

# Meteorological Overview of the June 1, 2011 Tornado

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On June 1, 2011, the 12<sup>th</sup> killer tornado in New England since 1950 tracked 63 km (39 miles) from Westfield to Charlton, Massachusetts resulting in 3 fatalities, 200 injuries, and EF-3 damage. This talk takes a look at important meteorological factors that contributed to this rare event including an elevated mixed layer (EML) which likely contributed to the severity of the storms. In addition, tornado signatures from the Taunton WSR-88D and experimental CASA 3-cm dual-polarization radar from UMASS Amherst are shown. The former includes a remarkable and perhaps unprecedented three-body scatter spike associated with lofted debris near peak intensity of the EF-3 tornado.

## **PRESENTER'S BIO**

**Michael Ekster** is a senior forecaster with the National Weather Service in Gray, ME. After growing up on the east end of Long Island, he graduated from Lyndon State College in VT with a bachelor's degree in meteorology in 1999. His first job in weather was forecasting for energy companies at a private meteorological firm. Shortly thereafter, he started his first full-time NWS job as a meteorologist intern in Wichita, KS. Thereafter, his work took him to NWS offices in Upton, NY and Taunton, MA. Mike worked at the Taunton office from 2006 through 2010 and worked several high impact events including the destructive ice storm of 2008. Mike is currently the severe weather program co-leader and flash flood focal point at NWS Gray, ME.

Mike is fascinated by all varieties of high-impact weather, including snowstorms, hurricanes, and ice storms. However, his main expertise and love is in severe thunderstorms, tornadoes, and their detection

via radar. Mike witnessed his first tornado on the High Plains of Colorado in May of 1996 - an event that got him hooked on severe storms and storm chasing for many years. Northeast U.S. severe weather has always been an interest of Mike's, and in August, 2010 he followed up on this interest by co-authoring a *Weather and Forecasting* journal article entitled "The Association of the Elevated Mixed Layer with Significant Severe Weather Events in the Northeastern United States". While Mike has temporarily stopped chasing storms in the Plains, he can still be found chasing his 2-year-old daughter Emily around the house. In his spare time, Mike enjoys golfing during the nice Maine summers.