



NExUS Ongoing Projects and Activities Wed Dec 19 10:37:35 EST 2018

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| Name | Accurate Storm Surge Modeling: The Influence of Model Dimensionality, Freshwater, Tides, Stratification and Model Grid Area |
| Description | 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. |
| Category | - Research |
| Sector | - Public Health and Safety - Infrastructure - Natural Ecosystems |
| Focus Area | - Coasts and Climate Resilience (including sea-level rise) - Changes in Extremes of Weather and Climate |
| Region | - Regional Or State -- Mid-Atlantic |
| Status | - Ongoing - Completed |
| Timelines | Date of completion, April 2012 |
| Lead Agencies | NOAA Regional Integrated Sciences and Assessments |
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