

Review by Associate Editor Claire Masteller (minor revisions)

We thank the AE for her time and constructive comments. Below we respond point by point and indicate the changes made in the manuscript. Minor points from the PDF were all answered and used to clarify the text. Maarten Kleinhans, on behalf of all authors

General comments:

- I found the introduction to be a bit muddled, and that the ideas and motivation could be streamlined with a more logical progression. I also found the terms "floodplain formation" and "floodplain" to be used almost interchangeably through this section, which I think could be modified for clarity by focusing on the role of mud or vegetation in driving the formation of the floodplain. I have made suggestions in the attached PDF toward this end.

REPLY: Thank you. We have implemented a number of changes that should clarify the text and the difference between floodplain formation as part of the dynamics and floodplain as having an effect by its presence.

- In the results, I had difficulty wrapping my head around the scale of the differences/changes between different experiments, the stages of each experiment, and different experimental reaches. The authors include figures produced from high-precision, high-quality measurements, and I encourage the authors to use the measurements to add more quantitative results to this section. For example, the terms "reduced", "Small", and "intermediate" do not provide a good sense of how marked the evolution of these features are throughout the experiment or the scale of difference between the experiments. I've made a number of comments in the attached PDF pointing out areas where I think this could be addressed to aid in reader understanding.

REPLY: We have done this more now. In the previous version we sought a balance between quantification of results that is useful for the understanding while not encouraging over-interpretation of our idealized small-scale estuaries.

- Additionally, I encourage the authors to revise the MS such that the experiments are discussed in a consistent order and that that order be consistent with the figures. I found often that the mud experiment was discussed first, then the control, and then the vegetated experiment. However, the figures present the experiments in the order (1) Sand, (2) Vegetation, (3) Mud. In order to ease the parsing of the results by the reader, I encourage the authors to choose an order (probably Control, Vegetation, Mud based on the figures) and stick with this order when introducing the experimental design and set-up, the results, and the discussion.

REPLY: The entire manuscript was checked and adjusted for a consistent order of sand (control), vegetation and mud. Where general development is described in the results and the experiments are compared in dimensions or dynamics, the present order is maintained.

Figure comments

Please note that the colors for mud and vegetation are switched between figure 3 and figure 9. Please make these consistent.

REPLY: thanks for your careful check. Figure 9 has been adjusted.