



Resuspension by gravity saline flows

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Laboratory experiments were conducted so as to study the interactions between gravity current and a bed made of loose particles of PMMA. The gravity flow is obtained by the release of a heavy fluid (a saline solution) in a lighter one (clear water). The channel is composed of two parts: the upper one consisted in a smooth strong slope (27°) whereas the second one is a plane of softer slope (10°), on which loose particles are disposed. The upper part let the saline solution gather speed. Downstream the gathered particles are collected through a net and are weighted. Both flow velocity and deposit topography are measured thanks to image processing. The variable parameters of the different experiment that were performed were both the density and the volume of the saline solution injected in water.