

A multiscale method applied to shallow water flow

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Resumen

A flux-limited second order scheme with the C-property is used to solve the one dimensional or two dimensional Saint-Venant system for shallow water flows with non-flat bottom and friction terms, as is introduced in [3].

High resolution at low cost can be obtained by applying point value multiresolution transform [1, 2, 4] in order to detect regions with singularities. The above method is applied in these regions while a cheap polynomial interpolation is used in the smooth ones, thus lowering the computational cost.

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Referencias

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