VEGETATION MODELING AND REMOTE SENSING

Location: DREAM CEFE CNRS Montpellier southern France
Net monthly salary: 2000 Euros
Tenure: 18-24 months
Application close: November 15 2010
Job category: post-doctoral fellowship

We are seeking a post-doctoral scientist with a good numerical analysis background who is interested in vegetation modeling and having experience with ecosystem and/or biogeochemical / biospheric models and regional scale datasets including climate data and climate projections, soil and vegetation maps and remote sensing (RS) time series. The successful candidate will join an interdisciplinary team of people in the CEFE Laboratory, CNRS in Montpellier, Southern France, with experts in Mediterranean ecology, ecosystem modeling, remote sensing and ecosystem fluxes. CNRS is France's leading research organization with over 30000 staff located across the country.

The position will contribute to 1) analyze the present ecosystem functions and disturbance patterns across Mediterranean southern France with ecosystem modeling and RS data and, 2) establish for this area projections of land use/land cover associated with the on-going climate changes and depending on a likely associated increased of droughts and fires regime. Research components of the project are: 1) to develop regional surface scheme able to simulate for Mediterranean-type environments soil water limitation, its effects on ecosystem functions and changes in vegetation types, 2) to identify and test RS time series to further constrain and/or validate model runs, 3) to combine data and models for improving estimates of overall water and carbon balances including perturbation losses, 4) to interact and exchange with other groups involved in the FUME UE project working on fire ecology. The pre-requisites for application are listed below:

1. PhD in relevant disciplines to the goals of the project (ecology, environmental sciences, remote sensing)
2. Demonstrated capability to conduct innovative research in project fields, particularly in the handling of models and analyses large datasets including remote sensing products.
3. Interest and understanding of water and carbon cycles, and particularly processes leading to change in natural vegetation cover related to perturbation regime.
4. Demonstrated ability to work independently and effectively as part of a team.
5. Evidence of good communication skills and ability to publish the results of scientific research in scientific journals.

Send a letter addressing the selection criteria and a CV including the names of two or three referees to Serge Rambal at CEFE CNRS 34293 Montpellier cedex 05 France or by email serge.rambal@cefe.cnrs.fr.