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DECISION SUPPORT SYSTEMS FOR FLOOD MANAGEMENT IN THE TIMIS BEGA CATCHMENT

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Abstract

To better monitor the progression of a major flood and its likely impact on people and properties, Romanian Water Boards are in need to build sophisticated Flood Emergency Decision Support Systems (DSS). The aim of such a DSS is to integrate the hydrologic, hydraulic and GIS flood maps, assessed over the last 10 years and extract and present vital flood emergency decision making information during an actual event. This paper outlines the DSS strategy and shows how the DSS should extract and display all the various components of information to various groups, which are required to respond to a flood emergency event in the Timis Bega catchment. Example is given of a framework of a collaborative project between Romania and the Netherlands, where a demonstrator of a flood forecasting system was developed, which can support operational water management under extreme conditions when actions have to be taken quickly.

Key words: decision support systems, flood, flood mapping, hydrodynamic modeling, hydroinformatics

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