Scientists from the U.S. National Center for Atmospheric Research (NCAR) invite you to attend their Side Event:

## *New directions in climate research and simulation: IPCC AR5 and U.S.* NCAR Climate Modeling Activities

on

## Tuesday, 9 December, 9:00 to 10:30 in the White-tail Eagle Room



In the wake of the IPCC AR4 report, questions posed to the science community are changing. The focus of climate change research has changed from proving that climate change is occurring to projecting rates of change under different emissions scenarios, investigating the effects of change on human and natural systems, and identifying and evaluating strategies for managing change and its impacts. These new questions reflect competition among different societies for finite food, water and energy resources in the context of rising global population and GNP coupled with climate change and other environmental stresses. Climate change scientists are developing new classes of models, scenarios and data distribution systems designed to be relevant for a much larger, more diverse community of policy and decision makers and researchers to enable the next round of IPCC assessments to tackle these societal questions.

Scientists from the U.S. National Center for Atmospheric Research will discuss exciting breakthroughs in climate research and new modeling capabilities aimed at providing improved information to decision makers. Included in the discussion will be an overview of the new scenarios for the upcoming IPCC AR5 effort, the enhancements made to the newest version of the U.S. Community Climate System Model (CCSM), development of a new Nested Regional Climate Model, and continuing improvements in the Earth System Grid (ESG), a global virtual data center designed to ensure open sharing of climate data among the global research community.

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