



## RESEARCH OFFICERS (2 Positions)

Climate-Agriculture Research (1 position)

Regional Climate Modeling (1 position)

Climate System Analysis Group (CSAG)

Department of Environmental and Geographical Science

Faculty of Science

The Climate System Analysis Group (CSAG) in the Department of Environmental & Geographical Science at the University of Cape Town, South Africa is seeking to appoint two Research Officers. These are permanent soft funded positions and will be predominantly research-based with responsibilities linked to ongoing projects.

### Requirements

- A PhD in a relevant discipline.
- >3 years relevant postdoctoral experience.
- Excellent interpersonal skills and team collaboration experience to engage in the CSAG theme research teams.
- Experience in capacity building with emerging scientists, especially in developing nations, and working with stakeholders of research output.
- Experience in post graduate student supervision.
- Strong writing skills with a track record of publications in science journals.
- Demonstrable experience in project management.
- Conversant with hydrological terminology and concepts to enable close collaboration with CSAG hydrologists and hydrological modeling activities.
- Familiarity with the regional and international climate change community and the related research for Africa.
- Installing and running model code on large cluster HPC computing systems.
- Strong data management skills for working with very large volume data sets.
- Excellent analysis skills that include coding, scripting and familiarity with common data analysis software (e.g. GrADS, NCL, CDO, Python, FORTRAN, R, etc.), with very strong Linux skills.
- Experience in model validation and associated observational data analysis.
- **For the post in regional climate modelling:** a skill set in the core research area of modelling and analysis for regional climate modeling including installing, configuring, and implementing models; experience with the WRF model; relevant analytical skills for model analysis; literate with procedures, formats and configurations requirements of the ESGF distributed global data archive; understanding of the regional climate dynamics of Africa in relation to past and future projected changes, as well as on timescales of weather events through to seasonal variability.
- **For the post in climate-agriculture research:** a skill set in the core research area of climate-agricultural systems, including agricultural and crop modelling; working on large cluster HPC computing systems; using impact models; coupling climate model and downscaling products to agriculture and crop modeling systems, including bias correction techniques; analysis of agriculture and crop model output that includes the assessment of uncertainties, likelihood, and probabilities, and integrated assessment methods and tools for coupled agricultural-climate systems.

### Responsibilities

- Supervision of Hons, Masters and PhD students in physical climate system topics (including existing supervision commitments).
- Participation and leadership in fulfilling existing research commitments. For the post in regional climate modelling this includes: two WRC projects (extreme rainfall, hydrology in seasonal forecasts); WASA wind atlas project; LUC4C project on land use modelling; CORDEX-Africa analysis. For the post in climate-agriculture research this includes leading CSAGs participation in two AgMIP projects; leading a WRC project on seasonal forecasting and community preparedness. Both posts have strong commitments to the large FRACTAL consortium project for which CSAG is the principal lead.
- Active proposal writing to generate research funds.

For further information, contact Professor Bruce Hewitson Email [Bruce.hewitson@uct.ac.za](mailto:Bruce.hewitson@uct.ac.za).

The annual cost of employment for 2015 including benefits: R528 275

**To apply**, please e-mail the below documents, clearly indicating which position you are applying for, in a **single pdf file** to Ms Edith Graham at [recruitment04@uct.ac.za](mailto:recruitment04@uct.ac.za):

- UCT Application Form (download at <http://web.uct.ac.za/depts/sapweb/forms/hr201.doc>)
- Motivational letter
- Curriculum Vitae (CV)

Please ensure the title and reference number are indicated in the subject line. An application which does not comply with the above requirements will be regarded as incomplete.

**Telephone:** 021 650 5405

**Website:** [www.csag.uct.ac.za](http://www.csag.uct.ac.za)

**Reference number:** E15125

**Closing date:** 3<sup>rd</sup> August 2015

UCT is committed to the pursuit of excellence, diversity and redress. Our Employment Equity Policy is available at <http://www.uct.ac.za/downloads/uct.ac.za/about/policies/eepolicy.pdf>

UCT reserves the right not to appoint