Natural Hazards
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Discussions

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Interactive comment on "Regional physically based landslide early warning modelling: soil parameterisation and validation of the results" *by* Teresa Salvatici et al.

Anonymous Referee #2

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The topic of the work meets the scope of the journal well. However, it is difficult for readers to recognize its contributions to the science community from its title, abstract and even the introduction part. The Introduction, Methodology and Discussion sections are not well-structured and pose difficult for readers to understand. My specific concerns are listed below:

1) The introduction part fails to convey the current research gap and readers have difficulty to assess its scientific significance. It is unable to convince the readers why the authors carry out this work. It seems that authors want to share with the community some improvements by considering soil and vegetation parameters by using the exist-

ing model HIRESSS. I recommend the authors first detail the research question clearly, and then briefly describe their way to solve the problem.

2) The Methodology part is mixed with Results. For example, lines 123-135 were measured results.

3) The structure of the Methodology is not logical. I suggest the authors put an outline paragraph at the beginning of this section, in which they brief the logics of this section. "3.3 HIRESSS description" and "3.4 HIRESSS input data" should be placed in the beginning of the Methodology.

4) Although physically based landslide model is desirable, the input data is enormous and rigorous. The data of root cohesion and some of the soil values seem to be derived from existing literature review. Is it really proper to directly use these data in your study? You should justify this problem.

5) Please detail the acquired time, spatial resolution and other characteristics of the DEM used in the model.

6) The discussion part is poorly written. Authors should explain the results, compare with other's work, provide implications, acknowledge its limitations and echo the introduction part. I think this part should be significantly improved.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2017-425, 2018.