Department of Energy (DOE) Atmospheric Radiation Measurement (ARM) Climate Research Facilities: Updates on Barrow, Oliktok, Atqasuk, Unmanned Aerial Vehicles, Tethered Balloons, Field Campaigns and Selected Significant Results

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Since 1998, ARM facilities on the North Slope of Alaska have provided data about cloud and radiative processes at high latitudes. The ARM North Slope facilities are available for collaborative international research for both long- and short-term projects: weeks, months, or longer. Past campaigns studied boundary layer clouds, mixed-phase Arctic clouds, and radiative heating in dry winter atmospheres. In 2011, we completed the installation of new instruments and upgrades to existing instruments in Barrow, Alaska. A new ARM Mobile Facility, the AMF3, is under development. Its first deployment is planned for Oliktok Point, Alaska, the site of previous ARM field campaigns. This poster will provide an update on new instruments at Barrow, current plans for Oliktok Point, and an update on development of the AMF3.



Figure 1. Oliktok Point, Alaska, location for a new DOE/ARM Facility to be installed starting summer, 2013.

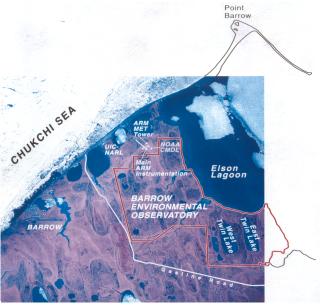


Figure 2. Barrow, Alaska, and surrounding areas with location of NOAA/ESRL Barrow Observatory and DOE/ARM Facility.