

The Polar Meteorology Group hosted Saptarshi Chaudhuri, a senior at Columbus Alternative High School, for an internship during summer 2008 and portions of the following school year. Saptarshi learned of the Byrd Polar Research Center and the Polar Meteorology Group from a field trip to the Byrd Center in middle school, and was intrigued by the work done there. The goal of his internship was to study the Ross Ice Shelf Air Stream (RAS), an important and prominent meteorological feature of Antarctica, using infrared satellite imagery. Saptarshi prepared and analyzed satellite imagery and output from the Antarctic Mesoscale Prediction System (AMPS), a real-time weather forecast model developed in part by the Polar Meteorology Group for use in Antarctic operations and research, to study the physical processes involved in the evolution of several RAS events. Originally, it was thought that warm signatures in infrared satellite imagery corresponded to surface features. However, this study shows that the warm signatures can result from low-level clouds instead. Also, deficiencies in the simulation of low-level meteorological conditions in AMPS were identified and discussed. Saptarshi is co-author on a paper resulting from this work, which is in press with *Monthly Weather Review* and due to be published in late 2009. Saptarshi acquired skills in computer programming, meteorology and climate, and research methods through this project. This helped him gain acceptance to Caltech, where he begins undergraduate studies in Fall 2009.

Internships are available for qualified high school students with an interest in meteorology and a strong background in science and mathematics. Please contact Dr. David Bromwich (bromwich@polarmet1.mps.ohio-state.edu) with inquiries.