



Local 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

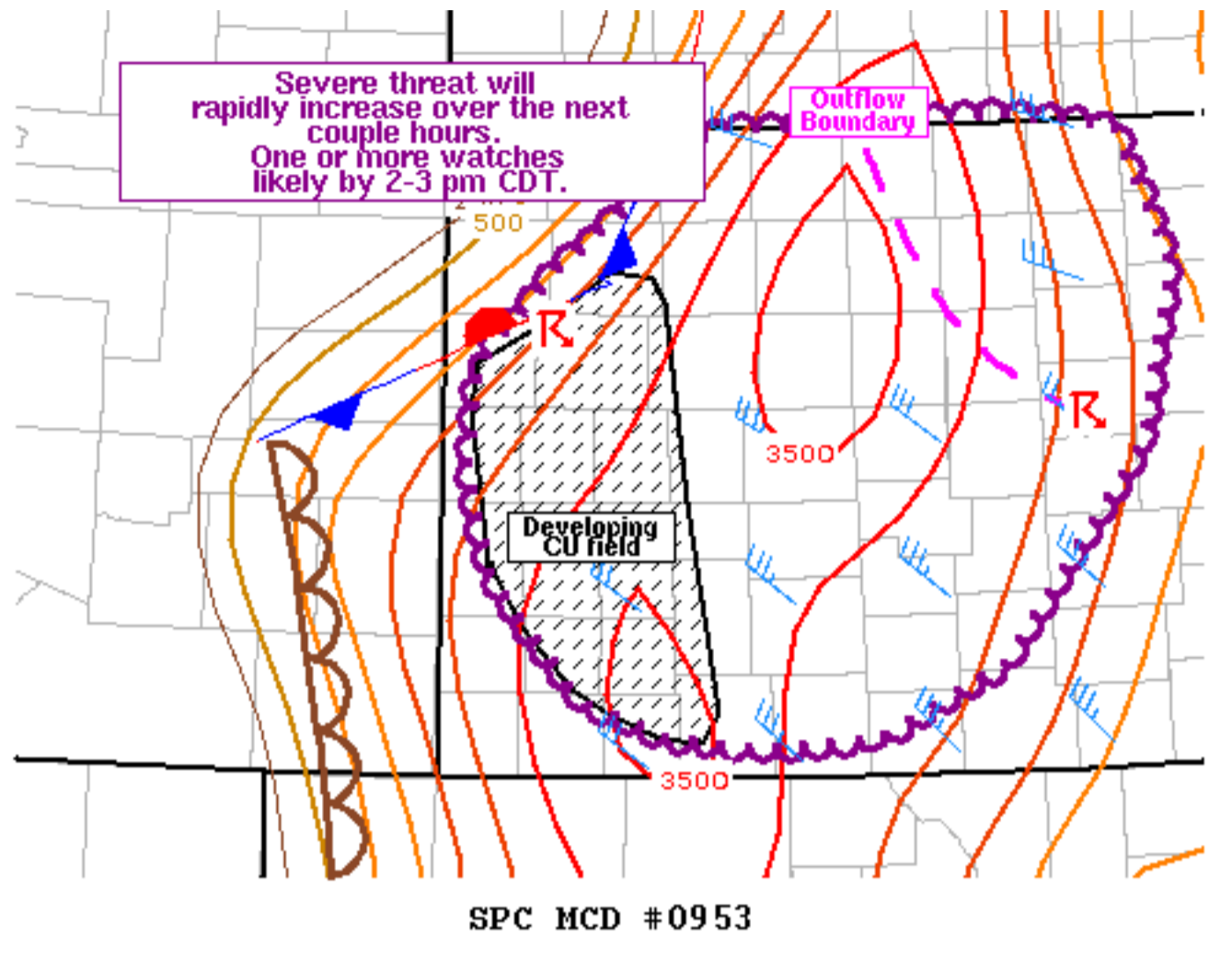
- Research
- Non-op. Products
- Forecast Tools
- Svr. Tstm. Events
- SPC Publications
- SPC-NSSL HWT
- Education & Outreach
- About the SPC
- SPC FAQ
- About Tornadoes
- About Derechos
- Video Lecture Series
- WCM Page
- Enh. Fujita Page
- Our History
- Public Tours

- Misc.
- Staff
- Contact Us
- SPC Feedback



## Mesoscale Discussion 953

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



SPC MCD #0953

Mesoscale Discussion 0953  
 NWS Storm Prediction Center Norman OK  
 0115 PM CDT Sun Jun 21 2020

Areas affected...Portions of western and central KS

Concerning...Severe potential...Watch likely

Valid 211815Z - 212015Z

Probability of Watch Issuance...95 percent

**SUMMARY...**The severe threat will increase rapidly across parts of western into central KS over the next couple of hours. One or more watches will be needed by 2-3 pm CDT. Large to very large hail, widespread damaging winds, and a tornado are all possible.

**DISCUSSION...**A very moist and unstable airmass is evolving early this afternoon across parts of western into central KS ahead of dryline and surface front. A couple of updrafts have already been noted along the boundary in Wallace County in northwest KS. To the east across north-central KS, strong to occasionally severe storms have continued through the morning and into this afternoon in a low-level confluence zone. Additional CU development has been noted along the associated outflow boundary. As inhibition continues to erode, additional thunderstorm development could zipper westward along that boundary over the next couple of hours. Forecast guidance has done a poor job of handling these storms, CAMs included, and some uncertainty exists with regards to convective evolution across that area.

To the southwest, moisture continues to increase, with widespread upper 60s to low 70s F noted in 17z obs. While a broader CU field has yet to develop across western KS, there are some signs of weakening inhibition and increasing ascent spreading over the region via increasing mid/upper level cloudiness streaming eastward from CO and modified forecast soundings showing a nearly-uncapped environment in the next hour. As such, storms are expected to become more widespread in the next 1-2 hours near the surface boundary/dryline across western KS. MLCAPE greater than 3000 J/kg in the presence of 30-45 kt effective shear will result in robust, organized updrafts and supercell structures. A plume of very steep midlevel lapse rates around 8 C/km and lengthened hodographs above 700 mb will support large to very large hail. Additionally, steep low level lapse rates and modest low level shear will support strong downdrafts and damaging winds. While convection may initially be semi-discrete, upward development into one or more bowing segments is expected as storm outflows/mergers occur in conjunction with cold pool development by late afternoon. While storm bases will be a bit high, mean mixing ratios around 14-15 g/kg and increasing effective SRH values across southwest KS could support a tornado or two in any more discrete storms.

..Leitman/Guyer.. 06/21/2020

...Please see [www.spc.noaa.gov](http://www.spc.noaa.gov) for graphic product...

ATTN...WFO...TOP...ICT...GID...DDC...GLD...

LAT...LON 39330134 39740076 39990040 40009971 40039867 39959796  
 39309767 38499789 37499876 37169950 37120014 37190073  
 37360119 37890170 38390186 38890182 39330134

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

Weather Topics:

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

National Weather Service • Since 1870

National Weather Service • Since 1870