Reviewer # 3

To my opinion, this work contributes to a large extent to an important topic of identifying critical gaps in available information on regional SLR and its potential impacts across European basins and provides a comprehensive analysis of knowledge requirements and areas necessitating further research. Based on relevant survey and workshops, it emphasizes the role of participatory approach and turns attention to regional disparities and lack of data, cooperation and access to information on SLR at all levels.

This paper may be of interest to policy makers, coastal planners, and stakeholders at large, and it definitely contributes to the ongoing process of harmonization of efforts in terms of policy and data collection between European regional seas (under MSFD-related directives, under UNEP Regional Seas Program, bilateral arrangements between regional sea conventions etc.) and setting a scene for further steps to be implemented for improving local and regional SLR projections, as well as improvements in physical science and data, hazards and impacts, adaptation policies and decision-making. The information analyzed in the article shows increasing recognition of nature-based solutions (NBS) and role of ecosystem management in addressing the SLR, which can be further used by regional policy-makers.

Response to reviewer #3

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

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

It could be still good to see a vision of potential instruments and approaches of regional cooperation on SLR in order to deal with challenges and gaps described in this article. Overall, this work is very comprehensive and eye-opening.

The reviewer is right and, in fact, this comment is related to one raised by reviewer#2 about the need for further cooperation on the issue. As we mention there, during some of the workshops, participants highlighted the importance of international cooperation to share experiences and knowledge. Furthermore, the variations observed in responses across different regions as well as common concerns and interests suggest the value of such knowledge transfer to enhance harmonization across European basins. We will include a recommendation in this sense as concluding remark, and will identify some existing frameworks that could be used for such as purpose.

s://doi.org/10.5194/sp-2023-34-EC1