SOIL

Discussions

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Interactive comment on "Sediment loss and its causes in Puerto Rico watersheds" *by* Y. Yuan et al.

Anonymous Referee #1

The manuscript contains the analysis of the influence of landscape characteristics on sediment loss. It shows an application in Puerto Rico and falls within the scope of SOIL. It is an interesting piece of work worthy of publication after moderate revision. My main concern is with the clear identification of the main results of the manuscript and the ANOVA test. All of the Tables and Figures but the last one appear along the Methodology section before Results and discussion section. Therefore the authors should make a clear distinction of the data they use to characterize the study site, and those that constitute computations specially carried out to support the conclusions of the study. In this way, at least Table 8 and Figure 2 to 4 should be referred to in section 3 and not before. Regarding the ANOVA test, it is a bit confusing as the description of the characteristics and measured values in just the 11 resulting stations after de

ANOVA test appears from Table 2 onwards. For example, results in section 3.2 are just analyzed in the 11 stations before their selection with the ANOVA analysis that comes after in section 3.3. Therefore, I think it should be the first result of section 3. Figures 2 and 3 would be easier to visually interpret and the confusion between the different numbers of watersheds/stations in each Table would disappear.

Specific comments: -Page 480: Please check the following sentence: "These secondary forests regenerated from abandoned pastures and coffee plantations, and currently are a mix of native and non-native naturalized species". -Page 480: The following statement could be removed as it is later repeated in section 2 where it suits better: "In this study, shade coffee plantations are classified as shrub because of their low canopy." -Page 481: the whole paragraph starting in line 25 should be either deleted or moved out of the Methodology section.

-Page 482: What is the time step of recorded stream flow and SS?. Also, how were the "Annual SS concentrations and load time series" of Figs. 2 and 3 computed? Are they annual means of recorded data? Please, add some clarification in this respect. -Page 486, line 5: I think that there is a mistake with station 9 and the authors really mean station 13. -Table 5 is unnecessary and could be deleted. -Please, check caption in Figure 1. -Please change captions in Figs 2 and 3 adding something like: "Mean annual suspended sediment concentration/load per monitoring station"