

Characteristics of radioactive Cs in reservoir sediment in Iwaki, Fukushima prefecture

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Large amount of radioactive elements, mainly Cs, were emitted from Fukushima Daiichi Nuclear Power Plant (FDNPP) because of Tohoku Earthquake occurred in March, 2011 and Fukushima prefecture and prefectures of the neighborhood were contaminated. Nuclear Regulation Authority, Japan (2013) reported that air dose rates evaluated based on the airborne monitoring results clearly show larger declines than those calculated based on the physical half-life of radioactive Cs. The reasons for such larger declines may include the effects of natural environmental erosion, such as rainfall. We have applied the sediment trap to sample the reservoir sediment. Sediment trap can observed the erosion continuously. Our purpose is to examine the characteristics of Cs contaminated soil continuously from summer to winter in 2013 in detail in Iwaki city, Fukushima prefecture.

Keywords: Radioactive Cs, Sediment, Erosion, Soil, Clay mineral