

**American Meteorological Society
Washington, D.C. Chapter**

***NOAA's National Weather Service
More Than Meets the Eye***

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***Silver Spring, MD
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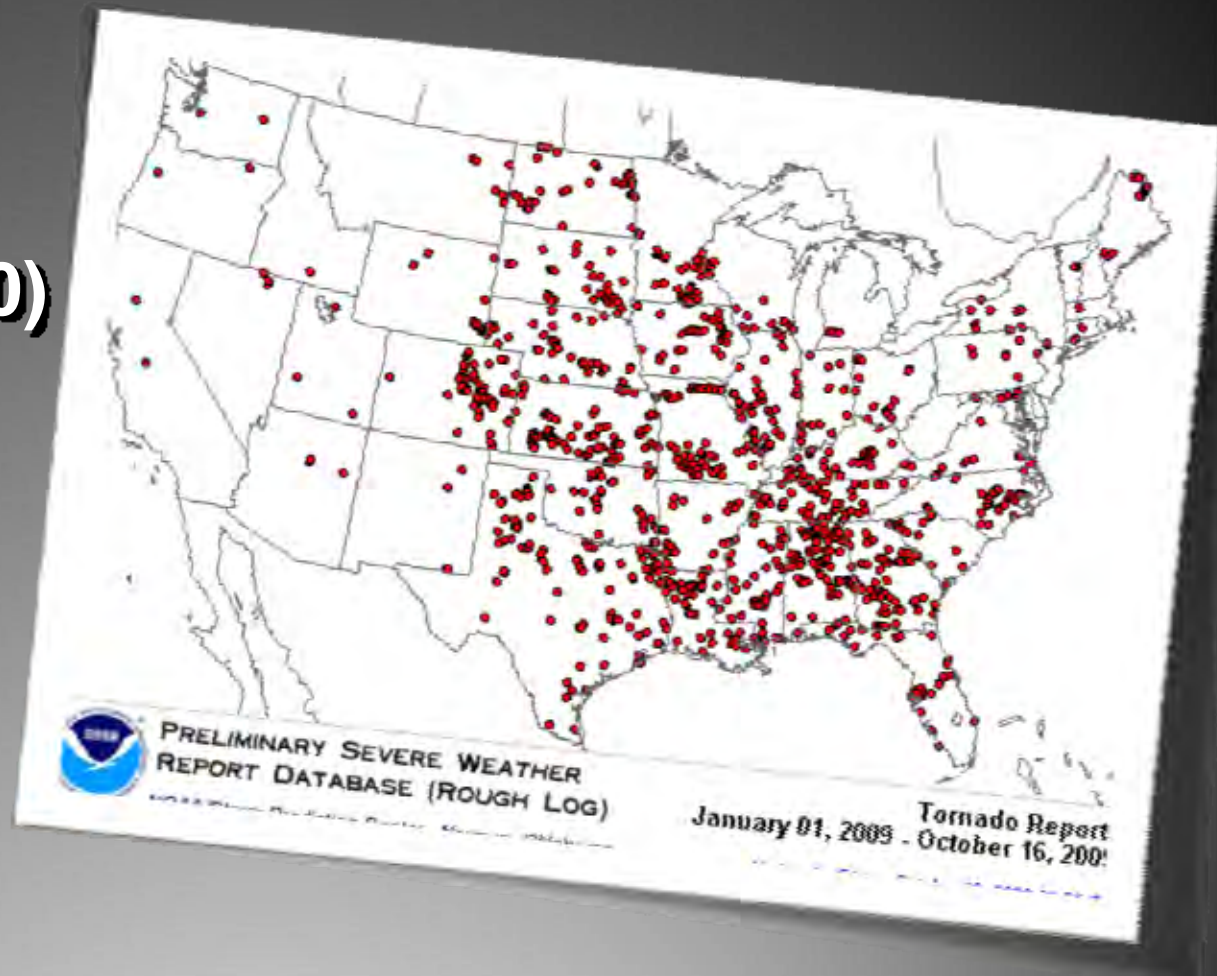
2009 Recap: Flooding

- Major flooding along Red River and elsewhere
- Avg. lead time for flash floods: 73 min.



2009 Recap: Tornadoes

- ~1,000 so far
(last year: 1,700)
- Avg. lead time:
12 min.



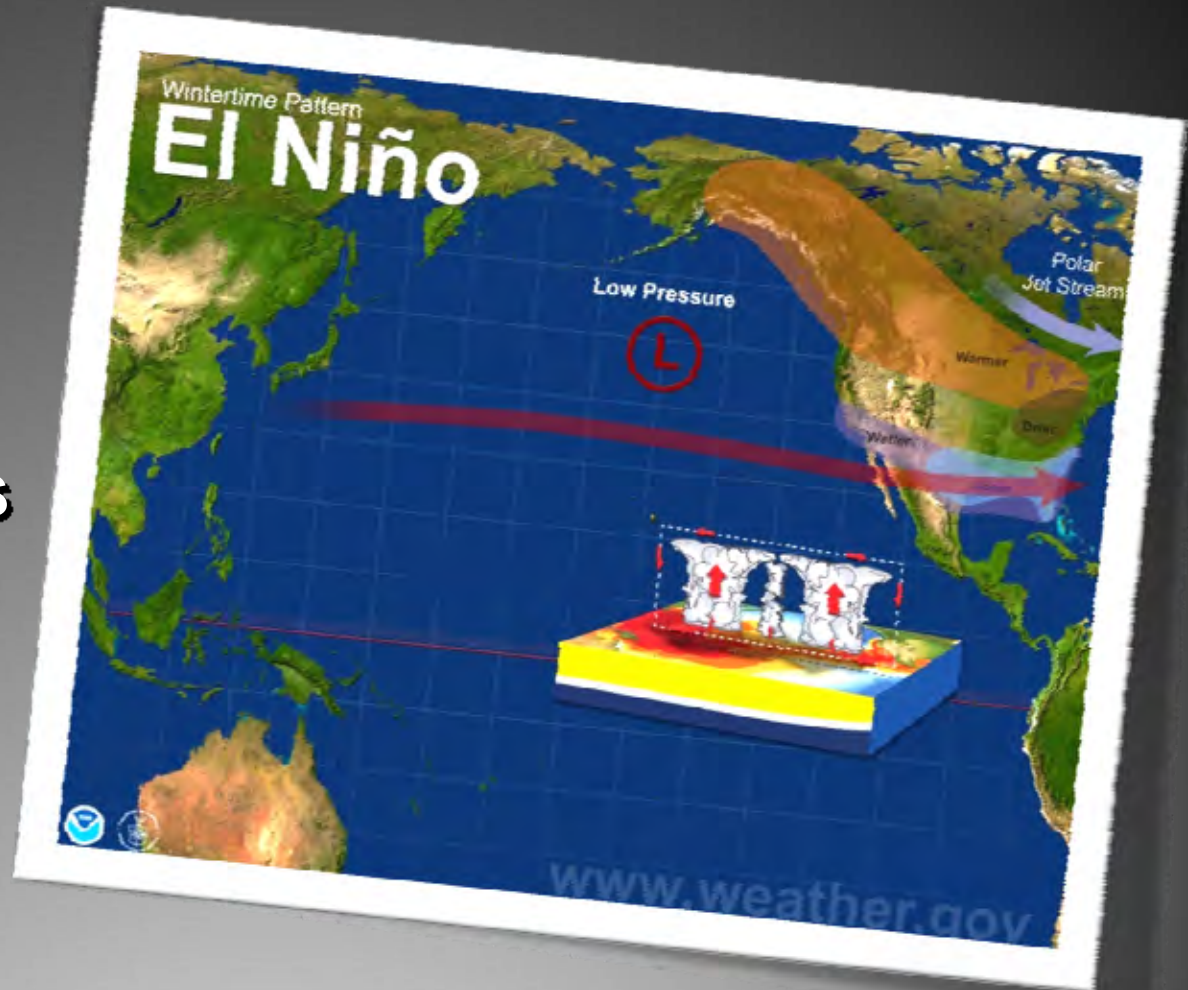
2009 Recap: Atlantic Hurricanes

- **8 named storms**
(last year: 16)
- **2 hurricanes**
(last year: 8)



Happening Now: El Niño

- Expected to strengthen
- Impacts across United States



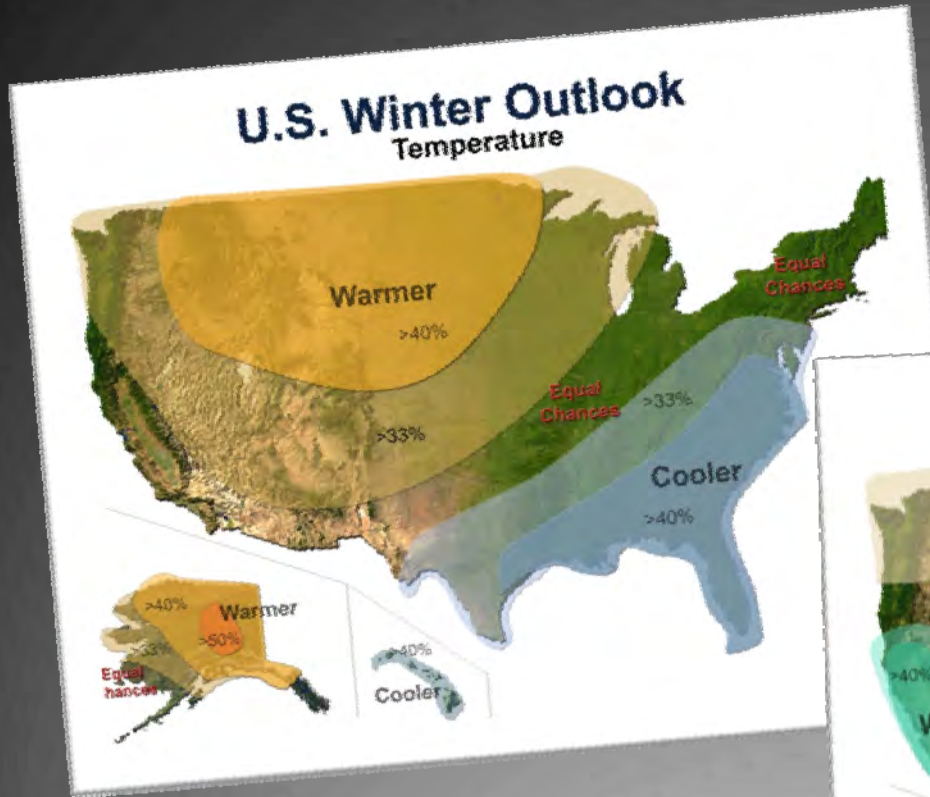
Happening Now: Hanson Dam Washington State



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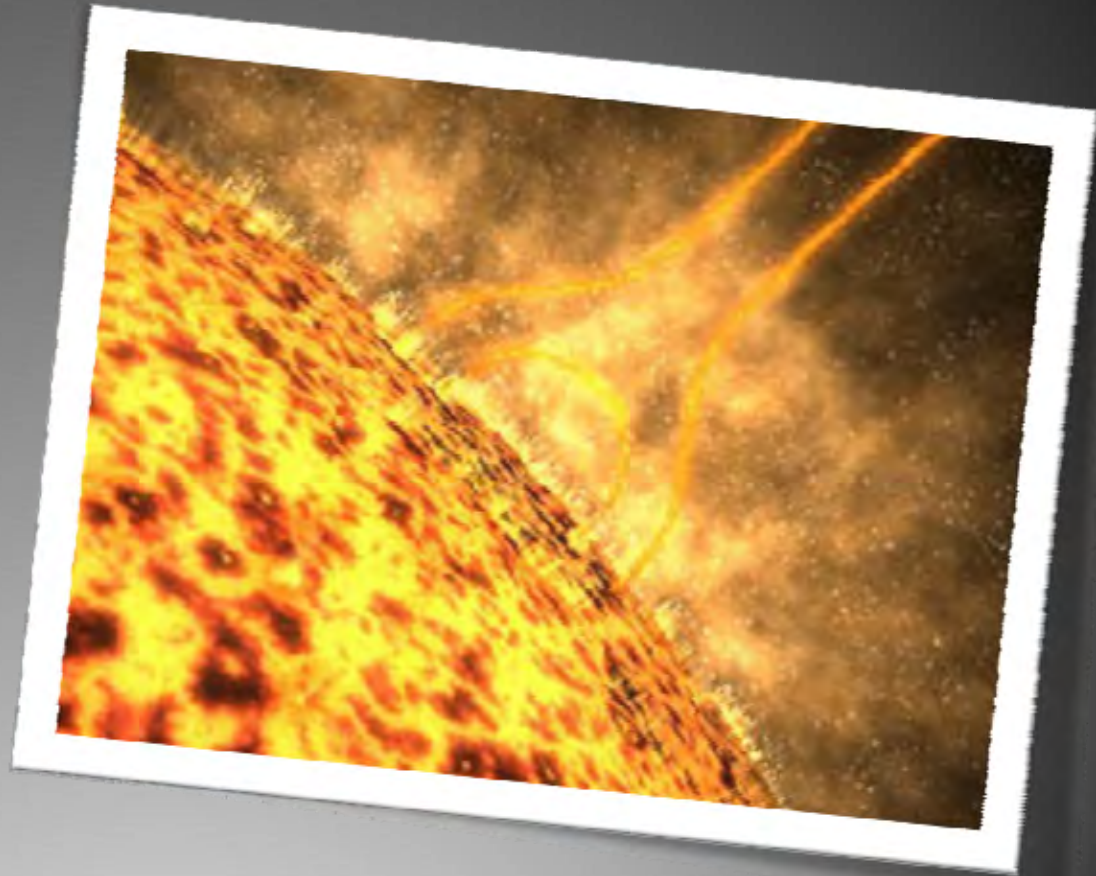
Happening Now: Winter Outlook



Space Weather Services

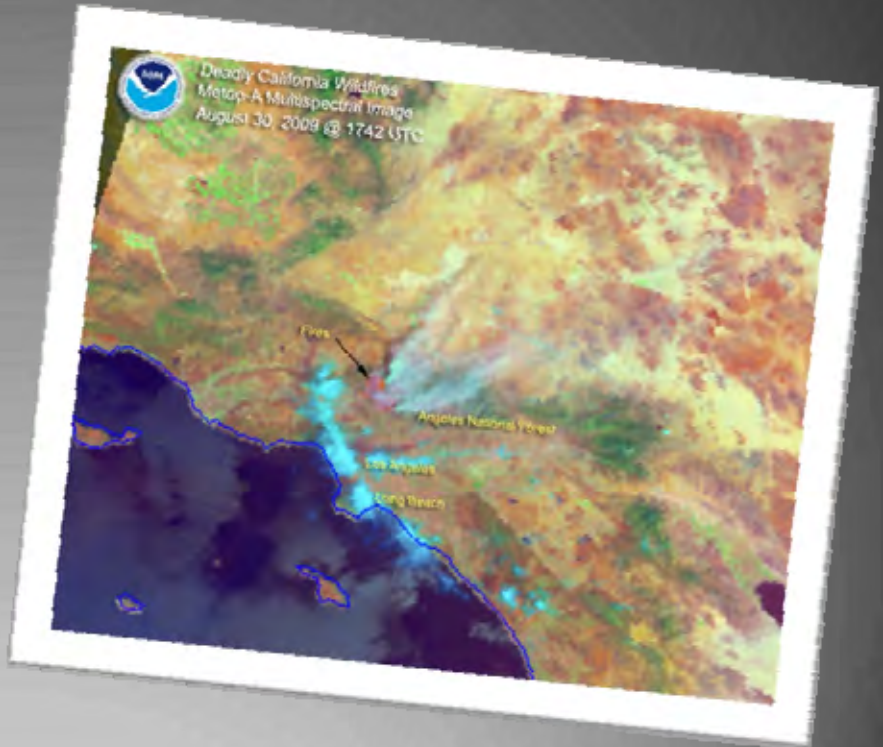
Mitigates threats to:

- *National security*
- *Communication*
- *Our economy*



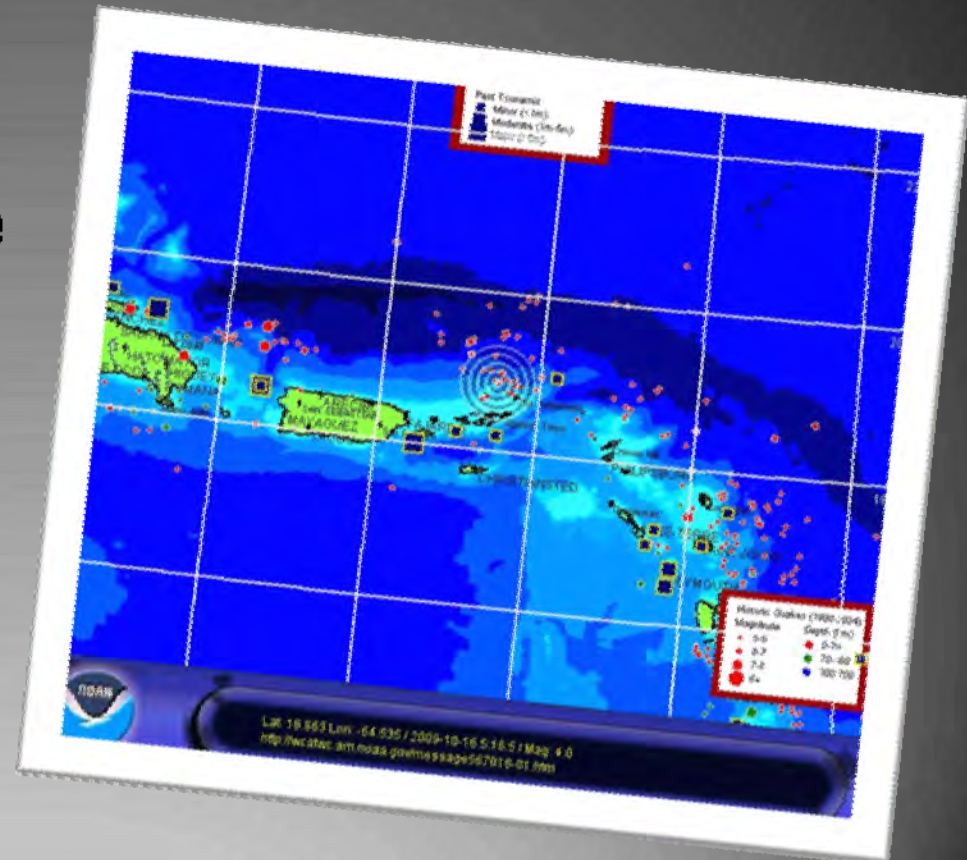
Fire Weather Services

- 85 NWS Incident Meteorologists
- Supports fire suppression nationwide
- Mutual agreement with Australia
 - *Operations*
 - *Training*



Tsunami Warning Services

- U.S. West Coast and Alaska Warning Center
- Pacific Tsunami Warning Center
- 24/7 operations
- Caribbean vulnerable



International Activities

- **NOAA/NWS Mission**
 - *Data exchange, interoperability of systems, research & development (next generation)*
- **U.S. Foreign Policy**
 - *Governance (met services, UN), humanitarian assistance, democracy (information access)*
- **U.S. Commerce**
 - *Demonstrate U.S. technologies, level playing field (policies & standards), market access*



International Activities

- **Severe Weather Forecasting Demonstration Project (SWFDP)**
- **Global Observing System (GOS)**
- **Bilateral relations**

- *Australia, Canada, China, Finland, Germany, Korea, Mexico, Russia, Saudi Arabia, UK*



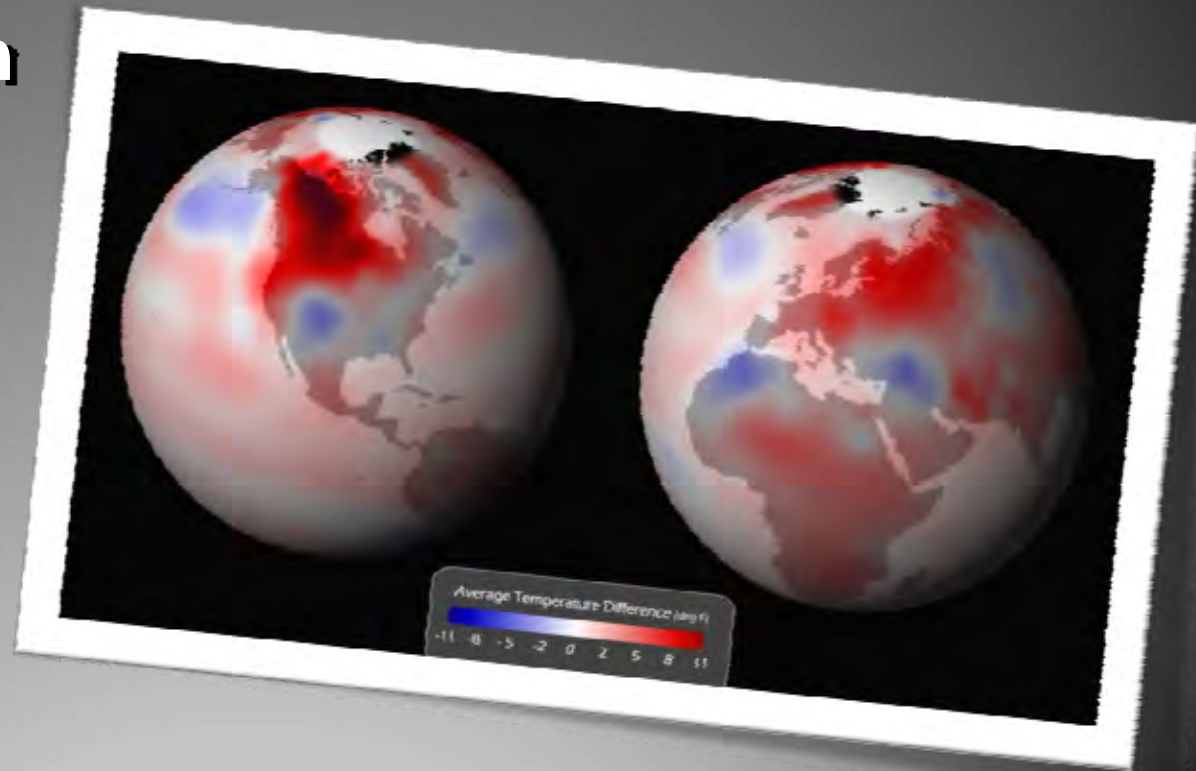
World Climate Conference

- **Dr. Lubchenco headed U.S. delegation**
 - *Eight Federal agencies*
 - *White House*
- **Theme: Better climate information for a better future**



Climate Services Development

- A NOAA-wide priority
- Climate observations and monitoring
- Climate research and modeling
- Mitigation
- Adaptation



Looking Ahead

NWS Strategic Plan Will Help Us Create Expanded and More Robust:

- **Decision support services**
- **NOAA climate services**
- **Water services**
- **Sector-specific services**
- **Earth System prediction capabilities**



National Mesonet

NRC Report on Network of Networks (NoN):

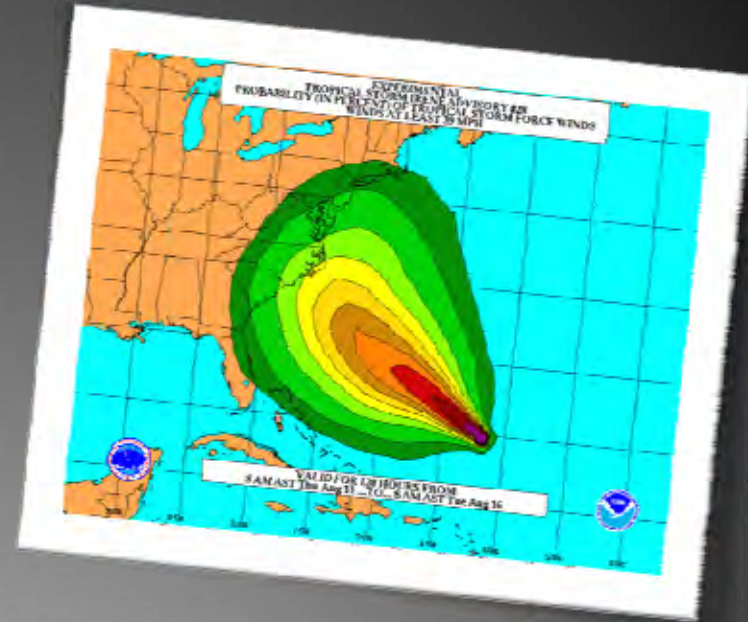
- U.S. capabilities are uncoordinated
- Overarching national strategy needed
 - *Build infrastructure for data exchange*
 - *Fill data gaps*
 - Spatial
 - Temporal
 - Elements



National Hurricane Forecast Improvement Project

Goals:

- **Improve Forecast Accuracy**
 - *Hurricane impact areas (track): 50% in 10 years*
 - *Severity (intensity): 50% in 10 years*
 - *Storm surge impact locations and severity*
- **Extend forecast reliability out to 7 days**
- **Quantify, bound and reduce forecast uncertainty to enable risk management decisions**



National Hurricane Forecast Improvement Project

- **National Hurricane Research Alliance**
 - **Find breakthrough improvements:**
 - *In our understanding of hurricane prediction science*
 - *In forecasting technologies*
 - **NOAA partnering with other Federal Agencies (NSF, Navy, NASA, DOE) and academic community**
 - *Synchronize efforts and resources*
 - *Apply new science and technology to warning and forecast shortfalls*

National Unified Operational Prediction Capability (NUOPC)

- USAF, Navy, and NOAA partnership
- Enables a National Global Prediction System
- Accelerated advancement of U.S. atmospheric prediction capability



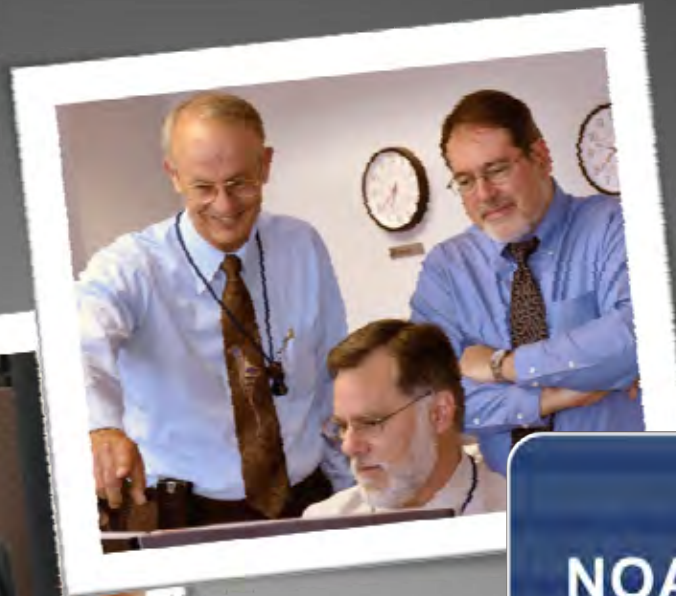
Partnerships Are Critical

- **Science and technology creating new opportunities**
- **Global needs are expanding**
- **Private sector capabilities**



The Best Places to Work

IN THE FEDERAL GOVERNMENT 2009



NOAA is ranked
#35 out of 216



You Can Join Us!

Student Career Experience Program (SCEP)

<http://www.weather.gov/mdl/coop/coop.php>

Hollings Scholarship

http://www.oesd.noaa.gov/Hollings_info.html

NOAA SeaGrant Fellowship

<http://www.seagrants.noaa.gov>

NOAA Educational Partnership Program (EPP)

<http://www.epp.noaa.gov>

Presidential Management Fellows (PMF) Program

<https://www.pmf.opm.gov>

