

**INFLUENCE OF THE FOREST VEGETATION ON EROSION
IN TORRENTIAL MARLY CATCHMENT BASINS:
ROLE OF THE SPATIAL DISTRIBUTION OF THE FOREST COVER**

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The experimental catchment basins of Draix (french southern Alps) are a privileged place for the study of erosive phenomena and torrential rising in a geomorphological context of badlands. At the integrating scale of the catchment basin, comparisons between a forested basin and a degraded one showed the clear influence of the forest cover on the reduction of both maximum flood flows and production of sediments. However, the wooded basin has a production of sediments quite less than that expected from the knowledge of the ablation of the rare stripped zones. Thus, modelling with the global spatialized model ETC leads to an over-estimate of the production of sediments. To explain the divergence observed, we suspect that the vegetal screen must certainly trap a part of the sediments eroded upstream. We then seek to estimate, on the scale of the gully and the versant, this complementary role of the vegetation. In particular, we try to specify the influence of the forest from the angle of the spatial distribution of the forest cover. For that, traps for sediments are installed at the exit of variously vegetalized gullies, and allow connecting the quantities of sediments measured there after rainfalls with the vegetal characteristics of the gullies. Observations on a versant scale make it possible, as for them, to analyse and understand the phenomena of materials stopping by the vegetation.