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## **NHESSD**

Interactive comment

## Interactive comment on "Regional snow-avalanche detection using object-based image analysis of near-infrared aerial imagery" by Karolina Korzeniowska et al.

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This paper presents an automatic object-based image analysis approach for the detection of snow avalanches using specific remote sensing data. The approach is explained in details and some statistical tests are performed for the evaluation of results uncertainty in relation to a reference data set. Following additional explanations/ comments would be valuable for the reader: I. A description of the conceptual model associated to the OBIA approach, it would provide some insight in relation to uncertainties and limitations; since only 61% of the total avalanche area was correctly identified... II. Mathematical details of the selected probability approach; to my understanding an

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Discussion paper



uniform distribution is selected in relation to the elevation; the selection of such simple statistical model should be justified in relation to point I. III. A reference for confusion matrices IV. The impact of snow thickness on the results V. The potential use of additional data (radar, seismic, ...) to improve the results

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