8 Isphere drifters were deployed near the Dry Tortugas on 16 April 2014. Being 50% submerged, Isphere drifters are influenced by wind, Stokes drift and currents and are supposed to behave like oil spills.

The drifters were dropped in two clusters in two locations (24.4N/81.8W and 24.4N/82.1 W) (Fig. 1).

Simulations by the MET Norway oil drift model OD3D and the Cuban PetroMar oil drift model are compared with the drifter trajectories. Forcing data are from WRF/WW3 atmospheric/wave models and HYCOM 0.9k (Fig. 2 & 3) and ROMS 2k (Fig. 2) and ocean models, respectively.

Results are promising using HYCOM 0.9k, but the simulated oil moves much slower than observed drifter trajectories. Because of this, the model skill score is very low. The simulated trajectories shown are the mass center of a large number of oil particles.

Results are also promising using PetroMar forced with WRF/ROMS but this analysis is in progress.