

## ***Interactive comment on “Frontiers in Geomorphometry and Earth Surface Dynamics: Possibilities, Limitations and Perspectives” by Giulia Sofia et al.***

**Giulia Sofia et al.**

giulia.sofia@unipd.it

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First of all, we wish to thank the two reviewers for their careful evaluation of our manuscript. We have tried our best to address all the issues raised during the review process, and believe that the manuscript benefited from the suggested changes and from further minor editing.

Summary of reviewers' comments.

Reviewer#1 provided some interesting suggestions about enlarging the references in the manuscript, and highlighting the importance of assessing the quality of the DTMs in geomorphometry, especially when dealing with surface derivatives. Other minor

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comments involved changes in some words in the text.

Reviewer#2 suggested to provide a flow diagram or a table summarizing the main findings of the articles collected in the special issue, and to enlarge the final chapter about the future challenges.

Below our response to the main point raised, and the related changes to the manuscript.

Please note that the complete rebuttal to each reviewer's comment, and a tracked version of the manuscript are attached as supplement to this comment.

Following Reviewer#1 suggestions, we have connected this work to the wider literature, including some earlier works by Pike (1995,2000), and we provided more references to the importance of DEMs' quality assessment. We also highlighted the fact that DEMs are also used to evaluate indices, or they are integrated into modelling, to portray and understand the specific process of interest.

Following Reviewer#2 comments, we added a new table (table 1) showing an overview of the main themes covered by the research presented in the Special Issue. Furthermore, in the revised text, we provided a new figure (Figure 1) where we illustrate a) the dominant geomorphic feature(s) and spatial extent of the techniques presented in the SI papers, and b) the dominant temporal scale and spatial extent of the applications in the SI papers. We also changed the title of the chapter to 'closing remarks', and we highlighted few more points about the future and challenges of Geomorphometry

Please also note the supplement to this comment:  
<http://www.earth-surf-dynam-discuss.net/esurf-2016-30/esurf-2016-30-AC1-supplement.pdf>