

Interactive comment on “Simulating the evolution of the topography-climate coupled system” by Kyungrock Paik and Won Kim

Anonymous Referee #2

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This manuscript covers an interesting topic and shows interesting results, highlighting the importance of topography-climate co-evolution effects. While the current paper explores these dynamics for a simple, virtual landscape, the implications for further investigation in real landscapes is promising.

The paper is generally well written and reads well, except for some grammar/typo's that I indicated in the attached annotated .pdf.

I have two questions / places where some more explanation would be appropriate: - line 184-185: why would over-erosion happen, please elaborate and explain in more depth - line 398: while the authors acknowledge that the current work is based on explorations on a virtual landscape, they indicate that testing their results on real landscapes is a challenge. The authors indicate they need to collaborate to obtain

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co-evolution data. Indeed this is an issue, but still it would be good if the authors could include some first ideas or examples of how / where their model could be tested.

Please also note the supplement to this comment:

<https://hess.copernicus.org/preprints/hess-2020-472/hess-2020-472-RC2-supplement.pdf>

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2020-472>, 2020.