Future Temperature and Rainfall Projections Over Bungoma County in Western Kenya

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Abstract

Using the PRECIS regional climate modeling system, this study projects extreme temperature and precipitation over Bungoma County in recent past (2001–2014) and in a future (2015–2050) climate under the IPCC SRES A2 and B2 emissions scenarios. Spatial-temporal analysis of future climate extremes will be done over Bungoma County. Relevant test of significance will be determined to shed light on whether any possible changes in future climate are statistically significant. It is expected that results of analysis will show simulations of temporal distribution of extreme temperature and rainfall events when compared with observations; over the area of study.