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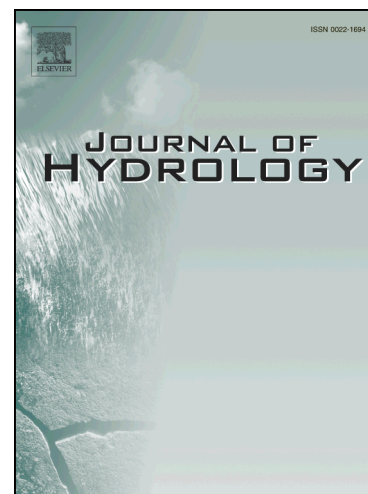
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Prediction of the depth-averaged two-dimensional flow direction along a meander in compound channels

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Highlights:

- (1) The flow direction is predicted along a meander in smooth and vegetated compound channels.
- (2) The influence of floodplain vegetation on the height of the secondary current cell is evaluated.
- (3) The dominant factors affecting the depth-averaged flow angle along a meander are investigated.
- (4) Predictions are verified using flume and field measurements from different sources.

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