

Interactive comment on “Efficient GIS-based model-driven method for flood risk management and its application in central China” by Y. Liu et al.

Anonymous Referee #1

Received and published: 7 July 2013

The manuscript essentially deals with the description of a risk management system based on loose-coupling (in opposition to tight-coupling) GIS with hydrological, hydrodynamic and disaster estimation models. The Jingjiang flood diversion area realized in 1952 is very impressive for its geographical, social and economic characteristics, and by sure its risk management should be rather complex. However the paper lacks on some essential information. The manuscript looks as written by an Information Technology expert, so a large (even too large) amount of acronyms is used (as it is in the IT style). By a modeling point of view the paper widely lacks in the descriptions of procedures and algorithms, making any commenting difficult. The term “model-driven” takes a central role in the manuscript but its meaning is never made explicit. Just an example: the authors state : “. . . focus on models rather than on computer programs.”,

C471

this probably means that a “model” is intended as a formalized representation of reality, but, as the same term is widely, and commonly, used to define a class of computer programs a more detailed description appears advisable. There is no direct relation between complexity and efficiency so the superior performances of the system have to be demonstrated in comparison with more traditional, and simpler, systems.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 1, 1535, 2013.