Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2019-226-RC2, 2019 © Author(s) 2019. This work is distributed under the Creative Commons Attribution 4.0 License.



Interactive comment on "Hydro-meteorological reconstruction and geomorphological impact assessment of the October, 2018 catastrophic flash flood at Sant Llorenç, Mallorca (Spain)" by Jorge Lorenzo-Lacruz et al.

Anonymous Referee #2

Received and published: 26 September 2019

The paper presents a very good characterization of a very heavy rainfall event in Mallorca. Despite this is an isolated event, this a very good example on how analyzing this type of hazards from the meteorological origin, to the derived impacts of the flood. Such chain of analyses can serve as example to analyze a very common hazard affecting to many Mediterranean sites. The used methodology is robust and the authors provide evidence that it worked in a very reasonable way (despite the difficulty to get reliable observations for calibration and validation under such extreme conditions). The graphical material provided in the article is of great quality.

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I have only minor comments in the structure of the article that authors may consider to prepare a definitive version of the manuscript. I think that the presentation of the synoptic characteristics of the storm should be moved to results section as they are presenting specific analyses for this event. In addition many other statements given when presenting results should probably be moved to discussion as they are not results themselves but they are hypothesis trying to explain the obtained results.

In addition the authors might consider to present how the weather forecast from the main meteorological models evolved the days before to predict the precipitation over this area. Authors said that models clearly underestimated the event, but it could be good to see more on that to illustrate to which extent the early warning systems (not real time ones) may work in these areas.

There are small typos over the text, so may be good a last slow reading to correct them.

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