Abstract Submitted
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Anisotropy in RT flows YE ZHOU, W. CABOT, LLNL — This work investigates several key statistical measurements of turbulence induced by Rayleigh-Taylor instability using data from well resolved numerical simulations at moderate Reynolds number with the goal of determining the degree of departure of this inhomogeneous flow from that of homogeneous, isotropic turbulence. The simulations use two miscible fluids with unity Schmidt number and moderate density contrast (3/2 to 9). The results of this study should find application in subgrid-scale modeling for large-eddy simulations and Reynolds-averaged Navier-Stokes modeling used in many engineering and scientific problems.

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