



Weather Induced Outage Risk Analysis

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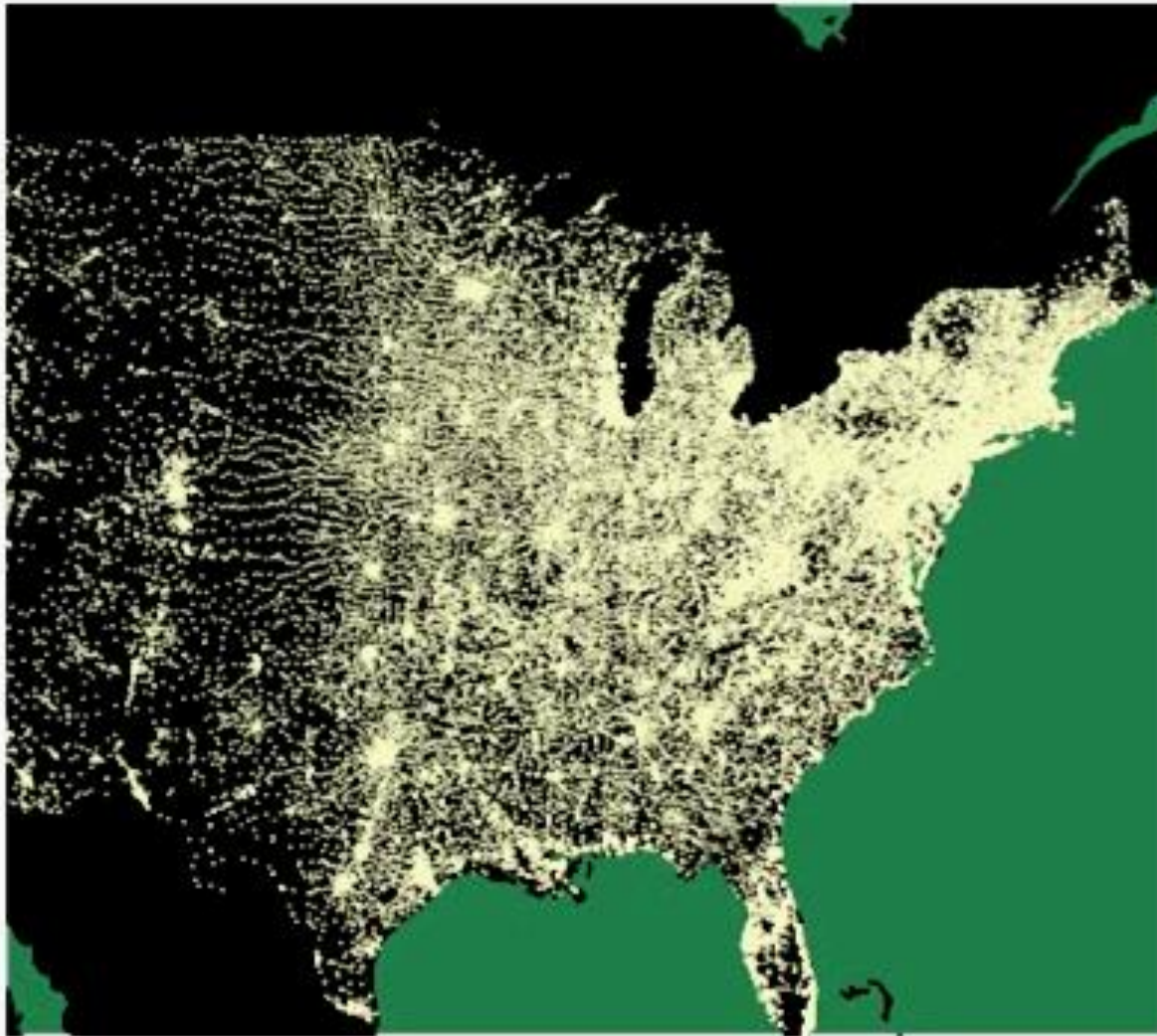


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Blackout Risk Model™



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Hartford Steam Boiler

500,000+ weather events

11,000 power plants

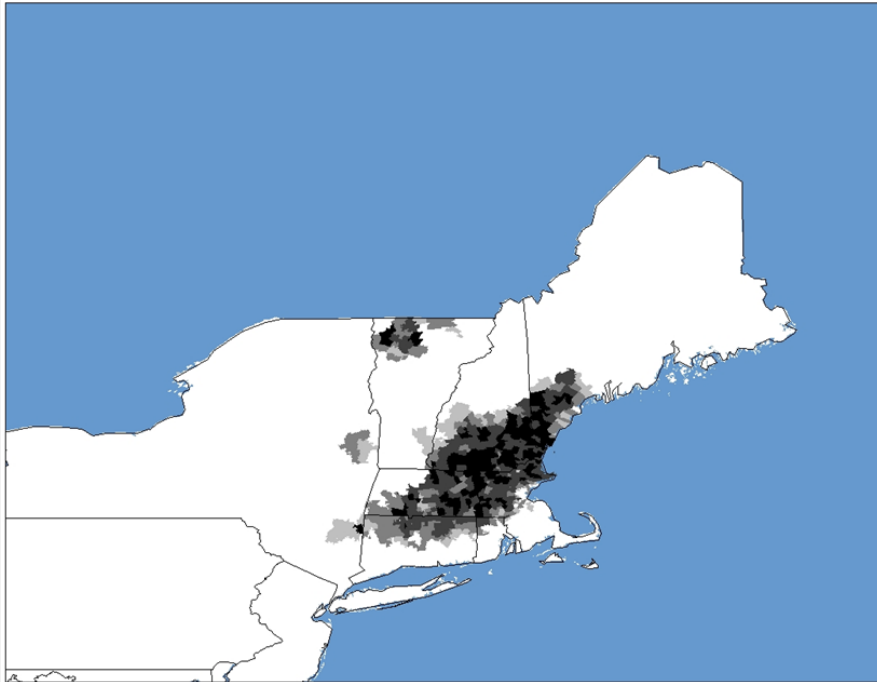
64,000 substations

737,000 miles of
transmission lines

Population density
weighting

Tree density modelling

Winter Storm



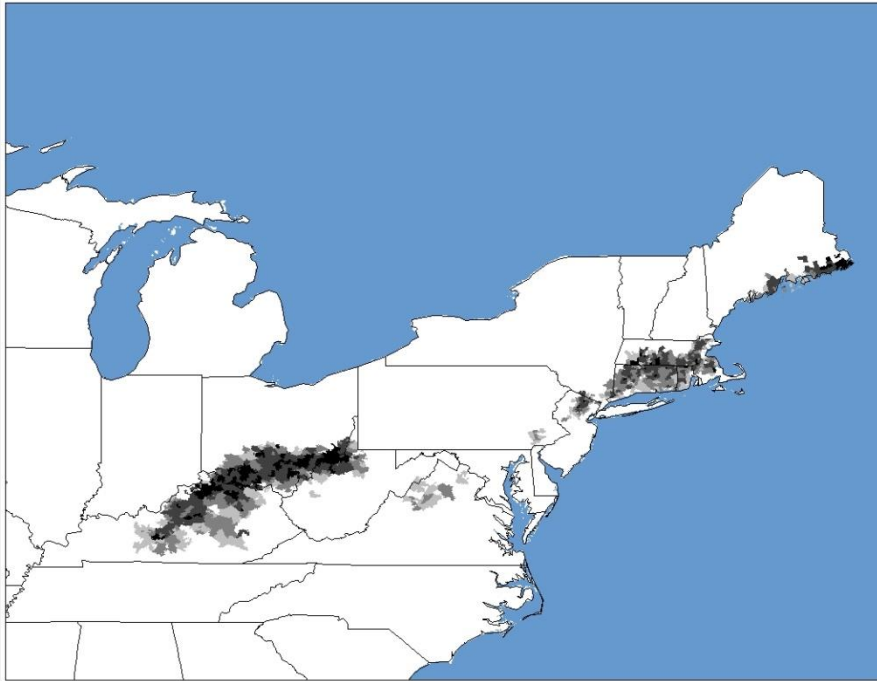
- Effects 13 million people: 12 states
- In Massachusetts, 806k people will have power loss.

Hurricane



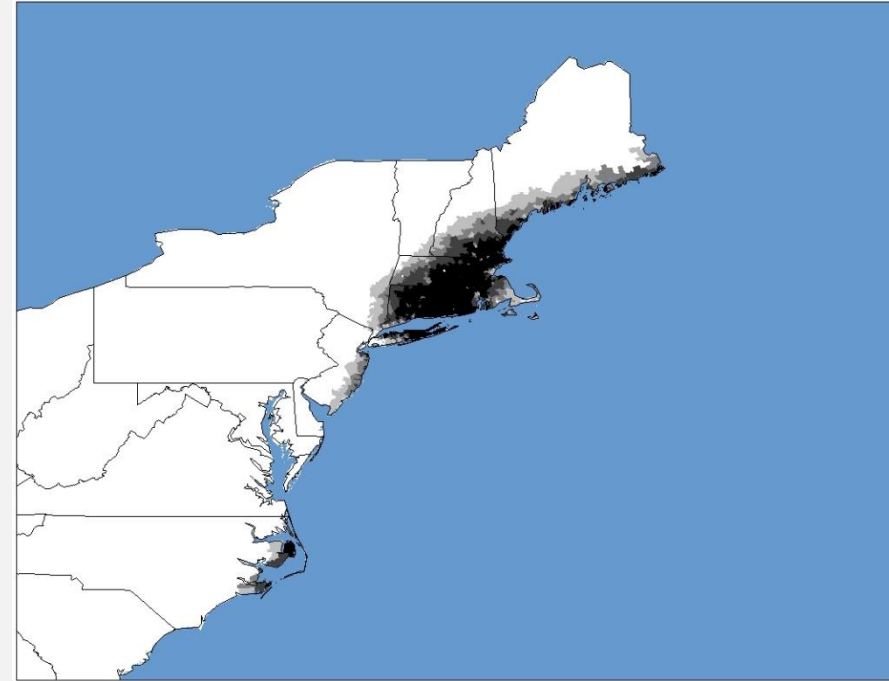
- Effects 2.5 million people: 10 states
- In Massachusetts, 1.2 million people will have power loss.

Winter Storm



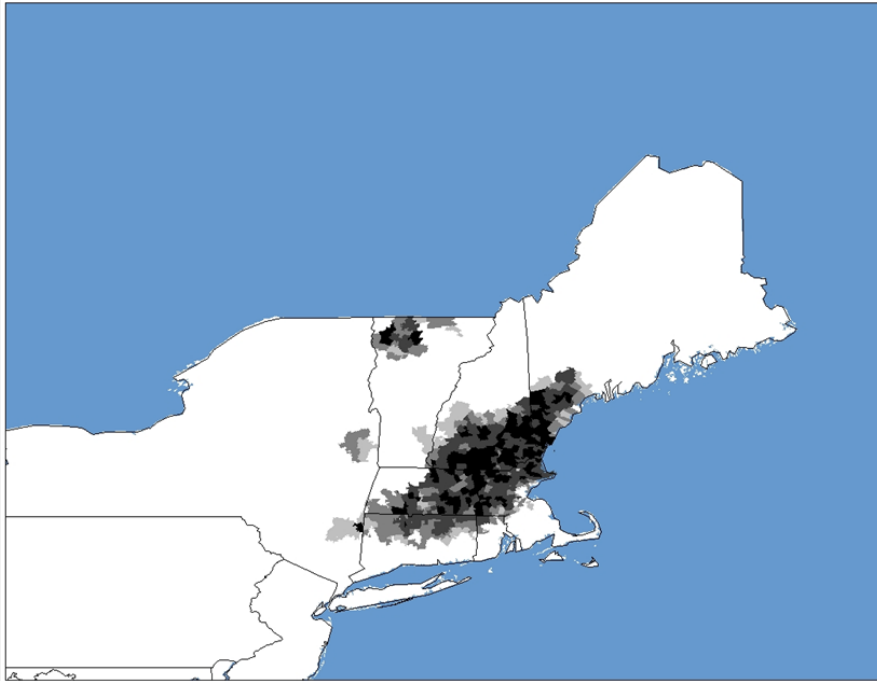
- Effects 7.1 million people: 14 states
- In Massachusetts, 2 million people will have power loss.

Hurricane



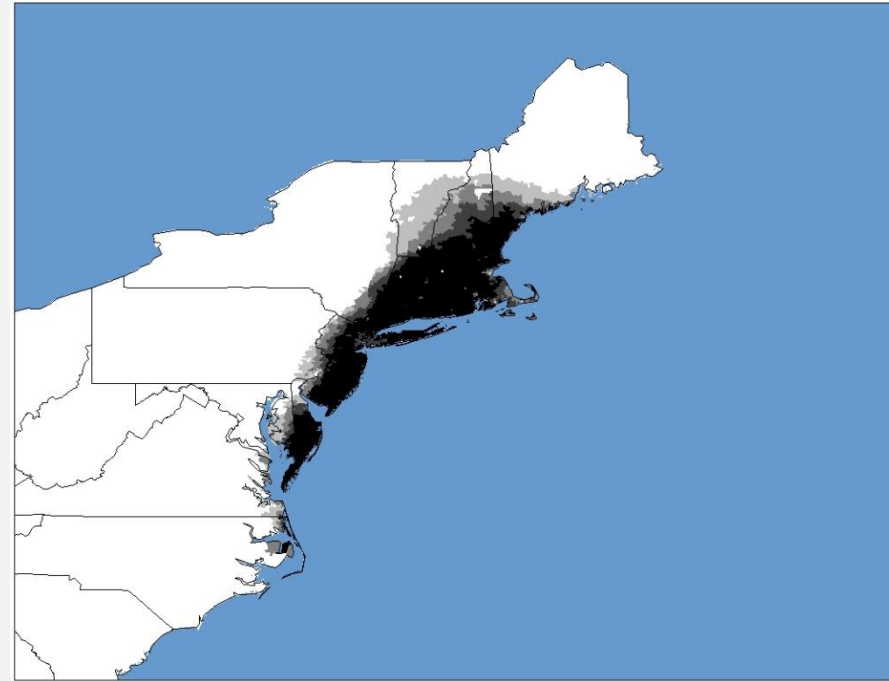
- Effects 13 million people: 12 states
- In Massachusetts, 4.5 million people will have power loss.

Winter Storm



- Effects 4.5 million people: 7 states
- In Massachusetts, 2.5 million people will have power loss.

Hurricane

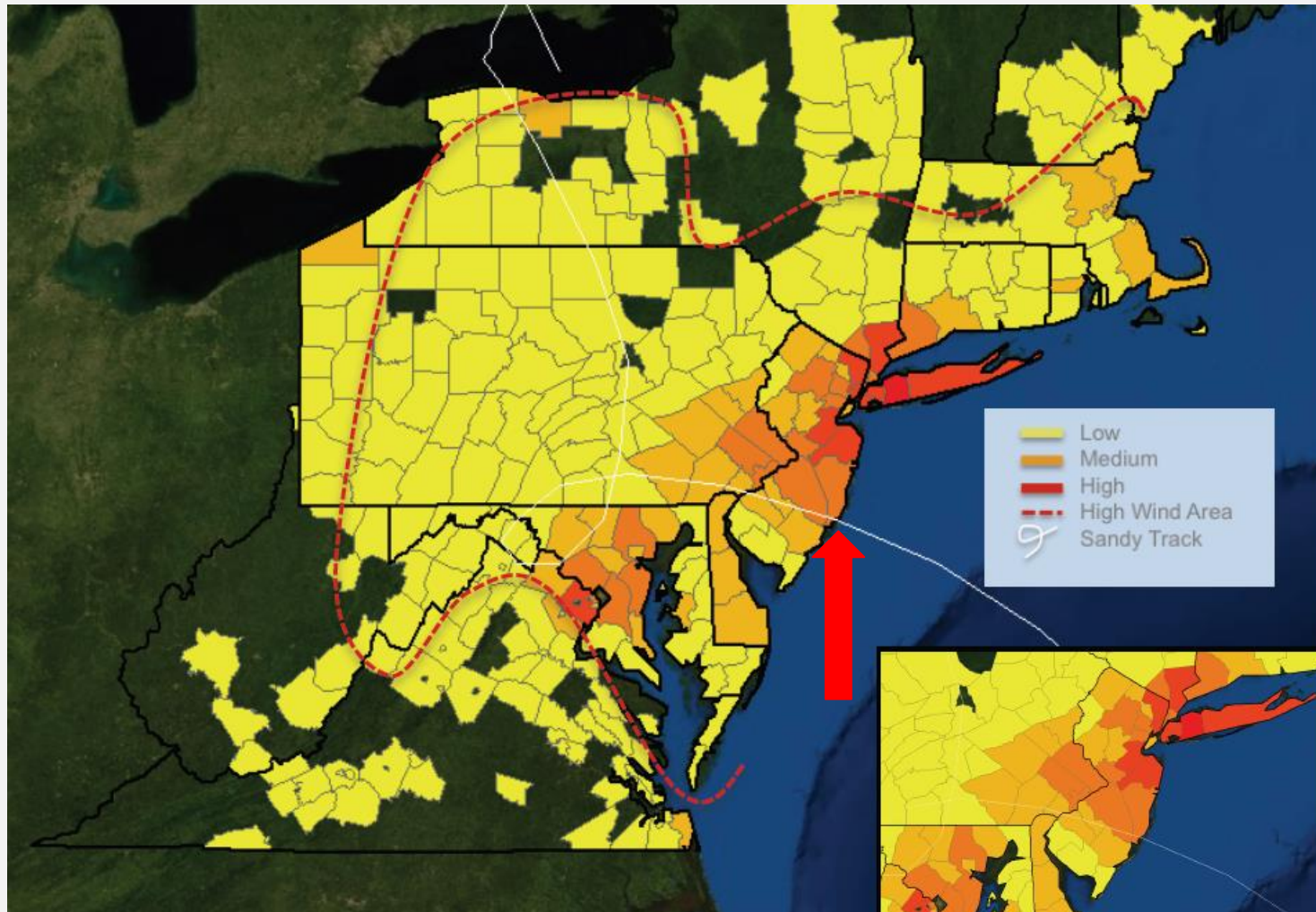


- Effects 31 million people: 13 states
- In Massachusetts, 5.1 million people will have power loss.

Sandy's Landfall - Location



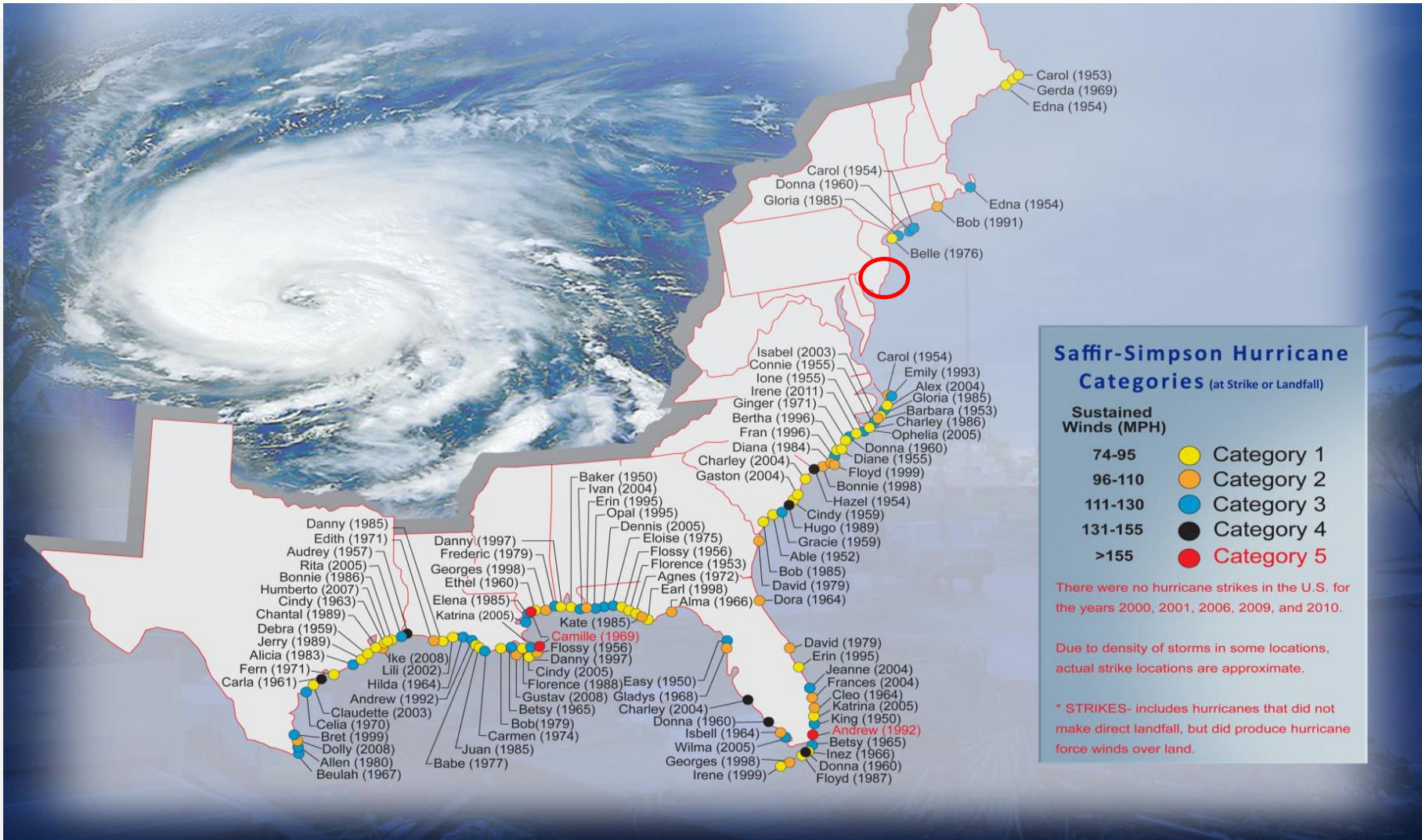
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Hurricane Landfalls 1950 - 2011



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NOAA's NATIONAL CLIMATIC DATA CENTER ■ ASHEVILLE, N.C.