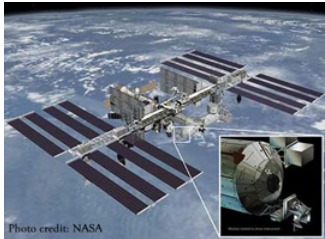




Fall 2014 Newsletter



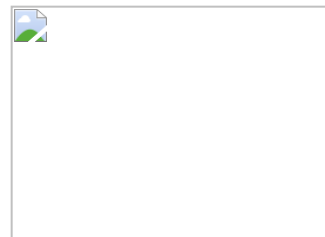
New satellite transported to the Int'l Space Station
COAPS' [Mark Bourassa](#) is leading NASA's Ocean Vector Winds science team and in September, a new instrument (ISS-Rapid Scatterometer) that measures ocean surface wind speed and direction was sent to the Intl Space Station. [View the launch on YouTube.](#) Note: After the solar panels open, you can see RapidScat bolted to the interior of the capsule.



Research offers new way to predict hurricane strength, destruction
[Vasu Misra](#), associate professor of meteorology and co-director of the Florida Climate Institute, along with 4th-year doctoral student **Michael Kozar** have introduced a new statistical model that complements hurricane forecasting by showing the size of storms, not just the wind speed. [Read more >](#)



Griffin addresses NOAA CDC Health Summit
Asst. State Climatologist [Melissa Griffin](#) was invited to present at the NOAA CDC Heat Health Summit. Griffin spoke about ongoing collaborations between the Florida Climate Center, the Florida National Weather Service Offices, and the Florida Department of Health to study heat and human health impacts.



Grant awarded for study physical & ecological processes in the Gulf
[Steve Morey](#) has received funding from NOAA/NGI for a project titled *"Increasing our Understanding of the Interaction between Physical and Ecological Processes in*



Ekaterina Maksimova awarded NSF Fellowship
Kat Maksimova has been awarded a grant through the NSF Ocean Sciences Postdoctoral Research Fellowship. Her project is entitled *"Near-Inertial Oscillations on the West*



COAPS alum appointed new director of OER
Alan Leonardi has been selected as Director of the Office of Ocean Exploration and Research (OER). Leonardi is a physical oceanographer and meteorologist who

the Gulf of Mexico and Caribbean." which consists of biophysical ocean modeling studies with application to regional fisheries.

Florida Shelf in the Eastern Gulf of Mexico."

previously served as deputy director of NOAA's Atlantic Oceanographic and Meteorological Lab (AOML). [MORE>>](#)

COAPS represented at the



THURSDAY, 18 December 2014

James O'Brien

Invited Talk: PCAs with Physics Illustrating Enso air ocean interactions

8:45-9:00 am

Session: OS41E Equatorial Dynamic of the Atm. and Ocean

Moscone West, 3010

FRIDAY, 19 December 2014

Mark Bourassa

Session Chair: *OS51D From QuikSCAT to RapidSCAT: Recent Accomplishments in Air-Sea Interaction and Climate Variability I*

8:00-10:00 am

Christopher Holmes

Presentation Title: *Where is the equator? A definition based on the atmosphere and its implications for atmospheric chemistry and climate*

10:50-11:05 am

Moscone West, 3006

Steve Morey

Presentation Title: *Spatio-Temporal Variability in Coastal Upwelling/Downwelling from Scatterometer Winds*

9:15-9:30 am

Moscone West, 3009

Poster Session (Friday, December 19, 1:40-6:00pm in Moscone West Poster Hall)

OS53A: From QuikSCAT to RapidSCAT: Recent Accomplishments in Air-Sea Interaction and Climate Variability II

- **Mark Bourassa:** High Resolution Wind and SST Coupling: Impacts on Ekman Upwelling
- **Dmitry Dukhovskoy:** Relation Between the Large-Scale Atmospheric Variability and Ocean Circulation in the Nordic Seas
- **Yangxing Zheng:** Impact of East Asian Winter and Australian Summer Monsoons on the Enhanced Surface Westerlies over the Western Tropical Pacific Ocean Preceding the El Niño Onset

Student Achievements

Tam Nguyen

successfully defended her master's thesis, *"The variability of cross-slope*

John Steffen

successfully defended his master's thesis, *"The effects of sea surface*

Heather Holbach has been awarded a grant from FSU to support completion of her dissertation. Holbach is

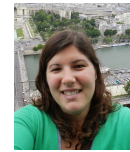
flows in the De Soto Canyon region."



temperature gradients on surface turbulent fluxes."



working with NOAA's Hurricane Research Division of the Atlantic Oceanographic and Meteorological Laboratory.

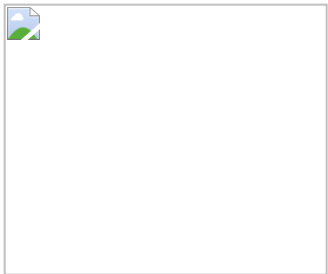


Russell Glazer successfully defended his master's thesis, "The influence of mesoscale sea surface temperature gradients on tropical cyclones."

Paul Hughes successfully defended his Ph.D. work on "The influence of small-scale sea surface temperature gradients on surface vector winds and subsequent impacts on oceanic Ekman pumping."

Kevin Forney completed his master's in meteorology.

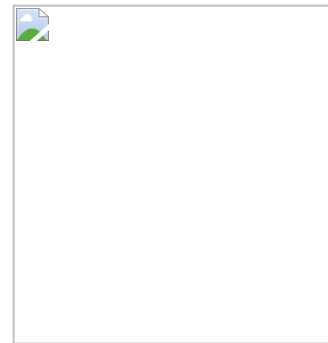
COAPS in the Community



Cleaning up the Gulf Coast
COAPS participated in the International Coastal Cleanup Day on September 20. Volunteers removed plastic and glass bottles, old crab traps, Styrofoam, and concrete blocks from the shoreline at Bald Point State Park. Thanks to all for helping keep our Gulf coast clean!



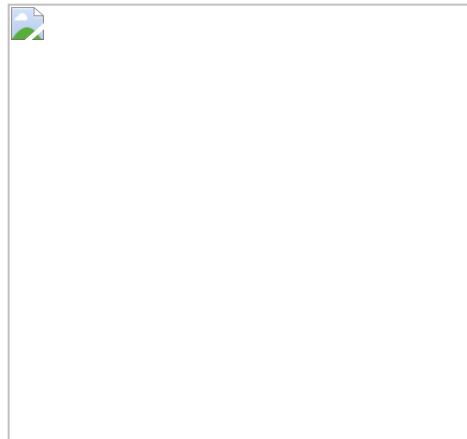
Education & Outreach at Local Events
Interactive activities from the Deep-C Consortium and the Florida Climate Center helped to educate the public during the October 12 Science Saturday at Lake Ella and the October 30 St. Marks Stone Crab Festival.



Science Fair Judging at RAA Middle School
COAPS scientists and educators gave valuable feedback to young scientists to help them understand the scientific process.

A Florida Climate Center Website...For Kids!

Packed with teacher resources, interactive tools, educational videos, and even links to games that your students can play to better understand climate and weather, climate. Take a moment to check it out at <http://climatecenter.fsu.edu/kids>.



Contact Outreach Coordinator [Brittany Pace](#) if you are aware of an education or outreach opportunity that COAPS might want to be involved in.

Recent Publications

COAPS authors are in **bold**.

Bastola, S., and **V. Misra** (2014), [Evaluation of dynamically downscaled reanalysis precipitation data for hydrological application in the southeast United States](#). *Hydrological Processes*, doi:10.1002/hyp.9734.

Hughes, Paul (2014), The influence of small-scale sea surface temperature gradients on surface vector winds and subsequent impacts on oceanic Ekman pumping. Ph.D. Dissertation, Department of Earth, Ocean, and Atmospheric Science, Florida State University, (accepted).

Li, H., and **V. Misra** (2014), [Global Seasonal Climate Predictability in a Two Tiered Forecast System. Part II: Boreal Winter and Spring Seasons](#). *Climate Dynamics*, doi:10.1007/s00382-013-1813-x.

Li, H; Kanamitsu, M; Hong, SY; Yoshimura, K; Cayan, DR; **Misra, V** (2014), [A high-resolution ocean-atmosphere coupled downscaling of the present climate over California](#). *Climate Dyn.*, 42, 701-714.

Michael, J-P (2014), On initializing CGCMs for seasonal predictability of ENSO. Ph.D. Dissertation, Department of Earth, Ocean, and Atmospheric Science, Florida State University, (accepted).

Misra, V; DiNapoli, S (2014), [The variability of the Southeast Asian summer monsoon](#). *International Journal of Climatology*, 34, 893-301, doi:10.1002/joc.3735.

Misra, V., **H. Li**, **Z. Wu**, and S. Dinapoli (2014), [Global Seasonal Climate Predictability in a Two Tiered Forecast System. Part I: Boreal Summer and Fall Seasons](#). *Climate Dynamics*, doi:10.1007/s00382-013-1812-y.

Nedbor-Gross, R., **D.S. Dukhovskoy**, **M.A. Bourassa**, **S.L. Morey** and **E.P. Chassignet** (2014), Investigation of the relationship between the Yucatan Channel transport and Loop Current area in a multi-decadal numerical simulation, *Marine Technology Society Journal*, 48, 15-26, doi:10.4031/MTSJ.48.4.8.

Wang, H; Long, L; Kumar, A; Wang, WQ; Schemm, JKE; Zhao, M; Vecchi, GA; **Larow, TE**; Lim, YK; Schubert, SD (2014), [How Well Do Global Climate Models Simulate the Variability of Atlantic Tropical Cyclones Associated with ENSO?](#). *Journal of Climate*, 27, 5673-5692, doi:10.1175/JCLI-D-13-00625.1.

Weih, R. R.; **Bourassa, M. A.** (2014), [Modeled diurnally varying sea surface temperatures and their influence on surface heat fluxes](#). *Journal of Geophysical Research - Oceans*, doi:10.1002/2013JC009489.

Zavala-Hidalgo, J., R. Romero-Centeno, A. Mateos-Jasso, **S.L. Morey**, and B. Martinez-Lopez (2014), [The response of the Gulf of Mexico to wind and heat flux forcing: What has been learned in recent years?](#) *Atmosfera*, 27, 317-334.

Zavala-Romero, O., Ahmed, A., **Chassignet, E.P.**, Zavala-Hidalgo, J., Eguiarte, A.F., Meyer-Base, A. (2014), [An open source Java web application to build self-contained web GIS sites](#). *Environmental Modelling & Software* 62 (2014), 210-220.

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