

Interactive comment on “EDDA: integrated simulation of debris flow erosion, deposition and property changes” by H. X. Chen and L. M. Zhang

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Received and published: 28 January 2015

Dear Mr. Lunt,

Thank you so much for reading our paper and making valuable suggestions for us to improve the paper.

- (1) The source code and the input files for the four test examples have been provided in a zipped file “Source Codes”, which has been uploaded to the website along with this reply.
- (2) A section "Code availability" has been added at the end of the paper, instructing how to obtain the source codes and test input files.

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EDDA is written in FORTRAN, which can be compiled by Intel FORTRAN Compilers. The source code is enclosed as supplement files. The main subroutine is dfs.F90, which contains the numerical solution algorithm for solving the governing equations. Two input files are needed. One is edda_in.txt, which is the file for inputting material parameters and setting controlling options. EDDA is designed as the debris-flow simulation part of a cell-based model for analysing regional slope failures and debris flows, so the edda_in.txt file also includes the material parameters and controlling options for slope stability analysis. The other is inflow.txt, which is the inflow hydrograph file. Digital terrain data (e.g. surface elevation, slope gradient, erodible layer thickness) are included in separate ASCII grid files and enclosed in the data folder. Output files are stored in the result folder. Investigated variables at selected points are stored in EDDALog.txt.

- (3) A model name and version number have been included in the title “EDDA 1.0: integrated simulation of debris flow erosion, deposition and property changes”.

Please also note the supplement to this comment:

<http://www.geosci-model-dev-discuss.net/7/C3155/2015/gmdd-7-C3155-2015-supplement.zip>

Interactive comment on Geosci. Model Dev. Discuss., 7, 7267, 2014.