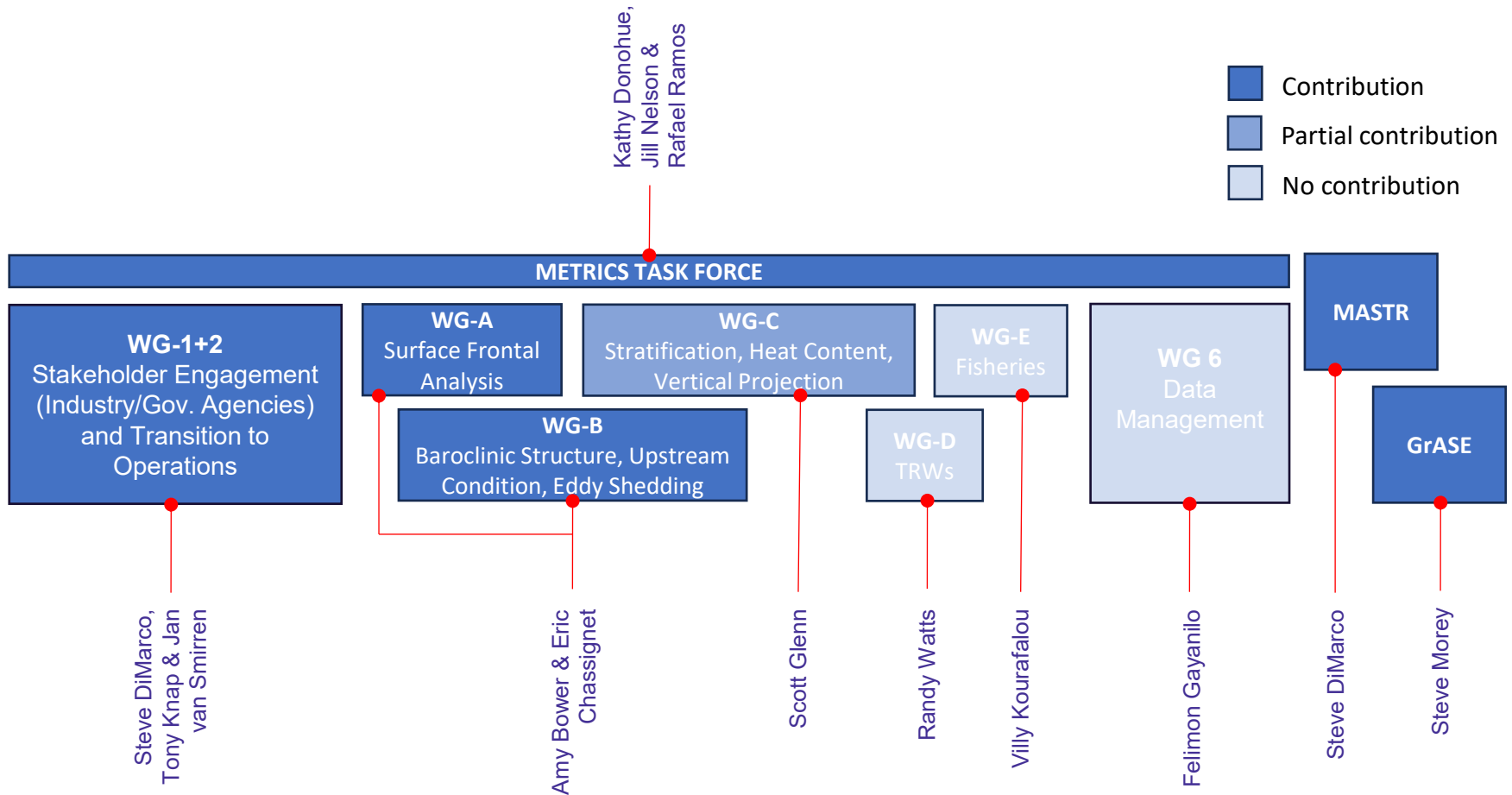


WHG Contributions to UGOS

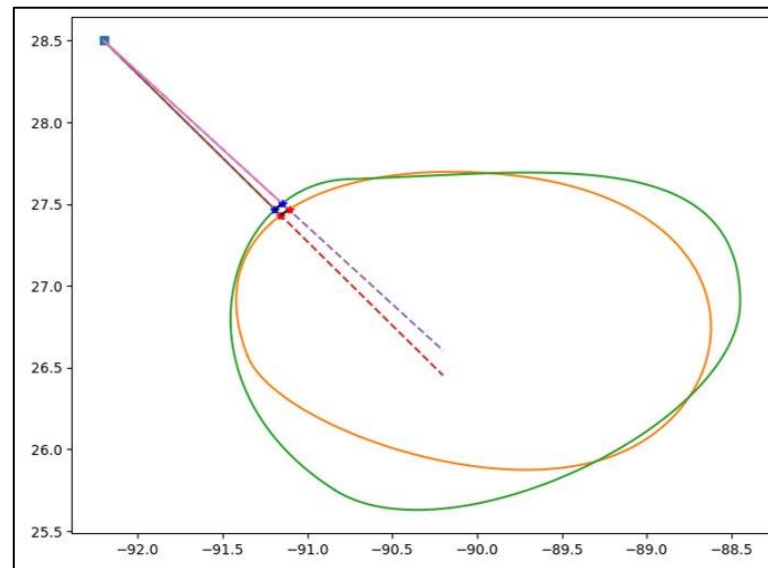
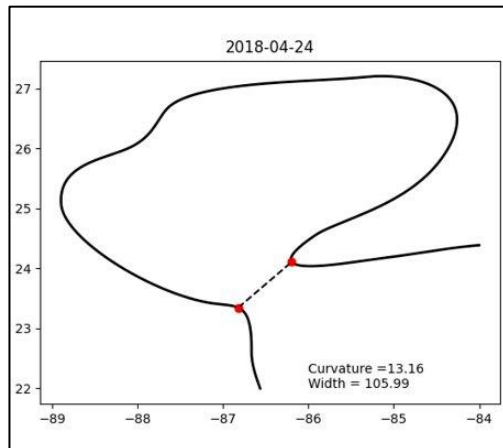
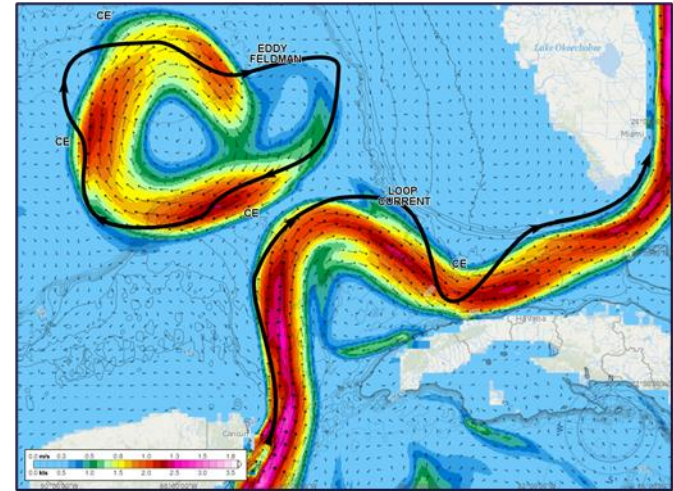


Research



Improve forecast of LCE location, detachment, and depth projection using industry-centered metric framework

- Site Eddy Index
- LC length
- Choke point distance
- LCE orientation
- CE progression

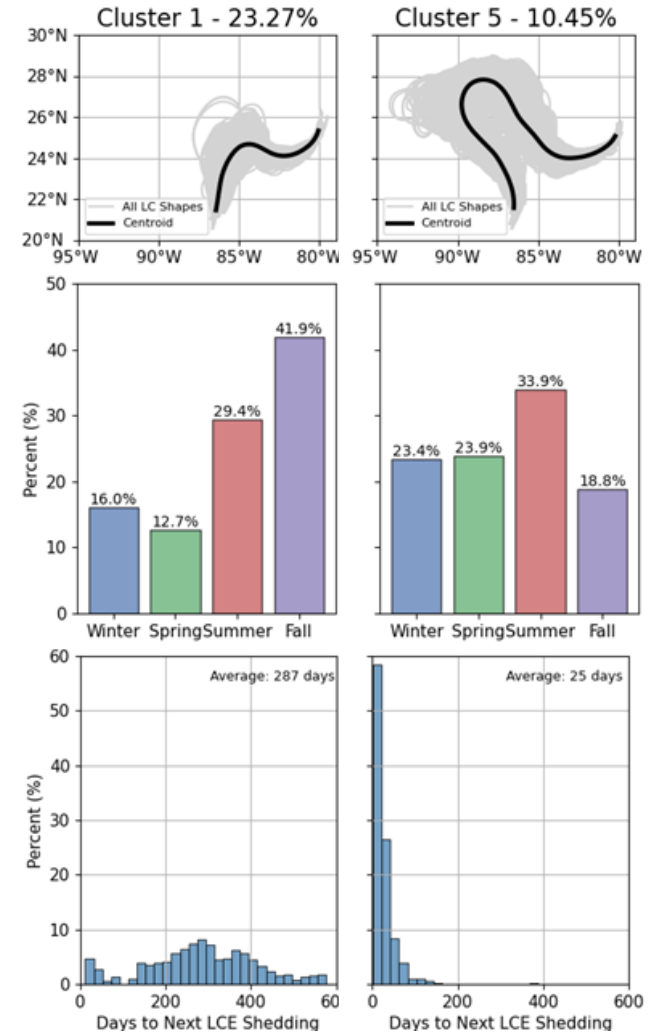
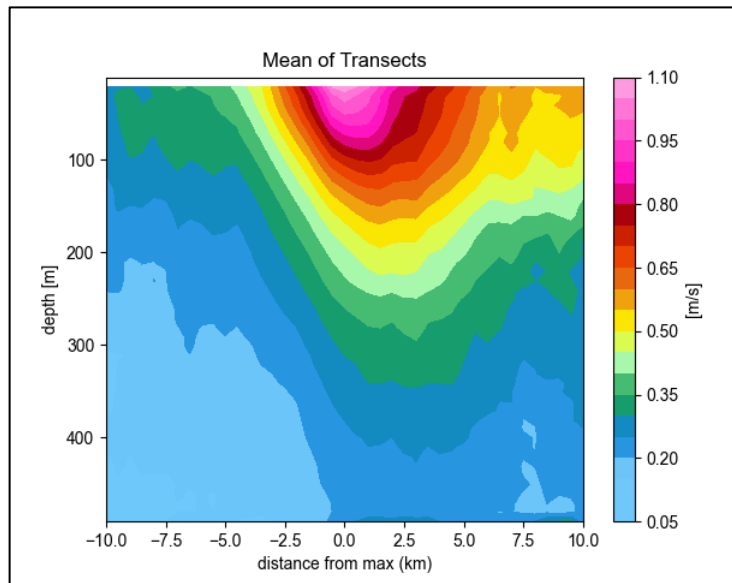


Research



Improve forecast of LCE location, detachment, and depth projection using industry-centered metric framework

- LCS clustering
- LCS vertical kinematic structure

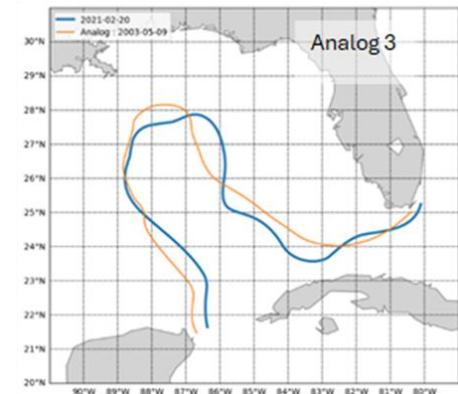
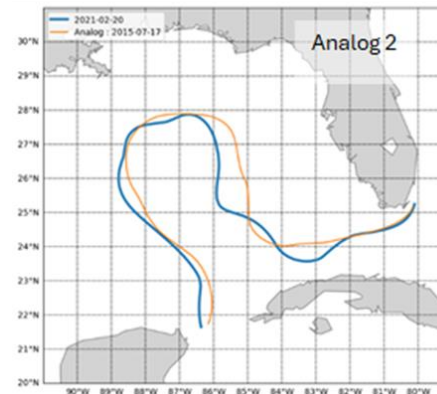
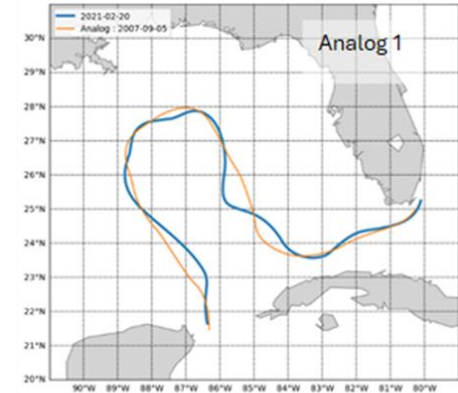
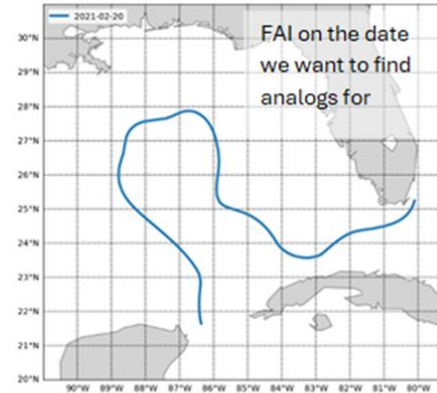
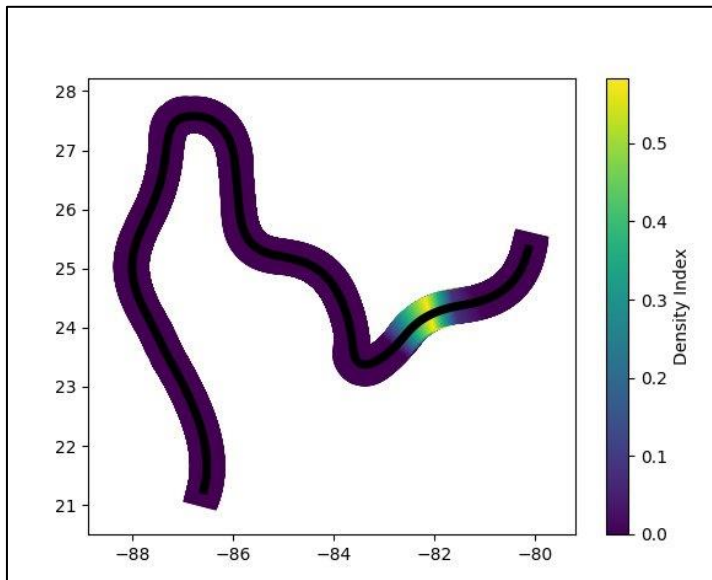




Research

Improve forecast of LCE location, detachment, and depth projection using industry-centered metric framework

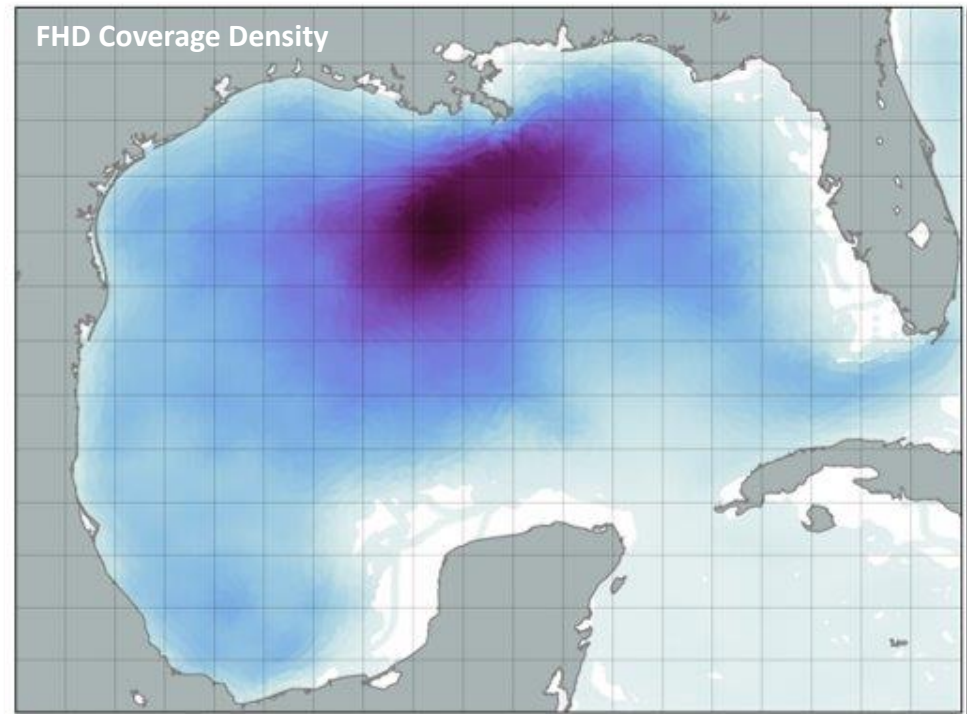
- Analog forecasting
- Frontal Analysis (1.5kt isotach) uncertainty



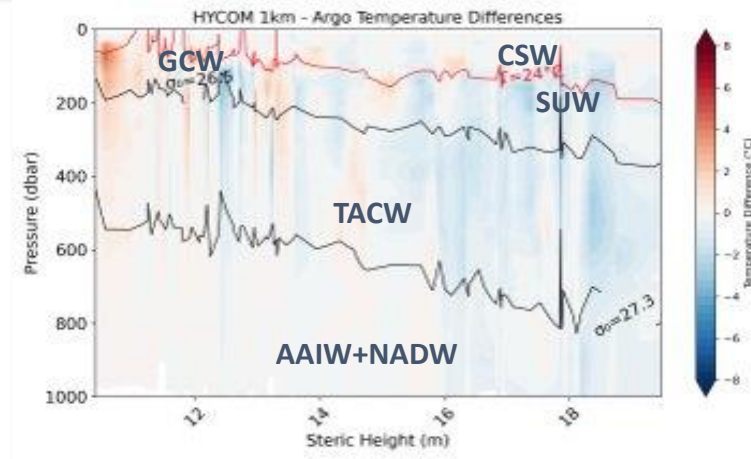
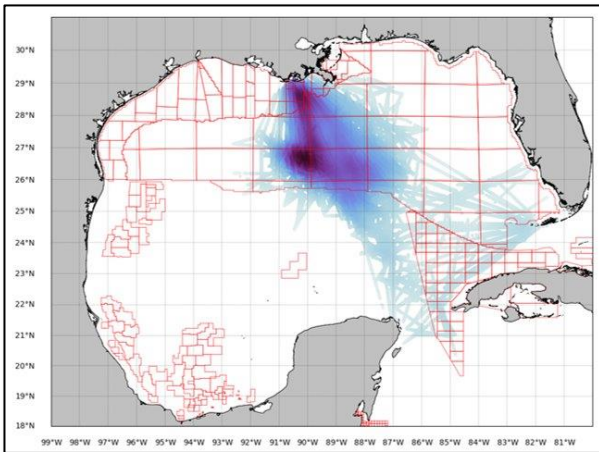
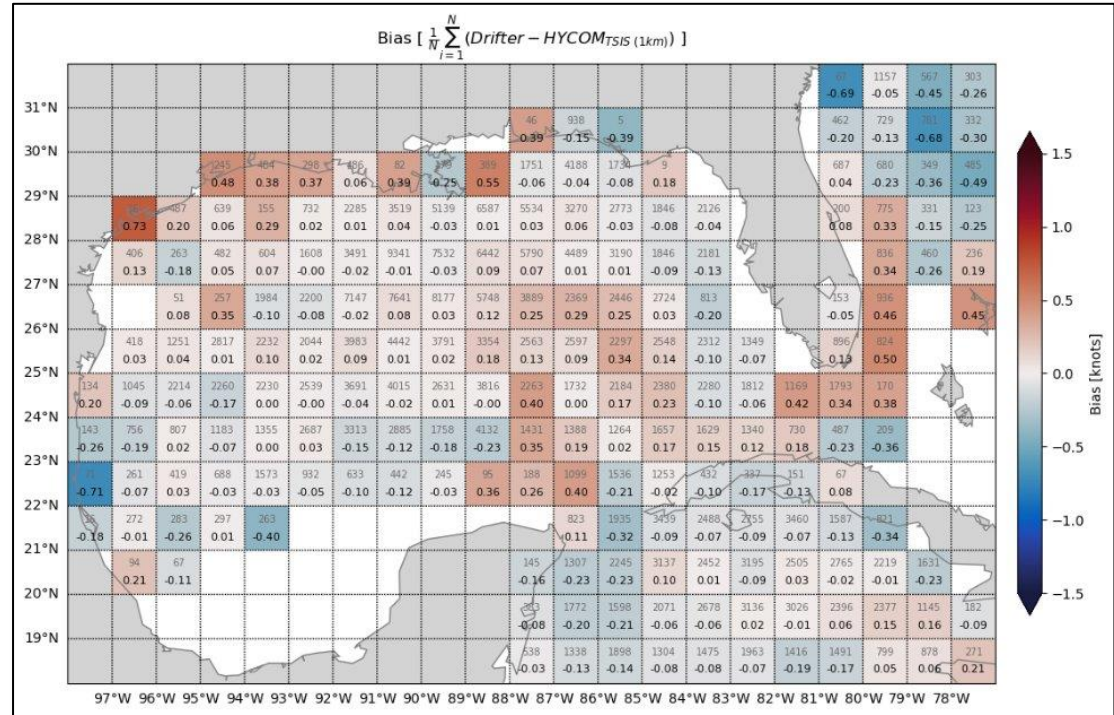
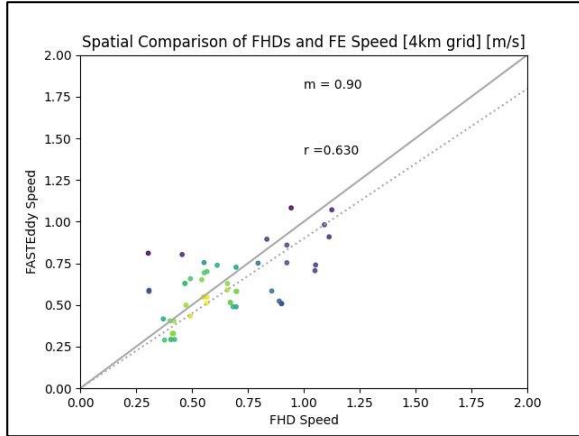
Data Procurement & Support



- Access to WHG's Metocean Mapper
- Far Horizon Drifter (FHD) dataset
- Frontal Analysis (1.5kt isotach)
- VMADCP dataset
- Planning support for adaptive sampling (MASTR and GrASE)
- Purpose-fit FHD deployments
- TSIS assimilation scheme
- TOPS to USCG
- FHD data to JPL/NASA



Model Validation & Skill Assessment



Transition to Operations



Available now

- New visualization schemes (risk level categorization)
- Additional functionality to Metocean Mapper (depth integrated currents, transect plots)
- More operational products (Ocean Heat Content)
- FHD deployment off Yucatan

To come

- Reachability maps
- Sampling optimization (FHDs)
- ...

