

Study of overland flow with uncertain infiltration using stochastic tools

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Saturated hydraulic conductivity is a key parameter in overland flow models with infiltration, but several studies have shown the difficulty to correctly measure or estimate this parameter. We therefore propose to consider this parameter as a stochastic input parameter. We are interested in uncertainty propagation stemming from this uncertain parameter in the Shallow Water equations. We use a Monte Carlo method to quantify uncertainty propagation and to study using Sobol indices the sensitivity of model results to the value and the spatial distribution of saturated hydraulic conductivity along a slope.

Références

- [1] AUTEUR, *Titre*, Editeur, année.
- [2] AUTEUR, *Titre*, Revue, références, année.

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