

Public justification (visible to the public if the article is accepted and published):

Dear authors,

Thank you very much for your re-revised manuscript and response to the reviewers. I am satisfied that you have addressed the reviewers' concerns, and note that the issue of how to correct denudation rates for anthropogenic impact is a difficult one, which in general needs more attention in the literature, but I appreciate your attempts at it here.

One minor point that could improve your justification of the anthropogenic corrections, and address Reviewer 2's concern about the direction of the correction (i.e. whether anthropogenic modification enhances or reduces denudation rates), would be to link back to the discussion of the direction of the correlation between the anthropogenic metrics and denudation rates. The positive correlation between human footprint index and artificial constructions with denudation rates, and the negative correlation with CSI, when all data are considered (Table 3) supports your argument that natural rates would be lower than the anthropogenically-influenced ones, rather than higher as Reviewer 2 suggested. I think you could make this point in Section 5.1.2 to strengthen your argument here.

Best wishes,
Fiona

Dear Fiona,

Thank you very much for your input and being the associate editor for this publication.

In order to further improve the manuscript, we added to Section 5.1.2 the following sentence: "The positive correlation between HFI and artificial constructions with denudation rates, and the negative correlation with CSI, when all data are considered (Table 3), supports the argument that natural rates are lower than the anthropogenically-influenced ones. We acknowledge, however, that not all human impacts increase erosion rates; for instance, dam construction may reduce downstream sediment transport and thus lower physical erosion, in which case the adjustment for applying a correction to denudation rates should be reversed."

In addition, we made the supplementary data publicly available through Zenodo.