



## **FFEM-DB: the multinational Database of Flood Fatalities from the Euro-Mediterranean region. Planning a public webgis platform to promote risk awareness and support risk reduction strategies**

Olga Petrucci<sup>1</sup> and the FFEM-DB Team\*

<sup>1</sup>CNR-IRPI National Research Council-Research Institute for Geo-Hydrological Protection, Rende, 87036, Italy.

(o.petrucci@irpi.cnr.it)

\*A full list of authors appears at the end of the abstract

In spite of substantial improvements in managing flood risk and a large number of governmental initiatives on a different scale, floods still represent a threat to human life. The July 2021 catastrophic flood that affected Germany and neighboring countries, killing more than 200 people, witnesses that citizens can be massively killed by floods in developed countries attentive to flood risk management. Beyond the local factors leading to each death, specific circumstances and individual behaviors are shown to be comparable among different flood fatalities. The collection of these data allows researchers and flood risk managers to explore demographic, behavioral, and situational factors and environmental features of flood-related mortality to promote Disaster Risk Reduction. To answer the lack of standardized data collection on flood fatalities on the European scale, we created FFEM-DB, the multinational Database of Flood Fatalities from the Euro-Mediterranean region. Currently, FFEM-DB hosts 2,875 flood fatalities from 12 territories (nine of which represent entire countries) in Europe and the broader Mediterranean region from 1980 to 2020 and provides data on fatalities' profiles, location, and circumstances contributing to the fatal accident. The FFEM-DB is expandable, regularly updated, publicly available, and with anonymized data. Compared to existing disaster datasets containing sparse data on flood fatalities, the key advantages are FFEM-DB's high level of detail, data accuracy, record completeness, and the large sample size from an extended area. The present contribution proposes future developments of the FFEM-DB in terms of a) the spatial expansion, covering more regions; b) data sharing by means of a dedicated webgis platform, planned to both support actions of civil protection agencies and promote data diffusion among citizens to raise risk awareness.

**FFEM-DB Team:** Katerina Papagiannaki 2 , Michalis Diakakis 3, Vassiliki Kotroni 2, Luigi Aceto 2, Cinzia Bianchi 4, Rudolf Brázdil 5,6, Miquel Grimalt Gelabert 7, Moshe Inbar 8, Abdullah Kahraman 9, Özgenur Kılıç 10, Astrid Krahn 11, Heidi Kreibich 11, Maria Carmen Llasat 12, Montserrat Llasat-Botija 12, Neil Macdonald 13, Mariana Madruga de Brito 14, Michele Mercuri 15, Susana Pereira 16,17, Jan Řehoř 5,6, Joan Rossello Geli 7, Paola Salvati 4, Freddy Vinet 18 & José Luis Zêzere 16,17