Recent media, policy, and public attention have focused on the potential impacts of climate change in the Arctic and around the globe. The increasing pace and scale of observed environmental changes may represent “tipping points”—new, unknown, and potentially irreversible vanguards of arctic and global change. As we enter into the final stages of the International Polar Year 2007–2008 (IPY), the scientific and policy communities are presented with an unprecedented opportunity to build on the wealth of data collected in the IPY to produce transformative advances in our understanding of climate change and to formulate appropriate policy and scientific responses—thus ensuring a successful national IPY legacy that addresses critical stakeholder issues.

This briefing will assist Congress in understanding the current state of scientific research on climate change and tipping points, with the intent to provide a basis for navigating research findings and media headlines to inform decision-making and policy. Leading scientists will discuss climate change implications such as infrastructure damage, food security, transportation, coastal erosion, national security, and the economic benefits of mitigating change.

**Presenters**

Moderator: Joshua Schimel  
*Department of Ecology, Evolution & Marine Biology, University of California Santa Barbara*

Panel Members:  
**Martin Miles**  
*Environmental Systems Analysis Research Center*  
~Changes in arctic climate and sea ice~

**Maribeth Murray**  
*Department of Anthropology, University of Alaska Fairbanks*  
~Human dimensions of climate change~

**Craig Fleener**  
*Gwich’in Council International*  
~Opportunities and costs to local communities~

The Arctic Research Consortium of the United States (ARCUS) is a nonprofit membership organization composed of universities and institutions that have a substantial commitment to research in the Arctic. For more information, contact ARCUS at: Phone: 907.474.1600, E-mail: info@arcus.org, or on the web at: www.arcus.org.