



Preliminary results from the subsurface Lagrangian component of the DIMES Experiment

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The Diapycnal and Isopycnal Mixing Experiment in the Southern Ocean (DIMES) is an ongoing CLIVAR process study designed to study mixing in the Antarctic Circumpolar Current, including tracer release, Lagrangian drifters, and microstructure turbulence. This presentation will report on the first technical results of the subsurface Lagrangian component, from quasi-isopycnal following floats deployed across the ACC in the Southeast Pacific Ocean. Approximately 130 floats were deployed at the 27.9 neutral density surface for a period of 1-3 years. A portion of these trajectories will be processed and presented for a first initial view of Lagrangian motion at mid-depth in the ACC. Float design, sound source array design, deployment strategy, and the processing system from the Argos telemetry stage to final trajectory will be described. Several additional, different platforms with rafos data are also noted.