

## **Numerical Simulation of Flow around an Embankment under Side Wind**

Koji NAKADE      Masahiro SUZUKI

This paper describes Large-Eddy Simulations of flow around an embankment within a turbulent boundary layer. The computational domain of the flow around the embankment needs an inflow boundary condition, which simulates the turbulent boundary layer. In order to realize the numerical simulation with the inflow turbulence, we performed two flow simulations simultaneously, one on the flow domain of the embankment and the other on the flow domain of the turbulent boundary layer, which is applicable to determine the inflow condition of the embankment. The numerical conditions were identical as the condition of the wind tunnel experiments exactly. We compared the simulation results with the results of the wind tunnel experiments, and consequently we achieved consistency. We have demonstrated and discussed the computed flow fields around the embankment.