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Ignoring the complexity of drainage network in drainage modeling: an efficient step towards integrated modeling

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ABSTRACT

Sewage networks and river networks are known to have very different characteristics. In this study, we present a modeling framework that allows modeling of rainfall/runoff processes in both sewage network and urban rivers. The originality of the model stands in the fact that the pipe network is absolutely not considered. It is instead replaced by a linear box reservoir. The efficiency of this simplification is illustrated by the validation of the basin on two overlapping basins: a sewage basin with endpoint the local WWTP, and urban river, with endpoint a natural Lake.

KEYWORDS

Modeling, Sewer basin, Urban hydrology

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