Post-doctoral research opportunity: modelling climate-fire-vegetation-carbon cycle interactions in Africa

We seek a post-doctoral research fellow to model the dynamic interactions of fire, vegetation, climate and human population in African ecosystems, and to analyse the effects on regional and continental carbon cycle.

The researcher will be responsible for implementing and testing a revised version of the fire module of the dynamic global vegetation model framework LPJ-GUESS, and for the adaptation of the models' plant functional types for key African ecosystems. Model output will be evaluated against a range of observations (e.g., vegetation parameters, ecosystem carbon fluxes, remote-sensing fire information, etc). Further information about the project can be obtained from Almut Arneth (almut.arneth@nateko.lu.se).

Requirements:

- Ph.D. degree (or equivalent) in a quantitative environmental sciences discipline, for instance meteorology, Environmental physics, -biology, or -engineering. Applications from candidates who are close to completion of their PhD degree will also be considered
- Expertise with process-based mathematical modelling of ecological processes
- Excellent programming skills (e.g., C++, Fortran)
- Expertise with the interpretation of field observations, satellite remote sensing products and with processing of information from data bases
- Willingness to communicate research results and to contribute to training courses

We welcome candidates with enthusiasm for collaboration within a multidisciplinary environment, as well as an aptness to pose and solve problems individually. The work involves extensive international collaboration and the candidate must be willing to travel.

The project is part of the EU-funded project 'CarboAfrica', and the position will be available from *c.* September 2006 (subject to final approval by the Commission), for a period of *c.* 24 months (depending on the entry level of the candidate). Lund is a pleasant university town in southern Sweden with excellent connections to Copenhagen International airport. Salaries will include full access to the Swedish social security system.

Deadline for application is 23 June 2006. Applications, in the PDF format, should include a description of motivation and research interests, detailed CV, publication list and names and contact details of two referees. Incomplete applications, or applications in a format other than PDF will not be considered. Please email your documents to:

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