

I've reviewed the revised manuscript and I'm satisfied by the changes. A few minor comments:

- Line 155: this should be "based on shipboard ADCP" instead of "based on LADCP" (there seems to be a confusion between a ship-mounted ADCP and a Lowered ADCP).

We have made this change in the text.

- L175: I don't see the purpose of mentioning that they did calculate meltwater fractions given that the review process concluded that this isn't a reliable calculation, and they don't show those results anyway.

We have removed the part of the sentence mentioning that we calculated the meltwater fractions.

- L400 this reading of Lentz & Helfrich is not correct. The current ends at a particular isobath not because it has a barotropic component, but precisely because it moves in the cross-shore direction until the along-shore bottom velocity (and thus, bottom stress) is zero. The relevant dynamics are driven by the along-shore flow and bottom Ekman layers, not Taylor columns as suggested in the revised manuscript (see section 1 of L&H).

We have revised this sentence to read as:

"Even with the weak stratification of the waters on the Antarctic continental shelf, the AACC may be tied to flow over particular isobaths as it reaches a geostrophic equilibrium where offshore Ekman transport of the boundary current at the bottom is zero."

- While a minor thing, I think figure 1 would be more useful if the authors more clearly spelled out all the names in the figure. There are a lot of them and a reader is forced to read the caption as each name is discussed to find it out where each place is.

We have changed Figure 1 to include the fully spelled out names of the major features.