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Survey of transported woody Debris after Flood Fvents in a little Stream in the North-East Italy

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Woody debris in an integral component of forested streams and elsewhere, yet little is known about wood's volume released by riverbanks, about how far wood is transported and where it is deposited in streams. Moving wood can be a geomorphic hazard in communities adjacent to forested mountain streams. Wood dramatically increases the destructive power of floods and debris flows, by increasing the force imparted to structures and riparian forests, and accumulating behind bridge abutments and culverts, causing backwater flooding.

Wood is often seen as a relatively immobile component of streams but extensive measurements done in Alpine streams attest to the high rates of wood transport during flood events.

A survey and evaluation of wood's storage along the channel was made before and after a flood event happened in 2004 in Rì Creek, a low order stream in Trentino, Italy.

The measurement concern different aspects: width and slope of channel, localization of wood's storage, diameter, length and volume of logs, a distinction of scattered or clustered logs.

Moreover an hydrology study on the catchment basin allow to relate the woody debris volume transported during a flood and captured by an open check dam with the hydograph pick and volume for six flood events. The Ishikawa (1990) and Rickenmann (1997) formulas were compared with the measured woody debris and a new relationship is proposed. In the end the relationship between average length of woody debris

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