



Vulnerability assessment to Extreme Temperatures. A case study: Municipality of Bucharest, Romania

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In the context of frequency and magnitude intensification of climate related hazard in the urban areas, vulnerability assessment of the societal and economical elements exposed to extreme temperatures hazard needs to be addressed. The future actions to mitigate the effects of changes in extreme temperatures require a quantitative vulnerability assessment in the cities. The urban area extension in the last decades, the intensification of traffic as well as characteristics of population such as pre-existing health issues may lead to more severe impact of extreme temperatures in the future.

In Romania, in the framework of the European Project URCLIM (www.urclim.eu), which aims to communicate climate knowledge in a way that it is scientifically sound and easily understood for urban planners and related stakeholders, an impact analysis of the extreme temperatures on population health is carried out for the Municipality of Bucharest. Hourly air temperature data measured using weather stations located in the city center and outside the city as well as emergency calls to the Ambulance Service between 2012 and 2017 are used to investigate the effects of extreme temperatures on urban population health in the Municipality of Bucharest, taking into account the social and urban characteristics. The preliminary results of this approach will be presented and discussed.

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