Climate Variability and Change
Session 2B

Chair: Margaret Leinen - NSF

Reporting: David Legler - US CLIVAR Office

Rapporteurs: Tom Spence - NSF, Mitch Baer - DOE

US Climate Change Science Program
www.climatescience.gov

Activities

Report on CCSP Synthesis and Assessment Products (SAPs) & Other Assessment Activities

- CCSP 1.1 Temperature Trends
- CCSP 3.3 Climate Extremes
- CCSP 1.3 Reanalysis of Historical Climate
- CCSP 3.1 Climate Models
- US Modeling Contributions to IPCC
- IPCC Working Group 1 Update

Panel:

- **Tony Busalacchi,** University of Maryland
- **Dan Reifsnyder,** Dept. of State
- **Linda Mearns,** NCAR
- **David Robinson**, State Climatologist New Jersey

Report on CCSP SAPs & Other Assessment Activities

- Fourth IPCC Assessment is underway
- 4 CCSP SAPs at various stages of completion (prospectus to publication)
- Common themes and traits
  - Utilizing models together with observations (e.g. key indicators, validation, synthesis)
  - Analysis of past (e.g. 20th century) climate
  - Emerging importance (& challenge) of probabilistic frameworks
  - The important and continuing role for a wide cross-section of the community; e.g. modeling centers, academia, and stakeholders
  - Continuing recognition and focus on trends and variations that impact **regional** climate

Evaluating Assessments

- ***Effectiveness***: What makes assessments more or less helpful to their intended users, and what can be done to improve their effectiveness?
- ***Assessment coverage*:** Given the range of assessments being conducted, what should the priorities be for future assessments?
- ***Process***: What is needed to improve the process of framing, conducting, and communicating assessments? How can we improve the connection between basic knowledge generation and applications?
- ***Integrating assessments***: What are the opportunities for integrating assessments in the areas of forcing, climate, and sensitivity/adaptation, as well as for integrating U.S. and international assessments?

Effectiveness

- Improve engagement and participation of non-gov't
- Presentations at this workshop roughly breakdown along the following lines:

Fed. Govt.	Academia	NGO	Public/Private Service
44	25	8	12

- Need mix of climate scientists, stakeholders, adaptation community, NGOs, & private sector

Assessment coverage

- There is a need for a variety of assessments
- Some gaps:
  - Climate variability/adaptive management (to complement current suite of SAPs which emphasize climate change/policy)
  - Seasonal-to-interannual prediction (strategy for research to applications?)
  - Regional and local (follow-on to US National Assessment?)
    - Users/stakeholders need digestible answers to first-order questions of local importance
- Need transparency in the process for identifying CCSP SAPs

Integrating assessments

- Improve engagement of scientific organizations, especially internationally (WCRP, IGBP, IHDP, DIVERSITAS)
- More coordination across assessment activities:
  - regional, national, and international assessments;
  - phasing of current SAPs
- Need for better integration across climate variability and change
- Take advantage of integration tools: PCMDI, NIDIS

Process

- Fully transparent process is crucial (especially changes introduced in the federal approval process of final SAP - decisions and reasoning)
- Widening participation to reduce likelihood of small communities writing and reviewing their own work
- Participant refreshening (need new blood, young talent)
- Issue: Availability of data and its documentation - how much should be required?
- Essential to communicate findings on multiple levels (scientists, stakeholders, legislators, general public)
- So what? (how will SAPs be used?)