

Interactive comment on “Effective surveyed area and its role in statistical landslide susceptibility assessments” by Txomin Bornaetxea et al.

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This paper propose a procedure to delineate and to evaluate the performance of the effective surveyed area (ESA) in preparing a landslide inventory by geomorphological field mapping. A GRASS GIS python module was developed to define the ESA and the open source software provided as supplementary material. Landslide survey was performed in Gipuzkoa Province (Basque Country). Four computational domains were built-up: slope units as alternative to grid-cells for terrain subdivisions, and both the approaches were tested over the entire study area and over the effective surveyed area. Finally, landslide susceptibility maps and the associated uncertainties were assessed using multivariate logistic regression, while their classification performances were measured my means of a set of validation tests.

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This paper focuses on an interesting topic, which is undoubtedly highly relevant in the domain uncertainty associated to landslide susceptibility mapping. It presents the new concept of effective surveyed area (ESA) and a new tool specifically developed to define this area. The overall presentation is well structured, the methods are appropriate, results are complete, accurate and reproducible.

However, the manuscript has some weak points and consequently it needs to be improved. Some sentences are too long and needed to be reformulate. The verb tenses need to be checked: sometimes past and present tense are used in an appropriate way.

My recommendation is that the manuscript could be accepted for publication by the journal Natural Hazard and Earth System Sciences with revisions outlined below in the attached supplement.

Please also note the supplement to this comment:

<https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2018-88/nhess-2018-88-RC1-supplement.pdf>

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2018-88>, 2018.

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