

Interactive comment on “Regional trends and controlling factors of fatal landslides in Latin America and the Caribbean” by S. A. Sepúlveda and D. N. Petley

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Response to Referee 2 The authors would like to thank Dr. McColl for his thoughtful comments and suggestions, which allowed adding more insights in the discussion of the topics covered by the manuscript. The aim of this work is to provide insights of the main factors controlling the occurrence of fatal landslides at a continental to national scale, providing some orientations on where the focus should be put in disaster prevention strategies. Regarding the referee comments on how the use of Spanish search terms has an impact on the analyses, we have included a new paragraph was included in the Discussion section about the small gain in the database from Spanish search

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terms. We agree that they were of limited value, but it helps to complete the database of small events. We also discuss some bias in the Spanish search that was done at the end of the studied period, thus it found mainly cases from the last years, as old web pages tend to be erased. A list of Spanish terms was included in the Methodology section.

Similarly, the comments on the role of research for prevention of this type of disasters are taken into account. While an in-depth analysis of how research impacts disaster prevention is out of scope of our study, but we agree that some orientations on further work on this can be given. A new paragraph discussing this issue has been included in the Discussion section.

Answer to main specific comments. Text corrections and suggestions for more clarity have been made in the manuscript. P 2783 l 15-22. These sentences are difficult to make sense of. Presumably the ‘slight reduction in gradient’ mentioned on line 15 refers to a reduction through time? If not a reduction through time, what is the reference point for the reduction? If it is a reduction through time, then I have difficulty understanding how the explanation for this reduction was arrived at: ‘: : .due to undersampling of small cases: : :’. The undersampling must be an issue for all years and the authors do not put forward any evidence to suggest that the sampling quality changed through time. R: The reduction in gradient is not through time, is for the PDF-fatalities curve, being lower for smaller numbers of fatalities. Text will be modified to avoid confusion.

P 2786, l 10-11: It says ‘We have also examined the relationship with other socio-economic factors such as: : :’ but doesn’t go on to say what these relationships were. The sentence that follows certainly does not help: ‘A weak increasing trend of fatalities induced by landslides can be observed: : :’ This sentence seems to only describe a trend over time, not a relationship/correlation between landslide fatalities and either of the two indices from the previous sentence. Is something missing?

R: The relationship is for total fatalities per country during the studied period against

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the socioeconomic indexes, not over time. The sentence was reworded specifying this. P 2786, l 10-18: It would be useful to see the correlations referred to here, either correlation scores or graphs, presented either in the main paper or in appendices.

R: A figure with graphs of the three correlations will be included as an appendix.

The reviewed version of the manuscript and appendix is included in the Supplement

Please also note the supplement to this comment:

<http://www.nat-hazards-earth-syst-sci-discuss.net/3/C1030/2015/nhessd-3-C1030-2015-supplement.pdf>

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 3, 2777, 2015.

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