

***INNOVATION:
What Is It & Why Does NIDIS Need To Do It?***

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Oklahoma Climatological Survey
(NERON Project Manager Until 9/30/06)***

In The Beginning...

- January 1991 — \$2.7 million from Governor Henry Bellmon to launch the Oklahoma Mesonet
- Summer 1992 — Educational outreach program launched for K-12 teachers in Oklahoma (called 'EarthStorm')
- March 1994 — Oklahoma Mesonet commissioned
- Summer 1996 — OK-FIRST launched as 'educational outreach' program for emergency management officials across Oklahoma
- October 2001 — OK-FIRST honored by Harvard University and the Ford Foundation as one of the five 'most innovative' programs in American government in 2001

Foundation of OCS Services...

Oklahoma Mesonet

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OVERVIEW | HISTORY | SITES | INSTRUMENTS | DATA | QUALITY ASSURANCE | SITE PASSES | PROJECTS

Current: Woodward, OK

65°F

Dewpoint: 64° F
Humidity: 94%
Rainfall: 0.57 in.
Wind: SSE at 12 mph

[View Mesonet Data](#)

Oklahoma's **World-Class Network** of Environmental Monitoring Stations

Over **3,568,809,744** observations since January 1st, 1994

12-Jan-2006 05:00 PM CST 01/12/06 23 GMT

5-MINUTE DATA NOW AVAILABLE
We now have 5-minute updated data on all Mesonet products!

MESONET FEATURE PRODUCT
Oklahoma Mesonet WEATHER DATA
Looking for a detailed dataset to test out your latest theories or models? Look no further.

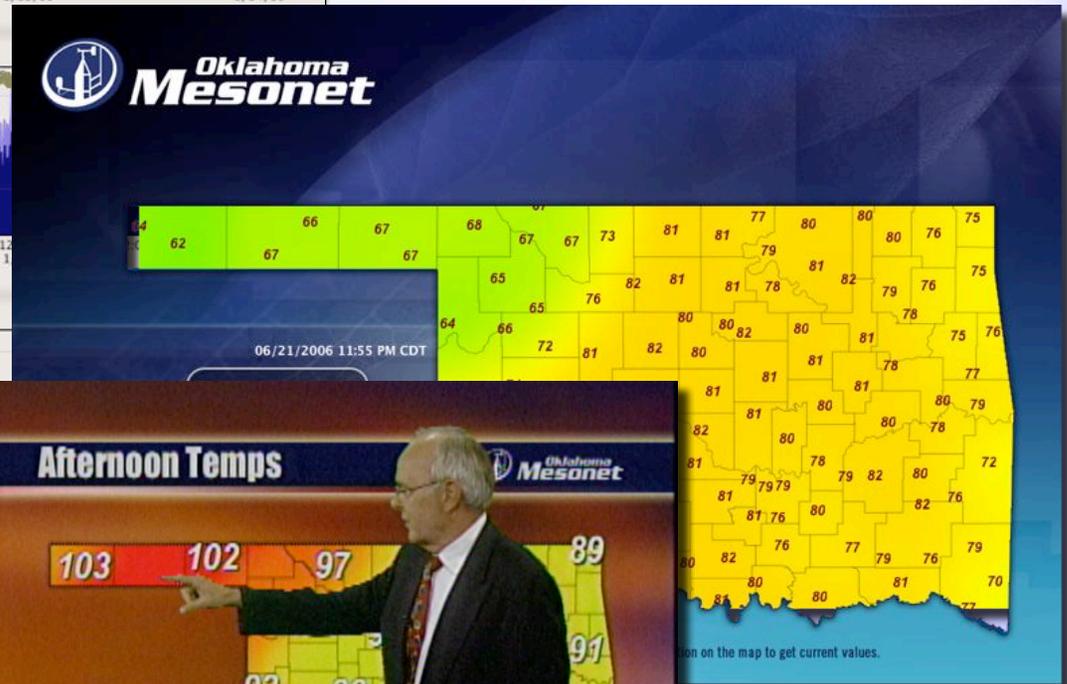
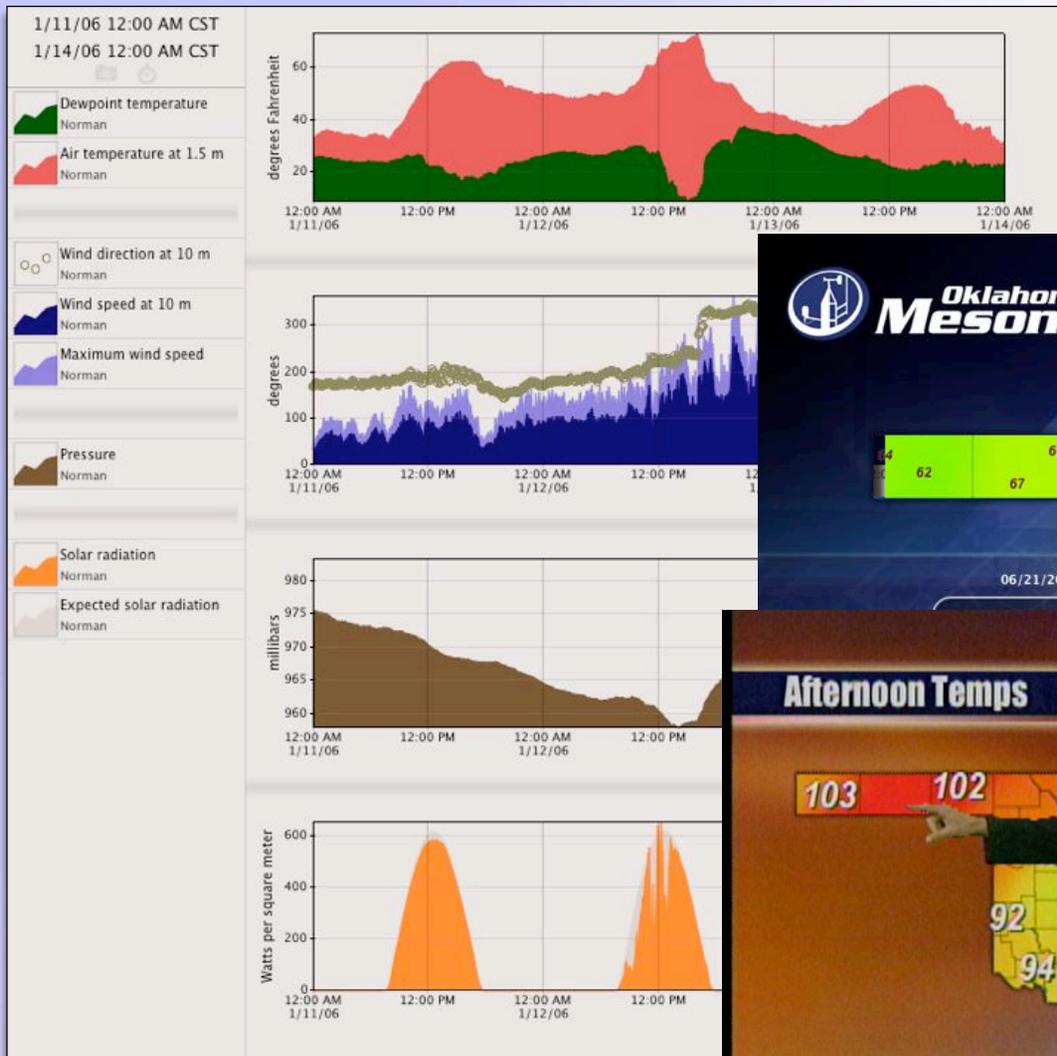
BURNING INDEX

- Water
- 0-9
- 10-19
- 20-29
- 30-39
- 40-59
- 60-79
- 80-109
- 110+

Oklahoma Mesonet | **Oklahoma Fire Danger Model**

The Oklahoma Mesonet is a world-class network of environmental monitoring stations. The network is managed by scientists at the University of Oklahoma (OU) and at Oklahoma State University (OSU). Copyright © 2006 Board of Regents. All Rights Reserved. webmaster@mesonet.org.

Newer Services...



Now, To the Point of This Presentation...

- Dictionary Definition of Innovation — ‘Something newly invented or a new way of doing things’
- Innovations in American Government defines innovation as an “innovative operating program, not an innovative idea.”
- The four (4) characteristics of innovation are ...
- An example of an ‘innovative program’ - and it is not the Oklahoma Mesonet - is ...
- The 6 drivers for innovative programs are ...
- The reason why NIDIS needs to embrace ‘innovation’ is ...

What's an Innovation?

Four Characteristics of Innovation

- **Novel Changes**
- **Must Address a Problem of Significance**
- **Effective / Positive Impact on Performance**
 - **Promote the empowerment of frontline employees to make decisions**
- **Replicable**
 - **Is the innovation too unique to be replicated?**
 - **Can components be replicated?**
 - **Do others have the incentives, motivation, ability, and/or (perceived) policy barriers to replicate?**
 - **Altshuler and Behn, 1997 (*Innovations in American Government*)**
 - **Osborne and Gaebler, 1992 (*Reinventing Government*)**

Outreach Services...

OK-FIRST

Home | Contact Us | News | About Us

- CURRENT WEATHER
- LATEST NEWS
- PARTICIPANT SERVICES
- ABOUT OK-FIRST
- PARTICIPANTS & STAFF
- CONTACT OK-FIRST

Upcoming Refresher Course

For Teachers | For Students | Materials | Data | Forums

EARTHSTORM

Norman, OK

90°F

Heat Index 91°F

Dewpoint: 64°F
Humidity: 42%
Rainfall: 0.00 in.
Wind: from the S
Speed: 13 mph
• [Choose Station](#)

Class Activities

What can EarthStorm Do for You?

Welcome to the EarthStorm educational outreach pages of the [Oklahoma Climatological Survey](#). We want to hear how you use this site and any ideas you have for additional materials. Email us at earthstorm@mesonet.org

EarthStorm 2006

The EarthStorm 2006 Summer Teacher Workshop will be held in Enid, OK on July 18-21. Click [here](#) for more information.

OK-FIRST: Supporting Public Safety Since 1996

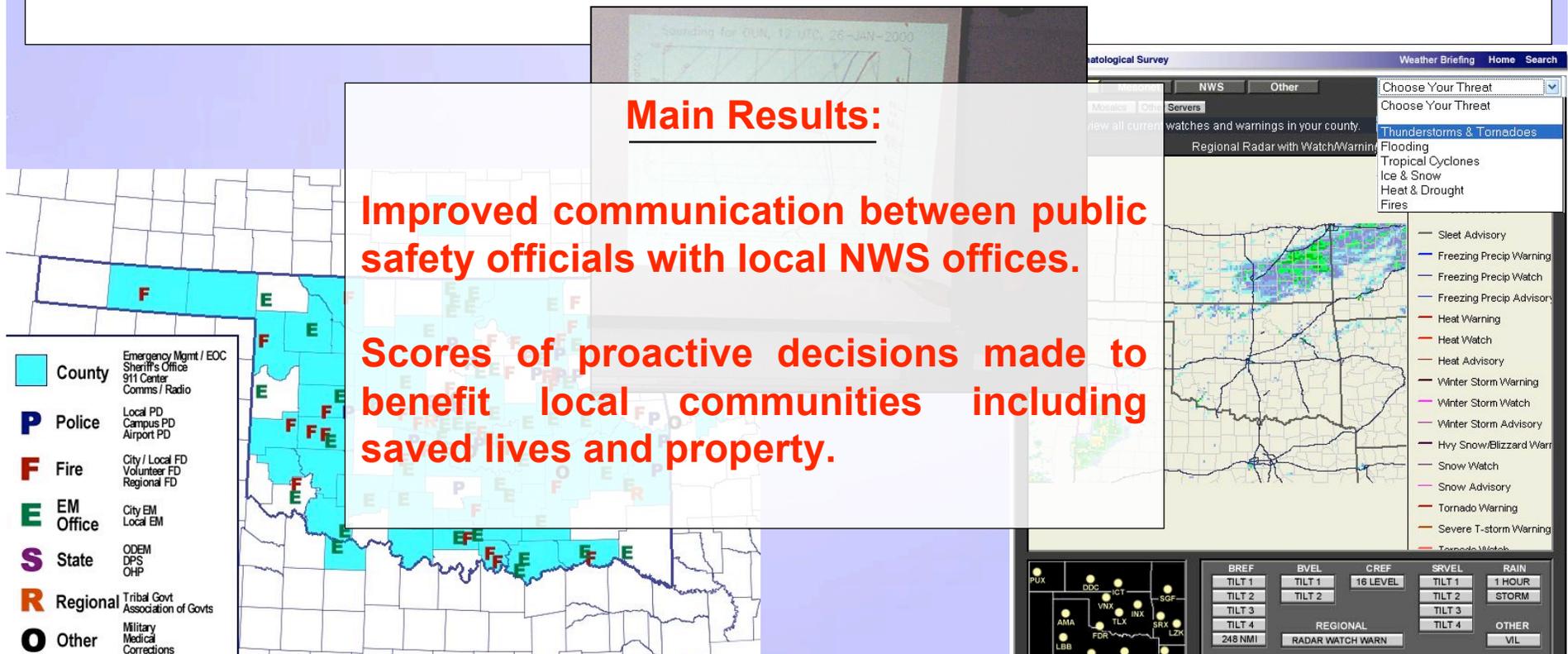


- 2nd Outreach Program Built upon Oklahoma Mesonet
- ~180 Police, Fire, and Emergency Management Agencies
- All-Hazard Decision-Support System Based on Comprehensive Suite of Weather Products
- Mandatory Training Workshops (Continuing Ed) & Ongoing Support

Main Results:

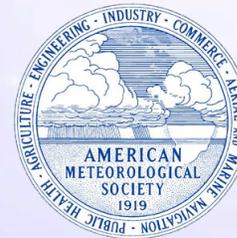
Improved communication between public safety officials with local NWS offices.

Scores of proactive decisions made to benefit local communities including saved lives and property.



Others Said OK-FIRST Was Innovative

- Outstanding Contributors to Emergency Management by Oklahoma Emergency Management Association (1998, 1999).
- Special Award from the American Meteorological Society in 2001.
- Finalist in 2001 Stockholm Challenge
- Innovations in American Government Award Winner in 2001 by Harvard University's JFK School of Government



Innovations in American Government

- **Founded in 1986**

- Kennedy School of Government at Harvard
- The Ford Foundation
- Council for Excellence in Government

- **Recognize, Promote, Study and Replicate Innovation**

- **2001 National Selection Committee**

- David Gergen (Advisor to Pres. Ford, Reagan & Clinton)
- William Clinger (Fmr. US Rep. from PA)
- Edwin Dorn (Dean of LBJ School of Public Affairs, Univ. of Texas)
- Lee Hamilton (Fmr. US Rep. from IN)
- Susan Hammer (Fmr. Mayor of San Jose)
- David Osborne (Advisor to Al Gore)
- Patricia Saiki (Fmr. US Rep. from HI)
- Lisbeth Schorr (Lecturer on Social Policy at Harvard)
- Carl Weisbrod (NYC Attorney)



L to R: David Gergen, Kevin Kloesel, Dale Morris
Ben Springfield, Stephen Goldsmith, Gail Christopher

Innovations in American Government

- Formed a partnership between The Ford Foundation, the John F. Kennedy School of Government at Harvard University, and the Council for Excellence in Government to recognize a small number of innovative programs which are examples of the “government’s capacity to address and develop creative solutions to critical societal problems.”
- The program was developed to support two primary goals:
 - To communicate information about government effectiveness to the public
 - To improve government performance by identifying programs worthy of replication

Concluding Remarks

- **6 Drivers for Innovative Programs (J. Walters, *Governing*)**
 - Frustration with the Status Quo
 - Responding to Crises
 - Focusing on Prevention
 - Emphasizing Results
 - Adapting Technology
 - Doing the Right Thing
- **Additional Motivators about Innovation and Replication (Abramson and Littman, *Innovation*)**
 - Collaboration with Other Agencies
 - Use of Information Technology
 - Reward for Innovating
- **Biggest Obstacle?**
 - Multidisciplinary aspects of natural hazards and emergency management require strong partnerships and strong motivation

The Status Quo and Responding to Crises

“For many years, the NWS operated on the assumption that if they produced a good product, someone would come to get it and use it. Users are currently left largely to their own devices in determining what is available and how to use it; many are unaware of the information available” (National Academy of Sciences 1980).

“The warning process was somewhat compromised by the limited resources many rural county emergency managers and law enforcement officials had at their disposal for receiving the emergency messages and enacting their preparedness response plans” (NOAA 1994).

On the evening of 3 May 1999 in central Oklahoma when an F5 tornado struck Oklahoma City and numerous other killer tornadoes occurred:

‘One emergency manager prevented an ambulance transporting a tornado victim from driving into another tornado’.

‘Another emergency manager evacuated an outlet mall nearly 30 minutes before a tornado swept the foundation clean’.

‘A 3rd emergency manager halted a caravan of law enforcement officers traveling toward OKC on I-40 as a killer tornado crossed the roadway ahead.’

NIDIS: Now and in 2025

-Now-

‘For many years, the Federal government operated on the assumption that if they produced a good product, someone would come to get it and use it. Users are currently left largely to their own devices in determining what is available and how to use it; many are unaware of the information available’. [Anonymous]

‘The drought response was somewhat compromised by the limited resources many rural county emergency managers and law enforcement officials had at their disposal for receiving the emergency messages and enacting their preparedness response plans’. [Anonymous]

-In 2025-

During the summer of 2025, a D5 drought brought havoc to much of the Nation.

But state and local drought leaders had already deployed resources to fight wildfires, relief had already reached the distressed cattle industry, and citizens voluntarily conserved their use of water.

As a result, economists estimated that damage to the national economy had been reduced by nearly 50% due to so many proactive decisions.

NIDIS Needs To Embrace Innovation

Summary Finding of the Independent Evaluator for OK-FIRST

“The project was able to change the behavior of local public safety officials and their approach to decision-making. The increased skills and capacity of the OK-FIRST participants have had a positive influence on the types of decisions they make, how they make those decisions, and when they are willing to make a decision.”

Significant Motivator to Establish OK-FIRST

To foster statewide political support at the grassroots level as a foundation for an eventual legislative campaign to achieve permanent funding for the Oklahoma Mesonet

Thank You...Any Questions?



Come visit and see our new building!