



## **Worst cases identification and spatial severity assessment using a damage database**

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Information stored in the "Aree Vulnerate Italiane" (AVI) flood damage archive and ancillary data, e.g., elements at risk and morphological information, are coupled in a GIS framework to sort historical flood "worst cases" in Italy for the last century. This sorting assumes vulnerability hypotheses derived from an economic context. The scenario for the most severe case is then reconstructed using the AVI archive and the same ancillary data. Aftermath, the definition of spatial return period is explored by comparing simulated scenarios and historical records for the selected case study. The event severity is therefore quantitatively assessed from a distributed/spatial point of view.