

GLOBAL HIGH-RESOLUTION EARTH SYSTEM MODELS REPRESENTATION OF REGIONAL CLIMATE CHANGE AND VARIABILITY

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This presentation focuses on southeast US climate variability and change simulated by global earth system models at unprecedented ocean (~10 km) and atmosphere (~25 km) resolution, and how these simulations differ from traditional IPCC climate simulations at ~100 km resolution in both that atmosphere and ocean. Particular focus is placed on large-scale drivers of regional extremes in rainfall, temperature and coast sea-level contrasting how north Atlantic variability and change drives regional southeast US changes in extremes that are not detected at more typical resolutions.

PRESENTER BIO: Dr. Kirtman is a professor of atmospheric science and was a coordinating lead author of the IPCC 5th Assessment Report. He has published over 225 peer-reviewed papers on climate variability and change.