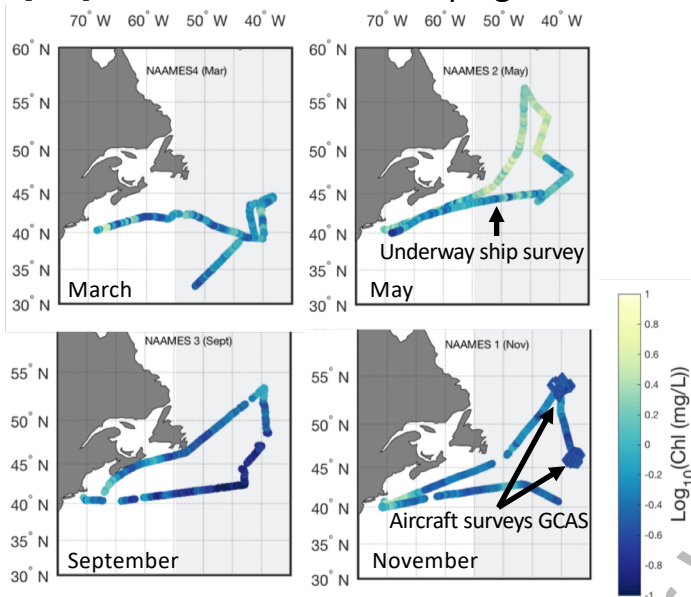


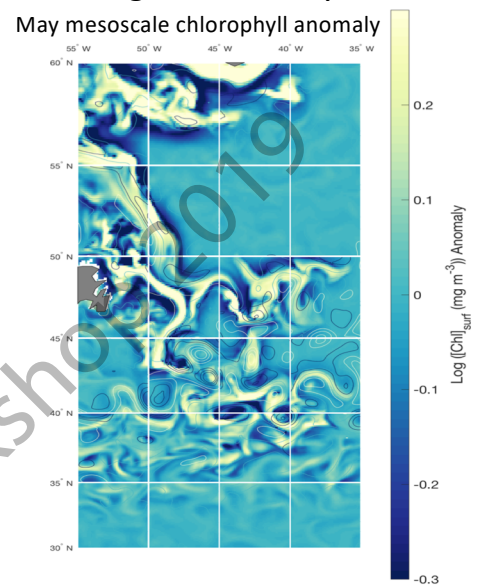
Geostatistical analysis of mesoscale ocean biophysical variability in the western North Atlantic from field observations, remote sensing & numerical modeling

Rachel Eveleth, Scott C. Doney, David M. Glover, Matt Long, Ivan Lima, Ali Chase and Minwei Zhang
Contact information: reveleth@oberlin.edu

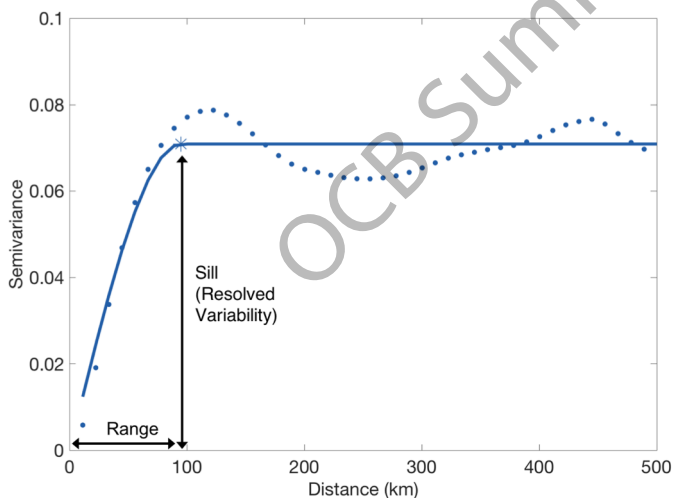
Ship surface chlorophyll concentration [Chl] from the NAAMES campaign



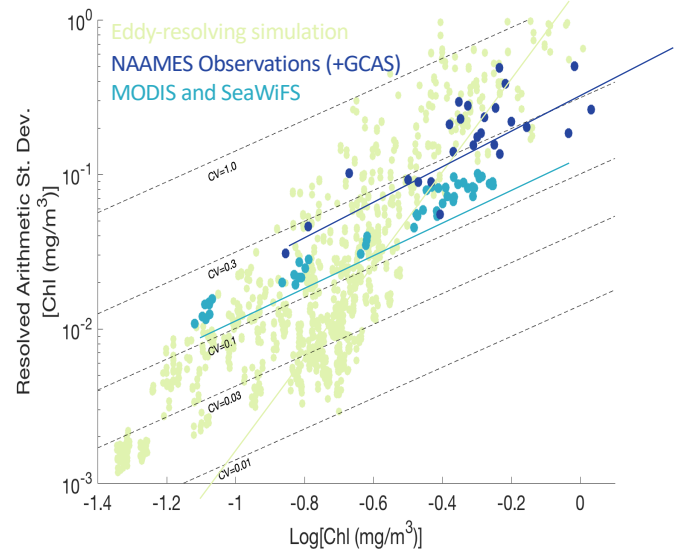
Spatial anomalies in surface chlorophyll from eddy-resolving ocean ecosystem simulation



Geostatistical semi-variogram quantifies spatial variability even with data gaps



Relationship between surface chlorophyll concentration & resolved spatial variability



Summary

- Consistent resolved spatial variability in ship, aircraft & satellite data
- Eddy-resolving model underestimates spatial variability at low surface concentrations & overestimates variability in strong blooms