



UPRM-CAOSE: The UPRM Center for Applied Ocean Science and Engineering



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ABOUT THE CENTER

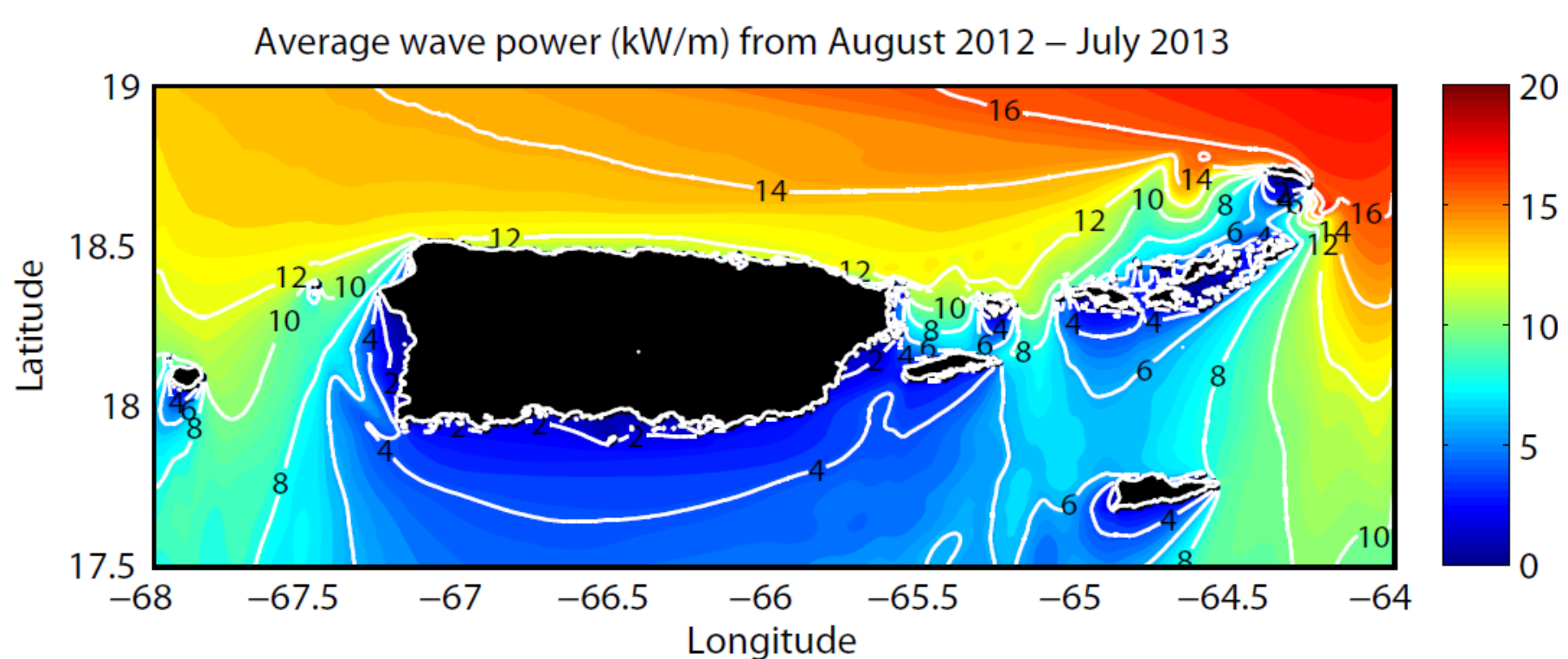
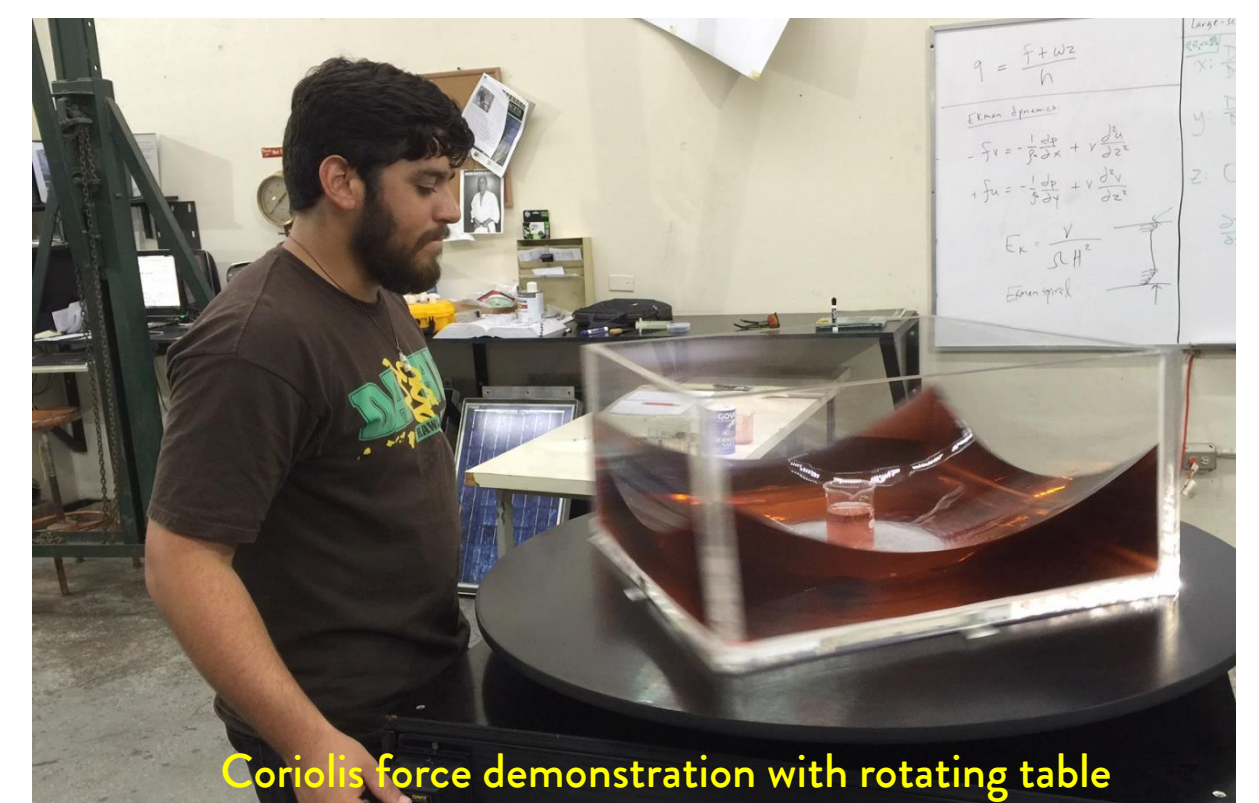
The CAOSE is an interdisciplinary effort that brings together students and faculty from several departments from both the Colleges of Engineering and Arts and Sciences at UPRM. CAOSE seeks to develop and maintain a state of the art, externally funded research, service and education program in applied ocean science and engineering. CAOSE's mission is to bring together the disciplines of oceanography, fluid dynamics, renewable ocean energy, and ocean, wind and coastal engineering in an effort to improve understanding of ocean processes and ways that society can live in harmony with our coastal environment, while driving economic growth and improving our quality of life. Specific goals include:

- Establishing and maintaining a state of the art, externally funded research program in applied ocean science and engineering
- Publishing research results in world-leading peer-reviewed journals
- Help lead UPRM to the forefront of research in ocean science and engineering
- Develop a novel study program in applied ocean science and engineering at UPRM

TEACHING & RESEARCH

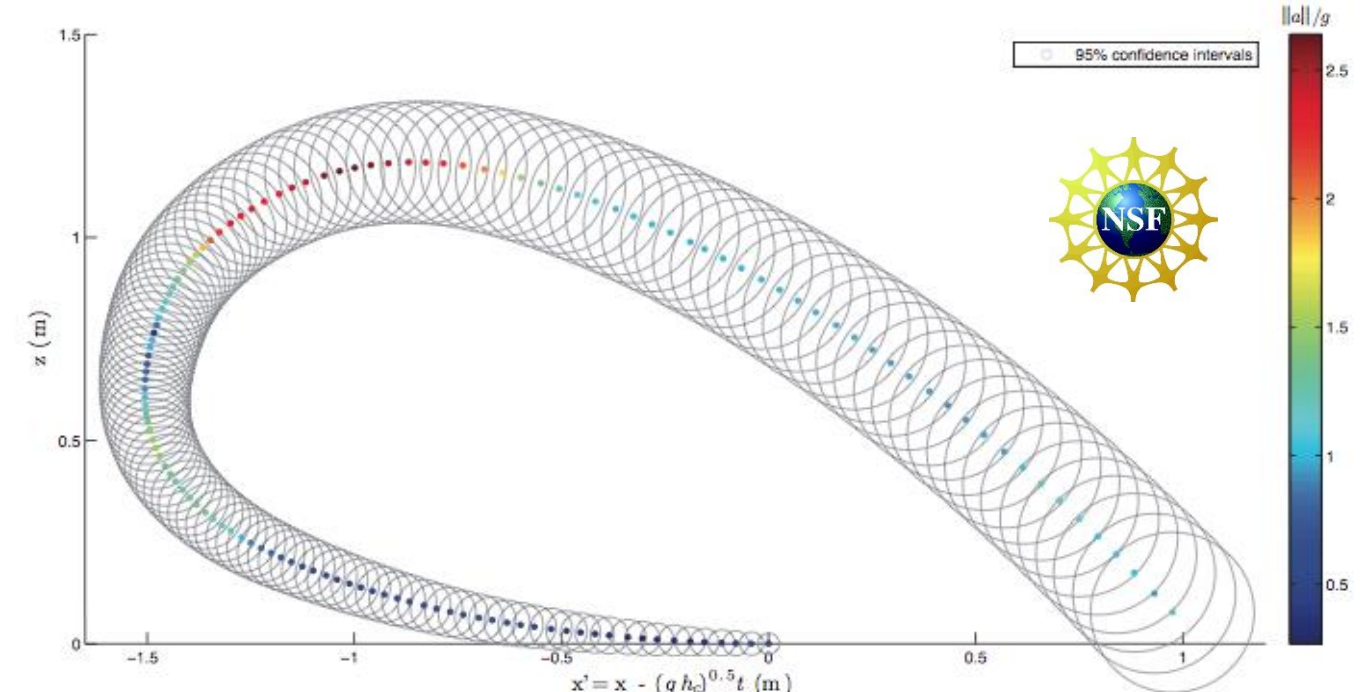
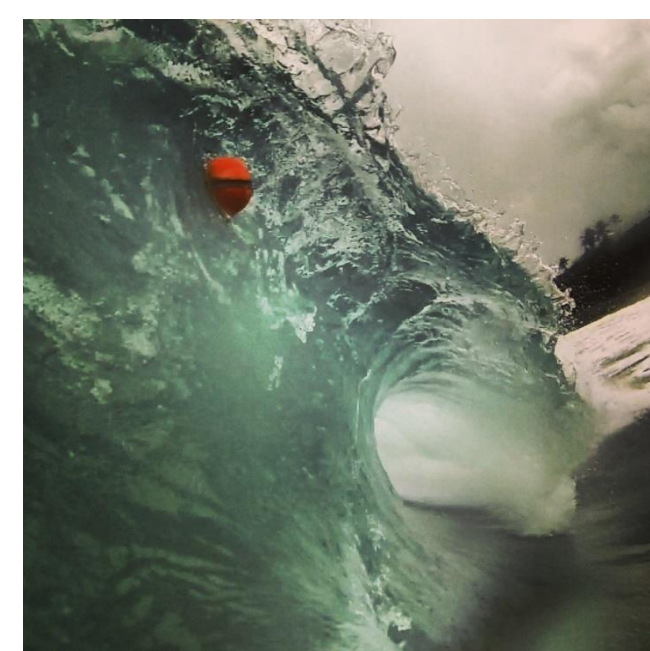
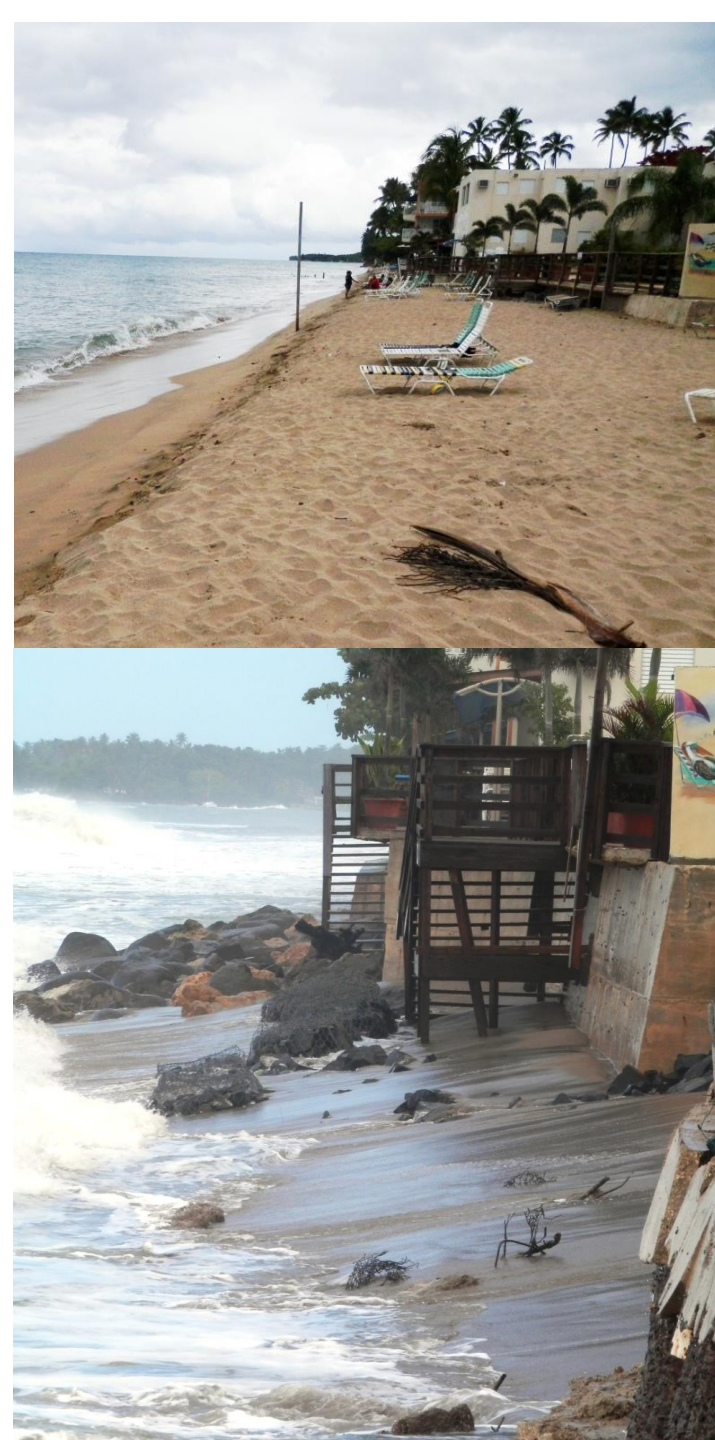
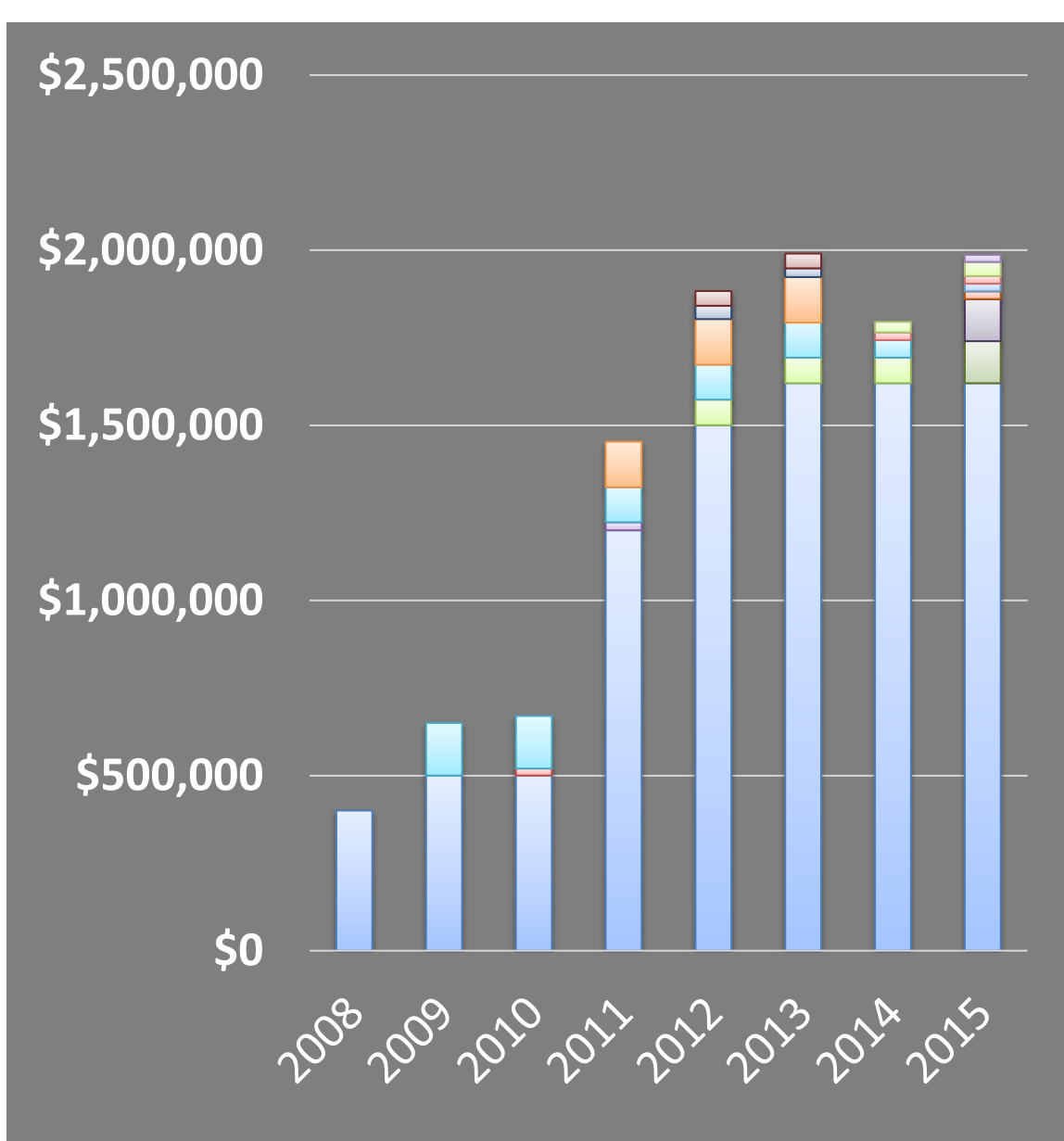
CAOSE supports both undergraduate and graduate students which come from a multidisciplinary background, including physics, oceanography, engineering, etc. CAOSE faculty develop and teach new courses such as:

- INGE 5185: Introduction to Coastal Engineering
- INGE 5027: Ocean Wave Dynamics for Engineers
- CMOF 6631: Geophysical Fluid Dynamics
- INGE 5996: Advanced Coastal Hydrodynamics
- INCI 6305: Wind Engineering



Mapping the renewable wave energy resource for PR/USVI

UPRM-CAOSE funding trend since inception



Probing the internal structure of plunging waves using inertial drifters (Amador & Canals, 2015)



UPRM-CAOSE is a CariCOOS partner



UPRM-CAOSE is funded by Sea Grant to conduct applied research in coastal erosion and beach nourishment.



UPRM-CAOSE supports the UPRM Marine Technology Student Chapter, please see their poster / exhibit!



THE UPRM CAOSE INTRAMURAL PRACTICE PROGRAM

The UPRM-CAOSE Intramural Practice Program allows state agencies, municipalities and the private industry access to expertise in oceanography, coastal hydrodynamics, and wind and ocean engineering. These projects also provide vital real world experience to students and up and coming professionals at our center.

- **WHY:** UPRM-CAOSE has the necessary expertise, resources and technological capabilities to address the most pressing challenges in today's complex oceanic environment.
- **HOW:** Through a professional services contract between UPRM and your agency, corporation or municipality. Please contact us for more information.