



## FLOODUP, a citizen science project to increase flood risk awareness and collective knowledge

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### Abstract

In recent years, there has been a growing demand to strengthen the connection between science and citizens, either through knowledge transfer or through co-participatory and co-creative processes. The goal is to ensure that the benefits of any knowledge gained reflect back on society and, in turn, that citizens become more involved in knowledge generation and more empowered. In this context, this article analyses the importance that this two-way exchange can have when dealing with flooding. To do so, the article focuses on floods in Catalonia (northeast Spain) and on the development of a methodology to encourage this exchange through the FLOODUP application, used mainly as a citizen science tool. This paper presents the adaptive learning-while-doing approach of the FLOODUP project in each of its three phases. The floods in the Maresme county in Catalonia during October 2016 are presented as a case study. In this case, citizen participation through platforms such as XOM, Meteo-climatic and FLOODUP allowed a better diagnosis of the event.

**Keywords:** Floods, citizen science, resilience, Catalonia, FLOODUP

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