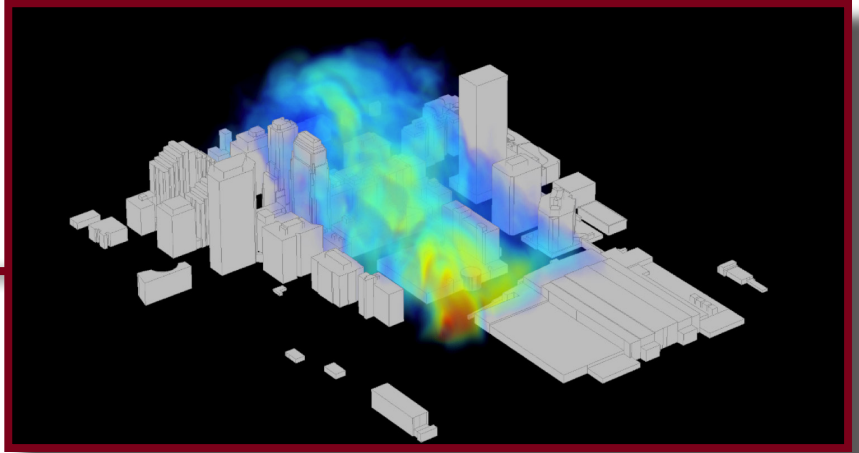


SAFL SEMINAR SERIES

WEDNESDAY, NOVEMBER 16, 2011, 3:30PM
ST. ANTHONY FALLS LABORATORY ~ AUDITORIUM

Mesoscale to microscale atmospheric simulations over complex terrain



Tina Katopodes-Chow
Associate Professor
Civil & Environmental Engineering
University of California, Berkeley

Abstract:

This presentation will describe challenges that arise when simulations of the atmospheric boundary layer are performed at higher and higher grid resolution. Improved parameterizations for turbulence allow representation of intermittent turbulence that occurs under moderate to strong stable stratification. Implications for boundary layer predictions important for wind energy applications are discussed. New techniques for representing complex topography such as steep mountains and buildings are also described, allowing mesoscale simulations to move from regional to urban scales.