

# Author's response

## MINOR COMMENTS

- 115 I like that the authors included a distinction between citizen science and community science but am a bit confused by how the manuscript is reframed around CCS...so do all the subsequent CCS projects you describe really encompass elements of both? E.g. Line 185: Is the CrowdWater initiative that the authors introduce as an example of CCS both a citizen science project and a community science project? i.e. did the community define the goals of CrowdWater and now the data is being crowdsourced by citizens? How is it a CCS project?

**Authors response:** *We have once again thoroughly examined the manuscript with regard to the difference between citizen science and community science and, for example, revised the section 2.2 and 2.3. Where statements were made in these sections about all three forms (citizen science, community science, and citizen and community science), we have referred to them as participatory projects for the sake of clarity. We also revised the part on Crowd Water, which is a purely Citizen Science project.*

- 206 Still says “Development of the CS app” and not with new CCS acronym

**Authors response:** *We have corrected this minor comment.*

- 207 Do I understand correctly that the authors are re-categorising their app and work as both citizen science and community science? Maybe it is worth it to elaborate on your reasoning (I think this is currently line 197?) as to why you have re-categorised your project from CS to CCS since some might argue that only one potential use case is not enough to be considered a hybrid CS and community science project. I understand that this use case is community-driven management of a researcher-designed project, which is excellent, but falls short of being community-designed from the start and is rather a citizen science project that follows a “hand-off” model. However, if you feel that your project is a hybrid citizen and community science project, then definitely go with this (but justify your reasoning a bit better) because it is great to see community science elements in a citizen science project!

**Authors response:** *Yes, we see our app as a hybrid form. The wording from line 197 onwards was misleading. ‘One potential use case’ referred to the current use case described in the paper. Other use cases are the extended fields of application mentioned in section 5.3, to which the CCS description also applies. We have removed the misleading wording ‘in one of the potential use cases’ at this point.*

- 208 Is Lemmens et al. (2021) really a source specifically for CCS apps or just CS apps? Be careful throughout the manuscript where it seems that all “CS” terms were replaced with “CCS” without consideration of if it actually represents this hybrid model.

**Authors response:** *We have corrected the section on Lemmens et al. (2021) on citizen science and have also revised the rest of the paper with regard to the distinctions.*

- 220 Maybe quickly explain what a native format is for those without a technical background

**Authors response:** *We have corrected this minor comment.*

- 448 “5.1 Advantages of the Citizen and Community Science approach...” similar comment as 207: better justification needed of community science inclusion. What exactly are the advantages of the citizen science approach and what are the advantages of the community science approach?

**Authors response:** *We have supplemented the section in some places with references to explicit citizen or community science benefits.*

- 463 “...info buttons (Figure 6)” delete extra line break here

**Authors response:** *We have corrected this minor comment.*