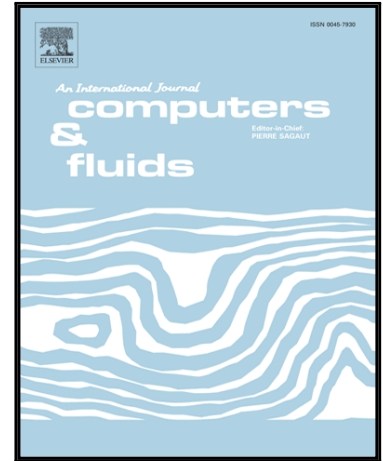


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A coupled numerical model for water flow, sediment transport and bed erosion

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Highlights

- A numerical method is proposed for the coupled hydrodynamic-morphodynamic system,
- Analytical expressions of the eigenstructure of the system are not required,
- This technique significantly reduces the computational cost,
- A well-balanced discretization is developed for the bed slope source term,
- The proposed techniques lead to accurate coupled numerical scheme.

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