

Site
Map

News Organization

Search for:

 SPC NCEP All NOAA

Go

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

City, St

Go

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

Watch/Warning 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

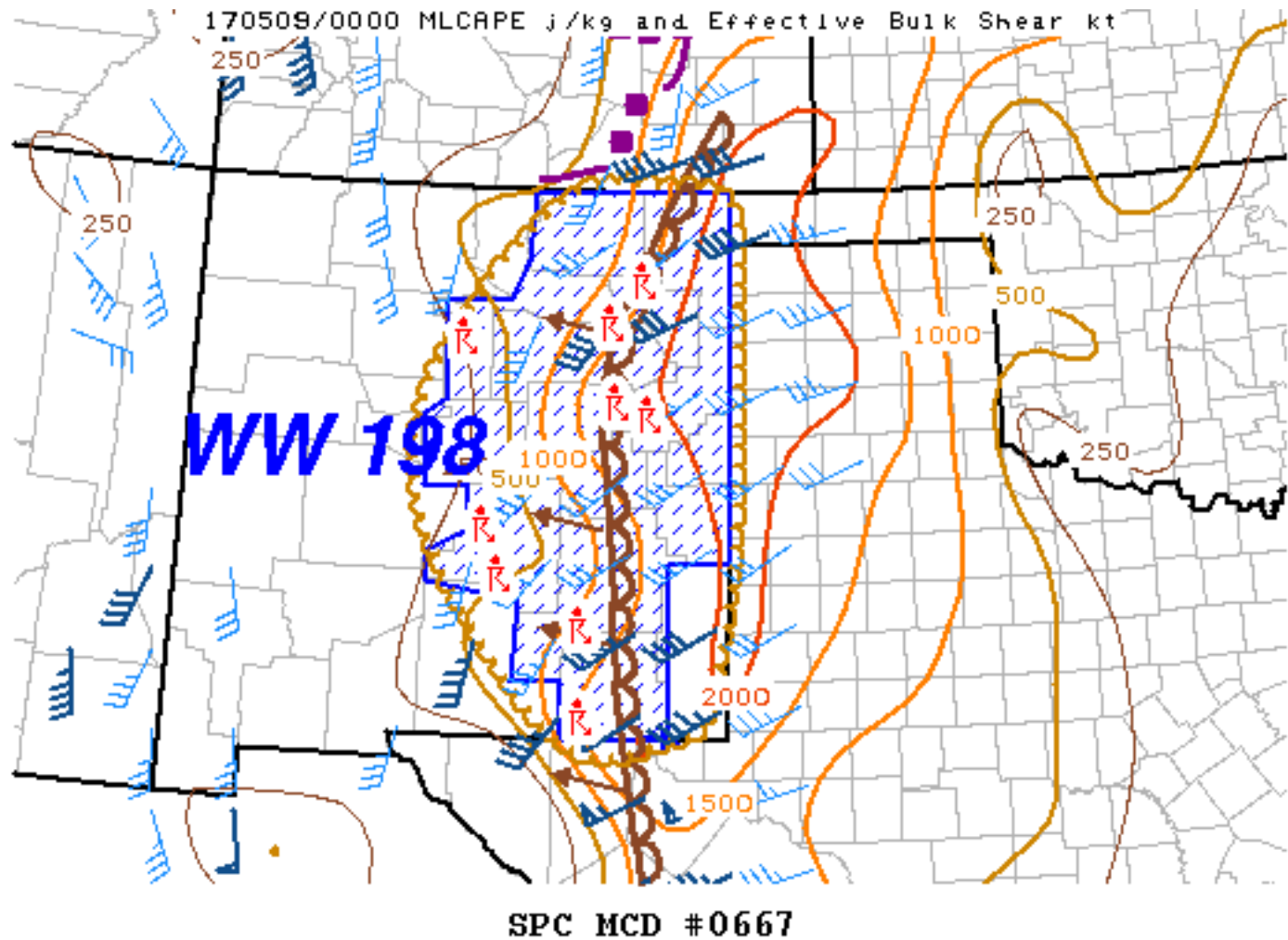
Contact Us

SPC Feedback

Mesoscale Discussion 667

< Previous MD

Next MD >



Mesoscale Discussion 0667

NWS Storm Prediction Center Norman OK

0730 PM CDT Mon May 08 2017

Areas affected...Eastern New Mexico

Concerning...Severe Thunderstorm Watch [198](#)...

Valid 090030Z - 090230Z

CORRECTED FOR WFO TAGS

The severe weather threat for Severe Thunderstorm Watch 198 continues.

SUMMARY...The severe weather threat remains across [WW 198](#) as convective coverage increases. With coalescing/expanding convective outflows in portions of northeastern NM during the next few hours, some parts of the watch may be suitable for clearing once related stabilization lowers the severe threat over sufficiently large areas.

DISCUSSION...Two primary, broken bands of thunderstorms and deep convective towers have developed in and near the watch area:

1. Near a dryline and boundary-layer convergence zone, from near the Union/Colfax county line roughly southward to eastern De Baca then into higher terrain near GDP.
2. Orographically aided development, initially in drier (but still favorable) near-surface conditions from the Sangre De Cristos to southeast of SAF then south-southeastward past SRR and the Guadalupe/Davis Mountains.

The two regimes intersect near GDP as the dryline backs into the higher terrain. With continued dryline retreat expected through the remainder of the afternoon into early evening, loss of heating in the preconvective boundary layer will be offset enough by moist advection to retain favorable buoyancy with weak CINH, supporting additional development in each band.

This activity will continue to move mainly northward amidst strongly meridional environmental mean flow, with left splits continuing to weaken rather quickly, and storms moving near or rightward of the hodograph posing the greatest large-hail threat. Damaging gusts and a brief tornado also are possible. Modified soundings and model soundings indicate on the order of 2000 J/kg MLCAPE east of the dryline, where surface dew points in the mid-50s F underlie the steepest lapse rates aloft. CINH increases and ambient lift decreases eastward toward the TX border, indicating questionable eastward survivability for even mature supercells with well-established internal vertical pressure-gradient forces. MLCAPE diminishes to under 500 J/kg right against the mountains in the west where theta-e is relatively minimized. A combination of spreading outflows and eventual nocturnal diabatic cooling will boost near-surface static stability. In the meantime, however, these two corridors should maintain the greatest severe potential, with an isolated deviant cell straying west or east before weakening.

..Edwards.. 05/09/2017

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

ATTN...WFO...LUB...AMA...MAF...PUB...ABQ...EPZ...

LAT...LON 31980367 31990484 33720628 35250635 36890491 37030368
 36850300 35460296 33790299 32290327 31980367

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

Weather Topics:

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