Global Climate Modell Biases

Causes, Correctability and Consequences for Regional Climate Scenarios

16 Oct 2014

09:00-09:30 Introduction

Douglas Maraun, GCM Bias Correction - Some General Considerations

09:30-12:30 Session 1: Global Climate Model Biases and their Causes

• Which are the most relevant global climate model biases?

Ingo Richter, Tropical Atlantic biases and their impact on simulated interannual variability

Jürgen Bader and Sebastian Milinski, Tropical Atlantic warm bias

Stefan Hagemann, Role of soil moisture for dry biases over Amazon and Congo catchments simulated by MPI-ESM

Fredrik Boberg, Temperature dependent climate projection biases in ENSEMBLES and CMIP5

14:00-16:00 Session 2: Consequences of Global Climate Model Biases

- Which regional climatic phenomena are severely affected by global climate model errors?
- In which of these regions can we trust the climate change signal?

Ted Shepherd, Potential impact of systematic errors in jet-stream position

Wang Chang, Downscaling CMIP5 GCMs using the MetUM - advances, challenges and issues (cancelled)

16:30-17:30 Wrap Up Day 1

17 Oct 2014

09:00-12:00 Session 3: Bias Correction of Global Climate Models

- To what extent is the post-processing of global climate models justified?
- What are the requirements for an 'acceptable' bias correction?
- How relevant are inconsistencies across scales in this context?
- How should regional climate scenarios thus be interpreted?

Martin Widmann, Skill, correction and downscaling of GCM-simulated precipitation Richard Chandler, From models to reality: the interpretation of simulator ensembles

13:00-15:00 Session 4: Improvement of Global Climate Models

Guiding questions:

• What are strategies to intrinsically reduce global climate model biases?

Thomas Jung, Diagnosing systematic error in NWP and climate models

15:30-16:00 Final Discussion