Opportunities for Collaborative Interdisciplinary Programs

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Outline

- Introduction: Motivation for the FCI
- Ongoing Projects
- Mechanisms
- Emerging Needs, Opportunities
- Closing Remarks

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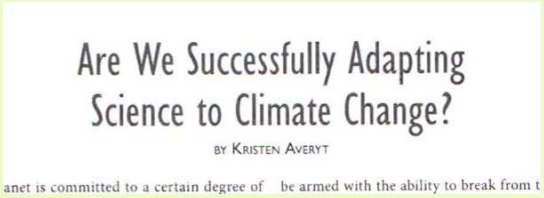
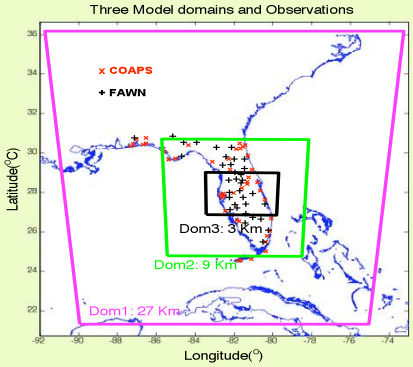
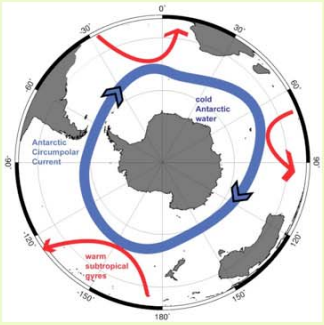
Introduction: Motivation for the FCI

- Science
- Societal Needs







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Motivation for the FCI

- Address the complex issues and challenges associated with climate change, climate variability, sea level rise
- Target science to inform decision and policy responses
- … We want the FCI to be known for both

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Motivation for the FCI

- Targeting Science Opportunities
  - Climate or sector-driven science questions
  - New technologies, education
  - Regional, national, international opportunities
- Targeting societal needs (*state* & *regional*)
  - Engagement with Floridians, Florida issues (FCI)
  - Regional (SECC, others in & affiliated with FCI)
  - Research, extension, education, service

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Mechanisms

- Interdisciplinary proposals written to federal agencies (research and education)
- Stakeholder climate working groups (involving scientists, agencies, private sector) to co-learn about issues, solutions
- Technical working groups (or task forces) to respond to stakeholder needs
- Other FCI activities (symposia, seminars, etc.)

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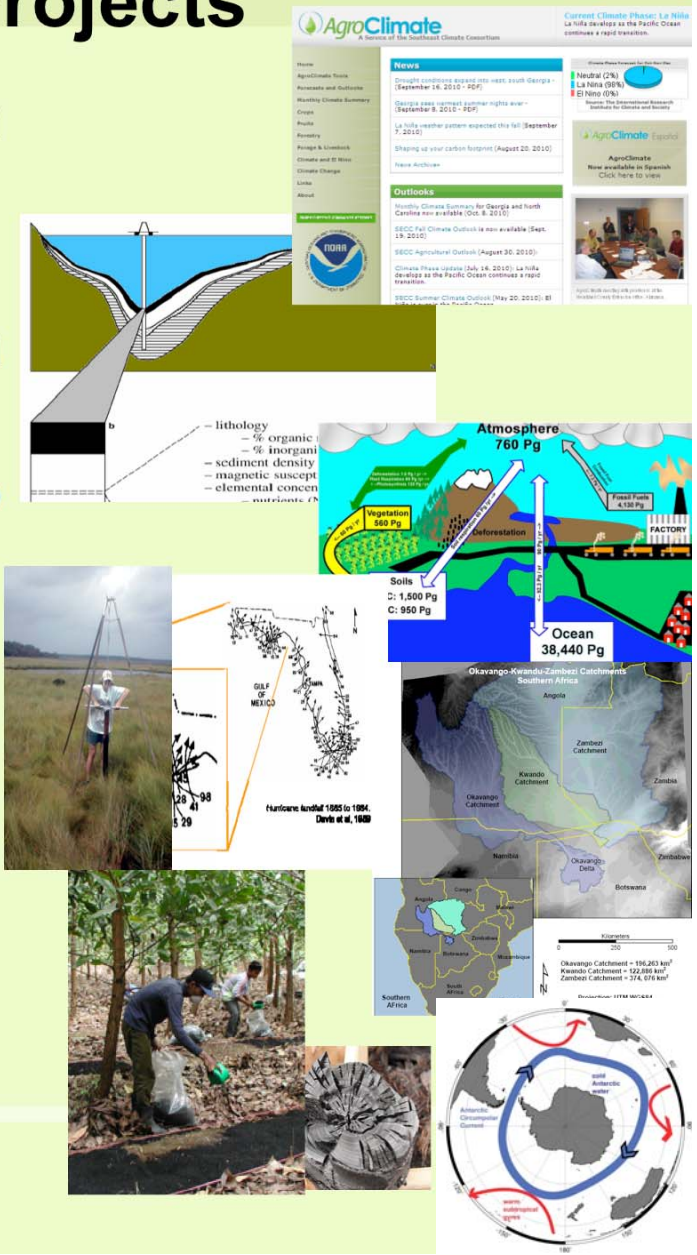
There Are Many Ongoing Projects

- Open-source climate information & decision support for **agriculture & food production**
- Inferring **paleoclimate** from lake sediments
- Carbon sequestration: **Terrestrial Carbon** information system
- Analysis of sedimentary data to **create paleo records of hurricane landfalls in Florida**
- Predicting impacts of climate variability & change on **land use/land cover change in Southern Africa**
- Stability, chemistry and interactions of **pyrogenic C (Biochar)** with soil minerals and microbes
- **Ocean circulation and Antarctic ice** sheet development



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Emerging Needs, Opportunities

- Meet state needs, engage Floridians
- Regional centers (i.e., USGS, NSF, …)
- National Climate Services (NOAA)
- National Climate Assessment (USGCRP)
- International research, education opportunities



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Meet State Needs

- Climate Working Groups (e.g., agriculture, water utilities; need to explore more)
- Technical Working Groups
  - Sea level rise?
  - Climate scenarios?
    - Local level (county or weather station scale)
    - Multiple time scales
    - Not only climate – population, land use, policy, …

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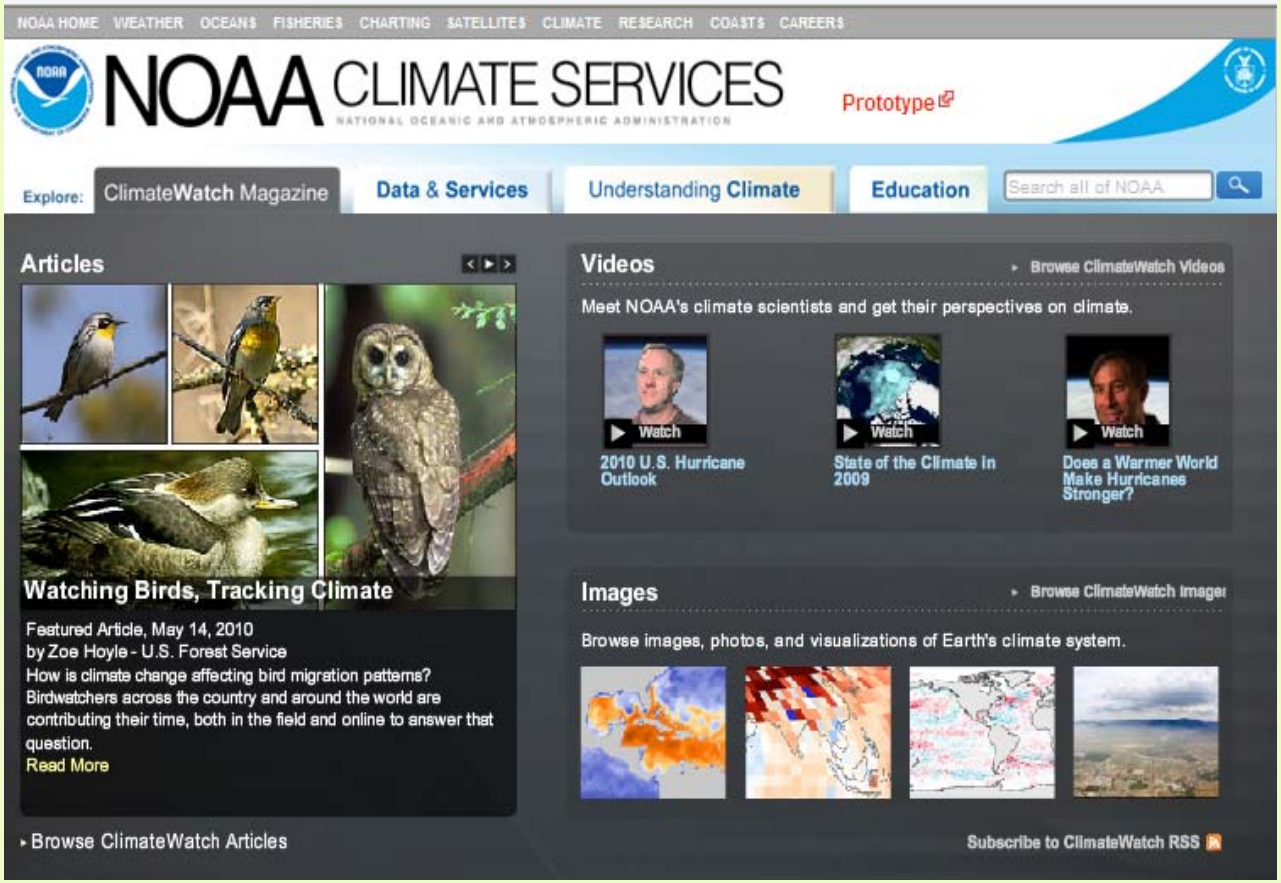
NOAA Climate Service (NCS)



Six Regions, SECC is a mechanism for engagement
Time Scales: 1-50+ years

Tom Karl is interim Director, Eileen Shea is Assistant Director, both of NCDC

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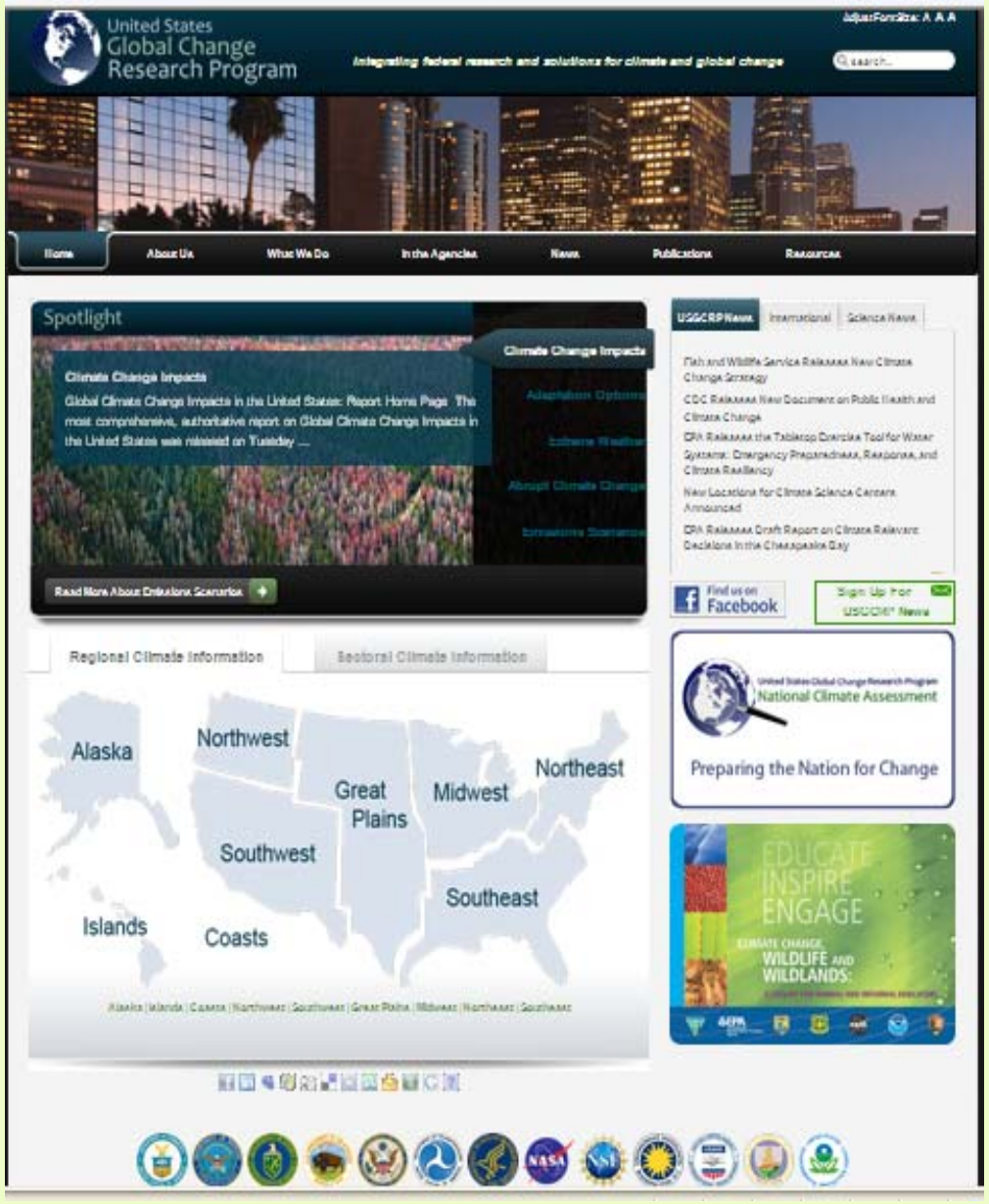
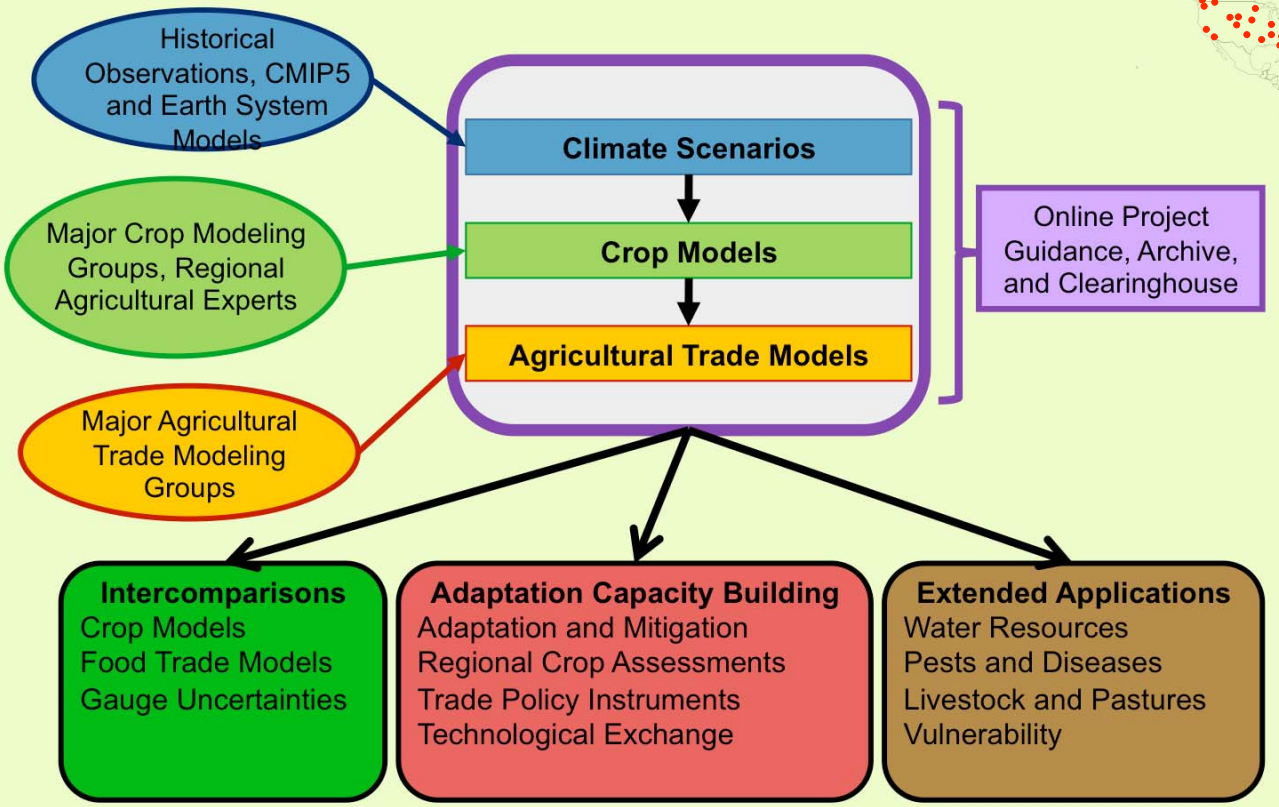
National Climate Assessment



Kathy Jacobs, on assignment from the University of Arizona, is the Director of the National Climate Assessment

Regional assessments
Time Scales: 25 years, 50-100 years
BUT include all time scales

International Agricultural Modeling Intercomparison and Improvement Project (AgMIP) – Models and Outcomes



Led by C. Resenzweig, J. Jones, J. Hatfield

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Closing Comments