



## **A Global Flood Model in the Context of the Global Assessment Report 2015: methodology presentation and discussion**

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The Global Assessment Report (GAR) is a major initiative of the UN International Strategy for Disaster Reduction (UNISDR). It contributes to the achievement of the Hyogo Framework of Action (HFA) through monitoring risk patterns and trends and progress in disaster risk reduction and by providing guidance, to governments and non-governmental actors alike, on why and how they can, together, reduce disaster risks. Among its goals is an enhanced Global Risk Model, addressing gaps in current knowledge on risk patterns and trends and providing accurate and credible information for the global disaster risk reduction community. Within this goal the present work aimed at improving the Global Flood Model.

The contribution will focus on the Hazard maps definition starting from a combination of stream-flow gauges frequency analysis and Hydrologic-hydraulic modelling. The Hazard maps produced by the Global Flood Model are not considering flood defences and are therefore not suitable as such for risk parameters computations; a post-processing procedure to consider flood defences is proposed and applied. The Hazard maps are then used to produce a full set of Possible Flood scenarios in order to compute PML curves. Results are discussed with reference to some example countries highlighting advantages and limitations of the approach undertaken.