

**The U.S. Department of Energy's atmospheric radiation measurement climate research facilities on the North Slope of Alaska**Mark Ivey<sup>†</sup>;<sup>†</sup> Sandia National Labs, USALeading author: [mdivey@sandia.gov](mailto:mdivey@sandia.gov)

The U.S. Department of Energy (DOE) provides scientific infrastructure and data archives to the international Arctic research community through a national user facility, the ARM Climate Research Facilities (ACRF), located on the North Slope of Alaska. The ARM installations at Barrow and Atkasuk, Alaska have been collecting and archiving atmospheric data for more than ten years. These data have been used for investigations of clouds, cloud processes, and radiative transfer as well as for remote sensing validations. Funding from the Recovery Act (American Recovery and Reinvestment Act of 2009) was used to install new instruments and upgrade existing instruments at the North Slope ARM Facilities. These instruments include: X-Band Scanning Precipitation Radar; W and Ka-Band Dual Frequency Scanning Cloud Radar; Automatic Balloon Launcher; High Spectral Resolution Lidar; Eddy Correlation Flux Systems; Upgraded Ceilometer, AERI, Micropulse Lidar, and Millimeter Cloud Radar. Information on how to access archived data from these instruments will be provided. An update on experimental and unmanned aerial vehicle activities planned at Oliktok Point will also be provided.