

We thank the editor for his constructive suggestions!

I only have a few remarks about aspects that the authors might address in a better way in the manuscript, as listed below:

- Figure 1: the quality of the figure shall be improved, as recommended by reviewer 2. So far, the resolution in the revised draft is still quite low;

Thank you for this suggestion.

We have added a higher-resolution Figure 1.

Besides, we also replaced the original Figure 2 with a higher-resolution one.

- Figure 4 and discussion: in their reply to reviewer 1, the authors extend their description about comparing different methodologies to assimilate in the ocean. I would recommend that this discussion is also provided in the draft (especially regarding the table and figure in the authors' reply);

We have added the discussion about the table and figure (**in bold**) to the context:

“However, the analysis error with a 1-day forcing update is still one order of magnitude greater than the ocean analyses obtained from the coupled models. **For the last ~11 model years, the WC 3D-Var achieves an averaged analysis RMSE of 1.160×10^{-3} for the atmosphere and 5.516×10^{-5} for the ocean. For the SC 3D-Var, the corresponding analysis RMSE is 1.159×10^{-3} for the atmosphere and 4.915×10^{-5} for the ocean, both smaller than the error from the WC 3D-Var. Among all three CDA configurations, SCDA analyses are the most accurate for the coupled states. Besides, the SC 3D-Var shows lower RMSE than the WC 3D-Var for the ocean during the spin-up period, and the SC 3D-Var also experiences a shorter spin-up period (Figure not shown).**”