

CARICOOS 2017 General Assembly

Rincón Beach Resort, Añasco, PR Friday April 28, 2017

<u>Goal</u>: To have a participatory stakeholder-centered meeting where users can learn about CARICOOS products and services while providing direct feedback and foreseeable needs to be addressed by the observing system.

<u>AGENDA</u>

| 8:00-9:00 AM | REGISTRATION, POSTERS & EXHIBITS (light breakfast provided) |
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| 9:00-9:30 AM | WELCOME REMARKS Prof. Ruperto Chaparro, Chairman of the Board & PR Sea Grant Director PR & USVI Government representatives (to be confirmed) University of Puerto Rico System (to be confirmed) University of Puerto Rico-Mayaguez (UPRM) Chancellor's Office (to be confirmed) |
| 9:30-9:45 AM | TEN YEARS OF CARICOOS Prof. Julio Morell, CARICOOS Executive Director |
| 9:45-10:00 AM | CHAIRMAN'S REPORT Prof. Ruperto Chaparro, Chairman of the Board & PR Sea Grant Director |
| 10:00-10:15 AM | MESSAGE FROM THE IOOS DIRECTOR Carl Gouldman, IOOS Director |
| 10:15-10:30 AM | TOWARDS NEW OCEAN OBSERVING AND PREDICTION CAPABILITIES IN THE CARIBBEAN Dr. Miguel Canals, CARICOOS Technical Director |
| 10:30-11:00 AM | COFFEE BREAK, POSTERS & EXHIBITS |
| 11:00-1:15 PM | OCEAN OBSERVING IN THE CARIBBEAN: Current Applications and Foreseeable Needs We want to hear from you, our stakeholder. We've asked some key stakeholder representatives to bring some examples of how they are using CARICOOS, and what ocean observing and forecasting needs they are anticipating for the future. These short 5-minute talks will be followed by 10 minutes of discussion. We want this |

to be a very interactive session. Please bring your comments and suggestions and help us shape the future of CARICOOS! Topics include:

- The Challenge of Outreach Moderator: Ruperto Chaparro
- Navigation & Marine Operations Moderator: Julio Morell
- Commercial Fishers Perspective Moderator: Miguel Canals
- Beach Hazards: Drowning Prevention & Water Quality Moderator: Sylvia Rodriguez
- Animal Tracking (Fish, Marine Mammals, Larvae) Moderator: Miguel Canals
- Erosion & Coastal Infrastructure Moderator: Ernesto Díaz
- Search and Rescue Moderator: Julio Morell

1:15-2:00 PM LUNCH, POSTERS AND EXHIBITS

2:00-4:00 PM BREAKOUT SESSION, POSTERS & EXHIBITS (coffee and snacks provided) We've saved this time to discuss one-on-one your specific sector needs. We will break out in small groups to assess your particular data needs, get feedback on our products and services, and discuss any other way we can make ourselves useful to your user group.

- Breakout group #1: Using CARICOOS products for recreational and commercial fishing.
- Breakout group #2: Using CARICOOS products to promote beach safety.
- Other breakout groups will be set up upon request!

POSTER SESSION: Want to learn more about the science involved in developing CARICOOS products and services? The general assembly will showcase several posters focused on the technical aspects behind our most accessed data services. Waves, currents, winds, water quality, you will find a poster for each and many more.

CARICOOS EXHIBITS: Not a tech savvy? No worries! We will have plenty of exhibits with CARICOOS products and services aimed at getting you up to speed on using our products. Our staff will be scattered around the room to give you one-on-one help, assist you on getting CARICOOS on your mobile device, among other hacks.

| LIST OF POSTERS | | |
|---|----------------------------------|--|
| TITLE | AUTHORS | |
| Eight years of wave observations in the US | Miguel Canals & the | |
| Caribbean | CARICOOS Team | |
| UPRM-CAOSE: The UPRM Center for Applied | Miguel Canals, Julio Morell, | |
| Ocean Science and Engineering | Sylvia Rodríguez-Abudo & the | |
| | CARICOOS team | |
| Model and Data Based Hydrodynamic | Jorge E. Capella, Miguel Canals, | |
| Connectivity Study for the Marine Protected Area | Julio M. Morell, Estefanía | |
| Network off Western Puerto Rico | Quiñones, and Fabián García | |
| A two-way grid refinement application of the | Miguel Solano, Juan González- | |
| Regional Ocean Modelling System for Puerto | López, Miguel Canals, Jorge | |
| Rico and the US Virgin Islands | Capella, Julio Morell, and | |
| | Stefano Leonardi | |
| The CARICOOS Wave Model v8.0 | Miguel Canals | |
| | | |
| Breaking Wave Height Predictions Using 2D | Miguel Canals | |
| Spectral Partitioning | | |
| Life Cycle Cost Analysis of Beach Restoration: | Francisco Villafañe and Luis | |
| Rincón, PR Testbed | Aponte, Miguel Canals | |
| | | |
| Using QG based reconstruction of sub-surface | Sonaljit Mukerjee | |
| fields from surface data for modeling particle | | |
| transport in the upper ocean | | |
| Process Automation & File Distribution of | Andy Breton | |
| Oceanographic Research Data | | |
| CARICOOS Outreach, Education & Engagement | Adolfo González, Sylvia | |
| | Rodríguez-Abudo and the | |
| | CARICOOS team | |
| An operational circulation model for the US | Adail Rivera, Patricia Chardón | |
| Caribbean based on the Finite Volume Coastal | and Miguel Canals | |
| Ocean Model (FVCOM) | | |
| Latest applications of ADCIRC+SWAN for storm | Juan Gonzalez-Lopez, Giovanni | |
| surge, hurricane waves, and hydrology coupling in | Seijo, Jaynise Perez, Felix | |
| Puerto Rico and the U.S. Virgin Islands | Santiago, Walter Silva-Araya, | |
| | Joannes Westerink, Andre van | |
| | der Westhuysen | |

| The impact of large scale processes on | Luis Pomales and Julio Morell |
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| CARICOOS regional currents | |
| AOML/CARICOOS Sea Glider Collaboration | Luis Pomales, Julio Morell y |
| | Gustavo Goni |
| An Assessment of Enteric Bacteria Abundance in | Geraldine Gómez, Julio Morell, |
| Playa Santa Beach, Southwest Puerto Rico | |
| Development and launching of the CARICOOS | Juan Gonzalez-Lopez, Giovanni |
| ocean-shelf current forecasting model | Seijo, Luis Pomales, Miguel |
| | Solano, Julio Morell, Miguel |
| | Canals, Jorge Capella |
| A Calibrated Combined Storm Surge-Inland | Félix Santiago, Walter Silva and |
| Runoff Model for the Coastal Zone of Arecibo, | Juan González-López |
| Puerto Rico | |
| CariCOOS Computer/Network Infrastructure | José Torres and Jorge Capella |
| Lagrangian Drifter Dispersion in the Mona | Estefanía Quiñones, Miguel |
| Passage | Canals |
| Spatial and Temporal Variability of Jobos Bay | Carla Lorraine Mejías-Rivera, |
| Coastal Waters | Julio M. Morell |
| Beach Water Quality at Rincón Public Beach: A | Priscila Vargas-Babilonia, Sylvia |
| 48-hr Sampling Campaign | Rodríguez-Abudo and Peter |
| | Rivera-Casillas |
| | |
| Puerto Rico Northwest Ecological Corridor: A | Hall KV, Figuerola-Hernández |
| case study of competing economies in oceanic | MG, Villanueva-Cubero L, |
| islands | Lebrón G, Torres MF, Quirós S |
| | |
| Toward Beach Water Quality Modeling in Dorado, | Daniel Martínez and Sylvia |
| PR: Preliminary Hydrodynamic Simulations | , Rodriguez |
| Numerical modeling of beach nourishment and | Gabriela Salgado, Miguel Canals |
| shoreline protection performance during | |
| Hurricane Matthew | |
| CariCOOS High-Frequency Radar Network | Colin Evans, Patricia Chardon |
| Expansion and Data Quality Assessment | |
| Carbon dynamics in La Parguera Bioluminescent | Erick García and Julio Morell |
| Bay | |
| , | |
| Wave observations using HF Radar in the US | Colin Evans, Miguel Canals |
| Caribbean | |
| Implementation of the Finite Volume Coastal | Fabian Garcia, Adail Rivera, |
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| Ocean Model (FVCOM) for the Parguera Ocean Acidification Testbed | Miguel Canals, Julio Morell |

| MatthewGabriela SalgadoHydrodynamic Connectivity off BelizeDavid LindoWater Quality Information Flows and Engagement Routes: The Reciprocal Roles of a Community- Based Science Program and CariCOOS with Stakeholder GroupsSteve Tamar, Yamilette ColónRecycled Glass as Beach Nourishment Material: Preliminary Feasibility StudyArgelys Monserrate-Cid and Sylvia Rodríguez-AbudoRecycled Glass as Beach Nourishment Material: Grain CharacterizationJuan Vargas-Martínez, Sylvia Rodríguez-Abudo, O. Marcelo Suárez, and Jonathan AmbroseCombined Effect of Ocean Acidification and Fluid Turbulence on Coastal Barriers: Experimental SetupJorge Algarín, Nérida de Jesús- Villanueva, Sylvia Rodríguez- Abudo, Julio MorellCARICOOS Beach Water Quality Products Case Study during November 2016Peter Rivera-Casillas, S. Rodríguez-Abudo, Priscila Vargas-BabiloniaMean Currents at La Parguera Marine Reserve: A Case Study during November 2016Sylvia Rodríguez-AbudoAutomated, Portable Fecal Bacteria Biosensor for Recreational WaterPedro Resto Irizarry, Dong Wang, Ubec Carambot, Osvaldo Duran, Luis Rosa, Gabriel Cordero, Azaria Feliciano, Jesus Aponte, Steve Tamar | Nearshore hydrodynamics during Hurricane | Patricia Chardon, Miguel Canals, |
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| Hydrodynamic Connectivity off BelizeDavid LindoWater Quality Information Flows and Engagement Routes: The Reciprocal Roles of a Community- Based Science Program and CariCOOS with Stakeholder GroupsSteve Tamar, Yamilette ColónRecycled Glass as Beach Nourishment Material: Preliminary Feasibility StudyArgelys Monserrate-Cid and Sylvia Rodríguez-AbudoRecycled Glass as Beach Nourishment Material: Grain CharacterizationJuan Vargas-Martínez, Sylvia Rodríguez-Abudo, O. Marcelo Suárez, and Jonathan AmbroseCombined Effect of Ocean Acidification and Fluid Turbulence on Coastal Barriers: Experimental SetupJorge Algarín, Nérida de Jesús- Villanueva, Sylvia Rodríguez- Abudo, Julio MorellCARICOOS Beach Water Quality ProductsPeter Rivera-Casillas, S. Rodríguez-Abudo, Priscila Vargas-BabiloniaMean Currents at La Parguera Marine Reserve: A Case Study during November 2016Sylvia Rodríguez-AbudoAutomated, Portable Fecal Bacteria Biosensor for Recreational WaterPedro Resto Irizarry, Dong Wang, Ubec Carambot, Osvaldo Duran, Luis Rosa, Gabriel Cordero, Azaria Feliciano, Jesus Aponte, Steve Tamar | | • |
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| Aponte, Steve Tamar | | Cordero, Azaria Feliciano, Jesus |
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| | Observations of the Surface Circulation Around | Daniel Prakash, Colin Evans and |
| Puerto Rico Hugh Roarty | Puerto Rico | |