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# Experimental Evidences on the Run-on Process

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## ABSTRACT

Experimental evidence of infiltration of excess water that moves downslope over unsaturated areas, usually called run-on process, is provided in laboratory. The experiments were carried out using a laboratory slope characterized by natural soils with thickness of 70 cm subject to artificial rainfalls. Measurements of overland flow, deep flow and soil water content, together with photographs of soil surface, were used to quantify the main features of the run-on process. Different rainfall patterns over the surface and different slope angles were also tested.

The results give evidence that the interaction between Hortonian overland flow, which occurs along preferential paths, and local infiltration over the permeable areas can be appropriately described by representing the flow depth per unit time as a completely infiltrated additional rainfall rate. Thus, these results strengthen the studies on the effects of run-on earlier performed by synthetic experiments.