

## **A two-year post-doctoral position on “Statistical merging of geophysical data and downscaling of extremes”**

This is a joint position between Climipact and “Laboratoire des Sciences du Climat et l'Environnement” (LSCE) within the European Network for Ice and Climate Evolution (NICE) project

### **Job information:**

The NICE research project belongs to a Marie Curie Research Training Network and its main goal focuses on improving our understanding of past and future climate evolutions and their interactions with polar ice sheets over centennial and millennium scales.

The successful candidate will work on two important statistical methods. First, there is a strong need to fill a methodological gap in knowledge needed to combine information from multiple sources (different numerical models, observations, proxies, prior information, etc) in an optimal way. The main issue is the quantification of uncertainty changes over time and a Bayesian statistical model should provide a flexible framework to determine probability distributions of future changes with respect to ice-sheet future evolution. The second topic focuses on the statistical downscaling of extremes, i.e. the modeling of the relationships between extremes recorded at two different spatial scales. By taking advantage of extreme value theory and recent developments in geostatistics and Bayesian analysis, the goal is to develop a series of innovative downscaling schemes for extreme events and to apply these procedures to NICE model outputs.

### **Required qualifications:**

- PhD in Statistics or Atmospheric/Oceanic sciences (or related fields)
- Strong background in data analysis and computing skills (R, Fortran, Linux/Unix, python,...).
- Since the host organization is located in France, researchers with French citizenship will not be appointed. For exceptions to this rule, see the Marie Curie Actions [help desk](#).

### **Contacts:**

Review of applications will begin December 15, 2006. Applications received after this date will be considered until the position is filled (job starting beginning of 2007). An application includes a cover letter, a complete CV, and two contact names for reference. The application should be sent by email (PDF format) to

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