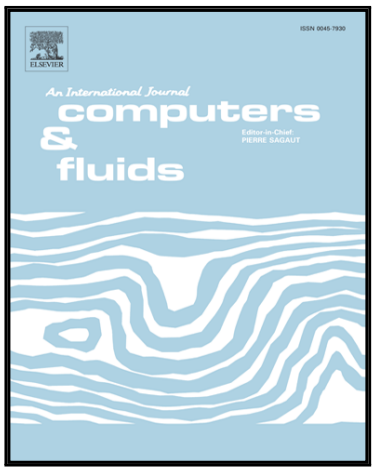

Turbulent flow over an array of boulders placed on a rough, permeable bed

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Highlights

- A large-eddy simulation method is applied to complex geophysical flow.
- The simulation is validated successfully with experimental data.
- The complex time-averaged flow is visualised with contour plots and streamline plots
- The instantaneous flow is educed and shear layer roll-up, vortex shedding and shear layer flapping mechanisms are quantified.