

Group Activity

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Objectives and agenda

- Objectives

- ▶ Participants should be comfortable retrieving, organizing, and analyzing a SWMP dataset
- ▶ Understand the questions and use appropriate methods

- Agenda

- ▶ Dataset description and questions
- ▶ Group activity

Dataset description

Hurricane Sandy

- Largest Atlantic hurricane on record (by diameter)
- Second costliest US hurricane
- US landfall October 29th, 2012
- Cat 2 on landfall
- Rainfall exceeding 12 inches, 13 foot storm surge in some areas



Dataset description

Several NERRS reserves were impacted, landfall directly over Jacques Cousteau



Dataset description

We will look at the water quality, nutrients, and weather data for 2012 and 2013 for Jacques Cousteau – ‘dataset4’ folder

Overall question

How did the hurricane impact the reserve?

Specific questions

- Are there noticeable changes in the time series? Which parameters?
- Are the long-term means different before and after landfall?
- Can the effects be detected prior to landfall?
- How long did the effects persist after the storm?

Dataset description

Specific questions

- Are there noticeable changes in the time series? Which parameters?
- Are the long-term means different before and after landfall?
- Can the effects be detected prior to landfall?
- How long did the effects persist after the storm?

How will you address these questions?

- What parameters or stations will you consider?
- How will you subset, combine, aggregate?
- What plots will you create?
- How will you interpret your results?

Resources - cookbook, SWMPPr tutorial, instructors, your table buddies!



NERRS / SWMP

Data Analysis Workshop: *Time Series*

November 17, 2014

Questions??