

Radiocesium transport on the hillslope of a backyard mountain

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The radiocesium (Cs) fallout from the Fukushima Dai-ichi Nuclear Power Plant was scraped off from the surface layer on a hillslope of a backyard mountain in Iitate Village, Fukushima Prefecture. Since the fallout radiocesium was removed from the soil surface within a 20 m range from houses, we continued to monitor changes in Cs concentration at the surface layer from the foothill to the Cs-remaining part along the hillslope. Just after the Cs-removing process, Cs concentration on the whole slope was similar from the foothill to the uphill. Radiocesium transport on the hillslope of a backyard mountain seemed to increase during big rainfall events. With time elapsed, Cs concentration seemed to increase in the middle and upper hillslopes. Interestingly, Cs concentration in the Cs-remaining part increased with time, meaning that Cs was transported from the further upper part of the hillslope. Long-term monitoring on the hillslope and vertical transport to the deeper soil layers should be needed.

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