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عنوان مقاله:
Assessment of Kraichnan model in turbulent particle dispersion

محل انتشار:
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خلاصه مقاله:
Two-phase vertical channel flow, which moves upward, is simulated by Monte Carlo techniques, which generate fluctuation velocities of continuum phase. The dispersion of various types of particles in a gridgenerated turbulence of Snyder and Lumley's experiment were surveyed. In essence, the point of commencement of their experiment is for stationary and homogenous turbulence. A series of simulations for particle dispersion from a point source of the wind channel was committed. An ensemble of 10000 particle trajectories is generated for evaluating statistics. Effect of particle diameter and density on particle dispersion are studied and discussed. The simulation results are compared .with the available experimental data and good agreement is observed

کلمات کلیدی:
Monte Carlo techniques, Grid-generatedturbulence, Dispersion curve

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