

# WCRP Model Advisory Council (WMAC)

40th Session of the WCRP Joint Scientific Committee

Co-chairs Paco Doblas-Reyes (presenting) and Gerald Meehl

May 2019 Geneva, Switzerland











Progress and achievements Pan-MCRP Modelling Groups Meeting and 6th Coinci Session of the WCRP Modelling Advisory Council

2nd WCRP Summer School on Climate Madel Development:

Scale aware parameterization for representing sub and scale processes

WCRP/WWRP International Prize for Model **Development 2018** 



Dr Thomas Melvin has been awarded the WCRP/WWRP International Prize for Model **Development 2018** 

WCRP is pleased to announce that Dr Thomas Melvin from the UK Met Office has been awarded the WCRP/WWRP International Prize for Model Development 2018.

The Prize Committee, consisting of representatives from WCRP, the World Weather Research Programme (WWRP), and the Working Group on Numerical Experimentation (WGNE) was greatly impressed by his strong profile and

the outstanding quality of his contributions to weather and climate model development.

International Science Council



## Progress and achievements

 WMAC supported WGCM in holding the CMIP6 Model Analysis workshop in Barcelona, March 25-28, 2019



 WMAC meeting in Barcelona, March 28, 2019, to formulate inputs to WCRP Implementation Plan and JSC40











## Future plans

 Follow up discussions with NCAR for 3rd WCRP Summer School on Climate Model Development to be held some

time in 2019-2020



 Call for nominations for WCRP/WWRP International Prize for Model Development for 2019 in July with 1 October deadline. Encourage your ECRs to apply











#### Recommendations on modeling activities and IP:

- Guiding principles:
  - Manage change carefully and gradually
  - Do not harm when it works
  - Changes need to be justified and require engagement
  - Timely opportunity to adjust structure
  - Further integrate activities within and outside (e.g. WWRP, GAW) WCRP
- Place model coordination role in a subset of JSC members, with a staff person responsible assigned for the activities across all modeling in WCRP acting as the single point of contact for all matters relating to modeling in WCRP.



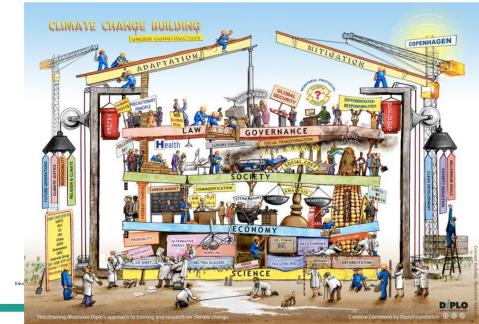








- Coordination of modeling activities is more important than ever as we move into seamlessness, Earth system models, Research-Operations, modelling in different places at WMO
- It requires JPS dedicated support
- Some scenarios:
  - (subset of) JSC playing coordination role
  - Maintain WMAC
  - Nothing...





- Form an Earth system model development working group with atmosphere, ocean, land surface, sea and land ice, chemistry, aerosols, biogeochemistry (AIMES), etc.
- Need proper internal 2-way communications to leverage fundamental 'process' and/or 'disciplinary' work (e.g. from core projects)
- "Initialized simulations": opportunities to consolidate S2S-WGSIP-DCPP, also possibly in closer connection to NWP/WWRP towards more 'seamlessness'
- Need to acknowledge respective roles and contributions of operational and research centers, as well as academia in this landscape











#### Changes affecting WGCM:

- opportunity to evolve into a "climate change" ('WGCC') with focus on longer term, uninitialized, historical and future climate change simulations and scenarios, support to assessments
- interface with the Integrated Assessment Modeling (growing importance of societal dimension)
- sustainability/resourcing and 'operationalization' of (parts) of CMIP (cf dedicated JSC40 agenda item): activity within the new "climate change working group" with a staff person hired to report to the CMIP Panel chair to coordinate funding for essential CMIP activities (e.g. forcing data sets, infrastructure)
- needs to be deeply rooted in modeling centers
- coordination with corresponding regional modeling









