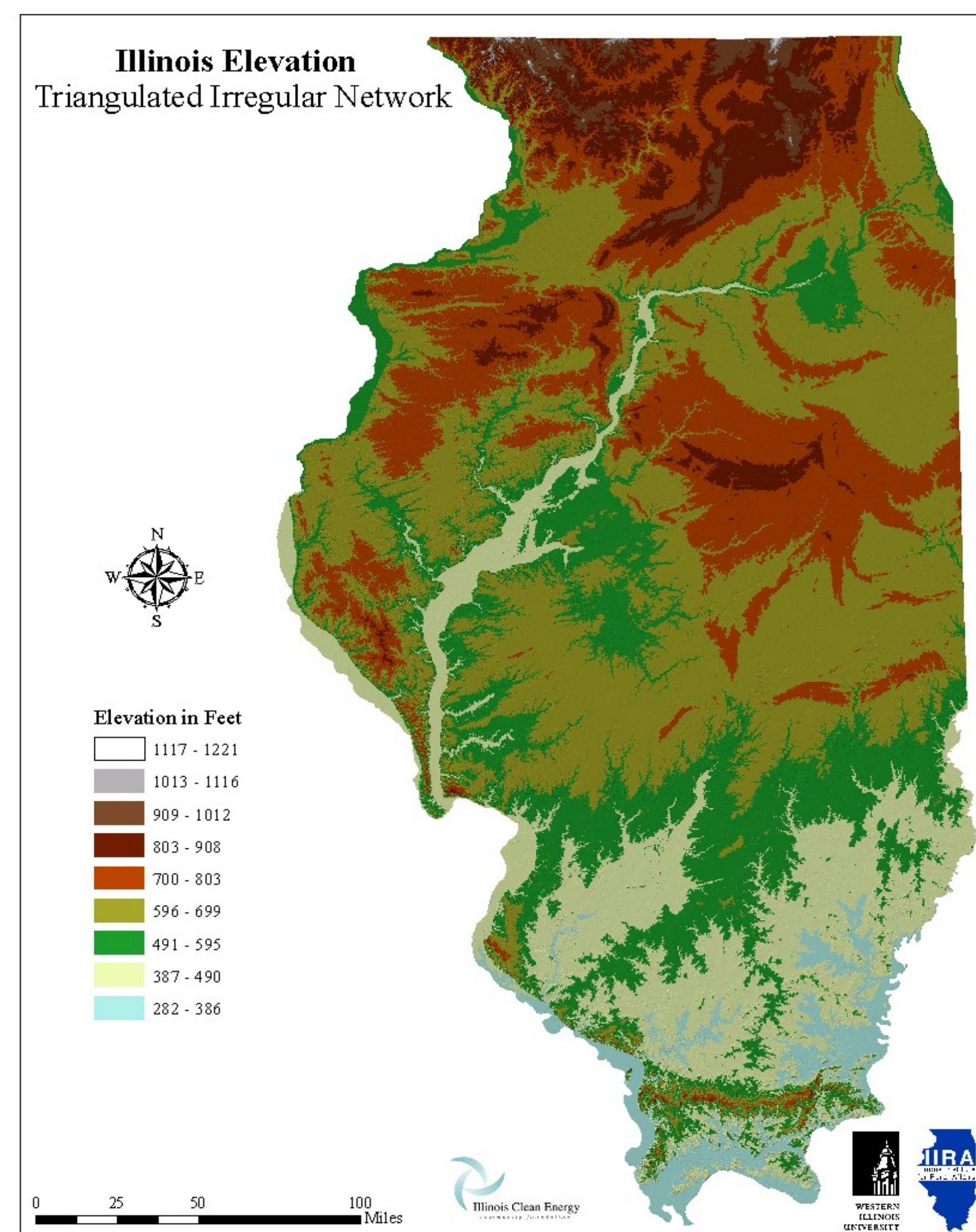
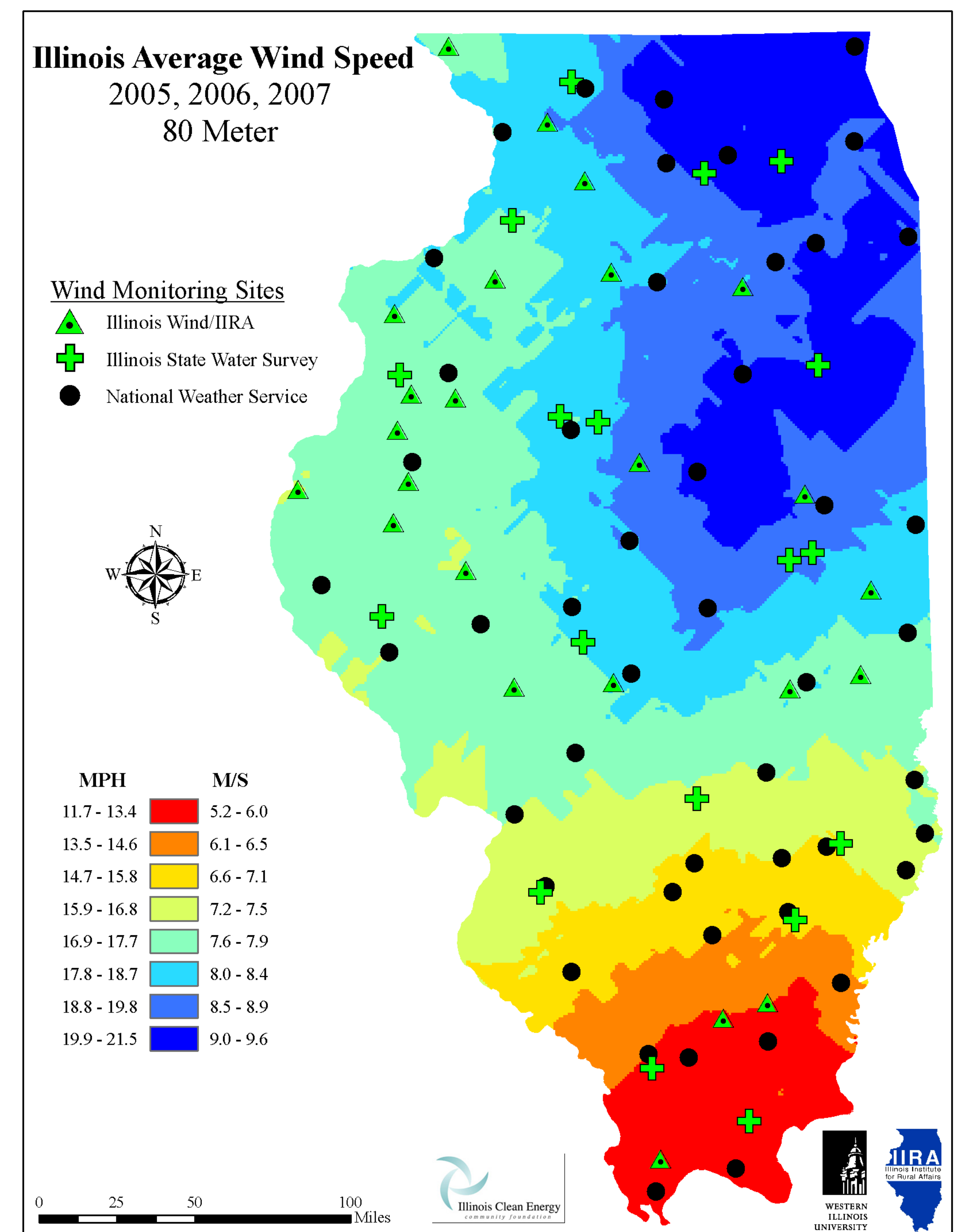
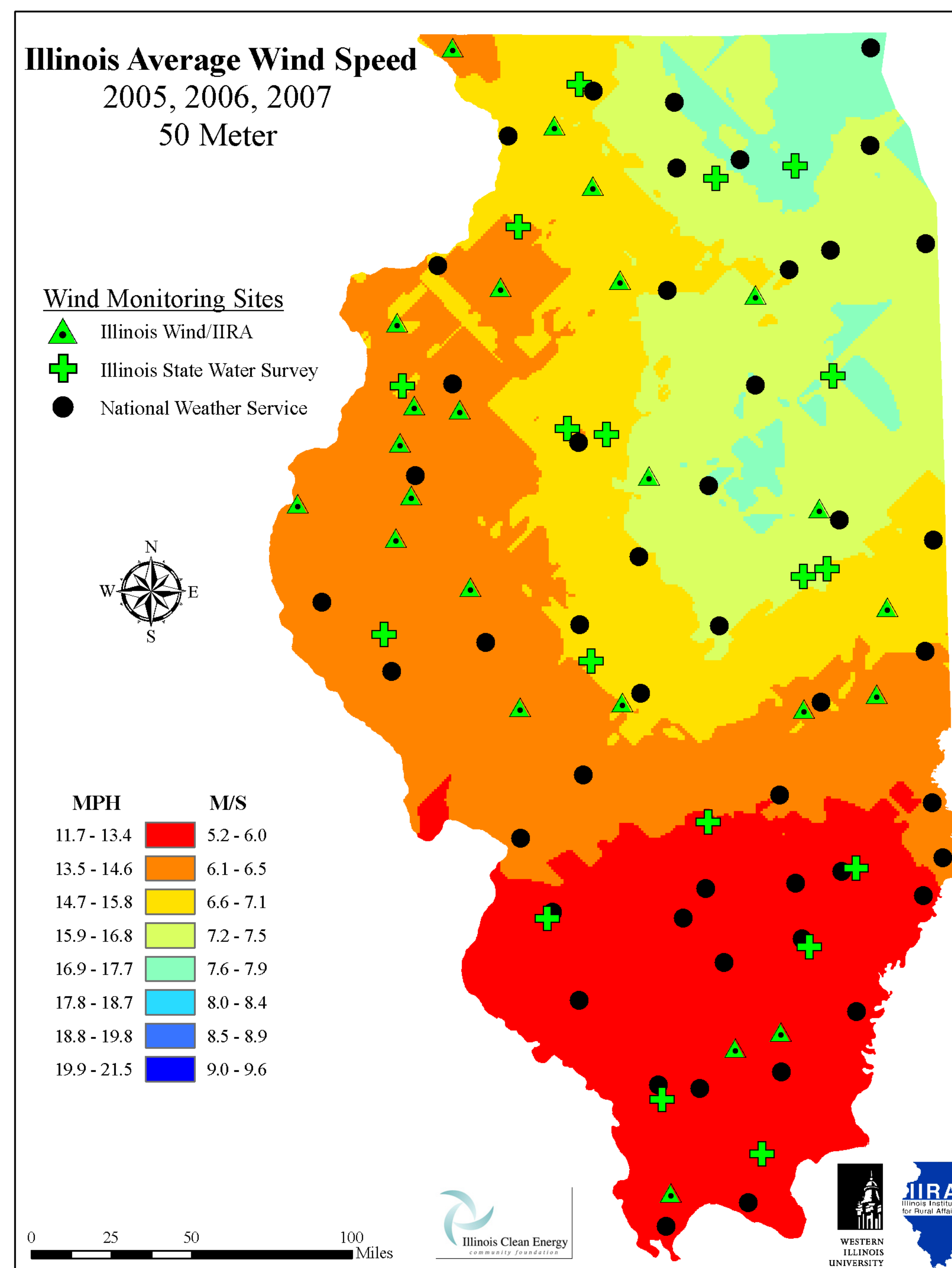


# Data Sources & Wind Monitoring Program

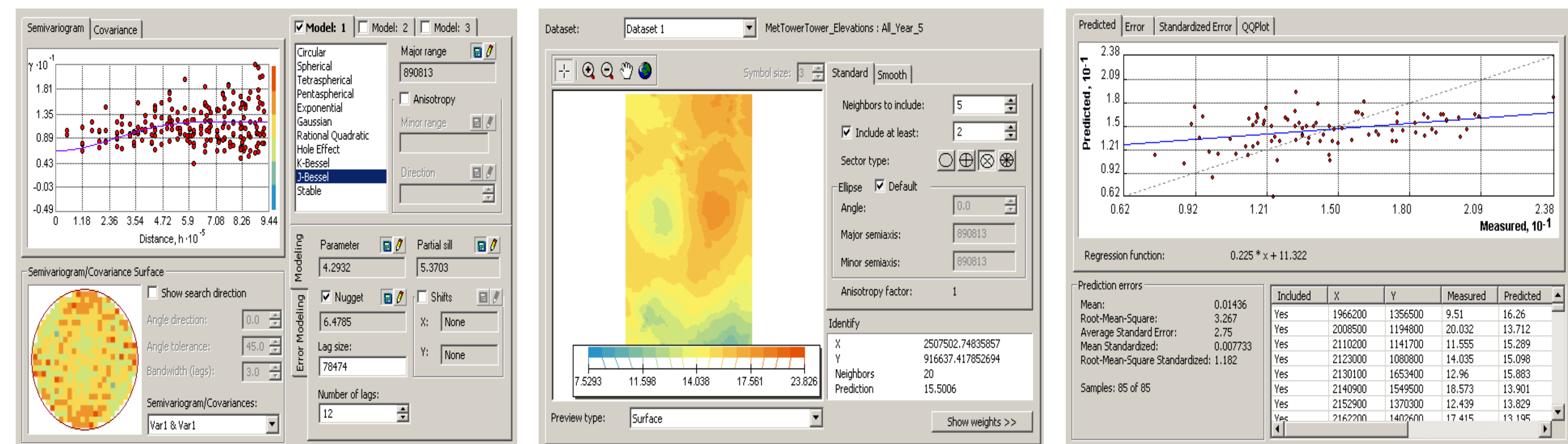
Between 2004 and 2008, IIRA solicited applications from landowners across Illinois to host meteorological towers. From this applicant pool eighteen sites were selected on the basis of optimum geographic distribution to receive 50 m meteorological towers with instrumentation at 10 and 50 m heights; towers remained in place for one year at each of these sites. At five additional sites, instruments were installed on pre-existing towers at 10, 50, and 80 m heights, and operated for multiple years. Equipment was installed and maintained by a professional contractor. Additional wind data was assembled weather stations operated by the National Weather Service (8 and 10 m heights) and the Illinois State Water Survey (10 m height). The elevation data employed was a US Geological Survey digital elevation model at 30 m resolution.



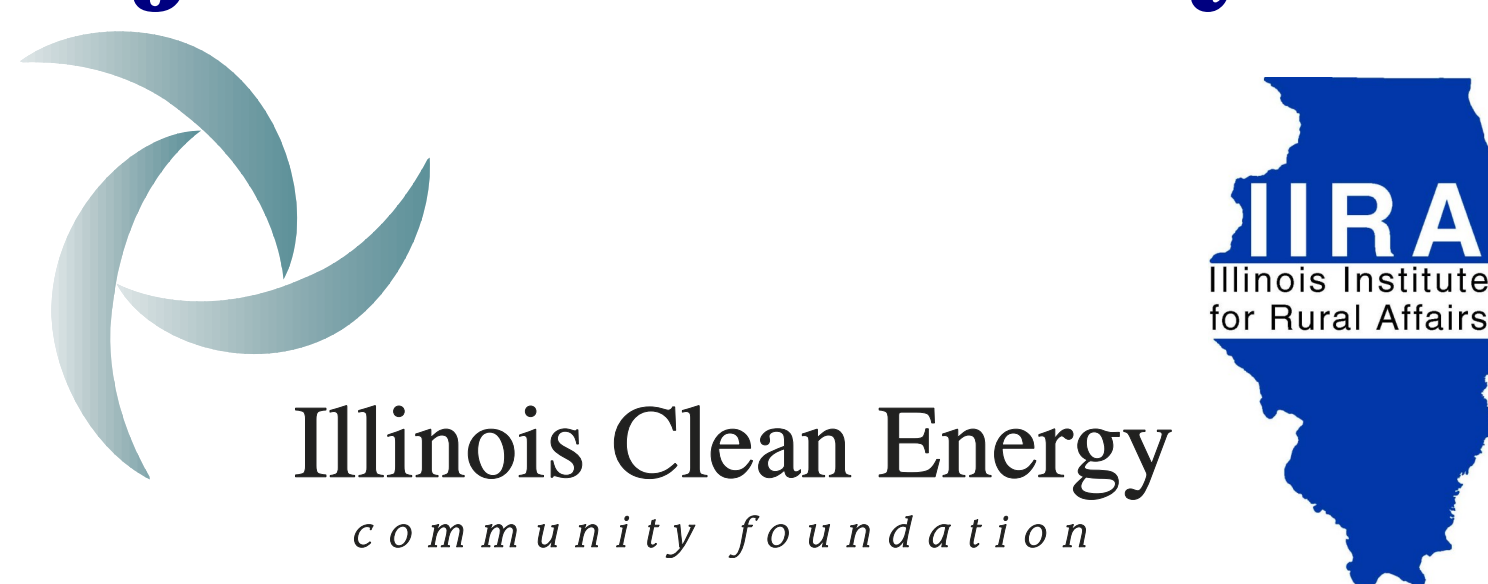
## Modeling

Modeling was performed in the Geostatistical Analyst extension of ArcGIS 9.2. The digital elevation model was contoured and converted to points. Each wind speed data point was then co-kriged against the surface elevation point data. Grid cell resolution was 1,000 x 1,000 ft.

### Geostatistical Analyst Output



Project funded by:



[www.illinoiswind.org](http://www.illinoiswind.org)  
[www.iira.org](http://www.iira.org)