

Self aggregation of convection in large-domain simulations of convection

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Simulations of self-aggregating convection under radiative convective equilibrium conditions in large-domain cloud system resolving simulation will be presented. The sensitivity of the self-aggregation to the representation of the boundary layer mixing and cloud and clear sky radiation will be presented to identify the mechanisms by which self-aggregation occurs in this model. The sensitivity of the self-aggregation to domain size will be examined in an integration on a 8000x4000km domain. The sensitivity of self-aggregation to the representation of the convection will be examined by considering integrations at lower resolution with parameterized convection.