As a part of Japanese Joint Global Ocean Flux Study (JGOFS) of IGBP/SCOR, marginal sea flux experiments in the West Pacific (MASFLEX) were performed in the East China Sea. This project was also a part of Japan–China Joint Program on material flux in the East China Sea (MAFLECS) and the first land–ocean interactions in the coastal zone (LOICZ) study within IGBP. The project began in April 1992 and continued for 5 years under the support of Science and Technology Agency of Japan (STA). Its main goal was to clarify a role of marginal and coastal seas in the biogeochemical cycles of carbon, nitrogen and other substances relating to global change. A multi-disciplinary approach made it possible to elucidate the highly complex nature of biogeochemical cycle of materials in the marginal sea.

The MASFLEX project was divided into two phases, phase I (April 1992–March 1995) and phase II (April 1995–March 1997). During the first phase, we chiefly occupied stations along an observation line, PN line, from the China coast to the Kuroshio region in the central part of the East China Sea. Three cruises were conducted on board R.V. Kaiyo (15 Feb.–10 Mar. 1993; 26 Sept.–3 Nov. 1993; 20 July–30 Aug. 1994). Additional cruises were carried out on other vessels (22 Feb.–5 Mar. 1994, R.V. Natsushima; 3–21 June 1994, R.V. Tansei; 26 Sept.–12 Oct. 1994, R.V. Bosei-Maru). The second phase was concentrated in the continental shelf and slope zones to evaluate the material exchange between the shelf region and the open sea during two cruises on board R.V. Kaiyo (21 Oct.–25 Nov. 1995; 22 Aug.–30 Sept. 1996).
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