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Estimation and communication of flood forecasting uncertainties: what is going on in France?

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To prepare the modernization of the flood vigilance system (www.vigicrues.gouv.fr) and more generally to improve the French flood forecasting system, the Ministry for an ecological and solidarity transition has launched in 2012 two think tanks on the estimation and communication of uncertainties related to hydrological forecasts. e. The first think tank, composed of expertsnhad to answer to three questions, namely: what uncertainty level is acceptable for the end-users, how should uncertainties be estimated and how should they be represented to be communicated. The second think tank, composed of engineers from flood forecasting services, had to suggest and test technical solutions for the evaluation and the publication of forecasting uncertainties. The main outcomes of these two think tanks will be presented as well as their implementation in the new versions of the French flood vigilance system. The main obstacles to the communication of forecasting uncertainties are not technical but rather institutional and sociological. The publication of uncertainties that sometimes may be large, modify significantly the relation between the forecasters and end-users, it had been foreseen that the publication of these uncertainties may be perceived at first sight as extremely inconfortable by some decision makers in crisis situation, leaving a larger space for their interpretation and responsibility. But, this publication did not generate the anticipated protests, maybe because it came along with the publication of complementary useful information about floods, and especially maps of flooding scenarios that help translate forecasted discharges or level into local possible impacts.