

CMIP5-Based Projections of Tropical Cyclone Activity

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The tropical cyclone downscaling method of Emanuel et al. (2008) has been applied to 5 CMIP5-generation global climate models run using historical radiative forcing over the period 1950-2005, and then the RCP8.5 radiative forcing scenario for the period 2006-2100. We will present results of this downscaling, which differ markedly from those downscaled from the CMIP3 generation of climate models, and discuss the physical reasons for the changing storm activity.

Emanuel, K., 2013: [Increased tropical cyclone activity from global warming: Results of downscaling CMIP5 climate models](#). *Proc. Nat. Acad. Sci.*, submitted.

Emanuel, K., R. Sundararajan, and J. Williams, 2008: [Hurricanes and global warming: Results from downscaling IPCC AR4 simulations](#). *Bull. Amer. Meteor. Soc.*, **89**, 347-367.