



Abstracts for Speakers: Session 4		
Abstract Title	Authors	
Water Management: Application of Climate Science (WA) Sub-Theme 1: Water Supply Science and Information Needs		
WA1.1 WA1.2	Droughts and Floods: Better Predictions thru Attribution Climate in Three Dimensions: Integrated Mountain Climate Observations	Martin Hoerling Kelly Redmond
WA1.3	Climate Forecasts and Reservoir Management - Possibilities and Challenges	Sankar Arumugam, Upmanu Lall, Casey Brown, Neil Ward
WA1.4	Experiences from the Water Resources and Agricultural Sectors during Drought: What Do Users Want? What Do Researchers Want? What is Needed?	R. Webb, R. Pulwarty, D. Kenney, S. Jain, A. Ray, B. Udall, K. Wolter
WA1.5	Managing Seattle's Water Supply in Step with a Changing Climate	Daniel Basketfield
Water Management: Application of Climate Science (WA) Sub-Theme 2: Climate-Related Decision Support for Water Allocation Use		
WA2.1 WA2.2 WA2.3 WA2.4 WA2.5	A RISA Success Story-The Southeast Climate Consortium Users Making Decisions for Water Allocation Walking the Talk: RISA Drought Insights for CCSP Robust Adaptation Decisions amid Climate Change Uncertainties Adapting New York City's Water Supply and Wastewater Treatment Systems to Climate Change	James J. O'Brien Eric Kuhn Gregg Garfin, Greg Carbone, Dan Cayan, Keith Ingram, Philip Mote, Eileen Shea, Brad Udall Suraje Dessai, Mike Hulme Emily Lloyd, David C. Major, Cynthia Rosenzweig, Kate Demong, Christina Stanton
Ecosystems Management: Application of Climate Science (EC) Ecosystems Decision Support and Adaptive Responses		
EC1.1 EC1.2	The Role of Climate Science in U.S. Crop Insurance Providing a Science-Practice Interface to Decision Makers through Global Environmental Change and Food Systems (GECAFS) Decision Support System Research	Thomas P. Zacharias Arvin Mosier, Jim Jones, Steve Sonka, Greg Kiker, John Ingram, Mike Brklacich
EC1.3 EC1.4	Active Fire Observations from MODIS to Support Decision Making Assessing Impacts of Changing Land Use, Climate and Atmospheric Chemistry on Forests of the Chesapeake Bay Watershed	I. Csiszar, C.O. Justice, J. Desclotres, D. Davies, L. Giglio, R. Sohlberg Richard Birdsey, Yude Pan, Eric Sprague, John Hom, Kevin McCullough
EC1.5 EC1.6 EC1.7	Designing Wetland Conservation Strategies under Climate Change A Tool for Screening Projects for Risks from Climate Change Ocean Climate Decision Making Systems for Predicting Catch in Pelagic Fisheries	Jiayi Li, Elizabeth Marshall, James Shortle, Richard Ready, Carl Hershner Ian Noble, Fareeha Iqbal Mitchell A. Roffer
EC1.8	The Implications of Climate Change in the Management of Vulnerable Species - The Case Study of Polar Bears	George M. Durner, Steven C. Amstrup, David C. Douglas, Gennady I. Belchansky, Geoffery York, Ryan Nielson, Trent McDonald
EC1.9	TNC's Adaptation Efforts in Conservation Landscapes: Models for Federal Land Managers?	Earl Saxon, Bill Stanley, Sam Pearsall
EC1.10	Linking Health and Environmental Data in a Public Health Surveillance System	Doug Rickman, Amanda Sue Niskar, Judith Qualters, Dale Quattrochi, Maury Estes, Ashutosh Limaye, William Crosson, Mohammad Al-Hamdan
Coastal Management: Application of Climate Science (CO) Sub-Theme 1: Climate and Coastal Infrastructure: Applications and Information Needs		
CO1.1	Climate and Coastal Communities: Improving the Decision-Making Process	Eileen L. Shea
CO1.2	Using Paleotempestology in Support of Decision Making Under Uncertainty of Hurricane Climate Variability	Kam-biu Liu
CO1.3 CO1.4	Sea Level Rise: A Trendy Perspective Informing Decision Makers of the Potential Impacts of Sea Level Rise on the Coastal Region of New Jersey, USA	Len Pietrafesa, Dave Dickey, Lian Xie Michael D. Beevers, Matthew J.P. Cooper, Michael Oppenheimer
CO1.5 CO1.6	Overview of Information Needed to Adapt to Rising Sea Level Sea Level Rise and Ground Water Sourced Community Water Supplies in Florida	James Titus John Furlow, Randall Freed, Susan Herrod-Julius
CO1.7 CO1.8 CO1.9	Context and Climate Change: Lessons from Barrow, Alaska Climate Change and Coastal Cities: Information for Decision Making A Resource Manager's Perspective on Applications and Information Needs	Ronald D. Brunner, Amanda Lynch, James Maslanik Roberta Balstad, W. Christopher Lenhardt Susan Snow-Cotter
Coastal Management: Application of Climate Science (CO) Sub-Theme 2: Climate and Coastal Ecosystems: Supporting Adaptive Management		
CO2.1	Understanding the Future of Coastal Wetlands in the Face of Sea-Level Rise: Lessons from Coastal Louisiana	Denise J. Reed
CO2.2	SELVA-MANGRO: An Integrated Landscape and Stand Simulation Model for Predicting Mangrove Forest Growth and Distribution across the Everglades Coastal Margin under Changing Climate	Thomas Doyle, Kenneth Krauss, Jason Sullivan, Andrew From
CO2.3	Using Climate Change to Information to Support Adaptive Coastal Conservation	Lynne Hale
CO2.4	An Information Guide for Strategic Management of Coral Reefs in a Changing Climate	Jordan West, Paul Marshall, Heidi Schuttenberg, Roger Griffiths
CO2.5	A Resource Manager's Perspective on Supporting Adaptive Management	Billy Causey

Abstracts for Speakers: Session 4 (continued)		
	Abstract Title	Authors
Air Quality Management: Application of Climate Science (AQ) Sub-Theme 1: Climate Change, Air Quality and Human Health		
AQ1.1	Review of the Health Effects Potentially Associated with Projected Changes in Concentrations of Air Pollutants and Aeroallergens	Kristie Ebi
AQ1.2	Impact of Climate Change on Air Pollution Episodes in the United States	L.J. Mickley, D.J. Jacob, B.D. Field, D. Rind, J.S. Fu, J.H. Seinfeld, D.G. Streets
AQ1.3	Ozone Air Quality Management through Methane Emission Reductions: Global Health Benefits	J. Jason West, Arlene M. Fiore, Larry W. Horowitz, Denise L. Mauzerall
AQ1.4	EPRI Workshop on Interactions of Climate Change and Air Quality: Findings and Recommendations	Daniel J. Jacob
Air Quality Management: Application of Climate Science (AQ) Sub-Theme 2: Linking Climate Change Research to Air Quality Decisions		
AQ2.1	Towards an Integrated Observing System for Air Quality Decision Making	Doreen Neil, R.B. Pierce, James Szykman, Jack Fishman
AQ2.2	Integrating Climate Modeling and Remote Sensing Data to Improve Public Health Decision Support Tools - Part I	Stanley Morain, Amelia Budge, Karl Benedict, William Hudspeth, Thomas Budge, Gary Sanchez, William Sprigg
AQ2.3	Supporting Long-Term Regional Air Quality Management in Response to Global Change	Dan Loughlin, Gary Kleiman, Bryan Hubbell, Darryl Weatherhead
AQ2.4	Application of an Integrated Modeling System for Climate and Air Quality Change Studies at Regional to Local Scales	Xin-Zhong Liang, Ho-Chun Huang, Allen Williams, Michael Caughey, Kenneth Kunkel, Donald Wuebbles
AQ2.5	Development and Evaluation of a Methodology for Determining Air Pollution Emissions Relative to Geophysical and Societal Change	Allen Williams, Geoffrey Hewings, Zhining Tao, Kieran Donaghy, Donald Wuebbles
Energy Systems: Application of Climate Science (EN) Brief Overview		
EN0.1	Brief Overview: CCSP Activities Informing Decision Making	Jerry Elwood
EN0.2	Brief Overview: CCTP Activities Informing Decision Making	David Conover
Energy Systems: Application of Climate Science (EN) Sub-Theme 1: Science Informing Operational and Short-Term Decision Making		
EN1.1	Climate Science Applications to Support Short-Term, Operational Decision Making for a Utility and for Financial Commodities Trading	David D'Arcangelo
EN1.2	NASA Satellite Measurements and Modeling Contributions to Decision Support in the Energy Sector	Richard S. Eckman, Paul W. Stackhouse, Mayra N. Montrose
EN1.3	Climate Forecasts for Improving Management of Energy and Hydropower Resources in the Western U.S.	Anthony Westerling, Eric Alfaro, Mary Altalo, Tim Barnett, Todd Davis, Phil Graham, Alan Hamlet, Dennis Lettenmaier, David Pierce, Anne Steinemann, Nathalie Voisin
EN1.4	Translating Research Results into Resource Plans at the State Level	Franco Guido
Energy Systems: Application of Climate Science (EN) Sub-Theme 2: Long-Term Planning and Investment, Including Carbon Management and Integrated Assessment		
EN2.1	Science Needs to Inform Long-Term Decision Making in the Energy Sector	TBD
EN2.2	Improving Climate Information for Hydroelectric Dam Relicensing	Kirstin Dow, Greg Carbone, Kirsten Lackstrom
EN2.3	Planning Bio-Energy Options: Climate Feedbacks and Information Needs	Robin L. Graham
EN2.4	Science for Carbon Management: Making Effective Connections Between Users and Producers of Information	L. Dilling, D. Fairman, R. Pielke, A. King
EN2.5	The Future of Integrated Assessment Modeling as a Decision Support Tool for Energy and Climate	Gerald Stokes
EN2.6	Tools for Interactive Decision Making under Uncertainty on Energy and Climate Change	Jurgen Scheffran



Abstracts for Posters: Evening Session – 14 November 2005		
Abstract Title	Authors	
Decision Support: Processes & Products (P-DS) Sub-Theme 1: Scientific Assessments		
P-DS1.1	CCSP Poster on Synthesis and Assessment Product 1.2: Past Climate Variability and Change in the Arctic and at High Latitudes	Thomas R. Armstrong, Joan Fitzpatrick
P-DS1.2	Climate Projections for Research and Assessment Based on Emissions Scenarios Developed through the CCTP - Synthesis and Assessment Product 3.2	Hiram Levy
P-DS1.3	CCSP Poster on Synthesis and Assessment Product 3.4: Risks of Abrupt Changes in Global Climate	Thomas R. Armstrong
P-DS1.4	National Academies Reports on Radiative Forcings and Climate Change Feedbacks	Ian Kraucunas, Chris Elfring, Amanda Staudt, Daniel Jacob, Dennis Hartmann
P-DS1.5	CCSP Synthesis and Assessment Product 4.2: State-of-knowledge of Thresholds of Change that Could Lead to Discontinuities (Sudden Changes) in Ecosystems and Climate-Sensitive Resources	Jack Waide, William Hohenstein, Bryce Stokes, Jeff Amthor, Susan Herrod-Julius, Kenric Osgood, Henry Gholz
P-DS1.6	CCSP Poster on Synthesis and Assessment Product 4.3: The Effects of Climate Change on Agriculture, Biodiversity, Land, & Water Resources	William Hohenstein, Bryce Stokes, Jack Waide, Jeff Amthor, Susan Herrod-Julius, Woody Turner, Paula Bontempi, Ned Cyr, Tom O'Connor, Kenric Osgood, Henry Gholz, Phil Taylor
P-DS1.7	CCSP Synthesis and Assessment Product 4.4: Preliminary Review of Adaptation Options for Climate Sensitive Ecosystems and Resources	Susan Julius, Bryce Stokes, Bill Hohenstein, Jack Waide, Woody Turner, Ed Sheffner, Kenric Osgood, Ned Cyr
P-DS1.8	CCSP Synthesis and Assessment Product 4.5: Analyses of Effects of Global Change on Energy Production and Consumption	Tom Wilbanks, Jerry Elwood
P-DS1.9	CCSP Synthesis and Assessment Product 4.6: Analyses of the Effects of Global Change on Human Health and Welfare and Human Systems	Janet L. Gamble, Anne Grambsch, John Houghton, Lawrence Friedl, Caitlin Simpson
P-DS1.10	CCSP Synthesis and Assessment Product 5.2: Best Practice Approaches for Characterizing, Communicating and Incorporating Scientific Uncertainty in Climate Decision Making	M. Granger Morgan
P-DS1.11	The National Academies: Informing National Decisions on Climate and Global Change	Gregory Symmes
P-DS1.12	Lessons Learned from Decision Support Processes in Place-based Settings	Janet Gamble, Frances Sussman, Susan Julius, Randy Freed, John Furlow, Melinda Harris, Jordan West
P-DS1.13	Meeting Societal Needs: Regional Integrated Assessments in Support of Decision Making	Amy Luers, Peter Frumhoff, Susanne Moser
P-DS1.14	A Synthesis and Outreach Program on Climate Variability and Change Research in the Northeastern U.S. and Eastern Canada	Lindsey Rustad, Roger Cox, Marc Deblois, Jeffrey Dukes, Andrew Richardson, Barry Rock, Mark Watson, Norman Willard
Decision Support: Processes & Products (P-DS) Sub-Theme 2: Estimation & Communication of Uncertainty		
P-DS2.1	Sources, Characterization, and Communication of Uncertainty in Climate Impacts	Bryan Pijanowski, Marianne Huebner, Brent Lofgren
P-DS2.2	Risk Modeling Using Multiple Probability Distributions for the Climate Sensitivity	Paul Baer, Michael Mastrandrea, Malte Meinshausen
P-DS2.3	Simple Climate-Economy Models: Transparent Tools for Policy Making or Opaque Screen Hiding Methodological Arbitrariness?	Hans-Martin Füssel
Decision Support: Processes & Products (P-DS) Sub-Theme 3: Interface Between Users & Information		
P-DS3.1	Ensuring Climate Services for the Nation	Roger Pulwarty, Kelly Redmond, Fiona Horsfall, Phil Pasteris, Nolan Doesken, Harvey Hill
P-DS3.2	SPARC: Science Policy Assessment and Research on Climate	Roger Pielke Jr.
P-DS3.3	The Multiple Audiences Problem in Constructing Effective Syntheses of Scientific Information for Purposes of Influencing Public Policy	William F. Eadie, Kerk F. Kee
P-DS3.4	An Analysis of Some Problems in the Transmission and Use of Climate Research by Public Policy Decision Makers and Some Suggestions for Improving the Process Using Currently Available Tools	Myron Ebell, Christopher Horner, Marlo Lewis, Iain Murray
P-DS3.5	Development and Gap Analysis of Climate Change Educational Resources Collection for K-12	Mark S. McCaffrey, Frank Niepold
P-DS3.6	Documenting Glacier Change and Landscape Evolution: An Alaskan Example of Providing Scientific Information to Support Decision Making and Outreach and Education	Bruce Molnia
Decision Support: Processes & Products (P-DS) Sub-Theme 4: International		
P-DS4.1	Robust Adaptation Decisions amid Climate Change Uncertainties	Suraje Dessai, Anglia, Mike Hulme
P-DS4.2	Decision Systems Research and Tool Development at the IRI	Neil Ward, James Hansen, Sankar Arumugam, Daniel Osgood, Lareef Zubair, Casey Brown, Ashok Mishra
P-DS4.3	Applying Climate Variability/Change Information for Early Warning and Response Decision-Making: Lessons Learned from the Conflict Early Warning and Response Mechanism (CEWARN)	Patrick Meier
P-DS4.4	Climate Change Science for Development	Keya Chatterjee, Jon Padgham



Abstracts for Posters: Evening Session (continued)		
Abstract Title	Authors	
Food Production (P-FP) Sub-Theme 1: Remote Sensing Applications		
P-FP1.1	The Multiple Roles of Satellite Data in Livelihood Based Famine Early Warning for Decision Makers	Molly Brown, Christopher Funk, Tanya Boudreau, Compton Tucker
P-FP1.2	Global Agricultural Monitoring: Science Information to Inform Decision Making	Chris Justice, Brad Dorn, Matthew Hansen, Jim Tucker, Assaf Anyamba, Mark Sullivan, Inbal Reshef
P-FP1.3	An Agricultural Information System Based on Satellite Remote Sensing Data for Decision Making	Bill Teng
P-FP1.4	Integrating Remote Sensing and other Products into the Decision Support Systems of the United Nations World Food Programme	Zhong Liu, Lenard Milich, William Teng, Long Chiu, Steven Kempler, Hualan Rui
P-FP1.5	Climate Constraints, Water Limitation and Global Food Security	Felix Kogan
Food Production (P-FP) Sub-Theme 2: Regional International Applications		
P-FP2.1	A Prototype, Scenario-Based, Decision Support System for Integrating Food Security and Ecosystem Management in Jamaica	Greg Kiker, Mindy Kiker, Arvin Mosier, Jim Jones, Igor Linkov
P-FP2.2	Climate Change Impact on Food Security and Policy Adaptations: A Synthesis from Selected African Countries	Tanveer A. Butt, Bruce A. McCarl
Food Production (P-FP) Sub-Theme 3: Impact Modeling		
P-FP3.1	Linking Seasonal Climate Forecasts with Crop Simulation to Optimize Maize Management	Ashok Mishra, James Hansen, K.P.C. Rao, Durton Nanja, Elijah Mukhala
P-FP3.2	Effects of Climate Variability on Irrigation Water Use in the Southeastern United States	J.O. Paz, G. Hoogenboom, A. Garcia y Garcia, L.C. Guerra, J.G. Bellow, C. W. Fraisse, J.W. Jones
P-FP3.3	Impact of Climate Information in Reducing Farm Risk by Selecting Crop Insurance Programs	Victor Cabrera, Clyde Fraisse, David Letson, Guillermo Podesta, James Novak
P-FP3.4	A Climate-based Tool for Agricultural Nitrogen Management Decisions	Arthur T. DeGaetano, Laura Joseph, Jeffrey J. Melkonian
Food Production (P-FP) Sub-Theme 4: Decision Support Projects & Programs		
P-FP4.1	Applications of Climate Information to Agriculture in the Southeast USA: A Perspective from Agricultural Extension Services	Joan Dusky
P-FP4.2	The Pileus Project: Climate Science in Support of Decision Making	J. Roy Black, Julie A. Winkler, Jeffrey A. Andresen, Jeanne Bisanz, Costanza Zavalloni
P-FP4.3	Farmer Climate Risk Management: Insights into Climate Change Adaptation Capacity	Jennifer Phillips, David Krantz, Brad Lyon
Ecosystems (P-EC) Sub-Theme 1: Observations & Applications		
P-EC1.1	Influence of Climate Variability on Regional Vegetation and Water Cycle over the East Coast of the United States	Donglian Sun, Menas Kafatos, Ruixin Yang
P-EC1.2	Satellite-derived MODIS Vegetation Attributes: Indicators of Climatic Effects on Biodiversity and Productivity Across the U.S.A.?	J.M. Nightingale, N.C. Coops, R.H. Waring, W. Fan
P-EC1.3	Altered Climate and Ecosystem Response: The Long-Term Ecological Research Program (LTER)	Jim Gosz, Mark Williams, Deb Peters, Alan Knapp
P-EC1.4	Climate LINKages of UPLand-Lowland Environments (LINKUP)	Henry Diaz
Ecosystems (P-EC) Sub-Theme 2: Wildfire		
P-EC2.1	Addressing the Impact of Climate Change on Wildland Fires	Margaret R. McCalla, Mary M. Cairns, Mark J. Welshinger
P-EC2.2	Keepers of the Flame: The Role and Use of Climate in National and Regional Fire Policy	Timothy Brown, Roger Pulwarty
P-EC2.3	Using Fire and Climate History for Assessing Current and Future Fire Hazards	Thomas Swetnam, Michael Crimmins, Barbara Morehouse
P-EC2.4	Using Satellite-Based Fire Products to Enhance the National Emissions Inventory	Amber Soja, Jay Al-Saadi, Brad Pierce, James Szykman, David J. Williams, Tom Pierce, Tom Pace, Joe Kordzi
P-EC2.5	The MODIS Rapid Response Project: A New Suite of Remote Sensing Products in Support of Decision Making	Jacques Desclotres, Jeff Schmaltz, Jackie Kendall, Louis Giglio, Chris Justice, Holli Riebeek
P-EC2.6	Statistical Modeling of Western Wildfire Season Severity for Decision Support	Anthony Westerling, Tim Barnett, Daniel Cayan, Michael Dettinger, Alexander Gershunov, Hugo Hidalgo
Ecosystems (P-EC) Sub-Theme 3: Land & Wildlife Management		
P-EC3.1	Decision Support Tools for Adaptive Forest Management	William T. Sommers
P-EC3.2	Interim Wildlife Management and Global Climate	Douglas Inkle
P-EC3.3	Redesigning Conservation for Climate Change	Lara Hansen, Eric Mielbrecht, Jennifer Biringer, Jennifer Hoffman



Abstracts for Posters: Evening Session (continued)

	Abstract Title	Authors
	Ecosystems (P-EC) Sub-Theme 4: Projections	
P-EC4.1	A Modeling Study of Climate-Ecosystem Interaction Over North America	Ming Chen, Huiting Mao, Robert Talbot
P-EC4.2	Transient Dynamics of Vegetation Response to Past and Future Major Climatic Changes in the Southwestern United States	Kenneth Cole, Kirsten Larsen, Phillip Duffy, Samantha Arundel
P-EC4.3	Potential Widespread Forest Dieback in North America: What is the Price of Uncertainty	Ronald P. Neilson, James M. Lenihan, Dominique Bachelet, Raymond J. Drapek, F.I. Woodward, M. Lomas, The VINCERA investigators
P-EC4.4	Vulnerability of Northern Prairie Wetlands to Climate Change: Implications for Waterfowl	Glenn Guntenspergen, Carter Johnson, David Naugle
P-EC4.5	Eastern Deciduous Forest Responses to Climatic Change Drivers: An Upland-Oak Forest Case Study	Paul J. Hanson, Stan D. Wullschlegler, Jeffery S. Amthor
P-EC4.6	Rising Atmospheric Carbon Dioxide as a Factor in the Success of Invasive Weeds	L.H. Ziska
	Carbon (P-CA) Sub-Theme 1: Sequestration in Ecosystems	
P-CA1.1	Using Ecosystem Models to Inventory and Mitigate Environmental Impacts of Agriculture	Stephen Del Grosso, Steve Ogle, William Paron, Keith Paustian, Ronald Follett
P-CA1.2	Renewable Energy as an Emission Control Alternative: Agricultural and Forestry Sector Roles	B.A. McCarl, J.C. Cornforth, R. Ismailova, W. You, M. El Halwagi, T. Mohan, X. Qin
P-CA1.3	Estimating U.S. Forest-Agriculture Climate Change Mitigation Opportunities at the National and Regional Scales using Economic, Policy, and Co-Benefits Criteria	Brian Murray, Bruce McCarl, Kenneth Andrasko, Benjamin DeAngelo, Brent Sohngen
P-CA1.4	A Modeling Framework to Relate Agricultural Practice, Land-Use Change, Energy Use, and Greenhouse Gas Emissions on Agricultural Lands in the USA: Integrating Carbon Accounting with Survey Data, Remote Sensing, and Economic Modeling	Tristram West, Gregg Marland, Craig Brandt, Daniel De La Torre Ugarte, James Larson, Budhendra Bhaduri, Sally Mueller, Aarthy Sabesan, Chad Hellwinkle, Brad Wilson
P-CA1.5	Determining the Long-Term Impact of Bioenergy Crops on the Global Warming Potential of Energy Use	Paul R. Adler, Steven J. Del Grosso, William J. Parton, William E. Easterling
P-CA1.6	COLE: Carbon OnLine Estimation Web Tool for Continental U.S. Forest Ecosystems	Linda S. Heath, Paul C. Van Deusen, Michael P. Spinney, Jeffrey H. Gove, James E. Smith
P-CA1.7	Spatial Biological and Industrial Carbon Budgets for Northern WI	D.E. Ahl, M.K. White, S.T. Gower, B. Bond-Lamberty, D. Helmers, S. Peckham
P-CA1.8	Carbon Sequestration Potential in New Mexico Rangelands	Jay Angerer, Joel Brown, Robert Blaisdell, Jerry Stuth
P-CA1.9	Summer and Winter Precipitation: Effects on Carbon Sequestration and Timber Production under Current and Future Atmospheric CO ₂	Ram Oren, Heather McCarthy, Sari Palmroth, Kurt Johnsen
	Carbon (P-CA) Sub-Theme 2: Emissions, Budgets, & Processes	
P-CA2.1	Nutrient Management to Enhance Carbon Sequestration in Piedmont Forests of the Southeastern U.S.	Peter Kapeluck, Wayne Carroll, David Van Lear, Elena Mikhailova, Christopher Post, Mark Schlautman, Wilfred Post, Chuck Garten, Phillip Jardine
P-CA2.2	Unaccounted Soil Carbon Stocks	Elena Mikhailova, Christopher Post, Kim Magrini-Bair
P-CA2.3	Estimating Soil C Changes for the US 1605B Program "Voluntary Reporting of Greenhouse Gas Mitigation"	Keith Paustian, John Brenner, Stephen Ogle, Mark Easter, Kendrick Killian, Jill Schuler, Steve Williams
P-CA2.4	Practical Applications of Uncertainty Analysis for National Greenhouse Gas Inventories	Michael Gillenwater, Fran Sussman, Jonathan Cohen
P-CA2.5	Spatiotemporally Explicit Maps of Anthropogenic CO ₂ Emissions for NACP	Marc Fischer, Kevin Gurney, Scott Denning, Steve Knox, Gregg Marland, Dennis Ojima, Lynn Price, Jayant Sathaye
P-CA2.6	Time Series Calibrated Carbon Emissions and Atmospheric Response	Clifford E. Singer
P-CA2.7	Carbon America: Providing Regional Carbon Emissions and Uptake Information for Carbon Management	David Hofmann, Pieter Tans
P-CA2.8	Monitoring CO ₂ from Space: The NASA Orbiting Carbon Observatory Mission	David Crisp, The OCO Team
P-CA2.9	Methane Emissions from Natural Wetlands in the United States: Satellite-Derived Estimation Based on Ecosystem Carbon Cycling	Christopher Potter, Steven Klooster, Seth Hiatt, Matthew Fladeland, Peggy Gross
P-CA2.10	Carbon Budgets for Ecosystems of the Continental United States	Christopher Potter, Steven Klooster, Vanessa Genovese, Matthew Fladeland
P-CA2.11	The U.S.-China Carbon Consortium (USCCC) and Its Contribution to Global Change Studies	Jiquan Chen
P-CA2.12	Urban and Regional Carbon Management: Comparative Framework of the Global Carbon Project	Penelope Canan
P-CA2.13	A Bayesian Synthesis Inversion of Carbon Cycle Observations: How Do Observations Reduce Uncertainties About Future Sinks?	Daniel Ricciuto, Klaus Keller, Kenneth Davis
P-CA2.14	Methodology and Cost of Evaluating Soil Carbon Stocks in a 2-m Soil Profile	Christopher Post, Elena Mikhailova, Kim Magrini-Bair
P-CA2.15	Carbon-Climate System Feedbacks to Natural and Anthropogenic Climate Change	S.C. Doney, I. Fung, K. Lindsay, J. John



Abstracts for Posters: Evening Session (continued)		
Abstract Title	Authors	
Coastal (P-CO) Sub-Theme 1: Built Environment and Hazards		
P-CO1.1 P-CO1.2 P-CO1.3	Space Based Data and Technology Applied to Gulf Coast Geodesy Impact of Sea-Level Rise on the Mid- and Upper-Atlantic Coast An End-User Defined Coastal Climatology Product for Recreation and Tourism in Southeastern North Carolina	Roy K. Dokka, Steven Baig, Ronald G. Blom, Tim Dixon, Eric Gurrola, Paul Rosen Shuang-Ye Wu, Raymond Najjar, John Stewart Douglas W. Gamble, Lynn Leonard
P-CO1.4 P-CO1.5	Global Climate Change Impacts on Coastal Infrastructure Services Which Uncertainties Matter for Decision-Making? Development of an Integrative Decision-Centered Screening Tool with an Application to Coastal Management in California	Rae Zimmerman Susanne Moser
P-CO1.6	The Consortium for Atlantic Regional Assessment: Bringing Climate and Land Use Change Information to Local and Regional Decision Makers	Brandi Nagle, James Shortle, Rachael Dempsey, Jennison Kipp
Coastal (P-CO) Sub-Theme 2: Wetlands		
P-CO2.1	Choice Modeling Tools to Inform Climate Change Decision-Making: A Case Study on Public Preferences for Coastal Wetland Restoration	Frank Lupi, Michael Kaplowitz, John Hoehn
P-CO2.2	Sea Level Rise and Potential Change in Coastal Bird Habitat in New Jersey, USA	Michael D. Beevers
P-CO2.3	Prediction of Ecological Effects of Sea Level Rise in North Carolina through Coupled Hydrodynamic, Digital Elevation, & Habitat Models	C. Auer, J. Feyen, K. Hess, E. Spargo, S. White, J. Sellars, S. Gill
P-CO2.4 P-CO2.5	Predicting the Persistence of Coastal Wetlands to Global Change Effects Studies of Climate-Driven Changes in Lake Levels Assist in Decision Making in the Great Lakes Region	Glenn Guntenspergen, Donald Cahoon Douglas A. Wilcox, Todd A. Thompson, Steve J. Baedke
Coastal (P-CO) Sub-Theme 3: Reefs and Fisheries		
P-CO3.1	Decision Support Tools for Coral Reef Management under Changing Climates	John W. McManus, Felimon C. Gayanilo, Amit L. Hazra, Marilyn E. Brandt, Alette T. Yri'96iguez, Wade T. Cooper, Johnathan Kool, Catherine A. Bliss
P-CO3.2	Coupling Remote Sensing and In-Situ Data to Derive a Calcification Index for Coral Reef Ecosystems	Dwight K. Gledhill
P-CO3.3	Climate and Ecosystem Research to Advance Fisheries Management	Kenric E. Osgood
Water & Energy (P-WE) Sub-Theme 1: Decision Support Applications: Practice & Theory		
P-WE1.1 P-WE1.2	Pacific ENSO Applications Center (PEAC): The First Decade Climate Change - A Looming Challenge for California: Applying State and Federal Science to Inform Decision Makers	Eileen Shea Daniel Cayan, Michael Dettinger, Kelly Redmond, Anthony Westerling, Guido Franco, Frank Gehrke, Mary Tyree, Noah Knowles, Hugo Hidalgo, Alexander Gershunov, Laura Edwards, David Pierce, Peter Bromirski
P-WE1.3	The Western Water Assessment: Integrated Sciences for Decision Support	Bradley Udall, Roger Pulwarty, Martyn Clark, Doug Kenney, Chris Goemans, Randy Dole, Susan Avery
P-WE1.4	Effecting Systemic Change in Climate Information Delivery and Decision Support	Holly Hartmann
P-WE1.5	Barriers to Weather and Climate Forecast Use by Community Water System Managers	Brent Yarnal, Robert O'Connor, Kirstin Dow, Christine L. Jocoy, Greg Carbone
P-WE1.6	Integrating Climate Information into Decision Making for Support of Water Management: A Protocol	Qi Hu, Roger Bruning, Lisa PytlikZillig, Gary Lynne, Kenneth Hubbard
P-WE1.7	Infrastructure to Document Local Hydroclimatic Vulnerabilities to Climate Variation and Change	John Harrington, Brent Yarnal, Andrew Comrie, Colin Polsky
P-WE1.8	Climate Information Needs for Decision Makers: Special Reference to Water	Leonard Berry, Lakhdar Boukerrou
P-WE1.9	Adapting New York City's Water Supply and Wastewater Treatment Systems to Climate Change	David C. Major, Cynthia Rosenzweig, Kate Demong, Christina Stanton
P-WE1.10	The Water Cycle Solutions Network	Paul Houser, Debbie Belvedere, Bisher Imam, Rick Lawford, Fritz Policielli, Robert Schiffer, C. Adam Schlosser, Hoshin Gupta, David Toll, Claire Welty, Charles Vorosmarty, David Matthews
P-WE1.11	Demonstrating Land Information System Decision Support Solutions	Paul Houser, Kristi Aresnault, Christa Peters-Lidard, David Toll
P-WE1.12	Drought Monitoring in Oklahoma: A Collaborative Endeavor	Mark A. Shafer, S. Arndt
P-WE1.13	Applying Planetary Water and Energy Cycle Science and Observations to Regional and Local Decision Making in the Water Sector	Rick Lawford
P-WE1.14	Development and Presentation of Climate-Based Streamflow Forecast Tools for Water Resource Managers in the Puget Sound Region	Richard Palmer, Matthew Wiley
P-WE1.15	Water Supply Forecasting for the Western U.S.	Phillip Pasteris, Tom Pagano
P-WE1.16	Hydroclimatic Reconstructions for Decision Support in the Colorado River Basin	Connie Woodhouse, Robert S. Webb, Gregg Garfin, Brad Udall
P-WE1.17	California's Coupled Water and Energy Response to Climate Change	Norman Miller, Larry Dale, Tariq Kadir
P-WE1.18	The Role of Climate Change in Thermoelectric Cooling Water Systems	B.T. Smith, A.W. King, M. Branstetter, C.C. Coutant, P.J. Mulholland, M.J. Sale
P-WE1.19	Climate-Driven Increases in Extreme Heat and Energy Demand in California	Norman L. Miller, Katharine Hayhoe, Jiming Jin
P-WE1.20 P-WE1.21	Climate Change Impacts on California's Energy Security Planning Using Climate Models Output in Adapting to Climate Change	Steven Fernandez, James Bossert, Loren Toole, Sam Flaim Joel B. Smith, Tom M. L. Wigley



Abstracts for Posters: Evening Session (continued)

	Abstract Title	Authors
	Water & Energy (P-WE) Sub-Theme 2: Science & Information Tools	
P-WE2.1	Giovanni - A Vital Tool Enabling Rapid and Accurate Climate Data Analysis for Evaluation, Assessment, and Research	James G. Acker, Stephen Berrick, Gregory Leptoukh, Steven Kempler, Zhong Liu, Hualan Rui, William Teng, Suhung Shen, Tong Zhu, James Johnson
P-WE2.2	Global Land Data Assimilation System (GLDAS) Products Available to Support Hydroclimatology and Decision Making	Matthew Rodell
P-WE2.3	Drought Monitoring and Applications of NASA's Hydrosphere States Mission	Christa Peters-Lidard, Peggy O'Neill, Dara Entekhabi, Eni Njoku, Paul Houser, Randy Koster
P-WE2.4	The Hydrologic Ensemble Prediction Experiment (HEPEX) Project	John Schaake
P-WE2.5	Climate Services for Water Resources Decision Support: An Overview of the State of the Practice and Some Implications Associated with Global Warming	Alan Hamlet, Edward Miles, Edward Sarachik
P-WE2.6	Assessing the Implications of Climate Variability and Change for Western Water Resources	Andrew W. Wood, Dennis P. Lettenmaier, Tim P. Barnett
P-WE2.7	Impacts of a Warming Climate on Water Availability in Snow-Dominated Regions	Jennifer Adam, Tim Barnett, Dennis Lettenmaier
P-WE2.8	Effects of Water Resources: Monitoring Snowmelt Runoff and Sea Level for Climate Change	Maury Roos
P-WE2.9	Regional Impacts of Climate Change, Landuse Change, and Human Population Dynamics on Water Availability and Demand across the Southeastern U.S.	Ge Sun, Steven G. McNulty, Erika Cohen, Jennifer Moore Myers, David Wear
P-WE2.10	Decision Support System for the Effects of Climate Change on Water Supply in San Juan River Basin	Carl W. Chen, Laura H.Z. Weintraub, Limin Chen, Joel W. Herr, Paul M. Rich, R.A. Goldstein
P-WE2.11	An Assessment of the Effectiveness of Riparian Buffers for Reducing Sediment Loading to Streams Under Alternative Climate Change Scenarios	T. Johnson, M. Huang, J. Furlow, C. Rogers, R. Freed, D. Pape
P-WE2.12	Assessing the Impact of Climate Change on the Hydrology and Water Quality of the Upper Mississippi River	Eugene Takle, Manoj Jha, Christopher Anderson, Phil Gassman
	Air Quality and Health (P-AQ)	
P-AQ1.1	Integrating Climate Modeling and Remote Sensing Data to Improve Public Health Decision Support Tools: Model Results - Part II	Dazhong Yin, Brian Barbaris, William A. Sprigg
P-AQ1.2	Possibilities and Challenges in Using Satellite Data for PM2.5 Forecasts	Mian Chin, Hongbin Yu, Allen Chu
P-AQ1.3	Satellite-Derived High Resolution Land Use/Land Cover Data to Improve Urban Air Quality Model Forecasts and Decision Making	Dale Quattrochi, William Crosson, Maury Estes, Maudood Khan
P-AQ1.4	Global Atmospheric Pollution Studies Using Space-Based Observations Alongside Global Modeling and Data Assimilation Tools Developed in NASA's Global Modeling and Assimilation Office	Steven Pawson, Ivanka Stajner, Julio Bacmeister, Andrew Tangborn
P-AQ1.5	Effects of Urbanization on Meteorology, Biogenic Emissions, and Air Quality in the Houston-Galveston Area (HGA) in Texas, USA	Daewon Byun, Soontae Kim, Fang-Yi Cheng
P-AQ1.6	Accounting for Uncertainty in Future Climate Change and Evaluating Its Effects on Regional Air Quality	Kasemsan Manomaiphobon, Armistead G. Russell, Chien Wang, Cassandra B. Roth, Lai-Yung Leung, Jung-Hun Woo, Praveen Amar, Shan He
P-AQ1.7	Examining the Impact of Climate Change and Variability on Regional Air Quality over the United States	Ellen Cooter, Robert Gilliam, Alice Gilliland, William Benjey, Jenise Swall, Chris Nolte
P-AQ1.8	Assessing Potential Health Impacts of Ozone and PM2.5 Under a Changing Climate	Patrick Kinney, Michelle Bell, Christian Hogrefe, Cynthia Rosenzweig, Kim Knowlton
P-AQ1.9	Criteria for Evaluation of Heat Event Early Warning Systems	Kristie L. Ebi, R. Sari Kovats
P-AQ1.10	Integration of NASA Data into ArboNET/Plague Surveillance System	Jorge E. Pinzon, Compton J. Tucker, Kenneth L.Gage, Russell E.Enscore
	General Climate Science (P-GC) Sub-Theme 1: Earth System Analysis & Products	
P-GC1.1	Warming of the World Ocean, 1955-2003	Syd Levitus
P-GC1.2	Assessing Risk of a Collapse of the Atlantic Thermohaline Circulation	Michael E. Schlesinger
P-GC1.3	Estimating the Probability of Future Climate Shifts	David Enfield
P-GC1.4	More on Hockey Sticks: The Case of Jones et al. [1998]	Stephen McIntyre
P-GC1.5	Assessment of U.S. Climate Variations Using the U.S. Climate Extremes Index and the U.S. Greenhouse Climate Response Index	David Karoly, Aaron Ruppert, David Easterling, Jay Lawrimore
P-GC1.6	Relative Sea Level Trends from Tide Stations: How Are They Determined and What Do They Tell Us?	Chris Zervas, Stephen Gill, Allison Stolz
P-GC1.7	A Maturity Model for Satellite-Derived Climate Data Records	Bruce R. Barkstrom, John J. Bates
P-GC1.8	The Contribution of Earth Science Remote Sensing Data to Natural Resources Policymaking	Molly Macaulay, Fred Vukovich
P-GC1.9	Assessing NOAA Daily Temperature and Precipitation Extremes Based on Combined/Threaded Station Records	Timothy W. Owen, Keith Eggleston, Art DeGaetano, Robert Leffler
P-GC1.10	NOAA Climate Prediction Center Products for Decision Making	James Laver
P-GC1.11	Aerosol Direct Radiative Effects Over the Northwest Atlantic, Northwest Pacific, and North Indian Oceans: Estimates Based on In-Situ Chemical and Optical Measurements and Chemical Transport Modeling and Their Relation to Decision-Support Information	A. Ravishankara, Timothy Bates, Theodore Anderson, Gregory Carmichael, Anthony Clarke, Caryn Erlick, Lawrence Horowitz, Patricia Quinn, Stephen Schwartz, H. Maring
P-GC1.12	Response of a Coupled Chemistry-Climate Model to Changes in Aerosol Emissions	Jean-Francois Lamarque, Jeff Kiehl, Peter Hess, Louisa Emmons, Paul Ginoux, Chao Luo, XueXi Tie
P-GC1.13	Aviation and the Global Atmosphere: The State of the Science and Future Research Needs	Lourdes Maurice, Curtis Holsclaw, Maryalice Locke, Ian Waitz, Stephen Lukachko, Rick Miale-Lye



Abstracts for Posters: Evening Session (continued)		
	Abstract Title	Authors
General Climate Science (P-GC) Sub-Theme 2: Model Evaluation and Strategy		
P-GC2.1	Simulations of Committed Climate Change and Sea-Level Rise through 2400 AD	William Collins, Gerald Meehl, Tom Wigley, Haiyan Teng
P-GC2.2	Model Evaluation and Projections of Climate for the Middle and Upper Atlantic Region of the United States	Raymond Najjar, Steve Graham, Steve Crawford, Steve Greybush
P-GC2.3	Development of Regional Probabilities of Climatic Change for Decision Making	Linda Mearns, Claudia Tebaldi, David Yates, Kathleen Miller
P-GC2.4	Evaluation of Regional Climate Simulations for Water Resources and Air Quality Assessment	L. Ruby Leung, Yun Qian, William Gustafson
P-GC2.5	The North American Regional Climate Change Assessment Program (NARCCAP): Multiple AOGCM and RCM Climate Scenario Projections for North America	William Gutowski, Linda Mearns, Raymond Arritt, Sebastien Biner, George Boer, Daniel Caya, Phil Duffy, Michel Giguere, Filippo Giorgi, Isaac Held, Richard Jones, Rene Laprise, Ruby Leung, Ana Nunes, Jeremy Pal, Yun Qian, John Roads, Lisa Sloan, Eugene Takle
P-GC2.6	Observed and Modeled Climate Variability over the United States Associated With Major Teleconnection Patterns	Katharine Hayhoe, Anne Hertel, Donald Wuebbles
P-GC2.7	Providing Climate Information Across a Continuum of Time Scales	Arthur M. Greene, Lisa Goddard, Walter Baethgen
P-GC2.8	Needed: A National Policy in Regard to Climate Modeling	David Douglass
P-GC2.9	A Closer Look at Sea Surface Temperature (SST) Trends	S. Fred Singer
P-GC2.10	Issues for Use of Climate Models to Inform Policymakers, Assess Impacts, and Develop Adaptive Strategies	Robert Livezey
P-GC2.11	Towards Interoperability of Global Geospatial Data Sets: Discrete Global Grids	Michael Freeston

