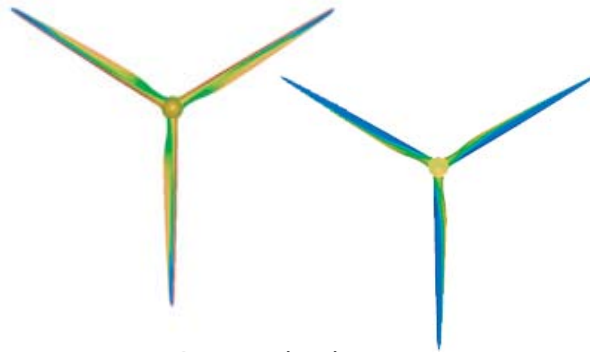


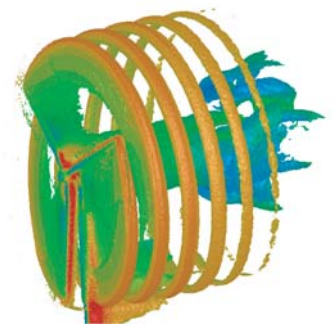
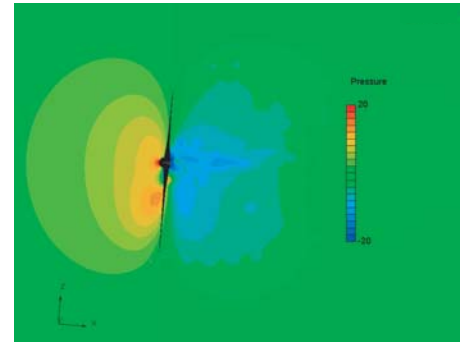
Renewable Energy and Simulation

Power Generation

SC/Tetra



Pressure distribution
(Left: Front & back view / Right: Side view)



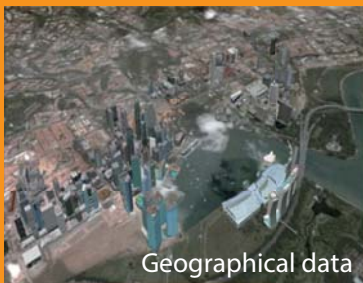
Isosurface of vorticity

Power generation

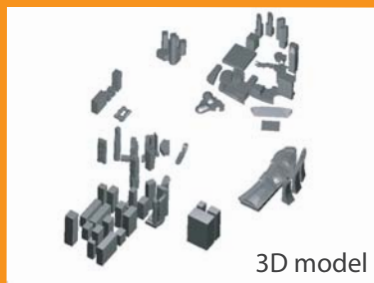
Renewable energy is attracting attention as next-generation energy sources, and wind power generation is one of them. CFD simulation can be used to predict wind environment around turbines, as well as pressure force and torque acting on turbine blades.

Wind Environment and Urban Planning

scSTREAM



Geographical data



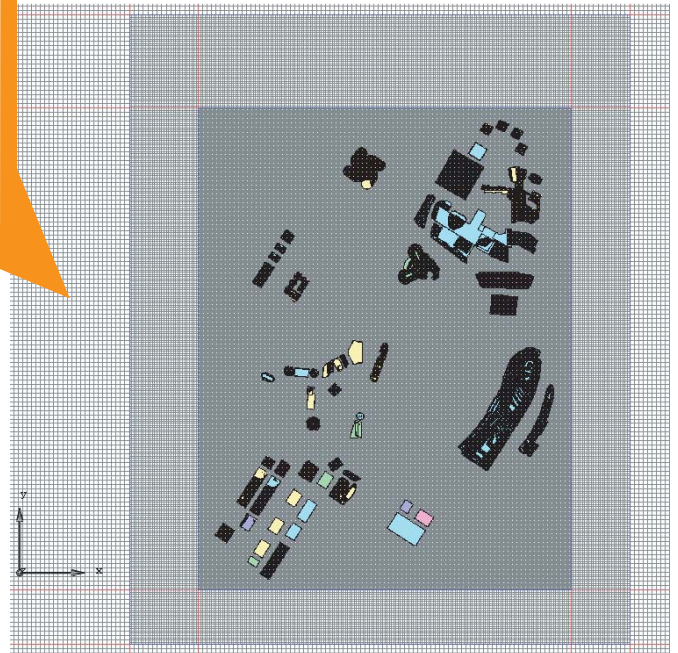
3D model



Velocity around buildings



Wind flow around buildings



Mesh of scSTREAM

Wind environment

Wind environment assessment is becoming highly important in urban planning and architectural design due to the increase in high-rise buildings in a congested area, making the wind flow very complicated. CFD simulation is very useful for predicting the wind effect and for taking measures against strong wind blowing through buildings. Even a wide area can be easily simulated using electronic geographical data.