

Abstract Submitted
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Student Instrumentation in Atmospheric Profiling¹ MEGAN PINA,
University of Houston — This project was twofold to test the feasibility of student made hardware and to teach students more about atmospheric instrumentation by providing students with education and materials, instructing them in design and building of hardware, and testing the hardware against commercial models in terms of weight, cost, and features. The Gaseous Compounds team of the University of Houston Undergraduate Student Instrument Project (USIP) selected the parts and the students of the team assembled the payload. The payload launched on a latex balloon in Fairbanks, Alaska. The instrument gathered data on the concentration of certain gases in the atmosphere as well as a meteorological profile of the atmosphere. The instrument collected data on carbon monoxide, nitric oxide, nitrogen dioxide, and ozone, as well as temperature, humidity, and barometric pressure. The data was stored on an SD card. Further modification is currently being done to the instrument to allow it to transmit the data to a ground team.

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