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Interactive comment on "Comparing CFSR and conventional weather data for discharge and sediment loss modelling with SWAT in small catchments in the Ethiopian Highlands" *by* V. Roth and T. Lemann

C. Baffaut (Referee)

claire.baffaut@ars.usda.gov

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I had already been asked to provide comments on a previous manuscript by the exact same title. Looking at the abstract, it appears that, in this study, the authors compared calibrated simulation discharge and sediment transport to measured data in order to assess the applicability of CFSR data as inputs to the SWAT model. In the previous study, they had used uncalibrated model results. The use of measured calibration data improves the manuscript significantly.

One concern with the previous article was that the subject of accuracy and usefulness of CFSR weather data is not new in the literature and the conclusion of this study had already been reached in other areas. The authors recognized this but nevertheless investigated the impact of these data on stream flow and sediment discharge predicted by the SWAT model, because a recent study showed that SWAT predictions with CFSR weather data could be useful even though it would be better to have site specific data.

The paper clearly shows significant discrepancies between the CFSR and WLRC precipitation data (section 3.1 and table 4). I don't understand why the authors go further and present the results of the modeling using CFSR data as inputs. What are the chances to have useful results? Why is there a need to go through the analysis of model results with CFSR data? Is there evidence in the literature or in the policy world that these considerations are not well taken into account?

One positive aspect of the paper is that it does present watershed input data, discharge and sediment data as well as modeling results from these three remote headwater watersheds of different characteristics in Ethiopia. The SWAT model is appropriately applied to the areas. The model results are adequate and useful, and may help calibration of models for larger river basins in Ethiopia.

Table 2: Unless a reader is familiar with the SWAT-CUP specific notation, the parameter names and values will not bee understood.

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