

## WGCM 18 session

### 8-10 October 2014, Grainau, Germany

#### Wednesday, October 8 [WGCM only]

##### 0900 - 0920 – Opening

Welcome (M. Rapp)

Logistics (S. Wenzel)

Meeting objectives, agenda (S. Bony, C. Senior)

##### 0920 - 1030 – CMIP6: Overview and organization

Review of CMIP6 proposal, synthesis of comments and of CMIP6-endorsed MIPs applications received to date, next steps (V. Eyring, 30 min)

*Discussion (40 min): Agree on e.g., (1) the overall structure, (2) the composition of the DECK (except a few points), (3) communication with CMIP6-Endorsed MIPs and Modelling Groups, (4) what it means for a MIP to be endorsed by CMIP6 and what is the process for it, (5) process to approve individual experiments proposed by CMIP6-Endorsed MIPs (6) special issue of CMIP6 experimental design + list issues to be approved/finalized at the meeting.*

##### 1030 - 1100 - Coffee break

##### 1100 - 1130 – CMIP6: infrastructure

WGCM Infrastructure Panel (V. Balaji or K. Taylor, 15 min)

*Discussion (15 min): (1) role of the WIP in ESGF governance, (2) CMIP data request (DECK, priorities, timeline, responsibilities), (3) documentation.*

##### 1130 - 1200 – CMIP6 (discussion to be continued with the modeling groups)

*Discussion: How much should the CMIP6 experiments be prioritized?*

##### 1200 - 1430 – Lunch + possible excursion to the Zugspitze

##### 1430 – 1530 – CMIP6 (discussion to be continued with the modeling groups)

*Discussion:*

- *Overlap and complementarity of the different MIP proposals*
- *A scenario in the DECK? If so, which one?*

**1530 - 1600 - Coffee break**

**1600 - 1630 – WCRP updates**

Updates from WCRP & Report from JSC-35 (M. Rixen, 5 min)

Report from WMAC3 (WCRP Modeling Advisory Council) (C. Jakob, 5 min)

Report on WCRP/IPCC workshop and implications for WGCM (S. Bony, 5 min)

Second CMIP analysis workshop (C. Jones, G. Meehl, 5 min)

*Discussion (10 min): Implications for CMIP6*

**1630 - 1730 – CMIP6: Discussion**

*Discussion: (1) Recap of the CMIP6 proposal to be presented to the modeling groups (DECK, etc); (2) Issues to be discussed with the modeling groups; (3) MIPs feedback form (any missing issue? timeline ahead?).*

**1730 – 1800 – WGCM issues (closed session)**

Membership strategy, future rotations, Next session: venue, dates

## Thursday October 9 [WGCM + modeling groups' representatives]

### 0830 – 0900

Introduction and welcome, logistics (V. Eyring, S. Wenzel)

Presentation of WGCM and of the meeting objectives (S. Bony or C. Senior)

### 0900 - 1030 – CMIP6 Overview and context

CMIP6 proposal (V. Eyring, 20 min)

CMIP6 infrastructure (V. Balaji or K. Taylor, 20 min)

*Discussion (50 min) (1) Can we endorse the overall CMIP6 design?, (2) Are we happy with the concept and content of the DECK? (3) would modeling groups value a limited CMIP6 'core' of experiments and what should this look like?*

### 1030-1100 - Coffee break

### 1100 - 1200

Overview of science questions from WCRP Grand Challenges or equivalent (S. Bony, 20 min)

Obs4MIPs, Metrics Panel and evaluation tools for CMIP6 (P. Gleckler, 15 min)

*Discussion (25 min)*

### 1200 – 1245 MIPs proposals for CMIP6 (1) Systematic biases

Synthesis of MIPs proposals related to systematic biases (~15 min, P. Gleckler)

*Discussion (~30 min)*

### 1245 - 1400 – Lunch

### 1400 – 1515 MIPs proposals for CMIP6 (2) Forcings and response

Synthesis of MIPs proposals related to forcings and response (~45 min, B. Stevens)

*Discussion (30 min)*

### 1515 - 1545 - Coffee break

### 1545 – 1645 MIPs proposals for CMIP6 (3) Variability, predictability and scenarios

Long-term climate projections (15 min, C. Tebaldi or D. van Vuuren)

Decadal Predictions (15 min, G. Meehl)

*Discussion (30 min)*

### 1645 - 1715 – CMIP6: Forcings and Timeline

Overview CMIP6 forcings (V. Eyring, 5 min)

Historical emissions and concentrations (J.-F. Lamarque, 5 min)

Future emissions and concentrations (D. van Vuuren, 5 min)

*Discussion (15 min): Implications for the CMIP6 Timeline*

**1715 - 1745 – Recap**

## Friday October 10 [WGCM + modeling groups' representatives]

### 0830 – 0920 Objectives

Evolving experimental design based on previous discussions; next steps (WGCM co-chairs & V. Eyring)

**0920 – 1400 Modeling groups perspective (maximum 9 minutes per group including questions for clarification, *note that the time limits will be strictly enforced*)**

*One person per group presents short update on CMIP6 plans (addressing the following points):*

- *Overview of models to be used and main point of contact*
- *Feedback on each of the CMIP DECK simulations, keeping the criteria of the DECK in mind*
- *The suite of CMIP6 simulations will consist of the DECK plus the additionally endorsed experiments from CMIP6-Endorsed MIPs (each individually approved). Which CMIP6 design do you prefer (a) no further prioritization beyond the DECK so that modelling groups choose from the MIP experiments (that are prioritized in Tiers for some MIPs) entirely based on their scientific interest, or (b) the definition of a CMIP6 CORE that would consist of the CMIP DECK plus a yet to be defined set of very high priority simulations of selected CMIP6-endorsed MIP experiments; if (b) what are your proposed criteria to define this set of very high priority simulations?*
- *Feedback on MIP proposals and your group's relative scientific interest in the different MIPs proposals (please also fill attached xls-spreadsheet)*
- *Approximate nb of years of experiments to be run for CMIP6 and infrastructure issues*
- *Other issues related to CMIP6?*

*Please send your presentation to Sandrine Bony, Cath Senior and Veronika Eyring by 3 October 2014 (note answers to the questions also requested in MIP feedback forms)*

### 0920 – 1030 Modeling groups perspective:

1. ACCESS, Australia (Martin Dix or Tony Hirst)
2. BCC, China (Tongwen Wu)
3. BNU, China (Yongjiu Dai)
4. CanESM, Canada (John Scinocca)
5. CESM, USA (Jean-Francois Lamarque)
6. CFS- IITM-ESM, India (P. Swapna)
7. CMCC, Italy (Silvio Gualdi)
8. CNRM, France (David Salas-Melia)

### 1030 – 1100 - Coffee break

### 1100 – 1230 Modeling groups perspective:

9. EC-Earth, Europe (Bart van der Hurk)
10. FGOALS, China (Tianjun Zhou or Wei Xu)
11. FIO, China (Zhenya Song or Fangli Qiao)

12. GFDL, USA (Ron Stouffer)
13. GISS, USA (Susanne Bauer)
14. INM, Russia (Evgeny Volodin)
15. IPSL-ESM, France (Jean-Louis Dufresne)
16. MIROC, Japan (Masahiro Watanabe or Michio Kawamiya)
17. MPI-ESM, Germany (Marco Giorgetta)
18. MRI, Japan (Hideaki Kawai)

### **1230 – 13:30 – Lunch**

#### **1330 – 1430 Modeling groups perspective:**

19. Nor-ESM, Norway (Trond Iversen)
20. UKESM, UK (Colin Jones or Cath Senior)
21. KMA, Korea (Young-Hwa Byun)
22. INPE, Brazil (presented by Cath Senior)
23. OMDP, CLIVAR (Gokhan Danabasoglu)

#### **1430 – 1500 - Synthesis Modeling groups perspectives**

Synthesis of main CMIP6 recommendations from modeling groups (J. Meehl, 15 minutes)

Discussion

### **1500 – 1530 - Coffee break**

#### **1530-17:00 - Final discussion and decisions**

Implications for CMIP6 plans (V. Eyring)

Final discussion on CMIP6 design and next steps (WGCM co-chairs)

### **1700 - Adjourn**