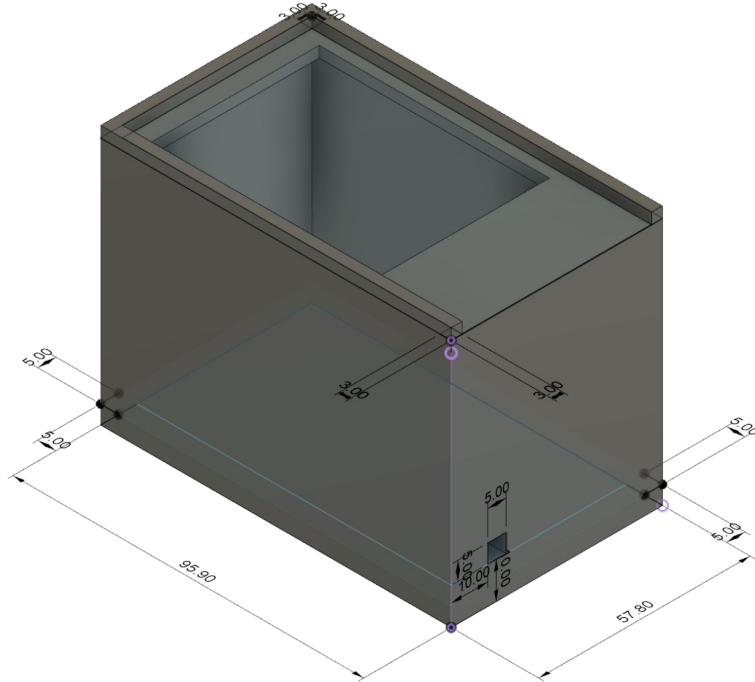


# Advancing Cool Roof Coatings for Urban Heat Resilience

August 28, 2023

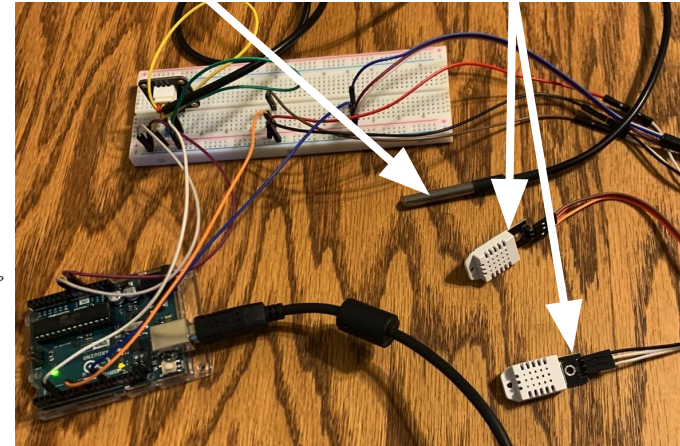
Colby Snyder, Dr. Russell Composto, and Dr. Kristin Field

# Simulating the Home Environment



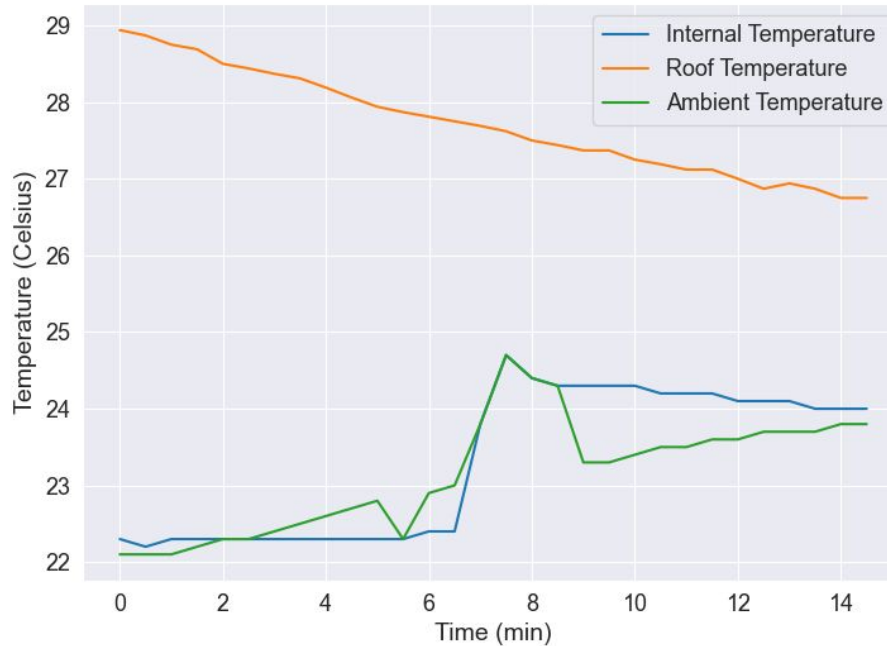
Temperature

Temperature  
& Humidity

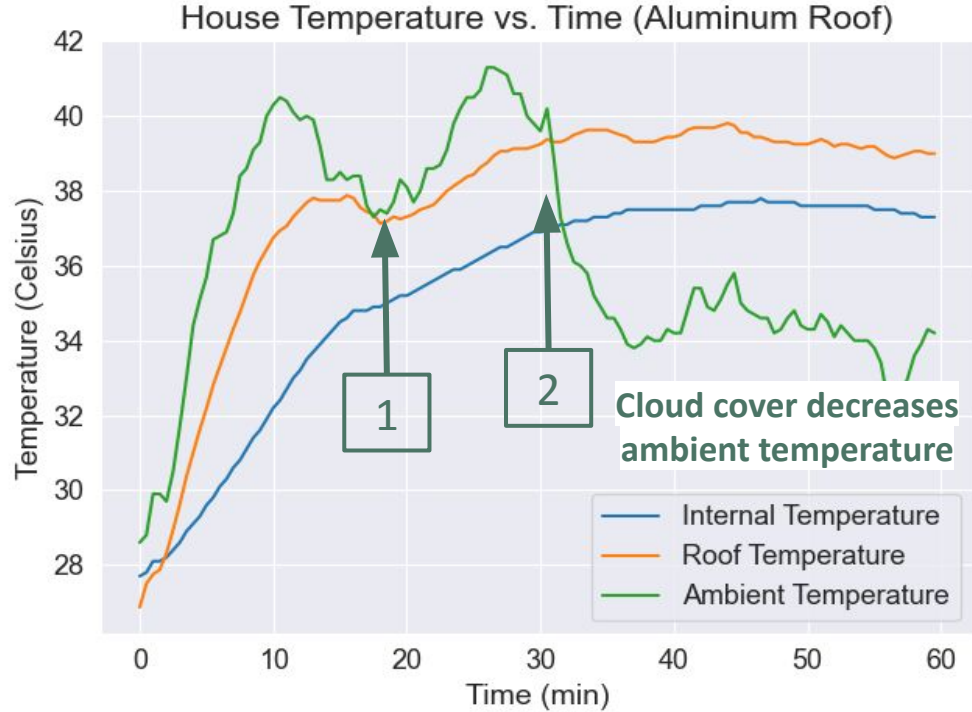
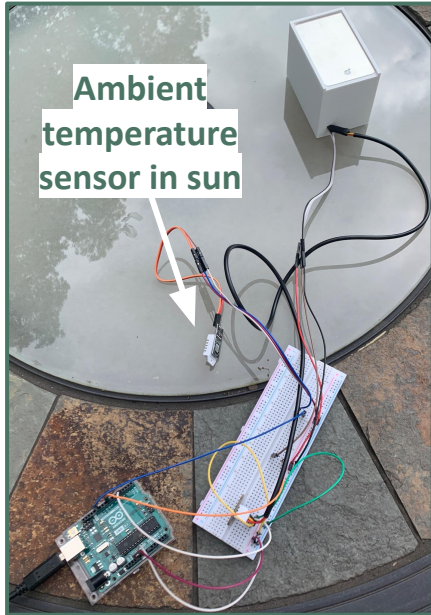


# Data collection can be automated with Arduino

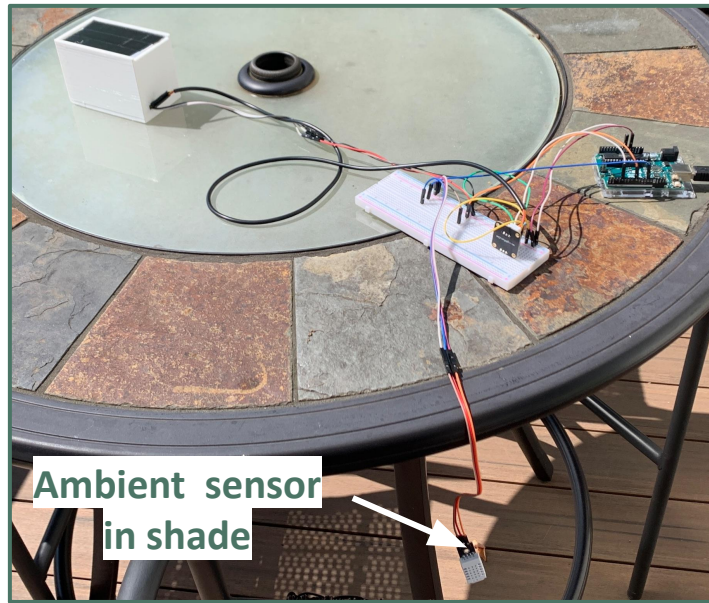
## Sensor Setup Test



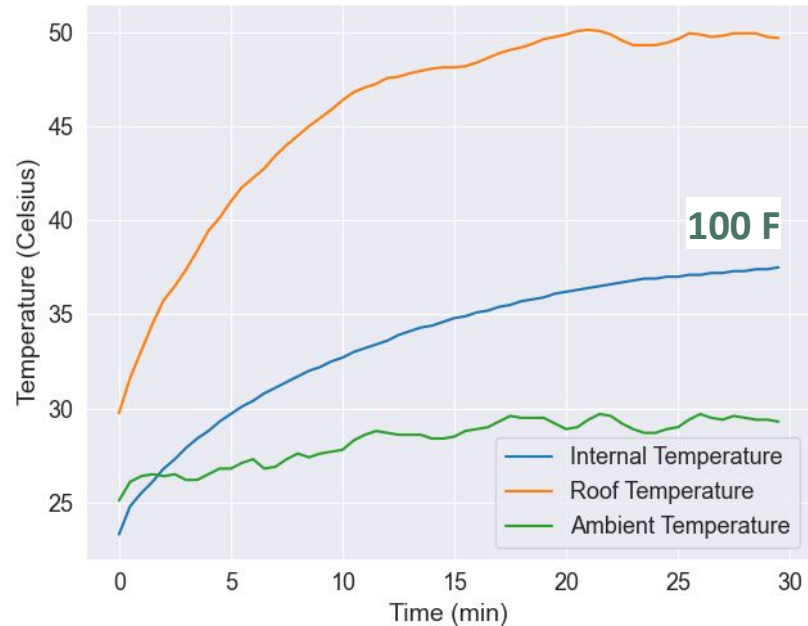
# First outdoor test shows experimental challenges



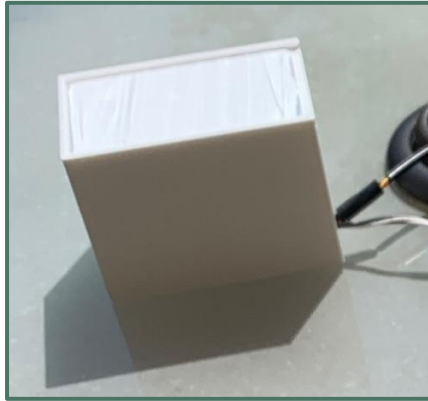
# Black roof reaches 20°C above ambient temperature



Black Roof (PVC)



# Simple white roof shows 50% reduction in temperature difference



White Roof (PTFE)

