We would like to express our thanks for the positive comments and the valuable questions/suggestions on our manuscript. We have revised the manuscript thoroughly based on all the comments. The reviewer's comments are enumerated. Our replies to each comment start with "Response."

Editor's Comment

Thank you very much for the additional revisions.

In principle, I will be glad to accept the manuscript for publication in HESS. However, please incorporate the last necessary technical corrections associated to the maps as indicated in the message by the Editorial team.

Response: Thank you very much for your feedback and for managing the review process. Your thoughtful consideration of the paper is greatly appreciated, and your insights are invaluable to us.

The comment raised by the Editorial team:

I just noticed that your figure 2b contains a map. To clarify whether a copyright statement or a credit must be given in the map itself or in the caption, we differentiate between (a) maps entirely created by you, (b) maps created by you but based on layers reused from other originators, or (c) maps simply reused from other originators. An example for (a) is a digital elevation model (DEM) purely based on measurement points collected by you and derived by using a software product. If you use an existing map layer from another originator as a basis for significantly enriching the map with your own content, this would be an example for case (b). Case (c) could be a pure reproduction of Google Maps where your own contribution is rather small (e.g. a city map where you only added a few marks for your study locations). If the map was entirely created by you (case a), there is no need to change the caption or map. Please simply inform us. To the contrary, if your map follows cases (b) or (c), please let us know whether the map is distributed under public domain. If yes, please do not include a copyright statement (copyright is waived) but consider adding a credit to the map or caption. However, if your map follows cases (b) or (c) and is not distributed under public domain, please include at least a credit or even a copyright statement (e.g. © Google Maps), if this is required by the map provider, in the map itself or in the caption.

Response: Thanks for your comment. Regarding your request for a copyright statement for Figure 2b of the manuscript numbered "hess-2024-96," I found that this figure could be classified as either case (b) or (c). After reviewing the website, I determined that we do not need to obtain permission. However, it would be prudent to include a statement in the caption, as you suggested. We have added the following statement, which reads as follows.

Figure 2. Illustration of developed integrated modeling framework: (a) the THREW hydrological model applied to the LMR basin: (b) the defined computational domain (white splines, i.e., land boundary) in the developed hydrodynamic model for analyzing daily river flow fluctuations. Each tributary is represented by a single cell located between the land boundary and the riverbank (red cells in panel (b)). Note: the cells in panel (b) do not represent the actual number of cells used in the simulations (see Section 4 of the SM file for more details). The name of each defined sub-basin in this study is based on its upstream and downstream stations (panel (a)). The background map in Figure 2b is adapted from Google Earth Maps (e.g., © Google Maps).