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Efficient numerical schemes for viscoplastic avalanches. Part 2: the 2D case

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Highlights

- 2D well-balanced scheme for viscoplastic shallow water model, taking into account wet/dry fronts.
- Blends well-balanced techniques with duality methods (augmented Lagrangian & Bermúdez-Moreno).
- Excellent accuracy to compute the arrested states of the avalanche, including on digital elevation models (DEM) topographies.
- Extensive study of the duality optimal parameters, including an automatic computation for the Bermúdez-Moreno method.

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