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Anisotropy in Direct Numerical Simulations of Homogeneous Stratified Turbulence JEREMY MELVIN, ROBERT D. MOSER, Institute for Computational Engineering and Sciences, The University of Texas at Austin — One of the main characteristics of stratified turbulence is the presence of anisotropy. We conduct a series of Direct Numerical Simulations (DNS) of both stable and unstable homogeneous stratified turbulence and investigate the characteristics of anisotropy in length scales and other turbulent statistics. We compare the observed quantities to derived scaling relationships based on the Froude number. Lastly, we discuss the impact of anisotropy on the development of applicable LES models for wind farm simulations.

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