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## Wind-Wave Interaction in A Turbulent Wind

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The Reynolds Averaged Navier-Stokes Equations are numerically solved for a turbulent air-water flow under a wind with speed of 5, 7.5, 10.0 and 12.5 m/s. A turbulent model is used to calculate turbulence viscosity. A comparison between the velocity distributions of experimental measurement and numerical simulation is made. The presentation will also show the micro-waves at the interface and the current under the interface generated by a strong wind. The detailed numerical results, such as turbulent velocity and pressure distributions in the air and water. The movies of interface will show the motion the interface.