

## **Preliminary programme (Feb 8<sup>th</sup>) of the CFMIP / ENSEMBLES Workshop**

**April 11-13 2007, Pierre et Marie Curie University, Jussieu, France**

### **DAY 1 (Wednesday 11 April):**

08:30-09:00: Registration and coffee

#### ***Opening / Overview :***

09:00-09:20: Jean-Louis Dufresne (LMD/IPSL) : Welcome and objectives of the workshop.

09:20-09:40: Chris Hewitt (Met Office): the ENSEMBLES project

09:40-10:00: Sandrine Bony (LMD/IPSL): Cloud feedbacks in GCMs: Progress and prospects

10:00-10:20: Mark Webb (Met Office): From CFMIP-1 to CFMIP-2

10:20-10:40: BREAK

#### ***Definition / Estimate forcings and feedbacks :***

10:40-11:00: Eigil Kaas (GFY): Estimates of fixed SST climate forcings during the 20th Century in the ENSEMBLES models

11:00-11:20: Bryant McAvaney (BMRC): Feedbacks in GCMs using the "fixed fields" approach

11:20-11:40: Rob Colman (BMRC): Diagnosing and comparing water vapour and lapse rate feedbacks in models.

11:40-12:00: Tokuta Yokohata (NIES): Climate feedback analysis by an approximate PRP method.

12:00-12:20: Karl Taylor (PCMDI): Cloud feedback analysis in Earth System Models (to be confirmed)

12:20-13:30: LUNCH

#### ***Understanding feedbacks :***

13:30-13:50: William Ingram (Oxford): A physical explanation for the size of the water vapour feedback and a new way of quantifying & attributing GCMs' water vapour feedback

13:50-14:10: Tomoo Ogura (NIES): Response of cloud condensate budget to CO<sub>2</sub> increase in GCMs

14:10-14:30: Brian Soden (RSMAS): Cloud feedback and the weakening of the tropical circulation

14:30-14:50: Brian Medeiros (UCLA): Using aquaplanets to understand GCM climate sensitivity

14:50-15:10: Minghua Zhang (SONY): Stratus and stratocumulus clouds over the Eastern Pacific in GCMs, SCMs and Satellite Data

15:10-15:30: BREAK

#### ***What do CRMs/MMF tell us ?***

15:30-15:50: Wojtek Grabowski (NCAR): The role of cloud microphysics in the climate problem

15:50-15:10: Marat Khairoutdinov (CSU): Cloud feedbacks as simulated by the CSU MMF

15:10-16:30: Shin-ichi Iga and Hirofumi Tomita (JAMSTEC): The NICAM Global CRM and presentation of a perpetual July simulation.

16:30-16:50: Yoko Tsushima (JAMSTEC): Toward improvement of GCM's cloud feedback through the comparative analysis with global cloud resolving model NICAM

## **DAY 2 (Thursday 12 April):**

### ***Use of satellites to evaluate models :***

09:00-09:20: Kuan-Man Xu (NASA Langley): Overview of CERES data products for model evaluation

09:20-09:40: Tony Del Genio (NASA GISS): What observed cloud objects tell us about processes that influence cloud feedbacks ?

09:40-10:00: Jason Cole (CCMA): Evaluation of cloud and radiative fluxes in the CCCma GCM

10:00-10:20: George Tselioudis (NASA GISS): Using dynamic regime composites to examine midlatitude cloud, radiation and precipitation feedbacks in observations and climate model simulations.

10:20-10:40: Keith Williams (Met Office): Constraining the range of climate sensitivity through the diagnosis of cloud regimes

10:40-11:00: BREAK

### ***Other strategies of validation :***

11:00-11:20: Leo Donner (GFDL): Strategies for Evaluating Aerosol-Cloud Interactions in GCMs.

11:20-11:40: Mark Rodwell (ECMWF): The use of NWP in climate model assessment.

11:40-12:00: Keith Williams (Met Office): Initial tendencies of cloud regimes in the Met Office Unified Model

12:00-12:20: Pascale Braconnot (LSCE/IPSL): Cloud Feedbacks in Palaeoclimate

12:20-13:30: LUNCH

### ***Future / Ongoing collaborative projects :***

13:30-13:50: Alejandro Bodas-Salcedo (MetOffice) and Marjolaine Chiriaco (SA/IPSL): The CFMIP CloudSat/CALIPSO simulator

13:50-14:10: Pier Siebesma: GCSS and its future link with CFMIP

14:10-14:30: Joao Teixeira (NRL): GEWEX Pacific Cross-Section Intercomparison (GPCI)

14:30-14:50: Bjorn Stevens (UCLA): An LES perspectives on cloud feedback.

14:50-15:10: Adrian Lock (Met Office): The GCSS PBL working group

15:10-15:30: BREAK

### ***Discussion :***

15:30-17:10: What particular aspects of cloud and water feedbacks need to be understood/evaluated ?

: What role for CRMs and LES in the cloud feedback problem?

: How may we apply observational tests to a large range of models?

: How may we constrain climate sensitivity estimates from understanding+evaluation?

: Other issues ?

### **DAY 3 (Friday 13 April):**

#### ***Ensembles - CFMIP2 sub-projects :***

09:00-09:20: Mark Webb (Mett Office): CFMIP-2 plans

09:20-09:40: Brian Soden (RSMAS): CFMIP -2 CO2 forcing subproject

09:40-10:00: Johannes Quaas (MPI): CFMIP-2 idealised physics sub-project.

10:00-10:20: Mark Ringer (Met Office): CFMIP-2 experimental design options

10:20-10:40: BREAK

10:40-11:00: Matthew Collins (Met Office): Perturbed physics approaches in ENSEMBLES  
and plans for applying CFMIP process based constraints.

11:00-11:20: Eigil Kaas (Copenhagen Univ) and Heike Huebener (Berlin Univ): Presentation  
of ENSEMBLES climate simulations.

11:20-11:40: Karl Taylor (PCMDI): Process for determining standard output and experiments for AR5

11:40-12:00: TBD

12:00-12:20: Definition of working groups (e.g: ENSEMBLES-CFMIP interactions, GCSS-CFMIP  
interactions, Experimental designs for CFMIP2).

12:20-13:30: LUNCH

#### ***Working Group Discussions:***

13:30-15:30 : “Brainstorming” of the different working groups

15:30-15:50 : BREAK

#### ***Conclusions :***

15:50-16:20 : Report from the Working Groups to the Plenary

16:20-17:00 : Discussion / concluding remarks

17:00 : End of the workshop