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Mixing and air-sea buoyancy fluxes set the time-mean overturning circulation in the subpolar North Atlantic

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I think the revised manuscript is very good and am largely satisfied by the authors' responses to my comments. I have only a few remarks that I hope the authors will take into consideration before the manuscript is published.

I am still not fully convinced about the water mass transformation that appears to take place on the Greenland shelf in Figure 8a and the authors' response to this concern. The figure shows that densification by air-sea fluxes in the two lowest density bands (27.40-27.60 kgm^{-3} and 27.60-27.77 kgm^{-3}) occurs on the Greenland shelf, which is typically still ice-covered in winter. The authors suggest that this could be summertime water mass transformation or that it is a consequence of remapping from temperature/salinity space to geographical space. I don't think that either of these suggestions can fully account for the water mass transformation shown in Figure 8. Firstly, in summer, I am unsure which process the authors refer to that would cause densification on the Greenland shelf. The air-sea interaction taking place would in general add buoyancy to the water column, particularly by solar insolation, not densify the water column. Mixing processes might, upwelling-favorable winds could for example bring dense water onto the shelf, but summertime air-sea interaction would in the mean reduce rather than increase density. Secondly, the Greenland shelf is primarily filled with Polar water masses. Within the domain considered in the manuscript, these water masses are found on the Greenland, Baffin, and Labrador shelves. It is not clear to me in which other regions densification by air-sea interaction in these temperature-salinity classes would occur, and then be remapped onto the Greenland shelf. I think it would be great if the authors could clarify this in the final version of the paper.

Line 27:
Labrador Sea Water should be capitalized.

Lines 499:
It should be "complementing" rather than "complimenting".