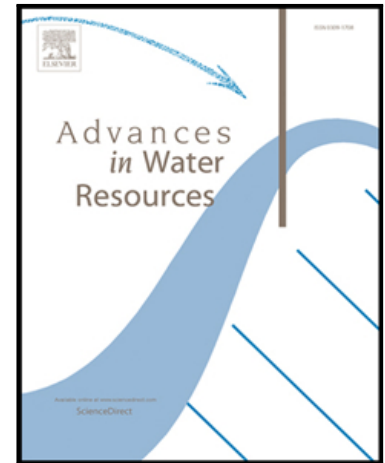


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Experimental observation of increased apparent dispersion and mixing in a beach aquifer due to wave forcing

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Highlights

- Wave forcing causes highly transient flow in beach aquifers due to wave run-up and beach face infiltration as well as head oscillations
- Transient flow increases solute spread and mixing, here referred to as apparent dispersion, by orders of magnitude
- Numerical solute transport models require consideration of this additional dispersion depending on wave conditions and subsurface location

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