

Reviewer #4

The manuscript by Jiménez et al. presents an insightful and methodologically robust scoping initiative, exploring significant voids in knowledge from both government and academic viewpoints on available information on sea-level rise and its potential impacts. The analysis of stakeholder engagement processes is both valuable and compelling, highlighting the study's strengths. However, there are some areas where clarity and presentation could be improved to enhance the manuscript's overall impact and readability.

Response to reviewer #4

Thank you very much for the time dedicated to review the manuscript and for comments and suggestions provided.

In what follows these comments and suggestions are addressed, where each comment is presented as given (in black) and then we specify how it will be addressed (in blue).

Specific Comments:

Abstract (Line 31): The term "information gap" is somewhat ambiguous. It would be beneficial to clarify the study's primary objective more distinctly. Is it to identify gaps in climate services for non-academic fields, to pinpoint areas needing further research from scientists, or both?

Thank for your observation. In the context of our study, the two examples you provided are relevant, as we aim to identify existing gaps for both scientists and non-academic (governmental) stakeholders. We will revisit the abstract to ensure clarity and avoid introducing ambiguity.

Link Functionality (Line 85): The provided link to the EU Survey platform is not operational.

We have checked and, now, the link is working properly.

Stakeholder Characteristics (Lines 101 to 106): Introducing specific characteristics of the stakeholders earlier in the section, preferably by Line 84, would greatly benefit the narrative flow and prevent the current belated introduction of this crucial information.

We will move the description of stakeholder characteristics to an earlier point in the section, as suggested.

Stakeholder Bias in Survey Data: The manuscript exhibits a noticeable bias towards researcher, which skews the study's findings. Clarifying the study's main goal—whether it is identifying research gaps, improving climate services, or both—would help in understanding the significance of this bias.

Thank you for your observation. We did not intend to show bias towards researchers. Any perceived bias may have stemmed from the composition of our participant pool.

Scientists accounted for the 64 % of the total participants, which naturally led to higher representation in the responses. However, we have taken measures to address this potential bias by presenting the responses of each participant group separately in instances where they significantly differ (see e.g. Fig 3a, Fig 4, Table 3, Fig 5b, Fig 7, Table 4). Despite these efforts, we will review the text to eliminate any inadvertent bias and, if necessary, provide clearer differentiation among the various participant profiles.

Scoping Workshop (line 127): It is unclear whether the workshop participants include only government representatives or also scientists – as ‘stakeholders’ (in line 128) could be both. If both groups are included in the workshops, a primary concern arises in the analysis of workshop outcomes, specifically regarding the clarity in distinguishing between government and researcher perspectives, as it is crucial to understand these distinct viewpoints to address the identified knowledge gaps. Providing a more detailed account of the stakeholders involved, including selection criteria and their roles, would improve readers' comprehension of the study's foundation. Or a dedicated section comparing and contrasting government and researcher perspectives could offer nuanced insights into the stakeholder engagement process.

The workshops included participants from both government representatives and scientists. The outcomes of these workshops reflect an integrated perspective, as they were designed not to solicit individual responses to specific questions but rather to serve as collaborative platforms where all participants, regardless of their background, contributed to the discussion of relevant issues. As a result, it is not feasible to discern the origin of contributions, as was possible with the survey responses. We will review the text to ensure that this perspective is well described.

Improve Figures 2 and 3: For Figure 2, adding a legend and title would improve its interpretability. For Figure 3, replacing numerical labels with terms like 'agree' on the Likert-scale and adding a descriptive title (the question) and a legend could make the data more accessible.

Figures will be modified to improve interpretability as suggested.

Visual Representation of Knowledge Gaps (Section 3.2): Presenting the main knowledge gaps/needs through visual means, such as tables or graphs, would offer a clearer, more immediate comparison across different basins.

Following the suggestion of the reviewer, we will incorporate visual aids (still to be defined if a table or a figure) to facilitate comparisons of the information presented across basins.

The manuscript provides an essential contribution to understanding stakeholder perspectives on information of sea-level rise and its impacts in Europe. By addressing the above suggestions, I believe the clarity and impact of your study can be enhanced. I look forward to seeing the revised manuscript and hope the feedback is useful.

Thank you for your positive comment.