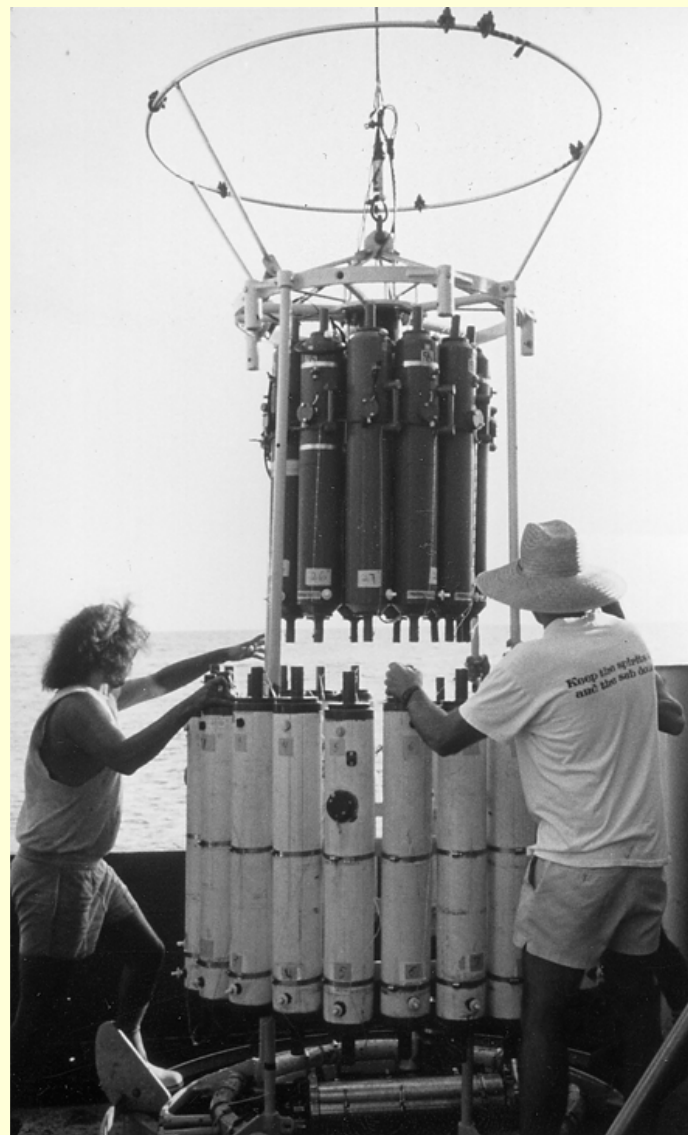
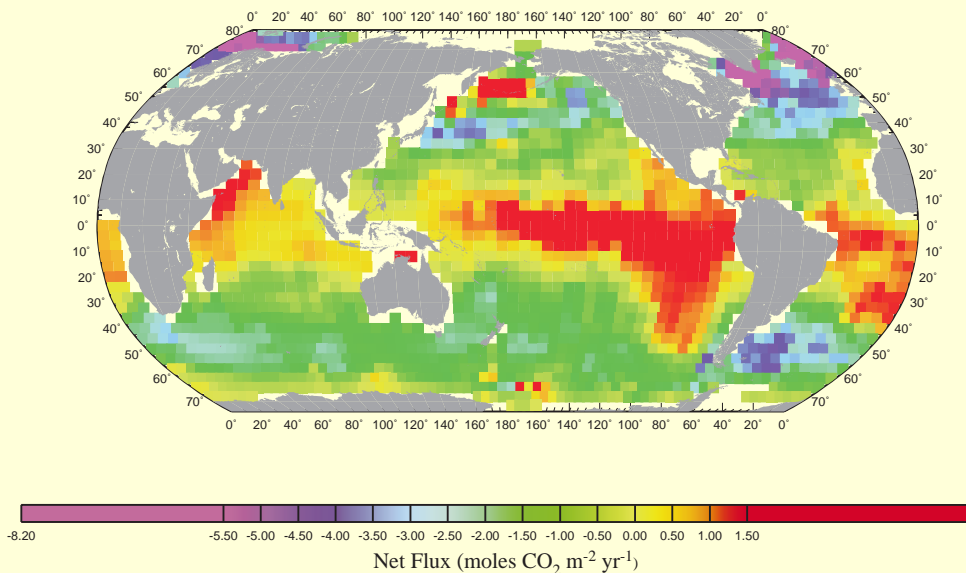


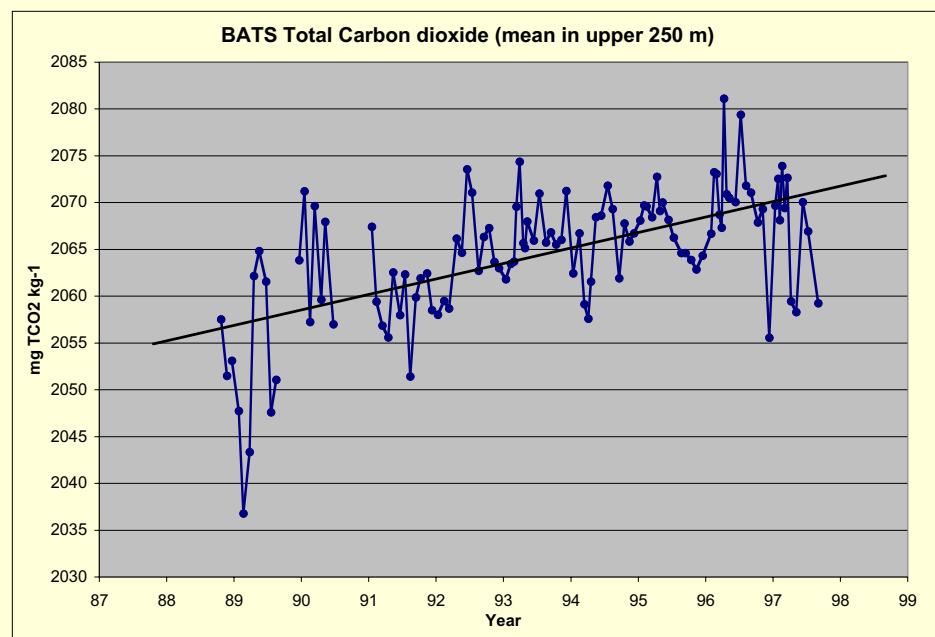
CO₂ Survey

Carbon Dioxide in the Sea. A principal aim of JGOFS is predicting the time-varying distributions of dissolved CO₂ in the oceans and its exchange with the atmosphere through an improved understanding of the underlying stocks and fluxes of carbon in the marine ecosystem.

Annual Flux per Sq Meter (Wanninkhof Gas Exchange) Full 1990 corr.



CO₂ survey samples were collected aboard WOCE Hydrographic Programme cruises.



Here we show the mean concentration of total CO₂ (TCO₂) in the upper 250 meters measured at the Bermuda Atlantic Time-series (BATS) site, and the estimated global CO₂ exchange with the atmosphere. TCO₂ varies over seasonal and interannual scales. The trend line suggests TCO₂ at BATS is increasing at 1.6 mmol kg⁻¹ y⁻¹, in response to anthropogenic CO₂ loading of the atmosphere. In the map, note the active regions of CO₂ uptake in the North Atlantic and Pacific and the source region in the Equatorial Pacific.