

Interactive comment on “Multiple knickpoints in an alluvial river generated by a single instantaneous drop in base level: experimental investigation” by A. Cantelli and T. Muto

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Dear Prof. Tom Coulthard, Thank you for the interactive comments. 1) The experiments presented are only some of many experiments I performed because once I observed the phenomenon I spent some time tuning the right ranges where I observed this phenomenon. Once individuated the right parameter ranges I did try to replicate some experiments to check how reproducible the results are. I found that in terms of having one single or multiple knickpoints the experiments are always reproducible. In other words all the experiments with multiple knickpoint were showing multiple knickpoints and vice versa. About the number of multiple knickpoints I found that run3 with just 2

C214

knickpoint were presenting the same number, for the Run 2 I found that the reproducibility was not 100% accurate and in this particular case I was getting 5 knickpoints with no “mid knickpoints” (the ones I classified with 3a and 4a). I personally think that the experimental set up was excellent with good control of input parameters but still with input errors that might affect reproducibility. 2) This is a good point, I am not hiding my suffering in writing and I will try to expand the discussion. The work from Hasbaargen and Paola (2000), as pointed out, is similar and what we tried to do in this paper is to isolate the phenomenon and understand better this process. I hope my answers satisfy your questions and I remain open for discussion, thank you Alessandro Cantelli

Interactive comment on Earth Surf. Dynam. Discuss., 1, 483, 2013.

C215