

Biogeochemical Particle Flux and Sedimentation Group

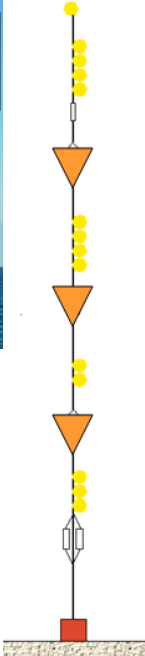
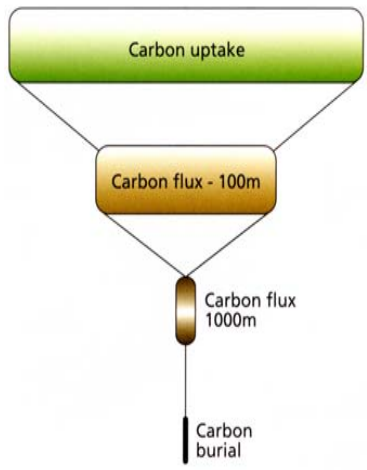


Goal:
To characterize, quantify, and model material fluxes through the ocean and delivery to the sediments (with particular focus on organic carbon and nitrogen, silica, and inorganic carbon) as a function of biophysical and chemical forcing functions on seasonal to decadal time scales.

- Applications:**
- Global carbon, nitrogen and silica budgets
 - Controls on ocean remineralization & diagenesis
 - Paleoceanography/limnology and climate change

- Primary Seagoing and Lab Equipment:**
- Time-series sediment traps
 - In-situ particle & plankton imaging systems
 - Box corer
 - Coulometric carbon analyzer
 - ICP atomic emission spectrometer

- Recent research activities:**
- Southern Indian Ocean Carbon and Silica Cycling
 - Gulf of Maine Particulate Nutrient Fluxes, Resuspension & Deposition
 - Pacific Ocean Nitrogen Cycling and Plankton Dynamics
 - In-Situ Particle and Plankton Image Acquisition and Analysis



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