

Water Institute Distinguished Scholar Seminar Series

Co-Host: Florida Climate Institute

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Thursday, October 6, 2011
3:30 PM – 4:30 PM
209 Emerson Alumni Hall

Title:

Climate Projections for Florida: Can we trust the models?

Abstract:

Developing reliable projections of climate change at the regional scale is a challenging task. Global models are not yet capable of resolving many of the processes and dynamics that affect climate over Florida and other regions. Here, I examine the extent to which it is possible to quantify our confidence in climate projections through combining critical analysis of global models with advanced downscaling approaches. First, I evaluate the ability of the current generation of global climate models to reproduce key features of climate over Florida, including annual cycles in temperature and precipitation, as well as observed relationships between natural modes of variability, such as ENSO, and climate anomalies. Second, I present an approach for removing model uncertainty due to climate sensitivity from future projections, and discuss the implications of these projections for Florida's future climate.