

Response to associate editor

Manuscript number: egusphere-2025-3290

Manuscript title: Prediction of present and future spatial occurrence of cyanobacteria and the toxin nodularin in the Baltic Sea

Authors: Mohanad Abdelgadir, Bengt Karlson, Elin Dahlgren, and Malin Olofsson

Principal Investigator: Mohanad Abdelgadir

Preprint link: <https://doi.org/10.5194/egusphere-2025-3290>

Dear Authors,

Thank you for your careful responses and revision. The manuscript has been re-evaluated by one of our previous reviewers, who was positive about the revision. I have also reviewed the revision and provide the following minor technical comments for your consideration:

Re: We greatly appreciate the effort made by the reviewers and the associate editor on our manuscript.

1. One of the reviewer's concerns about combining inconsistent data sources (global to regional models) was not fully addressed (see Comment 3 from RC1). Please either explain why this is acceptable or acknowledge the limitation in the manuscript.

Re: The use of different data sources is now acknowledged as a limitation in the manuscript.

It can be read as *"Although the study integrates different downscaled datasets from global and regional models, a careful inspection should be given to harmonize the datasets, calibrate regional projections using global boundary conditions, align the differing resolutions, and quantify uncertainty."* **lines 526-528.**

2. Line 184: Please either convert the horizontal resolution from nautical miles to kilometers, or add the conversion in brackets.

Re: Corrected and now can be read as *"... with a horizontal resolution of 1 nautical mile (1.852 kilometers)"*, **line 174.**

3. Figures 4 and 7: In both figures, one panel appears on a separate page. Please adjust the layout to keep each figure contiguous.

Re: Corrected. Figures 4 and 7 are now adjusted in one panel, see **line 333** and **line 397**

4. Figures 7 and 8: The x-axis and y-axis lack labels. Please add labels (e.g., Longitude and Latitude), or follow the style used in other figures (e.g., Figure 6) to make it clear that these values refer to longitude and latitude.

Re: Corrected. The label "Longitude" in x-axis and "Latitude" in y-axis are now added to Figures 7 and 8, see **line 397** and **line 416**