

Abstract Submitted
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Stochastic simulations of buoyancy-reversal experiments¹ SCOTT WUNSCH, The Johns Hopkins University — Buoyancy reversal occurs when the mixing of two fluids, initially stably stratified, produces a mixture which is more dense than either pure fluid. The resulting instability generates turbulent mixing, and may play an important role in several geophysical flows. In this work, a simple scaling hypothesis for buoyancy reversal is presented and compared to experimental results. The scaling is used to extrapolate from laboratory-scale flows to natural systems.

¹Work done in affiliation with Sandia National Laboratories

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