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Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Vulnerability and Site Effects in Earthquake Disasters in Armenia (Colombia). II – Observed Damages and Vulnerability" *by* Francisco J. Chávez-García et al.

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Authors' answer to the comments to our manuscript by Dr. Francesco Panzera

First, we would like to thank Dr. Panzera for his review of our manuscript. His report includes a general evaluation of our manuscript, four comments pointing to details that could be improved in our text, and a general comment concerning a more significant topic. In the following, we recall each of the reviewer's objections and describe the way in which a possible revised manuscript will correct our manuscript taking into account the reviewer's comments. We have been instructed by the editor to delay the

preparation of a revised manuscript.

General evaluation of the manuscript. Dr. Panzera first describes briefly the contents and intent of our manuscript. We thank him for his positive judgment of our work.

Four minor comments. Nhess-2020-385-RC2 document makes four suggestions to improve our presentation. Three of them are wording corrections that will improve the clarity of the text. The fourth suggestion is to include additional references. The referee suggests four recent papers that cover similar subjects as our manuscript and highlight cases that occurred in areas removed from our case of study. We thank Dr. Panzera for providing the links to the publications, which allowed us to get those papers immediately. We agree that adding these references to our manuscript broadens the geography of referred papers and simplifies the way (through the references included in those four papers) for interested readers to access more papers on our subject.

General comment. Finally, in a general comment, Dr. Panzera suggests us to improve the discussion around the possibility of site effects contributing to irregular damage distribution. We thank him for this remark that identifies a point where our manuscript could improve. First, as our title suggests, this manuscript is the second part of a study on ground motion of the 1999, Armenia, earthquake (part I) and the understanding of the factors which played a role in the damage observed during that event. However, the general comment from referee number 2 indicates that our manuscript lacks clarity regarding the role of site effects. True, a more detailed account of that is presented in part I of our study. However, part II requires to be self-contained. In this sense, some additional comments regarding the possible double resonance (soft soil resonance coupled to building resonance) would certainly improve our manuscript.

Finally, we thank again Dr. Panzera for his remarks that are helpful to improve our manuscript.

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