



## **Influence of radiocesium transfer and decontamination on ambient dose in Japanese forest environment**

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This study investigated the effect of post-depositional migration of radiocesium and decontamination on ambient dose rate in Japanese forest environment following the Fukushima Dai-ichi Nuclear Power Plant accident. We measured cesium-137 deposition from canopy to forest floor in association with rainfall and litterfall in two coniferous stands (plantation of Japanese cedar) and a deciduous broad-leaved forest stand (oak with red pine). We also measured temporal evolution of ambient dose rate at different height in each forest site. Radiocesium inventory balance in each forest component (e.g., canopy, litter and mineral soil layer) were established to determine causes of the measured changes of ambient dose rate in three forest sites. Furthermore, we assessed influence of forest decontamination (removal of organic layer of forest floor) on spatial pattern of radiocesium at the forest floor and reduction of ambient dose rate.