WMAC-4 Report

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We had a very successful meeting until well beyond closing time:



Role of WMAC

Our interpretation

- Provide the WCRP community with a go-to point for modelling beyond individual Projects, WGs and GCs
- Discuss and pursue issues that cut across several or all modelling groups
- Identify topical science connections across the WGs to leverage communication and scientific synergies
- Advise the JSC, Core projects and GCs on modelling issues

Joint WCRP/WWRP Model Development Prize

- Established and first awarded in 2014 Thank you Dave,
 Guy and especially Mich for all your work and support!
- Strong field of 17 Nominees, 4 judges, tough calls
- First winner: Peter Lauritzen, NCAR Certificate and funding to go to a meeting of their choice
- Learned a lot for the next round
- Call for nominations will come out in July with a 1st October deadline

Model development summer school

- First school is happening 15-26 June 2015 in Hamburg - Thank you MPI
 - Topic: Atmospheric Moist Processes
 - 240 applicants for 40 places workload for assessing those was an issue
- Next school in 2016 or 2017, volunteers will be sought through a letter to all modelling centres soon, some early contact has been made with some groups

Recommendations on the organisation of modelling in WCRP

- The structure of the modelling groups in WCRP is solid and functioning.
- While other structures could be envisioned, there is no obvious one that would be more suitable or efficient.
- However, communication between the groups should be improved:
 - Recommend regular joint meetings of the WGs (JSC)
 - Institute the Modelling "Olympics" a joint meeting of all modelling groups every 4 years (or so) (JSC).
 - MPI offered to host the first instalment in 2017 in conjunction with their Earth System Modelling workshop - WMAC is supportive of this idea (JSC) (P.S. The structure of modelling activities in WCRP could be revisited at this meeting)

Recommendations on the organisation of modelling in WCRP

- We recommend a name change for WGSIP to recognise its role in all initialised prediction (WGSIP to propose options at next JSC).
- We recommend to integrate CORDEX into the WGRC as its core modelling activity, similar to the integration of CMIP into WGCM (JSC)
- We recommend that the individual modelling WGs continue to report to the JSC directly, but with even shorter and more targeted reports to allow time for discussion of WCRP modeling with JSC in plenary (JSC).
- All modelling groups expressed great support for the current role, structure and meeting strategy of the WMAC and we recommend to maintain it as is (JSC).

- Earth System Grid Federation as host of all WCRP data
 - Form a small team to engage with ESGF to see what can and cannot be done and to begin developing a plan accordingly (JSC)
 - Inform JPS about training needs regarding the ESGF (Core projects, GCs)
- WMAC Summer Schools (and other training programmes)
 - Design a plan for providing a legacy, e.g., recording and web hosting of lectures (JSC)
 - JSC to consider to nominate members to oversee and help implement the summer school/training programme (JSC)

Modelling prize

 Refine selection criteria and encourage re-nomination of excellent candidates from last round (WMAC)

• CMIP

 WMAC supports the role of the DECK experiments as an entry card to CMIP, but urges the introduction some limited flexibility where appropriate, e.g., Decadal MIP (WGCM, CMIP panel)

AIMES

 WMAC recognizes the important role played by AIMES in connecting to WGCM with expertise in biogeochemistry in Earth System Models. There are issues around the future of AIMES.
 WMAC will monitor the situation and report at next JSC. (WMAC)

- Model evaluation
 - WMAC recommends to expand the scope of the WGNE-WGCM Climate metrics panel to (i) include model diagnosis and (ii) cover the WCRP as a whole. This will likely require a multi-step process (JSC to approve and communicate to the panel)
 - Form a small team to look into hosting model diagnostic tools for the use by the wider in a WCRP repository (JSC)

- Earth System Reanalysis
 - Monitor existing efforts in modelling centres and potentially invite a presentation at next JSC/WMAC meeting (JSC)
 - Communicate the need to continue supporting re-analyses of the physical systems as many improvements are still needed, e.g., water cycle, tropical states. (JSC, WDAC, WMAC)
- Transpose CMIP
 - Use WGSIP "Drift" project as pilot study and potential nucleus. Invite report on this at next WMAC meeting (WMAC)

Thanks to ...

- John Mitchell for being a great inaugural co-chair
- Jerry Meehl for agreeing to be the new co-chair
- Joan Alexander, who is rotating off WMAC this year
- The JPS for their support throughout the year
- All WMAC members for giving their time and energy to this group
- All modelling groups in WCRP for their tremendous amount of work and support