

## Statistical downscaling of climate scenarios for the impact communities. ***A CMIP5 perspective.***

### **Tentative programme**

#### ***Scientific programme***

In the context of the IS-ENES project, there is currently a European collaboration that work on bridging the gap between the climate modellers and the climate change impacts communities. In this context, several use cases are implemented in a dedicated portal. One of the objectives was to identify commonalities in the workflow of information from global climate change scenarios to impact and adaptation studies throughout Europe.

At the same time, CMIP5 data is now being made gradually accessible to users. This significant dataset opens large possibilities in climate science, regarding many scientific aspects of global climate change, but also on uncertainties with a more precise evaluation and quantification being now reachable.

Impact and adaptation studies require climate information at regional and local scales that are not well reproduced in most climate models. In this context, statistical downscaling and bias correction methodologies represent a key step regarding data provision to impact users because these methods can efficiently process several climate scenarios while removing biases. It also raises fundamental questions, such as which approaches should be used to select a representative subset of model output for the specific case impact studies in order to qualify and quantify the uncertainties of the results. Indeed, impact modellers cannot necessarily cope with the large number of scenarios and model outputs. On the other hand, climate data providers do not necessarily have the analysis power to downscale all these scenarios neither.

The aim of the workshop is to process on these questions in order to better guide the users from the existing use cases and identify new approaches and requirements for network configuration, disk storage and data processing that should be provided with climate model outputs.

The expected outcomes of the workshop will include

- Inventory of the diversity of downscaling and data correction methods

- Collection of ideas about new approaches regarding the analysis of a large number of scenarios in the context of downscaling; Summary of the best practices to deal with climate scenarios and uncertainties

These outcomes will be summarized in a workshop report. They will serve as guidelines for the documentation and best practice section of the IS-ENES e-impact portal (CLIMATE4IMPACT <http://climate4impact.eu/> ).

The workshop will be organized along a few keynote lectures to introduce the different points and breakout groups on specific questions.

The WG will have specific questions to address, with the first day morning presentations putting in context the questions.

A chairman and a rapporteur will be selected for each WG.

A team will be selected to lead the report writing.

Please come with one or two slides summarizing a impact question, and the means to address them. These contributions will feed reflexions of each working groupe.

### ***Practical information***

2-day workshop (Cf. Agenda attached)

Location: Meeting Room, LMD Jussieu (UMPC), Paris

Date: October 16-17th, 2012