

Recovery Act-Funded Additions to the U.S. Department of Energy's Atmospheric Radiation Measurement Climate Research Facilities on the North Slope of Alaska

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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 Atmospheric Radiation Measurement (ARM) Climate Research Facilities (ACRF), located on the North Slope of Alaska. The ACRF 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) will be used to install new instruments and upgrade existing instruments at the North Slope ACRF. These instruments include:

- Scanning Precipitation Radar;
- Scanning Cloud Radar;
- Automatic Balloon Launcher;
- High Spectral Resolution Lidar;
- Eddy Correlation Flux Systems;
- Upgraded Ceilometer, Atmospheric Emitted Radiance Interferometer, Micropulse Lidar, and Millimeter Cloud Radar.

Information on these planned additions and upgrades will be provided in our poster. An update on experimental and unmanned aerial vehicle activities planned at Oliktok Point, Alaska will also be provided.

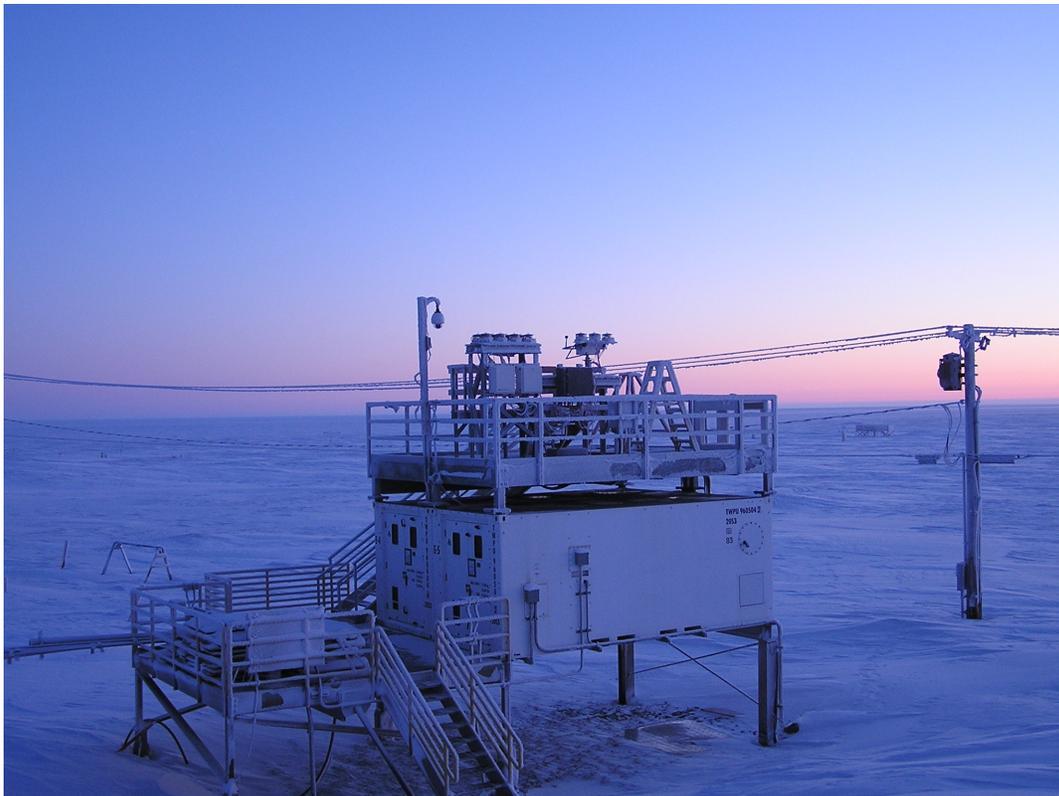


Figure 1. Instrument Shelters at ARM Climate Research Facility in Barrow.