Mesoscale Discussion 322

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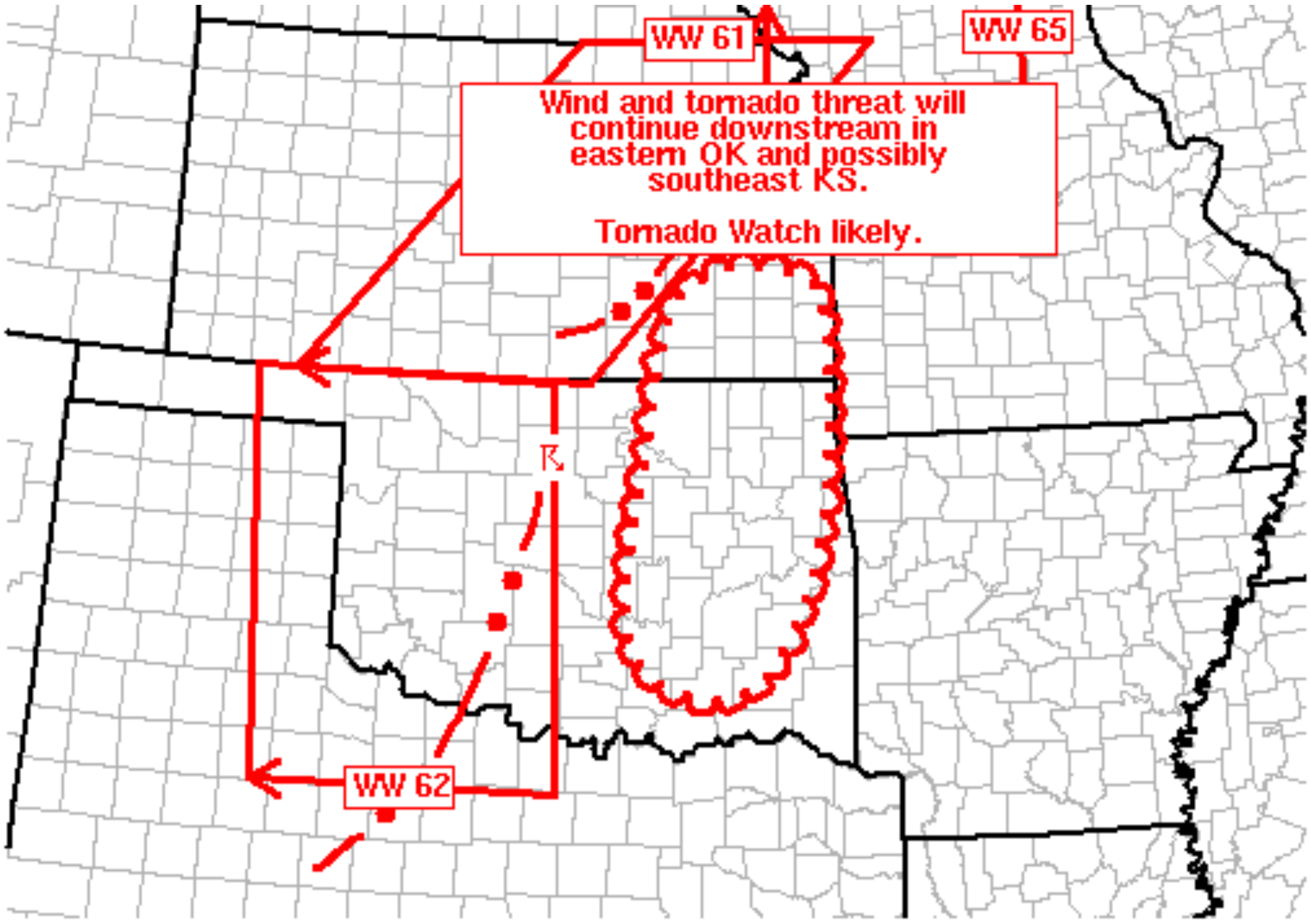

SPC MCD #0322

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Mesoscale Discussion 0322
NWS Storm Prediction Center Norman OK
0714 PM CDT Wed May 02 2018

Areas affected...Southeast KS...Central/Eastern OK

Concerning...Severe potential...Tornado Watch likely

Valid 030014Z - 030215Z

Probability of Watch Issuance...80 percent

SUMMARY...Wind damage and tornado threat is expected to continue
downstream of the ongoing Tornado Watches and an additional watch
will be needed across eastern OK and possibly southeast KS.

DISCUSSION...Airmass across eastern OK is characterized by
temperatures in the upper 70s/low 80s with dewpoints in the upper
60s to low 70s. Surface winds are southeasterly at 10-20 kt with 3
km winds (from the INX VAD) southwesterly at 30-35 kt. Mid-level
winds are a bit stronger, reaching 50 kt by 6 km. Low-level flow is
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expected to increase during the next several hours as the low-level jet strengthens, lengthening the low-level hodographs and strengthening low-level shear. Nocturnal cooling will likely result in weak surface-based convective inhibition but steep mid-level lapse rates will remain in place, maintaining strong instability.

Consequently, this airmass supports continued strong to severe storms as the upstream convection moves into the area. Several distinct areas of convection are currently upstream with the discrete cell near END likely reaching the edge of Tornado Watch 62 by 01Z. Additionally, convection across south-central KS has recently increased its forward speed and will likely reach the edge of Tornado Watch 61 around 01Z. Storms farther south across south-central OK may have a bit more time before reaching the eastern edge of Tornado Watch 62, but an increase in forward speed is anticipated with this activity as well.

Given the strengthening low-level wind fields and the organized nature of the convective lines (one in south-central KS and the other over southwest OK) suggests the severe threat will persist downstream of Tornado Watches 61 and 62, meriting a new downstream watch.

..Mosier/Edwards.. 05/03/2018

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

ATTN...WFO...SGF...TSA...ICT...OUN...

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