



THE FLORIDA STATE UNIVERSITY  
Center for Ocean-Atmospheric Prediction Studies  
*N e w s*



**Fall 2012**

*Top photo: COAPS  
personnel, 9/21/12*

## Florida's Fragile Oasis

In a place routinely afflicted by drought, water managers in Tampa Bay use climate forecasts to ensure a water supply to people's taps without sucking the region's rivers, wetlands, and groundwater dry. The limits of their innovation might be tested in a future which could pose even more challenges to ensuring the oasis remains green. With COAPS associate professor [Dr. Vasu Misra](#). [Read the full article...](#) (*ClimateWatch Magazine*).



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## Florida Climate Institute joins forces with four more Florida universities

The Florida Climate Institute - a joint venture started in 2010 by Florida State University and the University of Florida - has expanded to include the University of South Florida, the University of Central Florida, Florida Atlantic University and the University of Miami. "Each Florida university brings to the table complementary strengths and expertise that will allow the Florida Climate Institute to address questions that a single institution could not do," said Dr. Eric Chassignet, director of COAPS and of the FSU branch of the FCI. "FSU's strengths include global and regional climate modeling, extreme events, sea level rise, seasonal forecast, risk assessments and economic impact." [Read more...](#)

**Join Our Email List**



**SENSE IT Workshop for Teachers**

Join us Saturday, November 10, from 9am to 3pm for a hands-on temperature sensor workshop at the FSU Coastal and Marine Laboratory. The event is free and open to middle and high school teachers, as well as other interested educators, and is co-hosted by the [Deep-C Consortium](#). For more information, please see the [event flier](#).



## Honors



**Tam Nguyen**, a COAPS PhD student in oceanography, for being selected as a recipient of the Douglas Peterson Vietnamese Scholarship for the 2012-2013 academic year. This scholarship is in honor of Douglas "Pete" Peterson, former U.S. Congressman and former Ambassador to Vietnam. The scholarship is made possible by an endowment gift from Mr. Doan L. Phung, a Vietnamese American and FSU graduate.



**Heather Holbach** received her MS in meteorology this summer under the guidance of COAPS's Dr. Mark Bourassa. The title of her thesis is "The Effects of Gap-Wind-Induced Vorticity, the Monsoon Trough, and the ITCZ on Tropical Cyclogenesis." Heather is continuing at COAPS as a PhD student.

COAPS alumnus **Dr. Anthony Arguez** is a recipient of the 2011 Presidential Early Career Award for Scientists and Engineers. Dr. Arguez is a research climatologist at NOAA's National Climatic Data Center. He received his PhD and MS in meteorology under the direction of COAPS professor emeritus James O'Brien. For more information, please see the [NOAA press release](#).



COAPS alumnus **Michael Lowry** can now be seen on The Weather Channel! Michael joined The Weather Channel's tropical team in September after working at the National Hurricane Center. He received his MS in meteorology also under the guidance of Dr. O'Brien. You can read a 2011 interview with Michael [here](#).



## New Projects

**Development and Evaluation of Forecasting Techniques**

### **for Topographically Trapped Waves along the Sigsbee Escarpment**

With COAPS scientists [Steve Morey](#) and [Dmitry Dukhovskoy](#).  
Funded by DeepStar.

### **Weather and Advection Model for Oil Spill Tracking**

With COAPS scientists [Dmitry Dukhovskoy](#), [Mark Bourassa](#),  
and [Steve Morey](#). Funded by the Bureau of Ocean Energy  
Management.

### **Increasing Our Understanding of the Interaction Between Physical and Ecological Processes in the Gulf of Mexico and Caribbean**

With COAPS director [Eric Chassignet](#). Funded by NOAA  
through the Northern Gulf Institute.

### **Data Assimilative Ocean Hindcast for Oil Spill Risk Analysis in The Gulf of Mexico**

With COAPS director [Eric Chassignet](#). Funded by the Bureau  
of Ocean Energy Management.

## **Publications**

*COAPS authors are in bold.*

**Guimond, S.R.** and J.M. Reisner (2012), [A latent heat retrieval and its effects on the intensity and structure change of Hurricane Guillermo \(1997\). Part II: Numerical simulations](#), *J. Atmos. Sci.*, (early online release).

Huang, BH; Hu, ZZ; Schneider, EK; **Wu, ZH**; Xue, Y; Klinger, B (2012), [Influences of tropical-extratropical interaction on the multidecadal AMOC variability in the NCEP climate forecast system](#), *Climate Dynamics*, 39(3-4), 531-555, doi:10.1007/s00382-011-1258-z.

**Hughes, P. J., M. A. Bourassa, J. J. Rolph, and S. R. Smith** (2012), [Averaging-related biases in monthly latent heat fluxes](#), *Journal of Atmospheric and Oceanic Technology*, 29(7), 974-986, doi:10.1175/JTECH-D-11-00184.1.

Kunkel, K. E., T. R. Karl, H. Brooks, J. Kossin, J. Lawrimore, D. Arndt, L. Bosart, D. Changnon, S. Cutter, N. Doesken, K. Emanuel, P. Ya. Groisman, R. W. Katz, T. Knutson, **J. O'Brien**, C. Paciorek, T. Peterson, K. Redmond, D. Robinson, J. Trapp, R. Vose, S. Weaver, M. Wehner, K. Wolter, and D. Wuebbles (2012), [Monitoring and understanding trends in extreme storm statistics: state of knowledge](#), *Bull. Amer. Meteor. Soc.*, doi:10.1175/BAMS-D-11-00262.1.

**Misra, V., and S. M. DiNapoli** (2012), [The observed teleconnection between the equatorial Amazon and the Intra-Americas Seas](#), *Climate Dynamics*, doi:10.1007/s00382-012-1474-1.

**Misra, V., A. Stroman, and S. DiNapoli** (2012), [The rendition of the Atlantic Warm Pool in the reanalyses](#), *Climate Dynamics*, doi:10.1007/s00382-012-1503-0.

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**Powell, M. D., and S. Cocks** (2012), [Hurricane wind fields needed to assess risk to offshore wind farms](#), *Proceedings of the National Academy of Sciences of the United States of America*, doi:10.1073/pnas.1206189109.

Roncoli, C; Breuer, N; **Zierden, D**; Fraisse, C; Broad, K; Hoogenboom, G (2012), [The art of the science: climate forecasts for wildfire management in the southeastern United States](#), *Climatic Change*, 113(3-4), 1113-1121, doi:10.1007/s10584-012-0526-1.

**Smith, S. R., M. A. Bourassa**, and D. L. Jackson (2012), [Supporting satellite research with data collected by vessels](#), *Sea Technology*, 53(6), 21-24.

**Solis, D.** and D. Letson (2012), [Assessing the Value of Climate Information and Forecasts for the Agricultural Sector in the Southeastern United States: Multi-Output Stochastic Frontier Approach](#), *Regional Environmental Change*, (accepted).

**Stefanova, L., P. Sura and M. Griffin** (2012), [Quantifying the non-Gaussianity of observed wintertime daily minimum and maximum temperatures in the Southeast United States](#), *J. Climate*, (accepted).

**Stefanova, L., V. Misra**, S. C. Chan, **M. Griffin, J. J. O'Brien**, and T. J. Smith III (2012), [A proxy for high-resolution regional reanalysis for the Southeast United States: assessment of precipitation variability in dynamically downscaled reanalyses](#), *Climate Dynamics*, 38(11-12), 2449-2466, doi:10.1007/s00382-011-1230-y.

**Timko, PG**; Arbic, BK; Richman, JG; Scott, RB; Metzger, EJ; Wallcraft, AJ (2012), [Skill tests of three-dimensional tidal currents in a global ocean model: A look at the North Atlantic](#), *Journal of Geophysical Research - Oceans*, 117(C08014) doi:10.1029/2011JC007617.

Zhu, J., B. Huang, and **Z. Wu** (2012), [The role of ocean dynamics in the interaction between the Atlantic meridional and equatorial modes](#), *J. Climate*, 25(10), 3583-3598, doi:10.1175/JCLI-D-11-00364.1.

## Feature Photo





Friends of COAPS at France's Naval Hydrographic and Oceanographic Service. From left: Son Hoang, Stéphanie Corréard, Audrey Pasquet, Flavien Gouillon, and Remy Baraille.

## About COAPS

The Florida State University Center for Ocean-Atmospheric Prediction Studies (COAPS) is a center of excellence performing interdisciplinary research in ocean-atmosphere-land-ice interactions to increase our understanding of the physical, social, and economic consequences of climate variability. COAPS scientists and students come from a wide range of disciplines, including meteorology, physical oceanography, statistics, and the computer and information sciences.

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