

Interactive comment on “Assessment of geomorphic effectiveness of controlled floods in a braided river using a reduced-complexity numerical model” by Luca Ziliani et al.

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This is a really neat study looking at how a reduced complexity morphodynamic model can be used to investigate how the hydrological perturbation of flows within a managed braided river affect the morphology. Ultimately, it shows how controlled releases of larger flows have some but not significant impacts on channel widths and depths within the reach studied.

In doing so it also provides an excellent opportunity to evaluate/test a morphodynamic model (which is a complex and far from straightforward exercise) demonstrating how such methods can be used as management tools in such environments to answer ques-

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tions about hydro-geomorphic interactions.

The paper is well written, produced and structured. As per R1, there are several minor grammatical/typo mistakes that can be picked up in proof reading if the paper progresses. Some specific comments and suggestions for further literature that has not been cited (some has only just come out) are provided below.

65 Impellent?

70 A reference to Larsen et al <https://doi.org/10.1002/2014EO320001> might be useful in the RCM description section here.

230-236 - felt a bit clunky and repetitive - might be worth having a closer look at this section. Also there have been a series of CL papers and studies since 2013 that might be useful for the paper to cite here as well. There are others but two more recent ones CL Sensitivity analysis paper: <https://www.geosci-model-dev.net/11/4873/2018/> Calibrating valley floor re-working in CL. Feeney et al., 2020 <https://doi.org/10.1002/esp.4804>

237 Section 3.4. The two references above are also really relevant for this section - there have been more thoughts and studies on validation/calibration methods. Both compliment what you are doing here I think.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2019-424>, 2019.

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