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Preliminary results from DIMES: Dispersion in the ACC

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The Diapycnal and Isopynal Mixing Experiment in the Southern Ocean (DIMES) is a CLIVAR process study designed to study mixing in the Antarctic Circumpolar Current. The experiment includes tracer release, float, and small-scale turbulence components. This presentation will report on some results of the float component, from floats deployed across the ACC in the Southeast Pacific Ocean. These are the first subsurface Lagrangian trajectories from the ACC. Floats were deployed to follow approximately a constant density surface for a period of 1-3 years. To help aid the experimental results virtual floats were advected using AVISO data and basic statistics were derived from both deployed and virtual float trajectories. Experimental design, initial results, comparison to virtual floats and single particle and relative dispersion calculations will be presented.