



This special issue describes results obtained from a two-ship study carried out in the Bellingshausen Sea, Southern Ocean during October to December, 1992. The study, carried out aboard the Royal Research Ships James Clark Ross and Discovery, was the final field-work phase of the U.K. Natural Environment Research Council (NERC) funded Biogeochemical Ocean Flux Study (BOFS). BOFS was the major United Kingdom contribution to the IGBP Joint Global Ocean Flux Study (JGOFS) over the period 1989-1993. Aspects of the work also contributed to the WCRP World Ocean Circulation Experiment (WOCE), and the fruitful collaboration between the BOFS and WOCE communities added a new dimension to the biogeochemical work within BOFS.

The genesis of this study was a discussion meeting between BOFS scientists and scientists from the NERC British Antarctic Survey (BAS) held at the BAS headquarters in July 1990. The programme was subsequently developed to include a study to investigate biogeochemical fluxes during the spring ice-melt in the Greenland Sea. The original plan was to carry out the northern study in the Boreal spring prior to the Austral spring of 1992/93. This bi-polar study was named STERNA after the migrations carried out by the tern *Sterna paradisaea*, during which individuals commonly spend alternate summers in each polar region. In the event, major conversion work on the R.R.A. Discovery and necessary refit work on the then newly commissioned R.R.S. James Clark Ross, led to the cancellation of the northern component of the study; nevertheless the same STERNA was retained. This study was one of the largest individual oceanographic "experiments" conducted by the U.K. with a total of 63 scientists and technicians working on the two ships. However, we especially acknowledge the essential collaboration with colleagues from the U.S.A. and South Africa who took part in the field work.

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