The use of Th-234 to estimate the export flux of particulate organic carbon in the equatorial Pacific

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Using the Th-234 activity in the seawater and settling particle, the POC export flux were estimated in 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 3 times higher than those in the western Pacific. POC export fluxes were estimated from the Th-234 activities in the settling particle. The high values in the central area compared to the western 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 plankton species.