



Numerical Simulation of Air-Sea Turbulent Flow of A Progressive Wave

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The turbulence flow in the coupled water and air of a progressive wave is simulated. The Reynolds Averaged Navier-Stokes equations are used to produce the turbulence velocity and pressure distributions in the water and air. The turbulence Reynolds stress is modelled by the turbulence RNG (Re-Normalization Group) model. The numerical simulation is compared with the laboratory wave.