List of changes

1) The language of the entire manuscript was copy-edited and technical details raised by the reviewers were addressed.

2) All comments by reviewer 1 and 2 have been addressed. There is one exception: the extension of the abstract requested by reviewer 2 was not done.

3) In particular, a general overview is provided by Table 1. We added a sentence at the end of the introduction section clarifying that an overview and summary is provided by Table 1.

4) Concerning salinity changes, we better explained that we refer to the ensemble mean of the entire ensemble instead of individual simulations.

5) In the summary, we added a reference to the result section.

6) The changes in SST gradient were better explained: With increasing warming, SST trends in the northern Baltic Sea would get larger relative to SST trends in the southern Baltic Sea. As in present climate mean SSTs considerably decline from south to north, this gradient will be weaker in future compared to present climate. The latter might be caused by the ice-albedo feedback.

7) A too long sentence was splitted: These low-frequency changes in correlation were projected to continue. Furthermore, systematic changes in the influence of the large-scale atmospheric circulation on regional climate and on the NAO itself could not be detected. However, a northward shift in the mean summer position of the westerlies at the end of the twenty-first century compared to the twentieth century was reported earlier (Gröger et al., 2019).

8) We added a list of abbreviations.

9) We added a table characterizing the involved ensembles.

10) Thank you for the comments. We will try to improve our explanations of the results based on your comments in the revised manuscript.

11) A table for the changes in bioavailable nutrient inputs in the various scenario simulations was added

12) Details of the data assimilation by Liu et al. (2017) were added.

13) The explanation for the differences between the two ensembles, ECOSUPPORT and BalticAPP, was moved from the discussion to the result section.