

## Response to Reviewers

We are deeply thankful to the editors for the constructive comments that greatly improve the quality of this manuscript. We have addressed the comments one by one as follows.

*RC:* Even in the new version, I think that Figures 5, 6, 9, 11, 13, 14 are too small. Furthermore, including the RFC-codes in every single map creates a lot of additional "clutter" that makes the Figures very hard to read. So I would either increase the size even more so that we can easily identify the RFC-codes when your manuscript is printed on normal A4-paper or remove the codes from these Figures and add an additional map with only the boundaries and codes of the River Forecast Center domains. But please do not increase the size of the color scales in Figures 13 and 14 as they already look too long.

*AR:* We have increased the size of Figures 5, 6, 9, 11, 13, and 14. They are now 17 cm wide. The size can fit into an A4 paper with 2 cm margins. We also deleted the RFC codes from almost every but the one last panel of these figures. We hope the revised figures are easier to read. Besides, placing the RFC codes inside the figures should be convenient for reference from the text.

*RC:* You seem to use the same bounding box and a simple "lat-lon projection" in every single map. In such cases, please use a lat-lon-ratio of 1:1 (i.e., your grid cells / pixels are always squares) for every Figure as otherwise, your maps look quite inconsistent.

*AR:* We have adjusted the aspect ratio of every map to 1:1.

*RC:* I would also either remove the title "Total time series" from Figure 4 or add something more meaningful like "Monthly averages" or "Monthly time series".

*AR:* We have revised the title "total time series" to "monthly time series."

We also want to clarify the changes in authorship here. The changes were made in the first revision (Submitted on 19 Feb 2023). An author, Shu Wang, was added to the author list. She analyzed the snow-related variables and rewrote the Section 4.4 according to the reviewers' comments. The authorship has been modified to reflect the changes.