

Interactive comment on “A Bayesian decision approach to rainfall thresholds based flood warning” by M. L. V. Martina et al.

M. L. V. Martina et al.

Received and published: 30 March 2006

The authors are grateful to the reviewer for his helpful comments on the initial manuscript and have attempted to revise it accordingly. Some of the sections were revised, additional information was added, the text was clarified where necessary and figures were changed as requested. The aim of the paper is to explore the possibility of issuing flood warnings by directly comparing the forecast QPF to a critical rainfall threshold value incorporating all the important aspects of the problem (initial soil moisture conditions as well as expected costs), without the need to run the full chain of meteorological and hydrological/hydraulic real time forecasting models. Although it should not be considered as alternative to the comprehensive hydro-meteorological forecasting chain, due to the simplicity of the final product (a couple of graphs), this approach can be an immediate tool for non purely technical decision makers in the case of early warnings and flash floods. The rainfall threshold approach was recently applied beside

[Full Screen / Esc](#)

[Print Version](#)

[Interactive Discussion](#)

[Discussion Paper](#)

the traditional flood forecasting systems also in USA and Europe.

In response to the specific comments:

1. Caption of figure 3 was modified to better explain the meaning of T_c . Additional explanations on the meaning of T_c have been added to section 2 and 2.1.
2. Caption of figure 6 was modified. The graph is only an example of the expected cost in a specific case ($AMC = II$, $T = 12$). Section 2.4 has been modified in order to explain why U must depend on T .

Interactive comment on Hydrology and Earth System Sciences Discussions, 2, 2663, 2005.

Full Screen / Esc

Print Version

Interactive Discussion

Discussion Paper