National Mesonet and MADIS Transition Updates

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Based on Materials Originally Presented by
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Recommendations

- Governance
  - Roles and responsibilities of a "Centralized Authority" clearly articulated
    - Not explicit as to particular agencies
  - Specific recommendation on an organizational model (publicly charted, private non-profit)
    - Detailed discussion of other options
    - Sufficient flexibility for changing budget/political contexts

Recommendations

- Infrastructure
  - Focused on key gaps (Planetary Boundary Layer)
  - Metaphorically consistent with Governance ("From the Ground up")
    - Provided a start small *Steps to Ensure Progress* for sponsoring agencies
    - Leverage existing assets first

National Mesonet Earmarks

- FY09 and FY10 Congressional Directives for a "National Mesonet"

  "Increased coordination among existing surface networks would provide a significant step forward and serve to achieve improved quality checking, more complete metadata, increased access to observations, and broader usage of data serving multiple locally driven needs"

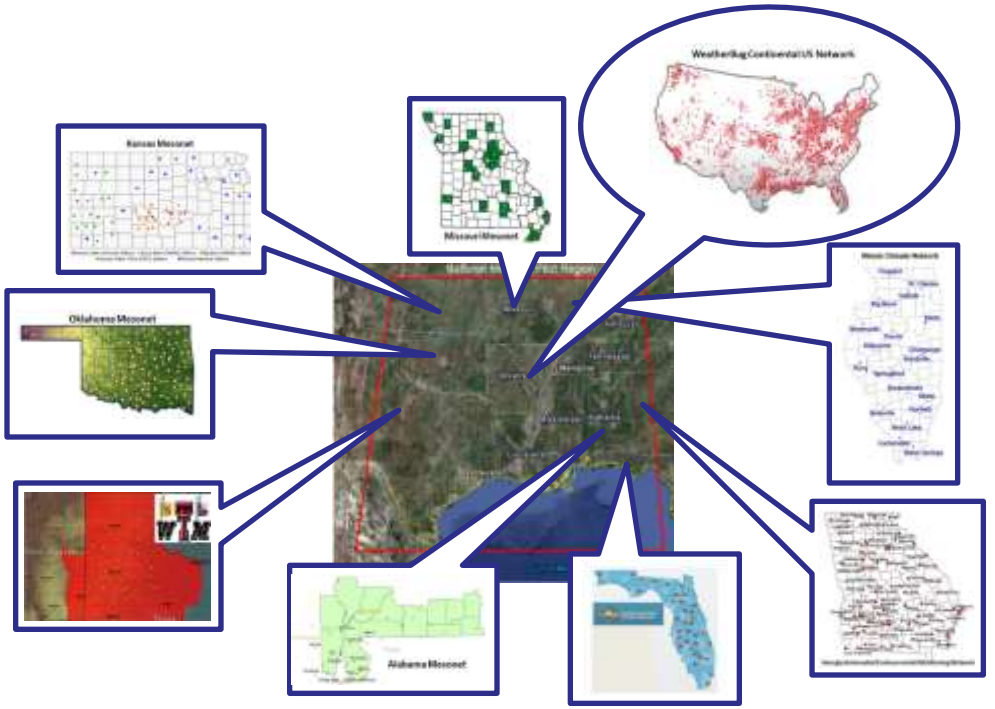
  – Provided resources for maintaining and forging new partnerships with non-federal "mesonets" with a focus on metadata

Mesonet Pilot Project

- National Mesonet Pilot Project

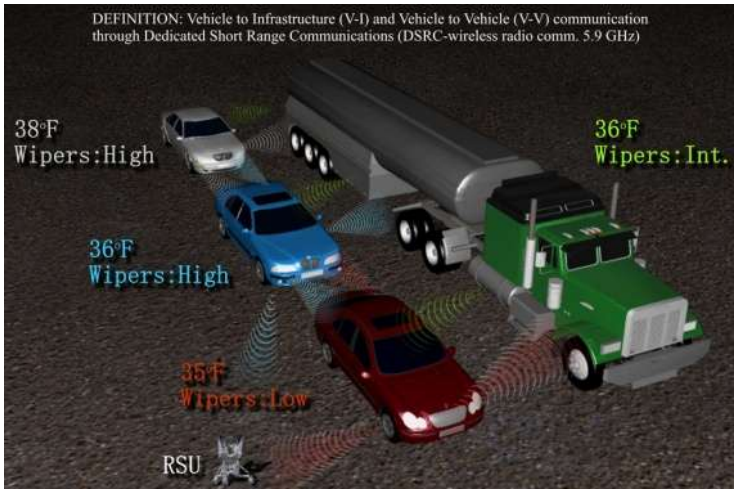
NATIONAL MESONET CONSORTIUM

Oklahoma	Illinois	Missouri
Texas	Georgia	Alabama
Kansas	Indiana	Florida



Mobile Observations

- Mobile Observations (led by GST, Inc.)
  - Mobile Platform Environmental Data (MoPED)
  - Prototype and Initial Capabilities to equip vehicle fleets (initial focus on bus fleets) with meteorological sensors
  - Demonstrate collection and dissemination of data to NOAA/NWS
  - Develop algorithms to monitor data quality as compared to Road Weather Information System (RWIS) and other reference data



Mobile Observations

- Mobile Observations (con't)
  - FY10 project ends September 2011
  - Over two years of project:
    - Prototyping in New England (FY09 dollars)
    - Expanded nationwide (FY10 dollars)

National Mesonet Expansion

- Continuing and Expanding Pilot Project and Mobile Observations Activities

MesoUS CONSORTIUM

Global Science & Technology

WeatherFlow

University of Utah (MesoWest)

Coastal Carolina University North Carolina State University

Rutgers University (NJ Mesonet)

University of Delaware (DEOS)

Computer Science Corporation

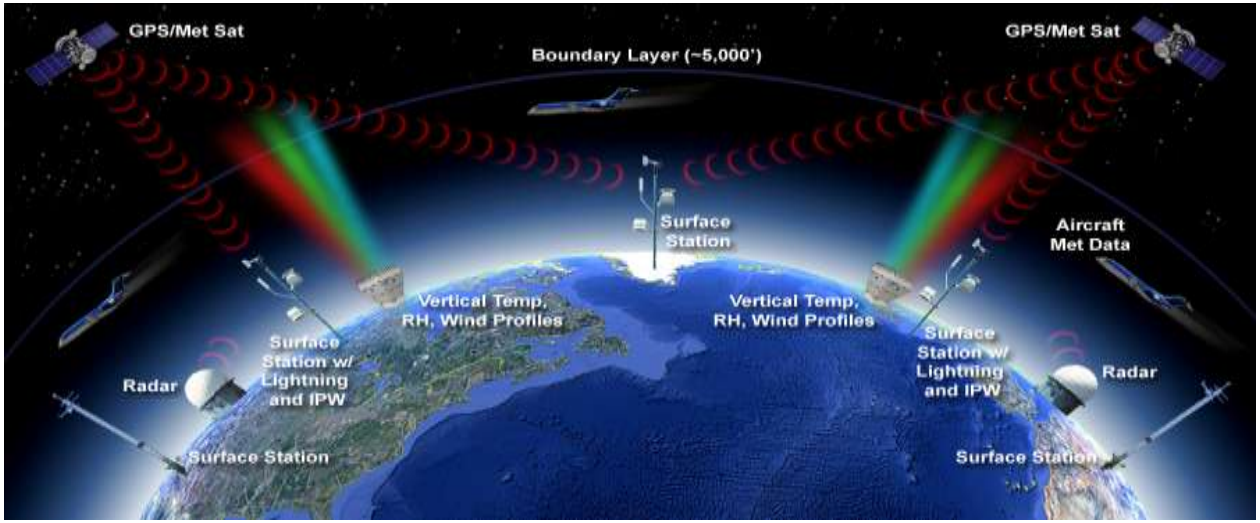
University of Wisconsin

*Includes surface networks and "profiling" Infrastructure

*Foresees NWS's National Mesonet as locus of a "4th Sector" NoN construct

Taking Mesonet Vertical

- Continuing and Expanding Pilot Project and Mobile Observations Activities
- The vision: A fully realized National Mesonet would incorporate the all important vertical dimension



FY 2011 Funding

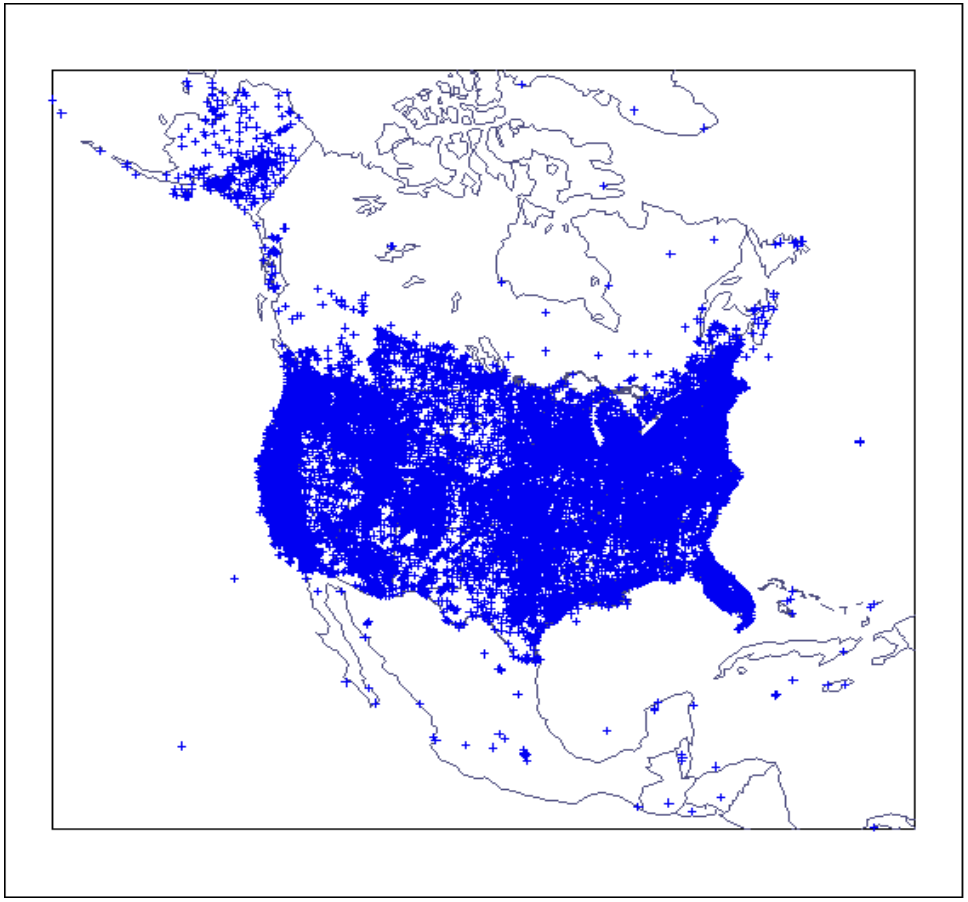
- NOAA will provide funds to NWS for:
  - A "barebones" contract to continue access to data obtained via the earmarks
  - MADIS sustainment
  - Minimal Program Office
- Contract obligation is expected in early 2012

The Future

- Continue working with stakeholders to maximize National Mesonet Program's contribution to the Network of Networks vision
- Continue efforts supported in FY11 and (hopefully?) FY12 and beyond
- BASC, AMS, OFCM, private sector

MADIS

NOAA Surface Observing Systems (~900)



Non-NOAA Surface Observing Stations (~20000)

MADIS Events

- 2001 - Present. MADIS Developed between NWS and OAR to collect, quality control and distribute data sets. Data sets provided by NOAA research to users until transition to operations
- 2008 – 2010 Planning for Transition to NWS Operations
- September 30 2010 Initial Operating Capability for MADIS within NWS
- 2011 sustainment of NWS MADIS operations System providing data to users
- 2012 continuation of MADIS transition with NCEP hosting MADIS on its super computer
- 2013 summer transition to MADIS full operating capability. All users will come to NWS MADIS only for MADIS Data, and the National Climatic Data Center for MADIS Archives

Next Steps

- Full Operating Capability (FOC) scheduled for end of FY13 Q4 (Target Summer 2013)

- Collaboration among NWS headquarters, NCEP, and GSD is back after delay of several months following retirements of key GSD personnel

- Collaboration with FHWA/RITA:
  - 2010-2011 study completed for integration of *Clarus* functions into MADIS
  - 2011 Fall meetings with NOAA and FHWS/RITA to discuss priorities and target dates for *Clarus*-MADIS activities
  - Determine further unique requirements or concerns from transportation sector

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