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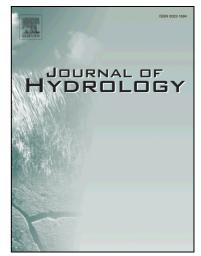
#### Research papers

Constraining coupled hydrological-hydraulic flood model by past storm events and post-event measurements in data-sparse regions

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# **ACCEPTED MANUSCRIPT**

## Constraining coupled hydrological-hydraulic flood

### model by past storm events and post-event

## measurements in data-sparse regions

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Abstract

Flood modelling in data-sparse regions have been always limited to empirical, statistical and geomorphic approaches that are suitable to produce regional hazard maps. Such coarse resolution maps are not adapted for basin scale applications, small to medium sized basins (<1000 km<sup>2</sup>), especially when detailed estimates of flows and water levels of a particular event is required and hence cannot replace the hydrological/hydraulic modelling. The latter is a challenging task in datasparse regions characterized by floods of typical duration times of a few hours which offer little opportunity for real-time recording by traditional Download English Version:

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