

Interactive comment on “A two-phase model for numerical simulation of debris flows” by S. He et al.

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First of all I would like to thank the three referees for providing a very useful discussion that definitely should help the authors to highlight the main critical issues of their work. All the three referees recommended a rejection according to the following points:

- lack of novelty/originality respect to the previous papers that published analysis on the same topic;
- poor assumptions of the model;
- the fact that model used here does not deviate from the model already introduced by Pitman and Le (2005) and by Pudasaini (2011), mentioned several times in the paper.

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According to reviewer #3 this fact undermines the originality of the paper;

- According to reviewer #3 the greatest limitation of the model is the fact that it is not able to simulate the processes of erosion and deposition;
- According to reviewer #3 the present model is not simpler than other models, but because of the several limitations it is not suitable for many applications;

The authors provided replies to three referees, however at my eyes these are not enough to make the paper ready for the publication in NHESS. I still have some doubts about the novelty and originality of the model presented. I think that the work needs to be rethought and improved in several sessions, in order to make it ready for a new submission and peer-review stage.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 2151, 2014.

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