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Interactive comment on "faSavageHutterFOAM 1.0: Depth-integrated simulation of dense snow avalanches on natural terrain with OpenFOAM" *by* Matthias Rauter et al.

JK Kowalski (Referee)

kowalski@aices.rwth-aachen.de

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The manuscript faSavageHutterFOAM 1.0: Depth-integrated simulation of dense snow avalanches on natural terrain with OpenFOAM is a well-written contribution to the

field of modeling and simulation of dense snow avalanches. The manuscript fits into the scope of the journal. It extends the description of the OpenFOAM implementation first published by one of the authors, Matthias Rauter in (Rauter and Tukovic, 2018), to realistic topographies.

The authors introduce the OpenFOAM specific work flow with a special focus on mesh

generation from DEM data and GIS compatible post-processing. They demonstrate the capability of the proposed solver while analyzing a specific case study, namely the Wolfsgruben avalanche. Simulation results of the new OpenFOAM based solver are compared to the established tool samosAT.

My overall impression of this article is very positive due to reasons described in the attached pdf file. A list of minor objections to the manuscript that complements other comments of the previous reviewers is likewise given in the attached pdf.

All in all, I am clearly in favor of publishing this paper and think it will be a valuable contribution to the field, if the objections have been properly addressed.

Please also note the supplement to this comment: https://www.geosci-model-dev-discuss.net/gmd-2018-67/gmd-2018-67-RC3-supplement.pdf

Interactive comment on Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2018-67, 2018.