

Aqueduct Global Flood Analyzer – bringing risk information to practice

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The economic losses associated with flooding are huge and rising. As a result, there is increasing attention for strategic flood risk assessments at the global scale. In response, the last few years have seen a large growth in the number of global flood models. At the same time, users and practitioners require flood risk information in a format that is easy to use, understandable, transparent, and actionable. In response, we have developed the Aqueduct Global Flood Analyzer (wri.org/floods). The Analyzer is a free, online, easy to use, tool for assessing global river flood risk at the scale of countries, states, and river basins, using data generated by the state of the art GLOFRIS global flood risk model. The Analyzer allows users to assess flood risk on-the-fly in terms of expected annual urban damage, and expected annual population and GDP affected by floods. Analyses can be carried out for current conditions and under future scenarios of climate change and socioeconomic development. We will demonstrate the tool, and discuss several of its applications in practice. In the past 15 months, the tool has been visited and used by more than 12,000 unique users from almost every country, including many users from the World Bank, Pacific Disaster Center, Red Cross Climate Centre, as well as many journalists from major international news outlets. Use cases will be presented from these user communities. We will also present ongoing research to improve the user functionality of the tool in the coming year. This includes the inclusion of coastal flood risk, assessing the costs and benefits of adaptation, and assessing the impacts of land subsidence and urban extension on risk.