From Mediocristan to Extremistan. Building up a civil protection knowledge

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It’s likely that many of those who attend the conference remember that the second part of Taleb’s recent book is titled We just can’t predict (Taleb, N., N., 2010, The Black Swan. The impact of highly improbable, Random House, N.Y.). Such a message sounds tragic for everybody has helped to build civil protection systems and for everybody daily works in them. It sounds tragic for everybody deals with "physical predictable events" like the meteorological and hydrological ones. It sounds tragic finally for the whole Hydro Meteoscientific community. They strive to advance knowledge to transform it into models available to forecasters. Attempting had been made to capture together the processes living in Mediocristan and the rare processes living in Extremistan. (see, for example: Rossi, F., Fiorentino, M., and Versace, P., 1984, Two-component extreme value distribution for flood frequency analysis. Water Resour. Res. 20 (7), 847-856.). However the world of civil protection is more complex and uncertain than the physical processes only. It involves social random processes of risk exposure of a few or sometimes many people. It involves human behaviour of decision makers.

I will try to read some of Taleb’s thesis using a historical example of the world of officers of civil protection. Such segment of civil servants gradually learns by reporting about past events, describing their physical features and social consequences. Collecting and analysing the "event reports" is their way to build up and transfer knowledge. Taleb addresses such a knowledge as poor under the scheme of "narrative fallacy". I will show that a much safer methodology is to report not only what just happened but also what might have happened. This way of reporting, hardly ever used by meteorologists and hydrologists, would largely improve the knowledge of the past and the ability to operate in the present: it will possibly change a narrative fallacy into a new narrative knowledge.