

Interactive comment on “Modern comprehensive approach to monitor the morphodynamic evolution of restored river corridors” by N. Pasquale et al.

Anonymous Referee #1

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General comment. The paper addresses a relevant topic in the field of river hydraulic, namely the river restoration, currently highly discussed by the scientific community. Particularly important is the experimental approach of the study, especially in a research field where experimental data (i.e., hydrological, morphological, of vegetation etc. . .) are scarce. Overall, the project looks very interesting. The main problem with the paper is that it does not give, at the moment, clear and general results that can be generalized for other locations. In particular, it is not clear if the paper is intended to present the framework of experimental activities or to describe and possibly model the processes involved. Due to the complexity of the problems involved with this research

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topic, it would be more convenient, in my opinion, to better focusing the a paper on the experimental part and on the monitoring strategy , especially considering the high quality of the experimental data processing presented. To this aim, it would be important to reorganize the introduction, in order to clearly state the purpose of the study. Moreover, the paper should be shortened, by eliminating the descriptions of some processes that are not properly justified by their physical underlying mechanisms. For instances, the considerations related to the phases space seem a little in advance with respect to the apparent understanding of the processes.

Specific comments. Figure 1c: add the date on which the picture has been taken
Figure 8: the authors state that the vegetation decrease in plot 21 of the 26 of June is due to the corresponding flood. However, the next high flood (the maximum in the hydrograph) does not have the same effect. How can this be explained? It depends only on the shear stress magnitude or also on the duration of its application?

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 7, 8873, 2010.