

Café Scientifique Headingley

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Predicting the weather and climate of Africa: a global challenge

By Doug Parker



Outline: The weather of Africa affects everyone around the world. Extreme weather events seem to cause massive humanitarian problems every year and are a hindrance to African economic development. Climatic pressures can lead to conflict and to migration, with global consequences. Parts of Africa already have climates which are marginal for human survival, and for this reason Africa is being called the “front line” of climate change.

Being able to predict these weather and climate patterns would enable people, businesses and governments to plan, and to take emergency action more effectively. But forecasting Africa’s weather and climate seems to be more difficult than forecasting for other regions. Global computer models which were developed by scientists working in the northern latitudes don’t work so well in Africa. Instead, statistical weather prediction may be about to offer us a revolution in our ability to predict humanitarian crises.

Doug Parker is Professor of Meteorology at the UK National Centre for Atmospheric Science, based in the University of Leeds. From 2010 to 2019 he was responsible for the coordination of the University’s formal partnership with the Met Office and he now has an adjoint position at NORCE-Climate in Bergen. His research investigates the dynamics of weather systems such as cumulonimbus storms, cyclones and monsoons, in the Earth’s changing climate. He has led and participated in a number of meteorological field campaigns, in the UK, Africa and India, leading to new theoretical models of weather systems, to explain their role in the global circulation and to explain their impacts. He led and edited a textbook on African weather forecasting – “Meteorology of Tropical West Africa: The Forecasters’ Handbook”. Doug’s work on tropical and African weather and climate formed a significant part of the Queen’s Anniversary Prize awarded to the University of Leeds in 2021.

Venue: *The New Headingley Club, 56 St Michaels Road, LS6 3BG*

Time: *Room opens 7:30pm, the presentation begins promptly at 7:45pm*

Entry: *Donation please, for room hire and expenses: £4 at the door*



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