

Review of: "Assessment of soil erosion in the Cesar watershed, an initial step toward the restoration of the Cesar River"

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Potential competing interests: No potential competing interests to declare.

For the article entitled: Assessment of soil erosion in the Cesar watershed, an initial step toward the restoration of the Cesar River, the following observations are made:

- 1) A revision of the writing of the text is required.
- 2) The introductory section is deficient when describing the research. Why was the RUSLE method chosen over other options?
- 3) There are deficiencies in the description of the methodology. The algebra of cartographic inputs needs to be better described.
- 4) There is no discussion of possible options for improving the methodology, from improving the spatial resolution of the cartographic inputs to the application of a better model for estimating the erosion rate.
- 5) No mention is made of possible solutions for erosion reduction based on the results obtained.
- 6) Assertions are made without further context or argumentation, for example: In general, areas with relatively low erosion rates can be attributed to anthropogenic processes influenced by changing land use.
- 7) It is necessary to show the soil type and land use maps because of their importance in the calculation of erosion rates. Also, verify their coincidence with the location of areas with higher erosion rates and hotspots.
- 8) The choice of sample ER135SR4 as the best fit or reference is ambiguous. Or the argumentation is deficient.
- 9) There are references in the wrong format.
- 10) There are unnumbered equations.
- 11) Improve Figure 3. The scientific significance of the graph is not understood or explained. what do the numbers in the circles indicate?
- 12) The following sentence needs to be rewritten: It appears that these areas generate a significant amount of sediment, despite the relatively small proportion of high and very high erosion rates.

13) The 2000 value of 2.03% of moderate erosion does not agree with the sentence: gradually increased from 2.21% in 2000 to 2.03% in 2010 and finally to 2.65% in 2020.

14) In Figure 1a, the map does not show the scale. The figure does not locate Colombia concerning South America as indicated in the text.

15) In Table 1, the expression 1:1000000 does not indicate a spatial resolution as such.

In my opinion, the article is of medium to low quality for publication, in terms of methodology and results presented.