



SPECS-PREFACE workshop: Initial shock, drift and systematic error

Institut Català de Ciències del Clima, Barcelona, Spain
27 and 28 March 2014

This workshop is organized informally by IC3, sponsored by the SPECS and PREFACE project and takes place at IC3 (Doctor Trueta 203 - 08005 Barcelona, Spain).

Meeting objective:

Discussing the recent developments on initial shock, drift and systematic error assessment in a climate prediction context.

Questions for discussion:

- *What are the physical process responsible for the model drift and the initial shock ?*
- *How to best characterise the drift and initial shock ?*
- *How to suggest model improvements that reduce the drift and how is this linked to the efforts to reduce the systematic error ?*
- *How the initialisation strategy influence the skill ?*
- *How to deal with the drift and the systematic error a posteriori: bias correction ?*

Preliminary Agenda:

Thursday 27th March 2014

14:00: Welcome and introduction of the workshop

14:15-15:00: Session on drift assessment

- 14:15-14:30: Assessing model drifts in the tropics in ECMWF System 4 and other models: Progress so far (Jon Shonk, University of Reading)
- 14:30-14:45: Preliminary assessment of the drift of seasonal forecast in ECMWF System 4 (Rodrigo Manzanas, Unican)
- 14:45-15:00: Assessing the seasonal forecast drift in Ecearth3 according to the resolution (Chloé Prodhomme, IC3)

15:00-15:30: Understanding the physical process responsible of the drift and initial shock

- 15:00-15:15: Physical characterisation of the drift in a coupled model initialized for decadal forecasts (Emilia Sánchez-Gómez, CERFACS)
- 15:15-15:30: Tropical Interbasin teleconnections. Multidecadal modulations of the bias in the tropics (Belen Rodriguez-Fonseca, UCM)

15:30-16:00: Coffee break

16:00-16:30: Understanding the impact of bias and initial shock on skill

- 16:00-16:15: Negative predictive skill over the tropical oceans in the Max-Planck-Institute decadal predictions for CMIP5 (Holger Pohlmann, MPI-MET)
- 16:15-16:30: Decadal prediction of Sahelian rainfall in CMIP5 simulations (Elsa Mohino-Harris, UCM)

16:45-17:30: Initialisation strategy and a-posteriori bias corrections

- 16:45-17:00: Full-field and anomaly initialisation using a low order climate model (Robin Weber, IC3)
- 17:00-17:15: A posteriori adjustment of near-term climate predictions: Accounting for the drift dependence on initial conditions (Neven Fuckar, IC3)
- 17h15-17h30: Impact of different initialisation techniques on the skill of global dynamical climate predictions. (Danila Volpi, IC3)

17:30-18:30: Summary of the talks and first discussion session

20:30: Joint dinner

Friday 28th March 2014

09:00-11:00: Second discussion session

11:00-11:30: Coffee break

11:30-13:00: Wrap up and future actions