



Assessing impacts of climate change: a role for GIS

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In preparation for the upcoming 4th Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), an extensive set of Climate Community Systems Model (CCSM) simulations of climate change was conducted and made available to the climate science community. Addressing questions of global climate change, especially those related to economic and environmental impacts, calls for better integration of information developed by atmospheric and geographic communities. GIS can play an important role in a comprehensive assessment of climate change impacts, in addition to providing a framework for planning and policy decisions. The GIS Climate Change Scenarios project conducted at NCAR distributes CCSM-3 outputs in a GIS format, thus allowing for easy integration of climate predictions with environmental and socio-economic datasets. This presentation describes the role of GIS in climate change impacts assessment, vulnerability and adaptation, and focuses on the GIS Climate Change Scenarios project with examples of GIS applications in climate change using the CCSM model outputs.