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Article: Hydrodynamic Modelling Techniques for Bays and Estuaries: Simulation Methodology and Practical Application

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Reviewer 1

Thank you in advance for your feedback regarding the technical paper. We have carefully reviewed each comment, and based on that, we have responded to them in this review letter. You can see all the improvements in the new manuscript highlighted in red.

Questions and responses

The manuscript presents a novel simulation methodology for hydrodynamic modeling in bays and estuaries, addressing the critical issue of data scarcity. By simplifying calibration to a single parameter—bed friction—it offers a practical and innovative approach for regions with limited field data. The methodology is rigorously developed, grounded in mass and momentum conservation equations, and validated through comprehensive comparisons with analytical solutions.

Minor grammatical corrections are suggested for clarity:

"shoes" should be corrected to "shows" (Line 344),

"towerds" to "towards" (Line 338),

and "designeers" to "designers" (Line 332).

The study's relevance lies in its potential application for pre-feasibility studies, optimizing water resource management. I recommend the manuscript for publication with these minor revisions.

R.\ Thank you so much. We have corrected these words ion the new version of the manuscript.

Kind regards,

The authors