

ICNet Members' New England Research & Project Survey



Research/Project Focus	Coastal Flooding and Erosion from Severe Storms in a Changing Climate
Research/Project Description	Goals are to improved real time forecasts of coastal flooding and to generate “dynamic” coastal inundation maps and storm impacts for Maine (and northern NH) . This work will identify what coastal causeway, bridge and other transportation infrastructure will like to be affected in the future
Primary Category*	Hydrology
Geographic Location	Maine and North New Hampshire coasts
Funding	NOAA Maine Sea grant
Contact	Qingping Zou UMaine-O: qingping.zou@maine.edu
Infrastructure sectors effected, subject area	Bridges, pavements, culverts, coastal causeway, property, coastal defense structure, beach
For modeled climate or sea level rise projections, AOGCM or other sources used	IPCC
Other Information, data, models, used	Wave, storm surge and mesoscale meteorology Numerical modelling, field measurements

Time periods analyzed	TBD
Status /Date submitted to ICNet	Proposal accepted, project will start Spring 2014
Brief key findings to date	N/A
Key publications/reports?	Zou, Q.-P., Chen, Y., Cluckie, I., Hewston, R., Pan, S., Peng, Z. and Reeve, D., 2013: “Ensemble prediction of coastal flood risk arising from overtopping and scour by linking meteorological, ocean, coastal and surf zone models”, <i>Quarterly Journal of the Royal Meteorological Society</i> , Vol. 139, Issue 671, pages 298–313, (DOI: 10.1002/qj.2078).
Other information (e.g., web links to technical reports).	N/A

*** Categories: Roads, bridges, and culverts; Pavement and/or soils; Hydrology (study of data/floods); Environmental/water resources (stormwater, drinking water); Transportation assets (network); Climate model output**