

The annual variations of the POC export flux in the equatorial Pacific

Tatsuo Aono[1], Masatoshi Yamada[2]

[1] Nakaminato Laboratory for Marine Radioecology, NIRS, [2] Nakaminato Lab. Mar. Radioecol., Natl. Inst. Radiological Sci.,

Using the Th-234 activity in the seawater and settling particle, the POC export flux were estimated inn the western and central equatorial Pacific. Samples were taken during the MR98-K02, MR99-K07 and MR00-K08 aboard the R. V. Mirai of JAMSTEC. The total mass fluxes in the central area were 2 times higher than those in the western Pacific. POC export fluxes were estimated from the Th-234 removal flux in seawater and the POC/Th-234 ratio in the settling particle. The high values in the western area compared to the central area were shown. As the primary productions are different in the effect by ENSO, the variation of POC export fluxes seems to be the effect by composition of particles and plank ton species.