The 3D structure of topographically generated inertia-gravity waves

R. Sharman

NCAR, RAL, Boulder, United States (sharman@ucar.edu)

The 3D structure of topographically generated inertia-gravity waves (Queney waves) in a constant wind, constant stability Boussinesq fluid is investigated through linear analysis and numerical simulation. The 3D structure has properties similar to ship waves, but the specific wave pattern depends on the characteristics of the obstacle (aspect ratio) generating the disturbance, and the ratio of stability to rotation.