

Future distribution of radiocesium in crops inside the evacuation zone, Fukushima, Japan.

KATSUMI SHOZUGAWA AND MAYUMI HORI

University of Tokyo

Presenting Author: cshozu@mail.ecc.u-tokyo.ac.jp

We conducted a study to predict future radiocesium ($^{134}\text{Cs}+^{137}\text{Cs}$) in crops inside the evacuation zone (Namie town, Fukushima prefecture, Japan) 10 years after the Fukushima Daiichi nuclear power plant accident. The survey had conducted in a mountainous area that had never been decontaminated. Detailed observations of radiocesium in some native crops growing in the evacuation zone showed that the average radioactivity in kiwi was about 80 Bq/kg-raw and that its distribution followed an approximately normal distribution (RSD 16.5%). There was no correlation between radiocesium and ^{40}K or sugar contents for any crops. Based on two years observation (2021-2022), it is predicted that the same level of radiocesium will continue to be detected in kiwis in the future unless decontamination activities are carried out.