

## The 26 July, 2012 twin tier severe weather and tornado outbreak: Part II: Radar analysis

Michael Evans

NOAA/NWS Binghamton, NY

A major severe weather outbreak struck the southern tier of New York and the northern tier of Pennsylvania on 26 July, 2012, including seven confirmed tornadoes. In this presentation, the structure of the storm associated with several of these tornadoes is shown, by examining data from the Binghamton, New York WSR-88D radar.

A broken line of convective storms initially developed over western New York and Pennsylvania during the early afternoon on the 26<sup>th</sup>. A supercell storm developed along the northern end of the line over southern New York around 1900 UTC and moved east, producing 4 EF-1 tornadoes from 1930-2015 UTC. The storm produced tornadoes as a pronounced inflow notch developed on its northeast side. Rotational velocity values associated with the storm were modest, averaging around 25 kts across a distance of 1.5 nm throughout the period when the storm was producing tornadoes. Spectrum width values generally trended upward to near or above 20 kts around the time of tornadogenesis. Dual-polarization-based products around the time of a tornado near Elmira indicated the development of a Zdr arc near the inflow region of the storm, and a separation between maxima of Zdr and Kdp.