



NExUS Ongoing Projects and Activities Mon Dec 18 09:40:52 EST 2017

<b>Name</b>	Accurate Storm Surge Modeling: The Influence of Model Dimensionality, Freshwater, Tides, Stratification and Model Grid Area
<b>Description</b>	Detailed simulations, comparisons with observations, and model sensitivity experiments are presented for the August 2011 tropical cyclone Irene and a March 2010 nor'easter that affected the New York City (NYC) metropolitan area. To "dissect" the storm tides and examine the role of various physical processes in controlling total water elevation, a series of model experiments was performed where one process was omitted for each experiment, and results were studied for eight different tide stations.
<b>Category</b>	- Research
<b>Sector</b>	- Public Health and Safety - Infrastructure - Natural Ecosystems
<b>Focus Area</b>	- Coasts and Climate Resilience (including sea-level rise) - Changes in Extremes of Weather and Climate
<b>Region</b>	- Regional Or State -- Mid-Atlantic
<b>Status</b>	- Ongoing - Completed
<b>Timelines</b>	Date of completion, April 2012
<b>Lead Agencies</b>	NOAA Regional Integrated Sciences and Assessments
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