**Introduction**

**DynLoop Array**
- Motivation: Observational window is limited in time and space. HYCOM provides a mechanism for further dynamical analyses.
- What are the pathways of deep energy generated under the Loop Current?
- What are the trigger mechanisms for Loop Current meanders that lead to Loop Current Eddy separations?

**Model:**
- 1/25° Gulf of Mexico HYbrid Coordinate Ocean Model (0.04, 31.0)
- 3.5 km latitudinal resolution
- Assimilates satellite SSH and SST

**Goal:** Assess HYCOM’s simulation of Gulf of Mexico circulation using observations from the Dynloop experiment.

**DynLoop Array**
- Placed in Loop Current Eddy formation region
- Provided full water-column measurements
- 9 tall and 7 near-bottom moorings, 25 PIES

**Time Series Comparisons**

**Spatial Comparisons**

**Deep EKE**

**Eddy Franklin Separation**

**Spatial EKE patterns match only in the southeastern portion of the array, but array-averaged EKE time series show a correlation of 0.68, and peak together. HYCOM EKE is approximately half that of observations.**

**References:**