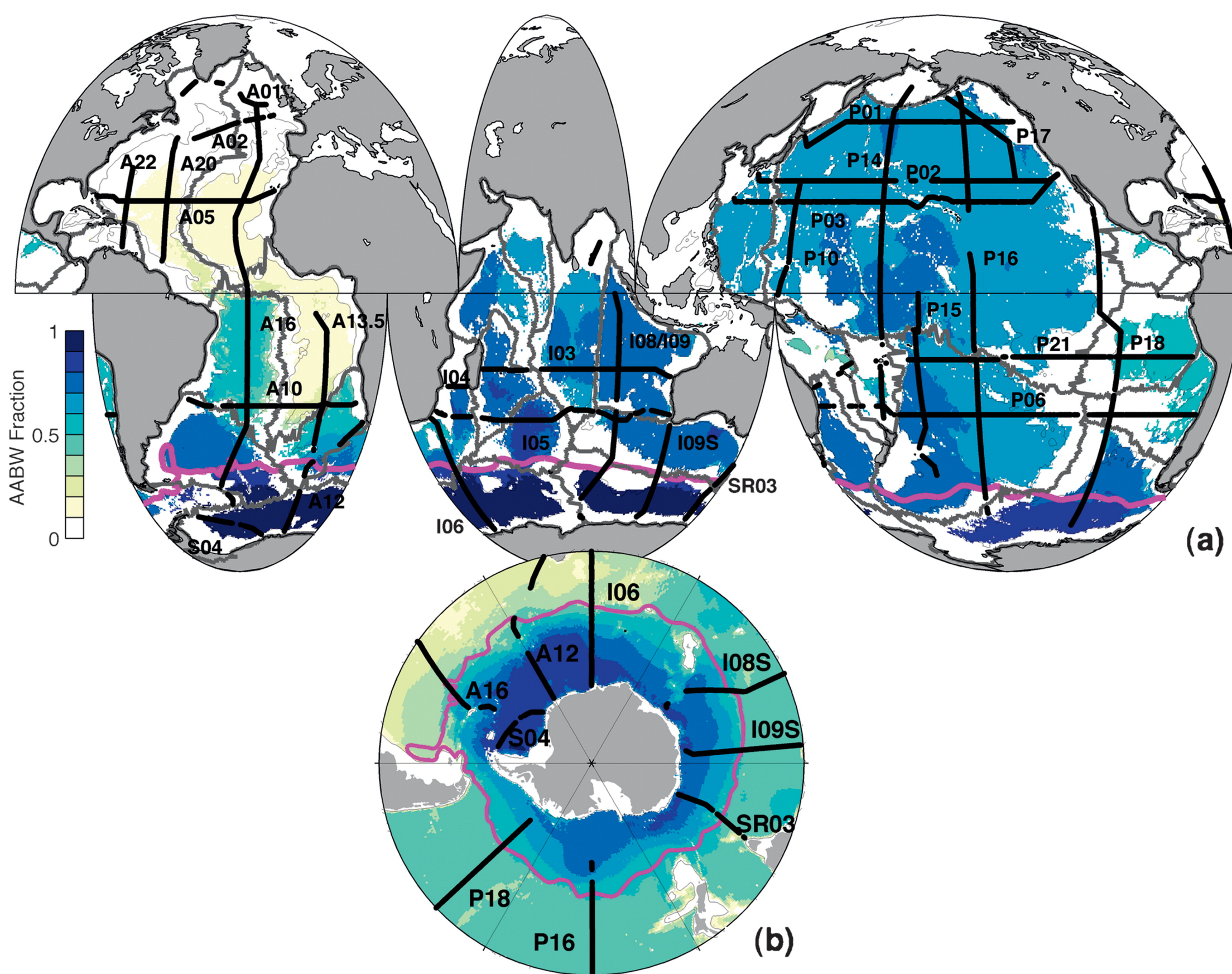


# Better Bottom Water or Bust!



Ekstrom Ice Shelf, Weddell Sea, Antarctica. I took this photo while aboard the R/V Polarstern in 2015



Depth-averaged AABW fraction a) below 4000 m and (b) 1000-4000 m from Purkey and Johnson 2010

Antarctic Bottom Water (AABW) is the most voluminous water mass. Its formation represents a crucial pathway by which heat and carbon enter the deep ocean.

We don't do AABW well in models, and those that do generally get its properties (e.g., density) right for the wrong reasons (Heuzé *et al.* 2013).

Poor AABW representation distorts our understanding of the deep ocean, how it works, and how it responds to both natural variability and climate change. This has serious consequences for the entire climate system.

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