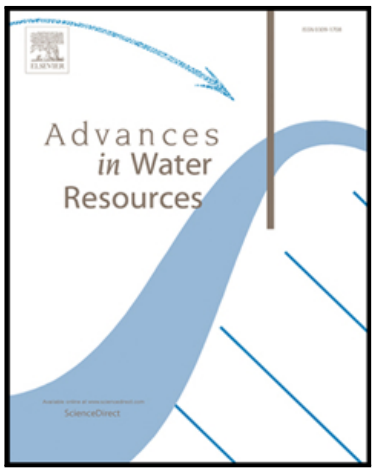


Wave propagation in linearized shallow flows of power-law fluids

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Highlights

- A depth-averaged model with a power-law rheology is studied analytically
- Basic wave parameters and linearized response functions are derived
- The Full Dynamic Model is compared with Kinematic Diffusion and Quasi-Steady Models
- The results indicate that the diffusive approximation is the most accurate one
- The analytical solutions may be used for testing numerical method performances