

NOAA's Surface Weather Program: Promoting Safe and Efficient Commerce and Transportation

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CLARUS ICC2
March 2, 2005

NOAA Surface Weather Program

- Surface Weather within NOAA
- History
- Charter
- Current Activities
- Future Activities
- ISOS



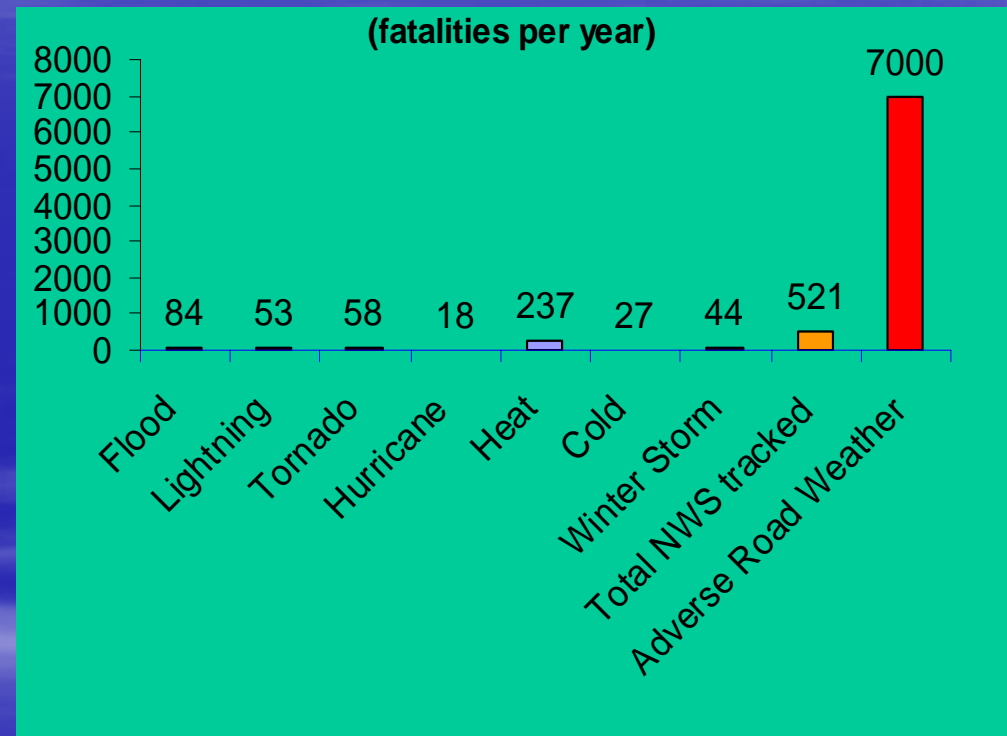
NOAA Surface Weather Program

NOAA is responsible for protecting life and property and promoting safe and efficient commerce and transportation

Weather contributes to ~7,000 fatalities, 600,000 injuries and 1,400,000 weather-related highway crashes per year

17% of all highway fatalities occur during adverse weather

Opportunity to improve safety with timely weather information that is transportation-relevant



NOAA Surface Weather Program

- Surface Weather within NOAA
 - Newest ‘formal’ program
 - Under Commerce and Transportation Goal
 - Budget plans for FY07-11
 - Milestones and AOP in place
 - Beginning work on FY08-12 budget cycle



Surface Weather within NOAA

NOAA's Mission Goal Structure



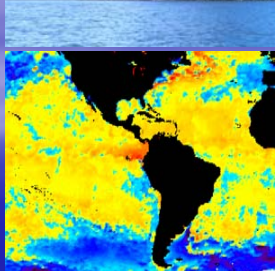
- **Weather and water:** Serve society's needs for weather and water information.



- **Commerce and transportation:** Support the Nation's commerce with information for safe, efficient, and environmentally sound transportation.



- **An ecosystem approach to management:** Protect, restore, and manage the use of coastal and ocean resources through ecosystem-based management.



- **Climate variability and change:** Understand climate variability and change to enhance society's ability to plan and respond.



Surface Weather within NOAA Commerce & Transportation Goal

- C&T Strategic Objectives:



Safe, secure, efficient and seamless movement of people and goods in the U.S. transportation system.



Environmentally sound development and use of the U.S. transportation system



NOAA Surface Weather Program

- History

- NWS Modernization
- Customer Needs Assessments
- Relationships with State/Local DOTs
- Early involvement with ITSA
- Relationship with FHWA
- NWS Headquarters
- NOAA



NOAA Surface Weather Program

- Charter, (Established June, 2004)

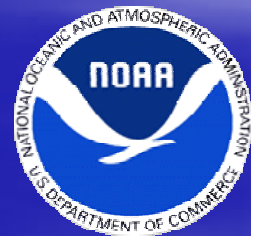
Provide the Nation with timely weather and hazard information on a scale that supports improvements to safe and efficient transportation.

Apply Research and development to all surface transportation modes with highways as a priority and for prototype purposes.



NOAA Surface Weather Program

- Current Activities
 - NOAA-FHWA Memorandum of Understanding
 - FHWA CLARUS Initiative Participation
 - FHWA VII Initiative Participation
 - OFCM WIST Working Group
 - NOAA Outreach
 - MADIS Transition to Operations



NOAA Surface Weather Program

- **Current Activities - CLARUS**
 - Strengthening ties between agencies with similar objectives; FHWA (DOT), NOAA (DOC), DOI, NASA, DOD, EPA
 - Assessment of awareness, dissemination and digital forecast services
 - Key demonstration for NOAA's Integrated Surface Observing System
 - Aligns with GEOSS system of systems/ U.S. Integrated Earth Observing System



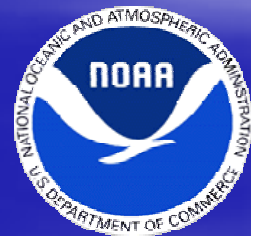
NOAA Surface Weather Program

- Current Activities
 - Evaluation of NDFD (IFPS) for Surface Transportation support
 - Assessment of NOAA operational support
 - Internal improvement demonstrations
 - Salt Lake City, Indianapolis
 - Pleasant Hill, Albany
 - Flagstaff, Detroit



NOAA Surface Weather Program

- Observations
 - Clarus participation; surface observation collection, data management, QC/QA, formatting and analysis, MADIS operationalization, ISOS capacity analysis
- Applications R&D
 - Assess and maximize use of existing capabilities and R&D efforts, both internal and external with targeted improvements
- Planning & Outreach
 - Training/Education of forecasters and users on existing resources
 - Workshops to identify path for future cooperative efforts with partners
 - Apply Fairweather Report principles and NOAA Partnership Policy to engage the Nation's environmental information enterprise
 - Socio-economic impacts



NOAA Surface Weather Program

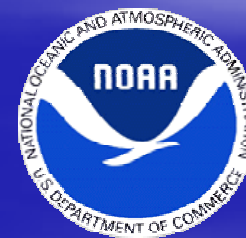
- Future Activities
 - CLARUS evaluations/actions
 - Environmental modeling improvements
 - ISOS-VII assessment
 - Applications evaluations
 - NDFD
 - Dissemination
 - Outreach/training
 - Emerging partnership opportunities



NOAA's

Integrated Surface Observing System (ISOS)

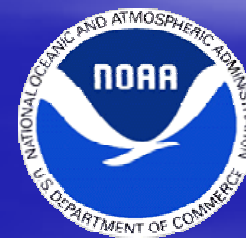
- Philosophy
 - Capacity (future needs, e.g., VII)
 - Inclusive (goal to accept all observations)
 - Available (mission support, latency issues)
 - Quality (levels of QC and QA)
 - Standards (stratified based on system)
 - Accessible (to all, at minimal cost)
 - Metadata (crucial for effective use)
 - Archive (forensic support)



NOAA's

Integrated Surface Observing System (ISOS)

- Participation
 - RWIS
 - ASOS (FAA/NWS)
 - AWOS (government/private)
 - NOAA Networks
 - COOP Modernization (NERON)
 - Non-NOAA Federal Networks
 - Private Sector Networks
 - Academic/Research/State Networks



ISOS – Update on COOP-M

Since CLARUS ICC1:

- Name changed to NERON; NOAA's Environmental Real-time Observation Network
- "Letter of Intent" signed with NLETS in Phoenix; MOA with NLETS is being drafted
- ~90 sites in New England now modernized and transmitting 5-minute observations
- Working to partner with GA LETS and the GA Mesonet to bring a state-operated network into the modernization (~160 sites) during FY05



NOAA's

Integrated Surface Observing System (ISOS)

- Status

- Goal Team (NOAA-wide) representation
- Inventory assessment
- Requirements process
- Program involvement
- ISOS Team development
- Linkage to NOAA digital services
- System design; data management
- Dissemination

