

Interactive comment on “What are the prospects for seasonal prediction of the marine environment of the Northwest European shelf?” by Jonathan Tinker et al.

Jonathan Tinker et al.

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Dear Referee 1,

Thank you for your review, and sorry for the slow response. I wanted to post a reply before making the changes and resubmitting the paper.

The main aim of the paper was to provide a roadmap for North West European shelf seas seasonal forecasting, with a marine management, marine policy and the marine user etc. audience in mind, as well as a general science readership. With this in mind, we wanted to take the reader through the various approaches in a clear manner. We

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will make this aim of the paper clearer in the manuscript. We agree that some of the results are not new, but we feel that the description of the approach to NWS seasonal forecasting is novel and should be published within the literature

While the deficiencies of global ocean models are simulating regional seas are well known to the scientific audience, we wanted to clarify that direct use of the seasonal forecasting system is not possible, as there has been a lot of interest in using North Sea seasonal forecasts from marine users.

We will improve our literature study of the paper, and should of referred to more NAO shelf seas response papers. Did you have any papers in particular in mind?

As the English Channel SST forecast was simply demonstrative, we didn't include the equation, but we can do.

We state that dynamic downscaling as a third approach to seasonal forecasting for the NW European shelf seas. Although previous studies state relationships between the open ocean and the NW European shelf seas, it is important to show that these relationships exist within this model and it boundary conditions. The examples chosen for the ocean lateral boundary condition relationship were indicative of the north south difference, rather than to discuss the dominant mechanisms, which was not the purpose of the paper. We removed additional description and discussion of the relationships between the ocean boundaries and the shelf seas response, as it didn't add to the story of the paper.

Thank you again for your review

Kind Regards

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