Hydrol. Earth Syst. Sci. Discuss., https://doi.org/10.5194/hess-2019-694-RC4, 2020 © Author(s) 2020. This work is distributed under the Creative Commons Attribution 4.0 License.



Interactive comment on "Development of a revised IHA method for the cumulative impacts of cascade reservoirs on flow regime" by Xingyu Zhou et al.

Anonymous Referee #4

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Optimum operation cascade reservoirs is significant to imrpove the benefits of water management and ecological protection. The way to weight and balance various objectives is always the ctitical points in this field. The authers present a revised IHA method for cumulative impacts of cascade reservoirs on flow regime is proposed by using the Projection Pursuit (PP) method based on the Real-coded Accelerated Genetic Algorithm (RAGA). They analyzed the cumulative effects of the Ertan, Xiangjiaba and Xiluodu Reservoirs on the flow regime of the outlet section of the Jinsha River. The topic is interesting and the technical soundness of the method is Generally, the contents are valuable for researchers and managers ivoveled in the work. For better understanding of the methodology and application, some parts are still recommanded to discussed and illustrated more, as follows: 1. section 2.1 could be simplified, Make

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it concise please. 2. The m-k method used in this paper, which is the basis distinguishing method, please adding some distinguishing methods to make readers more convinced. 3. The cascade reservoirs are built, the flow regime would be altered and not suited for spawning. Please clarify how and to what extent the former will impact the latter in your study area. It can be accepted and publised after pertinent revision.

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