Sivarajah Mylevaganam Alumnus, Spatial Sciences Laboratory, Texas A&M University, College Station, USA.

11) Line 12-Line 13:

Because ML models are trained with data from multiple watersheds, they are able to learn hydrologically diverse rainfall—runoff responses (Kratzert et al., **2019b**) in a way that is useful for example for prediction in ungauged basins (Kratzert et al., **2019a**).

First In First Out (FIFO) is the concept that is implemented in citing (i.e., 2019a should come first). Since I don't know what is being implemented by this journal office, I would let the journal office to pay an attention on this.

12) Line 21-Line 23:

Then, in the bottom-up approach, after a model is developed, we might work on regionalization strategies to extrapolate parameters and parameterizations to larger areas (e.g., Samaniego et al., 2010; Beck et al., 2016).

Using e.g., in citing previous research works is considered an evading language in the scientific field. This gives an indication that the authors have failed to document a comprehensive review of the literature.

13) Line 34-Line 36:

We collected these 100 papers for review in September, 2022, nearly three years after the original regional LSTM rainfall–runoff modeling papers (Kratzert et al., 2019a, b) were published.

The critical review of these 100 papers is not found the current version of the manuscript. Throughout this manuscript, the authors have freely cited their own works. Considering the level of their knowledge in the field of hydrology and the other related disciplines that are reflected in the current version of the manuscript, I would have my reservation in the cited manuscripts.

13) Line 106-Line 107:

We selected a k-means cluster model based on a maximin criterion on silhouette scores, which resulted in a model with 6 clusters ranging from 59 to 195 basins per cluster.

I would say that your clustering methodology is inappropriate for this task as it would completely destroy the stream network and the underlying hydrology. This is one of the reasons why we have HUCs in the datasets that you have used in your analysis. Do you know the exact definition of HUC and the rationale behind developing HUCs? Your Fig.A4 is completely meaningless considering the purpose of the manuscript. I would suggest you have an in-depth look at your Fig.A3 and Fig.A4. What do you learn from those figures?

14) Line 235-Line 240:

For a particular basin of your interest, would you be able to show the values of Ws and the associated hs?

Acknowledgement and Disclaimer

The author is an alumnus of Texas A&M University, Texas, USA. The views expressed here are solely those of the author in his private capacity and do not in any way represent the views of Texas A&M University, Texas, USA.