

## ***Interactive comment on “Global patterns of change in discharge regimes for 2100” by F. C. Sperna Weiland et al.***

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Received and published: 6 February 2012

I purposely did not read the comments of the first reviewer, before submitting mine, but after reading his observations, I must say that I would fully doubt any quantitative conclusions derived from GCM simulations. Discussing probabilities when the underlying models are so notoriously bad, seem to be meaningless.

Characterizations of the GCM performance in contemporary simulations are meaningful. Actually, I would love to see a single metric (frequencies of extremes, probability distribution of flow regimes, etc.) comparing GCM simulations for the last hundred years that show reasonable performance. I would consider the changes in those metric under future simulations as something trustworthy. Otherwise putting quantitative

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figures about the probabilities of changes in hydrography in the future is highly misleading.

There is no reason to believe that the GCM ensemble average is any closer to some sort of reality than any ensemble member. To some degree, GCM ensembles pose a great danger of becoming the modern means to prove that Earth is flat. Given modelers likely attitude to gravitate to the ensemble mean (since nobody likes to see their model as an outlier), chances are that the ensemble model comparisons are going to lead to an apparent narrowing of the GCM uncertainties (that did not quite happen yet) for the wrong reasons as modeling groups start to treat the GCM ensemble average as some sort of truth that their models should target.

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Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 8, 10973, 2011.