The Drought Interest Group: The recent tendency for increased drought in Eastern Africa

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Since the late 1990s many parts of East Africa have experienced a decline in rainfall during boreal spring, most notably during March-April-May (MAM), the "long rain" season in many parts of the region. A close examination of the annual cycle of rainfall across several data sets reveals that the largest decrease has occurred during the months of April and May. Interestingly, the consensus of coupled model projections from the Fourth Assessment Report of the IPCC (AR4) indicates an increase in precipitation for the region over the course of the current century. In this poster the anomalous atmospheric circulation associated with the recent decline in East Africa rainfall is first examined in different reanalysis data sets. Simulations from atmospheric general circulation models forced with observed sea surface temperatures (SST) are then employed to examine the role of global SSTs in the recent rainfall decline. In addition, a linear model is used to examine which forcing regions have had the greatest influence on East African rainfall.