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Comment

Interactive comment on “Brief Communication: A new testing field for debris flow warning systems and algorithms” by M. Arattano et al.

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We wish to thank our anonymous reviewer for her/his comments and suggestions and we wish to provide a first answer or, at least, a first clarification.

We will certainly add some more details on the technical aspects involved, as required by the reviewer, and we will include some information about what area/people/infrastructures are at risk. We will also specify where to find information concerning typical debris flows in the Gadria channel.

The first and probably most important question that the reviewer arises (What’s the purpose of this brief communication?) reveals that we have not emphasized clearly enough which is, in our view, the novelty of this installation that makes it worth a brief

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communication in NHESS. There are many installations worldwide where debris flow monitoring is performed and where Early Warning System (EWSs) and algorithms are being tested or are even already operational (Abancó et al., 2014; Badoux et al., 2008; Jacquemart et al., 2015). However, with the Gatria monitoring installation we are explicitly trying to take into account the informative aspects that can be involved in research activities concerning EWSs.

Peppoloni and Di Capua (2012), as an example, stress the importance of delineating the possible communication and educational strategies that should be adopted to transfer the value of the geosciences to society. Which are the best methods that should be adopted to educate people, in this case about debris flow early warning? Any EWS needs in fact the involvement and education of the population to grant its proper workability. This should be kept in mind already during the phase of research, providing the means to easily and effectively divulge the results and make them easily perceivable and understandable by those people who are the actual, final end-users: administrators, decision makers and citizens. It is important to start spreading a culture in this sense, stimulating researchers to include informative issues and solutions in their research activity and promote new ideas to this regard. Providing means to make visible the proper working of our warning system producing didactic videos through the video camera and the flashing light represents an effort in the above mentioned direction.

The video recorded in 2014 is a first product in this sense. The video has been already shown at different workshops and public conferences, gathering much interest by researchers but also by decision makers and the general public. We are convinced that similar initiatives will have to be carried out in the future in other sites where researches on landslide EWS will be performed. Therefore we are trying to set a first example in this direction and a brief communication in a special issue devoted to “Landslide Prediction & Forecasting” is particularly suitable to this purpose, according to our view. We will more explicitly state this in the paper and we will also add some citations about the social impact of our research on debris flow EWS (e.g. Peppoloni and Di Capua,

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2012).

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