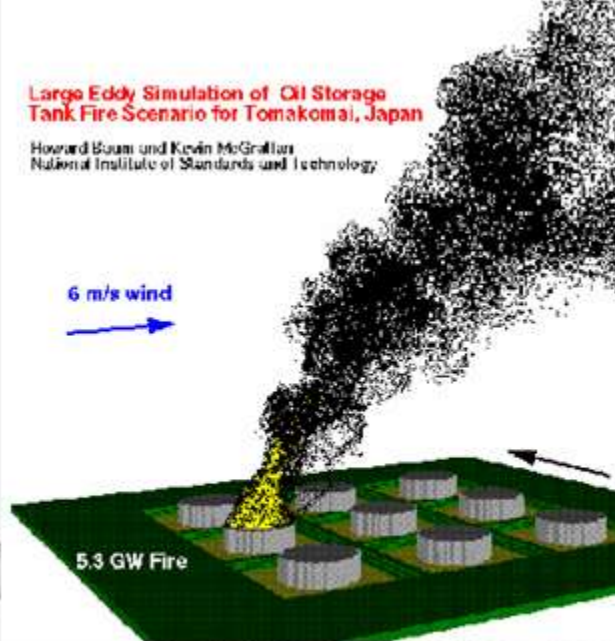




**Large Eddy Simulation of Oil Storage
Tank Fire Scenario for Tomakomai, Japan**

Howard Baum and Kevin McGrattan
National Institute of Standards and Technology



6 m/s wind

5.3 GW Fire

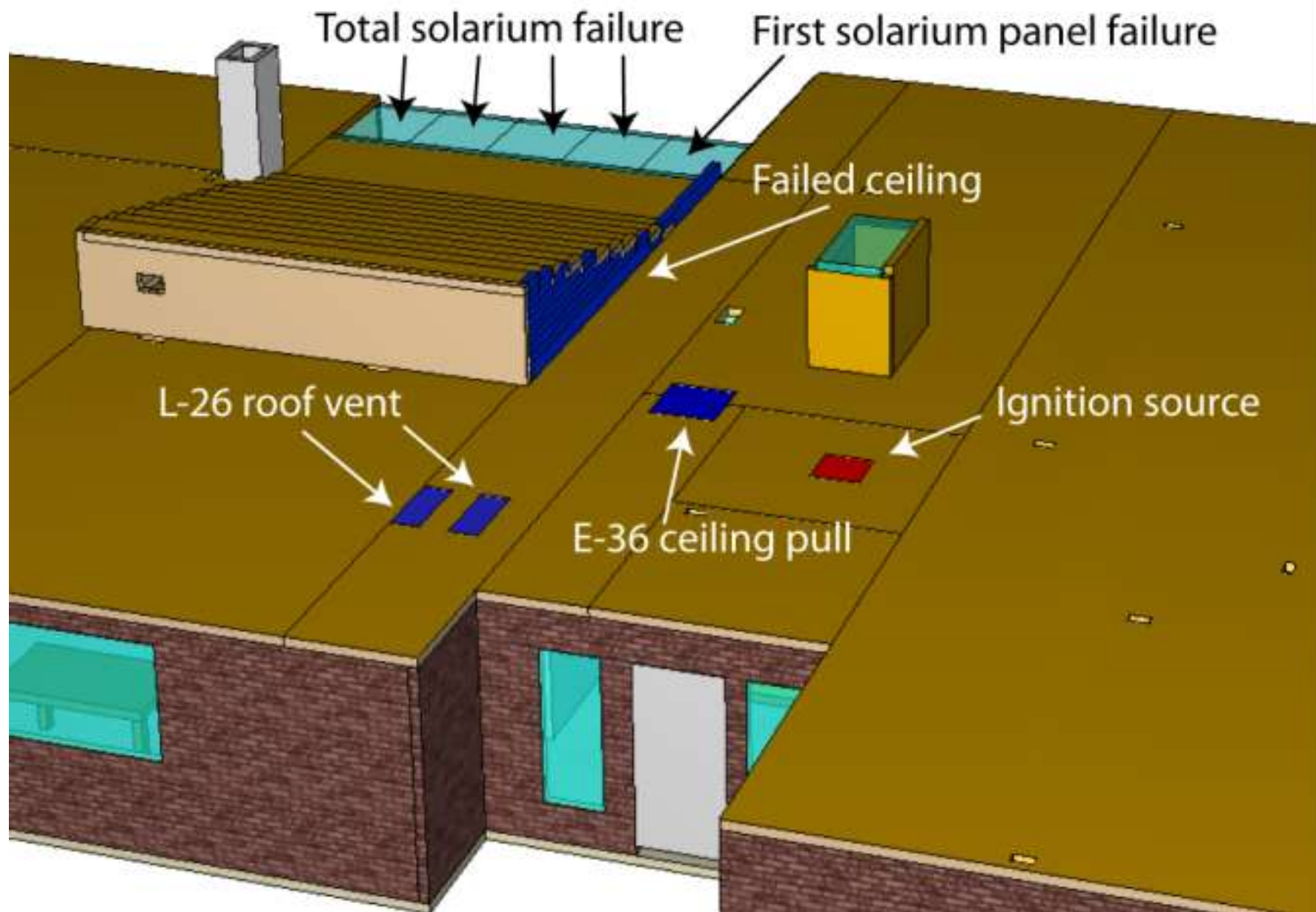


The Numerical Simulation of Fire

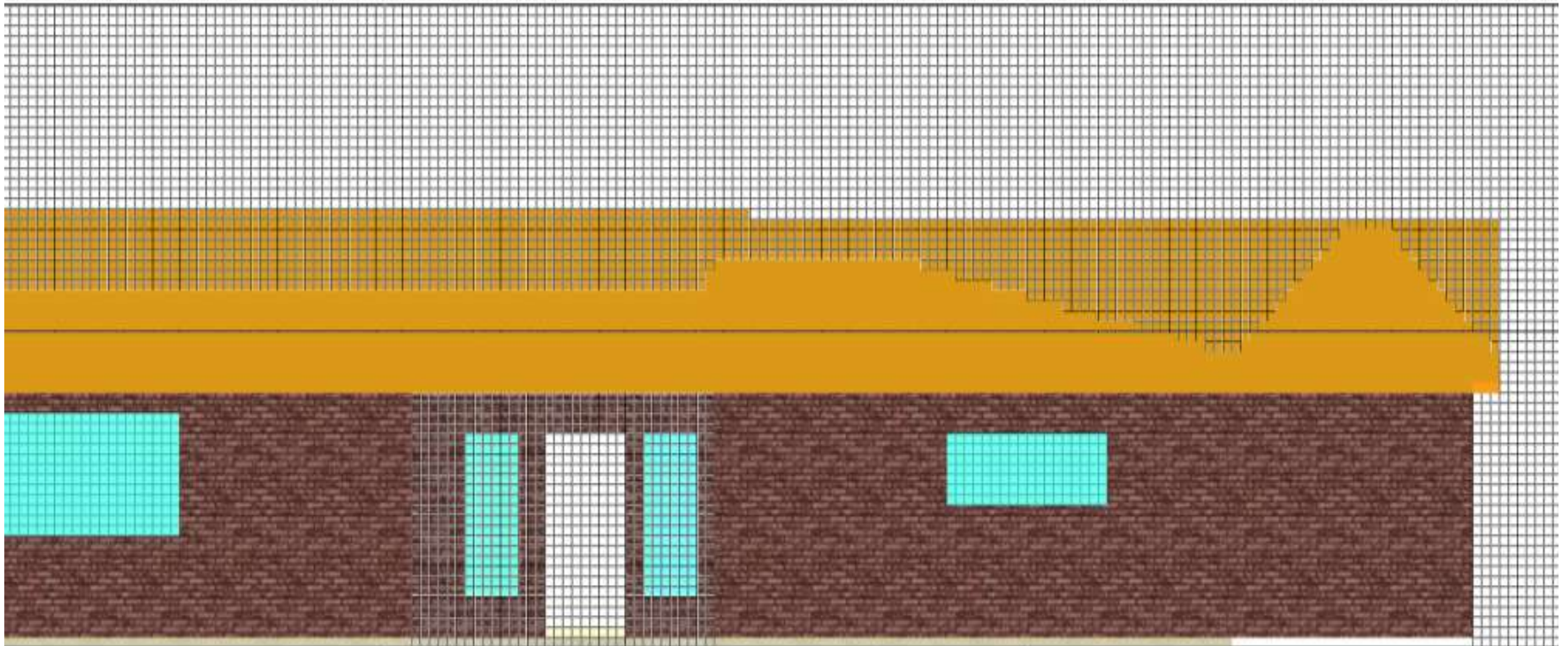
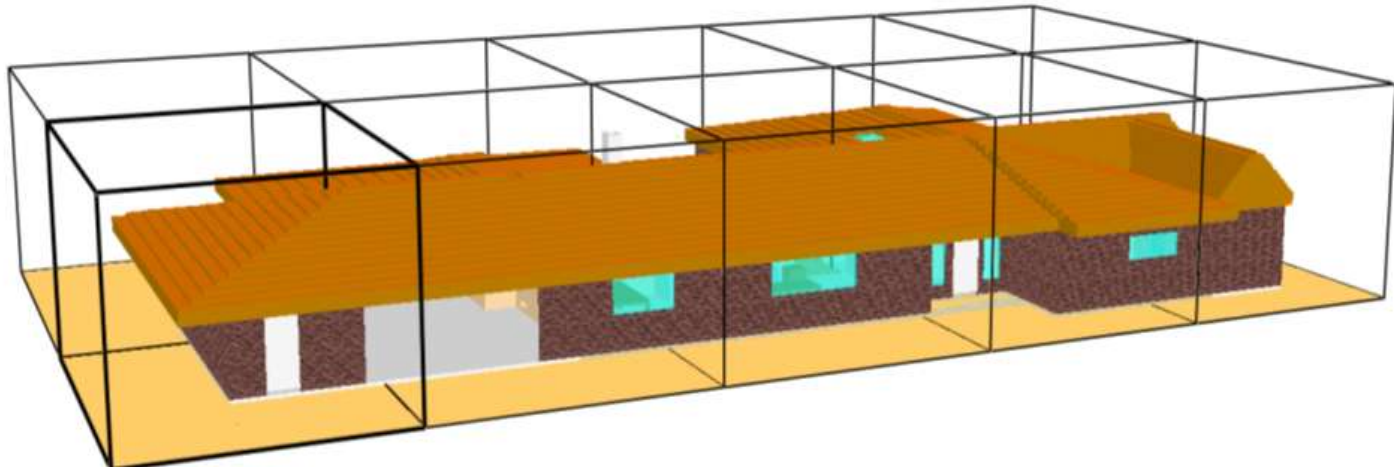
Analysis of a Fatal Wind-Driven Fire in a Single-Story House

Adam Barowy
Daniel Madrzykowski, PE

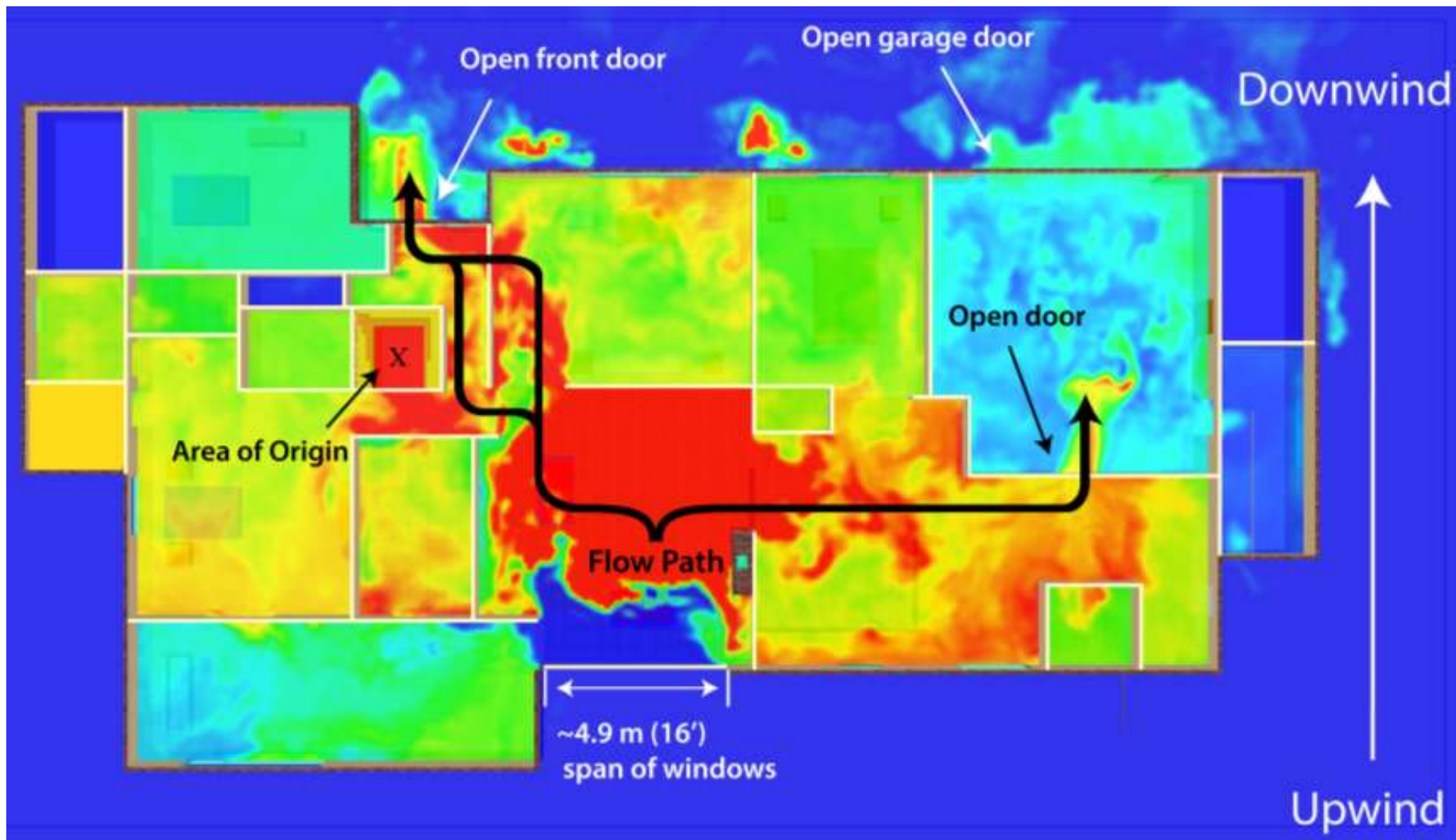




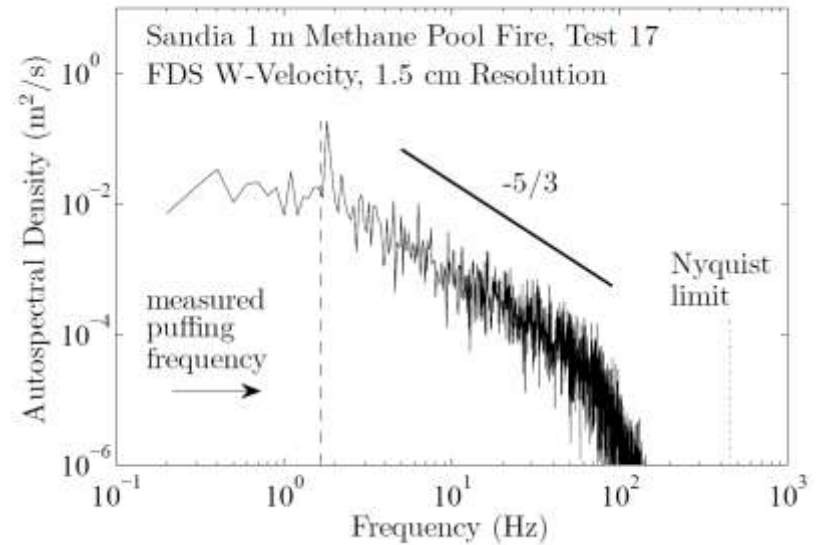
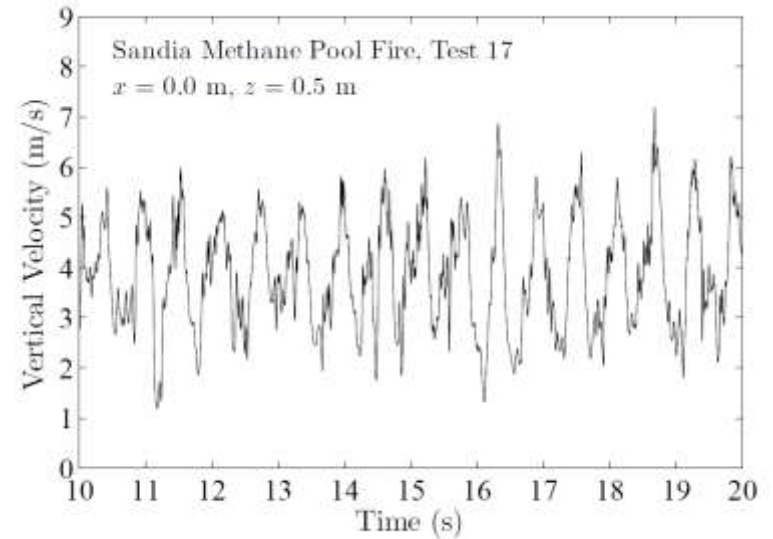
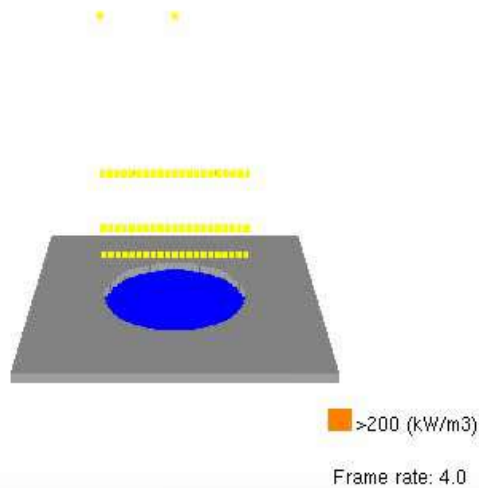
Fire Dynamics Simulator



Simulated Flow Path



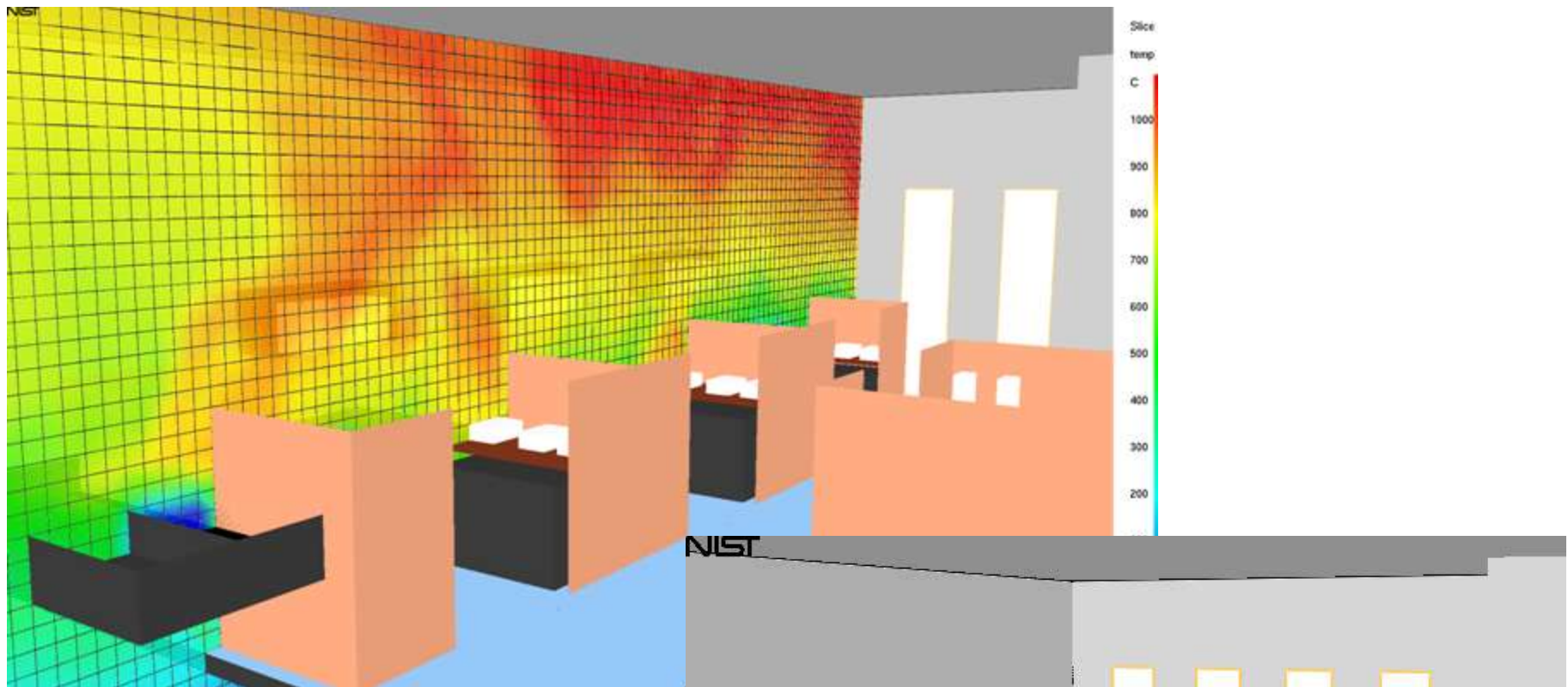
Measured Puffing Frequency = 1.65 Hz



S. R. Tieszen, T. J. O'Hern, R. W. Schefer, E. J. Weckman, and T. K. Blanchat, Experimental study of the flow field in and around a one meter diameter methane fire, Comb. Flame, 129:378-391, 2002.

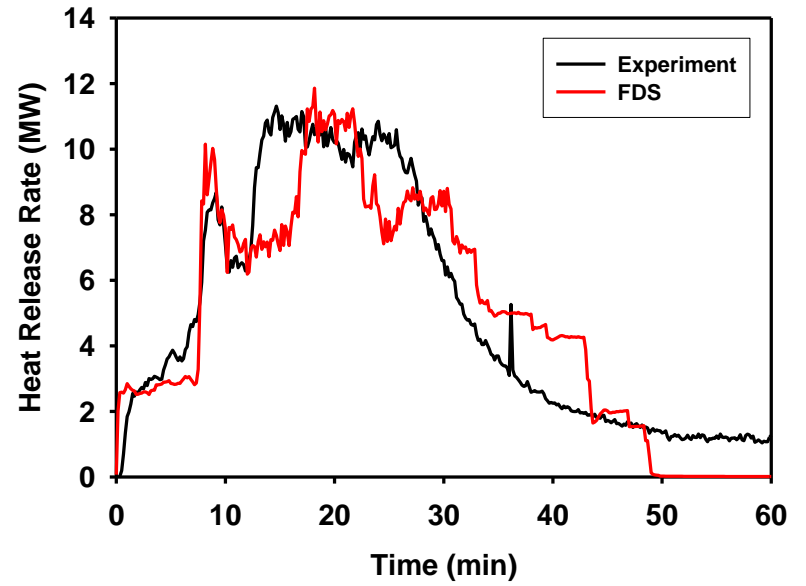


Photos courtesy of the Port Authority

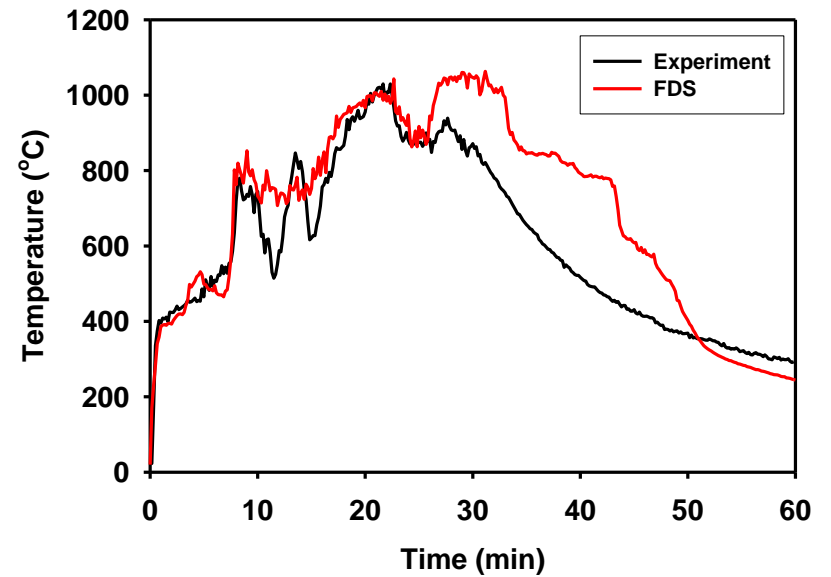




Heat Release Rate



Temperature



Video courtesy of Alex Maranghides,
Anthony Hamins, NIST