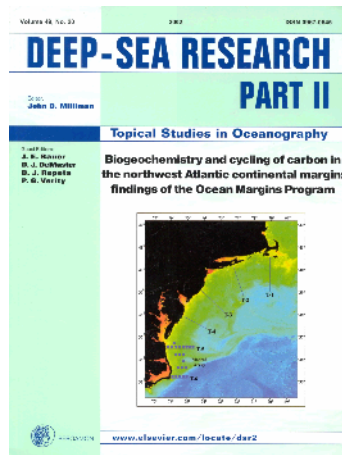


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Biogeochemistry and Cycling of Carbon in the Northwest Atlantic Continental Margin: Findings of the Ocean Margins Program

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Large-scale interdisciplinary efforts aimed at studying the cycling and fluxes of carbon in the northwest Atlantic continental margin, specifically in the Middle Atlantic Bight (MAB), have been ongoing for approximately the last 20 years through a variety of different programs (including the earlier "*Shelf Edge Exchange Programs*" (SEEP) I and II). The Ocean Margins Program (OMP) was elaborated to evaluate all the major pools, biogeochemical transformations, and fluxes of carbon (and associated biogenic elements) in its various forms more fully than any previous program conducted in continental shelf and slope waters and sediments in this region. The field effort embraced four major components: (1) whole-shelf and upper slope "surveys" extending from Cape Cod to Cape Hatteras, intended to evaluate the major inventories, sources, and

sinks of organic and inorganic carbon pools, (2) hydrographic surveys and the deployment, maintenance and retrieval of an array of between 23 and 26 highly instrumented (including both hydrographic and chemical sensors) moorings, distributed between the mouth of Chesapeake Bay and Cape Hatteras, (3) intensive "process-based studies" focusing on microbial food-web structure and function, primarily in the southern part of the MAB between Chesapeake Bay and Cape Hatteras, in the region of the moored array, and (4) outer shelf and slope sediment biogeochemical and benthic flux studies, also in the southern part of the study area.

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