

## The CARICOOS Operational Wind (WRF) Forecast Model

Investigator:

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### LONG-TERM GOALS

Operate, maintain and enhance a high-resolution operational wind model with the goal of enhancing available information for users and stakeholders.

### MILESTONES / OBJECTIVES

The following table includes the wind modeling milestones / tasks as included in the FY18 scope of work, and their current status.

MILESTONE / TASK	Q1	Q2	Q3	Q4	ORIGINAL COMPLETION DATE	Current Status
Operate, maintain and enhance CARICOOS WRF Model (1 km & 2 km resolution)					Continuous	On Schedule
Migrate the CARICOOS WRF Model to Amazon EC2 HPC instance					March 2019	In Progress
Improve the CARICOOS WRF model to provide other parameters to user and stakeholders					March 2019	In Progress

### WORK COMPLETED

#### 1. *Operate, maintain and enhance CARICOOS WRF model (1 km & 2 km resolution)*

The operational wind models have run without issues except for a period in November 2018 when issues with local server.

### WORK PLAN FOR UPCOMING PERFORMANCE PERIOD (December 1, 2018 – May 31, 2019)

#### 1. *Migrate the CARICOOS Nearshore Wave Model to Amazon EC2 HPC instance*

Model will be installed in AMAZON EC2HPC instance once funds become available to restart the HPC instance. A new version of WRF will be implemented. This is expected to happen in January 2019.

**2. *Improve the CARICOOS WRF model to provide other parameters to users and stakeholders***

Experimental work will be performed to improve the amplitude of the land-sea temperature gradients to capture the diurnal cycle of winds over the coastal regions, therefore improving CARICOOS coastal circulation model efforts.

**REFERENCES**

NONE

**PUBLICATIONS & PRODUCTS**

NONE