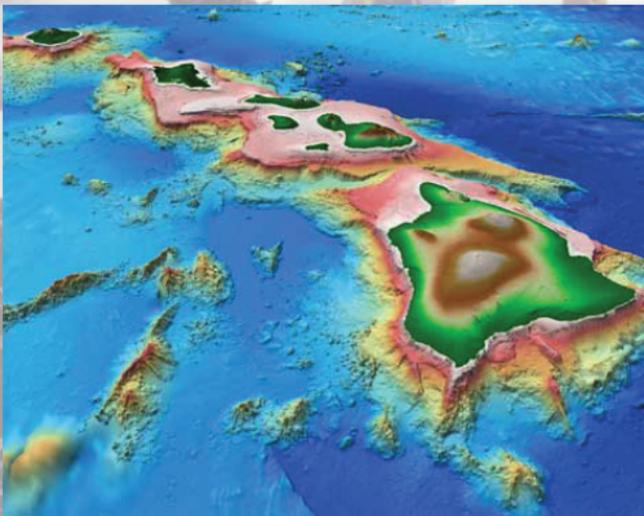
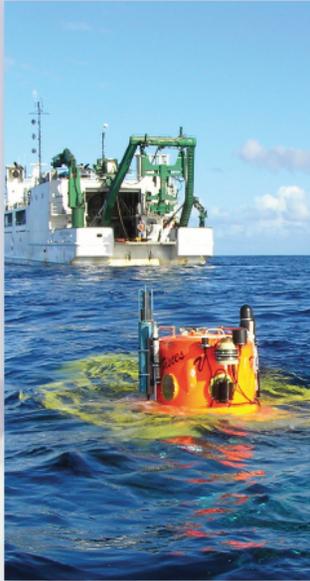


# SOEST

Dean's Faculty Meeting 5/7/13  
providing science, technology and  
education to advance understanding  
of the ocean, Earth and planets ...



## ... and

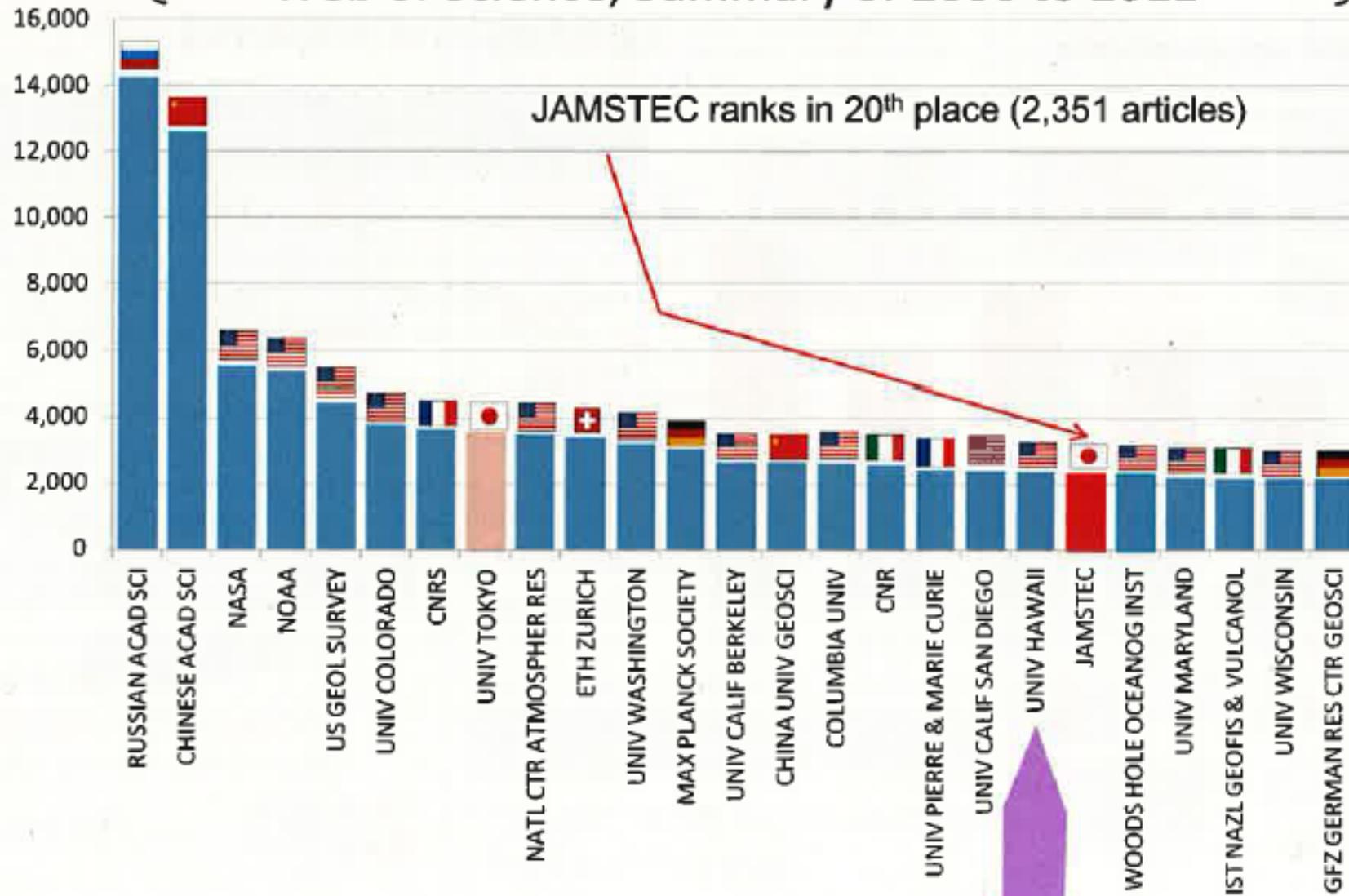
- solve energy and resource issues
- forecast our changing climate
- build and launch small satellites
- provide beach safety and vog alerts
- employ and train a high-tech workforce
- track sea level rise and coastal erosion
- preserve fisheries and coral reefs
- determine impacts of ocean acidification

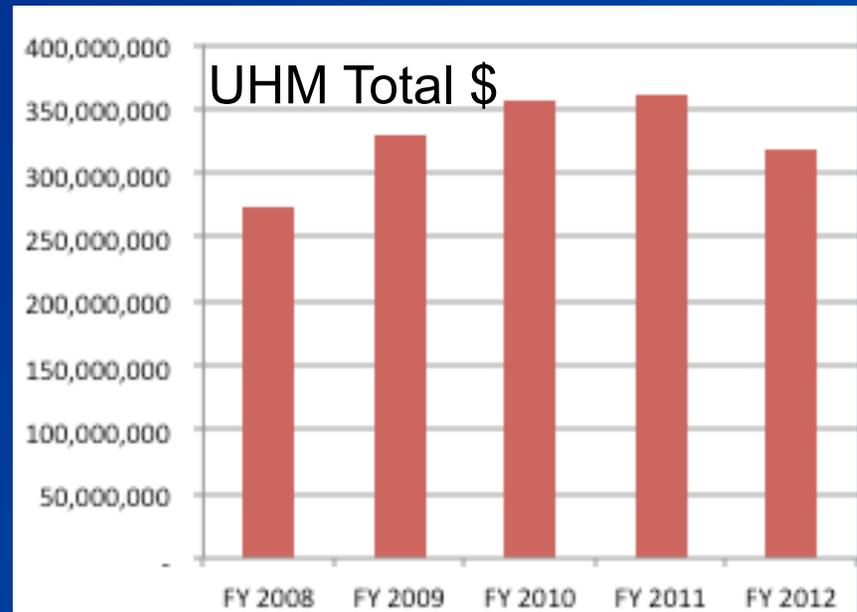
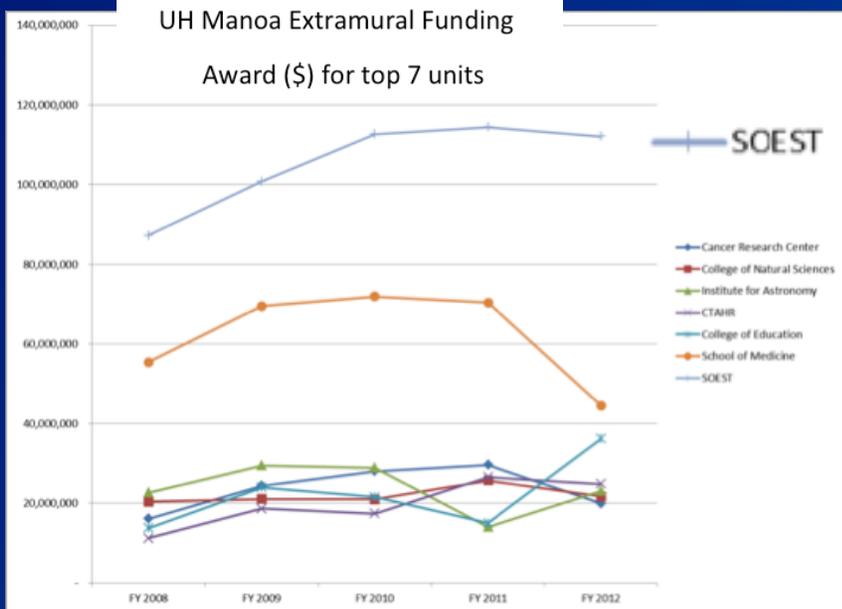
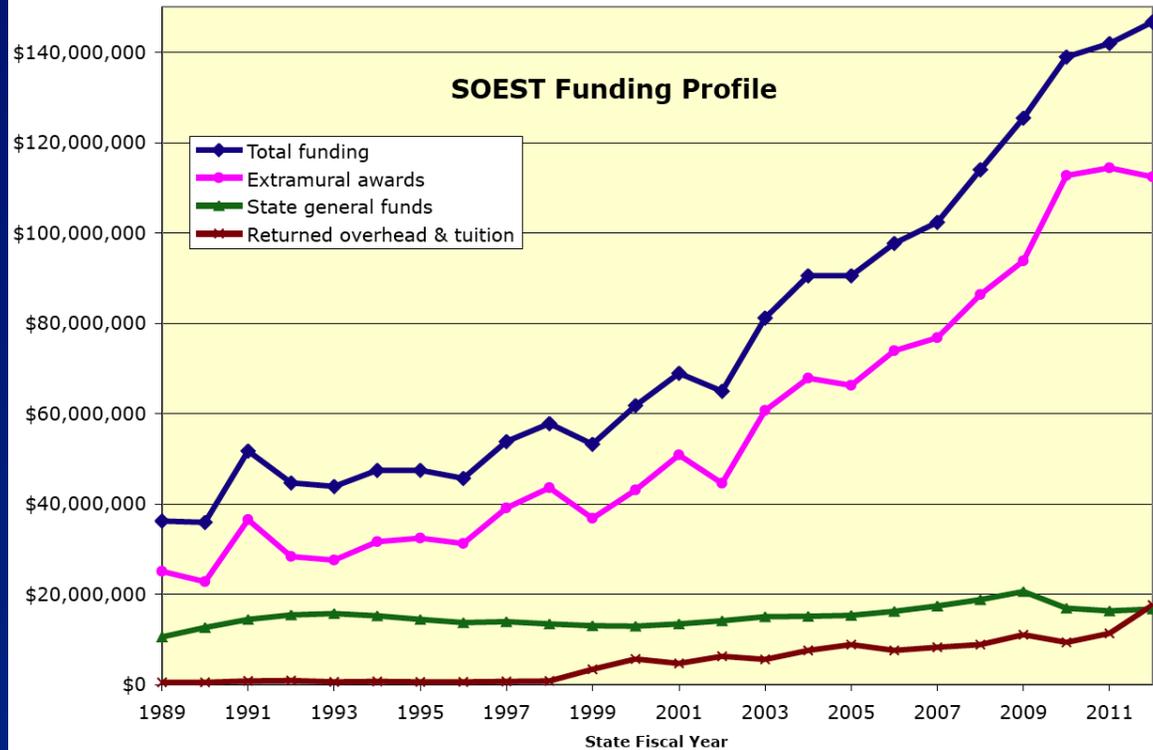




# The worlds TOP25 institutions in geoscience field

Number of papers published in geoscience field.  
Web of Science, Summary of 2006 to 2011





# SOEST Faculty Recognition

- David Karl

National Academy of Sciences  
Alexander Agassiz Medal



- Paul Wessel

Fellow of the AGU



- Jennifer Small Griswold
- NSF CAREER Award



- Bin Wang

BoR Excellence in Research Award



inaugural  
Denise B. Evans Fellowships  
in Oceanographic Research:  
Shimi Rii & Alice Colman



# 2013 Promotion & Tenure

- positive TPRC recommendations

G&G: Julia Hammer I5

OCE: Glenn Carter I4 & T

Brian Powell I4 & T

Niklas Schneider I5

HNEI: Jian Yu R5

HIMB: Megan Donahue R4 & T

Robert Toonen R5

Marc Lammers R4

HIGP: Kazu Nagashima S5

SeaGrant: Dolan Eversole A4

Elizabeth Maynard A4



# UH SEA GRANT LEADS THE UNIVERSITY OF HAWAI‘I AT MĀNOA IN COASTAL SUSTAINABILITY

*Seven New Talented Faculty Join UH Sea Grant through a Strategic Hiring Initiative*



**Rosie Alegado**

Assistant Professor,  
Department of  
**Oceanography &**  
Center for Microbial  
Oceanography:  
Research and  
Education



**Oceana Francis**

Assistant Professor,  
Department of Civil  
and Environmental  
Engineering



**Craig Nelson**

Assistant Professor,  
Department of  
**Oceanography &**  
Center for Microbial  
Oceanography:  
Research and  
Education



**Michael Roberts**

Associate Professor,  
Department of  
Economics



**Daniele Spirandelli**

Assistant Professor,  
Coastal Policy  
and Community  
Development,  
Department of Urban  
Regional Planning



**Mehana Vaughan**

Assistant Professor,  
Sustainable  
Watershed and  
Coastal Management,  
Department of  
Natural Resources  
and Environmental  
Management



**Wendy Meguro**  
School of Architecture

# Comings and Goings

New tenure track faculty this year, and coming next year

Leon Roose (HNEI)

Jennifer Small (MET)

Michael Bell (MET)

Anna Neuheimer (OCE)



Rosie Alegado

Craig Nelson

Ed DeLong

& offers made

to 4 more

New SOEST Young Investigators

Hollie Putnam (HIMB)

Brendan Hermalyn (HIGP)



Emeritus

Roger Lukas (OCE)

Tony Clarke (OCE)

Klaus Keil (HIGP)

Assistant Dean & Director, Strategic

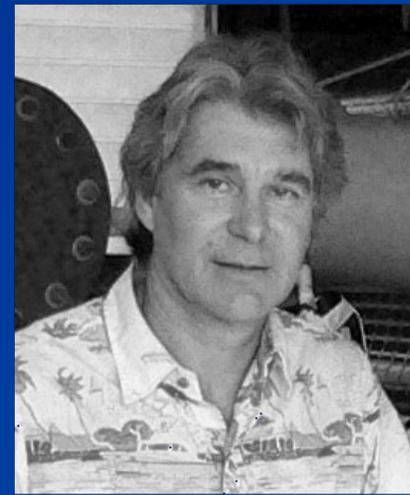
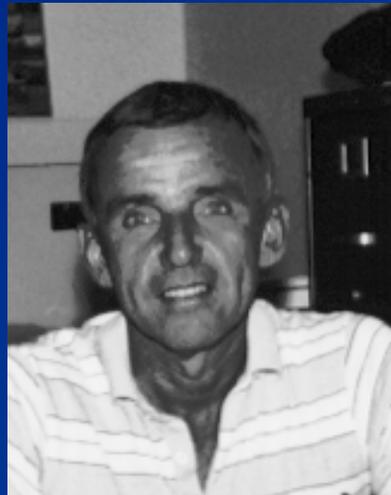
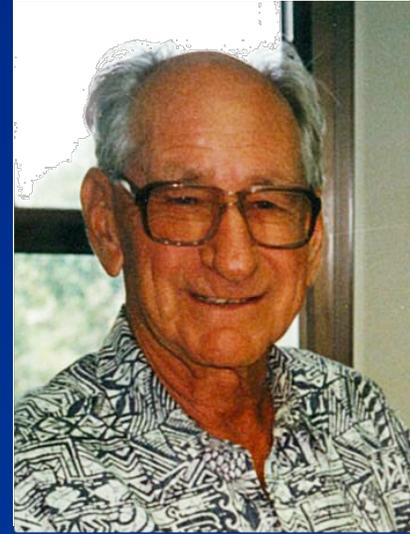
Initiatives & External Relations

Chris Ostrander



## In Memoriam

- John Mahoney
- Klaus Wyrтки
- David Meunow
- Marlin Atkinson



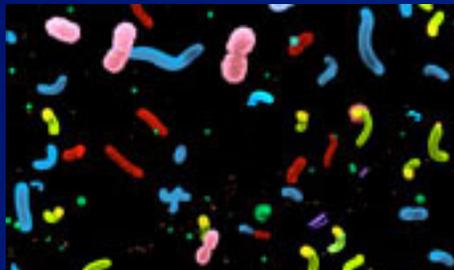


**Energy, Environment,  
and Economy: the  
Next 30 Years**

Eric S. Osinnikov  
Emeritus Professor, Dept. of Geology and  
Geophysics  
University of Hawaii, Manoa

TGI Seminar  
February 8, 2013

Hawaii Ocean Time-series



Coral Under Confocal



Senator Daniel K. Inouye  
(1924-2012)

HAWAII  
INSTITUTE OF  
MARINE  
BIOLOGY



December 15, 2012  
Five miles off the coast of Hawaii

HAWAII  
UNDERSEA  
RESEARCH  
LABORATORY



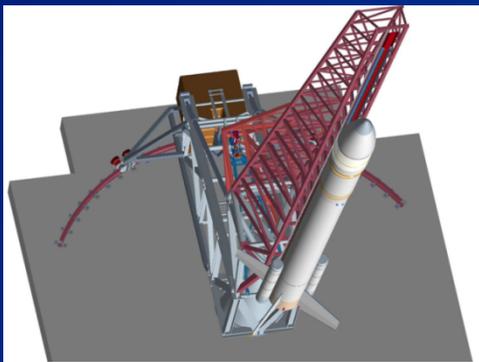
Three Pacific Voices

One Pacific Ocean

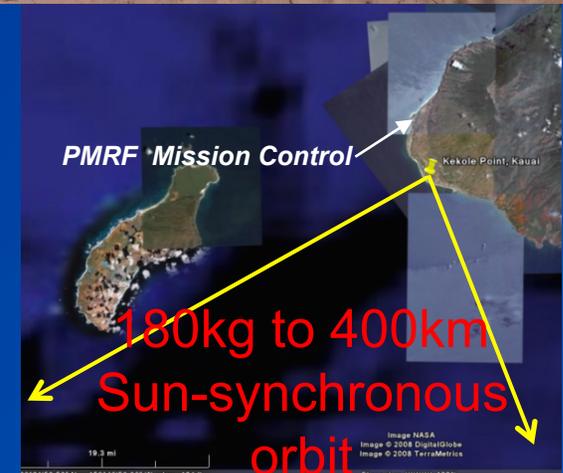
# Hawaii Space Flight Lab ORS-4 launch: end Sept. 2013



Rail-launched, 3-stage solid propellant motor stack



KestrelEye  
HiakaSat  
CubeSat



# Humu'ula Groundwater Research Project



Don Thomas

Drill two holes, 6000-6500 feet deep, to assess the groundwater resources available in the saddle region between Mauna Loa, Mauna Kea, and Hualalai.

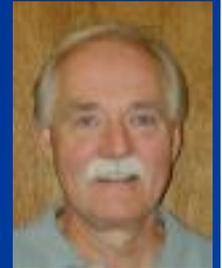
Describe & archive the core for future scientific analyses.



Nicole Lautze



# Battery Energy Storage for Generation Smoothing & Frequency Regulation



Rick Rocheleau & Larry Cutshaw



- Testing and evaluation of emerging battery technologies (integrated testing from laboratory to field)
- Analyze impacts of battery deployment on grid performance
  - Wind smoothing on HELCO grid
  - Frequency regulation on HELCO grid
  - Solar smoothing
  - Voltage/VAR support on distribution line with high penetration PV
  - Smart Grid applications

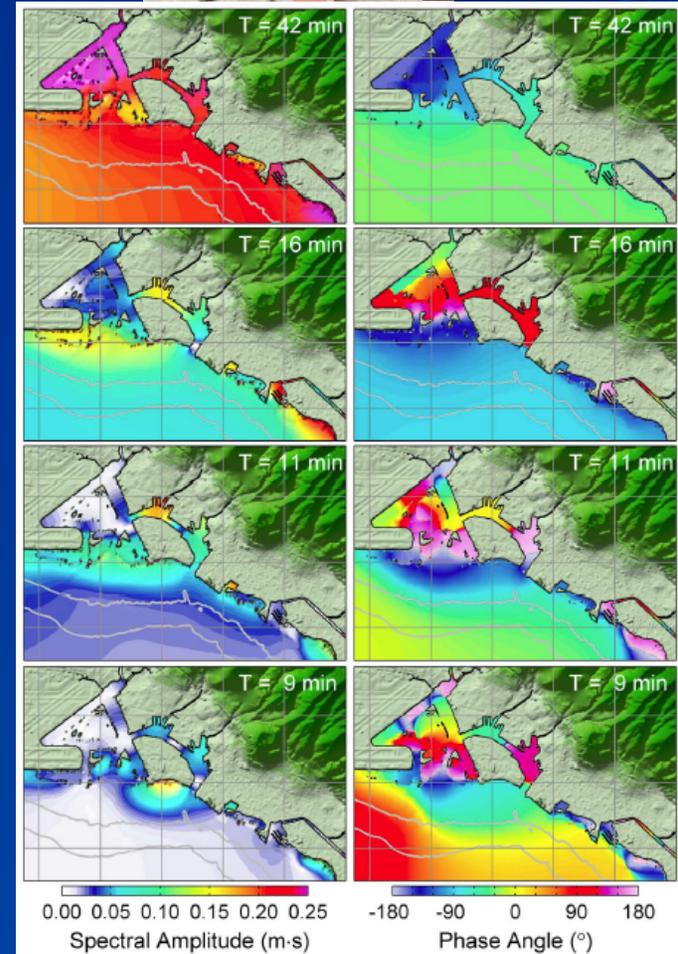
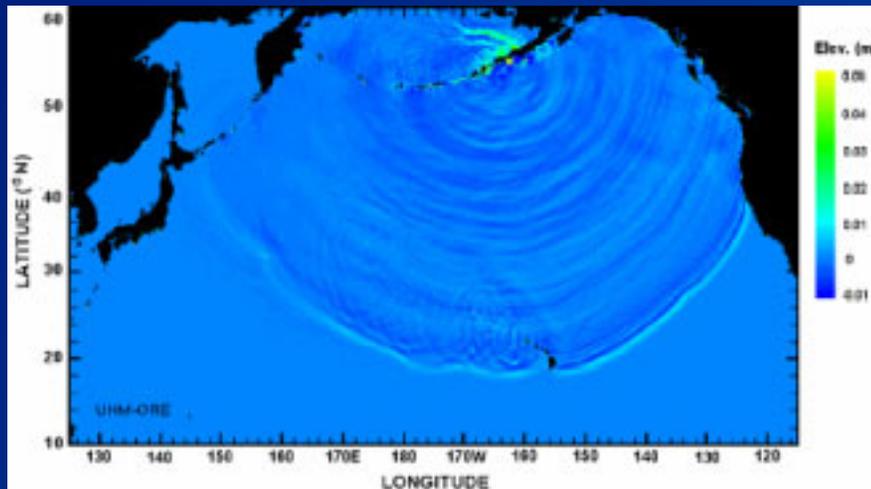
**1 MW / 250 kWh fast response  
Lithium ion Titanate battery**



2013 SOEST Dean's Award for  
Research that Matters  
in service of the Community



Rhett Butler, Kwok Fai Chun,  
& Yoshiki Yamazaki,  
Tsunami studies

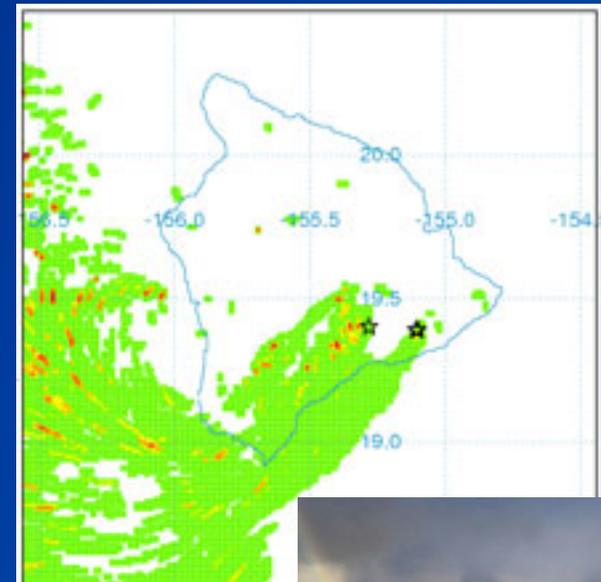
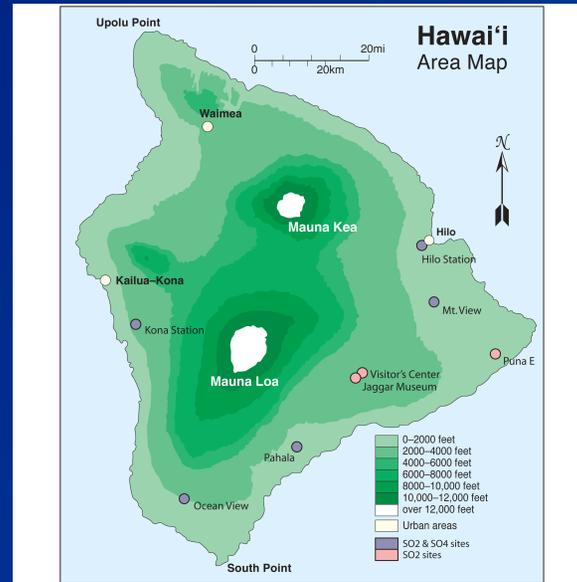
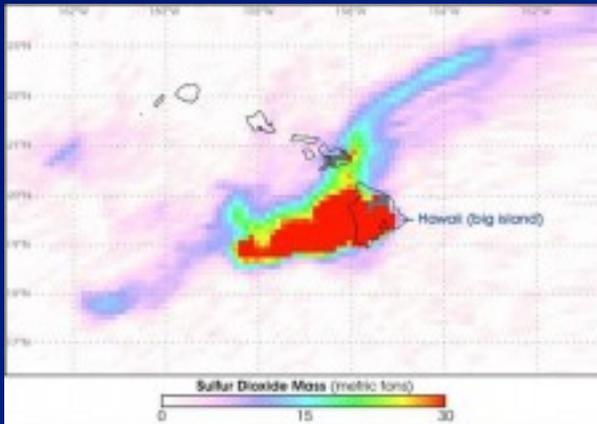




# 2013 SOEST Dean's Award for Research that Matters in service of the Community



## Steve Businger, Keith Horton, Tiziana Cherubini, VOG measurement and prediction

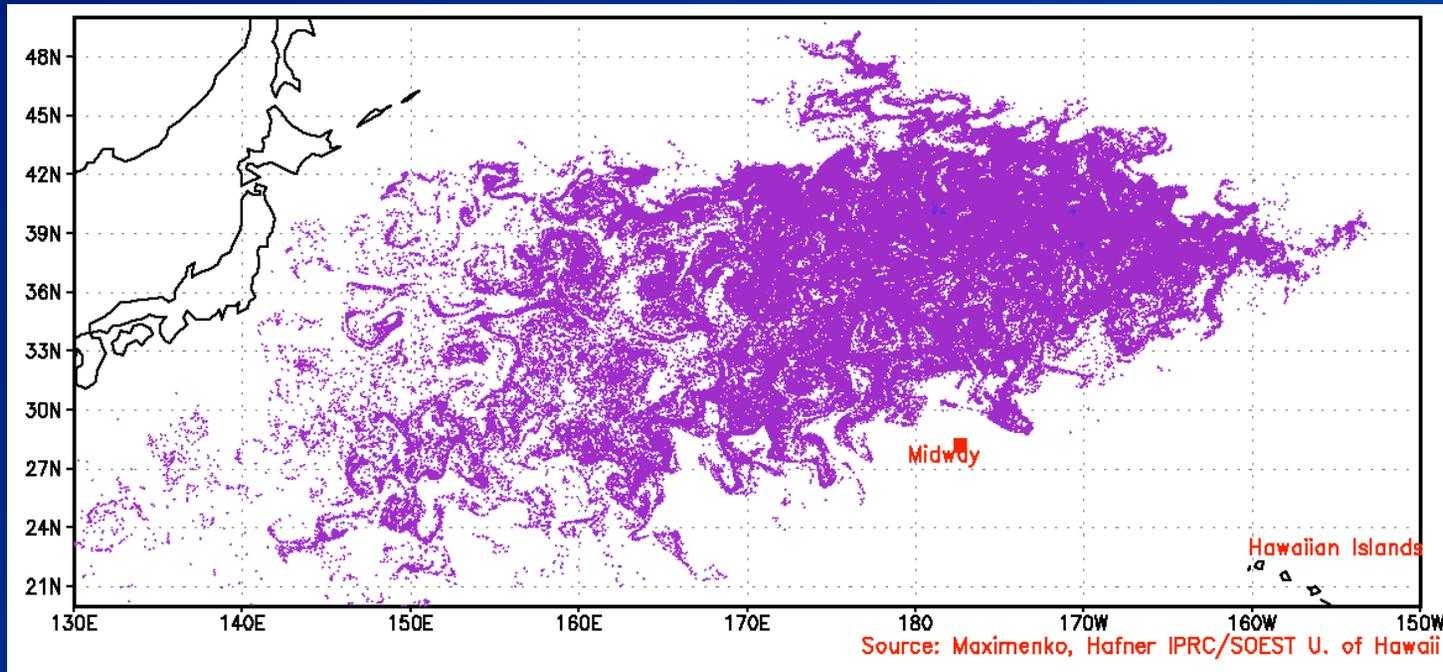




## 2013 SOEST Dean's Award for Research that Matters in service of the Community

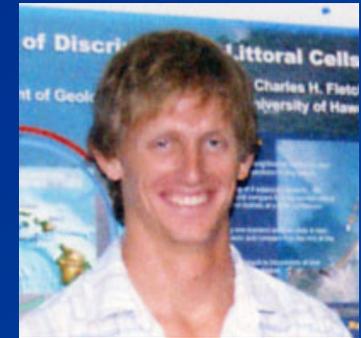


## Nikolai Maximenko, Jan Hafner, & Gisela Speidel Marine Debris

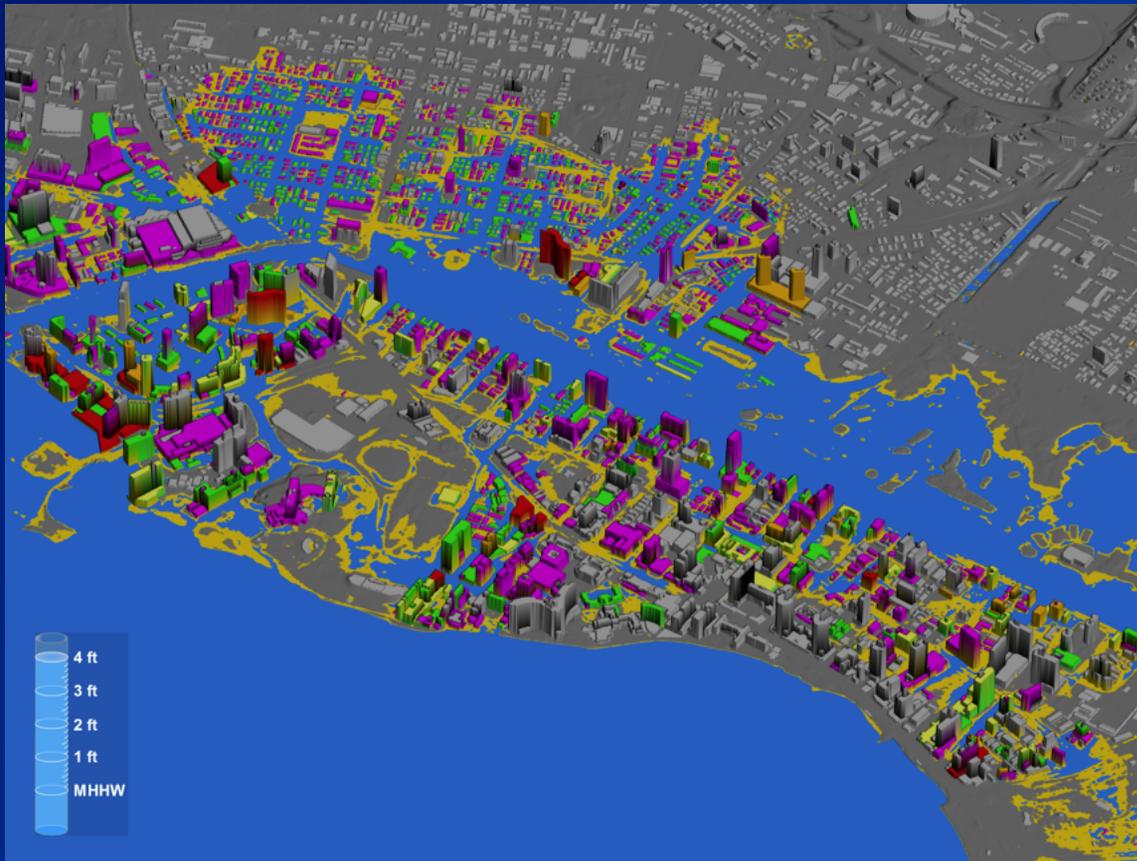




# 2013 SOEST Dean's Award for Research that Matters in service of the Community



## Chip Fletcher, Matt Barbee, Coastal Inundation



2013 SOEST Dean's Award for  
Research that Matters  
in service of the Community



Greta Aeby  
Coral disease & resilience





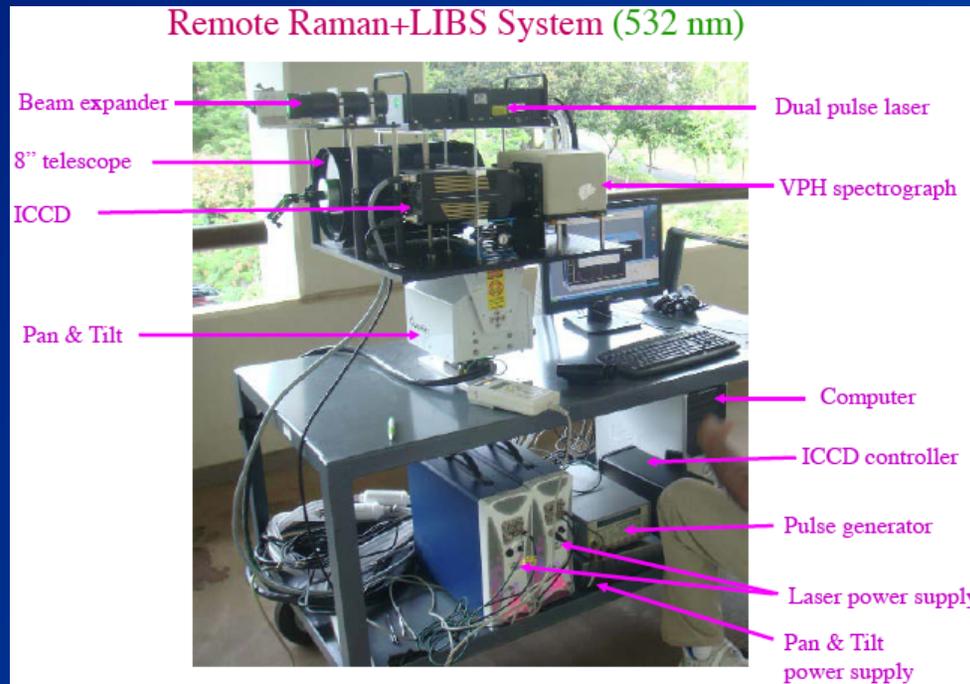
## 2013 SOEST Dean's Award for Innovation

Anupam Misra

Raman spectroscopy

Laser-induced breakdown spectroscopy

Fluorescence spectroscopy



UHMC move:  
Ships to pier 35  
Boats to METC  
summer 2014



\$2.2 M 6km ROV



KOK

Coconut Island renovations

MSB HVAC

SOEST-CNS joint graduate degree program  
in Marine Biology

# SOEST External Review Team 2013



SOEST 25th Anniversary

Oceanography 50th Anniversary