

WMAC-3 report

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WMAC Co-Chairs

Introductory remarks

- Third meeting -> New meeting format
- 2 days at JSC with all project, WG and Grand Challenge reports
- 1/2 day WMAC discussions
- This worked excellently - Lets do it again.

Introductory remarks



Last Year's Actions

- Modelling Prize -> resolution to come later
- ESGF -> confusion to come later
- Synthesis papers
 - good idea, but needs strict definition of scope; not much else to come

Grand Challenges, Working Groups & Core Projects

- Very happy with the GC, WG and project progress
- Comfortable with the variety of project involvement in the GCs
- Model development still not clearly represented in all reports
- Action to all Projects, WGs and GCs:
 - Model development should be mentioned specifically in Project and GC reports (1 slide as a minimum)
 - Project and GC reports should also highlight model and data impediments (1 slide as a minimum)

Regional climate change

- Pleased to see the progress in establishing WGRC and further progress in CORDEX
- Activities around provision of regional climate change information appear strongly user-driven
- Regional climate is the face of the programme to the outside world and should be a cross-programme activity involving all groups coordinated by WGRC and the GC
- Rigorous and transparent model evaluation effort should be central to WGRC activities
- WMAC strongly suggests to put greater focus in WGRC modelling activities on the science challenges and establishing the scientific rigour of the predictions

Regional climate change

- Examples for other challenges
 - Proving added value
 - Unstructured grids vs nested RCMs
 - Model development and linking it to global modelling efforts
 - Studying the behaviour of very high-resolution models in a scientific context
 - Including regional models in community wide process studies (e.g., GASS, GLASS,...)
- Actions for WGRC
 - Consider organising a scientific workshop on modelling regional climate that includes the CORDEX, WGNE, WGCM and WGSIP communities
 - Design and implement a model evaluation strategy

ESGF

- Happy that much progress has been made and that the WVIP has been established as a first liaison mechanism with the ESGF
- Role of the WVIP is limited to models, and in particular CMIP, by necessity
- Obs4MIPS is currently focussed by choice on long-term average data, ana4MIPs is focussed on reanalyses
- This leaves a gap for other types of data that needs careful consideration.
- Needs careful thoughts that in the future we have a central POC for any WCRP-ESGF interaction

ESGF

- JSC must recognize that implementing the ESGF program-wide will take time and new resources
- Actions for JSC (or their delegates)
 - Establish proper governance within WCRP for a whole-of-programme liaison with the ESGF (Extension of WVIP portfolio is one option, establishing other IPs is another)
 - Be an advocate to help raise the necessary funding
 - Consider having ESGF representative/talk at next JSC meeting
- An important aside:
 - Weather and Climate divide is reinforced around ESGF-style technical issues (GRIB vs NetCDF, ...)

ESGF

- Model development requires the support of advanced diagnostics applied to models and observations often at high time resolution
- Such data is currently unavailable in the ESGF
- To make short-term progress WMAC and WDAC propose a pilot project on storing high-time resolution observational data on the ESGF
- GEWEX has volunteered to support this idea using one or more of the GDAP data sets

Practical ways to promote model development

- WMAC to organize a WCRP-wide model development conference (2017/18 as a target)
- a special presentation on model development when WCRP talks to funding bodies
- model development science presentations at SSGs, JSCs etc (maybe on CPT activities or similar)
- model development sessions at WCRP meetings wherever possible

Summer School

- First school organised at MPI for June 2015
- Topic: The representation of clouds and convection in atmospheric models
- Strong partnership with modelling centre is key
- Propose to invite modelling centres to host future summer schools
- Action for WMAC: Design invitation document that sets out requirements and selection criteria
- Action for JPS: Advertise school concept on website and link to specific school website and other relevant summer schools in the community

Modeling Prize

- Name: “The WCRP/WWRP International prize for model development”
- Draft document for procedures exists and will be given to the JSC in 30 seconds
- Key points:
 - Prize to ECS within 10 years of PhD
 - Selection committee: WMAC and WGNE co-chairs in consultation with members
 - Prize includes attendance of a scientific or programmatic meeting
 - Simple nomination process involving 1 proposer and 1 seconder

Atmospheric Dynamics

- Agree that there is no gap in atmospheric dynamics in the program as a whole
- However, efforts are spread over many projects and GCs
- More coordination might be desirable
- Action for SPARC: Collect and provide an inventory of relevant activities across WCRP on their website and act as POC.

CMIP

- Discussed interaction between DECK and Shell experiments proposed for CMIP6
- Some lack of clarity was identified
- Proposed action for WGCM/CMIP: Clarify need (or not) for DECK experiments as an entry requirement for other activities

Organization

- WMAC Membership
 - WWRP representative
 - More emphasis on ex-officio membership
 - New members and co-chair proposed

Thank you

- John Mitchell is stepping down
- Thanks John for your enthusiasm and great support!
- John's secret: Don't buy him a drink, buy him an ice cream (preferably liquorice)!