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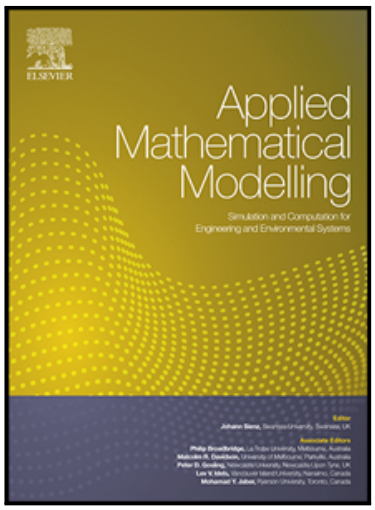

Well-balanced central schemes for two-dimensional systems of shallow water equations with wet and dry states

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Highlights

- New central finite volume scheme for the two-dimensional system of shallow water equations was developed
- The developed scheme is well-balanced and preserves the lake at rest constraint.
- The developed scheme is capable of handling wet and dry states whenever water run-ups/drains in the computational domain.
- The developed scheme is validated and used to solve classical two-dimensional shallow water equation problems.

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