Abstract

**Link to Paper**

*Deriving and Modeling Flood Dynamics From GIS-Based Doppler Radar*

**Track:** Climate and Weather  
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Doppler radar provides repetitive, short-term atmospheric reflection data, obtained from returns of pulsed radar. When plotted as time-base cells or points, Doppler data can be converted to equivalent rainfall, typically over five-minute intervals. ArcGIS facilitates selection and interpolation of short interval data to create multiple or summarized precipitation grids. This paper presents the compilation and analysis of Doppler data obtained during an intense storm event in Wilson, NC, on August 26, 2001. The storm caused widespread street flooding and resulted in numerous evacuations. Examples of Hydrologic model output that incorporate Doppler rainfall are presented to understand storm dynamics.

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