



Verification of flood damage modelling using insurance data

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ABSTRACT

This paper presents the results of an analysis using insurance data for damage description and risk model verification, based on data from a Danish case. The results show that simple, local statistics of rainfall are not able to describe the variation in individual cost per claim, but are, however, feasible for modelling the overall cost per day. The study also shows that combining the insurance and regional data it is possible to establish clear relationships between occurrences of claims and hazard maps. In particular, the results indicate that with improvements on data collection and analysis, improved prediction of damage information will be possible, e.g. based on also socioeconomic variables. Furthermore, the paper concludes that more collaboration between scientific research and insurance agencies is necessary to improve inundation modelling and economic assessments for urban drainage designs.

KEYWORDS

Drainage, flood, insurance, modelling, risk, urban