

# Lateral Dispersion in the Mona Passage and Off Southwestern PR



CARICOOS

UPRM Center for Applied Ocean Science and Engineering, Department of Engineering Science and Materials

Estefanía Quiñones Meléndez and Miguel Canals  
 Department of Marine Sciences, University of Puerto Rico at Mayagüez  
 Caribbean Coastal Ocean Observing System, University of Puerto Rico at Mayagüez



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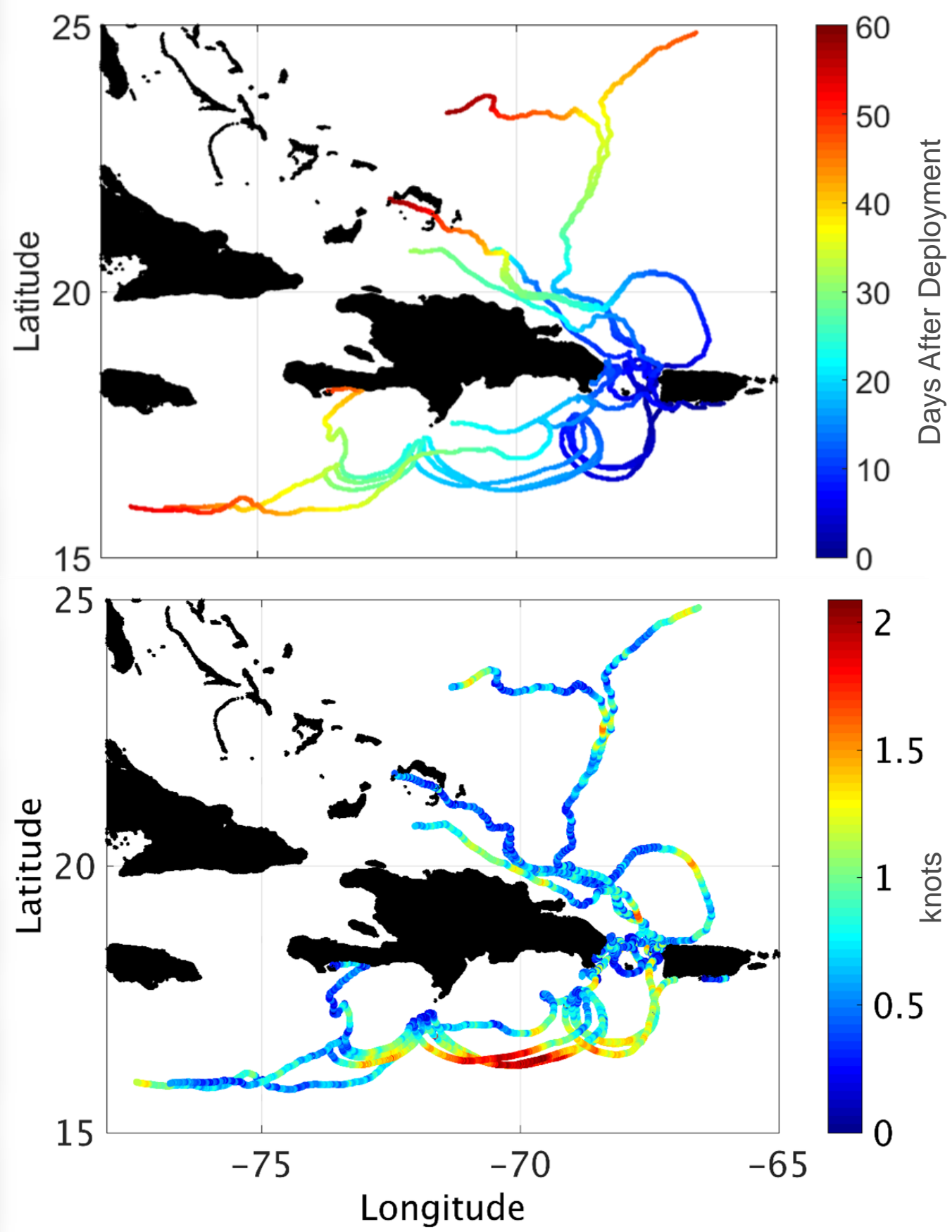


Caribbean Fishery Management Council

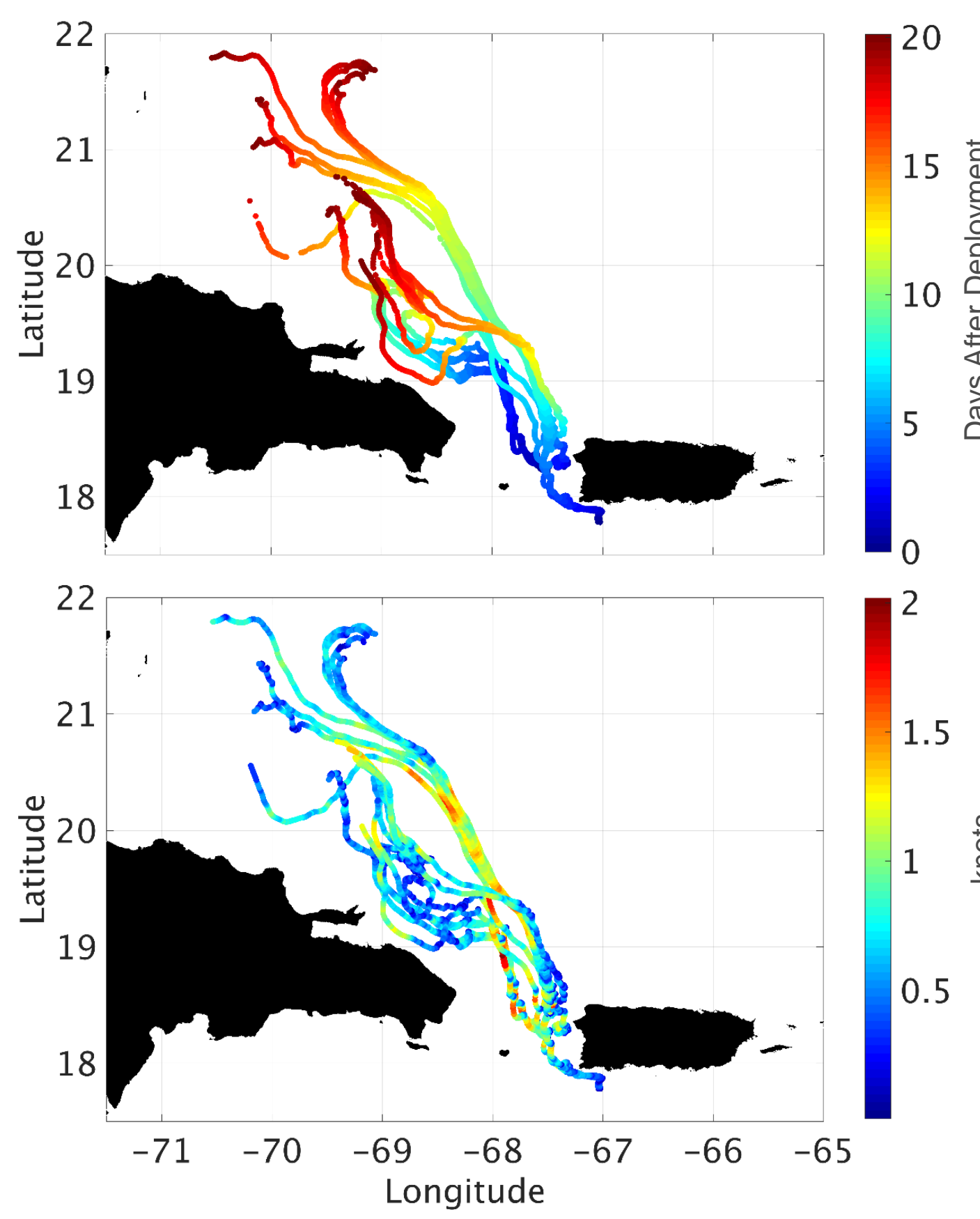
## OVERVIEW

CariCOOS has conducted multiple drifter deployments within the Mona Passage and off southwestern Puerto Rico. In 2015, a connectivity study between the Marine Protected Areas (MPAs) along the Mona Passage included four deployments of satellite-tracked drifters between the months of February and August. In an effort to better understand the dynamics of this region, a second deployment took place in April 2017. Eighteen eco-friendly drifters were released within the Mona Passage and to the south of Puerto Rico, becoming the largest drifter deployment recorded for the region. The acquired data from these deployments has allowed the direct observation of the very complex circulation patterns that dominate the Mona Passage and the lateral dispersion of particles in this region; both processes caused by the interaction between tidal currents, large-scale circulation and mesoscale phenomena.

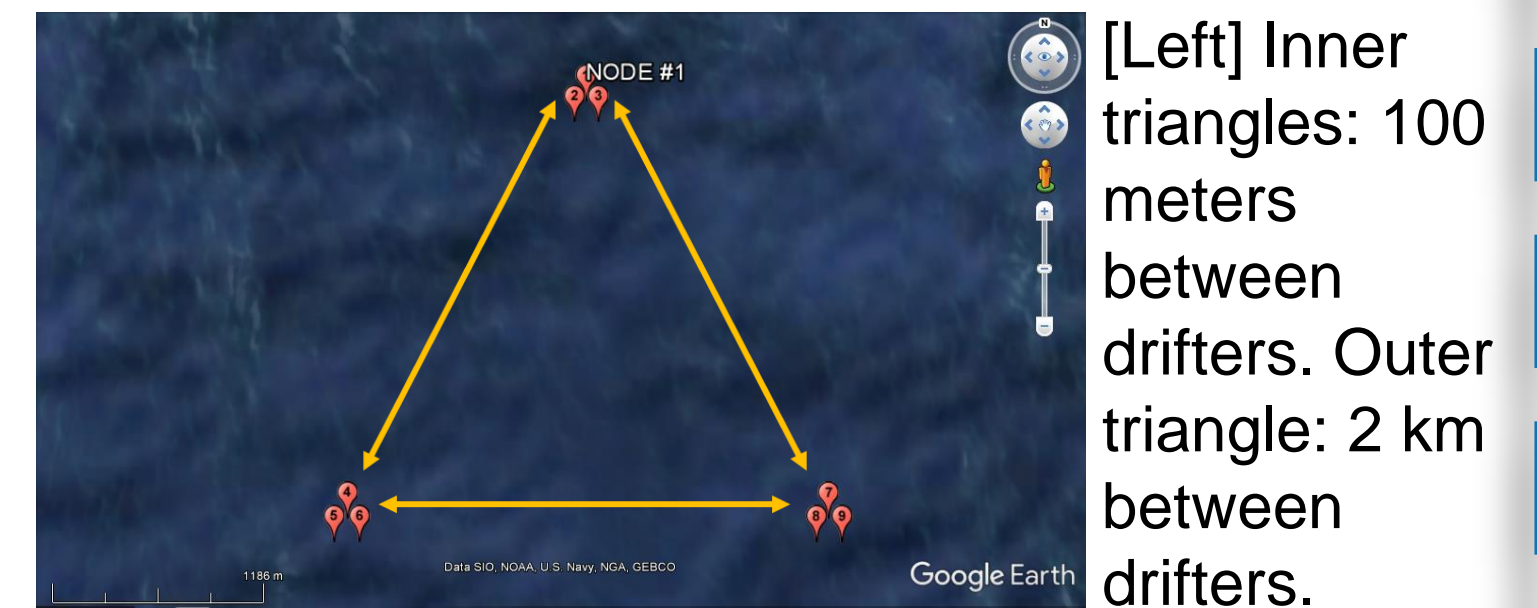
2015



2017

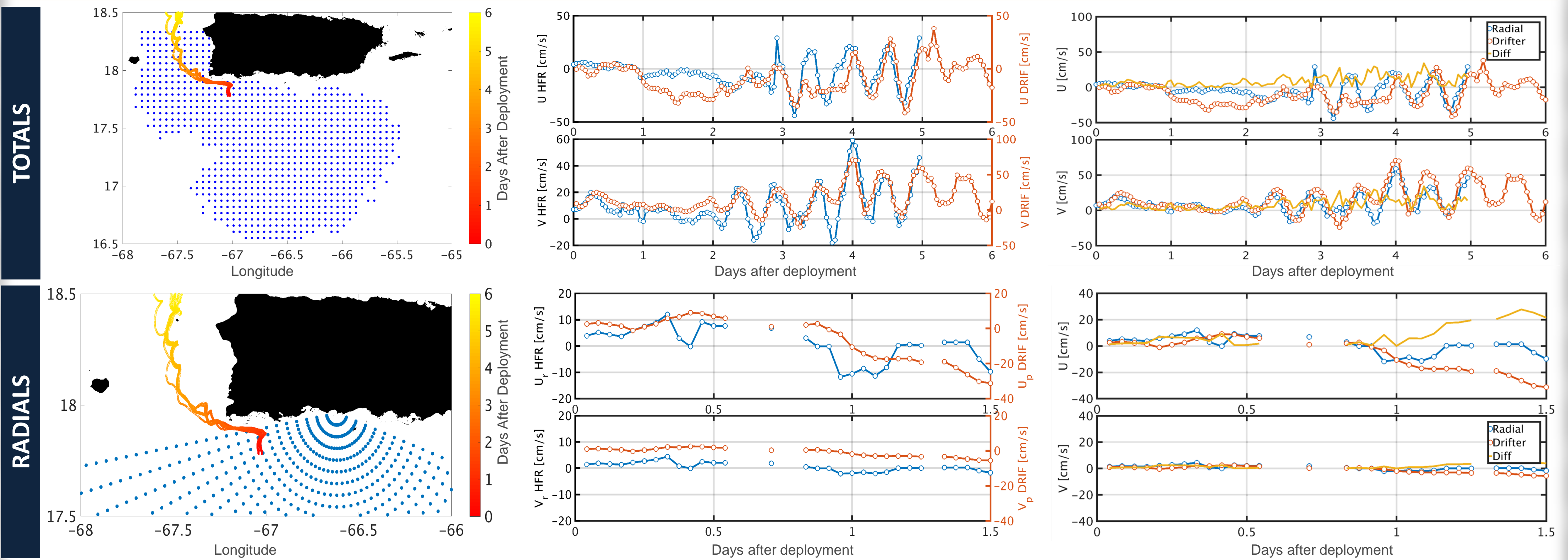


Deployment plan: 18 drifters deployed in two 9-drifter formations. Node #1 at 5 nm south of the Veril (southwestern site); Node #2 at 4.5 nm west of Bajo de Sico (western site).

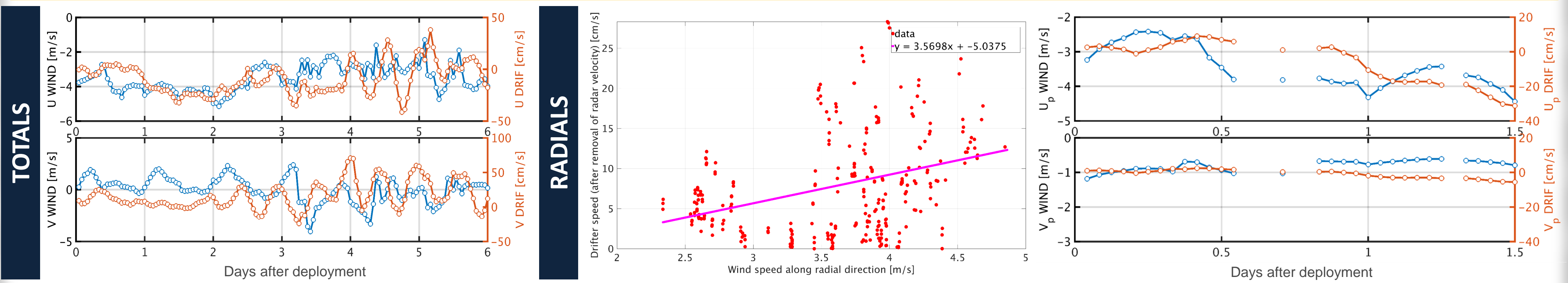


[Left] Inner triangles: 100 meters between drifters. Outer triangle: 2 km between drifters.

## COMPARISON WITH HF RADAR



## WIND DRIFT



## MEAN DRIFT AND CLOUD DISPERSAL

