



Pluvial flood damage analyses and mitigation

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Pluvial floods in urban areas are caused by local, fast storm events with very high rainfall rates that lead to failure of the drainage system of a city. Pluvial floods often occur with little warning in areas not obviously prone to flooding. Such local extreme events have a high potential for damage, particularly due to a high vulnerability caused by high densities of population, buildings and assets in cities. However, only little knowledge is available about the damaging processes during pluvial floods and how damage can be mitigated. To gain more insight, we investigated how pluvial floods affected private households during three different pluvial flood events and how people were able to cope with the flooding in the cities of Lohmar, Hersbruck and Osnabrück in Germany.