



Forecasting droughts in East Africa

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The humanitarian crisis caused by the recent droughts (2008-2009 and 2010-2011) in East Africa have illustrated that the ability to make accurate drought predictions with sufficient lead time is essential. The use of dynamical model forecasts in combination with drought indices, such as the Standardized Precipitation Index (SPI), can potentially lead to a better description of drought duration, magnitude and spatial extent. This study evaluates the use of the European Centre for Medium-Range Weather Forecasts (ECMWF) products in forecasting droughts in East Africa. ECMWF seasonal precipitation shows significant skill for both rain seasons when evaluated against measurements from the available in-situ stations from East Africa. The forecast for October-December rain season has higher skill than for the March-May season. ECMWF forecasts add value to the statistical forecasts produced during the Greater Horn of Africa Climate Outlook Forums (GHACOF), which is the present operational product. Complementing the raw precipitation forecasts with SPI provides additional information on the spatial extent and intensity of the drought event.