



DMAC-Webpage Subsystem

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PROGRESS REPORT FOR THE PERIOD JUNE 1 2018 - NOVEMBER 30 2018

Based on the Rescoped Workplan for FY18 (Tier 1 level funding) for the current funding cycle

Enhancing coastal intelligence in the US Caribbean archipelago: The Caribbean Coastal Ocean Observing System (October 26, 2017 version)

LONG-TERM GOALS

(No change from previous)

CariCOOS DMAC long-term goals are aligned with the stated IOOS DMAC Mission: “To promote broad access to and use of ocean and coastal data for the benefit of stakeholders, NOAA, and other IOOC agencies” (IOOS DMAC Vision Document Draft as of March 3, 2016). Our regional mandate makes us the stewards of ocean observations in the US-Caribbean-EEZ while our unique geographical location allows us to look beyond the US-EEZ and seek the additional long-term mission/goal of providing a leadership DMAC role in the international Caribbean domain. Our new role in NOAA as the Caribbean Regional Information Coordination Entity, or RICE, formalizes our status among non-federal observing organizations who are recognized as meeting federal standards for data gathering and management.

(May be appropriate to include excerpt from section 2.3 Operate an efficient CARICOOS DMAC subsystem)

MILESTONES / OBJECTIVES

The level of granularity of the WORK COMPLETED towards the Milestones/Objectives herein considered matches the DMAC Milestones/Tasks for Year-3 (FY18) listed in the DMAC section of the CARICOOS_Milestones_FY18.pdf document.

As a behind the scenes technical group our objectives are to keep CARICOOS running as a full fledged member of the IOOS RA community and to discharge our DMAC responsibility towards the CARICOOS region to the best of our abilities.

WORK COMPLETED

1. Add ROMS and FVCOM model output to CARICOOS ERDDAP as these models become operational
 - ROMS is not operational at the moment. Development of an operational version is being performed by Dr. Juan Gonzalez.

- A near-operational version of FVCOM is currently executing in our local servers. We are expecting to hear from the FVCOM development team before we start serving model output in THREDDS and ERDDAP.
2. Assist modelers in the migration of WRF, SWAN, FVCOM and ROMS to our HPC server at AWS.
 - The contract agreement with Amazon Web Services (AWS) is finally being processed after a prolonged budgetary hiatus so we realistically expect to have the AWS HPC resources online by January 2019, which should greatly accelerate the development, and ensure the prompt execution, of operational model versions.
 - The DMAC team is eager and ready to assist the modelers in accomplishing this objective.
 3. Attend IOOS DMAC meeting
 - The 2019 DMAC Meeting will take place April 30- May 2, 2019 and we plan to attend.
 4. Develop a data portal to provide real-time acidification data collected by La Parguera MAP CO2 buoy and derived ecosystem metabolic rates
 - A data portal that mimics the CARICOOS buoy portals is being developed. MAP-CO2 buoy data and La Parguera field sampling data are currently being ingested into the portal. We are in the testing phase in a webpage sandbox before moving to the CARICOOS webpage.
 5. Fully populate CARICOOS ERDDAP with operational models (SWAN, WRF, ROMS/FVCOM)
 - See milestone item (1) above for ROMS and FVCOM.
 - SWAN is currently available through the CARICOOS THREDDS and ERDDAP
 - We decided to wait on WRF for ERDDAP until a new version of WRF is implemented in the AWS HPC server
 6. Hosting of CARICOOS summer interns
 - Supervised the work of Mr. Diego Capre to whom we assigned a full scan of our THREDDS netcdf holdings using all major compliance checkers, including those of IOOS and NCEI
 - Diego also collaborated with us in sprucing the CARICOOS entries in the IOOS Catalog
 - Helped in hosting Mr. Abdullah Amin
 7. Identify suitable regional biological datasets and proceed with their processing into OBIS/MBON. Supported when Supplemental Funding as it becomes available. May undergo a training phase for CARICOOS staff and possibly a contractor.
 - Supplemental funding was delayed
 - Datasets have been identified but Dr. René Esteves, the contractor we have identified for this task, will only be available in 2019 and depending on the availability of funds
 8. RICE DMAC Review

- To be scheduled for early 2019
9. On-going, continuous or recurrent DMAC/IT tasks
- Compliance with IOOS DMAC metadata, file and data discovery standards and checks
 - Continue CARICOOS DMAC and Regional DAC efforts as detailed in the RICE DMS Plan
 - Continue operating DMAC and computational infrastructure
 - Historic data archival
 - Maintain and enhance CARICOOS website
 - Maintain the HPC infrastructure
 - Maintenance of CARICOOS in Spanish
 - Technical transfer to in-house IT, improvement and debugging of our web page

MAJOR OUTCOMES

There are few major outcomes from the DMAC-Webpage Subsystem during the reporting period. During this period we have worked extensively on the restoration of our operational status in the aftermath of Hurricanes Irma and Maria in strengthening our server assets and web products.

RELATED PROJECTS

None.

WORK PLAN FOR UPCOMING PERFORMANCE PERIOD (December 1 2018 - May 31 2019)

We plan to focus on those milestone/objectives that have been set aside due to budget delays:

- The AWS HPC server needs to come back online to proceed with model migration.
- Implementation of longterm data archival on cloud.
- Once the contractor who will execute the processing of biological dataset is recruited this task must be expedited.

Also,

- The MAP CO2 portal needs to be finished.
- The RICE DMAC Review and attendance to the DMAC Meeting are priority items.

PUBLICATIONS & PRODUCTS

No publications, but a significant amount of product updates.