Reviewers comments

The paper, *Spatiotemporal Prediction of Alpine Wetlands under Multi-emission Scenarios in Western Sichuan*, presents a method for predicting the likelihood of wetland occurrence in the alpine zone of Sichuan in the near future. The authors have effectively highlighted the importance of wetlands. However, they assume the reader is already familiar with the study area. More can be done to help the reader locate the study area, such as including major cities in the zoomed-out map in Figure 1 and adding "China" to the title.

Overall, the paper is well-written, and I have made only a few general grammatical corrections. As I am not a native English speaker, I will leave the handling of language issues to the editorial team.

My main concern is the lack of clear aims and objectives in the paper. While the authors have mapped wetlands using Google Earth Engine with good accuracy, this has been done before, and there is little novelty in the approach. The use of emission scenarios is a nice touch, but this should be tied to specific recommendations, which are largely missing from the paper. It seems the authors recognize this, as the last part of the conclusions briefly mentions four ecological protection strategies. However, these strategies are not discussed, leaving the reader unclear about their significance and how the study's findings contribute to them.

I suggest that the introduction ends with clearly stated aims and objectives. The authors seem to attempt this in lines 64–73, but that section is more about methodology than outlining the objectives of the study. Clear objectives would help guide the discussion and, ultimately, the conclusions.

Additionally, I question why only three topographical covariates were used and why those specific ones were selected. Surely, indices like the Terrain Wetness Index, valley depth, and terrain position would better explain the location of wetlands than just slope, aspect, and elevation.

Finally, it appears there was no ground-truthing, with wetlands identified solely from satellite imagery. This should be flagged as a potential limitation, and references to other studies using similar methods should be included.

General comments:
Line 10: 'deeply' is not the correct term. Perhaps 'adequately' or 'compressively'

Line 33: Define QTP again. Yes, it was defined in Abstract, but should be defined again in main text

Line 42: Explain what an ecological safety barrier is.

Line 63 – 73: Move to methodology section.

Line 108 – 110: Largely repetition from previous section.

Line 79: should probably include meters *above sea level*.

Line 92: GEE should be abbreviated here and not in line 109.

Line 99: Explain what CMIP6 is.