



SMART SEA LEVEL SENSOR WORKSHOP

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GEORGIA POWER CHAIR
EARTH & ATMOSPHERIC SCIENCES

AUGUST 21, 2018

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<http://smartcities.gatech.edu/georgia-smart>



<http://globalchange.gatech.edu>

Smart Sea Level Sensor Project

<http://sealevelsensors.org>



GEORGIA SMART COMMUNITIES CHALLENGE

Smart Sea Level Sensor Project Team



Nick Deffley
Office of Resilience
Tom McDonald
David Donnelly



Dr. Kim Cobb
Dr. Russ Clark*
Dr. David Frost
Dr. Emanuele Di Lorenzo
Lalith Polepeddi
Jayma Koval
Tim Cone*
Andrea Rodgers



Randall Mathews

Dennis Jones
Kirk McElveen



Clinton Edminster
Coco Papy
Jennifer Bonnett

*at GT-Savannah

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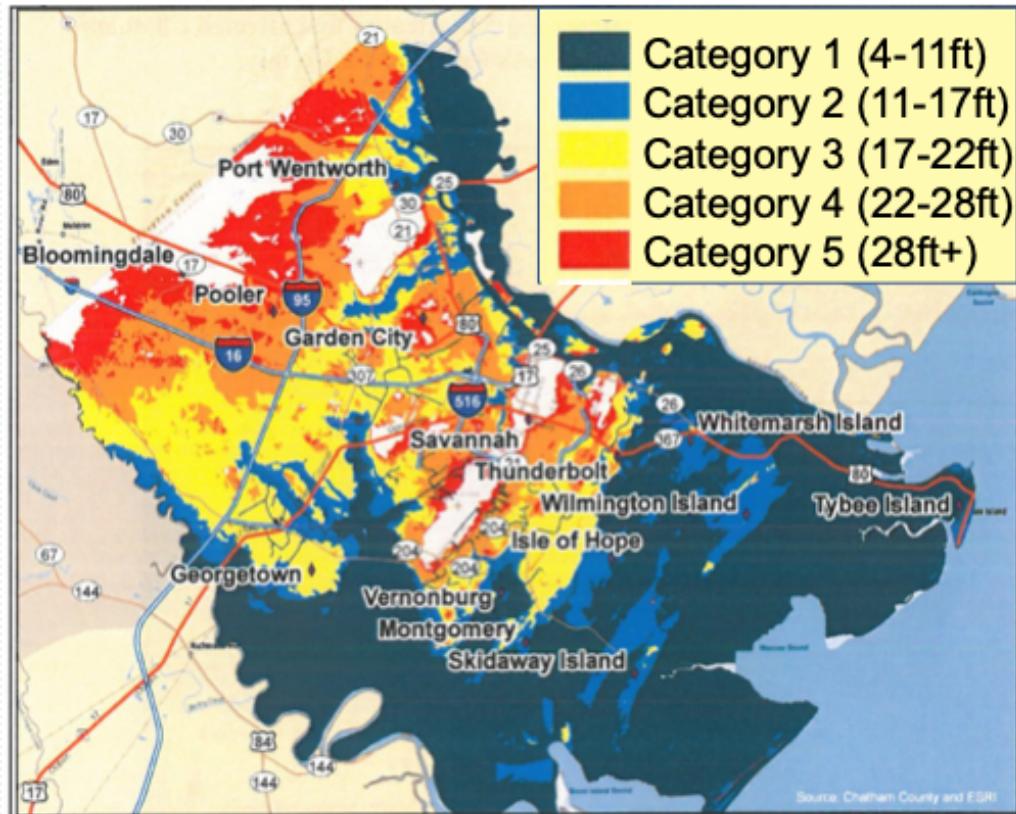


GEORGIA SMART COMMUNITIES CHALLENGE



Application Targets:

- 1) emergency planning & response
- 2) short- and long-term risk assessment & resilience planning
- 3) communication & building awareness
- 4) educational resources



CEMA, 2010

Four working groups:

1. Sensor Placement (Russ Clark & Randall Matthews)
2. Education (Tim Cone & Jayma Koval)
3. Community Engagement (Nick Deffley)
4. Communication (Lalith Polepeddi & Andrea Rogers)

Four working groups:

1. Sensor Placement (Russ Clark & Randall Matthews)
 - working with ten GT computer science undergrads through May, 2019 to design data visualization tools
 - Georgia Smart paid summer intern to work on project
2. Education (Tim Cone & Jayma Koval)
3. Community Engagement (Nick Deffley)
4. Communication (Lalith Polepeddi & Andrea Rogers)

FROM THE OPEN OCEAN TO THE URBAN SCALE: A MODELLING SYSTEM FOR SAVANNAH CITY AND GEORGIA COASTS

Emanuele Di Lorenzo, Georgia Tech

I. Federico, F. Montagna, S. Causio, G. Coppini, N. Pinardi, K. Park

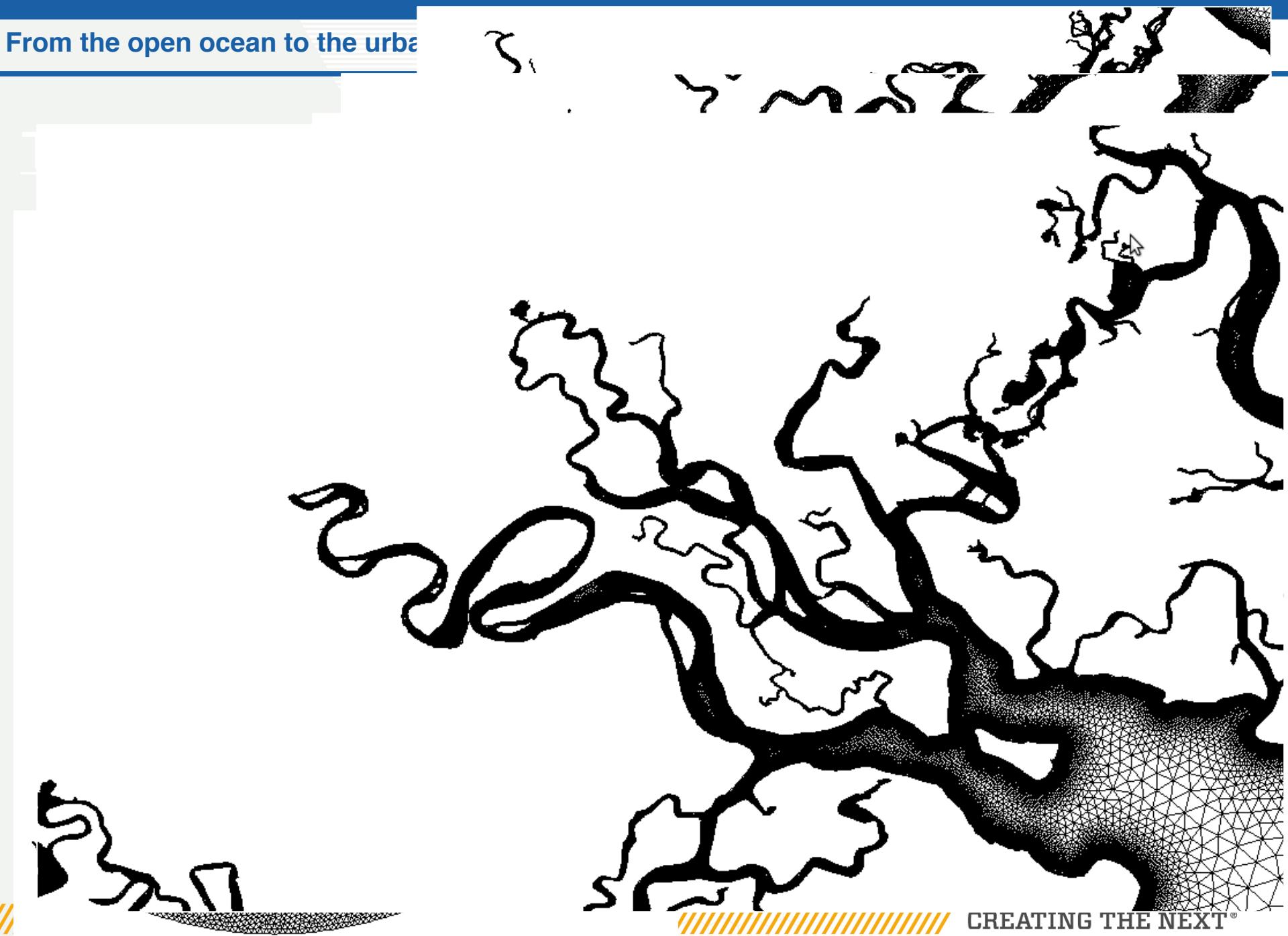


ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA



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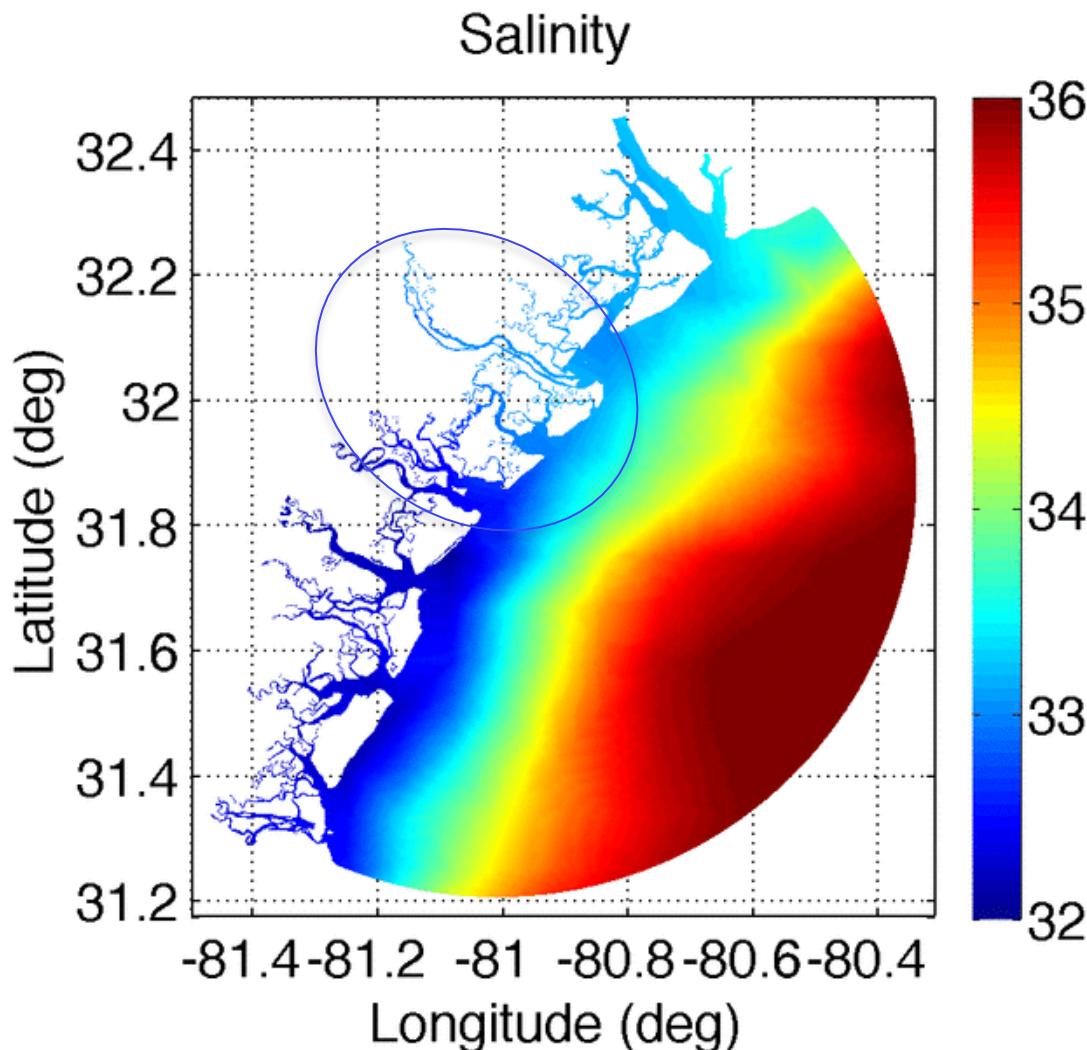
From the open ocean to the urban



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Preliminary results

Simulation period: 1-10 Jan 2017

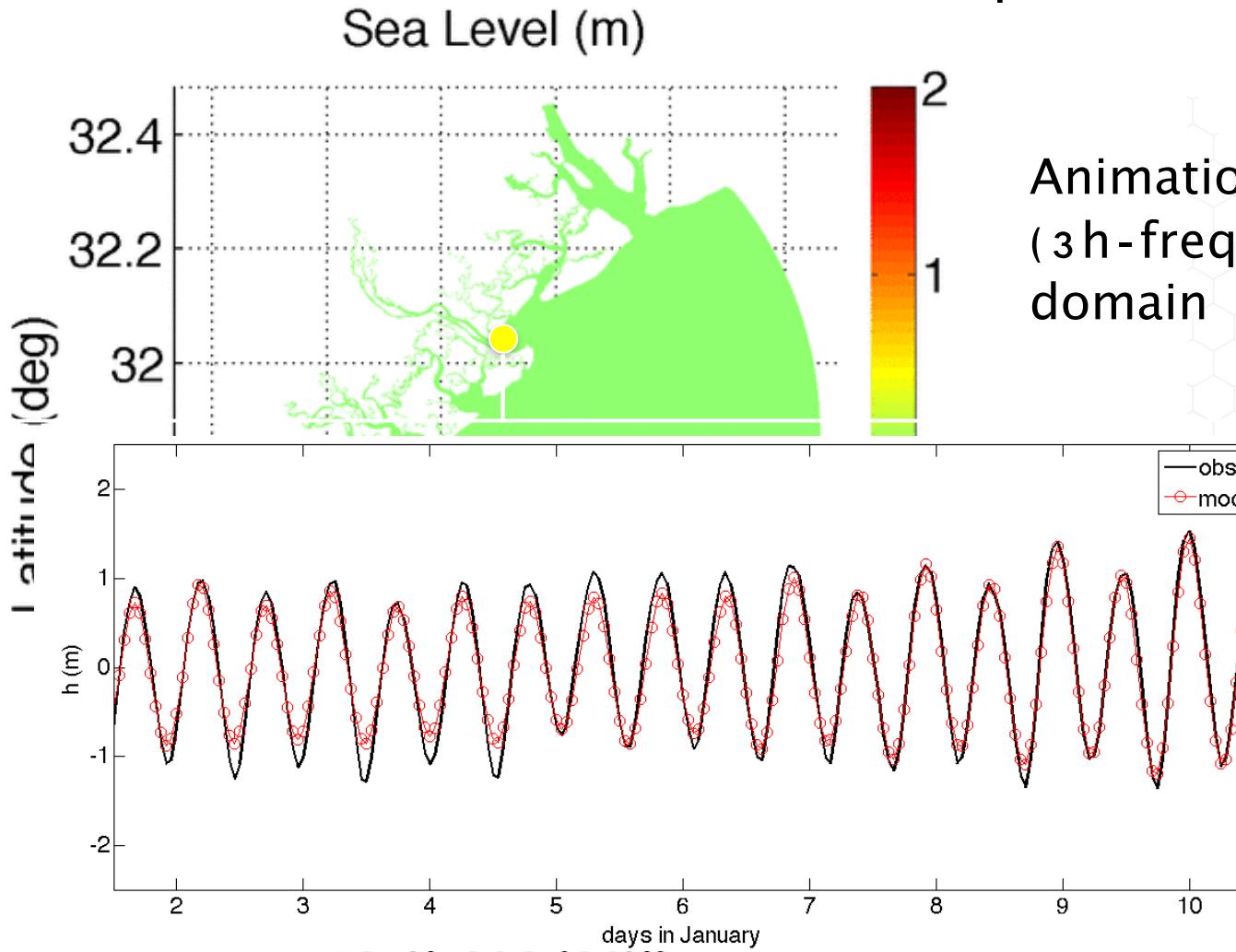


Animation of Sea Surface Salinity (6h-freq) for entire domain

Impact of Savannah river plume in delta and surrounded coastal areas

Preliminary

Simulation period: 1-10 Jan 2017



Model vs reality
Ft. Paluski

Comparison between modeled and observed water level at Fort Pulaski station
(tidesandcurrents.noaa.gov/)

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Four working groups:

1. Sensor Placement (Russ Clark & Randall Matthews)
2. Education (Tim Cone & Jayma Koval)
 - met at Jenkins High School yesterday to explore partnership (sensor assembly, student projects)
 - digital touch display at GT-Savannah
3. Community Engagement (Nick Deffley)
4. Communication (Lalith Polepeddi & Andrea Rogers)



Four working groups:

1. Sensor Placement (Russ Clark & Randall Matthews)
2. Education (Tim Cone & Jayma Koval)
3. Community Engagement (Nick Deffley)
 - Open Savannah
 - Coastal Georgia Indicators Coalition
 - Harambee House
4. Communication (Lalith Polepeddi & Andrea Rogers)

Four working groups:

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3. Community Engagement (Nick Deffley)
4. Communication (Lalith Polepeddi & Andrea Rogers)
- sealevelsensors.org