

Interactive comment on "Climate change impacts on river discharge in West Africa: a review" by P. Roudier et al.

Anonymous Referee #4

Received and published: 13 May 2014

This work is very interesting on climate change models and prediction of river flows. A very positive point concerns the study area which covers the entire West Africa. The predicted results are much contrasted, with high uncertainty. The major finding is that changes in rainfall would be the main factor affecting rivers flows. But not any clear trend is depicted. This finally raises the issue of the validity of climate models. How the accuracy of these models can be improved in future studies is also quite well addressed in the manuscript. However, in its current state, the work is reserved for quite a small audience, familiar with climate models. I fear that the interest of such an important work escapes most JHESS readers. I recommend to the authors, insofar as the paper is a review of results from various models, to include in the manuscript a section giving the principles of these models and scenarios, whether simple or advanced ones. A

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presentation of the six basins selected for this work (Niger, Volta, Senegal, Gambia, Sassandra) would be also helpful. The paper is well organised and written. Captions of some figures should be expanded, as they are too small and almost unreadable.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 2483, 2014.