

2011 AMS Washington Forum

SESSION 11: Responding to the Needs of
Climate Science and Service Users

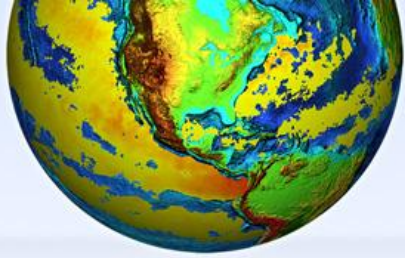
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Chair, Subcommittee on Global Change Research

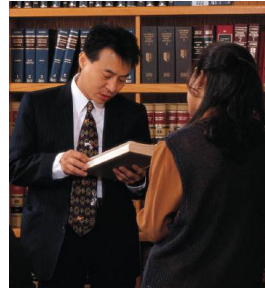


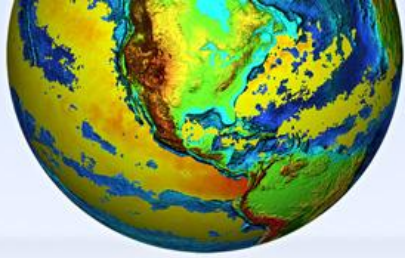
April 28, 2011



Question 1: Definition of Success as an Information Provider

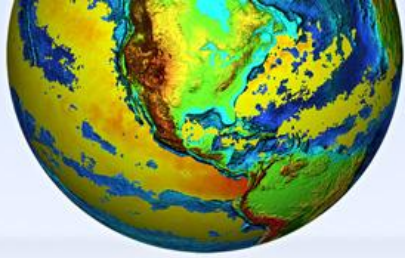
- Climate data, products and information services to inform decisions, manage risks, support economic growth and steward natural resources.
- NOAA's success depends on active and sustained engagement of all partners in the Weather-Climate Enterprise





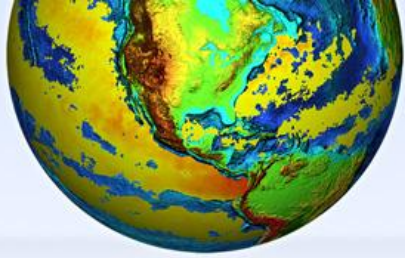
Increasing Demand as a Proxy for Success

- From FY09 to FY10, NOAA saw an 86% increase data and information distributed:
 - Equivalent to an increase from 1 billion Kindle books to 1.9 billion Kindle books worth of data & information
- From FY09 to FY10, NOAA saw an 11% increase in customer requests (phone, fax, e-mail, mail)
 - From 26,000 to 29,000 individual customer requests
- From FY09 to FY10, NOAA experienced a 57% increase in climate-related data and information website hits
 - From 906 million to 1.4 billion hits



Examples of NOAA Climate Services Three Core Roles

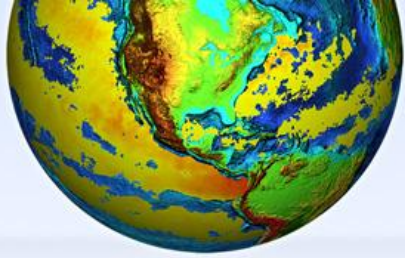
1. Government to government responsibilities
 - NOAA mission responsibilities
 - Legal requirements of other Federal agencies, interagency agreements, Federal-state programs
 - International commitments
2. Public information for decision-making
 - Current conditions (NIDIS), trends, changes, and normals
 - Forecasts and outlooks
 - Scientific assessments
3. Easy and full access to all data and information to:
 - Ensure full transparency in practices and methods
 - Foster growth of a private sector industry to meet specialized business & public sector needs



Question 2: Examples of specific products or services for targeted stakeholders

- Research and modeling (**academia, government, and private sector**)
 - Understanding climate processes, impacts, vulnerability
 - Reanalysis, Climate Forecast System (v1, v2, v3), CMIP 3 and CMIP 5
- Observations, monitoring, data stewardship (**public, resource managers, & scientists**)
 - Baseline reference data sets (scientists)
 - Local climatologies (public)
 - Atlases (Gulf of Mexico) (resource managers)

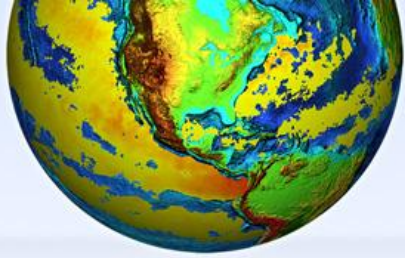




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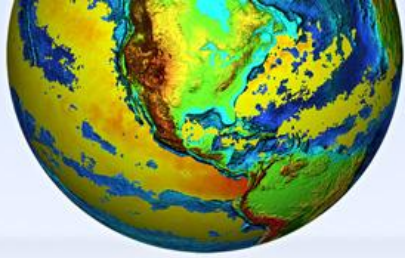
- Assessments
 - Problem-focused (Devil's Lake) --- (Local and regional government)
 - National and International (policy-makers):
 - IPCC
 - National Climate Assessment
 - Ozone Assessment
- Service Development and Delivery
 - Storm surge, sea level rise and inundation information and visualization tools (coastal managers & community planners)
 - Hurricane trends, climatologies and outlooks (emergency managers)





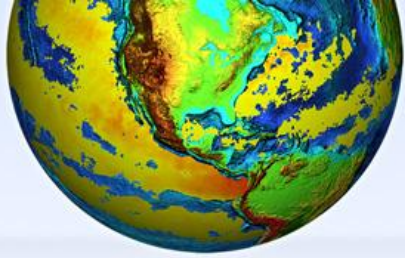
Question 3: Receiving Stakeholder Feedback

- Three primary foci for stakeholder engagement:
 - 1. Interagency partnerships and programs, e.g.,**
 - NIDIS
 - National Assessment
 - 2. Regional, e.g.,**
 - Information needs and asset/gaps by Regional Climate Service Directors
 - Shared insights from Regional Service Partnership involving core partners (RCCs, RISAs, State Climatologists, private sector, others)
 - 3. Private, academia, and public sectors, e.g.,**
 - Insights from Needs Assessments
 - Expanded dialogue with private-sector providers



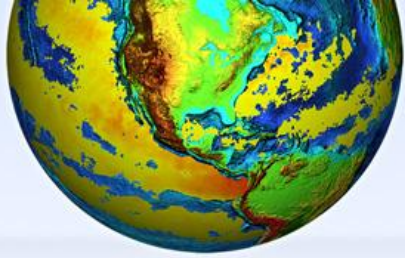
Question 3: Receiving Stakeholder Feedback *Some Specific Mechanisms*

- Formal needs assessments (Water, Extremes, Marine Ecosystems, Coastal Resilience)
- Direct user engagement in development and evaluation
- Regular engagement with core NOAA constituencies
- Web-based opportunities for user comments
- Workshops, user surveys, focus groups, scoping workshops, review of preferred sources
- Stakeholder calls, e-mails, correspondence
- Responding to scientific community guidance (e.g. SAB/CWG, NRC)



Question 4: Key Challenges and Success Factors

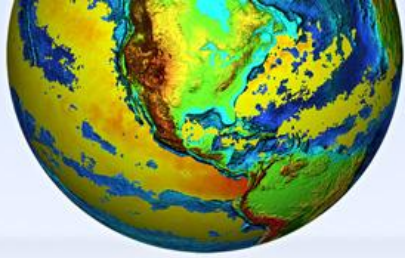
- Need for a unified management structure in NOAA to ensure effective science to service continuum that is informed by and responsive to users:
 - Linking organizations responsible for observations, data, research, modeling and services with continuous feedback and interaction
 - Providing datasets, products and information services drawn from diverse sources that are responsive to stakeholder needs and judged easy to use, credible and salient
 - Ensuring that NOAA's programs are adaptive to user priorities, new scientific insights and emerging issues



Question 4: Key Challenges and Success Factors

- Coordination with complementary efforts of other public agencies (Federal, state, local, tribal)
- Establishing innovative partnerships with the private sector to support the emergence of a viable, value-added community that is responsive to stakeholder needs
- Sufficient resources to support sustained engagement with partners and stakeholders:
 - Building trust and credibility
 - Understanding information needs and informing product development
 - Identifying gaps and opportunities to guiding future investments in observations, research, modeling, prediction/projection, assessment and services





For More Information...

www.noaa.gov/climate

- Vision and Strategic Framework, Document, Q&As, climate handouts, links to background resources.

www.climate.gov

- NOAA's Climate Portal

www.globalchange.gov

- US Global Change Research Program

