

## **Tornado Detection with Windprofiler Radar**

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Tornadoes that occur within 100 km of windprofiler radars produce unique repeatable signatures in radar backscattered power and turbulence strengths. These indicate a large vertical column of enhanced backscattered signal over the tornado reaching into the stratosphere, indicative of a region of enhanced humidity in the surrounding supercell. Studies show that the structure may be used for predictive purposes since it begins in advance of the tornado by up to an hour. Results from 31 tornado detections are presented.