

Radiocesium released from Fukushima was contained in the sinking particles in the western North Pacific.

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We carried out the sediment trap experiments in the western North Pacific during autumn 2010 and summer 2011. The sinking particles were collected in the area before and after the accident of Fukushima Dai-ichi nuclear power plant (FNPP). Cs-137 and Cs-134 were detected in the sinking particles at 500 and 4810 m depth after 25 March and 6 April forward, respectively. Because Cs-134/Cs-137 ratios were approximately 1.0, we assumed that these radioisotopes were released from FNPP. Using the time lag of the initial detection of radiocesium between 500 and 4810 m depth, the particle sinking rate was estimated as >180 m/day.

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