
[EJ] Evening Poster | M (Multidisciplinary and Interdisciplinary) | M-AG Applied Geosciences

[M-AG33]Dynamics of radionuclides emitted from Fukushima Dai-ichi Nuclear Power Plant in the environment

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The Great East Japan Earthquake caused the severe accident in TEPCO Fukushima dai-ichi nuclear power plant (FDNPP), leading to emission of huge amount of radionuclides to the environment. They have been transported and diffused by atmospheric motion, depositing them to soil and vegetation. Deposited radionuclides are dynamically shifted in the earth environment; atmosphere, soil, inland water, ocean, and ecosystem. To understand this dynamic shift in the environment and for the long-term prediction of the disaster by the radionuclides, investigation and discussion based on not only the earth sciences including ecology but also on the radiochemistry and other related sciences.

In this session, various efforts to understand the dynamic behavior of radionuclides emitted from FDNPP accident in the earth system as well as to predict their influences on the environment. It is expected that this session will offer a good opportunity to discuss radionuclides in the earth environment from wide aspect and to exchange information in various research fields.

[MAG33-P07]Impact on river water quality by the wildfire in non-decontamination forest in Fukushima Prefecture

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In April 2017, the wildfire occurred in Namie Town, Fukushima Prefecture. The area is included in the difficult-to-return zone due to TEPCO's Fukushima Dai-ichi Nuclear Power Plant accident in 2011. Because forest is not subject to decontamination, it is possible that river water quality is affected by changes of ¹³⁷Cs dynamics in catchment after the wildfire. Therefore, we investigate the change of outflow of ¹³⁷Cs from the catchment to evaluate the influence of wildfire on the change of river water quality. In this paper, we report the results of ¹³⁷Cs and major ion concentrations in the river waters in the study site.