



## **On the role of synoptic scale processes in severe local storm outbreaks**

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It is widely appreciated that synoptic-scale weather systems are instrumental in bringing together the ingredients for severe local storms. Recent work on severe thunderstorm outbreaks and, in particular, tornado outbreaks, has shown the area coverage of favorable conditions for tornadic supercells is a relatively good predictor of the chances for a major tornado outbreak. Use of area coverage of favorable conditions as a diagnostic variable makes it promising that predictability of major tornado outbreaks can extend for at least 72 h into the future, albeit at the cost of a relatively high rate of false alarms. Reasons for the high false alarm rate are discussed, and suggestions made for future research.