

Dr. Hilary McMillan
Editor
Hydrology and Earth System Sciences

Mar 17th, 2020

Dear Dr. McMillan,

We thank you for your effort in collecting the feedback report from the reviewer for our revised manuscript (manuscript ID: HESS-2019-328). We have addressed the minor issue identified by the reviewer. We also briefly respond to the comments in the late review report. The detailed responses are provided in the follow text.

If you have any further questions, please contact me.

Sincerely,

X 

Dongmei Feng

Dongmei Feng, Ph.D.
Department of Civil and Environmental Engineering
University of Massachusetts, Amherst
130 Natural Resources Road, Amherst, MA 01003
Tel: (617) 697-8789
Email: dmei.feng@gmail.com

RC1

Minor Comment:

The authors have revised their manuscript and addressed most of my concerns. But they still didn't answer why they only use annual runoff series for analysis because at such a small scale catchment, using annual runoff can miss many details that may result in different conclusions. From my experience, they should at least use daily runoff. So I want to hear from the authors why they only use annual runoff.

Response: In the study region, there is no rain for most time of a year, and it is not uncommon in such a Mediterranean climate region that the annual runoff is mainly generated from one major storm event. Therefore, the annual mean/max series are representative of the characteristics of the discharge dynamics. In fact, we conducted the uncertainty analysis for the daily series, and a similar result was obtained. We have inserted the following text in the manuscript (L277-280):

“In this study region, there is typically no rain for most time of a year, and it is not uncommon in such a Mediterranean climate region that the annual runoff is mainly generated from one major storm event. Therefore, the annual mean/max series are representative of the characteristics of the discharge dynamics.”

Response to the late review

Response: We appreciate the comments in the late review report. We have made some changes accordingly. The changes are in L77-81, L95-96, L162-163, and L178-179, and highlighted in red.