



Use of uncertainty information in flood management decision making

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Many operational flood warning systems now use ensemble methods to generate probabilistic forecasts of flood flows. Currently, this information is used qualitatively by flood management decision makers (cf. Bruen et al., 2010), but examples of quantitative use in practice are rare. This may be at least partly because of doubt about the applicability, in low probability-high damages situations, of the more classical, formal, methods of using such information; expected value, expected utility etc. While there has been some research work addressing this problem, particularly in the management science domain, it is rarely used in practical flood management settings. The EU-funded COST731 Action has investigated this aspect of decision making and this presentation gives a summary overview of the topic, identifies the major issues and suggests some directions for future work.

Reference:

Bruen, M., Krahe, P., Zappa, M., Olsson, J., Vehvilainen, B., Kok, K. & Daamen, K.(2010) Visualising flood forecasting uncertainty: Some current European EPS platforms – COST731 Working Group 3 (Atmospheric Science Letters - in press)