Overview

- Data issues discovered and confirmed by ARM as problems are stored in Data Quality Reports (DQRs).
- Current reports are not easily used by automated data processing codes, so are underutilized or ignored.
- We are developing methods to simplify application of the DQR data quality status to affected data.

Proposed Functionality

- World accessible web service to allow for on-demand query of known data quality status for any ARM measurement, in a machine readable format.
- Flag or filter data from Archive orders known to be ‘incorrect’ or ‘suspect’ before delivering data to end users.
- Allow users to easily ‘refresh’ data orders when new information regarding data quality is known.

DQR Web Service

- Given a datastream field, return a list of date/time ranges that document when data is bad or suspect.
- Response is either simple to parse delimited text or a fully qualified XML document.
- Output can be customized to the user’s liking, with choice of time formats and selection of DQR fields.

Example:
Return time periods of incorrect data for sfc_ir_temp

Query
http://www.archive.arm.gov/dqws/ARMDQR?
datasource=twpgndrad60sC2.b1
&varname=sfc_ir_temp
&dqrfields=dqrid,starttime,endtime,metric
&timeformat=yyyyymmdd.hhmmss
&responsetype=delimited

Milestones

- Design Finished: March 2012
- Design Review: April 2012
- Beta Release: September 2012
- Production Release: December 2012

Sample Queries and Reports