Characteristics of the Fuji-Sagamigawa Lahar deposit at the upper reaches of Sagami River, central Japan

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Lahar is a general term for a rapidly flowing mixture of rock debris and water (other than normal stream flow) from a volcano (Smith and Fritz, 1989). Fuji Sagamigawa Mud Flow (Lahar) originated from the Fuji Volcano (Older Fuji) around 22 ka (Machida, 2009) distributes along the Sagami River Valley. The lahar deposits have been reported from Tsuru City, Yamanashi Prefecture to Zama City, Kanagawa Prefecture which apart ca. 90 km from the present Fuji Volcano summit. Although more than 3 events have been recognized based on field surveys by Geographical and Geological Research Group in Sagamihara City (1990), detailed description of Fuji Sagamigawa lahar deposit at the upper reaches of Katsura River (Sagami River) has not been published yet.

Detailed investigation of the lahar deposits in the upper reaches of the Katsura River and Shakunagare River located on northern margin of the Katsura River valley revealed that (i) the lahar deposit would bury the Katsura River valley entirely with more than 20 m thick, (ii) the deposit at upperstream area is characterized by frequent silt layers intercalation, and (iii) several debris flow deposit layers are transformed into hyperconcentrated flow deposit.

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