

What is the FX-Net Program



FX-Net on a laptop

Evolution of Systems from AWIPS

- **FX-Net.** Provides full AWIPS visualization and data analysis capability over the internet. Runs on a laptop compared to full workstation setup of AWIPS.
- **Gridded FX-Net.** Allows full local access to raw AWIPS data using the AWIPS D-2D display system.
- **Grid Extraction Tool and Web Interface (GETWI) expands Gridded FX-Net.** Allows users to create rules to process and extract raw gridded data for other applications and algorithms.
- **Precision Controlled Wavelet Compression.** Enabling Technology developed with the Cooperative Institute for Research in the Atmosphere (CIRA).

Where FX-Net Programs are used operationally

- FX-Net is the primary weather forecasting workstation currently used by the National Weather Service (NWS) Incident Meteorologists (IMETS), National Interagency Fire Center (NIFC) and associated Geographical Coordination Centers (GACC).
- Dept. Of Agriculture Ag Outlook Board
- Air Force: Air Force One Met. Team (Andrews AFB)
- State of Colorado & State of Texas Weather Mod

Full AWIPS Workstation



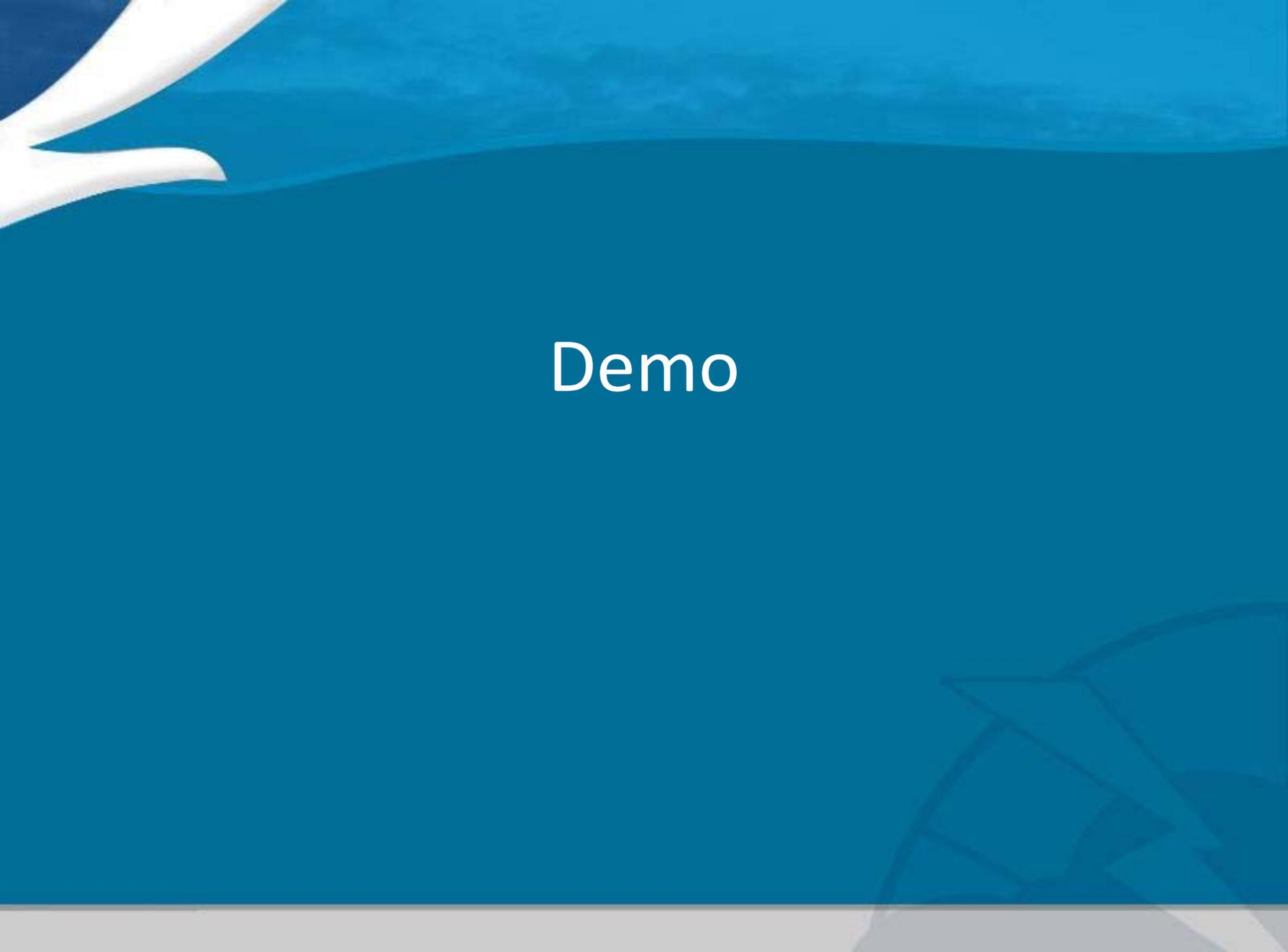
Impacts of FX-Net

- FX-Net has been deployed to hundreds of fires during the last six fire weather seasons.
- FX-Net used in support of other events including:
 - Katrina clean-up support
 - Oil spills
 - National political conventions and dedications
 - Salt Lake City 2002 Olympics
 - National Football League's Super Bowl®
- Gridded FX-Net and Grid Extraction Tool used by National Interagency Fire Center (NIFC) Predictive Services Group to:
 - Manage fire fighting resources
 - Develop new algorithms
 - Issue spot forecast for prescribed burns.
- FX-Net was successfully transferred to Public Sector as ENSCO's MetWise Net application, used by Air Quality Community and others.

NOAA's Weather and Water Goal

FX-Net and Gridded FX-net support NOAA's Weather and Water Goal by

- Working with our partners to develop robust technology that is critical to providing improved forecasts of hazardous weather events
- Transferring this technology to federal, state and private sector partner's operational services
- Committing to improve existing forecast and information services through innovative research and development.



Demo

“the FX-Net system is the ‘backbone’ of fire weather forecasting in the field”. Rob Balfour

“having the office out in the field”. Anonymous, 2006 IMET Survey

“We have both the Windows and Linux version of FX-Net installed at the Emergency Operations Center in Baton Rouge. Two meteorologists are providing on-site support at that location. They have briefed the Governor and other dignitaries plus the usual suite of daily briefings to support response and recovery operations”. David “Rusty” Billingsley, Southern Region Headquarters

Bottom Line:

FX-Net programs have improved delivery of high quality critical information to decision support personal.



FX-Net in use at Tampa Bay Emergency Operations Center during Super Bowl Week 2009.



Coleen Decker using FX-Net on location

FX-Net Project Collaborations

- **NOAA Research** – ESRL/PSD, ESRL/CSD
- **NOAA Operations** – National Weather Service Headquarters, NWS Western Region Headquarters, Southern Region Headquarters, Alaska Region Headquarters, Pacific Region Headquarters and Eastern Region Headquarters. NWS Office of Climate, Weather and Water Services (OCWWS), NWS AWIPS Program Office.
- **Other Government Agencies** – Bureau of Land Management, Forest Service, National Interagency Fire Center, Department of Agriculture, State of Colorado, NASA, Air Force.
- **Universities** – University of Northern Iowa, University of New Hampshire, Plymouth State University, Colorado State University, Florida State University, Embry Riddle, University of Northern Florida, University of Colorado.
- **Public Sector** – ENSCO.