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Geoengineering Model Intercomparison Project (GeoMIP) update

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The Geoengineering Model Intercomparison Project (GeoMIP) was kicked off with a workshop at Rutgers University in February 2011. GeoMIP is a "CMIP Coordinated Experiment," part of the Climate Model Intercomparison Project 5 (CMIP5), and is a cooperative project to conduct standardized general circulation model experiments to examine the climate response to artificial stratospheric aerosol clouds that have been proposed to counteract global warming. Thirteen different climate modeling groups, including nine CMIP5 participants, have agreed to conduct some or all of the GeoMIP model simulations. There are four GeoMIP experiments of varying complexity where the forcing by anthropogenic greenhouse gases is counteracted by reducing the solar constant or more realistic stratospheric sulfate aerosols. Participants will examine responses of the hydrological cycle, agricultural impacts, diurnal cycle changes, natural vegetation impacts, ozone responses, and many other aspects of the climate response. This poster will summarize the results of the runs completed by the time of the conference and summarize both common responses and differences in the different runs.