



# Southern Great Plains Newsletter

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## SGP HOSTS INSTRUMENT TEAM MEETING

The SGP central facility hosted the biennial ARM Climate Research Facility (ACRF) Instrument Team Meeting on August 2-4, 2005. Almost 50 instrument mentors, site scientists, and operations, data operations, and safety personnel represented the ACRF permanent sites (SGP, North Slope of Alaska, and Tropical Western Pacific) and the ARM Mobile Facility. The meeting was organized and chaired by Jim Liljegren, the ACRF Instrument Mentor Team Manager.

The goal of the three-day meeting was information exchange and interaction between instrument mentors and site operations personnel at each ACRF site. In both classroom and hands-on sessions with the instruments, attendees participated in discussions and demonstrations of instrument operation and maintenance, changes, plans, and problems. The meetings benefited both new and experienced mentors, as well as site operations personnel.



Figure 1. Instrument mentor Peter Kiedron (SUNY-Albany) (left) and Technician Mike Rainwater (SGP) calibrate the Rotating Shadowband Radiometer (ARM photo).

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Technical Contact: Brad W. Orr  
Phone: 630-252-8665  
Email: [brad.orr@anl.gov](mailto:brad.orr@anl.gov)  
Editor: Donna J. Holdridge  
Website: <http://www.arm.gov>

An instrument mentor is responsible for developing the technical specifications for an instrument system. Once the system is operational, the mentor reviews the instrument's performance and inspects data for signs of developing operational problems. Mentors provide guidance on instrument modifications, upgrades, and spare and replacement parts, all of which are important to ACRF budgeting.

Site operations personnel are responsible for the daily operations of the ACRF sites. Most importantly, they maintain the physical functions of the instruments installed at each site. For example, field technicians at the SGP site routinely travel throughout the 55,000-square-mile area, visiting all 31 remote facilities and each of the 200 instruments every two weeks.

Instrument mentors and site operations personnel must work together effectively to optimize the quality of data from instruments in the field. Accurate, uninterrupted data are essential to accomplishing ARM science goals.

## **ARM PROGRAM ANNOUNCES NEW CHIEF SCIENTIST**

On August 4, 2005, ARM Program Manager Dr. Wanda Ferrell announced the selection of Dr. Warren Wiscombe as ARM's new chief scientist. Dr. Wiscombe will begin his tenure on October 1, 2005, replacing the outgoing Dr. Tom Ackerman.

Dr. Wiscombe joined NASA Goddard Space Flight Center in 1984. He received his PhD in applied mathematics from the California Institute of Technology. His research interests include remote sensing and radiative transfer of clouds, single-scattering theory, and the development of new satellite system concepts. As an ARM research

collaborator since 1990, Dr. Wiscombe has received funding for four ARM science proposals. His most recent ARM project was "Studies of 3D-Cloud Depth from Small to Very Large Values, and of the Radiation and Remote Sensing Impacts of Larger-Drop Clustering."

Dr. Wiscombe was one of the ARM Program's founding members. He helped to write the first ARM *Science Plan* and is credited with contributing to ARM's creation after he and Dr. Robert Ellingson initiated a small field campaign known as SPECTRE.

The ARM Program is an unmatched source of research data generated through the work of nine U.S. Department of Energy laboratories, a number of private laboratories, more than 30 universities, and 18 international collaborations. The SGP site is an instrumental part of the program, serving as an outdoor laboratory that continuously gathers data for ARM science needs. The SGP site also supports specific field campaigns for collecting focused data sets, and it can host guest scientists and their instruments.



Figure 2. Dr. Warren Wiscombe is the new chief scientist for the ARM Program (ARM photo).