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Flood risk assessment of potential casualties in a global scale

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Floods are one of the most dangerous natural disasters for humanity, affecting many people every year. Quantitative risk models on a global scale are nowadays available tools for institutions and actors in charge of risk management in order to plan possible mitigation measures in case of flood risk events. Many of these models have been focus on potential economic damage, population and GDP exposure, but the potential casualties assessment has been left aside. This is partially due to the complexity of the problem itself, in which several variables like the age of a pedestrian (drag/exposed to a flood event), or his weight and swimming experience can be decisive for the complete understanding of the problem. In the present work is presented the advances for the development of a methodology in order to include in the GLOFRIS model a new indicator in case of flood risk events.

Preliminary analysis relating the GDP with the potential casualties shows that undeveloped countries have more susceptibility to loss of life in case of flood events. This because the GDP indicator evidences as well the protection measures available in a country.