Convection in Near-Global Aquaplanet CRM

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The aquaplanet simulations produced by the System for Atmospheric Modeling (SAM) CRM over different pre-scribed SST patterns are analyzed. The computation domain has been as wide as half of the Earth's equatorial circumference and extended up to the north and south about 50 degrees limited by rigid walls. The radiation is interactive with diurnal cycle. The horizontal grid spacing was 4 km. The SST patterns have been based on the standard SST patterns from Aqua-Planet Experiment (APE) used in the past for AGCM intercomparison. The results of +4K and $4xCO_2$ perturbation experiments will be discussed. Preliminary results of full-equatorial-circumference CRM experiments with the goal to simulate the MJO will be presented.