

## ***Interactive comment on “Hillslope denudation and morphologic response across a rock uplift gradient” by Vincent Godard et al.***

**Vincent Godard et al.**

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Dear Pr. Vanacker,

Please find our response (as an attached supplement) to reviewers comments on the manuscript entitled Hillslope denudation and morphologic response to a rock uplift gradient (esurf-2019-50), on behalf of myself and co-authors.

We thank all 3 reviewers for their highly valuable and constructive comments on our manuscript. Based on these reviews the main changes are the following.

- We have clarified an important point concerning the response of the fluvial network to the rock uplift gradient : we do observe a response, but the pattern is less resolved than what we obtain with the hillslope-based metrics. A new figure (8) has been added

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to better highlight this point (correlation between  $k_{sn}$  and  $E^*$ ).

- We have reorganized and expanded the Methods section (presentation of the river profile analysis and the modelling approach).

- We have reorganized the structure of the discussion (merging of the previous 5.1 and 5.3 subsections, displacement of some of the 5.3 subsection into the Methods).

- The data table have been expanded and reorganized into two different tables.

We will provide an edited version of the article where important additions and modifications are highlighted in red. We have complied with all the minor comments and suggestions relative to improving the text (spelling, formulations, typos) that were kindly provided by the reviewers, so we do not elaborate on the resulting modifications hereinafter, and, for the sake of readability, these small edits are not highlighted in the revised version of the manuscript.

Best regards,

Vincent Godard

Please also note the supplement to this comment:

<https://www.earth-surf-dynam-discuss.net/esurf-2019-50/esurf-2019-50-AC1-supplement.pdf>

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Interactive comment on Earth Surf. Dynam. Discuss., <https://doi.org/10.5194/esurf-2019-50>, 2019.

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