

Measurements of Vertical Ambient Temperature by Unmanned Aerosol System

Ryan Thalman

Snow College

Unmanned Aerial Systems (UAS, drones) represent a small mobile platform that can move air quality and meteorology sensors through the lower boundary layer where larger platforms often don't report data. We present an inexpensive off the shelf Arduino powered temperature, humidity, and pressure measurement on a commercial drone. Suggestions for flight planning, air space limitations, and considerations for applications looking at vertical gradients in the lower boundary layer.