

## Diffusion problems in rotating stratified turbulence

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Stratification and rotation are the two most fundamental physical processes in geophysical flows, and the study of flows under these influences is a vital subject in geophysical fluid dynamics. In this paper, consideration is made on the effects of stratification and rotation from the view point of particle dispersion in the flows. The method employed is to simulate the Navier-Stokes equations with the terms of rotation and stratification under the Boussinesq approximation, and at the same time trajectories and statistics such as single particle dispersion of Lagrangian particles are calculated.