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The features of Antarctic Bottom Water in the fracture zones at 7-10 deg. N of the Mid-Atlantic ridge

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Despite the fact that there are numerous estimates of the Antarctic Bottom Water (AABW) formation and transport, its evolution and distribution pathways are still debatable (Morozov E.G. et al., 2010).

The main task of this work was to identify the structure and transport of deep and bottom water mass of the fracture zones (7-10°N, Vernadsky and Doldrums). The research is based on new data (multibeam bottom relief, temperature, salinity, velocity) obtained during the research cruise on the RV "Akademik Nikolaj Strakhov" in October-November 2019 and WODB18 historical data.

The main result of the research is proper estimation of the AABW and LNADW transport, which takes into consideration the influence of fracture zone morphometry. Accordingly, the preliminary circulation scheme of water masses is obtained.