Acquisition and Grants Office

Professional and Technical Services (ProTech) Branch

Weather Domain Industry Day

December 18, 2017

Agenda

- **Introduction / Administrative Remarks**
- **Acquisition and Grants Office (AGO) - Opening Remarks**
  - **Mr. Jeffrey Thomas, Acting Director**
- **National Weather Service (NWS) / Office of Planning and Programming for Service Delivery**
  - **Mr. Kevin Cooley, Director**
- **NWS / National Centers for Environmental Prediction**
  - **Dr. Bill Lapenta, Director**
- **Break / Collect Question Cards**
- **ProTech Overview and Update / Questions and Answers**
  - **Mr. Jay Standring, ProTech Branch Chief**
- **Closing Remarks**
- **Meet and Greet**
  - **NWS, AGO Contracting Officers, and Small Business Representatives available in the Conference Center**

Administrative Information

- **This Industry Day event is part of the planning process**
  - **A Request for Proposals (RFP) has not been issued for the Weather Domain**
  - **All acquisition related information is subject to change**
  - **Any conflict between what you hear and see today will be resolved in favor of the written final RFP**
- **Registration list, presentations, and Q&As will be posted to the FBO notice and the ProTech website**

Jeffrey S. Thomas
Acting Director
Acquisition and Grants Office

Professional and Technical Services (ProTech)
Weather Domain Industry Day

December 18, 2017

DOC GOALS → NOAA PRIORITIES

COMMERCE GOALS

1. **TRADE AND INVESTMENT**
   Expand the U.S. economy through increased exports and inward foreign investment that lead to more and better American jobs

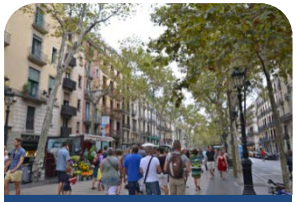
2. **INNOVATION**
   Foster a more innovative U.S. economy—one that is better at inventing, improving, and commercializing products and technologies that lead to higher productivity and competitiveness

3. **ENVIRONMENT**
   Ensure communities and businesses have the necessary information, products, and services to prepare for and prosper in a changing environment

4. **DATA**
   Improve government, business, and community decisions and knowledge by transforming Department data capabilities and supporting a data-enabled economy

5. **OPERATIONAL EXCELLENCE**
   Deliver better services, solutions, and outcomes that benefit the American people

ENVIRONMENTAL INTELLIGENCE



RESILIENT COMMUNITIES

WEATHER READY NATION

OBSERVATIONAL INFRASTRUCTURE

ORGANIZATIONAL EXCELLENCE

NOAA Primary Objectives

(RADM Timothy Gallaudet)

1. **Lead the world in earth system observation and prediction to enhance the nation's economy**

2. **Minimize the impacts of severe weather by implementing Public Law 115-25 (Weather Research and Forecasting Innovation Act)**

3. **Increase the sustainable contributions to the nation's economy through fishery and marine resource management, mapping, exploration, observation, and prediction**

Challenges

- **NOAA will never become an effective environmental intelligence capability for our nation relying solely on 13,000 civil servants. We need partners – a small cadre of organizations - small, medium, and large.**
- **One half of our budget is used to buy products and services under contract or grant.**
- **NOAA-wide spend analysis, sourcing, and major systems acquisition streamlining must become part of our forward progress.**

The Future – Build a ProTech Industrial Base

- ❑ Long Term Strategic Partnerships: Small – Medium – Large Firms
- ❑ Margin drives investment, recruitment, retention and esprit de corps
- ❑ A Race to the Bottom harms everyone

Summary

ProTech is the NOAA program for Professional and Technical Services. It will be a mandatory program for NOAA, available to DOC. It is based on five domains – Ocean, Fisheries, Weather, Satellites, Enterprise – and will be multiple award. It is aimed at providing a cadre of partners – organizations that will cooperate with NOAA for the duration, becoming part of the environmental intelligence capability of our Nation.

National Weather Service

Kevin C. Cooley
Director, Office of Planning and Programming for Service Delivery

December 18, 2017 – ProTech Weather Domain Industry Day
NOAA Center for Weather and Climate Prediction (NCWCP)

What We Do

MISSION

Provide weather, water, and climate data, forecasts and warnings for the protection of life and property and the enhancement of the national economy.

VISION

A Weather-Ready Nation where Society is prepared for and responds to Weather-Dependent Events.

"First, it should be understood that forecasts possess no intrinsic value. They acquire value through their ability to influence the decisions made by users of the forecasts."

What is a Good Forecast? An Essay on the Nature of Goodness in Weather Forecasting"

By Allan H. Murphy; Weather and Forecasting (June 1993)

NWS Mission

"To provide weather, water, and climate data, forecasts and warnings for the protection of life and property and enhancement of the national economy."

Touching every county every day.
Supporting national security and public safety.

"Ready, Responsive, Resilient"

Becoming a Weather-Ready Nation is about
building community resiliency in the face of increasing vulnerability to extreme weather, water and climate events

Better forecasts and warnings

Consistent products and services

Actionable environmental intelligence

Connecting forecasts to decisions

Involves the entire U.S. Weather, Water and Climate Enterprise WORKING TOGETHER

We have 6500+ WRN Ambassadors

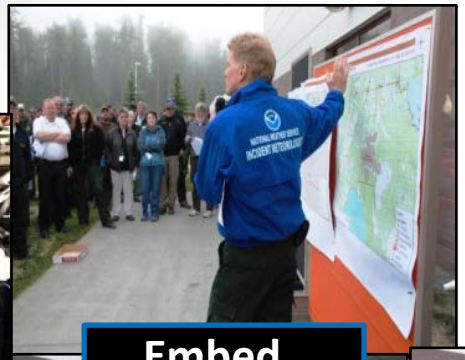
Becoming a Weather-Ready Nation Relies on the NWS Connecting Forecasts to Decisions Based on Impact-Based Decision Support

Generating forecasts and warnings + **Connecting those forecasts/warnings with partner decision-making process** = **Realizing Intrinsic Value and Mission Success**

The best hydrometeorological forecasting in the world

Practice, practice, practice!

Develop relationships / know partner needs



Embed

Impact-based Decision Support Services

Trust

"Ready, Responsive, Resilient"

Pulling it all together to build a Weather-Ready Nation

and accomplish the NWS mission to save lives and property

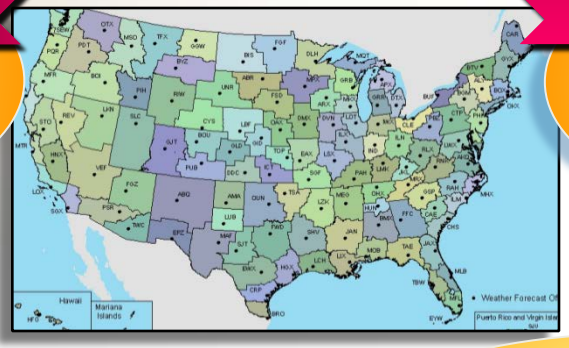
Establishing the Budget Structure Based on: The Forecast Process

Science & Technology Integration

R2O

O2R

Observations



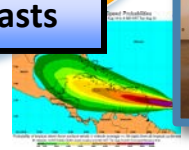
Dissemination

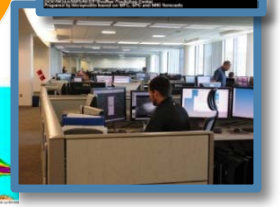
Central Processing

Central Guidance

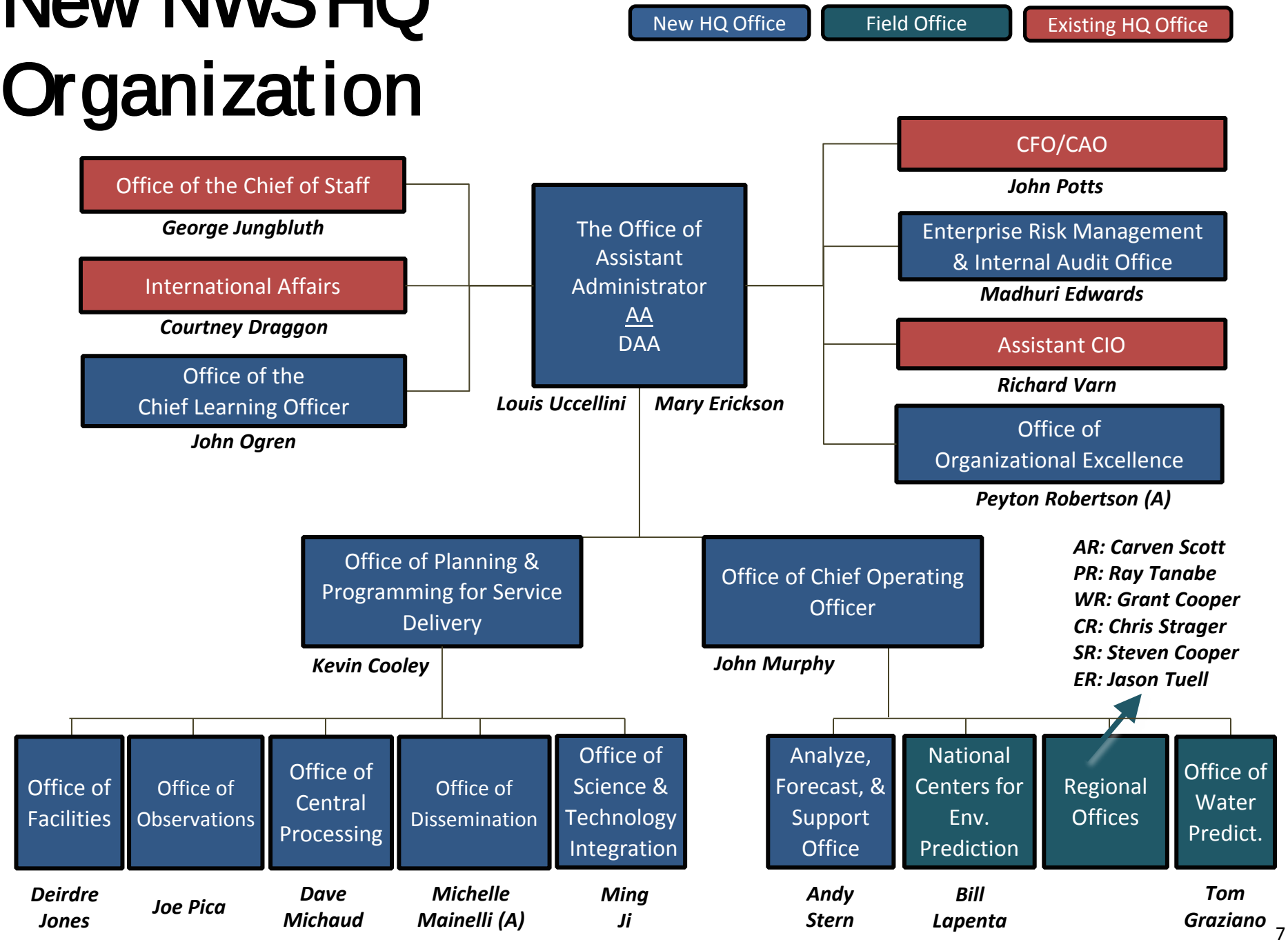
Analyze, Forecast, & Support

Local Forecasts





New NWS HQ Organization

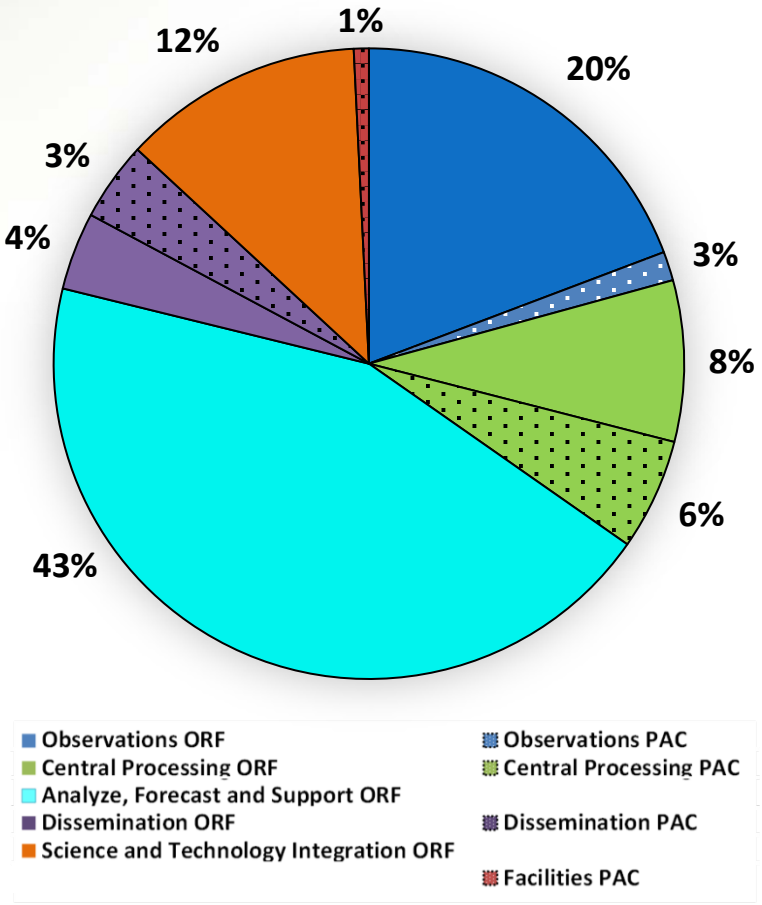


FY 2017 Omnibus
Composition by Portfolio

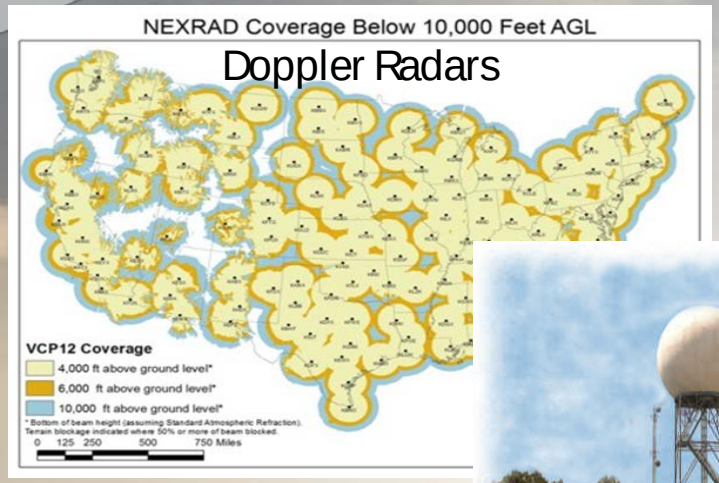
PPA	Funds*	Full Time Employees (FTE)
Observations ORF	216,363	804
Observations PAC	32,755	-
Central Processing ORF	92,790	232
Central Processing PAC	66,761	22
Analyze, Forecast and Support ORF	487,325	3,010
Dissemination ORF	46,743	82
Dissemination PAC	34,619	-
Science and Technology Integration ORF	136,558	488
Facilities PAC	7,650	-
TOTAL	1,121,564	4,638

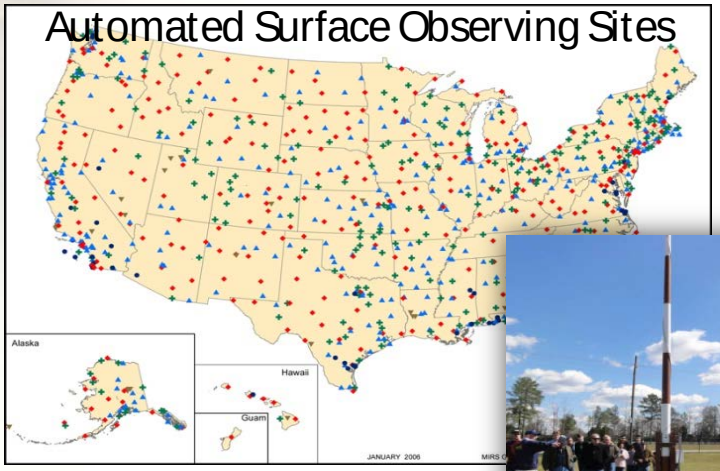
** In thousands of dollars*

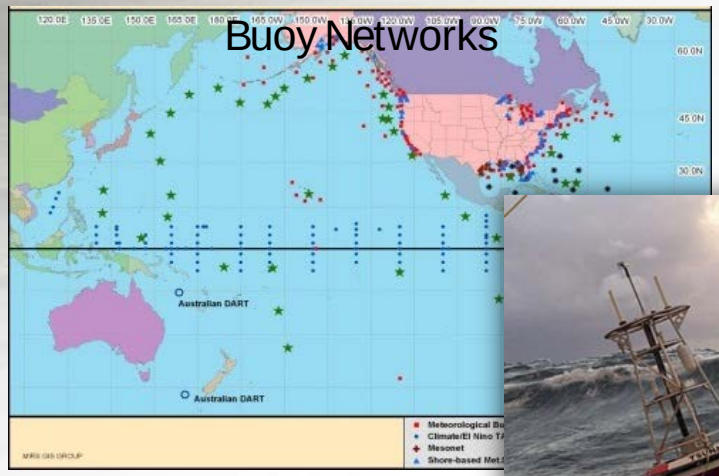
Funds Breakdown

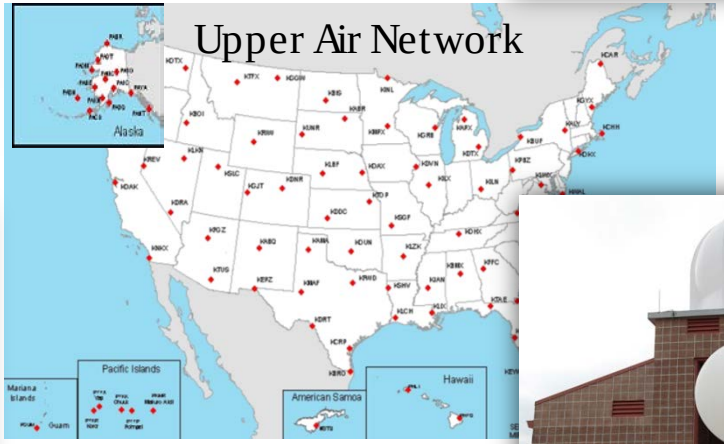


Observations





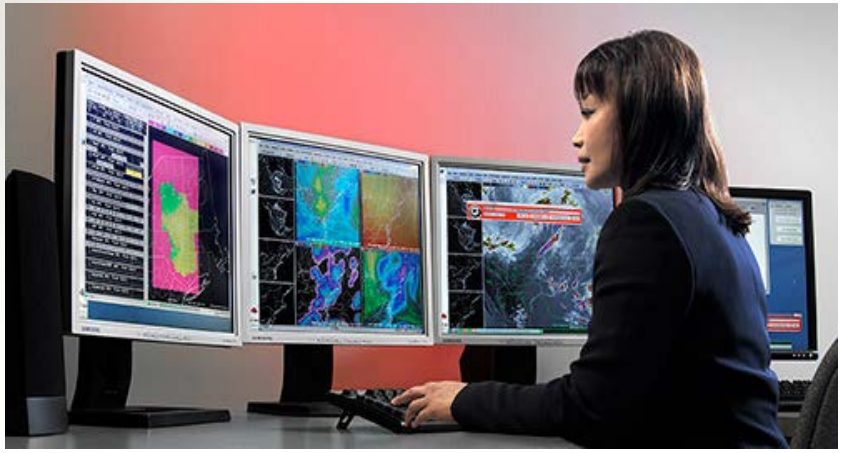




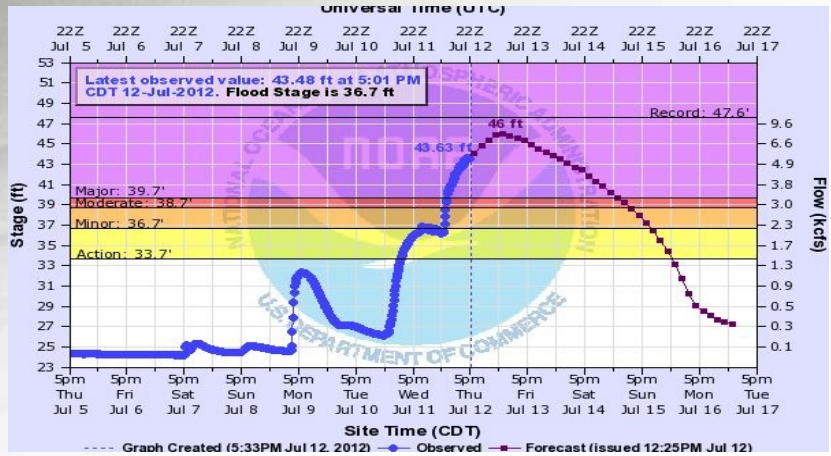
Central Processing

Weather and Climate Operational Supercomputing System (WCOSS)

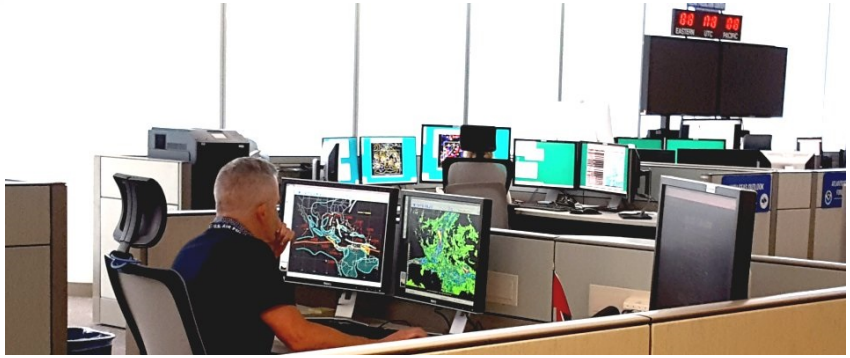
Advanced Weather Interactive Processing System (AWIPS)



Hydrology Information Technology (IT)



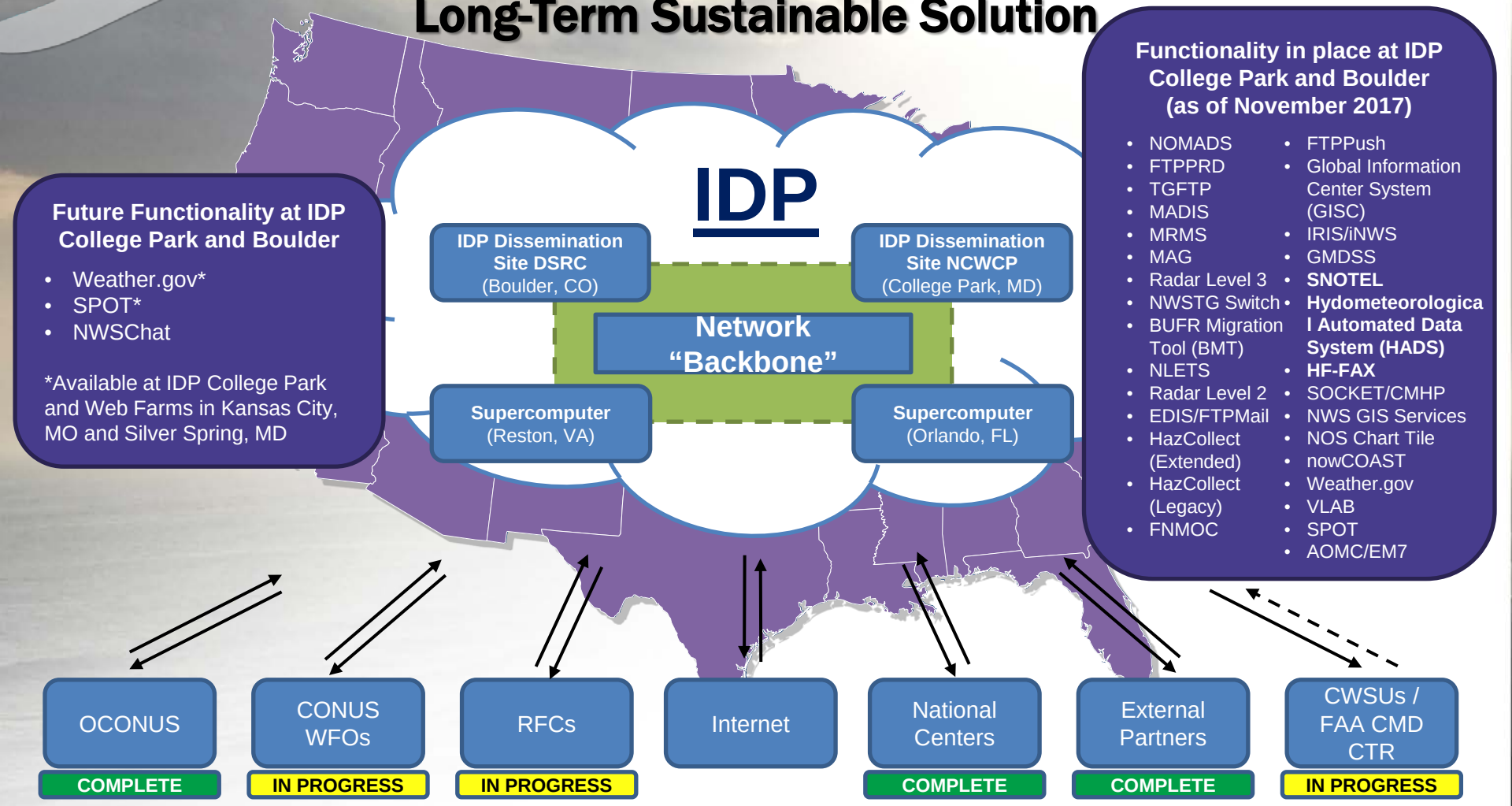
National Centers for Environmental Prediction (NCEP) Central Operations and Regional IT Infrastructure



Dissemination

Integrated Dissemination Program (IDP) OneNWS Network

Long-Term Sustainable Solution



Future Functionality at IDP College Park and Boulder

- Weather.gov*
- SPOT*
- NWSChat

*Available at IDP College Park and Web Farms in Kansas City, MO and Silver Spring, MD

Functionality in place at IDP College Park and Boulder (as of November 2017)

- NOMADS
- FTPPRD
- TGFTP
- MADIS
- MRMS
- MAG
- Radar Level 3
- NWSTG Switch
- BUFR Migration Tool (BMT)
- NLETS
- Radar Level 2
- EDIS/FTPMail
- HazCollect (Extended)
- HazCollect (Legacy)
- FNMOC
- FTPPush
- Global Information Center System (GISC)
- IRIS/iNWS
- GMDSS
- **SNOTEL**
- **Hydometeorological Automated Data System (HADS)**
- **HF-FAX**
- SOCKET/CMHP
- NWS GIS Services
- NOS Chart Tile
- nowCOAST
- Weather.gov
- VLAB
- SPOT
- AOMC/EM7

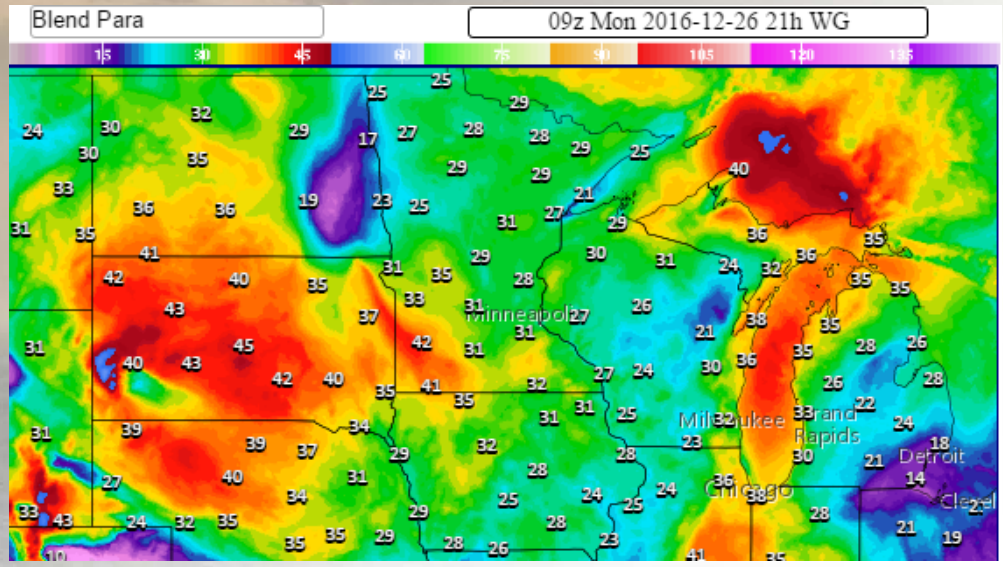
"OneNWS" Network

The future OneNWS network will consolidate all operational networks (OPSnet, Regional, etc.) as a single managed network under NCEP Central Operations (NCO).

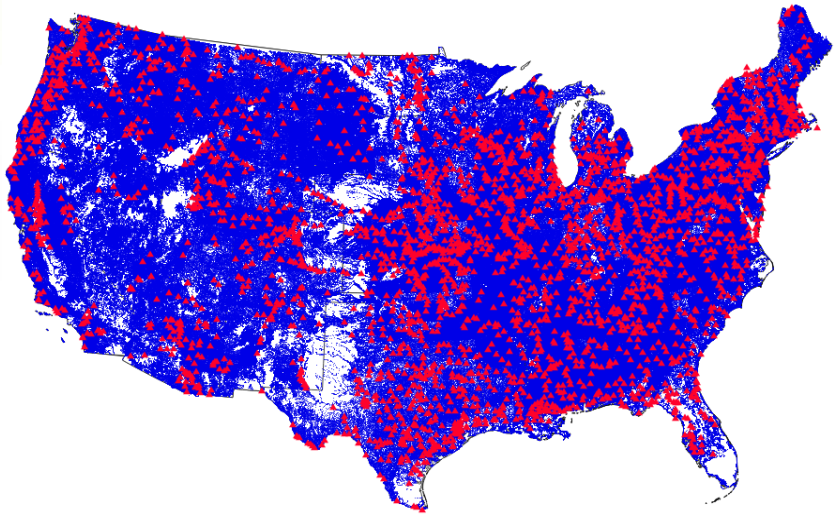
Science and Technology Integration

Coordinate, integrate, and manage field driven R2O

National Blend of Models



National Water Model (NWM)



Current NWS AHPS locations (red)
NWM output locations (blue)

VIRTUAL LAB
Virtual Lab

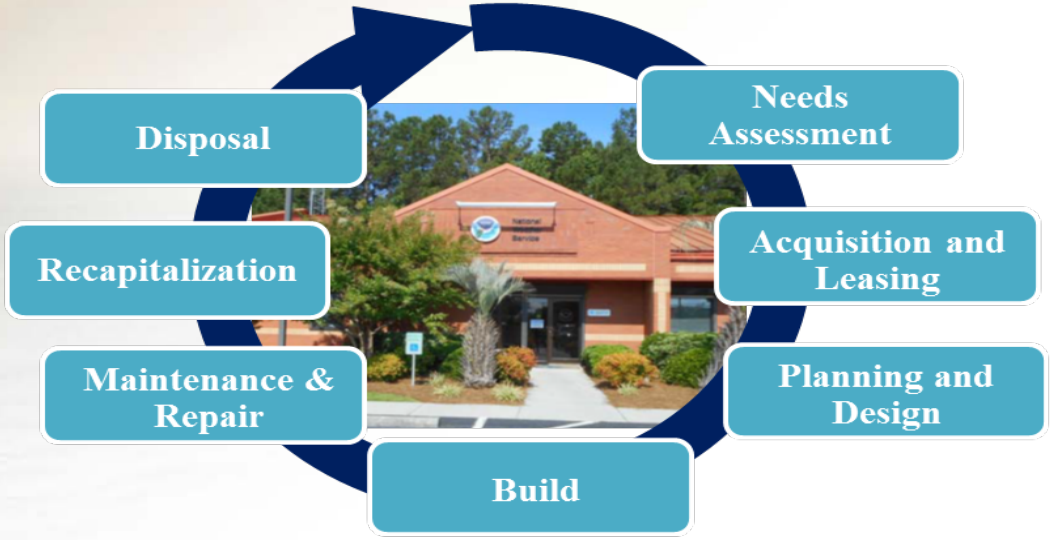
Facilities

Office of Facilities

Management Functions:

Portfolio, Program & Financial Management, Strategic Planning, Facility Operations, Safety, Customer Service & Labor Relations, Environmental Compliance & Sustainability

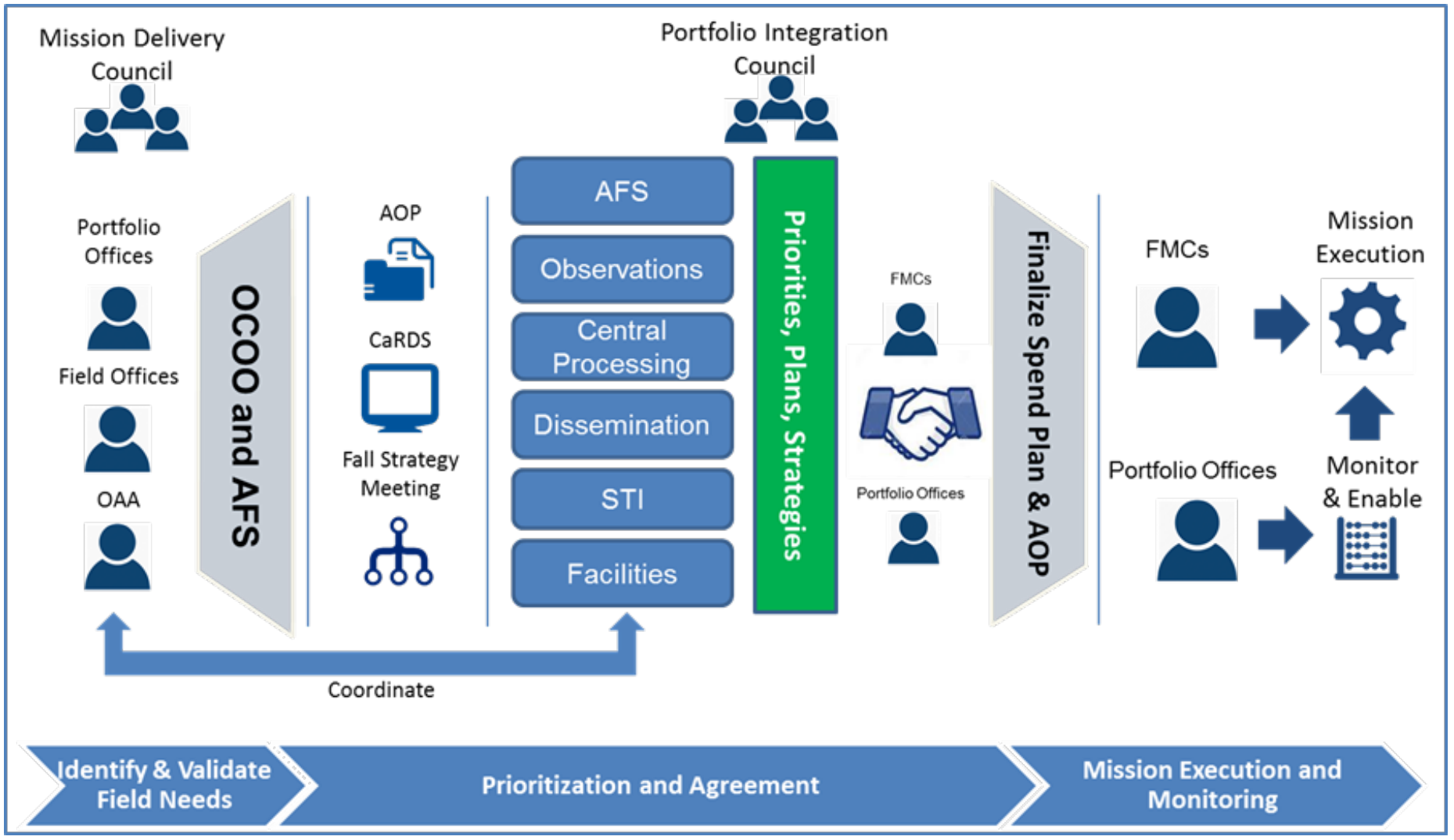
Facilities Lifecycle Management Process:



Requisite Facilities Skillsets:

- Project Management
- Engineering Support
- Data Management
- Space Management
- Planning & Programming
- Design & Construction

Planning to Execution



End to End Integration

Storm Surge Example

Storm Surge Watch/Warning

Operationalized in 2017 Hurricane Season

Science Technology Integration

- Modeling
- Social Science

Central Processing

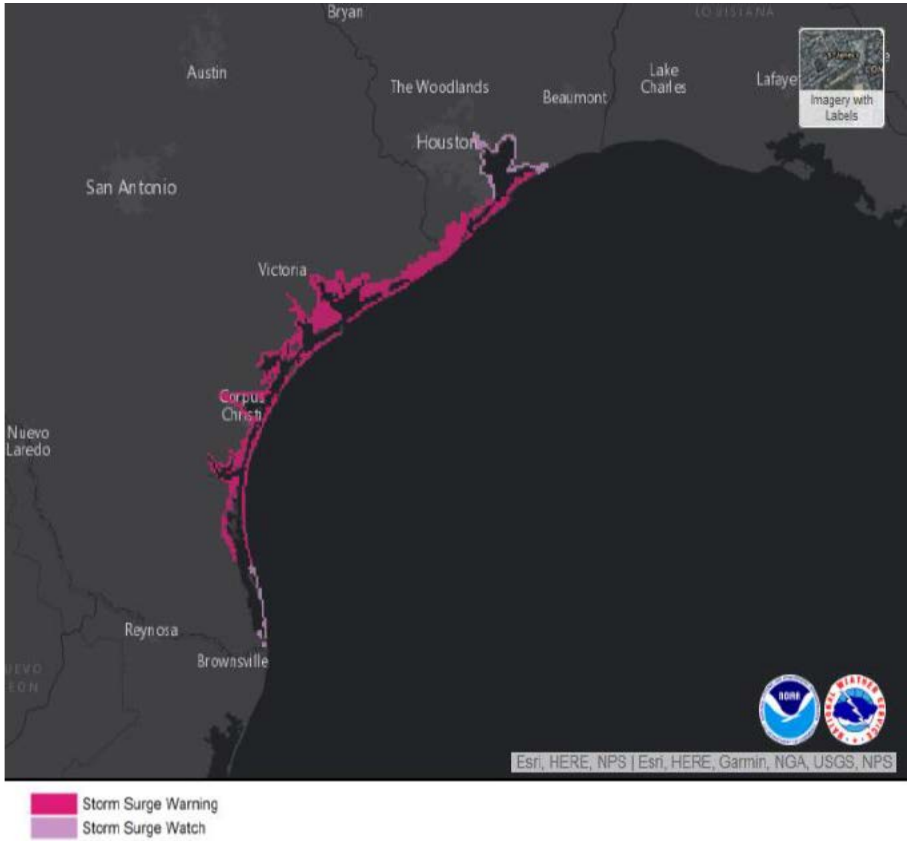
- Implement models on supercomputer
- Develop deploy AWIPS enhancements

Dissemination

- Modify web pages to display products
- Coordination with FCC / FEMA IPAWS

Analyze, Forecast, Support

- Spin-up primary/backup storm surge unit
- Public notification
- National / Local Office collaborative process



FY 2017 Portfolio Highlights

Observations

- NEXRAD Service Life Extension
- ASOS SLEP
- Radiosonde frequency migration
- Achieve IOC for GOES-16
- Weather Buoy Recapitalization
- Auto-launchers

Central Processing

- AWIPS configured for GOES-16 data
- Complete use case development for NAWIPS
- Extend the performance period WCOSS (4.2 PF) supercomputing systems and service.

Science & Tech Integration

- Complete GOES–16 training development (SIFT)
- National Water Model v 1.1
- GDAS/GFS upgrade (last spectral upgrade)
- NGGPS Dynamic Core Integration
- HWRF upgrade
- Implement Impacts Catalog IDSS Portal
- National Blend of Models v3.0

WRN Ambassador Initiative 6500+ Ambassadors

Facilities

- Complete relocation of WFO Davenport & WFO Boston
- Initiate Facility Assessments for 3rd 1/3
- Complete Phase 1 disposal of Annette Island, Alaska

Dissemination

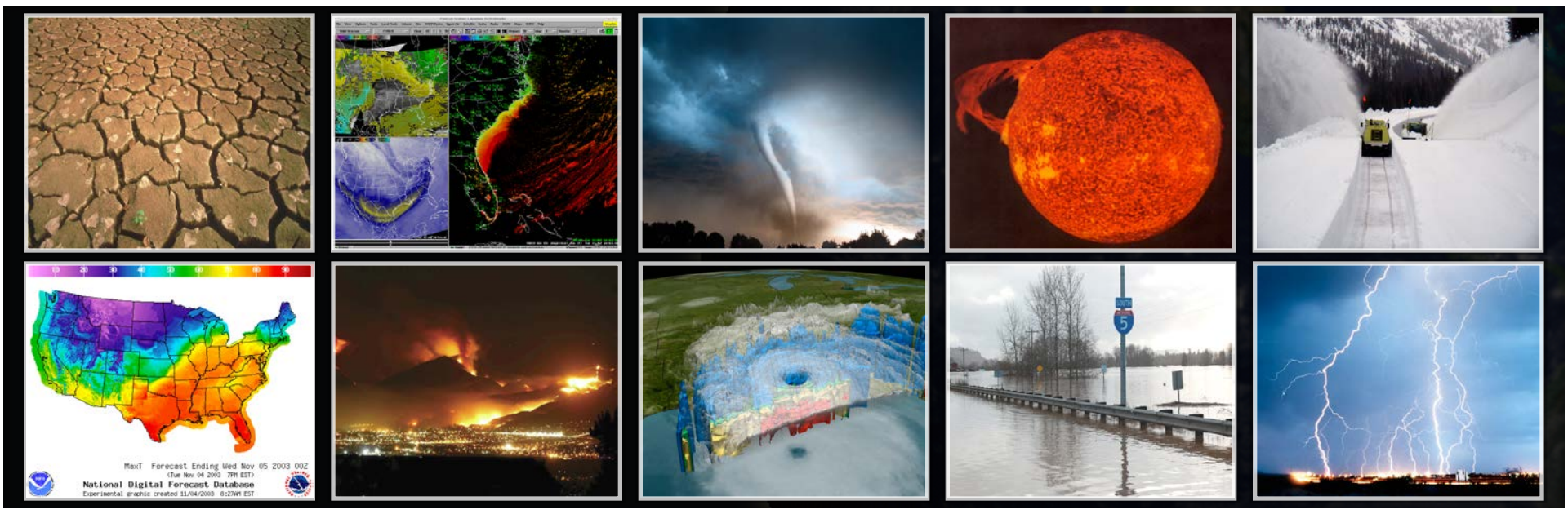
- Shutdown legacy NWSTG
- OneNWS upgrades for 50 CONUS sites
- Mass Dissemination for hazardous weather
- GOES-16 Readiness

Analyze, Forecast, Support

- Evaluation of National Blend of Models prototype demonstration
- Impacts Catalog demonstration to show integration with field ops
- Operational Storm Surge Watch/Warning in 2017
- Integration of GOES-16 products into SWPC operations & website
- CONOPS for NWC Operations Center
- Probabilistic snowfall experiment expanded to 44 WFOs
- Add WFOs to DOT Pathfinder Project

THANK YOU!

The National Centers for Environmental Prediction (NCEP): Enabling a Weather Ready Nation



Dr. William M. Lapenta

Director, National Centers for Environmental Prediction

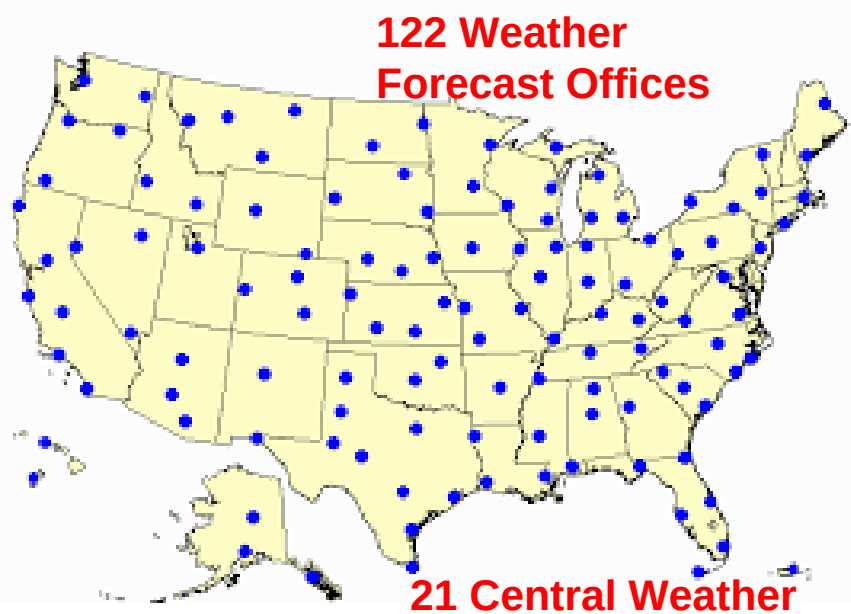
NOAA/National Weather Service

18 December 2017 – ProTech Weather Domain Industry Day

Connecting the NWS Organization to Deliver Accurate and Consistent Products and Services

13 River Forecast Centers

122 Weather Forecast Offices



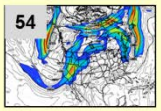
National Water Center

9 National Centers

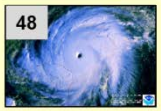
- 490 FTE
- 237 Contractors
- 40+ Visiting Scientists
- 6 NOAA Corps Officers
- $137M Budget

Aviation Weather Center
Kansas City, MO

Climate Prediction Center
College Park, MD



Environmental Modeling Center
College Park, MD



National Hurricane Center
Miami, FL

NCEP Central Operations
College Park, MD
(Supercomputers in Reston & Orlando)

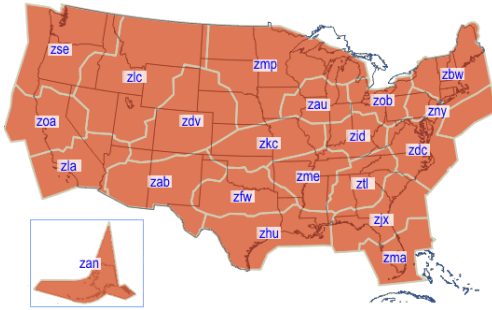
Ocean Prediction Center
College Park, MD

Space Weather Prediction Center
Boulder, CO

Storm Prediction Center
Norman, OK

Weather Prediction Center
College Park, MD

21 Central Weather Service Units



NWS National Centers for Environmental Prediction

Specialized Services – Common Mission

- 490 FTE
- 237 Contractors
- 20 visitors
- 5 NOAA Corps Officers
- $137M Budget

Aviation Weather Center
Kansas City, MO

Space Weather Prediction Center
Boulder, CO

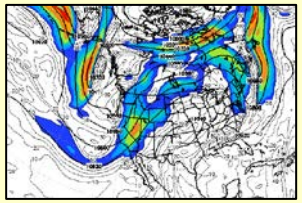
Storm Prediction Center
Norman, OK

National Hurricane Center
Miami, FL

NCEP Central Operations
College Park, MD
(Supercomputers in Reston & Orlando)

Ocean Prediction Center
College Park, MD

Climate Prediction Center
College Park, MD



Environmental Modeling Center
College Park, MD

Weather Prediction Center
College Park, MD

Mission

NCEP delivers national and global operational weather, water and climate products and services essential to protecting life, property and economic well-being.

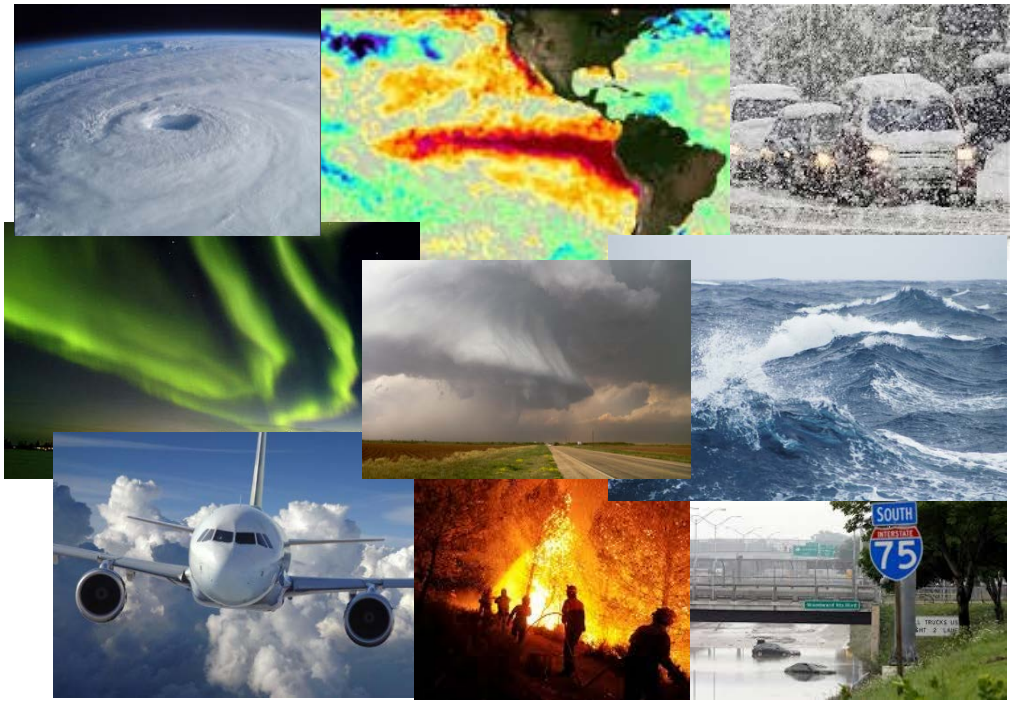
Vision

The trusted source for environmental predictions from the sun to the sea, when it matters most.

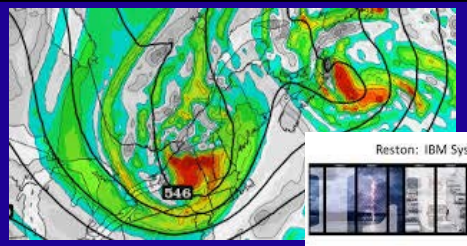
NCEP is a Critical Component of the NWS Collaborative Forecast Process

"Provision of Services from the Sun to the Sea"

- **Solar Monitoring, Warnings and Forecasts (SWPC)**
- **Aviation Forecasts and Warnings (AWC)**
- **Extreme Events (Hurricanes, snowstorms, excessive rain; severe & fire weather) (NHC, WPC, SPC)**
- **High Seas Forecasts and Warnings to day-5 (OPC)**
- **Week 3 & 4; Seasonal Outlooks; El Nino – La Nina Forecasts (CPC)**



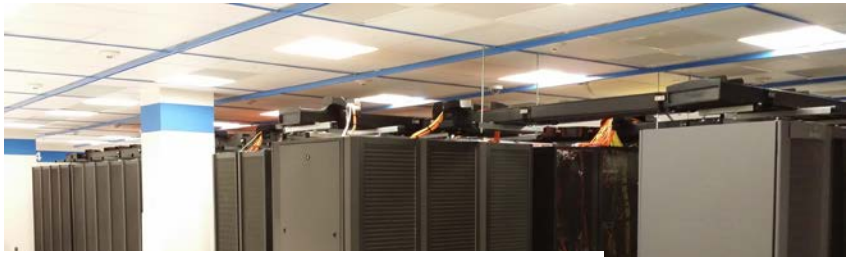
- **Model Development, Implementation and Applications for Global and Regional Weather, Climate, Oceans and Space Weather (EMC)**
- **Super Computer, Workstation and Network Operations (NCO)**

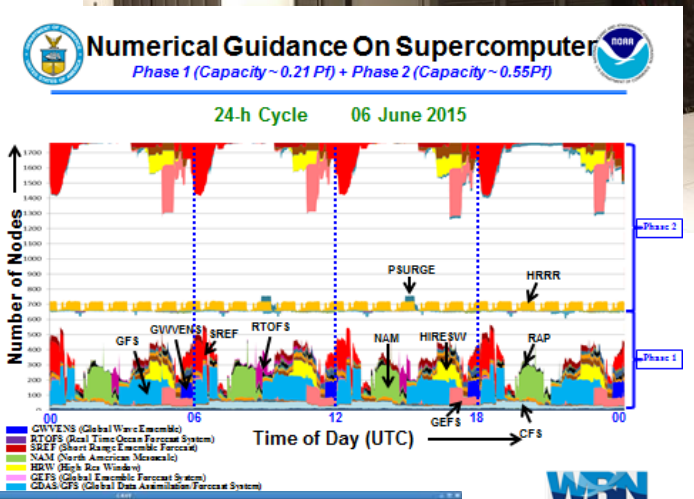


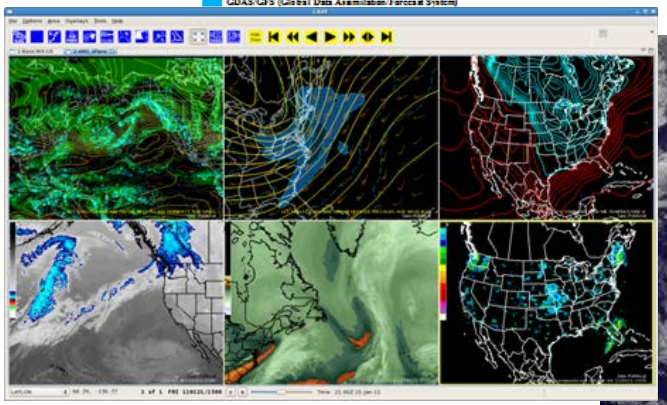
NCEP Central Operations (NCO)

Foundational Products and Services

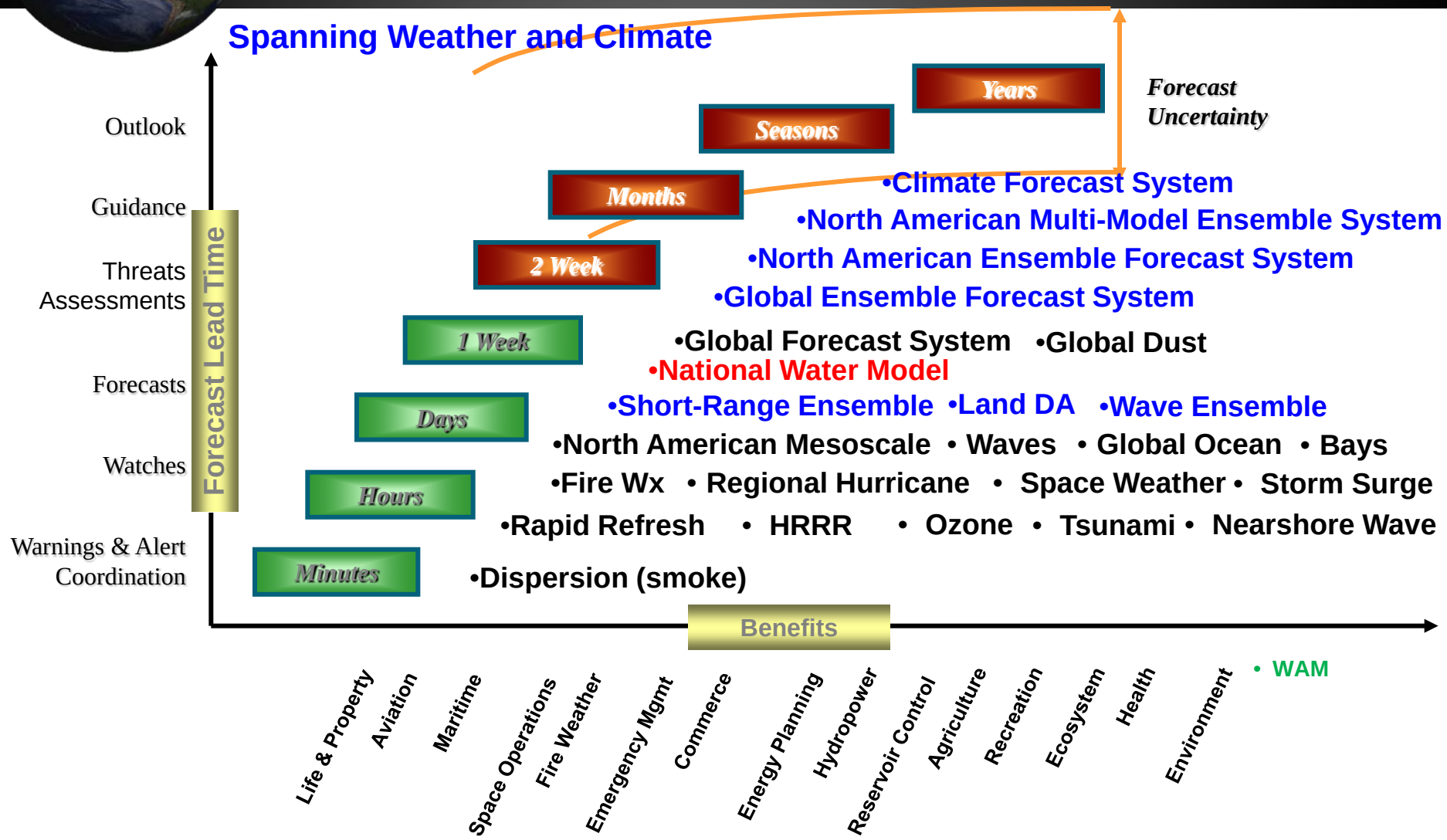
- **High Performance Computing**
- **24x7 Systems and Monitoring Support**
- **Telecoms Support: AOMC, NEXRAD, One-NWSnet**
- **NOAA's IDP: MRMS, MADIS, VLab, NOMADS, MAG, NIDS**
- **Operational Data Exchange**
- **AWIPS Software Development**



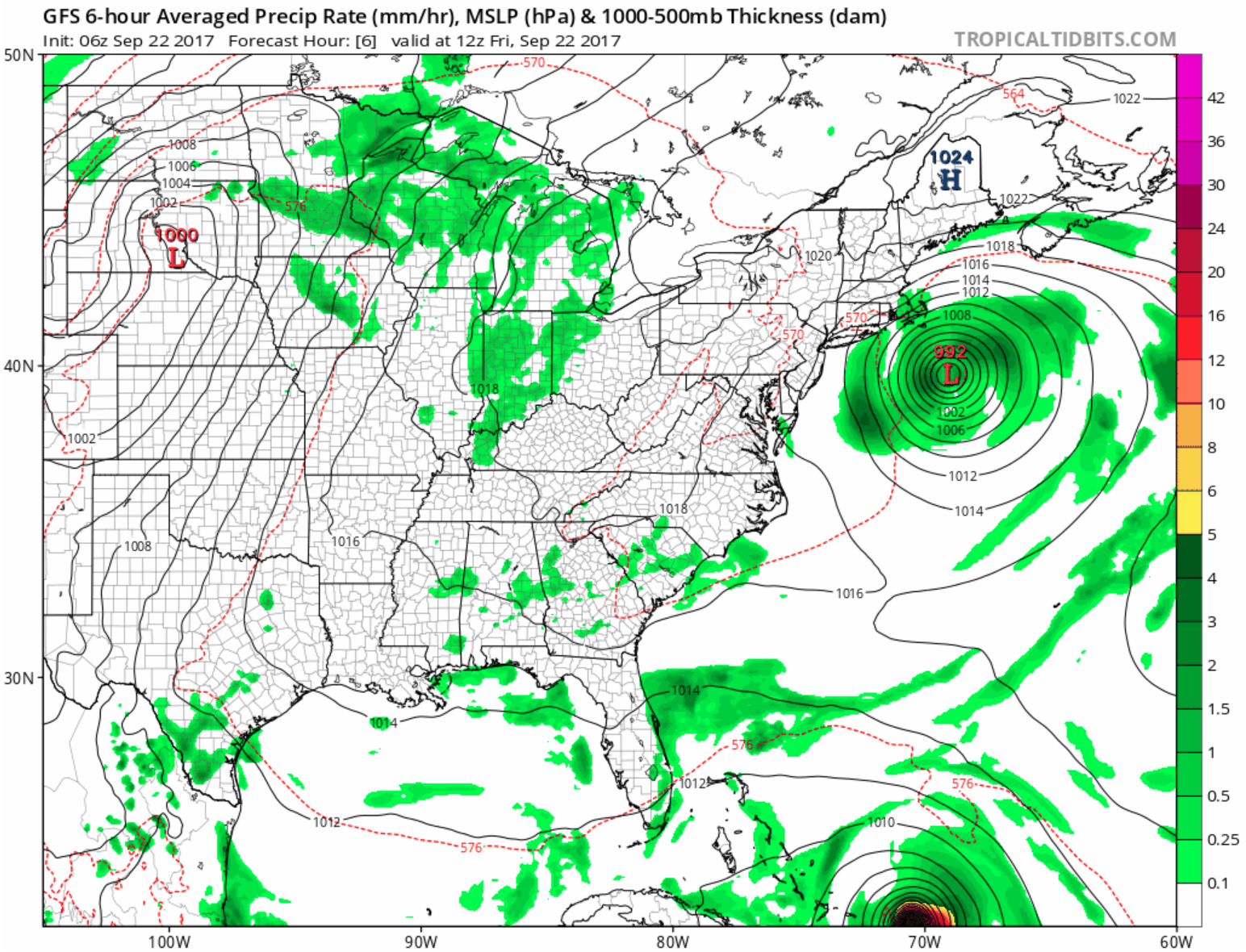




Seamless Suite of Operational Numerical Guidance Systems

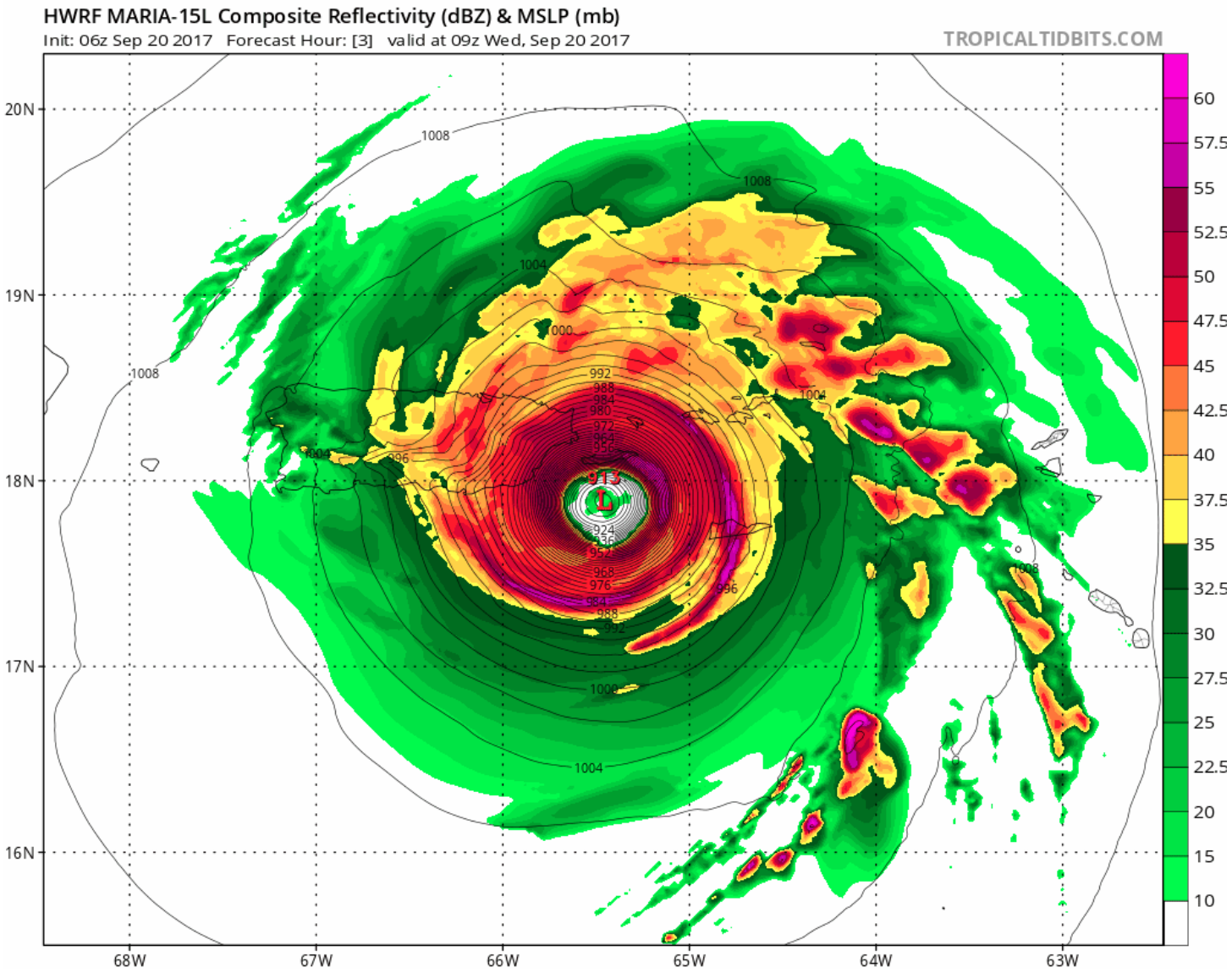


Global Forecast System (GFS)
Hurricane Maria (2017)



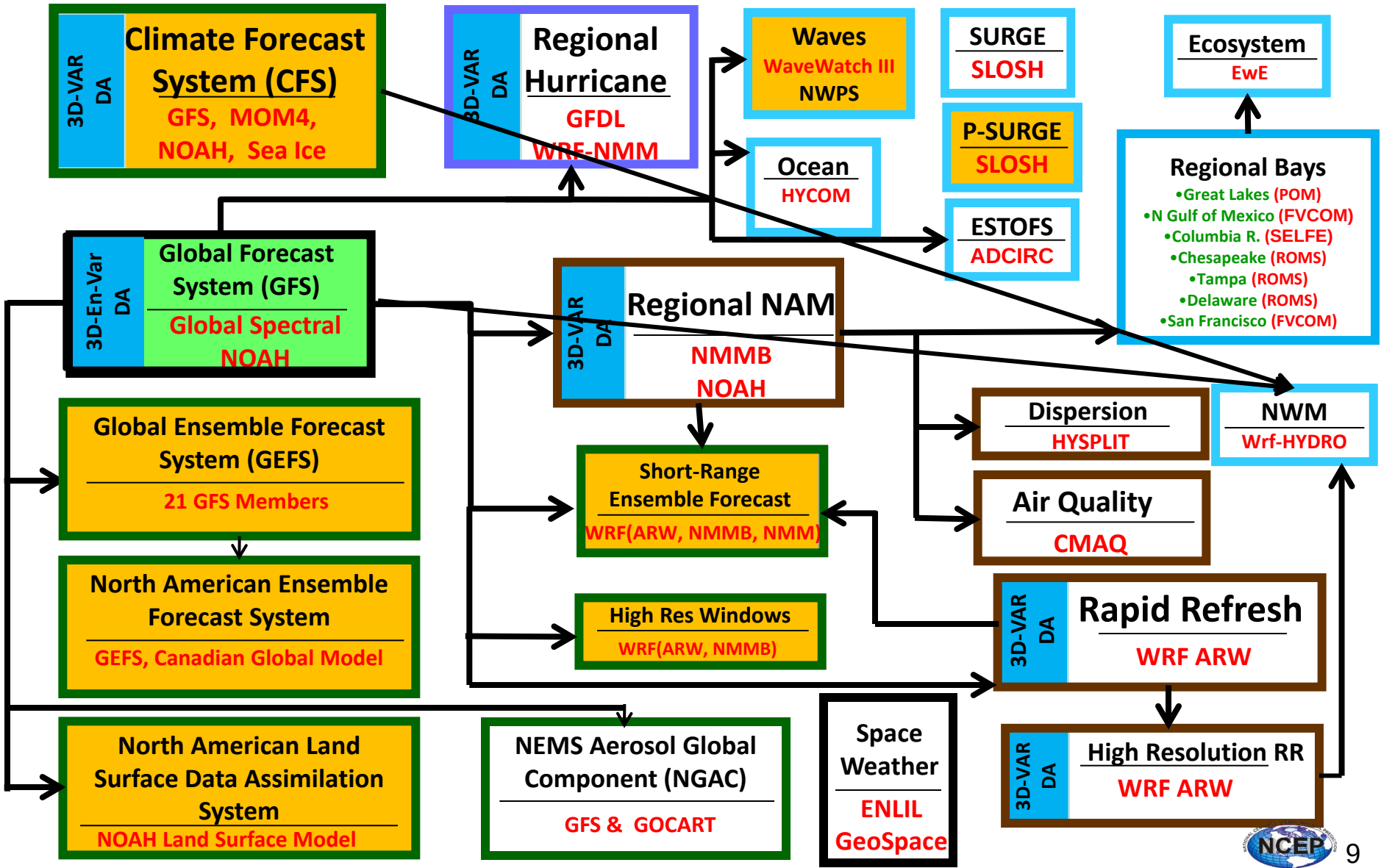
Initialized 06Z Friday 22 September to 12Z Friday 29 September

Regional Hurricane Model (HWRF)
Hurricane Maria (2017)



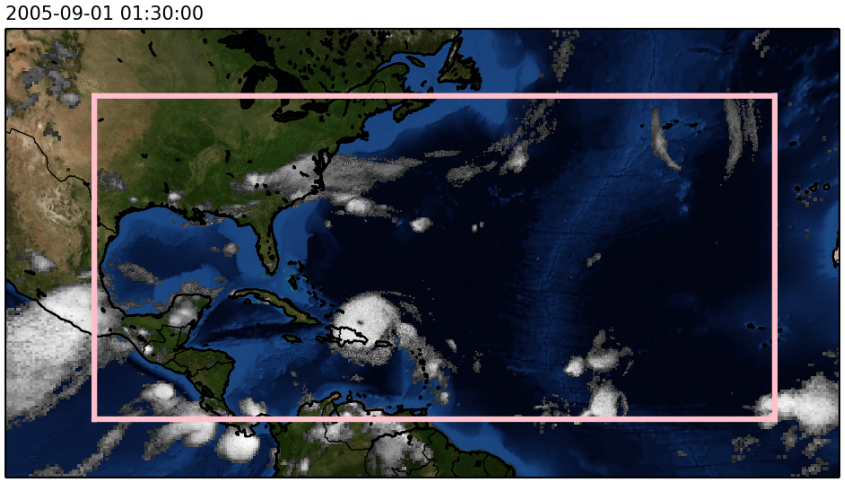
Initialized 06Z Wednesday 20 September to 12Z Monday 25 September

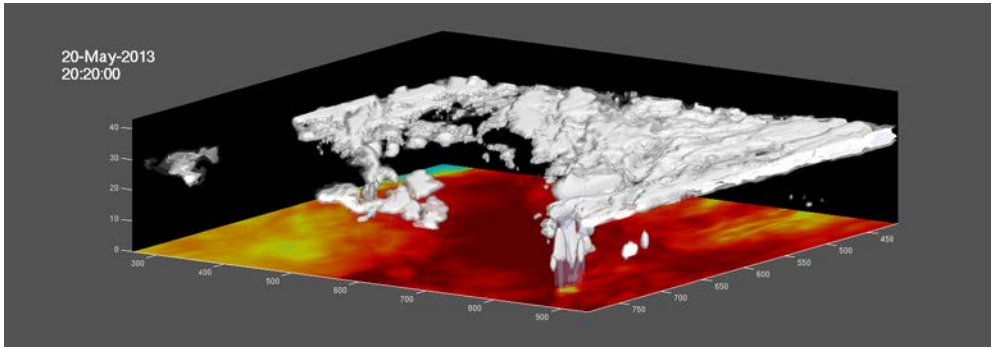
An Example of Complexity……



Next Generation Global Prediction System (NGGPS)

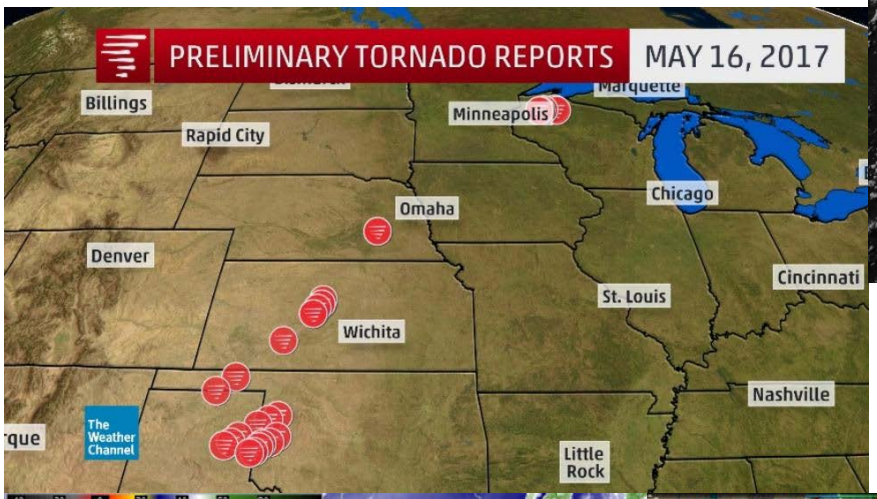
- Identify and adopt an advanced non-hydrostatic dynamic core and evolve it to meet operational needs for the foreseeable future
- Evidence based decision making process to ensure scientific integrity and excellence
- Enhanced O2R2O process and a unified and efficient infrastructure for community engagement and rapid transition of advanced research into operations
- Seamless solutions for tropical weather and climate in a unified global-to-local-scale modeling framework

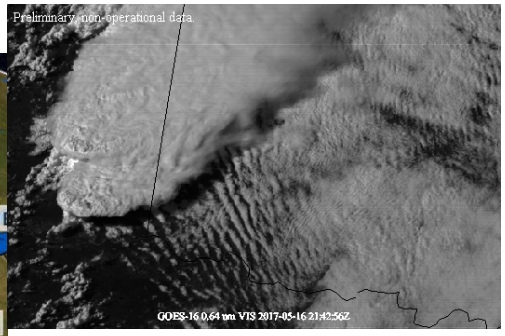




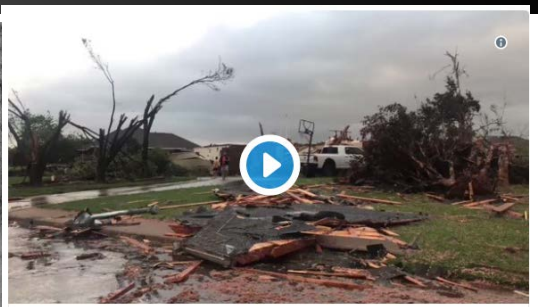
High-resolution nested grid simulations using HiRAM and Finite Volume 3 (FV3)

Severe Weather Event
16 May 2017





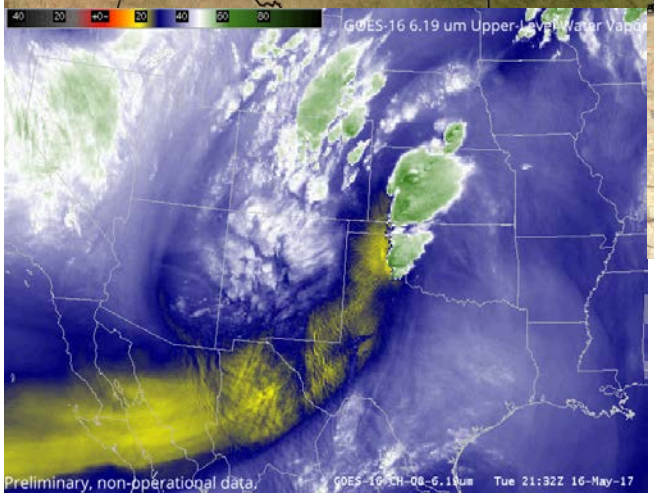
https://satelliteliaisonblog.files.wordpress.com/2017/05/20170517_witch_orphan2_anno.gif

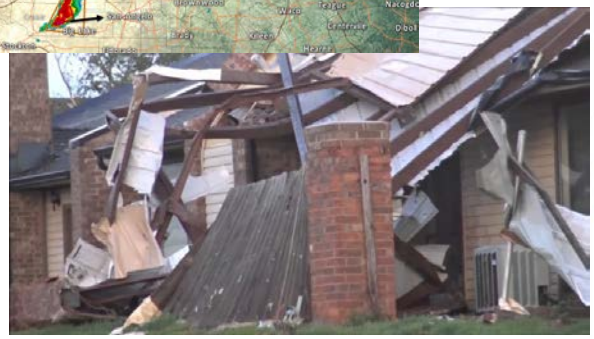


Everett Occhipinti
@Ejocch
Follow

Leveled homes everywhere south of Elk City... Spoke with families who made it out okay but some are missing their pets. #okwx

8:48 PM - 16 May 2017





https://satelliteliaisonblog.files.wordpress.com/2017/05/20170516_ulwv_anno.gif

Kerry Mason
@kerry_mason
Follow

Confirmed tornado on the ground SW of McLean

5:43 PM - 16 May 2017

Continuum of Products and Services Convey Uncertainty: 16 May 2017

Severe convection—wind, hail, tornadoes

Uncertainty Event will Occur

Day 6

Day 5

Day 4

Day 3

Day 2

Day 1

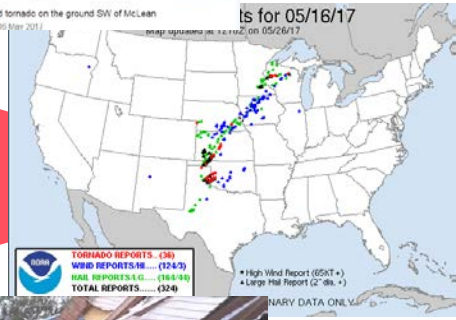
Outlooks

Watches

Warnings

MCD

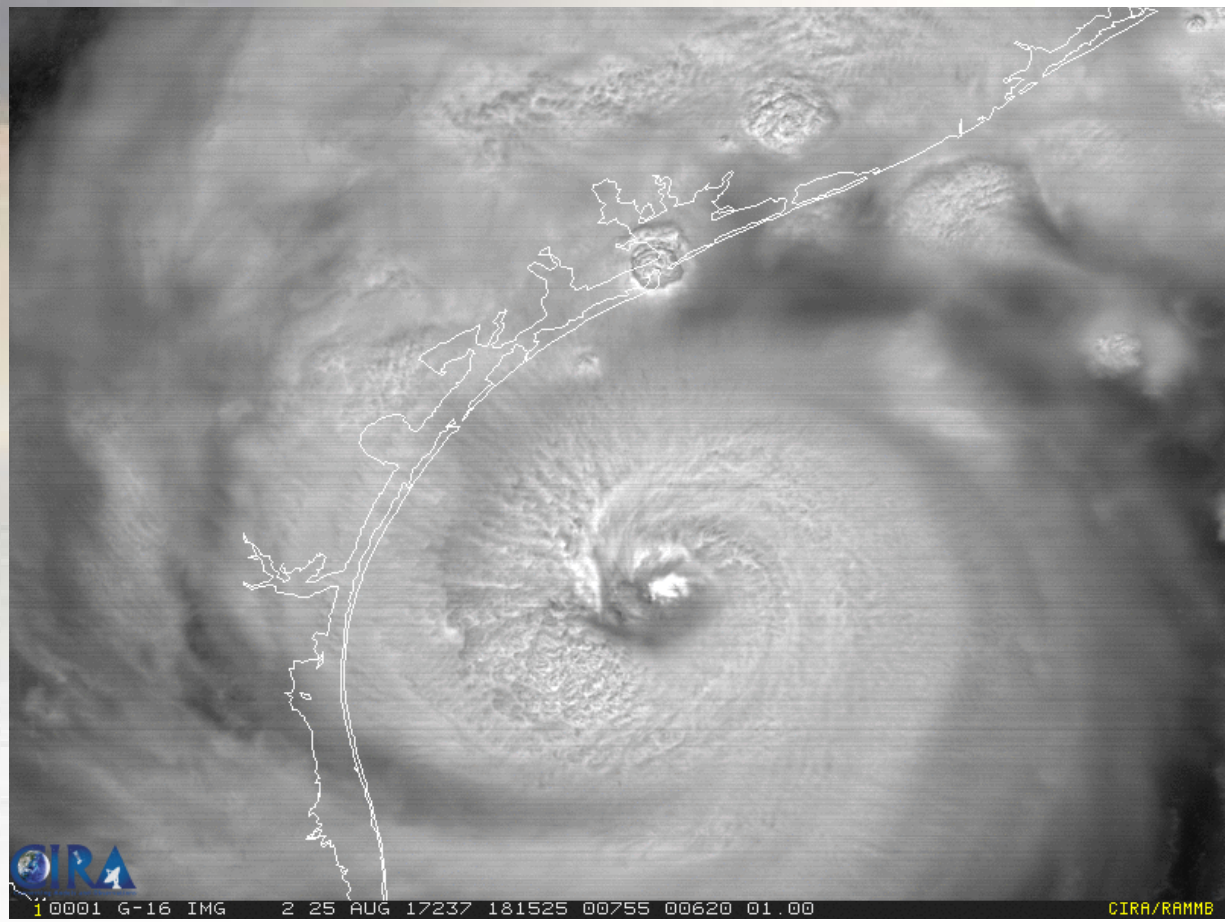
Tornado Watch



18 Mesoscale Discussions
11 Watches

11'th | 12'th | 13'th | 14'th | 15'th | 16'th | 16 1419 | 16 1450

GOES 16 – Harvey Intensification



GOES 16 is "redefining mesoscale meteorology"

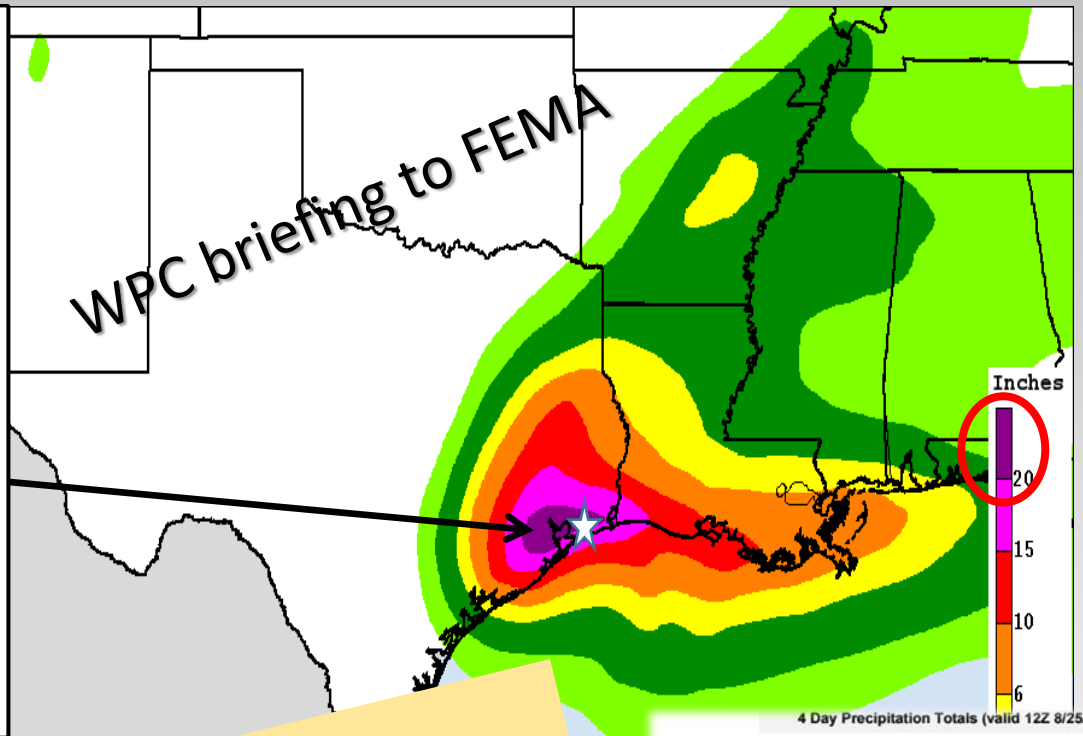
*** Louis Uccellini MAP email - June 20, 2017**

Harvey: WPC 5-Day Rainfall Forecast

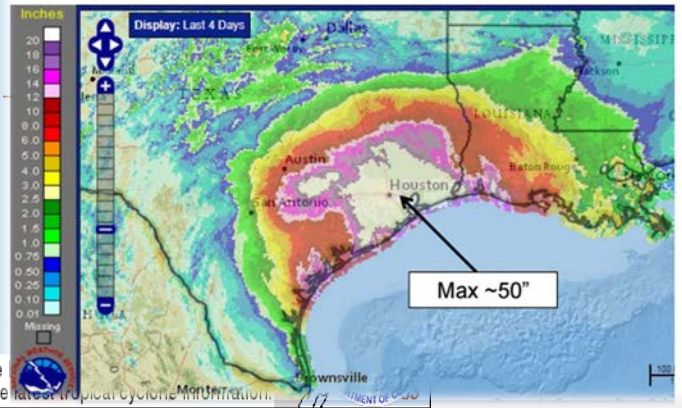
Issued Monday, Aug. 28, 2017

The breadth and intensity of this rainfall are beyond anything experienced before and catastrophic flooding is now underway and expected to continue for days.

<u>50 inches</u> will be possible by end of the week.



And the forecast verified!



Tropical Storm HARVEY
120-hour Day 1-5 Rainfall Forecast (inches)
Created 7:17 AM CDT Mon Aug 28 2017
Valid 7:00 AM CDT Mon Aug 28 2017
through 7:00 AM CDT Sat Sep 2 2017
NOAA/NWS/NCEP/WPC

Local point maximum rainfall may be
See the NHC public advisories for the

<u>Event totals (inches):</u>

Houston: 25-45

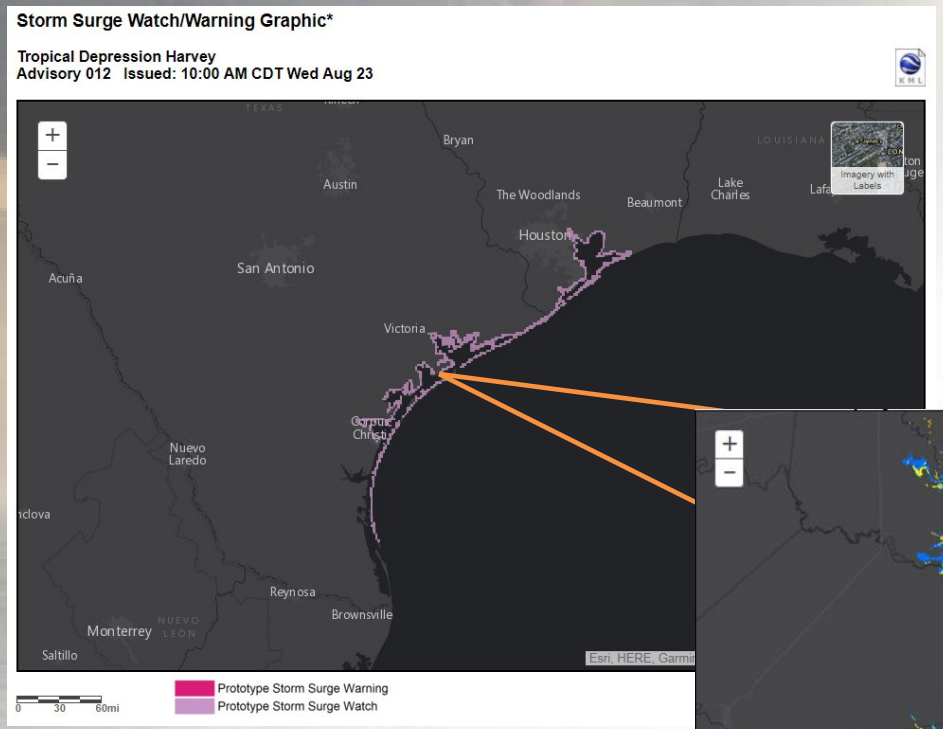
Port Arthur: 14-18

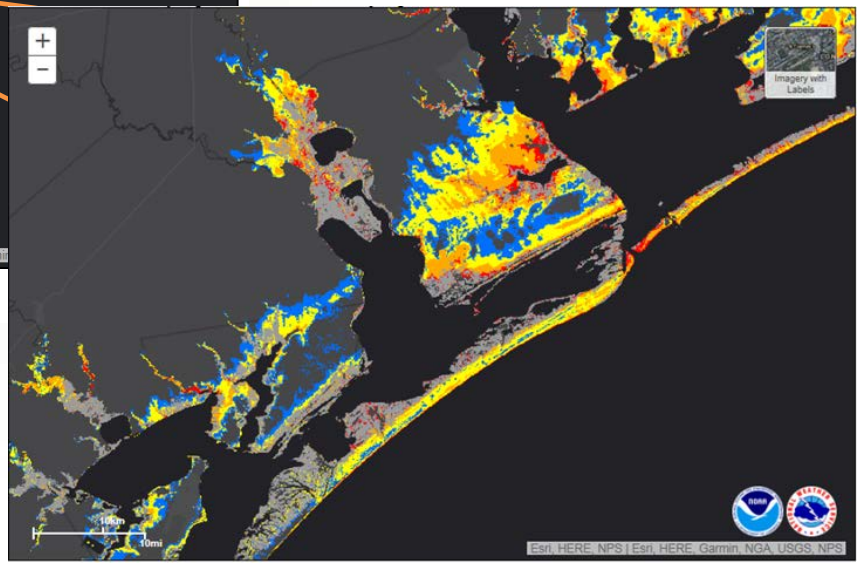
Victoria, TX: 12-15

Lake Charles: 14-18

New Orleans: 5-7

Harvey: Storm Surge Forecasts

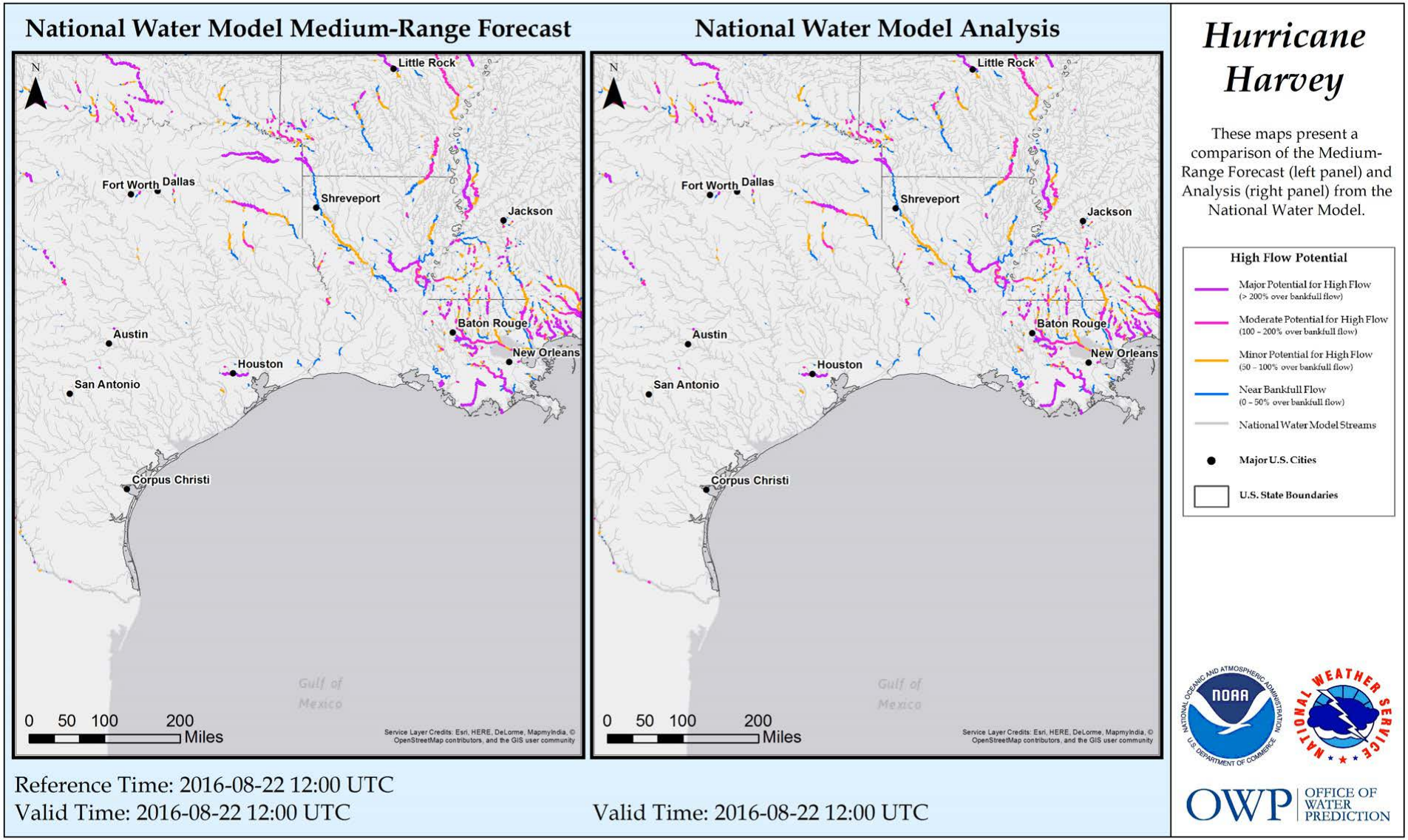




Potential Storm Surge Flooding*
- Intertidal Zone/Estuarine Wetland
- Greater than 1 foot above ground
- Greater than 3 feet above ground
- Greater than 6 feet above ground
- Greater than 9 feet above ground
- Leveed area
  Consult local officials for flood risk

First ever Operational Storm Surge Watches and Warnings

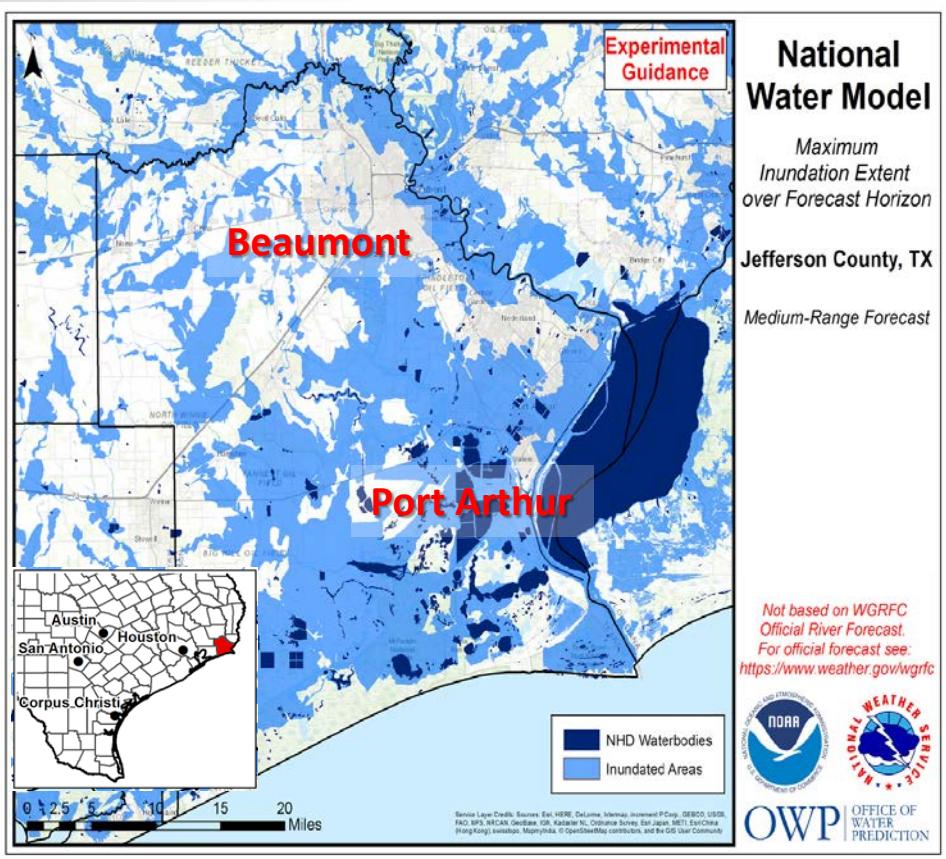
Harvey: NWS Streamflow Animation



Overall extreme streamflow pattern forecast several days in advance by NWM

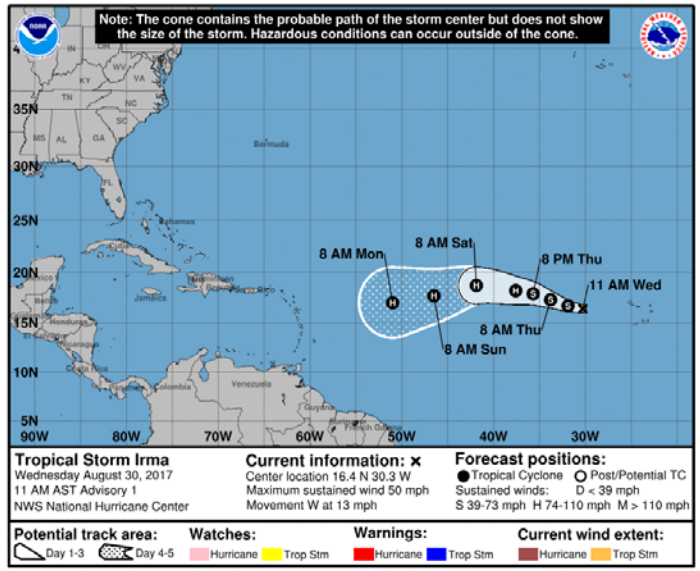
Harvey: Experimental NWM-based Guidance

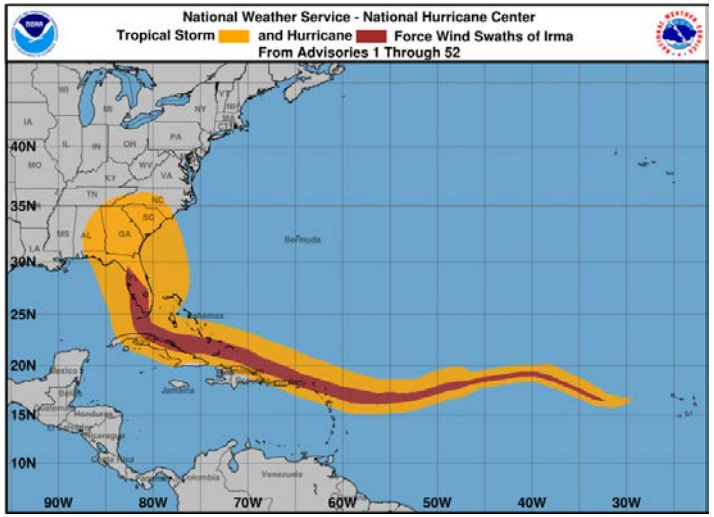
- Flood inundation maps based on NWM analysis and 5-day forecast
- Maps supported emergency management efforts to stage supplies in non-flooded areas and to target relief efforts
- TDEM needed information on exisiting and maximum possible flood extent



Irma: Forecast Improvements

- Models picked up on Irma before it formed in the Atlantic
- Indicated Southeast US threat 8-10 days in advance
- Sharp right turn to the north was expected based on good model (ensemble) agreement.
  - Exactly where it would occur was uncertain but confidence was high enough to alert Southeast US
- **The forecast verified**





Aviation Weather Center (AWC)

Kansas City, MO

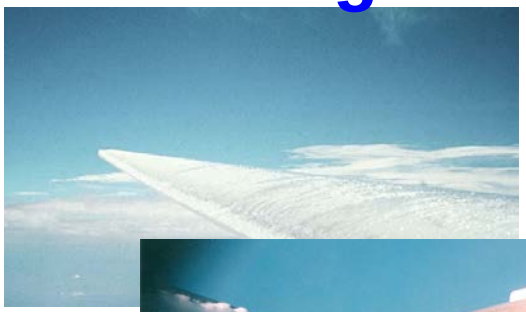
The AWC delivers consistent, timely and accurate weather information for the world airspace system

In Flight Forecasts, Advisories and Warnings:

Turbulence

Convection

Icing



Space Weather Prediction Center

Established 1946 as part of Central Radio Propagation Laboratory

Operations – Space Weather Forecast Office

Daily forecast since 1965.

Specifications; Current conditions
Forecast; Conditions tomorrow
Watches; Conditions are favorable for storm
Warnings; Storm is imminent with high probability
Alerts; observed conditions meeting or

R & D – Space Weather Prediction Testbed

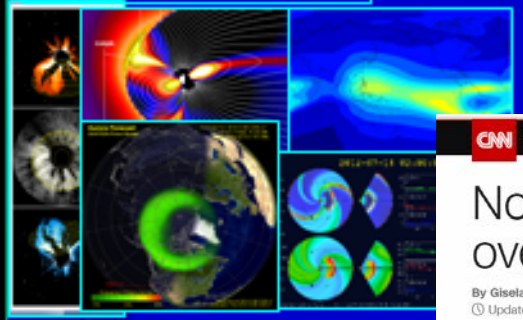
Transitioning models into operations

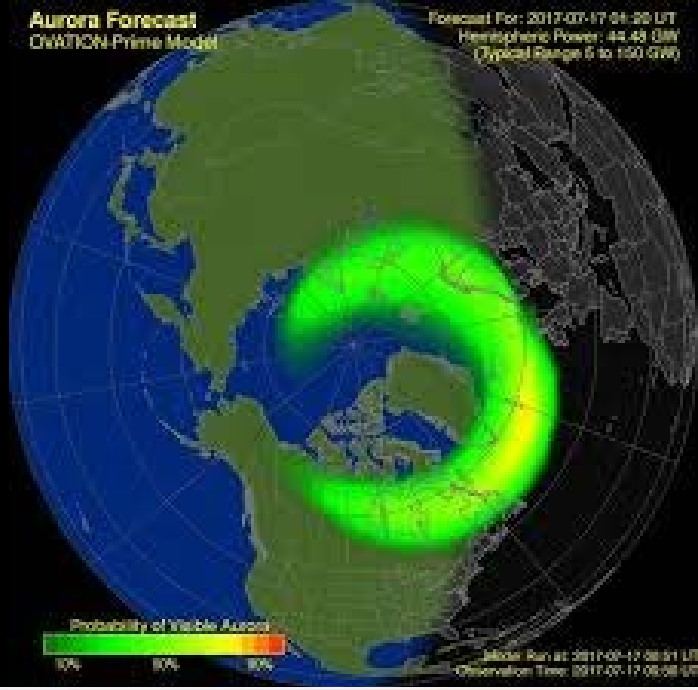
R2O

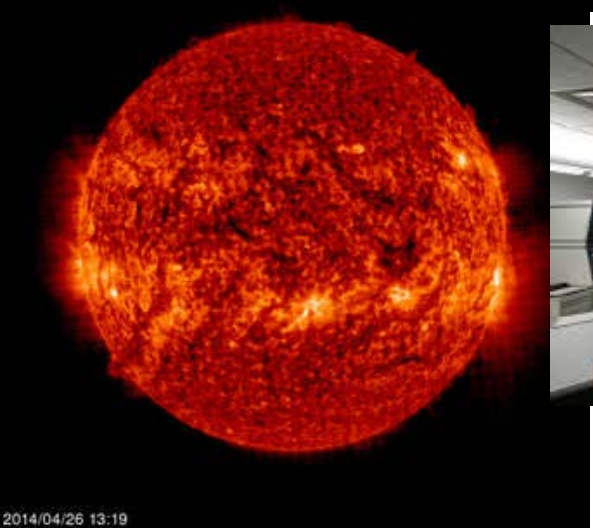
Research-to-Operations
- Applied Research
- Model Development
- Model Test/Evaluation
- Model Transition
- Operations Support

Operations-to-Research
- Customer Requirements
- Observation Requirements
- Research Requirements

O2R







CNN U.S. » Northern Lights captivate crowds overnight — Live TV — U.S. Edition

Northern Lights captivate crowds overnight

By Gisela Crespo, CNN
Updated 2:09 PM ET, Mon July 17, 2017

(CNN) — From Michigan to Canada, plenty of folks stayed up Sunday to watch and record the spectacle of the Northern Lights -- and it didn't disappoint.

NOAA's Space Weather Prediction announced last week that there was a possibility the Aurora Borealis would be visible "as low as New York to Wisconsin to Washington State," on Sunday

Top stories


Spicer contradicts emails, President on Trump Jr. meeting


Former Texas officer indicted for murder

THANK YOU!


NOAA
SCIENCE. SERVICE. STEWARDSHIP.
NOAA
S 222
Jay Standring
ProTech Branch Chief
Strategic Sourcing Acquisition Division
Acquisition and Grants Office
December 18, 2017
www.protechservices.noaa.gov
On the Web: www.noaa.gov | On Twitter: @NOAA | On Facebook: NOAA

ProTech Procurement Overview

- **Portfolio of Indefinite Delivery / Indefinite Quantity (IDIQ) contracts in five domains: Satellite, Ocean, Fisheries, Weather, and Enterprise Operations**
- **Full and open competition with reserves for small business**
- **5-Year total Period of Performance; 2-Year Base with 3 one-year Option Periods for each Domain portfolio of contracts**
- **Program ceiling is $3 billion total over the 5 years for all Domains**

ProTech Procurement Review

ProTech NAICS Codes and Size Standards		
Satellite Domain	541712	1,000 employees
Fisheries Domain	541990	$15M
Oceans Domain	541620	$15M
Weather Domain	541330	$15M
Enterprise Operations	541611	$15M

- **Reserve IDIQ contract awards for small business under a full and open competition**
  - When requirements cannot be specified at the contract level
  - May award IDIQ contracts to a small business, even if there are higher rated large businesses
  - Ensure small businesses receive contracts under a MAC scenario
  - Contracting Officers will set-aside task orders using FAR 19 criteria

ProTech RFP Review

- **The number of awards determined by:**
  - **Comprehensive services across an entire domain**
  - **Sufficiency for effective task order competition**
  - **Small Business and Socio-economic needs**
  - **Effective contract administration**

- **Proposal evaluations and awards by domain**
  - **Offerors will have to demonstrate capability by domain**
  - **Reserve authority will be used as required**

ProTech RFP Preview

- **Teaming**
  - **Not required to submit an offer**
  - **No requirement for exclusive teaming arrangements**
- **Joint Ventures**
  - **Allowed**
  - **8(a) Requirements will be outside of ProTech**
- **Niche Firms**
  - **Evaluated equally with all other offerors in accordance with the criteria in Section M**
- **On-Ramping**
  - **Used if the competitive pool has diminished for any reason during the period of performance**

ProTech Technical Approach

- **Experience and qualifications relevant to the SOW**
- **Breadth and depth**
- **Commitment to the pursuit of environmental intelligence and investment in innovative solutions for NOAA**

ProTech Management Approach

- ❑ **Organization**
- ❑ **Task order management**
- ❑ **Resources**
- ❑ **Communication**
- ❑ **Quality**
- ❑ **Small business subcontracting plan**

ProTech Past Performance

- Up to eight examples (at least three for prime)
- Contract description and performance narrative
- Offerors responsible for PP questionnaire submittals
- May use information from the Past Performance Information Retrieval System

ProTech Pricing

- **Ceiling hourly rates should reflect the highest proposed rate for each level within each labor category**
- **Highest cost location**
- **Ceiling hourly rates shall be fully burdened**
- **Evaluated for reasonableness**
  - **Rates will not be used to develop a price for each proposal that will be used to rank offerors from low to high**
  - **The offeror gains no advantage by bidding low ceiling rates**
- **The Government may seek clarifications or enter discussions to address concerns with reasonableness of proposed ceiling rates**

Weather Domain Milestone Schedule

Action Item	Completion Date
Acquisition Plan Approval by DOC	May 22, 2015
Weather Draft Statement of Work Posted on FBO	December 4, 2017
Weather Domain Industry Day	December 18, 2017
Weather Domain Draft Solicitation Release	2Q FY18
Weather Domain Final Solicitation Release	2Q/3Q FY18
Weather Domain Proposals Due	2Q/3Q FY18
Source Selection Evaluation	3QFY18 - 1QFY19
Award Weather Domain Contracts	2QFY19

Note: Award schedule is dependent on number of proposals received

Other ProTech RFPs

- Fisheries Domain RFP – closed 13 February 2017
  - Awards Anticipated Q2 FY18
- Oceans Domain RFP – closed 31 May 2017
  - Awards Anticipated Q4 FY18
- Enterprise Operations Revised Draft RFP – Q2 FY18

- Cost of Proposals
  - Government intent is to minimize
  - Page limits, price proposal approach

ProTech Website

- http://www.protechservices.noaa.gov
- **Satellite List of Awardees (for market research/teaming)**
- **Satellite Forecast**

Summary

- **ProTech is the NOAA Program for Professional and Technical Services**
- **Starts to build an industrial base to support NOAA's mission**
- **Supports NOAA becoming the environmental intelligence capability of our Nation**

Summary

Questions and Answers

Administrative Information

THANK YOU

- **FedBizOpps notice:** https://www.fbo.gov/index?s=opportunity&mode=form&id=b5d089a5367211533382ee60b9fbc547&tab=core&_cview=0
  - **Industry Day presentations and registration list posted later today**
  - **Questions and Answers posted at a later date**
- **ProTech Weather Domain POC:**

  Quyen Diep, Contracting Officer

  ProTech.Weather@noaa.gov