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Interactive comment on "Large scale landslide susceptibility assessment using the statistical methods of logistic regression and BSA – study case: the sub-basin of the small Niraj (Transylvania Depression, Romania)" *by* S. Roşca et al.

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Received and published: 22 February 2016

Dear reviewer, Thank you for reading our manuscript and reviewing it, fact which helped us to improve it we hope at a better scientific level. We revised our manuscript taking into account yours extremely objective and useful recommandations, and as a result several changes have taken place. So we are sending you the revised manuscript and also this attachment which contains the changes that were made at yours rec-

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Interactive Discussion

Discussion Paper

ommendations. We revised the English translation of the text, all the changes being highlighted in red. We thank you for drawing our attention to this problem. The use of the "large scale" expression is motivated by the employment of large scale maps (1:25000, 1:5000), not small scale maps (1:100000) in the GIS analysis. The difference in precipitation amount between the section presenting the study area and the precipitation amount included in Table 2 is due to the fact that the former value represents the average amount in the whole river catchment, while the latter represents the precipitation amount which was modelled in reference to the elevation and which was identified as having the highest influence on the probability of landslide occurrence and reactivation (with an Odds difference of 29%). Table 1 presents all the databases used by the GIS spatial analysis models in order to offer a general view of their input data types (vector, raster, primary, derived, modelled). Out of these, only 16 databases represent the common input data for the two GIS models, the rest being temporary databases used in various stages of model development. Fig. 1 represents a detailed geomorphologic map which highlights not only the existing landslides but also the geomorphologic susceptibility of the territory to such processes. As the presented material highlights two GIS models of spatial analysis, Fig 2 presents a simplified logical flow-chart of the research, which is discussed in further detail at each stage which focuses on presenting methodology and results. By creating the models in GIS environment, this flow-chart is very necessary to follow through the main modelling stages.

With Best Regards, The authors.

Please also note the supplement to this comment:
http://www.nat-hazards-earth-syst-sci-discuss.net/3/C3238/2016/nhessd-3-C3238-2016-supplement.pdf

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Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 3, 7171, 2015.