We thank William Kearney for taking the time and for constructive comments.

Indeed the experiments did not run long enough for complete convergence, but as with any process that has an exponentially decaying rate of change this would have taken a prohibitive time period as well as have induced growth of pests in parts of the sediment without significant flow (especially in buried nutshell or decaying vegetation, both of which were very limited now), despite pest control. The reviewer agrees with us that the experiments are nevertheless interesting complements to modelling and field studies, and that the numerical flow modelling used here is useful and not critically limited, while the comparison between the experiments is the most informative aspect.

In case of acceptance, we will make clearer in the paper that the experiment with only mud is indeed that experiment first described in Braat et al. (2019), reanalysed on different aspects here. We will check the description of the experimental conditions carefully.

Maarten Kleinhans, on behalf of all authors