Hydrol. Earth Syst. Sci. Discuss., 8, C3555–C3556, 2011

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## Interactive comment on "Water harvest- and storage- location assessment model using GIS and remote sensing" by H. Weerasinghe et al.

## H. Weerasinghe et al.

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## **Revision Notes**

Ref: hess-2011-84, Original Title: "Water harvest- and storage- location assessment model using GIS and remote sensing", Original Authors: H. Weerasinghe, U. A. Schneider, and A. Loew Article Type: Special Issue: Looking at catchments in colors: new ways of generating, combining and filtering information in hydrology

Response to referee #2

Furthermore, who can affirm that the current location of rain water harvesting and storage technology in the Sao-Francisco and Nile catchments are correct? At least, C3555

the methodology should be validated using watersheds in areas more developed than those used in the submitted paper. Response: If people behave rationally, the existing water harvest and storage locations should be located where the highest investment returns are achieved, i.e. where the highest economic suitability is. However, the objective of our method is to estimate the suitability of locations for water harvesting and storage based on natural conditions. We believe that the economic suitability can only be adequately assessed by an integrated method which links geographic and economic analysis. Thus, we cannot really validate our method. Nevertheless, it is sensible to assume that there is a substantial correlation between natural and economic suitability. For this reason, we compare our computed natural suitability estimate for harvesting and storage structures with existing locations for these structures.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 8, 3353, 2011.