

Interactive comment on “Multiply factors driving continual post-wildfire debris flows with varied rainfall thresholds in the Reneyong Valley, southwestern China” by Mingfeng Deng et al.

Anonymous Referee #2

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The paper deals with rainfall triggered debris flow related to wildfire. The Study area is the reneyong valley (China) where on July 2014, 4 debris flows have been triggered by heavy rainfall 3 days after a wildfire. The description of the event is very detailed and contains many hints for interpretation of the debris flow dynamics and possible further analysis. Unfortunately, the paper itself does not benefit from the quantity and quality of data and at this stage, it is not ready for publication on ISI peer reviewed journal. The innovation of the methods isn't clearly stated. For example: the volume calculation does not contain any reference. Why did you use this approach? who used it before? How different are the results you obtained compared to other methods? None of those questions has been addressed. Moreover, the structure is confusing and the language

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is not clear to me.

possible insights: “Before the debris flows reached the downstream area, the patrolman (Jiuli) again found no water flows in the channel and warned the local people to escape.” Why there was no water in the channel? following this observation, possible hydrological schemes of the area could be identified which could be tested in further research with geophysics.

Although a lot of work has been done in field, the paper does not contain any geomorphological map.

The authors identify a relationship between debris flow and wildfires but no historical data are used. I suggest to perform an historical research on wildfires (last 30- 50 years), debris flow activation and rainfall.

Please also note the supplement to this comment:

<https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2017-390/nhess-2017-390-RC2-supplement.pdf>

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2017-390>, 2017.

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