Japan Geoscience Union Meeting 2013

(May 19-24 2013 at Makuhari, Chiba, Japan)

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MAG35-07

Room:IC

Time:May 21 10:30-10:45

Radiocesium stored in bottom sediments after the nuclear power plant accident due to the M9 earthquake

Motoyoshi Ikeda^{1*}, KANDA, Jota²

Eastern Japan along the Pacific coast has been damaged seriously and is still on the way of recovery after the nuclear power plant accident in Fukushima due to the magnitude-9 earthquake on March 11, 2011. The radiocesium concentration went down greatly by the summer of 2011 in sea water, while it still keeps a high level in the bottom sediments. In particular off the coast from Miyagi to Ibaragi, some spots with high concentration have been found in the region shallower than 200-m depth. The dedicated members of the Oceanographic Society of Japan have been making estimations and discussion to find which processes are responsible for the high concentration. A symposium is held in March with widely opened discussion. We have so far reached the tentative conclusion that any process could be a possible one for the present condition among absorption/adsorption by plankton, detritus and disturbed sediments, direct adsorption of seawater cesium and inflow of suspended solids from rivers. The further collection and analyses of samples are required to confirm the actual processes, and therefore, the monitoring plan is proposed with effective analytical methods.

Keywords: radionuclide, earthquake, sediments

¹Hokkaido University, ²Tokyo Univ. of Marine Science and Tech.