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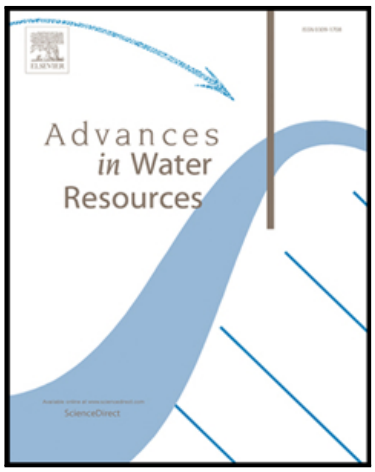

Approximate methodology to account for effects of coherent structures on sediment entrainment in RANS simulations WITH A MOVABLE BED and Applications to pier scour

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Highlights

- Most of sediment is entrained by coherent structures interacting with the bed.
- More accurate RANS based methods with movable bed are needed.
- An augmented bed shear stress can be used to account for effect of unresolved eddies.
- LES can be used to find optimum model coefficient of augmented shear stress.

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