# Kansas Record Hail and the Power of Social Media

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## ABSTRACT

A long-lived supercell developed during the late afternoon of 15 September 2010 and moved through portions of south central Kansas, impacting thousands of residents in the Wichita metropolitan area. The storm spawned several weak tornadoes in open country south of the city. Most notably, the supercell was a prolific large hail producer, distributing an expansive swath of significant hail through populated areas. WSR-88D signatures were consistent with recently developed radar-based characteristics by Blair et al. (2011) that have been shown to aid in the detection of hail > 102 mm (4.00 in) in diameter.This presentation will briefly review the evolution of the storm and its specific characteristics that may lead to the advanced recognition of giant hail.

Traditional media sources are now supplemented with the growing popularity of social media and a public armed with a widespread availability of digital cameras and mobile devices with photo and email capabilities. In this event, a rare opportunity existed to utilize these tools within the urban landscape affected to recreate the hail-fall character of the storm. In addition to the reports collected through social media outlets, a detailed hail survey was conducted over the hardest impacted areas,further increasing the density of hail reports. A total of 479 hail size data points were obtained within approximately a 648 sq km(250 sq mi) area, with 91% of the reports originating from social media and the hail survey. From these data, 8 hail stones were identified that equaled or exceeded the diameter of the previous state record of the 3 September 1970 Coffeyville stone, with the largest stone measured at 197 mm (7.75 in) in diameter.This reconstruction of the hail-fall character is among some of the highest spatial resolution hail datasets available, and has the additional benefit of actual photographic documentation for nearly all hail data points in the study. A summary of the preliminary findings from the data will be discussed.