

Atmospheric Radiation Measurement Program Data Quality Office Overview

K. Kehoe¹, R. Peppler¹, J. Monroe¹, A. Theisen¹ and S. Moore²

¹University of Oklahoma, 660 Parrington Oval, Norman, OK 73019; 303-497-4754, E-mail: kkehoe@ou.edu

²Alliant Techsystems, Santa Barbara, CA

The U.S. Department of Energy's Atmospheric Radiation Measurement (ARM) Program collects a plethora of atmospheric data at several highly-instrumented permanent facilities, two mobile facilities, an aerial facility, and is adding two new permanent facilities. A primary objective of the ARM Program is to improve the understanding of clouds, aerosols, and radiative feedback processes in the atmosphere by collecting field measurements to aid in the advancement of global climate models.

To ensure the data collected are of the highest standard possible, the ARM Data Quality Office monitors and inspects data collected in near real-time. A system of automated and manual quality control techniques were developed to facilitate the systematic inspection of data and efficiently report instances of suspect data. This talk will review the tools and processes developed to create and monitor the quality control metrics, plots, interactive displays, notification methods, and documentation process for tracking instances of problems from detection to resolution.



Figure 1. Atmospheric Radiation Measurement Program logo.