



Predictability of rotating stratified turbulence

K. Ngan (1), P. Bartello (1,2) and D.N. Straub (1)

(1) Atmospheric and Oceanic Sciences, McGill University (2) Mathematics and Statistics,
McGill University [kngan@meteo.mcgill.ca]

We examine the predictability of rotating stratified turbulence using a non-hydrostatic Boussinesq model. Comparisons with results for 2-D and 3-D turbulence are made and the dependence on the Rossby and Froude numbers is discussed. We describe the influence of a 3-D linear instability, the so-called hyperbolic instability, on the loss of predictability. We highlight differences between the linear and nonlinear regimes.