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U.S. National Weather Service Weather Ready Nation Initiative

Jim Salzwedel

U.S. National Weather Service

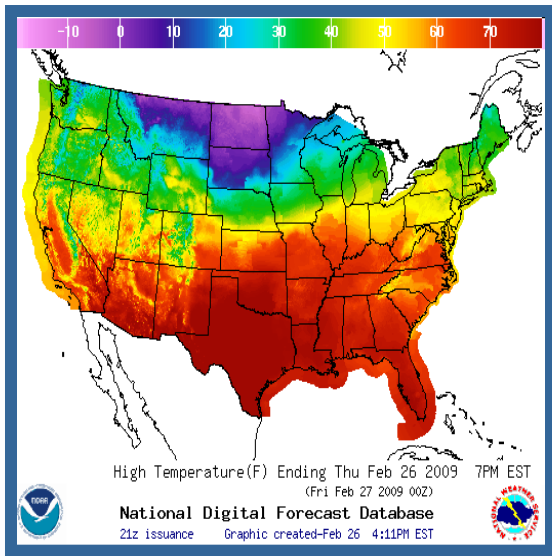
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National Oceanic and Atmospheric Administration

Be a Part of Building a Weather-Ready Nation: NWS Roadmap and Pilot Projects



Jim Salzwedel

National Weather Service WFO New Orleans/Baton Rouge





Building a Weather-Ready Nation



Looking Forward

Becoming a Weather-Ready Nation is about building community resilience in the face of increasing vulnerability to extreme weather.



NOAA's NWS is developing new decision support services, improving technology to track and forecast storms, and expanding its dissemination efforts to achieve far-reaching national preparedness for weather events.

Building a Weather-Ready Nation

Emphasis on Decision Support Services



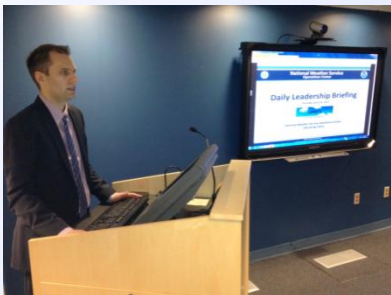
- Provide superior decision support and foundational information services
 - NWS will use our unique, local relationships with Core Partners to help them to **better prepare our communities** for extraordinary events
- Invest in Science and Technology
 - Use **state-of-the-art technology** and **cutting-edge science** to provide the best service possible
- Empower our workforce
 - Workforce is trained and equipped to meet America's evolving needs
 - **Emergency Response Specialists (ERS)** are accessible on-site and through remote technologies to provide **Impact-based Decision Support Services (IDSS)**

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National Weather Service Pilot Projects



- NWS Operations Center – Silver Spring, MD
- Regional Operations Center – Ft Worth, TX
- Impact-Based Decision Support Services in a Coastal Environment – New Orleans, LA
- Impact-Based Decision Support Services in an Urban Environment – Baltimore, MD/Washington DC
- Integrated Environmental Services – Tampa, FL
- Mesoscale Meteorology Science to Operations – Charleston, WV

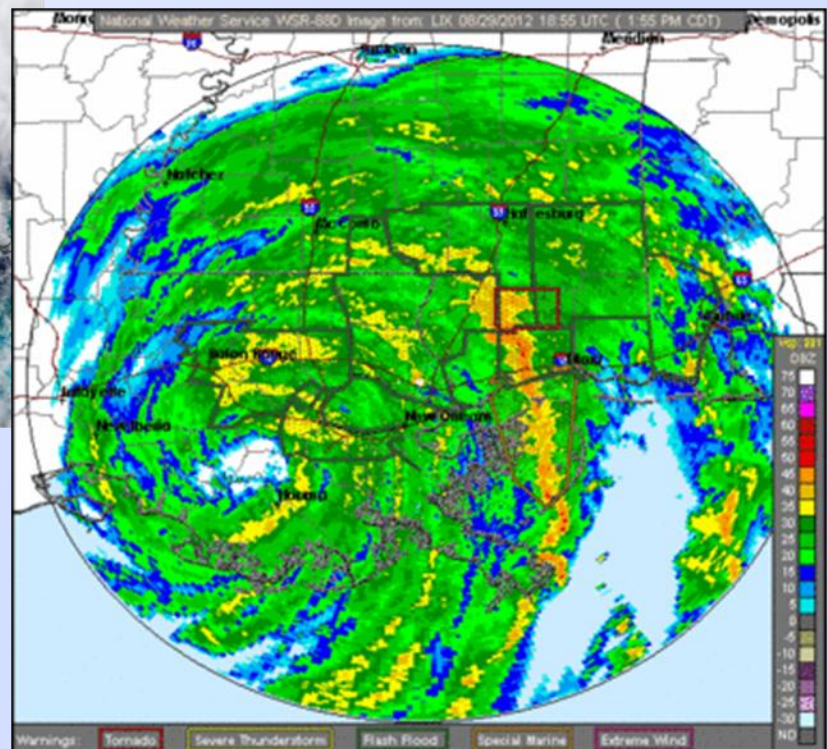




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WFO New Orleans/Baton Rouge Hurricane Isaac Support





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Big Impact

Storm Surge 6 to 12 feet. 8.2 feet was a new record for Lake Pontchartrain

Rainfall 10-20 inches – locally higher

Historic river flooding event

**Two potential dam compromises → warnings/evacuations with each
Three tornadoes on the MS coast → including an EF-2 in Pascagoula**

Over 12,000 homes flooded – including 7,000 in LaPlace alone

4 fatalities

Around 1 million power outages



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“Out of the box storm surge”

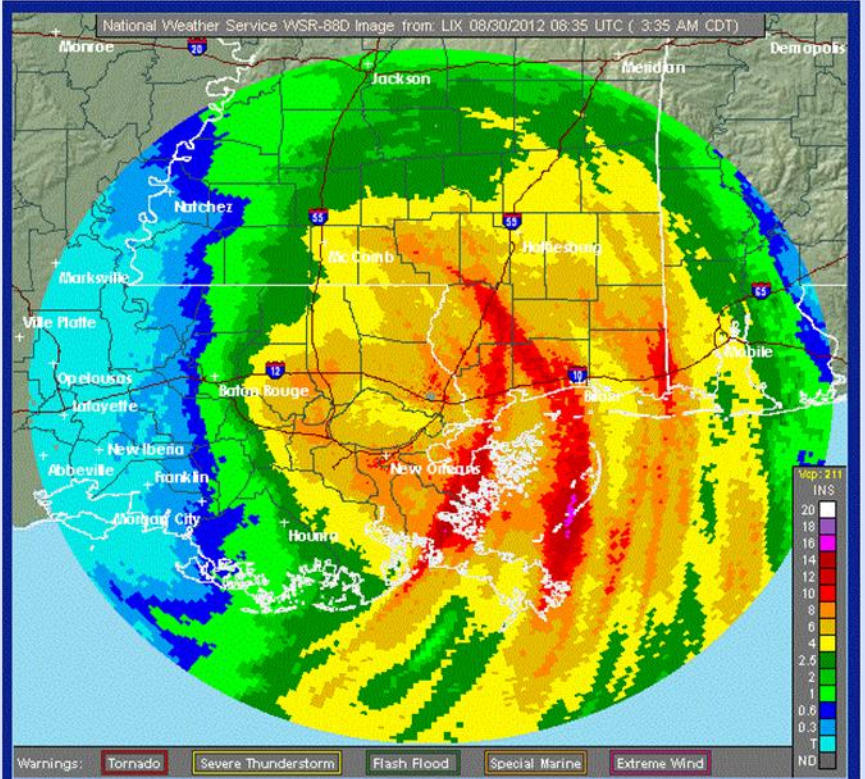
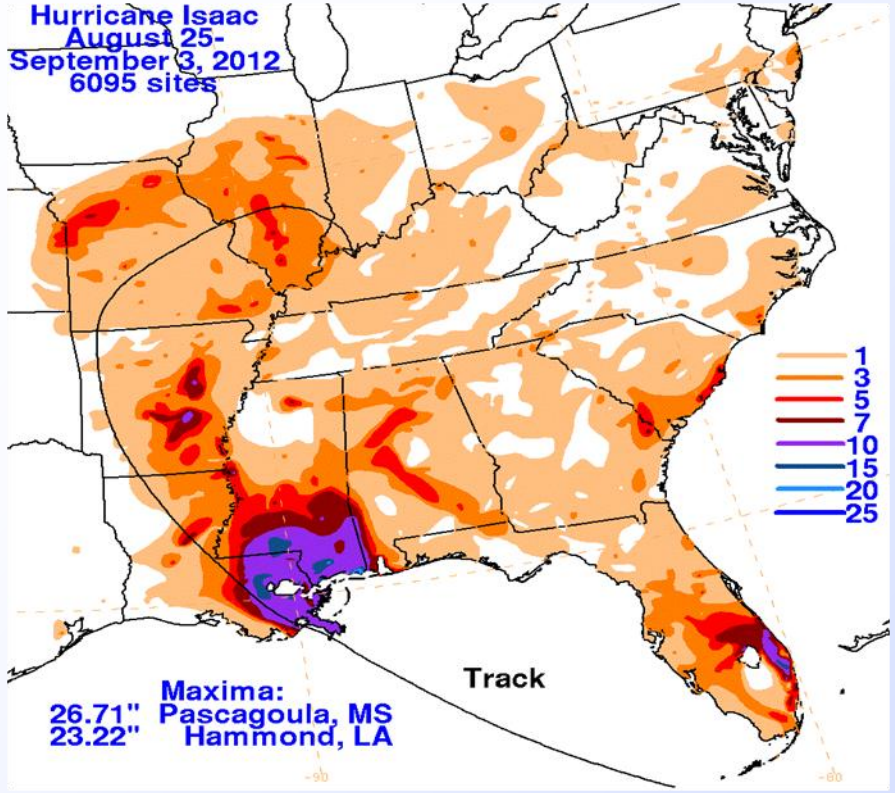




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Rain (26.71 Pascagoula/20.68 Carrollton New Orleans)





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Record River Flooding

Historic River Flooding

Location	Crest (feet)
Wolf near Landon	31.36 (record)
Wolf near Gulfport	16.50 (record)
Hobolochitto near Caesar	21.48 (record)
Tangipahoa near Kentwood	16.86 (major)
Tangipahoa near Robert	24.02 (major)
Amite near Maurepas	7.48 (major)
Pearl near Pearl River	18.54 (major)
Bogue Chitto near Tylertown	29.81 (major)
Bogue Chitto near Franklinton	22.13 (major)
Bogue Chitto near Bush	19.82 (major)
Biloxi near Wortham	26.38 (major)
Tchefuncte near Covington	26.81 (moderate)
Bogue Falaya at Camp Covington	55.15 (moderate)
Jourdan near Kiln	9.69 (moderate)



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Deployments

Louisiana Governor's Office of Homeland Security –
2 Meteorologists

New Orleans Emergency Operations Center – 2
Meteorologists

Mississippi Crisis Action Center – 2 Meteorologists,
Port Meteorological Officer

SWERV – Pearl River support – 1 Meteorologist and
1 Hydrologist from the Lower Mississippi River
Forecast Center



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Meanwhile, back at the office....

12 Hour Shifts

Coordinator

Digital

Decision Support

Public Service

Radar

Emergency Response

HAM



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Briefings (Power Point Updates Every 6 Hours)



Today's Schedule

Monday August 27, 2012



<p>Briefing Schedule Monday August 27, 2012</p> <p>0800 Federal Executive Board (KEG) 0830 SE LA Hurricane Task Force (MM) 0900 USCG Command (FR) 1000 Unified Command Group (KEG) 1015 MS Gulf Coast (KEG/FR/PBJ) 1030 USCG/Ports/Waterways Management/Shallow and Deep Draft Vessels (FR) 1100 Jefferson Parish 1300 USCG/Ports/River Pilots (FR) 1330 <u>WeatherNation</u> (KEG) 1400 WFO Webinar MS/LA (DSS Desk) 1600 MEMA Command Briefing (FR) ***Media cut ins*** (KEG)</p>	<p>Deployments</p> <p>Mississippi Crisis Action Center activation 0700 (<u>Bannan, Efferson</u>)</p> <p>LA GOHSEP activation 0800 (Moreland, Grigsby) SWERV deployed to Louisiana State Police Headquarters (<u>DeArmas</u>)</p> <p>New Orleans EOC/mayor: activation 1200 (Erickson, Zeigler)</p> <p>Jason Dunn (WFO FWD) deployed to WFO LIX to help with scheduling gaps beginning 8/28</p>
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All Clear

Minor Impacts

Heightened Impacts

High Impacts

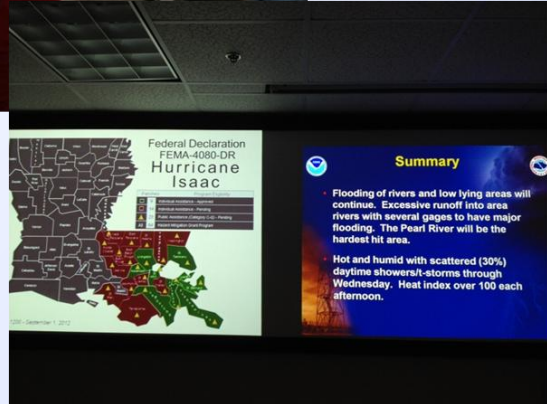
Full Engagement



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In action...

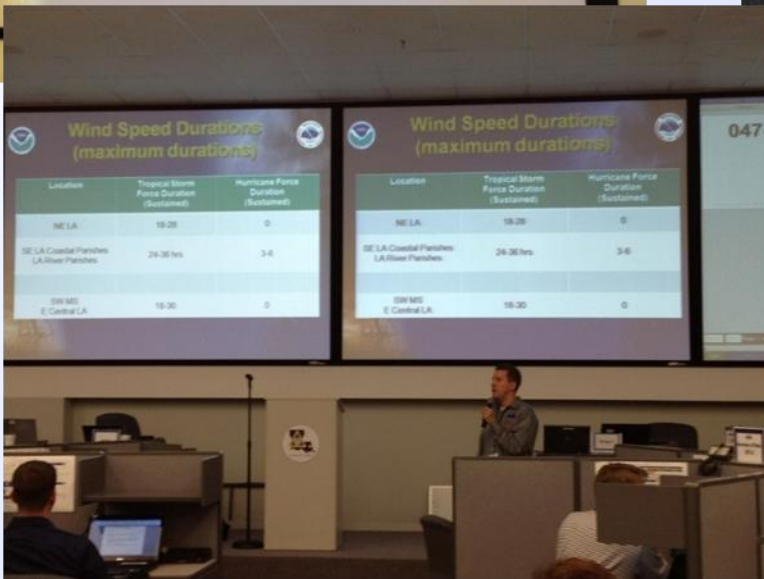




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In action...





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In action...





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Highlights...

WFO LIX - Isaac DSS Highlights

- Over 350 formal/informal briefings + nearly 100 from office
- **Press conferences**
- 95 media interviews
- **AWIPS thin client test**
- Face-to-face audience with
 - Governors of Louisiana and Mississippi
 - Mississippi and Louisiana Emergency Management Directors
 - Mayor of New Orleans
 - US Senator

Deployment Laptop

WFO LIX – Deployment Laptop



- RedHat 5 OS – Linux version of AWIPS thin client, Pidgin
- Virtual Windows for other software (GR2Analyst, HurrEvac)
- D2D/CAVE with LIX localization → Radar, lightning, model, satellite data



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Lessons Learned

WFO LIX - Isaac DSS Lessons Learned

- **Social science – categories vs. impacts**
- **Social media – staying on top of message (e.g. rumors going “viral” during dam failure threats)**
- **Storm surge graphics**
- **Deployment protocol/etiquette training**
- **Further improvements to coordination/communication**
- **Dam failure threat best practices**



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“New” From Our Pilot Project

Navy Week Deployment
Final Four Deployment
Superbowl Deployment
AWIPSII Thin Client
Mississippi River Navigation Forecast
Emergency Management Mobile Tool
HPAC Plume Modeling
Tropical Training
Exercises

We are in the game!!



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Homeland Security Support of Superbowl XLVII

Deployed with the United States Coast Guard

Deployed with New Orleans Emergency Operations Center

Deployed with Federal, state, and local DHS

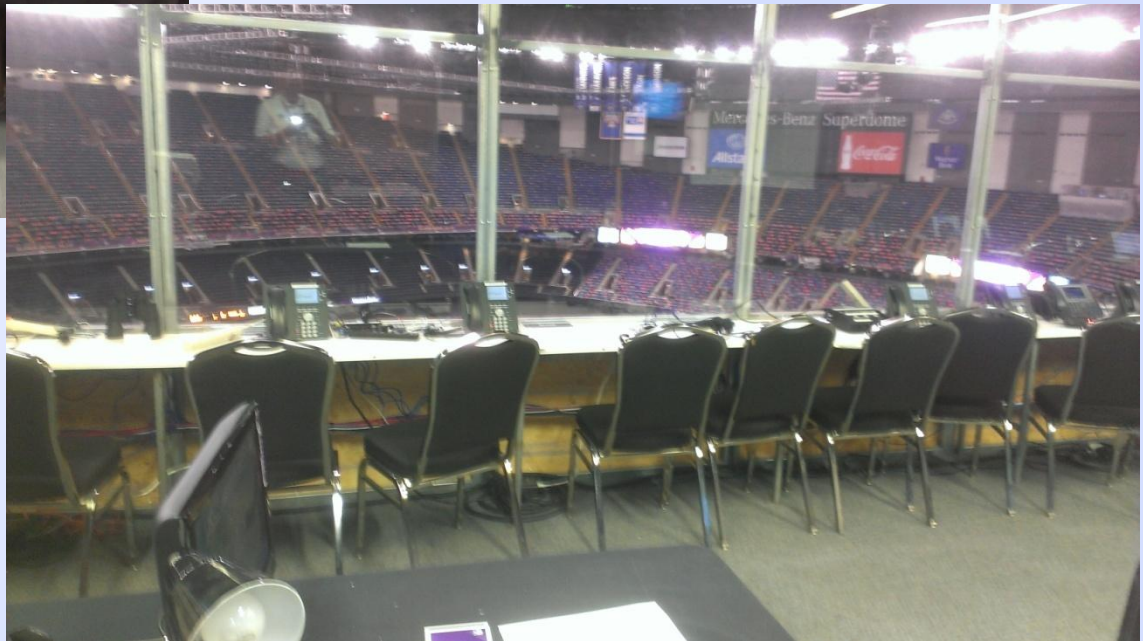
Ran contingency plume models



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Homeland Security Support of Superbowl XLVII





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This is NOT a game, you have to communicate!

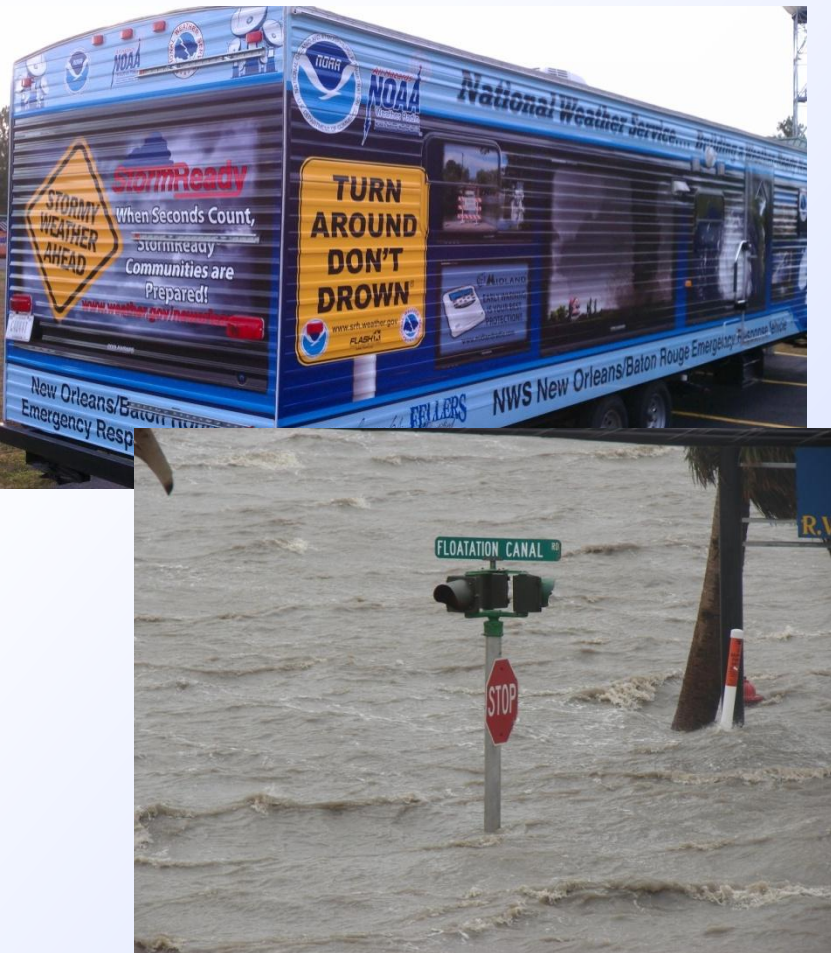




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This is NOT a game, you have to communicate!





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This is NOT a game, you have to communicate!





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This is NOT a game, you have to communicate!



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