

Data Management and Analysis Subcommittee (DMAS) Meeting
NADP Interim Meeting, May 3-4, 1999

1. Fall Minutes

The minutes for the fall meeting were not available for approval.

2. Data Status update

Bob Larson presented the data status update at the Program office (PO). The NADP databases currently include samples taken through:

NTN	August 1998
AIRMON	January 1999
MDN	December 1997

3. DMAS input for upcoming Central Analytical Laboratory (CAL) Audit (All)

The committee discussed the role of DMAS in the upcoming audit of the CAL. The consensus agreement of the committee was that an audit should be performed to :

- a. Determine the consistency of the CAL and Program Office (PO) databases;
- b. Verify the accuracy of data flow, from field and laboratory collection to the dissemination of the data to users;
- c. Verify the accuracy and completeness of the database documentation;
- d. Verify Y2K compliance;
- e. Examine efficiency of the Cal and PO data management;
- f. Make recommendations.

Motion: The committee recommends that Luther Smith and MaryAnn Allen be added to the audit team to represent data management issues during the CAL audit.

The motion passed unanimously.

It was also noted that DMAS needs to be represented in upcoming Mercury Analytical Laboratory (HAL) audits as well.

4. GIS at the PO and Watershed Deposition

Bob Larson presented the current capabilities of the PO in developing additional map products and analyses through GIS, including a new web option for hydrologic regions. The PO proposes to use GIS to display a site directory and different site classifications based on ecoregions, siting criteria, and regional representativeness. These new displays will require that the PO acquire additional geographic data sets, and Mr. Larson solicited ideas and opinions regarding different data sets that might be of interest, including the use of watersheds (currently being implemented), ecoregions, digital raster graphs (topo maps), digital elevation models, point emissions, landuse, census, agricultural census, roads and soils. In addition, Mr. Larson described different data analyses that are proposed for presenting spatial patterns of deposition, including evaluating Kriging and the use of National Weather Service precipitation data for preparing isopleth maps.

5. Data Quality Coding of the NADP Databases

The committee discussed ways to standardize data coding for the three NADP networks. Clyde Sweet presented the coding scheme for MDN. Bob Larsen presented the coding scheme for NTN. Van Bowersox presented the coding scheme for AIRMON. Extensive discussion ensued to determine a coding matrix that would be consistent and logical for all three of the networks.

A coding matrix was proposed for MDN and AIRMON and is included in Table A.

Motion: The Program Office shall apply and document the proposed coding matrix for AIRMON and MDN and recommend a compatible coding scheme for NTN by the Fall meeting.

The motion was approved unanimously.

6. Data products sent to sites

The need for additional data products was discussed, particularly with regard to providing better information to site operators. The consensus of the committee was that:

- a. Additional information is needed on the methods of communication that currently exist for operators, supervisors and other users before additional data products are developed. It was noted that the site calendar, HAL quarterly reports and Scott Dosset's monthly reports are popular and well-used.
- b. The highest priority should be getting the existing data products into production and efficient use.
- c. Communications are now extremely subnetwork dependent, and it will be necessary to pay attention to the needs of the users of the individual subnetworks and not just generic data products.

7. Trends on the web

Bob Larson presented the status of providing temporal trend information on the Web. Extensive discussion ensued regarding appropriate captions and titles for the graphs.

Motion: The Program Office shall implement the trends on the net as presented by Mr. Larson, with appropriate captions and titles.

The motion passed unanimously.

The committee voted to adjourn and reconvene with the Network Operations and Effects Subcommittees.

Table A. Proposed Coding Matrix for MDN and AIRMON.

Network	QR	Notes	Sample Type (valcode)	Valid for Summary?
MDN	A	--	w,d	Y
	B	E,M,D	w,d	Y
	B	Q	w	N
	C	B,U,F,L,C,N,T	w,d	N
AIRMON	A	--	w,d	Y
	B	E,M,D	w,d	Y
	B	I	w	N
	C	B,U,F,L,C,X,N,T	w,d	N

Where codes have the following meaning:

w wet sample, ppt \geq 0.01
 d dry sample, ppt < 0.01
 t some evidence of precip, but not enough to form sample
 B bulk sample
 C contaminated sample
 E extended duration sample, > 8 days for MDN, > 26hours for AIRMON
 F field error
 I low volume sample, incomplete analysis
 L laboratory error
 M missing information
 N no sample
 Q low volume sample, no analysis
 U undefined sample period
 X bird droppings
 T evidence of precip, but not enough to analyze
 V low volume in laboratory, rain gage > 35 ml