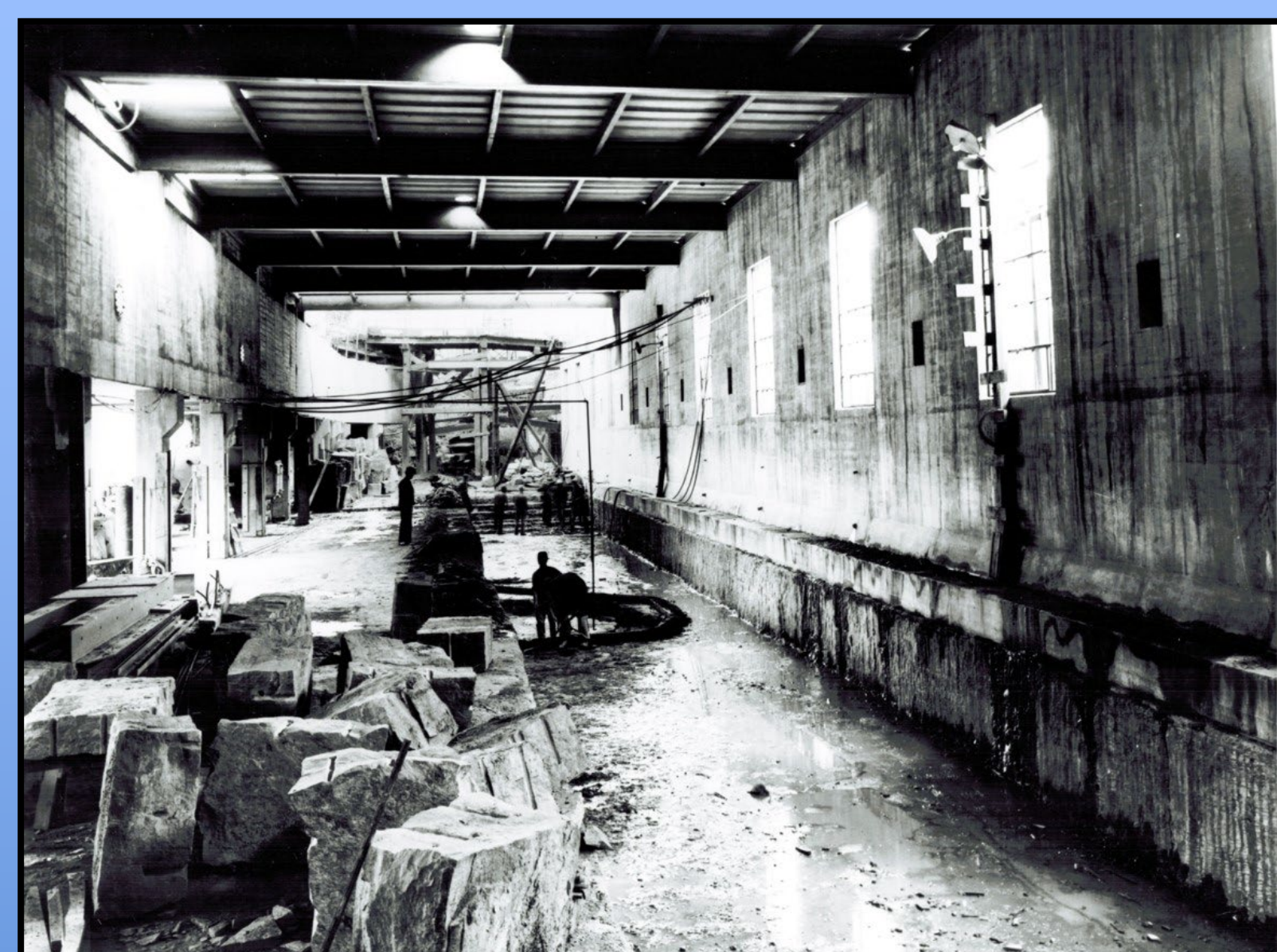


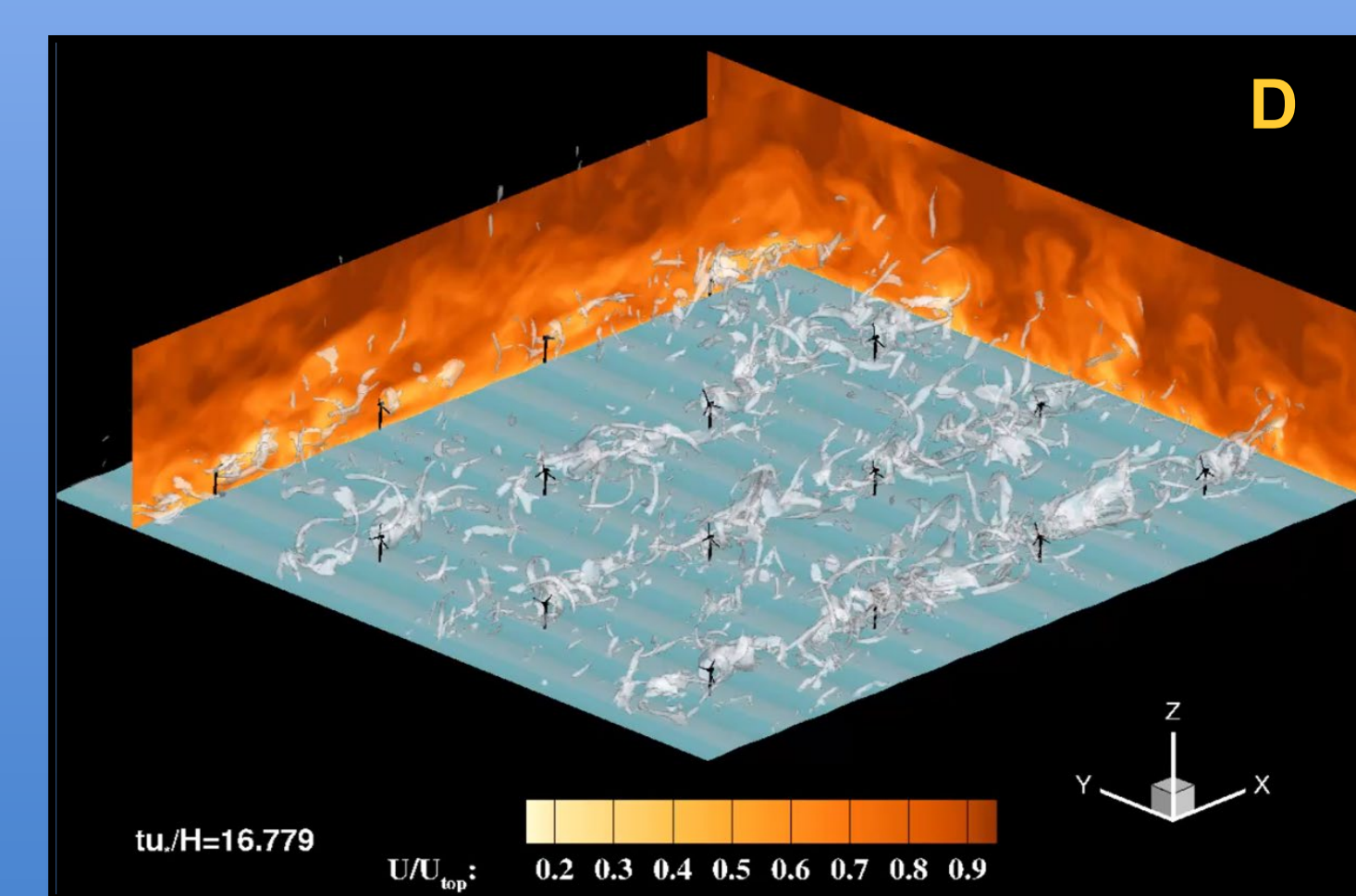
The St. Anthony Falls Laboratory, University of Minnesota: 86 years of hydraulic modeling and simulation research

Jeffrey Marr, Michele Guala, Lian Shen, Chris Feist, Matt Hernick
University of Minnesota, St. Anthony Falls Laboratory

Construction 1937-38

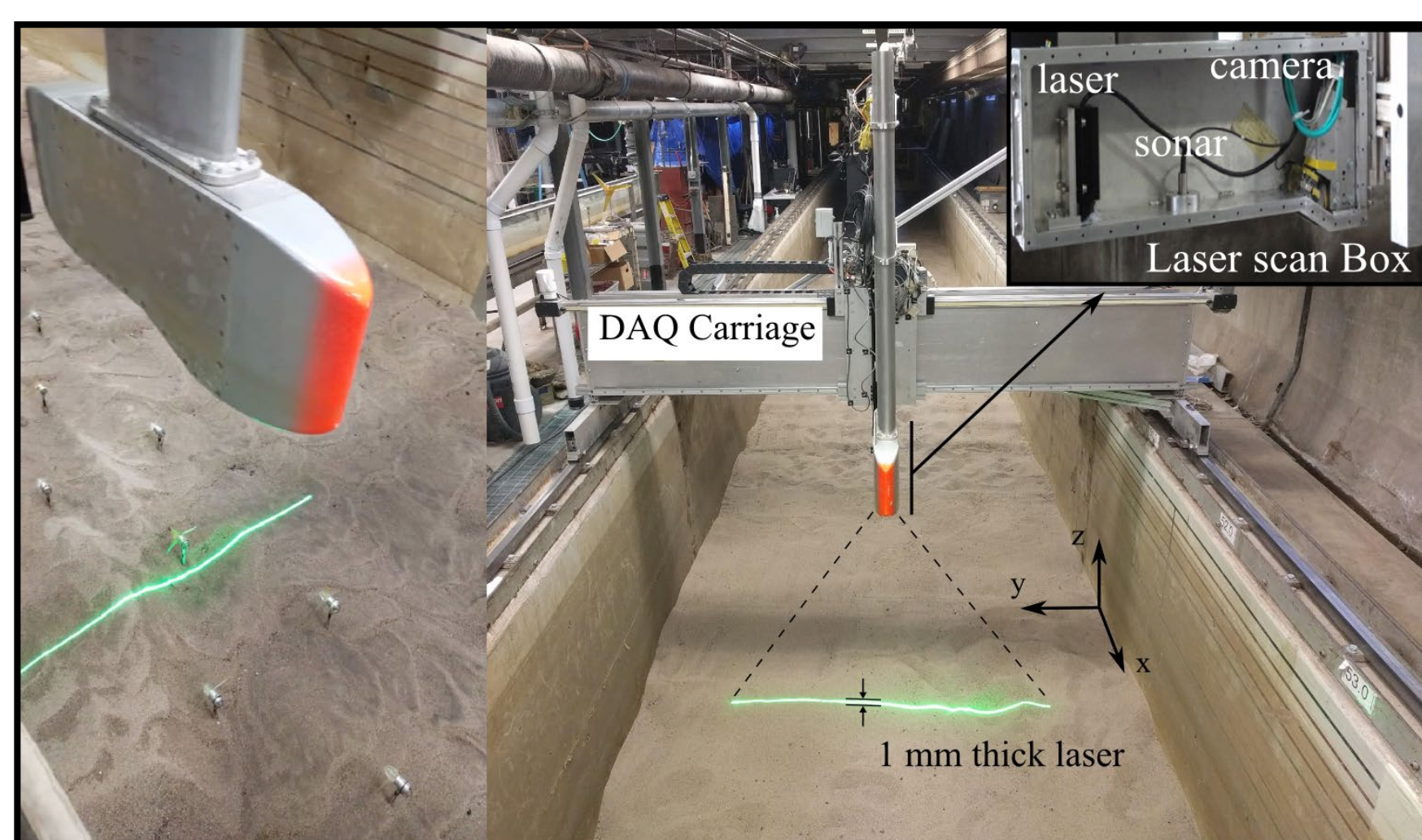
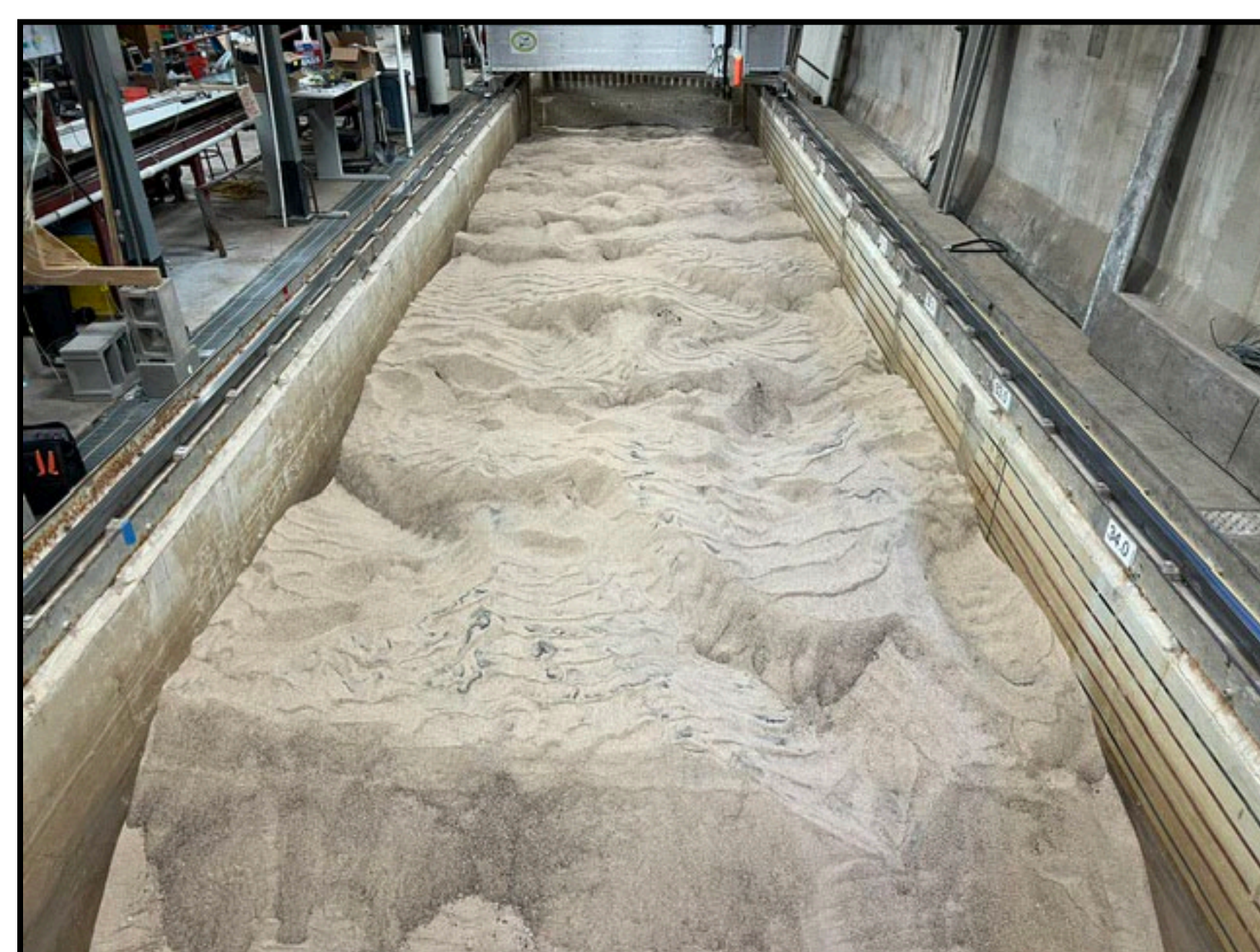
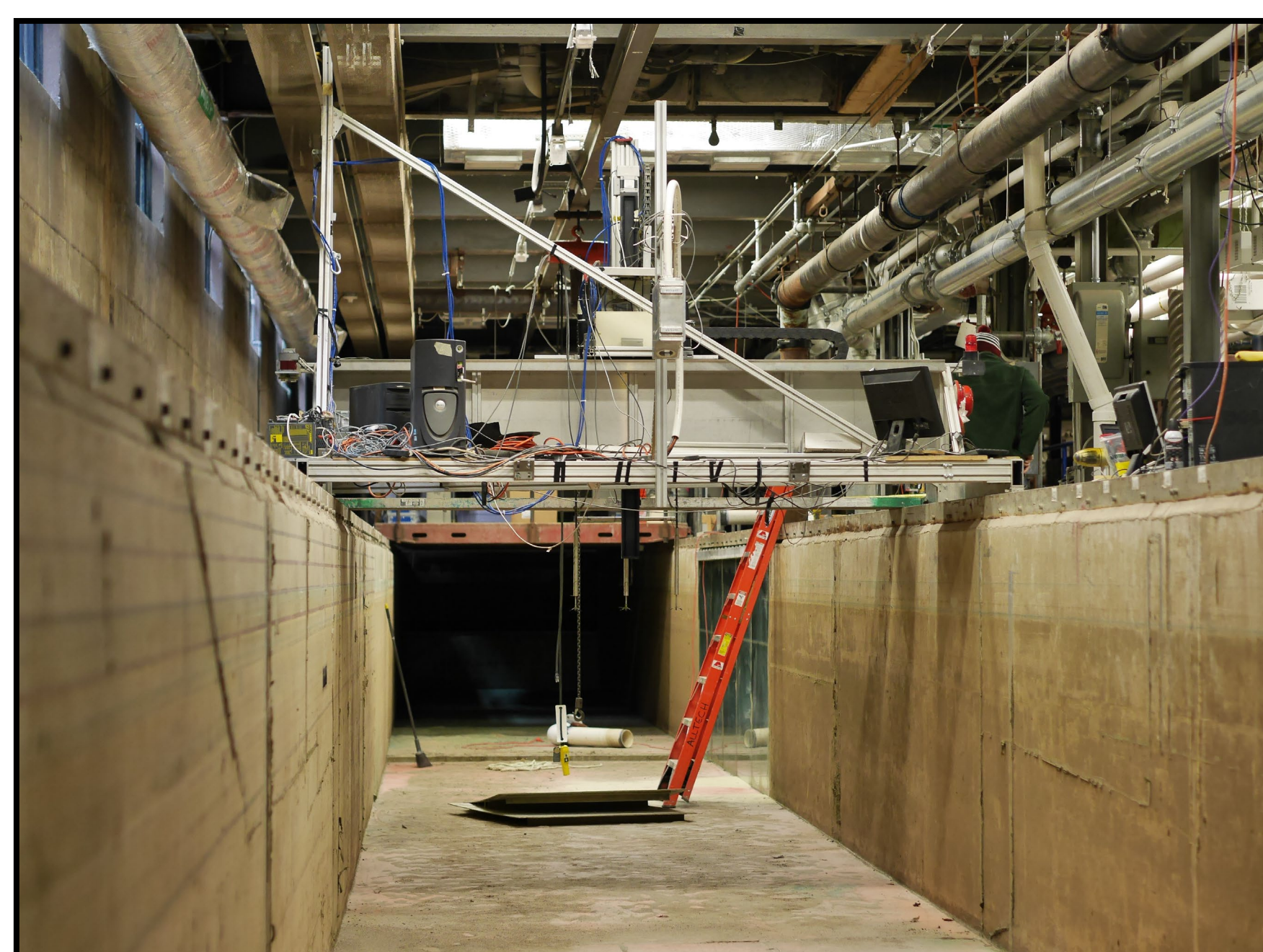


Modeling, Simulation, Research



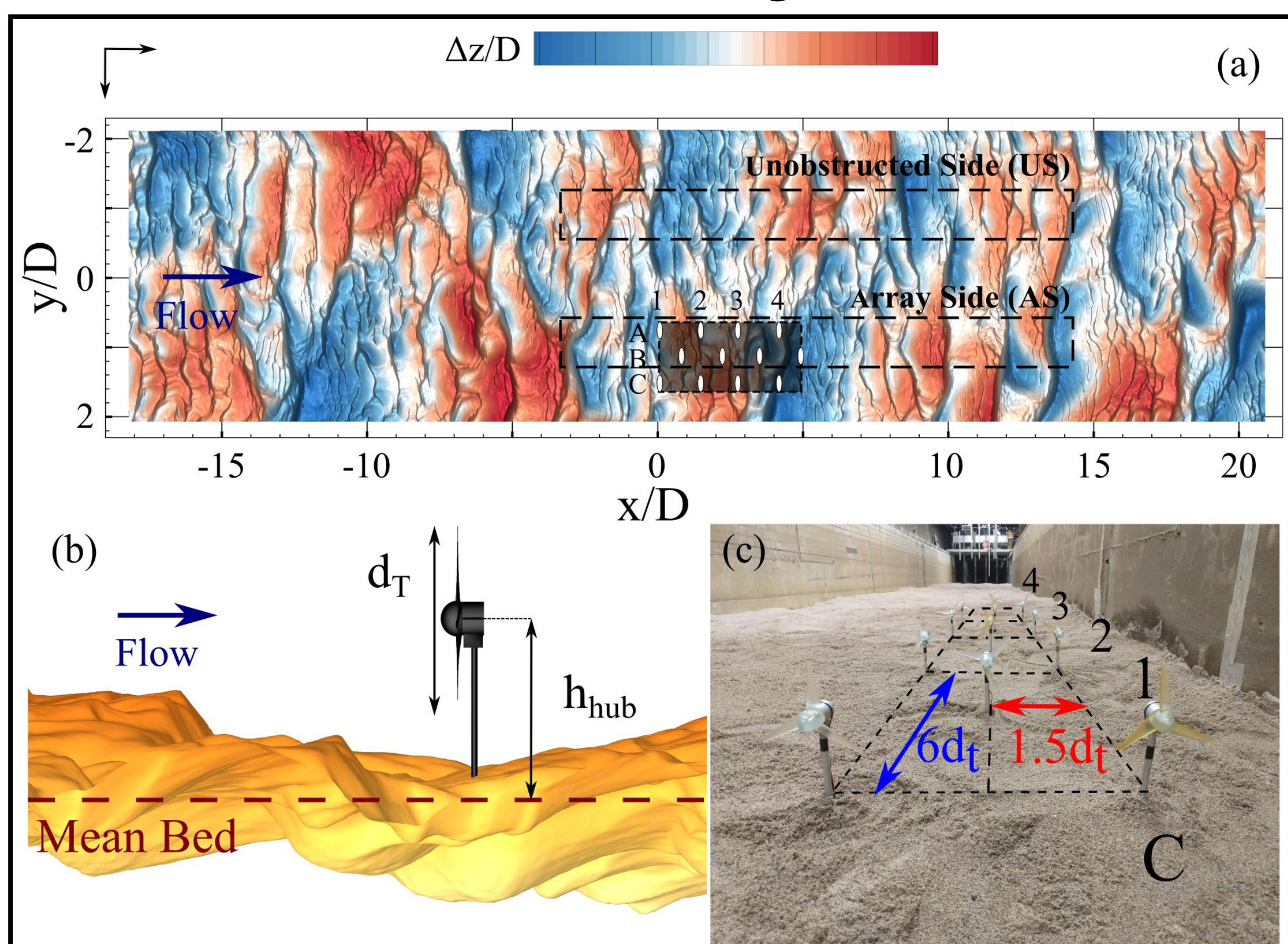
A) Early river model study of St. Anthony Falls; B) A view of UMN's 2.5 MW Wind Research Turbine; C) Cavitation image taken in SAFL's High Speed Water Tunnel; D) CFD simulation of floating wind farm with a wave environment.

Main Channel Facility



Musa, M., Hill, C., Sotiropoulos, F., and Guala, M. (2018). Performance and resilience of hydrokinetic turbine arrays under large migrating fluvial bedforms. Nature Energy, 3(10), 839. DOI.

Marine and Hydrokinetic Energy Research

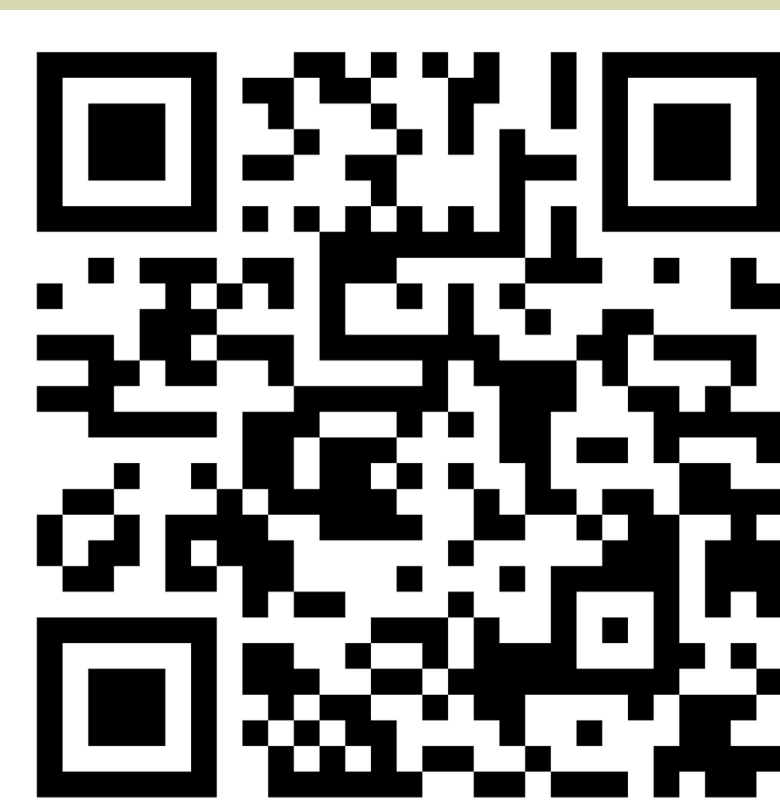


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Contact Us Today
SAFL@umn.edu

Jeff Marr (Associate Director of
Engineering and Facilities)

CFD & Offshore Floating Wind Energy Research

