

## **Flash flood forecast activities of NIMH in the frame of SAFER project**

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SAFER is EC FPS GMES project aiming to implement preoperational versions of Emergency Response Core Services. The project is lead by Info Terra, comprising more than forty European partner institutions, which should up-grade their core services and validate their performance.

NIMH is participating in the flash flood forecasting Work Package. The goal is to strengthen the flash flood forecasting chain, make use of the various meteorological diagnostic and forecasting products available in Bulgaria as follows:

- Elaborating algorithms locating the pixels from various grid point fields with various coordinate systems which are inside the polygon of a given river watershed. Preparing software which is complimenting the calculation estimates of precipitation and other meteorological characteristics over a given river basin.
- Organizing real-time data flows from the weather radars situated in Sofia, Plovdiv and Varna, focusing on the precipitation cuts.
- Organizing real-time data flows from the numerical high resolution weather forecasting model Aladin for the use of hydrological forecasting models. Preparing the necessary interfaces to the forecasted precipitation, air temperature, etc.
- Organizing real time data flows from the Eumetsat SAF products, namely MPE and other precipitation related fields.
- Setup pixel oriented thresholds taking into account soil conditions and snow accumulation using the MF Surfex runoff output.

Make the above products visible for the users: municipalities, Civil Protection, river basin directorates through the WEB.

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