

Interactive comment on “South African Weather Service operational satellite based precipitation estimation technique: applications and improvements” by E. de Coning and E. R. Poolman

Anonymous Referee #2

Received and published: 6 January 2011

In the introduction the authors rightfully point out the necessity for a better monitoring and nowcasting of convective storms. The focus on Africa in general and South Africa as a kind of testbed for new approaches given the availability of monitoring technology as opposed to much more data scarce regions in Africa is also a well taken point. However, instead of defining clear research objectives, the authors continue with a mere description of available tools and approaches. The manuscript therefore does not seem to be a research paper but more a report of existing results without any further analysis.

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To my understanding, all approaches presented in the paper have been previously published and no clear research question, methodology, or individual results are present. Despite very rudimentary local comparisons between the different rainfall estimation techniques presented no clear scientific analysis can be seen. As stated in the summary and conclusions "...the hydroestimator (HE) for southern Africa was described." For me that is clearly not sufficient for a scientific publication.

Despite the well written description and summaries of available data and the hydroestimator approach no additional work by the authors was obvious. Given the large resources in terms of data available to the authors I would expect a much more thorough analysis of the hydroestimator and not just a repetition of known facts (see page 8845, lines 6ff).

In its present form I can only recommend to reject the manuscript. As said before no clear scientific objective or even methodology have been presented. It is therefore difficult for me to propose any clear recommendations to the authors. If at all I can say that the authors seem to have an immense amount of observation and model data at hand which should make a thorough and scientifically interesting evaluation possible. Given that the paper should provide an evaluation of the HE rainfall products I can still only suggest to completely revise and re-submit the paper:

- state clear research objectives
- provide a methodology of the evaluation
- provide a much more thorough evaluation than just Figs. 14 to 16

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 7, 8837, 2010.

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