



## **Integrating Social Media into a Pan-European Flood Awareness System: A multilingual Approach**

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Social Media for Flood Risk (SMFR) is a prototype system that integrates social media analysis into EFAS and GloFAS, respectively the European and Global Flood Awareness System. This integration allows the collection of social media data to be automatically triggered by flood forecasts. Triggering can be determined either by a hydro-meteorological model focused on precision of classification, or by a series of heuristics indicators constantly monitored through a background data collector focused on recall of classification. SMFR adopts a multi-lingual approach to find flood-related messages by employing two state-of-the-art methodologies: language-agnostic word embeddings and language-aligned word embeddings. Both approaches can be used to bootstrap a classifier of social media messages for a new language with little or no labeled data. Finally we describe a method for selecting relevant and representative messages and displaying them back in the interface of EFAS/GloFAS.