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Anisotropy statistics in homogeneous stratified sheared turbulence GEORGIOS MATHEOU, Jet Propulsion Laboratory, California Institute of Technology, DANIEL CHUNG, Department of Mechanical Engineering, University of Melbourne — Stably stratified flows are prominent in many engineering and geophysical applications. Stratified turbulence is characterized by anisotropic large scales but for a high Reynolds number flow smaller scales are expected to become progressively more isotropic. We investigate the anisotropy characteristics of stationary homogeneous stratified sheared turbulence at various stratifications and Reynolds numbers. Three sets of direct numerical simulations are utilized with $Re_\lambda = 220$ –800. For each Taylor Reynolds number, four simulations were carried out that range from neutral to very stably stratified conditions. Elementary anisotropy statistics are discussed and compared to estimates for the onset of local isotropy.

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