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Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Deriving slope movements for an imminent landslide along the Jinsha river" *by* Wentao Yang et al.

Anonymous Referee #1

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Dear Editor and Authors,

I have read the manuscript nhess-2020-137 entitled "Deriving slope movements for an imminent landslide along the Jinsha river" by W. Yang et collab., submited for publication in NHESS Journal, Special Issue: "Remote sensing and Earth observation data in natural hazard and risk studies". The paper highlights the results obtained by using multi-temporal satellite images (Landsat 7 and Sentinel-2) and COSI-Corr method for a detailed spatio-temporal identification of slope movement alongside the mentioned river in Tibet Autonomous Region, China. While the method have been successfully applied by the authors in other publications, some issues must be developed in this newest paper, in order to make the manuscript suitable for publication.

General comments: In the introduction part, I suggest to the authors to frame their

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work in a much more general context regarding: (i) using RS optical imagery in slope movement detection; (ii) comparing the type of the errors with the results of other methods; (iii) frame the risk assessment problem in a widespread context of landslide-dammed valleys (not only by comparing with Baige 2018 event). The second part (here I suggest to use Methods instead Methodology) should be split in (i) Study area section (here I consider that a simple information regarding the main characteristic of the climate and V shaped valley is not enough to compare the both slopes - the authors must address a wide spectrum of conditional factors of a local assessment of mass movement - lithology, geohydrological conditions, land cover, anthropic influence etc.), (ii) COSI-corr method and (ii) Error assessment In the actual form, Results and Discussion parts seems to be a simple report. I suggest to enlarge these parts by using a set of similar papers and outcomes from the literature (here another major drawback of the manuscript - a weak framing in the bibliographical background). After these proposed major revisions, in order to increase the scientific soundness to an international level, I recommend the publication of the manuscript.

Specific comments: a set of suggestions were made in the pdf file attached.

Best regards

Please also note the supplement to this comment:
https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2020-137/nhess-2020-137-RC1-supplement.pdf

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