

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

Anonymous Referee #2

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General Comments

By using multi criteria evolution techniques the Authors describe a method to identify potential sites for rain water harvesting and storage. The topic is interesting, but my opinion is that this paper, in the present form, does not reach the minimum quality required for publication on Hydrology and Earth System Sciences mainly because it does not provide appreciable original contributions. Overall recommendation: Major revision.

Specific Comments

- The section 1 (Introduction) is very poor. It should be necessary to introduce the topic

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in a more comprehensive manner. - The section 2.2 (Multi Criteria Evolution Process) is not clear. Along this section the Authors usually describe the methodology through references to other papers (see page 5, lines 3-7). I think the Authors should specify (even briefly) the main phases. - The section 4.2 (Validation) is too poor. In my opinion, many other case studies are necessary to support the conclusions. 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, the methodology should be validate using watersheds in areas more developed than those used in the submitted paper. - The section 5 (Conclusions) is too synthetic.

Technical Corrections

- Page 2, line 9 (and line 22, 24, 27, ...): “Gupta, Deelstra et al. 1997” should be “Gupta et al., 1997”; - Page 2, line 32: “And, we apply...” should be “We apply...”; - Page 4, lines 11 and 13 are redundant; - Page 8, line 11: the symbol “la” is not in eqs. (3) and (4); - Page 9, line 18: please specify what means 19.53 Km³ and 4.25 Km³ (reservoir volumes?); - Page 12, line 9: “..could is a ...” should be “...could be a ...”. - Reference section: “et al.” should be substitute with the Authors names; - Page 17: the acronym LULC should be explained in the table caption; - Pages 22 and 23: Figures 2 and 3 are almost illegible (even if the reader uses a wide colour screen instead a black and white journal).

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