

Interactive comment on “Characteristics of a Hailstorm over the Andean La Paz Valley” by Marcelo Zamuriano et al.

Anonymous Referee #1

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Dear Editor and Authors,

This investigation analyzes the occurrence of a major hailstorm accompanied also by flash flood that occurred over La Paz and vicinities in February 2002. Despite the scarcity in available observations, the authors make an effort to describe the atmospheric conditions that led to the development of the severe weather event. To that end, TRMM and GOES satellite imagery, measurements from rain gauges, and gridded output from ERA Interim Reanalysis and from high resolution simulations with ARW-WRF model were employed. In addition, a sensitivity analysis based on a set of simulations with ARW-WRF was performed to assess the role played by the local geography (through terrain elevation and land-atmosphere interaction) in influencing the atmospheric environment in which the severe storm formed. The goals of the in-

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vestigation are relevant, especially when one considers the lack of studies addressing severe local storms in Bolivia. However, a number of important issues must be addressed before the manuscript can be considered ready for publication. I decided to rate the manuscript as "reconsidered after major revisions". I am attaching a pdf file (please see supplement material) containing my detailed comments.

(To the Editor) Thank you for the invitation to review this manuscript.

Please also note the supplement to this comment:

<https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2019-27/nhess-2019-27-RC1-supplement.pdf>

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2019-27>, 2019.

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