

A cool, damp, and rainy summer's day in eastern Minnesota and western Wisconsin during 2009 presented a handful of tornadoes, including the first one of the day in downtown Minneapolis. This tornado was not only unique in meteorological evolution but also in societal dimensions, having a great deal of media and public attention.



Overview



An Atypical Upper Midwest Tornado Event

2.2 mb 1-hr surfaace pressure drop at KMSF

- Below normal temperatures for an August afternoon.

- Low-topped (mini) supercell environment (low CAPE, high shear) in advance of an approaching circulation, similar to tropical cyclone situations.

- Hybrid mode tornadogenesis.

- Quick tornadic development and dissipation.

- Only a total of 6 cloud-to-ground lightning strikes on this day in the metro, and only one with the tornadic "storm."







Societal Dimensions of the 19 Aug 2009 Minneapolis Tornado

The NWS partnered with the Twin Cities American Meteorological Society (AMS) who hosted a survey on surveymonkey.com. The survey was simple and quick to make and take. Distribution strategy was to utilize e-mails, social media outlets, and local media. The survey began about six months after the notable event, with 175 respondents in two months, 61 who saw the tornado.

Survey Respondent Locations Where were you on the afternoon of August 19th, 2009 (the day of the downtown Minneapolis)? **Jednesdav** atternor Had you thought a large city like Minneapolis was safe from tornadoes Tornadoes and cities don't get along, right' Quantifying a "Tornado Day" Maybe it didn't el like a - Queried tornado days within 50 miles of tornado day Minneapolis from 2004 to 2009. - 20 tornado days, 8 of which had multiple tornadoes within the 50 mile radius. - Derived afternoon (12-6 pm) averages of weather elements observed at KMSP on these days, which are shown to the right. someone you know see a tornado that day, and if so was it perceived as odd? Did it not look like a tornado? Yes, saw one and yes it seemed odd it didn't seem odd 4.8 % Survey Comments

What the Public Thought About this Event - Survey Results

ational Weather Service, Twin Cities/Chanhassen, MN





August 19th Social Media Example

that is understanding and