

A³IR Conference Paper Abstract

Campus-based Training in Airborne Atmospheric Research

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Embry-Riddle Aeronautical University (ERAU) campus in Prescott, Arizona will conduct an aircraft measurement program during Spring Semester 2014 to introduce students in meteorology, aeronautical sciences and other departments to airborne scientific research technology and research flight logistics. The ERAU Department of Meteorology has support from the National Science Foundation (NSF) Division of Atmospheric and Geospace Sciences for an educational deployment of the University of Wyoming King Air (UWKA). The UWKA is an instrumented research aircraft providing atmospheric measurements and data relevant to study of aviation safety factors such as turbulence and airframe icing. Students will be involved in flight missions, instrument system training, flight forecast simulations and follow-up data analysis. Project activities will blend flight coordination, atmospheric measurement technology, airborne monitoring strategy, instrument design, aeronautical engineering, aviation safety and global security applications. Faculty and students will serve onboard during the flights to monitor data collection in flight, and will conduct weather balloon launches on campus to provide atmospheric profile observations.