

Leave No Content Behind “A case study in reality”

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Information Officer (PNNL)

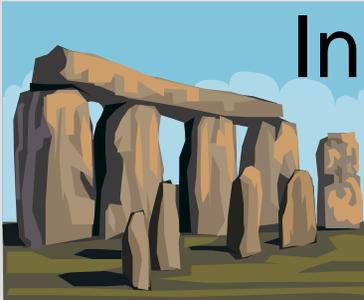
Rolanda Jundt, ARM/ACRF Website
Communications Manager (PNNL)

Fear Factor

Sharing Isn't Easy

- ▶ Atmospheric Radiation Measurement (ARM) Climate Research Facility
 - + Highly technical, complex program
 - + Huge website (>7 databases, >50,000 static pages)
 - + No content management database
 - + Part-time public relations activities
 - + No team meetings
- ▶ EQUALS: Content silos

Fear Factor



In the Old Days...

- ▶ Irregular, sporadic content
- ▶ Valuable content not shared
- ▶ Nothing was saved

Super Nanny



Learning to Share

- ▶ Hold regular team meetings
- ▶ Have a presence on infrastructure conference calls
- ▶ Read meeting minutes
- ▶ Introduce yourself
- ▶ Develop a process

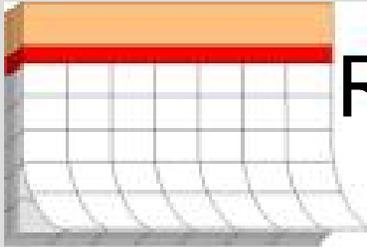
The Apprentice



Dedicated Writer

- ▶ Proven ability
 - Experience with technical content and working with multiple organizations
- ▶ Integral part of program team
- ▶ Familiar with subject matter
 - Improves over time
- ▶ Proactively shares information

Overhaulin'



Regular Updates

▶ Research Highlights (science)

Research Highlights

Members of ARM's science team are major contributors to radiation and cloud research. ARM investigators publish about 150 refereed journal articles per year, and ARM data are used in many studies published by other scientific organizations. These documented research efforts represent tangible evidence of ARM's contribution to advances in almost all areas of atmospheric radiation and cloud research. Below is a selection of summaries highlighting recently-published ARM research. The entire collection of ARM Research Highlights can be accessed using the sorting buttons at right.

To send in a research highlight, please use the [submittal form](#).

Recent Research Highlights				
Principal Investigator	Affiliation	Research Area	Title	Thumbnail (if available)
Cole, J.N.	Meteorological Service of Canada	General Circulation and Single Column Models/Parameterizations	Small Processes Make A Big Difference in Model Outcomes	
Turner, D.D.	Pacific Northwest National Laboratory (PNNL)	Radiation Measurements	Correction Method for Infrared Detector Confirmed, Error in Clear Sky Bias Condition Remains Unresolved	
Sheridan, P.	NOAA	Aerosol Characterizations	Aerosol Experiment Results Featured in Technical Journal	
Long, C.N.	Pacific Northwest National Laboratory (PNNL)	Radiation Measurements	Earth Lightens Up	

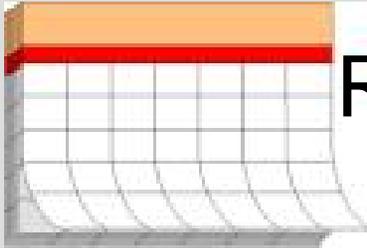
Sort Highlights

- [Principal Investigator](#)
- [Title](#)
- [Research Area](#)
- [Affiliation](#)
- [Publication Date](#)
- [Submission Date](#)

DOE Research Progress Reports

- [Biological and Environmental Research Abstracts Database](#)

Overhauled



Regular Updates

Operations Updates (infrastructure)

- Twice a month
- At least one article each time

Operations Updates

ARM Climate Research Facility Operations Update - October 15, 2005

This biweekly report provides a brief summary of significant accomplishments and activities in the operations area of the ARM Climate Research Facility (ACRF).

Room to Share—New Guest Facility Ready for Users at North Slope of Alaska

To alleviate crowded conditions at its research facilities on the North Slope of Alaska (NSA) site in Barrow, ACRF operations staff recently completed the installation of a new Guest Instrument Facility. Similar to the platform at the [Atkasuk site](#), the facility consists of two insulated shipping containers mounted on pilings, with a mezzanine to accommodate additional user instruments. This accomplishment reflects nearly a year's worth of planning and coordination to build the new facility on the sensitive Arctic tundra—not an easy feat!

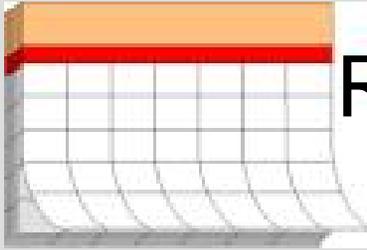
An application to modify the already-approved North Slope Bureau Development Permit had to be submitted and approved to allow the work to proceed during the melt (summer) season. Because construction would take place when movement of heavy equipment across the tundra is normally prohibited, a temporary road had to be built using heavy-duty polyethylene mats. These mats, borrowed from the [City of Barrow](#), provided a stable surface strong enough to support a loader and a crane while protecting the fragile, water-logged tundra. Approval for the work was also sought from the [Bureau of Land Management \(BLM\)](#) because ACRF's Barrow facilities are located on their land. BLM considered the "mat road" approach an experiment—which was deemed a success!

Logistics for transporting the instrument shelter containers and materials to Barrow also had to be arranged. The containers were trucked from the ACRF [Southern Great Plains site](#) to Seattle, via Albuquerque, where they were loaded on a barge in June for delivery to Barrow in early August. The shipment also included steel for the supports. Installation of the new mezzanine structure was completed on schedule in mid-September. Power availability to the shelters and mezzanine is expected in time to support facility operations this winter.

Updates Archive

- [2005](#)
- [2004](#)

Overhaulin'



Regular Updates

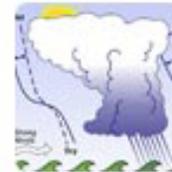
► Homepage Thumbnails

- Rotate based on new information
- Keep homepage “fresh”



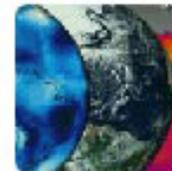
News

ARM Principal Investigator receives prestigious [AMS award](#)



Results

"[Humidistat](#)"—a self-regulating climate feedback mechanism



Event

Interagency Working Group on Earth Observations hosts [workshop](#) May 9-10



2005 Meeting

15th Annual ARM Science Team Meeting [photos](#) now available

Big Brother



Leave Nothing Behind

- ▶ Archives
 - Quarterly and yearly
- ▶ Google collections
 - Speedy searches of specific web pages
 - News (Web Watch, Operations Updates, News)
 - Education
 - Research Highlights
- ▶ KEY: Supports development of consistent communication products!

Extreme Makeover

- ▶ Improving Content Reuse
- ▶ Sharing environment equals
 - Collaboration
 - Less re-writing and duplication
 - Cost savings
 - More products
 - Consistent products
 - Consistent message
 - Increased accuracy



The Real World

- ▶ Now we know where it is—the website
- ▶ So reuse it!
- ▶ Field Campaign Example:
 - ↓ Scientist submits a preliminary proposal online
 - ↓ If accepted, writes a full proposal and a science plan
 - ↓ Media advisories may be written
 - ↓ News or Operation Update published to website
 - ↓ Results published to website
 - ↓ Photos collected from campaign for public relations
 - ↓ Text and images included in posters, annual reports

Example 1: Posters

Public Information

- Field Campaign Preproposals
- Science Plans
- Operations Updates
- Image Library



Vertical poster displayed in kiosk outside main visitor center (2x3)

Climate Research at Point Reyes National Seashore

Between March and September 2005, marine stratus clouds and coastal drizzle are the subject of a climate research project at Point Reyes National Seashore. Marine stratus clouds are some of the most prevalent clouds on earth. They exert a large-scale cooling effect on the ocean surface, representing an important component of the earth's total energy budget. In addition, marine stratus clouds are known to be susceptible to the byproducts of fossil fuel consumption. Despite their known importance to the earth-ocean-atmosphere system, relatively few detailed and comprehensive data sets of marine stratus clouds are available.




Point Reyes was chosen due to its marine environment, as well as its availability for scientific research endeavors. The ARM Program greatly appreciates the cooperation of the National Park Service during the preparation and conduct of this field campaign.

Researchers from the U.S. Department of Energy (DOE) Atmospheric Radiation Measurement (ARM) Program are collaborating with the U.S. Office of Naval Research and DOE's Atmospheric Science Program in the Marine Stratus, Radiation, Aerosol, and Drizzle project. Their objectives are to collect data from cloud/aerosol interactions and to improve understanding of cloud organization that is often associated with patches of drizzle.

During the 6-month campaign, the ARM Mobile Facility will contribute significantly to the project's scientific objectives by providing state-of-the-art active and passive remote sensors to measure the detailed microphysical structure of drizzle patches and the associated clouds as they move onshore. In addition, two research aircraft will participate in the project in July to collect airborne measurements.

For more information, please see www.arm.gov

The ARM Program was established by the Department of Energy (DOE) in 1989 to improve the treatment of clouds and radiation processes in global climate models. ARM researchers are studying the natural phenomena that occur in clouds and how these cloud conditions affect the earth's warming and cooling energy. ARM, in its larger form, our climate.

The ARM Program is sponsored by the DOE Office of Science, through the Office of Environmental and Biological Research.




Featured poster inside main visitor center throughout field campaign (3x5)



Example 2: Press Releases

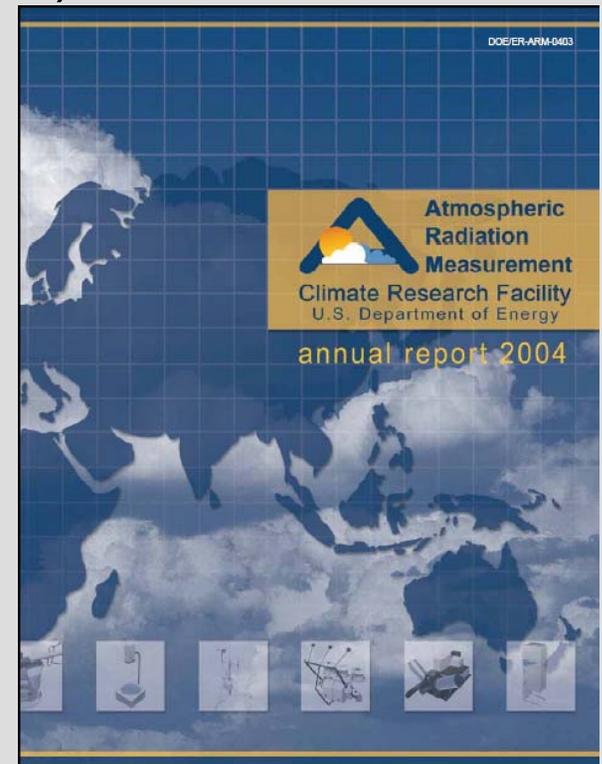
- ▶ Media Information
 - Science Plans
 - Operations Updates
 - News
 - Image Library

<http://www.arm.gov/about/090805release.stm>

Example 3: Annual Report

► Stakeholder Information

- Animation graphics (instrument stills)
- Management Plans
- Facility Statistics
- Research Highlights
- Operations Updates
- Field Campaigns Database
- Publications Database
- Image Library



Example 4: ARM Website

▶ www.arm.gov

▶ Public Information

- Journal Articles
- Newsletters
- Conference Calls
- Trip Reports
- Meeting Minutes
- Digital Images from Staff

The screenshot shows the ARM website homepage with the following elements:

- Navigation:** A top menu with links for ABOUT ARM, ABOUT ACRF, SCIENCE, SITES, INSTRUMENTS, MEASUREMENTS, DATA, PUBLICATIONS, EDUCATION, and FORMS. A search bar is located in the top right corner.
- Header:** The ARM logo and a tagline: "A Science Research Program for Global Climate Change".
- Main Content:**
 - A New Way to Order ARM Data:** A section with a screenshot of a data selection interface and text explaining the new ordering process.
 - Atmospheric Radiation Measurement Program:** A section describing the program's goals and its role in global climate change research.
 - ARM Climate Research Facility:** A section describing the facility's purpose and the review process for research proposals.
- Right Sidebar:** A vertical list of links for Field Campaigns, Events, Images, News, and Results, each accompanied by a small image.
- Footer:** Contact information for the Office of Science, including a link to the WWW Administrator and a copyright notice.

Survivor

Success at Last!

- ▶ Efficient, content development process
- ▶ Effective content storage mechanism
- ▶ Consistent messages
- ▶ Fresh content
- ▶ Less duplication of efforts

