Unidata Policy Committee
NOAA/NWS Update

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NOAA’s National Weather Service
Outline

• NOAA Budget
• NOAA Climate Service Status
• GOES status
• JPSS status
• Wireless Weather Services
• WFO AWIPS II status
• Mesonet Network of networks
• Year long CR expected in FY 12, if mini-bus not approved, then funding as part of gov-wide omni-bus
• House bill provides about $4.5B for NOAA
• Senate Bill provides just over $5.0B
• Largest differences are in Climate Services and JPSS
• NWS still dealing with structural deficit by reducing HDQ budgets 5% and increasing lapsed labor from 9 to 11% of positions
NOAA Climate Service

- Future uncertain due to differences between Senate and House
- Senior NOAA Regional Climate Directors in place at each NWS Regional HDQ Office

- NWS Deploying Local Climate Analysis Tool phase 1 in FY 12 to enable NWS field staff to utilize NOAA-coordinated best practices (standardized, scientifically sound methodologies) and NCDC- and NWS-recommended datasets to conduct local climate studies to respond to user requests
Goal

- Engage weather enterprise (government, private sector, academia) and core partners (e.g., emergency managers) in discussions on how best to provide wireless environmental information services.
- Solicit feedback on most appropriate role for NWS in providing wireless weather services.
- Not a “decision meeting”
Summary Issues/Conclusions

• Standardization of NWS data/products is critical
• Combination of (1) IPAWS/CMAS (FEMA’s Integrated Public Alert Warning System/Commercial Mobile Alert System) for government-sponsored weather alerts to general public and (2) mobile weather services available from commercial providers is a powerful combination in meeting the needs of the general public
• There is general recognition that NWS does have a special interest in serving “core partners,” however –
  • More clarity regarding NWS definition of “core partner” is needed
  • NWS commitment to meet needs of core partners is understood, but should recognize that core partners also use commercially available services
• Issues relating to assuring the quality of mobile weather services deserve attention
• Emerging issues – patents; weather info to cars vs. distracted driving
Current Status- WWS

- NWS undergoing internal discussions to finalize direction for wireless/mobile policy
- Next update at January Partners’ meeting
WFO AWIPS Status

- Dual testing at WFO Omaha (collocated with Raytheon development staff) this summer produced long list of showstoppers
- Field forecasters to start in Nov to do parallel operations at WFO Omaha to continue to shake down system
- Goal is to make WFO Omaha “deployed” by end of CY11 – Full deployment phased in during CY 12
- Boulder and other next OT&E sites depend on Omaha results this Fall
- Expect “deployment” to go into FY 13
Joint Polar Satellite System

- JPSS schedule is budget dependent from Congress – both House and Senate markups significantly higher than FY 11 - $ 382M
- PB request FY 12 - $ 1070M, House - $ 901M, Senate $ 920.8M
- NPP is a bridge from current Polar satellites to JPSS
- NPP launch scheduled for Oct 27
  - VIIRS - infrared imager
  - OMPS - Ozone Mapper Profiler
  - CERES – Clouds and Earth Radiant Energy System
  - CrIS – Cross-track Infrared Sounder
  - ATMS – Advanced Technology Microwave Sounder
GOES-15 Transition Timeline (launched 03/10)

8/22  Begin GOES-15 execution of GOES-West Schedule
9/01  GOES-15 Fall Eclipse season begins
10/12 Conduct GOES-15 Operational Readiness Review
10/15 GOES-15 Fall Eclipse season ends
10/18 Start GOES-15 westward drift from 89.5 W to 135 W
    Drift rate ~ 0.78 deg/day
12/01 GOES-15 drift rate adjust maneuver
12/06 Near 129 W; GOES-15 becomes GOES-West
    Stop GOES-11 GVAR
    GOES-15 GVAR relayed through GOES-11
    Users do not re-point antenna
12/14 Stop GOES-15 Drift at 135 W
    GOES-15 GVAR relayed through GOES-15
    Switch ancillary COMM services from GOES-11 to GOES-15
12/15 GOES-11 decommission and de-orbit maneuvers
GOES-15 features

- GOES-15 improvements
  - Improved 4km Water Vapor Channel
  - New 13 micron channel (also 4 km)
  - Improved Navigation
  - Better batteries - can operate through eclipse
  - Solar X-ray imager

- Lose 12.2 micron channel for Volcano monitoring - loss being alleviated through improved use of fleet of Polar satellites (NOAA, NASA, METOP, etc. and soon NPP)
Solar X-ray Imager

- Provides forecaster situational awareness
- Earliest possible location of geoeffective events and phenomena:
  - Flares
  - Coronal holes
  - Coronal Mass Ejections
  - Over-the-limb activity
- SWPC has been using GOES-15 SXI for operations since October 2010
Global Science and Technology (GST) awarded contract for “National Mesonet Pilot Project”

- Develop prototype capability (‘plumbing’) to provide surface atmospheric and soil moisture/temperature data with focus on enhanced metadata tool
- Support metadata exchange between data providers and applications developers, operate central archive
- Focus on documenting metadata for wind, temperature, and soil moisture
**Data Utilization & Development**

- **NOAA Development Team:**
  - NWS NCEP *(Data Assimilation/NWP)*
  - NWS MDL *(Statistical Forecasting)*
  - OAR ESRL *(Mesoscale Analysis)*
  - OAR ARL *(Dispersion modeling)*

- **Purpose:** Integrate enhanced metadata into the operational application environment

- Understand and document the benefits (service outcomes) of enhanced metadata

- NWS goal is to execute very high resolution mesoscale models on very fast high performance computing platforms for forecasting short-term, high-impact weather

- Meeting this goal will require the types of observations provided by a National Mesonet
Future Network of Networks

• **Continue to execute FY10 expansion contract**
  – Provide data and metadata to MADIS
  – Contract ends April 2012

• **Execute a bridge contract to continue access to data/metadata through end of FY12**

• **FY12 Senate Language provides $16M to**
  – Maintain existing agreements
  – Expand to new networks
  – Program Office/Data Utilization