

Estimates of a sediment yield and a outflow of radioactive Cs with 3D laser scanner

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For an estimate of movement from forest to living spheres, it is important to understand value of movement of soil and radioactive Cs from forest. We measured volumes of deposit with 3D laser scanner in an erosion control dam in Fukushima prefecture on August 29, 2013 and December 3, 2014.

As a result of measurement, an amount of increase of sediment for 15 months is 0.5 m³. A denudation rate is 0.02 mm/year. This value is on the same level with denudation rates in meadows and forest, 10-2 - 10-1 mm/year (Fujiwara et al, 1999). And it is estimated that a variation of radioactive Cs is Cs-137:200,000,000 Bq, Cs-134:80,000,000 Bq.

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