



A Strategy for Climate Change Stabilization Experiments with AOGCMs and ESMs

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Climate models used for climate change projections are on the threshold of including much greater biological and chemical detail. Today, standard climate models (referred to generically as atmosphere-ocean general circulation models, or AOGCMs) include components that simulate the coupled atmosphere, ocean, land and sea ice. Some modeling centers are now incorporating carbon cycle models into AOGCMs in a move towards an Earth System Model (ESM) capability. Additional candidate components for ESMs include aerosols, chemistry, and dynamic vegetation.

Modeling groups are making decisions this year on what form their next generation climate models will take with an eye to running new climate change experiments that may be evaluated in the next IPCC assessment. Additionally, new emission scenarios have been developed by the integrated assessment community reflecting recommendations of the 25th IPCC Session. This paper will discuss ongoing discussions between the climate and integrated assessment modeling communities towards future climate change simulations and experimental design.