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# Interactive comment on "Debris flow run-out simulation and analysis using a dynamic model" by Raquel Melo et al.

**Anonymous Referee #2**

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Given the relatively limited number of studies that apply dynamic models over larger areas, at a medium scale , this paper gives a very interesting contribution. It analyses several debris flows that were triggered after a wildfire, and uses the parameters for modelling debris flows at a basin scale under different scenarios. Given the basin scale application the authors use a simple model for evaluating the required excess rain and for analysing the entrainment, and use fixed a threshold for sediment concentration, and a simplified soil thickness model. Although these could be debated, their selection is explainable given the scale of analysis and the lack of data. The paper is well written and the results are clearly presented. I recommend that the paper is published as it is. It is interesting to note that the study area bears the same name as one of the co-authors. . .

C1