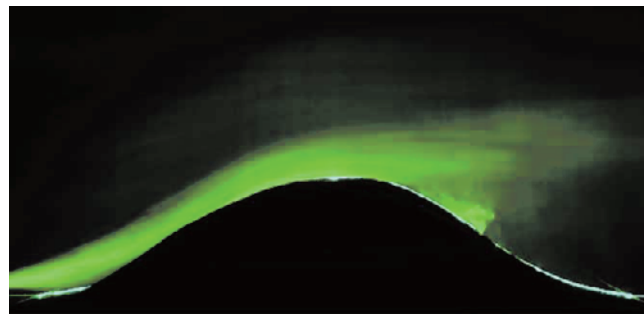


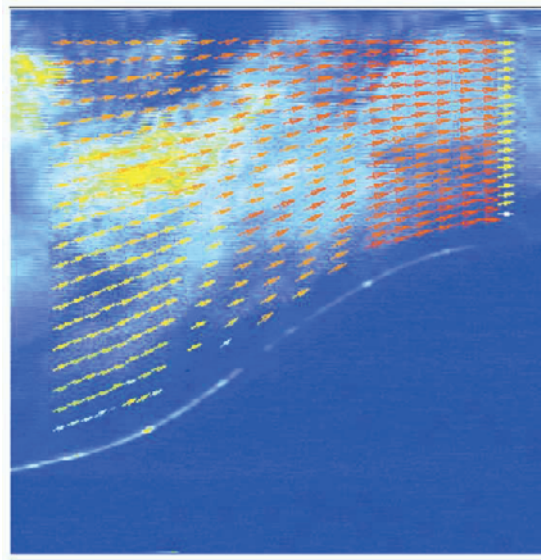
6. Flow Visualization of Local Wind over Complex Terrain

Nishihara, T.¹⁾, Eguchi, Y.¹⁾, Tanaka, N.¹⁾ and Hattori, Y.¹⁾

1) Hydraulics Department, Central Research Institute of Electric Power Industry, 1646 Abiko, Abiko-shi, Chiba 270-1194, JAPAN



Example of flow visualization around the topographical model



Variation of flow velocity around the topographical model estimated by PIV

Aiming to establish the advanced estimation method for a wind load of transmission towers, the fluid characteristics of atmospheric flows over the complex topography of terrain were experimentally investigated. Flow visualization experiments around the topographical models were conducted with a large-scale vertical water tunnel. Then, the velocity vectors were estimated by PIV (Particle Image Velocimetry) to comprehend the fluctuation characteristics of the velocity field in the boundary layer.