

Overall, I think the revised manuscript has improved substantially, and the authors have addressed my main concerns from the previous round. The manuscript is now much clearer and better structured. I only have a few minor comments that may help improve precision and readability. I would be happy to recommend acceptance after these minor comments are addressed.

Comment 1: I noticed that the manuscript alternates between phrases such as “draining-filling” and “filling-draining,” as well as “hydrologic” and “hydrological.” If these terms are intended to convey different meanings, please clarify. Otherwise, I suggest using the terminology consistently throughout the manuscript.

Comment 2: Please carry out one more careful language edit to correct small grammatical and formatting issues. Below are a few examples I noticed:

Title: Ensure capitalization is consistent and aligned with the journal guidelines.

Line 93: “are” should be “is.”

Line 98: “require” should be “requires.”

Line 246: “four remains active” should be “four remain active.”

Line 254: “contrast” should be “contrasting.”

Line 262: Remove the comma before “contains transitional elevation signals that create uncertainty.”

Line 273: “See” should be “see.”

Line 669: “run of the code” should be “run the code.”

Comment 3: In the code and data availability statement, the final Zenodo link should be updated to: <https://doi.org/10.5281/zenodo.18354195>