

Interactive comment on “Investigating possible changes of extreme annual rainfall in Zimbabwe” by D. Mazvimavi

Anonymous Referee #2

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My review comments are as follows:

1) The author disagrees with "perceptions" on increases in extreme rainfall in Zimbabwe (see Introduction para.2). Studies by Makarau (1994) and Unganai (1995) over Zimbabwe are discounted on the basis that they have used techniques capable of only detecting the medium/mean responses.

The object of the paper (Introducing para. 3) is to investigate extremes in rainfall using a new method "Quantile regression". He notes that very few studies have used this technique.

In view of the above, I am of the opinion that the author wishes to compare the new

technique to those previously used on a common data set and interpret the results. He needs to affirm whether this new method is one of those recommended by the IPCC in the study of Climate Change.

I suggest that this comparison is critical if this paper is to increment our knowledge of Zimbabwe rainfall characteristics. It is incumbent on the author to show that previous results have not brought out the true nature of Zimbabwe rainfall Series due to inappropriate choice of the analysis techniques.

2) The author further discredits his own results saying that they have no physical meaning and that they are due to sampling errors. This is not acceptable - the author needs to have checked these before analysis. The author should note that Zimbabwe (Fig. 1) runs from semi-arid (in sw) to high rainfall in the northeast with different rainfall-bringing systems affecting the different parts of the country.

3) I recommend the paper be returned to the author for the extensive revision as suggested above.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 5, 1765, 2008.

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