

Interactive comment on “Debris flow impact estimation on a rigid barrier” by F. Vagnon and A. Segalini

Anonymous Referee #2

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In this paper, authors revised the impact behavior of debris flow on a rigid barrier and proposed a new formulation for the evaluation of the peak force. Furthermore an interesting tool for the measurement of the evolution of impact pressure in time is described.

The formulation is derived from simple geometrical assessment; the innovation respect to the others equations shown in literature is represented by introduction of barrier dimensions and channel characteristics. It seems to be very easy to use this formula and the presented graphs show a significant correspondence between the theoretical and experimental data. But, as the other equations, it is extremely influenced by the dynamic coefficient (α); can the authors add more details about this parameter?

The pressure sensor used in the experimental test seems very a very useful tool to understand the behavior of the flow during impact. I suggest to add more information

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about it.

Even if the paper is well written, for the publication the English should be improved.

For all these reasons the paper should be considered by this journal after minor revision.

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