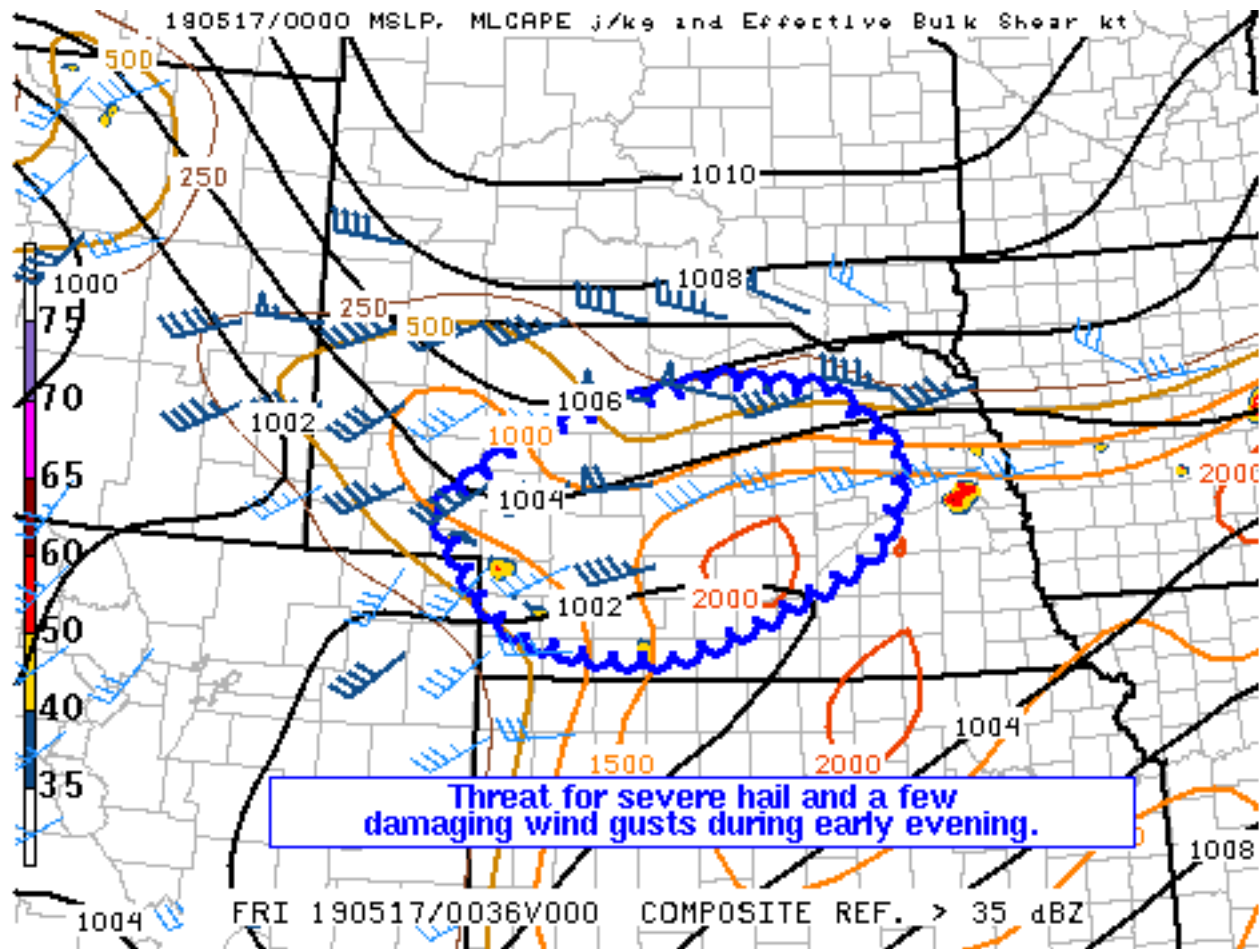


[Site Map](#)[News Organization](#)Search for: SPC NCEP All NOAALocal forecast by
"City, St" or "ZIP"[Find us on Facebook](#)

SPC on Facebook

[@NWSSPC](#)[NCEP Quarterly Newsletter](#)[Home \(Classic\)](#)[SPC Products](#)[All SPC Forecasts](#)[Current Watches](#)[Meso. Discussions](#)[Conv. Outlooks](#)[Tstm. Outlooks](#)[Fire Wx Outlooks](#)[RSS Feeds](#)[E-Mail Alerts](#)[Weather Information](#)[Storm Reports](#)[Storm Reports Dev.](#)[NWS Hazards Map](#)[National RADAR](#)[Product Archive](#)[NOAA Weather Radio](#)[Research](#)[Non-op. Products](#)[Forecast Tools](#)[Svr. Tstm. Events](#)[SPC Publications](#)[SPC-NSSL HWT](#)[Education & Outreach](#)[About the SPC](#)[SPC FAQ](#)[About Tornadoes](#)[About Derechos](#)[Video Lecture Series](#)[WCM Page](#)[Enh. Fujita Page](#)[Our History](#)[Public Tours](#)[Misc.](#)[Staff](#)[Contact Us](#)[SPC Feedback](#)

Mesoscale Discussion 644

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

SPC MCD #0644

Mesoscale Discussion 0644

NWS Storm Prediction Center Norman OK

0806 PM CDT Thu May 16 2019

Areas affected...Portions of Central Nebraska

Concerning...Severe potential...Watch possible

Valid 170106Z - 170300Z

Probability of Watch Issuance...40 percent

SUMMARY...Ongoing storms in southwest Nebraska have shown some marginally severe hail on MRMS MESH. Storms may be able to maintain their intensity as the low-level jet increases during the evening. However, uncertainty with regard to the storm coverage and intensity lessen confidence in WW issuance. Trends will be monitored.

DISCUSSION...A few storms are ongoing in southwest Nebraska. Observed 00Z soundings from LBF and OAX show mid-level lapse rates near 9 C/km, though deep-layer shear remains modest at around 40 kts



in the west to near 30 kts in the east. The steep mid-level lapse rates should drive a hail threat even as these storms become more elevated with time. As the low-level jet increases this evening and mid-level heights weakly fall, at least some of these storms may maintain their intensity. However, there is uncertainty with regard to how much new development will occur on the nose of the jet and, with the jet core progged to be farther east of the current activity, how intense the current storms will be in an hour or two. Consequently, CAM guidance differs widely on the exact evolution of this scenario. These factors reduce confidence in the need for a WW, though trends will continue to be monitored over the next few hours.

..Wendt/Guyer.. 05/17/2019

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

ATTN...WFO...OAX...GID...LBF...GLD...BOU...

LAT...LON 41370250 42020151 42499949 42419812 41799726 41089761
40519898 40209994 40240078 40360153 40670198 41370250

[Top/All Mesoscale Discussions/Forecast Products/Home](#)

Weather Topics:

[Watches](#), [Mesoscale Discussions](#), [Outlooks](#), [Fire Weather](#), [All Products](#), [Contact Us](#)

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
Page last modified: May 17, 2019

[Disclaimer](#)
[Information Quality](#)
[Help](#)
[Glossary](#)

[Privacy Policy](#)
[Freedom of Information Act \(FOIA\)](#)
[About Us](#)
[Career Opportunities](#)