Interactive comment on “Climate Change impacts the Water Highway project in Morocco” by Nabil El Moçayd et al.

Nabil El Moçayd et al.
nabil.elmocayd@um6p.ma

Received and published: 2 August 2019

We would like to thank the reviewer for the feedback about our work. The review suggested several interesting research path. However, we feel that the manuscript has been unfairly evaluated. First the reviewer began by assessing that our work does not fall under the scope of the journal. This remark is deeply contested because the journal clearly specifies in its webpage that it aims to: “encourage and support [...] applied research that advances the understanding of hydrological systems, their role in providing water for ecosystems and society [...]”. The questions addressing the Moroccan case in the present work are consistent with this aim. Furthermore, the review states that the analyses do not provide new results. We think that this statement is not true as the feasibility of the water highway project in Morocco (largest water infrastructure project in that country) under climate change impacts has not been assessed before in the literature. This manuscript is the unique scientific contribution that provides a deep discussion about how important is this project? and what are the climate and socioeconomical conditions under which the project would be feasible?. We recall that the aim of this paper is to provide a simple and rigorous methodology for water engineers in Morocco to assess such project. The literature provided by the reviewer addresses the classical problem of the impact of climate change on precipitation and water availability in Morocco. A question to which we answer in our analysis using a higher resolution model MRCM. The validations of the RCM simulations are provided in the companion paper “Kang, S., Tuel, A., & Eltahir, E. A. (2019). High resolution climate change projections over northwest africa. In preparation”. Finally, a revision of the present work will include the evaluation of the runoff sensitivity coefficients using the RCMs and all the other minor comments given by the reviewer.