

Interactive comment on “Comparing multi-criteria methods for landslide susceptibility mapping in Chania Prefecture, Crete Island, Greece” by M. Kouli et al.

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Dear Editor, We would like to thank you for your valuable comments and for your effort to organize the reviewing procedure of our work. Aiming to reply to your comments:

1. About your comments regarding the suitability of landslide inventory and our decision to consider landslide points instead of landslide areas. In order to cover your questions as well as the questions of the reviewers regarding that subject we added a new paragraph entitled “Landslide inventory”. At this paragraph we further describe the landslides occurred at the study area, we justify our selection regarding the use of

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points and we describe the limitations introduced by that choice.

2. Regarding the accuracy of this DEM. The digital elevation model (DEM) was constructed using 20 m altitude contours and spot height of 1:25,000 scale topographic map of Hellenic Military Service (<http://web.gys.gr/GeoSearch/>) and from this product we extracted all the geomorphometric parameters. By mistake we initially mentioned that the scale of the topographic maps is 1:50.000. We were confused by the scale of the geological maps. Considering the spatial extent of the study area grid cells with spatial resolution of 20X20 meters are enough.

3. Regarding the Channel network extraction. In the current work the Digital Elevation Model (DEM), with a resolution of 20 meters, was used in order to delineate the drainage network of the study area by applying a GIS hydrologic routine. Various threshold values were used in the current work and the extracted stream networks were compared and verified with the network visible on a Landsat- ETM image, acquired on 20/9/2000. An extensive reference on the extraction and verification procedure was added in the text.

4. Regarding the Validation of the susceptibility maps. We applied both success rate and prediction rate curve. We have done all necessary modifications to the manuscript. We hope the numerous modifications made during that very useful and interesting reviewing procedure meet your requirements.

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