The main purpose of the present research is to analyze the variability of thermohaline characteristics of deep and bottom water masses in transatlantic and meridional transects in the Central and South Atlantic Ocean. The distinctive feature of this study is a comparative analysis of the newest oceanographic data from 2000s derived from international program CLIVAR and Russian program “Meridian-plus”.

The variability of the thermohaline characteristics are usually based on results of the numerical modeling and are not connected with the real objects of the investigation (water masses). In the present work average characteristics of water masses were detected using repeating transect measurements.

According to this approach it was possible to reveal the trends of thermohaline characteristics changes in the deep and bottom water mass layers. Volume mean values were calculated for the whole water parcels as well as for its cores.

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