

NLDN Detects Large No. of CG Strokes in Derecho

On 29-30 June 2012, a derecho raced across several states in the northeast U.S. A derecho is a meteorological phenomenon that occurs during the summer months and produces strong winds over a very large area. In the U.S., a derecho typically occurs in the plains and Midwestern states. Less intense versions occur in other mid-latitude regions around the world during summer. Tornadoes are rarely associated with a derecho. In the case of June 2012, it began near Chicago and traveled at an average velocity of 35 meters per seconds for 1000 km. Measured surface wind speeds reached 55 meters per second. Several million people lost power due to damaged power lines and trees, very extensive damage occurred, and at least 17 people were killed.

The NLDN detected 129,016 cloud-to-ground lightning strokes during the course of this event. Figure 1 shows the strokes beginning west of Chicago and ending as the derecho reached the Atlantic coast to the east of D.C. 16 hours later.

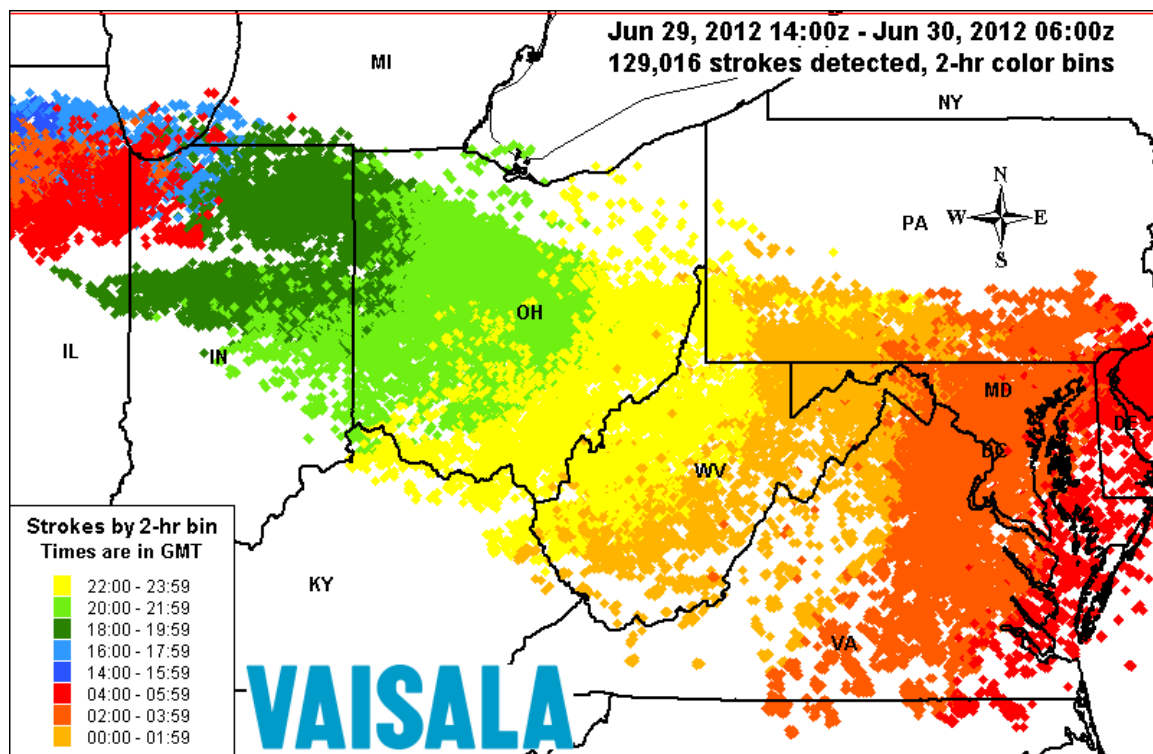


Figure 1. Map of NLDN strokes for 14 hours starting at 1400 UTC 29 June 2012. A total of 129,016 strokes were detected during this period. Colors indicate time in two-hour increments through the day.

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