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**High Altitude Ballooning: A Physics Experience For Undergraduate Students** TIMOTHY STILES, CORBIN PETERSON, GAGE DECOOK, PATRICK CRAWFORD, ANDREW SELEP, Monmouth College — High altitude ballooning is a popular scientific activity for colleges and high schools. In this three week summer project, four undergraduate students designed and constructed a helium balloon that lofted a 3.0 kg payload to 26500 m. An Arduino Mega acted as flight computer, recording GPS position, temperature, atmospheric pressure and relative humidity during the three hour flight. The payload also carried a digital camera and GPS receiver/satellite phone to transmit locations. The payload was successfully recovered and the data analyzed by the students. This project was an ideal activity for students to learn about measurement and analysis of data and an introduction to atmospheric physics.

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